

Списък на цитиранията на научните трудове (без автоцитирания) на  
Мирослав Абрашев

Общ брой – 3429 h-индекс = 30

(с 30 и повече цитирания са 30 работи: [20], [22], [26], [27], [28], [31], [36], [37], [39], [42], [43], [45], [46],  
[52], [54], [55], [56], [58], [59], [62], [65], [68], [71], [72], [75], [86], [89], [90], [91], [103])

1. "Raman Study of Hydrogenated  $RBa_2 Cu_3 O_{7-x}$  ( $R = Y, Gd$ )"

V. G. Hadjiev, M. V. Abrashev, M. N. Iliev , and L. N. Bozukov

Physica C 171 (1990) 257 - 264.

11. Hydrogen in a Nonstoichiometric  $YBa_2Cu_3O_{6.96}$  Compound: Study by Raman Spectroscopy

Bobylev, I. B.; Ponomov, Yu. S.; Zyuzeva, N. A.; et al.

PHYSICS OF METALS AND METALLOGRAPHY Volume: 119 Issue: 7 Pages: 643-649 Published: JUL 2018

10. Sumadiyasa, M., Adnyana, I.G.A.P., Widagda, I.G.A., Suharta, W.G.

Study synthesis of  $(La_{1-x}Gdx)Ba_2Cu_3O_{7-\delta}$  superconductors at low temperature

Journal of Physics: Conference Series 725(1), 12001 (2016)

9. Bobylev, I.B., Ponomov, Y.S., Zyuzeva, N.A.

Raman study of the effect of water vapor during low-temperature annealing on the structure and electrophysical properties of  $YBa_2Cu_3O_y$   
Materials Chemistry and Physics 167, 1-8 (2015)

8. Bobylev, I. B.; Ponomov, Yu. S.; Zyuzeva, N. A.

Interaction of  $YBa_2Cu_3O_6.8$  with atmospheric moisture during low-temperature annealing

PHYSICS OF THE SOLID STATE 56 (8) pp. 1536-1541 AUG 2014

7. Ponomov, Yu S.; Bobylev, I. B.; Zyuzeva, N. A.

Antiferromagnetic fluctuations in water-intercalated  $YBa_2Cu_3O_6.8$

JETP LETTERS 99 (6), pp. 340-345 MAY 2014

6. Tsaneva, V.N., Vickers, M.E., Blamire, M.G., Barber, Z.H., Evetts, J.E., Popov, T.K., Donchev, T.I., Ariosa, D.

Diagnostics of sputtering plasma variations affecting Y-Ba-Cu-O thin film growth and properties

Superconductor Science and Technology 17 (9), pp. S465-S472 (2004)

5. Hirata T

Hydrogen in high-T-c superconductors

PHYS STATUS SOLIDI A 156: (2) 227-250 AUG 16 1996

4. Harrington, I., Korn, C., Goren, S.D., Shaked, H., Kimmel, G.

X-ray diffraction study of the influence of hydrogen on the crystallographic structure of  $H_xYBa_2Cu_3O_{7-\delta}$

Physica C: Superconductivity and its applications 226, 255-261 (1994).

3. Goren, S.D., Korn, C., Volterra, V., Riesemeier, H., Rössler, E., Vieth, H.M., Lüders, K.

NMR OF H-1 AND 2D IN HYDROGEN-DOPED AND DEUTERIUM-DOPED  $YBa_2Cu_3O_7$

PHYS REV B 46: (21) 14142-14149 DEC 1 1992

2. Kamei, M., Yoshida, I., Takahashi, H., Itti, R., Morishita, T.

RESIDUAL HYDROGEN GAS INDUCED DEFECTS IN HETEROEPITAXIAL  $YBa_2Cu_3O_{7-x}$  FILMS

J APPL PHYS 72: (8) 3622-3625 OCT 15 1992

1. Richter, A., Irmer, G., Keßler, G., Panzner, M., Herzog, K.

RAMAN AND IR SPECTROSCOPY OF HYDROGEN-CHARGED  $YBa_2Cu_3O_7$ -DELTA FILMS

J ALLOY COMPD 187: (1) 59-66 AUG 27 1992

2. "Destruction of Non-Superconducting  $YBa_2 Cu_3 O_{6.3}$  and  $PrBa_2 Cu_3 O_{6.8}$  due to the  
Hydrogenation: Raman Scattering and X-Ray Diffraction Study"

Physica C 178 (1991) 317 - 323.

M. V. Abrashev, L. N. Bozukov and M. N. Iliev

3. CELANI F, BOUTET M, DIGIOACCHINO D, et al.

1ST RESULTS ABOUT HYDROGEN LOADING BY MEANS OF PULSED ELECTROLYSIS OF  $YBa_2Cu_3O_7$  PELLETS

PHYS LETT A 189: (5) 395-402 JUN 27 1994

2. KAMEI M, YOSHIDA I, TAKAHASHI H, et al.

RESIDUAL HYDROGEN GAS INDUCED DEFECTS IN HETEROEPITAXIAL  $YBa_2Cu_3O_{7-x}$  FILMS

J APPL PHYS 72: (8) 3622-3625 OCT 15 1992

1. CELANI F, SPALLONE A, LIBERATORI L, et al.

SEARCH FOR ENHANCEMENT OF NEUTRON EMISSION FROM NEUTRON-IRRADIATED, DEUTERIDED, HIGH-TEMPERATURE SUPERCONDUCTORS IN A VERY LOW BACKGROUND ENVIRONMENT  
FUSION TECHNOL 22: (1) 181-186 AUG 1992

3. "Polarized Raman Spectra of  $Y_2 BaCuO_5$ : Normal Mode Assignment from Substitution for  $Y$  and  $Ba$ "

M. V. Abrashev and M. N. Iliev

Phys. Rev. B 45 (1992) 8046 - 8051.

11. Das, Dhruba; Muralidhar, M.; Rao, M. S. Ramachandra; et al.

Top-seeded infiltration growth of  $(Y,Gd)Ba(2)Cu(3)O_y$  bulk superconductors with high critical current densities  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY 30 (10), 105015 OCT 2017

10. Shi, Y., Hasan, T., Babu, N.H., Torrisi, F., Milana, S., Ferrari, A.C., Cardwell, D.A.

Synthesis of  $YBa_2Cu_3O_{7-\delta}$  and  $YBaCuO_5$  nanocrystalline powders for YBCO superconductors using carbon nanotube templates  
ACS Nano 6 (6), pp. 5395-5403, 2012.

9. Gupta, H.C., Sharma, V.

Interatomic forces in  $Pnma$ ,  $Immm$ ,  $P4/mmb$  and  $I4/mcm$  phase of  $R_2BaMO_5$  ( $R$ = yttrium or lanthanides;  $M$ = Ni, Cu or Zn)  
Journal of Physics: Conference Series 92 (1), art. no. 012163 (2007).

8. Gouadec, G., Colombari, P.

Raman Spectroscopy of nanomaterials: How spectra relate to disorder, particle size and mechanical properties  
Progress in Crystal Growth and Characterization of Materials 53 (1), pp. 1-56 (2007).

7. Gupta HC, Sharma V

Lattice dynamic investigation of the Raman and infrared wavenumbers of orthorhombic  $R_2BaCuO_5$  ( $R$ = Y, Ho, Gd) oxides  
JOURNAL OF RAMAN SPECTROSCOPY 36 (1): 83-88 JAN 2005

6. Capsoni D, Bini M, Massarotti V, et al.

Micro-Raman and X-ray diffraction study of  $Y_2BaNi_{1-x}M_xO_5$  ( $M$ = Mg, Zn) polymorphs  
SOLID STATE COMMUN 122 (7-8): 367-372 2002

5. Provoost R, Rosseel K, Dierickx D, et al.

Stress analysis in melt processed  $RBa_2Cu_3O_7$  ( $R$ = Y, Nd) by micro-Raman spectroscopy  
APPL SUPERCOND 6: (2-5) 185-192 FEB-MAY 1998

4. Dietrich M, Thurian P, Loa I, et al.

Crystal-field transitions of  $Nd^{3+}$  and  $Er^{3+}$  in perovskite-type crystals  
MATER SCI FORUM 258-2: 1589-1594 Part 1-3 1997

3. Provoost R, Rosseel K, Dierickx D, et al.

Observation of local variations of stress in fast melt processed  $YBa_2Cu_3O_7$  superconductors at  $YBaCuO_5$  inclusions  
INST PHYS CONF SER (158) 1595-1598 1997

2. Provoost R, Rosseel K, Moshchalkov VV, et al.

Stress release at  $YBaCuO_5$  inclusions in fast melt processed  $YBa_2Cu_3O_{7-x}$  observed by micro-Raman spectroscopy  
APPL PHYS LETT 70: (21) 2897-2899 MAY 26 1997

1. DE ANDRES A, TABOADA S, MARTINEZ JL, et al.

OPTICAL PHONONS IN  $R_2BAMO_5$  OXIDES WITH  $M$ = CO, NI, CU, AND  $R$ = A RARE-EARTH  
PHYS REV B 47: (22) 14898-14904 JUN 1 1993

4. "Raman Spectroscopy of  $(Pb(1+x)/2 Cu(1-x)/2 )Sr_2(Y_{1-x}Ca_x)Cu_2O_{7+y}$  ( $x=0; 0.35$ )"

M. V. Abrashev, M. N. Iliev and L. N. Bozukov

Physica C 200 (1992) 189 - 194.

1. Ren, Y.T., Chang, H., Xiong, Q., Wang, Y.Q., Sun, Y.Y., Meng, R.L., Xue, Y.Y., Chu, C.W..  
Micro-Raman scattering on superconducting  $HgBa_2Can-1CunO_{2n+2+\delta}$  ( $n=1, 2, 3$ ) ceramics

Physica C: Superconductivity and its applications 217, 273-279 (1993)

5. "Raman-active phonons in  $R_2 BaCuO_5$  ( $R$ = La, Nd)"

M. V. Abrashev, G. A. Zlateva and E. Dinolova

Phys. Rev. B 47 (1993) 8320 - 8323.

6. Antony, C.J., Aatiq, A., Panicker, C.Y., Bushiri, M.J., Varghese, H.T., Manojkumar, T.K.

FT-IR and FT-Raman study of Nasicon type phosphates,  $ASnFe(PO_4)_3$  [ $A$ = Na(2), Ca, Cd]  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 78 (1) Pages: 415-419, JAN 2011.

5. Gupta, H.C., Sharma, V.

Interatomic forces in  $Pnma$ ,  $Immm$ ,  $P4/mmb$  and  $I4/mcm$  phase of  $R_2BaMO_5$  ( $R$ = yttrium or lanthanides;  $M$ = Ni, Cu or Zn)  
Journal of Physics: Conference Series 92 (1), art. no. 012163 (2007).

4. Gupta, H.C., Sharma, V.  
 Lattice dynamics of tetragonal R<sub>2</sub>BaCuO<sub>5</sub> (R = La, Nd) oxides in the P4/mmb structure  
 Journal of Raman Spectroscopy 38 (7), pp. 885-889 (2007).
3. Provoost R, Rosseel K, Dierickx D, et al.  
 Stress analysis in melt processed RBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub> (R = Y, Nd) by micro-Raman spectroscopy  
 APPL SUPERCOND 6: (2-5) 185-192 FEB-MAY 1998
2. Dareys B, Thurian P, Taboada S, et al.  
 Luminescence properties of Nd<sub>2</sub>BaZnO<sub>5</sub>  
 J LUMIN 72-4: 174-176 JUN 1997
1. TABOADA S, DEANDRES A, MARTINEZ JL, et al.  
 EFFECT OF THE RARE-EARTH SUBSTITUTION ON THE OPTICAL PHONONS OF LARBACUO(5) (R=ND AND EU) OXIDES  
 J ALLOY COMPD 225: (1-2) 216-219 JUL 15 1995
6. "Micro-Raman, SEM and X-ray characterization of (Pb0.5 Cu0.5 )LaSrCan-1 Cun Ox (n = 1, 2) ceramics"  
 M. V. Abrashev, V. N. Hadjimitov, E. Dinolova, and L. N. Bozukov  
 Physica C 215 (1993) 421 - 428.
7. Wang, J., Lin, Y., Zou, H., Pu, S., Shi, J.  
 Structural transition, electrical and magnetic properties of the B-site Co doped Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub> compounds  
 Journal of Physics Condensed Matter 21 (7), art. no. 075601 (2009).
6. Hu Ni, Xiong Rui, Wei Wei, et al.  
 Raman scattering study of the spin ladder compound Sr-14(Cu<sub>1-y</sub>Fey)(24)O-41  
 ACTA PHYSICA SINICA 57 (8) 5267-5271 AUG 2008
5. Carvalho CL, Guedes I  
 Spectroscopic characterization of BPSCCO thin films grown by dip-coating technique  
 PHYSICA C 390 (3): 239-242 JUL 1 2003
4. Ogita N, Fujita Y, Sakaguchi Y, et al.  
 Raman scattering study of Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
 J PHYS SOC JPN 69: (8) 2684-2690 AUG 2000
3. Osada M, Kakihana M, Nagai I, et al.  
 Raman-active phonons and their doping dependence in spin-ladder Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>  
 PHYSICA C 338: (1-2) 161-165 AUG 1 2000
2. Nagai, I., Osada, M., Kakihana, M., Noji, T., Adachi, T., Koike, Y.  
 Raman scattering study of Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
 Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy 46 (9), pp. 1004-1008 (1999)
1. Leonyuk L, Babonas GJ, Maltsev V  
 Regularities of cation sublattice structure in crystals of layered cuprates  
 INT J APPL ELECTROM 8: (3) 229-242 SEP 1997
7. "Preparation of a Calcium-substituted Copper-rich Yttrium Barium Copper Oxide Superconductor from a spray-dried nitrate precursor"  
 G. Gyurov, I. Khristova, P. Peshev and M. V. Abrashev  
 Mat. Res. Bull. 28 (1993) 1067 - 1074.
7. Nenartaviciene G, Jasaitis D, Kareiva A  
 Sol-gel synthesis and characterization of YBa<sub>2</sub>(Cu<sub>1-x</sub>Cr<sub>x</sub>)(4)O<sub>8</sub> superconductor  
 ACTA CHIMICA SLOVENICA 51 (4): 661-674 (2004).
6. Baranauskas, A., Jasaitis, D., Kareiva, A.  
 Characterization of sol-gel process in the Y-Ba-Cu-O acetate-tartrate system using IR spectroscopy  
 Vibrational Spectroscopy 28 (2), pp. 263-275 (2002)
5. Mathur S, Shen H, Lecerf N, et al.  
 Sol-gel synthesis route for the preparation of Y(Ba<sub>1-x</sub>Sr<sub>x</sub>)(2)Cu<sub>4</sub>O<sub>8</sub> superconducting oxides  
 J SOL-GEL SCI TECHN 24 (1): 57-68 MAY 2002
4. Baranauskas A, Jasaitis D, Kareiva A, et al.  
 Sol-gel preparation and characterization of manganese-substituted superconducting YBa<sub>2</sub>(Cu<sub>1-x</sub>Mn<sub>x</sub>)(4)O<sub>8</sub> compounds  
 J EUR CERAM SOC 21 (3): 399-408 MAR 2001
3. Van Bael MK, Kareiva A, Vanhoyland G, et al.

Influence of calcium substitution on the formation and thermal stability of the YBa<sub>2</sub>Cr<sub>4</sub>O<sub>8</sub> superconductor  
THERMOCHIM ACTA 341: 407-416 Sp. Iss. SI DEC 14 1999

2. Van Bael MK, Kareiva A, Vanhooyland G, et al.

Enhancement of T-c by substituting strontium for barium in the YBa<sub>2</sub>Cu<sub>4</sub>O<sub>8</sub> superconductor prepared by a sol-gel method  
PHYSICA C 307 (3-4): 209-220 OCT 20 1998

1. Kareiva A, Bryntse I, Karppinen M, et al.

Influence of complexing agents on properties of YBa<sub>2</sub>Cu<sub>4</sub>O<sub>8</sub> superconductors prepared by the sol-gel method  
J SOLID STATE CHEM 121 (2): 356-361 FEB 1 1996

8. "Morphological and compositional changes of the target surface during RF magnetron sputtering of the Y-Ba-Cu-O system"

R. Chakalov and M. V. Abrashev

Physica C 223 (1994) 173 - 178.

9. "Optical Phonons in Nd<sub>2</sub>BaMO<sub>5</sub> (M = Zn, Cu)"

M. V. Abrashev, G. A. Zlateva, M. N. Iliev, and M. Gyulmezov

Phys. Rev. B 49 (1994) 11783 - 11788.

9. Ten Kate, Otmar M.; van der Kolk, Erik

Quantum tripling in Tm<sup>3+</sup> doped La<sub>2</sub>BaZnO<sub>5</sub> phosphors for efficiency enhancement of small band gap solar cells  
JOURNAL OF LUMINESCENCE Volume: 156 Pages: 262-265 Published: DEC 2014

8. Cao, Renping; Cao, Chunyan; Yu, Xiaoguang; et al.

Visible to near-infrared luminescence properties of Nd<sup>3+</sup>-doped La<sub>2</sub>BaZnO<sub>5</sub> phosphor  
JOURNAL OF SOLID STATE CHEMISTRY 215, pp. 22-25 JUL 2014

7. Rosli, A.N., Kassim, H.A., Shrivastava, K.N.

DFT calculation of vibrations in the clusters of zinc and oxygen atoms  
Sains Malaysiana 42 (5), pp. 649-654, 2013

6. Gupta, H.C., Sharma, V.

Interatomic forces in Pnma, Immm, P4/mmb and I4/mcm phase of R<sub>2</sub>BaMO<sub>5</sub>(R= yttrium or lanthanides; M= Ni, Cu or Zn)  
Journal of Physics: Conference Series 92 (1), art. no. 012163 (2007).

5. Gupta, H.C., Sharma, V.

Lattice dynamics of tetragonal Nd<sub>2</sub>BaZnO<sub>5</sub>

Journal of Raman Spectroscopy 38 (12), pp. 1554-1560 (2007).

4. Gupta, H.C., Sharma, V.

Lattice dynamics of tetragonal R<sub>2</sub>BaCuO<sub>5</sub> (R = La, Nd) oxides in the P4/mmb structure

Journal of Raman Spectroscopy 38 (7), pp. 885-889 (2007)

3. Dietrich M, Thurian P, Loa I, et al.

Crystal-field transitions of Nd<sup>3+</sup> and Er<sup>3+</sup> in perovskite-type crystals  
MATER SCI FORUM 258-2: 1589-1594 Part 1-3 1997

2. Dareys B, Thurian P, Taboada S, et al.

Luminescence properties of Nd<sub>2</sub>BaZnO<sub>5</sub>

J LUMIN 72-4: 174-176 JUN 1997

1. de Andres A, Taboada S, Martinez JL, et al.

Nd<sup>3+</sup> crystal-field transitions studied by raman and FIR spectroscopies in Nd<sub>2</sub>BaZnO<sub>5</sub>

PHYS REV B 55: (6) 3568-3573 FEB 1 1997

10. "Raman-active Phonons in R<sub>2</sub>BaMO<sub>5</sub> (R - rare earth, M = Cu, Zn)"

M. V. Abrashev, G. A. Zlateva, and M. N. Iliev

Proc. Suppl. of Balkan Physics Letters 2 (1994) 538 - 542.

11. "Raman Study of R0.5 Pr0.5 Ba<sub>2</sub> Cu<sub>3</sub> O<sub>7</sub> (R = Y, Rare Earth)"

G. G. Bogachev, M. V. Abrashev, M. N. Iliev, N. Poulakis, E. Liarokapis, C. Mitros, A. Koufoudakis, and V. Psycharis

Phys. Rev. B 49 (1994) 12151 - 12158.

10. Zhang, A.-M., Zhang, Q.-M.

Electron-phonon coupling in cuprate and iron-based superconductors revealed by Raman scattering  
Chinese Physics B 22 (8), art. no. 087103, 2013

9. Barba D, Jandl S, Nekvasil V, et al.

Infrared transmission study of crystal-field excitations in Al- and Sr-doped  $\text{Pr}_{1+x}\text{Ba}_2\text{xCu}_3\text{O}_6$   
PHYS REV B 69 (2): Art. No. 024528 JAN 2004

8. Gantis A, Calamiotou M, Palles D, et al.  
Phase formation and lattice strain in superconducting compound  $\text{Y}_{1-x}\text{La}_x\text{Ba}_2\text{Cu}_3\text{O}_y$  ( $0 \leq x \leq 1$ )  
PHYS REV B 68 (6): Art. No. 064502 AUG 1 2003

7. Calamiotou M, Gantis A, Palles D, et al.  
Phase separation and internal strains in the mixed  $\text{La}_0.5\text{R}_0.5\text{Ba}_2\text{Cu}_3\text{O}_y$  compounds (R = rare-earth element)  
PHYS REV B 58: (22) 15238-15246 DEC 1 1998

6. Jin H, Ruan KQ, Wang CY, et al.  
Ion size effect on the charge transfer and Raman spectrum of the  $(\text{Pb}_{0.65}\text{Sr}_{0.35})\text{Sr}_2(\text{R}_{0.5}\text{Ca}_{0.5})\text{Cu}_2\text{O}_y$  compound  
PHYSICA C 292: (3-4) 211-217 DEC 20 1997

5. Faulques E, Ivanov VG  
Raman line shapes from sputtered thin films of  $\text{Y}(\text{Pr})\text{Ba}_2\text{Cu}_3\text{O}_{6+\delta}$ : Fine structures and oxygen ordering  
PHYS REV B 55: (6) 3974-3986 FEB 1 1997

4. Mayer M, Knoll P, HolzingerSchweiger E  
Phononic and spin excitations in  $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_{6.9}$  crystals  
J SUPERCOND 9: (4) 463-465 AUG 1996

3. Kall M, Litvinchuk AP, Berastegui P, et al.  
Phonon Raman scattering in  $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_8$  ( $x=0-1$ ) and  $(\text{Y}_{1-x}\text{Pr}_x)(2)\text{Ba}_4\text{Cu}_7\text{O}_{15-\delta}$  ( $x=0-0.6$ )  
PHYS REV B 53: (6) 3590-3597 FEB 1 1996

2. LIKODIMOS V, GUSKOS N, PALIOS G, et al.  
EPR STUDY OF LOCALIZED CU<sup>2+</sup> PARAMAGNETIC-IONS AND CU<sup>2+</sup> PAIRS IN THE OXYGEN-DEFICIENT  
 $\text{PRBa}_2\text{Cu}_3\text{O}_{6+X}$  AND PR(0.5)R(0.5)BA(2)CU(3)O(6+X) (R=Y,ER) COMPOUNDS  
PHYS REV B 52: (10) 7682-7688 SEP 1 1995

1. SHIN HS, YANG IS, LEE WC  
RAMAN-STUDY OF  $\text{Y}_1\text{-XPr}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$  AND  $\text{YBa}_2\text{Cu}_3\text{-XZn}_x\text{O}_{7-\delta}$  SINGLE-CRYSTALS  
PHYSICA C 250: (3-4) 275-281 AUG 15 1995

12. "Mossbauer, Crystal Structure, Magnetic and Raman Study of  $(\text{Y},\text{Ce})_2\text{Sr}_2\text{CuFeO}_8$  Isomorphic with  $T^*$  Structure Superconductors"  
M. Pissas, C. Mitros, D. Niarchos, A. Kostikas, A. Simopoulos, M. Abrashev, V. Hadjimitov, and M. N. Iliev  
Phys. Rev. B 50 (1994) 10157.

13. "Raman Study of the 1222 Compound  $(\text{Bi},\text{Cu})\text{Sr}_2(\text{R},\text{Ce})_2\text{Cu}_2\text{O}_{9-x}$  (R = Y, Ho)"  
M. V. Abrashev, V. N. Hadjimitov, L. N. Bozukov, and M. N. Iliev  
Solid State Commun. 93 (1995) 563.

5. Sathe, V.G., Awana, V.P.S., Deshpande, A., Kishan, H., Narlikar, A.V.  
Raman spectroscopy of  $\text{RuSr}_2(\text{Eu}_{1.5}\text{Ce}_{0.5})\text{Cu}_2\text{O}_{10}$  magneto-superconductor  
Solid State Communications 141 (12), pp. 658-662 (2007)

4. Xu GJ, Pu QR, Ding ZJ, et al.  
Microstructure and phonon vibration of the Fe-doped Bi2201 system  
PHYSICA C 340: (2-3) 178-184 DEC 1 2000

3. Chen XH, Ruan KQ, Qian GG, et al.  
Effects of doping on phonon Raman scattering in the Bi-based 2212 system  
PHYS REV B 58: (9) 5868-5872 SEP 1 1998

2. Choy JH, Hwang SJ, Kim DK  
Raman spectroscopic evidence on molecular mercuric bromide in the two-dimensional lattice of  $(\text{HgBr}_2)(0.5)\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_y$   
PHYS REV B 55: (9) 5674-5677 MAR 1 1997

1. Pissas, M., Kallias, G., Poulikas, N., Niarchos, D., Simopoulos, A., Liarokapis, E.  
Structural, Mössbauer, and Raman studies of the  $(\text{Y},\text{Ce})_2\text{Sr}_2\text{Cu}_2\text{FeO}_{8+y}$  compound  
Physical Review B 52(14), 10610 (1995)

14. "Raman-active phonons in  $\text{La}_4\text{Ba}_2\text{Cu}_5\text{O}_{13}$  : polarized Raman spectroscopy and lattice dynamical calculations"  
M. V. Abrashev and V. N. Popov  
J. Phys.: Condens. Matter 7 (1995) 4967.

15. "Preparation of a  $YBa_2Cu_4O_8$  high-temperature superconductor from a spray dried nitrate precursor"

G. Gyurov, I. Khristova, and M. V. Abrashev  
J. Mater. Sci. Lett. 15 (1996) 1559 - 1561.

16. "Raman spectroscopy and lattice dynamical calculations of mixed copper-titanium oxides"

M. V. Abrashev, C. Thomsen, V. N. Popov, and L. N. Bozukov  
Physica C 274 (1997) 141 - 148.

1. Lim, G.H

Vibration of plates and shells using finite elements (1996-1997)  
Finite Elements in Analysis and Design 31 (3), pp. 223-230 1999

17. "Optical properties of Nd<sup>3+</sup> in Nd<sub>2</sub>BaZnO<sub>5</sub>"

B. Dareys, P. Thurian, M. Dietrich, M. V. Abrashev, A. P. Litvinchuk, C. Thomsen, A. de Andres, and S. Taboada  
Phys. Rev. B 55 (1997) 6871 - 6879.

5. Gupta, H.C., Sharma, V.

Lattice dynamics of tetragonal Nd<sub>2</sub>BaZnO<sub>5</sub>  
Journal of Raman Spectroscopy 38 (12), pp. 1554-1560 (2007).

4. Klimin SA, Popova MN, Mill BV

Infrared spectroscopy of the Nd<sup>3+</sup> ion in Nd<sub>2</sub>BaCuO<sub>5</sub> and Nd<sub>2</sub>BaZnO<sub>5</sub>  
PHYS SOLID STATE+ 44 (8): 1564-1569 2002

3. Klimin SA, Popova MN, Antic-Fidancev E, et al.

Optical and crystal-field analysis of Nd<sup>3+</sup> ion in Nd<sub>2</sub>BaCuO<sub>5</sub> and Nd<sub>2</sub>BaZnO<sub>5</sub>  
J SOLID STATE CHEM 162 (1): 42-51 NOV 15 2001

2. Cruz GK, Carvalho RA, Basso HC

Energy assignments for the I-4(15/2) and S-4(3/2) multiplets of the Er<sup>3+</sup> ion in (Er<sub>0.05</sub>Y<sub>0.95</sub>)<sub>2</sub>BaZnO<sub>5</sub>  
J APPL PHYS 89: (4) 2194-2201 FEB 15 2001

1. Cruz GK, Basso HC, Terrile MC, et al.

Spectroscopic properties of Y<sub>2</sub>BaZnO<sub>5</sub> : Er<sup>3+</sup>  
J LUMIN 86: (2) 155-160 MAR 2000

18. "Optical phonons in the orthorhombic double-chain Sr<sub>1-x</sub>Ca<sub>x</sub>CuO<sub>2</sub> ( $x = 0, 0.5$ )"

M. V. Abrashev, A. P. Litvinchuk, C. Thomsen, and V. N. Popov

Phys. Rev. B 55 (1997) 9136 - 9141.

13. Finite size effect on the magnetic excitations spectra, phonons and heat conduction of the quasi- one-dimensional spin chains system SrCuO<sub>2</sub>

Bounoua, D., Saint-Martin, R., Petit, S., Bourdarot, F., Pinsard-Gaudart, L.  
Physica B: Condensed Matter Volume 536 Page 323-326 Published MAY 1 2018

12. Khan, Afzal; Jimenez, Carmen; Chaix-Pluchery, Odette; et al.

Effect of thermal annealing on electrical and optical properties of Ba-doped SrCu<sub>2</sub>O<sub>2</sub> thin films on glass substrates  
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE 210 (12), pp. 2569-2574 DEC 2013

11. Montagnese, M., Otter, M., Zotos, X., Fishman, D.A., Hlubek, N., Mityashkin, O., Hess, C., (...), Van Loosdrecht, P.H.M.  
Phonon-magnon interaction in low dimensional quantum magnets observed by dynamic heat transport measurements  
Physical Review Letters 110 (14), art. no. 147206, 2013

10. Cheng Li; Xiong Rui; Shi Jing

Raman scattering study of the spin ladder compound Sr(14) Cu(24) O(41+delta)  
ACTA PHYSICA SINICA 59 (7) Pages: 5078-5084, JUL 2010.

9. Nunner TS, Brune P, Kopp T, et al.

Phonon-assisted magnetic absorption of (La,Ca)(14)Cu<sub>24</sub>O<sub>41</sub>: Contribution of different phonon modes  
ACTA PHYS POL B 34 (2): 1545-1548 Sp. Iss. SI FEB 2003

8. Popovic ZV, Ivanov VA, Konstantinovic MJ, et al.

Optical studies of gap, hopping energies, and the Anderson-Hubbard parameter in the zigzag-chain compound SrCuO<sub>2</sub>  
PHYS REV B 63 (16): art. no. 165105 APR 15 2001

7. Popovic ZV, Konstantinovic MJ, Gajic R, et al.

Polarized far-infrared and Raman spectra of SrCuO<sub>2</sub> single crystals  
PHYSICA C 351 (4): 386-394 APR 15 2001

6. Lee YS, Noh TW, Choi HS, et al.  
Polarization-dependent infrared phonon spectra of quasi-one-dimensional Sr<sub>2</sub>CuO<sub>3</sub> and SrCuO<sub>2</sub>  
PHYS REV B 62: (9) 5285-5288 SEP 1 2000

5. Popovic ZV, Konstantinovic MJ, Ivanov VA, et al.  
Optical properties of the spin-ladder compound Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>  
PHYS REV B 62: (8) 4963-4972 AUG 15 2000

4. Nagai, I., Osada, M., Kakihana, M., Noji, T., Adachi, T., Koike, Y.  
Raman scattering study of Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy 46 (9), pp. 1004-1008 (1999)

3. Ruzicka B, Degiorgi L, Meijer GI, et al.  
Optical properties of Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub> and Sr<sub>0.73</sub>CuO<sub>2</sub>  
PHYSICA C 318: 282-285 MAY 1999

2. Milicic SN, Popovic ZV, Konstantinovic MJ, et al.  
Phonons in SrCuO<sub>2</sub> single crystals  
SOLID STATE PHENOM 61-2: 305-308 (1998).

1. Popovic ZS, Vukajlovic FR  
Coulomb correlated band structure of one-dimensional SrCuO<sub>2</sub>  
SOLID STATE COMMUN 106: (7) 415-420 MAY 1998

19. "Frohlich-interaction induced multi-phonon Raman scattering in SrCuO<sub>2</sub> and Sr<sub>0.5</sub>Ca<sub>0.5</sub>CuO<sub>2</sub>"

M. V. Abrashev, A. P. Litvinchuk, and C. Thomsen  
Phys. Rev. B 55 (1997) R8638 - R8641

19. Finite size effect on the magnetic excitations spectra, phonons and heat conduction of the quasi- one-dimensional spin chains system SrCuO<sub>2</sub>  
Bounoua, D., Saint-Martin, R., Petit, S., Bourdarot, F., Pinsard-Gaudart, L.  
Physica B: Condensed Matter Volume 536 Page 323-326 Published MAY 1 2018

18. Cristian Vasquez, G.; Maestre, David; Cremades, Ana; et al.  
Assessment of the Cr doping and size effects on the Raman-active modes of rutile TiO<sub>2</sub> by UV/Visible polarized Raman spectroscopy  
JOURNAL OF RAMAN SPECTROSCOPY 48 (6), 847-854 JUN 2017

17. Baibarac, M.; Smaranda, I.; Scocioreanu, M.; et al.  
Exciton-phonon interaction in PbI<sub>2</sub> revealed by Raman and photoluminescence studies using excitation light overlapping the fundamental absorption edge  
MATERIALS RESEARCH BULLETIN Volume: 70 Pages: 762-772 Published: OCT 2015

16. de la Flor, G.; Wehber, M.; Rohrbeck, A.; et al.  
Resonance Raman scattering of perovskite-type relaxor ferroelectrics under nonambient conditions  
PHYSICAL REVIEW B 90 (6), Art. No: 064107 AUG 12 2014

15. Bielecki, J., Svedlindh, P., Tibebu, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S.  
Structural and magnetic properties of isovalently substituted multiferroic BiFeO<sub>3</sub>: Insights from Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012

14. Andreasson, J., Holmlund, J., Singer, S.G., Knee, C.S., Rauer, R., Schulz, B., Käll, M., (...), Lichtenstein, A.  
Electron-lattice interactions in the perovskite LaFe<sub>0.5</sub>Cr<sub>0.5</sub>O<sub>3</sub> characterized by optical spectroscopy and LDA+U calculations  
Physical Review B - Condensed Matter and Materials Physics 80 (7), art. no. 075103 (2009).

13. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.  
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).

12. Hu Ni; Xiong Rui; Wei Wei; et al.  
Raman scattering study of the spin ladder compound Sr-14(Cu<sub>1-y</sub>Fey)(24)O-41  
ACTA PHYSICA SINICA Volume: 57 Issue: 8 Pages: 5267-5271 Published: AUG 2008

11. Holmlund, J., Andreasson, J., Knee, C.S., Bäckström, J., Käll, M., Osada, M., Noji, T., (...), Börjesson, L.  
Resonant two-phonon Raman scattering as a probe of hole crystal formation in Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (13), art. no. 134502 (2006)

10. Choi, K.-Y., Gnezdilov, V.P., Lemmens, P., Capogna, L., Johnson, M.R., Sofin, M., Maljuk, A., Keimer, B.  
Magnetic excitations and phonons in the spin-chain compound Na Cu<sub>2</sub> O<sub>2</sub>  
Physical Review B - Condensed Matter and Materials Physics 73 (9), art. no. 094409, pp. 1-8 (2006)

9. Livneh T, Sterer E  
 Effect of pressure on the resonant multiphonon Raman scattering in UO<sub>2</sub>  
*PHYSICAL REVIEW B* 73 (8): Art. No. 085118 FEB 2006
8. Popovic ZV, Ivanov VA, Konstantinovic MJ, et al.  
 Optical studies of gap, hopping energies, and the Anderson-Hubbard parameter in the zigzag-chain compound SrCuO<sub>2</sub>  
*PHYS REV B* 63 (16): art. no. 165105 APR 15 2001
7. Popovic ZV, Konstantinovic MJ, Gajic R, et al.  
 Polarized far-infrared and Raman spectra of SrCuO<sub>2</sub> single crystals  
*PHYSICA C* 351 (4): 386-394 APR 15 2001
6. Lee YS, Noh TW, Choi HS, et al.  
 Polarization-dependent infrared phonon spectra of quasi-one-dimensional Sr<sub>2</sub>CuO<sub>3</sub> and SrCuO<sub>2</sub>  
*PHYS REV B* 62: (9) 5285-5288 SEP 1 2000
5. Popovic ZS, Vukajlovic FR  
 Coulomb-correlated band structure of one-dimensional spin-Peierls alpha'-NaV<sub>2</sub>O<sub>5</sub>  
*PHYS REV B* 59: (8) 5333-5340 FEB 15 1999
4. Konstantinovic MJ  
 Raman scattering in copper-oxide based antiferromagnets  
*SOLID STATE PHENOM* 61-2: 59-66 1998
3. Milicic SN, Popovic ZV, Konstantinovic MJ, et al.  
 Phonons in SrCuO<sub>2</sub> single crystals  
*SOLID STATE PHENOM* 61-2: 305-308 (1998).
2. Lin Y, Eldridge JE  
 Fluctuation effects on the Raman scattering from the charge-density-wave system TTF-TCNQ  
*PHYS REV B* 58: (7) 3477-3481 AUG 15 1998
1. Popovic ZS, Vukajlovic FR  
 Coulomb correlated band structure of one-dimensional SrCuO<sub>2</sub>  
*SOLID STATE COMMUN* 106: (7) 415-420 MAY 1998
20. *"Raman and infrared-active phonons in hexagonal YMnO<sub>3</sub>: Experiment and lattice dynamical calculations"*  
 M. N. Iliev, H. G. Lee, V. N. Popov, M. V. Abrashev, A. Hamed, R. L. Meng, and C. W. Chu  
*Phys. Rev. B* 56 (1997) 2488 - 2494.
173. Study of gadolinium substitution effects in hexagonal yttrium manganite YMnO<sub>3</sub>  
 Karoblis, D (Karoblis, Dovydas) Zarkov, A (Zarkov, Aleksej) Garskaite, E (Garskaite, Edita) Mazeika, K (Mazeika, Kestutis) Baltrunas, D (Baltrunas, Dalis) Niaura, G (Niaura, Gediminas) Beganskiene, A (Beganskiene, Aldona) Kareiva, A (Kareiva, Aivaras)  
*SCIENTIFIC REPORTS* Volume11 Issue1 Article Number2875 PublishedFEB 3 2021
172. Unusual magnetic ordering transitions in nanoscale biphasic LuFeO<sub>3</sub>: the role of the ortho-hexa phase ratio and the local structure  
 Chaturvedi, S (Chaturvedi, Smita) Shyam, P (Shyam, Priyank) Shirolkar, MM (Shirolkar, Mandar M.) Krishna, SS (Krishna, Swathi S.) Sinha, B (Sinha, Bhavesh) Caliebe, W (Caliebe, Wolfgang) Kalinko, A (Kalinko, Aleksandr) Srinivasan, G (Srinivasan, Gopalan) Ogale, S (Ogale, Satishchandra)  
*JOURNAL OF MATERIALS CHEMISTRY C* Volume8 Issue47 Page17000-17008 PublishedDEC 21 2020
171. Effect of oxygen vacancy gradient on ion-irradiated Ca-doped YMnO<sub>3</sub> thin films  
 Rathod, KN (Rathod, Kunalsinh N.) Gadani, K (Gadani, Keval) Dhruv, D (Dhruv, Davit) Shrimali, VG (Shrimali, Vipul G.) Solanki, S (Solanki, Sapana) Joshi, AD (Joshi, Ashvini D.) Singh, JP (Singh, Jitendra P.) Chae, KH (Chae, Keun H.) Asokan, K (Asokan, Kandasami) Solanki, PS (Solanki, Piyush S.)  
*JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B* Volume38 Issue6 Article Number062208 PublishedNOV 2020
170. h-ErMnO<sub>3</sub> absorbance, reflectivity, and emissivity in the terahertz to mid-infrared from 2 to 1700 K: Carrier screening, Frohlich resonance, small polarons, and bipolarons  
 Massa, NE (Massa, Nestor E.) del Campo, L (del Campo, Leire) Holldack, K (Holldack, Karsten) Canizares, A (Canizares, Aurelien) Phuoc, VT (Phuoc, Vinh Ta) Kayser, P (Kayser, Paula) Alonso, JA (Antonio Alonso, Jose)  
*PHYSICAL REVIEW B* Volume102 Issue13 Article Number134305 PublishedOCT 12 2020
169. Magnetoelastic excitations in multiferroic hexagonal YMnO<sub>3</sub> studied by inelastic x-ray scattering  
 Park, K (Park, Kisoo) Oh, J (Oh, Joosung) Lee, KH (Lee, Ki Hoon) Leiner, JC (Leiner, Jonathan C.) Sim, H (Sim, Hasung) Nahm, HH (Nahm, Ho-Hyun) Kim, T (Kim, Taehun) Jeong, J (Jeong, Jaehong) Ishikawa, D (Ishikawa, Daisuke) Baron, AQR (Baron, Alfred Q. R.)  
*PHYSICAL REVIEW B* Volume102 Issue8 Article Number085110 PublishedAUG 5 2020
168. Valence fluctuation and magnetic frustration in Ga substituted YMnO<sub>3</sub>  
 Paul, P (Paul, Pralay) Rajarajan, AK (Rajarajan, A. K.) Debnath, AK (Debnath, A. K.) Rao, R (Rao, Rekha) Rao, TVC (Rao, T. V.) Chandrasekhar)  
*JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS* Volume503 Article Number166617 PublishedJUN 1 2020

167. Domain structure and multiferroic properties of epitaxial hexagonal  $\text{ErMnO}_3$  films  
 Chen, Y (Chen, Yi) Li, Y (Li, Ye) Zheng, DF (Zheng, Dongfeng) Li, LY (Li, Leiyu) Zeng, M (Zeng, Min) Qin, MH (Qin, Minghui) Hou, ZP (Hou, Zhipeng) Fan, Z (Fan, Zhen) Gao, XS (Gao, Xingsen) Lu, XB (Lu, Xubing)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume821 Article Number153529 PublishedAPR 25 2020
166. Parametric Excitation of an Optically Silent Goldstone-Like Phonon Mode  
 Jurasic, DM (Jurasic, Dominik M.) Meier, QN (Meier, Quintin N.) Narang, P (Narang, Prineha)  
 PHYSICAL REVIEW LETTERS Volume124 Issue11 Article Number117401 PublishedMAR 16 2020
165. The particle size effect of  $\text{Yb}_0.8\text{R}_{0.2}\text{MnO}_3$  (R is Sm, Nd, and Eu) on some physical properties  
 Abdel-Latif, IA (Abdel-Latif, I. A.)  
 JOURNAL OF NANOPARTICLE RESEARCH Volume22 Issue2 Article Number45 PublishedFEB 6 2020
164. Structure distortion and magnetic properties of Ru-doped H- $\text{LuMnO}_3$   
 Cao, HF (Cao, H. F.) Zhang, AM (Zhang, A. M.) Cui, JY (Cui, J. Y.) Yang, LP (Yang, L. P.) Wu, XS (Wu, X. S.)  
 SOLID STATE COMMUNICATIONS Volume 306 Article Number 113753 Published FEB 2020
163. Synthesized and Photocatalytic Mechanism of the NiO Supported YMnO<sub>3</sub> Nanoparticles for Photocatalytic Degradation of the Methyl Orange Dye  
 Wang, YJ (Wang, Yujuan) Song, JJ (Song, Jingjing)  
 ZEITSCHRIFT FUR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF RESEARCH IN PHYSICAL CHEMISTRY & CHEMICAL PHYSICS Volume234 Issue 1 Page 153-170 Published JAN 2020
162. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose  
 Hoang, NN (Nam Nhat Hoang) Pham, DHY (Duc Huyen Yen Pham) Nguyen, TN (The Nghia Nguyen)  
 SCIENTIFIC REPORTS Volume 9 Article Number 19204 Published DEC 16 2019
161. Competition of magnetic ordering and spin-phonon coupling in multiferroic hexagonal  $\text{YMn}_{1-x}\text{Cr}_x\text{O}_3$   
 Cui, JY (Cui, J. Y.) Zhang, AM (Zhang, A. M.) Shi, JY (Shi, J. Y.) Cao, HF (Cao, H. F.) Wu, XS (Wu, X. S.) Zhang, YM (Zhang, Y. M.)  
 JOURNAL OF APPLIED PHYSICS Volume 126 Issue 11 Article Number 114103 Published SEP 21 2019
160. Investigations on the Electronic Excitations through Spectroscopic Measures for Resistive Switching Character of Manganite Thin Films  
 Rathod, KN (Rathod, Kunalsinh N.) Gadani, K (Gadani, Keval) Dhruv, D (Dhruv, Davit) Boricha, H (Boricha, Hetal) Zankat, A (Zankat, Alpa) Joshi, AD (Joshi, Ashvini D.) Singh, JP (Singh, Jitendra P.) Chae, KH (Chae, Keun H.) Asokan, K (Asokan, Kandasami) Solanki, PS (Solanki, Piyuhs S.)  
 PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS Volume 256 Issue 12 Article Number 1900264 Published DEC 2019
159. Hybridization and Decay of Magnetic Excitations in Two-Dimensional Triangular Lattice Antiferromagnets  
 Kim, T (Kim, Taehun) Park, K (Park, Kisoo) Leiner, JC (Leiner, Jonathan C.) Park, JG (Park, Je-Geun)  
 JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume 88 Issue 8 Article Number 081003 Published AUG 15 2019
158. Crystal structure and vibrational spectra of hexagonal manganites  $\text{YMnO}_3$  and  $\text{LuMnO}_3$  under high pressure  
 Jabarov, SH (Jabarov, S. H.) Dang, NT (Dang, N. T.) Kichanov, SE (Kichanov, S. E.) Kozlenko, DP (Kozlenko, D. P.) Dubrovinsky, LS (Dubrovinsky, L. S.) Park, JG (Park, Je-Geun) Lee, S (Lee, Seongsu) Mammadov, AI (Mammadov, A., I) Mehdiyeva, RZ (Mehdiyeva, R. Z.) Savenko, BN (Savenko, B. N.)  
 MATERIALS RESEARCH EXPRESS Volume 6 Issue 8 Article Number 086110 Published AUG 2019
157. Lattice and spin dynamics in multiferroic  $\text{BiFeO}_3$  and  $\text{RMnO}_3$   
 Song, Y (Song, Yan) Xu, B (Xu, Ben) Nan, CW (Nan, Ce-Wen)  
 NATIONAL SCIENCE REVIEW Volume 6 Issue 4 Page 642-652 Published JUL 2019
156. Effects of a strong gravitational field on Mn-trimmers and magnetic properties of hexagonal  $\text{YMnO}_3$  single crystal  
 Tokuda, M (Tokuda, Makoto) Mashimo, T (Mashimo, Tsutomu) Ma, WJ (Ma, Weijian) Hayami, S (Hayami, Shinya) Ando, S (Ando, Shinji) Nishiyama, T (Nishiyama, Tadao) Yoshiasa, A (Yoshiasa, Akira)  
 JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume 129 Page 172-179 Published JUN 2019
155. Structural, ferroelectric and dielectric properties of multiferroic  $\text{YMnO}_3$  synthesized via microwave assisted radiant hybrid sintering  
 Kumar, M (Kumar, Manish) Phase, DM (Phase, D. M.) Choudhary, RJ (Choudhary, R. J.)  
 HELIYON Volume 5 Issue 5 Article Number 01691 Published MAY 2019
154. Characteristics of Coherent Optical Phonons in a Hexagonal  $\text{YMnO}_3$  Thin Film  
 Hasegawa, T (Hasegawa, Takayuki)  
 APPLIED SCIENCES-BASEL Volume 9 Issue 4 Article Number704 Published FEB 2 2019
153. High pressure structural investigations on hexagonal  $\text{YInO}_3$   
 Dwivedi, A (Dwivedi, Abhilash) Poswal, HK (Poswal, H. K.) Shukla, R (Shukla, R.) Velaga, S (Velaga, Srihari) Sahoo, BD (Sahoo, B. D.) Grover, V (Grover, V.) Deo, MN (Deo, M. N.)  
 HIGH PRESSURE RESEARCH Volume 39 Issue 1 Page 17-35 Published JAN 2 2019
152. New insight into the structure of  $\text{PuGaO}_3$  from ab initio particle-swarm optimization methodology  
 Li, SC (Li, Shichang) Ye, XQ (Ye, Xiaoqiu) Liu, T (Liu, Tao) Gao, T (Gao, Tao) Ma, SG (Ma, Shenggui) Ao, BY (Ao, Bingyun)  
 JOURNAL OF MATERIALS CHEMISTRY A Volume 6 Issue 45 Page 22798-22808 Published DEC 7 2018
151. Thermal stable blue pigment with tunable color of  $\text{DyIn}_{1-x}\text{Mn}_x\text{O}_3$  ( $0 \leq x \leq 0.1$ )

Zhang, YM (Zhang, Yimeng) Qi, H (Qi, Hui) Liu, HH (Liu, Huanhuan) Wang, S (Wang, Shan) Yuan, L (Yuan, Long) Hou, CM (Hou, Changmin)  
DYES AND PIGMENTS Volume 156 Page 192-198 Published SEP 2018

150. Synthesis, Structure and Spectral Properties of Fe-doped DyInO<sub>3</sub> Yellow Pigments

Zhang, YM (Zhang Yimeng) Yuan, L (Yuan Long) Liu, HH (Liu Huanhuan) Hou, CM (Hou Changmin)  
CHEMICAL JOURNAL OF CHINESE UNIVERSITIES-CHINESE Volume 39 Issue 7 Page 1400-1405 Published JUL 10 2018

149. Rare earth indates (RE: La-Yb): influence of the synthesis route and heat treatment on the crystal structure

Shukla, R (Shukla, Rakesh) Grover, V (Grover, Vinita) Srinivasu, K (Srinivasu, Kancharlapalli) Paul, B (Paul, Barnita) Roy, A (Roy, Anushree) Gupta, R (Gupta, Ruma) Tyagi, AK (Tyagi, Avesh Kumar)  
DALTON TRANSACTIONS Volume 47 Issue 19 Page 6787-6799 Published MAY 21 2018

148. Magnetic ground state of the multiferroic hexagonal LuFeO<sub>3</sub>

Suresh, P (Suresh, Pittala) Laxmi, KV (Laxmi, K. Vijaya) Bera, AK (Bera, A. K.) Yusuf, SM (Yusuf, S. M.) Chittari, BL (Chittari, Bheema Lingam) Jung, J (Jung, Jeil) Kumar, PSA (Kumar, P. S. Anil)  
PHYSICAL REVIEW B Volume 97 Issue 18 Article Number 184419 Published MAY 15 2018

147. Hole doping effect on structure, transport and magnetic properties of Dy<sub>1-x</sub>Ba<sub>x</sub>MnO<sub>3</sub> (0 <= x <= 1)

Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume 744 Page 82-89 Published MAY 5 2018

146. The magnetic transition temperature tuned by strain in YMn<sub>0.9</sub>Ru<sub>0.1</sub>O<sub>3</sub> thin films

Yang LP, Zhang AM, Wang K, Wu XS, Zhai ZY,  
AIP ADVANCES Volume 8 Issue 5 Article Number 055805 Published MAY 2018

145. Momentum-resolved observations of the phonon instability driving geometric improper ferroelectricity in yttrium manganite

Bansal D., Niedziela JL, Sinclair R, Garlea VO, Abernathy DL, Chi SX, Ren Y, Zhou HD, Delaire O,  
NATURE COMMUNICATIONS Volume 9 Article Number 15 Published JAN 2 2018

144. Demirel, S.; Oz, E.; Altin, S.; et al.

Structural, magnetic, electrical and electrochemical properties of SrCo<sub>0.5</sub>, Sr<sub>9</sub>Co<sub>2</sub>Mn<sub>5</sub>O<sub>21</sub> and SrMnO<sub>3</sub> compounds  
CERAMICS INTERNATIONAL Volume: 43 Issue: 17 Pages: 14818-14826 Published: DEC 1 2017

143. Zhang, Xiong; Song, Hongjia; Tan, Congbing; et al.

Epitaxial growth and magnetic properties of h-LuFeO<sub>3</sub> thin films  
JOURNAL OF MATERIALS SCIENCE Volume: 52 Issue: 24 Pages: 13879-13885 Published: DEC 2017

142. Hasegawa, Takayuki; Fujimura, Norifumi; Nakayama, Masaaki

Ultrafast dynamics of coherent optical phonon correlated with the antiferromagnetic transition in a hexagonal YMnO<sub>3</sub> epitaxial film  
APPLIED PHYSICS LETTERS Volume: 111 Issue: 19 Article Number: 192901 Published: NOV 6 2017

141. Rawat, Ritu; Phase, D. M.; Choudhary, R. J.

Spin-phonon coupling in hexagonal Sr<sub>0.6</sub>Ba<sub>0.4</sub>MnO<sub>3</sub>

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 441 Pages: 398-403 Published: NOV 1 2017

140. Muneeswaran, M.; Jang, Jae Won; Choi, Byung Chun; et al.

Structural, optical and multiferroic properties of pure and Dy modified YMnO<sub>3</sub>

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 22 Pages: 16788-16796 Published: NOV 2017

139. Qiang, Gang; Fang, Yifei; Zhang, Jincang

Two-dimensional antiferromagnetic perturbation and enhanced ferroelectricity in h-Yb<sub>1-x</sub>H<sub>x</sub>MnO<sub>3</sub>  
SOLID STATE COMMUNICATIONS Volume: 266 Pages: 46-49 Published: OCT 2017

138. Zhang, Zhenya; Wang, Saisai

High-temperature phase transition, coordination mechanism and magnetism in multiferroic YMnO<sub>3</sub> nanopowders

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 15 Pages: 10940-10950 Published: AUG 2017

137. Yang, L. P.; Zhang, A. M.; Dai, Y.; et al.

The effect of Dy-Fe co-doping on the structural and magnetic properties of h-YMnO<sub>3</sub>

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 12 Pages: 8872-8877 Published: JUN 2017

136. Chakraborty, Keka R.; Paul, Barnita; Shukla, R.; et al.

Revealing magnetic ordering and spin-phonon coupling in Y-1-xTbxMnO<sub>3</sub> (0.1 <= x <= 0.3) compounds

JOURNAL OF PHYSICS-CONDENSED MATTER 29 (15), 155804 APR 2017

135. Sarkar, Tanushree; Manna, Kaustuv; Elizabeth, Suja; et al.

Investigation of multiferroicity, spin-phonon coupling, and unusual magnetic ordering close to room temperature in LuMn<sub>0.5</sub>Fe<sub>0.5</sub>O<sub>3</sub>

JOURNAL OF APPLIED PHYSICS 121 (8), 084102 FEB 2017

134. Nguyen, TMH , Nguyen, TH, Chen, XB, Park, Y, Jung, YM, Lee, D, Noh, TW, Cheong, SW, Yang, IS

Correlation between magnon and magnetic symmetries of hexagonal RMnO<sub>3</sub> (R = Er, Ho, Lu)

133. Mustafa, G., Islam, M.U., Zhang, W., Arshad, M.I., Jamil, Y., Anwar, H., Murtaza, G., Hussain, M., Ahmad, M.  
Investigation of the Role of Ce<sup>3+</sup> Substituted Ions on Dielectric Properties of Co-Cr Ferrites Prepared by Co-precipitation Method  
JOURNAL OF ELECTRONIC MATERIALS Volume: 45 Issue: 11 Pages: 5830-5838 DOI: 10.1007/s11664-016-4783-z Published: NOV 2016
132. Biswas, T., Jain, M.  
Quasiparticle band structure and optical properties of hexagonal-YMnO<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 15 Article Number: 155102 DOI: 10.1063/1.4964690 Published: OCT 21 2016
131. Bekheet, M.F., Svoboda, I., Liu, N., Bayarjargal, L., Irran, E., Dietz, C., Stark, R.W., Riedel, R., Gurlo, A.  
Ferroelectric InMnO<sub>3</sub>: Growth of single crystals, structure and high-temperature phase transitions  
JOURNAL OF SOLID STATE CHEMISTRY Volume: 241 Pages: 54-63 DOI: 10.1016/j.jssc.2016.05.031 Published: SEP 2016
130. Paul, B., Chatterjee, S., Gop, S., Roy, A., Grover, V., Shukla, R., Tyagi, A.K.  
Evolution of lattice dynamics in ferroelectric hexagonal REInO<sub>3</sub> (RE = Ho, Dy, Tb, Gd, Eu, Sm) perovskites  
MATERIALS RESEARCH EXPRESS Volume: 3 Issue: 7 Article Number: UNSP 075703 DOI: 10.1088/2053-1591/3/7/075703  
Published: JUL 2016
129. Cheng, S., Li, M., Deng, S., Bao, S., Tang, P., Duan, W., Ma, J., Nan, C., Zhu, J.  
Manipulation of Magnetic Properties by Oxygen Vacancies in Multiferroic YMnO<sub>3</sub>  
ADVANCED FUNCTIONAL MATERIALS Volume: 26 Issue: 21 Pages: 3589-3598 DOI: 10.1002/adfm.201505031 Published: JUN 7 2016
128. Nguyen, D.T., Nguyen, M.T.T., Kim, H.-J.  
Optimization of the growth of epitaxial hexagonal YMnO<sub>3</sub> on different substrates via pulsed laser deposition  
New Physics: Sae Mulli 66(4), 398-401 DOI: 10.3938/NPSM.66.398 (2016)
127. Sim, H., Oh, J., Jeong, J., Le, M.D., Park, J.-G.  
Hexagonal RMnO<sub>3</sub>: a model system for two-dimensional triangular lattice antiferromagnets  
ACTA CRYSTALLOGRAPHICA SECTION B-STRUCTURAL SCIENCE CRYSTAL ENGINEERING AND MATERIALS Volume: 72 Pages: 3-19 DOI: 10.1107/S2052520615022106 Part: 1 Published: FEB 2016
126. Chai, J.-S., Tian, H., Mao, A.-J., Deng, L.-J., Kuang, X.-Y.  
Pressure effect on the properties of magnetic moments and phase transitions in YMnO<sub>3</sub> from first principles  
RSC ADVANCES Volume: 6 Issue: 59 Pages: 54041-54048 DOI: 10.1039/c6ra08539c Published: 2016
125. Romaguera-Barcelay, Y., Moreira, J.A., Almeida, A., Tavares, P.B., Fernandes, L., de la Cruz, J.P.  
Persistence of the orthorhombic phase in YMnO<sub>3</sub> hexagonal thin films  
FERROELECTRICS Volume: 498 Issue: 1 Special Issue: SI Pages: 80-84 DOI: 10.1080/00150193.2016.1168211 Part: 2 Published: 2016
124. Balamurugan, C., Lee, D.-W.  
Perovskite hexagonal YMnO<sub>3</sub> nanopowder as p-type semiconductor gas sensor for H<sub>2</sub>S detection  
Sensors and Actuators B: Chemical Volume 221, Pages 857–866, 31 December 2015
123. Li, S.-C., Zheng, Y.-L., Ma, S.-G., Gao, T., Ao, B.-Y.  
First-principles calculation of the electronic structure, chemical bonding, and thermodynamic properties of beta-US2  
CHINESE PHYSICS B Volume: 24 Issue: 12 Article Number: 127101 DOI: 10.1088/1674-1056/24/12/127101 Published: DEC 2015
122. Zhou, G., Gu, X., Xie, W., Gao, T., Peng, J., Wu, X.S.  
Polarized Raman Scattering Studies of Hexagonal YMnO<sub>3</sub> Single Crystal  
IEEE TRANSACTIONS ON MAGNETICS Volume: 51 Issue: 11 Article Number: 2501904 DOI: 10.1109/TMAG.2015.2438154  
Published: NOV 2015
121. Kozlenko, D.P., Dang, N.T., Kichanov, S.E., Lukin, E.V., Pashayev, A.M., Mammadov, A.I., Jabarov, S.H., Dubrovinsky, L.S., Liermann, H.-P., Morgenroth, W., Mehdiyeva, R.Z., Smotrakov, V.G., Savenko, B.N.  
Competing magnetic and structural states in multiferroic YMn<sub>2</sub>O<sub>5</sub> at high pressure  
PHYSICAL REVIEW B Volume: 92 Issue: 13 Article Number: 134409 DOI: 10.1103/PhysRevB.92.134409 Published: OCT 12 2015
120. Paul, Arpita; Sharma, Priya; Waghmare, Umesh V.  
Spin-orbit interaction, spin-phonon coupling, and anisotropy in the giant magnetoelastic effect in YMnO<sub>3</sub>  
PHYSICAL REVIEW B Volume: 92 Issue: 5 Article Number: 054106 Published: AUG 11 2015
119. Bouyanif, H.; Salah, A. M.; Zaghrouri, M.; et al.  
High-temperature lattice-dynamics evolution of YMnO<sub>3</sub> and YbMnO<sub>3</sub>  
PHYSICAL REVIEW B Volume: 91 Issue: 22 Article Number: 224104 Published: JUN 12 2015
118. Zhou, G., Gu, X., Peng, J., Wu, X.  
Behavior of atomic displacements and Mn-Mn coupling in YMnO<sub>3</sub> single crystal  
2015 IEEE MAGNETICS CONFERENCE (INTERMAG) Meeting Abstract: FT-06, art. No. 7157355 Published: 2015
117. Gupta, M.K., Mittal, R., Zbiri, M., Sharma, N., Rols, S., Schober, H., Chaplot, S.L.  
Spin-phonon coupling and high-temperature phase transition in multiferroic material YMnO<sub>3</sub>  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 44 Pages: 11717-11728 DOI: 10.1039/c5tc02096d Published: 2015

116. Shukla, R.; Gupta, Santosh K.; Grover, V.; et al.  
The role of reaction conditions in the polymorphic control of Eu<sup>3+</sup> doped YInO<sub>3</sub>: structure and size sensitive luminescence  
DALTON TRANSACTIONS Volume: 44 Issue: 23 Pages: 10628-10635 Published: 2015
115. Kumar, Manish; Choudhary, R. J.; Phase, D. M.  
Structural and Multiferroic Properties of Self Doped Yttrium Manganites YMn<sub>1+x</sub>O<sub>3</sub>  
AIP Conference Proceedings Volume: 1661 Article Number: 070005 Published: 2015
114. Satoh, Takuya; Iida, Ryugo; Higuchi, Takuya; et al.  
Writing and reading of an arbitrary optical polarization state in an antiferromagnet  
NATURE PHOTONICS Volume: 9 Issue: 1 Pages: 25-29 Published: JAN 2015
113. Shukla, Rakesh; Sayed, Farheen N.; Grover, Vinita; et al.  
Quest for Lead Free Relaxors in YIn<sub>1-x</sub>FexO<sub>3</sub> (0.0 <= x <= 1.0) System: Role of Synthesis and Structure  
INORGANIC CHEMISTRY Volume: 53 Issue: 19 Pages: 10101-10111 Published: OCT 6 2014
112. Patete, Jonathan M.; Han, Jinkyu; Tiano, Amanda L.; et al.  
Observation of Ferroelectricity and Structure-Dependent Magnetic Behavior in Novel One-Dimensional Motifs of Pure, Crystalline Yttrium Manganese Oxides  
JOURNAL OF PHYSICAL CHEMISTRY C 118 (37), pp. 21695-21705 SEP 18 2014
111. Basistyy, R.; Stanislavchuk, T. N.; Sirenko, A. A.; et al.  
Infrared-active optical phonons and magnetic excitations in the hexagonal manganites RMnO<sub>3</sub> (R = Ho, Er, Tm, Yb, and Lu)  
PHYSICAL REVIEW B 90 (2), Art. No. 024307 JUL 23 2014
110. Massa, Nestor E.; del Campo, Leire; Meneses, Domingos De Sousa; et al.  
Phonons and hybrid modes in the high and low temperature far infrared dynamics of hexagonal TmMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 26 (27), Art. No. 275901 JUL 9 2014
109. Iliescu, I.; Boudard, M.; Rapenne, L.; et al.  
MOCVD selective growth of orthorhombic or hexagonal YMnO<sub>3</sub> phase on Si(100) substrate  
APPLIED SURFACE SCIENCE 306, pp. 27-32 JUL 1 2014
108. Cano, A.  
Hidden order in hexagonal RMnO<sub>3</sub> multiferroics (R = Dy-Lu, In, Y, and Sc)  
PHYSICAL REVIEW B 89 (21), Art. No. 214107 JUN 17 2014
107. Chernyshev, V. A.; Petrov, V. P.; Nikiforov, A. E.  
Phonon Spectra of YTiO<sub>3</sub> and Y<sub>2</sub>Ti<sub>2</sub>O<sub>7</sub>: Ab Initio Calculations  
OPTICS AND SPECTROSCOPY 116 (6), 864-867 JUN 2014
106. Chaix, L.; de Brion, S.; Petit, S.; et al.  
Magneto- to Electroactive Transmutation of Spin Waves in ErMnO<sub>3</sub>  
PHYSICAL REVIEW LETTERS 112 (13), Art. No. 137201 APR 2 2014
105. Toulouse, C.; Liu, J.; Gallais, Y.; et al.  
Lattice and spin excitations in multiferroic h-YMnO<sub>3</sub>  
PHYSICAL REVIEW B 89 (9), Art. No. 094415 MAR 19 2014
104. Wang ShiFa; Zhang ChuanFei; Sun GuangAi; et al.  
Chelating agents role on phase formation and surface morphology of single orthorhombic YMn<sub>2</sub>O<sub>5</sub> nanorods via modified polyacrylamide gel route  
SCIENCE CHINA-CHEMISTRY 57 (3), pp. 402-408 MAR 2014
103. Nakayama, Masaaki; Furukawa, Yoshiaki; Maeda, Kazuhiro; et al.  
Correlation between the intra-atomic Mn<sup>3+</sup> photoluminescence and antiferromagnetic transition in an YMnO<sub>3</sub> epitaxial film  
APPLIED PHYSICS EXPRESS 7 (2), Art. No. 023002 FEB 2014
102. Xie, Miao; Winkler, Bjoern; Mao, Zhu; et al.  
Raman scattering from superhard rhenium diboride under high pressure  
APPLIED PHYSICS LETTERS 104 (1), Art. No. 011904 JAN 6 2014
101. Jandl, S.; Mansouri, S.; Vermette, J.; et al.  
Study of crystal-field excitations and infrared active phonons in the multiferroic hexagonal DyMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 25 (47), Art. No. 475403 NOV 27 2013
100. Shukla, Rakesh; Grover, Vinita; Deshpande, S. K.; et al.  
Synthesis and Structural and Electrical Investigations of a Hexagonal Y<sub>1-x</sub>GdxInO<sub>3</sub> (0.0 <= x <= 1.0) System Obtained via Metastable C-Type Intermediates  
INORGANIC CHEMISTRY Volume: 52 Issue: 22 Pages: 13179-13187 Published: NOV 18 2013
99. Du, Yi; Wang, Xiaolin; Chen, Dapeng; et al.  
Manipulation of domain wall mobility by oxygen vacancy ordering in multiferroic YMnO<sub>3</sub>  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 15 (46), pp. 20010-20015 2013

98. Lin, C., Liu, J., Li, Y., Li, X., Li, R.  
 Pressure-induced structural and vibrational evolution in ferroelectric RInO<sub>3</sub> (R=Eu, Gd,Dy)  
*Solid State Communications* 173, pp. 51-55, 2013
97. Raneesh, B., Saha, A., Kalarikkal, N.  
 Effect of gamma radiation on the structural, dielectric and magnetoelectric properties of nanostructured hexagonal YMnO<sub>3</sub>  
*Radiation Physics and Chemistry* 89, pp. 28-32, 2013
96. Kumar, M., Choudhary, R.J., Phase, D.M.  
 Valence band structure of YMnO<sub>3</sub> and the spin orbit coupling  
*Applied Physics Letters* 102 (18), art. no. 182902, 2013
95. Namdeo, S., Sinha, A.K., Singh, M.N., Awasthi, A.M.  
 Investigation of charge states and multiferroicity in Fe-doped h-YMnO<sub>3</sub>  
*Journal of Applied Physics* 113 (10), art. no. 104101, 2013
94. Chen, X.-B., Minh, H.N.T., Yang, I.-S., Lee, D., Noh, T.-W.  
 A raman study of the origin of oxygen defects in hexagonal manganite thin films  
*Chinese Physics Letters* 29 (12), 126103, 2012
93. Liu, J., Toulouse, C., Rovillain, P., Cazayous, M., Gallais, Y., Measson, M.-A., Lee, N., (...), Sacuto, A.  
 Lattice and spin excitations in multiferroic h-YbMnO<sub>3</sub>  
*Physical Review B - Condensed Matter and Materials Physics* 86 (18), art. no. 184410, 2012
92. El Amrani, M., Ta Phuoc, V., Ammar, M.R., Zaghloul, M., Gervais, F.  
 Structural modifications of disordered YMn<sub>1-x</sub>In<sub>x</sub>O<sub>3</sub> solid solutions evidenced by infrared and Raman spectroscopies  
*Solid State Sciences* 14 (9), pp. 1315-1320, 2012
91. Rushchanskii, K.Z., Leai, M.  
 Ab initio phonon structure of h-YMnO<sub>3</sub> in low-symmetry ferroelectric phase  
*Ferroelectrics* 426 (1), pp. 90-96, 2012.
90. Standard, E.C., Stanislavchuk, T., Sirenko, A.A., Lee, N., Cheong, S.-W.  
 Magnons and crystal-field transitions in hexagonal RMnO<sub>3</sub> (R = Er, Tm, Yb, Lu) single crystals  
*Physical Review B - Condensed Matter and Materials Physics* 85 (14), art. no. 144422, 2012.
89. Vermette, J., Jandl, S., Orlita, M., Gospodinov, M.M.  
 Role of the apical oxygen in the low-temperature magnetoelectric effect in RMnO<sub>3</sub> (R=Ho and Lu)  
*Physical Review B - Condensed Matter and Materials Physics* 85 (13), art. no. 134445, 2012.
88. Jiang, N., Zhang, X.  
 Atomistic simulation of Mn-site substitution in multiferroic h-YMnO<sub>3</sub>  
*Journal of Physics Condensed Matter* 24 (23), art. no. 235402, 2012.
87. Vieira, L.G., Ribeiro, J.L., Santo, O., Tavares, P.B.  
 Infrared anisotropy averaging in polycrystalline samples and resonant scattering: The example of YMnO<sub>3</sub>  
*Journal of Optics* 14 (4) , art. no. 045707, 2012.
86. Ji, Y., Cao, J., Zhu, Z., Li, J., Wang, Y., Tu, C.  
 Synthesis and white light emission of Dy<sup>3+</sup> ions doped hexagonal structure YAlO<sub>3</sub> nanocrystalline  
*Journal of Luminescence* 132 (3) , pp. 702-706, 2012.
85. Prikockyte, A., Bilc, D., Hermet, P., Dubourdieu, C., Ghosez, P.  
 First-principles calculations of the structural and dynamical properties of ferroelectric YMnO<sub>3</sub>  
*Physical Review B - Condensed Matter and Materials Physics* 84 (21) , art. no. 214301 (2011).
84. Zaghloul, M., Ta Phuoc, V.  
 Phonon dynamics of hexagonal YMn<sub>1-x</sub>FexO<sub>3</sub>  
*Solid State Communications* 151 (22), 1704-1707 (2011).
83. Hien, N.T.M., Oh, S.-Y., Chen, X.-B., Lee, D., Jang, S.-Y., Noh, T.W., Yang, I.-S.  
 Raman scattering studies of hexagonal rare-earth RMnO<sub>3</sub> (R = Tb, Dy, Ho, Er) thin films  
*Journal of Raman Spectroscopy* 42 (9), pp. 1774-1779, 2011.
82. Zhou Shuang; Mao Shao-Yu; Xie Zhao-Xiong; et al.  
 Preparation and gas sensing properties of Fe-doped yttrium manganate nanoparticles  
*SENSORS AND ACTUATORS B-CHEMICAL* 156 (1) Pages: 23-27, AUG 10 2011.
81. Cheng, Z.X., Zhao, H.Y., Du, Y., Kimura, H., Ozawa, K., Wang, X.L.  
 Exchange bias in multiferroic BiFeO(3) and YMnO(3) multilayers: One more parameter for magnetoelectric manipulation  
*SCRIPTA MATERIALIA* 65 (3) Pages: 249-252, AUG 2011.
80. Gao, P., Chen, Z., Tyson, T.A., Wu, T., Ahn, K.H., Liu, Z., Tappero, R., (...), Cheong, S.-W.  
 High-pressure structural stability of multiferroic hexagonal RMnO(3) (R = Y, Ho, Lu)  
*PHYSICAL REVIEW B* 83 (22) Article Number: 224113, JUN 27 2011.

79. Zhang ChengGuo; Zhang XiaoZhong; Sun YongHao; et al.  
 Atomistic simulation of dynamical and defect properties of multiferroic hexagonal YMnO(3)  
 SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY 54 (5) Pages: 836-840, MAY 2011.
78. Rusakov, D.A., Belik, A.A., Kamba, S., Savinov, M., Nuzhnny, D., Kolodiazhnyi, T., Yamaura, K., (...), Kroupa, J.  
 Structural Evolution and Properties of Solid Solutions of Hexagonal InMnO(3) and InGaO(3)  
 INORGANIC CHEMISTRY 50 (8) Pages: 3559-3566, APR 18 2011.
77. Zhang Chengguo; Zhang X.; Sun Yonghao; et al.  
 Atomistic simulation of Y-site substitution in multiferroic h-YMnO(3)  
 PHYSICAL REVIEW B 83 (5) Article Number: 054104, FEB 15 2011.
76. Vermette, J., Jandl, S., Mukhin, A.A., Ivanov, V.Y., Balbashov, A., Gospodinov, M.M., Pinsard-Gaudart, L.  
 Raman study of the antiferromagnetic phase transitions in hexagonal YMnO(3) and LuMnO(3)  
 JOURNAL OF PHYSICS-CONDENSED MATTER 22 (35) Article Number: 356002, SEP 8 2010.
75. Nguyen Thi Minh Hien; Chen Xiang-Bai; Luc Huy Hoang; et al.  
 Raman scattering studies of the magnetic ordering in hexagonal HoMnO(3) thin films  
 JOURNAL OF RAMAN SPECTROSCOPY 41 (9) Pages: 983-988, SEP 2010.
74. Das Raja; Jaiswal Adhish; Adyanthaya Suguna; et al.  
 Origin of Magnetic Anomalies below the Neel Temperature in Nanocrystalline LuMnO(3)  
 JOURNAL OF PHYSICAL CHEMISTRY C 114 (28) Pages: 12104-12109, JUL 22 2010.
73. Jang, K.-J., Lee, H.-G., Lee, S., Ahn, J., Ahn, J.S., Hur, N., Cheong, S.-W.  
 Strong spin-lattice coupling in multiferroic hexagonal manganite YMnO(3) probed by ultrafast optical spectroscopy  
 APPLIED PHYSICS LETTERS 97 (3) Article Number: 031914, JUL 19 2010.
72. Goian, V., Kamba, S., Kadlec, C., Nuzhnny, D., Kužel, P., Agostinho Moreira, J., Almeida, A., Tavares, P.B.  
 THz and infrared studies of multiferroic hexagonal Y<sub>1-x</sub>EuxMnO<sub>3</sub> (x=0-0.2) ceramics  
 PHASE TRANSITIONS 83 (10-11) Pages: 931-941, 2010.
71. Kovachev, S., Wesselinowa, J.M.  
 Impact of the spin-phonon interaction on the phonon properties of multiferroic hexagonal RMnO<sub>3</sub> thin films  
 Journal of Physics Condensed Matter 22 (25), art. no. 255901 (2010).
70. Liu, Y.-F., Wang, B., Zheng, H.-W., Liu, X.-Y., Gu, Y.-Z., Zhang, W.-F.  
 Temperature-dependent raman spectrum of hexagonal YMnO<sub>3</sub> films synthesized by chemical solution method  
 Chinese Physics Letters 27 (5), art. no. 056801 (2010).
69. Dixit, A., Smith, A.E., Subramanian, M.A., Lawes, G.  
 Suppression of multiferroic order in hexagonal YMn<sub>1 - x</sub>In<sub>x</sub>O<sub>3</sub> ceramics  
 Solid State Communications 150 (15-16), pp. 746-750 (2010).
68. Jang, K.-J., Lim, J., Ahn, J., Kim, J.-H., Yee, K.-J., Ahn, J.S., Cheong, S.-W.  
 Ultrafast IR spectroscopic study of coherent phonons and dynamic spin-lattice coupling in multiferroic LuMnO<sub>3</sub>  
 New Journal of Physics 12, art. no. 023017 (2010).
67. Wang, W.-R., Song, G.-X., Zhao, Y., Han, X.-Y.  
 Raman active phonons in RMnO<sub>3</sub> (R=La, Pr, Nd, Sm ) manganites  
 Proceedings of SPIE - The International Society for Optical Engineering 7282, art. no. 72822R (2009).
66. Choithrani, R., Rao, M.N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
 Lattice dynamics of manganites RMnO<sub>3</sub> (R = Sm, Eu or Gd): Instabilities and coexistence of orthorhombic and hexagonal phases  
 New Journal of Physics 11, art. no. 073041 (2009).
65. Delaney, K.T., Mostovoy, M., Spaldin, N.A.  
 Superexchange-Driven Magnetoelectricity in Magnetic Vortices  
 PHYSICAL REVIEW LETTERS Volume: 102 Issue: 15 Article Number: 157203 DOI: 10.1103/PhysRevLett.102.157203 Published:  
 APR 17 2009
64. Wang, K.F., Liu, J.-M., Ren, Z.F.  
 Multiferroicity: The coupling between magnetic and polarization orders  
 Advances in Physics 58 (4), pp. 321-448 (2009).
63. Zhong, C., Jiang, Q., Zhang, H., Jiang, X.  
 Effect of spin frustration and spin-orbit coupling on the ferroelectric polarization in multiferroic YMnO<sub>3</sub>  
 Applied Physics Letters 94 (22), art. no. 224107 (2009).
62. Lou, S.-T., Zimmermann, F.M., Bartynski, R.A., Hur, N., Cheong, S.-W.  
 Femtosecond laser excitation of coherent optical phonons in ferroelectric LuMnO<sub>3</sub>  
 Physical Review B - Condensed Matter and Materials Physics 79 (21), art. no. 214301 (2009).
61. Loshkareva, N.N., Moskvin, A.S., Balbashov, A.M.  
 Optical 4f-4f transitions in multiferroic HoMnO<sub>3</sub>  
 Physics of the Solid State 51 (5), pp. 930-932 (2009).

60. Zhong, C., Jiang, X., Yu, H., Jiang, Q., Fang, J., Li, Z.  
 First-principles studies of the magnetic structure and exchange interactions in the frustrated multiferroic YMnO<sub>3</sub>  
*Journal of Magnetism and Magnetic Materials* 321 (9), pp. 1260-1265 (2009).
59. Fukumura, H., Hasuike, N., Harima, H., Kisoda, K., Fukae, K., Yoshimura, T., Fujimura, N.  
 Spin-phonon coupling in multiferroic YbMnO<sub>3</sub> studied by Raman scattering  
*Journal of Physics Condensed Matter* 21 (6), art. no. 064218 (2009).
58. Talbayev, D., Laforge, A.D., Trugman, S.A., Hur, N., Taylor, A.J., Averitt, R.D., Basov, D.N.  
 Magnetic Exchange Interaction between Rare-Earth and Mn Ions in Multiferroic Hexagonal Manganites  
*PHYSICAL REVIEW LETTERS* Volume: 101 Issue: 24 Article Number: 247601 DOI: 10.1103/PhysRevLett.101.247601 Published:  
 DEC 12 2008
57. Zaghloul, M., Ta Phuoc, V., Souza, R.A., Gervais, M.  
 Polarized reflectivity and lattice dynamics calculation of multiferroic YMnO<sub>3</sub>  
*Physical Review B - Condensed Matter and Materials Physics* 78 (18), art. no. 184305 (2008).
56. Vermette, J., Jandl, S., Gospodinov, M.M.  
 Raman study of spin-phonon coupling in ErMnO<sub>3</sub>  
*Journal of Physics Condensed Matter* 20 (42), art. no. 425219 (2008).
55. Petit, S., Pailhès, S., Fabrèges, X., Hennion, M., Moussa, F., Pinsard, L., Regnault, L.-P., Ivanov, A.  
 Spin lattice coupling in multiferroic hexagonal YMnO<sub>3</sub>  
*PRAMANA-JOURNAL OF PHYSICS* Volume: 71 Issue: 4 Special Issue: SI Pages: 869-876 Published: OCT 2008
54. Lü, W., Ma, X., Zhou, H., Chen, G., Li, J., Zhu, Z., You, Z., Tu, C.  
 White up-conversion luminescence in rare-earth-ion-doped YAlO<sub>3</sub> nanocrystals  
*Journal of Physical Chemistry C* 112 (38), pp. 15071-15074 (2008).
53. Möller, A., Löw, U., Taetz, T., Kriener, M., André, G., Damay, F., Heyer, O., (...), Mydosh, J.A.  
 Structural domain and finite-size effects of the antiferromagnetic S=1/2 honeycomb lattice in InCu<sub>2/3</sub>V<sub>1/3</sub>O<sub>3</sub>  
*Physical Review B - Condensed Matter and Materials Physics* 78 (2), art. no. 024420 (2008).
52. Feng, S.M., Wang, L.J., Zhu, J.L., Li, F.Y., Yu, R.C., Jin, C.Q., Wang, X.H., Li, L.T.  
 Pressure-induced phase transition in Ho<sub>0.8</sub>Dy<sub>0.2</sub>MnO<sub>3</sub> multiferroic compound  
*Journal of Applied Physics* 103 (2), art. no. 026102 (2008).
51. Petit, S., Moussa, F., Hennion, M., Pailhès, S., Pinsard-Gaudart, L., Ivanov, A.  
 Spin phonon coupling in hexagonal multiferroic YMnO<sub>3</sub>  
*PHYSICAL REVIEW LETTERS* Volume: 99 Issue: 26 Article Number: 266604 DOI: 10.1103/PhysRevLett.99.266604 Published: DEC  
 31 2007
50. Fukumura, H., Hasuike, N., Harima, H., Kisoda, K., Fukae, K., Takahashi, T., Yoshimura, T., Fujimura, N.  
 Spin-coupled phonons in multiferroic YbMnO<sub>3</sub> epitaxial films by Raman scattering  
*Journal of Physics: Conference Series* 92 (1), art. no. 012126 (2007).
49. Nébert, G., Pollet, M., Marinelli, S., Blake, G.R., Meetsma, A., Palstra, T.T.M.  
 Experimental evidence for an intermediate phase in the multiferroic YMnO<sub>3</sub>  
*Journal of Physics Condensed Matter* 19 (46), art. no. 466212 (2007)
48. Poirier, M., Laliberté, F., Pinsard-Gaudart, L., Revcolevschi, A.  
 Magnetoelastic coupling in hexagonal multiferroic YMnO<sub>3</sub> using ultrasound measurements  
*Physical Review B - Condensed Matter and Materials Physics* 76 (17), art. no. 174426 (2007)
47. Ribeiro, J.L.  
 Symmetry and magnetically driven ferroelectricity in rare-earth manganites RMnO<sub>3</sub> (R=Gd,Tb,Dy)  
*Physical Review B - Condensed Matter and Materials Physics* 76 (14), art. no. 144417 (2007)
46. Wesselinowa, J.M., Kovachev, St.  
 Theoretical study of the phonon spectra of hexagonal multiferroics RMnO<sub>3</sub>  
*Journal of Physics Condensed Matter* 19 (38), art. no. 386218 (2007)
45. Fukumura, H., Matsui, S., Harima, H., Kisoda, K., Takahashi, T., Yoshimura, T., Fujimura, N.  
 Raman scattering studies on multiferroic YMnO<sub>3</sub>  
*Journal of Physics Condensed Matter* 19 (36), art. no. 365239 (2007)
44. Fukumura, H., Matsui, S., Harima, H., Takahashi, T., Itoh, T., Kisoda, K., Tamada, M., (...), Miyayama, M.  
 Observation of phonons in multiferroic BiFeO<sub>3</sub> single crystals by Raman scattering  
*Journal of Physics Condensed Matter* 19 (36), art. no. 365224 (2007)
43. Rini, E.G., Rao, M.N., Chalopin, S.L., Gaur, N.K., Singh, R.K.  
 Phonon dynamics of lanthanum manganite LaMnO<sub>3</sub> using an interatomic shell model potential  
*Physical Review B - Condensed Matter and Materials Physics* 75 (21), art. no. 214301 (2007)

42. Cho, D.-Y., Kim, J.-Y., Park, B.-G., Rho, K.-J., Park, J.-H., Noh, H.-J., Kim, B.J., Oh, S.-J., Park, H.-M., Ahn, J.-S., Ishibashi, H., Cheong, S.-W., Lee, J.H., Murugavel, P., Noh, T.W., Tanaka, A., Jo, T.  
 Ferroelectricity driven by Y d(0)-ness with rehybridization in YMnO<sub>3</sub>  
 PHYSICAL REVIEW LETTERS Volume: 98 Issue: 21 Article Number: 217601 DOI: 10.1103/PhysRevLett.98.217601 Published: MAY 25 2007
41. Lee, C.H., Kim, S.H., Choi, J.Y., Kim, J.  
 Interface Mn nanoclusters in YMnO<sub>3</sub>/Si ferroelectric gate structures revealed by electron magnetic resonance  
*Current Applied Physics* 7 (1), pp. 10-12 (2007)
40. Lee, C.H., Kim, S.H., Choi, J.Y., Kim, J.  
 Interface Mn nanoclusters in YMnO<sub>3</sub>/Si ferroelectric gate structures revealed by electron magnetic resonance  
*Current Applied Physics* 7 (1), pp. 10-12 (2006)
39. Zhou, J.-S., Goodenough, J.B., Gallardo-Amores, J.M., Morán, E., Alario-Franco, M.A., Caudillo, R.  
 Hexagonal versus perovskite phase of manganite RMn O<sub>3</sub> (R=Y, Ho, Er, Tm, Yb, Lu)  
*Physical Review B - Condensed Matter and Materials Physics* 74 (1), art. no. 014422 (2006)
38. Wang WR, Xu DP, Su WH  
 Raman shift of RMnO<sub>3</sub> (R = La, Pr, Nd, Sm) manganites  
*CHINESE PHYSICS LETTERS* 22 (3): 705-707 MAR 2005
37. Fiebig M, Pavlov VV, Pisarev RV  
 Second-harmonic generation as a tool for studying electronic and magnetic structures of crystals: review  
*JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS* 22 (1): 96-118 JAN 2005
36. Zhang, T., Branford, W.R., Trodahl, H.J., Sharma, A., Rager, J., MacManus-Driscoll, J.L., Cohen, L.F.  
 Raman spectroscopy of highly aligned thin films of Sr<sub>2</sub>FeMoO<sub>6</sub>  
*Journal of Raman Spectroscopy* 35 (12), pp. 1081-1085 (2004)
35. Lee CH, Han A, Kim J  
 Electron magnetic resonance study of a YMnO<sub>3</sub>/Si ferroelectric gate structure  
*JOURNAL OF THE KOREAN PHYSICAL SOCIETY* 45 (4): 1123-1126 OCT 2004
34. Sharma PA, Ahn JS, Hur N, et al.  
 Thermal conductivity of geometrically frustrated, ferroelectric YMnO<sub>3</sub>: Extraordinary spin-phonon interactions  
*PHYSICAL REVIEW LETTERS* 93 (17): Art. No. 177202 OCT 22 2004
33. Zhang MF, Liu JM, Liu ZG  
 Microstructural characterization of nanosized YMnO<sub>3</sub> powders: the size effect  
*APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING* 79 (7): 1753-1756 NOV 2004
32. Tian HW, Zang JF, Ding T, et al.  
 The evidence of phase separation in perovskite manganites above T-c  
*JOURNAL OF WUHAN UNIVERSITY OF TECHNOLOGY-MATERIALS SCIENCE EDITION* 19 (2): 62-63 JUN 2004
31. Van Aken BB, Palstra TTM, Filippetti A, et al.  
 The origin of ferroelectricity in magnetoelectric YMnO<sub>3</sub>  
*NATURE MATER* 3 (3): 164-170 MAR 2004
30. Staneva A, Gattef E, Dimitriev Y, et al.  
 Magnetic materials containing LaSr manganite phase  
*SOLID STATE SCI* 6 (1): 47-51 JAN 2004
29. Wu CT, Lin BN, Ku HC, et al.  
 Variation of triangular antiferromagnetic order in ferroelectromagnetic Sc<sub>1-x</sub>Lu<sub>x</sub>MnO<sub>3</sub> manganites  
*CHINESE J PHYS* 41 (6): 652-661 DEC 2003
28. Souchkov AB, Simpson JR, Quijada M, et al.  
 Exchange interaction effects on the optical properties of LuMnO<sub>3</sub>  
*PHYS REV LETT* 91 (2): Art. No. 027203 JUL 11 2003
27. Yoo, D.C., Lee, J.Y., Kim, I.S., Kim, Y.T.  
 Crystallization behavior and ferroelectric properties of YMnO<sub>3</sub> thin films on Si (100) substrates  
*Materials Research Society Symposium - Proceedings* 688, pp. 73-77 (2002)
26. Park J, Kong U, Pirogov A, et al.  
 Neutron-diffraction studies of YMnO<sub>3</sub>  
*APPL PHYS A-MATER* 74: S796-S798 Part 1 Suppl. S DEC 2002
25. Jiang Q, Zhong CG  
 The magnetoelectric properties study for system with the coexistence of the ferroelectric and antiferromagnetic orders  
*PHYS LETT A* 306 (2-3): 166-174 DEC 30 2002
24. Takahashi J, Kohn K, Hanamura E  
 Luminescence spectrum from hexagonal YMnO<sub>3</sub>

23. Kimel AV, Pisarev RV, Bentivegna F, et al.  
Ultrafast optical spectroscopy of hexagonal manganites RMnO<sub>3</sub> (R = Y, Er, Sc)  
FERROELECTRICS 279: 135-146 2002
22. Takahashi J, Hagita K, Kohn K, et al.  
Anomalously broad Raman scattering spectrum due to two-magnon excitation in hexagonal YMnO<sub>3</sub>  
PHYS REV LETT 89 (7): Art. No. 076404 AUG 12 2002
21. Zhong CG, Jiang Q  
Theoretical study on perpendicular magnetoelectric coupling in ferroelectromagnet system  
SOLID STATE COMMUN 122 (11): 601-605 (2002).
20. Filippetti A, Hill NA  
Coexistence of magnetism and ferroelectricity in perovskites  
PHYS REV B 65 (19): Art. No. 195120 MAY 15 2002
19. Yoshii K, Abe H  
Magnetic properties of LnMnO(3) (Ln=Ho, Er,Tm,Yb, and Lu)  
J SOLID STATE CHEM 165 (1): 131-135 APR 2002
18. Yoo DC, Lee JY, Kim IS, et al.  
Crystallization behavior of ferroelectric YMnO<sub>3</sub> thin films on Si(100) substrates  
J CRYST GROWTH 234 (2-3): 454-458 JAN 2002
17. Iizuka-Sakano, T., Hanamura, E., Tanabe, Y.  
Second-harmonic-generation spectra of the hexagonal manganites RMnO<sub>3</sub>  
Journal of Physics Condensed Matter 13 (13), pp. 3031-3055 (2001)
16. Kimel AV, Pisarev RV, Bentivegna F, et al.  
Time-resolved nonlinear optical spectroscopy of Mn<sup>3+</sup> ions in rare-earth hexagonal manganites RMnO<sub>3</sub> (R = Sc, Y, Er)  
PHYS REV B 64 (20): art. no. 201103 NOV 15 2001
15. Yoo DC, Lee JY, Kim IS, et al.  
Effects of post-annealing on the microstructure and ferroelectric properties of YMnO<sub>3</sub> thin films on Si  
J CRYST GROWTH 233 (1-2): 243-247 NOV 2001
14. Degenhardt C, Fiebig M, Frohlich D, et al.  
Nonlinear optical spectroscopy of electronic transitions in hexagonal manganites  
APPL PHYS B-LASERS O 73 (2): 139-144 AUG 2001
13. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons and light scattering in RMnO<sub>3</sub> (R=La, Pr, Nd, Ho, ErTb and Y) orthorhombic and hexagonal manganites  
J ALLOY COMPD 323: 494-497 JUL 12 2001
12. Tomuta DG, Ramakrishnan S, Nieuwenhuys GJ, et al.  
The magnetic susceptibility, specific heat and dielectric constant of hexagonal YMnO<sub>3</sub>, LuMnO<sub>3</sub> and ScMnO<sub>3</sub>  
J PHYS-CONDENS MAT 13 (20): 4543-4552 MAY 21 2001
11. Qian MC, Dong JM, Xing DY  
Optical properties of the ferroelectromagnet YMnO(3) studied from first principles  
PHYS REV B 63 (15): art. no. 155101 MAR 22 2001
10. Munoz A, Alonso JA, Martinez-Lope MJ, et al.  
Magnetic structure of hexagonal RMnO<sub>3</sub> (R = Y, Sc): Thermal evolution from neutron powder diffraction data  
PHYS REV B 62: (14) 9498-9510 OCT 1 2000
9. Yi WC, Kwun SI, Yoon JG  
Study on the electronic structure of hexagonal and orthorhombic YMnO<sub>3</sub>  
J PHYS SOC JPN 69: (8) 2706-2707 AUG 2000
8. Qian MC, Dong JM, Zheng QQ  
Electronic structure of the ferroelectromagnet YMnO<sub>3</sub>  
PHYS LETT A 270: (1-2) 96-101 MAY 22 2000
7. Sa D, Valenti R, Gros C  
A generalized Ginzburg-Landau approach to second harmonic generation  
EUR PHYS J B 14: (2) 301-305 MAR 2000
6. Kim SH, Lee SH, Kim TH, et al.  
Growth, ferroelectric properties, and phonon modes of YMnO<sub>3</sub> single crystal  
CRYST RES TECHNOL 35: (1) 19-27 2000
5. Lee HN, Kim IS, Kim YT, et al.  
Ferroelectric switching properties of highly c-axis oriented YMnO<sub>3</sub> gate capacitors

4. Pavlov, VV, Pisarev, RV, Frohlich, D, Leute, S  
Second-harmonic spectroscopy of the ferroelectric antiferromagnet YMnO<sub>3</sub>  
LASER SPECTROSCOPY AND OPTICAL DIAGNOSTICS: NOVEL TRENDS AND APPLICATIONS IN LASER CHEMISTRY,  
BIOPHYSICS, AND BIOMEDICINE - ICONO'98 Book Series: PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL  
INSTRUMENTATION ENGINEERS (SPIE) Volume: 3732 Pages: 72-80 DOI: 10.1117/12.339995 Published: 1999

3. Roy C, Budhani RC  
Raman, infrared and x-ray diffraction study of phase stability in La<sub>1-x</sub>Ba<sub>x</sub>MnO<sub>3</sub> doped manganites  
J APPL PHYS 85: (6) 3124-3131 MAR 15 1999

2. Pavlov VV, Pisarev RV, Frohlich D, et al.  
Nonlinear optical spectroscopy of electronic transitions and domains in ferroelectric antiferromagnet YMnO<sub>3</sub>  
FERROELECTRICS 218: (1-4) 375-380 1998

1. Frohlich D, Leute S, Pavlov VV, et al.  
Nonlinear optical spectroscopy of the two-order-parameter compound YMnO<sub>3</sub>  
PHYS REV LETT 81: (15) 3239-3242 OCT 12 1998

21. "Doping Effects in the Sr<sub>14</sub>Cu<sub>24</sub>O<sub>4</sub> - type structure: A Raman scattering study"  
M. V. Abrashev, C. Thomsen and M. Surtchev  
Physica C 280 (1997) 297 - 303.

26. Khan, A., Jiménez, C., Chaix-Pluchery, O., Roussel, H., Deschanvres, J.L.  
In-situ Raman spectroscopy and X-ray diffraction studies of the structural transformations leading to the SrCu<sub>2</sub>O<sub>2</sub> phase from strontium-copper oxide thin films deposited by metalorganic chemical vapor deposition  
Thin Solid Films 541, pp. 136-141, 2013

25. Naruse, K., Kawamata, T., Ohno, M., Matsuoka, Y., Kumagai, K., Koike, Y.  
Thermal conductivity due to magnons in high-quality single crystals of the two-leg spin-ladder system (Ca,Sr,La)<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>  
Solid State Communications 154 (1), pp. 60-63, 2013

24. Cheng Li; Xiong Rui; Shi Jing  
Raman scattering study of the spin ladder compound Sr(14) Cu(24) O(41+delta)  
ACTA PHYSICA SINICA 59 (7) Pages: 5078-5084, JUL 2010.

23. Wang, J., Lin, Y., Zou, H., Pu, S., Shi, J.  
Structural transition, electrical and magnetic properties of the B-site Co doped Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub> compounds  
Journal of Physics Condensed Matter 21 (7), art. no. 075601 (2009).

22. Hu, N, Xiong, R, Wei, W, Wang, ZY, Wang, LL, Yu, ZX, Tang, WF, Shi, J  
Raman scattering study of the spin ladder compound Sr<sub>14</sub>(Cu<sub>1-y</sub>Fey)24O<sub>41</sub>  
ACTA PHYSICA SINICA Volume: 57 Issue: 8 Pages: 5267-5271 Published: AUG 2008

21. Zeng, Y., Pan, F.-S., Yu, Z.-X., Shi, J.  
Phase evolution of (14-x)SrCO<sub>3</sub>-xCaCO<sub>3</sub>-24CuO system under ambient pressure below 1000°C  
Cailiao Kexue yu Gongyi/Material Science and Technology 15 (3), pp. 417-420 (2007)

20. Devereaux, T.P., Hackl, R.  
Inelastic light scattering from correlated electrons  
Reviews of Modern Physics 79 (1), pp. 175-233 (2007)

19. Holmlund, J., Andreasson, J., Knee, C.S., Bäckström, J., Käll, M., Osada, M., Noji, T., (...), Börjesson, L.  
Resonant two-phonon Raman scattering as a probe of hole crystal formation in Sr<sub>14</sub>-xCaxCu<sub>24</sub>O<sub>41</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (13), art. no. 134502 (2006)

18. Zeng Y, Pan FS, Yu ZX, et al.  
(14-x)SrCO<sub>3</sub>-xCaCO<sub>3</sub>(3)-24CuO system to synthesize spin-ladder compounds Sr<sub>14</sub>-xCaxCu<sub>24</sub>O<sub>41</sub> using DTA and XRD techniques  
CHINESE JOURNAL OF CHEMICAL PHYSICS 18 (4): 614-618 AUG 2005

17. Gossling A, Kuhlmann U, Thomsen C, et al.  
Magnetic excitations in SrCu<sub>2</sub>O<sub>3</sub>: A Raman scattering study  
PHYSICAL REVIEW B 67 (5): Art. No. 052403 FEB 1 2003

16. Zeng Y, Shi J, Yu ZX, et al.  
Thermal behavior during the synthesis of spin-ladder compound Sr<sub>14</sub>-xCaxCu<sub>24</sub>O<sub>41</sub>  
MATERIALS LETTERS 59 (6): 662-666 MAR 2005

15. Lemmens P, Guntherodt G, Gros C  
Magnetic light scattering in low-dimensional quantum spin systems  
PHYS REP 375 (1): 1-103 FEB 2003

14. Natsume Y, Tada S, Suzuki T

The origin of the asymmetric shape for the exchange-scattering peak of 2 Delta(g) in the ladder antiferromagnet CaV<sub>2</sub>O<sub>5</sub> with the singlet ground state  
J PHYS CHEM SOLIDS 63 (6-8): 1361-1364 JUN-AUG 2002

13. Schmidt KP, Knetter C, Uhrig GS  
Raman response in antiferromagnetic two-leg S=1/2 Heisenberg ladders  
EUROPHYS LETT 56 (6): 877-883 DEC 2001

12. Tada S, Natsume Y, Suzuki T  
Numerical study of magnetic Raman scattering spectra in ladder antiferromagnets - Exchange scatterings from the singlet ground state  
J PHYS SOC JPN 70 (8): 2443-2447 AUG 2001

11. Cabra DC, Dobry A, Rossini GL  
Nonperturbative effective-field theory for two-leg antiferromagnetic spin ladders  
PHYS REV B 63 (14): art. no. 144408 APR 1 2001

10. Nucker N, Merz M, Kuntscher CA, et al.  
Hole distribution in (Sr,Ca,Y,La)(14)Cu<sub>24</sub>O<sub>41</sub> ladder compounds studied by x-ray absorption spectroscopy  
PHYS REV B 62: (21) 14384-14392 DEC 1 2000

9. Strzeszewski J, Szymczak H, Leonyuk L, et al.  
Raman scattering study of (Sr,Ca)(10)Cu<sub>17</sub>O<sub>29</sub> single crystals  
ACTA PHYS POL A 98: (4) 429-439 OCT 2000

8. Origrac E, Citro R  
Raman scattering cross section of spin ladders  
PHYS REV B 62: (13) 8622-8625 OCT 1 2000

7. Ogita N, Fujita Y, Sakaguchi Y, et al.  
Raman scattering study of Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
J PHYS SOC JPN 69: (8) 2684-2690 AUG 2000

6. Popovic ZV, Konstantinovic MJ, Ivanov VA, et al.  
Optical properties of the spin-ladder compound Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>  
PHYS REV B 62: (8) 4963-4972 AUG 15 2000

5. Osada, M, Kakihana, M, Nagai, I, Noji, T.; Adachi, T, Koike, Y, Backstrom, J, Kall, M, Borjesson, L  
Charge and spin dynamics in spin-ladder Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub> investigated by Raman scattering  
ADVANCES IN SUPERCONDUCTIVITY XII Pages: 188-190 Published: 2000

4. Osada M, Kakihana M, Nagai I, et al.  
Raman-active phonons and their doping dependence in spin-ladder Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>  
PHYSICA C 338: (1-2) 161-165 AUG 1 2000

3. Nagai, I., Osada, M., Kakihana, M., Noji, T., Adachi, T., Koike, Y.  
Raman scattering study of Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy 46 (9), pp. 1004-1008 (1999)

2. Sugai S, Suzuki M  
Magnetic raman scattering in two-leg spin ladder Sr<sub>14-x-y</sub>CaxYyCu<sub>24</sub>O<sub>41</sub>  
PHYS STATUS SOLIDI B 215: (1) 653-659 SEP 1999

1. Natsume Y, Watabe Y, Suzuki T  
Numerical study of magnetic Raman spectra by the exchange-scattering in the antiferromagnetic ladder with two-legs  
J PHYS SOC JPN 67: (9) 3314-3315 SEP 1998

22. "Raman Spectroscopy of Orthorhombic Perovskite-Like YMnO<sub>3</sub> and LaMnO<sub>3</sub>"  
M. N. Iliev, M. V. Abrashev, H. G. Lee, V. N. Popov, Y. Y. Sun, C. Thomsen, R. L. Meng, and C. W. Chu  
Phys. Rev. B 57 (1998) 2872 - 2877.

519. Electrochemical and magnetic properties of perovskite type RMnO<sub>3</sub> (R = La, Nd, Sm, Eu) nanofibers  
Hu, Q., Yue, B., Yang, F., (...), Wang, Y., Liu, J.  
Journal of Alloys and Compounds 872,159727 (2021)

518. Characterization of structure and properties in CaO-Nd<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> microwave dielectric ceramic modified by Al<sub>2</sub>O<sub>3</sub>  
Xiong, Z., Zhang, X.,  
Materials Characterization 176,111108 (2021)

517. Influence of Ba<sup>2+</sup> Doping on Structural and Electrical Transport Properties of YMnO<sub>3</sub> Ceramics  
Shukla, J., Mishra, A.  
Journal of Superconductivity and Novel Magnetism 34(2), pp. 451-459 (2021)

516. Tuning Jahn-Teller distortion and electron localization of LaMnO<sub>3</sub> epitaxial films via substrate temperature

Chen, X (Chen, Xin) Wang, BH (Wang, Baohua) Chen, Y (Chen, Yang) Wei, HM (Wei, Haoming) Cao, BQ (Cao, Bingqiang)  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume54 Issue23 Article Number235302 PublishedJUN 10 2021

515. Raman spectroscopy of SrZrO<sub>3</sub> based proton conducting electrolyte: Effect of Y-doping and Sr-nonstoichiometry  
Shkerin, SN (Shkerin, S. N.) Rudakova, AV (Rudakova, A. V.) Bulanin, KM (Bulanin, K. M.) Khalilullina, AS (Khalilullina, A. Sh)  
Meshcherskikh, AN (Meshcherskikh, A. N.) Vokotrub, EG (Vokotrub, E. G.) Dunyushkina, LA (Dunyushkina, L. A.)  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume46 Issue32 Page17007-17018 PublishedMAY 10 2021

514. Spin induced exchange bias and lattice modulation in Nd<sub>1-x</sub>EuxCrO<sub>3</sub>  
Gupta, P (Gupta, Pragya) Pal, D (Pal, D.)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume33 Issue13 Article Number135806 PublishedMAR 31 2021

513. A comparative study of the structural, optical, magnetic and magnetocaloric properties of HoCrO<sub>3</sub> and HoCr<sub>0.85</sub>Mn<sub>0.15</sub>O<sub>3</sub> orthochromites  
Kanwar, K (Kanwar, Komal) Coondoo, I (Coondoo, Indrani) Anas, M (Anas, M.) Malik, VK (Malik, Vivek K.) Kumar, P (Kumar, Pradip)  
Kumar, S (Kumar, Sandeep) Kulriya, PK (Kulriya, Pawan K.) Kaushik, SD (Kaushik, S. D.) Panwar, N (Panwar, Neeraj)  
CERAMICS INTERNATIONAL Volume47 Issue6 Page7386-7397 PublishedMAR 15 2021

512. The Lattice Structure, Raman Spectra, Electronic Structure, and Magnetic Properties of RCrO<sub>3</sub> (R = Ho and Sm) Films: the Effect of Thickness  
Zhang, HG (Zhang, Hongguang) Peng, HP (Peng, Haiping) Xie, L (Xie, Liang) Wang, Z (Wang, Zheng) Liu, LQ (Liu, Liqing) He, XM  
(He, Xuemin) Li, YT (Li, Yongtao)  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM DOI10.1007/s10948-020-05778-7 Early AccessMAR 2021

511. Spray-Flame Synthesis of LaMnO<sub>3</sub>+delta Nanoparticles for Selective CO Oxidation (SELOX)  
Angel, S (Angel, Steven) Tapia, JD (Tapia, Juan David) Gallego, J (Gallego, Jaime) Hagemann, U (Hagemann, Ulrich) Wiggers, H  
(Wiggers, Hartmut)  
ENERGY & FUELS Volume35 Issue5 Page4367-4376 PublishedMAR 4 2021

510. Bi<sub>2</sub>S<sub>3</sub> Nanowires: First-Principles Phonon Dynamics and Their Photocatalytic Environmental Remediation  
Do, TAT (Do, T. Anh Thu) Vu, TTH (Vu, T. Thai Ha) Ho, GT (Giang Truong Ho) Pham, QN (Quang Ngan Pham) Giang, HT (Hong Thai Giang) Le, AT (Anh Thi Le) Man, MT (Minh Tan Man) Tran, DL (Dai Lam Tran)  
JOURNAL OF PHYSICAL CHEMISTRY C Volume125 Issue7 Page4086-4091 PublishedFEB 25 2021

509. Breaking of inversion symmetry in NdGaO<sub>3</sub>  
De Krishna, B (De Krishna, Binoy) Dwij, V (Dwij, Vivek) Gupta, MK (Gupta, Mayanak K.) Mittal, R (Mittal, Ranjan) Bhatt, H (Bhatt, Himal) Reddy, VR (Reddy, V. R.) Sathe, VG (Sathe, V. G.)  
PHYSICAL REVIEW B Volume103 Issue5 Article Number054106 PublishedFEB 8 2021

508. Study of gadolinium substitution effects in hexagonal yttrium manganite YMnO<sub>3</sub>  
Karoblis, D (Karoblis, Dovydė) Zarkov, A (Zarkov, Aleksej) Garskaite, E (Garskaite, Edita) Mazeika, K (Mazeika, Kestutis) Baltrunas, D  
(Baltrunas, Dalis) Niaura, G (Niaura, Gediminas) Beganskiene, A (Beganskiene, Aldona) Kareiva, A (Kareiva, Aivaras)  
SCIENTIFIC REPORTS Volume11 Issue1 Article Number2875 PublishedFEB 3 2021

507. Magnetic and Magnetocaloric Properties of Multiferroic Oxides Gd<sub>0.5</sub>Y<sub>0.5</sub>MnO<sub>3</sub> and Eu<sub>0.5</sub>Dy<sub>0.5</sub>MnO<sub>3</sub>  
Behera, PS (Behera, P. Suchismita) Nirmala, R (Nirmala, R.)  
IEEE TRANSACTIONS ON MAGNETICS Volume57 Issue2 Article Number2200705 PublishedFEB 2021

506. Intrinsic structural distortion assisted optical and magnetic properties of orthorhombic rare-earth perovskite La<sub>1-x</sub>EuxCrO<sub>3</sub>: Effect of t-e hybridization  
Siddique, MN (Siddique, M. Naseem) Faizan, M (Faizan, Mohd) Riyajuddin, S (Riyajuddin, Sk) Tripathi, P (Tripathi, P.) Ahmad, S  
(Ahmad, Shabbir) Ghosh, K (Ghosh, Kaushik)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume850 Article Number156748 PublishedJAN 5 2021

505. Strong Impact of Cr Doping on Structural and Magnetic Properties of Bi<sub>0.5</sub>La<sub>0.5</sub>Fe<sub>1-x</sub>CrxO<sub>3</sub>-delta  
Dang, NT (Dang, N. T.) Rutkaukas, AV (Rutkaukas, A., V) Kichanov, SE (Kichanov, S. E.) Kozlenko, DP (Kozlenko, D. P.) Nguyen, HH  
(Nguyen, H. H.) Tran, N (Tran, N.) Lee, MY (Lee, M. Y.) Lee, BW (Lee, B. W.) Phan, TL (Phan, T. L.) Khiem, LH (Khiem, L. H.)  
JOURNAL OF ELECTRONIC MATERIALS Volume50 Issue3 Page1340-1348 Special IssueSI PublishedMAR 2021

504. Subsolidus phase relationship in the Y<sub>2</sub>O<sub>3</sub>-Mn<sub>3</sub>O<sub>4</sub>-CoO<sub>x</sub> system in air  
Song, YJ (Song, Y. J.) He, LM (He, L. M.) Yan, JL (Yan, J. L.)  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume41 Issue1 Page472-479 PublishedJAN 2021

503. Effect of magnesium on the XPS and Raman spectra of (Ba<sub>0.5</sub>Sr<sub>0.5</sub>)(Al<sub>0.2-x</sub>MgxFe<sub>0.8</sub>)O<sub>3-x</sub> (x <= 0.2)  
Jaiswal, SK (Jaiswal, Shivendra Kumar) Kashyap, VK (Kashyap, Vijay Kumar) Kumar, J (Kumar, Jitendra)  
JOURNAL OF ASIAN CERAMIC SOCIETIES Volume9 Issue1 Page140-149 PublishedJAN 2 2021

502. Portable handheld Raman spectrometer for the identification of new psychoactive substances  
Li, B., Wang, S., Zhang, M., Jia, Q., Wang, Q.  
Hongwei yu Jiguang Gongcheng/Infrared and Laser Engineering 49,20200101 (2020)

501. Influence of Fe doping on microstructure and magnetic properties of YCrO<sub>3</sub>  
Su, Y., Guo, J., Shi, C., (...), Wang, Y., Li, Z.  
Gongneng Cailiao/Journal of Functional Materials 51(3), pp. 03075-03081 (2020)

500. The influence of calcination temperature on the structural properties of La<sub>2</sub>FeMnO<sub>6</sub> double perovskite materials

Yunida, Triyono, D.

IOP Conference Series: Materials Science and Engineering 902(1),012027 (2020)

499. Raman spectroscopy of SrZrO<sub>3</sub> based proton conducting electrolyte: Effect of Y-doping and Sr-nonstoichiometry  
Shkerin, S.N., Rudakova, A.V., Bulanin, K.M., (...), Vovkotrub, E.G., Dunyushkina, L.A.  
International Journal of Hydrogen Energy (Article in Press) 2020

498. Phase transition and multiferroic properties of Zr-doped BiFeO<sub>3</sub> thin films

Ma, ZB (Ma, Zhibiao) Liu, HY (Liu, Huiying) Wang, LX (Wang, Lingxu) Zhang, FQ (Zhang, Fengqing) Zhu, LY (Zhu, Luyi) Fan, SH (Fan, Suhua)

JOURNAL OF MATERIALS CHEMISTRY C Volume8 Issue48 Page17307-17317 PublishedDEC 28 2020

497. Local ferroelectric polarization in antiferroelectric chalcogenide perovskite BaZrS<sub>3</sub> thin films

Pandey, J (Pandey, Juhi) Ghoshal, D (Ghoshal, Debjit) Dey, D (Dey, Dibyendu) Gupta, T (Gupta, Tushar) Taraphder, A (Taraphder, A.) Koratkar, N (Koratkar, Nikhil) Soni, A (Soni, Ajay)

PHYSICAL REVIEW B Volume102 Issue20 Article Number205308 PublishedNOV 30 2020

496. Morphologically tuned LaMnO<sub>3</sub> as an efficient nanocatalyst for the removal of organic dye from aqueous solution under sunlight  
Priyatharshni, S (Priyatharshni, S.) Kumar, SR (Kumar, S. Rajesh) Viswanathan, C (Viswanathan, C.) Ponpandian, N (Ponpandian, N.)  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING Volume8 Issue5 Article Number104146 PublishedOCT 2020

495. Co-substitution tailored dielectric relaxation and electrical conduction in lanthanum orthoferrite

Rai, A (Rai, Atma) Thakur, AK (Thakur, Awalendra K.)

CERAMICS INTERNATIONAL Volume46 Issue14 Page22752-22765 PublishedOCT 1 2020

494. Influence of Ba(2+)Doping on Structural and Electrical Transport Properties of YMnO(3)Ceramics

Shukla, J (Shukla, Jyoti) Mishra, A (Mishra, Ashutosh)

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume34 Issue2 Page451-459 PublishedFEB 2021

493. Magnetocaloric effect and spin-phonon correlations in RFe<sub>0.5</sub>Cr<sub>0.5</sub>O<sub>3</sub> (R = Er and Yb) compounds

Yadav, K (Yadav, Kavita) Kaur, G (Kaur, Gurpreet) Sharma, MK (Sharma, Mohit K.) Mukherjee, K (Mukherjee, K.)

PHYSICS LETTERS A Volume384 Issue26 Article Number126638 PublishedSEP 18 2020

492. Evidence of weak antilocalization in quantum interference effects of (001) oriented La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-SrRuO<sub>3</sub> superlattices

Helen, RS (Helen, Roshna Sobhanan) Prellier, W (Prellier, Wilfrid) Padhan, P (Padhan, Prahallad)

JOURNAL OF APPLIED PHYSICS Volume128 Issue3 Article Number033906 PublishedJUL 21 2020

491. Impact of texturing on the phase transitions in sol-gel-processed Bi(Sm)FeO(3)thin films on LaNiO<sub>3</sub>-buffered silicon

Liu, LS (Liu, Lisha) Qiu, XF (Qiu, Xiaofu) Zhang, SW (Zhang, Suwei) Zhou, Z (Zhou, Zhen) Huang, Y (Huang, Yu) Shu, L (Shu, Liang)

Cheng, YY (Cheng, Yue-Yu-Shan) Wang, XP (Wang, Xuping) Li, JF (Li, Jing-Feng)

JOURNAL OF THE AMERICAN CERAMIC SOCIETY Volume103 Issue11 Page6554-6564 PublishedNOV 2020

490. Re-entrant spin reorientation transition and Griffiths-like phase in antiferromagnetic TbFe<sub>0.5</sub>Cr<sub>0.5</sub>O<sub>3</sub>

Mali, B (Mali, Bhawana) Nair, HS (Nair, Harikrishnan S.) Heitmann, TW (Heitmann, T. W.) Nhalil, H (Nhalil, Hariharan) Antonio, D (Antonio, Daniel) Gofryk, K (Gofryk, Krzysztof) Bhandari, SR (Bhandari, Shalika Ram) Ghimire, MP (Ghimire, Madhav Prasad) Elizabeth, S (Elizabeth, Suja)

PHYSICAL REVIEW B Volume102 Issue1 Article Number014418 PublishedJUL 13 2020

489. Surface Conditions That Constrain Alkane Oxidation on Perovskites

Koch, G (Koch, Gregor) Havecker, M (Havecker, Michael) Teschner, D (Teschner, Detre) Carey, SJ (Carey, Spencer J.) Wang, YQ (Wang, Yuanqing) Kube, P (Kube, Pierre) Hetaba, W (Hetaba, Walid) Lunkenbein, T (Lunkenbein, Thomas) Auffermann, G (Auffermann, Gudrun) Timpe, O (Timpe, Olaf)

ACS CATALYSIS Volume10 Issue13 Page7007-7020 PublishedJUL 2 2020

488. Dielectric relaxation, magneto-dielectric coupling, and pyrocurrent anomaly in point defect controlled HoCrO<sub>3</sub>

Anusree, VK (Anusree, V. K.) Lekshmi, PN (Lekshmi, P. Neenu) Bhat, SG (Bhat, Shwetha G.) Wagh, AA (Wagh, Aditya A.) Das, G (Das, Gangadhar) Santhosh, PN (Santhosh, P. N.)

JOURNAL OF APPLIED PHYSICS Volume127 Issue19 Article Number194105 PublishedMAY 21 2020

487. A Fast, Low-Temperature Synthesis Method for Hexagonal YMnO<sub>3</sub>: Kinetics, Purity, Size and Shape as Studied by In Situ X-ray Diffraction

Marshall, KP (Marshall, Kenneth P.) Blichfeld, AB (Blichfeld, Anders B.) Skjaervo, SL (Skjaervo, Susanne L.) Grendal, OG (Grendal, Ola G.) van Beek, W (van Beek, Wouter) Selbach, SM (Selbach, Sverre M.) Grande, T (Grande, Tor) Einarsrud, MA (Einarsrud, Mari-Ann)

CHEMISTRY-A EUROPEAN JOURNAL Volume26 Issue42 Page9330-9337 Special IssueSI PublishedJUL 27 2020

486. Room-temperature magnetization reversal and magnetocaloric switching in Fe substituted GdMnO<sub>3</sub>

Pal, A (Pal, Arnab) Mohan, M (Mohan, Manu) Venimadhav, A (Venimadhav, Adyam) Murugavel, P (Murugavel, Pattukkannu)

PHYSICAL REVIEW MATERIALS Volume4 Issue4 Article Number044407 PublishedAPR 24 2020

485. Enhanced ferromagnetism and conductivity in epitaxial LaMnO<sub>3</sub> thin films by oxygen-atmosphere annealing

Sun, QC (Sun, Qinchao) Luo, X (Luo, Xin) Xia, QT (Xia, Qingtao) Guo, YF (Guo, Yunfeng) Su, J (Su, Jie) Li, Q (Li, Qiang) Miao, GX (Miao, Guoxing)

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume499 Article Number166317 PublishedAPR 1 2020

484. Preparation of Multiferroic YFeO<sub>3</sub> Nanofibers and the Photocatalytic Activity under Visible Irradiation

Zhang, RL (Zhang, Runlan) Wang, XQ (Wang, Xiaoqin) Yu, CX (Yu, Chunxia) Liu, J (Liu, Jian) Yao, JJ (Yao, Junjie) Kang, XY (Kang, Xiaoying) Xing, XX (Xing, Xingxing) Xiong, SX (Xiong, Shanxin)  
INTEGRATED FERROELECTRICS Volume206 Issue1 Page105-111 Special IssueSI PublishedMAR 23 2020

483. Atomic layer deposition of YMnO<sub>3</sub> thin films

Choi, JH (Choi, Ju H.) Pham, C (Pham, Calvin) Dorman, J (Dorman, James) Kim, T (Kim, Taeseung) Chang, JP (Chang, Jane P.)  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume498 Article Number166146 PublishedMAR 15 2020

482. Electronic configuration and magnetic properties of La<sub>0.7</sub>Ca<sub>0.3</sub>Mn<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub> perovskite NPs: The effect of a lower Fe<sup>3+</sup> concentration

Martinez-Rodriguez, HA (Martinez-Rodriguez, H. A.) Onyekachi, K (Onyekachi, Kalu) Concha-Balderrama, A (Concha-Balderrama, A.) Herrera-Perez, G (Herrera-Perez, G.) Matutes-Aquino, JA (Matutes-Aquino, J. A.) Jurado, JF (Jurado, J. F.) Bocanegra-Bernal, MH (Bocanegra-Bernal, M. H.) Ramos-Sanchez, VH (Ramos-Sanchez, V. -H.) Duarte-Moller, JA (Duarte-Moller, J. A.) Reyes-Rojas, A (Reyes-Rojas, A.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume816 Article Number152668 PublishedMAR 5 2020

481. Strain modulated magnetocaloric effect in (111) oriented La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-SrRuO<sub>3</sub> superlattices

Roshna, SH (Roshna, S. H.) Prellier, WP (Prellier, W.) Padhan, PP (Padhan, P.)  
NANOSCALE Volume12 Issue8 Page5151-5158 PublishedFEB 28 2020

480. Spin phonon coupling in Mn doped HoFeO<sub>3</sub> compounds exhibiting spin reorientation behaviour

Prakash, P (Prakash, Pulkit) Sathe, V (Sathe, Vasant) Prajapat, CL (Prajapat, C. L.) Nigam, AK (Nigam, A. K.) Krishna, PSR (Krishna, P. S. R.) Das, A (Das, A.)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume32 Issue9 Article Number095801 PublishedFEB 27 2020

479. Magnetocaloric effect in mixed rare earth manganite Gd<sub>0.5</sub>Dy<sub>0.5</sub>MnO<sub>3</sub>

Behera, PS (Behera, P. Suchismita) Nirmala, R (Nirmala, R.) Edited by Shekhawat, MS (Shekhawat, MS) Bhardwaj, S (Bhardwaj, S) Suthar, B (Suthar, B)

3RD INTERNATIONAL CONFERENCE ON CONDENSED MATTER & APPLIED PHYSICS (ICC-2019) Book SeriesAIP Conference Proceedings Volume2220 Article Number1 10019 Published2020

478. Low temperature dielectric study of La<sub>2</sub>CuMnO<sub>6</sub> ceramics

Singh, DN (Singh, D. N.) Mahato, DK (Mahato, Dev K.)  
MATERIALS TODAY-PROCEEDINGS Volume29 Page768-771 Special IssueSI Part3 Published2020

477. Temperature dependent X-ray diffraction and Raman spectroscopy studies of polycrystalline YCrO<sub>3</sub> ceramics across the T-C similar to 460 K

Mall, AK (Mall, Ashish Kumar) Paul, B (Paul, Barnita) Garg, A (Garg, Ashish) Gupta, R (Gupta, Rajeev)  
JOURNAL OF RAMAN SPECTROSCOPY Volume51 Issue3 Page537-545 PublishedMAR 2020

476. Orbital Floquet engineering of exchange interactions in magnetic materials

Chaudhary, S., Hsieh, D., Refael, G.

Physical Review B 100(22),220403 (2019)

475. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose

Hoang, N.N., Pham, D.H.Y., Nguyen, T.N.

Scientific Reports 9(1), 19204 (2019)

474. Strain tuning effects in perovskites (Book Chapter)

Cheng, Z., Hong, F., Jia, T., (...), Ozawa, K., Kimura, H.

Nanoscale Ferroelectric-Multiferroic Materials for Energy Harvesting Applications pp. 23-39 (2019)

473. Low temperature dielectric study of La<sub>2</sub>CuMnO<sub>6</sub> ceramics

Singh, D.N., Mahato, D.K.

Materials Today: Proceedings 29, pp. 768-771 (2019)

472. X-ray diffraction and Raman spectroscopy for lead halide perovskites ( Book Chapter)

Rahman, M.Z., Edvinsson, T.

Characterization Techniques for Perovskite Solar Cell Materials pp. 23-47 (2019)

471. Study of structural and dielectric properties of La<sub>0.9</sub>Na<sub>0.1</sub>CrO<sub>3</sub>- and Ni<sub>0.5</sub>Cu<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub>-based composites

Saleem, M (Saleem, M.) Chouhan, S (Chouhan, Shivan) Mishra, A (Mishra, A.)

JOURNAL OF ADVANCED DIELECTRICS Volume9 Issue6 Article Number1950044 PublishedDEC 2019

470. Potential of Raman spectroscopy towards understanding structures of carbon-based materials and perovskites

Selvarajan, P (Selvarajan, Premkumar) Chandra, G (Chandra, Goutam) Bhattacharya, S (Bhattacharya, Susmita) Sil, S (Sil, Sanchita) Vinu, A (Vinu, Ajayan) Umapathy, S (Umapathy, Siva)

EMERGENT MATERIALS Volume2 Issue4 Page417-439 PublishedDEC 2019

469. Yttrium Manganese Oxide Phase Stability and Selectivity Using Lithium Carbonate Assisted Metathesis Reactions

Todd, PK (Todd, Paul K.) Smith, AMM (Smith, Antoinette M. M.) Neilson, JR (Neilson, James R.)

INORGANIC CHEMISTRY Volume58 Issue22 Page15166-15174 PublishedNOV 18 2019

468. First-principles study of structural, electronic, ferroelectric, and vibrational properties of BiInO<sub>3</sub> under high pressure

Kaczkowski, J (Kaczkowski, J.)

JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume134 Page225-237 PublishedNOV 2019

467. In Situ Observation of Thermally Induced Structural Transitions in Vacancy-Doped Cuprous Telluride ( $\text{Cu}_{2-x}\text{Te}$ ) Nanowires Using Raman Spectroscopy

Chen, CJ (Chen, Caiju) Liao, ML (Liao, Mengling) Shan, BB (Shan, Beibei) Li, M (Li, Ming)

JOURNAL OF PHYSICAL CHEMISTRY C Volume123 Issue40 Page24763-24771 PublishedOCT 10 2019

466. Structure and physical properties of  $\text{SeCo}_{1-x}\text{Mn}_x\text{O}_3$

Ridley, CJ (Ridley, Christopher J.) Knight, KS (Knight, Kevin S.) Wilson, CW (Wilson, Craig W.) Smith, RI (Smith, Ronald, I) Bull, CL (Bull, Craig L.)

JOURNAL OF PHYSICS-CONDENSED MATTER Volume31 Issue39 Article Number395402 PublishedOCT 2 2019

465. Polaronic Emergent Phases in Manganite-Based Heterostructures

Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)

CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019

464. Vapor-Phase Incommensurate Heteroepitaxy of Oriented Single-Crystal  $\text{CsPbBr}_3$  on GaN: Toward Integrated Optoelectronic Applications

Zhao, LY (Zhao, Liyun) Gao, Y (Gao, Yan) Su, M (Su, Man) Shang, QY (Shang, Qiuyu) Liu, Z (Liu, Zhen) Li, Q (Li, Qi) Wei, Q (Wei, Qi) Li, ML (Li, Meili) Fu, L (Fu, Lei) Zhong, YG (Zhong, Yangguang)

ACS NANO Volume13 Issue9 Page10085-10094 PublishedSEP 2019

463. Conventional synthesis and characterization of cubically ordered  $\text{La}_2\text{FeMnO}_6$  double perovskite compound

Dhilip, M (Dhilip, M.) Devi, NA (Devi, N. Aparna) Punitha, JS (Punitha, J. Stella) Anbarasu, V (Anbarasu, V) Kumar, KS (Kumar, K. Saravana)

VACUUM Volume167 Page16-20 PublishedSEP 2019

462. Significance of isostructural distortion and strong magnetoelastic coupling in the weak ferromagnet  $\text{YFe}_{0.9}\text{Cr}_{0.1}\text{O}_3$

Raut, S (Raut, Subhajit) Kar, B (Kar, Biman) Velaga, S (Velaga, Srihari) Poswal, HK (Poswal, Himanshu K.) Panigrahi, S (Panigrahi, S.) JOURNAL OF APPLIED PHYSICS Volume126 Issue7 Article Number074103 PublishedAUG 21 2019

461. Self-doped  $\text{La}_{1-x}\text{MnO}_3+\delta$  perovskites: Electron state hybridization and Raman modes

Ulyanov, AN (Ulyanov, A. N.) Sidorov, AV (Sidorov, A., V.) Pismenova, NE (Pismenova, N. E.) Goodilin, EA (Goodilin, E. A.) Savilov, SV (Savilov, S., V.)

SOLID STATE SCIENCES Volume94 Page41-44 PublishedAUG 2019

460. Crystal structure and vibrational spectra of hexagonal manganites  $\text{YMnO}_3$  and  $\text{LuMnO}_3$  under high pressure

Jabarav, SH (Jabarav, S. H.) Dang, NT (Dang, N. T.) Kichanov, SE (Kichanov, S. E.) Kozlenko, DP (Kozlenko, D. P.) Dubrovinsky, LS (Dubrovinsky, L. S.) Park, JG (Park, Je-Geun) Lee, S (Lee, Seongsu) Mammadov, AI (Mammadov, A., I) Mehdiyeva, RZ (Mehdiyeva, R. Z.) Savenko, BN (Savenko, B. N.)

MATERIALS RESEARCH EXPRESS Volume6 Issue8 Article Number086110 PublishedAUG 2019

459. Photo-Fenton Activity of Magnesium Substituted Cerium Ferrite Perovskites for Degradation of Methylene Blue via Sol-Gel Method Anantharaman, A (Anantharaman, Ashwini) Josephine, BA (Josephine, B. Avila) Teresita, VM (Teresita, V. Mary) Ajeesha, TL (Ajeesha, T. L.) George, M (George, Mary)

JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY Volume19 Issue8 Page5116-5129 PublishedAUG 2019

458. Griffiths phase-like behavior and origin of spin-phonon interaction in  $\text{Eu}_{0.75}\text{Y}_{0.25}\text{MnO}_3$

Gupta, S (Gupta, Surbhi) Sharma, G (Sharma, Gaurav) Reddy, VR (Reddy, V. R.) Sathe, VG (Sathe, V. G.) Siruguri, V (Siruguri, V) JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume482 Page38-43 PublishedJUL 15 2019

457. Investigation of multi-mode spin-phonon coupling and local B-site disorder in  $\text{Pr}_2\text{CoFeO}_6$  by Raman spectroscopy and correlation with its electronic structure by XPS and XAS studies

Pal, A (Pal, Arkadeb) Ghosh, S (Ghosh, Surajit) Joshi, AG (Joshi, Amish G.) Kumar, S (Kumar, Shiv) Patil, S (Patil, Swapnil) Gupta, PK (Gupta, Prince K.) Singh, P (Singh, Prajyoti) Gangwar, VK (Gangwar, V. K.) Prakash, P (Prakash, P.) Singh, RK (Singh, Ranjan K.) JOURNAL OF PHYSICS-CONDENSED MATTER Volume31 Issue27 Article Number275802 PublishedJUL 10 2019

456. Evidence for ferromagnetic clusters at room temperature in Dy and Mn site co-substituted compounds:  $\text{Dy}_{0.55}\text{Sr}_{0.45}\text{Mn}_{1-x}\text{Fe}_x\text{O}_3$  Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.) JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page411-417 PublishedJUL 5 2019

455. Structural, electrical, optical and magnetic properties of  $\text{SmCrO}_3$  chromites: Influence of Gd and Mn co-doping

Panwar, N (Panwar, Neeraj) Coondoo, I (Coondoo, Indrani) Kumar, S (Kumar, Surendra) Kumar, S (Kumar, Sandeep) Vasundhara, M (Vasundhara, M.) Rao, A (Rao, Ashok)

JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page1122-1131 PublishedJUL 5 2019

454. Raman spectroscopy study of the La-modified  $(\text{Bi}_{0.5}\text{Na}_{0.5})(0.92)\text{Ba}_0.08\text{TiO}_3$  lead-free ceramic system

Mendez-Gonzalez, Y (Mendez-Gonzalez, Y.) Pelaiz-Barranco, A (Pelaiz-Barranco, A.) Curcio, AL (Curcio, A. L.) Rodrigues, AD (Rodrigues, A. D.) Guerra, JDS (Guerra, J. D. S.)

JOURNAL OF RAMAN SPECTROSCOPY Volume50 Issue7 Page1044-1050 PublishedJUL 5 2019

453. Correlation between lattice strain and physical (magnetic, dielectric, and magnetodielectric) properties of perovskite-spinel  $(\text{Bi}_{0.85}\text{La}_{0.15}\text{FeO}_3)((1-x))-(\text{NiFe}_2\text{O}_4)(x)$  composites

Pandey, R (Pandey, Rabichandra) Pradhan, LK (Pradhan, Lagen Kumar) Kumar, S (Kumar, Sunil) Supriya, S (Supriya, Sweety) Singh, RK (Singh, Rakesh Kumar) Kar, M (Kar, Manoranjan)

JOURNAL OF APPLIED PHYSICS Volume125 Issue24 Article Number244105 PublishedJUN 28 2019

452. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy  
Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)  
PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019

451. Electric field and temperature induced local polarization switching and piezoresponse in Bi<sub>0.88</sub>Sm<sub>0.12</sub>FeO<sub>3</sub> ceramics for nanoscale applications  
Anthoniappen, J (Anthoniappen, Jesuraj) Chang, WS (Chang, Wei Sea) Ruiz, FM (Ruiz, Flora Mae) Tu, CS (Tu, Chi-Shun) Blaise, CT (Blaise, Carvyn Tutong) Chen, PY (Chen, Pin-Yi) Chen, CS (Chen, Cheng-Sao) Mana-ay, H (Mana-ay, Haidee) JOURNAL OF ALLOYS AND COMPOUNDS Volume790 Page587-596 PublishedJUN 25 2019

450. Effects of a strong gravitational field on Mn-trimers and magnetic properties of hexagonal YMnO<sub>3</sub> single crystal  
Tokuda, M (Tokuda, Makoto) Mashimo, T (Mashimo, Tsutomu) Ma, WJ (Ma, Weijian) Hayami, S (Hayami, Shinya) Ando, S (Ando, Shinji) Nishiyama, T (Nishiyama, Tadao) Yoshiasa, A (Yoshiasa, Akira) JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume129 Page172-179 PublishedJUN 2019

449. Mechanosynthesis of the Whole Y<sub>1-x</sub>B<sub>x</sub>Mn<sub>1-x</sub>F<sub>x</sub>O<sub>3</sub> Perovskite System: Structural Characterization and Study of Phase Transitions  
Quintana-Cilleruelo, JA (Angel Quintana-Cilleruelo, Jose) Veerapandian, VK (Veerapandian, Vignaswaran K.) Deluca, M (Deluca, Marco) Alguero, M (Alguero, Miguel) Castro, A (Castro, Alicia) MATERIALS Volume12 Issue9 Article Number1515 PublishedMAY 1 2019

448. Magnetic phase transition and multiferroic phase separation in Ho<sub>1-x</sub>Gd<sub>x</sub>MnO<sub>3</sub>  
Zhang, N (Zhang, N.) Wang, YP (Wang, Y. P.) Li, X (Li, X.) Liu, MF (Liu, M. F.) Liu, XN (Liu, X. N.) Li, N (Li, N.) Qiu, YJ (Qiu, Y. J.) Dong, RY (Dong, R. Y.) Fu, ZM (Fu, Z. M.) Guo, YY (Guo, Y. Y.) CERAMICS INTERNATIONAL Volume45 Issue7 Page8325-8332 PartA PublishedMAY 2019

447. Phase separation and local lattice distortions analysis of charge-ordered manganese films La<sub>1-x</sub>CaxMnO<sub>3-delta</sub> by Raman spectroscopy  
Trotsenko, VG (Trotsenko, V. G.) Lahmar, A (Lahmar, A.) Lyanguzov, NV (Lyanguzov, N. V.) El Marssi, M (El Marssi, M.) Torgashev, VI (Torgashev, V. I.) SUPERLATTICES AND MICROSTRUCTURES Volume127 Page100-108 PublishedMAR 2019

446. Magnetic-Field-Induced Suppression of Jahn-Teller Phonon Bands in (La<sub>0.6</sub>Pr<sub>0.4</sub>)(0.7)Ca<sub>0.3</sub>MnO<sub>3</sub>: the Mechanism of Colossal Magnetoresistance shown by Raman Spectroscopy  
Merten, S (Merten, S.) Shapoval, O (Shapoval, O.) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, v) SCIENTIFIC REPORTS Volume9 Article Number2387 PublishedFEB 20 2019

445. Mild Hydrothermal Crystallization of Heavy Rare-Earth Chromite RECrO<sub>3</sub> (RE = Er, Tm, Yb, Lu) Perovskites and Magnetic Properties  
Wang, S (Wang, Shan) Wu, XF (Wu, Xiaofeng) Wang, TS (Wang, Tiesheng) Zhang, JQ (Zhang, Jiaqi) Zhang, CY (Zhang, Chenyang) Yuan, L (Yuan, Long) Cui, XQ (Cui, Xiaoqiang) Lu, DY (Lu, Dayong) INORGANIC CHEMISTRY Volume58 Issue4 Page2315-2329 PublishedFEB 18 2019

444. Accelerated Ionic Motion in Amorphous Memristor Oxides for Nonvolatile Memories and Neuromorphic Computing  
Schmitt, R (Schmitt, Rafael) Kubicek, M (Kubicek, Markus) Sediva, E (Sediva, Eva) Trasslin, M (Trasslin, Morgan) Weber, MC (Weber, Mads C.) Rossi, A (Rossi, Antonella) Hutter, H (Hutter, Herbert) Kreisel, J (Kreisel, Jens) Fiebig, M (Fiebig, Manfred) Rupp, JLM (Rupp, Jennifer L. M.) ADVANCED FUNCTIONAL MATERIALS Volume29 Issue5 Article Number1804782 PublishedFEB 1 2019

443. Selective Formation of Yttrium Manganese Oxides through Kinetically Competent Assisted Metathesis Reactions  
Todd, PK (Todd, Paul K.) Neilson, JR (Neilson, James R.) JOURNAL OF THE AMERICAN CHEMICAL SOCIETY Volume141 Issue3 Page1191-1195 PublishedJAN 23 2019

442. Enhancing Capacitance of Nickel Cobalt Chalcogenide via Interface Structural Design  
Lu, F (Lu, Fei) Zhou, M (Zhou, Min) Su, K (Su, Kun) Ye, T (Ye, Tao) Yang, YJ (Yang, Yijun) Lam, TD (Lam, Tran Dai) Bando, Y (Bando, Yoshio) Wang, X (Wang, Xi) ACS APPLIED MATERIALS & INTERFACES Volume11 Issue2 Page2082-2092 PublishedJAN 16 2019

441. Effect of Ni doping on the structural, vibrational, optical and magnetic properties of YMn<sub>0.4</sub>Fe<sub>0.6-x</sub>Ni<sub>x</sub>O<sub>3</sub> (0 <= x <= 0.1) nanoparticles  
Chihaoui, S (Chihaoui, S.) Koubaa, M (Koubaa, M.) Cheikhrouhou-Koubaa, W (Cheikhrouhou-Koubaa, W.) Cheikhrouhou, A (Cheikhrouhou, A.) Guermazi, H (Guermazi, H.) JOURNAL OF ALLOYS AND COMPOUNDS Volume771 Page327-334 PublishedJAN 15 2019

440. High pressure structural investigations on hexagonal YInO<sub>3</sub>  
Dwivedi, A (Dwivedi, Abhilash) Poswal, HK (Poswal, H. K.) Shukla, R (Shukla, R.) Velaga, S (Velaga, Srihari) Sahoo, BD (Sahoo, B. D.) Grover, V (Grover, V.) Deo, MN (Deo, M. N.) HIGH PRESSURE RESEARCH Volume39 Issue1 Page17-35 PublishedJAN 2 2019

439. Processing and properties of pure antiferromagnetic h-YMnO<sub>3</sub>  
Pocuca-Nesic, M (Pocuca-Nesic, Milica) Stanojevic, ZM (Stanojevic, Zorica Marinkovic) Smole, PC (Smole, Patricia Cotic) Dapcevic, A (Dapcevic, Aleksandra) Tasic, N (Tasic, Nikola) Brankovic, G (Brankovic, Goran) Brankovic, Z (Brankovic, Zorica) PROCESSING AND APPLICATION OF CERAMICS Volume13 Issue4 Page427-434 Published2019

438. Thin film nano-potocatalysts with low band gap energy for gas phase degradation of p-xylene: TiO<sub>2</sub> doped Cr, UiO66-NH<sub>2</sub> and LaBO<sub>3</sub> (B = Fe, Mn, and Co)

Luu, C.L., Van Nguyen, T.T., Nguyen, T., (...), Hoang, T.C., Ha, C.A.  
Advances in Natural Sciences: Nanoscience and Nanotechnology 9(1),015003 2018

437. The effect of dynamic Jahn-Teller interaction on the Raman peaks in manganites  
Sahu, A.K., Rout, G.C., Sahu, D.R.  
African Review of Physics 13,0007, pp. 45-49 2018

436. Structural and electrical characterization of La<sub>2</sub>ZnMnO<sub>6</sub> double perovskite  
Singh, DN (Singh, D. N.) Mahato, DK (Mahato, Dev K.) Sinha, TP (Sinha, T. P.)  
PHYSICA B-CONDENSED MATTER Volume550 Page400-406 PublishedDEC 1 2018

435. Temperature dependent percolation mechanism for conductivity in Y-0.63 Ca0.37TiO<sub>3</sub> revealed by a microstructure study  
German, R (German, R.) Zimmer, B (Zimmer, B.) Koethe, TC (Koethe, T. C.) Barinov, A (Barinov, A.) Komarek, AC (Komarek, A. C.)  
Braden, M (Braden, M.) Parmigiani, F (Parmigiani, F.) van Loosdrecht, PHM (van Loosdrecht, P. H. M.)  
MATERIALS RESEARCH EXPRESS Volume5 Issue12 Article Number126101 PublishedDEC 2018

434. Composition and thermal structural evolution in Pr modified bismuth ferrite near the morphotropic phase boundary  
Tu, CS (Tu, Chi-Shun) Chen, CS (Chen, Cheng-Sao) Chen, PY (Chen, Pin-Yi) Hsieh, YL (Hsieh, Yi Lin) Chien, RR (Chien, R. R.)  
Schmidt, VH (Schmidt, V. Hugo) Feng, KC (Feng, Kuei-Chih) Chang, HW (Chang, Huang-Wei)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume768 Page903-913 PublishedNOV 5 2018

433. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates; RCrO<sub>3</sub> (R = La, Nd, Eu, Gd, Dy, and Y)  
Singh, KD (Singh, Kapil Dev) Pandit, R (Pandit, Rabia) Kumar, R (Kumar, Ravi)  
SOLID STATE SCIENCES Volume85 Page70-75 PublishedNOV 2018

432. Raman Spectrum of the Organic-Inorganic Halide Perovskite CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> from First Principles and High-Resolution Low-Temperature Raman Measurements  
Perez-Osorio, MA (Perez-Osorio, Miguel A.) Lin, QQ (Lin, Qianqian) Phillips, RT (Phillips, Richard T.) Milot, RL (Milot, Rebecca L.)  
Herz, LM (Herz, Laura M.) Johnston, MB (Johnston, Michael B.) Giustino, F (Giustino, Feliciano)  
JOURNAL OF PHYSICAL CHEMISTRY C Volume122 Issue38 Page21703-21717 PublishedSEP 27 2018

431. Structural, magnetic and electrical properties of Fe substituted GdCrO<sub>3</sub>  
Dash, BB (Dash, Bibhuti. B.) Ravi, S (Ravi, S.)  
SOLID STATE SCIENCES Volume83 Page192-200 PublishedSEP 2018

430. Magnetization reversal and exchange bias study in bulk Gd<sub>1-x</sub>Y<sub>x</sub>CrO<sub>3</sub> (x=0.0-1.0)  
Dash, BB (Dash, Bibhuti B.) Ravi, S (Ravi, S.)  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume461 Page91-99 PublishedSEP 1 2018

429. Pressure induced anomalous magnetic behaviour in nanocrystalline YCrO<sub>3</sub> at room temperature  
Jana, R (Jana, Rajesh) Pareek, V (Pareek, Vivek) Khatua, P (Khatua, Pradip) Saha, P (Saha, Pinku) Chandra, A (Chandra, Amreesh)  
Mukherjee, GD (Mukherjee, Goutam Dev)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume30 Issue33 Article Number335401 PublishedAUG 22 2018

428. Detail investigations of SmFeO<sub>3</sub> under extreme condition  
Tyagi, S (Tyagi, Shekhar) Sathe, VG (Sathe, V. G.) Sharma, G (Sharma, Gaurav) Gupta, MK (Gupta, M. K.) Mittal, R (Mittal, R.) Srihari, V (Srihari, Velaga) Poswal, HK (Poswal, Himanshu Kumar)  
MATERIALS CHEMISTRY AND PHYSICS Volume215 Page393-403 PublishedAUG 15 2018

427. Electric dipoles via Cr<sub>3+(d(3))</sub> ion off-center displacement in perovskite DyCrO<sub>3</sub>  
Yi, LH (Yi, L. H.) Shi, TF (Shi, T. F.) Zhang, RR (Zhang, R. R.) Park, CB (Park, C. B.) Kim, KH (Kim, Kee Hoon) Yang, J (Yang, J.)  
Tong, P (Tong, P.) Song, WH (Song, W. H.) Dai, JM (Dai, J. M.) Zhu, XB (Zhu, X. B.)  
PHYSICAL REVIEW B Volume98 Issue5 Article Number054301 PublishedAUG 2 2018

426. Colossal magnetoresistance manganites  
Bebenin, NG (Bebenin, N. G.) Zainullina, RI (Zainullina, R. I.) Ustinov, VV (Ustinov, V. V.)  
PHYSICS-USPEKHI Volume61 Issue8 Page719-738 PublishedAUG 2018

425. The Jahn-Teller distortion influenced ferromagnetic order in Pr<sub>1-x</sub>LaxMnO<sub>3</sub>  
He, FF (He, Feifei) Mao, ZQ (Mao, Zhongquan) Tang, LY (Tang, Lingyun) Zhang, J (Zhang, Jiang) Chen, X (Chen, Xi)  
SOLID STATE COMMUNICATIONS Volume274 Page21-26 PublishedJUN 2018

424. Enhancement in magnetocaloric properties of ErCrO<sub>3</sub> via A-site Gd substitution  
Shi, JH (Shi, Jianhang) Yin, SQ (Yin, Shiqi) Seehra, MS (Seehra, Mohindar S.) Jain, M (Jain, Menka)  
JOURNAL OF APPLIED PHYSICS Volume123 Issue19 Article Number193901 PublishedMAY 21 2018

423. Rare earth indates (RE: La-Yb): influence of the synthesis route and heat treatment on the crystal structure  
Shukla, R (Shukla, Rakesh) Grover, V (Grover, Vinita) Srinivasu, K (Srinivasu, Kancharlapalli) Paul, B (Paul, Barnita) Roy, A (Roy, Anushree) Gupta, R (Gupta, Ruma) Tyagi, AK (Tyagi, Avesh Kumar)  
DALTON TRANSACTIONS Volume47 Issue19 Page6787-6799 PublishedMAY 21 2018

422. Grain boundary-dominated electrical conduction and anomalous optical-phonon behaviour near the Neel temperature in YFeO<sub>3</sub> ceramics  
 Raut, S (Raut, Subhajit) Babu, PD (Babu, P. D.) Sharma, RK (Sharma, R. K.) Pattanayak, R (Pattanayak, Ranjit) Panigrahi, S (Panigrahi, Simanchalo)  
 JOURNAL OF APPLIED PHYSICS Volume123 Issue17 Article Number174101 PublishedMAY 7 2018
421. The magnetic transition temperature tuned by strain in YMn<sub>0.9</sub>Ru<sub>0.1</sub>O<sub>3</sub> thin films  
 Yang, LP (Yang, L. P.) Zhang, AM (Zhang, A. M.) Wang, K (Wang, K.) Wu, XS (Wu, X. S.) Zhai, ZY (Zhai, Z. Y.)  
 AIP ADVANCES Volume8 Issue5 Article Number055805 PublishedMAY 2018
420. An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes  
 Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Li, XX (Li, Xiaxi) Ding, D (Ding, Dong) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang) Ding, Y (Ding, Yong) Zhao, BT (Zhao, Bote) Murphy, R (Murphy, Ryan) Deglee, B (Deglee, Ben)  
 NANO ENERGY Volume47 Page474-480 PublishedMAY 2018
419. Spin-phonon coupling in HoCr<sub>1-x</sub>FeO<sub>3</sub> (x=0 and 0.5) compounds  
 Kotnana, G (Kotnana, Ganesh) Sathe, VG (Sathe, Vasant. G.) Jammalamadaka, SN (Jammalamadaka, S. Narayana)  
 JOURNAL OF RAMAN SPECTROSCOPY Volume49 Issue4 Page764-770 PublishedAPR 2018
418. Effect of Yttrium substitution on the structural and magnetic properties of GdCrO<sub>3</sub>  
 Dash, BB (Dash, Bibhuti B.) Ravi, S (Ravi, S.)  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume448 Page355-359 PublishedFEB 15 2018
417. Orbital wave in the Raman scattering cross section of LaMnO<sub>3</sub>  
 Munkhbaatar, P (Munkhbaatar, Purevdorj) Myung-Whun, K (Myung-Whun, Kim)  
 PHYSICAL REVIEW B Volume97 Issue8 Article Number085101 PublishedFEB 1 2018
416. An In Situ Formed, Dual-Phase Cathode with a Highly Active Catalyst Coating for Protonic Ceramic Fuel Cells  
 Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang) Zhang, L (Zhang, Lei) deGlee, B (deGlee, Ben) Murphy, R (Murphy, Ryan) Zhao, BT (Zhao, Bote) Zhang, YX (Zhang, Yanxiang) Chen, Y (Chen, Yan)  
 ADVANCED FUNCTIONAL MATERIALS Volume28 Issue5 Article Number1704907 PublishedJAN 31 2018
415. Structural dielectric and magnetic properties of (1-x) BiFeO<sub>3</sub>-xBa(0.9)Ca(0.1)Ti(0.9)Sn(0.1)O<sub>3</sub>) ceramics  
 Mizouri, F (Mizouri, F.) Kallel, I (Kallel, I.) Abdelmoula, N (Abdelmoula, N.) Mezzane, D (Mezzane, D.) Khemakhem, H (Khemakhem, H.)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume731 Page458-464 PublishedJAN 15 2018
414. Superconductor sandwiches: cuprate-manganite multilayers with a remarkable new ground state  
 Mallett, BPP (Mallett, B. P. P.) Marsik, P (Marsik, P.) Khmaladze, J (Khmaladze, J.) Arul, R (Arul, R.) Minola, M (Minola, M.) Simpson, MC (Simpson, M. C.) Bernhard, C (Bernhard, C.) Edited by Rogers, DJ (Rogers, DJ) Look, DC (Look, DC) Teherani, FH (Teherani, FH)  
 OXIDE-BASED MATERIALS AND DEVICES IX Book SeriesProceedings of SPIE Volume10533 Article NumberUNSP 105330Y Published2018
413. Magnetocaloric effect and magnetic properties in YMnO<sub>3</sub> perovskite  
 Jabar, A (Jabar, A.) Masrour, R (Masrour, R.)  
 PHASE TRANSITIONS Volume91 Issue3 Page284-292 Published2018
412. The tunable spin reorientation, temperature induced magnetization reversal, and spontaneous exchange bias effect of Sm<sub>0.7</sub>Y<sub>0.3</sub>Cr<sub>1-x</sub>GaxO<sub>3</sub>  
 Ma, ZJ (Ma, Zhijie) Liu, GH (Liu, Guanghui) Gao, WJ (Gao, Weijun) Liu, YZ (Liu, Yuzhuang) Xie, L (Xie, Liang) He, XM (He, Xuemin) Liu, LQ (Liu, Lijing) Li, YT (Li, Yongtao) Zhang, HG (Zhang, Hongguang)  
 RSC ADVANCES Volume8 Issue58 Page33487-33495 Published2018
411. High pressure studies on nanocrystalline YCrO<sub>3</sub>  
 Jana, R (Jana, Rajesh) Chandra, A (Chandra, Amreesh) Mukherjee, GD (Mukherjee, Goutam Dev)  
 Edited by Shekhawat, MS (Shekhawat, MS) Bhardwaj, S (Bhardwaj, S) Suthar, B (Suthar, B)  
 2ND INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND APPLIED PHYSICS (ICC-2017) Book SeriesAIP Conference Proceedings Volume1953 Article Number030081 Published2018
410. Effect of Pb<sup>2+</sup> Substitution at A-site on Structural and Magnetic Properties of LaMnO<sub>3</sub>  
 Kumar, S (Kumar, Sunil) Pal, J (Pal, Jaswinder) Kaur, S (Kaur, Shubhpreet) Agrawal, P (Agrawal, P.) Singh, M (Singh, Mandeep) Singh, A (Singh, Anupinder)  
 Edited by Shekhawat, MS (Shekhawat, MS) Bhardwaj, S (Bhardwaj, S) Suthar, B (Suthar, B)  
 2ND INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND APPLIED PHYSICS (ICC-2017) Book SeriesAIP Conference Proceedings Volume1953 Article Number120030 Published2018
409. Studies of dielectric and electrical transport characteristics of BaTiO<sub>3</sub>BiFeO<sub>3</sub>-CaSnO<sub>3</sub> ternary system  
 Hajra, S (Hajra, Sugato) Sahoo, S (Sahoo, Sushrisangita) Mishra, T (Mishra, Twinkle) Rout, PK (Rout, Pravat Kumar) Choudhary, RNP (Choudhary, Ram Naresh Prasad)  
 PROCESSING AND APPLICATION OF CERAMICS Volume12 Issue2 Page165-171 Published2018
408. Structural and spectroscopic studies on HoCr<sub>1-x</sub>FeO<sub>3</sub> (x=0 and 0.5) Compounds  
 Kotnana, G (Kotnana, Ganesh) Sathe, VG (Sathe, V. G.) Jammalamadaka, SN (Jammalamadaka, S. Narayana)  
 62ND DAE SOLID STATE PHYSICS SYMPOSIUM Book SeriesAIP Conference Proceedings Volume1942 Article Number090040 Published2018

407. Modification of low temperature magnetic interactions in Dy<sub>1-x</sub>EuxMnO<sub>3</sub>  
 Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Sharma, S (Sharma, Shilpam) Satya, AT (Satya, A. T.)  
 RSC ADVANCES Volume8 Issue24 Page13537-13545 Published2018
406. Intrinsic structural distortion and exchange interactions in SmFe<sub>x</sub>Cr<sub>1-x</sub>O<sub>3</sub> compounds  
 Xiang, ZC (Xiang, Zhongcheng) Li, WP (Li, Wenping) Cui, YM (Cui, Yimin)  
 RSC ADVANCES Volume8 Issue16 Page8842-8848 Published2018
405. Tailoring of magnetic orderings in Fe substituted GdMnO<sub>3</sub> bulk samples towards room temperature  
 Pal, A (Pal, A.) Sekhar, CD (Sekhar, C. Dhana) Venimadhav, A (Venimadhav, A.) Murugavel, P (Murugavel, P.)  
 JOURNAL OF PHYSICS-CONDENSED MATTER Volume29 Issue40 Article Number405803 PublishedOCT 11 2017
404. Stojadinovic, Bojan; Dohcevic-Mitrovic, Zorana; Stepanenko, Dimitrije; et al.  
 Dielectric and ferroelectric properties of Ho-doped BiFeO<sub>3</sub> nanopowders across the structural phase transition  
 CERAMICS INTERNATIONAL Volume: 43 Issue: 18 Pages: 16531-16538 Published: DEC 15 2017
403. Ulyanov, A. N.; Savilov, S. V.; Sidorov, A. V.; et al.  
 Electron structure, Raman "vacancy" modes and Griffiths-like phase of self-doped Pr<sub>1-x</sub>MnO<sub>3+delta</sub> manganites  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 722 Pages: 77-82 Published: OCT 25 2017
402. Gross, Nelson; Sun, Yi-Yang; Perera, Samanthe; et al.  
 Stability and Band-Gap Tuning of the Chalcogenide Perovskite BaZrS<sub>3</sub> in Raman and Optical Investigations at High Pressures  
 PHYSICAL REVIEW APPLIED Volume: 8 Issue: 4 Article Number: 044014 Published: OCT 25 2017
401. Mansouri, Sabeur; Jandl, Serge; Mukhin, Alexander; et al.  
 A comparative Raman study between PrMnO<sub>3</sub>, NdMnO<sub>3</sub>, TbMnO<sub>3</sub> and DyMnO<sub>3</sub>  
 SCIENTIFIC REPORTS Volume: 7 Article Number: 13796 Published: OCT 23 2017
400. Turki, D.; Ghouri, Zafar Khan; Al-Meer, Saeed; et al.  
 Synthesis and Physicochemical Studies of Perovskite Manganite La(0.8)Ca(0.2)Nn(1-x)Co(x)O(3) (0 <= x <= 0.3)  
 JOURNAL OF MAGNETICS Volume: 22 Issue: 3 Pages: 353-359 Published: SEP 2017
399. Kumar, Shiv; Dwivedi, G. D.; Joshi, Amish G.; et al.  
 Study of structural, dielectric, optical properties and electronic structure of Cr-doped LaInO<sub>3</sub> perovskite nanoparticles  
 MATERIALS CHARACTERIZATION Volume: 131 Pages: 108-115 Published: SEP 2017
398. Antunes, Isabel; Amador, Ulises; Alves, Adriana; et al.  
 Structure and Electrical -Transport Relations in Ba(Zr,Pr)O<sub>3+delta</sub> Perovskites  
 INORGANIC CHEMISTRY Volume: 56 Issue: 15 Pages: 9120-9131 Published: AUG 7 2017
397. Hernandez-Rodriguez, M. A.; Monteseguro, V.; Lozano-Gorrin, A. D.; et al.  
 Structural, Vibrational, and Elastic Properties of Yttrium Orthoaluminate Nanoperovskite at High Pressures  
 JOURNAL OF PHYSICAL CHEMISTRY C Volume: 121 Issue: 28 Pages: 15353-15367 Published: JUL 20 2017
396. Lazarevic, Zorica Z.; Jovalekic, Cedomir; Gilic, Martina; et al.  
 Yttrium Orthoferrite Powder Obtained by the Mechanochemical Synthesis  
 SCIENCE OF SINTERING Volume: 49 Issue: 3 Pages: 277-284 Published: JUL-SEP 2017
395. Abdel-Latif, I. A.; Ismail, Adel A.; Faisal, M.; et al.  
 Impact of the annealing temperature on perovskite strontium doped neodymium manganites nanocomposites and their photocatalytic performances  
 JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS Volume: 75 Pages: 174-182 Published: JUN 2017
394. Thygesen, Peter M. M.; Young, Callum A.; Beake, Edward O. R.; et al.  
 Local structure study of the orbital order/disorder transition in LaMnO<sub>3</sub>  
 PHYSICAL REVIEW B Volume: 95 Issue: 17 Article Number: 174107 Published: MAY 30 2017
393. Shimamoto, Kenta; Mukherjee, Saumya; Bingham, Nicholas S.; et al.  
 Single-axis-dependent structural and multiferroic properties of orthorhombic RMnO<sub>3</sub>(R = Gd-Lu)  
 PHYSICAL REVIEW B Volume: 95 Issue: 18 Article Number: 184105 Published: MAY 8 2017
392. Singh, Amit Kumar; Chauhan, Samta; Balasubramanian, Padmanabhan; et al.  
 Influence of substrate induced strain on B-site ordering and magnetic properties of Nd<sub>2</sub>NiMnO<sub>6</sub> epitaxial thin films  
 THIN SOLID FILMS Volume: 629 Pages: 49-54 Published: MAY 1 2017
391. Koval, Vladimir; Skorvanek, Ivan; Durisin, Juraj; et al.  
 Terbium-induced phase transitions and weak ferromagnetism in multiferroic bismuth ferrite ceramics  
 JOURNAL OF MATERIALS CHEMISTRY C Volume: 5 Issue: 10 Pages: 2669-2685 Published: MAR 14 2017
390. Sarkar, Tanushree; Manna, Kaustuv; Elizabeth, Suja; et al.  
 Investigation of multiferroicity, spin-phonon coupling, and unusual magnetic ordering close to room temperature in LuMn<sub>0.5</sub>Fe<sub>0.5</sub>O<sub>3</sub>  
 JOURNAL OF APPLIED PHYSICS Volume: 121 Issue: 8 Article Number: 084102 Published: FEB 28 2017
389. Narayanan, N.; Graham, P. J.; Reynolds, N.; et al.  
 Subpicometer-scale atomic displacements and magnetic properties in the oxygen-isotope substituted multiferroic DyMnO<sub>3</sub>

388. Thakur, Samita; Singh, K.; Pandey, O. P.

Sr doped BiMO<sub>3</sub> (M = Mn, Fe, Y) perovskites: Structure correlated thermal and electrical properties  
MATERIALS CHEMISTRY AND PHYSICS Volume: 187 Pages: 96-103 Published: FEB 1 2017

387. Concha-Balderrama, A.; Rojas-George, G.; Alvarado-Flores, J.; et al.

Nucleation and growth kinetics of La<sub>0.7</sub>Sr<sub>0.3</sub>Cr<sub>0.4</sub>Mn<sub>0.6</sub>O<sub>3</sub>-delta SOFC perovskite: Symmetry alteration evolution induced by Cu<sup>2+</sup> and Ni<sup>2+</sup> impregnation

PROGRESS IN NATURAL SCIENCE-MATERIALS INTERNATIONAL Volume: 26 Issue: 6 Pages: 665-670 Published: DEC 2016

386. Sathe, V.G., Tyagi, S., Sharma, G.

Electron-phonon coupling in perovskites studied by Raman Scattering

Journal of Physics: Conference Series 755(1), 12008 DOI: 10.1088/1742-6596/755/1/012008 (2016)

385. Abdel-Latif, I.A.

Study on structure, electrical and dielectric properties of Eu<sub>0.65</sub>Sr<sub>0.35</sub>Fe<sub>0.3</sub>Mn<sub>0.7</sub>O<sub>3</sub>

IOP Conference Series: Materials Science and Engineering 146(1), 12003 DOI: 10.1088/1757-899X/146/1/012003 (2016)

384. Sarswat, P.K., Free, M.L.

Long-Term stability of mixed perovskites

Materials Research Society Symposium Proceedings 1771, 193-198 DOI: 10.1557/proc.2015.612 (2016)

383. Wang, S., Hou, C., Yuan, L., Qu, M., Zou, B., Lu, D.

Hydrothermal preparation of perovskite structures DyCrO<sub>3</sub> and HoCrO<sub>3</sub>

Dalton Transactions 45(44), 17593-17597 DOI: 10.1039/c6dt02661c (2016)

382. Gopalarao, T.R., Ravi, S., Pamu, D.

Effect of Film Thickness in Electrical Resistivity and Magnetic Properties of Nd<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> Thin Films

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume: 29 Issue: 10 Pages: 2567-2572 DOI: 10.1007/s10948-016-3563-6 Published: OCT 2016

381. Pomar, Alberto; Konstantinovic, Zorica; Bagues, Nuria; et al.

Formation of Self-Organized Mn<sub>3</sub>O<sub>4</sub> Nano inclusions in LaMnO<sub>3</sub> Films

FRONTIERS IN PHYSICS Volume: 4 Article Number: 41 Published: SEP 20 2016

380. Patri, T., Ponnaiah, J., Kutty, P., Ghosh, A.

Raman and dielectric spectroscopic analysis of magnetic phase transition in Y(Fe0.5Cr0.5)O<sub>3</sub> multiferroic ceramics

CERAMICS INTERNATIONAL Volume: 42 Issue: 12 Pages: 13834-13840 DOI: 10.1016/j.ceramint.2016.05.188 Published: SEP 2016

379. Shukla, R., Patwe, S.J., Deshpande, S.K., Achary, S.N., Krishna, P.S.R., Shinde, A.B., Gopalakrishnan, J., Tyagi, A.K.

Structural manipulation and tailoring of dielectric properties in SrTi<sub>1-x</sub>FexTaxO<sub>3</sub> perovskites: Design of new lead free relaxors

SCIENTIFIC REPORTS Volume: 6 Article Number: 23400 DOI: 10.1038/srep23400 Published: AUG 12 2016

378. Gopalarao, TR (Gopalarao, T. R.); Ravi, S (Ravi, S.); Pamu, D (Pamu, D.)

Electrical transport and magnetic properties of epitaxial Nd<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> thin films on (001)-oriented LaAlO<sub>3</sub> substrate

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 409 Pages: 148-154 DOI: 10.1016/j.jmmm.2016.02.069

Published: JUL 1 2016

377. Vadnala, S., Pal, P., Asthana, S.

Investigation of near room temperature magnetocaloric, magnetoresistance and bolometric properties of Nd<sub>0.5</sub>La<sub>0.2</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>: Ag<sub>2</sub>O manganites

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 27 Issue: 6 Pages: 6156-6165 DOI: 10.1007/s10854-016-4543-0 Published: JUN 2016

376. Chaturvedi, S., Shyam, P., Apte, A., Kumar, J., Bhattacharyya, A., Awasthi, A.M., Kulkarni, S.

Dynamics of electron density, spin-phonon coupling, and dielectric properties of SmFeO<sub>3</sub> nanoparticles at the spin-reorientation temperature: Role of exchange striction

PHYSICAL REVIEW B Volume: 93 Issue: 17 Article Number: 174117 DOI: 10.1103/PhysRevB.93.174117 Published: MAY 26 2016

375. Behera, B.C., Padhan, P., Prellier, W.

Effect of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> crystal structures on magnetization of (111) oriented La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-SrRuO<sub>3</sub> superlattices

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 19 Article Number: 196004 DOI: 10.1088/0953-8984/28/19/196004 Published: MAY 18 2016

374. Bhat, I (Bhat, Irshad); Husain, S (Husain, Shahid); War, TA (War, Tariq Ahmad)

Magnetic Magnetic and Raman spectroscopic study of laser ablated 100 (nm) thin film of La<sub>0.85</sub>Te<sub>0.15</sub>MnO<sub>3</sub> deposited on LaAlO<sub>3</sub>

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 667 Pages: 225-228 DOI: 10.1016/j.jallcom.2016.01.149 Published: MAY 15 2016

373. Vrejoiu, I., Himcinschi, C., Jin, L., Jia, C.-L., Raab, N., Engelmayr, J., Waser, R., Dittmann, R., Van Loosdrecht, P.H.M.

Probing orbital ordering in LaVO<sub>3</sub> epitaxial films by Raman scattering

APL MATERIALS Volume: 4 Issue: 4 Article Number: 046103 DOI: 10.1063/1.4945658 Published: APR 2016

372. Perera, S., Hui, H., Zhao, C., Xue, H., Sun, F., Deng, C., Gross, N., Milleville, C., Xu, X., Watson, D.F., Weinstein, B., Sun, Y.-Y., Zhang, S., Zeng, H.

- Chalcogenide perovskites - an emerging class of ionic semiconductors  
 NANO ENERGY Volume: 22 Pages: 129-135 DOI: 10.1016/j.nanoen.2016.02.020 Published: APR 2016
371. Siaï, A., Horchani-Naifer, K., Haro-González, P., Férid, M.  
 Effects of the preparation processes on structural, electronic, and optical properties of LaHoO<sub>3</sub>  
 MATERIALS RESEARCH BULLETIN Volume: 76 Pages: 179-186 DOI: 10.1016/j.materresbull.2015.12.019 Published: APR 2016
370. Arnache, O., Osorio, J..  
 Comparative study of the Raman vibrational modes in pure and Fe-doped La<sub>2</sub>/3Ca<sub>1</sub>/3MnO<sub>3</sub> thin films  
 SUPERLATTICES AND MICROSTRUCTURES Volume: 92 Pages: 181-189 DOI: 10.1016/j.spmi.2016.02.020 Published: APR 2016
369. Gupta, S.K., Ghosh, P.S., Yadav, A.K., Pathak, N., Arya, A., Jha, S.N., Bhattacharyya, D., Kadam, R.M.  
 Luminescence Properties of SrZrO<sub>3</sub>/Tb<sup>3+</sup> Perovskite: Host-Dopant Energy-Transfer Dynamics and Local Structure of Tb<sup>3+</sup>  
 INORGANIC CHEMISTRY Volume: 55 Issue: 4 Pages: 1728-1740 DOI: 10.1021/acs.inorgchem.5b02639 Published: FEB 15 2016
368. Elsässer, S., Geurts, J., Mukhin, A.A., Balbashov, A.M.  
 Lattice dynamics and spin-phonon coupling in orthorhombic Eu<sub>1-x</sub>HoxMnO<sub>3</sub> ( $x \leq 0.3$ ) studied by Raman spectroscopy  
 PHYSICAL REVIEW B Volume: 93 Issue: 5 Article Number: 054301 DOI: 10.1103/PhysRevB.93.054301 Published: FEB 4 2016
367. Yuan, B., Yang, J., Zuo, X.Z., Kan, X.C., Zhu, X.B., Dai, J.M., Song, W.H., Sun, Y.P.  
 Observation of ferroelectricity and magnetoelectric coupling in Mn-doped orthochromite DyCr<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>3</sub>  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 656 Pages: 830-834 DOI: 10.1016/j.jallcom.2015.10.030 Published: JAN 25 2016
366. Das, P.T., Singh, R., Das, A., Nath, T.K.  
 Structural, magnetic, and physical properties of La(1-x)MnO<sub>3</sub> +/-delta nano-manganite  
 PHILOSOPHICAL MAGAZINE Volume: 96 Issue: 3 Pages: 286-300 DOI: 10.1080/14786435.2015.1131344 Published: JAN 22 2016
365. Chai, J.-S., Tian, H., Mao, A.-J., Deng, L.-J., Kuang, X.-Y.  
 Pressure effect on the properties of magnetic moments and phase transitions in YMnO<sub>3</sub> from first principles  
 RSC ADVANCES Volume: 6 Issue: 59 Pages: 54041-54048 DOI: 10.1039/c6ra08539c Published: 2016
364. Bukhari, S.H., Ahmad, J.  
 Infrared Active Phonons and Optical Band Gap in Multiferroic GdMnO<sub>3</sub> Studied by Infrared and UV-Visible Spectroscopy  
 ACTA PHYSICA POLONICA A Volume: 129 Issue: 1 Pages: 43-48 Published: JAN 2016
363. Kumar, P., Shankhwar, N., Srinivasan, A., Kar, M.  
 Oxygen octahedra distortion induced structural and magnetic phase transitions in Bi<sub>1-x</sub>CaxFe<sub>1-x</sub>Mn<sub>x</sub>O<sub>3</sub> ceramics  
 Journal of Applied Physics 117(19), 194103 DOI: 10.1063/1.4921433 (2015)
362. Panwar, N., Kumbhare, P., Singh, A.K., Venkataramani, N., Ganguly, U.  
 Effect of morphological change on unipolar and bipolar switching characteristics in Pr<sub>0.7</sub>Ca<sub>0.3</sub>MnO<sub>3</sub> based RRAM  
 Materials Research Society Symposium Proceedings 1729, 47-52 DOI: 10.1557/1.192 (2015)
361. Balamurugan, C., Lee, D.-W.  
 Perovskite hexagonal YMnO<sub>3</sub> nanopowder as p-type semiconductor gas sensor for H<sub>2</sub>S detection  
 SENSORS AND ACTUATORS B-CHEMICAL Volume: 221 Pages: 857-866 DOI: 10.1016/j.snb.2015.07.018 Published: DEC 31 2015
360. Zhu, J., Yang, L., Wang, H.-W., Zhang, J., Yang, W., Hong, X., Jin, C., Zhao, Y.  
 Local structural distortion and electrical transport properties of Bi(Ni<sub>1/2</sub>Ti<sub>1/2</sub>)O<sub>3</sub> perovskite under high pressure  
 SCIENTIFIC REPORTS Volume: 5 Article Number: 18229 DOI: 10.1038/srep18229 Published: DEC 16 2015
359. Karchev, N (Karchev, Naoum)  
 Leggett's modes in magnetic systems with Jahn-Teller distortion  
 ANNALS OF PHYSICS Volume: 363 Pages: 371-384 DOI: 10.1016/j.aop.2015.10.008 Published: DEC 2015
358. Handayani, I.P., Nugroho, A.A., Riyadi, S., Blake, G.R., Mufti, N., Palstra, T.T.M., Van Loosdrecht, P.H.M.  
 Correlation between lattice vibrations with charge, orbital, and spin ordering in the layered manganite Pr<sub>0.5</sub>Ca<sub>1.5</sub>MnO<sub>4</sub>  
 PHYSICAL REVIEW B Volume: 92 Issue: 20 Article Number: 205101 DOI: 10.1103/PhysRevB.92.205101 Published: NOV 2 2015
357. Zhang, X., Zhang, A.M., Xie, W.M., Lin, J.G., Wu, X.S.  
 Effect of strain-modulated lattice distortion on the magnetic properties of LaMnO<sub>3</sub> films  
 PHYSICA B-CONDENSED MATTER Volume: 476 Pages: 114-117 DOI: 10.1016/j.physb.2015.04.038 Published: NOV 1 2015
356. Blessington Selvadurai, A.P., Pazhanivelu, V., Jagadeeshwaran, C., Murugaraj, R., Panneer Muthuselvam, I., Chou, F.C.  
 Influence of Cr substitution on structural, magnetic and electrical conductivity spectra of LaFeO<sub>3</sub>  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 646 Pages: 924-931 DOI: 10.1016/j.jallcom.2015.05.213 Published: OCT 15 2015
355. Kozlenko, D.P., Dang, N.T., Kichanov, S.E., Lukin, E.V., Pashayev, A.M., Mammadov, A.I., Jabarov, S.H., Dubrovinsky, L.S., Liermann, H.-P., Morgenroth, W., Mehdiyeva, R.Z., Smotrakov, V.G., Savenko, B.N.  
 Competing magnetic and structural states in multiferroic YMn<sub>2</sub>O<sub>5</sub> at high pressure  
 PHYSICAL REVIEW B Volume: 92 Issue: 13 Article Number: 134409 DOI: 10.1103/PhysRevB.92.134409 Published: OCT 12 2015
354. Ulrich, C., Khaliullin, G., Guennou, M., Roth, H., Lorenz, T., Keimer, B.  
 Spin-Orbital Excitation Continuum and Anomalous Electron-Phonon Interaction in the Mott Insulator LaTiO<sub>3</sub>

PHYSICAL REVIEW LETTERS Volume: 115 Issue: 15 Article Number: 156403 DOI: 10.1103/PhysRevLett.115.156403 Published: OCT 9 2015

353. Sood, K (Sood, Kapil); Singh, K (Singh, K.); Basu, S (Basu, Sudhasatwa); Pandey, OP (Pandey, O. P.)  
Preferential occupancy of Ca<sup>2+</sup> dopant in La<sub>1-x</sub>Ca<sub>x</sub>IrO<sub>3</sub>-delta (x=0-0.20) perovskite: structural and electrical properties  
IONICS Volume: 21 Issue: 10 Pages: 2839-2850 DOI: 10.1007/s11581-015-1461-8 Published: OCT 2015
352. Kotnana, G (Kotnana, Ganesh); Jammalamadaka, SN (Jammalamadaka, S. Narayana)  
Band gap tuning and orbital mediated electron-phonon coupling in HoFe<sub>1-x</sub>CrxO<sub>3</sub> (0 <= x <= 1)  
JOURNAL OF APPLIED PHYSICS Volume: 118 Issue: 12 Article Number: 124101 DOI: 10.1063/1.4931155 Published: SEP 28 2015
351. Gao, Y, Wang, JJ, Wu, L, Bao, SY, Shen, Y, Lin, YH, Nan, CW  
Tunable magnetic and electrical behaviors in perovskite oxides by oxygen octahedral tilting  
Science China-Materials Volume: 58 Issue: 4 Pages: 302-312 DOI: 10.1007/s40843-015-0047-0 Published: APR 2015
350. Lee, N., Lansac, Y., Hwang, H., Jang, Y.H.  
Switching mechanism of Al/La<sub>1-x</sub>SrxMnO<sub>3</sub> resistance random access memory. I. Oxygen vacancy formation in perovskites  
RSC ADVANCES Volume: 5 Issue: 124 Pages: 102772-102779 DOI: 10.1039/c5ra21982e Published: 2015
349. Sayed, F.N., Shukla, R., Tyagi, A.K.  
A chemical method for stabilizing a new series of solid solution Pr<sub>1-x</sub>CexScO<sub>3</sub> (0.0 <= x <= 1.0) systems  
DALTON TRANSACTIONS Volume: 44 Issue: 38 Pages: 16929-16936 DOI: 10.1039/c5dt01459j Published: 2015
348. Behera, B. C.; Padhan, P.; Prellier, W.  
Influence of substrate in all-ferromagnetic superlattices  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 388 Pages: 22-27 Published: AUG 15 2015
347. Singh, Dheeraj Kumar; Lee, Ki Hoon; Takimoto, Tetsuya  
On the Origin of CE-Type Orbital Fluctuations in the Ferromagnetic Metallic Phase of La<sub>2-2x</sub>Sr<sub>1+2x</sub>Mn<sub>2</sub>O<sub>7</sub> near x=0.4  
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 84 Issue: 6 Article Number: 064709 Published: JUN 15 2015
346. McDannald, A.; Kuna, L.; Seehra, M. S.; et al.  
Magnetic exchange interactions of rare-earth-substituted DyCrO<sub>3</sub> bulk powders  
PHYSICAL REVIEW B Volume: 91 Issue: 22 Article Number: 224415 Published: JUN 11 2015
345. Zhang, Jing; Wu, Yu-Jie; Chen, Xiao-Jia  
Structural evolution and enhanced magnetization of Bi<sub>1-x</sub>Pr<sub>x</sub>O<sub>3</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 382 Pages: 1-6 Published: MAY 15 2015
344. Gopalarao, T. R.; Ravi, S.; Pamu, D.  
Effect of Post Annealing Process on Electrical and Magnetic Properties of Nd<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> Thin Films  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume: 28 Issue: 5 Pages: 1571-1576 Published: MAY 2015
343. Vitzthum, Daniela; Hering, Stefanie A.; Perfler, Lukas; et al.  
High-pressure syntheses and crystal structures of orthorhombic DyGaO<sub>3</sub> and trigonal GaBO<sub>3</sub>  
ZEITSCHRIFT FUR NATURFORSCHUNG SECTION B-A JOURNAL OF CHEMICAL SCIENCES Volume: 70 Issue: 4 Pages: 207-214 Published: APR 2015
342. Habib, Zubida; Majid, Kowsar; Ikram, M.; et al.  
Structural Analysis and Dielectric Properties of HoFe<sub>1-x</sub>Ni<sub>x</sub>O<sub>3</sub> (0 <= x <= 0.5)  
JOURNAL OF ELECTRONIC MATERIALS Volume: 44 Issue: 4 Pages: 1044-1053 Published: APR 2015
341. Varshney, Dinesh; Choudhary, Dinesh; Khan, Elias  
Electrical transport in the ferromagnetic state of silver substituted manganites La<sub>1-x</sub>Ag<sub>x</sub>MnO<sub>3</sub> (x=0.05 and 0.1)  
JOURNAL OF MATERIALS RESEARCH Volume: 30 Issue: 5 Pages: 654-665 Published: MAR 14 2015
340. Munkhbaatar, Purevdorj; Marton, Zsolt; Tsermaa, Baatarchuluun; et al.  
Room temperature optical anisotropy of a LaMnO<sub>3</sub> thin-film induced by ultra-short pulse laser  
APPLIED PHYSICS LETTERS Volume: 106 Issue: 9 Article Number: 092907 Published: MAR 2 2015
339. Qian, Gujie; Li, Yubiao; Gerson, Andrea R.  
Applications of surface analytical techniques in Earth Sciences  
SURFACE SCIENCE REPORTS Volume: 70 Issue: 1 Pages: 86-133 Published: MAR 2015
338. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.  
Controlling phase separation in La<sub>5/8-y</sub>PryCa<sub>3/8</sub>MnO<sub>3</sub> (y=0.45) epitaxial thin films by strain disorder  
APPLIED PHYSICS LETTERS Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015
337. Ding, Jun-Chao; Li, Hua-Yao; Cai, Ze-Xing; et al.  
LaCoO<sub>3</sub>-based sensors with high sensitivity to carbon monoxide  
RSC ADVANCES Volume: 5 Issue: 81 Pages: 65668-65673 Published: 2015
336. Sun, Wei; Li, Jing-Feng; Zhu, Fangyuan; et al.  
Thickness-dependent phase boundary in Sm-doped BiFeO<sub>3</sub> piezoelectric thin films on Pt/Ti/SiO<sub>2</sub>/Si substrates  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 17 Issue: 30 Pages: 19759-19765 Published: 2015

335. Sun, Wei; Li, Jing-Feng; Yu, Qi; et al.  
 Phase transition and piezoelectricity of sol-gel-processed Sm-doped BiFeO<sub>3</sub> thin films on Pt(111)/Ti/SiO<sub>2</sub>/Si substrates  
 JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 9 Pages: 2115-2122 Published: 2015
334. Gupta, Preeti; Poddar, Pankaj  
 Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in DyCrO<sub>3</sub> nanoplatelets  
 RSC ADVANCES Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015
333. Nova, T.F.; Cartella, A.; Cantaluppi, A.; Mikhaylovskiy, R.; Razdolski, I.; Först, M.; Kimel, A.V.; Cavalleri, A.  
 Controlling coherent energy flow between collective THz excitations in condensed matter  
 Optics InfoBase Conference Papers, Code 107128 (2014)
332. Sultan, K.; Habib, Z.; Jan, A.; Ahmad Mir, S.; Ikram, M.; Asokan, K.  
 Temperature dependent Raman spectroscopy of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x = 0.0, and 0.3)  
 Advanced Materials Letters 5(1), 9-13 DOI: 10.5185/amlett.2013.6496 (2014)
331. Bhadram, V.S.; Swain, D.; Dhanya, R.; Polentarutti, M.; Sundaresan, A.; Narayana, C.  
 Effect of pressure on octahedral distortions in RCrO<sub>3</sub> (R=Lu, Tb, Gd, Eu, Sm): the role of R-ion size and its implications  
 MATERIALS RESEARCH EXPRESS Volume: 1 Issue: 2 Article Number: 026111 DOI: 10.1088/2053-1591/1/2/026111 Published: JUN 2014
330. Iliescu, I.; Boudard, M.; Chaix-Pluchery, O.; et al.  
 Phase transformations and selective growth in YMnO<sub>3</sub> films  
 JOURNAL OF SOLID STATE CHEMISTRY Volume: 220 Pages: 245-253 Published: DEC 2014
329. Ganeshraj, C.; Santhosh, P. N.  
 First-principles study of structural, electronic, vibrational, dielectric and elastic properties of tetragonal Ba<sub>2</sub>YTaO<sub>6</sub>  
 JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 14 Article Number: 144104 Published: OCT 14 2014
328. Matsui, Hiroaki; Hasuike, Noriyuki; Harima, Hiroshi; et al.  
 Engineering of optical polarization based on electronic band structures of A-plane ZnO layers under biaxial strains  
 JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 11 Article Number: 113505 Published: SEP 21 2014
327. Lee, Hong-Sub; Choi, Sun Gyu; Yeom, Geun Young; et al.  
 The effect of Gd substitution in perovskite lanthanum strontium manganite films for use in resistive switching devices  
 JOURNAL OF THE CERAMIC SOCIETY OF JAPAN 122 (1428), pp. 622-625 AUG 2014
326. Nieto, S.; Roque-Malherbe, R.; Polanco, R.; et al.  
 High temperature proton transport in BaCe0.95Th0.05O<sub>3</sub> (-) (delta) perovskite  
 CERAMICS INTERNATIONAL 40 (7), pp.11359-11367 Part: B AUG 2014
325. Iliescu, I.; Boudard, M.; Rapenne, L.; et al.  
 MOCVD selective growth of orthorhombic or hexagonal YMnO<sub>3</sub> phase on Si(100) substrate  
 APPLIED SURFACE SCIENCE 306, pp. 27-32 JUL 1 2014
324. Sharma, Yogesh; Sahoo, Satyaprakash; Perez, William; et al.  
 Phonons and magnetic excitation correlations in weak ferromagnetic YCrO<sub>3</sub>  
 JOURNAL OF APPLIED PHYSICS 115 (18), Art. No. 183907 MAY 14 2014
323. Zagorac, J.; Zarubica, A.; Radosavljevic-Mihajlovic, A.; et al.  
 Structural study of nanosized yttrium-doped CaMnO<sub>3</sub> perovskites  
 BULLETIN OF MATERIALS SCIENCE 37 (3), pp. 407-416 MAY 2014
322. Kumar, Pradeep; Ghara, Somnath; Rajeswaran, B.; et al.  
 Temperature dependent magnetic, dielectric and Raman studies of partially disordered La<sub>2</sub>NiMnO<sub>6</sub>  
 SOLID STATE COMMUNICATIONS 184, 47-51 APR 2014
321. Ahmed, M. A.; Khafagy, Rasha M.; El-sayed, O.  
 Laser-induced down-conversion and infrared phosphorescence emissivity of novel ligand-free perovskite nanomaterials  
 JOURNAL OF MOLECULAR STRUCTURE 1062, pp. 133-140 MAR 24 2014
320. Varshney, Dinesh; Shaikh, M. W.  
 Substitutional effects on structural and magnetotransport properties of La-0.85-xSm<sub>x</sub>K<sub>0.15</sub>MnO<sub>3</sub> (x=0.05, 0.1 and 0.15  
 JOURNAL OF ALLOYS AND COMPOUNDS 589, pp. 558-567 MAR 15 2014
319. Behera, B. C.; Ravindra, A. V.; Padhan, P.; et al.  
 Raman spectra and magnetization of all-ferromagnetic superlattices grown on (110) oriented SrTiO<sub>3</sub>  
 APPLIED PHYSICS LETTERS 104 (9), Art. No. 092406 MAR 3 2014
318. Kaminskii, A. A.  
 Cascaded and cross-cascaded chi((3)) nonlinear optical effects in a new SRS-active YAlO<sub>3</sub> crystal  
 DOKLADY PHYSICS 59 (3), pp. 115-118 MAR 2014
317. Kozlenko, D. P.; Dang, N. T.; Jabarov, S. H.; et al.  
 Structural polymorphism in multiferroic BiMnO<sub>3</sub> at high pressures and temperatures

316. Yin, L. H.; Yang, J.; Zhang, R. R.; et al.

Multiferroicity and magnetoelectric coupling enhanced large magnetocaloric effect in DyFe0.5Cr0.5O3  
APPLIED PHYSICS LETTERS 104 (3), Art. No. 032904 JAN 20 2014

315. By: Sahu, A. K.; Rout, G. C.

The Effect of External Magnetic Field on the Raman Peaks in Manganites

SOLID STATE PHYSICS: PROCEEDINGS OF THE 58TH DAE SOLID STATE PHYSICS SYMPOSIUM 2013, PTS A & B Book Series: AIP Conference Proceedings 1591, pp. 1557-1559 2014

314. Liu, Yun; Chua, Kun Ting Eddie; Sum, Tze Chien; et al.

First-principles study of the lattice dynamics of Sb2S

PHYSICAL CHEMISTRY CHEMICAL PHYSICS 16 (1), pp. 345-350 2014

313. Sultan, Khalid; Ikram, M.; Asokan, K.

Structural, optical and dielectric study of Mn doped PrFeO<sub>3</sub> ceramics

VACUUM 99, pp. 251-258 JAN 2014

312. Lee, Jun Hee; Delaney, Kris T.; Bousquet, Eric; et al.

Strong coupling of Jahn-Teller distortion to oxygen-octahedron rotation and functional properties in epitaxially strained orthorhombic LaMnO<sub>3</sub>

PHYSICAL REVIEW B 88 (17), Art. No. 174426 NOV 27 2013

311. Silva, R. X.; Reichlova, H.; Marti, X.; et al.

Spin-phonon coupling in Gd(Co1/2Mn1/2)O-3 perovskite

JOURNAL OF APPLIED PHYSICS 114 (19) Art. No. 194102 NOV 21 2013

310. Yu, Chonglong; Ren, Yuhang; Chen, Zhuo; et al.

First-principles study of structural phase transitions in CsSnI<sub>3</sub>

JOURNAL OF APPLIED PHYSICS 114 (16), Art. No. 163505 OCT 28 2013

309. Wu, Yu-Jie; Chen, Xiao-Kun; Zhang, Jing; et al.

Pressure effect on structural and vibrational properties of Sm-substituted BiFeO<sub>3</sub>

JOURNAL OF APPLIED PHYSICS 114 (15), Art. No. 154110 OCT 21 2013

308. Daniels, Luke M.; Weber, Mads C.; Lees, Martin R.; et al.

Structures and Magnetism of the Rare-Earth Orthochromite Perovskite Solid Solution LaxSm1-xCrO<sub>3</sub>

INORGANIC CHEMISTRY 52 (20), pp. 12161-12169 OCT 21 2013

307. Beltran-Huarac, J., Carpena-Nuñez, J., Barrionuevo, D., Mendoza, F., Katiyar, R.S., Fonseca, L.F., Weiner, B.R., Morell, G.

Synthesis and transport properties of La0.67Sr 0.33MnO<sub>3</sub> conformally-coated on carbon nanotubes

Carbon 65, pp. 252-260, 2013

306. Lantieri, M., Spina, G., Cianchi, L., Del Giallo, F.

Eu-151 Mossbauer study of multiferroic Eu0.75Y0.25MnO<sub>3</sub>

EUROPEAN PHYSICAL JOURNAL B Volume: 86 Issue: 7 Article Number: 333 DOI: 10.1140/epjb/e2013-40409-4 Published: JUL 2013

305. Chu, Q., Wang, X., Li, B., Liu, F., Liu, X.

High pressure flux synthesis of LaMnO<sub>3</sub>+delta with charge ordering

RSC ADVANCES Volume: 3 Issue: 44 Pages: 21311-21314 DOI: 10.1039/c3ra43779e Published: 2013

304. Derras, M., Hamdad, N., Derras, M., Gessoum, A.

New theoretical model on the electronic structure and magnetic properties of the YMnO<sub>3</sub> perovskite oxide: Implementation of the U-Hubbard Hamiltonian

RESULTS IN PHYSICS Volume: 3 Pages: 219-230 DOI: 10.1016/j.rinp.2013.09.011 Published: 2013

303. Chaturvedi, A., Sathe, V.G.

Raman spectroscopy and X-ray diffraction study of PrMnO<sub>3</sub> oriented thin films deposited on LaAlO<sub>3</sub> and SrTiO<sub>3</sub> substrates

Journal of Magnetism and Magnetic Materials 344, pp. 230-234, 2013

302. Varshney, D., Choudhary, D., Khan, E.

Electrical transport in the ferromagnetic and paramagnetic state of potassium-substituted manganites La<sub>1-x</sub> K<sub>x</sub> MnO<sub>3</sub> (x = 0.05, 0.1 and 0.15)

Journal of Materials Science 48 (17), pp. 5904-5916, 2013

301. Hu, Y., Stender, D., Medarde, M., Lippert, T., Wokaun, A., Schneider, C.W.

Lattice distortion and strain relaxation in epitaxial thin films of multiferroic TbMnO<sub>3</sub> probed by X-ray diffractometry and micro-Raman spectroscopy

Applied Surface Science 278, pp. 92-95, 2013

300. Phong, P.T., Jang, S.J., Huy, B.T., Lee, Y.-I., Lee, I.-J.

Structural, magnetic, infrared and Raman studies of La0.8Sr x Ca0.2-x MnO<sub>3</sub> (0 ≤ x ≤ 0.2)

Journal of Materials Science: Materials in Electronics 24 (7), pp. 2292-2301, 2013

299. Nikolaev, S.A., Mazurenko, V.G., Rudenko, A.N.  
 Influence of magnetic order on phonon spectra of multiferroic orthorhombic YMnO<sub>3</sub>  
*Solid State Communications* 164, pp. 16-21, 2013
298. Choi, S.G., Lee, H.-S., Yeom, G.Y., Park, H.-H.  
 Investigation of the properties of Ba-substituted La<sub>0.7</sub>Sr<sub>0.3-x</sub>Ba<sub>x</sub>MnO<sub>3</sub> perovskite manganite films for resistive switching applications  
*Journal of Electronic Materials* 42 (6), pp. 1196-1201, 2013
297. Noked, O., Melchior, A., Shuker, R., Livneh, T., Steininger, R., Kennedy, B.J., Sterer, E.  
 Pressure-induced amorphization of La<sub>1/3</sub>TaO<sub>3</sub>  
*Journal of Solid State Chemistry* 202, pp. 38-42, 2013
296. Sidorov, T.A.  
 Identification of complex anions in La<sub>1 - X</sub>A<sub>X</sub>MnO<sub>3</sub> manganites (A = Ca, Sr) from neutron diffraction data and refinement of their structures on the basis of raman spectroscopy data  
*Russian Journal of Inorganic Chemistry* 58 (6), pp. 706-710, 2013
295. Zhang, J., Wu, Y.-J., Chen, X.-K., Chen, X.-J.  
 Structural evolution and magnetization enhancement of Bi<sub>1-x</sub>TbxFeO<sub>3</sub>  
*Journal of Physics and Chemistry of Solids* 74 (6), pp. 849-853, 2013
294. Wang, Y.T., Luo, C.W., Kobayashi, T.  
 Understanding multiferroic hexagonal manganites by static and ultrafast optical spectroscopy  
*Advances in Condensed Matter Physics* 2013, art. no. 104806, 2013
293. Chen, C., Li, Y., Wang, B.  
 Tunable competition and possible coexistence between superconductivity and ferromagnetism in the multilayers of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-δ</sub>/La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub>  
*Solid State Communications* 161, pp. 1-4, 2013
292. Kovaleva, N.N., Kusmartseva, O.E., Kugel, K.I., Maksimov, A.A., Nuzhnyy, D., Balbashov, A.M., Demikhov, E.I., (...), Stoneham, A.M.  
 Anomalous multi-order Raman scattering in LaMnO<sub>3</sub>: A signature of quantum lattice effects in a Jahn-Teller crystal  
*Journal of Physics Condensed Matter* 25 (15), art. no. 155602, 2013
291. Zheng, Y.-N., Wu, Y.-J., Qin, Z.-X., Chen, X.-J.  
 Structural transition and magnetic property of Bi<sub>1-x</sub>Yb<sub>x</sub>FeO<sub>3</sub>  
*Chinese Journal of Chemical Physics* 26 (2), pp. 157-162, 2013
290. Wang, C., Li, J.-B., Gao, Q., Li, G., Liu, G., Rao, G., Luo, J., (...), Liang, J.  
 Subsolidus phase relations of the BaO - Y<sub>2</sub>O<sub>3</sub>- MnO<sub>2</sub> system in air  
*Journal of the American Ceramic Society* 96 (4), pp. 1332-1336, 2013
289. Prado-Gonjal, J., Schmidt, R., Romero, J.-J., Ávila, D., Amador, U., Morán, E.  
 Microwave-assisted synthesis, microstructure, and physical properties of rare-earth chromites  
*Inorganic Chemistry* 52 (1), pp. 313-320, 2013
288. Srinu Bhadram, V., Rajeswaran, B., Sundaresan, A., Narayana, C.  
 Spin-phonon coupling in multiferroic RCrO<sub>3</sub> (R-Y, Lu, Gd, Eu, Sm): A Raman study  
*EPL* 101 (1), art. no. 17008, 2013
287. Harada, T., Takahashi, R., Lippmaa, M.  
 Nonmagnetic Sc substitution in a perovskite ferromagnetic insulator Pr<sub>0.8</sub>Ca<sub>0.2</sub>MnO<sub>3</sub>  
*Journal of the Physical Society of Japan* 82 (1), art. no. 014801, 2013
286. Jativa, J.; Jurado, J. F.; Vargas-Hernandez, C.  
 Hydrothermal synthesis, magnetic susceptibility, electrical transport and vibrational order of the polycrystalline structure La<sub>0.5</sub>Ba<sub>0.5</sub>MnO<sub>3</sub>  
*REVISTA MEXICANA DE FISICA* 58 (2), Suppl. S, 19-23, DEC 2012
285. Wdowik, U.D., Koza, M.M., Chatterji, T.  
 Phonons in lanthanum manganite: Inelastic neutron scattering and density functional theory studies  
*Physical Review B - Condensed Matter and Materials Physics* 86 (17), art. no. 174305, 2012
284. Bielecki, J., Svedlindh, P., Tibebu, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S.  
 Structural and magnetic properties of isovalently substituted multiferroic BiFeO<sub>3</sub>: Insights from Raman spectroscopy  
*Physical Review B - Condensed Matter and Materials Physics* 86 (18), art. no. 184422, 2012
283. Mir, F.A., Ikram, M., Kumar, R.  
 Amorphization and disorder of PrFeO<sub>3</sub> thin films after heavy ion irradiation  
*Applied Radiation and Isotopes* 70 (10), pp. 2409-2415, 2012
282. Bai, Y., Xia, Y., Li, H., Han, L., Wang, Z., Wu, X., Lv, S., (...), Meng, J.  
 A-site-doping enhanced B-site ordering and correlated magnetic property in La<sub>2-x</sub>Bi<sub>x</sub>CoMnO<sub>6</sub>  
*Journal of Physical Chemistry C* 116 (32), pp. 16841-16847, 2012

281. Mishra, D.K., Sathe, V.G.  
Evidence of the Fano resonance in a temperature dependent Raman study of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> and SrCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>  
Journal of Physics Condensed Matter 24 (25), art. no. 252202, 2012.
280. Runka, T., Berkowski, M.  
Perovskite La<sub>1-x</sub>Sr<sub>x</sub>Ga<sub>1-y</sub>Mn<sub>y</sub>O<sub>3</sub> solid solution crystals: Raman spectroscopy characterization  
Journal of Materials Science 47 (14), pp. 5393-5401, 2012.
279. Abdel-Latif, I.A., Saleh, S.A.  
Effect of iron doping on the physical properties of europium manganites  
Journal of Alloys and Compounds 530, pp. 116-120, 2012.
278. Rovillain, P., Liu, J., Cazayous, M., Gallais, Y., Measson, M.-A., Sakata, H., Sacuto, A.  
Electromagnon and phonon excitations in multiferroic TbMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 86 (1), art. no. 014437, 2012.
277. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V.  
Nanocomposite Structure and Reactivity of Perovskites Based on Lanthanum Manganites  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A 86 (4), 606-620, APR 2012.
276. Parida, S., Rout, S.K., Subramanian, V., Barhai, P.K., Gupta, N., Gupta, V.R.  
Structural, microwave dielectric properties and dielectric resonator antenna studies of Sr(Zr<sub>x</sub>Ti<sub>1-x</sub>)O<sub>3</sub> ceramics  
Journal of Alloys and Compounds 528, pp. 126-134, 2012.
275. Wu, Y.-J., Chen, X.-K., Zhang, J., Chen, X.-J.  
Magnetic enhancement across a ferroelectric-antiferroelectric phase boundary in Bi<sub>1-x</sub>NdxFeO<sub>3</sub>  
Journal of Applied Physics 111 (5), art. no. 053927, 2012.
274. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
273. Lee, Y.-L., Morgan, D.  
Ab initio and empirical defect modeling of LaMnO<sub>3±δ</sub> for solid oxide fuel cell cathodes  
Physical Chemistry Chemical Physics 14 (1), pp. 290-302, 2012.
272. Roberge, B., Jandl, S., Nugroho, A.A., Palstra, T.T.M.  
Micro-Raman study of orbiton-phonon coupling in YbVO<sub>3</sub>  
Journal of Raman Spectroscopy 43 (1), pp. 127-130, 2012.
271. Wu, Y.-J., Zhang, J., Chen, X.-K., Chen, X.-J.  
Phase evolution and magnetic property of Bi<sub>1-X</sub>Ho<sub>X</sub>FeO<sub>3</sub> powders  
Solid State Communications 151 (24), pp. 1936-1940, 2011.
270. Casu, A., Ricci, P.C.  
Raman and structural characterization of LuAlO<sub>3</sub>  
Journal of Solid State Chemistry 184 (11), pp. 3028-3033, 2011.
269. Chopelas, A.  
Single-crystal Raman spectra of YAlO<sub>3</sub> and GdAlO<sub>3</sub>: Comparison to several orthorhombic ABO<sub>3</sub> perovskites  
Physics and Chemistry of Minerals 38 (9), pp. 709-726, 2011.
268. Dhiman, I., Das, A., Priolkar, K.R., Murthy, P.S.R.  
Infrared absorption study of charge ordered La<sub>0.5</sub>Ca<sub>0.5-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> (0.1≤x≤0.5) manganites  
Physica B: Condensed Matter 406 (4), pp. 1028-1033, 2011.
267. Mandal, P., Bhadram, V.S., Sundarayya, Y., Narayana, C., Sundaresan, A., Rao, C.N.R.  
Spin-Reorientation, Ferroelectricity, and Magnetodielectric Effect in YFe(1-x)Mn(x)O<sub>3</sub>(0.1 <= x <= 0.40)  
PHYSICAL REVIEW LETTERS 107 (13) Article Number: 137202, SEP 19 2011.
266. Noked, O., Yakovlev, S., Greenberg, Y., Garbarino, G., Shuker, R., Avdeev, M., Sterer, E.  
Pressure-induced amorphization of La(1/3)NbO<sub>3</sub>  
JOURNAL OF NON-CRYSTALLINE SOLIDS 357 (18) Pages: 3334-3337, SEP 15 2011.
265. Cheng, Z.X., Wang, X.L., Dou, S.X., Osada, M., Kimura, H.  
Strain modulated magnetization and colossal resistivity of epitaxial La(2/3)Ca(1/3)MnO<sub>3</sub> film on BaTiO<sub>3</sub> substrate  
APPLIED PHYSICS LETTERS 99 (9) Article Number: 092103, AUG 29 2011.
264. Dhak, P., Pramanik, P., Bhattacharya, S., Roy, A., Achary, S.N., Tyagi, A.K.  
Structural phase transition in lanthanum gallate as studied by Raman and X-ray diffraction measurements  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 248 (8) Pages: 1884-1893, AUG 2011.
263. Varshney Dinesh; Dodiya N.  
Interpretation of metallic and semiconducting temperature dependent resistivity of La(0.91)Rb(0.06)Mn(0.94)O<sub>3</sub> manganites  
SOLID STATE SCIENCES 13 (8) Pages: 1623-1632, AUG 2011.

262. Chen, Z., Ma, C.-L., Wu, F.-X., Chen, Y.B., Zhou, J., Yuan, G.-L., Gu, Z.-B., (...), Chen, Y.-F.  
 The electrical and magnetic properties of epitaxial orthorhombic YMnO(3) thin films grown under various oxygen pressures  
 APPLIED SURFACE SCIENCE 257 (18) Pages: 8033-8037, JUL 1 2011.
261. Shi, L., Wang, Y., Zhou, S.M., Chu, S.N., Guo, Y.Q., Zhao, J.Y.  
 A-site ion-size effect on the transport and magnetic properties of Ce doping Pr(0.3)Ce(0.2)Ca(x)Sr(0.5-x)MnO(3) ( $0 \leq x \leq 0.25$ )  
 JOURNAL OF APPLIED PHYSICS 109 (12) Article Number: 123909, JUN 15 2011.
260. Li, S.-L., Li, J., Zhang, Y., Zheng, D.-N., Tsukagoshi, K.  
 Unipolar resistive switching in high-resistivity Pr(0.7)Ca(0.3)MnO(3) junctions  
 APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 103 (1) Pages: 21-26, APR 2011.
259. Antonakos, A., Liarokapis, E., Aydogdu, G.H., Habermeier, H.-U.  
 Strain induced phase separation on La(0.5)Ca(0.5)MnO(3) thin films  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.
258. Baldini, M., Struzhkin, V.V., Goncharov, A.F., Postorino, P., Mao, W.L.  
 Persistence of Jahn-Teller Distortion up to the Insulator to Metal Transition in LaMnO(3)  
 PHYSICAL REVIEW LETTERS 106 (6) Article Number: 066402, FEB 11 2011.
257. Glowacki, M., Runka, T., Domukhovski, V., Diduszko, R., Mirkowska, M., Berkowski, M., Dabrowski, B.  
 Growth and characterization of perovskite LaGaO(3) crystals doped with Sr and Mn  
 JOURNAL OF ALLOYS AND COMPOUNDS 509 (5) Pages: 1756-1759, FEB 3 2011.
256. Sardar, K., Lees, M.R., Kashtiban, R.J., Sloan, J., Walton, R.I.  
 Direct Hydrothermal Synthesis and Physical Properties of Rare-Earth and Yttrium Orthochromite Perovskites  
 CHEMISTRY OF MATERIALS 23 (1) Pages: 48-56, JAN 11 2011.
255. Chaix-Pluchery O.; Kreisel J.  
 Raman scattering of perovskite SmScO<sub>3</sub> and NdScO<sub>3</sub> single crystals  
 PHASE TRANSITIONS Volume: 84 (5-6) Pages: 542-554, 2011.
254. Fontcuberta, J., Fina, I., Fabrega, L., Sánchez, F., Martí, X., Skumryev, V.  
 Ferroelectricity and strain effects in orthorhombic YMnO<sub>3</sub> thin films  
 PHASE TRANSITIONS Volume: 84 (5-6) Pages: 555-568, 2011.
253. Jugdersuren, B., Kang, S., DiPietro, R.S., Heiman, D., McKeown, D., Pegg, I.L., Philip, J.  
 Large low field magnetoresistance in La(0.67)Sr(0.33)MnO(3) nanowire devices  
 JOURNAL OF APPLIED PHYSICS 109 (1) Article Number: 016109, JAN 1 2011.
252. Lee Nodo; Lansac Yves; Jang Yun Hee  
 Aluminum Oxide Formation at Al/La(1-x)Sr(x)MnO(3) Interface: A Computational Study for Resistance Random Access Memory Applications  
 JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY 11 (1) Pages: 339-343, JAN 2011.
251. Kozlenko, D.P., Chan, T.A., Kichanov, S.E., Jirák, Z., Dubrovinsky, L.S., Savenko, B.N.  
 Structural and magnetic phase transitions in Pr(0.7)Ca(0.3)MnO(3) at high pressures  
 JETP LETTERS 92 (9) Pages: 590-594, JAN 2011.
250. Anisimov, V., Izyumov, Y  
 Electronic Structure of Strongly Correlated Materials  
 ELECTRONIC STRUCTURE OF STRONGLY CORRELATED MATERIALS Book Series: Springer Series in Solid-State Sciences  
 Volume: 163 Pages: 1-288 DOI: 10.1007/978-3-642-04826-5 Published: 2010
249. Liu, Y.-F., Zheng, H.-W., Zhang, W.-F., Gu, Y.-Z., Li, Y.-L., Zhang, H.-R.  
 Investigation of preparation, microstructure and magnetic property of hexagonal YMnO<sub>3</sub> nanorods  
 Gongneng Cailiao/Journal of Functional Materials 41 (8), pp. 1336-1339, 2010.
248. Martí, X., Skumryev, V., Laukhin, V., Bachelet, R., Ferrater, C., García-Cuenca, M.V., Varela, M., (...), Fontcuberta, J.  
 Strain-driven noncollinear magnetic ordering in orthorhombic epitaxial YMnO(3) thin films  
 JOURNAL OF APPLIED PHYSICS 108 (12) Article Number: 123917, DEC 15 2010.
247. Issing, S., Pimenov, A., Ivanov, Y.Vu., Mukhin, A.A., Geurts, J.  
 Spin-phonon coupling in multiferroic manganites RMnO(3): comparison of pure (R = Eu, Gd, Tb) and substituted (R = Eu(1-x)Y(x)) compounds  
 EUROPEAN PHYSICAL JOURNAL B 78 (3) Pages: 367-372, DEC 2010.
246. Yang Y. -F.; Held K.  
 Dynamical mean field theory for manganites  
 PHYSICAL REVIEW B 82 (19) Article Number: 195109, NOV 9 2010.
245. Zhao L. Z.; Chen Y. W.; Wang G. R.  
 Raman spectra study of orthorhombic LiMnO(2)  
 SOLID STATE IONICS 181 (31-32) Pages: 1399-1402, OCT 7 2010.
244. Guennou, M., Bouvier, P., Krikler, B., Kreisel, J., Haumont, R., Garbarino, G.

High-pressure investigation of CaTiO(3) up to 60 GPa using x-ray diffraction and Raman spectroscopy  
PHYSICAL REVIEW B 82 (13) Article Number: 134101, OCT 4 2010.

243. Rout G. C.; Panda Saswati; Behera S. N.

Theoretical study of the Raman active CDW gap mode in manganites

JOURNAL OF PHYSICS-CONDENSED MATTER 22 (37) Article Number: 376003, SEP 22 2010.

242. Baldassarre, L., Peruchhi, A., Lupi, S., Dore, P.

Far infrared properties of the rare-earth scandate DyScO(3)

JOURNAL OF PHYSICS-CONDENSED MATTER 22 (35) Article Number: 355402, SEP 8 2010.

241. Chaban, N., Weber, M., Pignard, S., Kreisel, J.

Phonon Raman scattering of perovskite LaNiO(3) thin films

APPLIED PHYSICS LETTERS 97 (3) Article Number: 031915, JUL 19 2010

240. Varshney D.; Choudhary D.; Shaikh M. W.; et al.

Electrical resistivity behaviour of sodium substituted manganites: electron-phonon, electron-electron and electron-magnon interactions  
EUROPEAN PHYSICAL JOURNAL B 76 (2) Pages: 327-338, JUL 2010

239. Zagorac, J., Bošković, S., Matović, B., Babić-Stojić, B.

Structure and Magnetic Investigations of Ca(1+x)Y(x)MnO(3) ( $x=0, 0.1, 0.2, 0.3$ ) and Mn(4+)/Mn(3+) Relation Analysis

SCIENCE OF SINTERING 42 (2) Pages: 221-232, MAY-AUG 2010

238. Moreira, J.A., Almeida, A., Ferreira, W.S., Araújo, J.E., Pereira, A.M., Chaves, M.R., Kreisel, J., (...), Tavares, P.B.

Coupling between phonons and magnetic excitations in orthorhombic Eu(1-x)Y(x)MnO(3)

PHYSICAL REVIEW B 81 (5) Article Number: 054447, FEB 2010

237. Martí, X., Skumryev, V., Ferrater, C., García-Cuenca, M.V., Varela, M., Sánchez, F., Fontcuberta, J.

Emergence of ferromagnetism in antiferromagnetic TbMnO<sub>3</sub> by epitaxial strain

Applied Physics Letters 96 (22), art. no. 222505 (2010).

236. Chaix-Pluchery, O., Sauer, D., Kreisel, J.

Temperature-dependent Raman scattering of DyScO<sub>3</sub> and GdScO<sub>3</sub> single crystals

Journal of Physics Condensed Matter 22 (16), art. no. 165901 (2010).

235. Malavasi, L., Baldini, M., Di Castro, D., Nucara, A., Crichton, W., Mezouar, M., Blasco, J., Postorino, P.

High pressure behavior of Ga-doped LaMnO<sub>3</sub>: A combined X-ray diffraction and optical spectroscopy study

Journal of Materials Chemistry 20 (7), pp. 1304-1311 (2010).

234. Salama, H.A., Stewart, G.A., Hutchison, W.D., Nishimura, K., Scott, D.R., O'Neill, H.StC.

A 169Tm-Mössbauer spectroscopy investigation of orthorhombic phase o - TmMnO<sub>3</sub>

Solid State Communications 150 (5-6), pp. 289-291 (2010).

233. Issing, S., Fuchs, F., Ziereis, C., Batke, E., Pimenov, A., Ivanov, Y.V., Mukhin, A.A., Geurts, J.

Lattice dynamics of Eu<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> ( $0 \geq x \geq 0.5$ )

European Physical Journal B 73 (3), pp. 353-360 (2010).

232. Jehanathan, N., Lebedev, O., Gélard, I., Dubourdieu, C., Van Tendeloo, G.

Structure and defect characterization of multiferroic ReMnO<sub>3</sub> films and multilayers by TEM

Nanotechnology 21 (7), art. no. 075705 (2010).

231. Issing, S., Pimenov, A., Ivanov, V.Y., Mukhin, A.A., Geurts, J.

Composition-dependent spin-phonon coupling in mixed crystals of the multiferroic manganite Eu<sub>1-x</sub>Y<sub>x</sub>MnO ( $0 \leq x \leq 0.5$ ) studied by Raman spectroscopy

Physical Review B - Condensed Matter and Materials Physics 81 (2) Article Number: 024304 (2010).

230. Chen, C.Z., Cai, C.B., Liu, Z.Y., Peng, L., Gao, B., Fan, F., Lu, Y.M., (...), Dou, S.X.

Stress evolution and lattice distortion induced by thickness variation and lattice misfit in La<sub>0.67</sub> Sr<sub>0.33</sub> MnO<sub>3</sub> - δ films

Solid State Communications 150 (1-2), pp. 66-69 (2010).

229. Varshney, D., Choudhary, D., Shaikh, M.W.

Interpretation of metallic and semiconducting temperature-dependent resistivity of La<sub>1-x</sub>NaxMnO<sub>3</sub> ( $x = 0.07, 0.13$ ) manganites  
Computational Materials Science 47 (3), pp. 839-847 (2010).

228. Sopracase, R., Gruener, G., Olive, E., Soret, J.-C.

Infrared study of the phonon modes in PrMnO<sub>3</sub> and CaMnO<sub>3</sub>

Physica B: Condensed Matter 405 (1), pp. 45-52 (2010).

227. Yusa, H., Belik, A.A., Takayama-Muromachi, E., Hirao, N., Ohishi, Y.

High-pressure phase transitions in BiMO<sub>3</sub> (M=Al, Ga, and In): In situ x-ray diffraction and Raman scattering experiments

PHYSICAL REVIEW B Volume: 80 Issue: 21 Article Number: 214103 DOI: 10.1103/PhysRevB.80.214103 Published: DEC 2009

226. Casu, A., Ricci, PC, Anedda, A

Structural characterization of Lu<sub>0.7</sub>Y<sub>0.3</sub>AlO<sub>3</sub> single crystal by Raman spectroscopy

JOURNAL OF RAMAN SPECTROSCOPY Volume: 40 Issue: 9 Pages: 1224-1228 DOI: 10.1002/jrs.2266 Published: SEP 2009

225. Siranidi, E., Lampakis, D., Palles, D., Liarokapis, E., Palstra, T.T.M  
 Micro-Raman study of the spin and orbital ordering in SmVO<sub>3</sub>  
 Journal of Physics Conference Series Volume: 150 Article Number: 042184 DOI: 10.1088/1742-6596/150/4/042184 Part: 4 Published: 2009
224. Wall, S., Polli, D., Rini, M., Dharmalingam, P.; Boothroyd, A.T., Tomioka, Y., Tokura, Y., Schoenlein, R.W., Cerullo, G., Cavalleri, A  
 Coherent Orbital Waves in Manganites  
 ULTRAFAST PHENOMENA XVI Book Series: Springer Series in Chemical Physics Volume: 92 Pages: 170-172 Published: 2009
223. Rao, M.N., Kaur, N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
 Lattice dynamics of orthorhombic perovskite yttrium manganite, YMnO<sub>3</sub>  
 Journal of Physics Condensed Matter 21 (35), art. no. 355402 (2009).
222. Kuo, C.C., Liu, W.-R., Hsieh, W.F., Hsu, C.-H., Hsu, H.C., Chen, L.C.  
 Crystal symmetry breaking of wurtzite to orthorhombic in nonpolar a-ZnO epi-films  
 Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS , art. no. 5343083, pp. 349-350 (2009).
221. Yarlagadda, S., Littlewood, P.B., Mitra, M., Monu, R.K.  
 Orbital ordering in undoped manganites via a generalized Peierls instability  
 Physical Review B - Condensed Matter and Materials Physics 80 (23), art. no. 235123 (2009).
220. Siranidi, E., Lampakis, D., Palles, D., Liarokapis, E., Palstra, T.T.M.  
 Micro-Raman study of the spin and orbital ordering in SmVO<sub>3</sub>  
 Journal of Physics: Conference Series 150 (4), art. no. 042184 (2009).
219. Hsieh, C.C., Lin, T.H., Shih, H.C., Lin, J.-Y., Hsu, C.-H., Luo, C.W., Wu, K.H., (...), Juang, J.Y.  
 Electronic structure and magnetic anisotropies in orthorhombic multiferroic YMnO<sub>3</sub> thin films  
 Journal of Physics: Conference Series 150 (4), art. no. 042062 (2009).
218. Liu, X.-Q., Han, G.-J., Huang, C.-K., Lan, W.  
 Thickness dependence of microstructure for La<sub>0.9</sub>Sr<sub>0.1</sub>MnO<sub>3</sub>/Si films determined by micro-Raman spectroscopy  
 Wuli Xuebao/Acta Physica Sinica 58 (11), pp. 8008-8013 (2009).
217. Truong, K.D., Singh, M.P., Jandl, S., Fournier, P.  
 Influence of Ni/Mn cation order on the spin-phonon coupling in multifunctional La<sub>2</sub>NiMnO<sub>6</sub> epitaxial films by polarized Raman spectroscopy  
 Physical Review B - Condensed Matter and Materials Physics 80 (13), art. no. 134424 (2009).
216. Wang, W.-R., Song, G.-X., Zhao, Y., Han, X.-Y.  
 Raman active phonons in RMnO<sub>3</sub> (R=La, Pr, Nd, Sm ) manganites  
 Proceedings of SPIE - The International Society for Optical Engineering 7282, art. no. 72822R (2009).
215. Jang, Y.H., Gervais, F., Lansac, Y.  
 A-site ordering in colossal magnetoresistance manganite La<sub>1-x</sub>S<sub>x</sub>MnO<sub>3</sub>? Molecular dynamics simulations and quantum mechanics calculations  
 Journal of Chemical Physics 131 (9), art. no. 094503 (2009).
214. Wall, S., Prabhakaran, D., Boothroyd, A.T., Cavalleri, A.  
 Ultrafast coupling between light, Coherent lattice vibrations, and the magnetic structure of semicovalent LaMnO<sub>3</sub>  
 Physical Review Letters 103 (9), art. no. 097402 (2009).
213. Baldini, M., Di Castro, D., Cestelli-Guidi, M., Garcia, J., Postorino, P.  
 Phase-separated states in high-pressure LaMn<sub>1-x</sub>G<sub>x</sub>O<sub>3</sub> manganites  
 Physical Review B - Condensed Matter and Materials Physics 80 (4), art. no. 045123 (2009).
212. Chaboy, J.  
 Relationship between the structural distortion and the Mn electronic state in La<sub>1-x</sub>C<sub>x</sub>MnO<sub>3</sub>: A Mn K-edge XANES study  
 Journal of Synchrotron Radiation 16 (4), pp. 533-544 (2009).
211. Choithrami, R., Rao, M.N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
 Lattice dynamics of manganites RMnO<sub>3</sub> (R = Sm, Eu or Gd): Instabilities and coexistence of orthorhombic and hexagonal phases  
 New Journal of Physics 11, art. no. 073041 (2009).
210. Kuo, C.C., Liu, W.-R., Hsieh, W.F., Hsu, C.-H., Hsu, H.C., Chen, L.C.  
 Crystal symmetry breaking of wurtzite to orthorhombic in nonpolar a-ZnO epifilms  
 Applied Physics Letters 95 (1), art. no. 011905 (2009).
209. Chaix-Pluchery, O., Kreisel, J.  
 Raman scattering of perovskite DyScO<sub>3</sub> and GdScO<sub>3</sub> single crystals  
 Journal of Physics Condensed Matter 21 (17), art. no. 175901 (2009).
208. Hao, L., Sheng, L.  
 Formation and temperature evolution of correlated polarons in colossal magnetoresistive manganites  
 Journal of Physics Condensed Matter 21 (21), art. no. 215605 (2009).
207. Sathe, V.G., Rawat, R., Dubey, A., Narlikar, A.V., Prabhakaran, D.

Photo-induced insulator-metal transition probed by Raman spectroscopy  
Journal of Physics Condensed Matter 21 (7), art. no. 075603 (2009).

206. Moskvin, A.S.

Disproportionation and electronic phase separation in parent manganite LaMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 79 (11), art. no. 115102 (2009).

205. Antonakos, A., Filippi, M., Auban-Senzier, P., Lampakis, D., Pasquier, C.R., Prellier, W., Liarokapis, E.  
Pressure and magnetic field effects on Pr<sub>1-x</sub>CaxMnO<sub>3</sub> thin films  
Physica Status Solidi (B) Basic Research 246 (3), pp. 622-625 (2009).

204. Antonakos, A., Filippi, M., Aydogdu, G.H., Prellier, W., Habermeier, H.-U., Liarokapis, E.  
Tuning of the charge ordered state in the manganite thin films by internal or external strains  
Physica Status Solidi (B) Basic Research 246 (3), pp. 635-642 (2009).

203. Varshney, D., Mansuri, I., Kaurav, N.

Interpretation of thermal conductivity in the ferromagnetic metallic phase of La<sub>0.83</sub>Sr<sub>0.17</sub>MnO<sub>3</sub> manganites: Scattering of phonons and magnons  
Journal of Low Temperature Physics 155 (3-4), pp. 177-199 (2009).

202. Siranidi, E., Lampakis, D., Palles, D., Liarokapis, E., Colin, C., Palstra, T.T.M.  
Raman studies of vanadates at low temperatures and high pressures  
Journal of Superconductivity and Novel Magnetism 22 (2), pp. 185-188 (2009).

201. Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W., Aydogdu, G.H., Habermeier, H.-U.  
Infrared reflectivity spectra of manganite thin films grown on different substrates  
Journal of Superconductivity and Novel Magnetism 22 (2), pp. 109-113 (2009).

200. El-Hagary, M., Shoker, Y.A., Mohammad, S., Moustafa, A.M., El-Aal, A.A., Michor, H., Reissner, M., (...), Ramadan, A.A.  
Structural and magnetic properties of polycrystalline La<sub>0.77</sub>Sr<sub>0.23</sub>Mn<sub>1-x</sub>Cu<sub>x</sub>O<sub>3</sub> ( $0 \leq x \leq 0.5$ ) manganites  
Journal of Alloys and Compounds 468 (1-2), pp. 47-53 (2009).

199. Kovaleva, N.N., Boris, A.V., Capogna, L., Gavartin, J.L., Popovich, P., Yordanov, P., Maljuk, A., (...), Keimer, B.  
Dipole-active optical phonons in YTiO<sub>3</sub>: Ellipsometry study and lattice-dynamics calculations  
Physical Review B - Condensed Matter and Materials Physics 79 (4), art. no. 045114 (2009).

198. Popa, M., Calderón-Moreno, J.M.

Lanthanum cobaltite thin films on stainless steel  
Thin Solid Films 517 (5), pp. 1530-1533 (2009).

197. Sacchetti, A., Corridoni, T., Arcangeletti, E., Postorino, P.

High pressure Raman study of La<sub>1-x</sub>CaxMnO<sub>3</sub>-delta manganites  
EUROPEAN PHYSICAL JOURNAL B Volume: 66 Issue: 3 Pages: 301-305 DOI: 10.1140/epjb/e2008-00441-1 Published: DEC 2008

196. Dubey, A., Sathe, V.G., Rawat, R.

Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO<sub>3+delta</sub> thin films  
JOURNAL OF APPLIED PHYSICS Volume: 104 Issue: 11 Article Number: 113530 DOI: 10.1063/1.3040718 Published: DEC 1 2008

195. Dilawar, N., Chandra, U., Parthasarathy, G., Bandyopadhyay, A.K.

Study of high-pressure-induced phase transition in nanocrystalline perovskite (LaSr)(MnFe)O-3 by Raman spectroscopy  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 39 Issue: 12 Pages: 1765-1771 DOI: 10.1002/jrs.2032 Published: DEC 2008

194. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., Eriksson, S.-G., Rüthausen, M., Chaudhury, R.P.

Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
PHYSICAL REVIEW B Volume: 78 Issue: 23 Article Number: 235103 DOI: 10.1103/PhysRevB.78.235103 Published: DEC 2008

193. Smirnova, I.S., Bazhenov, A.V., Fursova, T.N., Dubovitskii, A.F., Uspenskaya, L.S., Maksimuk, M.Yu.

IR-active optical phonons in Pnma-1, Pnma-2 and R(3)over-bar-c phases of LaMnO(3+delta)

PHYSICA B-CONDENSED MATTER Volume: 403 Issue: 21-22 Pages: 3896-3902 DOI: 10.1016/j.physb.2008.07.008 Published: NOV 30 2008

192. Vermette, J., Jandl, S., Gospodinov, M.M.

Raman study of spin-phonon coupling in ErMnO<sub>3</sub>

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 20 Issue: 42 Article Number: 425219 DOI: 10.1088/0953-8984/20/42/425219 Published: OCT 22 2008

191. Lü, W., Ma, X., Zhou, H., Chen, G., Li, J., Zhu, Z., You, Z., Tu, C.

White up-conversion luminescence in rare-earth-ion-doped YAlO<sub>3</sub> nanocrystals

JOURNAL OF PHYSICAL CHEMISTRY C Volume: 112 Issue: 38 Pages: 15071-15074 DOI: 10.1021/jp805205v Published: SEP 25 2008

190. Antonakos, A., Palles, D., Liarokapis, E., Filippi, M., Prellier, W.

Evaluation of the strains in charge-ordered Pr(1-x)Ca(x)MnO(3) thin films using Raman spectroscopy

JOURNAL OF APPLIED PHYSICS Volume: 104 Issue: 6 Article Number: 063508 DOI: 10.1063/1.2978207 Published: SEP 15 2008

189. Girardot, C., Kreisel, J., Pignard, S., Caillault, N., Weiss, F.  
 Raman scattering investigation across the magnetic and metal-insulator transition in rare earth nickelate  $RNiO_3$  ( $R=Sm, Nd$ ) thin films  
 PHYSICAL REVIEW B Volume: 78 Issue: 10 Article Number: 104101 DOI: 10.1103/PhysRevB.78.104101 Published: SEP 2008
188. Souza, J.A., Terashita, H., Granado, E., Jardim, R.F., Oliveira, N.F., Muccillo, R.  
 Polaron liquid-gas crossover at the orthorhombic-rhombohedral transition of manganites  
 PHYSICAL REVIEW B Volume: 78 Issue: 5 Article Number: 054411 DOI: 10.1103/PhysRevB.78.054411 Published: AUG 2008
187. Singh, M.K., Jang, H.M., Gupta, H.C., Katiyar, R.S.  
 Polarized Raman scattering and lattice eigenmodes of antiferromagnetic  $NdFeO_3$   
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 39 Issue: 7 Pages: 842-848 DOI: 10.1002/jrs.1923 Published: JUL 2008
186. Kim, M., Barath, H., Cooper, S.L., Abbamonte, P., Fradkin, E., Rüthausen, M., Zhang, C.L., Cheong, S.-W.  
 Raman scattering studies of the temperature- and field-induced melting of charge order in  $La(x)Pr(y)Ca(1-x-y)MnO_3$   
 PHYSICAL REVIEW B Volume: 77 Issue: 13 Article Number: 134411 DOI: 10.1103/PhysRevB.77.134411 Published: APR 2008
185. Paula, A.J., Zaghete, M.A., Longo, E., Varela, J.A.  
 Microwave-assisted hydrothermal synthesis of structurally and morphologically controlled sodium niobates by using niobic acid as a precursor  
 EUROPEAN JOURNAL OF INORGANIC CHEMISTRY Issue: 8 Pages: 1300-1308 DOI: 10.1002/ejic.200701138 Published: MAR 2008
184. Li, N., Lin, F.-T., Ma, X.-M., Shi, W.-Z.  
 Effect of post-annealing on the structure and fluorescence properties of  $YMnO_3$  thin films  
 SPECTROSCOPY AND SPECTRAL ANALYSIS Volume: 28 Issue: 3 Pages: 606-608 Published: MAR 2008
183. Feng, S.M., Wang, L.J., Zhu, J.L., Li, F.Y., Yu, R.C., Jin, C.Q., Wang, X.H., Li, L.T.  
 Pressure-induced phase transition in  $Ho(0.8)Dy(0.2)MnO_3$  multiferroic compound  
 JOURNAL OF APPLIED PHYSICS Volume: 103 Issue: 2 Article Number: 026102 DOI: 10.1063/1.2829778 Published: JAN 15 2008
182. Lampakis, D., Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W.  
 Pressure induced insulator-metal phase transition on  $Pr0.6Ca0.4MnO_3$  thin films  
 Journal of Physics Conference Series Volume: 121 Article Number: 052002 DOI: 10.1088/1742-6596/121/5/052002 Published: 2008
181. Hsieh, C.C., Lin, T.H., Shih, H.C., Hsu, C.-H., Luo, C.W., Lin, J.-Y., Wu, K.H., (...), Juang, J.Y.  
 Magnetic ordering anisotropy in epitaxial orthorhombic multiferroic  $YMnO_3$  films  
 Journal of Applied Physics 104 (10), art. no. 103912 (2008).
180. Antonakos, A., Lampakis, D., Liarokapis, E., Filippi, M., Prellier, W., Auban-Senzier, P., Pasquier, C.  
 Pressure effects on the phase separation of  $Pr0.6Ca0.4MnO_3$  thin films  
 Journal of Physics Condensed Matter 20 (48), art. no. 485202 (2008).
179. Yun, H.J., Gervais, F., Lansac, Y.  
 A-site distribution in  $La_{1-x}Sr_xMnO_3$ : A computational study  
 Materials Research Society Symposium Proceedings 1074, pp. 46-51 (2008).
178. Dubey, A., Sathe, V.G.  
 The effect of magnetic order and thickness in the Raman spectra of oriented thin films of  $LaMnO_3$   
 JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 19 Issue: 34 Article Number: 346232 DOI: 10.1088/0953-8984/19/34/346232 Published: AUG 29 2007
177. Jandl, S., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.  
 Micro-Raman and magnetization studies of  $Nd(1-x)Ca(x)MnO_3$  phase transitions  
 Journal of Physics Conference Series Volume: 92 Article Number: 012125 DOI: 10.1088/1742-6596/92/1/012125 Published: 2007
176. Yang, Y.-F., Held, K.  
 Localization of strongly correlated electrons as Jahn-Teller polarons in manganites  
 Physical Review B - Condensed Matter and Materials Physics 76 (21), art. no. 212401 (2007)
175. Vali, R.  
 Vibrational, dielectric and scintillation properties of  $YAlO_3$   
 Journal of Luminescence 127 (2), pp. 727-730 (2007)
174. Gupta, R.K., Whang, C.M.  
 Effects of anion and synthesis route on the structure of  $(La0.9 Sr0.1)(Cr0.85 Fe0.05 Co0.05 Ni0.05)O_3 - \delta$  perovskite and removal of impurity phases  
 Solid State Ionics 178 (29-30), pp. 1617-1626 (2007)
173. Choi, Y., Mebane, D.S., Wang, J.-H., Liu, M.  
 Continuum and quantum-chemical modeling of oxygen reduction on the cathode in a solid oxide fuel cell  
 Topics in Catalysis 46 (3-4), pp. 386-401 (2007)
172. Antonakos, A., Liarokapis, E., Aydogdu, G.H., Habermeier, H.-U.  
 Strain effects on  $La0.5Ca0.5MnO_3$  thin films  
 Materials Science and Engineering B: Solid-State Materials for Advanced Technology 144 (1-3), pp. 83-88 (2007)

171. Ying, Y., Fan, J., Pi, L., Hong, B., Tan, S., Zhang, Y.  
 The effect of Ga doping in Nd<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> system  
 Solid State Communications 144 (7-8), pp. 300-304 (2007)
170. Truong, K.D., Laverdière, J., Singh, M.P., Jandl, S., Fournier, P.  
 Impact of Co Mn cation ordering on phonon anomalies in La<sub>2</sub>CoMnO<sub>6</sub> double perovskites: Raman spectroscopy  
 Physical Review B - Condensed Matter and Materials Physics 76 (13), art. no. 132413 (2007)
169. Fukumura, H., Matsui, S., Harima, H., Takahashi, T., Itoh, T., Kisoda, K., Tamada, M., (...), Miyayama, M.  
 Observation of phonons in multiferroic BiFeO<sub>3</sub> single crystals by Raman scattering  
 Journal of Physics Condensed Matter 19 (36), art. no. 365224 (2007)
168. Zinenko, V.I., Pavlovskii, M.S.  
 Lattice dynamics and the phase transition from the cubic phase to the tetragonal phase in the LaMnO<sub>3</sub> crystal within the polarizable-ion model  
 Physics of the Solid State 49 (9), pp. 1749-1758 (2007)
167. Li, W.J., Zhang, B., Lu, W., Sun, Y.P., Zhang, Y.  
 Cr-doping effect on the structural, magnetic, transport properties and Raman spectroscopy of La(2+x)/3Sr(1-x)/3Mn1-xCr<sub>x</sub>O<sub>3</sub> perovskites  
 Journal of Physics and Chemistry of Solids 68 (9), pp. 1749-1755 (2007)
166. Kawasaki, T., Ogimoto, Y., Ogawa, N., Miyano, K., Tamaru, H., Izumi, M.  
 Charge- and orbital-ordering patterns in Bi<sub>1/2</sub>Sr<sub>1/2</sub>MnO<sub>3</sub> thin films studied by Raman scattering  
 Journal of Applied Physics 101 (12), art. no. 123714 (2007)
165. Fan, J., Pi, L., He, Y., Ling, L., Dai, J., Zhang, Y.  
 Griffiths phase and magnetic polaronic behavior in B-site disordering manganites  
 Journal of Applied Physics 101 (12), art. no. 123910 (2007)
164. Rini, E.G., Rao, M.N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
 Phonon dynamics of lanthanum manganite LaMnO<sub>3</sub> using an interatomic shell model potential  
 Physical Review B - Condensed Matter and Materials Physics 75 (21), art. no. 214301 (2007)
163. Gupta, R.K., Whang, C.M.  
 Structural study of a sol-gel derived novel solid oxide fuel cell perovskite: (La<sub>1-x</sub>Sr<sub>x</sub>)(Cr<sub>0.85</sub>Fe<sub>0.05</sub>Co<sub>0.05</sub>Ni<sub>0.05</sub>)O<sub>3-δ</sub>  
 Journal of Physics Condensed Matter 19 (19), art. no. 196209 (2007)
162. Asokan, K., Dong, C.L., Bao, C.W., Tsai, H.M., Chiou, J.W., Chang, C.L., Pong, W.F., (...), Peña, O.  
 Electronic structures of hexagonal manganites HoMnO<sub>3</sub> studied by X-ray absorption near-edge structure  
 AIP Conference Proceedings 879, pp. 1659-1662 (2007)
161. Božin, E.S., Schmidt, M., Deconinck, A.J., Paglia, G., Mitchell, J.F., Chatterji, T., Radaelli, P.G., (...), Billinge, S.J.L.  
 Understanding the insulating phase in colossal magnetoresistance manganites: Shortening of the Jahn-Teller long-bond across the phase diagram of La<sub>1-x</sub>CaxMnO<sub>3</sub>  
 Physical Review Letters 98 (13), art. no. 137203 (2007)
160. Andreasson, J., Holmlund, J., Knee, C.S., Käll, M., Börjesson, L., Naler, S., Bäckström, J., (...), Eriksson, S.-G.  
 Franck-Condon higher order lattice excitations in the la Fe<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> (x=0, 0.1, 0.5, 0.9, 1.0) perovskites due to Fe-Cr charge transfer effects  
 Physical Review B - Condensed Matter and Materials Physics 75 (10), art. no. 104302 (2007)
159. Gouadec, G., Colombar, P.  
 Raman Spectroscopy of nanomaterials: How spectra relate to disorder, particle size and mechanical properties  
 Progress in Crystal Growth and Characterization of Materials 53 (1), pp. 1-56 (2007)
158. Xu, J., Park, J.H., Jang, H.M.  
 Orbital-spin-phonon coupling in Jahn-Teller-distorted LaMnO<sub>3</sub>: Softening of the 490 and 610 cm<sup>-1</sup> Raman-active modes  
 Physical Review B - Condensed Matter and Materials Physics 75 (1), art. no. 012409 (2007)
157. Vijayanandhini, K., Kutty, T.R.N.  
 Effects of Zn substitution on the magnetic and transport properties of La<sub>0.6</sub>Sr<sub>0.4</sub>Mn<sub>1-y</sub>Zn<sub>y</sub>O<sub>3-δ</sub> (0≤y≤0.3)  
 Solid State Communications 141 (5), pp. 252-257 (2007)
156. Sugai, S., Hirota, K., Kikuchi, A.  
 Orbital waves in YVO<sub>3</sub> observed by raman scattering  
 AIP Conference Proceedings 850, pp. 1227-1228 (2006)
155. Li, W.J., Zhang, Bo., Lu, W.  
 Structural properties and Raman spectroscopy of orthorhombic (Eu<sub>1-x</sub>Pr<sub>x</sub>)<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> (0≤x≤1.0)  
 Solid State Communications 140 (11-12), pp. 503-507 (2006)
154. Minh, N.V., Yang, I.-S.  
 A Raman scattering study of structural changes in LaMn<sub>1-x</sub>CoxO<sub>3+δ</sub> system  
 Vibrational Spectroscopy 42 (2), pp. 353-356 (2006)
153. Zhang, T., Li, G., Qian, T., Qu, J.F., Xiang, X.Q., Li, X.G.

Effect of particle size on the structure and magnetic properties of La<sub>0.6</sub>Pb<sub>0.4</sub>MnO<sub>3</sub> nanoparticles  
Journal of Applied Physics 100 (9), art. no. 094324 (2006)

152. Laverdière, J., Jandl, S., Mukhin, A.A., Ivanov, V.Yu.  
Raman study of orbital mediated multiphonons in RMnO<sub>3</sub> (R = Pr,Sm,Eu,Tb,Y)  
European Physical Journal B 54 (1), pp. 67-72 (2006)

151. Kim, J., Jung, S., Park, M.S., Lee, S.-I., Drew, H.D., Cheong, H., Kim, K.H., Choi, E.J.  
Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (5), art. no. 052406 (2006)

150. Minh, N.V., Hoc, N.Q., Ha Phuong, L.T., Yang, I.-S.  
The effect of Fe substitution on the structural transition of LaMn<sub>1-x</sub>FexO<sub>3</sub> manganites: A raman spectroscopy study  
Journal of Nonlinear Optical Physics and Materials 15 (3), pp. 315-321 (2006)

149. Choi, K.-Y., Pashkevich, Yu.G., Gnezdilov, V.P., Güntherodt, G., Yeremenko, A.V., Nabok, D.A., Kamenev, V.I., (...), Lemmens, P.  
Orbital fluctuating state in ferromagnetic insulating LaMn O<sub>3+δ</sub> (0.085≤δ≤0.125) studied using Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 74 (6), art. no. 064406 (2006)

148. Sartbaeva, A., Wells, S.A., Thorpe, M.F., Božin, E.S., Billinge, S.J.L.  
Geometric simulation of perovskite frameworks with Jahn-Teller distortions: Applications to the cubic manganites  
Physical Review Letters 97 (6), art. no. 065501 (2006)

147. Talati, M., Jha, P.K.  
Structure dependent phonon properties of LaMnO<sub>3</sub>  
Computational Materials Science 37 (1-2), pp. 64-68 (2006)

146. Mondal, P., Bhattacharya, D., Choudhury, P.  
Dielectric anomaly at the orbital order-disorder transition in LaMnO<sub>3+δ</sub>  
Journal of Physics Condensed Matter 18 (29), art. no. 024, pp. 6869-6881 (2006)

145. Hotta, T.  
Orbital ordering phenomena in d- and f-electron systems  
Reports on Progress in Physics 69 (7), art. no. R02, pp. 2061-2155 (2006)

144. Jandl, S., Laverdière, J., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.  
Raman and infrared quest for orbitons in Nd<sub>1-x</sub>SrxMnO<sub>3</sub>  
Physica B: Condensed Matter 381 (1-2), pp. 214-218 (2006)

143. Sacchetti, A., Baldini, M., Postorino, P., Martin, C., Maignan, A.  
Raman spectroscopy on cubic and hexagonal SrMnO<sub>3</sub>  
Journal of Raman Spectroscopy 37 (5), pp. 591-596 (2006)

142. Sugai, S., Kikuchi, A., Mori, Y.  
Raman scattering of orbital waves in YTiO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 73 (16), art. no. 161101, pp. 1-4 (2006)

141. Belik, A.A., Stefanovich, S.Yu., Lazoryak, B.I., Takayama-Muromachi, E.  
BiInO<sub>3</sub>: A polar oxide with GdFeO<sub>3</sub>-type perovskite structure  
Chemistry of Materials 18 (7), pp. 1964-1968

140. Liu, H.L., Lu, K.S., Kuo, M.X., Uba, L., Uba, S., Wang, L.M., Jeng, H.-T.  
Magneto-optical properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> thin films with perpendicular magnetic anisotropy  
Journal of Applied Physics 99 (4) (2006)

139. Kartopu G, Es-Souni M  
Microstructural properties of solution-deposited La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> and LaMnO<sub>3</sub> thin films  
JOURNAL OF APPLIED PHYSICS 99 (3): Art. No. 033501 FEB 1 2006

138. Sugai S, Hirota K  
Orbital waves in YVO<sub>3</sub> studied by Raman scattering  
PHYSICAL REVIEW B 73 (2): Art. No. 020409 JAN 2006

137. Roy, P., Qi, Z., Brubach, J.-B., Favarro, L., Piralli, O., Vervloet, M.  
Exploiting synchrotron infrared spectra using ab initio calculations  
WMSCI 2005: 9th World Multi-Conference on Systemics, Cybernetics and Informatics, Vol 6 Pages: 51-55 Published: 2005

136. Guidi, M.C., Sacchetti, E., Arcangeletti, M., Piccinini, P., Postorino, A., Nucara, A., Marcelli, P., Calvani  
Pressure dependence of the phonon spectrum of la<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3-δ</sub> manganites  
Proceedings of SPIE - The International Society for Optical Engineering 5932, pp. 1-8 (2005)

135. Liu, H.L., Kuo, M.X., Her, J.L., Lu, K.S., Weng, S.M., Wang, L.M., Cheng, S.L., Lin, J.G.  
Thickness-dependent optical properties of La<sub>0.7</sub> Sr<sub>0.3</sub> MnO<sub>3</sub> thin films  
Journal of Applied Physics 97 (11), pp. 1-4 (2005)

134. Dore P, Postorino P, Sacchetti A, et al.

Raman measurements on thin films of the La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite: a probe of substrate-induced effects  
EUROPEAN PHYSICAL JOURNAL B 48 (2): 255-258 NOV 2005

133. Zhao BC, Song WH, Ma YQ, et al.  
Reentrant metal-insulator transition in the Cu-doped manganites La<sub>1-x</sub>Pb<sub>x</sub>MnO<sub>3</sub> (x similar to 0.14) single crystals  
PHYSICAL REVIEW B 72 (13): Art. No. 132401 OCT 2005

132. Varshney D, Kaurav N  
Interpretation of temperature-dependent resistivity of La-Pb-MnO<sub>3</sub>: Role of electron-phonon interaction  
JOURNAL OF LOW TEMPERATURE PHYSICS 141 (3-4): 165-178 NOV 2005

131. Rozenberg GK, Pasternak MP, Xu WM, et al.  
Consequences of pressure-instigated spin crossover in RFeO<sub>3</sub> perovskites; a volume collapse with no symmetry modification  
EUROPHYSICS LETTERS 71 (2): 228-234 JUL 2005

130. Choi KY, Lemmens P, Guntherodt G, et al.  
Orbiton-mediated multiphonon scattering in La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
PHYSICAL REVIEW B 72 (2): Art. No. 024301 JUL 2005

129. Jandl S, Mukhin AA, Ivanov VY, et al.  
Raman-active phonons and Nd<sup>3+</sup> crystal-field studies of weakly doped Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
PHYSICAL REVIEW B 72 (2): Art. No. 024423 JUL 2005

128. Schulz B, Backstrom J, Budelmann D, et al.  
Fully reflective deep ultraviolet to near infrared spectrometer and entrance optics for resonance Raman spectroscopy  
REVIEW OF SCIENTIFIC INSTRUMENTS 76 (7): Art. No. 073107 JUL 2005

127. Ghosh S, Kamaraju N, Seto M, et al.  
Raman scattering in CaFeO<sub>3</sub> and La<sub>0.33</sub>Sr<sub>0.67</sub>FeO<sub>3</sub> across the charge-disproportionation phase transition  
PHYSICAL REVIEW B 71 (24): Art. No. 245110 JUN 2005

126. Aliaga H  
Time-dependent local Green's operator and its applications to manganites  
PHYSICAL REVIEW B 71 (18): Art. No. 184404 MAY 2005

125. Her JL, Liu HL, Mukovskii YM, et al.  
Raman scattering studies of single-crystal La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
CHINESE JOURNAL OF PHYSICS 43 (3): 763-766 Suppl. 2 JUN 2005

124. Choi KY, Lemmens P, Sahaoui T, et al.  
Existence of orbital polarons in ferromagnetic insulating La<sub>1-x</sub>SrMnO<sub>3</sub> (0.11 <= x <= 0.14) revealed by giant phonon softening  
PHYSICAL REVIEW B 71 (17): Art. No. 174402 MAY 2005

123. Lim D, Thorsmolle VK, Averitt RD, et al.  
Coherent optical and acoustic phonon generation correlated with the charge-ordering phase transition in La<sub>1-x</sub>CaxMnO<sub>3</sub>  
PHYSICAL REVIEW B 71 (13): Art. No. 134403 APR 2005

122. Xiong YM, Wang GY, Luo XG, et al.  
Magnetotransport properties in La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) thin films deposited on different substrates  
JOURNAL OF APPLIED PHYSICS 97 (8): Art. No. 083909 APR 15 2005

121. Wang WR, Xu DP, Su WH  
Raman shift of RMnO<sub>3</sub> (R = La, Pr, Nd, Sm) manganites  
CHINESE PHYSICS LETTERS 22 (3): 705-707 MAR 2005

120. Xu SJ, Tong W, Fan JY, et al.  
Influence of doped Dy on magnetic and electronic properties in La<sub>0.67-x</sub>Dy<sub>x</sub>Sr<sub>0.33</sub>MnO<sub>3</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 288: 92-105 MAR 2005

119. Seikh MM, Sood AK, Narayana C  
Electronic and vibrational Raman spectroscopy of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub> through the phase transitions  
PRAMANA-JOURNAL OF PHYSICS 64 (1): 119-128 JAN 2005

118. Venimadhav A, Yates KA, Blamire MG  
Scanning Raman spectroscopy for characterizing compositionally spread films  
JOURNAL OF COMBINATORIAL CHEMISTRY 7 (1): 85-89 JAN-FEB 2005

117. Pashkevich, YG, Gnezdilov, VP, Lemmens, P, Choi, KY, Guntherodt, G, Yeremenko, AV, Barilo, SN, Shiryaev, SV, Soldatov, AG  
Giant phonon softening in ferromagnetic LaMnO<sub>3+delta</sub>  
SPECTROSCOPY OF EMERGING MATERIALS Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS  
AND CHEMISTRY Volume: 165 Pages: 185-194 Published: 2004

116. Wu L, Yu JC, Zhang LZ, et al.  
Selective self-propagating combustion synthesis of hexagonal and orthorhombic nanocrystalline yttrium iron oxide  
JOURNAL OF SOLID STATE CHEMISTRY 177 (10): 3666-3674 OCT 2004

115. Bull, C.L., McMillan, P.F.  
 Raman scattering study and electrical properties characterization of elpasolite perovskites  $\text{Ln}_2(\text{BB}')\text{O}_6$  ( $\text{Ln}=\text{La, Sm...Gd}$  and  $\text{B,B}'=\text{Ni, Co, Mn}$ )  
*Journal of Solid State Chemistry* 177 (7), pp. 2323-2328 (2004)
114. Xiong YM, Chen T, Wang GY, et al.  
 Raman spectra in epitaxial thin films of  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$  ( $x=0.33, 0.5$ ) grown on different substrates  
*PHYSICAL REVIEW B* 70 (9): Art. No. 094407 SEP 2004
113. Varshney D, Kaurav N  
 Electrical resistivity in the ferromagnetic metallic state of  $\text{La}-\text{Ca}-\text{MnO}_3$ : Role of electron-phonon interaction  
*EUROPEAN PHYSICAL JOURNAL B* 40 (2): 129-136 JUL 2004
112. Yuan QS  
 Comment on "Strain effect and the phase diagram of  $\text{La}_{1-x}\text{Ba}_x\text{MnO}_3$  thin films"  
*PHYSICAL REVIEW B* 70 (6): Art. No. 066401 AUG 2004
111. Sacchetti A, Dore P, Postorino P, et al.  
 Pressure and temperature dependence of optical phonons in  $\text{La}_{0.75}\text{Ca}_{0.25}\text{MnO}_3$   
*JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS* 65 (8-9): 1431-1437 Sp. Iss. SI AUG-SEP 2004
110. Dho J, Leung CW, MacManus-Driscoll JL, et al.  
 Epitaxial and oriented  $\text{YMnO}_3$  film growth by pulsed laser deposition  
*JOURNAL OF CRYSTAL GROWTH* 267 (3-4): 548-553 JUL 1 2004
109. Arisi E, Bergenti I, Dedi V, et al.  
 Magnetic field-induced variations in  $\text{Pr}_{0.65}\text{Ca}_{0.35}\text{MnO}_3$ : Raman investigation  
*JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS* 272-76: 1751-1752 Part 3 Sp. Iss. SI MAY 2004
108. Maczka M, Hanuza J, Fuentes AF, et al.  
 Vibrational studies of  $\text{A}(\text{B}^{\prime} \text{B}-2/3 \text{B}^{\prime\prime})\text{O}_3$  perovskites ( $\text{A} = \text{Ba, Sr}; \text{B}' = \text{Y, Sm, Dy, Gd, In}; \text{B}'' = \text{Mo, W}$ )  
*JOURNAL OF PHYSICS-CONDENSED MATTER* 16 (13): 2297-2310 APR 7 2004
107. Tompsett GA, Sammes NM  
 Characterisation of the SOFC material,  $\text{LaCrO}_3$ , using vibrational spectroscopy  
*J POWER SOURCES* 130 (1-2): 1-7 MAY 3 2004
106. Mertelj T, Hrovat M, Kuscer D, et al.  
 Direct measurement of Polaron binding energy in  $\text{AMnO}_3(3)$  as a function of the A site ionic size by photoinduced IR absorption  
*J SUPERCOND* 17 (2): 187-191 APR 2004
105. Kruger R, Schulz B, Naler S, et al.  
 Orbital ordering in  $\text{LaMnO}_3$  investigated by resonance Raman spectroscopy  
*PHYS REV LETT* 92 (9): Art. No. 097203 MAR 5 2004
104. Tsurui T, Ogita N, Udagawa M, et al.  
 Raman scattering investigation of  $\text{Y}_{1-x}\text{Ca}_x\text{TiO}_3$   
*PHYS REV B* 69 (2): Art. No. 024102 JAN 2004
103. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
 Raman study in  $\text{Pr}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  thin films  
*ACTA PHYS POL A* 105 (1-2): 99-106 JAN-FEB 2004
102. Gnedilov VP, Yeremenko AV, Pashkevich YG, et al.  
 Phonon Raman scattering in  $\text{LaMn}_{1-x}\text{Co}_x\text{O}_3$  ( $x = 0, 0.2, 0.3, 0.4$ , and  $1.0$ )  
*LOW TEMP PHYS+* 29 (11): 963-966 NOV 2003
101. Gong F, Tong W, Tan S, et al.  
 Large effect of small Zn doping on the electric and magnetic properties in  $\text{LaMn}_{1-x}\text{Zn}_x\text{O}_3$   
*PHYS REV B* 68 (17): Art. No. 174410 NOV 2003
100. Takahashi J, Matsubara E, Arima T, et al.  
 Coherent multistep anti-Stokes and stimulated Raman scattering associated with third harmonics in  $\text{YFeO}_3$  crystals  
*PHYS REV B* 68 (15): Art. No. 155102 OCT 15 2003
99. Aliaga H, Magnoux D, Moreo A, et al.  
 Theoretical study of half-doped models for manganites: Fragility of CE phase with disorder, two types of colossal magnetoresistance, and charge-ordered states for electron-doped materials  
*PHYS REV B* 68 (10): Art. No. 104405 SEP 1 2003
98. Suzuki K, Fu DS, Nishizawa K, et al.  
 Ferroelectric property of alkoxo-derived  $\text{YMnO}_3$  films crystallized in argon  
*JPN J APPL PHYS* 1 42 (9A): 5692-5695 SEP 2003
97. Liu Y, Li G, Feng SJ, et al.  
 Jahn-Teller distortions cooperating with magnetic interaction in the Raman spectra of  $\text{La}(0.7)\text{Ca}(0.25)\text{MnO}_3(3)$  thin film

96. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study of anharmonic effects in Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003
95. Kreisel J, Bouvier P  
High-pressure Raman spectroscopy of nano-structured ABO(3) perovskites: a case study of relaxor ferroelectrics  
J RAMAN SPECTROSC 34 (7-8): 524-531 JUL-AUG 2003
94. Hu LB, Tong W, Zhu H, et al.  
The effects of Jahn-Teller distortion changes on transport properties in LaMn<sub>1-x</sub>Zn<sub>x</sub>O<sub>3</sub>  
J PHYS-CONDENS MAT 15 (12): 2033-2043 APR 2 2003
93. Jandl S, Barilo SN, Shiryaev SV, et al.  
Study of Raman active phonons in NdMnO<sub>3</sub>  
J MAGN MAGN MATER 264 (1): 36-43 AUG 2003
92. Suda J, Kamishima O, Hamaoka K, et al.  
The first-order Raman spectra and lattice dynamics for YAlO<sub>3</sub> crystal  
J PHYS SOC JPN 72 (6): 1418-1422 JUN 2003
91. Choi KY, Lemmens P, Guntherodt G, et al.  
Raman scattering study of Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> (x = 0.3, 0.5)  
J PHYS-CONDENS MAT 15 (19): 3333-3342 MAY 21 2003
90. Filippetti A, Spaldin NA  
Self-interaction-corrected pseudopotential scheme for magnetic and strongly-correlated systems  
PHYS REV B 67 (12): Art. No. 125109 MAR 15 2003
89. Van Minh N, Kim SJ, Yang IS  
Effect of Ni on structure and Raman scattering of LaMn<sub>1-x</sub>Ni<sub>x</sub>O<sub>3+delta</sub>  
PHYSICA B 327 (2-4): 208-210 APR 2003
88. Popa M, Van Hong L, Kakihana M  
Nanopowders of LaMeO<sub>3</sub> perovskites obtained by a solution-based ceramic processing technique  
PHYSICA B 327 (2-4): 233-236 APR 2003
87. Souza AG, Faria JLB, Guedes I, et al.  
Evidence of magnetic polaronic states in La<sub>0.70</sub>Sr<sub>0.30</sub>Mn<sub>1-x</sub>FexO<sub>3</sub> manganites  
PHYS REV B 67 (5): Art. No. 052405 FEB 1 2003
86. Guttler B, Amelitchev VA, Gorbenko OY, et al.  
Static and dynamic Jahn-Teller distortions in CMR manganites: A Raman spectrometric study  
PHASE TRANSIT 76 (1-2): 63-72 Part B JAN-FEB 2003
85. Nikiforov AE, Popov SE  
The lattice dynamics of LaMnO<sub>3</sub>: the role of the orbital degrees of freedom  
APPL PHYS A-MATER 74: S1743-S1745 Part 2 Suppl. S DEC 2002
84. Popa M, Frantti J, Kakihana M  
Characterization of LaMeO<sub>3</sub> (Me : Mn, Co, Fe) perovskite powders obtained by polymerizable complex method  
SOLID STATE IONICS 154: 135-141 Part B Sp. Iss. SI DEC 2002
83. Suda J, Mori T, Saito H, et al.  
First-order Raman spectra and lattice dynamics of a NdGaO<sub>3</sub> crystal  
PHYS REV B 66 (17): Art. No. 174302 NOV 1 2002
82. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons as a probe of disorder, fluctuations, and local structure in doped and undoped orthorhombic and rhombohedral manganites  
PHYS REV B 66 (17): Art. No. 174303 NOV 1 2002
81. Zhou HD, Li G, Liu F, et al.  
Raman spectrum and ESR of Pr<sub>0.5</sub>Ca<sub>0.4</sub>Sr<sub>0.1</sub>MnO<sub>3</sub>  
SOLID STATE COMMUN 124 (3): 83-87 2002
80. Qin S, Wu X, Seifert F, et al.  
Micro-Raman study of perovskites in the CaTiO<sub>3</sub>-SrTiO<sub>3</sub> system  
J CHEM SOC DALTON (19): 3751-3755 2002
79. Moskvin AS, Avvakumov IL  
Doped manganites beyond conventional double-exchange model  
PHYSICA B 322 (3-4): 371-389 SEP 2002
78. Hill NA  
Density functional studies of multiferroic magnetoelectrics

77. Suzuki, K, Nishizawa, K, Miki, T, Kato, K

Synthesis of ferroelectric YMnO<sub>3</sub> thin film by chemical solution deposition  
KEY ENG MAT 228-2: 141-146 2002

76. Suzuki K, Nishizawa K, Miki T, et al.

Effects of composition on crystallographic properties of alkoxy-derived (Y,Yb)MnO<sub>3</sub> thin films

ASIAN CERAMIC SCIENCE FOR ELECTRONICS I Book Series: KEY ENGINEERING MATERIALS Volume: 214-2 Pages: 151-156  
Published: 2002

75. Gontchar, L.E., Nikiforov, A.E.

Superexchange interaction in insulating manganites R<sub>1-x</sub>A<sub>x</sub>MnO<sub>3</sub> (x=0, 0.5)

Physical Review B - Condensed Matter and Materials Physics 66 (1), pp. 144371-144379 (2002)

74. Okamoto S, Ishihara S, Maekawa S

Theory of Raman scattering from orbital excitations in manganese oxides

PHYS REV B 66 (1): Art. No. 014435 JUL 1 2002

73. Pattabiraman M, Rangarajan G, Choi KY, et al.

Polarized Raman scattering in single crystals of Nd<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>

PRAMANA-J PHYS 58 (5-6): 1013-1017 MAY-JUN 2002

72. Postorino P, Congeduti A, Degiorgi E, et al.

High-pressure behavior of LaxSr<sub>2-x</sub>MnO<sub>4</sub> layered manganites investigated by Raman spectroscopy and x-ray diffraction

PHYS REV B 65 (22): Art. No. 224102 JUN 1 2002

71. Eriksson, S.-G., Valkeapää, M., Ivanov, S., Eriksen, J., Rundlöf, H., Johansson, L.-G., Mathieu, R., Svedlindh, P., Bäckström, J., Börjesson, L.

Phase transitions and magnetic order in La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3+delta</sub>(x <= 0.2; 2.85 <= 2-delta <= 3.00)

FERROELECTRICS Volume: 269 Pages: 309-314 DOI: 10.1080/00150190211131 Published: 2002

70. Loa I, Adler P, Grzechnik A, et al.

Suppression of Jahn-Teller distortion and insulator-to-metal transition in LaMnO<sub>3</sub> at high pressures

HIGH PRESSURE RES 22 (2): 325-329 Sp. Iss. SI MAY 2002

69. Kuroe H, Habu I, Kuwahara H, et al.

Low-frequency excitations in the charge-ordered phase of (Nd<sub>0.5</sub>Sr<sub>0.5</sub>)MnO<sub>3</sub>

PHYSICA B 316: 575-578 MAY 2002

68. Kreisel J, Lucaleau G, Dubourdieu C, et al.

Raman scattering study of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>/SrTiO<sub>3</sub> multilayers

J PHYS-CONDENS MAT 14 (20): 5201-5210 MAY 27 2002

67. Gupta R, Pai GV, Sood AK, et al.

Raman scattering in charge-ordered Pr<sub>0.63</sub>Ca<sub>0.37</sub>MnO<sub>3</sub>: Anomalous temperature dependence of linewidth

EUROPHYS LETT 58 (5): 778-784 JUN 2002

66. Bala J, Oles AM, Sawatzky GA

Orbital-lattice polarons in ferromagnetic LaMnO<sub>3</sub>

PHYS REV B 65 (18): Art. No. 184414 MAY 1 2002

65. Filippetti A, Hill NA

Coexistence of magnetism and ferroelectricity in perovskites

PHYS REV B 65 (19): Art. No. 195120 MAY 15 2002

64. Saitoh E, Tomioka Y, Kimura T, et al.

Role of orbital correlation in colossal magnetoresistance

J MAGN MAGN MATER 239 (1-3): 170-172 Sp. Iss. SI FEB 2002

63. Naler S, Rubhausen M, Yoon S, et al.

Lattice dynamics and charge ordering in La<sub>1-x</sub>C<sub>x</sub>MnO<sub>3</sub> (0.45 <= x <= 0.76)

PHYS REV B 65 (9): art. no. 092401 MAR 1 2002

62. Suzuki K, Nishizawa K, Miki T, et al.

Synthesis of ferroelectric YMnO<sub>3</sub> thin film by chemical solution deposition

KEY ENG MAT 7: 151-156 2002

61. Trodahl, H.J., Fainstein, A., Pregliasco, R.G., Buckley, R.G., Balakrishnan, G., Lees, M.R., Paul, D.M., Pantoja, A.E.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering

Physical Review B - Condensed Matter and Materials Physics 63(13), 132406 (2001)

60. Suzuki, K., Nishizawa, K., Miki, T., Kato, K.

Synthesis of YMnO<sub>3</sub> thin films from alkoxy-derived precursors

FERROELECTRICS Volume: 263 Issue: 1-4 Pages: 1585-1590 Published: 2001

59. Kreisel J, Lucaleau G, Dubourdieu C, et al.  
A Raman scattering investigation of tensile strain in La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>/SrTiO<sub>3</sub> multilayers  
J PHYS IV 11 (PR11): 227-231 DEC 2001
58. Eriksson SG, Ivanov S, Eriksen J, et al.  
A neutron powder diffraction and inelastic light scattering study of (La,Sr)MnO<sub>3+delta</sub>  
MATER SCI FORUM 378-3: 505-510 Part 1&2 2001
57. Zhang PX, Huang SJ, Habermeier HU, et al.  
Raman spectra from isotope substituted La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>  
PHYSICA C 364: 647-651 NOV 2001
56. Zhang PX, Huang SJ, Habermeier HU, et al.  
Isotope effect on Raman spectra of polycrystalline La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>  
J RAMAN SPECTROSC 32 (10): 812-816 OCT 2001
55. Filippetti A, Hill NA  
First principles study of structural, electronic and magnetic interplay in ferroelectromagnetic yttrium manganite  
J MAGN MAGN MATER 236 (1-2): 176-189 OCT 2001
54. Loa I, Adler P, Grzechnik A, et al.  
Pressure-induced quenching of the Jahn-Teller distortion and insulator-to-metal transition in LaMnO<sub>3</sub>  
PHYS REV LETT 87 (12): art. no. 125501 SEP 17 2001
53. Perebeinos V, Allen PB  
Multiphonon resonant Raman scattering predicted in LaMnO<sub>3</sub> from the Franck-Condon process via self-trapped excitons  
PHYS REV B 64 (8): art. no. 085118 AUG 15 2001
52. Martin-Carron L, de Andres A  
Melting of the cooperative Jahn-Teller distortion in LaMnO<sub>3</sub> single crystal studied by Raman spectroscopy  
EUR PHYS J B 22 (1): 11-16 JUL 2001
51. Yin WG, Lin HQ, Gong CD  
Single hole motion in LaMnO<sub>3</sub>  
PHYS REV LETT 87 (4): art. no. 047204 JUL 23 2001
50. Martin-Carron L, de Andres A  
Raman phonons and the Jahn-Teller transition in RMnO<sub>3</sub> manganites  
J ALLOY COMPD 323: 417-421 JUL 12 2001
49. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons and light scattering in RMnO<sub>3</sub> (R=La, Pr, Nd, Ho, Er/Tb and Y) orthorhombic and hexagonal manganites  
J ALLOY COMPD 323: 494-497 JUL 12 2001
48. Nikiforov AE, Popov SE  
Lattice dynamics of LaMnO<sub>3</sub>: Coupling of the lattice and orbital degrees of freedom  
PHYS SOLID STATE+ 43 (6): 1132-1140 JUN 2001
47. Pantoja AE, Trodahl HJ, Buckley RG, et al.  
Raman spectroscopy of orthorhombic La<sub>1-x</sub>CaxMnO<sub>3</sub>, x=0.1-0.3  
J PHYS-CONDENS MAT 13 (16): 3741-3752 APR 23 2001
46. Dagotto E, Hotta T, Moreo A  
Colossal magnetoresistant materials: The key role of phase separation  
PHYS REP 344 (1-3): 1-153 APR 2001
45. Pantoja AE, Trodahl HJ, Fainstein A, et al.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering  
PHYS REV B 63 (13): art. no. 132406 APR 1 2001
44. Amelitchev VA, Guttler B, Gorbenko OY, et al.  
Structural and chemical analysis of colossal magnetoresistance manganites by Raman spectrometry  
PHYS REV B 63 (10): art. no. 104430 FEB 21 2001
43. Saitoh E, Okamoto S, Takahashi KT, et al.  
Observation of orbital waves as elementary excitations in a solid  
NATURE 410: (6825) 180-183 MAR 8 2001
42. Congeduti A, Postorino P, Caramagno E, et al.  
Anomalous high pressure dependence of the Jahn-Teller phonon in La<sub>0.75</sub>Ca<sub>0.25</sub>MnO<sub>3</sub>  
PHYS REV LETT 86: (7) 1251-1254 FEB 12 2001
41. Li JM, Huan CHA, Du YW, et al.  
Magnetic-field-tunable charge carrier localization in sintered polycrystalline La<sub>0.75</sub>Ca<sub>0.25</sub>MnO<sub>3</sub>  
PHYS REV B 63 (2): art. no. 024416 JAN 1 2001

40. Francis, AJ, Bagal, A, Salvador, PA  
Thin film synthesis of metastable perovskites: YMnO<sub>3</sub>  
INNOVATIVE PROCESSING AND SYNTHESIS OF CERAMICS, GLASSES, AND COMPOSITES IV Book Series: CERAMIC TRANSACTIONS Volume: 115 Pages: 565-575 Published: 2000
39. Habermeier, HU  
Correlation of microstructure and magnetotransport properties of epitaxially grown La-Ca-Mn-O-3 thin films  
MAGNETIC AND SUPERCONDUCTING MATERIALS, (MSM-99), VOLS A AND B Pages: 905-918 DOI:  
10.1142/9789812793676\_0118 Published: 2000
38. Congeduti A, Postorino P, Dore P, et al.  
High pressure behavior of manganites by infrared and Raman spectroscopy  
INT J MOD PHYS B 14: (29-31) 3418-3423 DEC 20 2000
37. Perebeinos V, Allen PB  
Franck-condon-broadened angle-resolved photoemission spectra predicted in LaMnO<sub>3</sub>  
PHYS REV LETT 85: (24) 5178-5181 DEC 11 2000
36. Guedes I, Mitchell JF, Argyriou D, et al.  
Oxygen stoichiometry in Sr<sub>3</sub>Mn<sub>2</sub>O<sub>7-delta</sub>: A Raman scattering investigation  
PHYS REV B 62: (21) 13809-13811 DEC 1 2000
35. Guedes I, Mitchell JF, Argyriou D, et al.  
Raman phonons in La<sub>2-2x</sub>Sr<sub>1+2x</sub>Mn<sub>2</sub>O<sub>7</sub> layered manganites  
J RAMAN SPECTROSC 31: (11) 1013-1015 NOV 2000
34. Granado E, Sanjurjo JA, Rettori C, et al.  
Order-disorder in the Jahn-Teller transition of LaMnO<sub>3</sub>: A Raman scattering study  
PHYS REV B 62: (17) 11304-11307 NOV 1 2000
33. Hotta T, Malvezzi AL, Dagotto E  
Charge-orbital ordering and phase separation in the two-orbital model for manganites: Roles of Jahn-Teller phononic and Coulombic interactions  
PHYS REV B 62: (14) 9432-9452 OCT 1 2000
32. Saitoh E, Tomioka Y, Kimura T, et al.  
Directional ordering and collective fluctuation of orbital in a colossal magnetoresistive manganite  
J PHYS SOC JPN 69: (8) 2403-2406 AUG 2000
31. Yi WC, Kwun SI, Yoon JG  
Study on the electronic structure of hexagonal and orthorhombic YMnO<sub>3</sub>  
J PHYS SOC JPN 69: (8) 2706-2707 AUG 2000
30. Granado E, Sanjurjo JA, Rettori C, et al.  
Effects of cation vacancies in the phonon Raman spectra of LaMnO<sub>3</sub>  
PHYS STATUS SOLIDI B 220: (1) 609-613 JUL 2000
29. Ishihara S, Maekawa S  
Theory of orbital excitation and resonant inelastic x-ray scattering in manganites  
PHYS REV B 62: (4) 2338-2345 JUL 15 2000
28. Hill NA  
Why are there so few magnetic ferroelectrics?  
J PHYS CHEM B 104: (29) 6694-6709 JUL 27 2000
27. Argyriou DN, Bordallo HN, Campbell BJ, et al.  
Charge ordering and phase competition in the layered perovskite LaSr<sub>2</sub>Mn<sub>2</sub>O<sub>7</sub>  
PHYS REV B 61: (22) 15269-15276 JUN 1 2000
26. Yamamoto K, Kimura T, Ishikawa T, et al.  
Raman spectroscopy of the charge-orbital ordering in layered manganites  
PHYS REV B 61: (21) 14706-14715 JUN 1 2000
25. Gonchar' LE, Nikiforov AE  
Effect of orbital ordering on the magnetic-structure formation in the LaMnO<sub>3</sub> Jahn-Teller magnet  
PHYS SOLID STATE+ 42: (6) 1070-1074 2000
24. Dediu V, Ferdeghini C, Matacotta FC, et al.  
Jahn-Teller dynamics in charge-ordered manganites from Raman spectroscopy  
PHYS REV LETT 84: (19) 4489-4492 MAY 8 2000
23. Paolone A, Roy P, Pimenov A, et al.  
Infrared phonon spectrum of pure and doped LaMnO<sub>3</sub>  
PHYS REV B 61: (17) 11255-11258 MAY 1 2000
22. Pi L, Zheng L, Zhang YH

Transport mechanism in polycrystalline La<sub>0.825</sub>Sr<sub>0.175</sub>Mn<sub>1-x</sub>Cu<sub>x</sub>O<sub>3</sub>  
PHYS REV B 61: (13) 8917-8921 APR 1 2000

21. Bjornsson P, Rubhausen M, Backstrom J, et al.  
Lattice and charge excitations in La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
PHYS REV B 61: (2) 1193-1197 JAN 1 2000

20. Granado, E., Moreno, N.O., Garcia, A., Sanjurjo, J.A., Rettori, C., Torriani, I., Oseroff, S.B., Neumeier, J.J., McClellan, K.J., Cheong, S.-W., Tokura, Y.  
Raman scattering in CMR manganites  
Materials Science Forum 302-303, 134-138 (1999)

19. Hotta T, Yunoki S, Mayr M, et al.  
A-type antiferromagnetic and C-type orbital-ordered states in LaMnO<sub>3</sub> using cooperative Jahn-Teller phonons  
PHYS REV B 60: (22) R15009-R15012 DEC 1 1999

18. E. Liarokapis, Th. Leventouri, D. Lampakis, D. Palles, J. J. Neumeier, and D. H. Goodwin  
Local lattice distortions and Raman spectra in the La<sub>1-x</sub>CaxMnO<sub>3</sub> system  
PHYS. REV. B 60: (18) 12758 -12763 NOV 1 (1999)

17. Allen PB, Perebeinos V  
Self-trapped exciton and Franck-Condon spectra predicted in LaMnO<sub>3</sub>  
PHYS REV LETT 83: (23) 4828-4831 DEC 6 1999

16. Fedorov I, Lorenzana J, Dore P, et al.  
Infrared-active phonons of LaMnO<sub>3</sub> and CaMnO<sub>3</sub>  
PHYS REV B 60: (17) 11875-11878 NOV 1 1999

15. Granado E, Garcia A, Sanjurjo JA, et al.  
Magnetic ordering effects in the Raman spectra of La<sub>1-x</sub>Mn<sub>1-x</sub>O<sub>3</sub>  
PHYS REV B 60: (17) 11879-11882 NOV 1 1999

14. Habermeier HU, Razavi F, Lebedev O, et al.  
Correlation of microstructure and magnetotransport properties of epitaxially grown La-Ca-Mn-O-3 thin films  
PHYS STATUS SOLIDI B 215: (1) 679-683 SEP 1999

13. Gupta HC, Ashdhir P  
Zone center phonons of orthorhombic perovskite YMnO<sub>3</sub>  
J SOLID STATE CHEM 146: (2) 287-290 SEP 1999

12. Yamamoto K, Kimura T, Ishikawa T, et al.  
Probing charge/orbital correlation in La<sub>1.2</sub>Sr<sub>1.8</sub>Mn<sub>2</sub>O<sub>7</sub> by Raman spectroscopy  
J PHYS SOC JPN 68: (8) 2538-2541 AUG 1999

11. de Andres A, Martinez JL, Alonso JM, et al.  
Raman phonons in orthorhombic manganites  
J MAGN MAGN MATER 197: 453-454 MAY 1999

10. Irwin JC, Chrzanowski J, Franck JP  
Oxygen isotope effect on the vibrational modes of La<sub>1-x</sub>CaxMnO<sub>3</sub>  
PHYS REV B 59: (14) 9362-9371 APR 1 1999

9. Smirnova IS  
Normal modes of the LaMnO<sub>3</sub> Pnma phase: comparison with La<sub>2</sub>CuO<sub>4</sub> Cmca phase  
PHYSICA B 262: (3-4) 247-261 APR 1 1999

8. Roy C, Budhani RC  
Raman, infrared and x-ray diffraction study of phase stability in La<sub>1-x</sub>Ba<sub>x</sub>MnO<sub>3</sub> doped manganites  
J APPL PHYS 85: (6) 3124-3131 MAR 15 1999

7. Gupta HC, Ashdhir P  
Lattice dynamics of orthorhombic perovskite YMnO<sub>3</sub>  
PHYSICA B 262: (1-2) 1-4 FEB 1999

6. Calvani P, De Marzi G, Dore P, et al.  
Infrared absorption from charge density waves in magnetic manganites  
PHYS REV LETT 81: (20) 4504-4507 NOV 16 1998

5. Granado E, Moreno NO, Garcia A, et al.  
Phonon Raman scattering in R(1-x)A(x)MnO<sub>(3+delta)</sub> (R = La,Pr; A = Ca,Sr)  
PHYS REV B 58: (17) 11435-11440 NOV 1 1998

4. Salvador PA, Doan TD, Mercey B, et al.  
Stabilization of YMnO<sub>3</sub> in a perovskite structure as a thin film  
CHEM MATER 10: (10) 2592-2595 OCT 1998

3. De Teresa JM, Dorr K, Muller KH, et al.  
Strong influence of the Mn<sup>3+</sup> content on the binding energy of the lattice polarons in manganese perovskites  
PHYS REV B 58: (10) R5928-R5931 SEP 1 1998
2. Yoon S, Liu HL, Schollerer G, et al.  
Raman and optical spectroscopic studies of small-to-large polaron crossover in the perovskite manganese oxides  
PHYS REV B 58: (5) 2795-2801 AUG 1 1998
1. Podobedov VB, Weber A, Romero DB, et al.  
Effect of structural and magnetic transitions in La<sub>1-x</sub>M<sub>x</sub>MnO<sub>3</sub> (M=Sr, Ca) single crystals in Raman scattering  
PHYS REV B 58: (1) 43-46 JUL 1 1998
23. "Raman-active phonons in the quasi-one dimensional conductor La<sub>8-x</sub>S<sub>x</sub>Cu<sub>8</sub>O<sub>20-y</sub> (x = 1.6, 2.0): polarized Raman spectroscopy and lattice dynamical calculations"  
M. V. Abrashev, C. Thomsen, and V. N. Popov  
J. Phys.: Condens. Matter 10 (1998) 1643 - 1654.
1. Napoletano M, Amores JMG, Magnone E, et al.  
Skeletal infrared spectra and structural properties of La<sub>2-x</sub>S<sub>x</sub>CuO<sub>4</sub> and La<sub>2-x</sub>B<sub>x</sub>CuO<sub>4</sub> cuprate powders in the 0 <= x <= 0.125 region  
PHYSICA C 319: (3-4) 229-237 JUN 20 1999
24. "Raman-active phonons in orthorhombic YMnO<sub>3</sub> and LaMnO<sub>3</sub>"  
M. N. Iliev, M. V. Abrashev, H. G. Lee, V. N. Popov, Y. Y. Sun, C. Thomsen, R. L. Meng, and C. W. Chu  
J. Phys. Chem. Solids 59 no. 10 - 12 (1998) 1982 - 1984.
16. Physical study of PrCu<sub>1-x</sub>Zn<sub>x</sub>O<sub>3</sub> perovskite for 0.0 <= x <= 0.3  
Maayoufi, AE (Maayoufi, A. E.)  
Sdiri, N (Sdiri, N.) Valente, MA (Valente, M. A.) Horchani-Naifer, K (Horchani-Naifer, K.) Ferid, M (Ferid, M.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume849 Article Number156239 PublishedDEC 30 2020
15. Phase transition and multiferroic properties of Zr-doped BiFeO<sub>3</sub> thin films  
Ma, ZB (Ma, Zhibiao) Liu, HY (Liu, Huiying) Wang, LX (Wang, Lingxu) Zhang, FQ (Zhang, Fengqing) Zhu, LY (Zhu, Luyi) Fan, SH (Fan, Suhua)  
JOURNAL OF MATERIALS CHEMISTRY C Volume8 Issue48 Page17307-17317 PublishedDEC 28 2020
14. Bond analysis of novel MnZrTa<sub>2</sub>O<sub>8</sub> microwave dielectric ceramics with monoclinic structure  
Zhang, Y (Zhang, Yun) Ding, SH (Ding, Shihua) Li, C (Li, Chao) Song, TX (Song, Tianxiu) Zhang, YC (Zhang, Yingchun)  
JOURNAL OF MATERIALS SCIENCE Volume55 Issue20 Page8491-8501 PublishedJUL 2020
13. Optical Study of the Electronic Structure and Lattice Dynamics of NdBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
Mero, RD (Mero, Rea Divina) Ogawa, K (Ogawa, Kirari) Yamada, S (Yamada, Shigeki) Liu, HL (Liu, Hsiang-Lin)  
SCIENTIFIC REPORTS Volume9 Article Number18164 PublishedDEC 3 2019
12. Boukhachem, A., Ziouche, A., Amor, M.B., Kamoun, O., Zergoug, M., Maghraoui-Meherzi, H., Yumak, A., Boubaker, K., Amlouk, M.  
Physical investigations on perovskite LaMnO<sub>3-δ</sub> sprayed thin films for spintronic applications  
Materials Research Bulletin 74, 202-211 DOI: 10.1016/j.materresbull.2015.10.003 (2016)
11. Roberge, B., Balli, M., Jandl, S., Fournier, P., Palstra, T.T.M., Nugroho, A.A.  
Raman and infrared study of 4f electron-phonon coupling in HoVO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 43 Article Number: 435401 DOI: 10.1088/0953-8984/28/43/435401 Published: NOV 2 2016
10. Roberge, B., Jandl, S., Nugroho, A.A., Palstra, T.T.M., Tung, L.D., Balakrishnan, G.  
Study of phase coexistence in YVO<sub>3</sub> and LaVO<sub>3</sub>  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 46 Issue: 11 Pages: 1157-1160 DOI: 10.1002/jrs.4735 Published: NOV 2015
9. Balli, M.; Robarge, B.; Jandl, S.; et al.  
Observation of large refrigerant capacity in the HoVO<sub>3</sub> vanadate single crystal  
JOURNAL OF APPLIED PHYSICS Volume: 118 Issue: 7 Article Number: 073903 Published: AUG 21 2015
8. Iliescu, I.; Boudard, M.; Chaix-Pluchery, O.; et al.  
Phase transformations and selective growth in YMnO<sub>3</sub> films  
JOURNAL OF SOLID STATE CHEMISTRY Volume: 220 Pages: 245-253 Published: DEC 2014
7. Otero-Lorenzo, Ruth; Weber, Mads C.; Thomas, Pamela A.; et al.  
Interplay of chemical structure and magnetic order coupling at the interface between Cr<sub>2</sub>O<sub>3</sub> and Fe<sub>3</sub>O<sub>4</sub> in hybrid nanocomposites  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 16 Issue: 40 Pages: 22337-22342 Published: OCT 28 2014
6. Iliescu, I.; Boudard, M.; Rapenne, L.; et al.  
MOCVD selective growth of orthorhombic or hexagonal YMnO<sub>3</sub> phase on Si(100) substrate  
APPLIED SURFACE SCIENCE 306, pp. 27-32 JUL 1 2014

5. Li, M.-R., Walker, D., Retuerto, M., Sarkar, T., Hadermann, J., Stephens, P.W., Croft, M., (...), Greenblatt, M. Polar and magnetic Mn<sub>2</sub>FeMO<sub>6</sub> (M=Nb, Ta) with LiNbO<sub>3</sub>-type structure: High-pressure synthesis  
Angewandte Chemie - International Edition 52 (32), pp. 8406-8410, 2013
4. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
3. Chopelas, A.  
Single-crystal Raman spectra of YAlO<sub>3</sub> and GdAlO<sub>3</sub>: Comparison to several orthorhombic ABO<sub>3</sub> perovskites  
Physics and Chemistry of Minerals 38 (9), pp. 709-726, 2011.
2. Weisse A, Fehske H  
Interplay of charge, spin, orbital and lattice correlations in colossal magnetoresistance manganites  
EUR PHYS J B 30 (4): 487-494 DEC 2002
1. Irwin JC, Chrzanowski J, Franck JP  
Oxygen isotope effect on the vibrational modes of La<sub>1-x</sub>CaxMnO<sub>3</sub>  
PHYS REV B 59: (14) 9362-9371 APR 1 1999
- 25. "Raman spectroscopy of YSr<sub>2</sub>Cu<sub>3</sub>O<sub>7+y</sub>"**  
H. G. Lee, A. P. Litvinchuk, M. V. Abrashev, M. N. Iliev, S. H. Xu, and C. W. Chu  
J. Phys. Chem. Solids 59 no. 10 - 12 (1998) 1994 - 1996.
5. Galstyan, E., Xue, Y., Iliev, M., Sun, Y., Chu, C.-W.  
Origin of the superconductivity in the Y-Sr-Ru-O and Y-Sr-Cu-O systems  
Physical Review B - Condensed Matter and Materials Physics 76 (1), art. no. 014501 (2007).
4. Su HB, Welch DO, Wong-Ng W  
Strain effects on point defects and chain-oxygen order-disorder transition in 123 cuprate compounds  
PHYSICAL REVIEW B 70 (5): Art. No. 054517 AUG 2004
3. Petrykin VV, Osada M, Kakihana M, et al.  
Observation of the epitaxial satellite phase in the superconducting RuSr<sub>2</sub>Eu<sub>1.5</sub>Ce<sub>0.5</sub>Cu<sub>2</sub>O<sub>10</sub> ceramic samples  
CHEM MATER 15 (23): 4417-4423 NOV 18 2003
2. Ying XN, Li BQ, Liu YH, et al.  
T-c reduction in Sr-substituted Y(Ba<sub>1-x</sub>Srx)(2)Cu<sub>3</sub>O<sub>7-delta</sub> investigated by Cu-63,Cu-65 nuclear quadrupole resonance  
PHYS REV B 66 (1): Art. No. 012506 JUL 1 2002
1. Ying XN, Li A, Huang YN, et al.  
The effect of strain on the low-temperature internal friction of Y(Ba<sub>1-x</sub>Srx)(2)Cu<sub>3</sub>O<sub>7-delta</sub>  
J PHYS-CONDENS MAT 13 (43): 9813-9819 OCT 29 2001
- 26. "Raman spectroscopy of SrRuO<sub>3</sub> near the paramagnetic-to-ferromagnetic phase transition"**  
M. N. Iliev, A. P. Litvinchuk, H.-G. Lee, C. L. Chen, M. L. Dezaneti, C. W. Chu, V. G. Ivanov, M. V. Abrashev, and V. N. Popov  
Phys. Rev. B 59 (1999) 364 - 368.
58. Fermi surface and kink structures in Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub> revealed by synchrotron-based ARPES  
Ngabonziza, P (Ngabonziza, Prosper) Carleschi, E (Carleschi, Emanuela) Zabolotnyy, V (Zabolotnyy, Volodymyr) Taleb-Ibrahimi, A (Taleb-Ibrahimi, Amina) Bertran, F (Bertran, Francois) Fittipaldi, R (Fittipaldi, Rosalba) Granata, V (Granata, Veronica) Cuoco, M (Cuoco, Mario) Vecchione, A (Vecchione, Antonio) Doyle, BP (Doyle, Bryan Patrick)  
SCIENTIFIC REPORTS Volume10 Issue1 Article Number21062 PublishedDEC 3 2020
57. Strain healing of spin-orbit coupling:a cause for enhanced magnetic moment in epitaxial SrRuO<sub>3</sub> thin films  
Tyagi, S (Tyagi, Shekhar) Sathe, VG (Sathe, V. G.) Sharma, G (Sharma, Gaurav) Phase, DM (Phase, D. M.) Reddy, VR (Reddy, V. R.)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume32 Issue30 Article Number305501 PublishedJUL 15 2020
56. Spin-phonon coupling in epitaxial SrRuO(3)heterostructures  
Jeong, SG (Jeong, Seung Gyo) Lim, SY (Lim, Soo Yeon) Kim, J (Kim, Jiwoong) Park, S (Park, Sungkyun) Cheong, H (Cheong, Hyoonsik) Choi, WS (Choi, Woo Seok)  
NANOSCALE Volume12 Issue26 Page13926-13932 PublishedJUL 14 2020
55. Spin-phonon coupling and two-magnons scattering behaviors in hexagonal NiAs-type antiferromagnetic MnTe epitaxial films  
Zhang, JY (Zhang, Jiyue) Lian, Q (Lian, Qin) Pan, ZQ (Pan, Zhiqiang) Bai, W (Bai, Wei) Yang, J (Yang, Jing) Zhang, YY (Zhang, Yuanyuan) Tang, XD (Tang, Xiaodong) Chu, JH (Chu, Junhao)  
JOURNAL OF RAMAN SPECTROSCOPY Volume51 Issue8 Page1383-1389 PublishedAUG 2020
54. Strain modulated magnetocaloric effect in (111) oriented La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-SrRuO<sub>3</sub> superlattices  
Roshna, SH (Roshna, S. H.) Prellier, WP (Prellier, W.) Padhan, PP (Padhan, P.)  
NANOSCALE Volume12 Issue8 Page5151-5158 PublishedFEB 28 2020

53. Cerium induced Raman spectra of  $(Ba_{0.5}Sr_{0.5})(Fe_{1-x}Cx)O_3$ -delta ( $x=0-1$ )  
 Chauhan, S (Chauhan, Santosh) Kar, M (Kar, M.) Kumar, J (Kumar, Jitendra) Jaiswal, SK (Jaiswal, Shivendra Kumar)  
 MATERIALS CHEMISTRY AND PHYSICS Volume241 Article Number122378 PublishedFEB 1 2020
52. Spin reorientation functionality in antiferromagnetic  $TmFe_{1-x}In_xO_3$  polycrystalline samples  
 Sharma, P (Sharma, Poorva) Xu, YD (Xu, Yadong) Fan, HQ (Fan, Huiqing) Kumar, A (Kumar, Ashwini) Li, RB (Li, Rubin) Li, Q (Li, Qi) Ren, W (Ren, Wei) Cao, SX (Cao, Shixun)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume789 Page80-89 PublishedJUN 15 2019
51. Opacic, M.; Lazarevic, N.; Tanaskovic, D.; et al.  
 Small influence of magnetic ordering on lattice dynamics in  $TaFe_{1.25}Te_3$   
 PHYSICAL REVIEW B Volume: 96 Issue: 17 Article Number: 174303 Published: NOV 16 2017
50. Wei, Tzu-Chiao; Wang, Hsin-Ping; Liu, Heng-Jui; et al.  
 Photostriction of strontium ruthenate  
 NATURE COMMUNICATIONS Volume: 8 Article Number: 15108 Published: APR 24 2017
49. Sarkar, Tanushree; Manna, Kaustuv; Elizabeth, Suja; et al.  
 Investigation of multiferroicity, spin-phonon coupling, and unusual magnetic ordering close to room temperature in  $LuMn_{0.5}Fe_{0.5}O_3$   
 JOURNAL OF APPLIED PHYSICS Volume: 121 Issue: 8 Article Number: 084102 Published: FEB 28 2017
48. Xia, Weiren; Wu, Heng; Xing, Zhibiao; et al.  
 Structural and vibrational properties of  $(Bi_{1-x}La_x)FeO_3$  and  $(Bi_{1-y}Ba_y)(Fe_{1-y}Ti_y)O_3$  multiferroic ceramics investigated by Raman scattering  
 CERAMICS INTERNATIONAL Volume: 43 Supplement: 1 Pages: S43-S48 Published: 2017
47. Behera, B.C., Padhan, P., Prellier, W.  
 Effect of  $La_{0.7}Sr_{0.3}MnO_3$  crystal structures on magnetization of (111) oriented  $La_{0.7}Sr_{0.3}MnO_3\text{-}SrRuO_3$  superlattices  
 JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 19 Article Number: 196004 DOI: 10.1088/0953-8984/28/19/196004 Published: MAY 18 2016
46. Yang, H.F., Liu, Z.T., Fan, C.C., Yao, Q., Xiang, P., Zhang, K.L., Li, M.Y., Li, H., Liu, J.S., Shen, D.W., Jiang, M.H.  
 Origin of the kink in the band dispersion of the ferromagnetic perovskite  $SrRuO_3$ : Electron-phonon coupling  
 PHYSICAL REVIEW B Volume: 93 Issue: 12 Article Number: 121102 DOI: 10.1103/PhysRevB.93.121102 Published: MAR 4 2016
45. Behera, B. C.; Padhan, P.; Prellier, W.  
 Influence of substrate in all-ferromagnetic superlattices  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 388 Pages: 22-27 Published: AUG 15 2015
44. Shen, Xuan; Qiu, Xiangbiao; Su, Dong; et al.  
 Thickness-dependent metal-insulator transition in epitaxial  $SrRuO_3$  ultrathin films  
 JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 1 Article Number: 015307 Published: JAN 7 2015
43. Lyapin, S. G.; Utyuzh, A. N.; Petrova, A. E.; et al.  
 Raman studies of nearly half-metallic ferromagnetic  $CoS_2$   
 JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 26 Issue: 39 Article Number: 396001 Published: OCT 1 2014
42. Tripathy, Satya Narayan; Mishra, Karuna Kara; Sen, Shrabanee; et al.  
 Dielectric and Raman Spectroscopic Studies of  $Na_{0.5}Bi_{0.5}TiO_3\text{-}BaSnO_3$  Ferroelectric System  
 JOURNAL OF THE AMERICAN CERAMIC SOCIETY 97 (6), pp. 1846-1854 JUN 2014
41. Tsai, C. Y.; Chen, H. R.; Chang, F. C.; et al.  
 Anisotropic strain, magnetic properties, and lattice dynamics in self-assembled multiferroic  $CoFe_{2}O_4\text{-}PbTiO_3$  nanostructures  
 JOURNAL OF APPLIED PHYSICS 115 (13), Art. No. 134317 APR 7 2014
40. Behera, B. C.; Ravindra, A. V.; Padhan, P.; et al.  
 Raman spectra and magnetization of all-ferromagnetic superlattices grown on (110) oriented  $SrTiO_3$   
 APPLIED PHYSICS LETTERS 104 (9), Art. No. 092406 MAR 3 2014
39. Miao, Naihua; Bristowe, Nicholas C.; Xu, Bin; et al.  
 First-principles study of the lattice dynamical properties of strontium ruthenate  
 JOURNAL OF PHYSICS-CONDENSED MATTER 26 (3), Art. No. 035401 JAN 22 2014
38. Lu, W., He, K., Song, W., Sun, C.-J., Chow, G.M., Chen, J.-S.  
 Effect of oxygen vacancies on the electronic structure and transport properties of  $SrRuO_3$  thin films  
 Journal of Applied Physics 113 (17), art. no. 17E125, 2013
37. Pandey, P.K., Choudhary, R.J., Mishra, D.K., Sathe, V.G., Phase, D.M.  
 Signature of spin-phonon coupling in  $Sr_2Co_4O_7$  thin film: A Raman spectroscopic study  
 Applied Physics Letters 102 (14), art. no. 142401, 2013
36. Li, T., Shen, J., Li, N., Ye, M.  
 One-pot self-catalyzed synthesis and properties of multiferroic  $BiFeO_3$  single-phase crystallites by sucrose-assisted combustion  
 Journal of Alloys and Compounds 548, pp. 89-95, 2013

35. Tai, T., Nishide, M., Matsuoka, M., Kamo, T., Funakubo, H., Katoda, T., Shima, H., (...), Yamamoto, T. Investigation of sputtering damage in SrRuO<sub>3</sub> films prepared by sputtering with raman and x-ray photoemission spectroscopies Japanese Journal of Applied Physics 51 (9 PART 2), art. no. 09LA19, 2012
34. Koster, G., Klein, L., Siemons, W., Rijnders, G., Dodge, J.S., Eom, C.-B., Blank, D.H.A., Beasley, M.R. Structure, physical properties, and applications of SrRuO<sub>3</sub> thin films Reviews of Modern Physics 84 (1), pp. 253-298, 2012.
33. Mishra, K.K., Satya, A.T., Bharathi, A., Sivasubramanian, V., Murthy, V.R.K., Arora, A.K. Vibrational, magnetic, and dielectric behavior of La-substituted BiFeO<sub>3</sub>-PbTiO<sub>3</sub> Journal of Applied Physics 110 (12), art. no. 123529, 2011.
32. Ramachandran, B., Dixit, A., Naik, R., Lawes, G., Ramachandra Rao, M.S. Dielectric relaxation near 25 K in multiferroic BiFeO<sub>3</sub> ceramics Journal of Applied Physics 110 (10), art. no. 104105, 2011.
31. Chopelas, A. Single-crystal Raman spectra of YAlO<sub>3</sub> and GdAlO<sub>3</sub>: Comparison to several orthorhombic ABO<sub>3</sub> perovskites Physics and Chemistry of Minerals 38 (9), pp. 709-726, 2011.
30. Mishra, K.K., Sivasubramanian, V., Sarguna, R.M., Ravindran, T.R., Arora, A.K. Raman scattering from La-substituted BiFeO(3)-PbTiO(3) JOURNAL OF SOLID STATE CHEMISTRY 184 (9) Pages: 2381-2386, SEP 2011.
29. Anooz, S.B., Schwarzkopf, J., Dirsyte, R., Wagner, G., Fornari, R. Effects of post-growth annealing on physical properties of SrRuO(3) thin film grown by MOCVD PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE 207 (11) Pages: 2492-2498, NOV 2010.
28. Liu, Y.-F., Wang, B., Zheng, H.-W., Liu, X.-Y., Gu, Y.-Z., Zhang, W.-F. Temperature-dependent raman spectrum of hexagonal YMnO<sub>3</sub> films synthesized by chemical solution method Chinese Physics Letters 27 (5), art. no. 056801 (2010).
27. Jang, K.-J., Lim, J., Ahn, J., Kim, J.-H., Yee, K.-J., Ahn, J.S., Cheong, S.-W. Ultrafast IR spectroscopic study of coherent phonons and dynamic spin-lattice coupling in multiferroic LuMnO<sub>3</sub> New Journal of Physics 12, art. no. 023017 (2010).
26. Rout, D., Moon, K.-S., Suk-Joong L Kang Temperature-dependent Raman scattering studies of polycrystalline BiFeO<sub>3</sub> bulk ceramics Journal of Raman Spectroscopy 40 (6), pp. 618-626 (2009).
25. Fukumura, H., Hasuike, N., Harima, H., Kisoda, K., Fukae, K., Yoshimura, T., Fujimura, N. Spin-phonon coupling in multiferroic YbMnO<sub>3</sub> studied by Raman scattering Journal of Physics Condensed Matter 21 (6), art. no. 064218 (2009).
24. Hsu, H.C., Chou, F.C., Koyama, K., Watanabe, K., Liu, H.L. Spin-phonon coupling in antiferromagnetic Bi<sub>2</sub>Sr<sub>2</sub>CoO<sub>6+δ</sub>: An infrared reflectance study Physical Review B - Condensed Matter and Materials Physics 79 (15), art. no. 155109 (2009).
23. Singh, M.K., Dussan, S., Sharma, G.L., Katiyar, R.S. Raman scattering measurements of phonon anharmonicity in CuAlO<sub>2</sub> thin films Journal of Applied Physics 104 (11), art. no. 113503 (2008).
22. Crandles, D.A., Eftekhari, F., Faust, R., Rao, G.S., Reedyk, M., Razavi, F.S. Kramers-Kronig-constrained variational dielectric fitting and the reflectance of a thin film on a substrate Applied Optics 47 (23), pp. 4205-4211 (2008).
21. Crandles, D.A., Eftekhari, F., Faust, R., Rao, G.S., Reedyk, M., Razavi, F.S. Infrared active phonons in SrRuxO<sub>3</sub> and SrRu<sub>x</sub>Mg<sub>1-x</sub>O<sub>3</sub> thin films Journal of Physics D: Applied Physics 41 (13), art. no. 135007 (2008).
20. Herranz, G., Laukhin, V., Sánchez, F., Levy, P., Ferrater, C., García-Cuenca, M.V., Varela, M., Fontcuberta, J. Effect of disorder on the temperature dependence of the resistivity of SrRuO<sub>3</sub> Physical Review B - Condensed Matter and Materials Physics 77 (16), art. no. 165114 (2008).
19. Mangalam, R.V.K., Pradhan, G.K., Narayana, C., Sundaresan, A. Spin state transition in the ferromagnet Sr<sub>0.9</sub>Ce<sub>0.1</sub>CoO<sub>2.85</sub> Solid State Communications 146 (3-4), pp. 110-114 (2008).
18. Fukumura, H., Matsui, S., Harima, H., Kisoda, K., Takahashi, T., Yoshimura, T., Fujimura, N. Raman scattering studies on multiferroic YMnO<sub>3</sub> Journal of Physics Condensed Matter 19 (36), art. no. 365239 (2007)
17. Popa, M., Crespo, D., Calderon-Moreno, J.M., Preda, S., Fruth, V. Synthesis and structural characterization of single-phase BiFeO<sub>3</sub> powders from a polymeric precursor Journal of the American Ceramic Society 90 (9), pp. 2723-2727 (2007)

16. Maiti, K., Singh, R.S., Medicherla, V.R.R.  
Observation of particle hole asymmetry and phonon excitations in non-Fermi-liquid systems: A high-resolution photoemission study of ruthenates  
Europhysics Letters 78 (1), art. no. 17002 (2007)
15. Lee, J.-H., Freeman, A.J.  
Spin-induced variations of phonon frequencies in ferromagnetic metals  
Journal of Magnetism and Magnetic Materials 310 (2 SUPPL. PART 2), pp. 1084-1086 (2007)
14. Haumont, R., Kreisel, J., Bouvier, P.  
Raman scattering of the model multiferroic oxide BiFeO<sub>3</sub>: Effect of temperature, pressure and stress  
Phase Transitions 79 (12), pp. 1043-1064 (2006)
13. Łazewski, J., Piekarz, P., Oleś, A.M., Parlinski, K.  
Influence of local electron interactions on phonon spectrum in iron  
Physical Review B - Condensed Matter and Materials Physics 74 (17), art. no. 174304 (2006)
12. Kamal, S., Kim, D.M., Eom, C.B., Dodge, J.S.  
Terahertz-frequency carrier dynamics and spectral weight redistribution in the nearly magnetic metal CaRuO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (16), art. no. 165115 (2006)
11. Lee, J.-H., Hsue, Y.-C., Freeman, A.J.  
Magnetically induced variations in phonon frequencies  
Physical Review B - Condensed Matter and Materials Physics 73 (17), art. no. 172405 (2006)
10. Haumont, R., Kreisel, J., Bouvier, P., Hippert, F.  
Phonon anomalies and the ferroelectric phase transition in multiferroic BiFeO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 73 (13), art. no. 132101, pp. 1-4 (2006)
9. Singh MK, Jang HM, Ryu S, et al.  
Polarized Raman scattering of multiferroic BiFeO<sub>3</sub> epitaxial films with rhombohedral R3c symmetry  
APPLIED PHYSICS LETTERS 88 (4): Art. No. 042907 JAN 23 2006
8. Herranz G, Sanchez F, Fontcuberta J, et al.  
Domain structure of epitaxial SrRuO<sub>3</sub> thin films  
PHYSICAL REVIEW B 71 (17): Art. No. 174411 MAY 2005
7. Rykov AI, Nomura K, Sawada T, et al.  
Phonon density of states in Sr<sub>2</sub>FeCoO<sub>6</sub>-delta and BaSrFeCoO<sub>6</sub>-delta: Effects induced by magnetic order and transport coherence  
PHYS REV B 68 (22): Art. No. 224401 DEC 2003
6. Yu T, Shen ZX, Sun WX, et al.  
Spin-phonon coupling in rod-shaped half-metallic CrO<sub>2</sub> ultrafine particles: a magnetic Raman scattering study  
J PHYS-CONDENS MAT 15 (12): L213-L217 APR 2 2003
5. Rykov, AI (Rykov, AI); Nomura, K (Nomura, K); Mitsui, T (Mitsui, T); Seto, M (Seto, M)  
Nuclear resonance inelastic scattering of synchrotron radiation in oxides with colossal magnetoresistance  
MATERIAL RESEARCH IN ATOMIC SCALE BY MOSSBAUER SPECTROSCOPY Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY Volume: 94 Pages: 239-250 Published: 2003
4. Lee YS, Yu JJ, Lee JS, et al.  
Non-Fermi liquid behavior and scaling of the low-frequency suppression in the optical conductivity spectra of CaRuO<sub>3</sub>  
PHYS REV B 66 (4): Art. No. 041104 JUL 15 2002
3. Cooper SL  
Optical spectroscopic studies of metal-insulator transitions in perovskite-related oxides  
STRUCT BOND 98: 161-219 2001
2. Fainstein A, Etchegoin P, Trodahl HJ, et al.  
Spin-order-dependent Raman scattering in RuSr<sub>2</sub>GdCu<sub>2</sub>O<sub>8</sub>  
PHYS REV B 61: (22) 15468-15473 JUN 1 2000
1. Granado E, Garcia A, Sanjurjo JA, et al.  
Magnetic ordering effects in the Raman spectra of La<sub>1-x</sub>Mn<sub>1-x</sub>O<sub>3</sub>  
PHYS REV B 60: (17) 11879-11882 NOV 1 1999
27. "Comparative study of optical phonons in the rhombohedrally distorted perovskites LaAlO<sub>3</sub> and LaMnO<sub>3</sub>"  
M. V. Abrashev, A. P. Litvinchuk, M. N. Iliev, R. L. Meng, V. N. Popov, V. G. Ivanov, R. A. Chakalov, and C. Thomsen  
Phys. Rev. B 59 (1999) 4146 - 4153.
235. Electrochemical and magnetic properties of perovskite type RMnO<sub>3</sub> (R = La, Nd, Sm, Eu) nanofibers  
Hu, Q., Yue, B., Yang, F., (...), Wang, Y., Liu, J.

234. Raman spectroscopy of the Al-doping induced structural phase transition in LaCrO<sub>3</sub> perovskite  
Silva, R.S., Cunha, F., Barrozo, P.  
Solid State Communications 333,114346 (2021)

233. Tuning Jahn-Teller distortion and electron localization of LaMnO<sub>3</sub> epitaxial films via substrate temperature  
Chen, X (Chen, Xin) Wang, BH (Wang, Baohua) Chen, Y (Chen, Yang) Wei, HM (Wei, Haoming) Cao, BQ (Cao, Bingqiang)  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume54 Issue23 Article Number235302 PublishedJUN 10 2021

232. Electronic interactions between graphene and cobaltite thin film La<sub>0.7</sub>Sr<sub>0.3</sub>CoO<sub>3</sub> and its magnetic consequences  
Othmen, Z (Othmen, Zied) Othmen, R (Othmen, Riadh) Daoudi, K (Daoudi, Kais) Boudard, M (Boudard, Michel) Cavanna, A (Cavanna, Antonella) Madouri, A (Madouri, Ali) Gemeiner, P (Gemeiner, Pascale) Lupascu, DC (Lupascu, Doru C.) Oueslati, M (Oueslati, Meherzi) Dkhil, B (Dkhil, Brahim)  
SURFACES AND INTERFACES Volume23 Article Number100919 PublishedAPR 2021

231. Nonlinear phononics  
Cavalleri, A.  
Proceedings of the International School of Physics "Enrico Fermi" 199, pp. 171-186 (2020)

230. Influence Of Transition Metal Doping On The Structural And Transport Properties Of LaCoO<sub>3</sub> Cobaltite  
Tiwari, S (Tiwari, Shivendra) Saleem, M (Saleem, M.) Bajpai, N (Bajpai, N.) Soni, M (Soni, M.) Mishra, A (Mishra, A.)  
AIP Conference Proceedings Volume2220 Article Number040011 Published2020

229. A Reliable Method for Determining the Oxidation State of Manganese at the Microscale in Mn Oxides via Raman Spectroscopy  
Bernardini, S (Bernardini, Simone) Bellatreccia, F (Bellatreccia, Fabio) Della Ventura, G (Della Ventura, Giancarlo) Sodo, A (Sodo, Armida)  
GEOSTANDARDS AND GEOANALYTICAL RESEARCH Volume45 Issue1 Page223-244 PublishedMAR 2021

228. Phase transition and multiferroic properties of Zr-doped BiFeO<sub>3</sub> thin films  
Ma, ZB (Ma, Zhibiao) Liu, HY (Liu, Huiying) Wang, LX (Wang, Lingxu) Zhang, FQ (Zhang, Fengqing) Zhu, LY (Zhu, Luyi) Fan, SH (Fan, Suhua)  
JOURNAL OF MATERIALS CHEMISTRY C Volume8 Issue48 Page17307-17317 PublishedDEC 28 2020

227. Ultrafast strain engineering and coherent structural dynamics from resonantly driven optical phonons in LaAlO<sub>3</sub>  
Hortensius, JR (Hortensius, J. R.) Afanasiev, D (Afanasiev, D.) Sasani, A (Sasani, A.) Bousquet, E (Bousquet, E.) Caviglia, AD (Caviglia, A. D.)  
NPJ QUANTUM MATERIALS Volume5 Issue1 Article Number95 PublishedDEC 16 2020

226. Non-linear temperature dependent phononic response of epitaxial lanthanum nickelate thin film  
Sunidhi (Sunidhi) Sharma, V (Sharma, Vishal) Arora, SK (Arora, Sunil K.) Sanchez, F (Sanchez, Florencio) Sathe, V (Sathe, Vasant)  
SOLID STATE COMMUNICATIONS Volume321 Article Number114038 PublishedNOV 2020

225. Stability and amphotericity analysis in rhombohedral ABO(3) perovskites  
Behara, S (Behara, Santosh) Thomas, T (Thomas, Tiju)  
MATERIALIA Volume13 Article Number100819 PublishedSEP 2020

224. Structural and transport properties of La<sub>1-x</sub>SrxCo<sub>1-y</sub>Nb<sub>y</sub>O<sub>3</sub> thin films  
Shukla, R (Shukla, Rishabh) Kumar, A (Kumar, Ajay) Dalal, S (Dalal, Sandeep) Pandey, A (Pandey, Akhilesh) Dhaka, RS (Dhaka, R. S.)  
THIN SOLID FILMS Volume709 Article Number138250 PublishedSEP 1 2020

223. Effect of doping on the local structure of new block-layered proton conductors based on BaLaInO<sub>4</sub>  
Tarasova, N (Tarasova, N.) Animitsa, I (Animitsa, I.) Galisheva, A (Galisheva, A.)  
JOURNAL OF RAMAN SPECTROSCOPY Volume51 Issue11 Page2290-2297 PublishedNOV 2020

222. Physical investigations on LaMn(1-x)Ni(x)O(3)perovskite sprayed thin films along with surface magnetic applications  
Gharbi, B (Gharbi, B.) Boukhachem, A (Boukhachem, A.) Amlouk, M (Amlouk, M.) Oueslati, M (Oueslati, M.) Dkhil, B (Dkhil, B.)  
Meftah, A (Meftah, A.)  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume126 Issue8 Article Number604 PublishedJUL 11 2020

221. Photoinduced Persistent Electron Accumulation and Depletion in LaAlO<sub>3</sub>/SrTiO<sub>3</sub> Quantum Wells  
Chen, Y (Chen, Yu) Lechaux, Y (Lechaux, Yoann) Casals, B (Casals, Blai) Guillet, B (Guillet, Bruno) Minj, A (Minj, Albert) Gazquez, J (Gazquez, Jaume) Mechlin, L (Mechlin, Laurence) Herranz, G (Herranz, Gervasi)  
PHYSICAL REVIEW LETTERS Volume124 Issue24 Article Number246804 PublishedJUN 19 2020

220. Raman and photoluminescence spectral studies in double perovskite epitaxial Nd<sub>2</sub>CoMnO<sub>6</sub> thin films deposited by pulse laser deposition  
Anshul, A (Anshul, Avneesh) Kumar, M (Kumar, Manish) Raj, A (Raj, Abhishek)  
OPTIK Volume212 Article Number164749 PublishedJUN 2020

219. Vibrational properties of LaNiO<sub>3</sub> films in the ultrathin regime  
Schober, A (Schober, Alexander) Fowlie, J (Fowlie, Jennifer) Guennou, M (Guennou, Mael) Weber, MC (Weber, Mads C.) Zhao, HJ (Zhao, Hongjian) Iniguez, J (Iniguez, Jorge) Gibert, M (Gibert, Marta) Triscone, JM (Triscone, Jean-Marc) Kreisel, J (Kreisel, Jens)  
APL MATERIALS Volume8 Issue6 Article Number061102 PublishedJUN 1 2020

218. Parameterization of dilute Ising model for iron-containing lanthanum gallate and aluminate solid solutions based on first-principles calculations

Evarestov, RA (Evarestov, Robert A.) Bandura, AV (Bandura, Andrei, V) Sapova, MD (Sapova, Mariia D.) Korolev, DA (Korolev, Dmitry A.) Chezhina, NV (Chezhina, Natalia, V)

SOLID STATE IONICS Volume348 Article Number115283 PublishedMAY 2020

217. Particle dispersion and lattice distortion induced magnetic behavior of La<sub>1-x</sub>R<sub>x</sub>MnO<sub>3</sub> perovskite nanoparticles grown by salt-assisted solid-state synthesis

Ortiz-Quinonez, JL (Ortiz-Quinonez, Jose-Luis) Garcia-Gonzalez, L (Garcia-Gonzalez, Lorena) Cancino-Gordillo, FE (Enrique Cancino-Gordillo, Francisco) Pal, U (Pal, Umapada)

MATERIALS CHEMISTRY AND PHYSICS Volume246 Article Number122834 PublishedMAY 1 2020

216. PI-MOCVD technology of (La, Sr)(Mn, Co)O-3: From epitaxial to nanostructured films

Vagner, M (Vagner, Milita) Plausinaitiene, V (Plausinaitiene, Valentina) Lukose, R (Lukose, Rasuole) Kersulis, S (Kersulis, Skirmantas) Talaikis, M (Talaikis, Martynas) Knasiene, B (Knasiene, Birute) Stanionyte, S (Stanionyte, Sandra) Kubilius, V (Kubilius, Virgaudas) Motiejutis, K (Motiejutis, Karolis) Saltyte, Z (Saltyte, Zita)

SURFACE & COATINGS TECHNOLOGY Volume385 Article Number125287 PublishedMAR 15 2020

215. Lattice structure and microwave dielectric properties of La[Al-1-(x)(Mg0.5Ti0.5)(x)]O-3 (x=0-0.2)-based ceramics

Fan, J (Fan, Jun) Zhao, Q (Zhao, Qing) Du, K (Du, Kang) Wang, F (Wang, Fei) Wang, XH (Wang, Xiao-Hong) Lu, WZ (Lu, Wen-Zhong) Lei, W (Lei, Wen)

JOURNAL OF THE AMERICAN CERAMIC SOCIETY Volume103 Issue5 Page3231-3237 PublishedMAY 2020

214. Optical and magnetic properties of Gd<sub>1-x</sub>S<sub>x</sub>CrO<sub>3</sub> (0 <= x <= 0.15)

Sarkar, A (Sarkar, Ankita) Dalal, B (Dalal, Biswajit) De, SK (De, Subodh Kumar)

JOURNAL OF PHYSICS-CONDENSED MATTER Volume31 Issue50 Article Number505801 PublishedDEC 18 2019

213. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose

Hoang, NN (Nam Nhat Hoang) Pham, DHY (Duc Huyen Yen Pham) Nguyen, TN (The Nghia Nguyen)

SCIENTIFIC REPORTS Volume9 Article Number19204 PublishedDEC 16 2019

212. Potential of Raman spectroscopy towards understanding structures of carbon-based materials and perovskites

Selvarajan, P (Selvarajan, Premkumar) Chandra, G (Chandra, Goutam) Bhattacharya, S (Bhattacharya, Susmita) Sil, S (Sil, Sanchita) Vinu, A (Vinu, Ajayan) Umaphathy, S (Umaphathy, Siva)

EMERGENT MATERIALS Volume2 Issue4 Page417-439 PublishedDEC 2019

211. Short wavelength emission properties of Tm(3)(+) and Tm-3(+) + Yb3+ doped LaAlO<sub>3</sub> nanocrystals and polymer composites

Jusza, A (Jusza, Anna) Lipinska, L (Lipinska, Ludwika) Baran, M (Baran, Magdalena) Polis, P (Polis, Paweł) Olszyna, A (Olszyna, Andrzej) Piramidowicz, R (Piramidowicz, Ryszard)

OPTICAL MATERIALS Volume97 Article Number109365 PublishedNOV 2019

210. Influence of Induced Electrical Polarization on the Magnetoresistance and Magnetoimpedance in the Spin-Disordered TmxMn1-xS Solid Solution

Aplesnin, SS (Aplesnin, Sergey S.) Sitnikov, MN (Sitnikov, Maksim N.) Kharkov, AM (Kharkov, Anton M.) Masyugin, AN (Masyugin, Albert N.) Kretinin, VV (Kretinin, Vasiliy V.) Fisenko, OB (Fisenko, Olga B.) Gorev, MV (Gorev, Mikhail V.)

PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS Volume256 Issue10 Article Number1900043 PublishedOCT 2019

209. Self-doped La<sub>1-x</sub>MnO<sub>3</sub>+delta perovskites: Electron state hybridization and Raman modes

Ulyanov, AN (Ulyanov, A. N.) Sidorov, AV (Sidorov, A., V) Pismenova, NE (Pismenova, N. E.) Goodilin, EA (Goodilin, E. A.) Savilov, SV (Savilov, S., V)

SOLID STATE SCIENCES Volume94 Page41-44 PublishedAUG 2019

208. Temperature sensitive properties of Eu<sup>2+</sup>/Eu-3+dual-emitting LaAlO<sub>3</sub> phosphors

Chen, BW (Chen, Bowen) Li, CX (Li, Chenxia) Deng, DG (Deng, Degang) Ruan, FP (Ruan, Fengping) Wu, M (Wu, Ming) Wang, L (Wang, Le) Zhu, YT (Zhu, Yanting) Xu, SQ (Xu, Shiqing)

JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page702-712 PublishedJUL 5 2019

207. Local Structure Modulation Induced Highly Efficient Far-Red Luminescence of La<sub>1-x</sub>LuxAlO<sub>3</sub>:Mn<sup>4+</sup> for Plant Cultivation

Chen, JQ (Chen, Jinquan) Yang, CH (Yang, Conghua) Chen, YB (Chen, Yibo) He, J (He, Jin) Liu, ZQ (Liu, Zhao-Qing) Wang, J (Wang, Jing) Zhang, JL (Zhang, Jilin)

INORGANIC CHEMISTRY Volume58 Issue13 Page8379-8387 PublishedJUL 1 2019

206. Microscopic Mechanisms of Local Interfacial Resistive Switching in LaMnO<sub>3</sub>+delta

Meunier, B (Meunier, Benjamin) Pla, D (Pla, Dolors) Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Boudard, M (Boudard, Michel) Chaix-Pluchery, O (Chaix-Pluchery, Odette) Martinez, E (Martinez, Eugenie) Chevalier, N (Chevalier, Nicolas) Jimenez, C (Jimenez, Carmen) Burriel, M (Burriel, Monica) Renault, O (Renault, Olivier)

ACS APPLIED ELECTRONIC MATERIALS Volume1 Issue5 Page675-683 PublishedMAY 2019

205. Controlling the Electronic, Structural, and Optical Properties of Novel MgTiO<sub>3</sub>/LaNiO<sub>3</sub> Nanostructured Films for Enhanced Optoelectronic Devices

Mazzo, TM (Mazzo, T. M.) Macario, LR (Macario, L. R.) Gorup, LF (Gorup, L. F.) Bouquet, V (Bouquet, V) Deputier, S (Deputier, S.) Ollivier, S (Ollivier, S.) Guilloux-Viry, M (Guilloux-Viry, M.) Albuquerque, AR (Albuquerque, A. R.) Sambrano, JR (Sambrano, J. R.) La Porta, FA (La Porta, F. A.)

ACS APPLIED NANO MATERIALS Volume2 Issue5 Page2612-2620 PublishedMAY 2019

204. Rare Earth Sm<sup>3+</sup> Doped LaCoO<sub>3</sub> Cobaltite: Synthesis and Characterizations

Tiwari, S (Tiwari, S.) Saleem, M (Saleem, M.) Mishra, A (Mishra, A.) Varshney, M (Varshney, M.) Varshney, D (Varshney, D.)  
AIP Conference Proceedings Volume2100 Article Number020172 Published2019

203. Temperature Dependent Raman Spectroscopic Study of the Fe Doped La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub> Prepared Using Ball Milling Method  
Astik, N (Astik, Nidhi) Jha, PK (Jha, Prafulla K.) Sathe, V (Sathe, Vasant)  
PHYSICS OF THE SOLID STATE Volume61 Issue4 Page618-626 PublishedAPR 2019

202. Monovalent doping effects on the structural, magnetic and magnetotransport properties of La<sub>0.833</sub>R<sub>0.167</sub>MnO<sub>3</sub> (R = Li+, Na (+), Ag+, K+)  
Joseph, S (Joseph, Smitha) Saban, KV (Saban, K., V)  
CERAMICS INTERNATIONAL Volume45 Issue5 Page6425-6439 PublishedAPR 1 2019

201. Accelerated Ionic Motion in Amorphous Memristor Oxides for Nonvolatile Memories and Neuromorphic Computing  
Schmitt, R (Schmitt, Rafael) Kubicek, M (Kubicek, Markus) Sediva, E (Sediva, Eva) Trassin, M (Trassin, Morgan) Weber, MC (Weber, Mads C.) Rossi, A (Rossi, Antonella) Hutter, H (Hutter, Herbert) Kreisel, J (Kreisel, Jens) Fiebig, M (Fiebig, Manfred) Rupp, JLM (Rupp, Jennifer L. M.)  
ADVANCED FUNCTIONAL MATERIALS Volume29 Issue5 Article Number1804782 PublishedFEB 1 2019

200. Infrared reflectivity analysis of Y<sup>3+</sup> substituted LaMnO<sub>3</sub>  
Ahmad, J., Abbas, H., Bukhari, S.H., (...), Khan, J.A., Ali, S.A.  
Journal of Ovonic Research 14(6), pp. 429-439 (2018)

199. Thin film nano-photocatalysts with low band gap energy for gas phase degradation of p-xylene: TiO<sub>2</sub> doped Cr, Uio66-NH<sub>2</sub> and LaBO<sub>3</sub> (B = Fe, Mn, and Co)  
Luu, C.L., Van Nguyen, T.T., Nguyen, T., (...), Hoang, T.C., Ha, C.A.  
Advances in Natural Sciences: Nanoscience and Nanotechnology 9(1),015003 (2018)

198. RE<sub>3+</sub>:LaALO<sub>3</sub>(3) doped luminescent polymer composites  
Piramidowicz, R (Piramidowicz, Ryszard) Jusza, A (Jusza, Anna) Lipinska, L (Lipinska, Ludwika) Gil, M (Gil, Małgorzata) Mergo, P (Mergo, Paweł)  
OPTICAL MATERIALS Volume87 Page35-41 PublishedJAN 2019

197. 1.2 μm persistent luminescence of Ho<sup>3+</sup> in LaAlO<sub>3</sub> and LaGaO<sub>3</sub> perovskites  
Xu, J (Xu, Jian) Murata, D (Murata, Daisuke) So, B (So, Byoungjin) Asami, K (Asami, Kazuki) Ueda, J (Ueda, Junpei) Heo, J (Heo, Jong) Tanabe, S (Tanabe, Setsuhisa)  
JOURNAL OF MATERIALS CHEMISTRY C Volume6 Issue42 Page11374-11383 PublishedNOV 14 2018

196. Synthesis and Characterization of the Aurivillius Phase CoBi<sub>2</sub>O<sub>2</sub>F<sub>4</sub>  
Vagourdi, EM (Vagourdi, Eleni Mitoudi) Mullner, S (Muellner, Silvia) Lemmens, P (Lemmens, Peter) Kremer, RK (Kremer, Reinhard K.) Johnsson, M (Johnsson, Mats)  
INORGANIC CHEMISTRY Volume57 Issue15 Page9115-9121 PublishedAUG 6 2018

195. Synthesis and optical properties of La<sub>1-x</sub>Ce<sub>x</sub>MnO<sub>3</sub> studied by infrared reflectivity measurements  
Ahmad, J (Ahmad, Javed) Ahmad, U (Ahmad, Uzaira) Bukhari, SH (Bukhari, Syed Hamad)  
CHINESE JOURNAL OF PHYSICS Volume56 Issue4 Page1439-1448 PublishedAUG 2018

194. An insight into the effects of transition metals on the thermal expansion of complex perovskite compounds: an experimental and density functional theory investigation  
Wang, X (Wang, Xiao) Han, Y (Han, Ye) Song, XJ (Song, Xiaojie) Liu, WH (Liu, Weihui) Jin, YX (Jin, Yinxi) Liu, WT (Liu, Wentao) Cui, HZ (Cui, Hongzhi)  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume20 Issue26 Page17781-17789 PublishedJUL 14 2018

193. An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes  
Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Li, XX (Li, Xiaxi) Ding, D (Ding, Dong) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang) Ding, Y (Ding, Yong) Zhao, BT (Zhao, Bote) Murphy, R (Murphy, Ryan) Deglee, B (Deglee, Ben)  
NANO ENERGY Volume47 Page474-480 PublishedMAY 2018

192. Correlated oxygen displacements and phonon mode changes in LaCoO<sub>3</sub> single crystal  
Sikolenko, VV (Sikolenko, V. V.) Molodtsov, SL (Molodtsov, S. L.) Izquierdo, M (Izquierdo, M.) Troyanchuk, IO (Troyanchuk, I. O.) Karpinsky, D (Karpinsky, D.) Tiutiunnikov, SI (Tiutiunnikov, S. I.) Efimova, E (Efimova, E.) Prabhakaran, D (Prabhakaran, D.) Novoselov, D (Novoselov, D.) Efimov, V (Efimov, V.)  
PHYSICA B-CONDENSED MATTER Volume536 Page597-599 PublishedMAY 1 2018

191. Defect and Optical Properties of Sb doped and hydrogenated BaSnO<sub>3</sub>  
Sarkar, A (Sarkar, Ankita) De, SK (De, S. K.)  
SEMICONDUCTOR SCIENCE AND TECHNOLOGY Volume33 Issue3 Article Number035018 PublishedMAR 2018

190. Evolution of bulk and surface structures in stoichiometric LaAlO<sub>3</sub> mixed oxide prepared by using starch as template  
Stathopoulos, VN (Stathopoulos, Vassilis N.) Kuznetsova, T (Kuznetsova, Tatjana) Lapina, O (Lapina, Olga) Khabibulin, D (Khabibulin, Dzhalil) Pandis, PK (Pandis, Pavlos K.) Krieger, T (Krieger, Tamara) Chesalov, Y (Chesalov, Yuri) Gulyalev, R (Gulyalev, Roman) Krivensov, V (Krivensov, Vladimir) Larina, T (Larina, Tatjana)  
MATERIALS CHEMISTRY AND PHYSICS Volume207 Page423-434 PublishedMAR 1 2018

189. Anomalous magnetic and spin glass behavior in Nb-substituted LaCo<sub>1-x</sub>NbxO<sub>3</sub>  
Shukla, R (Shukla, Rishabh) Dhaka, RS (Dhaka, R. S.)

188. Enhanced degradation of organic pollutants over Cu-doped LaAlO<sub>3</sub> perovskite through heterogeneous Fenton-like reactions  
Wang, HH (Wang, Huihui) Zhang, LL (Zhang, Lili) Hu, C (Hu, Chun) Wang, XK (Wang, Xiangke) Lyu, L (Lyu, Lai) Sheng, GD (Sheng, Guodong)  
**CHEMICAL ENGINEERING JOURNAL** Volume332 Page572-581 PublishedJAN 15 2018
187. Structural, thermal, and transport properties of La0.67Sr0.33MnO<sub>3</sub> nanoparticles synthesized via the sol-gel auto-combustion technique  
Saleem, M (Saleem, M.) Varshney, D (Varshney, Dinesh)  
**RC ADVANCES** Volume8 Issue3 Page1600-1609 Published2018
186. Wang, Huihui; Zhang, Lili; Hu, Chun; et al.  
Enhanced degradation of organic pollutants over Cu-doped LaAlO<sub>3</sub> perovskite through heterogeneous Fenton-like reactions  
**CHEMICAL ENGINEERING JOURNAL** Volume: 332 Pages: 572-581 Published: JAN 15 2018
185. Daoudi, Kais; Alawadhi, Hussain; El Helali, Saoussen; et al.  
Effects of Mn<sub>3</sub>O<sub>4</sub> precipitates on the vibrational properties of epitaxial Ca-doped LaMnO<sub>3</sub> films  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 50 Issue: 39 Article Number: 395305 Published: OCT 4 2017
184. Rodrigues, J. E.; Bezerra, D. M.; Costa, R. C.; et al.  
Raman signatures of monoclinic distortion in (Ba<sub>1-x</sub>Sr<sub>x</sub>)(3)CaNb<sub>2</sub>O<sub>9</sub> complex perovskites  
**JOURNAL OF RAMAN SPECTROSCOPY** Volume: 48 Issue: 9 Pages: 1243-1249 Published: SEP 2017
183. Antunes, Isabel; Amador, Ulises; Alves, Adriana; et al.  
Structure and Electrical -Transport Relations in Ba(Zr,Pr)O<sub>3</sub>-delta Perovskites  
**INORGANIC CHEMISTRY** Volume: 56 Issue: 15 Pages: 9120-9131 Published: AUG 7 2017
182. Kubicek, Markus; Bork, Alexander H.; Rupp, Jennifer L. M.  
Perovskite oxides - a review on a versatile material class for solar-to-fuel conversion processes  
**JOURNAL OF MATERIALS CHEMISTRY A** Volume: 5 Issue: 24 Pages: 11983-12000 Published: JUN 28 2017
181. Ebeoglugil, M. Faruk  
Production and characterization of LaMnO<sub>3</sub> thin films prepared by Sol-Gel technique  
**REVISTA DE METALURGIA** Volume: 53 Issue: 2 Article Number: e091 Published: APR-JUN 2017
180. Aman, Amjad; Jordan, Ryan; Chen, Yan; et al.  
Non-congruence of high-temperature mechanical and structural behaviors of LaCoO<sub>3</sub> based perovskites  
**JOURNAL OF THE EUROPEAN CERAMIC SOCIETY** Volume: 37 Issue: 4 Pages: 1563-1576 Published: APR 2017
179. Cannuccia, Elena; Vinh Ta Phuoc; Briere, Benjamin; et al.  
Combined First-Principles Calculations and Experimental Study of the Phonon Modes in the Multiferroic Compound GeV4S8  
**JOURNAL OF PHYSICAL CHEMISTRY C** Volume: 121 Issue: 6 Pages: 3522-3529 Published: FEB 16 2017
178. Liu, Y.; Crespillo, M. L.; Huang, Q.; et al.  
Lattice damage assessment and optical waveguide properties in LaAlO<sub>3</sub> single crystal irradiated with swift Si ions  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 50 Issue: 5 Article Number: 055303 Published: FEB 8 2017
177. Singh, D.; Kaur, J.; Suryanarayana, N. S.; et al.  
Synthesis and luminescent behavior of UV induced Dy<sup>3+</sup> activated LaAlO<sub>3</sub>  
**JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS** Volume: 28 Issue: 3 Pages: 2462-2470 Published: FEB 2017
176. Liu, Y.; Huang, Q.; Crespillo, M. L.; et al.  
Ion beam damage assessment and waveguide formation induced by energetic Si-ion irradiation in lanthanum aluminate crystal  
**OPTICAL MATERIALS** Volume: 64 Pages: 391-400 Published: FEB 2017
175. Behrendt, Miroslaw; Malik, Sebastian; Grinberg, Marek; et al.  
Influence of charge transfer state on Eu<sup>3+</sup> luminescence in LaAlO<sub>3</sub>, by high pressure spectroscopy  
**OPTICAL MATERIALS** Volume: 63 Special Issue: SI Pages: 158-166 Published: JAN 2017
174. Rodrigues, J. E. F. S.; Castro, P. J.; Pizani, P. S.; et al.  
Structural ordering and dielectric properties of Ba<sub>3</sub>CaNb<sub>2</sub>O<sub>9</sub>-based microwave ceramics  
**CERAMICS INTERNATIONAL** Volume: 42 Issue: 16 Pages: 18087-18093 Published: DEC 2016
173. Saha, S., Cao, B.-C., Motapothula, M., Cong, C.-X., Sarkar, T., Srivastava, A., Sarkar, S., Patra, A., Ghosh, S., Ariando, Coey, J.M.D., Yu, T., Venkatesan, T.  
Magnetic Modes in Rare Earth Perovskites: A Magnetic-Field-Dependent Inelastic Light Scattering study  
Scientific Reports 6, 36859 DOI: 10.1038/srep36859 (2016)
172. Araki, W (Araki, Wakako); Takeda, K (Takeda, Kazutaka); Arai, Y (Arai, Yoshio)  
Mechanical behaviour of ferroelastic lanthanum metal oxides LaMO<sub>3</sub> (M = Co, Al, Ga, Fe)  
**JOURNAL OF THE EUROPEAN CERAMIC SOCIETY** Volume: 36 Issue: 16 Pages: 4089-4094 DOI:  
10.1016/j.jeurceramsoc.2016.07.006 Published: DEC 2016
171. Nicoletti, D., Cavalleri, A.  
Nonlinear light-matter interaction at terahertz frequencies

ADVANCES IN OPTICS AND PHOTONICS Volume: 8 Issue: 3 Pages: 401-464 DOI: 10.1364/AOP.8.000401 Published: SEP 30 2016

170. Nunley, T.N., Willett-Gies, T.I., Cooke, J.A., Manciu, F.S., Marsik, P., Bernhard, C., Zollner, S.  
Optical constants, band gap, and infrared-active phonons of (LaAlO<sub>3</sub>)(0.3)(Sr<sub>2</sub>AlTaO<sub>6</sub>)(0.35) (LSAT) from spectroscopic ellipsometry  
JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A Volume: 34 Issue: 5 Article Number: 051507 DOI: 10.1116/1.4960356  
Published: SEP 2016

169. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.  
Dielectric relaxation of PrFeO<sub>3</sub> nanoparticles  
SOLID STATE SCIENCES Volume: 58 Pages: 55-63 DOI: 10.1016/j.solidstatesciences.2016.05.013 Published: AUG 2016

168. Othmen, Z., Copie, O., Daoudi, K., Boudard, M., Gemeiner, P., Oueslati, M., Dkhil, B.  
Spin transitions in La<sub>0.7</sub>Ba<sub>0.3</sub>CoO<sub>3</sub> thin films revealed by combining Raman spectroscopy and X-ray diffraction  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 1 Article Number: 015308 DOI: 10.1063/1.4955220 Published: JUL 7 2016

167. Paul, B., Chatterjee, S., Gop, S., Roy, A., Grover, V., Shukla, R., Tyagi, A.K.  
Evolution of lattice dynamics in ferroelectric hexagonal REInO<sub>3</sub> (RE = Ho, Dy, Tb, Gd, Eu, Sm) perovskites  
MATERIALS RESEARCH EXPRESS Volume: 3 Issue: 7 Article Number: UNSP 075703 DOI: 10.1088/2053-1591/3/7/075703  
Published: JUL 2016

166. Mankowsky, R., Först, M., Cavalleri, A.  
Non-equilibrium control of complex solids by nonlinear phononics  
REPORTS ON PROGRESS IN PHYSICS Volume: 79 Issue: 6 Article Number: 064503 DOI: 10.1088/0034-4885/79/6/064503 Published:  
JUN 2016

165. Bhat, I (Bhat, Irshad); Husain, S (Husain, Shahid); War, TA (War, Tariq Ahmad)  
Magnetic Magnetic and Raman spectroscopic study of laser ablated 100 (nm) thin film of La<sub>0.85</sub>Te<sub>0.15</sub>MnO<sub>3</sub> deposited on LaAlO<sub>3</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 667 Pages: 225-228 DOI: 10.1016/j.jallcom.2016.01.149 Published: MAY 15  
2016

164. Hu, W., Catalano, S., Gibert, M., Triscone, J.-M., Cavalleri, A.  
Broadband terahertz spectroscopy of the insulator-metal transition driven by coherent lattice deformation at the SmNiO<sub>3</sub>/LaAlO<sub>3</sub> interface  
PHYSICAL REVIEW B Volume: 93 Issue: 16 Article Number: 161107 DOI: 10.1103/PhysRevB.93.161107 Published: APR 12 2016

163. Fredrickson, K.D., Lin, C., Zollner, S., Demkov, A.A.  
Theoretical study of negative optical mode splitting in LaAlO<sub>3</sub>  
PHYSICAL REVIEW B Volume: 93 Issue: 13 Article Number: 134301 DOI: 10.1103/PhysRevB.93.134301 Published: APR 1 2016

162. Das, P.T., Singh, R., Das, A., Nath, T.K.  
Structural, magnetic, and physical properties of La(1-x)MnO<sub>3</sub> +/-delta nano-manganite  
PHILOSOPHICAL MAGAZINE Volume: 96 Issue: 3 Pages: 286-300 DOI: 10.1080/14786435.2015.1131344 Published: JAN 22 2016

161. Varshney, D., Choudhary, D., Varshney, M., Singh, N.  
Thermal conductivity of ferromagnetic metallic La<sub>0.95</sub>Ag<sub>0.05</sub>MnO<sub>3</sub> manganites: role of carrier, spin waves and lattice-impurity scattering  
MOLECULAR SIMULATION Volume: 42 Issue: 2 Pages: 110-121 DOI: 10.1080/08927022.2015.1012643 Published: JAN 22 2016

160. Tepech-Carrillo, L., Escobedo-Morales, A., Pérez-Centeno, A., Chigo-Anota, E., Sánchez-Ramírez, J.F., López-Apreza, E., Gutiérrez-Gutiérrez, J.  
Preparation of Nanosized LaCoO<sub>3</sub> through Calcination of a Hydrothermally Synthesized Precursor  
JOURNAL OF NANOMATERIALS Article Number: 6917950 DOI: 10.1155/2016/6917950 Published: 2016

159. Sakhya, A.P., Dutta, A., Sinha, T.P.  
Dielectric Relaxation, Modulus Behaviour and Conduction Mechanism in NdAlO<sub>3</sub> Ceramics  
JOURNAL OF ELECTRONIC MATERIALS Volume: 44 Issue: 10 Pages: 3801-3810 DOI: 10.1007/s11664-015-3820-7 Published: OCT 2015

158. Shelke, A.R., Deshpande, N.G.  
Influence of the Calcination Temperature on the Combustion Synthesized Perovskite LaMnO<sub>3</sub> Compound  
JOURNAL OF NANO- AND ELECTRONIC PHYSICS Volume: 7 Issue: 3 Article Number: 03009 Published: 2015

157. Abdel-Latif, I. A.; Ismail, Adel A.; Bouzid, Houcine; et al.  
Synthesis of novel perovskite crystal structure phase of strontium doped rare earth manganites using sol gel method  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 393 Pages: 233-238 Published: NOV 1 2015

156. Xu, Peng; Huffman, T. J.; Branagan, N. C.; et al.  
Novel aspects of charge and lattice dynamics in the hole-doped manganite La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub>  
PHILOSOPHICAL MAGAZINE Volume: 95 Issue: 19 Pages: 2078-2091 Published: JUL 3 2015

155. Euler, C.; Holuj, P.; Talkenberger, A.; et al.  
Magnetic field dependent thermal conductance in La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 381 Pages: 188-193 Published: MAY 1 2015

154. Islam, Mohammad A.; Xie, Yujun; Scafetta, Mark D.; et al.  
Raman scattering in La<sub>1-x</sub>Sr<sub>x</sub>FeO<sub>3</sub>-delta thin films: annealing-induced reduction and phase transformation  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 27 Issue: 15 Article Number: 155401 Published: APR 22 2015

153. Arenas, D. J.; Middleton, Carl; Kemper, A. F.  
First-principles study of the phonon modes in bismuth selenites  
PHYSICAL REVIEW B Volume: 91 Issue: 14 Article Number: 144103 Published: APR 9 2015
152. Bachar, N.; Bechor, Y.; Gorshunov, B.; et al.  
Observation of a Bulk Nodal-Gap in Overdoped Y<sub>0.9</sub>Ca<sub>0.1</sub>Ba<sub>2</sub>Cu<sub>3</sub>O<sub>7-δ</sub> Thin Films  
JOURNAL OF LOW TEMPERATURE PHYSICS Volume: 179 Issue: 1-2 Pages: 108-112 Published: APR 2015
151. Varshney, Dinesh; Choudhary, Dinesh; Khan, Elias  
Electrical transport in the ferromagnetic state of silver substituted manganites La<sub>1-x</sub>Ag<sub>x</sub>MnO<sub>3</sub> (x=0.05 and 0.1)  
JOURNAL OF MATERIALS RESEARCH Volume: 30 Issue: 5 Pages: 654-665 Published: MAR 14 2015
150. Foerst, M.; Mankowsky, R.; Cavalleri, A.  
Mode-Selective Control of the Crystal Lattice  
ACCOUNTS OF CHEMICAL RESEARCH Volume: 48 Issue: 2 Pages: 380-387 Published: FEB 2015
149. Doig, K. I.; Peters, J. J. P.; Nawaz, S.; et al.  
Structural, optical and vibrational properties of self-assembled Pb<sub>n+1</sub>(Ti<sub>1-x</sub>Fex)(n)O<sub>3n+1-δ</sub> Ruddlesden-Popper superstructures  
SCIENTIFIC REPORTS Volume: 5 Article Number: 7719 Published: JAN 16 2015
148. Sun, Wei; Li, Jing-Feng; Zhu, Fangyuan; et al.  
Thickness-dependent phase boundary in Sm-doped BiFeO<sub>3</sub> piezoelectric thin films on Pt/Ti/SiO<sub>2</sub>/Si substrates  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 17 Issue: 30 Pages: 19759-19765 Published: 2015
147. Sun, Wei; Li, Jing-Feng; Yu, Qi; et al.  
Phase transition and piezoelectricity of sol-gel-processed Sm-doped BiFeO<sub>3</sub> thin films on Pt(111)/Ti/SiO<sub>2</sub>/Si substrates  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 9 Pages: 2115-2122 Published: 2015
146. Medina, J.Z., Martínez, G.T., Esparza, B.E., Hernández, A.M., Saldaña, J.M.  
Processing and microstructural characterization of sintered lanthanum aluminate obtained by two different routes  
Ceramic Transactions 249, 105-113 (2014)
145. Sultan, K., Habib, Z., Jan, A., Ahmad Mir, S., Ikram, M., Asokan, K.  
Temperature dependent Raman spectroscopy of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x = 0.0, and 0.3)  
Advanced Materials Letters 5(1), 9-13 DOI: 10.5185/amlett.2013.6496 (2014)
144. Willett-Gies, Travis; DeLong, Eric; Zollner, Stefan  
Vibrational properties of bulk LaAlO<sub>3</sub> from Fourier-transform infrared ellipsometry  
THIN SOLID FILMS Volume: 571 Pages: 620-624 Part: 3 Published: NOV 28 2014
143. Qiao, Mei; Wang, Tie-Jun; Yu, Xiao-Fei; et al.  
Comparison of waveguide properties and Raman spectroscopic visualization of C and O ion implantation on LaAlO<sub>3</sub> crystals  
APPLIED OPTICS Volume: 53 Issue: 32 Pages: 7619-7623 Published: NOV 10 2014
142. Wang, Q.; Duan, P.; Wang, J. Y.; et al.  
Effects of different sintering temperatures on microstructural, transport, and magnetic properties of La<sub>0.93</sub>Sb<sub>0.07</sub>MnO<sub>3</sub> compound  
INTERNATIONAL JOURNAL OF MODERN PHYSICS B 28 (24), Art. No. 1450166 SEP 30 2014
141. Marcondes, S. P.; Figueiredo Soares Rodrigues, Joao Elias; Andreetab, M. Rubens Barsi; et al.  
Resonance Raman spectroscopy of NdAlO<sub>3</sub> single-crystal fibers grown by the laser-heated pedestal growth technique  
VIBRATIONAL SPECTROSCOPY 73, 144-149 JUL 2014
140. Othmen, Z.; Schulman, A.; Daoudi, K.; et al.  
Structural, electrical and magnetic properties of epitaxial La<sub>0.7</sub>Sr<sub>0.3</sub>CoO<sub>3</sub> thin films grown on SrTiO<sub>3</sub> and LaAlO<sub>3</sub> substrates  
APPLIED SURFACE SCIENCE 306, pp. 60-65 JUL 1 2014
139. Elkhouni, T.; Amami, M.; Colin, C. V.; et al.  
The structure, Raman spectroscopy and evidence of ferromagnetic transition in CuCr<sub>1-x</sub>M<sub>x</sub>O<sub>2</sub> (M=Mn and Rh) compounds  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 355, pp. 158-163 APR 2014
138. Lloyd-Hughes, J.; Jones, S. P. P.; Castro-Camus, E.; et al.  
Modifying the polarization state of terahertz radiation using anisotropic twin-domains in LaAlO<sub>3</sub>  
OPTICS LETTERS 39 (5), pp. 1121-1124 MAR 1 2014
137. Lemanski, K.; Deren, P. J.  
Luminescent properties of LaAlO<sub>3</sub> nanocrystals, doped with Pr<sup>3+</sup> and Yb<sup>3+</sup> ions  
JOURNAL OF LUMINESCENCE 146, 239-242 FEB 2014
136. Bachar, N.; Farber, E.; Zhukova, E.; et al.  
Direct evidence of a bulk nodal gap in the overdoped regime of Y<sub>0.9</sub>Ca<sub>0.1</sub>Ba<sub>2</sub>Cu<sub>3</sub>O<sub>7-δ</sub> thin films from THz spectroscopy  
EPL 104 (6), Art. No. 67006 DEC 2013
135. Fu, Jianhui; Zhao, Jianxiong; Sa, Tongliang; et al.  
Photoluminescent and dielectric properties of Eu<sup>3+</sup>-doped LaAlO<sub>3</sub> thin films fabricated by chemical solution deposition method  
APPLIED SURFACE SCIENCE 286, pp. 1-6 DEC 1 2013

134. Di Castro, D.; Caramazza, S.; Innocenti, D.; et al.  
Raman spectroscopy study of the interface structure in  $(\text{CaCuO}_2)_n/(\text{SrTiO}_3)_m$  superlattices  
APPLIED PHYSICS LETTERS 103 (19), Art. No. 191903 NOV 4 2013
133. Först, M., Mankowsky, R., Bromberger, H., Fritz, D.M., Lemke, H., Zhu, D., Chollet, M., (...), Cavalleri, A.  
Displacive lattice excitation through nonlinear phononics viewed by femtosecond X-ray diffraction  
Solid State Communications 169, pp. 24-27, 2013
132. Duan, P., Duan, W.J., Wang, J.Y., Wang, Q., Chang, L., Kong, L.  
Study on extraordinary transport behaviors of polycrystalline La-Sb-Mn-O ceramic  
Advanced Materials Research 746, pp. 234-239, 2013
131. Varshney, D., Choudhary, D., Khan, E.  
Electrical transport in the ferromagnetic and paramagnetic state of potassium-substituted manganites  $\text{La}_{1-x}\text{K}_x\text{MnO}_3$  ( $x = 0.05, 0.1$  and  $0.15$ )  
Journal of Materials Science 48 (17), pp. 5904-5916, 2013
130. Huang, F., Zhou, Q., Ma, C., Li, L., Huang, X., Li, F., Cui, Q., (...), Zou, G.  
High pressure Raman scattering and X-ray diffraction studies of  $\text{MgNb}_2\text{O}_6$   
RSC Advances 3 (32), pp. 13210-13213, 2013
129. Islam, M.A., Rondinelli, J.M., Spanier, J.E.  
Normal mode determination of perovskite crystal structures with octahedral rotations: Theory and applications  
Journal of Physics Condensed Matter 25 (17), art. no. 175902, 2013
128. Khanduri, H., Chandra Dimri, M., Vasala, S., Leinberg, S., Löhmus, R., Ashworth, T.V., Mere, A., (...), Stern, R.  
Magnetic and structural studies of  $\text{LaMnO}_3$  thin films prepared by atomic layer deposition  
Journal of Physics D: Applied Physics 46 (17), art. no. 175003, 2013
127. Majumdar, S., Huhtinen, H., Paturi, P., Palai, R.  
The effect of oxygen on the Jahn-Teller distortion and magnetization dynamics of  $\text{Pr}_{0.9}\text{Ca}_{0.1}\text{MnO}_3$  thin films  
Journal of Physics Condensed Matter 25 (6), art. no. 066005, 2013
126. Stanislavchuk, T. N.; Sirenko, A. A.; Litvinchuk, A. P.; et al.  
Electronic band structure and optical phonons of  $\text{BaSnO}_3$  and  $\text{Ba}_{0.97}\text{La}_{0.03}\text{SnO}_3$  single crystals: Theory and experiment  
JOURNAL OF APPLIED PHYSICS 112 (4), 044108, AUG 15 2012
125. Maczka, M., Bednarkiewicz, A., Mendoza-Mendoza, E., Fuentes, A.F., Kepiński, L.  
Optical properties of Eu and Er doped  $\text{LaAlO}_3$  nanopowders prepared by low-temperature method  
Journal of Solid State Chemistry 194, pp. 264-269, 2012
124. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V.  
Nanocomposite Structure and Reactivity of Perovskites Based on Lanthanum Manganites  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A 86 (4), 606-620, APR 2012.
123. McZka, M., Mendoza-Mendoza, E., Fuentes, A.F., Lemański, K., Dereń, P.  
Low-temperature synthesis, luminescence and phonon properties of Er and/or Dy doped  $\text{LaAlO}_3$  nanopowders  
Journal of Solid State Chemistry 187 , pp. 249-257, 2012.
122. Lepetit, M.-B., Mercey, B., Simon, C.  
Interface effects in perovskite thin films  
Physical Review Letters 108 (8), art. no. 087202, 2012.
121. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of  $\text{RCrO}_3$  perovskites ( $\text{R}=\text{Y}, \text{La}, \text{Pr}, \text{Sm}, \text{Gd}, \text{Dy}, \text{Ho}, \text{Yb}, \text{Lu}$ )  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
120. Kintaka, Y., Kuretake, S., Hayashi, T., Tanaka, N., Ando, A., Takagi, H.  
Crystal structures and optical properties of transparent ceramics based on  $\text{LaAlO}_3-\text{Sr}(\text{Al,Ta})\text{O}_3$  solid solution  
Journal of the American Ceramic Society 94 (12), 4399-4403, 2011.
119. Först, M., Manzoni, C., Kaiser, S., Tomioka, Y., Tokura, Y., Merlin, R., Cavalleri, A.  
Nonlinear phononics as an ultrafast route to lattice control  
Nature Physics 7 (11), 854-856, 2011.
118. Simon, E., Borodavka, F., Gregora, I., Nuzhnny, D., Kamba, S., Hlinka, J., Bartasyte, A., Margueron, S.  
Ferroelectric domains in epitaxial  $\text{PbTiO}_3$  films on  $\text{LaAlO}_3$  substrate  
Journal of Applied Physics 110 (8) , art. no. 084115, 2011.
117. Gou, G., Grinberg, I., Rappe, A.M., Rondinelli, J.M.  
Lattice normal modes and electronic properties of the correlated metal  $\text{LaNiO}_3$   
Physical Review B - Condensed Matter and Materials Physics 84 (14) , art. no. 144101, 2011.
116. Rubinger, C.P.L., Moreira, R.L., Ribeiro, G.M., Matinaga, F.M., Autier Laurent, S., Mercey, B., Lobo, R.P.S.M.  
Intrinsic and extrinsic dielectric responses of  $\text{CaCu}_3\text{Ti}_4\text{O}_12$  thin films

Journal of Applied Physics 110 (7) , art. no. 074102, 2011.

115. Jia, B.W., Liu, X.Q., Chen, X.M.

Structure, magnetic and dielectric properties in Mn-substituted Sm 1.5Sr0.5NiO<sub>4</sub> ceramics  
Journal of Applied Physics 110 (6), art. no. 064110, 2011.

114. Mishra, D.K., Ahlawat, A., Sathe, V.G.

Influence of oxygen content in oriented LaCoO<sub>3</sub>-δ thin films: Probed by X-ray diffraction and Raman spectroscopy  
AIP Conference Proceedings 1349 (PART A), pp. 637-638, 2011.

113. Dhak, P., Pramanik, P., Bhattacharya, S., Roy, A., Achary, S.N., Tyagi, A.K.

Structural phase transition in lanthanum gallate as studied by Raman and X-ray diffraction measurements  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 248 (8) Pages: 1884-1893, AUG 2011.

112. Golosova, N.O., Kozlenko, D.P., Kolesnikov, A.I., Kazimirov, V.Yu., Smirnov, M.B., Jirák, Z., Savenko, B.N.  
Evolution of the phonon density of states of LaCoO<sub>3</sub> over the spin state transition  
PHYSICAL REVIEW B 83 (21) Article Number: 214305, JUN 30 2011.

111. Ma T. P.

Inelastic electron tunneling spectroscopy (IETS) study of high-k gate dielectrics  
SCIENCE CHINA-INFORMATION SCIENCES 54 (5) Pages: 980-989, MAY 2011.

110. Bachar, N., Zhukova, E., Gorshunov, B., Farber, E., Roth, M.

Anomaly in the Complex Conductivity of Overdoped Y(1-x)Ca(x)Ba(2)Cu(3)O(7-delta) Thin Films from THz Spectroscopy  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM 24 (3) Pages: 1225-1228, APR 2011.

109. Deren P. J.; Lemanski K.

On tuning the spectroscopic properties of LaAlO<sub>3</sub>:Pr(3+) nanocrystallites  
JOURNAL OF LUMINESCENCE 131 (3) Pages: 445-448, MAR 2011.

108. Mir Feroz Ahmad; Ikram M.; Kumar Ravi

Temperature-dependent Raman study of PrFeO(3) thin film  
JOURNAL OF RAMAN SPECTROSCOPY 42 (2) Pages: 201-208, FEB 2011.

107. Nomura, K.-I., Okami, S., Xie, X., Mizuno, M., Fukunaga, K., Ohki, Y.

Effect of Annealing on Optical Absorption of LaAlO<sub>3</sub> at Terahertz Frequencies  
JAPANESE JOURNAL OF APPLIED PHYSICS 50 (2) Article Number: UNSP 021502, FEB 2011.

106. Chaix-Pluchery O.; Kreisel J.

Raman scattering of perovskite SmScO<sub>3</sub> and NdScO<sub>3</sub> single crystals  
PHASE TRANSITIONS 84 (5-6) Pages: 542-554, 2011.

105. Gohil, S., Iyer, K.K., Aswathi, P., Ghosh, S., Sampathkumaran, E.V.

Raman study of Ca(3)Co(2)O(6) single crystals  
JOURNAL OF APPLIED PHYSICS 108 (10) Article Number: 103517, NOV 15 2010.

104. Deren P. J.; Lemanski K.; Gagor A.; et al.

Symmetry of LaAlO<sub>3</sub> nanocrystals as a function of crystallite size  
JOURNAL OF SOLID STATE CHEMISTRY 183 (9) Pages: 2095-2100, SEP 2010.

103. Reiner, J.W., Cui, S., Liu, Z., Wang, M., Ahn, C.H., Ma, T.P.

Inelastic Electron Tunneling Spectroscopy Study of Thin Gate Dielectrics  
ADVANCED MATERIALS 22 (26-27) Pages: 2962-2968, JUL 20 2010.

102. Chaban, N., Weber, M., Pignard, S., Kreisel, J.

Phonon Raman scattering of perovskite LaNiO<sub>3</sub> thin films  
APPLIED PHYSICS LETTERS 97 (3) Article Number: 031915, JUL 19 2010.

101. Varshney D.; Choudhary D.; Shaikh M. W.; et al.

Electrical resistivity behaviour of sodium substituted manganites: electron-phonon, electron-electron and electron-magnon interactions  
EUROPEAN PHYSICAL JOURNAL B 76 (2) Pages: 327-338, JUL 2010.

100. Laref, A., Luo, S.J.

Magnetic excitation and phonon dispersion in LaCoO<sub>3</sub> compound  
Journal of the Physical Society of Japan 79 (6), art. no. 064702 (2010).

99. Samal, D., Venkateswarlu, D., Anil Kumar, P.S.

Influence of finite size effect on magnetic and magnetotransport properties of La0.5 Sr0.5 CoO<sub>3</sub> thin films  
Solid State Communications 150 (13-14), pp. 576-580 (2010).

98. Kumar, P., Saha, S., Muthu, D.V.S., Sahu, J.R., Sood, A.K., Rao, C.N.R.

Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO<sub>3</sub>  
Journal of Physics Condensed Matter 22 (11), art. no. 115403 (2010).

97. Malavasi, L., Baldini, M., Di Castro, D., Nucara, A., Crichton, W., Mezouar, M., Blasco, J., Postorino, P.  
High pressure behavior of Ga-doped LaMnO<sub>3</sub>: A combined X-ray diffraction and optical spectroscopy study

Journal of Materials Chemistry 20 (7), pp. 1304-1311 (2010).

96. Gupta, R.K., Kim, E.Y., Kim, Y.H., Whang, C.M.

Effect of strontium ion doping on structural, thermal, morphological and electrical properties of a co-doped lanthanum manganite system  
Journal of Alloys and Compounds 490 (1-2), pp. 56-61 (2010).

95. Varshney, D., Choudhary, D., Shaikh, M.W.

Interpretation of metallic and semiconducting temperature-dependent resistivity of La<sub>1-x</sub>NaxMnO<sub>3</sub> (x = 0.07, 0.13) manganites  
Computational Materials Science 47 (3), pp. 839-847 (2010).

94. Yusa, H., Belik, A.A., Takayama-Miromachi, E., Hirao, N., Ohishi, Y.

High-pressure phase transitions in BiMO<sub>3</sub> (M=Al, Ga, and In): In situ x-ray diffraction and Raman scattering experiments  
PHYSICAL REVIEW B Volume: 80 Issue: 21 Article Number: 214103 DOI: 10.1103/PhysRevB.80.214103 Published: DEC 2009

93. Suda, J., Kamishima, O., Kawamura, J., Hattori, T., Sato, T.

Anharmonicity on Raman active phonon modes of LaAlO<sub>3</sub>

Journal of Physics Conference Series Volume: 150 Issue: 5a Article Number: 052249 DOI: 10.1088/1742-6596/150/5/052249 Published: 2009

92. Liu, X.-Q., Han, G.-J., Huang, C.-K., Lan, W.

Thickness dependence of microstructure for La<sub>0.9</sub>Sr<sub>0.1</sub>MnO<sub>3</sub>/Si films determined by micro-Raman spectroscopy  
Wuli Xuebao/Acta Physica Sinica 58 (11), pp. 8008-8013 (2009).

91. Talati, M., Jha, P.K.

Temperature effect on vibrational properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>

International Journal of Modern Physics B 23 (23), pp. 4767-4777 (2009).

90. Reiner, J.W., Posadas, A., Wang, M., Sidorov, M., Krivokapic, Z., Walker, F.J., Ma, T.P., Ahn, C.H.

Electrical properties and interfacial structure of epitaxial LaAlO<sub>3</sub> on Si (001)

Journal of Applied Physics 105 (12), art. no. 124501 (2009).

89. Orlovskaia, N., Lugovy, M., Carpenter, C., Pathak, S., Steinmetz, D., Lara-Curcio, E., Klemenz, C., Radovic, M.

On thermal and vibrational properties of LaGaO<sub>3</sub> single crystals  
Acta Materialia 57 (10), pp. 2984-2992 (2009).

88. Rousseau, S., Lordinat, S., Delichere, P., Boreave, A., Deloume, J.P., Vernoux, P.

La(1-x)Sr<sub>x</sub>Co<sub>1-y</sub>FeyO<sub>3</sub> perovskites prepared by sol-gel method: Characterization and relationships with catalytic properties for total oxidation of toluene

Applied Catalysis B: Environmental 88 (3-4), pp. 438-447 (2009).

87. Varshney, D., Mansuri, I., Kaurav, N.

Interpretation of thermal conductivity in the ferromagnetic metallic phase of La<sub>0.83</sub>Sr<sub>0.17</sub>MnO<sub>3</sub> manganites: Scattering of phonons and magnons

Journal of Low Temperature Physics 155 (3-4), pp. 177-199 (2009).

86. Gupta, R.K., Choi, I.-J., Cho, Y.-S., Lee, H.-L., Hyun, S.-H.

Characterization of perovskite-type cathode, La<sub>0.75</sub>Sr<sub>0.25</sub>Mn<sub>0.95-x</sub>CoxNi<sub>0.05</sub>O<sub>3+δ</sub> (0.1 ≤ x ≤ 0.3), for intermediate-temperature solid oxide fuel cells

Journal of Power Sources 187 (2), pp. 371-377 (2009).

85. Dereñ, P.J., Mahiou, R., Goldner, P.

Multiphonon transitions in LaAlO<sub>3</sub> doped with rare earth ions

Optical Materials 31 (3), pp. 465-469 (2009).

84. Vali, R.

Phonons and heat capacity of LaAlO<sub>3</sub>

Computational Materials Science 44 (2), pp. 779-782 (2008).

83. Dubey, A., Sathe, V.G., Rawat, R.

Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO<sub>3+δ</sub> thin films

Journal of Applied Physics 104 (11), art. no. 113530 (2008).

82. Smirnova, I.S., Bazhenov, A.V., Fursova, T.N., Dubovitskii, A.F., Uspenskaya, L.S., Maksimuk, M.Yu.

IR-active optical phonons in Pnma-1, Pnma-2 and R over(3, -) c phases of LaMnO<sub>3</sub> + δ

Physica B: Condensed Matter 403 (21-22), pp. 3896-3902 (2008).

81. Xing, X.J., Yu, Y.P., Xu, L.M., Wu, S.X., Li, S.W.

Magnetic properties of β-MnO<sub>2</sub> thin films grown by plasma-assisted molecular beam epitaxy

Journal of Physical Chemistry C 112 (39), pp. 15526-15531 (2008).

80. Van Minh, N., Kim, S.-J., Yang, I.-S.

A Raman Spectroscopy Study of Disorder and Local Vibrational Modes in La<sub>0.7</sub>Sr<sub>0.3</sub>Mn<sub>1-x</sub>M<sub>x</sub>O<sub>3</sub> (M=Fe, Co)

Journal of the Korean Physical Society 52 (5), pp. 1402-1405 (2008).

79. Dubey, A., Sathe, V.G.

The effect of magnetic order and thickness in the Raman spectra of oriented thin films of LaMnO<sub>3</sub>

78. Jandl, S., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.

Micro-Raman and magnetization studies of Nd<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub> phase transitions  
Journal of Physics: Conference Series 92 (1), art. no. 012125 (2007).

77. Giraudon, J.-M., Elhachimi, A., Wyrwalski, F., Siffert, S., Aboukaïs, A., Lamonier, J.-F., Leclercq, G.  
Studies of the activation process over Pd perovskite-type oxides used for catalytic oxidation of toluene  
Applied Catalysis B: Environmental 75 (3-4), pp. 157-166 (2007)

76. Sathe, V.G., Dubey, A.

Broken symmetry in LaAlO<sub>3</sub> single crystal probed by resonant Raman spectroscopy  
Journal of Physics Condensed Matter 19 (38), art. no. 382201 (2007)

75. Zinenko, V.I., Pavlovskii, M.S.

Lattice dynamics and the phase transition from the cubic phase to the tetragonal phase in the LaMnO<sub>3</sub> crystal within the polarizable-ion model  
Physics of the Solid State 49 (9), pp. 1749-1758 (2007)

74. Li, W.J., Zhang, B., Lu, W., Sun, Y.P., Zhang, Y.

Cr-doping effect on the structural, magnetic, transport properties and Raman spectroscopy of La(2+x)/3Sr(1-x)/3Mn1-xCr<sub>x</sub>O<sub>3</sub> perovskites  
Journal of Physics and Chemistry of Solids 68 (9), pp. 1749-1755 (2007)

73. Fan, J., Pi, L., He, Y., Ling, L., Dai, J., Zhang, Y.

Griffiths phase and magnetic polaronic behavior in B-site disordering manganites  
Journal of Applied Physics 101 (12), art. no. 123910 (2007)

72. Sadykov, V.A., Borchert, Yu.V., Alikina, G.M., Lukashevich, A.I., Mezentseva, N.V., Muzykantov, V.S., Moroz, E.M., (...), Smirnova, A.

Synthesis and properties of nanocomposites with mixed ionic-electronic conductivity on the basis of oxide phases with perovskite and fluorite structures  
Glass Physics and Chemistry 33 (4), pp. 320-334 (2007)

71. Varshney, D., Mansuri, I., Kaurav, N.

Effect of electron/hole doping on the transport properties of lanthanum manganites LaMnO<sub>3</sub>  
Journal of Physics Condensed Matter 19 (24), art. no. 246211 (2007)

70. Varshney, D., Kaurav, N.

Numerical analysis of heat transport behavior in the ferromagnetic metallic state of La<sub>0.80</sub>Ca<sub>0.20</sub>MnO<sub>3</sub> manganites  
Journal of Low Temperature Physics 147 (1-2), pp. 7-30 (2007)

69. Li, W.J., Zhang, B., Lu, W.

Structural properties and Raman spectroscopy of La(2+4x)/3Sr(1-4x)/3Mn1-xCu<sub>x</sub>O<sub>3</sub>(0 ≤ x ≤ 0.2)  
Physics Letters, Section A: General, Atomic and Solid State Physics 362 (4), pp. 327-330 (2007)

68. Wang, M., He, W., Ma, T.P., Edge, L.F., Schlom, D.G.

Electron tunneling spectroscopy study of amorphous films of the gate dielectric candidates LaAlO<sub>3</sub> and LaScO<sub>3</sub>  
Applied Physics Letters 90 (5), art. no. 053502 (2007)

67. Varshney, D., Kaurav, N., Choudhary, K.K., Singh, R.K.

Analysis of low temperature resistivity in the ferromagnetic metallic state of Pb-doped manganites  
AIP Conference Proceedings 850, pp. 1183-1184 (2006)

66. Zhang, T., Li, G., Qian, T., Qu, J.F., Xiang, X.Q., Li, X.G.

Effect of particle size on the structure and magnetic properties of La<sub>0.6</sub>Pb<sub>0.4</sub>MnO<sub>3</sub> nanoparticles  
Journal of Applied Physics 100 (9), art. no. 094324 (2006)

65. Kim, J., Jung, S., Park, M.S., Lee, S.-I., Drew, H.D., Cheong, H., Kim, K.H., Choi, E.J.

Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (5), art. no. 052406 (2006)

64. Minh, N.V., Hoc, N.Q., Ha Phuong, L.T., Yang, I.-S.

The effect of Fe substitution on the structural transition of LaMn<sub>1-x</sub>FexO<sub>3</sub> manganites: A raman spectroscopy study  
Journal of Nonlinear Optical Physics and Materials 15 (3), pp. 315-321 (2006)

63. Aruta, C., Angeloni, M., Balestrino, G., Boggio, N.G., Medaglia, P.G., Tebano, A., Davidson, B., (...), De Renzi, R.

Preparation and characterization of LaMnO<sub>3</sub> thin films grown by pulsed laser deposition  
Journal of Applied Physics 100 (2), art. no. 023910 (2006)

62. Talati, M., Jha, P.K.

Structure dependent phonon properties of LaMnO<sub>3</sub>  
Computational Materials Science 37 (1-2), pp. 64-68 (2006)

61. Lunkenheimer, P., Mayr, F., Loidl, A.

Dynamic conductivity from audio to optical frequencies of semiconducting manganites approaching the metal-insulator transition

Annalen der Physik (Leipzig) 15 (7-8), pp. 498-507 (2006)

60. Jandl, S., Laverdière, J., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.  
Raman and infrared quest for orbitons in Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
Physica B: Condensed Matter 381 (1-2), pp. 214-218 (2006)

59. Kobayashi, Y., Sin Naing, T., Suzuki, M., Akimitsu, M., Asai, K., Yamada, K., Akimitsu, J., (...), Shirane, G.  
Neutron scattering study of phonons in LaCoO<sub>3</sub>  
Physica B: Condensed Matter 378-380 (SPEC. ISS.), pp. 532-533 (2006)

58. Jandl S, Mukhin AA, Ivanov VY, et al.  
Micro-Raman study and phase transitions of Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006

57. Gnezdilov V, Fomin V, Yeremenko AV, et al.  
Low-temperature mixed spin state of Co<sup>3+</sup> in LaCoO<sub>3</sub> evidenced from Jahn-Teller lattice distortions  
LOW TEMPERATURE PHYSICS 32 (2): 162-168 FEB 2006

56. Dore P, Postorino P, Sacchetti A, et al.  
Raman measurements on thin films of the La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite: a probe of substrate-induced effects  
EUROPEAN PHYSICAL JOURNAL B 48 (2): 255-258 NOV 2005

55. Polychronopoulou K, Galisteo FC, Granados ML, et al.  
Novel Fe-Mn-Zn-Ti-O mixed-metal oxides for the low-temperature removal of H<sub>2</sub>S from gas streams in the presence of H<sub>2</sub>, CO<sub>2</sub>, and H<sub>2</sub>O  
JOURNAL OF CATALYSIS 236 (2): 205-220 DEC 10 2005

54. Kobayashi Y, Naing TS, Suzuki M, et al.  
Inelastic neutron scattering study of phonons and magnetic excitations in LaCoO<sub>3</sub>  
PHYSICAL REVIEW B 72 (17): Art. No. 174405 NOV 2005

53. Varshney D, Kaurav N  
Interpretation of temperature-dependent resistivity of La-Pb-MnO<sub>3</sub>: Role of electron-phonon interaction  
JOURNAL OF LOW TEMPERATURE PHYSICS 141 (3-4): 165-178 NOV 2005

52. Asselin S, Jandl S, Fournier P, et al.  
Resonant micro-Raman study of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005

51. Hayward SA, Morrison FD, Redfern SAT, et al.  
Transformation processes in LaAlO<sub>3</sub>: Neutron diffraction, dielectric, thermal, optical, and Raman studies  
PHYSICAL REVIEW B 72 (5): Art. No. 054110 AUG 2005

50. Orlovskaya N, Steinmetz D, Yarmolenko S, et al.  
Detection of temperature- and stress-induced modifications of LaCoO<sub>3</sub> by micro-Raman spectroscopy  
PHYSICAL REVIEW B 72 (1): Art. No. 014122 JUL 2005

49. Jandl S, Mukhin AA, Ivanov VY, et al.  
Raman-active phonons and Nd<sup>3+</sup> crystal-field studies of weakly doped Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
PHYSICAL REVIEW B 72 (2): Art. No. 024423 JUL 2005

48. Ghosh S, Kamaraju N, Seto M, et al.  
Raman scattering in CaFeO<sub>3</sub> and La<sub>0.33</sub>Sr<sub>0.67</sub>FeO<sub>3</sub> across the charge-disproportionation phase transition  
PHYSICAL REVIEW B 71 (24): Art. No. 245110 JUN 2005

47. Hartinger C, Mayr F, Loidl A, et al.  
Phonon metamorphosis in ferromagnetic manganite films: Probing the evolution of an inhomogeneous state  
PHYSICAL REVIEW B 71 (18): Art. No. 184421 MAY 2005

46. Popovic ZV, Cantarero A, Thijssen WHA, et al.  
Novel phase transitions in B-site doped manganites  
PHYSICA B-CONDENSED MATTER 359: 1276-1278 APR 30 2005

45. Delugas P, Fiorentini V, Filippetti A  
Dielectric properties and long-wavelength optical modes of the high-kappa oxide LaAlO<sub>3</sub>  
PHYSICAL REVIEW B 71 (13): Art. No. 134302 APR 2005

44. Popovic ZV, Cantarero A, Thijssen WHA, et al.  
Short range charge/orbital ordering in La<sub>1-x</sub>Sr<sub>x</sub>Mn<sub>1-z</sub>BzO<sub>3</sub> (B = Cu, Zn) manganites  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (2): 351-360 JAN 19 2005

43. Seikh MM, Sood AK, Narayana C  
Electronic and vibrational Raman spectroscopy of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub> through the phase transitions  
PRAMANA-JOURNAL OF PHYSICS 64 (1): 119-128 JAN 2005

42. Venimadhav A, Yates KA, Blamire MG

Scanning Raman spectroscopy for characterizing compositionally spread films  
JOURNAL OF COMBINATORIAL CHEMISTRY 7 (1): 85-89 JAN-FEB 2005

41. Orlovskaya N; Browning N  
Raman diagnostics of LaCoO<sub>3</sub> based perovskites  
MIXED IONIC ELECTRONIC CONDUCTING PEROVSKITES FOR ADVANCED ENERGY SYSTEMS Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY Volume: 173 Pages: 39-51 Published: 2004
41. Bergenti, I, Biscarini, F.; Cavallini, M, Dedi, V, Murgia, M, Nozar, P, Ruani, G, Taliani, C.  
Spin polarized effects at the interface between manganites and organic semiconductors  
MOLECULAR NANOWIRES AND OTHER QUANTUM OBJECTS Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY Volume: 148 Pages: 415-424 Published: 2004
40. Hartinger C, Mayr F, Loidl A, et al.  
Cooperative dynamics in doped manganite films: Phonon anomalies in the ferromagnetic state  
PHYSICAL REVIEW B 70 (13): Art. No. 134415 OCT 2004
39. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
38. Ishikawa A, Nohara J, Sugai S  
Raman study of the orbital-phonon coupling in LaCoO<sub>3</sub>  
PHYSICAL REVIEW LETTERS 93 (13): Art. No. 136401 SEP 24 2004
37. Varshney D, Kaurav N  
Electrical resistivity in the ferromagnetic metallic state of La-Ca-MnO<sub>3</sub>: Role of electron-phonon interaction  
EUROPEAN PHYSICAL JOURNAL B 40 (2): 129-136 JUL 2004
36. Maczka M, Hanuza J, Fuentes AF, et al.  
Vibrational studies of A(B 'B-2/3 '(1/3))O-3 perovskites (A = Ba, Sr; B ' = Y, Sm, Dy, Gd, In; B " = Mo, W)  
JOURNAL OF PHYSICS-CONDENSED MATTER 16 (13): 2297-2310 APR 7 2004
35. Busani, T., Devine, R.A.B.  
Substrate/oxide interface interaction in LaAlO<sub>3</sub>/Si structures  
Materials Research Society Symposium - Proceedings 786, pp. 189-194 (2004)
34. Nikiforov AE, Popov SE  
Cooperative dynamical effect in rhombohedral LaMnO<sub>3</sub>  
ADV QUANTUM CHEM 44: 587-598 2003
33. Tan S, Yue S, Zhang YH  
Jahn-Teller distortion induced by Mg/Zn substitution on Mn sites in the perovskite manganites  
PHYS LETT A 319 (5-6): 530-538 DEC 15 2003
32. Gnezdilov VP, Yeremenko AV, Pashkevich YG, et al.  
Phonon Raman scattering in LaMn<sub>1-x</sub>CoxO<sub>3</sub> (x = 0, 0.2, 0.3, 0.4, and 1.0)  
LOW TEMP PHYS+ 29 (11): 963-966 NOV 2003
31. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study of anharmonic effects in Pr0.5Ca0.5MnO<sub>3</sub> thin films  
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003
30. De Marzi G, Popovic ZV, Cantarero A, et al.  
Effect of A-site and B-site substitution on the infrared reflectivity spectra of La<sub>1-y</sub>AyMn<sub>1-x</sub>B<sub>x</sub>O<sub>3</sub> (A=Ba,Sr; B=Cu,Zn,Sc; 0 < y <= 0.3; 0 <= x <= 0.1) manganites  
PHYS REV B 68 (6): Art. No. 064302 AUG 1 2003
29. Devine RAB  
Infrared and electrical properties of amorphous sputtered (LaxAl<sub>1-x</sub>)<sub>2</sub>O-3 films  
J APPL PHYS 93 (12): 9938-9942 JUN 15 2003
28. Malavasi L, Alessandri I, Mozzati MC, et al.  
Preparation, structural and magnetic characterisation of RF-sputtered La<sub>1-x</sub>NaxMnO<sub>3</sub> +/-delta thin films manganites  
PHYS CHEM CHEM PHYS 5 (11): 2274-2278 2003
27. Deren PJ, Krupa JC  
Spectroscopic investigations of LaAlO<sub>3</sub> : Eu<sup>3+</sup>  
J LUMIN 102: 386-390 MAY 2003
26. Popa M, Van Hong L, Kakihana M  
Nanopowders of LaMeO<sub>3</sub> perovskites obtained by a solution-based ceramic processing technique  
PHYSICA B 327 (2-4): 233-236 APR 2003
25. Souza AG, Faria JLB, Guedes I, et al.  
Evidence of magnetic polaronic states in La<sub>0.70</sub>Sr<sub>0.30</sub>Mn<sub>1-x</sub>FexO<sub>3</sub> manganites

24. Guttler B, Amelitchev VA, Gorbenko OY, et al.  
Static and dynamic Jahn-Teller distortions in CMR manganites: A Raman spectrometric study  
PHASE TRANSIT 76 (1-2): 63-72 Part B JAN-FEB 2003
23. Taliani C, Dedi V, Biscarini F, et al.  
Organic-inorganic hybrid spin-valve: A novel approach to spintronics  
PHASE TRANSIT 75 (7-8): 1049-1058 Part B OCT-NOV 2002
22. Popa M, Frantti J, Kakihana M  
Characterization of LaMeO<sub>3</sub> (Me : Mn, Co, Fe) perovskite powders obtained by polymerizable complex method  
SOLID STATE IONICS 154: 135-141 Part B Sp. Iss. SI DEC 2002
21. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons as a probe of disorder, fluctuations, and local structure in doped and undoped orthorhombic and rhombohedral manganites  
PHYS REV B 66 (17): Art. No. 174303 NOV 1 2002
20. Hayward SA, Redfern SAT, Salje EKH  
Order parameter saturation in LaAlO<sub>3</sub>  
J PHYS-CONDENS MAT 14 (43): 10131-10144 NOV 4 2002
19. Bouvier P, Kreisel J  
Pressure-induced phase transition in LaAlO<sub>3</sub>  
J PHYS-CONDENS MAT 14 (15): 3981-3991 APR 22 2002
18. Frost, R.L., Kristóf, J., Horváth, E., Kloprogge, J.T.  
Raman phonons and Raman Jahn-Teller bands in perovskite-like manganites  
Journal of Raman Spectroscopy 32(10), 805-811 DOI: 10.1002/jrs.770 (2001)
17. Trodahl, H.J., Fainstein, A., Pregliasco, R.G., Buckley, R.G., Balakrishnan, G., Lees, M.R., Paul, D.M., Pantoja, A.E.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering  
Physical Review B - Condensed Matter and Materials Physics 63(13), 132406 (2001)
16. Nagaev EL  
Off-stoichiometry mechanism of the isotope effect in manganites  
PHYS REV B 64 (14): art. no. 144409 OCT 1 2001
15. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons and light scattering in RMnO<sub>3</sub> (R=La, Pr, Nd, Ho, ErTb and Y) orthorhombic and hexagonal manganites  
J ALLOY COMPD 323: 494-497 JUL 12 2001
14. Pantoja, A.E., Trodahl, H.J., Fainstein, A., Pregliasco, R.G., Buckley, R.G., Balakrishnan, G., Lees, M.R., Paul, D.McK.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering  
Physical Review B - Condensed Matter and Materials Physics 63 (13), pp. 1324061-1324064 (2001)
13. Nagaev EL  
Colossal-magnetoresistance materials: manganites and conventional ferromagnetic semiconductors  
PHYS REP 346 (6): 388-531 JUN 2001
12. Amelitchev VA, Guttler B, Gorbenko OY, et al.  
Structural and chemical analysis of colossal magnetoresistance manganites by Raman spectrometry  
PHYS REV B 63 (10): art no. 104430 MAR 1 2001
11. Saitoh E, Okamoto S, Takahashi KT, et al.  
Observation of orbital waves as elementary excitations in a solid  
NATURE 410: (6825) 180-183 MAR 8 2001
10. Amado, A.M., Ribeiro-Claro, P.J.A.  
Raman phonons in La(2-2x)Sr(1+2x)Mn<sub>2</sub>O<sub>7</sub> layered manganites  
Journal of Raman Spectroscopy 31(11), 1013-1015 DOI: 10.1002/1097-4555(200011)31:11<1013::AID-JRS637>;3.0.CO;2-9 (2000)
9. Mayr F, Hartinger C, Paraskevopoulos M, et al.  
High-frequency conductivity and phonon properties of La<sub>7/8</sub>Sr<sub>1/8</sub>MnO<sub>3</sub>  
PHYS REV B 62: (23) 15673-15679 DEC 15 2000
8. Guedes I, Mitchell JF, Argyriou D, et al.  
Raman phonons in La<sub>2-2x</sub>Sr<sub>1+2x</sub>Mn<sub>2</sub>O<sub>7</sub> layered manganites  
J RAMAN SPECTROSC 31: (11) 1013-1015 NOV 2000
7. Granado E, Sanjurjo JA, Rettori C, et al.  
Effects of cation vacancies in the phonon Raman spectra of LaMnO<sub>3</sub>  
PHYS STATUS SOLIDI B 220: (1) 609-613 JUL 2000
6. Yamamoto K, Kimura T, Ishikawa T, et al.

Raman spectroscopy of the charge-orbital ordering in layered manganites  
PHYS REV B 61: (21) 14706-14715 JUN 1 2000

5. Dediu V, Ferdeghini C, Matacotta FC, et al.  
Jahn-Teller dynamics in charge-ordered manganites from Raman spectroscopy  
PHYS REV LETT 84: (19) 4489-4492 MAY 8 2000

4. Paraskevopoulos M, Mayr F, Hartinger C, et al.  
The phase diagram and optical properties of La<sub>2-x</sub>S<sub>x</sub>MnO<sub>3</sub> for x <= 0.2  
J MAGN MAGN MATER 211: (1-3) 118-127 Sp. Iss. SI MAR 2000

3. Bjornsson P, Rubhausen M, Backstrom J, et al.  
Lattice and charge excitations in La<sub>1-x</sub>S<sub>x</sub>MnO<sub>3</sub>  
PHYS REV B 61: (2) 1193-1197 JAN 1 2000

2. Rubhausen M  
Study of the interplay between spin, charge, and lattice degrees of freedom by inelastic light scattering  
PHYS STATUS SOLIDI B 215: (1) 489-493 SEP 1999

1. Nagaev EL  
Polarons and isotope effect in manganites  
PHYS LETT A 258: (1) 65-73 JUL 12 1999

28. *"Raman Study of the Variations of the Jahn-Teller Distortions through the Metal-Insulator Transition in Magnetoresistive La<sub>0.7</sub>Ca<sub>0.3</sub>MnO<sub>3</sub> Thin Films"*

M. V. Abrashev, V. G. Ivanov, M. N. Iliev, R. A. Chakalov, R. I. Chakalova, and C. Thomsen  
phys. stat. sol. (b) 215 (1999) 631 - 636.

38. High-density sol-gel derived, cold-isostatically pressed La<sub>0.67</sub>Ca<sub>0.27</sub>Sr<sub>0.06</sub>MnO<sub>3</sub> polycrystalline ceramics and their room-temperature TCR improvement

Liu, Y (Liu, Yang) Dong, G (Dong, Gang) Zhang, S (Zhang, Shuai) Liu, X (Liu, Xiang)  
CERAMICS INTERNATIONAL Volume47 Issue6 Page7674-7682 PublishedMAR 15 2021

37. Electronic configuration and magnetic properties of La<sub>0.7</sub>Ca<sub>0.3</sub>Mn<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub> perovskite NPs: The effect of a lower Fe<sup>3+</sup> concentration

Martinez-Rodriguez, HA (Martinez-Rodriguez, H. A.) Onyekachi, K (Onyekachi, Kalu) Concha-Balderrama, A (Concha-Balderrama, A.) Herrera-Perez, G (Herrera-Perez, G.) Matutes-Aquino, JA (Matutes-Aquino, J. A.) Jurado, JF (Jurado, J. F.) Bocanegra-Bernal, MH (Bocanegra-Bernal, M. H.) Ramos-Sanchez, VH (Ramos-Sanchez, V. -H.) Duarte-Moller, JA (Duarte-Moller, J. A.) Reyes-Rojas, A (Reyes-Rojas, A.)

JOURNAL OF ALLOYS AND COMPOUNDS Volume816 Article Number152668 PublishedMAR 5 2020

36. Microstructure and electrical transport mechanisms of the Ca-doped LaMnO<sub>3</sub> films grown on MgO substrate

Daoudi, K (Daoudi, Kais) El-Helali, S (El-Helali, S.) Othmen, Z (Othmen, Z.) Suleiman, BM (Suleiman, B. M.) Tsuchiya, T (Tsuchiya, T.)

JOURNAL OF MATERIALS Volume6 Issue1 Page17-23 PublishedMAR 2020

35. Polaronic Emergent Phases in Manganite-Based Heterostructures

Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)  
CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019

34. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy

Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)

PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019

33. Magnetic-Field-Induced Suppression of Jahn-Teller Phonon Bands in (La<sub>0.6</sub>Pr<sub>0.4</sub>)(0.7)Ca<sub>0.3</sub>MnO<sub>3</sub>: the Mechanism of Colossal Magnetoresistance shown by Raman Spectroscopy

Merten, S (Merten, S.) Shapoval, O (Shapoval, O.) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, v)

SCIENTIFIC REPORTS Volume9 Article Number2387 PublishedFEB 20 2019

32. Daoudi, Kais; Alawadhi, Hussain; El Helali, Saoussen; et al.

Effects of Mn<sub>3</sub>O<sub>4</sub> precipitates on the vibrational properties of epitaxial Ca-doped LaMnO<sub>3</sub> films

JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 50 Issue: 39 Article Number: 395305 Published: OCT 4 2017

31. Turki, D.; Ghouri, Zafar Khan; Al-Meer, Saeed; et al.

Synthesis and Physicochemical Studies of Perovskite Manganite La(0.8)Ca(0.2)Nn(1-x)Co(x)O(3) (0 <= x <= 0.3)

JOURNAL OF MAGNETICS Volume: 22 Issue: 3 Pages: 353-359 Published: SEP 2017

30. Zhang, A. M.; Zhang, W. C.; Wu, X. S.; et al.

Abnormal enhancement of ferromagnetism for LaMnO<sub>3</sub>+delta thin films with decreasing oxygen pressure

AIP ADVANCES Volume: 7 Issue: 5 Article Number: 055837 Published: MAY 2017

29. Bhat, I (Bhat, Irshad); Husain, S (Husain, Shahid); War, TA (War, Tariq Ahmad)

Magnetic Magnetic and Raman spectroscopic study of laser ablated 100 (nm) thin film of La<sub>0.85</sub>Te<sub>0.15</sub>MnO<sub>3</sub> deposited on LaAlO<sub>3</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 667 Pages: 225-228 DOI: 10.1016/j.jallcom.2016.01.149 Published: MAY 15  
2016

28. Arnache, O., Osorio, J.

Comparative study of the Raman vibrational modes in pure and Fe-doped La<sub>2/3</sub>Ca<sub>1/3</sub>MnO<sub>3</sub> thin films  
SUPERLATTICES AND MICROSTRUCTURES Volume: 92 Pages: 181-189 DOI: 10.1016/j.spmi.2016.02.020 Published: APR 2016

27. McBride, K., Cook, J., Gray, S., Felton, S., Stella, L., Pouliidi, D.

Evaluation of La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> (0 <= x < 0.4) synthesised via a modified sol-gel method as mediators for magnetic fluid hyperthermia  
CRYSTENGCOMM Volume: 18 Issue: 3 Pages: 407-416 DOI: 10.1039/c5ce01890k Published: 2016

26. Euler, C.; Holuj, P.; Talkenberger, A.; et al.

Magnetic field dependent thermal conductance in La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 381 Pages: 188-193 Published: MAY 1 2015

25. Mir Feroz Ahmad; Ikram M.; Kumar Ravi

Symmetry breaking in Ni-doped PrFeO(3) thin films established by Raman study  
PHASE TRANSITIONS 84 (2) Pages: 167-178, 2011.

24. Talati, M., Jha, P.K.

Temperature effect on vibrational properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>

International Journal of Modern Physics B 23 (23), pp. 4767-4777 (2009).

23. Varshney, D., Mansuri, I., Kaurav, N.

Interpretation of thermal conductivity in the ferromagnetic metallic phase of La<sub>0.83</sub>Sr<sub>0.17</sub>MnO<sub>3</sub> manganites: Scattering of phonons and magnons

Journal of Low Temperature Physics 155 (3-4), pp. 177-199 (2009).

22. Dubey, A., Sathe, V.G., Rawat, R.

Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO<sub>3</sub>+δ thin films  
Journal of Applied Physics 104 (11), art. no. 113530 (2008).

21. Kim, M., Barath, H., Cooper, S.L., Abbamonte, P., Fradkin, E., Rüthausen, M., Zhang, C.L., Cheong, S.-W.

Raman scattering studies of the temperature- and field-induced melting of charge order in LaxPry Ca<sub>1-x-y</sub>MnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 77 (13), art. no. 134411 (2008).

20. Talati, M., Jha, P.K.

Phonons and Jahn-Teller distortion in manganites

Journal of Molecular Structure 838 (1-3), pp. 227-231 (2007)

19. Varshney, D., Mansuri, I., Kaurav, N.

Effect of electron/hole doping on the transport properties of lanthanum manganites LaMnO<sub>3</sub>

Journal of Physics Condensed Matter 19 (24), art. no. 246211 (2007)

18. Varshney, D., Kaurav, N.

Numerical analysis of heat transport behavior in the ferromagnetic metallic state of La<sub>0.80</sub>Ca<sub>0.20</sub>MnO<sub>3</sub> manganites  
Journal of Low Temperature Physics 147 (1-2), pp. 7-30 (2007)

17. Gouadec, G., Colombari, P.

Raman Spectroscopy of nanomaterials: How spectra relate to disorder, particle size and mechanical properties  
Progress in Crystal Growth and Characterization of Materials 53 (1), pp. 1-56 (2007)

16. Talati, M., Jha, P.K.

Pressure-dependent phonon properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>

Physical Review B - Condensed Matter and Materials Physics 74 (13), art. no. 134406 (2006)

15. Kim, J., Jung, S., Park, M.S., Lee, S.-I., Drew, H.D., Cheong, H., Kim, K.H., Choi, E.J.

Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (5), art. no. 052406 (2006)

14. Li T, Wang B, Dai HY, et al.

Annealing effect on the structural and magnetic properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> films

JOURNAL OF APPLIED PHYSICS 98 (12): Art. No. 123505 DEC 15 2005

13. Varshney D, Kaurav N

Interpretation of temperature-dependent resistivity of La-Pb-MnO<sub>3</sub>: Role of electron-phonon interaction

JOURNAL OF LOW TEMPERATURE PHYSICS 141 (3-4): 165-178 NOV 2005

12. Xiong YM, Chen T, Wang GY, et al.

Raman spectra in epitaxial thin films of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates

PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004

11. Varshney D, Kaurav N

Electrical resistivity in the ferromagnetic metallic state of La-Ca-MnO<sub>3</sub>: Role of electron-phonon interaction

EUROPEAN PHYSICAL JOURNAL B 40 (2): 129-136 JUL 2004

10. Liu, Y., Li, G., Feng, S.-J., Li, X.-G.  
Jahn-Teller Distortions Cooperating with Magnetic Interaction in the Raman Spectra of La<sub>0.75</sub>Ca<sub>0.25</sub>MnO<sub>3</sub> Thin Film  
Chinese Physics Letters 20 (9), pp. 1603-1606 (2003)
9. Malavasi L, Alessandri I, Mozzati MC, et al.  
Preparation, structural and magnetic characterisation of RF-sputtered La<sub>1-x</sub>NaxMnO<sub>3</sub> +/-delta thin films manganites  
PHYS CHEM CHEM PHYS 5 (11): 2274-2278 2003
8. Postorino P, Congeduti A, Degiorgi E, et al.  
High-pressure behavior of LaxSr<sub>2-x</sub>MnO<sub>4</sub> layered manganites investigated by Raman spectroscopy and x-ray diffraction  
PHYS REV B 65 (22): Art. No. 224102 JUN 1 2002
7. Frost, R.L., Kristóf, J., Horváth, E., Kloprogge, J.T.  
Raman phonons and Raman Jahn-Teller bands in perovskite-like manganites  
Journal of Raman Spectroscopy 32(10), 805-811 DOI: 10.1002/jrs.770 (2001)
6. Zhang PX, Huang SJ, Habermeier HU, et al.  
Isotope effect on Raman spectra of polycrystalline La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>  
J RAMAN SPECTROSC 32 (10): 812-816 OCT 2001
5. Pantoja AE, Trodahl HJ, Buckley RG, et al.  
Raman spectroscopy of orthorhombic La<sub>1-x</sub>CaxMnO<sub>3</sub>, x=0.1-0.3  
J PHYS-CONDENS MAT 13 (16): 3741-3752 APR 23 2001
4. Pantoja AE, Trodahl HJ, Fainstein A, et al.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering  
PHYS REV B 63 (13): art. no. 132406 APR 1 2001
3. Granado E, Garcia A, Sanjurjo JA, et al.  
Effects of phase separation on the magnetization, x-ray diffraction, and Raman scattering of (La<sub>1-y</sub>Ndy)(1-x)CaxMnO<sub>3</sub>  
(y=0,0.5,1.0; x=1/3)  
PHYS REV B 63 (6): art. no. 064404 FEB 1 2001
2. Granado E, Sanjurjo JA, Rettori C, et al.  
Effects of cation vacancies in the phonon Raman spectra of LaMnO<sub>3</sub>  
PHYS STATUS SOLIDI B 220: (1) 609-613 JUL 2000
1. Yamamoto K, Kimura T, Ishikawa T, et al.  
Raman spectroscopy of the charge-orbital ordering in layered manganites  
PHYS REV B 61: (21) 14706-14715 JUN 1 2000
29. "Raman Scattering Study of Heavily Oxygenated YSr<sub>2</sub>Cu<sub>3</sub>O<sub>7+y</sub> and AuBa<sub>2</sub>YC<sub>u2</sub>O<sub>7+y</sub> Superconductors"  
A. P. Litvinchuk, M. N. Iliev, H. G. Lee, M. V. Abrashev, L. M. Dezaneti, B. R. Hickey, Y. Y. Xue, and C. W. Chu  
Physica C 341-348 (2000) 2205 - 2208.
30. "Raman Monitoring of Dynamical Jahn-Teller Distortions in Rhombohedral Antiferromagnetic LaMnO<sub>3</sub> and Ferromagnetic Magnetoresistive La<sub>0.93</sub>Mn<sub>0.98</sub>O<sub>3</sub>"  
M. N. Iliev, A. P. Litvinchuk, M. V. Abrashev, V. G. Ivanov, H. G. Lee, W. H. McCarroll, M. Greenblatt, R. L. Meng, and C. W. Chu  
Physica C 341-348 (2000) 2257 - 2258.
14. Novel synthetic approach to the preparation of single-phase BixLa<sub>1-x</sub>MnO<sub>3+delta</sub> solid solutions  
Karoblis, D (Karoblis, Dovydė) Mazeika, K (Mazeika, Kestutis) Baltrunas, D (Baltrunas, Dalis) Lukowiak, A (Lukowiak, Anna) Strek, W (Strek, Wiesław) Zarkov, A (Zarkov, Aleksej) Kareiva, A (Kareiva, Aivaras)  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY Volume93 Issue3 Page650-656 PublishedMAR 2020
13. Polaronic Emergent Phases in Manganite-Based Heterostructures  
Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)  
CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019
12. Self-doped La<sub>1-x</sub>MnO<sub>3+delta</sub> perovskites: Electron state hybridization and Raman modes  
Ulyanov, AN (Ulyanov, A. N.) Sidorov, AV (Sidorov, A., V) Pismenova, NE (Pismenova, N. E.) Goodilin, EA (Goodilin, E. A.) Savilov, SV (Savilov, S., V)  
SOLID STATE SCIENCES Volume94 Page41-44 PublishedAUG 2019
11. Electrical behavior and structure - property correlations in La<sub>1-x</sub>Pr<sub>x</sub>MnO<sub>3</sub> (0 <= x <= 1) ceramics

Udeshi, B (Udeshi, Bhagyashree) Boricha, H (Boricha, Hetal) Rajyaguru, B (Rajyaguru, Bhargav) Gadani, K (Gadani, Keval) Rathod, KN (Rathod, K. N.) Dhruv, D (Dhruv, Davit) Kansara, SB (Kansara, S. B.) Trivedi, RK (Trivedi, R. K.) Pandya, DD (Pandya, D. D.) Asokan, K (Asokan, K.)

CERAMICS INTERNATIONAL Volume45 Issue1 Page1098-1109 PublishedJAN 2019

10. CHARACTERIZATION OF La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> (0 <= X <= 0.2) NANOPOWDERS SYNTHESIZED BY DIFFERENT METHODS Djani, F (Djani, Faical) Noureddine, I (Noureddine, Ikram) Martinez Arias, A (Martinez Arias, Arturo)

UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE Volume80 Issue1 Page101-112 Published 2018

9. Gadani, Keval; Keshvani, M. J.; Dhruv, Davit; et al.

Low field magnetoelectric and magnetotransport properties of sol-gel grown nanostructured LaMnO<sub>3</sub> manganites JOURNAL OF ALLOYS AND COMPOUNDS Volume: 719 Pages: 47-57 Published: SEP 30 2017

8. Jiang Shaoqun; Ma Xinxin; Tang Guangze; et al.

Microstructure and nano-scratch behaviors of La(0.7)Sr(0.3)MnO(3) films THIN SOLID FILMS 519 (15) Pages: 4880-4883, MAY 31 2011.

7. Talati, Mina; Jha, Prafulla K.

TEMPERATURE EFFECT ON VIBRATIONAL PROPERTIES OF La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> INTERNATIONAL JOURNAL OF MODERN PHYSICS B Volume: 23 Issue: 23 Pages: 4767-4777 Published: SEP 20 2009

6. Dubey, Aditi; Sathe, V. G.; Rawat, R.

Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO<sub>3+delta</sub> thin films JOURNAL OF APPLIED PHYSICS Volume: 104 Issue: 11 Article Number: 113530 Published: DEC 1 2008

5. Smirnova, I. S.; Bazhenov, A. V.; Fursova, T. N.; et al.

IR-active optical phonons in Pnma-1, Pnma-2 and R(3)over-barc phases of LaMnO(3+delta) PHYSICA B-CONDENSED MATTER Volume: 403 Issue: 21-22 Pages: 3896-3902 Published: NOV 30 2008

4. Choi, Y., Abernathy, H., Lynch, M.E., Liu, M.

Modeling, simulation, and in-situ characterization of functionally graded porous electrodes for solid oxide fuel cells Advances in Heterogeneous Material Mechanics 2008 - Proceedings of the 2nd International Conference on Heterogeneous Material Mechanics, ICHMM 2008 , pp. 290-293 (2008).

3. Chan TS, Liu RS, Yang CC, et al.

Influence of oxygen defects on the crystal structure and magnetic properties of the (Tb<sub>1-x</sub>Nax)MnO<sub>3-y</sub> (0 <= x <= 0.3) system INORGANIC CHEMISTRY 46 (11), pp. 4575-4582 (2007)

2. Li WJ, Zhang B, Lu W

Structural properties and Raman spectroscopy of La((2+4x))/Sr-3((1-4x))/Mn-3(1-x) Cu<sub>x</sub>O<sub>3</sub>(0 <= x <= 0.2) PHYSICS LETTERS A 362 (4), pp. 327-330 (2007).

1. Talati M, Jha PK

Structure dependent phonon properties of LaMnO<sub>3</sub>

COMPUTATIONAL MATERIALS SCIENCE 37 (1-2): 64-68 AUG 2006

31. "Nanosize gold catalysts promoted by vanadium oxide supported on titania and zirconia for complete benzene oxidation"

D. Andreeva, T. Tabakova, L. Ilieva, A. Naydenov, D. Mehanjiev, and M. V. Abrashev  
Applied Catalysis A - General 209 (1-2) 291 – 300 Feb 28 (2001)

86. Activity boosting of gold nanoparticles supported on V<sub>2</sub>O<sub>5</sub>/TiO<sub>2</sub> nanostructures for CO oxidation at low temperature

Camposeco, R., Zanella, R.

Catalysis Today (Article in Press) (2021)

85. Recent Advances in the Catalytic Oxidation of Volatile Organic Compounds: A Review Based on Pollutant Sorts and Sources He, C (He, Chi) Cheng, J (Cheng, Jie) Zhang, X (Zhang, Xin) Douthwaite, M (Douthwaite, Mark) Pattisson, S (Pattisson, Samuel) Hao, ZP (Hao, Zhengping)

CHEMICAL REVIEWS Volume119 Issue7 Page4471-4568 PublishedAPR 10 2019

84. Multipronged Validation of Oxalate C-C Bond Cleavage Driven by Au-TiO<sub>2</sub> Interfacial Charge Transfer Using Operando DRIFTS Tan, TH (Tan, Tze Hao) Wong, RJ (Wong, Roong Jien) Scott, J (Scott, Jason) Ng, YH (Ng, Yun Hau) Taylor, RA (Taylor, Robert A.)

Aguey-Zinsou, KF (Aguey-Zinsou, Kondo-Francois) Amal, R (Amal, Rose)

ACS CATALYSIS Volume8 Issue8 Page7158-7163 PublishedAUG 2018

83. Tan, Tze Hao; Scott, Jason A.; Ng, Yun Hau; et al.

Plasmon enhanced selective electronic pathways in TiO<sub>2</sub> supported atomically ordered bimetallic Au-Cu alloys JOURNAL OF CATALYSISIS Volume: 352 Pages: 638-648 Published: AUG 2017

82. Magadzu, T.; Scurrell, M. S.

Stability of gold particles in NaY-type zeolites: Promotional effects of co-exchanged metal cations

MICROPOROUS AND MESOPOROUS MATERIALS Volume: 241 Pages: 52-57 Published: MAR 15 2017

81. Li, Y.-K., Li, Z.-Y., Zhao, Y.-X., Liu, Q.-Y., Meng, J.-H., He, S.-G.  
 Activation and Transformation of Ethane by Au<sub>2</sub>VO<sub>3</sub><sup>+</sup> Clusters with Closed-Shell Electronic Structures  
*Chemistry - A European Journal* 22(5), 1825-1830 DOI: 10.1002/chem.201503676 (2016)
80. Villa, A., Dimitratos, N., Chan-Thaw, C.E., Hammond, C., Veith, G.M., Wang, D., Manzoli, M., Prati, L., Hutchings, G.J.  
 Characterisation of gold catalysts  
*CHEMICAL SOCIETY REVIEWS* Volume: 45 Issue: 18 Pages: 4953-4994 DOI: 10.1039/c5cs00350d Published: SEP 21 2016
79. Panayotov, D.A., Morris, J.R.  
 Surface chemistry of Au/TiO<sub>2</sub>: Thermally and photolytically activated reactions  
*SURFACE SCIENCE REPORTS* Volume: 71 Issue: 1 Pages: 77-271 DOI: 10.1016/j.surrep.2016.01.002 Published: MAR 2016
78. Santacruz-Chávez, J.A., Oros-Ruiz, S., Prado, B., Zanella, R.  
 Photocatalytic degradation of atrazine using TiO<sub>2</sub> superficially modified with metallic nanoparticles  
*CHEMISTRY-A EUROPEAN JOURNAL* Volume: 22 Issue: 5 Pages: 1825-1830 DOI: 10.1002/chem.201503676 Published: JAN 26 2016
77. Eliyas, A (Eliyas, A.); Petrova, P (Petrova, P.); Lopez-Tenllado, FJ (Lopez-Tenllado, F. J.); Tomova, D (Tomova, D.); Marinas, A (Marinas, A.)  
 Experimental arrangements for determining the photocatalytic activity of Au/TiO<sub>2</sub> in air and wastewater purification  
*BULGARIAN CHEMICAL COMMUNICATIONS* Volume: 47 Issue: 4 Pages: 978-984 Published: 2015
76. Garcia, Tomas; Agouram, Said; Taylor, Stuart H.; et al.  
 Total oxidation of propane in vanadia-promoted platinum-alumina catalysts: Influence of the order of impregnation  
*CATALYSIS TODAY* Volume: 254 Pages: 12-20 Published: OCT 1 2015
75. Carabineiro, S. A. C.; Chen, X.; Martynyuk, O.; et al.  
 Gold supported on metal oxides for volatile organic compounds total oxidation  
*CATALYSIS TODAY* Volume: 244 Pages: 103-114 Published: APR 15 2015
74. Balzer, R.; Probst, L. F. D.; Drago, V.; et al.  
 Catalytic oxidation of volatile organic compounds (n-hexane, benzene, toluene, o-xylene) promoted by cobalt catalysts supported on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub>  
*Brazilian Journal of Chemical Engineering* 31 (3), pp. 757-769 SEP 2014
73. Thimmaraju, N.; Shamshuddin, S. Z. Mohamed; Pratap, S. R.; et al.  
 Transesterification of diethyl malonate with benzyl alcohol catalyzed by modified zirconia: Kinetic study  
*JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL* 391, pp. 55-65 SEP 2014
72. Jiang, Xin; Hua, Jiefeng; Deng, Hui; et al.  
 Influence of pre-added NaOH on the microstructure of Au-CeO<sub>2</sub> catalyst and its activity for benzene oxidation  
*JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL* 383, pp. 188-193 MAR 2014
71. Oros-Ruiz, Socorro; Zanella, Rodolfo; Lopez, Rosendo; et al.  
 Photocatalytic hydrogen production by water/methanol decomposition using Au/TiO<sub>2</sub> prepared by deposition-precipitation with urea  
*JOURNAL OF HAZARDOUS MATERIALS* 263, pp. 2-10 Part: 1 DEC 15 2013
70. Oros-Ruiz, Socorro; Zanella, Rodolfo; Prado, Blanca  
 Photocatalytic degradation of trimethoprim by metallic nanoparticles supported on TiO<sub>2</sub>-P25  
*JOURNAL OF HAZARDOUS MATERIALS* 263, pp. 28-35 Part: 1 DEC 15 2013
69. Delaigle, R.; Joseph, M. M. F.; Debecker, D. P.; et al.  
 An Alternative Method for the Incorporation of Silver in Ag-VO<sub>x</sub>/TiO<sub>2</sub> Catalysts for the Total Oxidation of Benzene  
*TOPICS IN CATALYSIS* 56 (18-20) SI, pp. 1867-1874 DEC 2013
68. Balzer, R., Drago, V., Schreiner, W.H., Probst, L.F.D.  
 Removal of BTX compounds in air by total catalytic oxidation promoted by catalysts based on SiO<sub>2</sub>(1-x)Cu<sub>x</sub>  
*Journal of the Brazilian Chemical Society* 24 (10), pp. 1592-1598, 2013
67. Einaga, H., Maeda, N., Teraoka, Y.  
 Effect of catalyst composition and preparation conditions on catalytic properties of unsupported manganese oxides for benzene oxidation with ozone  
*Applied Catalysis B: Environmental* 142-143, pp. 406-413, 2013
66. Liu, Y., Dai, H., Deng, J., Li, X., Wang, Y., Arandiyan, H., Xie, S., (...), Guo, G.  
 Au/3DOM La<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub>: Highly active nanocatalysts for the oxidation of carbon monoxide and toluene  
*Journal of Catalysis* 305, pp. 146-153, 2013
65. Wang, C.-T., Chen, H.-Y., Chen, Y.-C.  
 Gold/vanadium-tin oxide nanocomposites prepared by co-precipitation method for carbon monoxide gas sensors  
*Sensors and Actuators, B: Chemical* 176, pp. 945-951, 2013
64. Barakat, T., Rooke, J.C., Genty, E., Cousin, R., Siffert, S., Su, B.-L.  
 Gold catalysts in environmental remediation and water-gas shift technologies  
*Energy and Environmental Science* 6 (2), pp. 371-391, 2013

63. Rezaei, E., Soltan, J., Chen, N., Lin, J.  
Effect of noble metals on activity of MnO<sub>x</sub>/γ-alumina catalyst in catalytic ozonation of toluene  
Chemical Engineering Journal 214, pp. 219-228, 2013
62. Delaigle, R., Eloy, P., Gaigneaux, E.M.  
Influence of the impregnation order on the synergy between Ag and V 2 O 5/TiO 2 catalysts in the total oxidation of Cl-aromatic VOC  
Catalysis Today 192 (1), pp. 2-9, 2012
61. Scirè, S., Liotta, L.F.  
Supported gold catalysts for the total oxidation of volatile organic compounds  
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.
60. Zanella, R., Rodríguez-González, V., Arzola, Y., Moreno-Rodríguez, A.  
Au/Y-TiO<sub>2</sub> catalyst: High activity and long-term stability in CO oxidation  
ACS Catalysis 2 (1), pp. 1-11, 2012.
59. Wu, H., Wang, L., Shen, Z., Zhao, J.  
Catalytic oxidation of toluene and p-xylene using gold supported on Co<sub>3</sub>O<sub>4</sub> catalyst prepared by colloidal precipitation method  
Journal of Molecular Catalysis A: Chemical 351, pp. 188-195, 2011.
58. Garcia, T., Weng, W., Solsona, B., Carter, E., Carley, A.F., Kiely, C.J., Taylor, S.H.  
The significance of the order of impregnation on the activity of vanadia promoted palladium-alumina catalysts for propane total oxidation  
Catalysis Science and Technology 1 (8), pp. 1367-1375, 2011.
57. Jiang, X., Deng, H.  
Synthesis of Au-CeO<sub>2</sub>/SiO<sub>2</sub> catalyst via adsorbed-layer reactor technique combined with alcohol-thermal treatment  
Applied Surface Science 257 (24), pp. 10883-10887, 2011.
56. Kalbasi Roozbeh Javad, Massah Ahmad Reza, Zamani Farzad, et al.  
Metal (Co, Mn)-amine-functionalized mesoporous silica SBA-15: synthesis, characterization and catalytic properties in hydroxylation of benzene  
JOURNAL OF POROUS MATERIALS 18 (4) Pages: 475-482, AUG 2011.
55. Sandoval Alberto; Aguilar Antonio; Louis Catherine; et al.  
Bimetallic Au-Ag/TiO(2) catalyst prepared by deposition-precipitation: High activity and stability in CO oxidation  
JOURNAL OF CATALYSIS 281 (1) Pages: 40-49, JUL 1 2011.
54. Luciani Silvia; Cavani Fabrizio; Dal Santo Vladimiro; et al.  
The mechanism of surface doping in vanadyl pyrophosphate, catalyst for n-butane oxidation to maleic anhydride: The role of Au promoter  
CATALYSIS TODAY 169 (1) Pages: 200-206, JUL 2011.
53. Wu, H., Wang, L., Zhang, J., Shen, Z., Zhao, J.  
Catalytic oxidation of benzene, toluene and p-xylene over colloidal gold supported on zinc oxide catalyst  
CATALYSIS COMMUNICATIONS 12 (10) Pages: 859-865, MAY 15 2011.
52. Einaga Hisahiro; Teraoka Yasutake; Ogata Atsushi  
Benzene oxidation with ozone over manganese oxide supported on zeolite catalysts  
CATALYSIS TODAY 164 (1) Pages: 571-574, APR 30 2011.
51. Solsona, B., Aylón, E., Murillo, R., Mastral, A.M., Monzonís, A., Agouram, S., Davies, T.E., (...), Garcia, T.  
Deep oxidation of pollutants using gold deposited on a high surface area cobalt oxide prepared by a nanocasting route  
JOURNAL OF HAZARDOUS MATERIALS 187 (1-3) Pages: 544-552, MAR 15 2011.
50. Li Ting-Yi; Chiang Shu-Jen; Liaw Biing-Jye; et al.  
Catalytic oxidation of benzene over CuO/Ce(1-x)Mn(x)O(2) catalysts  
APPLIED CATALYSIS B-ENVIRONMENTAL 103 (1-2) Pages: 143-148, MAR 14 2011.
49. Solsona, B., Garcia, T., Agouram, S., Hutchings, G.J., Taylor, S.H.  
The effect of gold addition on the catalytic performance of copper manganese oxide catalysts for the total oxidation of propane  
APPLIED CATALYSIS B-ENVIRONMENTAL 101 (3-4) Pages: 388-396, JAN 14 2011.
48. Hong, Y.-C., Sun, K.-Q., Han, K.-H., Liu, G., Xu, B.-Q.  
Comparison of catalytic combustion of carbon monoxide and formaldehyde over Au/ZrO(2) catalysts  
CATALYSIS TODAY 158 (3-4) Pages: 415-422, DEC 22 2010.
47. Li, W.B., Wang, J.X., Gong, H.  
Catalytic combustion of VOCs on non-noble metal catalysts  
Catalysis Today 148 (1-2), pp. 81-87 (2010).
46. Hernández, W.Y., Romero-Sarria, F., Centeno, M.A., Odriozola, J.A.  
In situ characterization of the dynamic gold-support interaction over ceria modified Eu<sup>3+</sup>. Influence of the oxygen vacancies on the CO oxidation reaction  
Journal of Physical Chemistry C 114 (24), pp. 10857-10865 (2010).
45. Einaga, H., Ogata, A.  
Catalytic oxidation of benzene in the gas phase over alumina-supported silver catalysts

Environmental Science and Technology 44 (7), pp. 2612-2617 (2010).

44. Hongjing, W., Qin, S., Zhenli, Z., Shenghong, H.

Complete benzene oxidation over colloidal gold catalysts supported on nanostructure zinc oxide  
Advanced Materials Research 96, pp. 21-27 (2010).

43. Wu, HJ (Wu, Hongjing); Shuai, Q (Shuai, Qin); Zhu, ZL (Zhu, Zhenli); Hu, SH (Hu, Shenghong)

Complete Benzene Oxidation over Colloidal Gold Catalysts Supported on Nanostructure Zinc Oxide

ADVANCE IN ECOLOGICAL ENVIRONMENT FUNCTIONAL MATERIALS AND ION INDUSTRY Book Series: Advanced

Materials Research Volume: 96 Pages: 21-27 DOI: 10.4028/www.scientific.net/AMR.96.21 Published: 2010

42. Li, WB (Li, W. B.); Wang, JX (Wang, J. X.); Gong, H (Gong, H.)

Catalytic combustion of VOCs on non-noble metal catalysts

CATALYSIS TODAY Volume: 148 Issue: 1-2 Pages: 81-87 DOI: 10.1016/j.cattod.2009.03.007 Published: OCT 30 2009

41. Hosseini, M., Siffert, S., Tidahy, HL, Cousin, R., Aboukais, A., De Weireld, G., Canet, X., Hadj-Sadok, Z., Su, BL

CHARACTERISATION OF NANOSTRUCTURED MACRO-MESOPOROUS TiO<sub>2</sub>-ZrO<sub>2</sub>) IMPREGNATED BY NOBLE METALS FOR VOC OXIDATION

CHARACTERISATION OF POROUS SOLIDS VIII Book Series: ROYAL SOCIETY OF CHEMISTRY SPECIAL PUBLICATIONS Issue: 318 Pages: 225-232 Published: 2009

40. Song, C., Chen, M., Ma, Y., Ma, C., Zheng, X.

The effect of preparation parameters on the structure and catalytic performance of Ce-Pt-Pd/SSWM stainless steel wire mesh catalyst  
Cailiao Yanjiu Xuebao/Chinese Journal of Materials Research 23 (5), pp. 508-512 (2009).

39. Ma, T.-Y., Cao, J.-L., Shao, G.-S., Zhang, X.-J., Yuan, Z.-Y.

Hierarchically structured squama-like cerium-doped titania: Synthesis, photoactivity, and catalytic CO oxidation  
Journal of Physical Chemistry C 113 (38), pp. 16658-16667 (2009).

38. Hosseini, M., Siffert, S., Cousin, R., Aboukais, A., Hadj-Sadok, Z., Su, B.-L.

Total oxidation of VOCs on Pd and/or Au supported on TiO<sub>2</sub>/ZrO<sub>2</sub> followed by "operando" DRIFT  
Comptes Rendus Chimie 12 (6-7), pp. 654-659 (2009).

37. Einaga, H., Ogata, A.

Benzene oxidation with ozone over supported manganese oxide catalysts: Effect of catalyst support and reaction conditions  
Journal of Hazardous Materials 164 (2-3), pp. 1236-1241 (2009).

36. Einaga, H., Harada, M., Ogata, A.

Relationship between the structure of manganese oxides on alumina and catalytic activities for benzene oxidation with ozone  
Catalysis Letters 129 (3-4), pp. 422-427 (2009).

35. Delaigle, R., Debecker, D.P., Bertinchamps, F., Gaigneaux, E.M.

Revisiting the behaviour of vanadia-based catalysts in the abatement of (chloro)-aromatic pollutants: Towards an integrated understanding  
Topics in Catalysis 52 (5), pp. 501-516 (2009).

34. Yang, S.M., Liu, D.M., Liu, S.Y.

Catalytic combustion of benzene over Au supported on ceria and vanadia promoted ceria  
Topics in Catalysis 47 (3-4), pp. 101-108 (2008).

33. Silva, A.M., Farias, A.M.D.d., Costa, L.O.O., Barandas, A.P.M.G., Mattos, L.V., Fraga, M.A., Noronha, F.B.

Partial oxidation and water-gas shift reaction in an integrated system for hydrogen production from ethanol  
Applied Catalysis A: General 334 (1), pp. 179-186 (2008)

32. Della Pina, C (Della Pina, Cristina); Dimitratos, N (Dimitratos, Nikolaos); Falletta, E (Falletta, Ermelinda); Rossi, M (Rossi, Michele); Siani, A (Siani, Attilio)

Catalytic performance of gold catalysts in the total oxidation of VOCs

GOLD BULLETIN Volume: 40 Issue: 1 Pages: 67-72 Published: 2007

31. Carabineiro, SAC (Carabineiro, Sonia A. C.); Thompson, DT (Thompson, David T.)

Catalytic Applications for Gold Nanotechnology

NANOCATALYSIS Book Series: Nanoscience and Technology Pages: 377-489 DOI: 10.1007/978-3-540-32646-5\_6 Published: 2007

30. Sandoval, A., Gómez-Cortés, A., Zanella, R., Díaz, G., Saniger, J.M.

Gold nanoparticles: Support effects for the WGS reaction

Journal of Molecular Catalysis A: Chemical 278 (1-2), pp. 200-208 (2007)

29. Dos Santos, A.A., Lima, K.M.N., Figueiredo, R.T., Egues, S.M.D.S., Ramos, A.L.D.

Toluene deep oxidation over noble metals, Copper and Vanadium Oxides

Catalysis Letters 114 (1-2), pp. 59-63 (2007)

28. Cellier, C., Lambert, S., Gaigneaux, E.M., Poleunis, C., Ruaux, V., Eloy, P., Lahousse, C., (...), Grange, P.

Investigation of the preparation and activity of gold catalysts in the total oxidation of n-hexane

Applied Catalysis B: Environmental 70 (1-4), pp. 406-416 (2007)

27. Trudeau, M.L.

Nanostructured Materials for Gas Reactive Applications

26. Hutchings, GJ (Hutchings, Graham J.).  
Reactions of Environmental Importance  
CATALYSIS BY GOLD Book Series: Catalytic Science Series Volume: 6 Pages: 286-310 Published: 2006
25. Yuan, M.-H., Chang, C.-Y., Shie, J.-L., Du, W.-K., Lee, D.-J., Tsai, W.-T.  
Catalytic oxidation of naphthalene using a Pt/Al<sub>2</sub>O<sub>3</sub> catalyst with ozone  
Proceedings of the Air and Waste Management Association's Annual Conference and Exhibition, AWMA 2, pp. 1135-1146 (2006)
24. Ahn HG, Choi BM, Lee DJ  
Complete oxidation of ethylene over supported gold nanoparticle catalysts  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY 6 (11): 3599-3603 NOV 2006
23. Solsona, B.E., Garcia, T., Jones, C., Taylor, S.H., Carley, A.F., Hutchings, G.J.  
Supported gold catalysts for the total oxidation of alkanes and carbon monoxide  
Applied Catalysis A: General 312 (1-2), pp. 67-76 (2006)
22. Ho, K.Y., Yeung, K.L.  
Effects of ozone pretreatment on the performance of Au/TiO<sub>2</sub> catalyst for CO oxidation reaction  
Journal of Catalysis 242 (1), pp. 131-141 (2006)
21. Grzybowska-Swierkosz B  
Nano-Au/oxide support catalysts in oxidation reactions: Provenance of active oxygen species  
CATALYSIS TODAY 112 (1-4): 3-7 MAR 15 2006
20. Einaga H, Futamura S  
Oxidation behavior of cyclohexane on alumina-supported manganese oxides with ozone  
APPLIED CATALYSIS B-ENVIRONMENTAL 60 (1-2): 49-55 SEP 1 2005
19. Alvim-Ferraz MCM, Gaspar CMTB  
Impregnated active carbons to control atmospheric emissions: Influence of impregnation methodology and raw material on the catalytic activity  
ENVIRONMENTAL SCIENCE & TECHNOLOGY 39 (16): 6231-6236 AUG 15 2005
18. Hua JM, Zheng Q, Zheng YH, et al.  
Influence of modifying additives on the catalytic activity and stability of Au/Fe<sub>2</sub>O<sub>3</sub>-MO<sub>x</sub> catalysts for the WGS reaction  
CATALYSIS LETTERS 102 (1-2): 99-108 JUL 2005
17. Ruszel M, Grzybowska B, Gasior M, et al.  
Effect of Au in V(2)O(5)/SiO<sub>2</sub> and MoO<sub>3</sub>/SiO<sub>2</sub> catalysts on physicochemical and catalytic properties in oxidation of C-3 hydrocarbons and of CO  
CATALYSIS TODAY 99 (1-2): 151-159 JAN 15 2005
16. Alvim-Ferraz MDM, Gaspar CMTB  
Catalytic activity of active carbons impregnated before activation of pinewood sawdust and nutshells to be used on the control of atmospheric emissions  
JOURNAL OF HAZARDOUS MATERIALS 119 (1-3): 135-143 MAR 17 2005
15. Garcia T, Solsona B, Murphy DM, et al.  
Deep oxidation of light alkanes over titania-supported palladium/vanadium catalysts  
JOURNAL OF CATALYSIS 229 (1): 1-11 JAN 1 2005
14. Wang, CM (Wang, CM); Shuthananan, V (Shuthananan, V); Zhang, Y (Zhang, Y); Baer, DR (Baer, DR); Thomas, LE (Thomas, LE); Thevuthasan, S (Thevuthasan, S)  
Microstructure of precipitated Au nanoclusters in TiO<sub>2</sub>  
CONTINUOUS NANOPHASE AND NANOSTRUCTURED MATERIALS Book Series: MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS Volume: 788 Pages: 249-253 Published: 2004
13. Einaga H, Futamura S  
Catalytic oxidation of benzene with ozone over alumina-supported manganese oxides  
JOURNAL OF CATALYSIS 227 (2): 304-312 OCT 25 2004
12. Meyer R, Lemire C, Shaikhutdinov SK, et al.  
Surface chemistry of catalysis by gold  
GOLD BULLETIN 37 (1-2): 72-124 2004
11. Narayana KV, Raju BD, Masthan SK, et al.  
ESR spectroscopic characterization of V<sub>2</sub>O<sub>5</sub>/AlF<sub>3</sub> ammonoxidation catalysts  
CATALYSIS COMMUNICATIONS 5 (8): 457-462 AUG 2004
10. Gasior M, Grzybowska B, Samson K, et al.  
Oxidation of CO and C-3 hydrocarbons on gold dispersed on oxide supports  
CATALYSIS TODAY 91-92: 131-135 JUL 15 2004

9. Wang CM, Zhang Y, Shuthananand V, et al.  
 Microstructure of precipitated au nanoclusters in TiO<sub>2</sub>  
 JOURNAL OF APPLIED PHYSICS 95 (12): 8185-8193 JUN 15 2004
8. De M, Kunzru D  
 Oxidative dehydrogenation of propane on V<sub>2</sub>O<sub>5</sub>/ZrO<sub>2</sub> catalyst  
 CATALYSIS LETTERS 96 (1-2): 33-42 JUL 2004
7. Einaga H, Futamura S  
 Comparative study on the catalytic activities of alumina-supported metal oxides for oxidation of benzene and cyclohexane with ozone  
 REACT KINET CATAL L 81 (1): 121-128 2004
6. Alvim-Ferraz MCM, Gaspar CMTB  
 Active carbons impregnated before activation of olive stones: catalytic activity to remove benzene from gaseous emissions  
 J PHYS CHEM SOLIDS 65 (2-3): 655-659 FEB-MAR 2004
5. Wang, C.M., Shuthananand, V., Zhang, Y., Baer, D.R., Thomas, L.E., Thevuthasan, S.  
 Microstructure of precipitated Au nanoclusters in TiO<sub>2</sub>  
 Materials Research Society Symposium - Proceedings 788, pp. 249-253 (2003)
4. Fan L, Ichikuni N, Shimazu S, et al.  
 Preparation of Au/TiO<sub>2</sub> catalysts by suspension spray reaction method and their catalytic property for CO oxidation  
 APPL CATAL A-GEN 246 (1): 87-95 JUN 25 2003
3. Dutta H, Pradhan SK  
 Microstructure characterization of high energy ball-milled nanocrystalline V(2)O(5) by Rietveld analysis  
 MATER CHEM PHYS 77 (3): 868-877 JAN 30 2003
2. Centeno MA, Paulis M, Montes M, et al.  
 Catalytic combustion of volatile organic compounds on Au/CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> and Au/Al<sub>2</sub>O<sub>3</sub> catalysts  
 APPL CATAL A-GEN 234 (1-2): 65-78 AUG 8 2002
1. Gupta NM, Tripathi AK  
 The role of nanosized gold particles in adsorption and oxidation of carbon monoxide over Au/Fe<sub>2</sub>O<sub>3</sub> catalyst  
 GOLD BULL 34 (4): 120-128 2001
32. *"About the possible diminution of the sp<sup>3</sup> C presence along with the increase of the nitrogen enclosure in the CNx thin films produced by reactive pulsed laser deposition"*  
 E. Gyorgy, I. N. Mihailescu, M. Baleva, E. P. Trifonova, M. Abrashev, V. Darakchieva, A. Zocco, and A. Perrone  
*J. Materials Science* 36 (2001) 1951 - 1956.
33. *"Impact of MOCVD-GaN "templates" on the spatial non-uniformities of strain and doping distribution in hydride vapour phase epitaxial GaN"*  
 E. Valcheva, T. Paskova, M. V. Abrashev, P. A. O. Persson, P. P. Paskov, E. M. Goldys, R. Beccard, M. Heukens, and M. Monemar  
*Mater. Sci. Eng. B* 82 (2001) 35 - 38.
5. Matsubara, Tohoru; Denpo, Yusho; Okada, Narihito; et al.  
 V-shaped pits in HVPE-grown GaN associated with columnar inversion domains originating from foreign particles of alpha-Si<sub>3</sub>N<sub>4</sub> and graphitic carbon  
 MICRON Volume: 94 Pages: 9-14 Published: MAR 2017
4. Meng, F.Y., Han, I., McFelea, H., Lindow, E., Bertram, R., Werkhoven, C., Arena, C., Mahajan, S.  
 Sapphire surface pits as sources of threading dislocations in hetero-epitaxial GaN layers  
*Scripta Materialia* 65 (3), pp. 257-260, 2011.
3. Meng, F.Y., Han, I., McFelea, H., Lindow, E., Bertram, R., Werkhoven, C., Arena, C., Mahajan, S.  
 Structural evolution of GaN layers grown on (0 0 0 1) sapphire by hydride vapor phase epitaxy  
 JOURNAL OF CRYSTAL GROWTH 327 (1) Pages: 13-21, JUL 15 2011.
2. Dam, C.E.C., Grzegorczyk, A.P., Hageman, P.R., Larsen, P.K.  
 What makes good templates for HVPE GaN growth?  
*Materials Research Society Symposium Proceedings* 892, pp. 737-741 (2006)
1. Dam, C.E.C., Grzegorczyk, A.P., Hageman, P.R., Larsen, P.K.  
 Method for HVPE growth of thick crack-free GaN layers  
*Journal of Crystal Growth* 290 (2), pp. 473-478 (2006)
34. *"Investigations of the crystal distortions in perovskites using Raman spectroscopy"*  
 M. V. Abrashev, V. G. Ivanov and M. N. Iliev

35. "Defect and stress relaxation in HVPE-GaN films using high temperature reactively sputtered AlN buffer"

T. Paskova, E. Valcheva, J. Birch, S. Tungasmita, P. A. O. Persson, P. P. Paskov, S. Evtimova, M. Abrashev, and B. Monemar

J. Cryst. Growth 230, no. ER3-4 (2001) 381 - 386.

19. Epitaxial Growth of GaN on Magnetron Sputtered AlN/Hexagonal BN/Sapphire Substrates

Wu, JX (Wu, Jinxing) Li, PX (Li, Peixian) Xu, SR (Xu, Shengui) Zhou, XW (Zhou, Xiaowei) Tao, HC (Tao, Hongchang) Yue, WK (Yue, Wenkai) Wang, YL (Wang, Yanli) Wu, JT (Wu, Jiangtao) Zhang, YC (Zhang, Yachao) Hao, Y (Hao, Yue)  
MATERIALS Volume13 Issue22 Article Number5118 PublishedNOV 2020

18. Emergence of high quality sputtered III-nitride semiconductors and devices

Izyumskaya, N (Izyumskaya, N.) Avrutin, V (Avrutin, V) Ding, K (Ding, K.) Ozgur, U (Ozgur, U.) Morkoc, H (Morkoc, H.) Fujioka, H (Fujioka, H.)  
SEMICONDUCTOR SCIENCE AND TECHNOLOGY Volume34 Issue9 Article Number093003 PublishedSEP 2019

17. AlN gradient interlayer design for the growth of high-quality AlN epitaxial film on sputtered AlN/sapphire substrate

Tan, B (Tan, Bo) Hu, JH (Hu, Jiahui) Zhang, J (Zhang, Jun) Zhang, Y (Zhang, Yi) Long, HL (Long, Hanling) Chen, JW (Chen, Jingwen) Du, SD (Du, Shida) Dai, JN (Dai, Jiangnan) Chen, CQ (Chen, Changqing) Xu, JT (Xu, Jintong)  
CRYSTENGCOMM Volume20 Issue41 Page6557-6564 PublishedNOV 7 2018

16. Wang, Jiaxing; Chen, Zhen; Xing, Yuchen; et al.

The influences of sputtered AlN buffer layer on AlInGaN based blue and near-ultraviolet light emitting diodes

PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE Volume: 214 (6) Article No: 1600714 Published: JUN 2017

15. Redkov, A.V., Kukushkin, S.A.

Surface defects formation on strained thin films growing via chemical reaction: a model

Journal of Physics Conference Series Volume: 643 Article Number: 012005 DOI: 10.1088/1742-6596/643/1/012005 Published: 2015

14. Chen, Y. A.; Kuo, C. H.; Wu, J. P.; et al.

Interruption-free growth of 10 μm m-thick GaN film prepared on sputtered AlN/PSS template by hydride vapor phase epitaxy

JOURNAL OF CRYSTAL GROWTH Volume: 426 Pages: 180-185 Published: SEP 15 2015

13. Kong, W.; Jiao, W. Y.; Li, J. C.; et al.

Effect of strain in sputtered AlN buffer layers on the growth of GaN by molecular beam epitaxy

APPLIED PHYSICS LETTERS Volume: 107 Issue: 3 Article Number: 032102 Published: JUL 20 2015

12. Oda, O.

Nitride and Other III-V Compounds

COMPOUND SEMICONDUCTOR BULK MATERIALS AND CHARACTERIZATIONS, VOL 2 Pages: 27-125 Published: 2012

11. Long, H., Yu, T.J., Fang, H., Yang, Z.J., Zhang, G.Y.

Modulation of anisotropic crystalline in a-plane GaN on HT-AlN buffer layer

Applied Surface Science 258 (15), 5579-5582, 2012.

10. Weyher, J.L., Ucznik, B., Grzegory, I., Smalc-Koziorowska, J., Paskova, T.

Revealing extended defects in HVPE-grown GaN

JOURNAL OF CRYSTAL GROWTH 312 (18) Pages: 2611-2615, SEP 1 2010.

9. Matoussi, A., Ben Nasr, F., Boufaden, T., Salh, R., Fakhfakh, Z., Guermazi, S., ElJani, B., Fitting, H.-J.

Luminescent properties of GaN films grown on porous silicon substrate

Journal of Luminescence 130 (3), pp. 399-403 (2010).

8. Li, X., Qiu, K., Zhong, F., Yin, Z., Ji, C., Wang, Y.

Preparation of porous GaN buffer and its influence on the residual stress of GaN epilayers grown by hydride vapor phase epitaxy  
Journal of Materials Science and Technology 23 (4), pp. 574-576 (2007)

7. Medjani, F., Sanjinés, R., Allidi, G., Karimi, A.

Effect of substrate temperature and bias voltage on the crystallite orientation in RF magnetron sputtered AlN thin films  
Thin Solid Films 515 (1), pp. 260-265 (2006)

6. Zhang JX, Cheng H, Chen YZ, et al.

Growth of AlN films on Si(100) and Si(111) substrates by reactive magnetron sputtering  
SURFACE & COATINGS TECHNOLOGY 198 (1-3): 68-73 AUG 1 2005

5. Mynbaeva MG, Mynbaev KD, Sarua A, et al.

Porous GaN/SiC templates for homoepitaxial growth: effect of the built-in stress on the formation of porous structures  
SEMICONDUCTOR SCIENCE AND TECHNOLOGY 20 (1): 50-55 JAN 2005

4. Zhang JX, Chen YZ, Cheng H, et al.

Interface study of AlN grown on Si substrates by radio-frequency magnetron reactive sputtering  
THIN SOLID FILMS 471 (1-2): 336-341 JAN 3 2005

3. Nouet G, Ruterana P, Chen J, et al.  
Characterization of thick HVPE GaN films  
SUPERLATTICES AND MICROSTRUCTURES 36 (4-6): 417-424 OCT-DEC 2004

2. Starikov, E., Gruinskis, V., Shiktorov, P.  
Strain evolution in high temperature AlN buffer layers for HVPE-GaN growth  
2002 Physica Status Solidi (A) Applied Research 190 (1), pp. 59-64

1. Wrobel, J.M., Płaczek-popko, E., Dubowski, J.J., Tang, H., Webb, J.B.  
A photoluminescence study of laser ablated gallium nitride thin films  
Proceedings of SPIE - The International Society for Optical Engineering 4637, pp. 82-89 (2002)

36. "Raman spectroscopy of the charge- and orbital-ordered state in  $La0.5Ca0.5MnO_3$ "  
M. V. Abrashev, J. Bäckstrom, L. Börjesson, M. Pissas, N. Kolev, and M. N. Iliev  
Phys. Rev. B 64 (2001) 144429.

57. Structural-distortion modes and transport properties of  $La0.5Ca0.5MnO_3$  by co-doping  $Dy^{3+}$  and  $Sr^{2+}$  ions  
Tang, Y.F., Zhang, A.M., Shi, J.Y., Wu, X.S.  
Ceramics International 46(8), pp. 10598-10602 (2020)

56. Influence of trivalent lanthanides substitution on the thermoelectric properties of nanostructured  $Ca_{1-x}Ln_3+xMnO_3-\delta$  ( $Ln^{3+} = Sm, Ce, La$ ;  $x = 0, 0.1$ )  
Mary, S.B., Rajesh, A.L.  
Journal of Materials Science: Materials in Electronics 31(8), pp. 6479-6487 (2020)

55. Backfolded acoustic phonons as ultrasonic probes in metal-oxide superlattices  
Lyzwa, F., Chan, A., Khmaladze, J., (...), Minola, M., Mallett, B.P.P.  
Physical Review Materials 4(4),043606 (2020)

54. Optical Study of the Electronic Structure and Lattice Dynamics of  $NdBaMn_2O_6$  Single Crystals  
Mero, R.D., Ogawa, K., Yamada, S., Liu, H.-L.  
Scientific Reports 9(1),18164 (2019)

53. Phase separation and local lattice distortions analysis of charge-ordered manganese films  $La_{1-x}Ca_xMnO_3-\delta$  by Raman spectroscopy  
Trotsenko, V.G., Lahmar, A., Lyanguzov, N.V., El Marssi, M., Torgashev, V.I.  
Superlattices and Microstructures 127, pp. 100-108 (2019)

52. Effects of A-site cation disordering on the transport properties of half-doping  $La0.5Ca0.5MnO_3$  manganites  
Shi, J.Y., Zhang, A.M., Wang, W.X., (...), Zhang, W.J., Wu, X.S.  
Chemical Physics Letters 706, pp. 223-227 (2018)

51. Superconductor sandwiches: Cuprate-manganite multilayers with a remarkable new ground state  
Mallett, B.P.P., Marsik, P., Khmaladze, J., (...), Simpson, M.C., Bernhard, C.  
Proceedings of SPIE - The International Society for Optical Engineering 10533,105330Y (2018)

50. Raman Scattering as a tool for studying complex materials (Book Chapter)  
Cooper, S.L., Abbamonte, P., Mason, N., (...), Casa, D., Gan, Y.  
Optical Techniques for Solid-State Materials Characterization pp. 193-234 (2016)

49. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.  
Controlling phase separation in  $La_{5/8-y}PryCa_3/8MnO_3$  ( $y=0.45$ ) epitaxial thin films by strain disorder  
APPLIED PHYSICS LETTERS Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015

48. Panda, S., Purohit, P.K., Rout, G.C.  
Study of Ferromagnetism Through Electron Self-Energy of Charge Ordered Manganites  
ADVANCED SCIENCE LETTERS Volume: 20 Issue: 3-4 Special Issue: SI Pages: 643-646 DOI: 10.1166/asl.2014.5373 Published:  
MAR-APR 2014

47. Norpeth, Jonas; Mildner, Stephanie; Scherff, Malte; et al.  
In situ TEM analysis of resistive switching in manganite based thin-film heterostructures  
NANOSCALE 6 (16), 9852-9862 AUG 21 2014

46. Gasparov, L.; Jegorek, T.; Loetgering, L.; et al.  
Thin film substrates from the Raman spectroscopy point of view  
JOURNAL OF RAMAN SPECTROSCOPY 45 (6), pp. 465-469 JUN 2014

45. Chaturvedi, Aditi; Sathe, V. G.  
Raman spectroscopy and X-ray diffraction study of  $PrMnO_3$  oriented thin films deposited on  $LaAlO_3$  and  $SrTiO_3$  substrates  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 344, 230-234, OCT 2013

44. Foerst, M.; Mankowsky, R.; Bromberger, H.; et al.

43. Chou, Ta-Lei; Lee, Jenn-Min; Chen, Shin-An; et al.

Pressure and Temperature Dependence of Local Structure and Electronic Structure of Orthorhombic DyMnO<sub>3</sub>  
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 82 (6), 064708, JUN 2013

42. Nikolaev, S. A.; Mazurenko, V. G.; Rudenko, A. N.

Influence of magnetic order on phonon spectra of multiferroic orthorhombic YMnO<sub>3</sub>  
SOLID STATE COMMUNICATIONS 164, 16-21, JUN 2013

41. Choi, Sun Gyu; Lee, Hong-Sub; Yeom, Geun Young; et al.

Investigation of the Properties of Ba-Substituted La0.7Sr0.3-x Ba (x) MnO<sub>3</sub> Perovskite Manganite Films for Resistive Switching Applications  
JOURNAL OF ELECTRONIC MATERIALS 42 (6), 1196-1201, JUN 2013

40. Phong, P.T., Jang, S.J., Huy, B.T., Lee, Y.-I., Lee, I.-J.

Structural, magnetic, infrared and Raman studies of La0.8Sr x Ca0.2-x MnO<sub>3</sub> (0 ≤ x ≤ 0.2)  
Journal of Materials Science: Materials in Electronics 24 (7) , pp. 2292-2301, 2013

39. Dodiya, N., Yogi, A., Varshney, D.

Low temperature Raman spectra of rhombohedral La0.925Na 0.075MnO<sub>3</sub>  
AIP Conference Proceedings 1512 , pp. 798-799, 2013

38. Dodiya, N., Varshney, D.

Structural properties and Raman spectroscopy of rhombohedral La 1-xNaxMnO<sub>3</sub> (0.075 ≤ x ≤ 0.15)  
Journal of Molecular Structure 1031 , pp. 104-109, 2013

37. Cooper, SL, Abbamonte, P, Mason, N.; Snow, CS, Kim, M, Barath, H.; Karpus, JF

RAMAN SCATTERING AS A TOOL FOR STUDYING COMPLEX MATERIALS

OPTICAL TECHNIQUES FOR SOLID-STATE MATERIALS CHARACTERIZATION Pages: 193-234 Published: 2012

36. Ravindra, A.V., Padhan, P., Prellier, W.

Electronic structure and optical band gap of CoFe 2O 4 thin films  
Applied Physics Letters 101 (16), art. no. 161902, 2012

35. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V.

Nanocomposite Structure and Reactivity of Perovskites Based on Lanthanum Manganites  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A 86 (4), 606-620, APR 2012.

34. Laverdiere J.; Jandl S.; Fournier P.

Colossal magnetoresistance of Nd(2/3)Sr(1/3)MnO(3) ultrathin films grown on charge-ordered Nd(1/2)Ca(1/2)MnO(3) manganite  
PHYSICAL REVIEW B 84 (10) Article Number: 104434, SEP 19 2011.

33. Antonakos A.; Liarokapis E.; Aydogdu G. H.; et al.

Strain induced phase separation on La(0.5)Ca(0.5)MnO(3) thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.

32. Truong, K.D., Singh, M.P., Jandl, S., Fournier, P.

Investigation of phonon behavior in Pr(2)NiMnO(6) by micro-Raman spectroscopy  
JOURNAL OF PHYSICS-CONDENSED MATTER 23 (5) Article Number: 052202, FEB 9 2011.

31. Liu Xue-Qin; Han Guo-Jian; Huang Chun-Kui; et al.

Thickness dependence of microstructure for La(0.9)Sr(0.1)MnO(3)/Si films determined by micro-Raman spectroscopy  
ACTA PHYSICA SINICA 58 (11) Pages: 8008-8013, NOV 2009.

30. Mansouri, S., Charpentier, S., Jandl, S., Fournier, P., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.

A micro-Raman study of a Pr0.5Ca0.5MnO<sub>3</sub> single crystal and thinfilms  
Journal of Physics Condensed Matter 21 (38), art. no. 386004 (2009).

29. Matsuzaki, H., Uemura, H., Matsubara, M., Kimura, T., Tokura, Y., Okamoto, H.

Detecting charge and lattice dynamics in photoinduced charge-order melting in perovskite-type manganites using a 30-femtosecond time resolution  
Physical Review B - Condensed Matter and Materials Physics 79 (23), art. no. 235131 (2009).

28. Lampakis, D., Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W.

Pressure induced insulator-metal phase transition on Pr0.6Ca0.4MnO<sub>3</sub> thin films  
Journal of Physics Conference Series Volume: 121 Article Number: 052002 DOI: 10.1088/1742-6596/121/5/052002 Published: 2008

27. Antonakos, A., Palles, D., Liarokapis, E., Filippi, M., Prellier, W.

Evaluation of the strains in charge-ordered Pr1-xCa xMnO<sub>3</sub> thin films using Raman spectroscopy  
Journal of Applied Physics 104 (6), art. no. 063508 (2008).

26. Kim, M., Barath, H., Cooper, S.L., Abbamonte, P., Fradkin, E., Rühausen, M., Zhang, C.L., Cheong, S.-W.  
Raman scattering studies of the temperature- and field-induced melting of charge order in LaxPryCa1-x-yMnO<sub>3</sub>

Physical Review B - Condensed Matter and Materials Physics 77 (13), art. no. 134411 (2008).

25. Antonakos A, Lampakis D, Palles D, et al.  
Low temperature micro-Raman measurements under magnetic field of Pr<sub>1-x</sub>CaxMnO<sub>3</sub> thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 310 (2), pp. 2164-2166 (2007)
24. Wu, L., Klie, R.F., Zhu, Y., Jooss, Ch.  
Experimental confirmation of Zener-polaron-type charge and orbital ordering in Pr<sub>1-x</sub> Cax MnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 76 (17), art. no. 174210 (2007)
23. Antonakos, A., Liarokapis, E., Aydogdu, G.H., Habermeier, H.-U.  
Strain effects on La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
Materials Science and Engineering B: Solid-State Materials for Advanced Technology 144 (1-3), pp. 83-88 (2007)
22. Truong, K.D., Laverdière, J., Singh, M.P., Jandl, S., Fournier, P.  
Impact of Co Mn cation ordering on phonon anomalies in La<sub>2</sub> CoMn O<sub>6</sub> double perovskites: Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 76 (13), art. no. 132413 (2007)
21. Jooss, Ch., Wu, L., Beetz, T., Klie, R.F., Beleggia, M., Schofield, M.A., Schramm, S., (...), Zhu, Y.  
Polaron melting and ordering as key mechanisms for colossal resistance effects in manganites  
Proceedings of the National Academy of Sciences of the United States of America 104 (34), pp. 13597-13602 (2007)
20. Kawasaki, T., Ogimoto, Y., Ogawa, N., Miyano, K., Tamaru, H., Izumi, M.  
Charge- and orbital-ordering patterns in Bi<sub>1/2</sub>Sr<sub>1/2</sub>MnO<sub>3</sub> thin films studied by Raman scattering  
Journal of Applied Physics 101 (12), art. no. 123714 (2007)
19. Kozlenko, D.P., Dubrovinsky, L.S., Goncharenko, I.N., Savenko, B.N., Voronin, V.I., Kiselev, E.A., Proskurnina, N.V.  
Pressure-induced monoclinic distortion and charge and orbital ordering in La<sub>0.5</sub> Ca<sub>0.5</sub> Mn O<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 75 (10), art. no. 104408 (2007)
18. Antonakos, A., Lampakis, D., Palles, D., Liarokapis, E., Prellier, W., Mercey, B.  
Low temperature micro-Raman measurements under magnetic field of Pr<sub>1-x</sub> Cax MnO<sub>3</sub> thin films  
Journal of Magnetism and Magnetic Materials 310 (2 SUPPL. PART 3), pp. 2164-2166 (2007)
17. Huang, S., Ruan, K., Pang, Z., Lv, Z., Wu, H., Shen, Z., Cao, L., Li, X.  
Molecular vibrations of the layered-perovskite cobalt oxides characterized by infrared and Raman spectroscopies coupled with crystal structure refinement  
Solid State Communications 141 (3), pp. 150-155 (2007)
16. Charpentier, S., Gill-Comeau, M., Jandl, S., Fournier, P.  
Observation of charge ordering by Raman scattering in Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
Journal of Physics Condensed Matter 18 (31), art. no. 014, pp. 7193-7202 (2006)
15. Jandl S, Mukhin AA, Ivanov VY, et al.  
Micro-Raman study and phase transitions of Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006
14. Gozar, A., Koomiya, S., Ando, Y., Blumberg, G.  
Magnetic and charge correlations in La<sub>2-x-y</sub>NdySr<sub>x</sub>CuO<sub>3</sub>: Raman scattering studyH<sub>2</sub>O  
Frontiers in Magnetic Materials 755-789 DOI: 10.1007/3-540-27284-4\_24 (2005)
13. Polychronopoulou K, Galisteo FC, Granados ML, et al.  
Novel Fe-Mn-Zn-Ti-O mixed-metal oxides for the low-temperature removal of H<sub>2</sub>S from gas streams in the presence of H<sub>2</sub>, CO<sub>2</sub>, and H<sub>2</sub>O  
JOURNAL OF CATALYSISIS 236 (2): 205-220 DEC 10 2005
12. Asselin S, Jandl S, Fournier P, et al.  
Resonant micro-Raman study of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005
11. Lim D, Thorsmolle VK, Averitt RD, et al.  
Coherent optical and acoustic phonon generation correlated with the charge-ordering phase transition in La<sub>1-x</sub>CaxMnO<sub>3</sub>  
PHYSICAL REVIEW B 71 (13): Art. No. 134403 APR 2005
10. Xiong YM, Wang GY, Luo XG, et al.  
Magnetotransport properties in La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) thin films deposited on different substrates  
JOURNAL OF APPLIED PHYSICS 97 (8): Art. No. 083909 APR 15 2005
9. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
8. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study in Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
ACTA PHYS POL A 105 (1-2): 99-106 JAN-FEB 2004
7. Gnezdilov VP, Yeremenko AV, Pashkevich YG, et al.

Phonon Raman scattering in LaMn<sub>1-x</sub>CoxO<sub>3</sub> (x = 0, 0.2, 0.3, 0.4, and 1.0)  
LOW TEMP PHYS+ 29 (11): 963-966 NOV 2003

6. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study of anharmonic effects in Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003

5. Kuroe H, Habu I, Sakuta A, et al.  
Optical study in the charge-ordered phase of (Nd<sub>1-x</sub>Srx)MnO<sub>3</sub>  
PHYSICA B 329: 822-823 Part 2 MAY 2003

4. Choi KY, Lemmens P, Guntherodt G, et al.  
Raman scattering study of Nd<sub>1-x</sub>SrxMnO<sub>3</sub> (x = 0.3, 0.5)  
J PHYS-CONDENS MAT 15 (19): 3333-3342 MAY 21 2003

3. Takenaka K, Okuyama S, Sugai S, et al.  
Optical reflectivity spectra measured on cleaved surfaces of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub>  
J PHYS SOC JPN 71 (12): 3065-3068 DEC 2002

2. Gorbenko OY, Graboy IE, Amelichev VA, et al.  
The structure and properties of Mn<sub>3</sub>O<sub>4</sub> thin films grown by MOCVD  
SOLID STATE COMMUN 124 (1-2): 15-20 2002

1. Naler S, Rubhausen M, Yoon S, et al.  
Lattice dynamics and charge ordering in La<sub>1-x</sub>CaxMnO<sub>3</sub> (0.45 <= x <= 0.76)  
PHYS REV B 65 (9): art. no. 092401 MAR 1 2002

### 37. "Raman phonons and Jahn-Teller bands in perovskite-like manganites"

Milko N. Iliev and Miroslav V. Abrashev

J. Raman Spectrosc. 32 (2001) 805 - 811.

120. Epitaxial LaMnO<sub>3</sub> films with remarkably fast oxygen transport properties at low temperature  
Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Pirovano, C (Pirovano, Caroline) Stangl, A (Stangl, Alexander) Pla, D (Pla, Dolors) Jonsson, R (Jonsson, Ragnar) Rapenne, L (Rapenne, Laetitia) Sarigiannidou, E (Sarigiannidou, Eirini) Nuns, N (Nuns, Nicolas) Roussel, H (Roussel, Herve) Chaix-Pluchery, O (Chaix-Pluchery, Odette)  
JOURNAL OF MATERIALS CHEMISTRY A DOI10.1039/d0ta12253j Early Access MAY 2021

119. Structural and magnetic properties of yttrium-substituted La<sub>0.6-x</sub>Y<sub>x</sub>Sr<sub>0.4</sub>MnO<sub>3</sub>(x=0-0.3)  
Hosseininejad, SS (Hosseininejad, S. S.) Ehsani, MH (Ehsani, M. H.) Esmaeili, S (Esmaeili, S.)  
CERAMICS INTERNATIONAL Volume47 Issue8 Page11536-11546 Published APR 15 2021

118. Spray-Flame Synthesis of LaMnO<sub>3</sub>+delta Nanoparticles for Selective CO Oxidation (SELOX)  
Angel, S (Angel, Steven) Tapia, JD (Tapia, Juan David) Gallego, J (Gallego, Jaime) Hagemann, U (Hagemann, Ulrich) Wiggers, H (Wiggers, Hartmut)  
ENERGY & FUELS Volume35 Issue5 Page4367-4376 Published MAR 4 2021

117. Polaronic Contributions to Friction in a Manganite Thin Film  
Weber, NA (Weber, Niklas A.) Schmidt, H (Schmidt, Hendrik) Sievert, T (Sievert, Tim) Jooss, C (Jooss, Christian) Guthoff, F (Guethoff, Friedrich) Mosheaga, V (Mosheaga, Vasily) Samwer, K (Samwer, Konrad) Kruger, M (Krueger, Matthias) Volkert, CA (Volkert, Cynthia A.)  
ADVANCED SCIENCE Volume8 Issue8 Article Number2003524 Published APR 2021

116. Manipulating the Raman scattering rotation via magnetic field in an MoS<sub>2</sub> monolayer  
Wan, Y (Wan, Yi) Cheng, X (Cheng, Xing) Li, YF (Li, Yanfang) Wang, YQ (Wang, Yaqian) Du, YP (Du, Yongping) Zhao, YB (Zhao, Yibin) Peng, B (Peng, Bo) Dai, L (Dai, Lun) Kan, EJ (Kan, Erjun)  
RSC ADVANCES Volume11 Issue7 Page4035-4041 Published JAN 29 2021

115. Structural, optical, and low-temperature resistivity of Ca-doped PrMnO<sub>3</sub>)nanoparticles  
Kumar, S (Kumar, Satyam) Ram, I (Ram, Indrasen) Kumar, A (Kumar, Aditya) Kumar, U (Kumar, Upendra)  
EMERGENT MATERIALS Volume3 Issue5 Page595-604 Published OCT 2020

114. Physical investigations on LaMn(1-x)Ni(x)O(3)perovskite sprayed thin films along with surface magnetic applications  
Gharbi, B (Gharbi, B.) Boukhachem, A (Boukhachem, A.) Amlouk, M (Amlouk, M.) Oueslati, M (Oueslati, M.) Dkhil, B (Dkhil, B.) Meftah, A (Meftah, A.)  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume126 Issue8 Article Number604 Published JUL 11 2020

113. Surface Conditions That Constrain Alkane Oxidation on Perovskites  
Koch, G (Koch, Gregor) Havecker, M (Havecker, Michael) Teschner, D (Teschner, Detre) Carey, SJ (Carey, Spencer J.) Wang, YQ (Wang, Yuanqing) Kube, P (Kube, Pierre) Hetaba, W (Hetaba, Walid) Lunkenbein, T (Lunkenbein, Thomas) Auffermann, G (Auffermann, Gudrun) Timpe, O (Timpe, Olaf)  
ACS CATALYSIS Volume10 Issue13 Page7007-7020 Published JUL 2 2020

112. Particle dispersion and lattice distortion induced magnetic behavior of La<sub>1-x</sub>SrxMnO<sub>3</sub> perovskite nanoparticles grown by salt-assisted solid-state synthesis

Ortiz-Quinonez, JL (Ortiz-Quinonez, Jose-Luis) Garcia-Gonzalez, L (Garcia-Gonzalez, Lorena) Cancino-Gordillo, FE (Enrique Cancino-Gordillo, Francisco) Pal, U (Pal, Umapada)  
MATERIALS CHEMISTRY AND PHYSICS Volume246 Article Number122834 PublishedMAY 1 2020

111. Enhanced ferromagnetism and conductivity in epitaxial LaMnO<sub>3</sub> thin films by oxygen-atmosphere annealing  
Sun, QC (Sun, Qinchao) Luo, X (Luo, Xin) Xia, QT (Xia, Qingtao) Guo, YF (Guo, Yunfeng) Su, J (Su, Jie) Li, Q (Li, Qiang) Miao, GX (Miao, Guoxing)

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume499 Article Number166317 PublishedAPR 1 2020

110. Effect of Magnetic Ordering on Phonon Raman Spectra in Magnetic Systems  
Swami, J., Dixit, A., Tiwari, B.  
Springer Proceedings in Physics 236, pp. 289-299 (2019)

109. Polaronic Emergent Phases in Manganite-Based Heterostructures  
Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)  
CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019

108. Frequency-dependent ferro-antiferro phase transition and internal bias field influenced piezoelectric response of donor and acceptor doped bismuth sodium titanate ceramics  
Verma, R (Verma, Rolly) Rout, SK (Rout, S. K.)  
JOURNAL OF APPLIED PHYSICS Volume126 Issue9 Article Number094103 PublishedSEP 7 2019

107. Self-doped La<sub>1-x</sub>MnO<sub>3+delta</sub> perovskites: Electron state hybridization and Raman modes  
Ulyanov, AN (Ulyanov, A. N.) Sidorov, AV (Sidorov, A., V.) Pismenova, NE (Pismenova, N. E.) Goodilin, EA (Goodilin, E. A.) Savilov, SV (Savilov, S., V.)  
SOLID STATE SCIENCES Volume94 Page41-44 PublishedAUG 2019

106. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy  
Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.)  
Moshnyaga, V (Moshnyaga, V.)  
PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019

105. Electric field and temperature induced local polarization switching and piezoresponse in Bi<sub>0.88</sub>Sm<sub>0.12</sub>FeO<sub>3</sub> ceramics for nanoscale applications  
Anthoniappan, J (Anthoniappan, Jesuraj) Chang, WS (Chang, Wei Sea) Ruiz, FM (Ruiz, Flora Mae) Tu, CS (Tu, Chi-Shun) Blaise, CT (Blaise, Carlyn Tutong) Chen, PY (Chen, Pin-Yi) Chen, CS (Chen, Cheng-Sao) Mana-ay, H (Mana-ay, Haidee)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume790 Page587-596 PublishedJUN 25 2019

104. Microscopic Mechanisms of Local Interfacial Resistive Switching in LaMnO<sub>3+delta</sub>  
Meunier, B (Meunier, Benjamin) Pla, D (Pla, Dolors) Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Boudard, M (Boudard, Michel) Chaix-Pluchery, O (Chaix-Pluchery, Odette) Martinez, E (Martinez, Eugenie) Chevalier, N (Chevalier, Nicolas) Jimenez, C (Jimenez, Carmen) Burriel, M (Burriel, Monica) Renault, O (Renault, Olivier)  
ACS APPLIED ELECTRONIC MATERIALS Volume1 Issue5 Page675-683 PublishedMAY 2019

103. Phase separation and local lattice distortions analysis of charge-ordered manganese films La<sub>1-x</sub>CaxMnO<sub>3-delta</sub> by Raman spectroscopy  
Trotsenko, VG (Trotsenko, V. G.) Lahmar, A (Lahmar, A.) Lyanguzov, NV (Lyanguzov, N. V.) El Marssi, M (El Marssi, M.) Torgashev, VI (Torgashev, V. I.)  
SUPERLATTICES AND MICROSTRUCTURES Volume127 Page100-108 PublishedMAR 2019

102. Integration of LaMnO<sub>3+delta</sub> films on platinized silicon substrates for resistive switching applications by PI-MOCVD  
Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Plat, D (Plat, Dolors) Chaix-Pluchery, O (Chaix-Pluchery, Odette) Meunier, B (Meunier, Benjamin) Wilhelm, F (Wilhelm, Fabrice) Rogalev, A (Rogalev, Andrei) Rapenne, L (Rapenne, Laetitia) Mescot, X (Mescot, Xavier) Rafhay, Q (Rafhay, Quentin) Roussel, H (Roussel, Herve)  
BEILSTEIN JOURNAL OF NANOTECHNOLOGY Volume10 Page389-398 PublishedFEB 7 2019

101. Composition and thermal structural evolution in Pr modified bismuth ferrite near the morphotropic phase boundary  
Tu, CS (Tu, Chi-Shun) Chen, CS (Chen, Cheng-Sao) Chen, PY (Chen, Pin-Yi) Hsieh, YL (Hsieh, Yi Lin) Chien, RR (Chien, R. R.) Schmidt, VH (Schmidt, V. Hugo) Feng, KC (Feng, Kuei-Chih) Chang, HW (Chang, Huang-Wei)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume768 Page903-913 PublishedNOV 5 2018

100. Synthesis and characterization of Sr<sub>1-x</sub>LaxMnO<sub>3</sub>/SiOC nanocomposites decorated with 1D nanostructures for high temperature CO<sub>2</sub> splitting  
Casado, E (Casado, Eva) Garcia, B (Garcia, Beatriz) Tamayo, A (Tamayo, Aitana)  
CERAMICS INTERNATIONAL Volume44 Issue15 Page18585-18594 PublishedOCT 15 2018

99. The Jahn-Teller distortion influenced ferromagnetic order in Pr<sub>1-x</sub>LaxMnO<sub>3</sub>  
He, FF (He, Feifei) Mao, ZQ (Mao, Zhongquan) Tang, LY (Tang, Lingyun) Zhang, J (Zhang, Jiang) Chen, X (Chen, Xi)  
SOLID STATE COMMUNICATIONS Volume274 Page21-26 PublishedJUN 2018

98. An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes  
Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Li, XX (Li, Xiaxi) Ding, D (Ding, Dong) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang) Ding, Y (Ding, Yong) Zhao, BT (Zhao, Bote) Murphy, R (Murphy, Ryan) Deglee, B (Deglee, Ben)  
NANO ENERGY Volume47 Page474-480 PublishedMAY 2018

97. Suppression of the cooperative Jahn-Teller distortion and its effect on the Raman octahedra-rotation modes of TbMn<sub>1-x</sub>FexO<sub>3</sub>

Vilarinho, R (Vilarinho, R.) Passos, DJ (Passos, D. J.) Queiros, EC (Queiros, E. C.) Tavares, PB (Tavares, P. B.) Almeida, A (Almeida, A.) Weber, MC (Weber, M. C.) Guennou, M (Guennou, M.) Kreisel, J (Kreisel, J.) Moreira, JA (Agostinho Moreira, J.) PHYSICAL REVIEW B Volume97 Issue14 Article Number144110 PublishedAPR 19 2018

96. Characterization of B site codoped LaFeO<sub>3</sub> nanoparticles prepared via co-precipitation route  
Varandili, SB (Varandili, Seyedeh Behnaz) Babaei, A (Babaei, Alireza) Ataie, A (Ataie, Abolghasem) RARE METALS Volume37 Issue3 Page181-190 PublishedMAR 2018

95. Fabrication of Ca-Mn-Nb-O compounds and their structural, electrical, magnetic and thermoelectric properties  
Oz, E (Oz, E.) Demirel, S (Demirel, S.) Altin, S (Altin, S.) Altin, E (Altin, E.) Baglayan, O (Baglayan, O.) Bayri, A (Bayri, A.) Avci, S (Avci, S.) MATERIALS RESEARCH EXPRESS Volume5 Issue3 Article Number036304 PublishedMAR 2018

94. Nano-structured Pd doped LaFe(Co)O<sub>3</sub> perovskite, synthesis, characterization and catalytic behavior  
Varandili, SB (Varandili, Seyedeh Behnaz) Babaei, A (Babaei, Alireza) Ataie, A (Ataie, Abolghasem) Khodadadi, AA (Khodadadi, Abbas Ali) Kazerooni, H (Kazerooni, Hossein) MATERIALS CHEMISTRY AND PHYSICS Volume205 Page228-239 PublishedFEB 1 2018

93. An In Situ Formed, Dual-Phase Cathode with a Highly Active Catalyst Coating for Protonic Ceramic Fuel Cells  
Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang) Zhang, L (Zhang, Lei) deGlee, B (deGlee, Ben) Murphy, R (Murphy, Ryan) Zhao, BT (Zhao, Bote) Zhang, YX (Zhang, Yanxiang) Chen, Y (Chen, Yan) ADVANCED FUNCTIONAL MATERIALS Volume28 Issue5 Article Number1704907 PublishedJAN 31 2018

92. Oumezzine, Marwene; Hassayoun, Oumayma; Bellouz, Ridha; et al.  
On the role of disorder produced by manganese vacancy at the B site on the structural and magnetic properties of La<sub>0.67</sub>Ba<sub>0.33</sub>Mn<sub>1-x</sub>O<sub>3</sub> nanocrystalline JOURNAL OF ALLOYS AND COMPOUNDS Volume: 729 Pages: 156-161 Published: DEC 30 2017

91. Daoudi, Kais; Alawadhi, Hussain; El Helali, Saussen; et al.  
Effects of Mn<sub>3</sub>O<sub>4</sub> precipitates on the vibrational properties of epitaxial Ca-doped LaMnO<sub>3</sub> films JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 50 Issue: 39 Article Number: 395305 Published: OCT 4 2017

90. Turki, D.; Ghouri, Zafar Khan; Al-Meer, Saeed; et al.  
Synthesis and Physicochemical Studies of Perovskite Manganite La<sub>(0.8)</sub>Ca<sub>(0.2)</sub>Nn<sub>(1-x)</sub>Co<sub>(x)</sub>O<sub>(3)</sub> (0 <= x <= 0.3)  
JOURNAL OF MAGNETICS Volume: 22 Issue: 3 Pages: 353-359 Published: SEP 2017

89. Kubicek, Markus; Bork, Alexander H.; Rupp, Jennifer L. M.  
Perovskite oxides - a review on a versatile material class for solar-to-fuel conversion processes  
JOURNAL OF MATERIALS CHEMISTRY A Volume: 5 Issue: 24 Pages: 11983-12000 Published: JUN 28 2017

88. Concha-Balderrama, A.; Rojas-George, G.; Alvarado-Flores, J.; et al.  
Nucleation and growth kinetics of La<sub>0.7</sub>Sr<sub>0.3</sub>Cr<sub>0.4</sub>Mn<sub>0.6</sub>O<sub>3</sub>-delta SOFC perovskite: Symmetry alteration evolution induced by Cu<sup>2+</sup> and Ni<sup>2+</sup> impregnation PROGRESS IN NATURAL SCIENCE-MATERIALS INTERNATIONAL Volume: 26 Issue: 6 Pages: 665-670 Published: DEC 2016

87. Golosova, NO, Kozlenko, DP, Kichanov, SE, Lukin, EV, Dubrovinsky, LS, Mammadov, AI, Mehdiyeva, RZ, Jabarov, SH, Liermann, HP, Glazyrin, KV, Dang, TN, Smotrakov, VG, Eremkin, VV, Savenko, BN  
Structural, magnetic and vibrational properties of multiferroic GaFeO<sub>3</sub> at high pressure  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 684 Pages: 352-358 DOI: 10.1016/j.jallcom.2016.04.316 Published: NOV 5 2016

86. Pomar, Alberto; Konstantinovic, Zorica; Bagues, Nuria; et al.  
Formation of Self-Organized Mn<sub>3</sub>O<sub>4</sub> Nanoinclusions in LaMnO<sub>3</sub> Films  
FRONTIERS IN PHYSICS Volume: 4 Article Number: 41 Published: SEP 20 2016

85. Praveena, K (Praveena, K.); Bharathi, P (Bharathi, P.); Liu, HL (Liu, Hsiang-Lin); Varma, KBR (Varma, K. B. R.)  
Structural, multiferroic properties and enhanced magnetoelectric coupling in Sm<sub>1-x</sub>CaxFeO<sub>3</sub>  
CERAMICS INTERNATIONAL Volume: 42 Issue: 12 Pages: 13572-13585 DOI: 10.1016/j.ceramint.2016.05.150 Published: SEP 2016

84. Yoon, KR (Yoon, Ki Ro); Kim, DS (Kim, Dae Sik); Ryu, WH (Ryu, Won-Hee); Song, SH (Song, Sung Ho); Youn, DY (Youn, Doo-Young); Jung, JW (Jung, Ji-Won); Jeon, S (Jeon, Seokwoo); Park, YJ (Park, Yong Joon); Kim, ID (Kim, Il-Doo)  
Tailored Combination of Low Dimensional Catalysts for Efficient Oxygen Reduction and Evolution in Li-O<sub>2</sub> Batteries  
CHEMSUSCHEM Volume: 9 Issue: 16 Pages: 2080-2088 DOI: 10.1002/cssc.201600341 Published: AUG 23 2016

83. Drichko, N (Drichko, Natalia); Broholm, C (Broholm, Collin); Kimura, K (Kimura, K.); Ishii, R (Ishii, R.); Nakasutji, S (Nakasutji, Satoru)  
Collective versus local Jahn-Teller distortion in Ba<sub>3</sub>CuSb<sub>2</sub>O<sub>9</sub>: Raman scattering study  
PHYSICAL REVIEW B Volume: 93 Issue: 18 Article Number: 184425 DOI: 10.1103/PhysRevB.93.184425 Published: MAY 20 2016

82. Pandey, S (Pandey, Suchita); Kumar, J (Kumar, Jitender); Awasthi, AM (Awasthi, A. M.)  
Magneto-thermally activated spin-state transition in La<sub>0.95</sub>Ca<sub>0.05</sub>CoO<sub>3</sub>: magnetically-tunable dipolar glass and giant magneto-electricity  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 18 Issue: 9 Pages: 6569-6579 DOI: 10.1039/c5cp06932g Published: MAR 7 2016

81. Abdel-Latif, I. A.; Ismail, Adel A.; Bouzid, Houcine; et al.  
Synthesis of novel perovskite crystal structure phase of strontium doped rare earth manganites using sol gel method

80. Katayama, Naoyuki; Kimura, Kenta; Han, Yibo; et al.

Absence of Jahn-Teller transition in the hexagonal Ba<sub>3</sub>CuSb<sub>2</sub>O<sub>9</sub> single crystal

PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA Volume: 112 Issue: 30 Pages: 9305-9309 Published: JUL 28 2015

79. Mota, Noelia; Barrio, Laura; Alvarez-Galvan, Consuelo; et al.

Ruthenium Effect on Formation Mechanism and Structural Characteristics of LaCo<sub>1-x</sub>Ru<sub>x</sub>O<sub>3</sub> Perovskites and Its Influence on Catalytic Performance for Hydrocarbon Oxidative Reforming

JOURNAL OF PHYSICAL CHEMISTRY C Volume: 119 Issue: 29 Pages: 16708-16723 Published: JUL 23 2015

78. Euler, C.; Holuj, P.; Talkenberger, A.; et al.

Magnetic field dependent thermal conductance in La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 381 Pages: 188-193 Published: MAY 1 2015

77. Islam, Mohammad A.; Xie, Yujun; Scafetta, Mark D.; et al.

Raman scattering in La<sub>1-x</sub>Sr<sub>x</sub>FeO<sub>3</sub>-delta thin films: annealing-induced reduction and phase transformation

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 27 Issue: 15 Article Number: 155401 Published: APR 22 2015

76. Vilarinho, R.; Almeida, A.; Machado da Silva, J. M.; et al.

Dzyaloshinskii-Moriya nature of ferroelectric ordering in magnetoelectric Gd<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> system

SOLID STATE COMMUNICATIONS Volume: 208 Pages: 34-40 Published: APR 2015

75. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.

Controlling phase separation in La<sub>5/8-y</sub>PryCa<sub>3/8</sub>MnO<sub>3</sub> (y=0.45) epitaxial thin films by strain disorder

APPLIED PHYSICS LETTERS Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015

74. Bork, A. H.; Kubicek, M.; Struzik, M.; et al.

Perovskite La<sub>0.6</sub>Sr<sub>0.4</sub>Cr<sub>1-x</sub>CoxO<sub>3</sub>-delta solid solutions for solar-thermochemical fuel production: strategies to lower the operation temperature

JOURNAL OF MATERIALS CHEMISTRY A Volume: 3 Issue: 30 Pages: 15546-15557 Published: 2015

73. Sun, Wei; Li, Jing-Feng; Zhu, Fangyuan; et al.

Thickness-dependent phase boundary in Sm-doped BiFeO<sub>3</sub> piezoelectric thin films on Pt/Ti/SiO<sub>2</sub>/Si substrates

PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 17 Issue: 30 Pages: 19759-19765 Published: 2015

72. Sun, Wei; Li, Jing-Feng; Yu, Qi; et al.

Phase transition and piezoelectricity of sol-gel-processed Sm-doped BiFeO<sub>3</sub> thin films on Pt(111)/Ti/SiO<sub>2</sub>/Si substrates

JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 9 Pages: 21115-2122 Published: 2015

71. Lee, Hong-Sub; Choi, Sun Gyu; Yeom, Geun Young; et al.

The effect of Gd substitution in perovskite lanthanum strontium manganite films for use in resistive switching devices

JOURNAL OF THE CERAMIC SOCIETY OF JAPAN 122 (1428), pp. 622-625 AUG 2014

70. Elkhouni, T.; Amami, M.; Colin, C. V.; et al.

The structure, Raman spectroscopy and evidence of ferromagnetic transition in CuCr<sub>1-x</sub>MxO<sub>2</sub> (M=Mn and Rh) compounds

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 355, pp. 158-163 APR 2014

69. Moshnyaga, V.; Belenchuk, A.; Huehn, S.; et al.

Intrinsic antiferromagnetic coupling underlies colossal magnetoresistance effect: Role of correlated polarons

PHYSICAL REVIEW B 89 (2), Art. No. 024420 JAN 30 2014

68. Zhu, L. P.; Deng, H. M.; Sun, L.; et al.

Optical properties of multiferroic LuFeO<sub>3</sub> ceramics

CERAMICS INTERNATIONAL 40 (1), pp. 1171-1175 Part: A JAN 2014

67. Choi, Sun Gyu; Lee, Hong-Sub; Choi, Hyejung; et al.

The effect of Ca substitution on the structural and electrical properties of La<sub>0.7</sub>Sr<sub>0.3-x</sub>CaxMnO<sub>3</sub> perovskite manganite films

JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (42), Art. No. 425102 OCT 23 2013

66. Chaturvedi, Aditi; Sathe, V. G.

Raman spectroscopy and X-ray diffraction study of PrMnO<sub>3</sub> oriented thin films deposited on LaAlO<sub>3</sub> and SrTiO<sub>3</sub> substrates

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 344, 230-234 OCT 2013

65. Foerst, M.; Mankowsky, R.; Bromberger, H.; et al.

Displacive lattice excitation through nonlinear phononics viewed by femtosecond X-ray diffraction

SOLID STATE COMMUNICATIONS 169, pp. 24-27 SEP 2013

64. Phong, P. T.; Jang, S. J.; Huy, B. T.; et al.

Structural, magnetic, infrared and Raman studies of La<sub>0.8</sub>SrxCa<sub>0.2-x</sub>MnO<sub>3</sub> (0 <= x <= 0.2)

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 24 (7), pp. 2292-2301 JUL 2013

63. Chou, Ta-Lei; Lee, Jenn-Min; Chen, Shin-An; et al.

Pressure and Temperature Dependence of Local Structure and Electronic Structure of Orthorhombic DyMnO<sub>3</sub>

JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 82 (6), Art. No. 064708 JUN 2013

62. Nikolaev, S. A.; Mazurenko, V. G.; Rudenko, A. N.  
 Influence of magnetic order on phonon spectra of multiferroic orthorhombic YMnO<sub>3</sub>  
 SOLID STATE COMMUNICATIONS 164, pp. 16-21 JUN 2013
61. Choi, Sun Gyu; Lee, Hong-Sub; Yeom, Geun Young; et al.  
 Investigation of the Properties of Ba-Substituted La<sub>0.7</sub>Sr<sub>0.3-x</sub> Ba (x) MnO<sub>3</sub> Perovskite Manganite Films for Resistive Switching Applications  
 JOURNAL OF ELECTRONIC MATERIALS 42 (6), 1196-1201 JUN 2013
60. Islam, Mohammad A.; Rondinelli, James M.; Spanier, Jonathan E.  
 Normal mode determination of perovskite crystal structures with octahedral rotations: theory and applications  
 JOURNAL OF PHYSICS-CONDENSED MATTER 25 (17), 175902, MAY 1 2013
59. Khanduri, H.; Dimri, M. Chandra; Vasala, S.; et al.  
 Magnetic and structural studies of LaMnO<sub>3</sub> thin films prepared by atomic layer deposition  
 JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (17), 175003, MAY 1 2013
58. Dodiya, Neha; Varshney, Dinesh  
 Structural properties and Raman spectroscopy of rhombohedral La<sub>1-x</sub>NaxMnO<sub>3</sub> (0.075 <= x <= 0.15)  
 JOURNAL OF MOLECULAR STRUCTURE 1031, 104-109, JAN 16 2013
57. Mishra, Dileep K.; Sathe, V. G.  
 Temperature Dependent Raman Study of Eu<sub>0.75</sub>Y<sub>0.25</sub>MnO<sub>3</sub>  
 AIP Conference Proceedings 1512, 800-801, 2013
56. Nima Ramirez Fabian Enrique; Ferreira Fabio Furlan; Alves Wendel Andrade; et al.  
 Magnetic, structural, and transport properties at very high temperature in manganites  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 324 (13), 2011-2018, JUL 2012.
55. Himcinschi, Cameliu; Vrejoiu, Ionela; Weissbach, Torsten; et al.  
 Raman spectra and dielectric function of BiCrO<sub>3</sub>: Experimental and first-principles studies  
 JOURNAL OF APPLIED PHYSICS 110 (7) Article Number: 073501, OCT 1 2011.
54. Yun B. K.; Koo Y. S.; Jung J. H.; et al.  
 Effect of hydroxyl group on global and local structures of hydrothermally grown KNbO<sub>3</sub> nanorods  
 MATERIALS CHEMISTRY AND PHYSICS 129 (3) Pages: 1071-1074, OCT 3 2011.
53. Antonakos A.; Liarokapis E.; Aydogdu G. H.; et al.  
 Strain induced phase separation on La(0.5)Ca(0.5)MnO<sub>3</sub> thin films  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.
52. Mir Feroz Ahmad; Ikram M.; Kumar Ravi  
 Temperature-dependent Raman study of PrFeO<sub>3</sub> thin film  
 JOURNAL OF RAMAN SPECTROSCOPY 42 (2) Pages: 201-208, FEB 2011.
51. Parhi Nilima; Rout G. C.; Behera S. N.  
 Study of J-T effect on the self-energy of electrons in manganite systems  
 INDIAN JOURNAL OF PHYSICS 84 (10) Pages: 1369-1377, OCT 2010.
50. Liang Shuhui; Xu Tongguang; Teng Fei; et al.  
 The high activity and stability of La(0.5)Ba(0.5)MnO<sub>3</sub> nanocubes in the oxidation of CO and CH<sub>4</sub>  
 APPLIED CATALYSIS B-ENVIRONMENTAL 96 (3-4) Pages: 267-275, JUN 7 2010.
49. Moreira J. Agostinho; Almeida A.; Ferreira W. S.; et al.  
 Coupling between phonons and magnetic excitations in orthorhombic Eu(1-x)Y(x)MnO<sub>3</sub>  
 PHYSICAL REVIEW B 81 (5) Article Number: 054447, Published: FEB 2010.
48. Issing S.; Fuchs F.; Ziereis C.; et al.  
 Lattice dynamics of Eu(1-x)Y(x)MnO<sub>3</sub> (0 <= x <= 0.5) studied by Raman and infrared spectroscopy  
 EUROPEAN PHYSICAL JOURNAL B 73 (3) Pages: 353-360, FEB 2010.
47. Malavasi Lorenzo; Baldini Maria; di Castro Daniele; et al.  
 High pressure behavior of Ga-doped LaMnO<sub>3</sub>: a combined X-ray diffraction and optical spectroscopy study  
 JOURNAL OF MATERIALS CHEMISTRY 20 (7) Pages: 1304-1311, 2010.
46. Issing, S.; Fuchs, F.; Ziereis, C.; et al.  
 Lattice dynamics of Eu<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> (0 <= x <= 0.5) studied by Raman and infrared spectroscopy  
 EUROPEAN PHYSICAL JOURNAL B 73 (3) Pages: 353-360, FEB 2010.
45. Chen C. Z.; Cai C. B.; Liu Z. Y.; et al.  
 Stress evolution and lattice distortion induced by thickness variation and lattice misfit in La(0.67)Sr(0.33)MnO<sub>3</sub>(3-delta) films  
 SOLID STATE COMMUNICATIONS 150 (1-2) Pages: 66-69, JAN 2010.
44. Liu Xue-Qin; Han Guo-Jian; Huang Chun-Kui; et al.  
 Thickness dependence of microstructure for La<sub>0.9</sub>Sr<sub>0.1</sub>MnO<sub>3</sub>/Si films determined by micro-Raman spectroscopy

ACTA PHYSICA SINICA 58 (11) Pages: 8008-8013, NOV 2009.

43. Mansouri, S.; Charpentier, S.; Jandl, S.; et al.

A micro-Raman study of a Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> single crystal and thin films

JOURNAL OF PHYSICS-CONDENSED MATTER 21 (38) Article Number: 386004, SEP 23 2009.

42. Cao Xian-Sheng; Chen Chang-Le

Phonon spectra of La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>

CHINESE PHYSICS B 18 (7) Pages: 2928-2932, JUL 2009.

41. Baldini, M.; Di Castro, D.; Cestelli-Guidi, M.; et al.

Phase-separated states in high-pressure LaMn<sub>1-x</sub>GaxO<sub>3</sub> manganites

PHYSICAL REVIEW B 80 (4) Article Number: 045123, JUL 2009.

40. Cao, Xian-Sheng; Chen, Chang-Le

Raman spectra of La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>

PHYSICA SCRIPTA 79 (4) Article Number: 045701, APR 2009.

39. Antonakos, A.; Filippi, M.; Aydogdu, G. H.; et al.

Tuning of the charge ordered state in the manganite thin films by internal or external strains

PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 246 (3) Pages: 635-642, MAR 2009.

38. Sathe, V. G.; Rawat, R.; Dubey, Aditi; et al.

Photo-induced insulator-metal transition probed by Raman spectroscopy

JOURNAL OF PHYSICS-CONDENSED MATTER 21 (7) Article Number: 075603, FEB 18 2009.

37. Antonakos, A.; Liarokapis, E.; Filippi, M.; et al.

Infrared Reflectivity Spectra of Manganite Thin Films Grown on Different Substrates

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM 22 (2) Pages: 109-113, FEB 2009.

36. Minh, NV (Nguyen Van Minh); Kim, SJ (Kim, Sung-Jin); Yang, IS (Yang, In-Sang)

A Raman spectroscopy study of disorder and local vibrational modes in La<sub>0.7</sub>Sr<sub>0.3</sub>Mn<sub>1-x</sub>M<sub>x</sub>O<sub>3</sub> (M=Fe, Co)

JOURNAL OF THE KOREAN PHYSICAL SOCIETY Volume: 52 Issue: 5 Pages: 1402-1405 Published: MAY 2008

35. Antonakos, A.; Lampakis, D.; Liarokapis, E.; et al.

Pressure effects on the phase separation of Pr<sub>0.6</sub>Ca<sub>0.4</sub>MnO<sub>3</sub> thin films

JOURNAL OF PHYSICS-CONDENSED MATTER 20 (48) Article Number: 485202, DEC 3 2008.

34. Sacchetti, A.; Corridoni, T.; Arcangeletti, E.; et al.

High pressure Raman study of La<sub>1-x</sub>CaxMnO<sub>3</sub>-delta manganites

EUROPEAN PHYSICAL JOURNAL B 66 (3) Pages: 301-305, DEC 2008.

33. Andreasson, Jakob; Holmlund, Joakim; Rauer, Ralf; et al.

Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution

PHYSICAL REVIEW B 78 (23) Article Number: 235103, DEC 2008.

32. Antonakos, A.; Lampakis, D.; Liarokapis, E.; et al.

Phase separation in manganite thin films

JOURNAL OF PHYSICS-CONDENSED MATTER 20 (43) Article Number: 434232, OCT 29 2008.

31. Nguyen Van Minh; Kim, Sung-Jin; Yang, In-Sang

A Raman spectroscopy study of disorder and local vibrational modes in La<sub>0.7</sub>Sr<sub>0.3</sub>Mn<sub>1-x</sub>M<sub>x</sub>O<sub>3</sub> (M=Fe, Co)

JOURNAL OF THE KOREAN PHYSICAL SOCIETY 52 (5) Pages: 1402-1405, MAY 2008.

30. Kim, M.; Barath, H.; Cooper, S. L.; et al.

Raman scattering studies of the temperature- and field-induced melting of charge order in La(x)Pr(y)Ca(1-x-y)MnO(3)

PHYSICAL REVIEW B 77 (13) Article Number: 134411, APR 2008.

29. Rossiny, JCH.; Fearn, S, Kilner, JA, Zhang, Y, Chen, L, Yang, S, Evans, J, Zhang, T, Yates, K, Cohen, LF

Characterisation of Combinatorial Libraries of Perovskite Materials for SOFC Cathode Applications

SOLID OXIDE FUEL CELLS 10 (SOFC-X), PTS 1 AND 2 Book Series: ECS Transactions Volume: 7 Issue: 1 Pages: 1005-1013 DOI: 10.1149/1.2729196 Published: 2007

28. Antonakos A, Liarokapis E, Aydogdu GH, et al.

Strain effects on La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films

MATER. SCIENCE AND ENG. B-SOLID STATE MATER.FOR ADV.TECHNOL.144 (1-3) Sp. Iss. SI, pp. 83-88 (2007).

27. Liang S, Teng F, Bulgan G, et al.

Effect of jahn-teller distortion in La<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub> cubes and nanoparticles on the catalytic oxidation of CO and CH<sub>4</sub>

JOURNAL OF PHYSICAL CHEMISTRY C 111 (45), pp. 16742-16749 (2007).

26. Sathe VG, Dubey A

Broken symmetry in LaAlO<sub>3</sub> single crystal probed by resonant Raman spectroscopy

JOURNAL OF PHYSICS-CONDENSED MATTER 19 (38) Art. No. 382201 (2007).

25. Dubey, Aditi; Sathe, V. G.  
The effect of magnetic order and thickness in the Raman spectra of oriented thin films of LaMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 19 (34) Article Number: 346232, AUG 29 2007.
24. Wesselinowa JM, St Kovachev  
Magnetic ordering effects in the phonon spectra of orthorhombic RMnO<sub>3</sub> compounds  
JOURNAL OF PHYSICS-CONDENSED MATTER 19 (17), Art. No. 176211 (2007).
23. Jandl, S.; Mukhin, A. A.; Ivanov, V. Yu; et al.  
Micro-Raman and magnetization studies of Nd(1-x)Ca(x)MnO<sub>3</sub> phase transitions  
12TH INTERNATIONAL CONFERENCE ON PHONON SCATTERING IN CONDENSED MATTER (PHONONS 2007) Book Series:  
Journal of Physics Conference Series 92 Article Number: 012125, 2007.
22. Li WJ, Zhang B, Lu W  
Structural properties and Raman spectroscopy of La((2+4x))/Sr-3((1-4x))/Mn-3(1-x) Cu<sub>x</sub>O<sub>3</sub>(0 <= x <= 0.2)  
PHYSICS LETTERS A 362 (4), pp. 327-330 (2007).
21. Aruta, C., Angeloni, M., Balestrino, G., Boggio, N.G., Medaglia, P.G., Tebano, A., Davidson, B., (...), De Renzi, R.  
Preparation and characterization of LaMnO<sub>3</sub> thin films grown by pulsed laser deposition  
Journal of Applied Physics 100 (2), art. no. 023910 (2006)
20. Jandl, S., Laverdière, J., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.  
Raman and infrared quest for orbitons in Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
Physica B: Condensed Matter 381 (1-2), pp. 214-218 (2006)
19. Jandl S, Mukhin AA, Ivanov VY, et al.  
Micro-Raman study and phase transitions of Nd0.5Ca0.5MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006
18. Cairns, DL (Cairns, DL); Reaney, IM (Reaney, IM); Zheng, H (Zheng, H); Iddles, D (Iddles, D); Price, T (Price, T)  
Synthesis and characterisation of La(Co<sub>1/2</sub>Ti<sub>1/2</sub>)O<sub>3</sub>  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 25 Issue: 4 Pages: 433-439 DOI: 10.1016/j.jeurceramsoc.2004.02.016  
Published: APR 2005
17. Jandl, S., Mukhin, A.A., Ivanov, V.Yu., Nekvasil, V., Sadowski, M.L.  
Raman-active phonons and Nd<sub>3+</sub> crystal-field studies of weakly doped Nd<sub>1-x</sub> Sr<sub>x</sub> MnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 72 (2), art. no. 024423 (2005)
16. Dore P, Postorino P, Sacchetti A, et al.  
Raman measurements on thin films of the La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite: a probe of substrate-induced effects  
EUROPEAN PHYSICAL JOURNAL B 48 (2): 255-258 NOV 2005
15. Asselin S, Jandl S, Fournier P, et al.  
Resonant micro-Raman study of Nd0.5Sr0.5MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005
14. Orlovskaia N, Steinmetz D, Yarmolenko S, et al.  
Detection of temperature- and stress-induced modifications of LaCoO<sub>3</sub> by micro-Raman spectroscopy  
PHYSICAL REVIEW B 72 (1): Art. No. 014122 JUL 2005
13. Ghosh S, Kamaraju N, Seto M, et al.  
Raman scattering in CaFeO<sub>3</sub> and La<sub>0.33</sub>Sr<sub>0.67</sub>FeO<sub>3</sub> across the charge-disproportionation phase transition  
PHYSICAL REVIEW B 71 (24): Art. No. 245110 JUN 2005
12. Jandl S, Nekvasil V, Divis M, et al.  
Infrared study of the crystal-field excitations in NdMnO<sub>3</sub> in high magnetic fields  
PHYSICAL REVIEW B 71 (2): Art. No. 024417 JAN 2005
11. Motin Seikh, Md., Sudheendra, L., Narayana, C., Rao, C.N.R.  
A Raman study of the temperature-induced low-to-intermediate-spin state transition in LaCoO<sub>3</sub>  
Journal of Molecular Structure 706 (1-3 SPEC. ISS.), pp. 121-126 (2004)
10. Cairns DL, Reaney IM, Zheng H, et al.  
Synthesis and characterisation of La(Co<sub>1/2</sub>Ti<sub>1/2</sub>)O<sub>3</sub>  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY 25 (4): 433-439 APR 2004
9. Alessandri I, Bontempi E, Sangaletti L, et al.  
Sodium doped lanthanum manganites thin films: Influence of the oxygen content on the structural parameters  
JOURNAL DE PHYSIQUE IV 118: 165-171 NOV 2004
8. Rao CNR, Seikh M, Narayana C  
Spin-state transition in LaCoO<sub>3</sub> and related materials  
TOPICS IN CURRENT CHEMISTRY 234: 1-21 2004
7. Seikeh MM, Sudheendra L, Narayana C, et al.  
A Raman study of the temperature-induced low-to-intermediate-spin state transition in LaCoO<sub>3</sub>

6. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
5. Sudheendra L, Seikh M, Raju AR, et al.  
Dielectric properties of rare earth cobaltates, LnCoO(3) (Ln = La, Pr, Nd), across the spin-state transition  
FERROELECTRICS 306: 227-234 2004
4. Alessandri I, Malavasi L, Bontempi E, et al.  
Synthesis and characterisation of La<sub>1-x</sub>NaxMnO<sub>3+delta</sub> thin films manganites  
MATERIALS SCIENCE AND ENGINEERING B-SOLID STATE MATERIALS FOR ADVANCED TECHNOLOGY 109 (1-3): 203-206 JUN 15 2004
3. Orlovskaya, N; Steinmetz, D  
Raman diagnostics of LACOO(3) based perovskites  
MIXED IONIC ELECTRONIC CONDUCTING PEROVSKITES FOR ADVANCED ENERGY SYSTEMS Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY 173 Pages: 39-51, 2004.
2. Nikiforov AE, Popov SE  
Cooperative dynamical effect in rhombohedral LaMnO<sub>3</sub>  
ADV QUANTUM CHEM 44: 587-598 2003
1. Malavasi L, Alessandri I, Mozzati MC, et al.  
Preparation, structural and magnetic characterisation of RF-sputtered La<sub>1-x</sub>NaxMnO<sub>3 +/- delta</sub> thin films manganites  
PHYS CHEM CHEM PHYS 5 (11): 2274-2278 2003
38. "Elimination of nonuniformities in thick GaN films using chemical vapor deposited GaN templates"  
E. Valcheva, T. Paskova, M. V. Abrashev, P. P. Paskov, P. O. A. Persson, E. M. Goldys, R. Beccard, M. Heukens, and B. Monemar  
J. Appl. Phys. 90 (2001) 6011 - 6016.
5. Zhou, A, Xiu, XQ, Zhang, R, Xie, ZL, Chen, DJ, Liu, B, Zheng, YD  
Effect of lattice defects on the property of GaN crystal: A molecular dynamics simulation study  
SUPERLATTICES AND MICROSTRUCTURES Volume: 88 Pages: 679-684 DOI: 10.1016/j.spmi.2015.10.027 Published: DEC 2015
4. Sochacki, Tomasz; Bryan, Zachary; Amilusik, Mikolaj; et al.  
HVPE-GaN grown on MOCVD-GaN/sapphire template and ammonothermal GaN seeds: Comparison of structural, optical, and electrical properties  
JOURNAL OF CRYSTAL GROWTH 394, pp. 55-60 MAY 15 2014
3. Zhou, A., Xiu, X.-Q., Zhang, R., Xie, Z.-L., Hua, X.-M., Liu, B., Han, P., (...), Zheng, Y.-D.  
Roles of V/III ratio and mixture degree in GaN growth: CFD and MD simulation study  
Chinese Physics B 22 (1), art. no. 017801, 2013
2. Wei, T.B., Duan, R.F., Wang, J.X., Li, J.M., Huo, Z.Q., Ma, P., Liu, Zh., Zeng, Y.P.  
Characterization of free-standing GaN substrate grown through hydride vapor phase epitaxy with a TiN interlayer  
Applied Surface Science 253 (18), pp. 7423-7428 (2007)
1. Hageman PR, Kirilyuk V, Corbeek WHM, et al.  
Thick GaN layers grown by hydride vapor-phase epitaxy: hetero- versus homo-epitaxy  
J CRYST GROWTH 255 (3-4): 241-249 AUG 2003
39. "Raman spectroscopy of CaMnO<sub>3</sub>: Mode assignment and relationship between Raman line intensities and structural distortions"  
M. V. Abrashev, J. Backstrom, L. Borjesson, V. N. Popov, R. A. Chakalov, N. Kolev, R. -L. Meng, and M. N. Iliev  
Phys. Rev. B 65 (2002) 184301.
92. Investigation of electron and phonon transport in Bi-doped CaMnO<sub>3</sub> for thermoelectric applications  
Suprayoga, E., Putri, W.B.K., Singsoog, K., (...), Seetawan, T., Hasdeo, E.H.  
Materials Research Bulletin 141,111359 (2021)
91. Characterization of structure and properties in CaO-Nd<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> microwave dielectric ceramic modified by Al<sub>2</sub>O<sub>3</sub>  
Xiong, Z., Zhang, X., Tang, B., (...), Fang, Z., Zhang, S.  
Materials Characterization 176,111108 (2021)
90. Site substitution in GdMnO<sub>3</sub>: Effects on structural, electronic, and magnetic properties

Mahana, S (Mahana, Sudipta) Pandey, SK (Pandey, Shishir Kumar) Rakshit, B (Rakshit, Bipul) Nandi, P (Nandi, Pronoy) Basu, R (Basu, Raktima) Dhara, S (Dhara, Sandip) Turchini, S (Turchini, S.) Zema, N (Zema, N.) Manju, U (Manju, U.) Mahanti, SD (Mahanti, Subhendra D.)

PHYSICAL REVIEW B Volume102 Issue24 Article Number245120 PublishedDEC 15 2020

89. Field-driven spin reorientation in SmMnO<sub>3</sub> polycrystalline powders

Mantilla, J (Mantilla, John) Morales, M (Morales, Marco) Venceslau, W (Venceslau, Wenderson) Corredor, L (Corredor, Laura) Morais, PC (Morais, P. C.) Aragon, FFH (Aragon, Fermin F. H.) da Silva, SW (da Silva, Sebastiao William) Coaquiria, JA (Coaquiria, Jose A.) JOURNAL OF ALLOYS AND COMPOUNDS Volume845 Article Number156327 PublishedDEC 10 2020

88. Cooperative Catalysis toward Oxygen Reduction Reaction under Dual Coordination Environments on Intrinsic AMnO(3)-Type Perovskites via Regulating Stacking Configurations of Coordination Units

Zhao, CN (Zhao, Chunling) Zhang, XL (Zhang, Xilin) Yu, M (Yu, Meng) Wang, AS (Wang, Ansheng) Wang, LX (Wang, Linxia) Xue, LN (Xue, Lina) Liu, JY (Liu, Jieyu) Yang, ZX (Yang, Zongxian) Wang, WC (Wang, Weichao) ADVANCED MATERIALS Volume32 Issue50 Article Number2006145 PublishedDEC 2020

87. One-Step Integrated Comodification to Improve the Electrochemical Performances of High-Voltage LiCoO<sub>2</sub> for Lithium-Ion Batteries Gu, R (Gu, Run) Qlan, RC (Qlan, Ruicheng) Lyu, YC (Lyu, Yingchun) Guo, BK (Guo, Bingkun)

ACS SUSTAINABLE CHEMISTRY & ENGINEERING Volume8 Issue25 Page9346-9355 PublishedJUN 29 2020

86. Influence of trivalent lanthanides substitution on the thermoelectric properties of nanostructured Ca<sub>1-x</sub>Ln(3+)(x)MnO<sub>3</sub>-delta (Ln(3+) = Sm, Ce, La; x=0, 0.1)

Mary, SB (Mary, S. Berbeth) Rajesh, AL (Rajesh, A. Leo) JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume31 Issue8 Page6479-6487 PublishedAPR 2020

85. Temperature dependent X-ray diffraction and Raman spectroscopy studies of polycrystalline YCrO<sub>3</sub> ceramics across the T-C similar to 460 K

Mall, AK (Mall, Ashish Kumar) Paul, B (Paul, Barnita) Garg, A (Garg, Ashish) Gupta, R (Gupta, Rajeev) JOURNAL OF RAMAN SPECTROSCOPY Volume51 Issue3 Page537-545 PublishedMAR 2020

84. One-Step Integrated Comodification to Improve the Electrochemical Performances of High-Voltage LiCoO<sub>2</sub> for Lithium-Ion Batteries Gu, R (Gu, Run) Qlan, RC (Qlan, Ruicheng) Lyu, YC (Lyu, Yingchun) Guo, BK (Guo, Bingkun)

ACS SUSTAINABLE CHEMISTRY & ENGINEERING Volume8 Issue25 Page9346-9355 PublishedJUN 29 2020

83. Influence of Mn doping on dielectric properties, conduction mechanism and photocatalytic nature of gadolinium-based orthochromites Qahtan, AAA (Qahtan, Aref A. A.) Husain, S (Husain, Shahid) Somvanshi, A (Somvanshi, Anand) Khan, W (Khan, Wasi) Manea, YK (Manea, Yahya K.)

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume31 Issue12 Page9335-9351 PublishedJUN 2020

82. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose

Hoang, NN (Nam Nhat Hoang) Pham, DHY (Duc Huyen Yen Pham) Nguyen, TN (The Nghia Nguyen)

SCIENTIFIC REPORTS Volume9 Article Number19204 PublishedDEC 16 2019

81. Enhanced thermoelectric property of nanostructured CaMnO<sub>3</sub> by sol-gel hydrothermal method

Mary, SB (Mary, S. Berbeth) Francis, M (Francis, M.) Sathe, VG (Sathe, V. G.) Ganeshan, V (Ganeshan, V) Rajesh, AL (Rajesh, A. Leo) PHYSICA B-CONDENSED MATTER Volume575 Article Number411707 PublishedDEC 15 2019

80. Optical Study of the Electronic Structure and Lattice Dynamics of NdBaMn<sub>2</sub>O<sub>6</sub> Single Crystals

Mero, RD (Mero, Rea Divina) Ogawa, K (Ogawa, Kirari) Yamada, S (Yamada, Shigeki) Liu, HL (Liu, Hsiang-Lin) SCIENTIFIC REPORTS Volume9 Article Number18164 PublishedDEC 3 2019

79. Evidence for ferromagnetic clusters at room temperature in Dy and Mn site co-substituted compounds: Dy<sub>0.55</sub>Sr<sub>0.45</sub>Mn<sub>1-x</sub>FexO<sub>3</sub>

Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)

JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page411-417 PublishedJUL 5 2019

78. Structural and electrochemical properties of B-site Ru-doped (La<sub>0.8</sub>Sr<sub>0.2</sub>)(0.9)Sc<sub>0.2</sub>Mn<sub>0.8</sub>O<sub>3</sub>-delta as symmetrical electrodes for reversible solid oxide cells

Zhou, J (Zhou, Jun) Wang, N (Wang, Ning) Cui, JJ (Cui, Jiajia) Wang, JK (Wang, Junkai) Yang, JM (Yang, Jiaming) Zong, Z (Zong, Zheng) Zhang, ZH (Zhang, Zihang) Chen, QC (Chen, Qianchang) Zheng, XC (Zheng, Xinchi) Wu, K (Wu, Kai) JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page1132-1140 PublishedJUL 5 2019

77. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy

Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)

PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019

76. Phase separation and local lattice distortions analysis of charge-ordered manganese films La<sub>1-x</sub>CaxMnO<sub>3</sub>-delta by Raman spectroscopy

Trotsenko, VG (Trotsenko, V. G.) Lahmar, A (Lahmar, A.) Lyanguzov, NV (Lianguzov, N. V.) El Marssi, M (El Marssi, M.) Torgashev, VI (Torgashev, V. I.)

SUPERLATTICES AND MICROSTRUCTURES Volume127 Page100-108 PublishedMAR 2019

75. Ion-beam-induced ferromagnetism in Ca-doped LaMnO<sub>3</sub> thin films grown on Si (100)

Sultan, K., Aarif ul Islam, S., Habib, Z., Ikram, M., Asokan, K.

Radiation Effects and Defects in Solids 173(3-4), pp. 184-197 (2018)

74. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates;  $\text{RCrO}_3$  ( $\text{R} = \text{La, Nd, Eu, Gd, Dy, and Y}$ )  
 Singh, KD (Singh, Kapil Dev) Pandit, R (Pandit, Rabia) Kumar, R (Kumar, Ravi)  
 SOLID STATE SCIENCES Volume85 Page70-75 PublishedNOV 2018
73. Ion-beam-induced ferromagnetism in Ca-doped  $\text{LaMnO}_3$  thin films grown on Si (100)  
 Sultan, K (Sultan, Khalid) ul Islam, SA (ul Islam, Shah Aarif) Habib, Z (Habib, Zubida) Ikram, M (Ikram, M.) Asokan, K (Asokan, K.)  
 RADIATION EFFECTS AND DEFECTS IN SOLIDS Volume173 Issue3-4 Page184-197 Published2018
72. Analysis of Zn substitution on structure, optical absorption, magnetization, and high temperature specific heat anomaly of the nanocrystalline  $\text{LaFeO}_3$   
 Manzoor, S (Manzoor, Samiya) Husain, S (Husain, Shahid)  
 JOURNAL OF APPLIED PHYSICS Volume124 Issue6 Article Number065110 PublishedAUG 14 2018
71. Observation of transient lattice disorder at the onset of multiferroic ordering in  $\text{Eu}_{1-x}\text{Ho}_x\text{MnO}_3$  by Raman spectroscopy  
 Elsaesser, S (Elsaesser, S.) Mukhin, AA (Mukhin, A. A.) Balbashov, AM (Balbashov, A. M.) Geurts, J (Geurts, J.)  
 PHYSICAL REVIEW B Volume97 Issue22 Article Number224307 PublishedJUN 25 2018
70. Hole doping effect on structure, transport and magnetic properties of  $\text{Dy}_{1-x}\text{Ba}_x\text{MnO}_3$  ( $0 \leq x \leq 1$ )  
 Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume744 Page82-89 PublishedMAY 5 2018
69. Fabrication of Ca-Mn-Nb-O compounds and their structural, electrical, magnetic and thermoelectric properties  
 Oz, E (Oz, E.) Demirel, S (Demirel, S.) Altin, S (Altin, S.) Altın, E (Altin, E.) Baglayan, O (Baglayan, O.) Bayri, A (Bayri, A.) Avci, S (Avci, S.)  
 MATERIALS RESEARCH EXPRESS Volume5 Issue3 Article Number036304 PublishedMAR 2018
68. Modification of low temperature magnetic interactions in  $\text{Dy}_{1-x}\text{Eu}_x\text{MnO}_3$   
 Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Sharma, S (Sharma, Shilpam) Satya, AT (Satya, A. T.)  
 RSC ADVANCES Volume8 Issue24 Page13537-13545 Published2018
67. Tailoring the bandgap and magnetic properties by bismuth substitution in neodymium chromite  
 Mannepalli, VR (Mannepalli, Venkateswara Rao) Mohan, MMS (Mohan, M. M. Saj) Ranjith, R (Ranjith, R.)  
 BULLETIN OF MATERIALS SCIENCE Volume40 Issue7 Page1503-1511 PublishedDEC 2017
66. Ben Khalfa, H.; M'nassri, R.; Cheikhrouhou-Koubaa, W.; et al.  
 Structural characterization and magnetic field dependence of the magnetocaloric properties in  $\text{Pr}_{0.8}\text{Na}_{0.05}\text{K}_{0.15}\text{MnO}_3$  ceramic  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 439 Pages: 148-155 Published: OCT 1 2017
65. Kumar, Shiv; Dwivedi, G. D.; Joshi, Amish G.; et al.  
 Study of structural, dielectric, optical properties and electronic structure of Cr-doped  $\text{LaInO}_3$  perovskite nanoparticles  
 MATERIALS CHARACTERIZATION Volume: 131 Pages: 108-115 Published: SEP 2017
64. Mannepalli, Venkateswara Rao; Raghunathan, Rajamani; Ramadurai, Ranjith; et al.  
 Local structural distortion and interrelated phonon mode studies in yttrium chromite  
 JOURNAL OF MATERIALS RESEARCH Volume: 32 Issue: 8 Pages: 1541-1547 Published: APR 2017
63. Yadagiri, K.; Nithya, R.; Shukla, Neeraj; et al.  
 Role of trivalent bismuth ion substitution at Dy site on the physical properties of  $\text{DyMnO}_3$   
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 695 Pages: 2959-2964 Published: FEB 25 2017
62. Bhat, M.A., Modi, A., Tarachand, Bhattacharya, S., Gaur, N.K., Okram, G.S.  
 Impact of silver substitution on the magnetotransport and thermal behavior of polycrystalline  $\text{Sm}_{0.55}\text{Sr}_{0.45-x}\text{Ag}_x\text{MnO}_3$  ( $x=0$  & 0.15) manganites  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 691 Pages: 230-238 DOI: 10.1016/j.jallcom.2016.08.222 Published: JAN 15 2017
61. Praveena, K., Bharathi, P., Liu, H.-L., Varma, K.B.R.  
 Structural, multiferroic properties and enhanced magnetoelectric coupling in  $\text{Sm}_{1-x}\text{Ca}_x\text{FeO}_3$   
 CERAMICS INTERNATIONAL Volume: 42 Issue: 12 Pages: 13572-13585 DOI: 10.1016/j.ceramint.2016.05.150 Published: SEP 2016
60. Mishra, S.K., Gupta, M.K., Mittal, R., Kolesnikov, A.I., Chaplot, S.L.  
 Spin-phonon coupling and high-pressure phase transitions of  $\text{RMnO}_3$  ( $\text{R} = \text{Ca and Pr}$ ): An inelastic neutron scattering and first-principles study  
 PHYSICAL REVIEW B Volume: 93 Issue: 21 Article Number: 214306 DOI: 10.1103/PhysRevB.93.214306 Published: JUN 22 2016
59. Elsässer, S., Geurts, J., Mukhin, A.A., Balbashov, A.M.  
 Lattice dynamics and spin-phonon coupling in orthorhombic  $\text{Eu}_{1-x}\text{Ho}_x\text{MnO}_3$  ( $x \leq 0.3$ ) studied by Raman spectroscopy  
 PHYSICAL REVIEW B Volume: 93 Issue: 5 Article Number: 054301 DOI: 10.1103/PhysRevB.93.054301 Published: FEB 4 2016
58. Karchev, N (Karchev, Naoum)  
 Leggett's modes in magnetic systems with Jahn-Teller distortion  
 ANNALS OF PHYSICS Volume: 363 Pages: 371-384 DOI: 10.1016/j.aop.2015.10.008 Published: DEC 2015
57. Singh, Brajendra  
 Room temperature large positive and negative magnetocapacitance in  $\text{CaMn}_{0.95}\text{Fe}_{0.05}\text{O}_3$ -delta

56. Modi, Anchit; Gaur, N. K

Structural, electrical and magnetic phase evolution of Cr substituted  $\text{GdMn}_{1-x}\text{Cr}_x\text{O}_3$  ( $0 \leq x \leq 0.2$ ) manganites  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 644 Pages: 575-581 Published: SEP 25 2015

55. Euler, C.; Holuj, P.; Talkenberger, A.; et al.

Magnetic field dependent thermal conductance in  $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 381 Pages: 188-193 Published: MAY 1 2015

54. Goian, V.; Kamba, S.; Borodavka, F.; et al.

The manifestation of spin-phonon coupling in  $\text{CaMnO}_3$

JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 16 Article Number: 164103 Published: APR 28 2015

53. Sultan, Khalid; Ikram, M.; Gautam, Sanjeev; et al.

Electrical and magnetic properties of the pulsed laser deposited Ca doped  $\text{LaMnO}_3$  thin films on Si (100) and their electronic structures  
RSC ADVANCES Volume: 5 Issue: 85 Pages: 69075-69085 Published: 2015

52. Singh, Brajendra

Structural, transport, magnetic and magnetoelectric properties of  $\text{CaMn}_{1-x}\text{Fe}_x\text{O}_3$ -delta ( $0.0 \leq x \leq 0.4$ )

RSC ADVANCES Volume: 5 Issue: 50 Pages: 39938-39945 Published: 2015

51. Gupta, Preeti; Poddar, Pankaj

Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in  $\text{DyCrO}_3$  nanoplatelets

RSC ADVANCES Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015

50. Sood, Kapil; Singh, K.; Pandey, O. P.

Co-existence of cubic and orthorhombic phases in Ba-doped  $\text{LaInO}_3$  and their effect on conductivity

PHYSICA B-CONDENSED MATTER Volume: 456 Pages: 250-257 Published: JAN 1 2015

49. Cai, Xuan; Shi, Lei; Zhou, Shiming; et al.

Size-dependent structure and magnetic properties of  $\text{DyMnO}_3$  nanoparticles

JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 10 Article Number: 103903 Published: SEP 14 2014

48. Garcia-Saiz, Abel; de Pedro, Imanol; Migowski, Pedro; et al.

Anion-pi and Halide-Halide Nonbonding Interactions in a New Ionic Liquid Based on Imidazolium Cation with Three-Dimensional

Magnetic Ordering in the Solid State

INORGANIC CHEMISTRY 53 (16), pp. 8384-8396 AUG 18 2014

47. Muneeswaran, M.; Giridharan, N. V.

Effect of Dy-substitution on the structural, vibrational, and multiferroic properties of  $\text{BiFeO}_3$  nanoparticles

JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 214109 JUN 7 2014

46. Anokhin, A. S.; Bunina, O. A.; Golovko, Yu I.; et al.

Raman and X-ray diffraction study of  $(\text{Ba},\text{Sr})\text{TiO}_3/(\text{Bi},\text{Nd})\text{FeO}_3$  multilayer heterostructures

THIN SOLID FILMS 545, pp. 267-271 OCT 31 2013

45. Belik, Alexei A.; Matsushita, Yoshitaka; Tanaka, Masahiko; et al.

High-Pressure Synthesis, Crystal Structures, and Properties of  $\text{ScRhO}_3$  and  $\text{InRhO}_3$  Perovskites

INORGANIC CHEMISTRY 52 (20), pp. 12005-12011 OCT 21 2013

44. Kozlenko, D. P.; Dang, N. T.; Kichanov, S. E.; et al.

Pressure-induced structural transformations, orbital order and antiferromagnetism in  $\text{La}_{0.75}\text{Ca}_{0.25}\text{MnO}_3$

EUROPEAN PHYSICAL JOURNAL B 86 (8), 360, AUG 2013

43. Tiwari, Brajesh; Surendra, M. Krishna; Rao, M. S. Ramachandra

$\text{HoCrO}_3$  and  $\text{YCrO}_3$ : a comparative study

JOURNAL OF PHYSICS-CONDENSED MATTER 25 (21), 216004, MAY 29 2013

42. Kumar, A.; Shahi, P.; Kumar, S.; et al.

Raman effect and magnetic properties of doped  $\text{TbMnO}_3$

JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (12), 125001, MAR 27 2013

41. Anokhin, A.S., Bunina, O.A., Golovko, Yu.I., Mukhortov, V.M., Yuzyuk, Yu.I., Simon, P.

Raman and X-ray diffraction study of  $(\text{Ba},\text{Sr})\text{TiO}_3/(\text{Bi},\text{Nd})\text{FeO}_3$  multilayer heterostructures

Thin Solid Films 545, pp. 267-271, 2013

40. Dang, N.T., Kozlenko, D.P., Kichanov, S.E., Dubrovinsky, L.S., Jirák, Z., Levin, D.M., Lukin, E.V., Savenko, B.N.

Structural and magnetic phase transitions occurring in  $\text{Pr}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$  manganite at high pressures

JETP Letters 97 (9), pp. 540-545, 2013

39. Pham, D.H.Y., Nguyen, D.T., Pham, D.T., Hoang, N.N., Pham, T.T.

Optical spectra of the colloidal Fe-doped manganate  $\text{CaMn}_{1-x}\text{Fe}_x\text{O}_3$  ( $x = 0, 0.01, 0.03, 0.05$ )

Journal of the Korean Physical Society 62 (12), pp. 2133-2138, 2013

38. Yi, W., Liang, Q., Matsushita, Y., Tanaka, M., Hu, X., Belik, A.A.

Crystal structure and properties of high-pressure-synthesized BiRhO<sub>3</sub>, LuRhO<sub>3</sub>, and NdRhO<sub>3</sub>  
Journal of Solid State Chemistry 200, pp. 271-278, 2013

37. Jativa, J.; Jurado, J. F.; Vargas-Hernandez, C.

Hydrothermal synthesis, magnetic susceptibility, electrical transport and vibrational order of the polycrystalline structure  
La0.5Ba0.5MnO<sub>3</sub>  
REVISTA MEXICANA DE FISICA 58 (2) Suppl. S, 19-23, DEC 2012

36. Bielecki, J., Svedlindh, P., Tibebu, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S.

Structural and magnetic properties of isovalently substituted multiferroic BiFeO<sub>3</sub>: Insights from Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012

35. Stanislavchuk, T.N., Sirenko, A.A., Litvinchuk, A.P., Luo, X., Cheong, S.-W.

Electronic band structure and optical phonons of BaSnO<sub>3</sub> and Ba 0.97La 0.03SnO<sub>3</sub> single crystals: Theory and experiment  
Journal of Applied Physics 112 (4), art. no. 044108, 2012

34. Álvarez-Serrano, I., López, M.L., Rubio, F., García-Hernández, M., Cuello, G.J., Pico, C., Luisa Veiga, M.

Non-symmetric superparamagnetic clusters in the relaxor manganites Sr<sub>2-x</sub>BixMnTiO<sub>6</sub> ( $0 \leq x \leq 0.75$ )  
Journal of Materials Chemistry 22 (23), pp. 11826-11835, 2012.

33. Runka, T., Berkowski, M.

Perovskite La 1-xSr xGa 1-yMn yO<sub>3</sub> solid solution crystals: Raman spectroscopy characterization  
Journal of Materials Science 47 (14), pp. 5393-5401, 2012.

32. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V.

Nanocomposite Structure and Reactivity of Perovskites Based on Lanthanum Manganites  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A 86 (4), 606-620, APR 2012.

31. Kozlenko, D.P., Chan, T.A., Trukhanov, A.V., Kichanov, S.E., Trukhanov, S.V., Dubrovinsky, L.S., Savenko, B.N.

Effect of high pressure on the crystal and magnetic structure and on the Raman spectra in Pr0.7Ba0.3MnO<sub>3</sub>  
JETP Letters 94 (7), 579-584, 2011.

30. Chopelas, A.

Single-crystal Raman spectra of YAIO<sub>3</sub> and GdAlO<sub>3</sub>: Comparison to several orthorhombic ABO<sub>3</sub> perovskites  
Physics and Chemistry of Minerals 38 (9), pp. 709-726, 2011.

29. Hirai, S., Kojima, Y., Ohfuchi, H., Nishiyama, N., Irfune, T., Klemme, S., Bromiley, G., Attfield, J.P.

High-pressure Raman studies and heat capacity measurements on the MgSiO(3) analogue CaIr(0.5)Pt(0.5)O(3)  
PHYSICS AND CHEMISTRY OF MINERALS 38 (8) Pages: 631-637, SEP 2011.

28. Antonakos, A., Liarokapis, E., Aydogdu, G.H., Habermeier, H.-U.

Strain induced phase separation on La(0.5)Ca(0.5)MnO(3) thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.

27. Kozlenko, D.P., Chan, T.A., Kichanov, S.E., Jirák, Z., Dubrovinsky, L.S., Savenko, B.N.

Structural and magnetic phase transitions in Pr(0.7)Ca(0.3)MnO(3) at high pressures  
JETP LETTERS 92 (9) Pages: 590-594, Published: JAN 2011.

26. Guennou, M., Bouvier, P., Krikler, B., Kreisel, J., Haumont, R., Garbarino, G.

High-pressure investigation of CaTiO(3) up to 60 GPa using x-ray diffraction and Raman spectroscopy  
PHYSICAL REVIEW B 82 (13) Article Number: 134101, OCT 4 2010.

25. Rout G. C.; Panda Saswati; Behera S. N.

Theoretical study of the Raman active CDW gap mode in manganites  
JOURNAL OF PHYSICS-CONDENSED MATTER 22 (37) Article Number: 376003, SEP 22 2010.

24. Liu Ying-Xin; Qin Shan; Jiang Jian-Zhong; et al.

High pressure X-ray diffraction study of CaMnO(3) perovskite  
CHINESE PHYSICS C 34 (7) Pages: 1025-1028, JUL 2010.

23. Paszkowicz, W., Pietosa, J., Woodley, S.M., Dłuzewski, P.A., Kozłowski, M., Martin, C.

Lattice parameters and orthorhombic distortion of CaMnO<sub>3</sub>  
Powder Diffraction 25 (1), art. no. 013001PDJ, pp. 46-59 (2010).

22. Sopracase, R., Gruener, G., Olive, E., Soret, J.-C.

Infrared study of the phonon modes in PrMnO<sub>3</sub> and CaMnO<sub>3</sub>  
Physica B: Condensed Matter 405 (1), pp. 45-52 (2010).

21. Lampakis, D., Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W.

Pressure induced insulator-metal phase transition on Pr0.6Ca0.4MnO<sub>3</sub> thin films  
Journal of Physics Conference Series Volume: 121 Article Number: 052002 DOI: 10.1088/1742-6596/121/5/052002 Published: 2008

20. Antonakos, A., Palles, D., Liarokapis, E., Filippi, M., Prellier, W.

Evaluation of the strains in charge-ordered Pr<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub> thin films using Raman spectroscopy  
Journal of Applied Physics 104 (6), art. no. 063508 (2008).

19. Bhattacharjee, S., Bousquet, E., Ghosez, P.  
First-principles study of the dielectric and dynamical properties of orthorhombic CaMnO<sub>3</sub>  
Journal of Physics Condensed Matter 20 (25), art. no. 255229 (2008).
18. Kim, M., Barath, H., Cooper, S.L., Abbamonte, P., Fradkin, E., Rübhausen, M., Zhang, C.L., Cheong, S.-W.  
Raman scattering studies of the temperature- and field-induced melting of charge order in LaxPryCa1-x-yMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 77 (13), art. no. 134411 (2008).
17. Buch, J.J.U., Lalitha, G., Pathak, T.K., Vasoya, N.H., Lakhani, V.K., Reddy, P.V., Kumar, R., Modi, K.B.  
Structural and elastic properties of Ca-substituted LaMnO<sub>3</sub> at 300 K  
Journal of Physics D: Applied Physics 41 (2), art. no. 025406 (2008).
16. Nikiforov, A.E., Gontchar, L.E., Popov, S.E., Kotomanov, S.V., Larin, A.V.  
Charge-ordering in La<sub>0.333</sub>Ca<sub>0.667</sub>MnO<sub>3</sub>  
Physica Status Solidi (C) Current Topics in Solid State Physics 4 (3), pp. 1222-1225 (2007).
15. Chan TS, Liu RS, Yang CC, et al.  
Chemical size effect on the magnetic and electrical properties in the (Tb<sub>1-x</sub>Eux)MnO<sub>3</sub> (0 <= x <= 1.0) System  
JOURNAL OF PHYSICAL CHEMISTRY B 111 (9), pp.2262-2267 (2007).
14. Andreasson J, Holmlund J, Knee CS, et al.  
Franck-Condon higher order lattice excitations in the LaFe<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> (x=0, 0.1, 0.5, 0.9, 1.0) perovskites due to Fe-Cr charge transfer effects  
PHYSICAL REVIEW B 75 (10) Art. No. 103402 (2007).
13. Chan TS, Liu RS, Yang CC, et al.  
Influence of oxygen defects on the crystal structure and magnetic properties of the (Tb<sub>1-x</sub>Nax)MnO<sub>3-y</sub> (0 <= x <= 0.3) system  
INORGANIC CHEMISTRY 46 (11) , 4575-4582 (2007).
12. Charpentier, S., Gill-Comeau, M., Jandl, S., Fournier, P.  
Observation of charge ordering by Raman scattering in Nd 0.5Ca0.5MnO<sub>3</sub> thin films  
Journal of Physics Condensed Matter 18 (31), art. no. 014, pp. 7193-7202 (2006).
11. Jandl, S., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.  
Micro-Raman study and phase transitions of Nd0.5Ca0.5MnO<sub>3</sub>  
Journal of Physics Condensed Matter 18 (5), pp. 1667-1676 (2006).
10. Kim, J., Jung, S., Park, M.S., Lee, S.-I., Drew, H.D., Cheong, H., Kim, K.H., Choi, E.J.  
Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (5), art. no. 052406 (2006)
9. Rozenberg, G.Kh., Pasternak, M.P., Xu, W.M., Dubrovinsky, L.S., Carlson, S., Taylor, R.D.  
Consequences of pressure-instigated spin crossover in RFeO<sub>3</sub> perovskites: a volume collapse with no symmetry modification  
Europhysics Letters 71 (2), pp. 228-234 (2005)
8. Cohn, J.L., Chiorescu, C., Neumeier, J.J.  
Polaron transport in the paramagnetic phase of electron-doped manganites  
Physical Review B - Condensed Matter and Materials Physics 72 (2), art. no. 024422 (2005)
7. Ghosh, S., Kamaraju, N., Seto, M., Fujimori, A., Takeda, Y., Ishiwata, S., Kawasaki, S., Sood, A.K.  
Raman scattering in CaFeO<sub>3</sub> and La<sub>0.33</sub>Sr<sub>0.67</sub>FeO<sub>3</sub> across the charge-disproportionation phase transition  
Physical Review B - Condensed Matter and Materials Physics 71 (24), pp. 1-7 (2005)
6. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
5. Garbarino G, Acha C, Vega D, et al.  
Revealing polarons with high pressure on low electron-doped manganites  
PHYSICAL REVIEW B 70 (1): Art. No. 014414 JUL 2004
4. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study in Pr0.5Ca0.5MnO<sub>3</sub> thin films  
ACTA PHYS POL A 105 (1-2): 99-106 JAN-FEB 2004
3. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study of anharmonic effects in Pr0.5Ca0.5MnO<sub>3</sub> thin films  
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003
2. Wang ZW, Saxena SK, Neumeier JJ  
Raman scattering study on pressure-induced phase transformation of marokite (CaMn<sub>2</sub>O<sub>4</sub>)  
J SOLID STATE CHEM 170 (2): 382-389 FEB 1 2003
1. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons as a probe of disorder, fluctuations, and local structure in doped and undoped orthorhombic and rhombohedral manganites  
PHYS REV B 66 (17): Art. No. 174303 NOV 1 2002

40. "Raman spectroscopy of  $\text{CaRuO}_3$ "

N. Kolev, C. L. Chen, M. Gospodinov, R. P. Bontchev, V. N. Popov, A. P. Litvinchuk, M. V. Abrashev, V. G. Hadjiev, and M. N. Iliev  
Phys. Rev. B 66, 014101 (2002).

16. Spin-phonon coupling in epitaxial  $\text{SrRuO}_3$ (3)heterostructures

Jeong, SG (Jeong, Seung Gyo) Lim, SY (Lim, Soo Yeon) Kim, J (Kim, Jiwoong) Park, S (Park, Sungkyun) Cheong, H (Cheong, Hyeonsik) Choi, WS (Choi, Woo Seok)  
NANOSCALE Volume12 Issue26 Page13926-13932 PublishedJUL 14 2020

15. Investigation of New B-Site-Disordered Perovskite Oxide  $\text{CaLaScRuO}_{6+\delta}$ : An Efficient Oxygen Bifunctional Electrocatalyst in a Highly Alkaline Medium

Kumar, N (Kumar, Nikhil) Kumar, M (Kumar, Mukesh) Nagaiah, TC (Nagaiah, Tharamani C.) Siruguri, V (Siruguri, Vasudeva) Rayaprol, S (Rayaprol, Sudhindra) Yadav, AK (Yadav, Ashok Kumar) Jha, SN (Jha, Shambhu Nath) Bhattacharyya, D (Bhattacharyya, Dibyendu) Paul, AK (Paul, Avijit Kumar)  
ACS APPLIED MATERIALS & INTERFACES Volume12 Issue8 Page9190-9200 PublishedFEB 26 2020

14. Effect of microstructure on the electronic transport properties of epitaxial  $\text{CaRuO}_3$  thin films

Daptary, G.N., Sow, C., Sarkar, S., (...), Sil, A., Bid, A.  
Physica B: Condensed Matter 511, pp. 74-79 (2017)

13. Thakur, R., Thakur, R.K., Gaur, N.K.

Elastic and thermal properties of  $\text{Sr}_{1-x}\text{Ca}_x\text{RuO}_3$   
International Journal of Modern Physics B 27 (17), art. no. 1350054, 2013

12. Tai, T., Nishide, M., Matsuoka, M., Kamo, T., Funakubo, H., Katoda, T., Shima, H., (...), Yamamoto, T.

Investigation of sputtering damage in  $\text{SrRuO}_3$  films prepared by sputtering with raman and x-ray photoemission spectroscopies  
Japanese Journal of Applied Physics 51 (9 PART 2), art. no. 09LA19, 2012

11. Demkó, L., Bordács, S., Vojta, T., Nozadze, D., Hrahsheh, F., Svoboda, C., Dóra, B., (...), Kézsmárki, I.

Disorder promotes ferromagnetism: Rounding of the quantum phase transition in  $\text{Sr}_{1-x}\text{Ca}_x\text{RuO}_3$   
Physical Review Letters 108 (18), art. no. 185701, 2012.

10. Gat-Malureanu, I.M., Carlo, J.P., Goko, T., Fukaya, A., Ito, T., Kyriakou, P.P., Larkin, M.I., (...), Uemura, Y.J.

Muon spin relaxation and susceptibility measurements of an itinerant-electron system  $\text{Sr}_{1-x}\text{Ca}_x\text{RuO}_3$ : Quantum evolution from ferromagnet to paramagnet  
Physical Review B - Condensed Matter and Materials Physics 84 (22), art. no. 224415, 2011.

9. Chopelas, A.

Single-crystal Raman spectra of  $\text{YAlO}_3$  and  $\text{GdAlO}_3$ : Comparison to several orthorhombic  $\text{ABO}_3$  perovskites  
Physics and Chemistry of Minerals 38 (9), pp. 709-726, 2011.

8. Yun, B.K., Koo, Y.S., Jung, J.H., Song, M., Yoon, S.

Effect of hydroxyl group on global and local structures of hydrothermally grown  $\text{KNbO}_3$  nanorods  
MATERIALS CHEMISTRY AND PHYSICS 129 (3) Pages: 1071-1074, OCT 3 2011.

7. Wang, G.-T., Zhang, M.-P., Yang, Z.-X., Fang, Z.

Orbital orderings and optical conductivity of  $\text{SrRuO}_3$  and  $\text{CaRuO}_3$ : First-principles studies  
Journal of Physics Condensed Matter 21 (26), art. no. 265602 (2009).

6. Samata, H., Saeki, Y., Mizusaki, S., Nagata, Y., Ozawa, T.C., Sato, A.

Electrochemical crystal growth of perovskite ruthenates  
Journal of Crystal Growth 311 (3), pp. 623-626 (2009).

5. Maiti, K., Singh, R.S., Medicherla, V.R.R.

Observation of particle hole asymmetry and phonon excitations in non-Fermi-liquid systems: A high-resolution photoemission study of ruthenates  
Europhysics Letters 78 (1), art. no. 17002 (2007)

4. Kamal, S., Kim, D.M., Eom, C.B., Dodge, J.S.

Terahertz-frequency carrier dynamics and spectral weight redistribution in the nearly magnetic metal  $\text{CaRuO}_3$   
Physical Review B - Condensed Matter and Materials Physics 74 (16), art. no. 165115 (2006)

3. Markovich V, Auslender M, Fita I, et al.

Interplay between itinerant and localized states in  $\text{CaMn}_{1-x}\text{Ru}_x\text{O}_3$  ( $x \leq 0.5$ ) manganites  
PHYSICAL REVIEW B 73 (1): Art. No. 014416 JAN 2006

2. Tkach A, Vilarinho PM, Khoklin AL, et al.

Lattice dynamics and dielectric response of Mg-doped  $\text{SrTiO}_3$  ceramics in a wide frequency range  
JOURNAL OF APPLIED PHYSICS 97 (4): Art. No. 044104 FEB 15 2005

1. Mathieu R, Asamitsu A, Yamada H, et al.

Scaling of the anomalous Hall effect in  $\text{Sr}_{1-x}\text{Ca}_x\text{RuO}_3$

41. "Correlation between the chemical bonding and the physical properties of the CN<sub>x</sub> films obtained by pulsed laser deposition from C targets in low-pressure N<sub>2</sub>"

E. György, I. N. Mihailescu, M. Baleva, M. Abrashev, E. P. Trifonova, A. Szekeres, and A. Perrone  
Mater. Sci. Engineering B 97, 251 – 257 (2003).

6. Tsvetkova, T., Balabanov, S., Bischoff, L., Krastev, V., Stefanov, P., Avramova, I.

X-ray photoelectron study of Si+ ion implanted polymers

Journal of Physics: Conference Series 253 (1), art. no. 012070, 2010.

5. Wnuk, J.D., Gorham, J.M., Fairbrother, D.H.

Growth and microstructure of nanoscale amorphous carbon nitride films deposited by electron beam irradiation of 1, 2-diaminopropane  
Journal of Physical Chemistry C 113 (28), pp. 12345-12354 (2009).

4. Riascos, H., Zambrano, G., Camps, E., Prieto, P.

Influence of nitrogen gas pressure on plume-plasma and chemical bonding of carbon nitride films synthesized by pulsed laser deposition  
Revista Mexicana de Fisica 53 (7), pp. 274-278 (2007).

3. Yang, L., May, P.W., Yin, L., Scott, T.B., Smith, J.A., Rosser, K.N.

Growth and characterization of self-assembled carbon nitride leaf-like nanostructures

Nanotechnology 17 (23), art. no. 015, pp. 5798-5804 (2006)

2. Petrik, P., Lohner, T., Égerházi, L., Geretovszky, Zs.

Optical models for the ellipsometric characterization of carbon nitride layers prepared by inverse pulsed laser deposition  
Applied Surface Science 253 (1 SPEC. ISS.), pp. 173-176 (2006)

1. Naydenov, N., Popov, A.

Pre- and post-service microhardness measurements of electrical contacts operating at Kozloduy NPP

Materials Science and Engineering B: Solid-State Materials for Advanced Technology 132 (3), pp. 247-252 (2006)

42. "Role of Jahn-Teller disorder in Raman scattering of mixed-valence manganites"

M. N. Iliev, M. V. Abrashev, V. N. Popov, and V. G. Hadjiev

Phys. Rev. B 67, 212301 (2003).

100. Compression effect on structure of the Li-stabilized high-temperature phase of Mn-3(VO<sub>4</sub>)(2) with composition Li0.2Mn2.9(VO<sub>4</sub>)(2)  
- Raman spectroscopic and X-ray diffraction investigations

Kesari, S (Kesari, Swayam) Garg, AB (Garg, Alka B.) Clemens, O (Clemens, Oliver) Rao, R (Rao, Rekha)

JOURNAL OF ALLOYS AND COMPOUNDS Volume870 Article Number159418 PublishedJUL 25 2021

99. Structural, dielectric, and magnetic properties of LaCo0.2Mn0.8O<sub>3</sub> and La<sub>2</sub>CoMnO<sub>6</sub> perovskite materials

Yousif, NM (Yousif, N. M.) Makram, N (Makram, N.) Wahab, LA (Wahab, L. A.)

JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY Volume98 Issue1 Page238-251 PublishedAPR 2021

98. Effects of particle sizes of starting oxides on the properties of spinel-type Mn<sub>1.1</sub>Co<sub>1.5</sub>Fe<sub>0.4</sub>O<sub>4</sub> negative temperature coefficient ceramics

Wang, B (Wang, Bing) Wang, JH (Wang, Junhua) Chang, AM (Chang, Aimin) Yao, JC (Yao, Jincheng)

CERAMICS INTERNATIONAL Volume47 Issue2 Page2531-2537 PublishedJAN 15 2021

97. Surface Restructuring of Thin-Film Electrodes Based on Thermal History and Its Significance for the Catalytic Activity and Stability at the Gas/Solid and Solid/Solid Interfaces

Celikbilek, O., Cavallaro, A., Kerherve, G., (...), Kilner, J.A., Skinner, S.J.

ACS Applied Materials and Interfaces 12(30), pp. 34388-34401 (2020)

96. Role of Ni substitution on structural, magnetic and electronic properties of epitaxial CoCr<sub>2</sub>O<sub>4</sub> spinel thin films

Mohanty, P., Chowdhury, S., Choudhary, R.J., (...), Prinsloo, A.R.E., Sheppard, C.J.

Nanotechnology 31(28),285708 (2020)

95. Site substitution in GdMnO<sub>3</sub>: Effects on structural, electronic, and magnetic properties

Mahana, S (Mahana, Sudipta) Pandey, SK (Pandey, Shishir Kumar) Rakshit, B (Rakshit, Bipul) Nandi, P (Nandi, Pronoy) Basu, R (Basu, Rakmita) Dhara, S (Dhara, Sandip) Turchini, S (Turchini, S.) Zema, N (Zema, N.) Manju, U (Manju, U.) Mahanti, SD (Mahanti, Subhendra D.)

PHYSICAL REVIEW B Volume102 Issue24 Article Number245120 PublishedDEC 15 2020

94. Anomalous magnetism in Al doped La<sub>2</sub>CoMnO<sub>6</sub> ceramics

Xin, Y (Xin, Yang) Shi, L (Shi, Lei) Zhao, JY (Zhao, Jiyin) Yuan, XY (Yuan, Xueyou) Zhou, SM (Zhou, Shiming) Hou, L (Hou, Li)

Tong, RX (Tong, Ruixue)

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume510 Article Number166950 PublishedSEP 15 2020

93. Valence-induced distortion controls the resistivity and thermal stability of Co<sub>2.77</sub>Mn<sub>1.71</sub>Fe<sub>1.10</sub>Zn<sub>0.42</sub>O<sub>8</sub> ceramics

Wang, B (Wang, Bing) Yao, JC (Yao, Jincheng) Wang, JH (Wang, Junhua) Chang, AM (Chang, Aimin)

MATERIALS & DESIGN Volume192 Article Number108736 PublishedAUG 2020

92. Surface Conditions That Constrain Alkane Oxidation on Perovskites  
 Koch, G (Koch, Gregor) Havecker, M (Haevecker, Michael) Teschner, D (Teschner, Detre) Carey, SJ (Carey, Spencer J.) Wang, YQ (Wang, Yuanqing) Kube, P (Kube, Pierre) Hetaba, W (Hetaba, Walid) Lunkenbein, T (Lunkenbein, Thomas) Auffermann, G (Auffermann, Gudrun) Timpe, O (Timpe, Olaf)  
 ACS CATALYSIS Volume10 Issue13 Page7007-7020 PublishedJUL 2 2020
91. Structural-distortion modes and transport properties of La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> by co-doping Dy<sup>3+</sup> and Sr<sup>2+</sup> ions  
 Tang, YF (Tang, Y. F.) Zhang, AM (Zhang, A. M.) Shi, JY (Shi, J. Y.) Wu, XS (Wu, X. S.)  
 CERAMICS INTERNATIONAL Volume46 Issue8 Page10598-10602 PartA PublishedJUN 1 2020
90. Backfolded acoustic phonons as ultrasonic probes in metal-oxide superlattices  
 Lyzwa, F (Lyzwa, F.) Chan, A (Chan, A.) Khmaladze, J (Khmaladze, J.) Fursich, K (Fuersich, K.) Keimer, B (Keimer, B.) Bernhard, C (Bernhard, C.) Minola, M (Minola, M.) Mallett, BPP (Mallett, B. P. P.)  
 PHYSICAL REVIEW MATERIALS Volume4 Issue4 Article Number043606 PublishedAPR 28 2020
89. Role of Ni substitution on structural, magnetic and electronic properties of epitaxial CoCr<sub>2</sub>O<sub>4</sub> spinel thin films  
 Mohanty, P (Mohanty, P.) Chowdhury, S (Chowdhury, S.) Choudhary, RJ (Choudhary, R. J.) Gome, A (Gome, A.) Reddy, VR (Reddy, V. R.) Umapathy, GR (Umapathy, G. R.) Ojha, S (Ojha, S.) Carleschi, E (Carleschi, E.) Doyle, BP (Doyle, B. P.) Prinsloo, ARE (Prinsloo, A. R. E.)  
 NANOTECHNOLOGY Volume31 Issue28 Article Number285708 PublishedAPR 24 2020
88. Influence of trivalent lanthanides substitution on the thermoelectric properties of nanostructured Ca<sub>1-x</sub>Ln(3+)(x)MnO<sub>3-delta</sub> (Ln(3+) = Sm, Ce, La; x=0, 0.1)  
 Mary, SB (Mary, S. Berbeth) Rajesh, AL (Rajesh, A. Leo)  
 JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume31 Issue8 Page6479-6487 PublishedAPR 2020
87. Structural, optical and magneto-electric coupling analysis in 'Y' doped double perovskite La<sub>2</sub>NiMnO<sub>6</sub> nanoparticles  
 Kumar, M (Kumar, Manish) Prajapati, B (Prajapati, Brijmohan) Singh, A (Singh, Abhishek) Kumar, S (Kumar, Shiv) Kumar, A (Kumar, Arvind) Mittal, S (Mittal, Srishti) Aditya (Aditya)  
 CHEMICAL PHYSICS Volume532 Article Number110688 PublishedAPR 1 2020
86. Microstructure and electrical transport mechanisms of the Ca-doped LaMnO<sub>3</sub> films grown on MgO substrate  
 Daoudi, K (Daoudi, Kais) El-Helali, S (El-Helali, S.) Othmen, Z (Othmen, Z.) Suleiman, BM (Suleiman, B. M.) Tsuchiya, T (Tsuchiya, T.)  
 JOURNAL OF MATERIOMICS Volume6 Issue1 Page17-23 PublishedMAR 2020
85. Monitoring intermediate species formation by DRIFT during the simultaneous removal of soot and NO<sub>x</sub> over LaAgMnO<sub>3</sub> catalyst  
 Urán, L., Gallego, J., Ruiz, W., (...), Bueno-López, A., Santamaría, A.  
 Applied Catalysis A: General 588,117280 (2019)
84. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose  
 Hoang, NN (Nam Nhat Hoang) Pham, DHY (Duc Huyen Yen Pham) Nguyen, TN (The Nghia Nguyen)  
 SCIENTIFIC REPORTS Volume9 Article Number19204 PublishedDEC 16 2019
83. Optical Study of the Electronic Structure and Lattice Dynamics of NdBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
 Mero, RD (Mero, Rea Divina) Ogawa, K (Ogawa, Kirari) Yamada, S (Yamada, Shigeki) Liu, HL (Liu, Hsiang-Lin)  
 SCIENTIFIC REPORTS Volume9 Article Number18164 PublishedDEC 3 2019
82. Probing the Subtle Magnetic Transitions with Raman Spectroscopy in a Bi-layered La<sub>1.15</sub>Sr<sub>1.85</sub>Mn<sub>2</sub>O<sub>7</sub> Single Crystal  
 Egilmez, M (Egilmez, M.) Hamdan, NM (Hamdan, N. M.) Alawadhi, H (Alawadhi, H.) AlGhabra, MS (AlGhabra, M. S.) Prabhakarian, D (Prabhakarian, D.)  
 JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume32 Issue12 Page3939-3945 PublishedDEC 2019
81. Polaronic Emergent Phases in Manganite-Based Heterostructures  
 Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)  
 CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019
80. Evidence for ferromagnetic clusters at room temperature in Dy and Mn site co-substituted compounds: Dy<sub>0.55</sub>Sr<sub>0.45</sub>Mn<sub>1-x</sub>FexO<sub>3</sub>  
 Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page411-417 PublishedJUL 5 2019
79. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy  
 Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)  
 PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019
78. Mechanosynthesis of the Whole Y<sub>1-x</sub>BixMn<sub>1-x</sub>FexO<sub>3</sub> Perovskite System: Structural Characterization and Study of Phase Transitions  
 Quintana-Cilleruelo, JA (Angel Quintana-Cilleruelo, Jose) Veerapandian, VK (Veerapandian, Vignaswaran K.) Deluca, M (Deluca, Marco) Alguelo, M (Alguelo, Miguel) Castro, A (Castro, Alicia)  
 MATERIALS Volume12 Issue9 Article Number1515 PublishedMAY 1 2019
77. Magnetic-Field-Induced Suppression of Jahn-Teller Phonon Bands in (La<sub>0.6</sub>Pr<sub>0.4</sub>)(0.7)Ca<sub>0.3</sub>MnO<sub>3</sub>: the Mechanism of Colossal Magnetoresistance shown by Raman Spectroscopy  
 Merten, S (Merten, S.) Shapoval, O (Shapoval, O.) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)  
 SCIENTIFIC REPORTS Volume9 Article Number2387 PublishedFEB 20 2019

76. Integration of LaMnO<sub>3</sub>+delta films on platinized silicon substrates for resistive switching applications by PI-MOCVD  
 Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Plat, D (Plat, Dolors) Chaix-Pluchery, O (Chaix-Pluchery, Odette) Meunier, B (Meunier, Benjamin) Wilhelm, F (Wilhelm, Fabrice) Rogalev, A (Rogalev, Andrei) Rapenne, L (Rapenne, Laetitia) Mescot, X (Mescot, Xavier) Rafhay, Q (Rafhay, Quentin) Roussel, H (Roussel, Herve)  
**BEILSTEIN JOURNAL OF NANOTECHNOLOGY** Volume10 Page389-398 PublishedFEB 7 2019
75. Surface reconstructions and modified surface states in La<sub>1-x</sub>CaxMnO<sub>3</sub>  
 Vasudevan, RK (Vasudevan, Rama K.) Dixit, H (Dixit, Hemant) Tselev, A (Tselev, Alexander) Qiao, L (Qiao, Liang) Meyer, TL (Meyer, Tricia L.) Cooper, VR (Cooper, Valentino R.) Baddorf, AP (Baddorf, Arthur P.) Lee, HN (Lee, Ho Nyung) Ganesh, P (Ganesh, P.) Kalinin, SV (Kalinin, Sergei, V)  
**PHYSICAL REVIEW MATERIALS** Volume2 Issue10 Article Number104418 PublishedOCT 31 2018
74. First principles investigation of electronic and optical properties of AgAlO<sub>2</sub>  
 Rizwan, M (Rizwan, Muhammad) Haider, I (Haider, Imran) Mahmood, T (Mahmood, Tariq) Shakil, M (Shakil, Muhammad) ul Hassan, M (ul Hassan, Mahmood) Jin, HB (Jin, Hai-Bo) Bao, CC (Bao, Cao Chuan)  
**CHINESE JOURNAL OF PHYSICS** Volume56 Issue5 Page2186-2190 PublishedOCT 2018
73. Effects of A-site cation disordering on the transport properties of half-doping La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> manganites  
 Shi, JY (Shi, J. Y.) Zhang, AM (Zhang, A. M.) Wang, WX (Wang, W. X.) Cui, JY (Cui, J. Y.) Zhang, WJ (Zhang, W. J.) Wu, XS (Wu, X. S.)  
**CHEMICAL PHYSICS LETTERS** Volume706 Page223-227 PublishedAUG 16 2018
72. Hole doping effect on structure, transport and magnetic properties of Dy<sub>1-x</sub>BaxMnO<sub>3</sub> (0 <= x <= 1)  
 Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
**JOURNAL OF ALLOYS AND COMPOUNDS** Volume744 Page82-89 PublishedMAY 5 2018
71. Effect of Annealing Temperature on the Structural and the Electrical Transport Properties of La<sub>2</sub>NiMnO<sub>6</sub> Nanoparticles  
 Chakraborty, D (Chakraborty, Deblina) Nandi, U (Nandi, Upendranath) Dey, AK (Dey, Animesh Kumar) Dasgupta, P (Dasgupta, Papri) Poddar, A (Poddar, Asok) Jana, D (Jana, Debnarayan)  
**PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS** Volume255 Issue4 Article Number1700436 PublishedAPR 2018
70. Superconductor sandwiches: cuprate-manganite multilayers with a remarkable new ground state  
 Mallett, BPP (Mallett, B. P. P.) Marsik, P (Marsik, P.) Khmaladze, J (Khmaladze, J.) Arul, R (Arul, R.) Minola, M (Minola, M.) Simpson, MC (Simpson, M. C.) Bernhard, C (Bernhard, C.)  
**OXIDE-BASED MATERIALS AND DEVICES IX Book SeriesProceedings of SPIE** Volume10533 Article NumberUNSP 105330Y Published2018
69. Modification of low temperature magnetic interactions in Dy<sub>1-x</sub>EuxMnO<sub>3</sub>  
 Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Sharma, S (Sharma, Shilpam) Satya, AT (Satya, A. T.)  
**RSC ADVANCES** Volume8 Issue24 Page13537-13545 Published2018
68. Structural, thermal, and transport properties of La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub> nanoparticles synthesized via the sol-gel auto-combustion technique  
 Saleem, M (Saleem, M.) Varshney, D (Varshney, Dinesh)  
**RSC ADVANCES** Volume8 Issue3 Page1600-1609 Published2018
67. Defective and "c-Disordered" Hortensia-like Layered MnO<sub>x</sub> as an Efficient Electrocatalyst for Water Oxidation at Neutral pH  
 Zhang, B., Chen, H., Daniel, Q., (...), Rensmo, H., Sun, L.  
**ACS Catalysis** 7(9), pp. 6311-6322 (2017)
66. Manifestation of quantum rotor orbital excitations in Raman spectra of Jahn-Teller crystal LaMnO<sub>3</sub>  
 Kovaleva, N.N., Kusmartseva, O.E., Kugel, K.I., Kusmartsev, F.V.  
**Journal of Physics: Conference Series** 833(1),012005 (2017)
65. Synthesis and physicochemical studies of perovskite manganite La<sub>0.8</sub>Ca<sub>0.2</sub>Nn<sub>1-x</sub>CoxO<sub>3</sub>(0≤x≤0.3)  
 Turki, D., Ghouri, Z.K., Al-Meer, S., (...), Ellouze, M., Hlil, E.K.  
**Journal of Magnetics** 22(3), pp. 353-359 (2017)
64. Khanahmadzadeh, Salah; Khojasteh, Hossein; Mikaeili, Negar; et al.  
 Facile synthesis of CaMn<sub>2</sub>O<sub>4</sub> nanoparticles and investigation of photocatalytic activity, optical and magnetic properties and its influence on the thermal stability of polymeric nanocomposite  
**JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS** Volume: 28 Issue: 5 Pages: 4521-4529 Published: MAR 2017
63. Yadagiri, K.; Nithya, R.; Shukla, Neeraj; et al.  
 Role of trivalent bismuth ion substitution at Dy site on the physical properties of DyMnO<sub>3</sub>  
**JOURNAL OF ALLOYS AND COMPOUNDS** Volume: 695 Pages: 2959-2964 Published: FEB 25 2017
62. Baranovskiy, Andrei; Amouyal, Yaron  
 Dependence of electrical transport properties of CaO(CaMnO<sub>3</sub>)<sub>m</sub> (m=1, 2, 3, infinity) thermoelectric oxides on lattice periodicity  
**JOURNAL OF APPLIED PHYSICS** Volume: 121 Issue: 6 Article Number: 065103 Published: FEB 14 2017
61. Karchev, N (Karchev, Naoum)  
 Leggett's modes in magnetic systems with Jahn-Teller distortion  
**ANNALS OF PHYSICS** Volume: 363 Pages: 371-384 DOI: 10.1016/j.aop.2015.10.008 Published: DEC 2015

60. Shi, L., Liu, W., Zhao, J., Li, Y., Zhou, S., Guo, Y., Wang, Y.  
 The magnetic properties and spin-phonon coupling of Pr<sub>2</sub>CoMnO<sub>6</sub> particles  
 MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 7 Article Number: 076104 DOI: 10.1088/2053-1591/2/7/076104 Published: JUL 2015
59. Singh, Brajendra  
 Room temperature large positive and negative magnetocapacitance in CaMn<sub>0.95</sub>Fe<sub>0.05</sub>O<sub>3</sub>-delta  
 MATERIALS LETTERS Volume: 156 Pages: 76-78 Published: OCT 1 2015
58. Fan, Jiyu; Xu, Lisha; Zhang, Xiyuan; et al.  
 Effect of A-site average radius and cation disorder on magnetism and electronic properties in manganite (A = Sm, Dy, Er)  
 JOURNAL OF MATERIALS SCIENCE Volume: 50 Issue: 5 Pages: 2130-2137 Published: MAR 2015
57. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.  
 Controlling phase separation in La<sub>5/8-y</sub>PryCa<sub>3/8</sub>MnO<sub>3</sub> (y=0.45) epitaxial thin films by strain disorder  
 APPLIED PHYSICS LETTERS Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015
56. Singh, Brajendra  
 Structural, transport, magnetic and magnetoelectric properties of CaMn<sub>1-x</sub>FexO<sub>3</sub>-delta (0.0 <= x <= 0.4)  
 RSC ADVANCES Volume: 5 Issue: 50 Pages: 39938-39945 Published: 2015
55. Cai, Xuan; Shi, Lei; Zhou, Shiming; et al.  
 Size-dependent structure and magnetic properties of DyMnO<sub>3</sub> nanoparticles  
 JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 10 Article Number: 103903 Published: SEP 14 2014
54. Patwe, Sadequa J.; Patra, Atanu; Dey, Rita; et al.  
 Probing the Local Structure and Phase Transitions of Bi<sub>4</sub>V<sub>2</sub>O<sub>11</sub>-Based Fast Ionic Conductors by Combined Raman and XRD Studies  
 JOURNAL OF THE AMERICAN CERAMIC SOCIETY 96 (11), pp. 3448-3456 NOV 2013
53. Reshak, A. H.  
 First Principle Calculations of Transition Metal Oxide, AgAlO<sub>2</sub>, as Active Photocatalyst: Sustainable Alternative Sources of Energy  
 INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE 8 (7), pp. 9371-9383 JUL 2013
52. Bin, Zhan; Lan Jinle; Lin Yuanhua  
 Preparation and Characterization of CaMnO<sub>3</sub> Thermoelectric Film  
 RARE METAL MATERIALS AND ENGINEERING 42 Suppl. 1A, 54-56, JUN 2013
51. M'nassri, R.; Cheikhrouhou-Koubaa, W.; Boudjada, N.; et al.  
 Magnetocaloric Effects in Pr<sub>0.6-x</sub>Er<sub>x</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> (0.0 <= x <= 0.2) Manganese Oxides  
 JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM 26 (5) SI, 1429-1435, MAY 2013
50. Kovaleva, N. N.; Kusmartseva, O. E.; Kugel, K. I.; et al.  
 Anomalous multi-order Raman scattering in LaMnO<sub>3</sub>: a signature of quantum lattice effects in a Jahn-Teller crystal  
 JOURNAL OF PHYSICS-CONDENSED MATTER 25 (15), 155602, APR 17 2013
49. Kumar, A.; Shahi, P.; Kumar, S.; et al.  
 Raman effect and magnetic properties of doped TbMnO<sub>3</sub>  
 JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (12), 125001, MAR 27 2013
48. Reshak, A.H.  
 First principle calculations of transition metal oxide, AgAlO<sub>2</sub>, as active photocatalyst: Sustainable alternative sources of energy  
 International Journal of Electrochemical Science 8 (7), pp. 9371-9383, 2013
47. Liu, H., Zhang, H., Li, Y., Chen, Y., Chen, L., Dong, X., Chen, K., Li, Q.  
 Magnetism and resistances of slightly dy doped LaMnO<sub>3</sub> solid solutions  
 Journal of Superconductivity and Novel Magnetism 25 (4) , pp. 1049-1054, 2012.
46. Wu, X.-W., Zhang, H.-X., Liu, X.-J., Zhang, X.-G.  
 Optical properties and photocatalytic activity of marokite-type CaMn<sub>2</sub>O<sub>4</sub>  
 Chinese Physics Letters 28 (10), art. no. 107101, 2011.
45. Gu Yijing; Wang Yunfeng; Wang Tao; et al.  
 Synthesis, structural and magnetic study of polycrystalline LaNi<sub>(1-x)</sub>Mn<sub>(x)</sub>O<sub>3</sub> films  
 PHYSICA B-CONDENSED MATTER 406 (14) Pages: 2876-2879, JUL 15 2011.
44. Mishra Dileep K.; Sathe V. G.  
 Evidence of orbital excitations in CaCu<sub>(3)</sub>Ti<sub>(4)</sub>O<sub>(12)</sub> probed by Raman spectroscopy  
 JOURNAL OF PHYSICS-CONDENSED MATTER 23 (7) Article Number: 072203, FEB 23 2011.
43. Jugderson, B., Kang, S., DiPietro, R.S., Heiman, D., McKeown, D., Pegg, I.L., Philip, J.  
 Large low field magnetoresistance in La(0.67)Sr(0.33)MnO<sub>3</sub> nanowire devices  
 JOURNAL OF APPLIED PHYSICS 109 (1) Article Number: 016109, JAN 1 2011.
42. Laref Amel; Luo Shi Jun  
 Magnetic Excitation and Phonon Dispersion in LaCoO<sub>3</sub> Compound

41. Kumar Pradeep; Saha Surajit; Muthu D. V. S.; et al.

Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO<sub>3</sub>

JOURNAL OF PHYSICS-CONDENSED MATTER 22 (11) Article Number: 115403, MAR 24 2010.

40. Wang Tao; Shi Wangzhou; Fang Xiaodong; et al.

Fabrication of polycrystalline La<sub>2</sub>NiMnO<sub>6</sub> thin films on Si (100) substrates by chemical solution deposition

JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY 53 (3) Pages: 655-659, MAR 2010.

39. Sopracase Rodolphe; Gruener Gisele; Olive Enrick; et al.

Infrared study of the phonon modes in PrMnO<sub>3</sub> and CaMnO<sub>3</sub>

PHYSICA B-CONDENSED MATTER 405 (1) Pages: 45-52, JAN 1 2010.

38. Jandl S.; Nugroho A. A.; Palstra T. T. M.

A comparative Raman study between YbVO<sub>3</sub> and YVO<sub>3</sub>

Book Series: Journal of Physics Conference Series 200, Article Number: 032025, 2010.

37. Laref, A., Luo, S.J.

Magnetic excitation and phonon dispersion in LaCoO<sub>3</sub> compound

Journal of the Physical Society of Japan 79 (6), art. no. 064702 (2010).

36. Kumar, P., Saha, S., Muthu, D.V.S., Sahu, J.R., Sood, A.K., Rao, C.N.R.

Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO<sub>3</sub>

Journal of Physics Condensed Matter 22 (11), art. no. 115403 (2010).

35. Chen, C.Z., Cai, C.B., Liu, Z.Y., Peng, L., Gao, B., Fan, F., Lu, Y.M., (...), Dou, S.X.

Stress evolution and lattice distortion induced by thickness variation and lattice misfit in La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub> - δ films

Solid State Communications 150 (1-2), pp. 66-69 (2010).

34. Sopracase, R., Gruener, G., Olive, E., Soret, J.-C.

Infrared study of the phonon modes in PrMnO<sub>3</sub> and CaMnO<sub>3</sub>

Physica B: Condensed Matter 405 (1), pp. 45-52 (2010).

33. Rao, M.N., Kaur, N., Chaplot, S.L., Gaur, N.K., Singh, R.K.

Lattice dynamics of orthorhombic perovskite yttrium manganite, YMnO<sub>3</sub>

Journal of Physics Condensed Matter 21 (35), art. no. 355402 (2009).

32. Cao, X.-S., Chen, C.-L.

Raman spectra of La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>

Physica Scripta 79 (4), art. no. 045701 (2009).

31. Zhao, S., Shi, L., Zhou, S., Zhao, J., Yang, H., Guo, Y.

Size-dependent magnetic properties and Raman spectra of La<sub>2</sub>NiMnO<sub>6</sub> nanoparticles

Journal of Applied Physics 106 (12), art. no. 123901 (2009).

30. Talati, M., Jha, P.K.

Temperature effect on vibrational properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>

International Journal of Modern Physics B 23 (23), pp. 4767-4777 (2009).

29. Cao, X.-S., Chen, C.-L.

Phonon spectra of La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>

Chinese Physics B 18 (7), pp. 2928-2932 (2009).

28. Wang, T., Xu, W., Fang, X., Dong, W., Tao, R., Li, D., Zhao, Y., Zhu, X.

Chemical solution deposition preparation of double-perovskite La<sub>2</sub>NiMnO<sub>6</sub> film on LaAlO<sub>3</sub> (0 0 1) substrate

Journal of Alloys and Compounds 475 (1-2), pp. 9-12 (2009).

27. Sathe, V.G., Rawat, R., Dubey, A., Narlikar, A.V., Prabhakaran, D.

Photo-induced insulator-metal transition probed by Raman spectroscopy

Journal of Physics Condensed Matter 21 (7), art. no. 075603 (2009).

26. Guo, H.Z., Burgess, J., Ada, E., Street, S., Gupta, A., Iliev, M.N., Kellock, A.J., Magen, C., Varela, M., Pennycook, S.J.

Influence of defects on structural and magnetic properties of multifunctional La<sub>2</sub>NiMnO<sub>6</sub> thin films

PHYSICAL REVIEW B Volume: 77 Issue: 17 Article Number: 174423 DOI: 10.1103/PhysRevB.77.174423 Published: MAY 2008

25. Dubey, A., Sathe, V.G., Rawat, R.

Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO<sub>3</sub>+δ thin films

Journal of Applied Physics 104 (11), art. no. 113530 (2008).

24. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.

Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution

Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).

23. Smirnova, I.S., Bazhenov, A.V., Fursova, T.N., Dubovitskii, A.F., Uspenskaya, L.S., Maksimuk, M.Yu.

IR-active optical phonons in Pnma-1, Pnma-2 and R over(3, -) c phases of LaMnO<sub>3</sub> + δ  
Physica B: Condensed Matter 403 (21-22), pp. 3896-3902 (2008).

22. Wang, T., Fang, X., Dong, W., Tao, R., Deng, Z., Li, D., Zhao, Y., (...), Zhu, X.  
Fabrication of polycrystalline La<sub>2</sub>NiMnO<sub>6</sub> thin films on LaAlO<sub>3</sub> (1 0 0) substrates by chemical solution deposition  
Journal of Crystal Growth 310 (14), pp. 3386-3390 (2008).

21. Ramakrishnan, TV  
Modelling colossal magnetoresistance manganites  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 19 Issue: 12 Article Number: 125211 DOI: 10.1088/0953-8984/19/12/125211 Published: MAR 28 2007

20. Rossiny, J.C.H., Fearn, S., Kilner, J.A., Zhang, Y., Chen, L., Yang, S., Evans, J., (...), Cohen, L.F.  
Characterisation of combinatorial libraries of perovskite materials for SOFC cathode applications  
ECS Transactions 7 (1 PART 1), pp. 1003-1013 (2007).

19. Fan, J., Pi, L., He, Y., Ling, L., Dai, J., Zhang, Y.  
Griffiths phase and magnetic polaronic behavior in B-site disordering manganites  
Journal of Applied Physics 101 (12), art. no. 123910 (2007)

18. Chan, T.S., Liu, R.S., Yang, C.C., Li, W.-H., Lien, Y.H., Huang, C.Y., Lynn, J.W., (...), Sheu, H.-S.  
Influence of oxygen defects on the crystal structure and magnetic properties of the (Tb<sub>1-x</sub>Nax)MnO<sub>3-y</sub> (0 ≤ x ≤ 0.3) system  
Inorganic Chemistry 46 (11), pp. 4575-4582 (2007)

17. Chan, T.S., Liu, R.S., Yang, C.C., Li, W.-H., Lien, Y.H., Huang, C.Y., Lee, J.-F.  
Chemical size effect on the magnetic and electrical properties in the (Tb<sub>1-x</sub>Eux)MnO<sub>3</sub> (0 ≤ x ≤ 1.0) system  
Journal of Physical Chemistry B 111 (9), pp. 2262-2267 (2007)

16. Li, W.J., Zhang, B., Lu, W.  
Structural properties and Raman spectroscopy of La(2+4x)/3Sr(1-4x)/3Mn1-xCux O<sub>3</sub>(0 ≤ x ≤ 0.2)  
Physics Letters, Section A: General, Atomic and Solid State Physics 362 (4), pp. 327-330 (2007)

15. Guo, H., Burgess, J., Street, S., Gupta, A., Calvarese, T.G., Subramanian, M.A.  
Growth of epitaxial thin films of the ordered double perovskite La<sub>2</sub>NiMnO<sub>6</sub> on different substrates  
Applied Physics Letters 89 (2), art. no. 022509 (2006)

14. Aruta, C., Angeloni, M., Balestrino, G., Boggio, N.G., Medaglia, P.G., Tebano, A., Davidson, B., (...), De Renzi, R.  
Preparation and characterization of LaMnO<sub>3</sub> thin films grown by pulsed laser deposition  
Journal of Applied Physics 100 (2), art. no. 023910 (2006)

13. Charpentier, S., Gill-Comeau, M., Jandl, S., Fournier, P.  
Observation of charge ordering by Raman scattering in Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
Journal of Physics Condensed Matter 18 (31), art. no. 014, pp. 7193-7202 (2006)

12. Talati, M., Jha, P.K.  
Structure dependent phonon properties of LaMnO<sub>3</sub>  
Computational Materials Science 37 (1-2), pp. 64-68 (2006)

11. Jandl, S., Laverdière, J., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.  
Raman and infrared quest for orbitons in Nd<sub>1-x</sub>SrxMnO<sub>3</sub>  
Physica B: Condensed Matter 381 (1-2), pp. 214-218 (2006)

10. Jandl S, Mukhin AA, Ivanov VY, et al.  
Micro-Raman study and phase transitions of Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006

9. Kartopu G, Es-Souni M  
Microstructural properties of solution-deposited La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> and LaMnO<sub>3</sub> thin films  
JOURNAL OF APPLIED PHYSICS 99 (3): Art. No. 033501 FEB 1 2006

8. Dore, P., Postorino, P., Sacchetti, A., Baldini, M., Giambelluca, R., Angeloni, M., Balestrino, G.  
Raman measurements on thin films of the La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite: A probe of substrate-induced effects  
European Physical Journal B 48 (2), pp. 255-258 (2005)

7. Sacchetti A, Baldini M, Crispoldi F, et al.  
Temperature dependence of the optical phonons in SrMnO<sub>3</sub> manganite: Evidence of a low-temperature structural transition in the hexagonal compound  
PHYSICAL REVIEW B 72 (17): Art. No. 172407 NOV 2005

6. Asselin S, Jandl S, Fournier P, et al.  
Resonant micro-Raman study of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005

5. Jandl S, Mukhin AA, Ivanov VY, et al.  
Raman-active phonons and Nd<sup>3+</sup> crystal-field studies of weakly doped Nd<sub>1-x</sub>SrxMnO<sub>3</sub>  
PHYSICAL REVIEW B 72 (2): Art. No. 024423 JUL 2005

4. Venimadhav A, Yates KA, Blamire MG  
 Scanning Raman spectroscopy for characterizing compositionally spread films  
 JOURNAL OF COMBINATORIAL CHEMISTRY 7 (1): 85-89 JAN-FEB 2005
3. Guo HZ, Chen ZH, Liu LF, et al.  
 Structural properties and spin-phonon coupling effect of La<sub>1-x</sub>T<sub>x</sub>MnO<sub>3</sub> thin films  
 APPLIED PHYSICS LETTERS 85 (15): 3172-3174 OCT 11 2004
2. Xiong YM, Chen T, Wang GY, et al.  
 Raman spectra in epitaxial thin films of La<sub>1-x</sub>C<sub>x</sub>MnO<sub>3</sub> ( $x=0.33, 0.5$ ) grown on different substrates  
 PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
1. Ishikawa A, Nohara J, Sugai S  
 Raman study of the orbital-phonon coupling in LaCoO<sub>3</sub>  
 PHYSICAL REVIEW LETTERS 93 (13): Art. No. 136401 SEP 24 2004
43. “Nanosize gold-ceria catalysts promoted by vanadia for complete benzene oxidation”  
 D. Andreeva, R. Nedyalkova, L. Ilieva, and M. V. Abrashev  
 Appl. Catalysis A: General 246(1) (2003) 29 - 38.
50. Niobium Modification of Au/CeO<sub>2</sub> for Enhanced Catalytic Performance over Benzene Combustion  
 Liu, Zhe; Zhang, Xiaolan; Cai, Ting; et al.  
 NANOMATERIALS Volume: 11 Issue: 1 Article Number: 189 Published: JAN 2021
49. Establishing high-performance Au/cobalt oxide interfaces for low-temperature benzene combustion  
 Jiang, Wu; Feng, Yina; Zeng, Yiqiang; et al.  
 JOURNAL OF CATALYSIS Volume: 375 Pages: 171-182 Published: JUL 2019
48. Heterogeneous Gold Catalysis: From Discovery to Applications  
 Alshammari, Ahmad S.  
 CATALYSTS Volume: 9 Issue: 5 Article Number: 402 Published: MAY 2019
47. Recent Advances in the Catalytic Oxidation of Volatile Organic Compounds: A Review Based on Pollutant Sorts and Sources  
 He, Chi; Cheng, Jie; Zhang, Xin; et al.  
 CHEMICAL REVIEWS Volume: 119 Issue: 7 Pages: 4471-4568 Published: APR 10 2019
46. Ferric sludge derived from the process of water purification as an efficient catalyst and/or support for the removal of volatile organic compounds  
 Sanchis, Rut; Dejoz, Ana; Vazquez, Isabel; et al.  
 CHEMOSPHERE Volume: 219 Pages: 286-295 Published: MAR 2019
45. Theoretical investigation of the effect of phosphate doping on the aggregation of Au atoms on an Al<sub>2</sub>O<sub>3</sub> (0001) surface  
 Tada, Kohei; Koga, Hiroaki; Sakurai, Hiroaki; et al.  
 APPLIED SURFACE SCIENCE Volume: 465 Pages: 1003-1013 Published: JAN 28 2019
44. Deposition of Au nanoparticles inside porous CeO<sub>2</sub> nanocubes using Langmuir-Blodgett technique  
 Das, Subhasis; Bhattacharjee, Gourab; Satpati, Biswarup; et al.  
 NEW JOURNAL OF CHEMISTRY Volume: 42 Issue: 2 Pages: 1379-1386 Published: JAN 21 2018
43. Han, Zhong-Kang; Wang, Yang-Gang; Gao, Yi  
 Catalytic role of vacancy diffusion in ceria supported atomic gold catalyst  
 CHEMICAL COMMUNICATIONS Volume: 53 Issue: 65 Pages: 9125-9128 Published: AUG 21 2017
42. Calzada, Lina A.; Collins, Sebastian E.; Han, Chang W.; et al.  
 Synergetic effect of bimetallic Au-Ru/TiO<sub>2</sub> catalysts for complete oxidation of methanol  
 APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 207 Pages: 79-92 Published: JUN 15 2017
41. Wang, Z., Deng, Y., Shen, G., Akram, S., Han, N., Chen, Y., Wang, Q.  
 Catalytic Degradation of Benzene over Nanocatalysts containing Cerium and Manganese  
 CHEMISTRYOPEN Volume: 5 Issue: 5 Pages: 495-504 DOI: 10.1002/open.201600047 Published: OCT 2016
40. Villa, A., Dimitratos, N., Chan-Thaw, C.E., Hammond, C., Veith, G.M., Wang, D., Manzoli, M., Prati, L., Hutchings, G.J.  
 Characterisation of gold catalysts  
 CHEMICAL SOCIETY REVIEWS Volume: 45 Issue: 18 Pages: 4953-4994 DOI: 10.1039/c5cs00350d Published: SEP 21 2016
39. Topka, P (Topka, Pavel); Kaluza, L (Kaluza, Lukáš); Gaalova, J (Gaalova, Jana)  
 Total oxidation of ethanol and toluene over ceria-zirconia supported platinum catalysts  
 CHEMICAL PAPERS Volume: 70 Issue: 7 Pages: 898-906 DOI: 10.1515/chempap-2016-0028 Published: JUL 2016
38. Panayotov, D.A., Morris, J.R.  
 Surface chemistry of Au/TiO<sub>2</sub>: Thermally and photolytically activated reactions  
 SURFACE SCIENCE REPORTS Volume: 71 Issue: 1 Pages: 77-271 DOI: 10.1016/j.surfrep.2016.01.002 Published: MAR 2016

37. Aguilar-Tapia, A., Zanella, R., Calers, C., Louis, C., Delannoy, L.  
 Synergistic effects of Ir-Au/TiO<sub>2</sub> catalysts in the total oxidation of propene: influence of the activation conditions  
*PHYSICAL CHEMISTRY CHEMICAL PHYSICS* Volume: 17 Issue: 42 Pages: 28022-28032 DOI: 10.1039/c5cp00590f Published: 2015
36. Garcia, Tomas; Agouram, Said; Taylor, Stuart H.; et al.  
 Total oxidation of propane in vanadia-promoted platinum-alumina catalysts: Influence of the order of impregnation  
*CATALYSIS TODAY* Volume: 254 Pages: 12-20 Published: OCT 1 2015
35. Stadnichenko, A. I.; Koshcheev, S. V.; Boronin, A. I.  
 An XPS and TPD study of gold oxide films obtained by exposure to RF-activated oxygen  
*JOURNAL OF STRUCTURAL CHEMISTRY* Volume: 56 Issue: 3 Pages: 557-565 Published: JUN 2015
34. Carabineiro, S. A. C.; Chen, X.; Martynyuk, O.; et al.  
 Gold supported on metal oxides for volatile organic compounds total oxidation  
*CATALYSIS TODAY* Volume: 244 Pages: 103-114 Published: APR 15 2015
33. Yosefi, Leila; Haghghi, Mohammad; Allahyari, Somaiyah; et al.  
 The beneficial use of HCl-activated natural zeolite in ultrasound assisted synthesis of Cu/clinoptyilolite-CeO<sub>2</sub> nanocatalyst used for catalytic oxidation of diluted toluene in air at low temperature  
*JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY* Volume: 90 Issue: 4 Pages: 765-774 Published: APR 2015
32. Garcia, T., Solsona, B., Taylor, S.H.  
 The catalytic oxidation of hydrocarbon volatile organic compounds  
*Handbook of Advanced Methods and Processes in Oxidation Catalysis: From Laboratory to Industry 51-90* DOI: 10.1142/9781848167513\_0003 (2014)
31. Zuo, Shufeng; Sun, Xuejie; Lv, Ningning; et al.  
 Rare Earth-Modified Kaolin/NaY-Supported Pd-Pt Bimetallic Catalyst for the Catalytic Combustion of Benzene  
*ACS APPLIED MATERIALS & INTERFACES* 6 (15), pp. 11988-11996 AUG 13 2014
30. Wang, Zhen; Yang, Min; Shen, Genli; et al.  
 Catalytic removal of benzene over CeO<sub>2</sub>-MnO<sub>x</sub> composite oxides with rod-like morphology supporting PdO  
*JOURNAL OF NANOPARTICLE RESEARCH* 16 (5), Art. No. 2367 APR 6 2014
29. Jiang, Xin; Hua, Jiefeng; Deng, Hui; et al.  
 Influence of pre-added NaOH on the microstructure of Au-CeO<sub>2</sub> catalyst and its activity for benzene oxidation  
*JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL* 383, pp. 188-193 MAR 2014
28. Aw, M. S.; Crnivec, I. G. Osojnik; Pintar, A.  
 Toward enhanced conversion of model biogas mixtures: parametric tuning and mechanistic study for ceria-zirconia supported nickel-cobalt catalyst  
*CATALYSIS SCIENCE & TECHNOLOGY* 4 (5), pp. 1340-1349 2014
27. Sedjame, H.-J., Fontaine, C., Lafaye, G., Barbier Jr, J.  
 On the promoting effect of the addition of ceria to platinum based alumina catalysts for VOCs oxidation  
*Applied Catalysis B: Environmental* 144 (1), pp. 233-242, 2014
26. Balzer, R., Drago, V., Schreiner, W.H., Probst, L.F.D.  
 Removal of BTX compounds in air by total catalytic oxidation promoted by catalysts based on SiO<sub>2</sub>(1-x)Cu<sub>x</sub>  
*Journal of the Brazilian Chemical Society* 24 (10), pp. 1592-1598, 2013
25. Zuo, S., Du, Y., Liu, F., Han, D., Qi, C.  
 Influence of ceria promoter on shell-powder-supported Pd catalyst for the complete oxidation of benzene  
*Applied Catalysis A: General* 451, pp. 65-70, 2013
24. Chen, Q.-Y., Li, N., Luo, M.-F., Lu, J.-Q.  
 Catalytic oxidation of dichloromethane over Pt/CeO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> catalysts  
*Applied Catalysis B: Environmental* 127, pp. 159-166, 2012
23. Scirè, S., Liotta, L.F.  
 Supported gold catalysts for the total oxidation of volatile organic compounds  
*Applied Catalysis B: Environmental* 125, pp. 222-246, 2012.
22. Garcia, T., Weng, W., Solsona, B., Carter, E., Carley, A.F., Kiely, C.J., Taylor, S.H.  
 The significance of the order of impregnation on the activity of vanadia promoted palladium-alumina catalysts for propane total oxidation  
*Catalysis Science and Technology* 1 (8), 1367-1375, 2011.
21. Ousmane, M., Liotta, L.F., Pantaleo, G., Venezia, A.M., Di Carlo, G., Aouine, M., Retailleau, L., Giroir-Fendler, A.  
 Supported Au catalysts for propene total oxidation: Study of support morphology and gold particle size effects  
*Catalysis Today* 176 (1), 7-13, 2011.
20. Wu Hongjing; Wang Liuding; Zhang Jiaoqiang; et al.  
 Catalytic oxidation of benzene, toluene and p-xylene over colloidal gold supported on zinc oxide catalyst  
*CATALYSIS COMMUNICATIONS* 12 (10) Pages: 859-865, MAY 15 2011.
19. Abbasi Zahra; Haghghi Mohammad; Fatehifar Esmaeil; et al.

Synthesis and physicochemical characterizations of nanostructured Pt/Al<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub> catalysts for total oxidation of VOCs  
JOURNAL OF HAZARDOUS MATERIALS 186 (2-3) Pages: 1445-1454, FEB 28 2011.

18. Solsona, B., Garcia, T., Agouram, S., Hutchings, G.J., Taylor, S.H.  
The effect of gold addition on the catalytic performance of copper manganese oxide catalysts for the total oxidation of propane  
APPLIED CATALYSIS B-ENVIRONMENTAL 101 (3-4) Pages: 388-396, JAN 14 2011.
17. Ousmane, M., Liotta, L.F., Di Carlo, G., Pantaleo, G., Venezia, A.M., Deganello, G., Retailleau, L., (...), Giroir-Fendler, A.  
Supported Au catalysts for low-temperature abatement of propene and toluene, as model VOCs: Support effect  
APPLIED CATALYSIS B-ENVIRONMENTAL 101 (3-4) Pages: 629-637, JAN 14 2011.
16. Song Haiyan; Li Gang; Wang Xiangsheng  
Preparation and Application of Porous Material Supported Gold Catalysts  
PROGRESS IN CHEMISTRY 22 (4) Pages: 573-579, APR 2010.
15. Wu Hongjing; Shuai Qin; Zhu Zhenli; et al.  
Complete Benzene Oxidation over Colloidal Gold Catalysts Supported on Nanostructure Zinc Oxide  
ADVANCE IN ECOLOGICAL ENVIRONMENT FUNCTIONAL MATERIALS AND ION INDUSTRY Book Series: Advanced Materials Research 96 Pages: 21-27, 2010.
14. Ying Fang; Wang Shuiju; Au Chak-Tong; et al.  
Effect of the oxidation state of gold on the complete oxidation of isobutane on Au/CeO<sub>2</sub> catalysts  
GOLD BULLETIN 43 (4) Pages: 241-251, 2010.
13. Hongjing, W., Qin, S., Zhenli, Z., Shenghong, H.  
Complete benzene oxidation over colloidal gold catalysts supported on nanostructure zinc oxide  
Advanced Materials Research 96, pp. 21-27 (2010).
12. Rossi, M., Della Pina, C., Falletta, E., Matarrese, R.  
Gold Nanoparticles: From Preparation to Catalytic Evaluation  
METAL NANOCLUSTERS IN CATALYSIS AND MATERIALS SCIENCE: THE ISSUE OF SIZE CONTROL Pages: 253-262 DOI: 10.1016/B978-044453057-8.50014-3 Published: 2008
11. Yang, X., Dong, X., Huang, L., Wang, J., Liu, G.  
Synthesis and properties of CeO<sub>2</sub>@Au core-shell structure nanoparticles  
Zhongguo Xitu Xuabao / Journal of the Chinese Rare Earth Society 26 (6), pp. 683-688 (2008).
10. Tang, X., Xu, Y., Shen, W.  
Promoting effect of copper on the catalytic activity of MnO<sub>x</sub>-CeO<sub>2</sub> mixed oxide for complete oxidation of benzene  
Chemical Engineering Journal 144 (2), pp. 175-180 (2008).
9. Yang, S.M., Liu, D.M., Liu, S.Y.  
Catalytic combustion of benzene over Au supported on ceria and vanadia promoted ceria  
Topics in Catalysis 47 (3-4), pp. 101-108 (2008).
8. Carabineiro, SAC (Carabineiro, Sonia A. C.); Thompson, DT (Thompson, David T.)  
Catalytic Applications for Gold Nanotechnology  
NANOCATALYSIS Book Series: Nanoscience and Technology Pages: 377-489 DOI: 10.1007/978-3-540-32646-5\_6 Published: 2007
7. Della Pina C, Dimitratos N, Falletta E, et al.  
Catalytic performance of gold catalysts in the total oxidation of VOCs  
GOLD BULLETIN 40 (1), pp.67-72 (2007).
6. Delannoy, L., Weiher, N., Tsapatsaris, N., Beesley, A.M., Nchari, L., Schroeder, S.L.M., Louis, C.  
Reducibility of supported gold (III) precursors: Influence of the metal oxide support and consequences for CO oxidation activity  
Topics in Catalysis 44 (1-2), pp. 263-273 (2007)
5. Hutchings, GJ (Hutchings, Graham J.)  
Reactions of Environmental Importance  
CATALYSIS BY GOLD Book Series: Catalytic Science Series Volume: 6 Pages: 286-310 Published: 2006
4. Solsona, B.E., Garcia, T., Jones, C., Taylor, S.H., Carley, A.F., Hutchings, G.J.  
Supported gold catalysts for the total oxidation of alkanes and carbon monoxide  
Applied Catalysis A: General 312 (1-2), pp. 67-76 (2006)
3. Radhika, T., Sugunan, S.  
Structural and catalytic investigation of vanadia supported on ceria promoted with high surface area rice husk silica  
Journal of Molecular Catalysis A: Chemical 250 (1-2), pp. 169-176 (2006)
2. Lai SY, Qiu YF, Wang SJ  
Effects of the structure of ceria on the activity of gold/ceria catalysts for the oxidation of carbon monoxide and benzene  
JOURNAL OF CATALYSIS 237 (2): 303-313 JAN 25 2006
1. Burda C, Chen XB, Narayanan R, et al.  
Chemistry and properties of nanocrystals of different shapes  
CHEMICAL REVIEWS 105 (4): 1025-1102 APR 2005

44. "Phonons and magnetic excitations in the Mott insulator LaTiO<sub>3</sub>"

M. N. Iliev, A. P. Litvinchuk, M. V. Abrashev, V. N. Popov, J. Cmaidalka, B. Lorenz, and R. L. Meng  
Phys. Rev. B 69, 172301 (2004).

16. Negative dielectric behavior in tetragonal La<sub>0.8</sub>Co<sub>0.2-x</sub>EuxTiO<sub>3</sub> (x=0.01-0.04) nanorods  
Kumar, N. Suresh; Suvarna, R. Padma; Naidu, K. Chandra Babu

MATERIALS CHARACTERIZATION Volume: 166 Article Number: 110425 Published: AUG 2020

15. Orbital Floquet engineering of exchange interactions in magnetic materials

Chaudhary, Swati; Hsieh, David; Refael, Gil

PHYSICAL REVIEW B Volume: 100 Issue: 22 Article Number: 220403 Published: DEC 9 2019

14. Structural and metal-insulator transitions in rhenium-based double perovskites via orbital ordering

Lee, Alex Taekyung; Marianetti, Chris A.

PHYSICAL REVIEW B Volume: 97 Issue: 4 Article Number: 045102 Published: JAN 3 2018

13. Li, Bing; Louca, Despina; Niedziela, Jennifer; et al.

Lattice and magnetic dynamics in perovskite Y<sub>1-x</sub>LaxTiO<sub>3</sub>

PHYSICAL REVIEW B Volume: 94 Issue: 22 Article Number: 224301 Published: DEC 7 2016

12. Ulrich, C., Khaliullin, G., Guennou, M., Roth, H., Lorenz, T., Keimer, B.

Spin-Orbital Excitation Continuum and Anomalous Electron-Phonon Interaction in the Mott Insulator LaTiO<sub>3</sub>

PHYSICAL REVIEW LETTERS Volume: 115 Issue: 15 Article Number: 156403 DOI: 10.1103/PhysRevLett.115.156403 Published: OCT 9 2015

11. Kumar, Pradeep; Bera, Achintya; Muthu, D. V. S.; et al.

Coupled phonons, magnetic excitations, and ferroelectricity in AlFeO<sub>3</sub>: Raman and first-principles studies

PHYSICAL REVIEW B 85 (13) Article Number: 134449, APR 27 2012.

10. Kowalczyk Radoslaw M.; Kemp Thomas F.; Walker David; et al.

A variable temperature solid-state nuclear magnetic resonance, electron paramagnetic resonance and Raman scattering study of molecular dynamics in ferroelectric fluorides

JOURNAL OF PHYSICS-CONDENSED MATTER 23 (31) Article Number: 315402, AUG 10 2011.

9. Liu Chun-Mei; Ge Ni-Na; Cheng Yan; et al.

Structural and elastic properties of LaTiO(3) under pressure

PHYSICA B-CONDENSED MATTER 406 (10) Pages: 1926-1931, MAY 1 2011.

8. Girardot, C., Kreisel, J., Pignard, S., Caillault, N., Weiss, F.

Raman scattering investigation across the magnetic and metal-insulator transition in rare earth nickelate RNiO<sub>3</sub> (R=Sm, Nd) thin films  
Physical Review B - Condensed Matter and Materials Physics 78 (10), art. no. 104101 (2008).

7. Cheng, J.-G., Sui, Y., Zhou, J.-S., Goodenough, J.B., Su, W.H.

Transition from orbital liquid to Jahn-Teller insulator in orthorhombic perovskites RTiO<sub>3</sub>

Physical Review Letters 101 (8), art. no. 087205 (2008).

6. Haumont, R., Kreisel, J., Bouvier, P.

Raman scattering of the model multiferroic oxide BiFeO<sub>3</sub>: Effect of temperature, pressure and stress

Phase Transitions 79 (12), pp. 1043-1064 (2006)

5. Ulrich, C., Gössling, A., Grüninger, M., Guennou, M., Roth, H., Cwik, M., Lorenz, T., (...), Keimer, B.

Raman scattering in the Mott insulators LaTiO<sub>3</sub> and YTiO<sub>3</sub>: Evidence for orbital excitations

Physical Review Letters 97 (15), art. no. 157401 (2006)

4. Haumont, R., Kreisel, J., Bouvier, P., Hippert, F.

Phonon anomalies and the ferroelectric phase transition in multiferroic BiFeO<sub>3</sub>

Physical Review B - Condensed Matter and Materials Physics 73 (13), art. no. 132101, pp. 1-4 (2006)

3. Pavarini E, Yamasaki A, Nuss J, et al.

How chemistry controls electron localization in 3d(1) perovskites: a Wannier-function study

NEW JOURNAL OF PHYSICS 7: Art. No. 188 SEP 2 2005

2. Schmitz R, Entin-Wohlman O, Aharonov A, et al.

Magnetic structure of the Jahn-Teller system LaTiO<sub>3</sub>

PHYSICAL REVIEW B 71 (14): Art. No. 144412 APR 2005

1. Masahito Mochizuki and Masatoshi Imada

Orbital physics in the perovskite Ti oxides

New Journal of Physics 6: 154 – 196 NOV 5 2004

45. "Photoluminescence depending on the ZnS shell thickness of CdS/ZnS core-shell semiconductor nanoparticles"

Alexandre R. Loukanov, Ceco D. Dushkin, Karolina I. Papazova, Andrey V. Kirov, Miroslav V. Abrashev and Eiki Adachi  
Colloids and Surfaces, A: Physicochem. and Eng. Asp. 245, 9-14 (2004).

58. Atomistic modeling of InGaN/GaN quantum dots-in-nanowire for graded surface-emitting low-threshold, blue exciton laser  
Taher, Mayada M.; Al-yousif, Shahad; Ahmed, Naser M.  
RESULTS IN PHYSICS Volume: 20 Article Number: 103732 Published: JAN 2021

57. Morphological characterisation of zinc sulfide nanoparticles using electron microscopy and X-ray diffraction assay  
Rajeshkumar, S., Santhoshkumar, J., Lakshmi, T., (...), Vanaja, M., Pavunraj, M.  
Plant Cell Biotechnology and Molecular Biology 21(29-30), pp. 97-105 (2020)

56. Effect of annealed ZnS nanoparticles on the structural and optical properties of PVA polymer nanocomposite  
Mohamed, Mohamed Bakr; Abdel-Kader, M. H.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 241 Article Number: 122285 Published: FEB 1 2020

55. Exciton states in InGaAsP/InP core-shell quantum dots under an external electric field  
Hu, Min; Wang, Hailong; Gong, Qian; et al.  
JOURNAL OF COMPUTATIONAL ELECTRONICS Volume: 18 Issue: 4 Pages: 1243-1250 Published: DEC 2019

54. The effect of Cd- substitution on the Raman vibrational characteristics of sphalerite  
Babedi, L.; von der Heyden, B. P.; Neethling, P. H.; et al.  
VIBRATIONAL SPECTROSCOPY Volume: 105 Article Number: 102968 Published: NOV 2019

53. Recent advances in metal sulfides: from controlled fabrication to electrocatalytic, photocatalytic and photoelectrochemical water splitting and beyond  
Chandrasekaran, Sundaram; Yao, Lei; Deng, Libo; et al.  
CHEMICAL SOCIETY REVIEWS Volume: 48 Issue: 15 Pages: 4178-4280 Published: AUG 7 2019

52. The External Electric and Magnetic Fields Effect on Binding Energy of Hydrogenic Donor Impurity in a InGaAsP/InP Core-Shell Quantum Dot  
Hui, Min; Wang, Hailong; Gong, Qian; et al.  
JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS Volume: 14 Issue: 7 Pages: 1016-1023 Published: JUL 2019

51. Dielectric properties of polyvinyl alcohol (PVA) nanocomposites filled with green synthesized zinc sulphide (ZnS) nanoparticles  
Reddy, P. Lokanatha; Deshmukh, Kalim; Chidambaram, K.; et al.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 30 Issue: 5 Pages: 4676-4687 Published: MAR 2019

50. Photoluminescence properties of Co and Ni co-doped CdS/ZnS Core/Shell Nanoparticles  
Sabir, Nadeem; Qayyum, Wahid; Hussain, Syed Zajif; et al.  
COLLOIDAL NANOPARTICLES FOR BIOMEDICAL APPLICATIONS XIII Book Series: Proceedings of SPIE Volume: 10507 Article Number: UNSP 1050705 Published: 2018

49. Wang, Zhenli; Zhang, Haiyue; Cao, Hongwei; et al.  
Facile preparation of ZnS/CdS core/shell nanotubes and their enhanced photocatalytic performance  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 42 Issue: 27 Pages: 17394-17402 Published: JUL 6 2017

48. Benhaddou, F.; Zorkani, I.; Jorio, A.  
The confinement effect in spherical inhomogeneous quantum dots and stability of excitons  
AIP ADVANCES Volume: 7 Issue: 6 Article Number: 065112 Published: JUN 2017

47. Silva Adaya, Daniela; Aguirre-Cruz, Lucinda; Guevara, Jorge; et al.  
Nanobiomaterials' applications in neurodegenerative diseases  
JOURNAL OF BIOMATERIALS APPLICATIONS Volume: 31 Issue: 7 Pages: 953-984 Published: FEB 2017

46. Zahra, H.; Elmaghroui, D.; Fezai, I.; et al.  
II-VI colloidal quantum-dot/quantum-rod heterostructures under electric field effect and their energy transfer rate to graphene  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 20 Article Number: 205702 Published: NOV 28 2016

45. Ozga, K., Michel, J., Nechyporuk, B.D., Ebothé, J., Kityk, I.V., Albassam, A.A., El-Naggar, A.M., Fedorchuk, A.O.  
ZnS/PVA nanocomposites for nonlinear optical applications  
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES Volume: 81 Pages: 281-289 DOI: 10.1016/j.physe.2016.03.041 Published: JUL 2016

44. Ahmadi, R., Sadrnezhad, S.K., Zangeneh, R.N., Oghabian, M.A.  
Kinetics of oxygen adsorption on ZnS nanoparticles synthesized by precipitation process  
MATERIALS SCIENCE-POLAND Volume: 34 Issue: 2 Pages: 260-265 DOI: 10.1515/msp-2016-0037 Published: JUN 2016

43. Mandal, A.R., Ishteev, A.R., Volchematev, S.A., Mazov, V.N., Kuznetsov, D.V.  
Synthesis of water-soluble core/shell CdS/ZnS nanoparticles at room temperature under ultrasonic irradiation: Potential for human serum detection  
INORGANIC MATERIALS Volume: 52 Issue: 3 Pages: 256-261 DOI: 10.1134/S0020168516030109 Published: MAR 2016

42. Mendonça, L.T.B., De Azevedo, W.M.  
 A fast bottom-up route for preparing CdS quantum dots using laser ablation in a liquid environment  
 JOURNAL OF LUMINESCENCE Volume: 171 Pages: 79-84 DOI: 10.1016/j.jlumin.2015.10.031 Published: MAR 2016
41. Sanders, G.D., Musfeldt, J.L., Stanton, C.J.  
 Tuning g factors of core-shell nanoparticles by controlled positioning of magnetic impurities  
 PHYSICAL REVIEW B Volume: 93 Issue: 7 Article Number: 075431 DOI: 10.1103/PhysRevB.93.075431 Published: FEB 23 2016
40. Li, N., Kerman, K.  
 Nanomaterial-based dual detection platforms: Optics meets electrochemistry  
 Nanobiosensors and Nanobioanalyses 99-120 DOI: 10.1007/978-4-431-55190-4\_6 (2015)
39. Kocevski, V., Eriksson, O., Gerard, C., Sarma, D.D., Rusz, J.  
 Influence of dimensionality and interface type on optical and electronic properties of CdS/ZnS core-shell nanocrystals-A first-principles study  
 JOURNAL OF CHEMICAL PHYSICS Volume: 143 Issue: 16 Article Number: 164701 DOI: 10.1063/1.4933058 Published: OCT 28 2015
38. Chen, L., Liu, Y., Lai, C., Berry, R.M., Tam, K.C.  
 Aqueous synthesis and biostabilization of CdS@ZnS quantum dots for bioimaging applications  
 MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 10 Article Number: 105401 DOI: 10.1088/2053-1591/2/10/105401 Published: OCT 2015
37. Luo, Jian; Zhao, Suqing; Wu, Panpan; et al.  
 Synthesis and characterization of new Cd-doped ZnO/ZnS core-shell quantum dots with tunable and highly visible photoluminescence  
 JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 14 Pages: 3391-3398 Published: 2015
36. Andal, V.; Buvaneswari, G.  
 Effect of Nature of Surfactant on the Formation of beta-Ag<sub>2</sub>Se Nanoparticles and Optical Properties of beta-Ag<sub>2</sub>Se and ZnS/beta-Ag<sub>2</sub>Se Nanocomposite  
 JOURNAL OF NANO RESEARCH Volume: 30 Pages: 96-105 Published: 2015
34. Zhu, Yinglian; Li, Chunsheng; Xu, Ying; et al.  
 Ultrasonic-assisted synthesis of aqueous CdTe/CdS QDs in salt water bath heating  
 JOURNAL OF ALLOYS AND COMPOUNDS 608, pp. 141-147 SEP 25 2014
33. Yang, Lin; Zhu, Jianguo; Xiao, Dingquan  
 Synthesis and characterization of ZnSe:Fe/ZnSe core/shell nanocrystals  
 JOURNAL OF LUMINESCENCE 148, pp. 129-133 APR 2014
32. Hosseini, Z.; Azizian-Kalandaragh, Y.; Khodayari, A.; et al.  
 Sonochemically prepared PbS nanostructures and investigation of their optical and structural properties  
 OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS 8 (3-4), pp. 201-203 MAR-APR 2014
31. Shahi, A. K.; Pandey, B. K.; Gopal, R.  
 PEG mediated solvothermal synthesis of fine ZnS sub-micro and microspheres and their optical properties  
 MATERIALS LETTERS 116, pp. 112-115 FEB 1 2014
30. Malarkodi, C.; Rajeshkumar, S.; Paulkumar, K.; et al.  
 Biosynthesis and Antimicrobial Activity of Semiconductor Nanoparticles against Oral Pathogens  
 BIOINORGANIC CHEMISTRY AND APPLICATIONS Art. No.347167 2014
29. Xiong, Gang; Xu, Hang; Cui, Jian-Zhong; et al.  
 The multiple core-shell structure in Cu(24)Ln(6) cluster with magnetocaloric effect and slow magnetization relaxat  
 DALTON TRANSACTIONS 43 (15), pp. 5639-5642 2014
28. Xu, L., Xia, H.  
 Multi-metal sulfide for absorbing near infrared light  
 Zhongguo Jiguang/Chinese Journal of Lasers 40 (6), art. no. 0606001, 2013
27. Kharazmi, A., Saion, E., Faraji, N., Soltani, N., Dehzangi, A.  
 Optical properties of CdS/PVA nanocomposite films synthesized using the gamma-irradiation-induced method  
 Chinese Physics Letters 30 (5), art. no. 057803, 2013
26. Tripathi, S.K., Sharma, M.  
 Synthesis and optical study of green light emitting polymer coated CdSe/ZnSe core/shell nanocrystals  
 Materials Research Bulletin 48 (5), pp. 1837-1844, 2013
25. Ladj, R., Bitar, A., Eissa, M., Mugnier, Y., Le Dantec, R., Fessi, H., Elaissari, A.  
 Individual inorganic nanoparticles: Preparation, functionalization and in vitro biomedical diagnostic applications  
 Journal of Materials Chemistry B 1 (10), pp. 1381-1396, 2013
24. Soltani, N., Dehzangi, A., Saion, E., MAJLIS, M.Y., ZARE, M.R., Kharazmi, A., Navasery, M.  
 Influence of exposure time on structural, optical and electrical properties of zinc sulphide nanoparticles synthesized by microwave technique  
 Chalcogenide Letters 10 (1), pp. 27-37, 2013

23. Li, C., Jiang, Z., Yao, Z.  
Self-assembly of large scale CdS/TiO<sub>2</sub> film photocatalyst  
Advanced Materials Research 512-515, pp. 1692-1698, 2012.
22. Saran, A.D., Mehra, A., Bellare, J.R.  
Superposition of Quantum Confinement Energy (SQCE) model for estimating shell thickness in core-shell quantum dots: Validation and comparison  
Journal of Colloid and Interface Science 378 (1), pp. 21-29, 2012.
21. Saran Amit D.; Sadawana Mayur M.; Srivastava Rohit; et al.  
An optimized quantum dot-ligand system for biosensing applications: Evaluation as a glucose biosensor  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 384 (1-3) Pages: 393-400, JUL 5 2011.
20. Heera T. R.; Cindrella L.  
PbS/CoS-Pani composite semiconductor films  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING 14 (2) Pages: 151-156, JUN 2011.
19. Saran Amit D.; Bellare Jayesh R.  
Green engineering for large-scale synthesis of water-soluble and bio-taggable CdSe and CdSe-CdS quantum dots from microemulsion by double-capping  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 369 (1-3) Pages: 165-175, OCT 20 2010.
18. Khaorapapong Nithima; Ontam Areeporn; Ogawa Makoto  
Formation of ZnS and CdS in the interlayer spaces of montmorillonite  
APPLIED CLAY SCIENCE 50 (1) Pages: 19-24, SEP 2010.
17. Heera, T.R., Cindrella, L.  
Synthesis and characterization of NiS/MnS core-shell embedded conducting polyaniline composite for photovoltaic application  
International Journal of Polymeric Materials 59 (8), pp. 607-621 (2010).
16. Ganguli, A.K., Ganguly, A., Vaidya, S.  
Microemulsion-based synthesis of nanocrystalline materials  
Chemical Society Reviews 39 (2), pp. 474-485 (2010).
15. Wang, Y., Wang, H., Li, R., Du, Y.-K.  
Recent progress in synthesis and properties of the core-shell nanoparticles  
Yingxiang Kexue yu Guanghuaxue/Imaging Science and Photochemistry 28 (1), pp. 65-78 (2010).
14. Cindrella, L., Heera, T.R.  
Wide spectrum responsive polyaniline based solid state solar cell  
Journal of Bionanoscience 3(2), 124-130 DOI: 10.1166/jbns.2009.1019 (2009)
13. Su, X., Qian, R., Tang, A.-M.  
Preparation and characterization of in-situ composition of microcrystalline cellulose/CdS fluorescent nanoparticles  
PROCEEDINGS OF 2009 INTERNATIONAL CONFERENCE ON ADVANCED FIBERS AND POLYMER MATERIALS, VOLS 1 AND 2 Pages: 1174-1176 Published: 2009
12. Behboudnia, M., Habibi-Yangjeh, A., Jafari-Tarzanag, Y., Khodayari, A.  
Template free preparation and characterization of CuS nanoparticles in aqueous solutions of [EMIM][EtSO<sub>4</sub>] as a low cost ionic liquid using ultrasonic irradiation  
Journal of Optoelectronics and Advanced Materials 11 (2), pp. 134-139 (2009).
11. Bala, H., Fu, W., Yu, Y., Yang, H., Zhang, Y.  
Preparation, optical properties, magnetic properties and thermal stability of core-shell structure cobalt/zinc oxide nanocomposites  
Applied Surface Science 255 (7), pp. 4050-4055 (2009).
10. Bala, H., Yu, Y., Cao, X., Fu, W.  
Preparation and characterization of nickel/zinc sulphide: Bifunctional magnetic-optical nanocomposites  
Materials Chemistry and Physics 111 (1), pp. 50-53 (2008).
9. Wu, Y., Wang, L., Xiao, M., Huang, X.  
A novel sonochemical synthesis and nanostructured assembly of polyvinylpyrrolidone-capped CdS colloidal nanoparticles  
Journal of Non-Crystalline Solids 354 (26), pp. 2993-3000 (2008).
8. Khaorapapong, N., Ontam, A., Youngme, S., Ogawa, M.  
Solid-state intercalation and in situ formation of cadmium sulfide in the interlayer space of montmorillonite  
Journal of Physics and Chemistry of Solids 69 (5-6), pp. 1107-1111 (2008).
7. Li, L., Tang, Y., Yang, J., Zhang, Y., Du, B.  
Facile synthesis of ZnS hollow submicrospheres with open holes in solution containing ethylenediamine and CS<sub>2</sub>  
Chemical Journal on Internet 10 (1) (2008).
6. Bumajdad, A., Eastoe, J., Zaki, M.I., Heenan, R.K., Pasupulety, L.  
Generation of metal oxide nanoparticles in optimised microemulsions  
Journal of Colloid and Interface Science 312 (1), pp. 68-75 (2007)

5. Piret, F., Bouvy, C., Marine, W., Su, B.L.  
 A new series of optoelectronic nanocomposites: CMI-1 mesoporous core/ZnS shell  
*Chemical Physics Letters* 441 (1-3), pp. 83-87 (2007)
4. Ethayaraja, M., Ravikumar, C., Muthukumaran, D., Dutta, K., Bandyopadhyaya, R.  
 CdS-ZnS core-shell nanoparticle formation: Experiment, mechanism, and simulation  
*Journal of Physical Chemistry C* 111 (8), pp. 3246-3252 (2007)
3. Shukla, D., Mehra, A.  
 Modeling shell formation in core-shell nanocrystals in reverse micelle systems  
*Langmuir* 22 (23), pp. 9500-9506 (2006)
2. Fu, W., Yang, H., Hari-Bala, Liu, S., Li, M., Zou, G.  
 Preparation and magnetic characterization of core-shell structure stainless steel/silica nanoparticles  
*Materials Letters* 60 (13-14), pp. 1728-1732 (2006)
1. Stroyuk, A.L., Kryukov, A.I., Kuchmii, S.Ya., Pokhodenko, V.D.  
 Quantum size effects in the photonics of semiconductor nanoparticles  
*Theoretical and Experimental Chemistry* 41 (2), pp. 67-91 (2005)
- 46. "Gold–vanadia catalysts supported on ceria–alumina for complete benzene oxidation"**  
 D. Andreeva, R. Nedyalkova, L. Ilieva, and M. V. Abrashev  
*Appl. Catalysis B: Environmental* 52, 157 – 165 (2004).
74. Preparation of NiZnCe composite oxide and its catalytic performance for dehydrogenation of n-butane  
 Wang, L., Wan, C., Cheng, D., Chen, F., Zhan, X.  
*Huangong Xuebao/CIESC Journal* 72(1), pp. 534-542 (2021)
73. Highly efficient catalytic oxidation of benzene over Ag assisted Co<sub>3</sub>O<sub>4</sub> catalysts  
 Ma, X., Yu, X., Ge, M.  
*Catalysis Today* (Article in Press) (2020)
72. Unveiling the Remarkable Arsenic Resistance Origin of Alumina Promoted Cerium-Tungsten Catalysts for NH<sub>3</sub>-SCR  
 Jiang, Si; Li, Teng; Zheng, JiKai; et al.  
*ENVIRONMENTAL SCIENCE & TECHNOLOGY* Volume: 54 Issue: 22 Pages: 14740-14749 Published: NOV 17 2020
71. Establishing high-performance Au/cobalt oxide interfaces for low-temperature benzene combustion  
 Jiang, Wu; Feng, Yina; Zeng, Yiqiang; et al.  
*JOURNAL OF CATALYSIS* Volume: 375 Pages: 171-182 Published: JUL 2019
70. Recent Advances in the Catalytic Oxidation of Volatile Organic Compounds: A Review Based on Pollutant Sorts and Sources  
 He, Chi; Cheng, Jie; Zhang, Xin; et al.  
*CHEMICAL REVIEWS* Volume: 119 Issue: 7 Pages: 4471-4568 Published: APR 10 2019
69. An environmentally friendly wide temperature CeW<sub>x</sub>TiO<sub>x</sub> catalyst with superior performance for the selective catalytic reduction NO<sub>x</sub> with NH<sub>3</sub>  
 Huang Xiaosheng; Zhang Guodong; Dong Fang; et al.  
*JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY* Volume: 69 Pages: 66-76 Published: JAN 25 2019
68. Effect of Ca Doping on the Selective Catalytic Reduction of NO with NH<sub>3</sub> Over Ce-Ti Oxide Catalyst  
 Jiang, Ye; Wang, Xuechong; Lai, Chengzhen; et al.  
*CATALYSIS LETTERS* Volume: 148 Issue: 9 Pages: 2911-2917 Published: SEP 2018
67. Ce-Co interaction effects on the catalytic performance of uniform mesoporous Ce-x-Co-y catalysts in Hg-0 oxidation process  
 Zhang, Xiaopeng; Wang, Jinxin; Tan, Bojian; et al.  
*FUEL* Volume: 226 Pages: 18-26 Published: AUG 15 2018
66. Role of Silver Nanoclusters in the Enhanced Photocatalytic Activity of Cerium Oxide Nanoparticles  
 Samai, Boby; Chall, Sayantani; Mati, Soumya Sundar; et al.  
*EUROPEAN JOURNAL OF INORGANIC CHEMISTRY* Issue: 27 Pages: 3224-3231 Published: JUL 23 2018
65. In situ pyrolysis of Ce-MOF to prepare CeO<sub>2</sub> catalyst with obviously improved catalytic performance for toluene combustion  
 Chen, Xi; Chen, Xi; Yu, Enqi; et al.  
*CHEMICAL ENGINEERING JOURNAL* Volume: 344 Pages: 469-479 Published: JUL 15 2018
64. Yan, Zheng; Qu, Yanxin; Liu, Lili; et al.  
 Promotional effect of rare earth-doped manganese oxides supported on activated semi-coke for selective catalytic reduction of NO with NH<sub>3</sub>  
*ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH* Volume: 24 Issue: 31 Pages: 24473-24484 Published: NOV 2017
63. Jin, Qijie; Shen, Yuesong; Zhu, Shemin; et al.  
 Rare earth ions (La, Nd, Sm, Gd, and Tm) regulate the catalytic performance of CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> for NH<sub>3</sub>-SCR of NO  
*JOURNAL OF MATERIALS RESEARCH* Volume: 32 Issue: 12 Pages: 2438-2445 Published: JUN 2017

62. Jiang, Ye; Wang, Xuechong; Bao, Changzhong; et al.  
Poisoning effect of CaO on CeO<sub>2</sub>/TiO<sub>2</sub> catalysts for selective catalytic reduction of NO with NH<sub>3</sub>  
KOREAN JOURNAL OF CHEMICAL ENGINEERING Volume: 34 Issue: 6 Pages: 1874-1881 Published: JUN 2017
61. Jin, Qijie; Shen, Yuesong; Zhu, Shemin  
Praseodymium Oxide Modified CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> Catalyst for Selective Catalytic Reduction of NO by NH<sub>3</sub>  
CHINESE JOURNAL OF CHEMISTRY Volume: 34 Issue: 12 Pages: 1283-1290 Published: DEC 2016
60. Li, G., Wu, B., Li, L.  
Surface-structure effect of nano-crystalline CeO<sub>2</sub> support on low temperature CO oxidation  
Journal of Molecular Catalysis A: Chemical 424, 304-310 DOI: 10.1016/j.molcata.2016.08.035 (2016)
59. Jin, QJ (Jin Qijie); Shen, YS (Shen Yuesong); Zhu, SM (Zhu Shemin); Liu, Q (Liu Qing); Li, XH (Li Xihong); Yan, W (Yan Wei)  
Effect of praseodymium additive on CeO<sub>2</sub>(ZrO<sub>2</sub>)/TiO<sub>2</sub> for selective catalytic reduction of NO by NH<sub>3</sub>  
JOURNAL OF RARE EARTHS Volume: 34 Issue: 11 Pages: 1111-1120 DOI: 10.1016/S1002-0721(16)60142-4 Published: NOV 2016
58. Villa, A., Dimitratos, N., Chan-Thaw, C.E., Hammond, C., Veith, G.M., Wang, D., Manzoli, M., Prati, L., Hutchings, G.J.  
Characterisation of gold catalysts  
CHEMICAL SOCIETY REVIEWS Volume: 45 Issue: 18 Pages: 4953-4994 DOI: 10.1039/c5cs00350d Published: SEP 21 2016
57. Jin, Q., Shen, Y., Zhu, S., Li, X., Hu, M.  
Promotional effects of Er incorporation in CeO<sub>2</sub>(ZrO<sub>2</sub>)/TiO<sub>2</sub> for selective catalytic reduction of NO by NH<sub>3</sub>  
CHINESE JOURNAL OF CATALYSIS Volume: 37 Issue: 9 Pages: 1521-1529 DOI: 10.1016/S1872-2067(16)62450-6 Published: SEP 2016
56. Jin, B., Wei, Y., Zhao, Z., Liu, J., Jiang, G., Duan, A.  
Effects of Au-Ce strong interactions on catalytic activity of Au/CeO<sub>2</sub>/3DOM Al<sub>2</sub>O<sub>3</sub> catalyst for soot combustion under loose contact conditions  
CHINESE JOURNAL OF CATALYSIS Volume: 37 Issue: 6 Pages: 923-933 DOI: 10.1016/S1872-2067(15)61094-4 Published: JUN 2016
55. He, D., Wan, G., Hao, H., Chen, D., Lu, J., Zhang, L., Liu, F., Zhong, L., He, S., Luo, Y.  
Microwave-assisted rapid synthesis of CeO<sub>2</sub> nanoparticles and its desulfurization processes for CH<sub>3</sub>SH catalytic decomposition  
CHEMICAL ENGINEERING JOURNAL Volume: 289 Pages: 161-169 DOI: 10.1016/j.cej.2015.12.103 Published: APR 1 2016
54. Chu, B., An, H., Nijhuis, T.A., Schouten, J.C., Cheng, Y.  
A self-redox pure-phase M1 MoVNbTeO<sub>x</sub>/CeO<sub>2</sub> nanocomposite as a highly active catalyst for oxidative dehydrogenation of ethane  
Journal of Catalysis 329, Art. No. 11790, pages 471-478 DOI: 10.1016/j.jcat.2015.06.009 (2015)
53. Jin, B., Wei, Y., Zhao, Z., Liu, J., Yu, X., Li, Y., Li, J.  
Synthesis of three-dimensionally ordered macroporous Al-Ce mixed oxide catalysts with high catalytic activity and stability for diesel soot combustion  
CATALYSIS TODAY Volume: 258 Pages: 487-497 DOI: 10.1016/j.cattod.2015.01.021 Part: 2 Published: DEC 1 2015
52. Jiang, Y (Jiang, Ye); Xing, ZM (Xing, Zhimin); Wang, XC (Wang, Xuechong); Huang, SB (Huang, Shanbo); Liu, QY (Liu, Qingyu); Yang, JS (Yang, Jingshan)  
MoO<sub>3</sub> modified CeO<sub>2</sub>/TiO<sub>2</sub> catalyst prepared by a single step sol-gel method for selective catalytic reduction of NO with NH<sub>3</sub>  
JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY Volume: 29 Pages: 43-47 DOI: 10.1016/j.jiec.2015.04.023  
Published: SEP 25 2015
51. Palcheva, R (Palcheva, R.); Pawelec, B (Pawelec, B.); Gaigneaux, E (Gaigneaux, E.); Fierro, JL (Fierro, J. L.); Damyanova, S (Damyanova, S.)  
Redox properties of ceria-alumina oxides  
BULGARIAN CHEMICAL COMMUNICATIONS Volume: 47 Special Issue: C Pages: 19-24 Published: 2015
50. Jiang, Ye; Xing, Zhimin; Wang, Xuechong; et al.  
Activity and characterization of a Ce-W-Ti oxide catalyst prepared by a single step sol-gel method for selective catalytic reduction of NO with NH<sub>3</sub>  
FUEL Volume: 151 Pages: 124-129 Published: JUL 1 20
49. Li, Gengnan; Li, Liang; Jiang, Dong  
Facile Synthesis of Highly Active Mesoporous PdCeO<sub>x</sub> Solid Solution for Low-Temperature CO Oxidation  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 119 Issue: 22 Pages: 12502-12507 Published: JUN 4 2015
48. Tang, Wenxiang; Wu, Xiaofeng; Chen, Yunfa  
Catalytic removal of gaseous benzene over Pt/SBA-15 catalyst: the effect of the preparation method  
REACTION KINETICS MECHANISMS AND CATALYSIS Volume: 114 Issue: 2 Pages: 711-723 Published: APR 2015
47. Li, Gengnan; Li, Liang  
Highly efficient formaldehyde elimination over meso-structured M/CeO<sub>2</sub> (M = Pd, Pt, Au and Ag) catalyst under ambient conditions  
RSC ADVANCES Volume: 5 Issue: 46 Pages: 36428-36433 Published: 2015
46. Garcia, T., Solsona, B., Taylor, S.H.  
The catalytic oxidation of hydrocarbon volatile organic compounds

45. Yu, Shen-Wei; Huang, Hsin-Hua; Tang, Chih-Wei; et al.  
The effect of accessible oxygen over Co<sub>3</sub>O<sub>4</sub>-CeO<sub>2</sub> catalysts on the steam reforming of ethanol  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 39 Issue: 35 Pages: 20700-20711 Published: DEC 3 2014
44. Manuel Lopez, Jose; Arenal, Raul; Puertolas, Begona; et al.  
Au deposited on CeO<sub>2</sub> prepared by a nanocasting route: A high activity catalyst for CO oxidation  
JOURNAL OF CATALYSIS 317, pp. 167-175 AUG 2014
43. Tang, Wenxiang; Wu, Xiaofeng; Li, Dongyan; et al.  
Oxalate route for promoting activity of manganese oxide catalysts in total VOCs' oxidation: effect of calcination temperature and preparation method  
JOURNAL OF MATERIALS CHEMISTRY A 2 (8), pp. 2544-2554 2014
42. Venezia, AM (Venezia, Anna Maria); Liotta, LF (Liotta, Leonarda Francesca); Pantaleo, G (Pantaleo, Giuseppe); Longo, A (Longo, Alessandro)  
CERIA-BASED CATALYSTS FOR AIR POLLUTION ABATEMENT  
CATALYSIS BY CERIA AND RELATED MATERIALS, 2ND EDITION Book Series: Catalytic Science Series Volume: 12 Pages: 813-879 Published: 2013
41. Delaigle, R.; Joseph, M. M. F.; Debecker, D. P.; et al.  
An Alternative Method for the Incorporation of Silver in Ag-V<sub>2</sub>O<sub>5</sub>/TiO<sub>2</sub> Catalysts for the Total Oxidation of Benzene  
TOPICS IN CATALYSIS 56 (18-20) SI, pp. 1867-1874 DEC 2013
40. Sellick, D.R., Aranda, A., García, T., López, J.M., Solsona, B., Mastral, A.M., Morgan, D.J., (...), Taylor, S.H.  
Influence of the preparation method on the activity of ceria zirconia mixed oxides for naphthalene total oxidation  
Applied Catalysis B: Environmental 132-133, pp. 98-106, 2013
39. Neto, R.C.R., Schmal, M.  
Synthesis of CeO<sub>2</sub> and CeZrO<sub>2</sub> mixed oxide nanostructured catalysts for the iso-syntheses reaction  
Applied Catalysis A: General 450 , pp. 131-142, 2013
38. Aranda, A., Agouram, S., López, J.M., Mastral, A.M., Sellick, D.R., Solsona, B., Taylor, S.H., García, T.  
Oxygen defects: The key parameter controlling the activity and selectivity of mesoporous copper-doped ceria for the total oxidation of naphthalene  
Applied Catalysis B: Environmental 127, pp. 77-88, 2012
37. Scirè, S., Liotta, L.F.  
Supported gold catalysts for the total oxidation of volatile organic compounds  
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.
36. Reina, T.R., Moreno, A.Á., Ivanova, S., Odriozola, J.A., Centeno, M.A.  
Influence of Vanadium or Cobalt Oxides on the CO Oxidation Behavior of Au/MOx/CeO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> Systems  
ChemCatChem 4 (4), 512-520, 2012.
35. Solsona, B., Concepción, P., Hernández, S., Demicol, B., Nieto, J.M.L.  
Oxidative dehydrogenation of ethane over NiO-CeO<sub>2</sub> mixed oxides catalysts  
Catalysis Today 180 (1), 51-58, 2012.
33. Ntainjua, E.N., Davies, T.E., Garcia, T., Solsona, B., Taylor, S.H.  
The influence of platinum addition on nano-crystalline ceria catalysts for the total oxidation of naphthalene a model polycyclic aromatic hydrocarbon  
Catalysis Letters 141 (12), 1732-1738, 2011.
32. Wu Hongjing; Wang Liuding; Zhang Jiaoqiang; et al.  
Catalytic oxidation of benzene, toluene and p-xylene over colloidal gold supported on zinc oxide catalyst  
CATALYSIS COMMUNICATIONS 12 (10) Pages: 859-865, MAY 15 2011.
31. Li Ting-Yi; Chiang Shu-Jen; Liaw Biing-Jye; et al.  
Catalytic oxidation of benzene over CuO/Ce(1-x)Mn(x)O(2) catalysts  
APPLIED CATALYSIS B-ENVIRONMENTAL 103 (1-2) Pages: 143-148, MAR 14 2011.
30. Abbasi Zahra; Haghghi Mohammad; Fatehifar Esmaeil; et al.  
Synthesis and physicochemical characterizations of nanostructured Pt/Al<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub>(2) catalysts for total oxidation of VOCs  
JOURNAL OF HAZARDOUS MATERIALS 186 (2-3) Pages: 1445-1454, FEB 28 2011.
29. Ribeiro Nielson F. P.; Bonfim Rodrigo P. F.; Souza Mariana M. V. M.; et al.  
Investigation of activity losses of gold nanoparticles in the CO selective oxidation  
JOURNAL OF POWER SOURCES 195 (21) Pages: 7386-7390, NOV 1 2010.
28. Xia Yunsheng; Dai Hongxing; Zhang Lei; et al  
Ultrasound-assisted nanocasting fabrication and excellent catalytic performance of three-dimensionally ordered mesoporous chromia for the combustion of formaldehyde, acetone, and methanol  
APPLIED CATALYSIS B-ENVIRONMENTAL 100 (1-2) Pages: 229-237, OCT 11 2010.

27. Yin Hongfeng; Ma Zhen; Zhu Haoguo; et al.  
 Evidence for and mitigation of the encapsulation of gold nanoparticles within silica supports upon high-temperature treatment of Au/SiO<sub>2</sub> catalysts: Implication to catalyst deactivation  
*APPLIED CATALYSIS A-GENERAL* 386 (1-2) Pages: 147-156 SEP 30 2010.
26. Gao Xiang; Jiang Ye; Fu Yincheng; et al.  
 Preparation and characterization of CeO<sub>2</sub>/TiO<sub>2</sub> catalysts for selective catalytic reduction of NO with NH<sub>3</sub>  
*CATALYSIS COMMUNICATIONS* 11 (5) Pages: 465-469, JAN 25 2010.
25. Puertolas Begona; Solsona Benjamin; Agouram Said; et al.  
 The catalytic performance of mesoporous cerium oxides prepared through a nanocasting route for the total oxidation of naphthalene  
*APPLIED CATALYSIS B-ENVIRONMENTAL* 93 (3-4) Pages: 395-405, JAN 12 2010.
24. Wu Hongjing; Shuai Qin; Zhu Zhenli; et al.  
 Complete Benzene Oxidation over Colloidal Gold Catalysts Supported on Nanostructure Zinc Oxide  
 Source: ADVANCE IN ECOLOGICAL ENVIRONMENT FUNCTIONAL MATERIALS AND ION INDUSTRY Book Series:  
*Advanced Materials Research* Volume: 96 Pages: 21-27, 2010.
23. Yu, Q.-Q., Dong, Y.-Y., Liao, W.-P., Jin, M.-S., He, T., Suo, Z.-H.  
 Preparation of ceria-alumina and catalytic activity of gold catalyst supported on ceria-alumina for water gas shift reaction  
*Ranlia Huaxue Xuebao/Journal of Fuel Chemistry and Technology* 38 (2), pp. 223-229 (2010).
22. Hongjing, W., Qin, S., Zhenli, Z., Shenghong, H.  
 Complete benzene oxidation over colloidal gold catalysts supported on nanostructure zinc oxide  
*Advanced Materials Research* 96, pp. 21-27 (2010).
21. Gao, X., Jiang, Y., Fu, Y., Zhong, Y., Luo, Z., Cen, K.  
 Preparation and characterization of CeO<sub>2</sub>/TiO<sub>2</sub> catalysts for selective catalytic reduction of NO with NH<sub>3</sub>  
*Catalysis Communications* 11 (5), pp. 465-469 (2010).
20. Puertolas, B., Solsona, B., Agouram, S., Murillo, R., Mastral, A.M., Aranda, A., Taylor, S.H., Garcia, T.  
 The catalytic performance of mesoporous cerium oxides prepared through a nanocasting route for the total oxidation of naphthalene  
*Applied Catalysis B: Environmental* 93 (3-4), pp. 395-405 (2010).
19. Aranda, A., López, J.M., Murillo, R., Mastral, A.M., Dejoz, A., Vázquez, I., Solsona, B., (...), García, T.  
 Total oxidation of naphthalene with high selectivity using a ceria catalyst prepared by a combustion method employing ethylene glycol  
*Journal of Hazardous Materials* 171 (1-3), pp. 393-399 (2009).
18. Solsona, B., García, T., Murillo, R., Mastral, A.M., Ntanjua Ndifor, E., Hetrick, C.E., Amiridis, M.D., Taylor, S.H.  
 Ceria and gold/ceria catalysts for the abatement of polycyclic aromatic hydrocarbons: An in situ DRIFTS study  
*Topics in Catalysis* 52 (5), pp. 492-500 (2009).
17. Zhang, Y., Wang, Z., Zhou, J., Cen, K.  
 Ceria as a catalyst for hydrogen iodide decomposition in sulfur-iodine cycle for hydrogen production  
*International Journal of Hydrogen Energy* 34 (4), pp. 1688-1695 (2009).
16. Edwin, NN (Edwin, Ntanjua N.); Garcia, T (Garcia, Tomas); Solsona, B (Solsona, Benjamin); Taylor, SH (Taylor, Stuart H.).  
 The influence of cerium to urea preparation ratio of nanocrystalline ceria catalysts for the total oxidation of naphthalene  
*CATALYSIS TODAY* Volume: 137 Issue: 2-4 Pages: 373-378 DOI: 10.1016/j.cattod.2007.12.140 Published: SEP 30 2008
15. Tang, X., Xu, Y., Shen, W.  
 Promoting effect of copper on the catalytic activity of MnO<sub>x</sub>-CeO<sub>2</sub> mixed oxide for complete oxidation of benzene  
*Chemical Engineering Journal* 144 (2), pp. 175-180 (2008).
14. Ntanjua N., E., Garcia, T., Solsona, B., Taylor, S.H.  
 The influence of cerium to urea preparation ratio of nanocrystalline ceria catalysts for the total oxidation of naphthalene  
*Catalysis Today* 137 (2-4), pp. 373-378 (2008).
13. Wang, L.-C., He, L., Liu, Q., Liu, Y.-M., Chen, M., Cao, Y., He, H.-Y., Fan, K.-N.  
 Solvent-free selective oxidation of alcohols by molecular oxygen over gold nanoparticles supported on  $\beta$ -MnO<sub>2</sub> nanorods  
*Applied Catalysis A: General* 344 (1-2), pp. 150-157 (2008).
12. Yang, S.M., Liu, D.M., Liu, S.Y.  
 Catalytic combustion of benzene over Au supported on ceria and vanadia promoted ceria  
*Topics in Catalysis* 47 (3-4), pp. 101-108 (2008).
11. Li, C., Shen, Y., Jia, M., Sheng, S., Adebajo, M.O., Zhu, H.  
 Catalytic combustion of formaldehyde on gold/iron-oxide catalysts  
*Catalysis Communications* 9 (3), pp. 355-361 (2008)
10. Della Pina, C (Della Pina, Cristina); Dimitratos, N (Dimitratos, Nikolaos); Falletta, E (Falletta, Ermelinda); Rossi, M (Rossi, Michele); Siani, A (Siani, Attilio)  
 Catalytic performance of gold catalysts in the total oxidation of VOCs  
*GOLD BULLETIN* Volume: 40 Issue: 1 Pages: 67-72 Published: 2007

9. Carabineiro, SAC (Carabineiro, Sonia A. C.); Thompson, DT (Thompson, David T.)  
 Catalytic Applications for Gold Nanotechnology  
 NANOCATALYSIS Book Series: Nanoscience and Technology Pages: 377-489 DOI: 10.1007/978-3-540-32646-5\_6 Published: 2007
8. Ndifor, E.N., Garcia, T., Solsona, B., Taylor, S.H.  
 Influence of preparation conditions of nano-crystalline ceria catalysts on the total oxidation of naphthalene, a model polycyclic aromatic hydrocarbon  
*Applied Catalysis B: Environmental* 76 (3-4), pp. 248-256 (2007)
7. Hai, F., Jia, M., Zhaorigetu, Sagala, Li, Y.  
 Preparation of Au/ZrO<sub>2</sub> catalyst and its activity in CO oxidation  
*Petrochemical Technology* 36 (9), pp. 876-881 (2007)
6. Hutchings, GJ (Hutchings, Graham J.)  
 Reactions of Environmental Importance  
 CATALYSIS BY GOLD Book Series: Catalytic Science Series Volume: 6 Pages: 286-310 Published: 2006
5. Liotta, L.F., Di Carlo, G., Pantaleo, G., Venezia, A.M., Deganello, G.  
 Co<sub>3</sub>O<sub>4</sub>/CeO<sub>2</sub> composite oxides for methane emissions abatement: Relationship between Co<sub>3</sub>O<sub>4</sub>-CeO<sub>2</sub> interaction and catalytic activity  
*Applied Catalysis B: Environmental* 66 (3-4), pp. 217-227 (2006)
4. García, T., Solsona, B., Taylor, S.H.  
 Naphthalene total oxidation over metal oxide catalysts  
*Applied Catalysis B: Environmental* 66 (1-2), pp. 92-99 (2006)
3. Garcia T, Solsona B, Cazorla-Amoros D, et al.  
 Total oxidation of volatile organic compounds by vanadium promoted palladium-titania catalysts: Comparison of aromatic and polyaromatic compounds  
*APPLIED CATALYSIS B-ENVIRONMENTAL* 62 (1-2): 66-76 JAN 10 2006
2. Garcia T, Solsona B, Taylor SH  
 Nano-crystalline ceria catalysts for the abatement of polycyclic aromatic hydrocarbons  
*CATALYSIS LETTERS* 105 (3-4): 183-189 DEC 2005
1. Centeno MA, Portales C, Carrizosa I, et al.  
 Gold supported CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> catalysts for CO oxidation: influence of the ceria phase  
*CATALYSIS LETTERS* 102 (3-4): 289-297 AUG 2005
- 47. "Plasma-assisted deposition of thin carbon films from methane and the influence of the plasma parameters and additional gases"**  
 F. Hamelmann, A. Aschentrup, A. Brechling, U. Heinzmann, M. Abrashev, A. Szekeres and K. Gesheva  
*Vacuum* 76, 139-142 (2004)
3. Impact of plasma treatment in CH<sub>4</sub>/N<sub>2</sub> on the properties of reduced graphene oxide  
 Neustroev, E.P., Prokopiev, A.R., Timofeev, V.B., (...), Alekseev, A.A., Semenov, S.O.  
 IOP Conference Series: Materials Science and Engineering 693(1),012043 (2019)
2. Formation of nanographite flakes on SiO<sub>2</sub> substrate by plasma deposition of carbon and subsequent annealing  
 Neustroev, E.P., Popov, V.I., Prokopiev, A.R., Davydova, Z.Y., Semenov, S.O.  
 AIP Conference Proceedings 2179, 020019 (2019)
1. Pereira J, Massereau-Guilbaud V, Geraud-Grenier I, et al.  
 CH and CN radical contribution in the particle formation generated in a radio-frequency CH<sub>4</sub>/N<sub>2</sub> plasma  
*PLASMA PROCESSES AND POLYMERS* 2 (8): 633-640 OCT 11 2005
- 48. "Low-pressure sublimation epitaxy of AlN films—growth and characterization"**  
 M. Beshkova, Z. Zakhariev, M.V. Abrashev, E. Birch, A. Kakanakova and R. Yakimova  
*Vacuum* 76, 143-146 (2004)
4. Abid M. A.; Abu Hassan H.; Ng S. S.  
 Theoretical and experimental investigations of zone-center optical phonons in wurtzite Al(x)Ga(1-x)N using pseudo unit cell model  
*OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS* 4 (5) Pages: 693-698, MAY 2010.
3. Han, Q., Duan, C., Ji, C., Qiu, K., Zhong, F., Li, X., Yin, Z., (...), Wang, Y.  
 Polarity analysis of self-seeded aluminum nitride crystals grown by sublimation  
*Journal of Electronic Materials* 37 (8), pp. 1058-1063 (2008).
2. Iborra, E., Clement, M., Vergara, L., Sanz-Hervás, A., Olivares, J., Sangrador, J.  
 Dependence of the IR reflectance LO absorption bands on the crystalline texture of AlN films  
*Applied Physics Letters* 88 (23), art. no. 231901 (2006)
1. Fisher AS, Goodall PS, Hinds MW, et al.

49. "Optical and electrochromic properties of CVD mixed MoO<sub>3</sub>-WO<sub>3</sub> thin films"

T. Ivanova, K. Gesheva, F. Hamelmann, G. Popkirov, M. Abrashev, M. Ganchev and E. Tzvetkova  
Vacuum 76, 195-198 (2004)

19. Detailed transmittance analysis of high-performance SnO<sub>2</sub>-doped WO<sub>3</sub> thin films in UV-Vis region for electrochromic devices  
Olkun, A., Pat, S., Akkurt, N., (...), Özgür, M., Korkmaz, S.  
Journal of Materials Science: Materials in Electronics 31(21), pp. 19074-19084 (2020)

18. Structural, electronic, optical and lattice dynamic properties of the different WO<sub>3</sub> phases: First-principle calculation  
Yang, H., Sun, H., Li, Q., (...), Song, B., Wang, L.  
Vacuum 164, pp. 411-420 (2019)

17. Polyoxometalates as promising materials for electrochromic devices  
Wang, S.-M., Hwang, J., Kim, E.  
Journal of Materials Chemistry C 7(26), pp. 7828-7850 (2019)

16. Indium-doped and positively charged ZnO nanoclusters: versatile materials for CO detection  
Omidvar, A.  
Vacuum 147, pp. 126-133 (2018)

15. Chu, Ximo S.; Li, Duo O.; Green, Alexander A.; et al.  
Formation of MoO<sub>3</sub> and WO<sub>3</sub> nanoscrolls from MoS<sub>2</sub> and WS<sub>2</sub> with atmospheric air plasma  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 5 Issue: 43 Pages: 11301-11309 Published: NOV 21 2017

14. Jittiarpong, Phuriwat; Sikong, Lek; Kooparnond, Kalayanee; et al.  
Electrochromic properties of MoO<sub>3</sub>-WO<sub>3</sub> thin films prepared by a sol-gel method, in the presence of a triblock copolymer template  
SURFACE & COATINGS TECHNOLOGY Volume: 327 Pages: 66-74 Published: OCT 25 2017

13. Balaji, M., Chandrasekaran, J., Raja, M., Rajesh, S.  
Structural, optical and electrical properties of Ru doped MoO<sub>3</sub> thin films and its P-N diode application by JNS pyrolysis technique  
Journal of Materials Science: Materials in Electronics 27(11), 11646-11658 DOI: 10.1007/s10854-016-5300-0 (2016)

12. Kim, M.H., Bark, C.W., Choi, H.W., Kim, K.H.  
Working pressure dependence of WO<sub>3-x</sub> thin films prepared by reactive facing targets sputtering  
Molecular Crystals and Liquid Crystals 602(1), 185-192 DOI: 10.1080/15421406.2014.944761 (2014)

11. Kim, M.H., Choi, H.W., Kim, K.H.  
Thickness dependence of WO<sub>3-x</sub> thin films for electrochromic device application  
Molecular Crystals and Liquid Crystals 598(1), 54-61 DOI: 10.1080/15421406.2014.933298 (2014)

10. Choi, D.S., Han, S.H., Kim, H., Kim, T.Y., Rhyu, S.H., Yoon, D.H., Yang, W.S.  
Electrochromic characterization of amorphous tungsten oxide films deposited on indium tin oxide and CVD-graphene electrodes by RF magnetron sputtering  
Journal of Ceramic Processing Research 15(4), 273-276 (2014)

9. Kim, M.H., Choi, H.W., Kim, K.H.  
Properties of WO<sub>3-x</sub> electrochromic thin film prepared by reactive sputtering with various post annealing temperatures  
Japanese Journal of Applied Physics 52(11) PART 2 Art. No. 11NB09 DOI: 10.7567/JJAP.52.11NB09 (2013)

8. Kim, M.H., Kang, T.Y., Jung, Y.S., Kim, K.H.  
Electrochromic properties of tungsten oxide films prepared by reactive sputtering  
Japanese Journal of Applied Physics 52 (5 PART 3), art. no. 05EC03, 2013

7. Zhao, X.-M., Chen, W.-J., Zhang, X.-H., Liu, W.-B., Zhang, Y.-F., Huang, X.  
Electronic Properties and Chemical Bonding of O-Rich Clusters MM' O<sub>7</sub> - (M, M' = V, Nb, Ta)  
Journal of Cluster Science 22 (3), pp. 397-404, 2011.

6. Lee, Y.J., Seo, Y.I., Kim, S.-H., Kim, D.-G., Kim, Y.D.  
Optical properties of molybdenum oxide thin films deposited by chemical vapor transport of MoO<sub>3</sub>(OH)<sub>2</sub>  
Applied Physics A: Materials Science and Processing 97 (1), pp. 237-241 (2009).

5. Deki, S., Béléké, A.B., Kotani, Y., Mizuhata, M.  
Liquid phase deposition synthesis of hexagonal molybdenum trioxide thin films  
Journal of Solid State Chemistry 182 (9), pp. 2362-2367 (2009).

4. Rothgeb, D.W., Hossain, E., Kuo, A.T., Troyer, J.L., Jarrold, C.C.  
Structures of Mox W (3-x) O<sub>6</sub> (x=0-3) anion and neutral clusters determined by anion photoelectron spectroscopy and density functional theory calculations  
Journal of Chemical Physics 131 (4), art. no. 044310 (2009).

3. Mayhall, N.J., Rothgeb, D.W., Hossain, E., Raghavachari, K., Jarrold, C.C.  
 Electronic structures of MoWO<sub>y</sub> - and MoWO<sub>y</sub> determined by anion photoelectron spectroscopy and DFT calculations  
*Journal of Chemical Physics* 130 (12), art. no. 124313 (2009).
2. Niklasson, G.A., Granqvist, C.G.  
 Electrochromics for smart windows: Thin films of tungsten oxide and nickel oxide, and devices based on these  
*Journal of Materials Chemistry* 17 (2), pp. 127-156 (2007)
1. Avendano E, Berggren L, Niklasson GA, et al.  
 Electrochromic materials and devices: Brief survey and new data on optical absorption in tungsten oxide and nickel oxide films  
*THIN SOLID FILMS* 496 (1): 30-36 FEB 1 2006
50. "Comparative Raman studies of Sr<sub>2</sub>RuO<sub>4</sub>, Sr<sub>3</sub>Ru<sub>2</sub>O<sub>7</sub> and Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>"  
 M. N. Iliev, V. N. Popov, A. P. Litvinchuk, M. V. Abrashev, J. Backstrom, Y. Y. Sun, R. L. Meng, and C. W. Chu  
*Physica B* 358, 138 – 152 (2005)
20. Facile fabrication of exsolved nanoparticle-decorated hollow ferrite fibers as active electrocatalyst for oxygen evolution reaction  
 Fu, L., Zhou, J., Zhou, L., (...), Wang, J., Wu, K.  
*Chemical Engineering Journal* 418,129422 (2021)
19. Spectroscopic and transport properties of Ba- and Ti-doped BaLaInO<sub>4</sub>  
 Tarasova, N.; Galisheva, A.; Animitsa, I  
*JOURNAL OF RAMAN SPECTROSCOPY* Volume: 52 Issue: 5 Pages: 980-987 Published: MAY 2021
18. Fermi surface and kink structures in Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub> revealed by synchrotron-based ARPES  
 Ngabonziza, Prosper; Carleschi, Emanuel; Zabolotnyy, Volodymyr; et al.  
*SCIENTIFIC REPORTS* Volume: 10 Issue: 1 Article Number: 21062 Published: DEC 3 2020
17. Effect of doping on the local structure of new block-layered proton conductors based on BaLaInO<sub>4</sub>  
 Tarasova, N.; Animitsa, I.; Galisheva, A.  
*JOURNAL OF RAMAN SPECTROSCOPY* Volume: 51 Issue: 11 Pages: 2290-2297 Published: NOV 2020
16. Electronic and vibrational signatures of ruthenium vacancies in Sr<sub>2</sub>RuO<sub>4</sub> thin films  
 Kim, Gideok; Suyolcu, Y. Eren; Herrero-Martin, J.; et al.  
*PHYSICAL REVIEW MATERIALS* Volume: 3 Issue: 9 Article Number: 094802 Published: SEP 27 2019
15. Barman, Nabadyuti; Singh, Priyank; Narayana, Chandrabhas; et al.  
 Incipient ferroelectric to a possible ferroelectric transition in Te<sup>4+</sup> doped calcium copper titanate (CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>) ceramics at low temperature as evidenced by Raman and dielectric spectroscopy  
*AIP ADVANCES* Volume: 7 Issue: 3 Article Number: 035105 Published: MAR 2017
14. Chen, C., Kim, J., Nascimento, V.B., Diao, Z., Teng, J., Hu, B., Li, G., Liu, F., Zhang, J., Jin, R., Plummer, E.W.  
 Hidden phases revealed at the surface of double-layered Sr-3(Ru<sub>1-x</sub>Mn<sub>x</sub>)(2)O-7  
*PHYSICAL REVIEW B* Volume: 94 Issue: 8 Article Number: 085420 DOI: 10.1103/PhysRevB.94.085420 Published: AUG 22 2016
13. Behera, P.S., Bhobe, P.A., Sathe, V.G., Nigam, A.K.  
 Local lattice distortions and magnetic properties of CdCr<sub>2</sub>Se<sub>4-x</sub>S<sub>x</sub>  
*JOURNAL OF APPLIED PHYSICS* Volume: 120 Issue: 4 Article Number: 045107 DOI: 10.1063/1.4959878 Published: JUL 28 2016
12. Granata, V., Capogna, L., Forte, F., Lepetit, M.-B., Fittipaldi, R., Stunault, A., Cuoco, M., Vecchione, A.  
 Spin-orbital nature of the high-field magnetic state in the Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>  
*PHYSICAL REVIEW B* Volume: 93 Issue: 11 Article Number: 115128 DOI: 10.1103/PhysRevB.93.115128 Published: MAR 17 2016
11. Gu, X  
 Magnetism and optical properties of Co doped Sr<sub>2</sub>RuO<sub>4</sub>  
*2015 IEEE MAGNETICS CONFERENCE (INTERMAG)* Meeting Abstract: GS-11 Published: 2015
10. Jiang, Ning; Woodley, Scott M.; Catlow, C. Richard A.; et al.  
 Applying a new interatomic potential for the modelling of hexagonal and orthorhombic YMnO<sub>3</sub>  
*JOURNAL OF MATERIALS CHEMISTRY C* Volume: 3 Issue: 18 Pages: 4787-4793 Published: 2015
9. Carleschi, E.; Doyle, B. P.; Fittipaldi, R.; et al.  
 Double metamagnetic transition in Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>  
*PHYSICAL REVIEW B* Volume: 90 Issue: 20 Article Number: 205120 Published: NOV 13 2014
8. Cooper, S.L.  
 Exploring the magnetostructural phases of the layered ruthenates with Raman scattering  
*FRONTIERS OF 4D- AND 5D- TRANSITION METAL OXIDES* Pages: 99-162 DOI: 10.1142/9789814374866\_0004 Published: 2013
7. Pandey, P.K., Choudhary, R.J., Mishra, D.K., Sathe, V.G., Phase, D.M.  
 Signature of spin-phonon coupling in Sr<sub>2</sub>CoO<sub>4</sub> thin film: A Raman spectroscopic study  
*Applied Physics Letters* 102 (14), art. no. 142401, 2013

6. Ngabonziza, P, Carleschi, E, Doyle, BP  
 Signature of Electron-Phonon Correlation in the Band Structure of Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>  
 PROCEEDINGS OF SAIP2012: THE 57TH ANNUAL CONFERENCE OF THE SOUTH AFRICAN INSTITUTE OF PHYSICS Pages:  
 153-157 Published: 2012
5. Mirri, C., Vitucci, F.M., Di Pietro, P., Lupi, S., Fittipaldi, R., Granata, V., Vecchione, A., (...), Calvani, P.  
 Anisotropic optical conductivity of Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>  
 Physical Review B - Condensed Matter and Materials Physics 85 (23) , art. no. 235124, 2012.
4. Puetter Christoph M.; Rau Jeffrey G.; Kee Hae-Young  
 Microscopic route to nematicity in Sr<sub>3</sub>Ru<sub>2</sub>O<sub>7</sub>  
 PHYSICAL REVIEW B 81 (8) Article Number: 081105, FEB 2010 .
3. Davidson, G  
 Vibrational spectra of transition element compounds  
 SPECTROSCOPIC PROPERTIES OF INORGANIC AND ORGANOMETALLIC COMPOUNDS, VOL. 39 Book Series: Specialist Periodical Reports Spectroscopic Properties of Inorganic and Organometallic Compounds Volume: 39 Pages: 259-300 DOI: 10.1039/b614705b Published: 2007
2. Gupta R, Kim M, Barath H, et al.  
 Field- and pressure-induced phases in Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>: A spectroscopic investigation  
 PHYSICAL REVIEW LETTERS 96 (6): Art. No. 067004 FEB 17 2006
1. Laverdiere J, Jandl S, Mukhin AA, et al.  
 Spin-phonon coupling in orthorhombic RMnO<sub>3</sub> (R=Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Y): A Raman study  
 PHYSICAL REVIEW B 73 (21), 214301 (2006).
- 51. "Optical and electrochromic characterization of multilayered mixed metal oxide thin films"**  
 Hamelmann F, Gesheva K, Ivanova T, Szekeres A, Abrashev M, Heinzmann U  
 J. Optoelectr. and Adv. Mater. 7 (1): 393-396 (2005).
27. Tungsten doping effect on V<sub>2</sub>O<sub>5</sub> thin film electrochromic performance  
 Panagopoulou, Marianthi; Vernardou, Dimitra; Koudoumas, Emmanuel; et al.  
 ELECTROCHIMICA ACTA Volume: 321 Article Number: 134743 Published: OCT 20 2019
26. Mechanical Milling Influence on Lattice Vibrational Behaviour of MoO<sub>3</sub>-V<sub>2</sub>O<sub>5</sub> Composite Nanopowders  
 Sundeep, Dola; Kumar, T. Vijaya; Kumar, M. Kiran; et al.  
 SILICON Volume: 11 Issue: 3 Pages: 1517-1524 Published: JUN 2019
25. Physical Investigations on (MoO<sub>3</sub>)<sub>x</sub>-(WO<sub>3</sub>)<sub>(1-x)</sub> Composite Thin Films  
 Srinivasarao, K.; Prameela, Ch  
 JOURNAL OF SURFACE SCIENCE AND TECHNOLOGY Volume: 35 Issue: 1-2 Pages: 26-35 Published: JUN 2019
24. Enhanced photo catalytic activity of graphene oxide /MoO<sub>3</sub> nanocomposites in the degradation of Victoria Blue Dye under visible light irradiation  
 Kamalam, M. Beaula Ruby; Inbanathan, S. S. R.; Sethuraman, K.  
 APPLIED SURFACE SCIENCE Volume: 449 Special Issue: SI Pages: 685-696 Published: AUG 15 2018
23. Sundeep, Dola; Krishna, A. Gopala; Ravikumar, R. V. S. S. N.; et al.  
 Spectral characterization of mechanically synthesized MoO<sub>3</sub>-CuO nanocomposite  
 INTERNATIONAL NANO LETTERS Volume: 6 Issue: 2 Pages: 119-128 Published: JUN 2016
22. Gopala Krishna, A., Ravikumar, R.V.S.S.N, Vijaya Kumar, T., Daniel Ephraim, S., Ranjith, B., Pranoy, M., Dola, S.  
 Investigation and comparison of optical and Raman bands of mechanically synthesised MoO<sub>3</sub> nano powders  
 Materials Today: Proceedings 3(1), 54-63 DOI: 10.1016/j.matpr.2016.01.121 (2016)
21. Meenakshi, M., Sivakumar, R., Perumal, P., Sanjeeviraja, C.  
 Studies on electrochromic properties of RF sputtered Vanadium Oxide: Tungsten Oxide thin films  
 MATERIALS TODAY-PROCEEDINGS Volume: 3 Pages: S30-S39 DOI: 10.1016/j.matpr.2016.01.005 Supplement: 1 Published: 2016
20. Prameela, C., Srinivasarao, K.  
 Characterization of (MoO<sub>3</sub>)<sub>x</sub>/(Wo<sub>3</sub>)<sub>1-x</sub> composites  
 International Journal of Applied Engineering Research 10(4), 9865-9875 (2015)
19. Manivel, Arumugam; Lee, Gang-Juan; Chen, Chin-Yi; et al.  
 Synthesis of MoO<sub>3</sub> nanoparticles for azo dye degradation by catalytic ozonation  
 MATERIALS RESEARCH BULLETIN Volume: 62 Pages: 184-191 Published: FEB 2015
18. Pal, Jaya; Ganguly, Mainak; Mondal, Chanchal; et al.  
 Precursor salt assisted syntheses of high-index faceted concave hexagon and nanorod-like polyoxometalates  
 NANOSCALE Volume: 7 Issue: 2 Pages: 708-719 Published: 2015
17. Kharade, Rohini R.; Mali, S. S.; Mohite, S. S.; et al.  
 Hybrid Physicochemical Synthesis and Electrochromic Performance of WO<sub>3</sub>/MoO<sub>3</sub> Thin Films  
 ELECTROANALYSIS Volume: 26 Issue: 11 Special Issue: SI Pages: 2388-2397 Published: NOV 2014

16. Chandrasekhar, Prasanna; Zay, Brian J.; Cai, Chunming; et al.  
Matched-Dual-Polymer Electrochromic Lenses, Using New Cathodically Coloring Conducting Polymers, with Exceptional Performance and Incorporated Into Automated Sunglasses  
JOURNAL OF APPLIED POLYMER SCIENCE 131 (22), Art. No. 41043 NOV 15 2014
15. Lupan, O.; Trofim, V.; Cretu, V.; et al.  
Investigation of optical properties and electronic transitions in bulk and nano-microribbons of molybdenum trioxide  
JOURNAL OF PHYSICS D-APPLIED PHYSICS 47 (8), Art. No. 085302 FEB 26 2014
14. Chen, Hsi-Chao; Jan, Der-Jun; Luo, Yu-Siang; et al.  
Electrochromic and optical properties of tungsten oxide films deposited with DC sputtering by introducing hydrogen  
APPLIED OPTICS 53 (4), pp. A321-A329 FEB 1 2014
13. Chen, H.-C., Jan, D.-J., Chen, C.-H., Huang, K.-T.  
Bond and electrochromic properties of WO<sub>3</sub> films deposited with horizontal DC, pulsed DC, and RF sputtering  
Electrochimica Acta 93, pp. 307-313, 2013
12. Galindo, RE, Benito, N.; Duday, D.; Fuentes, GG, Valle, N, Herrero, P, Vergara, L, Joco, V, Sanchez, O.; Arranz, A, Palacio  
In-depth multi-technique characterization of chromium-silicon mixed oxides produced by reactive ion beam mixing of the Cr/Si interface  
JOURNAL OF ANALYTICAL ATOMIC SPECTROMETRY Volume: 27 Issue: 3 Pages: 390-400 DOI: 10.1039/c2ja10296j Published: 2012
11. Chen, H.-C., Jan, D.-J., Chen, C.-H., Huang, K.-T., Luo, Y.-S., Chen, J.-M.  
Investigation of the optical and structural properties of WO<sub>3</sub> thin films with different sputtering power supplies  
Proceedings of SPIE - The International Society for Optical Engineering 8486, art. no. 84861F, 2012
10. Chen Hsi-Chao; Jan Der-Jun; Chen Chien-Han  
Investigation of Optical and Electrochromic Properties of Tungsten Oxide Deposited with Horizontal DC and DC Pulse Magnetron Sputtering  
JAPANESE JOURNAL OF APPLIED PHYSICS 51 (4) Article Number: 045503, APR 2012.
9. Escobar Galindo R.; Benito N.; Duday D.; et al.  
In-depth multi-technique characterization of chromium-silicon mixed oxides produced by reactive ion beam mixing of the Cr/Si interface  
JOURNAL OF ANALYTICAL ATOMIC SPECTROMETRY 27 (3), 390-400, 2012.
8. Chen, H.-C., Jan, D.-J., Chen, C.-H., Huang, K.-T., Lo, Y.-M., Chen, S.-H.  
Investigation of the optical property and structure of WO<sub>3</sub> thin films with different sputtering depositions  
Proceedings of SPIE - The International Society for Optical Engineering 8168 , art. no. 1, 2011.
7. Liu, P., Liang, Y., Lin, X., Wang, C., Yang, G.  
A General Strategy To Fabricate Simple Polyoxometalate Nanostructures: Electrochemistry-Assisted Laser Ablation in Liquid ACS NANO 5 (6) Pages: 4748-4755, JUN 2011.
6. Pan, W., Tian, R., Jin, H., Guo, Y., Zhang, L., Wu, X., Zhang, L., (...), Chu, W.  
Structure, Optical, and Catalytic Properties of Novel Hexagonal Metastable h-MoO<sub>3</sub> Nano- and Microrods Synthesized with Modified Liquid-Phase Processes  
CHEMISTRY OF MATERIALS 22 (22) Pages: 6202-6208, NOV 23 2010.
5. Chu, W.G., Wang, H.F., Guo, Y.J., Zhang, L.N., Han, Z.H., Li, Q.Q., Fan, S.S.  
Catalyst-free growth of quasi-aligned nanorods of single crystal Cu<sub>3</sub>Mo<sub>2</sub>O<sub>9</sub> and their catalytic properties  
Inorganic Chemistry 48 (3), pp. 1243-1249 (2009).
4. Granqvist, C.G  
Transparent conductors as solar energy materials: A panoramic review  
Solar Energy Materials and Solar Cells 91 (17), pp. 1529-1598 (2007)
3. Chu, W.G., Zhang, L.N., Wang, H.F., Han, Z.H., Han, D., Li, Q.Q., Fan, S.S  
Direct thermal oxidation evaporation growth, structure, and optical properties of single-crystalline nanobelts of molybdenum trioxide  
Journal of Materials Research 22 (6), pp. 1609-1617 (2007)
2. Niklasson GA, Granqvist CG  
Electrochromics for smart windows: thin films of tungsten oxide and nickel oxide, and devices based on these  
JOURNAL OF MATERIALS CHEMISTRY 17 (2): 127-156 (2007).
1. Saad, E.A.-F.I.  
Dielectric properties of molybdenum oxide thin films  
Journal of Optoelectronics and Advanced Materials 7 (5), pp. 2743-2752 (2005)
52. "Resonant Raman scattering in ion-beam-synthesized Mg<sub>2</sub>Si in a silicon matrix"  
M. Baleva, G. Zlateva, A. Atanassov, M. Abrashev, and E. Goranova  
Phys. Rev. B 72, 115330 (2005)
48. Fine structural and photoluminescence properties of Mg<sub>2</sub>Si nanosheet bundles rooted on Si substrates

Koga, Tomoya; Tamaki, Ryo; Meng, Xiang; et al.  
JAPANESE JOURNAL OF APPLIED PHYSICS Volume: 60 Issue: SB Supplement: B Article Number: SBBK07 Published: MAY 1 2021

47. Improving Interface Stability of Si Anodes by Mg Coating in Li-Ion Batteries  
Li, Zhifei; Stetson, Caleb; Teeter, Glenn; et al.  
ACS APPLIED ENERGY MATERIALS Volume: 3 Issue: 12 Pages: 11534-11539 Published: DEC 28 2020

46. Highly Porous Magnesium Silicide Honeycombs Prepared by Magnesium Vapor Annealing of Silica-Coated Polymer Honeycomb Films toward Ultralightweight Thermoelectric Materials  
Yabu, Hiroshi; Matsuo, Yasutaka; Yamada, Takahiro; et al.  
CHEMISTRY OF MATERIALS Volume: 32 Issue: 23 Pages: 10176-10183 Published: DEC 8 2020

45. Research on Mg<sub>2</sub>Si films prepared using thermal evaporation with Al doping  
Yu, H., Zheng, L., Ji, S.T., (...), Gao, C.G., Wu, X.P.  
Proceedings of SPIE - The International Society for Optical Engineering 11606, 1160618 (2020)

44. Formation of Crystallographically Oriented Metastable Mg<sub>1.8</sub>Si in Mg Ion-Implanted Si  
Kobayashi, Yuki; Naito, Muneyuki; Sudoh, Koichi; et al.  
CRYSTAL GROWTH & DESIGN Volume: 19 Issue: 12 Pages: 7138-7142 Published: DEC 2019

43. Influences of Nd doping on preparing Mg<sub>2</sub>Si semiconductor thin films by thermal evaporation  
Yu, Hong; Luo, Yuee; Wang, Xuwen; et al.  
MICRO & NANO LETTERS Volume: 14 Issue: 7 Pages: 737-739 Published: JUN 26 2019

42. Effects of La doping on Mg<sub>2</sub>Si semiconductor thin films prepared by thermal evaporation  
Yu, Hong; Luo, Yuee; Wang, Xuwen; et al.  
MATERIALS RESEARCH EXPRESS Volume: 6 Issue: 2 Article Number: 026301 Published: FEB 2019

41. First-principles study of pressure-induced phase transformations in thermoelectric Mg<sub>2</sub>Si  
Ji, Depeng; Chong, XiaoYu; Ge, Zhen-Hua; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 773 Pages: 988-996 Published: JAN 30 2019

40. Titanium-based thin films for protective coatings prepared by TVA (Thermionic Vacuum Arc) technology  
Vladoiu, R., Mandes, A., Dinca, V., Prodan, G.  
MATEC Web of Conferences 249, 01005 (2018)

39. Defect-induced room-temperature visible light luminescence in Mg<sub>2</sub>Si:Al films  
Liao, Yangfang; Fan, Menghui; Xie, Quan; et al.  
APPLIED SURFACE SCIENCE Volume: 458 Pages: 360-368 Published: NOV 15 2018

38. Amorphous magnesium silicide  
Durandurdu, Murat  
JOURNAL OF NON-CRYSTALLINE SOLIDS Volume: 498 Pages: 118-124 Published: OCT 15 2018

37. Growth of (111)-oriented epitaxial magnesium silicide (Mg<sub>2</sub>Si) films on (001) Al<sub>2</sub>O<sub>3</sub> substrates by RF magnetron sputtering and their properties  
Katagiri, Atsuo; Ogawa, Shota; Uehara, Mutsuo; et al.  
JOURNAL OF MATERIALS SCIENCE Volume: 53 Issue: 7 Pages: 5151-5158 Published: APR 2018

36. Fabrication and Electrical Properties of Mg<sub>2</sub>Si Films on Soda Lime Glass  
Fang, D., Xiao, Q., Liao, Y., (...), Wang, S., Wu, H.  
Cailiao Daobao/Materials Review 31(2), pp. 9-13 (2017)

35. Wang, J. L.; Zhang, S. J.; Liu, Y.; et al.  
Pressure-induced metallization in Mg<sub>2</sub>Si  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 50 Issue: 23 Article Number: 235304 Published: JUN 14 2017

34. Liao, Yang-Fang; Xie, Quan; Xiao, Qing-Quan; et al.  
Photoluminescence of Mg<sub>2</sub>Si films fabricated by magnetron sputtering  
APPLIED SURFACE SCIENCE Volume: 403 Pages: 302-307 Published: MAY 1 2017

33. Luniakov, Y.V.  
Mg<sub>2</sub>Si under pressure: Dft evolutionary search results  
Solid State Phenomena 249, 9-16 DOI: 10.4028/www.scientific.net/SSP.249.9 (2016)

32. Stefanaki, E.-C., Hatzikraniotis, E., Vourlias, G., Chrissafis, K., Kitis, G., Paraskevopoulos, K.M., Polymeris, G.S.  
Thermal Stability Study from Room Temperature to 1273 K (1000 A degrees C) in Magnesium Silicide  
METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE Volume:  
47A Issue: 10 Pages: 5146-5158 DOI: 10.1007/s11661-016-3682-5 Published: OCT 2016

31. Chernev, IM, Shevlyagin, AV, Galkin, KN, Stuchlik, J, Remes, Z, Fajgar, R, Galkin  
On the way to enhance the optical absorption of a-Si in NIR by embedding Mg<sub>2</sub>Si thin film  
APPLIED PHYSICS LETTERS Volume: 109 Issue: 4 Article Number: 043902 DOI: 10.1063/1.4960011 Published: JUL 25 2016

30. Schmuelling, G., Winter, M., Placke, T.

29. Katagiri, Atsuo; Ogawa, Shota; Oikawa, Takahiro; et al.  
Structural characterization of epitaxial Mg<sub>2</sub>Si films grown on MgO and MgO-buffered Al<sub>2</sub>O<sub>3</sub> substrates  
JAPANESE JOURNAL OF APPLIED PHYSICS Volume: 54 Issue: 7 Special Issue: 2 Article Number: 07JC01 Published: JUL  
2015
28. Balout, H.; Boulet, P.; Record, M. -C.  
Polycrystalline Mg<sub>2</sub>Si thin films: A theoretical investigation of their electronic transport properties  
JOURNAL OF SOLID STATE CHEMISTRY Volume: 225 Pages: 174-180 Published: MAY 2015
27. Yang, M., Wang, C., Shen, Q.  
Growth and microstructures characterization of pulsed laser deposited Mg<sub>2</sub>Si thin film on Si(111) substrate  
Zhenkong Kexue yu Jishu Xuebao/Journal of Vacuum Science and Technology 34(10), 1112-1117 DOI:  
10.13922/j.cnki.cjovst.2014.10.20 (2014)
26. Katagir, A., Ogawa, S., Shimizu, T., Matsushima, M., Akiyama, K., Funakubo, H.  
High temperature reproducible preparation of Mg<sub>2</sub>Si films on (001)Al<sub>2</sub>O<sub>3</sub> substrates using RF magnetron sputtering method  
Materials Research Society Symposium Proceedings 1642 January, 36-41 DOI: 10.1557/osp.2014.44 (2014)
25. Xie, Zheng; Liu, Xiangxuan; Wang, Weipeng; et al.  
Enhanced photoelectrochemical properties of TiO<sub>2</sub> nanorod arrays decorated with CdS nanoparticles  
SCIENCE AND TECHNOLOGY OF ADVANCED MATERIALS Volume: 15 Issue: 5 Article Number: 055006 Published: OCT  
2014
24. Polymeris, G. S.; Theodorakakos, A.; Mars, K.; et al.  
Comparing Doping Methodologies in Mg<sub>2</sub>Si/AgMg System  
JOURNAL OF ELECTRONIC MATERIALS 43 (10), pp. 3876-3883 OCT 2014
23. Morozova, Natalia V.; Ovsyannikov, Sergey V.; Korobeinikov, Igor V.; et al.  
Significant enhancement of thermoelectric properties and metallization of Al-doped Mg<sub>2</sub>Si under pressure  
JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 213705 JUN 7 2014
22. Balout, Hilal; Boulet, Pascal; Record, Marie-Christine  
Effect of Biaxial Strain on Electronic and Thermoelectric Properties of Mg<sub>2</sub>Si  
JOURNAL OF ELECTRONIC MATERIALS 42 (12), pp. 3458-3466 DEC 2013
21. Stathokostopoulos, D.; Chaliampalias, D.; Stefanaki, E. C.; et al.  
Structure, morphology and electrical properties of Mg<sub>2</sub>Si layers deposited by pack cementation  
APPLIED SURFACE SCIENCE 285, pp. 417-424 Part: B NOV 15 2013
20. Akiyama, Kensuke; Katagiri, Atsuo; Ogawa, Shota; et al.  
Epitaxial growth of Mg<sub>2</sub>Si films on strontium titanate single crystals  
Physica Status Solidi C-Current Topics in Solid State Physics 10 (12), pp. 1688-1691 2013
19. Yu, H.; Xie, Q.; Chen, Q.  
Effects of annealing on the formation of Mg<sub>2</sub>Si film prepared by resistive thermal evaporation method  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 24 (10), 3768-3775, OCT 2013
18. Udon, Haruhiko; Yamanaka, Yusuke; Uchikoshi, Masahito; et al.  
Infrared photoresponse from pn-junction Mg<sub>2</sub>Si diodes fabricated by thermal diffusion  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 74 (2), 311-314, FEB 2013
17. Yu, Z., Xie, Q.  
Effects of sputtering power on preferred orientation of semiconductor optoelectronics Mg<sub>2</sub>Si films  
Yadian Yu Shengguang/Piezoelectrics and Acoustooptics 35 (3), pp. 438-440, 2013
16. Yu, H., Xie, Q., Xiao, Q.-Q., Chen, Q.  
Thermal evaporation method of semiconducting Mg<sub>2</sub>Si films  
Gongneng Cailiao/Journal of Functional Materials 44 (8), pp. 1204-1207, 2013
15. Xiao, Q.-Q., Xie, Q., Shen, X.-Q., Zhang, J.-M., Chen, Q.  
Preparation of single phase semiconducting Mg<sub>2</sub>Si film on Si substrate by low vacuum heat treatment  
Gongneng Cailiao/Journal of Functional Materials 44 (4), pp. 585-589, 2013
14. Zhu, Feng; Wu, Xiang; Qin, Shan; et al.  
A re-investigation on pressure-induced phase transition of Mg<sub>2</sub>Si  
SOLID STATE COMMUNICATIONS 152 (24), 2160-2164, DEC 2012
13. Zhang, C., Yu, Z.  
Effects of sputtering power on the fabrication of Mg<sub>2</sub>Si films  
Yadian Yu Shengguang/Piezoelectrics and Acoustooptics 34 (2), pp. 273-275, 2012.
12. Yu, R., Zhai, P., Li, G., Liu, L.

Molecular dynamics simulation of the mechanical properties of single-crystal bulk Mg<sub>2</sub>Si  
Journal of Electronic Materials 41 (6) , pp. 1465-1469, 2012.

11. Ren Wanbin; Han Yonghao; Liu Cailong; et al.

Pressure-induced semiconductor-metal phase transition in Mg<sub>2</sub>Si  
SOLID STATE COMMUNICATIONS 152 (5), 440-442, MAR 2012.

10. Zhong, J., Yu, Z., Zhang, C., Yang, Q.

Study on epitaxial growth of Mg<sub>2</sub>Si film on Si (100) substrate  
Yadian Yu Shengguang/Piezoelectrics and Acoustooptics 34 (1), 133-135, 2012.

9. Loannou M.; Hatzikraniotis E.; Lioutas Ch.; et al.

Fabrication of nanocrystalline Mg<sub>2</sub>Si via ball milling process: Structural studies  
POWDER TECHNOLOGY 217, 523-532, FEB 2012.

8. Kato, T., Sago, Y., Fujiwara, H.

Optoelectronic properties of Mg<sub>2</sub>Si semiconducting layers with high absorption coefficients  
Journal of Applied Physics 110 (6) , art. no. 063723, 2011.

7. Zhang, C., Yua, Z.

Effects of sputtering power on the microstructure of Mg<sub>2</sub>Si films by magnetron sputtering  
Advanced Materials Research 287-290, 2298-2301, 2011.

6. Yu Ben-Hai; Liu Mo-Lin; Chen Dong

First principles study of structural, electronic and elastic properties of Mg(2)Si polymorphs  
ACTA PHYSICA SINICA 60 (8) Article Number: 087105, AUG 2011.

5. Yu Ben-Hai; Peng Feng; Chen Dong; et al.

Periodic DFT calculation of the pressure-induced phase transition and thermodynamical properties of magnesium silicide polymorphs  
PHYSICA B-CONDENSED MATTER 406 (11) Pages: 2070-2076, MAY 15 2011.

4. Yu Ben-Hai; Chen Dong

Phase transition, structural and thermodynamic properties of Mg(2)Si polymorphs  
CHINESE PHYSICS B 20 (3) Article Number: 030508, MAR 2011.

3. Hao Jun-Hua; Guo Zhi-Guang; Jin Qing-Hua

First principles calculation of structural phase transformation in Mg(2)Si at high pressure  
SOLID STATE COMMUNICATIONS 150 (47-48) Pages: 2299-2302. DEC 2010.

2. Yu Benhai; Chen Dong; Tang Qingbin; et al.

Structural, electronic, elastic and thermal properties of Mg(2)Si  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 71 (5) Pages: 758-763, MAY 2010.

1. Hao Jian; Zou Bo; Zhu Pinwen; et al.

In situ X-ray observation of phase transitions in Mg(2)Si under high pressure  
SOLID STATE COMMUNICATIONS 149 (17-18), 689-692, MAY 2009.

53. “*Low-temperature CVD-process for growing of electrochromic chromium oxide thin films*”

T. Ivanova, K. A. Gesheva, E. Steinman, and M. Abrashev

Proceedings – Electrochemical Society PV 2005-09, 928-935 (2005).

54. “*Distortion-dependent Raman spectra and mode mixing in RMnO<sub>3</sub> perovskites*

(R=La,Pr,Nd,Sm,Eu,Gd,Tb,Dy,Ho,Y)”

M. N. Iliev, M. V. Abrashev, J. Laverdière, S. Jandl, M. M. Gospodinov, Y.-Q. Wang, and Y.-Y. Sun  
Phys. Rev. B 73, 064302 (2006).

174. Electrochemical and magnetic properties of perovskite type RMnO<sub>3</sub> (R = La, Nd, Sm, Eu) nanofibers  
Hu, Q., Yue, B., Yang, F., (...), Wang, Y., Liu, J.

Journal of Alloys and Compounds 872,159727 (2021)

173. Spin-phonon coupling in the incommensurate magnetic ordered phase of orthorhombic TmMnO<sub>3</sub>

Araújo, B.S., Arévalo-López, A.M., Santos, C.C., (...), Paschoal, C.W.A., Ayala, A.P.

Journal of Physics and Chemistry of Solids 154,110044 (2021)

172. Exploiting novel optical thermometry near room temperature with a combination of phase-change host and luminescent Pr<sup>3+</sup> ion  
Wang, S., Zhang, J., Ye, Z., Yu, H., Zhang, H.

Chemical Engineering Journal 414,128884 (2021)

171. Tuning Jahn-Teller distortion and electron localization of LaMnO<sub>3</sub> epitaxial films via substrate temperature

Chen, Xin; Wang, Baohua; Chen, Yang; et al.

JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 54 Issue: 23 Article Number: 235302 Published: JUN 10 2021

170. Epitaxial LaMnO<sub>3</sub> films with remarkably fast oxygen transport properties at low temperature

Rodriguez-Lamas, Raquel; Pirovano, Caroline; Stangl, Alexander; et al.  
JOURNAL OF MATERIALS CHEMISTRY A Early Access: MAY 2021

169. Vibrational study of lead bromide perovskite materials with variable cations based on Raman spectroscopy and density functional theory  
Ghosh, Supriya; Rana, Debkumar; Pradhan, Bapi; et al.

JOURNAL OF RAMAN SPECTROSCOPY Early Access: MAY 2021

168. Structure-property correlations and scaling in the magnetic and magnetocaloric properties of GdCrO<sub>3</sub> particles  
Shi, Jianhang; Sauyet, Theodore; Dang, Yanliu; et al.

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 33 Issue: 20 Article Number: 205801 Published: MAY 19 2021

167. A comparative study of the structural, optical, magnetic and magnetocaloric properties of HoCrO<sub>3</sub> and HoCr<sub>0.85</sub>Mn<sub>0.15</sub>O<sub>3</sub> orthochromites  
Kanwar, Komal; Coondoo, Indrani; Anas, M.; et al.

CERAMICS INTERNATIONAL Volume: 47 Issue: 6 Pages: 7386-7397 Published: MAR 15 2021

166. Constructing Electron Levers in Perovskite Nanocrystals to Regulate the Local Electron Density for Intensive Chemodynamic Therapy  
Zhao, Peiran; Jiang, Yaqin; Tang, Zhongmin; et al.

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION Volume: 60 Issue: 16 Pages: 8905-8912 Published: APR 12 2021

165. Spectroscopic and transport properties of Ba- and Ti-doped BaLaInO<sub>4</sub>  
Tarasova, N.; Galisheva, A.; Animitsa, I.

JOURNAL OF RAMAN SPECTROSCOPY Volume: 52 Issue: 5 Pages: 980-987 Published: MAY 2021

164. Study of gadolinium substitution effects in hexagonal yttrium manganite YMnO<sub>3</sub>  
Karoblis, Dovydas; Zarkov, Aleksej; Garskaite, Edita; et al.

SCIENTIFIC REPORTS Volume: 11 Issue: 1 Article Number: 2875 Published: FEB 3 2021

163. Magnetic and Magnetocaloric Properties of Multiferroic Oxides Gd<sub>0.5</sub>Y<sub>0.5</sub>MnO<sub>3</sub> and Eu<sub>0.5</sub>Dy<sub>0.5</sub>MnO<sub>3</sub>  
Behera, P. Suchismita; Nirmala, R.

IEEE TRANSACTIONS ON MAGNETICS Volume: 57 Issue: 2 Article Number: 2200705 Published: FEB 2021

162. Strong Impact of Cr Doping on Structural and Magnetic Properties of Bi<sub>0.5</sub>La<sub>0.5</sub>Fe<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub>-delta  
Dang, N. T.; Rutkaukas, A., V.; Kichanov, S. E.; et al.

JOURNAL OF ELECTRONIC MATERIALS Volume: 50 Issue: 3 Special Issue: SI Pages: 1340-1348 Published: MAR 2021

161. New perovskite Ba<sub>0.7</sub>La<sub>0.3</sub>Ti<sub>0.55</sub>Fe<sub>0.45</sub>O<sub>3</sub>-delta prepared by citric sol-gel method: From structure to physical properties  
Bennour, I., Mohamed, M., Kabadou, A., Abdelmouleh, M.  
Journal of Molecular Structure 1217,128347 (2020)

160. Physical study of PrCu<sub>1-x</sub>ZnxO<sub>3</sub> perovskite for 0.0 <= x <= 0.3  
Maayoufi, A. E.; Sdiri, N.; Valente, M. A.; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 849 Article Number: 156239 Published: DEC 30 2020

159. Site substitution in GdMnO<sub>3</sub>: Effects on structural, electronic, and magnetic properties  
Mahana, Sudipta; Pandey, Shishir Kumar; Rakshit, Bipul; et al.

PHYSICAL REVIEW B Volume: 102 Issue: 24 Article Number: 245120 Published: DEC 15 2020

158. Field-driven spin reorientation in SmMnO<sub>3</sub> polycrystalline powders  
Mantilla, John; Morales, Marco; Venceslau, Wenderson; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 845 Article Number: 156327 Published: DEC 10 2020

157. Heterometallic 3d-4f Complexes as Air-Stable Molecular Precursors in Low Temperature Syntheses of Stoichiometric Rare-Earth Orthoferrite Powders  
Alsoawayigh, Marwah M.; Timco, Grigore A.; Borilovic, Ivana; et al.

INORGANIC CHEMISTRY Volume: 59 Issue: 21 Pages: 15796-15806 Published: NOV 2 2020

156. Synthesis, structural and optical properties of LaFe<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> nanoparticles  
Rachid, F. Z.; Omari, L. H.; Lassri, H.; et al.

OPTICAL MATERIALS Volume: 109 Article Number: 110332 Published: NOV 2020

155. The effect of rare-earth Gd-substitution on the structural, magnetic and specific heat properties in orthorhombic DyMnO(3)ceramics  
Bhoi, Krishnamayee; Patidar, Manju Mishra; Krishnan, M.; et al.

JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 40 Article Number: 405301 Published: SEP 30 2020

154. Effect of doping on the local structure of new block-layered proton conductors based on BaLaInO<sub>4</sub>  
Tarasova, N.; Animitsa, I.; Galisheva, A.

JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 11 Pages: 2290-2297 Published: NOV 2020

153. Strain healing of spin-orbit coupling:a cause for enhanced magnetic moment in epitaxial SrRuO<sub>3</sub> thin films  
Tyagi, Shekhar; Sathe, V. G.; Sharma, Gaurav; et al.

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 32 Issue: 30 Article Number: 305501 Published: JUL 15 2020

152. Temperature-induced crystallinity and vibrational properties in samarium orthovanadate

Varghese, Emin; Kumar, Sourabh; Pathak, Biswarup; et al.

PHYSICAL REVIEW B Volume: 101 Issue: 17 Article Number: 174112 Published: MAY 21 2020

151. Spin-phonon coupling in monoclinic BiCrO<sub>3</sub>

Araujo, B. S.; Arevalo-Lopez, A. M.; Santos, C. C.; et al.

JOURNAL OF APPLIED PHYSICS Volume: 127 Issue: 11 Article Number: 114102 Published: MAR 21 2020

150. X-ray diffraction and Raman spectroscopy for lead halide perovskites (Book Chapter)

Rahman, M.Z., Edvinsson, T.

Characterization Techniques for Perovskite Solar Cell Materials pp. 23-47 (2019)

149. Anomalous magnetic behavior and complex magnetic structure of proximate LaCrO<sub>3</sub>-LaFeO<sub>3</sub> system

Tiwari, Brajesh; Dixit, Ambesh; Rao, M. S. Ramachandra

MATERIALS RESEARCH EXPRESS Volume: 6 Issue: 12 Article Number: 126119 Published: DEC 2019

148. A Griffiths-like phase and variable range hopping of polarons in orthorhombic perovskite Pr<sub>2</sub>CrMnO<sub>6</sub>

Aswathi, Kaipamangalath; Palakkal, Jasnamol P.; Lekshmi, P. Neenu; et al.

NEW JOURNAL OF CHEMISTRY Volume: 43 Issue: 44 Pages: 17351-17357 Published: NOV 28 2019

147. Structure of nanocrystalline Nd<sub>0.5</sub>R<sub>0.5</sub>FeO<sub>3</sub> (R=La, Pr, and Sm) intercorrelated with optical, magnetic and thermal properties

Somvanshi, Anand; Husain, Shahid; Manzoor, Samiya; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 806 Pages: 1250-1259 Published: OCT 25 2019

146. Magnetic field-dependent low-energy magnon dynamics in alpha-RuCl<sub>3</sub>

Ozel, Ilkem Ozge; Belvin, Carina A.; Baldini, Edoardo; et al.

PHYSICAL REVIEW B Volume: 100 Issue: 8 Article Number: 085108 Published: AUG 2 2019

145. Fast preparation of Ce<sup>3+</sup>-activated scandate for high-color- rendering warm white-light illumination by cation exchange

Ma, Shuwei; Liu, Shuxin; Wang, Shuxian; et al.

JOURNAL OF LUMINESCENCE Volume: 212 Pages: 361-367 Published: AUG 2019

144. Structural and magnetic phase transitions along with optical properties in GdMn<sub>1-x</sub>FeO<sub>3</sub> perovskite

Tiwari, Priyanka; Kumar, Sandeep; Rath, Chandana

JOURNAL OF APPLIED PHYSICS Volume: 126 Issue: 4 Article Number: 045102 Published: JUL 28 2019

143. Structural and electrochemical properties of B-site Ru-doped (La<sub>0.8</sub>Sr<sub>0.2</sub>)(0.9)Sc<sub>0.2</sub>Mn<sub>0.8</sub>O<sub>3</sub>-delta as symmetrical electrodes for reversible solid oxide cells

Zhou, Jun; Wang, Ning; Cui, Jiajia; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 792 Pages: 1132-1140 Published: JUL 5 2019

142. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy

Merten, S.; Bruchmann-Bamberg, V; Damaschke, B.; et al.

PHYSICAL REVIEW MATERIALS Volume: 3 Issue: 6 Article Number: 060401 Published: JUN 28 2019

141. Magnetic phase transition and multiferroic phase separation in Ho<sub>1-x</sub>GdxMnO<sub>3</sub>

Zhang, N.; Wang, Y. P.; Li, X.; et al.

CERAMICS INTERNATIONAL Volume: 45 Issue: 7 Pages: 8325-8332 Part: A Published: MAY 2019

140. Intrinsic structural distortion and magnetic interaction in Lu<sub>x</sub>Sm<sub>1-x</sub>CrO<sub>3</sub> compounds

Xiang, Zhongcheng; Ge, Shuaipeng; Huang, Yunxia; et al.

SOLID STATE SCIENCES Volume: 89 Pages: 100-105 Published: MAR 2019

139. Phase separation and local lattice distortions analysis of charge-ordered manganese films La<sub>1-x</sub>CaxMnO<sub>3</sub>-delta by Raman spectroscopy

Trotsenko, V. G.; Lahmar, A.; Lyanguzov, N. V.; et al.

SUPERLATTICES AND MICROSTRUCTURES Volume: 127 Pages: 100-108 Published: MAR 2019

138. Crossover in the pressure evolution of elementary distortions in RFeO<sub>3</sub> perovskites and its impact on their phase transition

Vilarinho, R.; Bouvier, P.; Guennou, M.; et al.

PHYSICAL REVIEW B Volume: 99 Issue: 6 Article Number: 064109 Published: FEB 25 2019

137. Magnetic-Field-Induced Suppression of Jahn-Teller Phonon Bands in (La<sub>0.6</sub>Pr<sub>0.4</sub>)(0.7)Ca<sub>0.3</sub>MnO<sub>3</sub>: the Mechanism of Colossal Magnetoresistance shown by Raman Spectroscopy

Merten, S.; Shapoval, O.; Damaschke, B.; et al.

SCIENTIFIC REPORTS Volume: 9 Article Number: 2387 Published: FEB 20 2019

136. Study of crystal-field excitations and infrared active phonons in TbMnO<sub>3</sub>

Mansouri, S., Jandl, S., Balli, M., (...), Balbashov, A., Orlita, M.

Journal of Physics Condensed Matter 30(17),175602 (2018)

135. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates; RC<sub>2</sub>O<sub>3</sub> (R = La, Nd, Eu, Gd, Dy, and Y)

Singh, Kapil Dev; Pandit, Rabia; Kumar, Ravi

SOLID STATE SCIENCES Volume: 85 Pages: 70-75 Published: NOV 2018

134. Handling magnetic and structural properties of EuMnO<sub>3</sub> thin films by the combined effect of Lu doping and substrate strain

- Romaguera-Barcelay, Y.; Figueiras, F. G.; Agostinho Moreira, J.; et al.  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 762 Pages: 319-325 Published: SEP 25 2018
133. A Novel Wet-Chemical Route for Synthesis of Multiferroic  $AMnO_3$  ( $A = Gd, Tb, Dy$ ) Particles and Its Structural, Optical and Magnetic Properties  
 Qu, Nianrui; Li, Zhiping  
 JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume: 31 Issue: 9 Pages: 2869-2877 Published: SEP 2018
132. Analysis of Zn substitution on structure, optical absorption, magnetization, and high temperature specific heat anomaly of the nanocrystalline  $LaFeO_3$   
 Manzoor, Samiya; Husain, Shahid  
 JOURNAL OF APPLIED PHYSICS Volume: 124 Issue: 6 Article Number: 065110 Published: AUG 14 2018
131. Observation of transient lattice disorder at the onset of multiferroic ordering in  $Eu_{1-x}H_{x}MnO_3$  by Raman spectroscopy  
 Elsaesser, S.; Mukhin, A. A.; Balbashov, A. M.; et al.  
 PHYSICAL REVIEW B Volume: 97 Issue: 22 Article Number: 224307 Published: JUN 25 2018
130. Rare earth indates (RE: La-Yb): influence of the synthesis route and heat treatment on the crystal structure  
 Shukla, Rakesh; Grover, Vinita; Srinivasu, Kancharpalli; et al.  
 DALTON TRANSACTIONS Volume: 47 Issue: 19 Pages: 6787-6799 Published: MAY 21 2018
129. An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes  
 Chen, Yu; Yoo, Seonyoung; Li, Xiaxi; et al.  
 NANO ENERGY Volume: 47 Pages: 474-480 Published: MAY 2018
128. Suppression of the cooperative Jahn-Teller distortion and its effect on the Raman octahedra-rotation modes of  $TbMn_{1-x}Fe_xO_3$   
 Vilarinho, R.; Passos, D. J.; Queiros, E. C.; et al.  
 PHYSICAL REVIEW B Volume: 97 Issue: 14 Article Number: 144110 Published: APR 19 2018
127. Spin-phonon coupling in  $HoCr_{1-x}Fe_xO_3$  ( $x=0$  and 0.5) compounds  
 Kotnana, Ganesh; Sathe, Vasant. G.; Jammalamadaka, S. Narayana  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 4 Pages: 764-770 Published: APR 2018
126. Lattice-mediated magnetic order melting in  $TbMnO_3$   
 Baldini, Edoardo; Kubacka, Teresa; Mallett, Benjamin P. P.; et al.  
 PHYSICAL REVIEW B Volume: 97 Issue: 12 Article Number: 125149 Published: MAR 27 2018
125. An In Situ Formed, Dual-Phase Cathode with a Highly Active Catalyst Coating for Protonic Ceramic Fuel Cells  
 Chen, Yu; Yoo, Seonyoung; Pei, Kai; et al.  
 ADVANCED FUNCTIONAL MATERIALS Volume: 28 Issue: 5 Article Number: 1704907 Published: JAN 31 2018
124. Exchange bias effect in hybrid improper ferroelectricity  $Ca_{2.94}Na_{0.06}Mn_2O_7$   
 Li, Songyang; Wang, Shouyu; Lu, Yangong; et al.  
 AIP ADVANCES Volume: 8 Issue: 1 Article Number: 015009 Published: JAN 2018
123. Structural and spectroscopic studies on  $HoCr_{1-x}Fe_xO_3$  ( $x=0$  and 0.5) Compounds  
 Kotnana, Ganesh; Sathe, V. G.; Jammalamadaka, S. Narayana  
 AIP Conference Proceedings Volume: 1942 Article Number: 090040 Published: 2018
122. Ac Conductivity And Raman Spectroscopic Studies Of  $PrMnO_3$  Nanostructure  
 Saha, Sujoy; Maity, Ritwik; Sakhya, Anup Pradhan; et al.  
 MATERIALS TODAY-PROCEEDINGS Volume: 5 Issue: 3 Pages: 9981-9988 Part: 3 Published: 2018
121. Intrinsic structural distortion and exchange interactions in  $SmFe_xCr_{1-x}O_3$  compounds  
 Xiang, Zhongcheng; Li, Wenping; Cui, Yimin  
 RSC ADVANCES Volume: 8 Issue: 16 Pages: 8842-8848 Published: 2018
120. Structural, microstructural and dielectric behavior of sol-gel grown nanostructured  $Y_{0.95}Zr_{0.05}MnO_3$   
 Rathod, K.N., Thakrar, K., Gadani, K., (...), Solanki, P.S., Shah, N.A.  
 Materials Chemistry and Physics 198, pp. 200-208 (2017)
119. Polarized Raman scattering on single crystals of rare earth orthochromite  $RCrO_3$  ( $R=La, Pr, Nd, and Sm$ )  
 Camara, Nimbo Robert; Vinh Ta Phuoc; Monot-Laffez, Isabelle; et al.  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 12 Pages: 1839-1851 Published: DEC 2017
118. A comparative Raman study between  $PrMnO_3$ ,  $NdMnO_3$ ,  $TbMnO_3$  and  $DyMnO_3$   
 Mansouri, Sabeur; Jandl, Serge; Mukhin, Alexander; et al.  
 SCIENTIFIC REPORTS Volume: 7 Article Number: 13796 Published: OCT 23 2017
117. Shimamoto, Kenta; Mukherjee, Saumya; Bingham, Nicholas S.; et al.  
 Single-axis-dependent structural and multiferroic properties of orthorhombic  $RMnO_3$  ( $R = Gd-Lu$ )  
 PHYSICAL REVIEW B Volume: 95 Issue: 18 Article Number: 184105 Published: MAY 8 2017
116. Singh, Deepa; Gupta, Rashmi; Bamzai, K. K.  
 Electrical and magnetic properties of  $GdCr_xMn_{1-x}O_3$  ( $x=0.0, 0.1$ ) multiferroic nanoparticles

115. Blanck, Dimitri; Schon, Anke; Mamede, Anne-Sophie; et al.

In situ Raman spectroscopy evidence of an accessible phase potentially involved in the enhanced activity of La -deficient lanthanum orthoferrite in 3-way catalysis (TWC)

CATALYSIS TODAY Volume: 283 Pages: 151-157 Published: APR 1 2017

114. Aliabad, H. A. Rahnamaye; Barzanuni, Z.; Sani, S. Ramezani; et al.

Thermoelectric and phononic properties of (Gd, Tb) MnO<sub>3</sub> compounds: DFT calculations

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 690 Pages: 942-952 Published: JAN 5 2017

113. Meyer, Christoph; Huehn, Sebastian; Jungbauer, Markus; et al.

Tip-enhanced Raman spectroscopy (TERS) on double perovskite La<sub>2</sub>CoMnO<sub>6</sub> thin films: field enhancement and depolarization effects

JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 1 Pages: 46-52 Published: JAN 2017

112. Rahnamaye Aliabad, H.A., Barzanuni, Z., Sani, S.R., Ahmad, I., Jalali-Asadabadi, S., Vaezi, H., Dastras, M.

Thermoelectric and phononic properties of (Gd, Tb) MnO<sub>3</sub> compounds: DFT calculations

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 690 Pages: 942-952 DOI: 10.1016/j.jallcom.2016.08.167 Published: JAN 5 2017

111. Weber, Mads Christof; Guennou, Mael; Zhao, Hong Jian; et al.

Raman spectroscopy of rare-earth orthoferrites RFeO<sub>3</sub> (R=La, Sm, Eu, Gd, Tb, Dy)

PHYSICAL REVIEW B Volume: 94 Issue: 21 Article Number: 214103 Published: DEC 7 2016

110. Praveena, K., Bharathi, P., Liu, H.-L., Varma, K.B.R.

Structural, multiferroic properties and enhanced magnetoelectric coupling in Sm<sub>1-x</sub>CaxFeO<sub>3</sub>

Ceramics International 42(12), 13572-13585 DOI: 10.1016/j.ceramint.2016.05.150 (2016)

109. Jin, X., Li, H., Li, D., Zhang, Q., Li, F., Sun, W., Chen, Z., Li, Q.

Role of ytterbium- erbium co-doped gadolinium molybdate (Gd-2(MoO<sub>4</sub>)(3):Yb/Er) nanophosphors in solar cells

OPTICS EXPRESS Volume: 24 Issue: 18 Pages: A1276-A1287 DOI: 10.1364/OE.24.0A1276 Published: SEP 5 2016

108. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.

Dielectric relaxation of PrFeO<sub>3</sub> nanoparticles

SOLID STATE SCIENCES Volume: 58 Pages: 55-63 DOI: 10.1016/j.solidstatesciences.2016.05.013 Published: AUG 2016

107. Weber, M.C., Guennou, M., Dix, N., Pesquera, D., Sánchez, F., Herranz, G., Fontcuberta, J., López-Conesa, L., Estradé, S., Peiró, F., Iñiguez, J., Kreisel, J.

Multiple strain-induced phase transitions in LaNiO<sub>3</sub> thin films

PHYSICAL REVIEW B Volume: 94 Issue: 1 Article Number: 014118 DOI: 10.1103/PhysRevB.94.014118 Published: JUL 29 2016

106. Paul, B., Chatterjee, S., Gop, S., Roy, A., Grover, V., Shukla, R., Tyagi, A.K.

Evolution of lattice dynamics in ferroelectric hexagonal REInO<sub>3</sub> (RE = Ho, Dy, Tb, Gd, Eu, Sm) perovskites

MATERIALS RESEARCH EXPRESS Volume: 3 Issue: 7 Article Number: UNSP 075703 DOI: 10.1088/2053-1591/3/7/075703

Published: JUL 2016

105. Mishra, S.K., Gupta, M.K., Mittal, R., Kolesnikov, A.I., Chaplot, S.L.

Spin-phonon coupling and high-pressure phase transitions of RMnO<sub>3</sub> (R = Ca and Pr): An inelastic neutron scattering and first-principles study

PHYSICAL REVIEW B Volume: 93 Issue: 21 Article Number: 214306 DOI: 10.1103/PhysRevB.93.214306 Published: JUN 22 2016

104. Shukla, R, Chakraborty, KR, Mandal, BP, Kaushik, SD, Mukadam, MD, Lawes, G, Naik, R,; Kumarasiri, A, Siruguri, V, Yusuf, SM, Tyagi, AK

Synthesis, Characterization and Exploration of Multiferroic Properties in Nano-Crystalline Tb<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> (0 <= x <= 0.4)

JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY Volume: 16 Issue: 4 Pages: 4094-4099 DOI: 10.1166/jnn.2016.11102

Published: APR 2016

103. Kováčik, R., Murthy, S.S., Quiroga, C.E., Ederer, C., Franchini, C.

Combined first-principles and model Hamiltonian study of the perovskite series RMnO<sub>3</sub> (R = La,Pr,Nd,Sm,Eu, and Gd)

PHYSICAL REVIEW B Volume: 93 Issue: 7 Article Number: 075139 DOI: 10.1103/PhysRevB.93.075139 Published: FEB 19 2016

102. Elsässer, S., Geurts, J., Mukhin, A.A., Balbashov, A.M.

Lattice dynamics and spin-phonon coupling in orthorhombic Eu<sub>1-x</sub>H<sub>x</sub>MnO<sub>3</sub> (x <= 0.3) studied by Raman spectroscopy

PHYSICAL REVIEW B Volume: 93 Issue: 5 Article Number: 054301 DOI: 10.1103/PhysRevB.93.054301 Published: FEB 4 2016

101. Wahab, H.

Effect of A - Site disorder on the bonding mechanism and optical properties of Sm<sub>x</sub>(Al<sub>2</sub>O<sub>3</sub>)<sub>(1-x)</sub> system

PHYSICA B-CONDENSED MATTER Volume: 481 Pages: 24-31 DOI: 10.1016/j.physb.2015.10.020 Published: JAN 15 2016

100. Yadagiri, K., Nithya, R.

Structural and micro-Raman studies of DyMnO<sub>3</sub> with potassium substitution at the Dy site

RSC ADVANCES Volume: 6 Issue: 98 Pages: 95417-95424 DOI: 10.1039/c6ra13808j Published: 2016

99. Romaguera-Barcelay, Y., Moreira, J.A., Almeida, A., Tavares, P.B., Fernandes, L., Pérez de la Cruz, J.

Persistence of the orthorhombic phase in YMnO<sub>3</sub> hexagonal thin films

FERROELECTRICS Volume: 498 Issue: 1 Special Issue: SI Pages: 80-84 DOI: 10.1080/00150193.2016.1168211 Part: 2 Published: 2016

98. Lahmar, A., Es-Souni, M.  
Sequence of structural transitions in BiFeO<sub>3</sub>-RMnO<sub>3</sub> thin films (R=Rare earth)  
*Ceramics International* 41(4), 5721-5726 DOI: 10.1016/j.ceramint.2014.12.157 (2015)
97. Zhang, AM (Zhang An-Min); Liu, K (Liu Kai); Ji, JT (Ji Jian-Ting); He, CZ (He Chang-Zhen); Tian, Y (Tian Yong); Jin, F (Jin Feng); Zhang, QM (Zhang Qing-Ming)  
Raman phonons in multiferroic FeVO<sub>4</sub> crystals  
*CHINESE PHYSICS B* Volume: 24 Issue: 12 Article Number: 126301 DOI: 10.1088/1674-1056/24/12/126301 Published: DEC 2015
96. Chanda, S., Saha, S., Dutta, A., Irfan, B., Chatterjee, R., Sinha, T.P.  
Magnetic and dielectric properties of orthoferrites La<sub>1-x</sub>Pr<sub>x</sub>FeO<sub>3</sub> (x=0, 0.1, 0.2, 0.3, 0.4 and 0.5)  
*JOURNAL OF ALLOYS AND COMPOUNDS* Volume: 649 Pages: 1260-1266 DOI: 10.1016/j.jallcom.2015.07.215 Published: NOV 15 2015
95. Li, D., Sun, W., Shao, L., Wu, S., Huang, Z., Jin, X., Zhang, Q., Li, Q.  
Tailoring solar energy spectrum for efficient organic/inorganic hybrid solar cells by up-conversion luminescence nanophosphors  
*ELECTROCHIMICA ACTA* Volume: 182 Pages: 416-423 DOI: 10.1016/j.electacta.2015.09.023 Published: NOV 10 2015
94. Zhang, X., Zhang, A.M., Xie, W.M., Lin, J.G., Wu, X.S.  
Effect of strain-modulated lattice distortion on the magnetic properties of LaMnO<sub>3</sub> films  
*PHYSICA B-CONDENSED MATTER* Volume: 476 Pages: 114-117 DOI: 10.1016/j.physb.2015.04.038 Published: NOV 1 2015
93. Xie, Changzheng; Shi, Lei; Zhao, Jiyin; et al.  
The influence of substrate orientation and annealing condition on the properties of LaMnO<sub>3</sub> thin films grown by polymer-assisted deposition  
*APPLIED SURFACE SCIENCE* Volume: 351 Pages: 188-192 Published: OCT 1 2015
92. Vilarinho, R.; Queiros, E. C.; Almeida, A.; et al.  
Scaling spin-phonon and spin-spin interactions in magnetoelectric Gd<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub>  
*JOURNAL OF SOLID STATE CHEMISTRY* Volume: 228 Pages: 76-81 Published: AUG 2015
91. McDannald, A.; Kuna, L.; Seehra, M. S.; et al.  
Magnetic exchange interactions of rare-earth-substituted DyCrO<sub>3</sub> bulk powders  
*PHYSICAL REVIEW B* Volume: 91 Issue: 22 Article Number: 224415 Published: JUN 11 2015
90. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.  
Controlling phase separation in La<sub>5/8-y</sub>PryCa<sub>3/8</sub>MnO<sub>3</sub> (y=0.45) epitaxial thin films by strain disorder  
*APPLIED PHYSICS LETTERS* Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015
89. Tang, Ping; Kuang, Daihong; Yang, Shenghong; et al.  
The structural, optical and enhanced magnetic properties of Bi<sub>1-x</sub>GdxFe<sub>1-y</sub>MnyO<sub>3</sub> nanoparticles synthesized by sol-gel  
*JOURNAL OF ALLOYS AND COMPOUNDS* Volume: 622 Pages: 194-199 Published: FEB 15 2015
88. Lazurova, J.; Mihalik, M.; Mihalik, M., Jr.; et al.  
Magnetic Properties and Mossbauer spectroscopy of NdFe(1-x)MnxO(3)  
*Journal of Physics Conference Series* Volume: 592 Article Number: 012117 Published: 2015
87. Gupta, Preeti; Poddar, Pankaj  
Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in DyCrO<sub>3</sub> nanoplatelets  
*RSC ADVANCES* Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015
86. Bhadram, V.S., Swain, D., Dhanya, R., Polentaratutti, M., Sundaresan, A., Narayana, C.  
Effect of pressure on octahedral distortions in RCrO<sub>3</sub> (R=Lu, Tb, Gd, Eu, Sm): the role of R-ion size and its implications  
*MATERIALS RESEARCH EXPRESS* Volume: 1 Issue: 2 Article Number: 026111 DOI: 10.1088/2053-1591/1/2/026111 Published: JUN 2014
85. Yan, N.; Zhang, Y. L.; Tang, W. L.; et al.  
The effects of Mn doping on the optical properties of chemically deposited BiFeO<sub>3</sub> thin films  
*THIN SOLID FILMS* Volume: 571 Pages: 554-557 Part: 3 Published: NOV 28 2014
84. Mota, D. A.; Almeida, A.; Rodrigues, V. H.; et al.  
Dynamic and structural properties of orthorhombic rare-earth manganites under high pressure  
*PHYSICAL REVIEW B* Volume: 90 Issue: 5 Article Number: 054104 Published: AUG 8 2014
83. Romaguera-Barcelay, Y.; Agostinho Moreira, J.; Almeida, A.; et al.  
Structural, electrical and magnetic properties of magnetoelectric GdMnO<sub>3</sub> thin films prepared by a sol-gel method  
*THIN SOLID FILMS* 564, pp. 419-425 AUG 1 2014
82. Manna, Kaustuv; Bhadram, Venkata Srinu; Elizabeth, Suja; et al.  
Octahedral distortion induced magnetic anomalies in LaMn<sub>0.5</sub>Co<sub>0.5</sub>O<sub>3</sub> single crystals  
*JOURNAL OF APPLIED PHYSICS* 116 (4), Art. No. 043903 JUL 28 2014
81. Romero, M.; Gomez, R. W.; Marquina, V.; et al.  
Synthesis by molten salt method of the AF<sub>2</sub>O(3) system (A= La, Gd) and its structural, vibrational and internal hyperfine magnetic field characterization  
*PHYSICA B-CONDENSED MATTER* 443, pp. 90-94 JUN 15 2014

80. Guennou, Mael; Bouvier, Pierre; Toulemonde, Pierre; et al.  
 Jahn-Teller, Polarity, and Insulator-to-Metal Transition in BiMnO<sub>3</sub> at High Pressure  
*PHYSICAL REVIEW LETTERS* 112 (7), Art. No. 075501 FEB 19 2014
79. Kozlenko, D. P.; Dang, N. T.; Jabarov, S. H.; et al.  
 Structural polymorphism in multiferroic BiMnO<sub>3</sub> at high pressures and temperatures  
*JOURNAL OF ALLOYS AND COMPOUNDS* 585, pp. 741-747 FEB 5 2014
78. Staruch, M.; Jain, M.  
 Evidence of antiferromagnetic and ferromagnetic superexchange interactions in bulk TbMn<sub>1-x</sub>CrxO<sub>3</sub>  
*JOURNAL OF PHYSICS-CONDENSED MATTER* 26 (4), Art. No. 046005 JAN 29 2014
77. Das, Raja; Poddar, Pankaj  
 Observation of exchange bias below incommensurate antiferromagnetic (ICAFM) to canted A-type antiferromagnetic (cAAFM) transition in nanocrystalline orthorhombic EuMnO<sub>3</sub>  
*RSC ADVANCES* 4 (21), pp. 10614-10618 2014
76. Zhu, L. P.; Deng, H. M.; Sun, L.; et al.  
 Optical properties of multiferroic LuFeO<sub>3</sub> ceramics  
*CERAMICS INTERNATIONAL* 40 (1), pp. 1171-1175 Part: A JAN 2014
75. Do, D., Kim, J.W., Song, T.K., Kim, S.S.  
 Effects of transition metal (Ni, Mn, Cu) doping on ferroelectric properties of Bi<sub>0.9</sub>Nd<sub>0.1</sub>FeO<sub>3</sub> thin films prepared by chemical solution deposition method  
*Journal of Electroceramics* 30, 55-59 DOI: 10.1007/s10832-012-9715-6 (2013)
74. Chaturvedi, Aditi; Sathe, Vasant  
 Thickness dependent Raman study of epitaxial LaMnO<sub>3</sub> thin films  
*THIN SOLID FILMS* 548, pp. 75-80 DEC 2 2013
73. Choi, Sun Gyu; Lee, Hong-Sub; Choi, Hyejung; et al.  
 The effect of Ca substitution on the structural and electrical properties of La<sub>0.7</sub>Sr<sub>0.3-x</sub>CaxMnO<sub>3</sub> perovskite manganite films  
*JOURNAL OF PHYSICS D-APPLIED PHYSICS* 46 (42), Art. No. 425102 OCT 23 2013
72. Chaturvedi, Aditi; Sathe, V. G.  
 Raman spectroscopy and X-ray diffraction study of PrMnO<sub>3</sub> oriented thin films deposited on LaAlO<sub>3</sub> and SrTiO<sub>3</sub> substrates  
*JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS* 344, 230-234, OCT 2013
71. Dang, N. T.; Kozlenko, D. P.; Kichanov, S. E.; et al.  
 Structural and magnetic phase transitions occurring in Pr<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite at high pressures  
*JETP LETTERS* 97 (9), 540-545, JUL 2013
70. Chou, Ta-Lei; Lee, Jenn-Min; Chen, Shin-An; et al.  
 Pressure and Temperature Dependence of Local Structure and Electronic Structure of Orthorhombic DyMnO<sub>3</sub>  
*JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN* 82 (6), 064708, JUN 2013
69. Choi, Sun Gyu; Lee, Hong-Sub; Yeom, Geun Young; et al.  
 Investigation of the Properties of Ba-Substituted La<sub>0.7</sub>Sr<sub>0.3-x</sub>Ba(x)MnO<sub>3</sub> Perovskite Manganite Films for Resistive Switching Applications  
*JOURNAL OF ELECTRONIC MATERIALS* 42 (6), 1196-1201, JUN 2013
68. Staruch, M.; Violette, D.; Jain, M.  
 Structural and magnetic properties of multiferroic bulk TbMnO<sub>3</sub>  
*MATERIALS CHEMISTRY AND PHYSICS* 139 (2-3), 897-900, MAY 15 2013
67. Pandey, Pankaj K.; Choudhary, R. J.; Mishra, Dileep K.; et al.  
 Signature of spin-phonon coupling in Sr<sub>2</sub>CoO<sub>4</sub> thin film: A Raman spectroscopic study  
*APPLIED PHYSICS LETTERS* 102 (14), 142401, APR 8 2013
66. Staruch, M.; Lawes, G.; Kumarasiri, A.; et al.  
 Effects of holmium substitution on multiferroic properties in Tb<sub>0.67</sub>Ho<sub>0.33</sub>MnO<sub>3</sub>  
*APPLIED PHYSICS LETTERS* 102 (6), 062908, FEB 11 2013
65. Hu, Y., Stender, D., Medarde, M., Lippert, T., Wokaun, A., Schneider, C.W.  
 Lattice distortion and strain relaxation in epitaxial thin films of multiferroic TbMnO<sub>3</sub> probed by X-ray diffractometry and micro-Raman spectroscopy  
*Applied Surface Science* 278, pp. 92-95, 2013
64. Mota, D.A., Romaguera Barcelay, Y., Tavares, P.B., Chaves, M.R., Almeida, A., Oliveira, J., Ferreira, W.S., Agostinho Moreira, J.  
 Competing exchanges and spin-phonon coupling in Eu<sub>1-x</sub>R<sub>x</sub>MnO<sub>3</sub> (R=Y, Lu)  
*Journal of Physics Condensed Matter* 25 (23), art. no. 235602, 2013
63. Caviezel, A., Mariager, S.O., Johnson, S.L., Möhr-Vorobeva, E., Huang, S.W., Ingold, G., Staub, U., (...), Beaud, P.  
 Identification of coherent lattice modulations coupled to charge and orbital order in a manganite  
*Physical Review B - Condensed Matter and Materials Physics* 87 (20), art. no. 205104, 2013

62. Kumar, A., Shahi, P., Kumar, S., Shukla, K.K., Singh, R.K., Ghosh, A.K., Nigam, A.K., Chatterjee, S. Raman effect and magnetic properties of doped TbMnO<sub>3</sub>  
Journal of Physics D: Applied Physics 46 (12), art. no. 125001, 2013
61. Thomasson, A., Kreisel, J., Lefèvre, C., Roulland, F., Versini, G., Barre, S., Viart, N. Raman scattering of magnetoelectric gallium ferrite thin films  
Journal of Physics Condensed Matter 25 (4), art. no. 045401, 2013
60. Srinu Bhadram, V., Rajeswaran, B., Sundaresan, A., Narayana, C. Spin-phonon coupling in multiferroic RCrO<sub>3</sub> (R-Y, Lu, Gd, Eu, Sm): A Raman study  
EPL 101 (1), art. no. 17008, 2013
59. Fernández-García, M.P., Agostinho Moreira, J., Pereira, A.M., Oliveira, G.N.P., Azevedo, J., Oliveira, J., Chaves, M.R., Mota, D., Sousa, C.T., Teixeira, J.M., Lopes, A.M.L., Costa, M.M.R., Amaral, J.S., Mendonça, T.M., Khonchenko, V.A., Rodrigues, V.H., Tavares, P.B., Mendes, A., Correia, J.G., Amaral, V.S., Almeida, A., Sousa, J.B., Araújo, J.P. Synchrotron radiation experiments on multiferroic, magnetocaloric and magnetic nanostructured materials  
Ciencia e Tecnologia dos Materiais 24, 128-133 (2012)
58. Do, Dalhyun; Kim, Jin Won; Kim, Sang Su; et al. Electrical properties in lanthanides substituted (Bi-0.9 A (0.1))(Fe0.975Co0.025)O<sub>3</sub>-delta (A = La, Eu, Gd) thin films  
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 61 (9), 1409-1412, NOV 2012
57. Agostinho Moreira, J., Almeida, A., Chaves, M.R., Kreisel, J., Oliveira, J., Carpinteiro, F., Tavares, P.B. Magnetically-induced lattice distortions and ferroelectricity in magnetoelectric GdMnO<sub>3</sub>  
Journal of Physics Condensed Matter 24 (43), art. no. 436002, 2012
56. Kim, J.W., Raghavan, C.M., Kim, H.J., Kim, Y.J., Jang, K.W., Kim, S.S., Lee, Y.I., (...), Shin, D.S. Electrical properties of Dy, Mn Co-doped BiFeO<sub>3</sub> thin films prepared by using chemical solution deposition  
Journal of the Korean Physical Society 61 (6), pp. 903-907, 2012
55. Raghavan, C.M., Kim, J.W., Do, D., Kim, S.S., Kim, M.H., Song, T.K. Enhancement of ferroelectricity in rare earth and manganese ions Co-doped BiFeO<sub>3</sub> thin films via chemical solution deposition method  
Integrated Ferroelectrics 132 (1), pp. 45-52, 2012
54. Do, D., Kim, J.W., Kim, S.S., Kim, W.-J., Lee, M.H., Cho, H.J., Cho, J.H., (...), Kim, M.H. Reduced leakage current and improved ferroelectric properties of Eu and Mn codoped BiFeO<sub>3</sub> thin films  
Journal of the Korean Physical Society 60 (2), pp. 203-206, 2012
53. Lazarević, N., Radonjić, M.M., Tanasković, D., Hu, R., Petrović, C., Popović, Z.V. Lattice dynamics of FeSb<sub>2</sub>  
Journal of Physics Condensed Matter 24 (25), art. no. 255402, 2012.
52. Rovillain, P.; Liu, J.; Cazayous, M.; et al. Electromagnon and phonon excitations in multiferroic TbMnO<sub>3</sub>  
PHYSICAL REVIEW B 86 (1) Article Number: 014437, JUL 30 2012.
51. Romaguera-Barcelay Y.; Agostinho Moreira J.; Almeida A.; et al. Dimensional effects on the structure and magnetic properties of GdMnO<sub>3</sub> thin films  
MATERIALS LETTERS 70, 167-170, MAR 1 2012.
50. Hu, L., Sheng, Z., Hu, X., Zhang, R., Wang, B., Song, W., Sun, Y. Control of the charge/orbital ordering transition in epitaxial La<sub>7</sub>/8Sr<sub>1</sub>/8MnO<sub>3</sub> thin films through compressive strain  
Journal of Physics D: Applied Physics 45 (17), art. no. 175002, 2012.
49. Oliveira, J., Agostinho Moreira, J., Almeida, A., Rodrigues, V.H., Costa, M.M.R., Tavares, P.B., Bouvier, P., (...), Kreisel, J. Structural and insulator-to-metal phase transition at 50 GPa in GdMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 052101, 2012.
48. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I. Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
47. Himcinschi, C., Vrejoiu, I., Weibach, T., Vijayanandhini, K., Talkenberger, A., Rder, C., Bahmann, S., (...), Kortus, J. Raman spectra and dielectric function of BiCrO<sub>3</sub>: Experimental and first-principles studies  
Journal of Applied Physics 110 (7), art. no. 073501, 2011.
46. Hien, N.T.M., Oh, S.-Y., Chen, X.-B., Lee, D., Jang, S.-Y., Noh, T.W., Yang, I.-S. Raman scattering studies of hexagonal rare-earth RMnO<sub>3</sub> (R = Tb, Dy, Ho, Er) thin films  
Journal of Raman Spectroscopy 42 (9), 1774-1779, 2011.
45. Do, D., Kim, J.W., Kim, G.H., Bae, Y.R., Kim, E.S., Kim, S.S., Lee, M.H., (...), Song, T.K. EuMnO<sub>3</sub> effects on structure and electrical properties of chemical solution deposited BiFeO<sub>3</sub> thin films  
2011 International Symposium on Applications of Ferroelectrics and 2011 International Symposium on Piezoresponse Force Microscopy and Nanoscale Phenomena in Polar Materials, ISAF/PFM 2011 , art. no. 6014145, (2011).

44. Do Dalhyun; Kim Jin Won; Kim Sang Su  
 Effects of Dy and Mn Codoping on Ferroelectric Properties of BiFeO<sub>3</sub> Thin Films  
 JOURNAL OF THE AMERICAN CERAMIC SOCIETY 94 (9) Pages: 2792-2795, SEP 2011.
43. Do Dalhyun; Bae Yu Ri; Kim Jin Won; et al.  
 Multiferroic (Bi(0.9)Dy(0.1))(Fe(0.9)Mn(0.1))O<sub>3</sub> Thin Film  
 JOURNAL OF THE KOREAN PHYSICAL SOCIETY 59 (3) Pages: 2462-2465, SEP 2011.
42. Rovillain P.; Cazayous M.; Gallais Y.; et al.  
 Magnetic Field Induced Dehybridization of the Electromagnons in Multiferroic TbMnO<sub>3</sub>  
 PHYSICAL REVIEW LETTERS 107 (1) Article Number: 027202, JUL 5 2011.
41. Romaguera-Barcelay Y.; Moreira J. Agostinho; Gonzalez-Aguilar G.; et al.  
 Synthesis of orthorhombic rare-earth manganite thin films by a novel chemical solution route  
 JOURNAL OF ELECTROCERAMICS 26 (1-4) Pages: 44-55, JUN 2011.
40. Choithrani Renu; Rao Mala N.; Chaplot S. L.; et al.  
 Structural and phonon dynamical properties of perovskite manganites: (Tb, Dy, Ho)MnO<sub>3</sub>  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (12) Pages: 1627-1635, JUN 2011.
39. Kaur Nupinderjeet; Mohan Rajneesh; Gaur N. K.; et al.  
 Influence of La doping on elastic and thermodynamic properties of SrMoO<sub>3</sub>  
 JOURNAL OF ALLOYS AND COMPOUNDS 509 (20) Pages: 6077-6082, MAY 19 2011.
38. Das Raja; Jaiswal Adhish; Adyanthaya Suguna; et al.  
 Effect of particle size and annealing on spin and phonon behavior in TbMnO<sub>3</sub>  
 JOURNAL OF APPLIED PHYSICS 109 (6) Article Number: 064309, MAR 15 2011.
37. Antonakos A.; Liarokapis E.; Aydogdu G. H.; et al.  
 Strain induced phase separation on La(0.5)Ca(0.5)MnO<sub>3</sub> thin films  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.
36. Chaix-Pluchery O.; Kreisel J.  
 Raman scattering of perovskite SmScO<sub>3</sub> and NdScO<sub>3</sub> single crystals  
 PHASE TRANSITIONS Volume: 84 (5-6) Pages: 542-554 Article Number: PII 934269525, 2011.
35. Chou, T.L., Lee, J.M., Chen, S.A., Ishii, H., Hiraoka, N., Lin, C.M., Chen, T.H., Haw, S.C., Chen, S.W., Lu, K.T., Chen, J.M.  
 Modifications of MnO<sub>6</sub> Octahedra in DyMnO<sub>3</sub> under High Pressure  
 Journal of Physics Conference Series Volume: 215 Article Number: 012030 DOI: 10.1088/1742-6596/215/1/012030 Published: 2010
34. Gao, P., Chen, H.Y., Tyson, T.A., Liu, Z.X., Bai, J.M., Wang, L.P., Choi, Y.J., Cheong, S.-W.  
 Observation of anomalous phonons in orthorhombic rare-earth manganites  
 APPLIED PHYSICS LETTERS 97 (26) Article Number: 262905, DEC 27 2010.
33. Issing, S., Pimenov, A., Ivanov, Y.Vu., Mukhin, A.A., Geurts, J.  
 Spin-phonon coupling in multiferroic manganites RMnO<sub>3</sub>: comparison of pure (R = Eu, Gd, Tb) and substituted (R = Eu(1-x)Y(x)) compounds  
 EUROPEAN PHYSICAL JOURNAL B 78 (3) Pages: 367-372, DEC 2010.
32. Guennou, M., Bouvier, P., Krikler, B., Kreisel, J., Haumont, R., Garbarino, G.  
 High-pressure investigation of CaTiO<sub>3</sub> up to 60 GPa using x-ray diffraction and Raman spectroscopy  
 PHYSICAL REVIEW B 82 (13) Article Number: 134101, OCT 4 2010.
31. Chaban N.; Weber M.; Pignard S.; et al.  
 Phonon Raman scattering of perovskite LaNiO<sub>3</sub> thin films  
 APPLIED PHYSICS LETTERS 97 (3) Article Number: 031915, JUL 19 2010.
30. Chaix-Pluchery O.; Sauer D.; Kreisel J.  
 Temperature-dependent Raman scattering of DyScO<sub>3</sub> and GdScO<sub>3</sub> single crystals  
 JOURNAL OF PHYSICS-CONDENSED MATTER 22 (16) Article Number: 165901, APR 28 2010.
29. Lazarevic N.; Popovic Z. V.; Hu Rongwei; et al.  
 Evidence for electron-phonon interaction in Fe(1-x)M(x)Sb(2) (M=Co and Cr; 0 <= x <= 0.5) single crystals  
 PHYSICAL REVIEW B 81 (14) Article Number: 144302, APR 1 2010.
28. Kumar Pradeep; Saha Surajit; Muthu D. V. S.; et al.  
 Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO<sub>3</sub>  
 JOURNAL OF PHYSICS-CONDENSED MATTER 22 (11) Article Number: 115403, MAR 24 2010.
27. Moreira J. Agostinho; Almeida A.; Ferreira W. S.; et al.  
 Coupling between phonons and magnetic excitations in orthorhombic Eu(1-x)Y(x)MnO<sub>3</sub>  
 PHYSICAL REVIEW B 81(5) Article Number: 054447, FEB 2010.
26. Kumar Pradeep; Saha Surajit; Serrao C. R.; et al.  
 Temperature-dependent infrared reflectivity studies of multiferroic TbMnO<sub>3</sub>: Evidence for spin-phonon coupling  
 PRAMANA-JOURNAL OF PHYSICS 74 (2) Pages: 281-291, FEB 2010.

25. Issing S.; Pimenov A.; Ivanov V. Yu.; et al.  
 Composition-dependent spin-phonon coupling in mixed crystals of the multiferroic manganite  $\text{Eu}(1-x)\text{Y}(x)\text{MnO}_3$  ( $0 \leq x \leq 0.5$ ) studied by Raman spectroscopy  
*PHYSICAL REVIEW B* 81 (2) Article Number: 024304, JAN 2010.
24. Sopracase Rodolphe; Gruener Gisele; Olive Enrick; et al.  
 Infrared study of the phonon modes in  $\text{PrMnO}_3$  and  $\text{CaMnO}_3$   
*PHYSICA B-CONDENSED MATTER* 405 (1) Pages: 45-52, JAN 1 2010.
23. Issing, S., Fuchs, F., Ziereis, C., Batke, E., Pimenov, A., Ivanov, Y.V., Mukhin, A.A., Geurts, J.  
 Lattice dynamics of  $\text{Eu}_{1-x}\text{Y}_x\text{MnO}_3$  ( $0 \geq x \geq 0.5$ )  
*European Physical Journal B* 73 (3), pp. 353-360 (2010).
22. Rao, M.N., Kaur, N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
 Lattice dynamics of orthorhombic perovskite yttrium manganite,  $\text{YMnO}_3$   
*JOURNAL OF PHYSICS-CONDENSED MATTER* Volume: 21 Issue: 35 Article Number: 355402 DOI: 10.1088/0953-8984/21/35/355402 Published: SEP 2 2009
21. Choithrani, R., Rao, M.N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
 Lattice dynamics of manganites  $\text{RMnO}_3$  ( $R = \text{Sm}, \text{Eu}$  or  $\text{Gd}$ ): instabilities and coexistence of orthorhombic and hexagonal phases  
*NEW JOURNAL OF PHYSICS* Volume: 11 Article Number: 073041 DOI: 10.1088/1367-2630/11/7/073041 Published: JUL 23 2009
20. Matsuzaki, H., Uemura, H., Matsubara, M., Kimura, T., Tokura, Y., Okamoto, H.  
 Detecting charge and lattice dynamics in photoinduced charge-order melting in perovskite-type manganites using a 30-femtosecond time resolution  
*PHYSICAL REVIEW B* Volume: 79 Issue: 23 Article Number: 235131 DOI: 10.1103/PhysRevB.79.235131 Published: JUN 2009
19. Antonakos, A., Filippi, M., Auban-Senzier, P., Lampakis, D., Pasquier, C.R., Prellier, W., Liarokapis, E.  
 Pressure and magnetic field effects on  $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$  thin films  
*PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS* Volume: 246 Issue: 3 Pages: 622-625 DOI: 10.1002/pssb.200880539 Published: MAR 2009
18. Antonakos, A., Filippi, M., Aydogdu, G.H., Prellier, W., Habermeier, H.-U., Liarokapis, E.  
 Tuning of the charge ordered state in the manganite thin films by internal or external strains  
*PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS* Volume: 246 Issue: 3 Pages: 635-642 DOI: 10.1002/pssb.200880545 Published: MAR 2009
17. Chaix-Pluchery, O., Kreisel, J.  
 Raman scattering of perovskite  $\text{DyScO}_3$  and  $\text{GdScO}_3$  single crystals  
*Journal of Physics Condensed Matter* 21 (17), art. no. 175901 (2009).
16. Sathe, V.G., Rawat, R., Dubey, A., Narlikar, A.V., Prabhakaran, D.  
 Photo-induced insulator-metal transition probed by Raman spectroscopy  
*Journal of Physics Condensed Matter* 21 (7), art. no. 075603 (2009).
15. Antonakos, A., Lampakis, D., Liarokapis, E., Filippi, M., Prellier, W., Aydogdu, G.H., Habermeier, H.U  
 Phase separation in manganite thin films  
 Phase separation in manganite thin films  
*JOURNAL OF PHYSICS-CONDENSED MATTER* Volume: 20 Issue: 43 Article Number: 434232 DOI: 10.1088/0953-8984/20/43/434232 Published: OCT 29 2008
14. Lampakis, D., Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W., Auban-Senzier, P., Pasquier, C.  
 Pressure effects on the phase separation of  $\text{Pr}_{0.6}\text{Ca}_{0.4}\text{MnO}_3$  thin films  
*Journal of Physics Condensed Matter* 20 (48), art. no. 485202 (2008).
13. Dubey, A., Sathe, V.G., Rawat, R.  
 Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial  $\text{LaMnO}_{3+\delta}$  thin films  
*Journal of Applied Physics* 104 (11), art. no. 113530 (2008).
12. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.  
 Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
*Physical Review B - Condensed Matter and Materials Physics* 78 (23), art. no. 235103 (2008).
11. Choithrani, R., Gaur, N.K., Singh, R.K.  
 Thermodynamic properties of  $\text{SmMnO}_3$ ,  $\text{Sm}_{0.55}\text{Sr}_{0.45}\text{MnO}_3$  and  $\text{Ca}_{0.85}\text{Sm}_{0.15}\text{MnO}_3$   
*Journal of Physics Condensed Matter* 20 (41), art. no. 415201 (2008).
10. Barath, H., Kim, M., Cooper, S.L., Abbamonte, P., Fradkin, E., Mahns, I., Rüthausen, M., (...), Argyriou, D.N.  
 Domain fluctuations near the field-induced incommensurate-commensurate phase transition of  $\text{TbMnO}_3$   
*Physical Review B - Condensed Matter and Materials Physics* 78 (13), art. no. 134407 (2008).
9. Antonakos, A., Palles, D., Liarokapis, E., Filippi, M., Prellier, W.  
 Evaluation of the strains in charge-ordered  $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$  thin films using Raman spectroscopy  
*Journal of Applied Physics* 104 (6), art. no. 063508 (2008).

8. Choithrani, R., Gaur, N.K., Singh, R.K.  
Specific heat and transport properties of La<sub>1-x</sub>Gd<sub>x</sub>MnO<sub>3</sub> at 15 K ≤ T ≤ 300 K  
Solid State Communications 147 (3-4), pp. 103-106 (2008).
7. Choithrani, R., Gaur, N.K.  
Heat capacity of EuMnO<sub>3</sub> and Eu0.7A0.3MnO<sub>3</sub> (A=Ca, Sr) compounds  
Journal of Magnetism and Magnetic Materials 320 (5), pp. 612-616 (2008).
6. Truong, K.D., Laverdière, J., Singh, M.P., Jandl, S., Fournier, P.  
Impact of Co/Mn cation ordering on phonon anomalies in La(2)CoMnO(6) double perovskites: Raman spectroscopy  
PHYSICAL REVIEW B Volume: 76 Issue: 13 Article Number: 132413 DOI: 10.1103/PhysRevB.76.132413 Published: OCT 2007
5. Dubey, A., Sathe, V.G.  
The effect of magnetic order and thickness in the Raman spectra of oriented thin films of LaMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 19 Issue: 34 Article Number: 346232 DOI: 10.1088/0953-8984/19/34/346232 Published: AUG 29 2007
4. Gupta, R.K., Whang, C.M.  
Structural study of a sol-gel derived novel solid oxide fuel cell perovskite: (La<sub>1-x</sub>Sr<sub>x</sub>)(Cr<sub>0.85</sub>Fe<sub>0.05</sub>Co<sub>0.05</sub>Ni<sub>0.05</sub>)O<sub>3-δ</sub>  
Journal of Physics Condensed Matter 19 (19), art. no. 196209 (2007).
3. Wesselinowa JM, St Kovachev  
Magnetic ordering effects in the phonon spectra of orthorhombic RMnO<sub>3</sub> compounds  
JOURNAL OF PHYSICS-CONDENSED MATTER 19 (17), 176211 (2007).
2. Rini EG, Rao MN, Chaplot SL, et al.  
Phonon dynamics of lanthanum manganite LaMnO<sub>3</sub> using an interatomic shell model potential  
PHYSICAL REVIEW B 75 (21), 214301 (2007).
1. Han JT, Huang YH, Huang W, et al.  
Selective synthesis of TbMn<sub>2</sub>O<sub>5</sub> nanorods and TbMnO<sub>3</sub> micron crystals  
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 128 (45): 14454-14455 NOV 15 2006
55. “Gold catalysts supported on ceria and ceria-alumina for water-gas shift reaction”  
Andreeva, D., Ivanov, I., Ilieva, L., Abrashev, M.V.  
Applied Catalysis A: General 302 (1), pp. 127-132 (2006).
71. Ceria-Based Catalysts for Selective Hydrogenation Reactions: A Critical Review  
Razmgar, Kourosh; Altarawneh, Mohammednoor; Oluwoye, Ibukun; et al.  
CATALYSIS SURVEYS FROM ASIA Volume: 25 Issue: 1 Pages: 27-47 Published: MAR 2021
70. Divergent influence of {111} vs. {100} crystal planes and Yb<sup>3+</sup> dopant on CO oxidation paths in mixed nano-sized oxide Au/Ce<sub>1-x</sub>Yb<sub>x</sub>O<sub>2-x/2</sub> (x=0 or 0.1) systems  
Wozniak, Piotr; Kraszkiewicz, Piotr; Malecka, Małgorzata A.  
CRYSTENGCOMM Volume: 22 Issue: 35 Pages: 5828-5840 Published: SEP 21 2020
69. Recent Advances in Design of Gold-Based Catalysts for H-2 Clean-Up Reactions  
Tabakova, Tatjana  
FRONTIERS IN CHEMISTRY Volume: 7 Article Number: 517 Published: AUG 7 2019
68. Recent Advances in the Gold-Catalysed Low-Temperature Water-Gas Shift Reaction  
Carter, James H.; Hutchings, Graham J.  
CATALYSTS Volume: 8 Issue: 12 Article Number: 627 Published: DEC 2018
67. Gonzalez-Castano, M.; Ivanova, S.; Ioannides, T.; et al.  
Deep insight into Zr/Fe combination for successful Pt/CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> WGS catalyst doping  
CATALYSIS SCIENCE & TECHNOLOGY Volume: 7 Issue: 7 Pages: 1556-1564 Published: APR 7 2017
66. Magadzu, T.; Scurrell, M. S.  
Stability of gold particles in NaY-type zeolites: Promotional effects of co-exchanged metal cations  
MICROPOROUS AND MESOPOROUS MATERIALS Volume: 241 Pages: 52-57 Published: MAR 15 2017
65. Menegazzo, Federica; Signoretto, Michela; Ghedini, Elena; et al.  
Effects of zirconia precursor on gold based samples for low temperature WGSR  
BIOINTERFACE RESEARCH IN APPLIED CHEMISTRY Volume: 6 Issue: 6 Pages: 1828-1832 Published: DEC 15 2016
64. Gurram, Venkata Ramesh Babu; Enumula, Siva Sankar; Mutyal, Suresh; et al.  
The advantage of ceria loading over V<sub>2</sub>O<sub>5</sub>/Al<sub>2</sub>O<sub>3</sub> catalyst for vapor phase oxidative dehydrogenation of ethylbenzene to styrene using CO<sub>2</sub> as a soft oxidant  
APPLIED PETROCHEMICAL RESEARCH Volume: 6 Issue: 4 Pages: 427-437 Published: DEC 2016
63. Gomes, S.R., Bion, N., Duprez, D., Epron, F.  
Hydrogen production from hydrocarbons over Rh supported on Ce-based oxides for automotive applications

62. Villa, A., Dimitratos, N., Chan-Thaw, C.E., Hammond, C., Veith, G.M., Wang, D., Manzoli, M., Prati, L., Hutchings, G.J.  
Characterisation of gold catalysts  
CHEMICAL SOCIETY REVIEWS Volume: 45 Issue: 18 Pages: 4953-4994 DOI: 10.1039/c5cs00350d Published: SEP 21 2016
61. Montini, T., Melchionna, M., Monai, M., Fornasiero, P.  
Fundamentals and Catalytic Applications of CeO<sub>2</sub>-Based Materials  
CHEMICAL REVIEWS Volume: 116 Issue: 10 Pages: 5987-6041 DOI: 10.1021/acs.chemrev.5b00603 Published: MAY 25 2016
60. Pérez, P., Soria, M.A., Carabineiro, S.A.C., Maldonado-Hódar, F.J., Mendes, A., Madeira, L.M.  
Application of Au/TiO<sub>2</sub> catalysts in the low-temperature water-gas shift reaction  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 41 Issue: 8 Pages: 4670-4681 DOI: 10.1016/j.ijhydene.2016.01.037  
Published: MAR 2 2016
59. Reddy, G.K., Smirniotis, P.G.  
Water Gas Shift Reaction: Research Developments and Applications  
Water Gas Shift Reaction: Research Developments and Applications 1-261 (2015)
58. Ma, Z (Ma, Zhen); Tao, F (Tao, Franklin (Feng)); Gu, XL (Gu, Xiaoli)  
DEVELOPMENT OF NEW GOLD CATALYSTS FOR REMOVING CO FROM H-2  
HETEROGENEOUS CATALYSIS AT NANOSCALE FOR ENERGY APPLICATIONS Pages: 217-238 Published: 2015
57. Zhou, Zhiwei; Dai, Songshan; Qin, Juan; et al.  
Preparation of nano-Ni/meso-Ce-TiO<sub>2</sub> by one-step in a sol-gel system and its catalytic performance for hydrogenolysis of xylitol  
RSC ADVANCES Volume: 5 Issue: 86 Pages: 70410-70416 Published: 2015
56. Li, Changshun; Sun, Yufeng; Zhang, Aimin  
Binary Ce-Mn oxides confined in carbon nanotubes as efficient catalysts for ethylbenzene dehydrogenation in the presence of carbon dioxide  
RSC ADVANCES Volume: 5 Issue: 46 Pages: 36394-36403 Published: 2015
55. Correia Carabineiro, S.A.  
Synthesis and applications of gold nanoparticles  
Advances in Nanotechnology 12, 95-122 (2014)
54. Raju, G., Reddy, B.M., Park, S.-E.  
CO<sub>2</sub> promoted oxidative dehydrogenation of n-butane over VO<sub>x</sub>/MO<sub>2</sub>ZrO<sub>2</sub> (M = Ce or Ti) catalysts  
JOURNAL OF CO<sub>2</sub> UTILIZATION Volume: 5 Pages: 41-46 DOI: 10.1016/j.jcou.2013.12.003 Published: MAR 2014
53. Kustov, Leonid M.; Tarasov, Andrei L.  
Hydrogenation of carbon dioxide: a comparison of different types of active catalysts  
MENDELEEV COMMUNICATIONS Volume: 24 Issue: 6 Pages: 349-350 Published: NOV-DEC 2014
52. Ang, M. L.; Oemar, U.; Saw, E. T.; et al.  
Highly Active Ni/xNa/CeO<sub>2</sub> Catalyst for the Water Gas Shift Reaction: Effect of Sodium on Methane Suppression  
ACS CATALYSIS 4 (9), pp. 3237-3248 SEP 2014
51. Gonzalez Castano, M.; Reina, T. R.; Ivanova, S.; et al.  
Pt vs. Au in water-gas shift reaction  
JOURNAL OF CATALYSIS 314, pp. 1-9 MAY 2014
50. Ramirez Reina, Tomas; Ivanova, Svetlana; Jose Delgado, Juan; et al.  
Viability of Au/CeO<sub>2</sub>-ZnO/Al<sub>2</sub>O<sub>3</sub> Catalysts for Pure Hydrogen Production by the Water-Gas Shift Reaction  
CHEMCATCHEM 6 (5), pp. 1401-1409 MAY 2014
49. Soria, M. A.; Perez, P.; Carabineiro, S. A. C.; et al.  
Effect of the preparation method on the catalytic activity and stability of Au/Fe<sub>2</sub>O<sub>3</sub> catalysts in the low-temperature water-gas shift reaction  
APPLIED CATALYSIS A-GENERAL 470, pp. 45-55 JAN 30 2014
48. Marin, Raimon P.; Kondrat, Simon A.; Davies, Thomas E.; et al.  
Novel cobalt zinc oxide Fischer-Tropsch catalysts synthesised using supercritical anti-solvent precipitation  
CATALYSIS SCIENCE & TECHNOLOGY 4 (7), pp. 1970-1978 2014
47. Li, Yong; Shen, Wenjie  
Morphology-dependent nanocatalysts: Rod-shaped oxides  
CHEMICAL SOCIETY REVIEWS 43 (5), pp. 1543-1574 2014
46. Deshpande, P.A., Madras, G.  
Catalytic Synthesis of CO Free Hydrogen  
New and Future Developments in Catalysis 223-252 DOI: 10.1016/B978-0-444-53882-6.00009-7 (2013)
45. Carabineiro, S.A.C.  
Synthesis and applications of gold nanoparticles

44. Signoretto, Michela; Menegazzo, Federica; Trevisan, Valentina; et al.

Investigation on the Stability of Supported Gold Nanoparticles

CATALYSTS 3 (3), pp. 656-670 SEP 2013

43. Gnanakumar, Edwin S.; John, Jino C.; Raja, Thirumalaiswamy; et al.

Functional and Disordered Meso-Macroporous gamma-Al<sub>2-x</sub>M<sub>x</sub>O<sub>3</sub> +/- y (M = Cu and/or Ce)

JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY 13 (4) SI, 2682-2688, APR 2013

42. Liu, Z., Tan, X., Lv, C.

Sucrose-assisted synthesis of three-dimensionally ordered macroporous CeO<sub>2</sub> and its use as a support for promotional catalytic performance of CO oxidation

Applied Surface Science 283, pp. 290-296, 2013

41. Tao, F., Ma, Z.

Water-gas shift on gold catalysts: Catalyst systems and fundamental studies

Physical Chemistry Chemical Physics 15 (37), pp. 15260-15270, 2013

40. Wang, N., Shen, K., Huang, L., Yu, X., Qian, W., Chu, W.

Facile route for synthesizing ordered mesoporous Ni-Ce-Al oxide materials and their catalytic performance for methane dry reforming to hydrogen and syngas

ACS Catalysis 3 (7), pp. 1638-1651, 2013

39. Mandal, S., Santra, C., Bando, K.K., James, O.O., Maity, S., Mehta, D., Chowdhury, B.

Aerobic oxidation of benzyl alcohol over mesoporous Mn-doped ceria supported Au nanoparticle catalyst

Journal of Molecular Catalysis A: Chemical 378, pp. 47-56, 2013

38. Ta, N., Liu, J., Shen, W.

Tuning the shape of ceria nanomaterials for catalytic applications

Cuihua Xuebao/Chinese Journal of Catalysis 34 (5), pp. 838-850, 2013

37. Reina, T.R., Xu, W., Ivanova, S., Centeno, M.Á., Hanson, J., Rodriguez, J.A., Odriozola, J.A.

In situ characterization of iron-promoted ceria-alumina gold catalysts during the water-gas shift reaction

Catalysis Today 205, pp. 41-48, 2013

36. Reina, T.R., Ivanova, S., Idakiev, V., Delgado, J.J., Ivanov, I., Tabakova, T., Centeno, M.A., Odriozola, J.A.

Impact of Ce-Fe synergism on the catalytic behaviour of Au/CeO<sub>2</sub>-FeOx/Al<sub>2</sub>O<sub>3</sub> for pure H<sub>2</sub> production

Catalysis Science and Technology 3 (3), pp. 779-787, 2013

35. Mandal, S., Bando, K.K., Santra, C., Maity, S., James, O.O., Mehta, D., Chowdhury, B.

Sm-CeO<sub>2</sub> supported gold nanoparticle catalyst for benzyl alcohol oxidation using molecular O<sub>2</sub>

Applied Catalysis A: General 452, pp. 94-104, 2013

34. Yazid, H., Adnan, R., Farrukh, M.A.

Gold nanoparticles supported on titania for the reduction of p-nitrophenol

Indian Journal of Chemistry - Section A Inorganic, Physical, Theoretical and Analytical Chemistry 52 (2), pp. 184-191, 2013

33. Hutchings, G.J., Edwards, J.K.

Application of gold nanoparticles in catalysis

Frontiers of Nanoscience 3 (1), pp. 249-293, 2012

32. Fonseca, J., Royer, S., Bion, N., Pirault-Roy, L., Rangel, M.C., Duprez, D., Epron, F.

Preferential CO oxidation over nanosized gold catalysts supported on ceria and amorphous ceria-alumina

Applied Catalysis B: Environmental 128, pp. 10-20, 2012

31. Reddy, E.L., Prabhakarn, A., Karuppiyah, J., Rameshbabu, N., Subrahmanyam, C.H.

Gold supported calcium deficient hydroxyapatite for room temperature co oxidation

International Journal of Nanoscience 11 (3), art. no. 1240004, 2012.

30. Alhumaimess, M., Lin, Z., Weng, W., Dimitratos, N., Dummer, N.F., Taylor, S.H., Bartley, J.K., (...), Hutchings, G.J.

Oxidation of benzyl alcohol by using gold nanoparticles supported on ceria foam

ChemSusChem 5 (1), pp. 125-131, 2012.

29. Xu, J., Xue, B., Liu, Y.-M., Li, Y.-X., Cao, Y., Fan, K.-N.

Mesostructured Ni-doped ceria as an efficient catalyst for styrene synthesis by oxidative dehydrogenation of ethylbenzene

Applied Catalysis A: General 405 (1-2), pp. 142-148, 2011.

28. Kugai Junichiro; Miller Jeffrey T.; Guo Neng; et al.

Role of metal components in Pd-Cu bimetallic catalysts supported on CeO<sub>2</sub> for the oxygen-enhanced water gas shift

APPLIED CATALYSIS B-ENVIRONMENTAL 105 (3-4) Pages: 306-316, JUN 22 2011.

27. Ousmane M.; Liotta L. F.; Di Carlo G.; et al.

Supported Au catalysts for low-temperature abatement of propene and toluene, as model VOCs: Support effect

APPLIED CATALYSIS B-ENVIRONMENTAL 101 (3-4) Pages: 629-637, JAN 14 2011.

26. Sun Y.; Hla S. S.; Duffy G. J.; et al.  
High temperature water-gas shift Cu catalysts supported on Ce-Al containing materials for the production of hydrogen using simulated coal-derived syngas  
CATALYSIS COMMUNICATIONS 12 (4) Pages: 304-309, DEC 15 2010.
25. Ma Zhen; Yin Hongfeng; Dai Sheng  
Performance of Au/M(x)O(y)/TiO(2) Catalysts in Water-Gas Shift Reaction  
CATALYSIS LETTERS 136 (1-2) Pages: 83-91, MAY 2010.
24. Ma, Z., Yin, H., Dai, S.  
Performance of Au/M x Oy/TiO2 Catalysts in water-gas shift reaction  
Catalysis Letters 136 (1-2), pp. 83-91 (2010).
23. Yu, Q.-Q., Dong, Y.-Y., Liao, W.-P., Jin, M.-S., He, T., Suo, Z.-H.  
Preparation of ceria-alumina and catalytic activity of gold catalyst supported on ceria-alumina for water gas shift reaction  
Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology 38 (2), pp. 223-229 (2010).
22. González, I.D., Navarro, R.M., Wen, W., Marinkovic, N., Rodríguez, J.A., Rosa, F., Fierro, J.L.G.  
A comparative study of the water gas shift reaction over platinum catalysts supported on CeO<sub>2</sub>, TiO<sub>2</sub> and Ce-modified TiO<sub>2</sub>  
Catalysis Today 149 (3-4), pp. 372-379 (2010).
21. Carmen Blanco Ortiz, M.D.  
Catalysis  
Modern Supramolecular Gold Chemistry: Gold-Metal Interactions and Applications 429-490 DOI: 10.1002/9783527623778.ch8 (2009)
20. Xu, J., Wang, L.-C., Liu, Y.-M., Cao, Y., He, H.-Y., Fan, K.-N.  
Mesostructured CeO<sub>2</sub> as an effective catalyst for styrene synthesis by oxidative dehydrogenation of ethylbenzene  
Catalysis Letters 133 (3-4), pp. 307-313 (2009).
19. Miedziak, P.J., Tang, Z., Davies, T.E., Enache, D.I., Bartley, J.K., Carley, A.F., Herzing, A.A., (...), Hutchings, G.J.  
Ceria prepared using supercritical antisolvent precipitation: A green support for gold-palladium nanoparticles for the selective catalytic oxidation of alcohols  
Journal of Materials Chemistry 19 (45), pp. 8619-8627 (2009).
18. Yen, C.-W., Lin, M.-L., Wang, A., Chen, S.-A., Chen, J.-M., Mou, C.-Y.  
CO oxidation catalyzed by Au-Ag bimetallic nanoparticles supported in mesoporous silica  
Journal of Physical Chemistry C 113 (41), pp. 17831-17839 (2009).
17. She, Y., Zheng, Q., Li, L., Zhan, Y., Chen, C., Zheng, Y., Lin, X.  
Rare earth oxide modified CuO/CeO<sub>2</sub> catalysts for the water-gas shift reaction  
International Journal of Hydrogen Energy 34 (21), pp. 8929-8936 (2009).
16. Zane, F., Trevisan, V., Pinna, F., Signoretto, M., Menegazzo, F.  
Investigation on gold dispersion of Au/ZrO<sub>2</sub> catalysts and activity in the low-temperature WGS reaction  
Applied Catalysis B: Environmental 89 (1-2), pp. 303-308 (2009).
15. Yang, S., Zhan, Y., Chen, C., Cao, Y., Lin, X., Zheng, Q.  
Effect of rare earth oxide on the catalytic performance of Au/CeO<sub>2</sub> catalyst for water-gas shift reaction  
Cuihua Xuebao / Chinese Journal of Catalysis 30 (7), pp. 666-672 (2009).
14. Chen, Y.-C., Chen, K.-B., Lee, C.-S., Lin, M.C.  
Direct synthesis of Zr-doped ceria nanotubes  
Journal of Physical Chemistry C 113 (13), pp. 5031-5034 (2009).
13. Skála, T., Šutara, F., Prince, K.C., Matolín, V.  
Cerium oxide stoichiometry alteration via Sn deposition: Influence of temperature  
Journal of Electron Spectroscopy and Related Phenomena 169 (1), pp. 20-25 (2009).
12. Menegazzo, F., Pinna, F., Signoretto, M., Trevisan, V., Bocuzzi, F., Chiorino, A., Manzoli, M.  
Highly dispersed gold on zirconia: Characterization and activity in low-temperature water gas shift tests  
CHEMSUSCHEM Volume: 1 Issue: 4 Pages: 320-326 DOI: 10.1002/cssc.200700152 Published: 2008
11. Romero-Sarria, F., Penkova, A., Martinez T., L.M., Centeno, M.A., Hadjiivanov, K., Odriozola, J.A.  
Role of water in the CO oxidation reaction on Au/CeO<sub>2</sub>: Modification of the surface properties  
Applied Catalysis B: Environmental 84 (1-2), pp. 119-124 (2008).
10. Skála, T., Šutara, F., Cabala, M., Škoda, M., Prince, K.C., Matolín, V.  
A photoemission study of the interaction of Ga with CeO<sub>2</sub>(1 1 1) thin films  
Applied Surface Science 254 (21), pp. 6860-6864 (2008).
9. Bali, S., Turpin, G.C., Ernst, R.D., Pugmire, R.J., Singh, V., Seehra, M.S., Eyring, E.M.  
Water gas shift catalysis using iron aerogels doped with palladium by the gas-phase incorporation method  
Energy and Fuels 22 (3), pp. 1439-1443 (2008).
8. Jacobs, G, Davis, BH  
Low temperature water-gas shift catalysts

7. Reddy BM, Rao KN, Reddy GK, et al.

Structural characterization and oxidehydrogenation activity of CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> and V<sub>2</sub>O<sub>5</sub>/CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> catalysts  
JOURNAL OF PHYSICAL CHEMISTRY C 111 (50), pp. 18751-18758 (2007).

6. Li, L., Zhan, Y., Zheng, Q., Zheng, Y., Lin, X., Li, D., Zhu, J.

Water-gas shift reaction over aluminum promoted Cu/CeO<sub>2</sub> nanocatalysts characterized by XRD, BET, TPR and cyclic voltammetry (CV)  
Catalysis Letters 118 (1-2), pp. 91-97 (2007)

5. Tang, Z.-R., Edwards, J.K., Bartley, J.K., Taylor, S.H., Carley, A.F., Herzing, A.A., Kiely, C.J., Hutchings, G.J.

Nanocrystalline cerium oxide produced by supercritical antisolvent precipitation as a support for high-activity gold catalysts  
Journal of Catalysis 249 (2), pp. 208-219 (2007)

4. Hammer, N., Kvande, I., Chen, D., Ronning, M.

Au-TiO<sub>2</sub> catalysts stabilised by carbon nanofibres  
Catalysis Today 122 (3-4), pp. 365-369 (2007)

3. Shapovalov, V., Metiu, H.

Catalysis by doped oxides: CO oxidation by Au<sub>x</sub>Ce<sub>1-x</sub>O<sub>2</sub>  
Journal of Catalysis 245 (1), pp. 205-214 (2007)

2. Cortie, M., Laguna, A., Thompson, D.

Gold 2006. Highlights of 4th International Conference on the Science, Technology and Industrial Applications of Gold: Limerick, Ireland  
3-6 September (2006).  
Gold Bulletin 39 (4), pp. 226-235 (2006).

1. Hashmi, A.S.K., Hutchings, G.J.

Gold Catalysis  
Angewandte Chemie - International Edition 45 (47), pp. 7896-7936 (2006)

**56. "Raman and infrared studies of La<sub>1-y</sub>Sr<sub>y</sub>Mn<sub>1-x</sub>M<sub>x</sub>O<sub>3</sub> (M=Cr, Co, Cu, Zn, Sc or Ga): Oxygen disorder and local vibrational modes"**

A. Dubroka, J. Humlíček, M. V. Abrashev, Z. V. Popovic, F. Sapiña, and A. Cantarero  
Phys. Rev. B 73, 224401 (2006).

37. Enhancement of intrinsic magnetoresistance in Zn doped La<sub>0.9</sub>Sr<sub>0.1</sub>MnO<sub>3</sub> epitaxial films

Yin, Lu; Wang, Chuanbin; Shen, Qiang  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 859 Article Number: 157817 Published: APR 5 2021

36. Influence of calcination on the structural properties of earth abundant Cu<sub>2</sub>ZnSnS<sub>4</sub>

Ahmadi, Souha; Khemiri, Naoufel; Cantarero, Andres; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 852 Article Number: 156714 Published: JAN 25 2021

35. Short-Range Order in VI3

Mijin, Sanja Djurdjic; Abeykoon, A. M. Milinda; Solajic, Andrijana; et al.  
INORGANIC CHEMISTRY Volume: 59 Issue: 22 Pages: 16265-16271 Published: NOV 16 2020

34. PI-MOCVD technology of (La, Sr)(Mn, Co)O-3: From epitaxial to nanostructured films

Vagner, Milita; Plausinaitiene, Valentina; Lukose, Rasuole; et al.  
SURFACE & COATINGS TECHNOLOGY Volume: 385 Article Number: 125287 Published: MAR 15 2020

33. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose

Nam Nhat Hoang; Duc Huyen Yen Pham; The Nghia Nguyen  
SCIENTIFIC REPORTS Volume: 9 Article Number: 19204 Published: DEC 16 2019

32. In Situ Method Correlating Raman Vibrational Characteristics to Chemical Expansion via Oxygen Nonstoichiometry of Perovskite Thin Films

Sediva, Eva; Defferriere, Thomas; Perry, Nicola H.; et al.  
ADVANCED MATERIALS Volume: 31 Issue: 33 Article Number: 1902493 Published: AUG 2019

31. Self-doped La<sub>1-x</sub>MnO<sub>3+delta</sub> perovskites: Electron state hybridization and Raman modes

Ulyanov, A. N.; Sidorov, A., V.; Pismenova, N. E.; et al.  
SOLID STATE SCIENCES Volume: 94 Pages: 41-44 Published: AUG 2019

30. Temperature Dependent Raman Spectroscopic Study of the Fe Doped La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub> Prepared Using Ball Milling Method  
Astik, Nidhi; Jha, Prafulla K.; Sathe, Vasant  
PHYSICS OF THE SOLID STATE Volume: 61 Issue: 4 Pages: 618-626 Published: APR 2019

29. Phenomenological description of doped manganites. Electron bandwidth, crystal local structure and Curie temperature  
Ulyanov, A. N.; Vasiliev, A. V.; Eremina, E. A.; et al.

CERAMICS INTERNATIONAL Volume: 44 Issue: 18 Pages: 22297-22300 Published: DEC 15 2018

28. LaFeO<sub>3</sub> thin films as relevant models for the surface investigation of 3-way catalysts  
 Nandi, Shreya; Blanck, Dimitri; Carlier, Thomas; et al.  
 SURFACE AND INTERFACE ANALYSIS Volume: 50 Issue: 11 Pages: 1018-1024 Published: NOV 2018
27. Influence of Fe substitution on structure and Raman spectra of La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub>: Experimental and density functional studies  
 Astik, Nidhi M.; Soni, Himadri; Jha, Prafulla K.; et al.  
 PHYSICA B-CONDENSED MATTER Volume: 541 Pages: 103-110 Published: JUL 15 2018
26. H<sub>2</sub>S sensing characteristics of Ni-doped CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> films synthesized by a sol-gel method  
 Boontum, Arisara; Phokharatkul, Ditsayut; Hodak, Jose H.; et al.  
 SENSORS AND ACTUATORS B-CHEMICAL Volume: 260 Pages: 877-887 Published: MAY 1 2018
25. Boontum, A., Phokharatkul, D., Hodak, J.H., Wisitsoraat, A., Hodak, S.K.  
 H<sub>2</sub>S sensing characteristics of Ni-doped CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>films synthesized by a sol-gel method  
 Sensors and Actuators, B: Chemical 260, pp. 877-887, 2018
24. Oumezzine, Marwene; Hassayoun, Oumayma; Bellouz, Ridha; et al.  
 On the role of disorder produced by manganese vacancy at the B site on the structural and magnetic properties of La<sub>0.67</sub>Ba<sub>0.33</sub>Mn<sub>1-x</sub>O<sub>3</sub> nanocrystalline  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 729 Pages: 156-161 Published: DEC 30 2017
23. Ulyanov, A. N.; Savilov, S. V.; Sidorov, A. V.; et al.  
 Electron structure, Raman "vacancy" modes and Griffiths-like phase of self-doped Pr<sub>1-x</sub>MnO<sub>3+delta</sub> manganites  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 722 Pages: 77-82 Published: OCT 25 2017
22. Turki, D.; Ghouri, Zafar Khan; Al-Meer, Saeed; et al.  
 Synthesis and Physicochemical Studies of Perovskite Manganite La(0.8)Ca(0.2)Nn(1-x)Co(x)O(3) (0 <= x <= 0.3)  
 JOURNAL OF MAGNETICS Volume: 22 Issue: 3 Pages: 353-359 Published: SEP 2017
21. Blanck, Dimitri; Schon, Anke; Mamede, Anne-Sophie; et al.  
 In situ Raman spectroscopy evidence of an accessible phase potentially involved in the enhanced activity of La -deficient lanthanum orthoferrite in 3-way catalysis (TWC)  
 CATALYSIS TODAY Volume: 283 Pages: 151-157 Published: APR 1 2017
20. Zhang, J.Z., Jiang, K., Hu, Z.G., Chu, J.H.  
 A novel technique for probing phase transitions in ferroelectric functional materials: Condensed matter spectroscopy  
 SCIENCE CHINA-TECHNOLOGICAL SCIENCES Volume: 59 Issue: 10 Pages: 1537-1548 DOI: 10.1007/s11431-015-0999-6  
 Published: OCT 2016
19. Jiang, K., Zhang, P., Zhang, J., Xu, G., Li, W., Hu, Z., Chu, J.  
 Relationship between negative thermal expansion and lattice dynamics in a tetragonal PbTiO<sub>3</sub>-Bi(Mg<sub>1/2</sub>Ti<sub>1/2</sub>)O<sub>3</sub> perovskite single crystal  
 RSC ADVANCES Volume: 6 Issue: 4 Pages: 3159-3164 DOI: 10.1039/c5ra24408k Published: 2016
18. Kotnana, G (Kotnana, Ganesh); Jammalamadaka, SN (Jammalamadaka, S. Narayana)  
 Band gap tuning and orbital mediated electron-phonon coupling in HoFe<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> (0 <= x <= 1)  
 JOURNAL OF APPLIED PHYSICS Volume: 118 Issue: 12 Article Number: 124101 DOI: 10.1063/1.4931155 Published: SEP 28 2015
17. Zhang, Jinzhong; Tong, Wen-Yi; Zhu, Jiajun; et al.  
 Temperature-dependent lattice dynamics and electronic transitions in 0.93Pb(Zn<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-0.07PbTiO<sub>3</sub>(3) single crystals: Experiment and theory  
 PHYSICAL REVIEW B Volume: 91 Issue: 8 Article Number: 085201 Published: FEB 4 2015
16. Duan, Z. H.; Chang, P.; Hu, Z. G.; et al.  
 Temperature dependent Raman scattering and far-infrared reflectance spectra of MgO modified Pb-0.99(Zr0.95Ti0.05)(0.98)Nb0.02O<sub>3</sub> ceramics: A composition effect  
 JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 9 Article Number: 093513 Published: SEP 7 2014
15. Graziosi, P.; Gambardella, A.; Prezioso, M.; et al.  
 Polaron framework to account for transport properties in metallic epitaxial manganite films  
 PHYSICAL REVIEW B 89 (21), Art. No. 214411 JUN 12 2014
14. Phong, P.T., Jang, S.J., Huy, B.T., Lee, Y.-I., Lee, I.-J.  
 Structural, magnetic, infrared and Raman studies of La<sub>0.8</sub>SrxCa<sub>0.2-x</sub>MnO<sub>3</sub> (0 ≤ x ≤ 0.2)  
 Journal of Materials Science: Materials in Electronics 24(7), 2292-2301 DOI: 10.1007/s10854-013-1092-7 (2013)
13. Dodiya, Neha; Varshney, Dinesh  
 Structural properties and Raman spectroscopy of rhombohedral La<sub>1-x</sub>NaxMnO<sub>3</sub> (0.075 <= x <= 0.15)  
 JOURNAL OF MOLECULAR STRUCTURE 1031, 104-109, JAN 16 2013
12. Islam, M.A., Rondinelli, J.M., Spanier, J.E.  
 Normal mode determination of perovskite crystal structures with octahedral rotations: Theory and applications  
 Journal of Physics Condensed Matter 25 (17), art. no. 175902, 2013
11. Craus, M.-L., Anitas, E., Cornei, N., Islamov, A., Garamus, V.  
 Magnetic structure of La 0.54Ho 0.11Sr 0.35Mn 1-xCu xO 3 manganites

Diffusion and Defect Data Pt.B: Solid State Phenomena 190, pp. 121-124, 2012

10. Eremina, R. M.; Sharipov, K. R.; Mingalieva, L. V.; et al.

Properties of La<sub>1-x</sub>Sr<sub>x</sub>Mn<sub>0.925</sub>Zn<sub>0.075</sub>O<sub>3</sub> (x=0.075, 0.095, 0.115) ceramics  
PHYSICS OF THE SOLID STATE 54 (6) Pages: 1160-1165, JUN 2012.

9. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.

Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.

8. Mir Feroz Ahmad; Ikram M.; Kumar Ravi

Local symmetry breaking in PrFeO(3) thin films and other similar systems after Ni doping: A brief Raman study  
VIBRATIONAL SPECTROSCOPY 55 (2) Pages: 307-310, MAR 2011.

7. Mir Feroz Ahmad; Ikram M.; Kumar Ravi

Symmetry breaking in Ni-doped PrFeO(3) thin films established by Raman study  
PHASE TRANSITIONS 84 (2) Pages: 167-178, 2011.

6. Chen CZ, Cai CB, Liu ZY, et al

Stress evolution and lattice distortion induced by thickness variation and lattice misfit in La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub>-delta films  
Solid State Communications 150 (1-2), 66-69 (2010).

5. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.

Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).

4. Nucara, A., Maselli, P., Del Bufalo, M., Guidi, M.C., Garcia, J., Orgiani, P., Maritato, L., Calvani, P.

Effect of Ga substitution on the optical properties of La-Sr manganites

Physical Review B - Condensed Matter and Materials Physics 77 (6), art. no. 064431 (2008).

3. Rossiny, J.C.H., Fearn, S., Kilner, J.A., Zhang, Y., Chen, L., Yang, S., Evans, J., (...), Cohen, L.F.

Characterisation of combinatorial libraries of perovskite materials for SOFC cathode applications  
ECS Transactions 7 (1 PART 1), pp. 1003-1013 (2007).

2. Andreasson J, Holmlund J, Knee CS, et al.

Franck-Condon higher order lattice excitations in the LaFe<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> (x=0, 0.1, 0.5, 0.9, 1.0) perovskites due to Fe-Cr charge transfer effects PHYSICAL REVIEW B 75 (10), 103402 (2007).

1. Li WJ, Zhang B, Lu W

Structural properties and Raman spectroscopy of La((2+4x))/Sr-3((1-4x))/Mn-3(1-x) Cu<sub>x</sub>O<sub>3</sub>(0 <= x <= 0.2)  
PHYSICS LETTERS A 362 (4), pp. 327-330 (2007).

57. "Properties of AlN epitaxial layers on 6H-SiC substrate grown by sublimation in argon, nitrogen, and their mixtures"

M. Beshkova, Z. Zakhariev, M.V. Abrashev, J. Birch, A. Postovit, and R. Yakimova

Materials Science and Engineering B 129, 228–231 (2006).

2. Perng, Ya-Chuan; Kim, Taeseung; Chang, Jane P.

Effect of residual H<sub>2</sub>O on epitaxial AN film growth on 4H-SiC by alternating doses of TMA and NH<sub>3</sub>  
APPLIED SURFACE SCIENCE 314, pp. 1047-1052 SEP 30 2014

1. Kangawa, Y., Wakigawa, T., Kakimoto, K.

Possibility of AlN solution growth using Al and Li<sub>3</sub>N

Japanese Journal of Applied Physics, Part 1: Regular Papers and Short Notes and Review Papers 46 (9 A), pp. 5785-5787 (2007)

58. "Gold supported on ceria and ceria-alumina promoted by molybdena for complete benzene oxidation"

Andreeva, D., Petrova, P., Sobczak, J.W., Ilieva, L., and Abrashev, M.

Applied Catalysis B: Environmental 67 (3-4), pp. 237-245 (2006).

34. Divergent influence of {111} vs. {100} crystal planes and Yb<sup>3+</sup> dopant on CO oxidation paths in mixed nano-sized oxide Au/Ce<sub>1-x</sub>YbxO<sub>2-x/2</sub> (x=0 or 0.1) systems

Wozniak, Piotr; Kraszkiewicz, Piotr; Malecka, Małgorzata A.

CRYSTENGCOMM Volume: 22 Issue: 35 Pages: 5828-5840 Published: SEP 21 2020

33. Decoration of Cube-Like Ceria Crystals by Well-Dispersed Au Nanoparticles: Surface Influence  
Malecka, Małgorzata A.; Matus, Krzysztof; Wozniak, Piotr

CHEMISTRYSELECT Volume: 5 Issue: 10 Pages: 2871-2877 Published: MAR 13 2020

32. Establishing high-performance Au/cobalt oxide interfaces for low-temperature benzene combustion  
Jiang, Wu; Feng, Yina; Zeng, Yiqiang; et al.

JOURNAL OF CATALYSISIS Volume: 375 Pages: 171-182 Published: JUL 2019

31. Recent Advances in the Catalytic Oxidation of Volatile Organic Compounds: A Review Based on Pollutant Sorts and Sources  
He, Chi; Cheng, Jie; Zhang, Xin; et al.  
CHEMICAL REVIEWS Volume: 119 Issue: 7 Pages: 4471-4568 Published: APR 10 2019
30. The Key Role of Nanocasting in Gold-based Fe<sub>2</sub>O<sub>3</sub> Nanocasted Catalysts for Oxygen Activation at the Metal-support Interface  
Garcia, Tomas; Lopez, Jose M.; Solsona, Benjamin; et al.  
CHEMCATCHEM Volume: 11 Issue: 7 Pages: 1915-1927 Published: APR 4 2019
29. Ce/Al<sub>2</sub>O<sub>3</sub> as an efficient catalyst for oxidative desulfurization of liquid fuel  
Jatav, Shweta; Srivastava, Vimal Chandra  
PETROLEUM SCIENCE AND TECHNOLOGY Volume: 37 Issue: 6 Pages: 633-640 Published: MAR 19 2019
28. Effect of the chemical composition of mesoporous cerium-zirconium oxides on the modification with sulfur and gold species and their application in glycerol oxidation  
Kaminski, P.  
ChemEngineering 1(2),18, pp. 1-24 (2017)
27. Development of Mo/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub> catalyst with high thermal stability by modified impregnation method  
Ramli, A  
Materials Science Forum 888 MSF, pp. 491-495 (2017)
26. Jin, Baofang; Wei, Yuechang; Zhao, Zhen; et al.  
Three-dimensionally ordered macroporous CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub>-supported Au nanoparticle catalysts: Effects of CeO<sub>2</sub> nanolayers on catalytic activity in soot oxidation  
CHINESE JOURNAL OF CATALYSIS Volume: 38 Issue: 9 Pages: 1629-1641 Published: SEP 2017
25. Centeno, M.A., Reina, T.R., Ivanova, S., Laguna, O.H., Odriozola, J.A.  
Au/CeO<sub>2</sub> catalysts: Structure and CO oxidation activity  
Catalysts 6(10), Art.No. 158 DOI: 10.3390/catal6100158 (2016)
24. Liberman, E.Yu., Naumkin, A.V., Mikhailichenko, A.I., Batrakova, M.K., Maslakov, K.I., Revina, A.A., Papkova, M.V., Kon'Kova, T.V., Grunskii, V.N., Gasparyan, M.D., Karpovich, A.L., Lizunova, A.A.  
Au/Ce<sub>0.72</sub>Zr<sub>0.18</sub>Pr<sub>0.10</sub>2 nanodisperse catalyst for oxidation of carbon monoxide  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A Volume: 90 Issue: 1 Pages: 166-172 DOI: 10.1134/S0036024416010167  
Published: JAN 2016
23. Tang, W.X., Li, S.D., Chen, Y.F.  
Controlled synthesis of manganese oxides with different morphologies and their performance for catalytic removal of gaseous benzene  
Energy and Environmental Engineering - Proceedings of the International Conference on Energy and Environmental Engineering, ICEEE 2014, 47-51 (2015)
22. Dongil, A.B., Pastor-Pérez, L., Sepúlveda-Escribano, A., Reyes, P.  
Promoter effect of sodium in graphene-supported Ni and Ni-CeO<sub>2</sub> catalyst for the low-temperature WGS reaction  
APPLIED CATALYSIS A-GENERAL Volume: 505 Pages: 98-104 DOI: 10.1016/j.apcata.2015.07.036 Published: SEP 25 2015
21. Fiorenza, Roberto; Crisafulli, Carmelo; Condorelli, Guglielmo G.; et al.  
Au-Ag/CeO<sub>2</sub> and Au-Cu/CeO<sub>2</sub> Catalysts for Volatile Organic Compounds Oxidation and CO Preferential Oxidation  
CATALYSIS LETTERS Volume: 145 Issue: 9 Pages: 1691-1702 Published: SEP 2015
20. Carabineiro, S. A. C.; Chen, X.; Martynyuk, O.; et al.  
Gold supported on metal oxides for volatile organic compounds total oxidation  
CATALYSIS TODAY Volume: 244 Pages: 103-114 Published: APR 15 2015
19. Lakshmanan, Pandian; Averseng, Frederic; Bion, Nicolas; et al.  
Understanding of the oxygen activation on ceria- and ceria/alumina-supported gold catalysts: a study combining O-18/O-16 isotopic exchange and EPR spectroscopy  
GOLD BULLETIN 46 (4), pp. 233-242 2013
18. Lakshmanan, Pandian; Delannoy, Laurent; Louis, Catherine; et al.  
Au/xCeO<sub>(2)</sub>/Al<sub>2</sub>O<sub>3</sub> catalysts for VOC elimination: oxidation of 2-propanol  
CATALYSIS SCIENCE & TECHNOLOGY 3 (11), pp. 2918-2925 2013
17. Kaminski, P., Sobczak, I., Decyk, P., Ziolek, M., Roth, W.J., Campo, B., Daturi, M.  
Zeolite MCM-22 modified with Au and Cu for catalytic total oxidation of methanol and carbon monoxide  
Journal of Physical Chemistry C 117 (5), pp. 2147-2159, 2013
16. Farooq, M., Ramli, A., Subbarao, D.  
Synthesis and characterization of molybdenum catalysts supported on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub> composite oxides  
AIP Conference Proceedings 1482, pp. 585-589, 2012
15. Bo, L.-L., Zhang, Y.-C., Wang, X.-H., Liu, H.-N., Zhang, H.  
Preparation and application of high-performance catalyst in microwave assisted catalytic oxidation of benzene  
Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology 40 (7), pp. 878-885, 2012
14. Scirè, S., Liotta, L.F.

Supported gold catalysts for the total oxidation of volatile organic compounds  
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.

13. Wu, P., Loh, P.K., Zhao, X.S.  
Supported gold catalysts for selective oxidation of organics  
Science of Advanced Materials 3 (6), pp. 970-983, 2011.

12. Bonelli R.; Lucarelli C.; Pasini T.; et al.  
Total oxidation of volatile organic compounds on Au/FeO(x) catalysts supported on mesoporous SBA-15 silica  
APPLIED CATALYSIS A-GENERAL 400 (1-2) Pages: 54-60, JUN 30 2011.

11. Bonelli R.; Albonetti S.; Morandi V.; et al.  
Design of nano-sized FeO(x) and Au/FeO(x) catalysts supported on CeO(2) for total oxidation of VOC  
APPLIED CATALYSIS A-GENERAL 395 (1-2) Pages: 10-18, MAR 15 2011.

10. Wang Lei; Guo Guangsheng; Gu Fubo; et al.  
Preparation of three different sphere-like Au/CeO(2) catalysts and their activity for the CO oxidation  
MATERIALS SCIENCE AND ENGINEERING APPLICATIONS, PTS 1-3 Book Series: Advanced Materials Research Volume: 160-162 Pages: 428-433, 2011.

9. Musialik-Piotrowska Anna  
Activity of Perovskite-Based Platinum Doped Catalysts in Oxidation of Organic Air Pollutants  
OCHRONA SRODOWISKA 33 (1) Pages: 19-24, 2011.

8. Yu Qiangqiang; Chen Wei; Li Yang; et al.  
The action of Pt in bimetallic Au- Pt/CeO(2) catalyst for water-gas shift reaction  
CATALYSIS TODAY 158 (3-4) Pages: 324-328, DEC 22 2010.

7. Scire Salvatore; Riccobene Paolo M.; Crisafulli Carmelo  
Ceria supported group IB metal catalysts for the combustion of volatile organic compounds and the preferential oxidation of CO  
APPLIED CATALYSIS B-ENVIRONMENTAL 101 (1-2) Pages: 109-117, NOV 22 2010.

6. Yu, Q.-Q., Dong, Y.-Y., Liao, W.-P., Jin, M.-S., He, T., Suo, Z.-H.  
Preparation of ceria-alumina and catalytic activity of gold catalyst supported on ceria-alumina for water gas shift reaction  
Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology 38 (2), pp. 223-229 (2010).

5. Delannoy, L., Fajerwerg, K., Lakshmanan, P., Potvin, C., Méthivier, C., Louis, C.  
Supported gold catalysts for the decomposition of VOC: Total oxidation of propene in low concentration as model reaction  
Applied Catalysis B: Environmental 94 (1-2), pp. 117-124 (2010).

4. Huang, S., Zhang, C., He, H.  
Complete oxidation of o-xylene over Pd/Al<sub>2</sub>O<sub>3</sub> catalyst at low temperature  
Catalysis Today 139 (1-2), pp. 15-23 (2008).

3. Manzoli, M., Avgoustopoulos, G., Tabakova, T., Papavasiliou, J., Ioannides, T., Bocuzzi, F.  
Preferential CO oxidation in H<sub>2</sub>-rich gas mixtures over Au/doped ceria catalysts  
Catalysis Today 138 (3-4), pp. 239-243 (2008).

2. Wang, L.-C., He, L., Liu, Q., Liu, Y.-M., Chen, M., Cao, Y., He, H.-Y., Fan, K.-N.  
Solvent-free selective oxidation of alcohols by molecular oxygen over gold nanoparticles supported on β-MnO<sub>2</sub> nanorods  
Applied Catalysis A: General 344 (1-2), pp. 150-157 (2008).

1. Gennequin, C., Lamalle, M., Cousin, R., Siffert, S., Aissi, F., Aboukais, A.  
Catalytic oxidation of VOCs on Au/Ce-Ti-O  
Catalysis Today 122 (3-4), pp. 301-306 (2007)

59. "Raman spectroscopy of low-temperature (*Pnma*) and high-temperature (*R-3c*) phases of LaCrO<sub>3</sub>"  
Iliev, M.N., Litvinchuk, A.P., Hadjiev, V.G., Wang, Y.-Q., Cmaidalka, J., Meng, R.-L., Sun, Y.-Y., Kolev N., and Abrashev, M.V.  
Phys. Rev. B 74 (21), 214301 (2006).

51. Raman spectroscopy of the Al-doping induced structural phase transition in LaCrO<sub>3</sub> perovskite  
Silva, R.S., Cunha, F., Barrozo, P.  
Solid State Communications 333,114346 (2021)

50. Characterization of structure and properties in CaO-Nd<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> microwave dielectric ceramic modified by Al<sub>2</sub>O<sub>3</sub>  
Xiong, Z., Zhang, X., Tang, B., (...), Fang, Z., Zhang, S.  
Materials Characterization 176,111108 (2021)

49. Structural and morphological characterization of the perovskite LaFe<sub>0.2</sub>Cr<sub>0.8-x</sub>CoxO<sub>3</sub> (x=0.0, 0.2, 0.4, 0.6, 0.8) for selective oxidation of CO  
Rativa-Parada, Wilson; Gomez-Cuaspud, Jairo A.; Schmal, Martin; et al.  
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY Early Access: MAR 2021

48. Site substitution in GdMnO<sub>3</sub>: Effects on structural, electronic, and magnetic properties  
 Mahana, Sudipta; Pandey, Shishir Kumar; Rakshit, Bipul; et al.  
*PHYSICAL REVIEW B* Volume: 102 Issue: 24 Article Number: 245120 Published: DEC 15 2020
47. Spin-phonon coupling and thermodynamic behaviour in YCrO<sub>3</sub>and LaCrO<sub>3</sub>: inelastic neutron scattering and lattice dynamics  
 Gupta, Mayanak K.; Mittal, Ranjan; Mishra, Sanjay K.; et al.  
*JOURNAL OF PHYSICS-CONDENSED MATTER* Volume: 32 Issue: 50 Article Number: 505402 Published: SEP 30 2020
46. Assignment of optical phonons at the zone center of distorted orthorhombic RCrO<sub>3</sub> (R = La, Pr, Nd, Sm, Eu) perovskites using force-field lattice model  
 Jana, Y. M.; Saha, Jyoti; Nandi, Saikat  
*VIBRATIONAL SPECTROSCOPY* Volume: 109 Article Number: 103086 Published: JUL 2020
45. Orbital facilitated charge transfer originated phonon mode in Cr-substituted PrFeO<sub>3</sub>: A brief Raman study  
 Kumar, Anil; Umrao, Sima; Sagdeo, Pankaj R.  
*JOURNAL OF RAMAN SPECTROSCOPY* Volume: 51 Issue: 7 Pages: 1210-1218 Published: JUL 2020
44. Spin-phonon coupling in monoclinic BiCrO<sub>3</sub>  
 Araujo, B. S.; Arevalo-Lopez, A. M.; Santos, C. C.; et al.  
*JOURNAL OF APPLIED PHYSICS* Volume: 127 Issue: 11 Article Number: 114102 Published: MAR 21 2020
43. Anomalous magnetic behavior and complex magnetic structure of proximate LaCrO<sub>3</sub>-LaFeO<sub>3</sub> system  
 Tiwari, B., Dixit, A., Ramachandra Rao, M.S.  
*Materials Research Express* 6(12),126119 (2019)
42. Impedance spectroscopy study on Ca<sup>2+</sup> doped YCrO<sub>3</sub> ceramics  
 Mall, Ashish Kumar; Pramanik, A. K.  
*AIP Conference Proceedings* Volume: 2220 Article Number: 110005 Published: 2019
41. Study of structural and dielectric properties of La<sub>0.9</sub>Na<sub>0.1</sub>CrO<sub>3</sub>- and Ni<sub>0.5</sub>Cu<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub>-based composites  
 Saleem, M.; Chouhan, Shivani; Mishra, A.  
*JOURNAL OF ADVANCED DIELECTRICS* Volume: 9 Issue: 6 Article Number: 1950044 Published: DEC 2019
40. Modifying La<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> Perovskites with Cr Incorporation for Fast Isothermal CO<sub>2</sub>-Splitting Kinetics in Solar-Driven Thermochemical Cycles  
 Carrillo, Alfonso J.; Bork, Alexander H.; Moser, Thierry; et al.  
*ADVANCED ENERGY MATERIALS* Volume: 9 Issue: 28 Article Number: 1803886 Published: JUL 2019
39. Mild Hydrothermal Crystallization of Heavy Rare-Earth Chromite RECrO<sub>3</sub> (RE = Er, Tm, Yb, Lu) Perovskites and Magnetic Properties  
 Wang, Shan; Wu, Xiaofeng; Wang, Tiesheng; et al.  
*INORGANIC CHEMISTRY* Volume: 58 Issue: 4 Pages: 2315-2329 Published: FEB 18 2019
38. Structural, vibrational, and enhanced magneto-electric coupling in Ho-substituted BiFeO<sub>3</sub>  
 Muneeswaran, M., Lee, S.H., Kim, D.H., (...), Giridharan, N.V., Venkateswaran, C.  
*Journal of Alloys and Compounds* 750, pp. 276-285 (2018)
37. Continuous Hydrothermal Flow Synthesis of LaCrO<sub>3</sub> in Supercritical Water and Its Application in Dual-Phase Oxygen Transport Membranes  
 Xu, Y., Pirou, S., Zielke, P., (...), Hendriksen, P.V., Kiebach, R.  
*Industrial and Engineering Chemistry Research* 57(6), pp. 2123-2130 (2018)
36. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates; RCrO<sub>3</sub> (R = La, Nd, Eu, Gd, Dy, and Y)  
 Singh, Kapil Dev; Pandit, Rabia; Kumar, Ravi  
*SOLID STATE SCIENCES* Volume: 85 Pages: 70-75 Published: NOV 2018
35. Suppression of the cooperative Jahn-Teller distortion and its effect on the Raman octahedra-rotation modes of TbMn<sub>1-x</sub>FexO<sub>3</sub>  
 Vilarinho, R.; Passos, D. J.; Queiros, E. C.; et al.  
*PHYSICAL REVIEW B* Volume: 97 Issue: 14 Article Number: 144110 Published: APR 19 2018
34. Study of Structural and Magnetic Characterization of Polycrystalline Y0.5Ho0.5CrO<sub>3</sub>  
 Mall, Ashish Kumar; Garg, Ashish; Gupta, Rajeev  
*AIP Conference Proceedings* Volume: 1953 Article Number: 120009 Published: 2018
33. Study of structural, dielectric, optical properties and electronic structure of Cr-doped LaInO<sub>3</sub> perovskite nanoparticles  
 Kumar, S., Dwivedi, G.D., Joshi, A.G., Chatterjee, S., Ghosh, A.K.  
*Materials Characterization* 131, pp. 108-115 (2017)
32. Ac Conductivity And Raman Spectroscopic Studies Of PrMnO<sub>3</sub> Nanostructure  
 Saha, Sujoy; Maity, Ritwik; Sakhya, Anup Pradhan; et al.  
*MATERIALS TODAY-PROCEEDINGS* Volume: 5 Issue: 3 Pages: 9981-9988 Part: 3 Published: 2017
31. Polarized Raman scattering on single crystals of rare earth orthochromite RCrO<sub>3</sub> (R=La, Pr, Nd, and Sm)  
 Camara, Nimbo Robert; Vinh Ta Phuoc; Monot-Laffez, Isabelle; et al.

30. Blanck, Dimitri; Schon, Anke; Mamede, Anne-Sophie; et al.  
In situ Raman spectroscopy evidence of an accessible phase potentially involved in the enhanced activity of La -deficient lanthanum orthoferrite in 3-way catalysis (TWC)
- CATALYSIS TODAY Volume: 283 Pages: 151-157 Published: APR 1 2017
29. Weber, Mads Christof; Guennou, Mael; Zhao, Hong Jian; et al.  
Raman spectroscopy of rare-earth orthoferrites RFeO<sub>3</sub> (R=La, Sm, Eu, Gd, Tb, Dy)  
PHYSICAL REVIEW B Volume: 94 Issue: 21 Article Number: 214103 Published: DEC 7 2016
28. Shportko, K.V., Rueckamp, R., Shoukavaya, T.V., Trukhan, V.M., El-Nasser, H.M., Venger, E.F.  
Effect of the low temperatures on the Raman active vibrational modes in ZnP<sub>2</sub> and CdP<sub>2</sub>  
Vibrational Spectroscopy 87, 173-181 DOI: 10.1016/j.vibspec.2016.09.02 (2016)
27. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.  
Dielectric relaxation of PrFeO<sub>3</sub> nanoparticles  
SOLID STATE SCIENCES Volume: 58 Pages: 55-63 DOI: 10.1016/j.solidstatesciences.2016.05.013 Published: AUG 2016
26. Taheri, M., Razavi, F.S., Yamani, Z., Flacau, R., Reuvekamp, P.G., Schulz, A., Kremer, R.K.  
Magnetic structure, magnetoelastic coupling, and thermal properties of EuCrO<sub>3</sub> nanopowders  
PHYSICAL REVIEW B Volume: 93 Issue: 10 Article Number: 104414 DOI: 10.1103/PhysRevB.93.104414 Published: MAR 16 2016
25. Shi, J., Zong, S., Hu, Y., Guan, X., Luo, J., Shang, Y., Li, G., Liu, D., Wang, X., Guo, P.  
Continuous solid solutions of Na<sub>0.5</sub>La<sub>0.5</sub>TiO<sub>3</sub>-LaCrO<sub>3</sub> for photocatalytic H-2 evolution under visible-light irradiation  
RSC ADVANCES Volume: 6 Issue: 57 Pages: 51801-51806 DOI: 10.1039/c6ra07891e Published: 2016
24. Mall, A.K., Garg, A., Gupta, R.  
High Temperature X-ray Diffraction, Raman Spectroscopy and Dielectric Studies on Yttrium Orthochromites  
AIP Conference Proceedings Volume: 1728 Article Number: 020239 DOI: 10.1063/1.4946290 Published: 2016
23. Wang, S., Huang, K., Hou, C., Yuan, L., Wu, X., Lu, D.  
Low temperature hydrothermal synthesis, structure and magnetic properties of RECrO<sub>3</sub> (RE = La, Pr, Nd, Sm)  
DALTON TRANSACTIONS Volume: 44 Issue: 39 Pages: 17201-17208 DOI: 10.1039/c5dt02342d Published: 2015
22. Gupta, Preeti; Bhargava, Richa; Poddar, Pankaj  
Colossal increase in negative magnetization, exchange bias and coercivity in samarium chromite due to a strong coupling between Sm<sup>3+</sup>-Cr<sup>3+</sup> spins sublattices  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 48 Issue: 2 Article Number: 025004 Published: JAN 21 2015
21. Gupta, Preeti; Poddar, Pankaj  
Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in DyCrO<sub>3</sub> nanoplates  
RSC ADVANCES Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015
20. Sood, Kapil; Singh, K.; Pandey, O. P.  
Co-existence of cubic and orthorhombic phases in Ba-doped LaInO<sub>3</sub> and their effect on conductivity  
PHYSICA B-CONDENSED MATTER Volume: 456 Pages: 250-257 Published: JAN 1 2015
19. Mandal, P.R., Sahoo, R.C., Nath, T.K.  
A comparative study of structural, magnetic, dielectric behaviors and impedance spectroscopy for bulk and nanometric double perovskite Sm<sub>2</sub>CoMnO<sub>6</sub>  
MATERIALS RESEARCH EXPRESS Volume: 1 Issue: 4 Article Number: 046108 DOI: 10.1088/2053-1591/1/4/046108 Published: DEC 2014
18. Bhadram, V.S., Swain, D., Dhanya, R., Polentarutti, M., Sundaresan, A., Narayana, C.  
Effect of pressure on octahedral distortions in RCrO<sub>3</sub> (R=Lu, Tb, Gd, Eu, Sm): the role of R-ion size and its implications  
MATERIALS RESEARCH EXPRESS Volume: 1 Issue: 2 Article Number: 026111 DOI: 10.1088/2053-1591/1/2/026111 Published: JUN 2014
17. Muneeswaran, M.; Giridharan, N. V.  
Effect of Dy-substitution on the structural, vibrational, and multiferroic properties of BiFeO<sub>3</sub> nanoparticles  
JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 214109 JUN 7 2014
16. El Amrani, M.; Zaghououi, M.; Ta Phuoc, V.; et al.  
Local symmetry breaking and spin-phonon coupling in SmCrO<sub>3</sub> orthochromite  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 361, pp.1-6 JUN 2014
15. Saha, Sujoy; Chanda, Sadhan; Dutta, Alo; et al.  
Dielectric relaxation and phonon modes of NdCrO<sub>3</sub> nanostructure  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY 69 (3), pp. 553-563 MAR 2014
14. Tiwari, B., Dixit, A., Naik, R., Lawes, G., Ramachandra Rao, M.S.  
Dielectric and optical phonon anomalies near antiferromagnetic ordering in LaCrO<sub>3</sub>: A possible near room temperature magnetodielectric system  
Applied Physics Letters 103(15), 152906 DOI: 10.1063/1.4824919 (2013)

13. Daniels, Luke M.; Weber, Mads C.; Lees, Martin R.; et al.  
 Structures and Magnetism of the Rare-Earth Orthochromite Perovskite Solid Solution  $\text{LaxSm}_{1-x}\text{CrO}_3$   
 INORGANIC CHEMISTRY 52 (20), pp. 12161-12169 OCT 21 2013
12. Jacob, Kallarackel Thomas; Gupta, Sapna; Singh, Prabhakar  
 Electrochemical Determination of Gibbs Energy of Formation of  $\text{LaCrO}_3$  Using a Composition-Graded Bielectrolyte  
 JOURNAL OF THE AMERICAN CERAMIC SOCIETY 96 (10), pp. 3272-3278 OCT 2013
11. Bielecki, J., Svedlindh, P., Tibebu, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S.  
 Structural and magnetic properties of isovalently substituted multiferroic  $\text{BiFeO}_3$ : Insights from Raman spectroscopy  
 Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012
10. Runka, T.; Berkowski, M.  
 Perovskite  $\text{La}_{1-x}\text{Sr}_x\text{Ga}_{1-y}\text{Mn}_y$  O-(3) solid solution crystals: Raman spectroscopy characterization  
 JOURNAL OF MATERIALS SCIENCE 47 (14) Pages: 5393-5401, JUL 2012.
9. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
 Phonon Raman scattering of  $\text{RCrO}_3$  perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
 Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
8. Martinelli, A., Ferretti, M., Cimberle, M.R., Ritter, C.  
 The crystal and magnetic structure of Ti-substituted  $\text{LaCrO}_3$   
 Materials Research Bulletin 46 (2), pp. 190-193 (2011).
7. Du Yi; Cheng Zhen Xiang; Wang Xiao-Lin; et al.  
 Structure, magnetic, and thermal properties of  $\text{Nd}(1-x)\text{La}(x)\text{CrO}_3$  ( $0 \leq x \leq 1.0$ )  
 JOURNAL OF APPLIED PHYSICS 108 (9) Article Number: 093914, NOV 1 2010.
6. Shen Y, Liu MN, He TM, et al  
 A potential interconnect material for solid oxide fuel cells:  $\text{Nd}_{0.75}\text{Ca}_{0.25}\text{Cr}_{0.98}\text{O}_3-\delta$   
 Journal of Power Sources 157 (3), B441-B448 (2010).
5. Sharma, V.I., Yildiz, B.  
 Degradation mechanism in  $\text{La}_0.8\text{Sr}_0.2\text{CoO}_3$  as contact layer on the solid oxide electrolysis cell anode  
 Journal of the Electrochemical Society 157 (3), pp. B441-B448 (2010).
4. Shen, Y., Liu, M., He, T., Jiang, S.P.  
 Preparation, electrical conductivity, and thermal expansion behavior of dense  $\text{Nd}_{1-x}\text{Ca}_x\text{CrO}_3$  solid solutions  
 Journal of the American Ceramic Society 92 (10), pp. 2259-2264 (2009).
3. Povoden, E., Chen, M., Grundy, A.N., Ivas, T., Gauckler, L.J.  
 Thermodynamic assessment of the La-Cr-O system  
 Journal of Phase Equilibria and Diffusion 30 (1), pp. 12-27 (2009).
2. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.  
 Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
 Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).
1. Ong, K.P., Blaha, P., Wu, P.  
 Origin of the light green color and electronic ground state of  $\text{LaCrO}_3$   
 Physical Review B - Condensed Matter and Materials Physics 77 (7), art. no. 073102 (2008).
60. "Sublimation Epitaxy of AlN layers grown by different conditions on 4H-SiC substrates"  
 M. Beshkova, K. G. Grigorov, Z. Zakhariiev, M. Abrashev, M. Massi, R. Yakimova  
 J. Optoelectr. and Adv. Mater. 9, 213 (2007).
61. "Polarized micro-Raman scattering characterization of Mg2Si nanolayers in (001) Si matrix"  
 G. Zlateva, A. Atanassov, M. Baleva, L Nikolova and M. V. Abrashev  
 J. Phys.: Condens. Matter 19, 086220 (2007). (9 pages)
5. First-Principle Simulation of Ferromagnetism in Gd-Doped Mg<sub>2</sub>X (X = Si, Ge and Sn)  
 El Ahmar, Y.; Hallouche, A.; Dahani, A.; et al.  
 SPIN Volume: 9 Issue: 3 Article Number: 1950010 Published: SEP 2019
4. AZ91 magnesium matrix foam composites with fly ash cenospheres fabricated by negative pressure infiltration technique  
 Braszczyńska-Malik, K.N., Kamieniak, J.  
 Materials Characterization 128, pp. 209-216 (2017)
3. Morozova, Natalia V.; Ovsyannikov, Sergey V.; Korobeinikov, Igor V.; et al.  
 Significant enhancement of thermoelectric properties and metallization of Al-doped Mg<sub>2</sub>Si under pressure  
 JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 213705 JUN 7 2014

2. Fan, T.-W., Ke, J.-L., Fu, L., Tang, B.-Y., Peng, L.-M., Ding, W.-J.  
Ideal strength of Mg<sub>2</sub>X (X = Si, Ge, Sn and Pb) from first-principles  
Journal of Magnesium and Alloys 1(2), 163-168 DOI: 10.1016/j.jma.2013.06.002 (2013)
- 1.Kang, Y., Brockway, L., Vaddiraju, S.  
A simple phase transformation strategy for converting silicon nanowires into metal silicide nanowires: Magnesium silicide  
Materials Letters 100, pp. 106-110, 2013
62. “Raman spectroscopy of ordered double perovskite La<sub>2</sub>CoMnO<sub>6</sub> thin films”  
M. N. Iliev, M. V. Abrashev, A. P. Litvinchuk, V. G. Hadjiev, H. Guo, and A. Gupta  
Phys. Rev. B 75, 104118 (2007). (6 pages)
121. Strong spin-phonon coupling and large dielectric constant observed in quasi-two-dimensional layered perovskite SrLaCo0.5Mn0.5O4  
Das, R.R., Lekshmi, P.N., Santhosh, P.N.  
Journal of Alloys and Compounds 874,159736 (2021)
120. Tuning of multi-magnetic phase and exchange bias effect by antisite disorder in Ca-doped La<sub>2</sub>CoMnO<sub>6</sub>double perovskites  
Sahoo, R.C., Das, S., Daw, D., (...), Das, A., Nath, T.K.  
Journal of Physics Condensed Matter 33(21),215804 (2021)
119. Unraveling the impact of nonmagnetic Sc substitution on the magnetic properties of La<sub>2</sub>NiMnO<sub>6</sub> double perovskite  
Nasir, Mohammad; Khan, Mahmud; Bhatt, Subhash; et al.  
PHYSICA SCRIPTA Volume: 96 Issue: 4 Article Number: 045805 Published: APR 2021
118. Bandgap engineering and sublattice distortion driven bandgap bowing in Cs<sub>2</sub>Ag<sub>1-x</sub>NaxBiCl<sub>6</sub> double perovskites  
Dakshinamurthy, Athrey C.; Sudakar, C.  
APPLIED PHYSICS LETTERS Volume: 118 Issue: 13 Article Number: 131902 Published: MAR 29 2021
117. Structural, dielectric, and magnetic properties of LaCo0.2Mn0.8O<sub>3</sub> and La<sub>2</sub>CoMnO<sub>6</sub> perovskite materials  
Yousif, N. M.; Makram, N.; Wahab, L. A.  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY Volume: 98 Issue: 1 Pages: 238-251 Published: APR 2021
116. Atomically dispersed nonmagnetic electron traps improve oxygen reduction activity of perovskite oxides  
Zhuang, Zechao; Li, Yong; Li, Yihang; et al.  
ENERGY & ENVIRONMENTAL SCIENCE Volume: 14 Issue: 2 Pages: 1016-1028 Published: FEB 1 2021
115. Preparation and characterization of R<sub>2</sub>CoMnO<sub>6</sub> (R=La, Nd) via PVA sol-gel route  
Xu, Zhibo; Feng, Zhongshuai; Xu, Yebin  
JOURNAL OF ASIAN CERAMIC SOCIETIES Volume: 9 Issue: 1 Pages: 119-127 Published: JAN 2 2021
114. Improved magnetic performance of Co-doped La<sub>2</sub>NiMnO<sub>6</sub> ceramics prepared at low temperature  
Gan, H., Wang, C., Shen, Q.  
Journal of the European Ceramic Society 40(5), pp. 1909-1916 (2020)
113. Physical properties in nano-crystalline Ho<sub>2</sub>CoMnO<sub>6</sub>  
Bhatti, I.N., Bhatti, I.N., Mahato, R.N., Ahsan, M.A.H.  
Ceramics International 46(1), pp. 46-55 (2020)
112. Anomalous magnetism in Al doped La<sub>2</sub>CoMnO<sub>6</sub> ceramics  
Xin, Y., Shi, L., Zhao, J., (...), Hou, L., Tong, R.  
Journal of Magnetism and Magnetic Materials 510, 166950 (2020)
111. Structure, magnetism and dielectric study of nano-crystalline Gd<sub>2</sub>CoMnO<sub>6</sub>  
Bhatti, Ilyas Noor; Bhatti, Imtiaz Noor; Mahato, Rabindra Nath; et al.  
SOLID STATE SCIENCES Volume: 108 Article Number: 106384 Published: OCT 2020
110. Evidence of cluster-glass and Griffiths-like phases in partially ordered La(2)FeMnO(6) double perovskite  
Nasir, Mohammad; Khan, Mahmud; Agbo, Sunday Arome; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 37 Article Number: 375003 Published: SEP 9 2020
109. Effect of bismuth (Bi<sup>3+</sup>) substitution on structural, optical, dielectric and magnetic nature of La(2)CoMnO(6)double perovskite  
Bajpai, Niketa; Saleem, M.; Mishra, Ashutosh  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Early Access: SEP 2020
108. High-temperature structural phase transition and infrared dielectric features of La<sub>2</sub>CoMnO<sub>6</sub>  
Silva, R. X.; Silva, A.; Moreira, R. L.; et al.  
MATERIALS RESEARCH BULLETIN Volume: 129 Article Number: 110878 Published: SEP 2020
107. Structural, Dielectric, and Energy Storage Properties of Citric Acid and Ethylene Glycol Assisted Hydrothermally Synthesized Y<sub>2</sub>FeCoO<sub>6</sub>  
Devi, Manju; Kumar, Ashavani; Kumar, Ashok  
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE Volume: 217 Issue: 20 Article Number: 2000324  
Published: OCT 2020

106. Extraordinary magnetic properties of double perovskite Eu(2)CoMnO(6)wide band gap semiconductor  
 Alam, Mohd; Singh, Prajyoti; Anand, Khyati; et al.  
**JOURNAL OF PHYSICS-CONDENSED MATTER** Volume: 32 Issue: 36 Article Number: 365802 Published: AUG 26 2020
105. Effect of structural and magnetic disorder on the 3d-5d exchange interactions in La<sub>2-x</sub>CaxCoIrO<sub>6</sub>  
 Bufaical, L.; Sadrolahi, E.; Litterst, F. J.; et al.  
**PHYSICAL REVIEW B** Volume: 102 Issue: 2 Article Number: 024436 Published: JUL 22 2020
104. Structural, transport, optical, and electronic properties of Sr<sub>2</sub>CoNbO<sub>6</sub> thin films  
 Kumar, Ajay; Shukla, Rishabh; Pandey, Akhilesh; et al.  
**JOURNAL OF APPLIED PHYSICS** Volume: 128 Issue: 2 Article Number: 025303 Published: JUL 14 2020
103. Antisite disorder driven magnetodielectric and magnetocaloric effect in double perovskite La<sub>2-x</sub>SrxCoMnO<sub>6</sub> (x=0.0, 0.5, 1.0)  
 Mandal, P. R.; Khan, Anasua; Nath, T. K.  
**JOURNAL OF APPLIED PHYSICS** Volume: 128 Issue: 2 Article Number: 024104 Published: JUL 14 2020
102. Investigation of structural, morphological and electrochemical properties of mesoporous La(2)CuCoO(6)rods fabricated by facile hydrothermal route  
 Singh, Jashandeep; Kumar, Ashok  
**INTERNATIONAL JOURNAL OF MINERALS METALLURGY AND MATERIALS** Volume: 27 Issue: 7 Pages: 987-995  
 Published: JUL 2020
101. Raman and photoluminescence spectral studies in double perovskite epitaxial Nd<sub>2</sub>CoMnO<sub>6</sub> thin films deposited by pulse laser deposition  
 Anshul, Avneesh; Kumar, Manish; Raj, Abhishek  
**OPTIK** Volume: 212 Article Number: 164749 Published: JUN 2020
100. Structure, magnetic and dielectric properties in nano-crystalline Yb<sub>2</sub>CoMnO<sub>6</sub>  
 Bhatti, Ilyas Noor; Bhatti, Imtiaz Noor; Mahato, Rabindra Nath; et al.  
**MATERIALS CHEMISTRY AND PHYSICS** Volume: 244 Article Number: 122709 Published: APR 1 2020
99. Physical properties of nano-crystalline Sm<sub>2</sub>CoMnO<sub>6</sub>: Structure, magnetism, spin-phonon coupling and dielectric study  
 Bhatti, Ilyas Noor; Bhatti, Imtiaz Noor; Mahato, Rabindra Nath; et al.  
**PHYSICA B-CONDENSED MATTER** Volume: 582 Article Number: 411975 Published: APR 1 2020
98. Unraveling magnetic interactions and the spin state in insulating Sr<sub>2-x</sub>LaxCoNbO<sub>6</sub>  
 Kumar, Ajay; Dhaka, R. S.  
**PHYSICAL REVIEW B** Volume: 101 Issue: 9 Article Number: 094434 Published: MAR 31 2020
97. Spin-phonon coupling in monoclinic BiCrO<sub>3</sub>  
 Araujo, B. S.; Arevalo-Lopez, A. M.; Santos, C. C.; et al.  
**JOURNAL OF APPLIED PHYSICS** Volume: 127 Issue: 11 Article Number: 114102 Published: MAR 21 2020
96. Wet chemical synthesis and electrochemical performance of novel double perovskite Y<sub>2</sub>CuMnO<sub>6</sub> nanocrystallites  
 Mansoorie, Farha Naaz; Singh, Jashandeep; Kumar, Ashok  
**MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING** Volume: 107 Article Number: 104826 Published: MAR 1 2020
95. Bismuth Doped La<sub>2</sub>CoMnO<sub>6</sub>: A Study of Williamson-Hall Analysis And Four-Probe Resistivity Measurement  
 Bajpai, N.; Saleem, M.; Tiwari, S.; et al.  
**AIP Conference Proceedings** Volume: 2220 Article Number: 040029 Published: 2020
94. Structural and transport study of disordered double perovskite Pr<sub>2</sub>FeMnO<sub>6</sub>  
 Rana, Sumesh; Dwij, Vivek; Sharma, Gaurav; et al.  
**AIP Conference Proceedings** Volume: 2220 Article Number: 040005 Published: 2020
93. Facile wet chemical synthesis and electrochemical behavior of La<sub>2</sub>FeCoO<sub>6</sub> nano-crystallites  
 Singh, J., Kumar, A.  
**Materials Science in Semiconductor Processing** 99, pp. 8-13 (2019)
92. Optical Study of the Electronic Structure and Lattice Dynamics of NdBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
 Mero, Rea Divina; Ogawa, Kirari; Yamada, Shigeki; et al.  
**SCIENTIFIC REPORTS** Volume: 9 Article Number: 18164 Published: DEC 3 2019
91. Influence of Cation Order and Valence States on Magnetic Ordering in La<sub>2</sub>Ni<sub>1-x</sub>Mn<sub>1+x</sub>O<sub>6</sub>  
 Nasir, Mohd.; Khan, Mahmud; Bhatt, Subhash; et al.  
**PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS** Volume: 256 Issue: 11 Article Number: 1900019 Published: NOV 2019
90. Lattice Dynamics, Phonon Chirality, and Spin-Phonon Coupling in 2D Itinerant Ferromagnet Fe<sub>3</sub>GeTe<sub>2</sub>  
 Du, Luojun; Tang, Jian; Zhao, Yanchong; et al.  
**ADVANCED FUNCTIONAL MATERIALS** Volume: 29 Issue: 48 Article Number: 1904734 Published: NOV 2019
89. Zero-field-cooled exchange bias effect in phase-segregated La<sub>2-x</sub>A(x)CoMnO<sub>(6-delta)</sub> (A = Ba,Ca,Sr; x=0, 0.5)  
 Coutrim, L. T.; Rigitano, D.; Macchiutti, C.; et al.  
**PHYSICAL REVIEW B** Volume: 100 Issue: 5 Article Number: 054428 Published: AUG 21 2019

88. The effect of high temperature annealing on the antisite defects in ferromagnetic La<sub>2</sub>NiMnO<sub>6</sub> double perovskite  
Nasir, Mohd; Khan, Mahmud; Kumar, Sunil; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 483 Pages: 114-123 Published: AUG 1 2019
87. Magnetoelastic coupling behavior at the ferromagnetic transition in the partially disordered double perovskite La<sub>2</sub>NiMnO<sub>6</sub>  
Yang, Dexin; Lampronti, Giulio, I; Haines, C. R. Sebastian; et al.  
PHYSICAL REVIEW B Volume: 100 Issue: 1 Article Number: 014304 Published: JUL 23 2019
86. High-Pressure Study of the Elpasolite Perovskite La<sub>2</sub>NiMnO<sub>6</sub>  
Ridley, Christopher J.; Daisenberger, Dominik; Wilson, Craig W.; et al.  
INORGANIC CHEMISTRY Volume: 58 Issue: 14 Pages: 9016-9027 Published: JUL 15 2019
85. Investigation of multi-mode spin-phonon coupling and local B-site disorder in Pr<sub>2</sub>CoFeO<sub>6</sub> by Raman spectroscopy and correlation with its electronic structure by XPS and XAS studies  
Pal, Arkadeb; Ghosh, Surajit; Joshi, Amish G.; et al.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 31 Issue: 27 Article Number: 275802 Published: JUL 10 2019
84. SYNTHESIS, X-RAY DIFFRACTION, AND RAMAN SPECTROSCOPY OF AgSnBiSe<sub>3</sub> AND AgSnBiSe<sub>2</sub>S SYSTEMS  
Moris, S.; Barahona, P.; Valencia-Galvez, P.; et al.  
CHALCOGENIDE LETTERS Volume: 16 Issue: 6 Pages: 303-307 Published: JUN 2019
83. Dielectric and Raman spectroscopy study of structural phase transformation of Sr-doped La<sub>2</sub>CoMnO<sub>6</sub> double perovskite  
Magray, Mushtaq Ahmad; Ikram, M.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 30 Issue: 9 Pages: 8655-8666 Published: MAY 2019
82. Strain coupling and acoustic attenuation associated with glassy magnetic phase transitions in the disordered double perovskite La<sub>2</sub>FeMnO<sub>6</sub>  
Yang, Dexin; Yang, Tao; Mukherjee, Paromita; et al.  
PHYSICAL REVIEW B Volume: 99 Issue: 9 Article Number: 094314 Published: MAR 28 2019
81. Vibrational properties and infrared dielectric features of Gd<sub>2</sub>CoMnO<sub>6</sub> and Y<sub>2</sub>CoMnO<sub>6</sub> double perovskites  
Silva, R. X.; Almeida, R. M.; Moreira, R. L.; et al.  
CERAMICS INTERNATIONAL Volume: 45 Issue: 4 Pages: 4756-4762 Published: MAR 2019
80. Connection between Unusual Lattice Thermal Expansion and Cooperative Jahn-Teller Effect in Double Perovskites LaPbMSbO<sub>6</sub> (M = Mn, Co, Ni)  
Bai, Yijia; Han, Lin; Meng, Jian; et al.  
INORGANIC CHEMISTRY Volume: 58 Issue: 4 Pages: 2888-2898 Published: FEB 18 2019
79. Competing short-range magnetic correlations, metamagnetic behavior and spin-phonon coupling in Nd<sub>2</sub>CoMnO<sub>6</sub> double perovskite  
Das, Ranjana R.; Lekshmi, R. Neenu; Das, S. C.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 773 Pages: 770-777 Published: JAN 30 2019
78. Structural and Magnetic Properties of Fe, Mn based Double Perovskite La<sub>2</sub>FeMnO<sub>6</sub> Compound  
Punitha, J. Stella; Dhilip, M.; Anbarasu, V.; et al.  
AIP Conference Proceedings Volume: 2115 Article Number: 030468 Published: 2019
77. Role of Antisite Disorder, Rare-Earth Size, and Superexchange Angle on Band Gap, Curie Temperature, and Magnetization of R<sub>2</sub>NiMnO<sub>6</sub> Double Perovskites  
Nasir, Mohd; Kumar, Sunil; Patra, Nirmalendu; et al.  
ACS APPLIED ELECTRONIC MATERIALS Volume: 1 Issue: 1 Pages: 141-153 Published: JAN 2019
76. Spin-phonon coupling in melanothallite Cu<sub>2</sub>OCl<sub>2</sub>  
Araujo, B. S.; Arevalo-Lopez, A. M.; Attfield, J. P.; et al.  
APPLIED PHYSICS LETTERS Volume: 113 Issue: 22 Article Number: 222901 Published: NOV 26 2018
75. Electrochemical and Operando Spectroscopic Studies of Sr<sub>2</sub>Fe<sub>1.5</sub>Mo<sub>0.5</sub>O<sub>6</sub>-delta Anode Catalysts in Solid Oxide Fuel Cells Operating with Direct Alcohol Fuels  
Bode, Gregory L.; McIntyre, Melissa D.; Neuberger, Daniel M.; et al.  
CHEMEELECTROCHEM Volume: 5 Issue: 21 Pages: 3162-3168 Published: NOV 2 2018
74. Structure, magnetism, and spin-phonon coupling in heteroepitaxial La<sub>2</sub>CoMnO<sub>6</sub>/Al<sub>2</sub>O<sub>3</sub>(0001) films  
Meyer, Ch; Roddatis, V; Ksoll, P.; et al.  
PHYSICAL REVIEW B Volume: 98 Issue: 13 Article Number: 134433 Published: OCT 18 2018
73. Quantum well structure of a double perovskite superlattice and formation of a spin-polarized two-dimensional electron gas  
Samanta, S.; Mishra, S. B.; Nanda, B. R. K.  
PHYSICAL REVIEW B Volume: 98 Issue: 11 Article Number: 115155 Published: SEP 26 2018
72. Effect of rare earth site substitution on magnetic and transport properties of Ln(2)CoMnO(6) (Ln = La, Sm and Gd) double perovskites  
Sahoo, R. C.; Das, Sananda; Nath, T. K.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 460 Pages: 409-417 Published: AUG 15 2018
71. Revisiting La<sub>2</sub>MMnO<sub>6</sub> (M = Co, Ni, Cu, Zn) perovskites in view of 3d-electron configuration  
Guo, Lin; Bai, Yijia; Huang, Chunming; et al.

70. Role of spontaneous strains on the biphasic nature of partial B-site disorder double perovskite La<sub>2</sub>NiMnO<sub>6</sub>  
Yang, Dexin; Wang, Wei; Yang, Tao; et al.

APL MATERIALS Volume: 6 Issue: 6 Article Number: 066102 Published: JUN 2018

69. Strain-induced changes of the electronic properties of B-site ordered double-perovskite Sr<sub>2</sub>CoIrO<sub>6</sub> thin films  
Esser, S.; Chang, C. F.; Kuo, C-Y; et al.

PHYSICAL REVIEW B Volume: 97 Issue: 20 Article Number: 205121 Published: MAY 15 2018

68. Grain boundary-dominated electrical conduction and anomalous optical-phonon behaviour near the Neel temperature in YFeO<sub>3</sub> ceramics  
Raut, Subhajit; Babu, P. D.; Sharma, R. K.; et al.

JOURNAL OF APPLIED PHYSICS Volume: 123 Issue: 17 Article Number: 174101 Published: MAY 7 2018

67. Spin-phonon coupling in HoCr<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub> (x=0 and 0.5) compounds  
Kotnana, Ganesh; Sathe, Vasant. G.; Jammalamadaka, S. Narayana

JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 4 Pages: 764-770 Published: APR 2018

66. Barbosa, D. A. B.; Paschoal, C. W. A.

Raman evidence for presence of high-temperature ferromagnetic clusters in magnetodielectric compound Ba-doped La<sub>2</sub>NiMnO<sub>6</sub>  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY Volume: 185 Pages: 125-129

Published: OCT 5 2017

65. Yadav, Rashmi; Para, Touseef Ahmad; Reshi, Hilal Ahmad; et al.

Easy synthesis and electric, magneto-transport and magnetic properties of double perovskite La<sub>2</sub>CoMnO<sub>6</sub> compound

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 3 Pages: 2970-2975 Published: FEB 2017

64. Meyer, Christoph; Huehn, Sebastian; Jungbauer, Markus; et al

Tip-enhanced Raman spectroscopy (TERS) on double perovskite La<sub>2</sub>CoMnO<sub>6</sub> thin films: field enhancement and depolarization effects  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 1 Pages: 46-52 Published: JAN 2017

63. Silva, R.X., Castro Júnior, M.C., Yáñez-Vilar, S., Andújar, M.S., Mira, J., Señaris-Rodríguez, M.A., Paschoal, C.W.A.

Spin-phonon coupling in multiferroic Y<sub>2</sub>CoMnO<sub>6</sub>

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 690 Pages: 909-915 DOI: 10.1016/j.jallcom.2016.07.010 Published: JAN 5 2017

62. Opacic, M, Lazarevic, N, Radonjic, MM.; Scepanovic, M, Ryu, H, Wang, AF.; Tanaskovic, D, Petrovic, C, Popovic, ZV

Raman spectroscopy of K<sub>x</sub>Co<sub>2</sub>-ySe<sub>2</sub> single crystals near the ferromagnet-paramagnet transition

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 48 Article Number: 485401 DOI: 10.1088/0953-8984/28/48/485401 Published: DEC 7 2016

61. Krishna Murthy, J., Devi Chandrasekhar, K., Venimadhav, A.

Observation of Griffiths-like phase and its tunability in La<sub>2</sub>Ni<sub>1-x</sub>CoxCoxO<sub>6</sub> (0 <= x <= 1) nanoparticles

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 418 Pages: 2-8 DOI: 10.1016/j.jmmm.2016.02.074 Published: NOV 15 2016

60. Xie, CZ (Xie, Changzheng); Shi, L (Shi, Lei); Zhao, JY (Zhao, Jiyin); Zhou, SM (Zhou, Shiming); Li, Y (Li, Yang); Yuan, XY (Yuan, Xueyou)

Spin-phonon coupling in R<sub>2</sub>CoMnO<sub>6</sub> (R=Pr, Nd, Sm) thin films under biaxial compressive strain

JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 15 Article Number: 155302 DOI: 10.1063/1.4964940 Published: OCT 21 2016

59. Ren, Yaoyu; Liu, Ting; Shen, Yang; et al.

Chemical compatibility between garnet-like solid state electrolyte Li<sub>6.75</sub>La<sub>3</sub>Zr<sub>1.75</sub>Ta<sub>0.25</sub>O<sub>12</sub> and major commercial lithium battery cathode materials

JOURNAL OF MATERIOMICS Volume: 2 Issue: 3 Pages: 256-264 Published: SEP 2016

58. Reddy, MP (Reddy, M. Penchal); Shakoor, RA (Shakoor, R. A.); Mohamed, AMA (Mohamed, A. M. A.)

Structural and magnetic studies of La<sub>2</sub>BMnO<sub>6</sub> (B=Ni and Co) nanoparticles prepared by microwave sintering approach

MATERIALS CHEMISTRY AND PHYSICS Volume: 177 Pages: 346-352 DOI: 10.1016/j.matchemphys.2016.04.038 Published: JUL 1 2016

57. Silva, R.X., De Menezes, A.S., Almeida, R.M., Moreira, R.L., Paniago, R., Marti, X., Reichlova, H., Maryško, M., Rezende, M.V.D.S., Paschoal, C.W.A.

Structural order, magnetic and intrinsic dielectric properties of magnetoelectric La<sub>2</sub>CoMnO<sub>6</sub>

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 661 Pages: 541-552 DOI: 10.1016/j.jallcom.2015.11.097 Published: MAR 15 2016

56. Neenu Lekshmi, P., Raama Varma, M.

Colossal magneto-dielectricity in La<sub>2</sub>NiMnO<sub>6</sub> probed by Raman spectroscopy

Materials Science Forum 830-831, 513-517 DOI: 10.4028/www.scientific.net/MSF.830-831.513 (2015)

55. Kumar, D., Sathe, V.G.

Raman spectroscopic study of structural transformation in ordered double perovskites La<sub>2</sub>CoMnO<sub>6</sub> bulk and epitaxial film

SOLID STATE COMMUNICATIONS Volume: 224 Pages: 10-14 DOI: 10.1016/j.ssc.2015.09.014 Published: DEC 2015

54. Masud, MG (Masud, Md G.); Sakata, H (Sakata, H.); Biswal, AK (Biswal, A. K.); Vishwakarma, PN (Vishwakarma, P. N.); Chaudhuri, BK (Chaudhuri, B. K.)  
 Structural, ac conductivity scaling and magnetodielectric behaviour of a partially disordered insulating ferromagnetic double perovskite Eu<sub>2</sub>NiMnO<sub>6</sub>  
 JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 48 Issue: 37 Article Number: 375504 DOI: 10.1088/0022-3727/48/37/375504  
 Published: SEP 23 2015
53. Xie, C., Shi, L., Zhou, S., Zhao, J., Liu, H., Li, Y., Yao, D.  
 Structural characteristics, magnetic properties of Re<sub>2</sub>NiMnO<sub>6</sub> (Re = La, Pr, Nd, Sm, Y) thin films on (001) LaAlO<sub>3</sub> by simple polymer assisted deposition  
 SURFACE & COATINGS TECHNOLOGY Volume: 277 Pages: 222-226 DOI: 10.1016/j.surfcoat.2015.07.056 Published: SEP 15 2015
52. Macedo Filho, R.B., Barbosa, D.A.B., Reichlova, H., Marti, X., De Menezes, A.S., Ayala, A.P., Paschoal, C.W.A.  
 Role of rare-earth ionic radii on the spin-phonon coupling in multiferroic ordered double perovskites  
 MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 7 Article Number: 075201 DOI: 10.1088/2053-1591/2/7/075201 Published: JUL 2015
51. Shi, L., Liu, W., Zhao, J., Li, Y., Zhou, S., Guo, Y., Wang, Y.  
 The magnetic properties and spin-phonon coupling of Pr<sub>2</sub>CoMnO<sub>6</sub> particles  
 MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 7 Article Number: 076104 DOI: 10.1088/2053-1591/2/7/076104 Published: JUL 2015
50. Kumar, D (Kumar, Dhirendra); Kumar, S (Kumar, Satish); Sathe, VG (Sathe, V. G.)  
 Raman Studies of Ordered Double Perovskite Thin Film at High Temperatures  
 PROCEEDINGS OF THE 59TH DAE SOLID STATE PHYSICS SYMPOSIUM 2014 (SOLID STATE PHYSICS) Book Series: AIP Conference Proceedings Volume: 1665 Article Number: 140030 DOI: 10.1063/1.4918239 Published: 2015
49. Silva, R. X.; Moreira, R. L.; Almeida, R. M.; et al.  
 Intrinsic dielectric properties of magnetodielectric La<sub>2</sub>CoMnO<sub>6</sub>  
 JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 21 Article Number: 214105 Published: JUN 7 2015
48. Takahashi, R.; Ohkubo, I.; Yamauchi, K.; et al.  
 A-site-driven ferroelectricity in strained ferromagnetic La<sub>2</sub>NiMnO<sub>6</sub> thin films  
 PHYSICAL REVIEW B Volume: 91 Issue: 13 Article Number: 134107 Published: APR 20 2015
47. Murthy, J. Krishna; Chandrasekhar, K. Devi; Murugavel, S.; et al.  
 Investigation of the intrinsic magnetodielectric effect in La<sub>2</sub>CoMnO<sub>6</sub>: role of magnetic disorder  
 JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 4 Pages: 836-843 Published: 2015
46. Mandal, PR (Mandal, P. R.); Sahoo, RC (Sahoo, R. C.); Nath, TK (Nath, T. K.)  
 A comparative study of structural, magnetic, dielectric behaviors and impedance spectroscopy for bulk and nanometric double perovskite Sm<sub>2</sub>CoMnO<sub>6</sub>  
 MATERIALS RESEARCH EXPRESS Volume: 1 Issue: 4 Article Number: 046108 DOI: 10.1088/2053-1591/1/4/046108 Published: DEC 2014
45. Liu, Wenjie; Shi, Lei; Zhou, Shiming; et al.  
 Griffiths phase, spin-phonon coupling, and exchange bias effect in double perovskite Pr<sub>2</sub>CoMnO<sub>6</sub>  
 JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 19 Article Number: 193901 Published: NOV 21 2014
44. Han, Lin; Bai, Yijia; Liu, Xiaojuan; et al.  
 Synthesis, structure and dielectric properties of new ordering perovskites LnPbMgSbO(6) (Ln = La, Pr, Nd)  
 SOLID STATE SCIENCES Volume: 36 Pages: 8-15 Published: OCT 2014
43. Kumar, Dhirendra; Kumar, Satish; Sathe, Vasant G.  
 Spin-phonon coupling in ordered double perovskites A(2)CoMnO(6) (A=La, Pr, Nd) probed by micro-Raman spectroscopy  
 SOLID STATE COMMUNICATIONS 194, pp. 59-64 SEP 2014
42. Ghosh, Binita; Halder, Saswata; Sinha, Tripurari Prasad  
 Dielectric Relaxation and Collective Vibrational Modes of Double-Perovskites A(2)SmTaO(6) (A = Ba, Sr and Ca)  
 JOURNAL OF THE AMERICAN CERAMIC SOCIETY 97 (8), pp. 2564-2572 AUG 2014
41. Manna, Kaustuv; Bhadram, Venkata Srinu; Elizabeth, Suja; et al.  
 Octahedral distortion induced magnetic anomalies in LaMn<sub>0.5</sub>Co<sub>0.5</sub>O<sub>3</sub> single crystals  
 JOURNAL OF APPLIED PHYSICS 116 (4), Art. No. 043903 JUL 28 2014
40. Basistyy, R.; Stanislavchuk, T. N.; Sirenko, A. A.; et al.  
 Infrared-active optical phonons and magnetic excitations in the hexagonal manganites RMnO<sub>3</sub> (R = Ho, Er, Tm, Yb, and Lu)  
 PHYSICAL REVIEW B 90 (2), Art. No. 024307 JUL 23 2014
39. Apostolov, A. T.; Apostolova, I. N.; Wesselinowa, J. M.  
 The magnetoelectric effect in thin films of ferromagnetic semiconductor La<sub>2</sub>NiMnO<sub>6</sub>  
 PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 251 (6), pp. 1219-1224 JUN 2014
38. El Amrani, M.; Zaghloui, M.; Ta Phuoc, V.; et al.  
 Local symmetry breaking and spin-phonon coupling in SmCrO<sub>3</sub> orthochromite  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 361, pp. 1-6 JUN 2014

37. Kumar, Pradeep; Ghara, Somnath; Rajeswaran, B.; et al.  
Temperature dependent magnetic, dielectric and Raman studies of partially disordered La<sub>2</sub>NiMnO<sub>6</sub>  
SOLID STATE COMMUNICATIONS 184, pp. 47-51 APR 2014
36. Garcia-Flores, A. F.; Terashita, H.; Bittar, E. M.; et al.  
Raman scattering in the magnetically frustrated double perovskite Sr<sub>2</sub>YRuO<sub>6</sub>  
JOURNAL OF RAMAN SPECTROSCOPY 45 (2), pp. 193-196 FEB 2014
35. Ghosh, Binita; Dutta, Alo; Shannigrahi, Santiranjan; et al.  
Combined XPS and first principles study of double-perovskite Ca<sub>2</sub>GdTaO<sub>6</sub>  
JOURNAL OF MATERIALS SCIENCE 49 (2), pp. 819-826 JAN 2014
34. Ghosh, Binita; Dutta, Alo; Sinha, T. P.  
Vibrational modes and electrical transport in Sr<sub>2</sub>GdTaO<sub>6</sub>  
MATERIALS CHEMISTRY AND PHYSICS 143 (1), 26-33 DEC 16 2013
33. Silva, R. X.; Reichlova, H.; Marti, X.; et al.  
Spin-phonon coupling in Gd(Co<sub>1/2</sub>Mn<sub>1/2</sub>)O<sub>3</sub> perovskite  
JOURNAL OF APPLIED PHYSICS 114 (19), Art. No. 194102 NOV 21 2013
32. Macedo Filho, Raimundo Bezerra; Ayala, Alejandro Pedro; de Araujo Paschoal, Carlos William  
Spin-phonon coupling in Y<sub>2</sub>NiMnO<sub>6</sub> double perovskite probed by Raman spectroscopy  
APPLIED PHYSICS LETTERS 102 (19), 192902, MAY 13 2013
31. Milenov, T. I.; Rafailov, P. M.; Urcelay-Olabarria, I.; et al.  
Magnetic behavior of La<sub>2</sub>CoMnO<sub>6</sub>-delta crystal doped with Pb and Pt  
MATERIALS RESEARCH BULLETIN 47 (12), 4001-4005 DEC 2012
30. Bai, YJ, Xia, YJ.; Li, HP, Han, L, Wang, ZC, Wu, X, Lv, SH, Liu, XJ, Meng, J  
A-Site-Doping Enhanced B-Site Ordering and Correlated Magnetic Property in La<sub>2-x</sub>B<sub>x</sub>CoMnO<sub>6</sub>  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 116 Issue: 32 Pages: 16841-16847 DOI: 10.1021/jp302735x Published: AUG 16 2012
29. Mishra, Dileep K.; Sathe, V. G.  
Evidence of the Fano resonance in a temperature dependent Raman study of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> and SrCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 24 (25) Article Number: 252202, JUN 27 2012.
28. Bai, Yijia; Liu, Xiaojuan; Xia, Yanjie; et al.  
B-site ordering induced suppression of magnetic cluster glass and dielectric anomaly in La<sub>2-x</sub>B<sub>x</sub>CoMnO<sub>6</sub>  
APPLIED PHYSICS LETTERS 100 (22) Article Number: 222907, MAY 28 2012.
27. Garcia-Flores, A. F.; Moreira, A. F. L.; Kaneko, U. F.; et al.  
Spin-Electron-Phonon Excitation in Re-based Half-Metallic Double Perovskites  
PHYSICAL REVIEW LETTERS 108 (17) Article Number: 177202, APR 25 2012.
26. Gu Yijing; Wang Yunfeng; Wang Tao; et al.  
Structure and current-induced effect on the resistivity of La<sub>2</sub>CoMnO<sub>6</sub> thin films  
MATERIALS CHEMISTRY AND PHYSICS 132 (2-3), 466-470, FEB 15 2012.
25. Zhu Min; Lin Yong; Lo Edward W. C.; et al.  
Electronic and magnetic properties of La<sub>2</sub>NiMnO<sub>6</sub> and La<sub>2</sub>CoMnO<sub>6</sub> with cationic ordering  
APPLIED PHYSICS LETTERS 100 (6) Article Number: 062406, FEB 6 2012.
24. Zhang Zhiqing; Jian Hongbin; Tang Xianwu; et al.  
Structural, magnetic and dielectric properties of La(2)NiMnO(6) thin film by chemical solution deposition method  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY 61 (1), 224-228, JAN 2012.
23. Nair Harikrishnan S.; Swain Diptikanta; Hariharan N.; et al.  
Griffiths phase-like behavior and spin-phonon coupling in double perovskite Tb(2)NiMnO(6)  
JOURNAL OF APPLIED PHYSICS 110 (12) Article Number: 123919, DEC 15 2011.
22. Gu Yijing; Wang Yunfeng; Wang Tao; et al.  
Synthesis, structural and magnetic study of polycrystalline LaNi(1-x)Mn(x)O(3) films  
PHYSICA B-CONDENSED MATTER 406 (14) Pages: 2876-2879, JUL 15 2011.
21. Singh M. P.; Truong K. D.; Jandl S.; et al.  
Magnetic properties and phonon behavior of Pr(2)NiMnO(6) thin films  
APPLIED PHYSICS LETTERS 98 (16) Article Number: 162506, APR 18 2011.
20. Viswanathan M.; Hsieh H. H.; Lin H. -J.; et al.  
Investigation on the Magnetic Anomaly and the Role of Orbital Moment on the Magnetic Properties of LaMn(0.5)Co(0.5)O(3)  
JOURNAL OF PHYSICAL CHEMISTRY C 115 (11) Pages: 4851-4855, MAR 24 2011.
19. Truong K. D.; Singh M. P.; Jandl S.; et al.  
Investigation of phonon behavior in Pr(2)NiMnO(6) by micro-Raman spectroscopy

18. Moreira, A.F.L., García-Flores, A.F., Granado, E., Massa, N.E., Pinacca, R.M., Pedregosa, J.C., Carbonio, R.E., (...), Echegut, P. Raman and infrared spectroscopy of Sr(2)B<sup>+</sup>UO(6) (B<sup>+</sup> = Ni; Co) double perovskites VIBRATIONAL SPECTROSCOPY 54 (2) Pages: 142-147, NOV 18 2010.
17. Zhao, H., Kimura, H., Cheng, Z., Wang, X., Ozawa, K., Nishida, T. Magnetic properties of La doped Bi(2)FeMnO(6) ceramic and film JOURNAL OF APPLIED PHYSICS 108 (9) Article Number: 093903, NOV 1 2010.
16. Viswanathan, M., Anil Kumar, P.S., Bhadram, V.S., Narayana, C., Bera, A.K., Yusuf, S.M. Influence of lattice distortion on the Curie temperature and spin-phonon coupling in LaMn0.5Co0.5O3 Journal of Physics Condensed Matter 22 (34), art. no. 346006, SEP 1 2010.
15. Singh M. P.; Truong K. D.; Jandl S.; et al. Phase formation, phonon behavior, and magnetic properties of novel ferromagnetic La(3)BALMnO(9) (B=Co or Ni) triple perovskites JOURNAL OF APPLIED PHYSICS 107 (9) Article Number: 09D916, MAY 1 2010.
14. Wang, T., Shi, W., Fang, X., Dong, W., Tao, R. Fabrication of polycrystalline La2NiMnO6 thin films on Si (1 0 0) substrates by chemical solution deposition Journal of Sol-Gel Science and Technology 53 (3), pp. 655-659, MAR 2010.
13. Singh, M.K., Prellier, W., Jang, H.M., Katiyar, R.S. Anomalous magnetic ordering induced spin-phonon coupling in BiFeO3 thin films SOLID STATE COMMUNICATIONS Volume: 149 Issue: 43-44 Pages: 1971-1973 DOI: 10.1016/j.ssc.2009.07.036 Published: NOV 2009
12. Truong, K.D., Singh, M.P., Jandl, S., Fournier, P. Influence of Ni/Mn cation order on the spin-phonon coupling in multifunctional La2NiMnO6 epitaxial films by polarized Raman spectroscopy PHYSICAL REVIEW B Volume: 80 Issue: 13 Article Number: 134424 DOI: 10.1103/PhysRevB.80.134424 Published: OCT 2009
11. Singh, M.P., Truong, K.D., Jandl, S., Fournier, P. Long-range Ni/Mn structural order in epitaxial double perovskite La2NiMnO6 thin films PHYSICAL REVIEW B Volume: 79 Issue: 22 Article Number: 224421 DOI: 10.1103/PhysRevB.79.224421 Published: JUN 2009
10. Singh, M.P., Truong, K.D., Fournier, P., Rauwel, P., Rauwel, E., Carignan, L.P., Ménard, D. A radical approach to promote multiferroic coupling in double perovskites Journal of Magnetism and Magnetic Materials 321 (11), pp. 1743-1747 (2009).
9. Tong, W., Yoon, W.-S., Hagh, N.M., Amatucci, G.G. A novel silver molybdenum oxyfluoride perovskite as a cathode material for lithium batteries Chemistry of Materials 21 (10), pp. 2139-2148 (2009).
8. Singh, M.P., Truong, K.D., Jandl, S., Fournier, P. Stabilization and functional properties of La3NiAlMnO9 and La3CoAlMnO9 magnetoelectric triple perovskites Applied Physics Letters 94 (17), art. no. 171908 (2009).
7. Wang, T., Xu, W., Fang, X., Dong, W., Tao, R., Li, D., Zhao, Y., Zhu, X. Chemical solution deposition preparation of double-perovskite La2NiMnO6 film on LaAlO3 (0 0 1) substrate Journal of Alloys and Compounds 475 (1-2), pp. 9-12 (2009).
6. Sheets, W.C., Smith, A.E., Subramanian, M.A., Prellier, W. Effect of oxygen concentration on the structural and magnetic properties of LaRh1/2Mn1/2O3 thin films Journal of Applied Physics 105 (2), art. no. 023915 (2009).
5. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P. Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).
4. Wang, T., Fang, X., Dong, W., Tao, R., Deng, Z., Li, D., Zhao, Y., (...), Zhu, X. Fabrication of polycrystalline La2NiMnO6 thin films on LaAlO3 (1 0 0) substrates by chemical solution deposition Journal of Crystal Growth 310 (14), pp. 3386-3390 (2008).
3. Singh, M.P., Truong, K.D., Laverdière, J., Charpentier, S., Jandl, S., Fournier, P. Cationic ordering and role of A-site ion in manganese-based double perovskites Journal of Applied Physics 103 (7), art. no. 07E315 (2008).
2. Ranjith, R., Kundu, A.K., Filippi, M., Kundys, B., Prellier, W., Raveau, B., Laverdière, J., (...), Jandl, S. Ferromagnetism and magnetodielectric effect in insulating LaBiMn43Co23O6 thin films Applied Physics Letters 92 (6), art. no. 062909 (2008).
1. Truong KD, Laverdiere J, Singh MP, et al. Impact of Co/Mn cation ordering on phonon anomalies in La2CoMnO6 double perovskites: Raman spectroscopy PHYSICAL REVIEW B 76 (13), 132413 (2007).

63. "Design of new gold catalysts supported on mechanochemically activated ceria-alumina, promoted by molybdena for complete benzene oxidation"

D. Andreeva, P. Petrova, L. Ilieva, J.W. Sobczak and M.V. Abrashev  
Applied Catalysis B: Environmental 77 (3-4), 364-372 (2008).

16. Centeno, M.A., Reina, T.R., Ivanova, S., Laguna, O.H., Odriozola, J.A.

Au/CeO<sub>2</sub> catalysts: Structure and CO oxidation activity

Catalysts 6(10), Art.No. A15 DOI: 10.3390/catal6100158 (2016)

15. Mitran, G., Pavel, O.D., Mieritz, D.G., Seo, D.-K., Florea, M.

Effect of Mo/Ce ratio in Mo-Ce-Al catalysts on the hydrogen production by steam reforming of glycerol  
Catalysis Science and Technology 6(21), 7902-7912 DOI: 10.1039/c6cy00999a (2016)

14. Kaminski, P., Ziolek, M.

Mobility of gold, copper and cerium species in Au, Cu/Ce, Zr-oxides and its impact on total oxidation of methanol

APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 187 Pages: 328-341 DOI: 10.1016/j.apcatb.2016.01.040 Published: JUN 15 2016

13. Jiang, F., Chen, H., Zheng, S.

Catalytic combustion of ethyl acetate on Al<sub>2</sub>O<sub>3</sub> supported chromia catalysts

Indoor Air 2014 - 13th International Conference on Indoor Air Quality and Climate, 134-136 (2014)

12. Laguna, O.H., Domínguez, M.I., Romero-Sarria, F., Odriozola, J.A., Centeno, M.A.

Role of oxygen vacancies in gold oxidation catalysis

RSC Catalysis Series 2014-January(18), 489-511 (2014)

11. Gao Lin-Xin; Jiang Xin; Guo Sen

MnO<sub>x</sub>/CeO<sub>2</sub>/SiO<sub>2</sub> Catalysts Prepared by Adsorption Phase Reaction Technique for Selective Catalytic Reduction of NO<sub>x</sub> at Low-Temperature

ACTA PHYSICO-CHIMICA SINICA 30 (7), pp. 1303-1308 JUL 2014

10. Xing, T., Wan, H., Shao, Y., Han, Y., Xu, Z., Zheng, S.

Catalytic combustion of benzene over  $\gamma$ -alumina supported chromium oxide catalysts

Applied Catalysis A: General 468, pp. 269-275, 2013

9. Long, Baihua; Huang, Jianhui; Wang, Xinchen

Photocatalytic degradation of benzene in gas phase by nanostructured BiPO<sub>4</sub> catalysts

PROGRESS IN NATURAL SCIENCE-MATERIALS INTERNATIONAL 22 (6), 645-654, DEC 2012

8. Bazin, P., Marie, O., Daturi, M.

Operando IR spectroscopy study of catalytic materials for pollution treatment of vehicle cockpits: Evidence of the active sites, intermediate/spectator species and reaction mechanisms

Materiaux et Techniques 100 (3) , pp. 201-210, 2012.

7. Jiang, X., Deng, H.

Synthesis of Au-CeO<sub>2</sub>/SiO<sub>2</sub> catalyst via adsorbed-layer reactor technique combined with alcohol-thermal treatment

Applied Surface Science 257 (24), pp. 10883-10887, 2011.

6. Bonelli R.; Albonetti S.; Morandi V.; et al.

Design of nano-sized FeO(x) and Au/FeO(x) catalysts supported on CeO<sub>(2)</sub> for total oxidation of VOC

APPLIED CATALYSIS A-GENERAL 395 (1-2) Pages: 10-18, MAR 15 2011.

5. Carolina Gomez-Carrillo Sandra; Guillermo Bolcatto Pablo

Coexistence of root 3 x root 3 and quasi-linear phases of sulfur adsorbed (Theta=1/3) on a gold (111) substrate

PHYSICAL CHEMISTRY CHEMICAL PHYSICS 13 (2) Pages: 461-466, 2011.

4. Rousseau Severine; Marie Olivier; Bazin Philippe; et al.

Investigation of Methanol Oxidation over Au/Catalysts Using Operando IR Spectroscopy: Determination of the Active Sites, Intermediate/Spectator Species, and Reaction Mechanism

JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 132 (31) Pages: 10832-10841, AUG 11 2010.

3. Hu, C., Zhu, Q., Chen, L., Wu, R.

CuO-CeO<sub>2</sub> binary oxide nanoplates: Synthesis, characterization, and catalytic performance for benzene oxidation

Materials Research Bulletin 44 (12), pp. 2174-2180 (2009).

2. Naknam, P., Luengnaruemitchai, A., Wongkasemjit, S.

Preferential CO oxidation over Au/ZnO and Au/ZnO-Fe<sub>2</sub>O<sub>3</sub> catalysts prepared by photodeposition

International Journal of Hydrogen Energy 34 (24), pp. 9838-9846 (2009).

1. Jianhui, H., Kaining, D., Xinchen, W., Xianzhi, F.

Nanostructuring cadmium germanate catalysts for photocatalytic oxidation of benzene at ambient conditions

Langmuir 25 (14), pp. 8313-8319 (2009).

64. "Gold catalysts on doped by lanthanides ceria for pure hydrogen production"  
 D. Andreeva, I. Ivanov, J. W. Sobczak, W. Lisowski, P. Petrova, M. V. Abrashev, and L. Ilieva  
*Current Topics in Catalysis* 7, 33-41 (2008).
65. "Gold catalysts supported on ceria doped by rare earth metals for water gas shift reaction: Influence of the preparation method"  
 Andreeva, D., Ivanov, I., Ilieva, L., Abrashev, M.V., Zanella, R., Sobczak, J.W., Lisowski, W., Kantcheva M., Avdeev G., and Petrov, K.  
*Applied Catalysis A: General* 357(2) 159–169 (2009).
51. Methanol reforming by nanostructured Pd/Sm-doped ceria catalysts  
 Kosinski, M. R.; Vizcaino, A. J.; Gomez-Sainero, L. M.; et al.  
*APPLIED CATALYSIS B-ENVIRONMENTAL* Volume: 286 Article Number: 119935 Published: JUN 5 2021
50. A review of recent advances in water-gas shift catalysis for hydrogen production  
 Ebrahimi, Parisa; Kumar, Anand; Khrasheh, Majeda  
*EMERGENT MATERIALS* Volume: 3 Issue: 6 Pages: 881-917 Published: DEC 2020
49. Nontraditional Catalyst Supports in Surface Organometallic Chemistry  
 Witzke, Ryan J.; Chapovetsky, Alon; Conley, Matthew P.; et al.  
*ACS CATALYSIS* Volume: 10 Issue: 20 Pages: 11822-11840 Published: OCT 16 2020
48. Defect Chemistry of Ceria Nanostructures and Their Applications in Heterogeneous Catalysis  
 Yuan, K., Zhang, Y.  
*Zhongguo Xitu Xuebao/Journal of the Chinese Rare Earth Society* 38(3), pp. 326-344 (2020)
47. Heterogeneous Gold Catalysis: From Discovery to Applications  
 Alshammary, Ahmad S.  
*CATALYSTS* Volume: 9 Issue: 5 Article Number: 402 Published: MAY 2019
46. Recent Advances in the Gold-Catalysed Low-Temperature Water-Gas Shift Reaction  
 Carter, James H.; Hutchings, Graham J.  
*CATALYSTS* Volume: 8 Issue: 12 Article Number: 627 Published: DEC 2018
45. Ambient temperature aqueous synthesis of ultrasmall copper doped ceria nanocrystals for the water gas shift and carbon monoxide oxidation reactions  
 Curran, Christopher D.; Lu, Li; Kiely, Christopher J.; et al.  
*JOURNAL OF MATERIALS CHEMISTRY A* Volume: 6 Issue: 1 Pages: 244-255 Published: JAN 7 2018
44. Temperature-programmed reduction of lightly yttrium-doped Au/CeO<sub>2</sub> catalysts Correlation between oxygen mobility and WGS activity  
 Munteanu, G.; Petrova, P.; Ivanov, I.; et al.  
*JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY* Volume: 131 Issue: 1 Pages: 145-154 Published: JAN 2018
43. Preparation and characterization of Ce<sub>1-x</sub>Pr<sub>x</sub>O<sub>2</sub> supports and their catalytic activities  
 Chanapattharapol, Kingkaew Chayakul; Krachuamram, Somkiat; Makdee, Ammarika; et al.  
*JOURNAL OF RARE EARTHS* Volume: 35 Issue: 12 Pages: 1197-1205 Published: DEC 2017
42. Oh, Jiwoo; Do Yoo, Jeong; Kim, Keunsoo; et al.  
 Negative Effects of Dopants on Copper-Ceria Catalysts for CO Preferential Oxidation Under the Presence of CO<sub>2</sub> and H<sub>2</sub>O  
*CATALYSIS LETTERS* Volume: 147 Issue: 12 Pages: 2987-3003 Published: DEC 2017
41. Genty, Eric; Jacobs, Luc; de Bocarme, Thierry Visart; et al.  
 Dynamic Processes on Gold-Based Catalysts Followed by Environmental Microscopies  
*CATALYSTS* Volume: 7 Issue: 5 Article Number: 134 Published: MAY 2017
40. Yang, Nan; Orgiani, Pasquale; Di Bartolomeo, Elisabetta; et al.  
 Effects of Dopant Ionic Radius on Cerium Reduction in Epitaxial Cerium Oxide Thin Films  
*JOURNAL OF PHYSICAL CHEMISTRY C* Volume: 121 Issue: 16 Pages: 8841-8849 Published: APR 27 2017
39. Izquierdo, U.; Neuberg, S.; Pecov, S.; et al.  
 Hydrogen production with a microchannel heat-exchanger reactor by single stage water-gas shift; catalyst development  
*CHEMICAL ENGINEERING JOURNAL* Volume: 313 Pages: 1494-1508 Published: APR 1 2017
38. He, RX (He Runxia); Wang, DD (Wang Dandan); Zhi, KD (Zhi Keduan); Wang, B (Wang Bin); Zhong, HC (Zhong Huacong); Jiang, HQ (Jiang Haoqiang); Li, N (Li Na); Liu, QS (Liu Quansheng)  
 Cu-Mn catalysts modified by rare earth lanthanum for low temperature water-gas shift reaction  
*JOURNAL OF RARE EARTHS* Volume: 34 Issue: 10 Pages: 994-1003 DOI: 10.1016/S1002-0721(16)60126-6 Published: OCT 2016
37. Bilkova, I., Sobczak, I., Decyk, P., Ziolek, M., Whitten, J.E.  
 The effect of zinc and copper in gold catalysts supported on MCF cellular foams on surface properties and catalytic activity in methanol oxidation  
*MICROPOROUS AND MESOPOROUS MATERIALS* Volume: 232 Pages: 97-108 DOI: 10.1016/j.micromeso.2016.06.008 Published: SEP 15 2016

36. Jaoude, M.A.; Polychronopoulou, K; Hinder, S.J; Katsiotis, M.S; Baker, M.A; Greish, Y.E; Alhassan, S.M  
 Synthesis and properties of 1D Sm-doped CeO<sub>2</sub> composite nanofibers fabricated using a coupled electrospinning and sol-gel methodology  
*CERAMICS INTERNATIONAL* Volume: 42 Issue: 9 Pages: 10734-10744 DOI: 10.1016/j.ceramint.2016.03.197 Published: JUL 2016
35. Montini, T.; Melchionna, M.; Monai, M.; Fornasiero, P.  
 Fundamentals and Catalytic Applications of CeO<sub>2</sub>-Based Materials  
*CHEMICAL REVIEWS* Volume: 116 Issue: 10 Pages: 5987-6041 DOI: 10.1021/acs.chemrev.5b00603 Published: MAY 25 2016
34. Liberman, E.Yu., Naumkin, A.V., Mikhailichenko, A.I., Batrakova, M.K., Maslakov, K.I., Revina, A.A., Papkova, M.V., Kon'Kova, T.V., Grunskii, V.N., Gasparyan, M.D., Karpovich, A.L., Lizunova, A.A.  
 Au/Ce0.72Zr0.18Pr0.1O2 nanodisperse catalyst for oxidation of carbon monoxide  
*RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A* Volume: 90 Issue: 1 Pages: 166-172 DOI: 10.1134/S0036024416010167  
 Published: JAN 2016
33. Liao, W.; Lv, H.; Suo, Z.  
 The action of VO<sub>x</sub> doping on Au/CeO<sub>2</sub> catalysts for CO oxidation and water-gas shift reaction  
*REACTION KINETICS MECHANISMS AND CATALYSIS* Volume: 116 Issue: 2 Pages: 491-506 DOI: 10.1007/s11144-015-0921-5  
 Published: DEC 2015
32. Sultana, S.S.P.; Kishore, D.H.V.; Kuniyil, M.; Khan, M.; Alwarthan, A.; Prasad, K.R.S.; Labis, J.P.; Adil, S.F.  
 Ceria doped mixed metal oxide nanoparticles as oxidation catalysts: Synthesis and their characterization  
*ARABIAN JOURNAL OF CHEMISTRY* Volume: 8 Issue: 6 Pages: 766-770 DOI: 10.1016/j.arabjc.2015.05.008 Published: NOV 2015
31. Ma, Z (Ma, Zhen); Tao, F (Tao, Franklin (Feng)); Gu, XL (Gu, Xiaoli)  
 DEVELOPMENT OF NEW GOLD CATALYSTS FOR REMOVING CO FROM H-2  
 HETEROGENEOUS CATALYSIS AT NANOSCALE FOR ENERGY APPLICATIONS Pages: 217-238 Published: 2015
30. Gradisher, Logan; Dutcher, Bryce; Fan, Maohong  
 Catalytic hydrogen production from fossil fuels via the water gas shift reaction  
*APPLIED ENERGY* Volume: 139 Pages: 335-349 Published: FEB 1 2015
29. Deng, Changshun; Li, Bin; Dong, Lihui; et al.  
 NO reduction by CO over CuO supported on CeO<sub>2</sub>-doped TiO<sub>2</sub>: the effect of the amount of a few CeO<sub>2</sub>  
*PHYSICAL CHEMISTRY CHEMICAL PHYSICS* Volume: 17 Issue: 24 Pages: 16092-16109 Published: 2015
28. Zhang, Yashan; Jin, Lei; Sterling, Kevin; et al.  
 Potassium modified layered Ln(2)O(2)CO(3) (Ln: La, Nd, Sm, Eu) materials: efficient and stable heterogeneous catalysts for biofuel production  
*GREEN CHEMISTRY* Volume: 17 Issue: 6 Pages: 3600-3608 Published: 2015
27. Correia Carabineiro, S.A.  
 Synthesis and applications of gold nanoparticles  
*Advances in Nanotechnology* 12, 95-122 (2014)
26. He, Geping; Fan, Huiqing; Wang, Zhiwei  
 Enhanced optical properties of heterostructured ZnO/CeO<sub>2</sub> nanocomposite fabricated by one-pot hydrothermal method: Fluorescence and ultraviolet absorption and visible light transparency  
*OPTICAL MATERIALS* Volume: 38 Pages: 145-153 Published: DEC 2014
25. Odabasi, Cagla; Gunay, M. Erdem; Yildirim, Ramazan  
 Knowledge extraction for water gas shift reaction over noble metal catalysts from publications in the literature between 2002 and 2012  
*INTERNATIONAL JOURNAL OF HYDROGEN ENERGY* 39 (11), pp. 5733-5746 APR 4 2014
24. Chen, Guangliang; Xue, Fei; Chen, Zhili; et al.  
 FABRICATING WELL-DISPersed NANoSIZEd GOLD CATALYST ON TITANATE NANOWIRES SURFACE FOR 4-NITROPHENOL REDUCTION  
*NANO* 9 (3), Art. No. 1450039 APR 2014
23. He Runxia; Jiang Haoqiang; Wu Fang; et al.  
 Effect of doping rare earth oxide on performance of copper-manganese catalysts for water-gas shift reaction  
*JOURNAL OF RARE EARTHS* 32 (4), pp. 298-305 APR 2014
22. Deshpande, P.A.; Madras, G.  
 Catalytic Synthesis of CO Free Hydrogen  
 New and Future Developments in Catalysis 223-252 DOI: 10.1016/B978-0-444-53882-6.00009-7 (2013)
21. Carabineiro, S.A.C.  
 Synthesis and applications of gold nanoparticles  
*Gold Nanoparticles: Synthesis, Optical Properties and Applications for Cancer Treatment* 1-37 (2013)
20. Delgado, JJ; del Rio, E; Chen, XW.; Blanco, G.; Pintado, JM; Bernal, S; Calvino, JJ  
 UNDERSTANDING CERIA-BASED CATALYTIC MATERIALS: AN OVERVIEW OF RECENT PROGRESS  
 CATALYSIS BY CERIA AND RELATED MATERIALS, 2ND EDITION Book Series: Catalytic Science Series Volume: 12 Pages: 47-138 Published: 2013

19. Tao, F., Ma, Z.  
Water-gas shift on gold catalysts: Catalyst systems and fundamental studies  
Physical Chemistry Chemical Physics 15 (37), pp. 15260-15270, 2013
18. Ivanov, I., Petrova, P., Georgiev, V., Batakliev, T., Karakirova, Y., Serga, V., Kulikova, L., (...), Rakovsky, S.  
Comparative study of ceria supported nano-sized platinum catalysts synthesized by extractive-pyrolytic method for Low-Temperature WGS reaction  
Catalysis Letters 143 (9), pp. 942-949, 2013
17. He, G., Fan, H., Wang, K., Yin, H., Wu, J.  
The heterostructured AAO/CeO<sub>2</sub> nanosystem fabricated by electrodeposition for charge storage and hydrophobicity  
Materials Science and Engineering B: Solid-State Materials for Advanced Technology 178 (17), pp. 1140-1146, 2013
16. Del Río, E., López-Haro, M., Cíes, J.M., Delgado, J.J., Calvino, J.J., Trasobares, S., Blanco, G., (...), Bernal, S.  
Dramatic effect of redox pre-treatments on the CO oxidation activity of Au/Ce0.50Tb0.12Zr0.38O<sub>2-x</sub> catalysts prepared by deposition-precipitation with urea: A nano-analytical and nano-structural study  
Chemical Communications 49 (60), pp. 6722-6724, 2013
15. Liu, X., Guo, P., Wang, B., Jiang, Z., Pei, Y., Fan, K., Qiao, M.  
A comparative study of the deactivation mechanisms of the Au/CeO<sub>2</sub> catalyst for water-gas shift under steady-state and shutdown/start-up conditions in realistic reformate  
Journal of Catalysis 300, pp. 152-162, 2013
14. Alijani, A., Irankhah, A.  
Effect of Nickel Addition on Ceria-Supported Platinum Catalysts for Medium-Temperature Shift Reaction in Fuel Processors  
Chemical Engineering and Technology 36 (4), pp. 552-558, 2013
13. Alijani, A., Irankhah, A.  
Medium-Temperature Shift Catalysts for Hydrogen Purification in a Single-Stage Reactor  
Chemical Engineering and Technology 36 (2), pp. 209-219, 2013
12. Reddy, E.L., Prabhakarn, A., Karuppiyah, J., Rameshbabu, N., Subrahmanyam, C.H.  
Gold supported calcium deficient hydroxyapatite for room temperature co oxidation  
International Journal of Nanoscience 11 (3), art. no. 1240004, 2012.
11. Spivey, J.J.  
GasifDeactivation of Reforming Catalysts  
FUEL CELLS: TECHNOLOGIES FOR FUEL PROCESSING Pages: 285-315 DOI: 10.1016/B978-0-444-53563-4.10011-2 Published: 2011
10. Pinto, F., André, R., Costa, P., Carolino, C., Lopes, H., Gulyurtlu, I.  
Gasification Technology and Its Contribution to Deal with Global Warming  
SOLID BIOFUELS FOR ENERGY: A LOWER GREENHOUSE GAS ALTERNATIVE Book Series: Green Energy and Technology Pages: 151-175 DOI: 10.1007/978-1-84996-393-0\_7 Published: 2011
9. Caglayan Burcu Selen; Aksoylu A. Erhan  
Water-gas shift activity of ceria supported Au-Re catalysts  
CATALYSIS COMMUNICATIONS 12 (13) Pages: 1206-1211, JUL 26 2011.
8. Lenite Brenno A.; Galletti Camilla; Specchia Stefania  
Studies on Au catalysts for water gas shift reaction  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY 36 (13) Pages: 7750-7758, JUL 2011.
7. Yu Qiangqiang; Li Yang; Zou Xuhua; et al.  
Effect of Alkali Metal Promoters on Water-Gas Shift Activity over Au-Pt/CeO<sub>(2)</sub> Catalyst  
CHINESE JOURNAL OF CATALYSIS 31 (6) Pages: 671-676, JUN 2010.
6. Hernández, W.Y., Romero-Sarria, F., Centeno, M.A., Odriozola, J.A.  
In situ characterization of the dynamic gold-support interaction over ceria modified Eu<sup>3+</sup>. Influence of the oxygen vacancies on the co oxidation reaction  
Journal of Physical Chemistry C 114 (24), pp. 10857-10865 (2010).
5. Ma, Z., Yin, H., Dai, S.  
Performance of Au/M x O<sub>y</sub>/TiO<sub>2</sub> Catalysts in water-gas shift reaction  
Catalysis Letters 136 (1-2), pp. 83-91 (2010).
4. Bali, S., Huggins, F.E., Ernst, R.D., Pugmire, R.J., Huffman, G.P., Eyring, E.M.  
Iron-ceria aerogels doped with palladium as water-gas shift catalysts for the production of hydrogen  
Industrial and Engineering Chemistry Research 49 (4), pp. 1652-1657 (2010).
3. Delannoy, L., Fajerwerg, K., Lakshmanan, P., Potvin, C., Méthivier, C., Louis, C.  
Supported gold catalysts for the decomposition of VOC: Total oxidation of propene in low concentration as model reaction  
Applied Catalysis B: Environmental 94 (1-2), pp. 117-124 (2010).
2. Duarte de Farias, A.M., Nguyen-Thanh, D., Fraga, M.A.  
Discussing the use of modified ceria as support for Pt catalysts on water-gas shift reaction

Applied Catalysis B: Environmental 93 (3-4), pp. 250-258 (2010).

1. Yang, S., Zhan, Y., Chen, C., Cao, Y., Lin, X., Zheng, Q.

Effect of rare earth oxide on the catalytic performance of Au/CeO<sub>2</sub> catalyst for water-gas shift reaction  
Cuihua Xuebao / Chinese Journal of Catalysis 30 (7), pp. 666-672 (2009).

66. "Growth and characterization of large  $La_{1-x}Pb_xMnO_{3+\delta}$  ( $x=0.32-0.35$ ) crystals"

Milenov, T.I., Rafailov, P.M., Abrashev, M.V., Nikolova, R.P., Titorenkova, R., Gospodinov, M.M.  
Crystal Research and Technology 44 (11), pp. 1192-1196 (2009).

2. Ewas, Ashraf M.; Hamad, Mahmoud A

Large magnetocaloric effect of  $La_0.67Pb_0.33Mn_{1-x}Co_xO_3$  in small magnetic field variation  
CERAMICS INTERNATIONAL Volume: 43 Issue: 10 Pages: 7660-7662 Published: JUL 2017

1.Blagoev, B.S., Terzieva, S.D., Nurgaliev, T.K., Shavachev, B.L., Zaleski, A.J., Mikli, V., Staneva, A.D., Stoyanova-Ivanova, A.K.  
Magnetic and transport characteristics of oxygenated polycrystalline  $La_0.6Pb_0.4MnO_3$   
Journal of Magnetism and Magnetic Materials 329, pp. 34-38, 2013

67. "Optical phonons of  $NdBaCo_2O_{5+x}$ : Lattice dynamics calculations"

Todorov, N.D., Abrashev, M.V., Ivanov, V.G., Vlakhov, E.  
AIP Conference Proceedings 1203, pp. 1003-1006 (2009).

68. "Raman spectroscopy investigation of magnetite nanoparticles in ferrofluids"

Slavov, L., Abrashev, M.V., Merodiiska, T., Gelev, Ch., Vandenberghe, R.E., Markova-Deneva, I., Nedkov, I.

Journal of Magnetism and Magnetic Materials 322 (14), pp. 1904-1911 (2010).

144. Magnetic-core-based silibinin nanopolymeric carriers for the treatment of renal cell cancer  
Takke, Anjali; Shende, Pravin  
LIFE SCIENCES Volume: 275 Article Number: 119377 Published: JUN 15 2021

143. Photocatalytic and antibacterial performance of iron oxide nanoparticles formed by the combustion method  
Tharani, K.; Christy, A. Jegatha; Sagadevan, Suresh; et al.  
CHEMICAL PHYSICS LETTERS Volume: 771 Article Number: 138524 Published: MAY 16 2021

142. Study of the surface properties and particle-particle interactions in oleic acid-coated Fe<sub>3</sub>O<sub>4</sub> nanoparticles  
Urian, Y. A.; Atoche-Medrano, J. J.; Quispe, Luis T.; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 525 Article Number: 167686 Published: MAY 1 2021

141. Synthesis and characterization of magnetic wrinkled mesoporous silica nanocomposites containing Fe<sub>3</sub>O<sub>4</sub> or CoFe<sub>2</sub>O<sub>4</sub> nanoparticles for potential biomedical applications  
Flood-Garibay, Jessica Andrea; Mendez-Rojas, Miguel A.  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS Volume: 615 Article Number: 126236  
Published: APR 20 2021

140. Magnetic iron oxides nanoparticles obtained by mechanochemical reactions from different solid precursors  
Bedoya, Pedro A. Calderon; Botta, Pablo M.; Bercoff, Paula G.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 860 Article Number: 157892 Published: APR 15 2021

139. Rietveld Refinement, mu-Raman, X-ray Photoelectron, and Mossbauer Studies of Metal Oxide-Nanoparticles Growth on Multiwall Carbon Nanotubes and Graphene Oxide  
Ramos-Guivar, Juan A.; Gonzalez-Gonzalez, J. C.; Litterst, F. Jochen; et al.  
CRYSTAL GROWTH & DESIGN Volume: 21 Issue: 4 Pages: 2128-2141 Published: APR 7 2021

138. Numerical simulation of ferrofluid-lubricated rough elliptical contact with start-up motion  
Huang, Xingbao; Zhang, Xiao; Wang, Youqiang  
APPLIED MATHEMATICAL MODELLING Volume: 91 Pages: 232-260 Published: MAR 2021

137. Effect of surface functionalization on the heating efficiency of magnetite nanoclusters for hyperthermia application  
Jamir, Molongnenla; Islam, Riyajul; Pandey, Lalit M.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 854 Article Number: 157248 Published: FEB 15 2021

136. Role of Magnetite Nanoparticles Size and Concentration on Hyperthermia under Various Field Frequencies and Strengths  
Narayanaswamy, Venkatesha; Sambasivam, Sangaraju; Saj, Alam; et al.  
MOLECULES Volume: 26 Issue: 4 Article Number: 796 Published: FEB 2021

135. A Full Set of In Vitro Assays in Chitosan/Tween 80 Microspheres Loaded with Magnetite Nanoparticles  
Roacho-Perez, Jorge A.; Rodriguez-Aguillon, Cassandra O.; Gallardo-Blanco, Hugo L.; et al.  
POLYMERS Volume: 13 Issue: 3 Article Number: 400 Published: FEB 2021

134. Correlation between structural evolution and oxidative desulfurization activity for magnetically-recoverable gamma-Fe<sub>2</sub>O<sub>3</sub>@SiO<sub>2</sub> core-shell-Supported WO<sub>x</sub> nanostructure  
Piva, Diogenes H.; Piva, Roger H.; Picinini, Monize; et al.

133. A simple in-situ flame synthesis of nanocomposite (MWCNTs-Fe<sub>2</sub>O<sub>3</sub>) for electrochemical sensing of proguanil in pharmaceutical formulation  
Nate, Zondi; Gill, Atal A. S.; Shinde, Suraj; et al.

DIAMOND AND RELATED MATERIALS Volume: 111 Article Number: 108178 Published: JAN 2021

132. Removal of azo dyes in aqueous solutions using magnetized and chemically modified chitosan beads  
Muedas-Taipe, Golfer; Maza Mejia, Ily M.; Santillan, Fatima A.; et al.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 256 Article Number: 123595 Published: DEC 1 2020

131. Optimized and scalable synthesis of magnetic nanoparticles for RNA extraction in response to developing countries' needs in the detection and control of SARS-CoV-2  
Chacon-Torres, Julio C.; Reinoso, C.; Navas-Leon, Daniela G.; et al.  
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 19004 Published: NOV 4 2020

130. Synthesis of single-walled carbon nanotubes in rich hydrogen/air flames  
Zhang, Cen; Tian, Bo; Chong, Cheng Tung; et al.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 254 Article Number: 123479 Published: NOV 1 2020

129. A sustainable two-layer lignin-anodized composite coating for the corrosion protection of high-strength low-alloy steel  
Dastpak, Arman; Hannula, Pyry-Mikko; Lundstrom, Mari; et al.  
PROGRESS IN ORGANIC COATINGS Volume: 148 Article Number: 105866 Published: NOV 2020

128. Impact of the pulling rate on the redox state and magnetic domains of Fe-Si-O glass ceramic processed by LFZ method  
Salehizadeh, S. A.; Ferreira, N. M.; Ivanov, M. S.; et al.  
MATERIALS RESEARCH BULLETIN Volume: 131 Article Number: 110972 Published: NOV 2020

127. Synthesis, characterization and catalytic activity of Fe<sub>3</sub>O<sub>4</sub>@WO<sub>3</sub>/SBA-15 on photodegradation of the acid dichlorophenoxyacetic (2,4-D) under UV irradiation  
Lima, Maciel S.; Cruz-Filho, Joao F.; Noleto, Luis F. G.; et al.  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING Volume: 8 Issue: 5 Article Number: 104145 Published: OCT 2020

126. Thermosensitive Betulinic Acid-Loaded Magnetoliposomes: A Promising Antitumor Potential for Highly Aggressive Human Breast Adenocarcinoma Cells Under Hyperthermic Conditions  
Farcas, Claudia Geanina; Dehelean, Cristina; Pinzaru, Iulia Andreea; et al.  
INTERNATIONAL JOURNAL OF NANOMEDICINE Volume: 15 Pages: 8175-8200 Published: 2020

125. Recent Advances in Water Treatment Using Graphene-Based Materials  
Khaligh, Nader Ghaffari; Johan, Mohd Rafie  
MINI-REVIEWS IN ORGANIC CHEMISTRY Volume: 17 Issue: 1 Pages: 74-90 Published: 2020

124. Effects of pulsed laser and plasma interaction on Fe, Ni, Ti, and their oxides for LIBS Raman analysis in extraterrestrial environments  
Schroeder, Susanne; Rammelkamp, Kristin; Hanke, Franziska; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 9 Special Issue: SI Pages: 1667-1681 Published: SEP 2020

123. Investigation of the stability of NiFe-(oxy)hydroxide anodes in alkaline water electrolysis under industrially relevant conditions  
Pascuzzi, Marco Etzi Coller; Man, Alex J. W.; Goryachev, Andrey; et al.  
CATALYSIS SCIENCE & TECHNOLOGY Volume: 10 Issue: 16 Pages: 5593-5601 Published: AUG 21 2020

122. Use of polyethylenimine functionalised magnetic nanoparticles for gold thiosulfate recovery  
Ilankoon, N. D.; Aldrich, C.; Oraby, E. A.; et al.  
HYDROMETALLURGY Volume: 195 Article Number: 105375 Published: AUG 2020

121. Engineering nanostructured spinel ferrites by co-substitution for total water electrolysis by preferential exposure of metal cations on the surface  
Archana, V. N.; Rastogi, Pankaj Kumar; Thoufeeq, S.; et al.  
SUSTAINABLE ENERGY & FUELS Volume: 4 Issue: 8 Pages: 3915-3925 Published: AUG 1 2020

120. Sonosynthesis and characterization of a fluorescent Trojan Horse based on magnetic nanoparticles  
Reyman, Dolores; Perez-Ramos, Marina; Diaz-Oliva, Cristina  
JOURNAL OF NANOSTRUCTURE IN CHEMISTRY Volume: 10 Issue: 2 Pages: 105-113 Published: JUN 2020

119. Cytotoxic effect of thermosensitive magnetoliposomes loaded with gemcitabine and paclitaxel on human primary breast cancer cells (MGSO-3 line)  
Ribeiro, Rita F. L.; Ferreira, Roberta, V; Pedersoli, Davyston C.; et al.  
JOURNAL OF NANOPARTICLE RESEARCH Volume: 22 Issue: 7 Article Number: 172 Published: JUN 17 2020

118. Impact of the magnetic field on 3T3-E1 preosteoblasts inside SMART silk fibroin-based scaffolds decorated with magnetic nanoparticles  
Tanasă, Eugenia; Zaharia, Catalin; Hudita, Ariana; et al.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS Volume: 110 Article Number: 110714 Published: MAY 2020

117. Long-Term Sour Corrosion of Carbon Steel in Anoxic Conditions

Goldman, M.; Noel, J. J.; Shoesmith, D. W.

CORROSION Volume: 76 Issue: 3 Pages: 324-331 Published: MAR 2020

116. Low-cost sugarcane bagasse and peanut shell magnetic-composites applied in the removal of carbofuran and iprodione pesticides  
Paola Toledo-Jaldin, Helen; Sanchez-Mendieta, Victor; Blanco-Flores, Alien; et al.

ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH Volume: 27 Issue: 8 Pages: 7872-7885 Published: MAR 2020

115. Microstructure and chemical stability analysis of magnetic core coated with SILICA and functionalized with silane OTS  
Candian Lobato, Natalia Cristina; Ferreira, Angela de Mello; Weidler, Peter Georg; et al.  
APPLIED SURFACE SCIENCE Volume: 505 Article Number: 144565 Published: MAR 1 2020

114. Iron oxide nanoparticle core-shell magnetic microspheres: Applications toward targeted drug delivery  
Ayyanaar, Srinivasan; Kesavan, Mookkandi Palsamy; Balachandran, Chandrasekar; et al.  
NANOMEDICINE-NANOTECHNOLOGY BIOLOGY AND MEDICINE Volume: 24 Article Number: 102134 Published: FEB 2020

113. Photo-electrochemical ability of iron oxide nanoflowers fabricated via electrochemical anodization  
Mir, Jaffar Farooq; Rubab, S.; Shah, M. A.  
CHEMICAL PHYSICS LETTERS Volume: 741 Article Number: 137088 Published: FEB 16 2020

112. Graphene nanoribbons and iron oxide nanoparticles composite as a potential candidate in DNA sensing applications  
Rodriguez, B. A. G.; Perez-Caro, M.; Alencar, R. S.; et al.  
JOURNAL OF APPLIED PHYSICS Volume: 127 Issue: 4 Article Number: 044901 Published: JAN 31 2020

111. Magnetic Graphene Oxide Composite for the Microextraction and Determination of Benzophenones in Water Samples  
Medina, Alejandro; Antonio Casado-Carmona, Francisco; Lopez-Lorente, Angela I.; et al.  
NANOMATERIALS Volume: 10 Issue: 1 Article Number: 168 Published: JAN 2020

110. Microstrain analyses of Fe(3)O(4)NPs greenly synthesized using Gardenia jasminoides flower extract, during the photocatalytic removal of a commercial dye  
Espinoza-Gomez, Heriberto; Flores-Lopez, Lucia Z.; Alejandra Espinoza, Karla; et al.  
APPLIED NANOSCIENCE Volume: 10 Issue: 1 Pages: 127-140 Published: JAN 2020

109. Spin plasmonics and surface enhanced raman spectroscopy in label free biomolecular sensing  
Grigorescu, C.E.A., Iordache, A.-M., Rusu, M.I., (...), Tonetto, A., Notonier, R.  
International Conference on Transparent Optical Networks 2019-July, 8840169 (2019)

108. Improvement of magnetic solvent extraction using functionalized silica coated Fe<sub>3</sub>O<sub>4</sub> nanoparticles  
Candian Lobato, Natalia Cristina; Ferreira, Angela de Mello; Weidler, Peter Georg; et al.  
SEPARATION AND PURIFICATION TECHNOLOGY Volume: 229 Article Number: 115839 Published: DEC 15 2019

107. Simple continuous flow synthesis of linoleic and palmitic acid-coated magnetite nanoparticles  
Sawisai, Rotcharin; Wanchanthuek, Ratchanekorn; Radchatawedchakoon, Widchaya; et al.  
SURFACES AND INTERFACES Volume: 17 Article Number: 100344 Published: DEC 2019

106. Photo-Fenton Degradation of RB5 Dye in Aqueous Solution Using Fe Supported on Mexican Natural Zeolite  
Domenzain-Gonzalez, Jose; Castro-Arellano, Jose J.; Galicia-Luna, Luis A.; et al.  
INTERNATIONAL JOURNAL OF PHOTOENERGY Volume: 2019 Article Number: 4981631 Published: NOV 21 2019

105. In Vitro and In Vivo Antioxidant Activity of the New Magnetic-Cerium Oxide Nanoconjugates  
Turin-Moleavin, Ioana-Andreea; Fifere, Adrian; Lungoci, Ana-Lacramioara; et al.  
NANOMATERIALS Volume: 9 Issue: 11 Article Number: 1565 Published: NOV 2019

104. Hydrothermal synthesis of Fe<sub>3</sub>O<sub>4</sub>/TiO<sub>2</sub>/g-C<sub>3</sub>N<sub>4</sub>: Advanced photocatalytic application  
Raza, Adil; Shen, Honglie; Haidry, Azhar Ali; et al.  
APPLIED SURFACE SCIENCE Volume: 488 Pages: 887-895 Published: SEP 15 2019

103. Synthesis and Characterization of Hydrophilic gamma-Fe<sub>2</sub>O<sub>3</sub> Nanoparticles for Biomedical Applications  
Malaeru, Teodora; Enescu, Elena; Georgescu, Gabriela; et al.  
REVISTA DE CHIMIE Volume: 70 Issue: 6 Pages: 2026-2031 Published: JUN 2019

102. Raman spectroscopy to unravel the magnetic properties of iron oxide nanocrystals for bio-related applications  
Testa-Anta, Martin; Ramos-Docampo, Miguel A.; Comesana-Hermo, Miguel; et al.  
NANOSCALE ADVANCES Volume: 1 Issue: 6 Pages: 2086-2103 Published: JUN 1 2019

101. Clove and cinnamon: Novel anti-oxidant fuels for preparing magnetic iron oxide particles by the sol-gel auto-ignition method  
Bena-Arfa, Basam A. E.; Miranda Salvado, Isabel M.; Ferreira, Jose M. F.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 786 Pages: 71-76 Published: MAY 25 2019

100. Kinetics and mechanism of selenite reduction by zero valent iron under anaerobic condition activated and enhanced by dissolved Fe(II)  
Xu, Lin; Huang, Yongheng  
SCIENCE OF THE TOTAL ENVIRONMENT Volume: 664 Pages: 698-706 Published: MAY 10 2019

99. Structure, thermal, magnetic and magneto-optical properties of core/shell Fe<sub>3</sub>O<sub>4</sub>@MoS<sub>2</sub> doped diamagnetic glasses  
Chen, Qiuling; Su, Kai; Zhang, Meng

98. Effects of polyethylene glycol (PEG) on the corrosion inhibition of mild steel by cerium nitrate in chloride solution  
Boudellioua, H.; Hamlaoui, Y.; Tifouti, L.; et al.

APPLIED SURFACE SCIENCE Volume: 473 Pages: 449-460 Published: APR 15 2019

97. Biomimetic Mineralization of Magnetic Iron Oxide Nanoparticles Mediated by Bi-Functional Copolyptides  
Liu, Liu; Pu, Ximing; Yin, Guangfu; et al.

MOLECULES Volume: 24 Issue: 7 Article Number: 1401 Published: APR 10 2019

96. Controlling the transverse proton relaxivity of magnetic graphene oxide  
Thapa, Bibek; Diaz-Diestra, Daysi; Badillo-Diaz, Dayra; et al.

SCIENTIFIC REPORTS Volume: 9 Article Number: 5633 Published: APR 4 2019

95. Effects of Nanoscale Structures on Photothermal Heating Behaviors of Surface-Modified Fe<sub>3</sub>O<sub>4</sub> Nanoparticles  
Sadat, M. E.; Mast, David B.; Sookoor, Jason; et al.

NANO LIFE Volume: 9 Issue: 1-2 Special Issue: SI Article Number: UNSP 1950001 Published: MAR-JUN 2019

94. A novel route to the formation of 3D nanoflower-like hierarchical iron oxide nanostructure  
Ali, Ghafar; Park, Yang Jeong; Hussain, Arif; et al.

NANOTECHNOLOGY Volume: 30 Issue: 9 Article Number: 095601 Published: MAR 1 2019

93. Fe<sub>3</sub>O<sub>4</sub>/BaTiO<sub>3</sub> COMPOSITES WITH CORE-SHELL STRUCTURE

Tanasa, Eugenia; Andronescu, Ecaterina; Cernea, Marin; et al.

UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE Volume: 81 Issue: 2 Pages: 171-180 Published: 2019

92. ATR-FTIR VERSUS RAMAN SPECTROSCOPY USED FOR STRUCTURAL ANALYSES OF THE IRON OXIDE NANOPARTICLES

Racuciu, M.; Oancea, S.

ROMANIAN REPORTS IN PHYSICS Volume: 71 Issue: 3 Article Number: 507 Published: 2019

91. Remediation of selected heavy metals (Pb, Cd) from fly ash using magnetite nanoparticles  
Yadav, Virendra Kumar; Fulekar, M. H.

JOURNAL OF THE INDIAN CHEMICAL SOCIETY Volume: 96 Issue: 1 Special Issue: SI Pages: 203-206 Published: JAN 2019

90. Adsorption of Methylene Blue on Titanate Nanotubes Synthesized with Ultra-Small Fe<sub>3</sub>O<sub>4</sub> Nanoparticles  
Marc, Maciej; Dudek, Mirosław R.; Koziol, Jacek J.; et al.

NANO Volume: 13 Issue: 12 Article Number: 1850142 Published: DEC 2018

89. Surface micro-structuring of type 304 stainless steel by femtosecond pulsed laser: effect on surface wettability and corrosion resistance  
Singh, A. K.; Kumar, B. Sunil; Jha, P.; et al.

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 124 Issue: 12 Article Number: 846 Published: DEC 2018

88. Magnetite originating from bonfires in a Brazilian prehistoric Anthrosol: A micro-Raman approach  
de Sousa, Daniel Vieira; Ker, Joao Carlos; Schaefer, Carlos Ernesto R.; et al.

CATENA Volume: 171 Pages: 552-564 Published: DEC 2018

87. Composite photocatalysts containing MIL-53(Fe) as a heterogeneous photo-Fenton catalyst for the decolorization of rhodamine B under visible light irradiation

Vinh Huu Nguyen; Long Giang Bach; Quynh Thi Phuong Bui; et al.

JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING Volume: 6 Issue: 6 Pages: 7434-7441 Published: DEC 2018

86. Extraction of nanosilica from oil palm leaves and its application as support for lipase immobilization  
Onoja, Emmanuel; Chandren, Sheela; Razak, Fazira Ilyana Abdul; et al.

JOURNAL OF BIOTECHNOLOGY Volume: 283 Pages: 81-96 Published: OCT 10 2018

85. Fe/Fe<sub>2</sub>O<sub>3</sub> nanoparticles as anode catalyst for exclusive power generation and degradation of organic compounds using microbial fuel cell

Mohamed, Hend Omar; Obaid, M.; Poo, Kyung-Min; et al.

CHEMICAL ENGINEERING JOURNAL Volume: 349 Pages: 800-807 Published: OCT 1 2018

84. Recent Application of the Various Nanomaterials and Nanocatalysts for the Heavy Metals' Removal from Wastewater  
Khaligh, Nader Ghaffari; Johan, Mohd Rafie

NANO Volume: 13 Issue: 9 Article Number: 1830006 Published: SEP 2018

83. A theranostic nanocomposite system based on iron oxide-drug nanocages for targeted magnetic field responsive chemotherapy  
Kesavan, Mookkandi Palsamy; Kotla, Nirajan G.; Ayyanaar, Srinivasan; et al.

NANOMEDICINE-NANOTECHNOLOGY BIOLOGY AND MEDICINE Volume: 14 Issue: 5 Pages: 1643-1654 Published: JUL 2018

82. Immobilization of PMIDA on Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles surface: Mechanism of bonding  
Demin, Alexander M.; Mekhaev, Alexander V.; Esin, Alexander A.; et al.

APPLIED SURFACE SCIENCE Volume: 440 Pages: 1196-1203 Published: MAY 15 2018

81. Effective reduction of p-nitrophenol by silver nanoparticle loaded on magnetic Fe<sub>3</sub>O<sub>4</sub>/ATO nano-composite  
Karki, Hem Prakash; Ojha, Devi Prashad; Joshi, Mahesh Kumar; et al.  
APPLIED SURFACE SCIENCE Volume: 435 Pages: 599-608 Published: MAR 30 2018
80. Heavy-metal detectors based on modified ferrite nanoparticles  
Klekotka, Urszula; Winska, Ewelina; Zambrzycka-Szelewa, Elzbieta; et al.  
BEILSTEIN JOURNAL OF NANOTECHNOLOGY Volume: 9 Pages: 762-770 Published: FEB 28 2018
79. Synthesis of magnetite by coprecipitation and sintering and its characterization  
Dubey, Vivekanand; Kain, Vivekanand  
MATERIALS AND MANUFACTURING PROCESSES Volume: 33 Issue: 8 Pages: 835-839 Published: 2018
78. Nanopatterning of steel by one-step anodization for anti-adhesion of bacteria  
Chen, S., Li, Y., Cheng, Y.F.  
Scientific Reports 7(1),5326 (2017)
77. Iskenderoglu, Demet; Guney, Harun  
Synthesis and characterization of ZnO:Ni thin films grown by spray-deposition  
CERAMICS INTERNATIONAL Volume: 43 Issue: 18 Pages: 16593-16599 Published: DEC 15 2017
76. Bharasi, N. Sivai; Pujar, M. G.; Mallika, C.; et al.  
Corrosion and Passive Film Formation Studies on Modified 9Cr-1Mo Steel in Different Sodium Hydroxide Concentrations at Room Temperature and in Boiling Condition  
TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS Volume: 70 Issue: 8 Pages: 1953-1963 Published: OCT 2017
75. Guo, Juanjuan; Zheng, Zhichang; Chen, Chi; et al.  
Enhanced Production of kappa-Carrageenase and kappa-Carrageenan Oligosaccharides through Immobilization of Thalassospira sp Fjfst-332 with Magnetic Fe<sub>3</sub>O<sub>4</sub>-Chitosan Microspheres  
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY Volume: 65 Issue: 36 Pages: 7934-7943 Published: SEP 13 2017
74. Puente-Urbina, Allen; Montero-Campos, Virginia  
Porous Materials Modified with Fe<sub>3</sub>O<sub>4</sub> Nanoparticles for Arsenic Removal in Drinking Water  
WATER AIR AND SOIL POLLUTION Volume: 228 Issue: 9 Article Number: 374 Published: SEP 2017
73. Zou, Peng; Tyner, Katherine; Raw, Andre; et al.  
Physicochemical Characterization of Iron Carbohydrate Colloid Drug Products  
AAPS JOURNAL Volume: 19 Issue: 5 Pages: 1359-1376 Published: SEP 2017
72. Ragavan, K. V.; Rastogi, Navin K.  
beta-Cyclodextrin capped graphene-magnetite nanocomposite for selective adsorption of Bisphenol-A  
CARBOHYDRATE POLYMERS Volume: 168 Pages: 129-137 Published: JUL 15 2017
71. Singh, K. K.; Senapati, K. K.; Sarma, K. C.  
Synthesis of superparamagnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticles coated with green tea polyphenols and their use for removal of dye pollutant from aqueous solution  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING Volume: 5 Issue: 3 Pages: 2214-2221 Published: JUN 2017
70. Candian Lobato, Natalia Cristina; Mansur, Marcelo Borges; Ferreira, Angela de Mello  
Characterization and Chemical Stability of Hydrophilic and Hydrophobic Magnetic Nanoparticles  
MATERIALS RESEARCH-IBERO-AMERICAN JOURNAL OF MATERIALS Volume: 20 Issue: 3 Pages: 736-746 Published: MAY-JUN 2017
69. Taufik, Ardiansyah; Saleh, Rosari  
Synergistic effect between ternary iron-zinc-copper mixed oxides and graphene for photocatalytic water decontamination  
CERAMICS INTERNATIONAL Volume: 43 Issue: 4 Pages: 3510-3520 Published: MAR 2017
68. Badhe, Ravindra V.; Kumar, Pradeep; Choonara, Yahya E.; et al.  
Induction of creep crack morphology in iron oxide microparticles: An outcome of the common-ion effect  
MATERIALS LETTERS Volume: 188 Pages: 417-422 Published: FEB 1 2017
67. Joseph, Delina; Rodriguez, Raul D.; Verma, Akash; et al.  
Electrochemistry and surface-enhanced Raman spectroscopy of CTAB modulated interactions of magnetic nanoparticles with biomolecules  
RSC ADVANCES Volume: 7 Issue: 7 Pages: 3628-3634 Published: 2017
66. Singh, K.K., Sarma, K.C.  
A simple and feasible approach to decorating MWCNT with Fe<sub>3</sub>O<sub>4</sub> and ZnS and their use as a magnetically separable photocatalyst in the degradation of Cr(VI) in wastewater  
Environmental Nanotechnology, Monitoring and Management 6, 206-213 DOI: 10.1016/j.enmm.2016.11.003 (2016)
65. Prakash, T., Williams, G.V.M., Kennedy, J., Rubanov, S.  
High spin-dependent tunneling magnetoresistance in magnetite powders made by arc-discharge  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 12 Article Number: 123905 DOI: 10.1063/1.4963293 Published: SEP 28 2016
64. Lobato, N.C.C., Ferreira, A.D.M., Mansur, M.B.

Evaluation of magnetic nanoparticles coated by oleic acid applied to solvent extraction processes  
SEPARATION AND PURIFICATION TECHNOLOGY Volume: 168 Pages: 93-100 DOI: 10.1016/j.seppur.2016.05.027 Published:  
AUG 10 2016

63. Ivashchenko, O., Jurga-Stopa, J., Coy, E., Peplinska, B., Pietralik, Z., Jurga, S.  
Fourier transform infrared and Raman spectroscopy studies on magnetite/Ag/antibiotic nanocomposites  
APPLIED SURFACE SCIENCE Volume: 364 Pages: 400-409 DOI: 10.1016/j.apsusc.2015.12.149 Published: FEB 28 2016
62. Williams, M.J., Sánchez, E., Aluri, E.R., Douglas, F.J., Maclare, D.A., Collins, O.M., Cussen, E.J., Budge, J.D., Sanders, L.C., Michaelis, M., Smale, C.M., Cinatl, J., Lorrio, S., Krueger, D., De Rosales, R.T.M., Corr, S.A.  
Microwave-assisted synthesis of highly crystalline, multifunctional iron oxide nanocomposites for imaging applications  
RSC ADVANCES Volume: 6 Issue: 87 Pages: 83520-83528 DOI: 10.1039/c6ra11819d Published: 2016
61. Ramanaidou, E., Wells, M., Lau, I., Laukamp, C.  
Characterization of iron ore by visible and infrared reflectance and, Raman spectroscopies  
Iron Ore: Mineralogy, Processing and Environmental Sustainability 191-228 DOI: 10.1016/B978-1-78242-156-6.00006-X (2015)
60. Barot, B.S., Parejiya, P.B., Shelat, P.K., Shah, G.B., Mehta, D.M., Pathak, T.V.  
Physicochemical and toxicological characterization of sucrose-bound polynuclear iron oxyhydroxide formulations  
Journal of Pharmaceutical Investigation 45(1), 35-49 DOI: 10.1007/s40005-014-0143-2 (2015)
59. Lu, J.F., Tsai, C.J.  
Reduction kinetics of hematite to magnetite under hydrothermal treatments  
RSC Advances 5(22), 17236-17244 DOI: 10.1039/c4ra12389a (2015)
58. Singh, P.N., Tiwary, D., Sinha, I.  
Chromium removal from aqueous media by superparamagnetic starch functionalized maghemite nanoparticles  
JOURNAL OF CHEMICAL SCIENCES Volume: 127 Issue: 11 Pages: 1967-1976 DOI: 10.1007/s12039-015-0957-0 Published: NOV 2015
57. Ibarra, J., Melendres, J., Almada, M., Burboa, M.G., Taboada, P., Juárez, J., Valdez, M.A.  
Synthesis and characterization of magnetite/PLGA/chitosan nanoparticles  
MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 9 Article Number: 095010 DOI: 10.1088/2053-1591/2/9/095010 Published: SEP 2015
56. Herrera, W.T., Ramos Guivar, J.A., González, J.C., Baggio-Saitovitch, E.M.  
Structural and vibrational studies of fatty acids-functionalized iron oxide nanoparticles via alkaline co-precipitation route  
NANOCON 2015: 7TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION Pages: 511-519  
Published: 2015
55. Venkateswarlu, S., Yoon, M.  
Surfactant-free green synthesis of Fe<sub>3</sub>O<sub>4</sub> nanoparticles capped with 3,4-dihydroxy-phenethylcarbamodithioate: stable recyclable magnetic nanoparticles for the rapid and efficient removal of Hg(II) ions from water  
DALTON TRANSACTIONS Volume: 44 Issue: 42 Pages: 18427-18437 DOI: 10.1039/c5dt03155a Published: 2015
54. Ong, Hun Tiar; Julkapli, Nurhidayatullaili Muhd; Abd Hamid, Sharifah Bee; et al.  
Effect of magnetic and thermal properties of iron oxide nanoparticles (IONs) in nitrile butadiene rubber (NBR) latex  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 395 Pages: 173-179 Published: DEC 1 2015
53. Joshi, Mahesh Kumar; Pant, Hem Raj; Liao, Nina; et al.  
In-situ deposition of silver-iron oxide nanoparticles on the surface of fly ash for water purification  
JOURNAL OF COLLOID AND INTERFACE SCIENCE Volume: 453 Pages: 159-168 Published: SEP 1 2015
52. Andrade, Luiza N.; Amorim, Camila C.; Santos, Sara V.; et al.  
Efficient demulsification of wastewater by steel furnace dust. with amphiphilic and surface charge properties  
CHEMICAL ENGINEERING JOURNAL Volume: 271 Pages: 281-286 Published: JUL 1 2015
51. Tavengwa, Nikita Tawanda; Cukrowska, Ewa; Chimuka, Luke  
Sequestration of U(VI) from aqueous solutions using precipitate ion imprinted polymers endowed with oleic acid functionalized magnetite  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY Volume: 304 Issue: 2 Pages: 933-943 Published: MAY 2015
50. Altan, Cem L.; Lenders, Jos J. M.; Bomans, Paul H. H.; et al.  
Partial Oxidation as a Rational Approach to Kinetic Control in Bioinspired Magnetite Synthesis  
CHEMISTRY-A EUROPEAN JOURNAL Volume: 21 Issue: 16 Pages: 6150-6156 Published: APR 13 2015
49. Yusoff, N.; Kumar, S. Vijay; Pandikumar, A.; et al.  
Core-shell Fe<sub>3</sub>O<sub>4</sub>-ZnO nanoparticles decorated on reduced graphene oxide for enhanced photoelectrochemical water splitting  
CERAMICS INTERNATIONAL Volume: 41 Issue: 3 Pages: 5117-5128 Part: B Published: APR 2015
48. Dolores, Reyman; Raquel, Serrano; Adianez, Garcia-Leis  
Sonochemical synthesis of iron oxide nanoparticles loaded with folate and cisplatin: Effect of ultrasonic frequency  
ULTRASONICS SONOCHEMISTRY Volume: 23 Pages: 391-398 Published: MAR 2015
47. Asfaram, Arash; Ghaedi, Mehrorang; Goudarzi, Alireza; et al.  
Response surface methodology approach for optimization of simultaneous dye and metal ion ultrasound-assisted adsorption onto Mn doped Fe<sub>3</sub>O<sub>4</sub>-NPs loaded on AC: kinetic and isothermal studies

46. Singh, Mahander Pratap; Raghupathy, Y.; Natarajan, K. A.; et al.  
Synthesis, electron microscopy and anti-microbial properties of Fe<sub>3</sub>O<sub>4</sub>-Ag nanotubes  
RSC ADVANCES Volume: 5 Issue: 48 Pages: 38164-38169 Published: 2015
45. Baibarac, M., Sima, M., Matei, E., Pasuk, I., Mihut, L.  
Synthesis and Raman scattering of multiferroic Fe-Pb(Zr0.2Ti0.8)O<sub>3</sub> core-shell wire arrays  
Physica Status Solidi (A) Applications and Materials Science 211(1), 200-205 DOI: 10.1002/pssa.201330062 (2014)
44. Modh, N., Mehta, D., Parejiya, P., Popat, A., Barot, B.  
An overview of recent patents on nanosuspension  
Recent Patents on Drug Delivery and Formulation 8(2), 144-154 (2014)
43. Tai, M. F.; Lai, C. W.; Hamid, S. B. A.; et al.  
Facile synthesis of magnetite iron oxide nanoparticles via precipitation method at different reaction temperatures  
MATERIALS RESEARCH INNOVATIONS Volume: 18 Supplement: S6 Pages: 470-473 Published: DEC 2014
42. Gao, Yanyan; Zhong, Daobo; Zhang, Dafeng; et al.  
Thermal regeneration of recyclable reduced graphene oxide/Fe<sub>3</sub>O<sub>4</sub> composites with improved adsorption properties  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY Volume: 89 Issue: 12 Pages: 1859-1865 Published: DEC 2014
41. Chowdhury, Anirban; Iyyappan, Ramasamy; Majumdar, Dipanwita; et al.  
Structural and spectroscopic characterisations of the surface oxide scales and inclusions present on edge-burst hot-rolled steel coils  
MATERIALS CHEMISTRY AND PHYSICS Volume: 148 Issue: 1-2 Pages: 276-283 Published: NOV 14 2014
40. Al'myashev, V. I.; Gareev, K. G.; Ionin, S. A.; et al.  
Investigation of the structure, elemental and phase compositions of Fe<sub>3</sub>O<sub>4</sub>-SiO<sub>2</sub> composite layers by scanning electron microscopy, X-ray spectroscopy, and thermal nitrogen desorption methods  
PHYSICS OF THE SOLID STATE Volume: 56 Issue: 11 Pages: 2155-2159 Published: NOV 2014
39. Lenders, Jos J. M.; Altan, Cem L.; Bomans, Paul H. H.; et al.  
A Bioinspired Coprecipitation Method for the Controlled Synthesis of Magnetite Nanoparticles  
CRYSTAL GROWTH & DESIGN Volume: 14 Issue: 11 Pages: 5561-5568 Published: NOV 2014
38. Kumar, Pawan; No-Lee, Heung; Kumar, Rajesh  
Synthesis of phase pure iron oxide polymorphs thin films and their enhanced magnetic properties  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 25 (10), pp. 4553-4561 OCT 2014
37. Venkateswarlu, Sada; Kumar, B. Natesh; Prasad, C. H.; et al.  
Bio-inspired green synthesis of Fe<sub>3</sub>O<sub>4</sub> spherical magnetic nanoparticles using Syzygium cumini seed extract  
PHYSICA B-CONDENSED MATTER 449, pp. 67-71 SEP 15 2014
36. Dudek, Gabriela; Gnus, Malgorzata; Turczyn, Roman; et al.  
Pervaporation with chitosan membranes containing iron oxide nanoparticles  
SEPARATION AND PURIFICATION TECHNOLOGY 133, pp. 8-15 SEP 8 2014
35. Prozorov, Tanya; Perez-Gonzalez, Teresa; Valverde-Tercedor, Carmen; et al.  
Manganese incorporation into the magnetosome magnetite: magnetic signature of doping  
EUROPEAN JOURNAL OF MINERALOGY 26 (4), pp. 457-471 AUG 2014
34. Surendra, M. Krishna; De, Subhra Kanti; Rao, M. S. Ramachandra  
Application Worthy SPIONs: Coated Magnetic Nanoparticles  
IEEE TRANSACTIONS ON MAGNETICS Volume: 50 Issue: 7 Article Number: 5200306 Part: 2 Published: JUL 2014
33. Ortiz-Morales, M.; Frausto-Reyes, C.; Soto-Bernal, J. J.; et al.  
Infrared nanosecond pulsed laser irradiation of stainless steel: Micro iron-oxide zones generation  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 128, pp. 681-685 JUL 15 2014
32. Wang, Xiang; Pu, Shengl; Ji, Hongzhu; et al.  
Optical transmittance of ferromagnetic materials in the visible range  
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 16 (7-8), pp. 771-775 JUL-AUG 2014
31. Liang, Liping; Guan, Xiaohong; Shi, Zhong; et al.  
Coupled Effects of Aging and Weak Magnetic Fields on Sequestration of Selenite by Zero-Valent Iron  
ENVIRONMENTAL SCIENCE & TECHNOLOGY 48 (11), pp. 6326-6334 JUN 3 2014
30. Urquijo, Jeaneth Patricia; Casanova, Herley; Morales, Alvaro L.; et al.  
Engineering iron oxide nanoparticles for biomedicine and bioengineering applications  
Revista Facultad de Ingeniería Universidad de Antioquia Issue: 71 Pages: 230-243 Published: 2014-06
29. Lu, Jie-feng; Tsai, Cho-Jen  
Hydrothermal phase transformation of hematite to magnetite  
NANOSCALE RESEARCH LETTERS Volume: 9 Article Number: 230 Published: MAY 13 2014

28. Chakraborty, Gopa; Kumar, N.; Das, C. R.; et al.  
Study on microstructure and wear properties of different nickel base hardfacing alloys deposited on austenitic stainless steel  
SURFACE & COATINGS TECHNOLOGY 244, pp.180-188 APR 15 2014
27. Joshi, Mahesh Kumar; Pant, Hem Raj; Kim, Han Joo; et al.  
One-pot synthesis of Ag-iron oxide/reduced graphene oxide nanocomposite via hydrothermal treatment  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 446, pp. 102-108 APR 5 2014
26. Yardley, James T.; Hagadorn, Alexis  
Characterization of the Chemical Nature of the Black Ink in the Manuscript of The Gospel of Jesus 's Wife through Micro-Raman Spectroscopy  
HARVARD THEOLOGICAL REVIEW 107 (2), pp. 162-164 APR 2014
25. Piquer, C.; Laguna-Marcos, M. A.; Roca, A. G.; et al.  
Fe K-Edge X-ray Absorption Spectroscopy Study of Nanosized Nominal Magnetite  
JOURNAL OF PHYSICAL CHEMISTRY C 118 (2), pp.1332-1346 JAN 16 2014
24. Gareev, K. G.; Kononova, I. E.; Levitckii, V. S.; et al.  
Influence of constant magnetic field on aggregation processes in magnetite colloids  
Journal of Physics Conference Series Volume: 572 Article Number: 012027 Published: 2014
23. Biswal, Mandakini; Suryawanshi, Anil; Thakare, Vishal; et al.  
Mesoscopic magnetic iron oxide spheres for high performance Li-ion battery anode: a new pulsed laser induced reactive micro-bubble synthesis process  
JOURNAL OF MATERIALS CHEMISTRY A 1 (44), pp. 13932-13940 2013
22. Miyazaki, Celina M.; Riul, Antonio, Jr.; Dos Santos, David S., Jr.; et al.  
Bending of Layer-by-Layer Films Driven by an External Magnetic Field  
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES 14 (7), 12953-12969, JUL 2013
21. Ribeiro, V.G.P., Barreto, A.C.H., Denardin, J.C., Mele, G., Carbone, L., Mazzetto, S.E., Sousa, E.M.B., Fechine, P.B.A.  
Magnetic nanoparticles coated with anacardic acid derived from cashew nut shell liquid  
Journal of Materials Science 48 (22), pp. 7875-7882, 2013
20. Ming, H., Ming, J., Li, X., Zhou, Q., Jin, L., Fu, Y., Adkins, J., (...), Zheng, J.  
Synthesis of N-doped carbon coated metal oxide nanoparticles for enhanced Li-ion storage ability  
RSC Advances 3 (36), pp. 15613-15617, 2013
19. Barreto, A.C.H., Santiago, V.R., Freire, R.M., Mazzetto, S.E., Denardin, J.C., Mele, G., Cavalcante, I.M., (...), Fechine, P.B.A.  
Magnetic nanosystem for cancer therapy using oncocalyxone A, an antitumour secondary metabolite isolated from a Brazilian plant  
International Journal of Molecular Sciences 14 (9), pp. 18269-18283, 2013
18. Kartsonakis, I., Papadopoulos, N., Tserotas, Ph., Svec, P.  
Low-temperature synthesis of maghemite nanoparticles  
Key Engineering Materials 543, pp. 468-47, 2013
17. Nowicka, A.M., Kowalczyk, A., Jarzebinska, A., Donten, M., Krysinski, P., Stojek, Z., Augustin, E., Mazerska, Z.  
Progress in targeting tumor cells by using drug-magnetic nanoparticles conjugate  
Biomacromolecules 14 (3), pp. 828-833, 2013
16. Ibupoto, Z.H., Khun, K., Lu, J., Liu, X., Alsalhi, M.S., Atif, M., Ansari, A.A., Willander, M.  
Well aligned ZnO nanorods growth on the gold coated glass substrate by aqueous chemical growth method using seed layer of Fe<sub>3</sub>O<sub>4</sub> and Co<sub>3</sub>O<sub>4</sub> nanoparticles  
Journal of Crystal Growth 368, pp. 39-46, 2013
15. Bourgeois, F., Gergaud, P., Rennier, H., Leclerc, C., Feuillet, G.  
Low temperature oxidation mechanisms of nanocrystalline magnetite thin film  
Journal of Applied Physics 113 (1), art. no. 013510, 2013
14. Zhang, Q., Su, H., Luo, J., Wei, Y.  
"Click" magnetic nanoparticle-supported palladium catalyst: A phosphine-free, highly efficient and magnetically recoverable catalyst for Suzuki-Miyaura coupling reactions  
Catalysis Science and Technology 3 (1), pp. 235-243, 2013
13. Soler, M.A.G., Qu, F.  
Raman spectroscopy of iron oxide nanoparticles  
Raman Spectroscopy for Nanomaterials Characterization 379-416 DOI: 10.1007/978-3-642-20620-7\_14 (2012)
12. Costa, A.L., Ballarin, B., Spegni, A., Casoli, F., Gardini, D.  
Synthesis of nanostructured magnetic photocatalyst by colloidal approach and spray-drying technique  
Journal of Colloid and Interface Science 388 (1), pp. 31-39, 2012
11. Yuan, Y., Rende, D., Altan, C.L., Bucak, S., Ozisik, R., Borca-Tasciuc, D.-A.  
Effect of surface modification on magnetization of iron oxide nanoparticle colloids  
Langmuir 28 (36), pp. 13051-13059, 2012

10. Pola, J., Gondal, M.A., Urbanová, M., Pokorná, D., Masoudi, H.M., Bakardjieva, S., Bastl, Z., (...), Siddiqui, M.N.  
Laser photochemical deposition of magnetite nanograins in a-Fe/C/O composite: High-pressure metal oxide polymorph surviving ambient conditions  
Journal of Photochemistry and Photobiology A: Chemistry 243, pp. 33-40, 2012
9. Dincer, I., Tozkoparan, O., German, S.V., Markin, A.V., Yildirim, O., Khomutov, G.B., Gorin, D.A., (...), Elerman, Y.  
Effect of the number of iron oxide nanoparticle layers on the magnetic properties of nanocomposite LbL assemblies  
Journal of Magnetism and Magnetic Materials 324 (19), pp. 2958-2963, 2012.
8. Li, Y.-S., Church, J.S., Woodhead, A.L.  
Infrared and Raman spectroscopic studies on iron oxide magnetic nano-particles and their surface modifications  
Journal of Magnetism and Magnetic Materials 324 (8), 1543-1550, 2012.
7. Nawara, K., Romiszewski, J., Kijewska, K., Szczytko, J., Twardowski, A., Mazur, M., Krysinski, P.  
Adsorption of doxorubicin onto citrate-stabilized magnetic nanoparticles  
Journal of Physical Chemistry C 116 (9), 5598-5609, 2012.
6. Barreto A. C. H.; Maia F. J. N.; Santiago V. R.; et al.  
Novel ferrofluids coated with a renewable material obtained from cashew nut shell liquid  
MICROFLUIDICS AND NANOFUIDICS 12 (5), 677-686, MAR 2012.
5. Tung, T.T., Feller, J.-F., Kim, T., Kim, H., Yang, W.S., Suh, K.S.  
Electromagnetic properties of Fe<sub>3</sub>O<sub>4</sub>-functionalized graphene and its composites with a conducting polymer  
Journal of Polymer Science, Part A: Polymer Chemistry 50 (5), pp. 927-935, 2012.
4. Barreto, A.C.H., Santiago, V.R., Mazzetto, S.E., Denardin, J.C., Lavín, R., Mele, G., Ribeiro, M.E.N.P., (...), Fechine, P.B.A.  
Magnetic nanoparticles for a new drug delivery system to control quercetin releasing for cancer chemotherapy  
Journal of Nanoparticle Research 13 (12), 6545-6553, 2011.
3. Pu Shengli; Bai Xuekun; Wang Lunwei  
Temperature dependence of photonic crystals based on thermoresponsive magnetic fluids  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (22) Pages: 2866-2871, NOV 2011.
2. Cheng J. P.; Ma R.; Chen X.; et al.  
Effect of ferric ions on the morphology and size of magnetite nanocrystals synthesized by ultrasonic irradiation  
CRYSTAL RESEARCH AND TECHNOLOGY 46 (7) Pages: 723-730, JUL 2011.
1. Can Musa Mutlu; Ozcan Sadan; Ceylan Abdullah; et al.  
Effect of milling time on the synthesis of magnetite nanoparticles by wet milling  
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS 172 (1), pp.72-75, AUG 15 2010
- 69. "Optical and vibrational spectra analysis of CVD - Mixed oxide films: Optimization of the films electrochromic performance"**  
Ivanova, T., Gesheva, K.A., Abrashev, M., Sharlandjiev, P., Nazarova, D.  
Journal of Physics: Conference Series 223 (1), art. no. 012039 (2010). (5 pages)
2. Prameela, C., Anjaiah, M., KrishnaMurthy, K., Srinivasarao, K.  
Optical and IR studies on (MoO<sub>3</sub>)<sub>1-x</sub>-(WO<sub>3</sub>)<sub>x</sub> mixed oxide thin films  
Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B 57(3), 139-145 DOI: 10.13036/17533562.57.3.014 (2016)
1. Prameela, C., Srinivasarao, K.  
Characterization of (MoO<sub>3</sub>)<sub>x</sub> - (Wo<sub>3</sub>)<sub>1-x</sub> composites  
International Journal of Applied Engineering Research Volume 10, Issue 4, 2015, Pages 9865-9875
- 70. "Growth and characterization of La<sub>2</sub>CoMnO<sub>6</sub> crystals doped with Pb"**  
Milenov, T.I., Rafailov, P.M., Abrashev, M.V., Nikolova, R.P., Nakatsuka, A., Avdeev, G.V., Veleva, M.N., Dobreva S., Yankova L, and Gospodinov, M.M.  
Materials Science and Engineering B: Solid-State Materials for Advanced Technology 172 (1), pp. 80-84 (2010).
4. Li, Qiuhang; Xing, Lei; Xu, Mingxiang  
Magnetic properties, resistivity and magnetoresistance effects of double perovskite La<sub>2</sub>Co<sub>1-x</sub>FexMnO<sub>6</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 710 Pages: 771-777 Published: JUL 5 2017
3. Meng, Junling; Yuan, Na; Liu, Xiaojuan; et al.  
Synergistic Effects of Intrinsic Cation Disorder and Electron-Deficient Substitution on Ion and Electron Conductivity in La<sub>1-x</sub>SrxCo<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>3-delta</sub> (x=0, 0.5, and 0.75)  
INORGANIC CHEMISTRY Volume: 54 Issue: 6 Pages: 2820-2829 Published: MAR 16 2015
2. Orayech, B.; Urcelay-Olabarria, I.; Lopez, G. A.; et al.

Synthesis, structural, magnetic and phase-transition studies of the ferromagnetic La<sub>2</sub>CoMnO<sub>6</sub> double perovskite by symmetry-adapted modes

DALTON TRANSACTIONS Volume: 44 Issue: 31 Pages: 13867-13880 Published: 2015

1. Bai, Y., Xia, Y., Li, H., Han, L., Wang, Z., Wu, X., Lv, S., (...), Meng, J.

A-site-doping enhanced B-site ordering and correlated magnetic property in La<sub>2-x</sub>B<sub>x</sub>CoMnO<sub>6</sub>  
Journal of Physical Chemistry C 116 (32), pp. 16841-16847, 2012

71. "Polarized Raman spectroscopy of nearly tetragonal BiFeO<sub>3</sub> thin films"

M. N. Iliev, M. V. Abrashev, D. Mazumdar, V. Shelke, and A. Gupta

Physical Review B 82, 014107 (2010). (5 pages)

56. Sol-gel synthesis, characterization, dielectric and anti-bacterial properties of soft ferromagnetic oxide system Gd<sub>4-x</sub>Sr<sub>1+x</sub>Fe<sub>5-x</sub>ZnxO<sub>14+delta</sub> [0 <= x <= 0.45]

Thangaraj, Venkatesan; Chang, Jih-Hsing; Shkir, Mohd; et al.

INORGANIC CHEMISTRY COMMUNICATIONS Volume: 125 Article Number: 108432 Published: MAR 2021

55. Patterning enhanced tetragonality in BiFeO<sub>3</sub> thin films with effective negative pressure by helium implantation

Toulouse, C.; Fischer, J.; Farokhipoor, S.; et al.

PHYSICAL REVIEW MATERIALS Volume: 5 Issue: 2 Article Number: 024404 Published: FEB 9 2021

54. Magnetoelastic distortion of multiferroic BiFeO<sub>3</sub> in the canted antiferromagnetic state

Room, T.; Viirok, J.; Peedu, L.; et al.

PHYSICAL REVIEW B Volume: 102 Issue: 21 Article Number: 214410 Published: DEC 9 2020

53. Emergence of two-magnon modes below spin-reorientation transition and phonon-magnon coupling in bulk BiFeO<sub>3</sub>: An infrared spectroscopic study

Das, B. K.; Ramachandran, B.; Dixit, A.; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 832 Article Number: 154754 Published: AUG 15 2020

52. Built-in electric field induces polarization rotation in bilayer BiFeO<sub>3</sub>/(Ba,Sr)TiO<sub>3</sub> thin films

Razumnyaya, G.; Mikheykin, A. S.; Stryukov, D., V; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 812 Article Number: 152164 Published: JAN 5 2020

51. Enhanced magnetization in multiferroic BiFeO<sub>3</sub> through structural distortion and particle size reduction

Bagwaiya, Toshi; Reshi, Hilal A.; Khade, Poonam; et al.

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 483 Pages: 59-64 Published: AUG 1 2019

50. Lattice dynamics of mixed-phase BiFeO<sub>3</sub> films: Insights from micro-Raman scattering

Liang, Z. W.; Wang, Z-H; Feng, Y.; et al.

PHYSICAL REVIEW B Volume: 99 Issue: 6 Article Number: 064304 Published: FEB 25 2019

49. Ferroelastic domain identification in BiFeO<sub>3</sub> crystals using Raman spectroscopy

Himcinschi, Cameliu; Rix, Jan; Roeder, Christian; et al.

SCIENTIFIC REPORTS Volume: 9 Article Number: 379 Published: JAN 23 2019

48. Structural, vibrational, and enhanced magneto-electric coupling in Ho-substituted BiFeO<sub>3</sub>

Muneeswaran, M., Lee, S.H., Kim, D.H., (...), Giridharan, N.V., Venkateswaran, C.

Journal of Alloys and Compounds 750, pp. 276-285 (2018)

47. Investigation on gas sensing properties of Ag doped BiFeO<sub>3</sub>

Bagwaiya, T., Khade, P., Reshi, H.A., (...), Muthe, K.P., Gadkari, S.C.

AIP Conference Proceedings 1942, 080076 (2018)

46. Sol-Gel Synthesis of Ce<sub>4-x</sub>Sr<sub>1+x</sub>Fe<sub>5-x</sub>ZnxO<sub>14+delta</sub> [0 <= x <= 0.45] Superparamagnetic Oxide Systems and Its Magnetic, Dielectric, and Drug Delivery Properties

Thangaraj, Venkatesan; Yogapriya, Murugesan; Thirumalai, Kuppulingam; et al.

ACS OMEGA Volume: 3 Issue: 12 Pages: 16509-16518 Published: DEC 2018

45. Room-temperature ferrimagnetic multiferroic BiFe<sub>0.5</sub>Co<sub>0.5</sub>O<sub>3</sub> thin films with giant piezoelectric response

Gao, Baizhi; Lin, Lingfang; Chen, Chen; et al.

PHYSICAL REVIEW MATERIALS Volume: 2 Issue: 8 Article Number: 084401 Published: AUG 7 2018

44. Evidence of magnetoelectric coupling in 0.9BiFeO(3)-0.1Ba [Ti-0.95(Yb<sub>0.5</sub>Nb<sub>0.5</sub>)(0.05)]O<sub>3</sub> ceramic

Amouri, A.; Aydi, S.; Abdelmoula, N.; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 739 Pages: 1065-1079 Published: MAR 30 2018

43. Qi, Ji; Zhang, Yilin; Wang, Yuhan; et al.

Effect of Cr doping on the phase structure, surface appearance and magnetic property of BiFeO<sub>3</sub> thin films prepared via sol-gel technology  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 23 Pages: 17490-17498 Published: DEC 2017

42. Ning, Shuai; Huberman, Samuel C.; Zhang, Chen; et al.

Dependence of the Thermal Conductivity of BiFeO<sub>3</sub> Thin Films on Polarization and Structure

41. Lahmar, Abdelilah

Multiferroic properties and frequency dependent coercive field in BiFeO<sub>3</sub>-LaMn0.5Co0.5O<sub>3</sub> thin films

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 439 Pages: 30-37 Published: OCT 1 2017

40. Stryukov, D. V.; Razumnyaya, A. G.; Golovko, Yu I.; et al.

Lattice dynamics and structural distortions in the multiferroic (Ba,Sr)TiO<sub>3</sub>/(Bi,Nd)FeO<sub>3</sub> heterostructures

THIN SOLID FILMS Volume: 636 Pages: 220-224 Published: AUG 31 2017

39. Huang, Yen-Chin; Liou, Yi-De; Liu, Heng-Jui; et al.

Magnetic-coupled phase anomaly in mixed-phase BiFeO<sub>3</sub> thin films

APL MATERIALS Volume: 5 Issue: 8 Article Number: 086112 Published: AUG 2017

38. Wu, J., Fan, Z., Xiao, D., Zhu, J., Wang, J.

Multiferroic bismuth ferrite-based materials for multifunctional applications: Ceramic bulks, thin films and nanostructures

Progress in Materials Science 84, 335-402 DOI: 10.1016/j.pmatsci.2016.09.001 (2016)

37. Ting, Y., Tu, C.-S., Chen, P.-Y., Chen, C.-S., Anthoniappen, J., Schmidt, V.H., Lee, J.-M., Chan, T.-S., Chen, W.-Y., Song, R.-W.

Magnetization, phonon, and X-ray edge absorption in barium-doped BiFeO<sub>3</sub> ceramics

JOURNAL OF MATERIALS SCIENCE Volume: 52 Issue: 1 Pages: 581-594 DOI: 10.1007/s10853-016-0355-0 Published: JAN 2017

36. Chen, C.-S., Tu, C.-S., Chen, P.-Y., Schmidt, V.H., Xu, Z.-R., Ting, Y.

Spin-lattice coupling phase transition and phonon anomalies in bismuth ferrite BiFeO<sub>3</sub>

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 687 Pages: 442-450 DOI: 10.1016/j.jallcom.2016.06.193 Published: DEC 5 2016

35. Chiang, Y.-S., Tu, C.-S., Chen, P.-Y., Chen, C.-S., Anthoniappen, J., Ting, Y., Chan, T.-S., Schmidt, V.H.

Magnetic and phonon transitions in B-site Co doped BiFeO<sub>3</sub> ceramics

CERAMICS INTERNATIONAL Volume: 42 Issue: 11 Pages: 13104-13112 DOI: 10.1016/j.ceramint.2016.05.097 Published: AUG 15 2016

34. Damodaran, AR, Agar, JC, Pandya, S, Chen, ZH, Dedon, L, Xu, RJ, Apgar, B, Saremi, S, Martin, LW

New modalities of strain-control of ferroelectric thin films

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 26 Article Number: 263001 DOI: 10.1088/0953-8984/28/26/263001 Published: JUL 6 2016

33. Sando, D., Xu, B., Bellaiche, L., Nagarajan, V.

A multiferroic on the brink: Uncovering the nuances of strain-induced transitions in BiFeO<sub>3</sub>

APPLIED PHYSICS REVIEWS Volume: 3 Issue: 1 Article Number: 011106 DOI: 10.1063/1.4944558 Published: MAR 2016

32. Liu, Y., Wei, J., Liu, Y., Bai, X., Shi, P., Mao, S., Zhang, X., Li, C., Dkhil, B.

Phase transition, leakage conduction mechanism evolution and enhanced ferroelectric properties in multiferroic Mn-doped BiFeO<sub>3</sub> thin films

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 27 Issue: 3 Pages: 3095-3102 DOI: 10.1007/s10854-015-4135-4 Published: MAR 2016

31. Stojadinović, B., Dohčević-Mitrović, Z., Paunović, N., Ilić, N., Tasić, N., Petronijević, I., Popović, D., Stojanović, B.

Comparative study of structural and electrical properties of Pr and Ce doped BiFeO<sub>3</sub> ceramics synthesized by auto-combustion method

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 657 Pages: 866-872 DOI: 10.1016/j.jallcom.2015.09.235 Published: FEB 5 2016

30. Liu, YL (Liu, Yalong); Wei, J (Wei, Jie); Guo, YX (Guo, Yaxin); Yang, TT (Yang, Tiantian); Xu, Z (Xu, Zuo)

Phase transition, interband electronic transitions and enhanced ferroelectric properties in Mn and Sm co-doped bismuth ferrite films

RSC ADVANCES Volume: 6 Issue: 99 Pages: 96563-96572 DOI: 10.1039/c6ra20740e Published: 2016

29. Santhiya, M., Pugazhvadivu, K.S., Balakrishnan, L., Tamilarasan, K.

Effect of RF Power on Structural and Magnetic Properties of La doped Bi<sub>2</sub>Fe<sub>4</sub>O<sub>9</sub> Thin Films

DAE SOLID STATE PHYSICS SYMPOSIUM 2015 Book Series: AIP Conference Proceedings Volume: 1731 Article Number: 080077 DOI: 10.1063/1.4947955 Published: 2016

28. Amrillah, T., Vandangi, S.K., Bitla, Y., Do, T.H., Liao, S.-C., Tsai, C.-Y., Chin, Y.-Y., Liu, Y.-T., Lin, M.-L., He, Q., Lin, H.-J., Lee, H.-Y., Lai, C.-H., Arenholz, E., Juang, J.-Y., Chu, Y.-H.

Tuning the magnetic properties of self-assembled BiFeO<sub>3</sub>-CoFe<sub>2</sub>O<sub>4</sub> heteroepitaxy by magneto-structural coupling

NANOSCALE Volume: 8 Issue: 16 Pages: 8847-8854 DOI: 10.1039/c5nr09269h Published: 2016

27. Chen, J., Wang, Y., Deng, Y.

Competition between compressive strain and Mn doping on tuning the structure and magnetic behavior of BiFeO<sub>3</sub> thin films

FUNCTIONAL MATERIALS LETTERS Volume: 8 Issue: 6 Article Number: 1550066 DOI: 10.1142/S1793604715500666 Published: DEC 2015

26. Barman, R., Singh, S.K., Kaur, D.

Structural phase transition and enhanced ferroelectricity in Bi(Fe<sub>1-x</sub>Mn<sub>x</sub>)O<sub>3</sub> thin films deposited by pulsed laser deposition

THIN SOLID FILMS Volume: 594 Pages: 80-87 DOI: 10.1016/j.tsf.2015.10.017 Part: A Published: NOV 2 2015

25. Liu, HJ, Du, YH, Gao, P, Huang, YC, Chen, HW, Chen, YC, Liu, HL, He, Q, Ikuhara, Y, Chu, YH

Tetragonal BiFeO<sub>3</sub> on yttria-stabilized zirconia

APL MATERIALS Volume: 3 Issue: 11 Article Number: 116104 DOI: 10.1063/1.4935310 Published: NOV 2015

24. Teplyakova, NA, Titov, SV, Verbenko, IA, Sidorov, NV, Reznichenko, LA  
 A Raman scattering study of the structural ordering in Bi<sub>1-x</sub> La (x) FeO<sub>3</sub> ceramic ferroelectromagnetics  
 OPTICS AND SPECTROSCOPY Volume: 119 Issue: 3 Pages: 460-466 DOI: 10.1134/S0030400X15090234 Published: SEP 2015
23. Das, SC, Maan, S, Katiyal, S, Shripathi, T, Sathe, V  
 Effect of Lattice Strain and Annealing on the BiFeO<sub>3</sub> Films  
 PROCEEDINGS OF THE 59TH DAE SOLID STATE PHYSICS SYMPOSIUM 2014 (SOLID STATE PHYSICS) Book Series: AIP Conference Proceedings Volume: 1665 Article Number: 140017 DOI: 10.1063/1.4918226 Published: 2015
22. Ahlawat, Anju; Satapathy, S.; Sathe, V. G.; et al.  
 Modification in structure of La and Nd co-doped epitaxial BiFeO<sub>3</sub> thin films probed by micro Raman spectroscopy  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 46 Issue: 7 Pages: 636-643 Published: JUL 2015
21. Doig, K. I.; Peters, J. J. P.; Nawaz, S.; et al.  
 Structural, optical and vibrational properties of self-assembled Pb<sub>n+1</sub>(Ti<sub>1-x</sub>Fe<sub>x</sub>)(n)O<sub>3n+1</sub>-delta Ruddlesden-Popper superstructures  
 SCIENTIFIC REPORTS Volume: 5 Article Number: 7719 Published: JAN 16 2015
20. Hincinschi, Cameliu; Bhatnagar, Akash; Talkenberger, Andreas; et al.  
 Optical properties of epitaxial BiFeO<sub>3</sub> thin films grown on LaAlO<sub>3</sub>  
 APPLIED PHYSICS LETTERS Volume: 106 Issue: 1 Article Number: 012908 Published: JAN 5 2015
19. Khabiri, G.; Anokhin, A. S.; Razumnaya, A. G.; et al.  
 Phonon and Magnon Excitations in Raman Spectra of an Epitaxial Bismuth Ferrite Film  
 PHYSICS OF THE SOLID STATE Volume: 56 Issue: 12 Pages: 2507-2513 Published: DEC 2014
18. Clemens, Oliver; Kruk, Robert; Patterson, Eric A.; et al.  
 Introducing a Large Polar Tetragonal Distortion into Ba-Doped BiFeO<sub>3</sub> by Low-Temperature Fluorination  
 INORGANIC CHEMISTRY Volume: 53 Issue: 23 Pages: 12572-12583 Published: DEC 1 2014
17. Yan, N.; Zhang, Y. L.; Tang, W. L.; et al.  
 The effects of Mn doping on the optical properties of chemically deposited BiFeO<sub>3</sub> thin films  
 THIN SOLID FILMS Volume: 571 Pages: 554-557 Part: 3 Published: NOV 28 2014
16. Sando, D.; Barthelemy, A.; Bibes, M.  
 BiFeO<sub>3</sub> epitaxial thin films and devices: past, present and future  
 JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 26 Issue: 47 Article Number: 473201 Published: NOV 26 2014
15. Yang, Y.; Yao, Y. B.; Zhang, Q.; et al.  
 Polarized Raman study on the lattice structure of BiFeO<sub>3</sub> films prepared by pulsed laser deposition  
 VIBRATIONAL SPECTROSCOPY Volume: 75 Pages: 101-106 Published: NOV 2014
14. Ahlawat, Anju; Satapathy, S.; Maan, Satish; et al.  
 Correlation of structure and spin-phonon coupling in (La, Nd) doped BiFeO<sub>3</sub> films  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 45 Issue: 10 Pages: 958-962 Published: OCT 2014
13. Huang, Chuanwei; Chen, Lang  
 Effects of Interfaces on the Structure and Novel Physical Properties in Epitaxial Multiferroic BiFeO<sub>3</sub> Ultrathin Films  
 MATERIALS 7 (7), pp. 5403-5426 JUL 2014
12. Zhang, Jinxing; Ke, Xiaoxing; Gou, Gaoyang; et al.  
 A nanoscale shape memory oxide  
 NATURE COMMUNICATIONS 4, Art. No. 2768 NOV 2013
11. Anokhin, A. S.; Bunina, O. A.; Golovko, Yu I.; et al.  
 Raman and X-ray diffraction study of (Ba,Sr)TiO<sub>3</sub>/(Bi,Nd)FeO<sub>3</sub> multilayer heterostructures  
 THIN SOLID FILMS 545, 267-271, OCT 31 2013
10. Thomasson, A., Kreisel, J., Lefèvre, C., Roulland, F., Versini, G., Barre, S., Viart, N.  
 Raman scattering of magnetoelectric gallium ferrite thin films  
 Journal of Physics Condensed Matter 25 (4) , art. no. 045401, 2013
9. Bai, W.; Xu, W. F.; Wu, J.; et al.  
 Investigations on electrical, magnetic and optical behaviors of five-layered Aurivillius Bi<sub>6</sub>Ti<sub>3</sub>Fe<sub>2</sub>O<sub>18</sub> polycrystalline films  
 THIN SOLID FILMS 525, 195-199, DEC 15 2012
8. Zhang, J.X., Zeches, R.J., He, Q., Chu, Y.-H., Ramesh, R.  
 Nanoscale phase boundaries: A new twist to novel functionalities  
 Nanoscale 4 (20) , pp. 6196-6204, 2012
7. Liu Huajun; Yang Ping; Yao Kui; et al.  
 Origin of a Tetragonal BiFeO<sub>3</sub> Phase with a Giant c/a Ratio on SrTiO<sub>3</sub> Substrates  
 ADVANCED FUNCTIONAL MATERIALS 22 (5), 937-942, MAR 7 2012.
6. Ko, K.-T., Jung, M.H., He, Q., Lee, J.H., Woo, C.S., Chu, K., Seidel, J., (...), Yang, C.-H.  
 Concurrent transition of ferroelectric and magnetic ordering near room temperature

Nature Communications 2 (1) , art. no. 567, 2011.

5. Choi, K.-Y., Do, S.H., Lemmens, P., Wulferding, D., Woo, C.S., Lee, J.H., Chu, K., Yang, C.-H.

Anomalous low-energy phonons in nearly tetragonal BiFeO<sub>3</sub> thin films

Physical Review B - Condensed Matter and Materials Physics 84 (13) , art. no. 132408, 2011.

4. Kreisel J.; Jadhav P.; Chaix-Pluchery O.; et al.

A phase transition close to room temperature in BiFeO(3) thin films

JOURNAL OF PHYSICS-CONDENSED MATTER 23 (34), Article Number: 342202, AUG 31 2011.

3. Christen, H.M., Nam, J.H., Kim, H.S., Hatt, A.J., Spaldin, N.A.

Stress-induced R-MA-MC-T symmetry changes in BiFeO<sub>3</sub> films

Physical Review B - Condensed Matter and Materials Physics 83 (14), art. no. 144107, APR 14 2011.

2. Zhang, J.X., He, Q., Trassin, M., Luo, W., Yi, D., Rossell, M.D., Yu, P., (...), Ramesh, R.

Microscopic origin of the giant ferroelectric polarization in tetragonal-like BiFeO<sub>3</sub>

Physical Review Letters 107 (14), art. no. 147602, 2011.

1. Hlinka J., Pokorný J., Karimi S.; et al.

Angular dispersion of oblique phonon modes in BiFeO(3) from micro-Raman scattering

PHYSICAL REVIEW B 83 (2) Article Number: 020101, JAN 10 2011.

## 72. "Short-range B-site ordering in the inverse spinel ferrite NiFe<sub>2</sub>O<sub>4</sub>"

V. G. Ivanov, M. V. Abrashev, M. N. Iliev, M. M. Gospodinov, J. Meen, and M. I. Aroyo

Physical Review B **82**, 024104 (2010). (8 pages)

96. Atomic Structure and Electron Magnetic Circular Dichroism of Individual Rock Salt Structure Antiphase Boundaries in Spinel Ferrites  
Li, Zhuo; Lu, Jinlian; Jin, Lei; et al.

ADVANCED FUNCTIONAL MATERIALS Volume: 31 Issue: 21 Article Number: 2008306 Published: MAY 2021

95. A Nano-Micro Engineering Nanofiber for Electromagnetic Absorber, Green Shielding and Sensor  
Zhang, Min; Han, Chen; Cao, Wen-Qiang; et al.

NANO-MICRO LETTERS Volume: 13 Issue: 1 Article Number: 27 Published: MAR 23 2021

94. Role of Mg<sup>2+</sup> and In<sup>3+</sup> substitution on magnetic, magnetostrictive and dielectric properties of NiFe<sub>2</sub>O<sub>4</sub> ceramics derived from nanopowders

Anantharamaiah, P. N.; Rao, B. Prerna; Shashanka, H. M.; et al.

PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 23 Issue: 2 Pages: 1694-1705 Published: JAN 14 2021

93. Stuffed Tridymite Structures: Synthesis, Structure, Second Harmonic Generation, Optical, and Multiferroic Properties  
Bhim, Anupam; Sutter, Jean-Pascal; Gopalakrishnan, Jagannatha; et al.

CHEMISTRY-A EUROPEAN JOURNAL Volume: 27 Issue: 6 Pages: 1995-2008 Published: JAN 26 2021

92. Structural and magnetic properties of Bi substituted nickel ferrite

Sattibabu, Bhumireddi; Rao, T. Durga; Bhatnagar, A. K.; et al.

MATERIALS TODAY-PROCEEDINGS Volume: 39 Pages: 1482-1486 Part: 4 Published: 2020

91. Neutron diffraction study and magnetic properties of NiFe<sub>2-x</sub>Sc<sub>x</sub>O<sub>4</sub>

Sattibabu, Bhumireddi; Rao, T. Durga; Bhatnagar, A. K.; et al.

MATERIALS LETTERS Volume: 277 Article Number: 128325 Published: OCT 15 2020

90. Influence of cation distribution on magnetic response of polycrystalline Co<sub>1-x</sub>Ni<sub>x</sub>Fe<sub>2</sub>O<sub>4</sub> (0 <= x <= 1) ferrites  
Bestha, Kranti Kumar; Abraham, Joyal John; Chelvane, Jeyaramane Arout; et al.

PHYSICA SCRIPTA Volume: 95 Issue: 8 Article Number: 085802 Published: AUG 2020

89. Raman spectra tell us so much more: Raman features and saturation magnetization for efficient analysis of manganese zinc ferrite nanoparticles

Nekyapil, Fran; Bunge, Alexander; Radu, Teodora; et al.

JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 6 Pages: 959-968 Published: JUN 2020

88. Magnetic Properties of NiFe<sub>2</sub>O<sub>4</sub> Compound: Ab Initio Calculation and Monte Carlo Simulation

Idrissi, L.; Tahiri, N.; El Bounogui, O.; et al.

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume: 33 Issue: 5 Pages: 1369-1375 Published: MAY 2020

87. Effect performance of the nanomagnetic properties of Ni-Cu-Co ferrites by Al<sup>3+</sup> ions adulteration

Suo, Nanzhai; Sun, Aimin; Yu, Lichao; et al.

MODERN PHYSICS LETTERS B Volume: 34 Issue: 5 Article Number: 2050059 Published: FEB 20 2020

86. Interface-induced perpendicular magnetic anisotropy in Co<sub>2</sub>FeAl/NiFe<sub>2</sub>O<sub>4</sub> superlattice: first-principles study

Li, Fangfang; Yang, Baishun; Zhang, Jianmin; et al.

PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 22 Issue: 2 Pages: 716-723 Published: JAN 14 2020

85. Stirring-mediated anomalous dielectric behaviour of electrodeposited and in situ oxidized FeAl<sub>2</sub>O<sub>4</sub> thin films

Awan, Attia; Riaz, Saira; Butt, Azqa Farrukh; et al.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 31 Issue: 1 Special Issue: SI Pages: 814-831  
Published: JAN 2020

84. Disordered structure of ZnAl<sub>2</sub>O<sub>4</sub> phase and the formation of a Zn NCO complex in ZnAl mixed oxide catalysts for glycerol carbonylation with urea  
Nguyen-Phu, H., Shin, E.W.  
Journal of Catalysis 373, pp. 147-160 (2019)

83. Cationic ordering and magnetic properties of rare-earth doped NiFe<sub>2</sub>O<sub>4</sub> probed by Mossbauer and X-ray spectroscopies  
Ugendar, Kodam; Hari Babu, Vasili; Reddy, V. Raghavendra; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 484 Pages: 291-297 Published: AUG 15 2019

82 Cation distribution in nanocrystalline cobalt substituted nickel ferrites: X-ray diffraction and Raman spectroscopic investigations  
Nandan, Brajesh; Bhatnagar, M. C.; Kashyap, Subhash C.  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume: 129 Pages: 298-306 Published: JUN 2019.

81. Nickel based oxide film formed in molten salts for efficient electrocatalytic oxygen evolution  
Liang, Xin Xin; Weng, Wei; Gu, Dong; et al.  
JOURNAL OF MATERIALS CHEMISTRY A Volume: 7 Issue: 17 Pages: 10514-10522 Published: MAY 7 2019

80. Room-temperature multiferroic and magnetodielectric properties of SrTiO<sub>3</sub>/NiFe<sub>2</sub>O<sub>4</sub> composite ceramics  
Ke, Hua; Zhang, Hongjun; Zhou, Junjie; et al.  
CERAMICS INTERNATIONAL Volume: 45 Issue: 7 Pages: 8238-8242 Part: A Published: MAY 2019

79. Ferroelectric order associated with ordered occupancy at the octahedral site of the inverse spinel structure of multiferroic NiFe<sub>2</sub>O<sub>4</sub>  
Dey, J. K.; Chatterjee, A.; Majumdar, S.; et al.  
PHYSICAL REVIEW B Volume: 99 Issue: 14 Article Number: 144412 Published: APR 15 2019

78. Evidence of surface spin-glass behavior in NiFe<sub>2</sub>O<sub>4</sub> nanoparticles determined using magnetic resonance technique  
Mantilla, J.; Leon Felix, L.; Martinez, M. A. R.; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 476 Pages: 392-397 Published: APR 15 2019

77. Spin glass freezing, magnetocapacitance and dielectric anomalies in 0.3NiFe(2)O(4)-0.7BiFeO(3) nanocomposite  
Sarahbavan, M.; Annamalai, K.; Parida, Tripta; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 474 Pages: 144-151 Published: MAR 15 2019

76. Cation Vacancies in NiFe<sub>2</sub>O<sub>4</sub> During Heat Treatments at High Temperatures: Structural, Morphological and Magnetic Characterization  
Salazar-Tamayo, Harrison; Garcia Tellez, Karen Edilma; Barrero Meneses, Cesar Augusto  
MATERIALS RESEARCH-IBERO-AMERICAN JOURNAL OF MATERIALS Volume: 22 Issue: 5 Article Number: e20190298  
Published: 2019

75. Magnetic Properties and Electrical Conductivity of NiFe<sub>2</sub>O<sub>4</sub>-MWNT/PVA Nanocomposite Films  
Mulyawan, A., Purwanto, S., Mashadi, M.  
Journal of Physics: Conference Series 1091(1),012001 (2018)

74. Structure and magnetism of ultrathin nickel-iron oxides grown on Ru(0001) by high-temperature oxygen-assisted molecular beam epitaxy  
Mandziak, Anna; de la Figuera, Juan; Ruiz-Gomez, Sandra; et al.  
SCIENTIFIC REPORTS Volume: 8 Article Number: 17980 Published: DEC 19 2018

73. Cation distributions and magnetism of Al-substituted CoFe<sub>2</sub>O<sub>4</sub> - NiFe<sub>2</sub>O<sub>4</sub> solid solutions synthesized by sol-gel auto-combustion method  
Kumar, R. Vijaya; Anupama, A. V.; Kumar, R.; et al.  
CERAMICS INTERNATIONAL Volume: 44 Issue: 17 Pages: 20708-20715 Published: DEC 1 2018

72. Designing Magnetic Anisotropy through Strain Doping  
Herklotz, Andreas; Gai, Zheng; Sharma, Yogesh; et al.  
ADVANCED SCIENCE Volume: 5 Issue: 11 Article Number: 1800356 Published: NOV 2018

71. In house designed magnetron sputtering source: Effect of power and annealing on structural, optical and magnetic properties of NiFe<sub>2-x</sub>LuxO<sub>4</sub> (x=0, 0.075) thin films  
Kodam, Ugendar; Baby, Anoop K. B.; Markandeyulu, G.  
THIN SOLID FILMS Volume: 662 Pages: 180-186 Published: SEP 30 2018

70. Magnetic properties of multilayer BaTiO<sub>3</sub>/NiFe<sub>2</sub>O<sub>4</sub> thin films prepared by solution deposition technique  
Bajac, Branimir; Milanovic, Marija; Cvejic, Zeljka; et al.  
CERAMICS INTERNATIONAL Volume: 44 Issue: 13 Pages: 15965-15971 Published: SEP 2018

69. Transition metal cations on the move: simultaneous operando X-ray absorption spectroscopy and X-ray diffraction investigations during Li uptake and release of a NiFe<sub>2</sub>O<sub>4</sub>/CNT composite  
Permien, Stefan; Neumann, Tobias; Indris, Sylvio; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 20 Issue: 28 Pages: 19129-19141 Published: JUL 28 2018

68. Development of magnetoelectric nanocomposite for soft technology

Bitla, Yugandhar; Chu, Ying-Hao  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 51 Issue: 23 Article Number: 234006 Published: JUN 13 2018

67. Nanocrystal growth, magnetic and electrochemical properties of NiZn ferrite  
Freire, R. M.; Freitas, P. G. C.; Galvao, W. S.; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 738 Pages: 206-217 Published: MAR 25 2018

66. Raman spectra of Ni<sub>1-X</sub>Zn<sub>X</sub>Fe<sub>2</sub>O<sub>4</sub> nanopowders

Aliyeva, Shahla; Babayev, Sardar; Mehdiyev, Talat

JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 2 Pages: 271-278 Published: FEB 2018

65. Dielectric Anomalies and Competing Magnetic Interactions in NiFe<sub>2</sub>O<sub>4</sub>-PMN-PT Nanocomposite Materials  
Bharathi, K. Kamala; Parida, Tripta; Dara, Hanuma Kumar; et al.

JOURNAL OF PHYSICAL CHEMISTRY C Volume: 122 Issue: 1 Pages: 880-887 Published: JAN 11 2018

64. Effect of Substrate Temperature on Some Properties of Nitrogen Incorporated Nickel Ferrite Thin Films  
Baby, K. B. Anoop; Markandeyulu, G.; Subrahmanyam, A.

AIP Conference Proceedings Volume: 1942 Article Number: 080042 Published: 2018

63. Structural, Magnetic and Magnetoreactance Studies In NiFe<sub>2-x</sub>R<sub>x</sub>O<sub>4</sub> (x=0, 0.05; R = Y, Yb and Lu)

Ugendar, Kodam; Chunchu, Venkatrao; Rani, G. Neeraja; et al.

AIP Conference Proceedings Volume: 1942 Article Number: 130016 Published: 2018

62. Ushakov, M. V.; Senthilkumar, B.; Selvan, R. Kalai; et al.

Mossbauer spectroscopy of NiFe<sub>2</sub>O<sub>4</sub> nanoparticles: The effect of Ni<sup>2+</sup> in the Fe<sup>3+</sup> local microenvironment in both tetrahedral and octahedral sites

MATERIALS CHEMISTRY AND PHYSICS Volume: 202 Pages: 159-168 Published: DEC 1 2017

61. Jian, Gang; Xue, Fei; Zhang, Chen; et al.

Orientation dependence of elastic and piezomagnetic properties in NiFe<sub>2</sub>O<sub>4</sub>

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 442 Pages: 141-144 Published: NOV 15 2017

60. Baby, K. B. Anoop; Markandeyulu, G.; Subrahmanyam, A.

Magnetic Properties of Nanocrystalline N-NFO Thin Films

IEEE TRANSACTIONS ON MAGNETICS Volume: 53 Issue: 11 Article Number: 2002505 Published: NOV 2017

59. Baby, K. B. Anoop; George, Lijin; Jaiswal, Manu; et al.

Structure-Property Correlations of Carbon and Nitrogen Incorporated NiFe<sub>2</sub>O<sub>4</sub>

IEEE TRANSACTIONS ON MAGNETICS Volume: 53 Issue: 11 Article Number: 1000705 Published: NOV 2017

58. Aakash; Nordblad, Per; Mohan, Rajendra; et al.

Structural, magnetic and hyperfine characterizations of nanocrystalline Zn-Cd doped nickel ferrites

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 441 Pages: 710-717 Published: NOV 1 2017

57. Chand, Prakash; Vaish, Swapnil; Kumar, Praveen

Structural, optical and dielectric properties of transition metal (MFe<sub>2</sub>O<sub>4</sub>; M = Co, Ni and Zn) nanoferrites

PHYSICA B-CONDENSED MATTER Volume: 524 Pages: 53-63 Published: NOV 2017

56. Lyubutin, Igor S.; Lin, Chun-Rong; Starchikov, Sergey S.; et al.

Structural, Magnetic, and Electronic Properties of Mixed Spinel NiFe<sub>2-x</sub>CrxO<sub>4</sub> Nanoparticles Synthesized by Chemical Combustion INORGANIC CHEMISTRY Volume: 56 Issue: 20 Pages: 12469-12475 Published: OCT 16 2017

55. Wang, Yan; Li, Liping; Zhang, Yuelan; et al.

Growth Kinetics, Cation Occupancy, and Magnetic Properties of Multimetal Oxide Nanoparticles: A Case Study on Spinel NiFe<sub>2</sub>O<sub>4</sub>  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 121 Issue: 35 Pages: 19467-19477 Published: SEP 7 2017

54. O'Quinn, Eric C.; Shamblin, Jacob; Perlov, Brandon; et al.

Inversion in Mg<sub>1-x</sub>Ni<sub>x</sub>Al<sub>2</sub>O<sub>4</sub> Spinel: New Insight into Local Structure

JOURNAL OF THE AMERICAN CHEMICAL SOCIETY Volume: 139 Issue: 30 Pages: 10395-10402 Published: AUG 2 2017

53. Chauhan, Lalita; Singh, Nidhi; Dhar, Ajay; et al.

Structural and electrical properties of Dy<sup>3+</sup> substituted NiFe<sub>2</sub>O<sub>4</sub> ceramics prepared from powders derived by combustion method  
CERAMICS INTERNATIONAL Volume: 43 Issue: 11 Pages: 8378-8390 Published: AUG 1 2017

52. Ugendar, Kodam; Samanta, S.; Rayaprol, Sudhindra; et al.

Effect of frustrated exchange interactions and spin-half-impurity on the electronic structure of strongly correlated NiFe<sub>2</sub>O<sub>4</sub>  
PHYSICAL REVIEW B Volume: 96 Issue: 3 Article Number: 035138 Published: JUL 19 2017

51. Abidat, I.; Morais, C.; Comminges, C.; et al.

Three dimensionally ordered mesoporous hydroxylated Ni<sub>x</sub>Co(3-x)O<sub>4</sub> spinels for the oxygen evolution reaction: on the hydroxyl-induced surface restructuring effect

JOURNAL OF MATERIALS CHEMISTRY A Volume: 5 Issue: 15 Pages: 7173-7183 Published: APR 21 2017

50. Rani, Jyoti; Kushwaha, Varun K.; Kolte, Jayant; et al.

Structural, dielectric and magnetoelectric studies of [0.5Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub>-0.5(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub>]-Ni<sub>0.8</sub>Zn<sub>0.2</sub>Fe<sub>2</sub>O<sub>4</sub> multiferroic composites

49. Liu, Heng-Jui; Wang, Chih-Kuo; Su, Dong; et al.

Flexible Heteroepitaxy of CoFe<sub>2</sub>O<sub>4</sub>/Muscovite Bimorph with Large Magnetostriction

ACS APPLIED MATERIALS & INTERFACES Volume: 9 Issue: 8 Pages: 7297-7304 Published: MAR 1 2017

48. Kodam, Ugendar; Bharathi, Kamala K.; Reddy, Raghavendra, V; et al.

Onsite magnetic moment through cation distribution and magnetocrystalline anisotropy studies in NiFe<sub>2-x</sub>R<sub>x</sub>O<sub>4</sub> (R = Y and Lu; x=0, 0.05, and 0.075)

JOURNAL OF APPLIED PHYSICS Volume: 121 Issue: 5 Article Number: 055101 Published: FEB 7 2017

47. Panwar, Kalpana; Tiwari, Shailja; Bapna, Komal; et al.

The effect of Cr substitution on the structural, electronic and magnetic properties of pulsed laser deposited NiFe<sub>2</sub>O<sub>4</sub> thin films

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 421 Pages: 25-30 Published: JAN 1 2017

46. Karimi, S (Karimi, S.); Kameli, P (Kameli, P.); Ahmadvand, H (Ahmadvand, H.); Salamat, H (Salamat, H.)

Effects of Zn-Cr-substitution on the structural and magnetic properties of Ni<sub>1-x</sub>ZnxFe<sub>2-x</sub>CrxO<sub>4</sub> ferrites

CERAMICS INTERNATIONAL Volume: 42 Issue: 15 Pages: 16948-16955 DOI: 10.1016/j.ceramint.2016.07.196 Published: NOV 15 2016

45. Jong, UG (Jong, Un-Gi); Yu, CJ (Yu, Chol-Jun); Park, YS (Park, Yong-Su); Ri, CS (Ri, Chong-Suk)

First-principles study of ferroelectricity induced by p-d hybridization in ferrimagnetic NiFe<sub>2</sub>O<sub>4</sub>

PHYSICS LETTERS A Volume: 380 Issue: 40 Pages: 3302-3306 DOI: 10.1016/j.physleta.2016.08.006 Published: SEP 23 2016

44. Dimitrijevska, M., Ivetić, T.B., Litvinchuk, A.P., Fairbrother, A., Miljević, B.B., Štrbac, G.R., Pérez Rodríguez, A., Lukic-Petrović, S.R.

Eu3+-Doped Wide Band Gap Zn<sub>2</sub>SnO<sub>4</sub> Semiconductor Nanoparticles: Structure and Luminescence

JOURNAL OF PHYSICAL CHEMISTRY C Volume: 120 Issue: 33 Pages: 18887-18894 DOI: 10.1021/acs.jpcc.6b05335 Published: AUG 25 2016

43. Ugendar, K., Vaithyanathan, V., Patro, L.N., Inbanathan, S.S.R., Bharathi, K.K.

Temperature-dependent magnetization, anisotropy and conductivity of CoFe<sub>2-x</sub>SnxO<sub>4</sub> (x=0.025, 0.05, 0.075): appearance of grain boundary conductivity at high temperatures

JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 49 Issue: 30 Article Number: 305001 DOI: 10.1088/0022-3727/49/30/305001 Published: AUG 3 2016

42. Chauhan, L., Shukla, A.K., Sreenivas, K.

Properties of NiFe<sub>2</sub>O<sub>4</sub> ceramics from powders obtained by auto-combustion synthesis with different fuels

CERAMICS INTERNATIONAL Volume: 42 Issue: 10 Pages: 12136-12147 DOI: 10.1016/j.ceramint.2016.04.146 Published: AUG 1 2016

41. Aakash, Choubey, R., Das, D., Mukherjee, S.

Effect of doping of manganese ions on the structural and magnetic properties of nickel ferrite

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 668 Pages: 33-39 DOI: 10.1016/j.jallcom.2016.01.198 Published: MAY 25 2016

40. Otero-Lorenzo, R., Fantechi, E., Sangregorio, C., Salgueirino, V.

Solvothermally Driven Mn Doping and Clustering of Iron Oxide Nanoparticles for Heat Delivery Applications

CHEMISTRY-A EUROPEAN JOURNAL Volume: 22 Issue: 19 Pages: 6666-6675 DOI: 10.1002/chem.201505049 Published: MAY 4 2016

39. Shamblin, J., Feygenson, M., Neufeld, J., Tracy, C.L., Zhang, F., Finkeldei, S., Bosbach, D., Zhou, H., Ewing, R.C., Lang, M.

Probing disorder in isometric pyrochlore and related complex oxides

NATURE MATERIALS Volume: 15 Issue: 5 Pages: 507-511 DOI: 10.1038/NMAT4581 Published: MAY 2016

38. Aakash, Roychowdhury, A., Das, D., Mukherjee, S.

Effect of doping of chromium ions on the structural and magnetic properties of nickel ferrite

CERAMICS INTERNATIONAL Volume: 42 Issue: 6 Pages: 7742-7747 DOI: 10.1016/j.ceramint.2016.01.188 Published: MAY 1 2016

37. Datt, G., Sen Bishwas, M., Manivel Raja, M., Abhyankar, A.C.

Observation of magnetic anomalies in one-step solvothermally synthesized nickel-cobalt ferrite nanoparticles

NANOSCALE Volume: 8 Issue: 9 Pages: 5200-5213 DOI: 10.1039/c5nr06791j Published: 2016

36. Quandt, N., Roth, R., Syrowatka, F., Steimecke, M., Ebbinghaus, S.G.

Spin-Coating and Characterization of Multiferroic MFe<sub>2</sub>O<sub>4</sub> (M=Co, Ni) / BaTiO<sub>3</sub> Bilayers

JOURNAL OF SOLID STATE CHEMISTRY Volume: 233 Pages: 82-89 DOI: 10.1016/j.jssc.2015.10.010 Published: JAN 2016

35. Majumder, A., Ugendar, K., Anoop Baby, K.B., Chunchu, V., Mondal, R.A., Markandeyulu, G.

Anisotropy, Magnetostriction and Converse Magnetoelectric Effect in Dy Substituted Ni Ferrite

Physics Procedia 75, 238-244 DOI: 10.1016/j.phpro.2015.12.029 (2015)

34. Amir, M., Ünal, B., Geleri, M., Güngüneş, H., Shirasath, S.E., Baykal, A.

Electrical properties and hyperfine interactions of boron doped Fe<sub>3</sub>O<sub>4</sub> nanoparticles

SUPERLATTICES AND MICROSTRUCTURES Volume: 88 Pages: 450-466 DOI: 10.1016/j.spmi.2015.10.005 Published: DEC 2015

33. Cvejić, Ž., Durdić, E., Ivković Ivandekić, G., Bajac, B., Postolache, P., Mitoseriu, L., Srdić, V.V., Rakić, S.

The effect of annealing on microstructure and cation distribution of NiFe<sub>2</sub>O<sub>4</sub>

32. Ehi-Eromosele, C.O., Ita, B.I., Iweala, Ej., Adalikwu, S.A., Anawe, P.A.L.  
Magneto-structural properties of Ni-Zn nanoferrites synthesized by the low-temperature auto-combustion method  
BULLETIN OF MATERIALS SCIENCE Volume: 38 Issue: 5 Pages: 1465-1472 Published: SEP 2015
31. Puli, Venkata Sreenivas; Adireddy, Shiva; Ramana, C. V.  
Chemical bonding and magnetic properties of gadolinium (Gd) substituted cobalt ferrite  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 644 Pages: 470-475 Published: SEP 25 2015
30. Vaithyanathan, V.; Ugendar, Kodam; Chelvane, J. Arout; et al.  
Structural and magnetic properties of Sn and Ti doped Co ferrite  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 382 Pages: 88-92 Published: MAY 15 2015
29. Lang, L. L.; Xu, J.; Li, Z. Z.; et al.  
Study of the magnetic structure and the cation distributions in MnCo spinel ferrites  
PHYSICA B-CONDENSED MATTER Volume: 462 Pages: 47-53 Published: APR 1 2015
28. Lazarevic, Zorica Z.; Milutinovic, Aleksandra N.; Jovalekic, Cedomir D.; et al.  
Spectroscopy investigation of nanostructured nickel-zinc ferrite obtained by mechanochemical synthesis  
MATERIALS RESEARCH BULLETIN Volume: 63 Pages: 239-247 Published: MAR 2015
27. Bao, Lihong; Zang, Jianfeng; Wang, Guofeng; et al.  
Atomic-Scale Imaging of Cation Ordering in Inverse Spinel Zn<sub>2</sub>SnO<sub>4</sub> Nanowires  
NANO LETTERS Volume: 14 Issue: 11 Pages: 6505-6509 Published: NOV 2014
26. Lang, L. L.; Xu, J.; Qi, W. H.; et al.  
Study of cation magnetic moment directions in Cr (Co) doped nickel ferrites  
JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 12 Article Number: 123901 Published: SEP 28 2014
25. Arras, R.; Calmels, L.  
Fully spin-polarized two-dimensional electron gas at the CoFe<sub>2</sub>O<sub>4</sub>/MgAl<sub>2</sub>O<sub>4</sub>(001) polar interface  
PHYSICAL REVIEW B 90 (4), Art. No. 045411 JUL 17 2014
24. Dong, Guohua; Tan, Guoqiang; Luo, Yangyang; et al.  
The superior multiferroic properties of Bi<sub>0.85</sub>Nd<sub>0.15</sub>Fe<sub>0.98</sub>Mn<sub>0.02</sub>O<sub>3</sub>/CoFe<sub>2</sub>O<sub>4</sub> heterostructure thin film at room temperature  
MATERIALS LETTERS 127, pp. 24-27 JUL 15 2014
23. Kumar, K. S. Aneesh; Bhowmik, R. N.  
Micro-structural characterization and magnetic study of Ni<sub>1.5</sub>Fe<sub>1.5</sub>O<sub>4</sub> ferrite synthesized through coprecipitation route at different pH values  
MATERIALS CHEMISTRY AND PHYSICS 146 (1-2), pp. 159-169 JUL 15 2014
22. Lekha, P. Chithra; Ramesh, G.; Revathi, V.; et al.  
Relaxor-like ferroelectric behaviour favoured by short-range B-site ordering in 10% Ba<sup>2+</sup> substituted MgFe<sub>2</sub>O<sub>4</sub>  
MATERIALS RESEARCH BULLETIN 53, pp. 240-245 MAY 2014
21. Tsai, C. Y.; Chen, H. R.; Chang, F. C.; et al.  
Anisotropic strain, magnetic properties, and lattice dynamics in self-assembled multiferroic CoFe<sub>2</sub>O<sub>4</sub>-PbTiO<sub>3</sub> nanostructures  
JOURNAL OF APPLIED PHYSICS 115 (13), Art. No. 134317 APR 7 2014
20. Tang, G. D.; Han, Q. J.; Xu, J.; et al.  
Investigation of magnetic ordering and cation distribution in the spinel ferrites Cr<sub>x</sub>Fe<sub>3-x</sub>O<sub>4</sub> (0.0 <= x <= 1.0)  
PHYSICA B-CONDENSED MATTER 438, pp. 91-96 APR 1 2014
19. Shen, Liming; Althammer, Matthias; Pachauri, Neha; et al.  
Epitaxial growth of spinel cobalt ferrite films on MgAl<sub>2</sub>O<sub>4</sub> substrates by direct liquid injection chemical vapor deposition  
JOURNAL OF CRYSTAL GROWTH 390, pp. 61-66 MAR 15 2014
18. Cheng, Ching  
Enhanced magnetization and conductive phase in NiFe<sub>2</sub>O<sub>4</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 325, 144-146, 2013
17. Walsh, Sean R.; Rusakova, Irene; Whitmire, Kenton H.  
Rock salt vs. wurtzite phases of Co<sub>1-x</sub>Mn<sub>x</sub>O: control of crystal lattice and morphology at the nanoscale  
CRYSTENGCOMM 15 (4), 775-784, 2013
16. Zhong, H., Xiao, X., Zheng, S., Zhang, W., Ding, M., Jiang, H., Huang, L., Kang, J.  
Mass spectrometric analysis of mono- and multi-phosphopeptides by selective binding with NiZnFe<sub>2</sub>O<sub>4</sub> magnetic nanoparticles  
Nature Communications 4, art. no. 1656, 2013
15. Tsai, C.Y., Chen, H.R., Chang, F.C., Tsai, W.C., Cheng, H.M., Chu, Y.H., Lai, C.H., Hsieh, W.F.  
Stress-mediated magnetic anisotropy and magnetoelastic coupling in epitaxial multiferroic PbTiO<sub>3</sub>-CoFe<sub>2</sub>O<sub>4</sub> nanostructures  
Applied Physics Letters 102 (13), art. no. 132905, 2013

14. Himcinschi, C., Vrejoiu, I., Salvan, G., Fronk, M., Talkenberger, A., Zahn, D.R.T., Rafaja, D., Kortus, J. Optical and magneto-optical study of nickel and cobalt ferrite epitaxial thin films and submicron structures Journal of Applied Physics 113 (8), art. no. 084101, 2013
13. Caffrey, N.M., Fritsch, D., Archer, T., Sanvito, S., Ederer, C. Spin-filtering efficiency of ferrimagnetic spinels CoFe<sub>2</sub>O<sub>4</sub> and NiFe<sub>2</sub>O<sub>4</sub> Physical Review B - Condensed Matter and Materials Physics 87 (2), art. no. 024419, 2013
12. Lorenz, M., Ziese, M., Wagner, G., Lenzner, J., Kranert, C., Brachwitz, K., Hochmuth, H., (...), Grundmann, M. Exchange bias and magnetodielectric coupling effects in ZnFe<sub>2</sub>O<sub>4</sub>-BaTiO<sub>3</sub> composite thin films CrystEngComm 14 (20), pp. 6477-6486, 2012
11. Ravindra, A.V., Padhan, P., Prellier, W. Electronic structure and optical band gap of CoFe<sub>2</sub>O<sub>4</sub> thin films Applied Physics Letters 101 (16), art. no. 161902, 2012
10. Gutiérrez, D., Foerster, M., Fina, I., Fontcuberta, J., Fritsch, D., Ederer, C. Dielectric response of epitaxially strained CoFe<sub>2</sub>O<sub>4</sub> spinel thin films Physical Review B - Condensed Matter and Materials Physics 86 (12), art. no. 125309, 2012
9. Landon, J., Demeter, E., Inođlu, N., Keturakis, C., Wachs, I.E., Vasić, R., Frenkel, A.I., Kitchin, J.R. Spectroscopic characterization of mixed Fe-Ni oxide electrocatalysts for the oxygen evolution reaction in alkaline electrolytes ACS Catalysis 2 (8), pp. 1793-1801, 2012
8. Fritsch, D., Ederer, C. First-principles calculation of magnetoelastic coefficients and magnetostriction in the spinel ferrites CoFe<sub>2</sub>O<sub>4</sub> and NiFe<sub>2</sub>O<sub>4</sub> Physical Review B - Condensed Matter and Materials Physics 86 (1), art. no. 014406, 2012
7. Benrabaa R.; Boukhlof H.; Barama S.; et al. Structural, Textural and Acid-Base Properties of Nano-Sized NiFe<sub>2</sub>O<sub>4</sub> Spinel Catalysts CATALYSIS LETTERS 142 (1), 42-49, JAN 2012.
6. Li, N., Wang, Y.-H.A., Iliev, M.N., Klein, T.M., Gupta, A. Growth of Atomically Smooth Epitaxial Nickel Ferrite Films by Direct Liquid Injection CVD CHEMICAL VAPOR DEPOSITION Volume: 17 Issue: 7-9 Pages: 261-269 DOI: 10.1002/cvde.201106930 Published: SEP 2011
5. Stevanovic, V (Stevanovic, Vladan); d'Avezac, M (d'Avezac, Mayeul); Zunger, A (Zunger, Alex) Universal Electrostatic Origin of Cation Ordering in A(2)BO(4) Spinel Oxides JOURNAL OF THE AMERICAN CHEMICAL SOCIETY Volume: 133 Issue: 30 Pages: 11649-11654 DOI: 10.1021/ja2034602 Published: AUG 3 2011
4. Zhu X. F.; Chen L. F. First-principles study of the electronic and magnetic properties of a Nickel-Zinc ferrite: Zn(x)Ni(1-x)Fe(2)O(4) JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (23), pp.3138-3142, DEC 2011
3. Fritsch, D., Ederer, C. Effect of epitaxial strain on the cation distribution in spinel ferrites CoFe<sub>2</sub>O<sub>4</sub> and NiFe<sub>2</sub>O<sub>4</sub>: A density functional theory study Applied Physics Letters 99 (8), art. no. 081916, AUG 22 2011.
2. Haetge, J., Suchomski, C., Brezesinski, T. Ordered mesoporous MFe<sub>2</sub>O<sub>4</sub> (M = Co, Cu, Mg, Ni, Zn) thin films with nanocrystalline walls, uniform 16 nm diameter pores and high thermal stability: Template-directed synthesis and characterization of redox active trevorite Inorganic Chemistry 49 (24), pp. 11619-11626, DEC 2010.
1. Fritsch Daniel, Ederer Claude Epitaxial strain effects in the spinel ferrites CoFe(2)O(4) and NiFe(2)O(4) from first principles Physical Review B - Condensed Matter and Materials Physics 82 (10), art. no. 104117, SEP 23 2010.
73. "Synthesis and characterization of RBaCo<sub>2</sub>O<sub>5+x</sub> (R = La, Nd, Gd, Y and Ho)" N. D. Todorov, M. V. Abrashev, V. G. Ivanov, G. V. Avdeev and S. C. Russev Journal of Physics: Conference Series 253 (2010) 012071 (6 pages)
1. Gomez, L.; Galeano, V.; Vallejo, E.; et al. On the magnetic behavior of polycrystalline RBaCo<sub>2</sub>O<sub>5+delta</sub> synthesized by solid state and wet chemical routes Journal of Physics Conference Series 480, Art. No. 012035 2014
74. "Lattice dynamics of the  $\alpha$  and  $\beta$  phases of LiFe<sub>5</sub>O<sub>8</sub>" M. N. Iliev, V. G. Ivanov, N. D. Todorov, V. Marinova, M. V. Abrashev, R. Petrova, Y.-Q. Wang, and A. P. Litvinchuk Physical Review B 83, 174111 (2011) (7 pages)
20. Magnetodielectric response of composites based on a natural garnet and spinel ferrites for sub-GHz wireless applications N. S., Ganesanpotti, S.

19. Structural and magnetic properties of ordered inverse spinel  $\text{Li}_x\text{Fe}_5\text{O}_8$   
Kumawat, K. K.; Jain, A.; Meena, Sher Singh; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 865 Article Number: 158849 Published: JUN 5 2021
18. Magnetic anomalies, chemical and magnetic properties at wide temperature range (15–1000 K) in  $\text{Li}_{\text{x}}\text{Sr}_{\text{x}}\text{Fe}_5\text{-x}\text{O}_8$  ( $\text{x}=0, 0.025, 0.05$ )  
Udhayakumar, S.; Kumar, G. Jagadish; Kumar, E. Senthil; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 859 Article Number: 158290 Published: APR 5 2021
17. Facile and Low-Temperature Synthesis of  $\gamma$ - $\text{Fe}_2\text{O}_3$ Nanoparticles with Thermally Stable Ferrimagnetism for Use in Magnetic Recording Tapes  
Uyama, T., Mukai, K., Yamada, I.  
ACS Applied Nano Materials 3(11), pp. 10678-10690 (2020)
16. Transformation of Solid Solution with Spinel-Type Structure Within the Range  $\text{LiMn}_{2-\text{x}}(\text{Ni}_{0.33}\text{Co}_{0.33}\text{Fe}_{0.33})(\text{x})\text{O}_4$  ( $0 \leq \text{x} \leq 2$ )  
Nipan, G. D.; Smirnova, M. N.; Kornilov, D. Yu; et al.  
JOURNAL OF PHASE EQUILIBRIA AND DIFFUSION Volume: 41 Issue: 6 Special Issue: SI Pages: 819-826 Published: DEC 2020
15. Strain-tuned optical property in magnetoelectric  $\text{LiFe}_5\text{O}_8$  thin film  
Li, Hua; Wang, Xin; Zhou, Pengxia; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 821 Article Number: 153199 Published: APR 25 2020
14. Magnetic and broadband dielectric studies of calcium-substituted  $\text{LiFe}_5\text{O}_8$   
Mohapatra, Prajna P.; Dobbidi, Pamu  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 500 Article Number: 166354 Published: APR 15 2020
13. Self-Assembled Room Temperature Multiferroic  $\text{BiFeO}_3$ - $\text{LiFe}_5\text{O}_8$  Nanocomposites  
Sharma, Yogesh; Agarwal, Radhe; Collins, Liam; et al.  
ADVANCED FUNCTIONAL MATERIALS Volume: 30 Issue: 3 Article Number: 1906849 Published: JAN 2020
12. Influence of Ag doping on the dielectric and magnetic properties of  $\text{LiFe}_5\text{O}_8$  ceramics  
Li, Jing; Zhou, Di  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 785 Pages: 13-18 Published: MAY 15 2019
11. Magnetic Elastomeric Composites Filled by Lithium Ferrites  
Usakova, Mariana; Usak, Elemir; Dosoudil, Rastislav; et al.  
AIP Conference Proceedings Volume: 2131 Article Number: 020049 Published: 2019
10. A spinel-related solid solution ceramic  $0.7\text{LiFe}_5\text{O}_8-0.3\text{Li}_2\text{MgTi}_3\text{O}_8$  with high permeability and excellent microwave dielectric properties  
He, L., Wang, J., Zhang, C., Xie, H., Qun, L.  
Materials Letters 232, pp. 157-159 (2018)
9. Facile Synthesis of Flowerlike  $\text{LiFe}_5\text{O}_8$  Microspheres for Electrochemical Supercapacitors  
Lin, Ying; Dong, Jingjing; Dai, Jingjing; et al.  
INORGANIC CHEMISTRY Volume: 56 Issue: 24 Pages: 14960-14967 Published: DEC 18 2017
8. Electrical relaxation, optical and magnetic studies of nanocrystalline lithium ferrite synthesized by different chemical routes  
Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
MATERIALS RESEARCH EXPRESS Volume: 4 Issue: 12 Article Number: 125008 Published: DEC 2017
7. Reitz, C., Suchomski, C., Wang, D., Hahn, H., Brezesinski, T.  
In situ tuning of magnetization via topotactic lithium insertion in ordered mesoporous lithium ferrite thin films  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 4 Issue: 38 Pages: 8889-8896 DOI: 10.1039/c6tc02731h Published: 2016
6. He, Li; Mi, Shao-Bo; Jin, Xiaowei; et al.  
Order-Disorder Phase Transition and Magneto-Dielectric Properties of  $(1-\text{x})\text{LiFe}_5\text{O}_8-\text{xLi}(2)\text{ZnTi}(3)\text{O}(8)$  Spinel-Structured Solid Solution Ceramics  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY Volume: 98 Issue: 7 Pages: 2122-2129 Published: JUL 2015
5. Pachauri, Neha; Khodadadi, Behrouz; Althammer, Matthias; et al.  
Study of structural and ferromagnetic resonance properties of spinel lithium ferrite ( $\text{LiFe}_5\text{O}_8$ ) single crystals  
JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 23 Article Number: 233907 Published: JUN 21 2015
4. Soreto Teixeira, S.; Graca, M. P. F.; Dionisio, M.; et al.  
Self-standing elastomeric composites based on lithium ferrites and their dielectric behavior  
JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 22 Article Number: 224102 Published: DEC 14 2014
3. Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
Super-linear frequency dependence of ac conductivity in nanocrystalline lithium ferrite  
MATERIALS CHEMISTRY AND PHYSICS 146 (3), pp. 389-398 AUG 14 2014
2. Teixeira, S. Soreto; Graca, M. P. F.; Costa, L. C.; et al.

Study of the influence of thermal treatment on the magnetic properties of lithium ferrite prepared by wet ball-milling using nitrates as raw material

MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS 186, pp. 83-88 AUG 2014

1.Teixeira, S.S., Graça, M.P.F., Costa, L.C.

Dielectric, morphological and structural properties of lithium ferrite powders prepared by solid state method  
Journal of Non-Crystalline Solids 358 (16), pp. 1924-1929, 2012

*75. "Comparative Raman study of isostructural  $YCrO_3$  and  $YMnO_3$ : Effects of structural distortions and twinning"*

N. D. Todorov, M. V. Abrashev, V. G. Ivanov, G. G. Tsutsumanova, V. Marinova, Y.-Q. Wang, and M. N. Iliev

Physical Review B **83**, 224303 (2011) (6 pages)

39. Ni/ $YMnO_3$  perovskite catalyst for CO<sub>2</sub> methanation

González-Castaño, M., de Miguel, J.C.N., Penkova, A., (...), Odriozola, J.A., Arellano-Garcia, H.  
Applied Materials Today 23,101055 (2021)

38. Magnetoelastic coupling and spin contributions to entropy and thermal transport in biferroic yttrium orthochromite  
Bajaj, Naini; Roy, Aditya Prasad; Khandelwal, Ashish; et al.

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 33 Issue: 12 Article Number: 125702 Published: MAR 23 2021

37. Physical study of  $PrCu_{1-x}Zn_xO_3$  perovskite for  $0.0 \leq x \leq 0.3$

Maayoufi, A. E.; Sdiri, N.; Valente, M. A.; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 849 Article Number: 156239 Published: DEC 30 2020

36. Site substitution in  $GdMnO_3$ : Effects on structural, electronic, and magnetic properties

Mahana, Sudipta; Pandey, Shishir Kumar; Rakshit, Bipul; et al.

PHYSICAL REVIEW B Volume: 102 Issue: 24 Article Number: 245120 Published: DEC 15 2020

35. Spin-phonon coupling and thermodynamic behaviour in  $YCrO_3$ and  $LaCrO_3$ : inelastic neutron scattering and lattice dynamics

Gupta, Mayank K.; Mittal, Ranjan; Mishra, Sanjay K.; et al.

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 32 Issue: 50 Article Number: 505402 Published: SEP 30 2020

34. Magnetocaloric effect and spin-phonon correlations in  $RFe0.5Cr0.5O_3$  ( $R = Er$  and  $Yb$ ) compounds

Yadav, Kavita; Kaur, Gurpreet; Sharma, Mohit K.; et al.

PHYSICS LETTERS A Volume: 384 Issue: 26 Article Number: 126638 Published: SEP 18 2020

33. Crystalline and magnetic structures, magnetization, heat capacity, and anisotropic magnetostriction effect in a yttrium-chromium oxide  
Zhu, Yinghao; Fu, Ying; Tu, Bao; et al.

PHYSICAL REVIEW MATERIALS Volume: 4 Issue: 9 Article Number: 094409 Published: SEP 15 2020

32. Spin-phonon coupling in monoclinic  $BiCrO_3$

Araujo, B. S.; Arevalo-Lopez, A. M.; Santos, C. C.; et al.

JOURNAL OF APPLIED PHYSICS Volume: 127 Issue: 11 Article Number: 114102 Published: MAR 21 2020

31. Temperature dependent X-ray diffraction and Raman spectroscopy studies of polycrystalline  $YCrO_3$  ceramics across the T-C similar to 460 K

Mall, Ashish Kumar; Paul, Barnita; Garg, Ashish; et al.

JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 3 Pages: 537-545 Published: MAR 2020

30. Structure, Mossbauer spectroscopy and vibration phonon spectra in valence-bond force-field model approach for distorted perovskites  $AFeO(3)$  ( $A = La, Y$ )

Saha, J.; Jana, Y. M.; Mukherjee, G. D.; et al.

MATERIALS CHEMISTRY AND PHYSICS Volume: 240 Article Number: 122286 Published: JAN 15 2020

29. Physical properties of Nano Crystalline Ceramic  $Ho_{1-x}Ba_xCrO_3$

Ben Youssef, R. Triki; Sdiri, Nasr; Valente, M. A.; et al.

CERAMICS INTERNATIONAL Volume: 45 Issue: 16 Pages: 20211-20225 Published: NOV 2019

28. Intrinsic anharmonicity effect in  $YCrO_3$ : Pressure and temperature dependent Raman spectra studies

Su, Yuling; Guo, Jinjin; Cheng, Xuerui; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 805 Pages: 489-495 Published: OCT 15 2019

27. Structural electronic and magnetic properties of  $BaBiO_3$  single crystals

Foyevtsov, O.; Balandeh, S.; Chi, S.; et al.

PHYSICA B-CONDENSED MATTER Volume: 570 Pages: 328-333 Published: OCT 1 2019

26. Mechanosynthesis of the Whole  $Y_{1-x}Bi_xMn_{1-x}Fe_xO_3$  Perovskite System: Structural Characterization and Study of Phase Transitions  
Angel Quintana-Cilleruelo, Jose; Veerapandiyan, Vignaswaran K.; Deluca, Marco; et al.

MATERIALS Volume: 12 Issue: 9 Article Number: 1515 Published: MAY 1 2019

25. Phase separation and local lattice distortions analysis of charge-ordered manganese films La<sub>1-x</sub>CaxMnO<sub>3</sub>-delta by Raman spectroscopy  
 Trotsenko, V. G.; Lahmar, A.; Lyanguzov, N. V.; et al.  
 SUPERLATTICES AND MICROSTRUCTURES Volume: 127 Pages: 100-108 Published: MAR 2019
24. Mild Hydrothermal Crystallization of Heavy Rare-Earth Chromite RECrO<sub>3</sub> (RE = Er, Tm, Yb, Lu) Perovskites and Magnetic Properties  
 Wang, Shan; Wu, Xiaofeng; Wang, Tiesheng; et al.  
 INORGANIC CHEMISTRY Volume: 58 Issue: 4 Pages: 2315-2329 Published: FEB 18 2019
23. Synthesis and photocatalytic property of p-n junction YMnO<sub>3</sub>/SrTiO<sub>3</sub> composites  
 Cao, Zhengheng; Wang, Caqin; Chen, Jun  
 MATERIALS RESEARCH EXPRESS Volume: 5 Issue: 11 Article Number: 115512 Published: NOV 2018
22. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates; RCrO<sub>3</sub> (R = La, Nd, Eu, Gd, Dy, and Y)  
 Singh, Kapil Dev; Pandit, Rabia; Kumar, Ravi  
 SOLID STATE SCIENCES Volume: 85 Pages: 70-75 Published: NOV 2018
21. Pressure induced anomalous magnetic behaviour in nanocrystalline YCrO<sub>3</sub> at room temperature  
 Jana, Rajesh; Pareek, Vivek; Khatua, Pradip; et al.  
 JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 30 Issue: 33 Article Number: 335401 Published: AUG 22 2018
20. Two types of B-site ordered structures of the double perovskite Y<sub>2</sub>CrMnO<sub>6</sub>: experimental identification and first-principles study  
 Wang, Weipeng; Liu, Fuyang; Zhang, Xuejing; et al.  
 INORGANIC CHEMISTRY FRONTIERS Volume: 5 Issue: 1 Pages: 217-224 Published: JAN 2018
19. High pressure studies on nanocrystalline YCrO<sub>3</sub>  
 Jana, Rajesh; Chandra, Amreesh; Mukherjee, Goutam Dev  
 AIP Conference Proceedings Volume: 1953 Article Number: 030081 Published: 2018
18. Singh, Karan; Sharma, Mohit K.; Mukherjee, K.  
 Spin-phonon coupling and exchange interaction in Gd substituted YFe<sub>0.5</sub>Cr<sub>0.5</sub>O  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 447 Pages: 26-31 Published: FEB 1 2018
17. Tailoring the bandgap and magnetic properties by bismuth substitution in neodymium chromite  
 Manneplalli, Venkateswara Rao; Mohan, M. M. Saj; Ranjith, R.  
 BULLETIN OF MATERIALS SCIENCE Volume: 40 Issue: 7 Pages: 1503-1511 Published: DEC 2017
16. Polarized Raman scattering on single crystals of rare earth orthochromite RCrO<sub>3</sub> (R=La, Pr, Nd, and Sm)  
 Camara, Nimbo Robert; Vinh Ta Phuoc; Monot-Laffez, Isabelle; et al.  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 12 Pages: 1839-1851 Published: DEC 2017
15. Magnetic and magnetocaloric properties of HoCrO<sub>3</sub> tuned by selective rare-earth doping  
 Yin, Shiqi; Sehra, Mohindar S.; Guild, Curtis J.; et al.  
 PHYSICAL REVIEW B Volume: 95 Issue: 18 Article Number: 184421 Published: MAY 18 2017
14. Lazarevic, Zorica Z.; Jovalekic, Cedomir; Gilic, Martina; et al.  
 Yttrium Orthoferrite Powder Obtained by the Mechanochemical Synthesis  
 SCIENCE OF SINTERING Volume: 49 Issue: 3 Pages: 277-284 Published: JUL-SEP 2017
13. Manneplalli, Venkateswara Rao; Raghunathan, Rajamani; Ramadurai, Ranjith; et al.  
 Local structural distortion and interrelated phonon mode studies in yttrium chromite  
 JOURNAL OF MATERIALS RESEARCH Volume: 32 Issue: 8 Pages: 1541-1547 Published: APR 2017
12. Shao, Tao; Qi, Zeming; Wang, Yuyin; et al.  
 Metal-insulator transition in epitaxial NdNiO<sub>3</sub> thin film: A structural, electrical and optical study  
 APPLIED SURFACE SCIENCE Volume: 399 Pages: 346-350 Published: MAR 31 2017
11. Manneplalli, Venkateswara Rao; Ramadurai, Ranjith  
 Studies on Local Structural Inhomogeneity and Origin of Ferroelectricity in Yttrium chromite Ceramics  
 MRS ADVANCES Volume: 1 Issue: 9 Pages: 609-614 Published: 2016
10. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.  
 Dielectric relaxation of PrFeO<sub>3</sub> nanoparticles  
 SOLID STATE SCIENCES Volume: 58 Pages: 55-63 DOI: 10.1016/j.solidstatesciences.2016.05.013 Published: AUG 2016
9. Mall, A.K., Garg, A., Gupta, R.  
 High Temperature X-ray Diffraction, Raman Spectroscopy and Dielectric Studies on Yttrium Orthochromites  
 INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND APPLIED PHYSICS (ICC 2015) Book Series: AIP Conference Proceedings Volume: 1728 Article Number: 020239 DOI: 10.1063/1.4946290 Published: 2016
8. Gupta, Preeti; Poddar, Pankaj  
 Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in DyCrO<sub>3</sub> nanoplatelets  
 RSC ADVANCES Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015

7. Sharma, Yogesh; Sahoo, Satyaprakash; Perez, William; et al.  
 Phonons and magnetic excitation correlations in weak ferromagnetic YCrO<sub>3</sub>  
 JOURNAL OF APPLIED PHYSICS 115 (18), Art. No. 183907 MAY 14 2014
6. Staruch, M.; Jain, M.  
 Evidence of antiferromagnetic and ferromagnetic superexchange interactions in bulk TbMn<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub>  
 JOURNAL OF PHYSICS-CONDENSED MATTER 26 (4), Art. No. 046005 JAN 29 2014
5. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.  
 Dielectric relaxation and phonon modes of NdCrO<sub>3</sub> nanostructure  
 Journal of Sol-Gel Science and Technology Volume 69, Issue 3, March 2014, Pages 553-563
4. Mall, A. K.; Mukherjee, S.; Sharma, Y.; et al.  
 Temperature Dependent Raman Scattering in YCrO<sub>3</sub>  
 AIP Conference Proceedings 1591, pp. 1753-1754 2014
3. Singh, Inderjeet; Nigam, A. K.; Landfester, Katharina; et al.  
 Anomalous magnetic behavior below 10 K in YCrO<sub>3</sub> nanoparticles obtained under droplet confinement  
 APPLIED PHYSICS LETTERS 103 (18) OCT 28 2013
2. Tiwari, B., Surendra, M.K., Ramachandra Rao, M.S.  
 HoCrO<sub>3</sub> and YCrO<sub>3</sub>: A comparative study  
 Journal of Physics Condensed Matter 25 (21), art. no. 216004, 2013
1. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
 Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
 Physical Review B - Condensed Matter and Materials Physics 85 (5) , art. no. 054303, 2012.
76. “*Infrared response of α- and β-phases of LiFe<sub>5</sub>O<sub>8</sub>*”  
 V. G. Ivanov, A. P. Litvinchuk, N. D. Todorov, M. V. Abrashev, and V. Marinova  
 Physical Review B **84**, 094111 (2011) (5 pages)
2. Electrical relaxation, optical and magnetic studies of nanocrystalline lithium ferrite synthesized by different chemical routes  
 Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
 MATERIALS RESEARCH EXPRESS Volume: 4 Issue: 12 Article Number: 125008 Published: DEC 2017
1. Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
 Super-linear frequency dependence of ac conductivity in nanocrystalline lithium ferrite  
 MATERIALS CHEMISTRY AND PHYSICS 146 (3), pp. 389-398 AUG 14 2014
77. “*Electrochromic and Optical Study of Atmospheric Pressure Chemical Vapour Deposition MoO<sub>3</sub>-Cr<sub>2</sub>O<sub>3</sub> Films*”  
 T. Ivanova, K. A. Gesheva, M. Kozlov, and M. Abrashev  
 Journal of Nanoscience and Nanotechnology **11**(9), 8017–8023 (2011) (7 pages)
1. Gomes, Adriano S. O.; Yaghini, Negin; Martinelli, Anna; et al.  
 A micro-Raman spectroscopic study of Cr(OH)(3) and Cr<sub>2</sub>O<sub>3</sub> nanoparticles obtained by the hydrothermal method  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 10 Pages: 1256-1263 Published: OCT 2017
78. “*Frequency dependence of the quasi-soft Raman-active modes in rotationally distorted R<sub>3</sub>+B<sub>3</sub>+O<sub>3</sub> perovskites (R<sub>3</sub>+—rare earth, B<sub>3</sub>+ D Al, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Ga)*”  
 N. D. Todorov, M. V. Abrashev and V. G. Ivanov  
 J. Phys.: Condens. Matter **24**, 175404 (2012) (8 pages)
19. Spectroscopic and transport properties of Ba- and Ti-doped BaLaInO<sub>4</sub>  
 Tarasova, N.; Galisheva, A.; Animitsa, I  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 52 Issue: 5 Pages: 980-987 Published: MAY 2021
18. Effect of doping on the local structure of new block-layered proton conductors based on BaLaInO<sub>4</sub>  
 Tarasova, N.; Animitsa, I.; Galisheva, A.  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 11 Pages: 2290-2297 Published: NOV 2020
17. Modified Benign approach for probing the structural, optical and antibacterial activity of Sm<sup>3+</sup>-doped Bi<sup>3+</sup>-co-doped LaAlO<sub>3</sub> nanoparticles  
 Pratibha, S.; Dhananjaya, N.; Begum, J. P. Shabaaz; et al.  
 EUROPEAN PHYSICAL JOURNAL PLUS Volume: 135 Issue: 8 Article Number: 651 Published: AUG 12 2020
16. Temperature and pressure manipulation of magnetic ordering and phonon dynamics with phase transition in multiferroic GdFeO<sub>3</sub>: Evidence from Raman scattering  
 Ye, Yan; Cui, Anyang; Bian, Mengyun; et al.  
 PHYSICAL REVIEW B Volume: 102 Issue: 2 Article Number: 024103 Published: JUL 7 2020

15. Magnetic phase transition and multiferroic phase separation in Ho<sub>1-x</sub>GdxMnO<sub>3</sub>  
 Zhang, N.; Wang, Y. P.; Li, X.; et al.  
*CERAMICS INTERNATIONAL* Volume: 45 Issue: 7 Pages: 8325-8332 Part: A Published: MAY 2019
14. First-principles study of elastic, dielectric, and vibrational properties of orthoferrites RFeO<sub>3</sub> (R = Ho, Er, Tm and Lu)  
 Wang, Zhao-Qi; Mu, Yi; Zeng, Zhao-Yi; et al.  
*MATERIALS RESEARCH EXPRESS* Volume: 6 Issue: 5 Article Number: 055605 Published: MAY 2019
13. Crossover in the pressure evolution of elementary distortions in RFeO<sub>3</sub> perovskites and its impact on their phase transition  
 Vilarinho, R.; Bouvier, P.; Guennou, M.; et al.  
*PHYSICAL REVIEW B* Volume: 99 Issue: 6 Article Number: 064109 Published: FEB 25 2019
12. Suppression of the cooperative Jahn-Teller distortion and its effect on the Raman octahedra-rotation modes of TbMn<sub>1-x</sub>FexO<sub>3</sub>  
 Vilarinho, R.; Passos, D. J.; Queiros, E. C.; et al.  
*PHYSICAL REVIEW B* Volume: 97 Issue: 14 Article Number: 144110 Published: APR 19 2018
11. Crystal structure and magnetic properties of Ti-doped Bi<sub>0.84</sub>La<sub>0.16</sub>FeO<sub>3</sub> at morphotropic phase boundary  
 Tho, P. T.; Clements, E. M.; Kim, D. H.; et al.  
*JOURNAL OF ALLOYS AND COMPOUNDS* Volume: 741 Pages: 59-64 Published: APR 15 2018
10. Blanck, Dimitri; Schon, Anke; Mamede, Anne-Sophie; et al.  
*In situ* Raman spectroscopy evidence of an accessible phase potentially involved in the enhanced activity of La -deficient lanthanum orthoferrite in 3-way catalysis (TWC)  
*CATALYSIS TODAY* Volume: 283 Pages: 151-157 Published: APR 1 2017
9. Weber, Mads Christof; Guennou, Mael; Zhao, Hong Jian; et al.  
 Raman spectroscopy of rare-earth orthoferrites RFeO<sub>3</sub> (R=La, Sm, Eu, Gd, Tb, Dy)  
*PHYSICAL REVIEW B* Volume: 94 Issue: 21 Article Number: 214103 Published: DEC 7 2016
8. Wang, H (Wang, Heng); Li, GS (Li, Guangshe); Li, LP (Li, Liping)  
 Influence of Mn-substitution on the structure and low-temperature electrical conduction properties of PrCoO<sub>3</sub>  
*CERAMICS INTERNATIONAL* Volume: 42 Issue: 10 Pages: 12283-12288 DOI: 10.1016/j.ceramint.2016.04.175 Published: AUG 1 2016
7. Weber, M.C., Guennou, M., Dix, N., Pesquera, D., Sánchez, F., Herranz, G., Fontcuberta, J., López-Conesa, L., Estradé, S., Peiró, F., Iñiguez, J., Kreisel, J.  
 Multiple strain-induced phase transitions in LaNiO<sub>3</sub> thin films  
*PHYSICAL REVIEW B* Volume: 94 Issue: 1 Article Number: 014118 DOI: 10.1103/PhysRevB.94.014118 Published: JUL 29 2016
6. Paul, B., Chatterjee, S., Gop, S., Roy, A., Grover, V., Shukla, R., Tyagi, A.K.  
 Evolution of lattice dynamics in ferroelectric hexagonal REInO<sub>3</sub> (RE = Ho, Dy, Tb, Gd, Eu, Sm) perovskites  
*MATERIALS RESEARCH EXPRESS* Volume: 3 Issue: 7 Article Number: UNSP 075703 DOI: 10.1088/2053-1591/3/7/075703 Published: JUL 2016
5. Remya, G.R., Solomon, S., Thomas, J.K., John, A.  
 Optical and dielectric properties of nano GdAlO<sub>3</sub>  
*MATERIALS TODAY-PROCEEDINGS* Volume: 2 Issue: 3 Pages: 1012-1016 DOI: 10.1016/j.matpr.2015.06.027 Published: 2015
4. Mota, D. A.; Almeida, A.; Rodrigues, V. H.; et al.  
 Dynamic and structural properties of orthorhombic rare-earth manganites under high pressure  
*PHYSICAL REVIEW B* Volume: 90 Issue: 5 Article Number: 054104 Published: AUG 8 2014
3. Atuchin, Victor; Zhu, Lei; Lee, Soo Hyun; et al.  
 Microwave-Assisted Solvothermal Synthesis of Sr<sub>3</sub>V<sub>2</sub>O<sub>8</sub> Nanoparticles and Their Spectroscopic Properties  
*ASIAN JOURNAL OF CHEMISTRY* 26 (5), pp. 1290-1292 Part: A MAR 2014
2. Lim, C.S., Atuchin, V.V.  
 Preparation and characterization of Sr<sub>3</sub>V<sub>2</sub>O<sub>8</sub> nanoparticles via cyclic MAS route  
*Proceedings of SPIE - The International Society for Optical Engineering* Volume 8771, Article number 877112, 2013
- 1.Bielecki, J., Svedlindh, P., Tibebu, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S.  
 Structural and magnetic properties of isovalently substituted multiferroic BiFeO<sub>3</sub>: Insights from Raman spectroscopy  
*Physical Review B - Condensed Matter and Materials Physics* 86 (18), art. no. 184422, 2012
79. *“Relationship between structural properties and activity in complete benzene oxidation over Au/CeO<sub>2</sub>-CoO<sub>x</sub> catalysts”*  
 L. Ilieva, P. Petrova, T. Tabakova, R. Zanella, M.V. Abrashev, J.W. Sobczak, W. Lisowski, Z. Kaszkur, and D. Andreeva  
*Catalysis Today* 187, 30– 38 (2012) (9 pages)
9. Electric Field Promoted Complete Oxidation of Benzene over PdCexCoy Catalysts at Low Temperature  
 Shen, Feixiang; Li, Ke; Xu, Dejun; et al.  
*CATALYSTS* Volume: 9 Issue: 12 Article Number: 1071 Published: DEC 2019

8. Mono- and bimetallic nano-Re systems doped Os, Mo, Ru, Ir as nanocatalytic platforms for the acetalization of polyalcohols into cyclic acetals and their applications as fuel additives  
 Kapkowski, M., Popiel, J., Siudyga, T., (...), Zubko, M., Polanski, J.  
*Applied Catalysis B: Environmental* 239, pp. 154-167 (2018)
7. Wang, Wei-Jia; Wang, Yan; Xu, Qian; et al  
 Interaction of cobalt with ceria thin films and its influence on supported Au nanoparticles  
*CHINESE CHEMICAL LETTERS* Volume: 28 Issue: 8 Pages: 1760-1766 Published: AUG 2017
6. Nevanperä, T.K., Ojala, S., Bion, N., Epron, F., Keiski, R.L.  
 Catalytic oxidation of dimethyl disulfide ( $\text{CH}_3\text{SSCH}_3$ ) over monometallic Au, Pt and Cu catalysts supported on gamma-Al<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub> and CeO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub>  
*APPLIED CATALYSIS B-ENVIRONMENTAL* Volume: 182 Pages: 611-625 DOI: 10.1016/j.apcatb.2015.10.012 Published: MAR 2016
5. Wen, Meicheng; Takakura, Shuhei; Fuku, Kojirou; et al.  
 Enhancement of Pd-catalyzed Suzuki-Miyaura coupling reaction assisted by localized surface plasmon resonance of Au nanorods  
*CATALYSIS TODAY* Volume: 242 Pages: 381-385 Part: B Published: MAR 15 2015
4. Wang, Yu; Chen, Bing-bing; Crocker, Mark; et al.  
 Understanding on the origins of hydroxyapatite stabilized gold nanoparticles as high-efficiency catalysts for formaldehyde and benzene oxidation  
*CATALYSIS COMMUNICATIONS* Volume: 59 Pages: 195-200 Published: JAN 10 2015
3. Ralphs, K., Hardacre, C., James, S.L.  
 Application of heterogeneous catalysts prepared by mechanochemical synthesis  
*Chemical Society Reviews* 42 (18), pp. 7701-7718, 2013
2. Arab, M., Lopes-Moriyama, A.L., Dos Santos, T.R., De Souza, C.P., Gavarri, J.R., Leroux, C.  
 Strontium and cerium tungstate materials SrWO<sub>4</sub> and Ce<sub>2</sub>(WO<sub>4</sub>)<sub>3</sub>: Methane oxidation and mixed conduction  
*Catalysis Today* 208, pp. 35-41, 2013
1. Huang, J., Xue, C., Wang, B., Guo, X., Wang, S.  
 Gold-supported tin dioxide nanocatalysts for low temperature CO oxidation: Preparation, characterization and DRIFTS study  
*Reaction Kinetics, Mechanisms and Catalysis* 108 (2), pp. 403-416, 2013
80. “Raman spectroscopy and lattice-dynamical calculations of  $\text{Sc}_3\text{CrO}_6$  single crystals”  
 N. D. Todorov, M. V. Abrashev, S. C. Russev, V. Marinova, R. P. Nikolova, and B. L. Shivachev  
*Physical Review B* **85**, 214301 (2012) (7 pages)
1. Symmetries of modes in Ni<sub>3</sub>V<sub>2</sub>O<sub>8</sub>: Polarized Raman spectroscopy and ab initio phonon calculations  
 Kesari, Swayam; Rao, Rekha; Gupta, Mayanak K.; et al.  
*JOURNAL OF RAMAN SPECTROSCOPY* Volume: 50 Issue: 4 Pages: 587-594 Published: APR 2019
81. “Study of electrochromic APCVD WO<sub>3</sub>-V<sub>2</sub>O<sub>5</sub> films”  
 G. Bodurov, T. Ivanova, M. Abrashev, and K. Gesheva  
*Journal of Physics: Conference Series* **398** (2012) 012016 (6 pages)
4. Lu, Y.-R., Hsu, H.-H., Chen, J.-L., Chang, H.-W., Chen, C.-L., Chou, W.-C., Dong, C.-L.  
 Atomic and electronic aspects of the coloration mechanism of gasochromic Pt/Mo-modified V<sub>2</sub>O<sub>5</sub> smart films: an in situ X-ray spectroscopic study  
*PHYSICAL CHEMISTRY CHEMICAL PHYSICS* Volume: 18 Issue: 7 Pages: 5203-5210 DOI: 10.1039/c5cp06870c Published: FEB 21 2016
3. Drosos, C., Vernardou, D.  
 Perspectives of energy materials grown by APCVD  
*Solar Energy Materials and Solar Cells* Volume 140, September 2015, Article number 7655, Pages 1-8
2. Lin, Y. -S.; Tsai, T. -H.; Lu, W. -H.; et al.  
 Lithium electrochromic properties of atmospheric pressure plasma jet-synthesized tungsten/molybdenum-mixed oxide films for flexible electrochromic device  
*IONICS* 20 (8), 1163-1174 AUG 2014
1. Mane, Anil U.; Elam, Jeffrey W.  
 Atomic Layer Deposition of W:Al<sub>2</sub>O<sub>3</sub> Nanocomposite Films with Tunable Resistivity  
*CHEMICAL VAPOR DEPOSITION* Volume: 19, Issue: 4-6, Special Issue: SI, Pages: 186-193, 2013
82. “Raman spectroscopy and lattice dynamical calculations of  $\text{Sc}_2\text{O}_3$  single crystals”  
 N. D. Todorov, M. V. Abrashev, V. Marinova, M. Kadiyski, L. Dimowa, and E. Faulques  
*Physical Review B* **87**, 104301 (2013) (5 pages)
17. Spectroscopy and laser operation of highly-doped 10 at.% Yb:(Lu,Sc)2O<sub>3</sub> ceramics

Jing, W., Loiko, P., Basyrova, L., (...), Díaz, F., Mateos, X.  
Optical Materials 117,111128 (2021)

16. Comparative study of Yb:Lu<sub>3</sub>Al<sub>5</sub>O<sub>12</sub> and Yb:Lu<sub>2</sub>O<sub>3</sub> laser ceramics produced from laser-ablated nanopowders  
Basyrova, L., Loiko, P., Maksimov, R., (...), Díaz, F., Mateos, X.  
Ceramics International 47(5), pp. 6633-6642 (2021)

15. A systematic study on extraction and separation of scandium using phosphinic acid by both solvent extraction and hollow fibre membrane  
Rout, P. C.; Sarangi, K.

MINERAL PROCESSING AND EXTRACTIVE METALLURGY-TRANSACTIONS OF THE INSTITUTIONS OF MINING AND METALLURGY Early Access: MAR 2021

14. Unraveling microstrain-promoted structural evolution and thermally driven phase transition in c-Sc<sub>2</sub>O<sub>3</sub> nanocrystals at high pressure  
Zou, Yongtao; Li, Mu; Zhang, Wei; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 21 Article Number: 214115 Published: DEC 31 2020

13. Exploring the surface-to-volume ratio in ultrasmall nanocrystals using the optical probe of Eu<sup>3+</sup> ion  
Fu, Huhui; Feng, Rui; Jiang, Feilong; et al.  
CHEMICAL COMMUNICATIONS Volume: 56 Issue: 93 Pages: 14725-14728 Published: DEC 4 2020

12. Optical properties and charge transport of textured Sc<sub>2</sub>O<sub>3</sub> thin films obtained by atomic layer deposition  
Lebedev, M. S.; Kruchinin, V. N.; Afonin, M. Yu.; et al.  
APPLIED SURFACE SCIENCE Volume: 478 Pages: 690-698 Published: JUN 1 2019

11. Lattice dynamics study of cubic Tb<sub>2</sub>O<sub>3</sub>  
Ibanez, Jordi; Blazquez, Oriol; Hernandez, Sergi; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 12 Pages: 2021-2027 Published: DEC 2018

10. Pressure induced structural phase transition in rare earth sesquioxide Tm<sub>2</sub>O<sub>3</sub>: Experiment and ab initio calculations  
Irshad, K. A.; Anees, P.; Sahoo, Shradhanjali; et al.  
JOURNAL OF APPLIED PHYSICS Volume: 124 Issue: 15 Article Number: 155901 Published: OCT 21 2018

9. Density functional study of the phase stability and Raman spectra of Yb<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>SiO<sub>5</sub> and Yb<sub>2</sub>Si<sub>2</sub>O<sub>7</sub> under pressure  
Ogawa, Takafumi; Otani, Noriko; Yokoi, Taishi; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 20 Issue: 24 Pages: 16518-16527 Published: JUN 28 2018

8. Co-solubility of aluminium and scandium oxides in molten sodium cryolite  
Rudenko, A.V., Kataev, A.A., Zakiryanova, I.D., Tkacheva, O.  
Tsvetnye Metally (11), pp. 22-26 (2017)

7. Structure and vibrational spectra of thin films Y<sub>2</sub>O<sub>3</sub>:Eu  
Bordun, O.M., Bordun, I.O., Kukharskyy, I.J., (...), Tsapovska, Z.I., Leonov, D.S.  
Nanosistemi, Nanomateriali, Nanotehnologii 15(1), pp. 27-36 (2017)

6. Jing, Wei; Loiko, Pavel; Serres, Josep Maria; et al.  
Synthesis, spectroscopy, and efficient laser operation of "mixed" sesquioxide Tm:(Lu, Sc)(2)O-3 transparent ceramics  
OPTICAL MATERIALS EXPRESS Volume: 7 Issue: 11 Pages: 4192-4202 Published: NOV 1 2017

5. Greiner, Stefan; Chou, Sheng-Chun; Schleid, Thomas  
Two anionically derivatized scandium oxoselenates(TV): ScF[SeO<sub>3</sub>] and Sc<sub>2</sub>O<sub>2</sub>[SeO<sub>3</sub>]  
JOURNAL OF SOLID STATE CHEMISTRY Volume: 246 Pages: 160-166 Published: FEB 2017

4. Irshad, KA (Irshad, K. A.); Shekar, NVC (Shekar, Chandra N. V.); Ravindran, TR (Ravindran, T. R.); Srihari, V (Srihari, V.); Pandey, KK (Pandey, K. K.)  
X-ray diffraction and Raman studies on Ho: Eu<sub>2</sub>O<sub>3</sub>  
JOURNAL OF MOLECULAR STRUCTURE Volume: 1128 Pages: 325-329 DOI: 10.1016/j.molstruc.2016.08.077 Published: JAN 15 2017

3. Fernández-González, R., Velázquez, J.J., Rodríguez, V.D., Rivera-López, F., Lukowiak, A., Chiasera, A., Ferrari, M., Gonçalves, R.R., Marrero-Jerez, J., Lahoz, F., Núñez, P.  
Luminescence and structural analysis of Ce<sup>3+</sup> and Er<sup>3+</sup> doped and Ce<sup>3+</sup>-Er<sup>3+</sup> codoped Ca<sub>3</sub>Sc<sub>2</sub>Si<sub>3</sub>O<sub>12</sub> garnets: influence of the doping concentration in the energy transfer processes  
RSC ADVANCES Volume: 6 Issue: 18 Pages: 15054-15061 DOI: 10.1039/c5ra22630a Published: 2016

2. Ovsyannikov, SV, Bykova, E, Bykov, M, Wenz, MD, Pakhomova, AS, Glazyrin, K, Liermann, HP, Dubrovinsky, L  
Structural and vibrational properties of single crystals of Scandia, Sc<sub>2</sub>O<sub>3</sub> under high pressure  
JOURNAL OF APPLIED PHYSICS Volume: 118 Issue: 16 Article Number: 165901 DOI: 10.1063/1.4933391 Published: OCT 28 2015

1. Velazquez, J. J.; Fernandez-Gonzalez, R.; Marrero-Jerez, J.; et al.  
Structural and luminescence study of Ce<sup>3+</sup> and Tb<sup>3+</sup> doped Ca<sub>3</sub>Sc<sub>2</sub>Si<sub>3</sub>O<sub>12</sub> garnets obtained by freeze-drying synthesis method  
OPTICAL MATERIALS Volume: 46 Pages: 109-114 Published: AUG 2015

83. “*Biogenic iron oxides produced by neutrophilic iron-oxidizing bacteria under laboratory conditions*”

Ralitsa Angelova, Lyubomir Slavov, Mihail Iliev, Blagoi Blagoev, Daniela Kovacheva, Miroslav Abrashev, Ivan Nedkov, and Veneta Groudeva  
Current Opinion in Biotechnology **24**, Suppl. 1, S108–S109 (2013)

1. Shopska, M, Paneva, D, Kadinov, G, Todorova, S, Fabian, M, Yordanova, I, Cherkezova-Zheleva, Z, Mitov, I  
Composition and catalytic behavior in CO oxidation of biogenic iron-containing materials  
REACTION KINETICS MECHANISMS AND CATALYSIS Volume: 118 Issue: 1 Pages: 179-198 DOI: 10.1007/s11144-016-0989-6  
Published: JUN 2016

84. “*Thin film optical coatings of Vanadium Oxide and mixed Tungsten/Vanadium Oxide deposited by APCVD employing precursors of Vanadyl Acetylacetone and a mixture with tungsten hexacarbonyl*”  
Georgi Bodurov, Tatyana Ivanova, Miroslav Abrashev, Zoya Nenova, and Kostadinka Gesheva  
Physics Procedia **46**, 127 – 136 (2013)

4. Room-temperature application of VO<sub>2</sub> microstructures on rigid and flexible substrates based on synthesis of crystalline VO<sub>2</sub> solution  
Taha, Mohammad; Mayes, Edwin L. H.; Field, Matthew R.; et al.  
MATERIALS ADVANCES Volume: 1 Issue: 6 Pages: 1685-1694 Published: SEP 1 2020

3. Crystal Structure, Surface Topography, Surface Morphology and Optical Properties of DC Magnetron Sputtered VO<sub>2</sub> Thin Films using VO<sub>2</sub> Target  
Muslim, N., Md Idris, M.N.S., Soon, Y.W., (...), Lim, C.M., Voo, N.Y.  
IOP Conference Series: Materials Science and Engineering 409(1),012025 (2018)

2. Graf, David; Schlaefer, Johannes; Garbe, Simon; et al.  
Interdependence of Structure, Morphology, and Phase Transitions in CVD Grown VO<sub>2</sub> and V<sub>2</sub>O<sub>3</sub> Nanostructures  
CHEMISTRY OF MATERIALS Volume: 29 Issue: 14 Pages: 5877-5885 Published: JUL 25 2017

1. Vernardou, D., Louloudakis, D., Spanakis, E., Katsarakis, N., Koudoumas, E.  
Amorphous thermochromic VO<sub>2</sub> coatings grown by APCVD at low temperatures  
Advanced Materials Letters Volume 6, Issue 7, 2015, Pages 660-663

85. “*Phonon and magnon Raman scattering in CuB<sub>2</sub>O<sub>4</sub>*”  
V. G. Ivanov, M. V. Abrashev, N. D. Todorov, V. Tomov, R. P. Nikolova, A. P. Litvinchuk, and M. N. Iliev  
Physical Review B **88**, 094301 (2013) (8 pages)

7. Spectroscopic Signature of Spin-Charge-Lattice Coupling in CuB<sub>2</sub>O<sub>4</sub>  
Mero, Rea Divina; Lai, Chun-Hao; Du, Chao-Hung; et al.  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 125 Issue: 7 Pages: 4322-4329 Published: FEB 25 2021

6. Vapor Deposition of Magnetic Van der Waals NiI<sub>2</sub> Crystals  
Liu, Haining; Wang, Xinsheng; Wu, Juanxia; et al.  
ACS NANO Volume: 14 Issue: 8 Pages: 10544-10551 Published: AUG 25 2020

5. Exciton and exciton-magnon photoluminescence in the antiferromagnet CuB<sub>2</sub>O<sub>4</sub>  
Kudlacik, D.; Ivanov, V. Yu; Yakovlev, D. R.; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 3 Article Number: 035128 Published: JUL 16 2020

4. Symmetries of modes in Ni<sub>3</sub>V<sub>2</sub>O<sub>8</sub>: Polarized Raman spectroscopy and ab initio phonon calculations  
Kesari, Swayam; Rao, Rekha; Gupta, Mayanak K.; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 50 Issue: 4 Pages: 587-594 Published: APR 2019

3. Excitation of multiple phonon modes in copper metaborate CuB<sub>2</sub>O<sub>4</sub> via nonresonant impulsive stimulated Raman scattering  
Imasaka, Kotaro; Pisarev, Roman, V; Bezmaternykh, Leonard N.; et al.  
PHYSICAL REVIEW B Volume: 98 Issue: 5 Article Number: 054303 Published: AUG 7 2018

2. Femtosecond activation of magnetoelectricity  
Bossini, D.; Konishi, K.; Toyoda, S.; et al.  
NATURE PHYSICS Volume: 14 Issue: 4 Pages: 370-+ Published: APR 2018

1. Molchanova, A. D.; Prosnikov, M. A.; Dubrovin, R. M.; et al.  
Lattice dynamics and electronic transitions in a structurally complex layered copper borate Cu-3(BO<sub>3</sub>)<sub>(2</sub>)  
PHYSICAL REVIEW B Volume: 96 Issue: 17 Article Number: 174305 Published: NOV 27 2017

86. “*Microwave plasma based single step method for free standing graphene synthesis at atmospheric conditions*”  
E. Tatarova, J. Henriques, C. C. Luhrs, A. Dias, J. Phillips, M. V. Abrashev, and C. M. Ferreira  
Applied Physics Letters **103**, 134101 (2013)

36. Optimizing high-quality graphene nanoflakes production through organic (bio)-precursor plasma decomposition

Casanova, A.; Rincon, R.; Munoz, J.; et al.

FUEL PROCESSING TECHNOLOGY Volume: 212 Article Number: 106630 Published: FEB 2021

35. Pressure-dependent synthesis of graphene nanoflakes using Ar/H<sub>2</sub>/CH<sub>4</sub> non-thermal plasma based on rotating arc discharge  
Wang, Cheng; Lu, ZhongShan; Ma, Jing; et al.

DIAMOND AND RELATED MATERIALS Volume: 111 Article Number: 108176 Published: JAN 2021

34. Electron concentration in the non-luminous part of the atmospheric pressure filamentary discharge

Faltynek, J.; Kudrle, V; Snirer, M.; et al.

PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 30 Issue: 1 Article Number: 015001 Published: JAN 2021

33. Synthesis of carbon nanoparticles in a non-thermal plasma process

Wang, Cheng; Li, Dongning; Lu, ZhongShan; et al.

CHEMICAL ENGINEERING SCIENCE Volume: 227 Article Number: 115921 Published: DEC 14 2020

32. Large-scale Growth of Quasifreestanding Graphene by using a Single-step Process

Khadka, Ishwor Bahadur; Park, Ji-Hoon; Kim, Eun Hye; et al.

JOURNAL OF THE KOREAN PHYSICAL SOCIETY Volume: 77 Issue: 9 Pages: 768-772 Published: NOV 2020

31. Effects of hydrogen/carbon molar ratio on graphene nano-flakes synthesis by a non-thermal plasma process

Lu, Zhongshan; Li, Dongning; Wang, Cheng; et al.

DIAMOND AND RELATED MATERIALS Volume: 108 Article Number: 107932 Published: OCT 2020

30. Computational study of plasma-induced flow instabilities in power modulated atmospheric-pressure microwave plasma jet

Kubecka, M.; Snirer, M.; Obrusnik, A.; et al.

PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 29 Issue: 7 Article Number: 075001 Published: JUL 2020

29. Continuous preparation and formation mechanism of few-layer graphene by gliding arc plasma

Zhong, Ruipeng; Hong, Ruoyu

CHEMICAL ENGINEERING JOURNAL Volume: 387 Article Number: 124102 Published: MAY 1 2020

28. Deposition of vertical carbon nanosheets by MPECVD at atmospheric pressure

Marinov, S.; Vachkov, V.; Kiss'ovski, Zh

Journal of Physics Conference Series Volume: 1492 Article Number: 012032 Published: 2020

27. Synthesis of few-layer graphene flakes by magnetically rotating arc plasma: effects of input power and feedstock injection position  
Wang, Cheng; Song, Ming; Chen, Xianhui; et al.

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 126 Issue: 3 Published: FEB 19 2020

26. Effects of Buffer Gases on Graphene Flakes Synthesis in Thermal Plasma Process at Atmospheric Pressure

Wang, Cheng; Song, Ming; Chen, Xianhui; et al.

NANOMATERIALS Volume: 10 Issue: 2 Article Number: 309 Published: FEB 2020

25. A 3D numerical analysis on magnetic field enhanced microwave linear plasma

Zhang, Wenjin; Chen, Longwei; Jiang, Yiman; et al.

AIP ADVANCES Volume: 10 Issue: 1 Article Number: 015220 Published: JAN 2020

24. Determination of electron density in microwave plasma torch by microwave interferometry

Faltýnek, J., Kudrle, V., Šnirer, M., Toman, J., Jašek, O.

46th EPS Conference on Plasma Physics, EPS 2019 (2019)

23. State-of-the-art advancements in studies and applications of graphene: a comprehensive review

Walimbe, Pratik; Chaudhari, Mangesh

MATERIALS TODAY SUSTAINABILITY Volume: 6 Article Number: 100026 Published: DEC 2019

22. Continuous synthesis of graphene nano-flakes by a magnetically rotating arc at atmospheric pressure

Wang, Cheng; Sun, Lu; Dai, Xiaoyu; et al.

CARBON Volume: 148 Pages: 394-402 Published: JUL 2019

21. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel microwave plasma torch at atmospheric pressure  
Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.

JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019

20. Effect of hydrogen concentration on graphene synthesis using microwave-driven plasma-mediated methane cracking

Singh, Madhu; Sengupta, Arupananda; Zeller, Kurt; et al.

CARBON Volume: 143 Pages: 802-813 Published: MAR 2019

19. Graphene synthesized in atmospheric plasmas-A review

Dato, Albert

JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019

18. Formation of carbon nanostructures by the plasma jets: Synthesis, characterization, application

Shavelkina, M., Amirov, R., Bilera, I.

Materials Today: Proceedings 5(12), pp. 25956-25961 (2018)

17. Surface-wave-sustained argon plasma kinetics from intermediate to atmospheric pressure  
 Benova, Evgenia; Marinova, Plamena; Atanasova, Mariana; et al.  
 JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 51 Issue: 47 Article Number: 474004 Published: NOV 28 2018
16. Review of Graphene Growth From a Solid Carbon Source by Pulsed Laser Deposition (PLD)  
 Bleu, Yannick; Bourquard, Florent; Tite, Teddy; et al.  
 FRONTIERS IN CHEMISTRY Volume: 6 Article Number: 572 Published: NOV 21 2018
15. Graphene synthesized as by-product of gas purification in long-term space missions and its lithium-ion battery application  
 Nie, Yao; Kacica, Clayton; Meyer, Marit E.; et al.  
 ADVANCES IN SPACE RESEARCH Volume: 62 Issue: 5 Pages: 1015-1024 Published: SEP 1 2018
14. Synthesis of Hydrogenated Graphene during Acetylene Conversion in Helium Plasma Jet  
 Shavelkina, M. B.; Amirov, R. Kh.; Shatalova, T. B.  
 HIGH ENERGY CHEMISTRY Volume: 52 Issue: 4 Pages: 343-347 Published: JUL 2018
13. Plasma Synthesis of Graphene from Mango Peel  
 Shah, Javishk; Lopez-Mercado, Janneth; Carreon, M. Guadalupe; et al.  
 ACS OMEGA Volume: 3 Issue: 1 Pages: 455-463 Published: JAN 2018
12. Melero, C.; Rincon, R.; Munoz, J.; et al.  
 Scalable graphene production from ethanol decomposition by microwave argon plasma torch  
 PLASMA PHYSICS AND CONTROLLED FUSION Volume: 60 Issue: 1 Article Number: 014009 Published: JAN 2018
11. Toman, Jozef; Jasek, Ondrej; Jurmanova, Jana  
 THE INFLUENCE OF GAS ADMIXTURES ON THE SYNTHESIS OF GRAPHENE NANOSHEETS IN ARGON MICROWAVE PLASMA TORCH DISCHARGE  
 8TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2016) Pages: 122-126 Published: 2017
10. Jo, E.H., Chang, H., Kim, S.K., Choi, J.-H., Park, S.-R., Lee, C.M., Jang, H.D.  
 One-Step Synthesis of Pt/Graphene Composites from Pt Acid Dissolved Ethanol via Microwave Plasma Spray Pyrolysis  
 SCIENTIFIC REPORTS Volume: 6 Article Number: 33236 DOI: 10.1038/srep33236 Published: SEP 13 2016
9. Andriotis, V.M.E., Rejzek, M., Barclay, E., Rugen, M.D., Field, R.A., Smith, A.M.  
 Cell wall degradation is required for normal starch mobilisation in barley endosperm  
 Scientific Reports 6, 33215 DOI: 10.1038/srep33215 (2016)
8. Dimitrov, Zh., Nikovski, M., Kiss'ovski, Zh.  
 Deposition of carbon nanostructures on metal substrates at atmospheric pressure  
 Journal of Physics: Conference Series 700(1), 12045 DOI: 10.1088/1742-6596/700/1/012045 (2016)
7. Rincón, R., Marinas, A., Muñoz, J., Melero, C., Calzada, M.D.  
 Experimental research on ethanol-chemistry decomposition routes in a microwave plasma torch for hydrogen production  
 CHEMICAL ENGINEERING JOURNAL Volume: 284 Pages: 1117-1126 DOI: 10.1016/j.cej.2015.09.062 Published: JAN 15 2016
6. Chen, Chuan-Jie; Li, Shou-Zhe  
 Spectroscopic measurement of plasma gas temperature of the atmospheric-pressure microwave induced nitrogen plasma torch  
 PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 24 Issue: 3 Article Number: 035017 Published: MAY 2015
5. Rincon, R.; Melero, C.; Jimenez, M.; et al.  
 Synthesis of multi-layer graphene and multi-wall carbon nanotubes from direct decomposition of ethanol by microwave plasma without using metal catalysts  
 PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 24 Issue: 3 Article Number: 032005 Published: MAY 2015
4. Salavagione, Horacio J.  
 Covalent Graphene-Polymer Nanocomposites  
 GRAPHENE MATERIALS: FUNDAMENTALS AND EMERGING APPLICATIONS Book Series: Advanced Materials Series Pages: 101-149 Published: 2015
3. Paukner, C., Juda, K., Clayton, A., (...), Joaug, J., Koziol, K.  
 Large scale production of few layer graphene from novel plasma reactor system  
 Technical Proceedings of the 2014 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2014 Volume 1, 2014, Pages 45-48
2. Kumar, Indrajeet; Khare, Alike  
 Multi- and few-layer graphene on insulating substrate via pulsed laser deposition technique  
 APPLIED SURFACE SCIENCE Volume: 317 Pages: 1004-1009 Published: OCT 30 2014
1. Salavagione, Horacio J.  
 Promising alternative routes for graphene production and functionalization  
 JOURNAL OF MATERIALS CHEMISTRY A 2 (20), pp. 7138-7146 2014
87. "Lattice dynamics and spin-phonon coupling in CaMn<sub>2</sub>O<sub>4</sub>: A Raman study"

V. G. Ivanov, V. G. Hadjiev, A. P. Litvinchuk, D. Z. Dimitrov, B. L. Shivachev, M. V. Abrashev, B. Lorenz, and M. N. Iliev  
Physical Review B **89**, 184307 (2014)

3. Electric transport properties of rare earth doped YbxCa<sub>1-x</sub>MnO<sub>3</sub> ceramics (part I: Optimization of ceramic processing)  
Rahmani, Meimanat; Pithan, Christian; Waser, Rainer  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 39 Issue: 4 Pages: 1245-1250 Published: APR 2019

2. Singh, Karan; Sharma, Mohit K.; Mukherjee, K.  
Spin-phonon coupling and exchange interaction in Gd substituted YFe0.5Cr0.5O  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 447 Pages: 26-31 Published: FEB 1 2018

1. Galuskin, E.V., Krüger, B., Krüger, H., Blass, G., Widmer, R., Galuskina, I.O.  
Wernerkruseite, CaFe23+Mn4+O6: the first nonstoichiometric post-spinel mineral, from Bellerberg volcano, Eifel, Germany  
EUROPEAN JOURNAL OF MINERALOGY Volume: 28 Issue: 2 Pages: 485-493 DOI: 10.1127/ejm/2016/0028-2509 Published: MAR-APR 2016

88. "Raman study of phonons in CaMn<sub>7</sub>O<sub>12</sub>: Effects of structural modulation and structural transition"

M. N. Iliev, V. G. Hadjiev, M. M. Gospodinov, R. P. Nikolova, and M. V. Abrashev  
Physical Review B **89**, 214302 (2014)

10. Changes in spin and lattice dynamics induced by magnetic and structural phase transitions in multiferroic SrMn<sub>7</sub>O<sub>12</sub>  
Kamba, Stanislav; Goian, Veronica; Kadlec, Filip; et al.  
PHYSICAL REVIEW B Volume: 99 Issue: 18 Article Number: 184108 Published: MAY 20 2019

9. Magnetic transitions in CaMn<sub>7</sub>O<sub>12</sub>: Raman observation of spin-phonon couplings  
Toulouse, C.; Martin, C.; Measson, M-A; et al.  
PHYSICAL REVIEW B Volume: 99 Issue: 2 Article Number: 024303 Published: JAN 7 2019

8. Helical magnetism in Sr-doped CaMn<sub>7</sub>O<sub>12</sub> films  
Huon, Amanda; Vibhakar, Anuradha M.; Grutter, Alexander J.; et al.  
PHYSICAL REVIEW B Volume: 98 Issue: 22 Article Number: 224419 Published: DEC 19 2018

7. Impact of Co-doping on the structural and magnetic properties of multiferroic CaMn<sub>7</sub>O<sub>12</sub>  
Nonato, A.; Yanez-Vilar, S.; Sanchez-Andujar, M.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 740 Pages: 559-566 Published: APR 5 2018

6. Souliou, S. M.; Li, Y.; Du, X.; et al.  
Soft-phonon-driven orbital order in CaMn<sub>7</sub>O<sub>12</sub>  
PHYSICAL REVIEW B Volume: 94 Issue: 18 Article Number: 184309 Published: NOV 22 2016

5. Zhang, H.-G., Ma, X.-C., Xie, L.  
The structural and magnetic properties of Sr-doped multiferroic CaMn<sub>7</sub>O<sub>12</sub>  
INTERNATIONAL JOURNAL OF MODERN PHYSICS B Volume: 29 Issue: 30 Article Number: 1550221 DOI:  
10.1142/S0217979215502215 Published: DEC 10 2015

4. Glazkova, Y.S., Terada, N., Matsushita, Y., Katsuya, Y., Tanaka, M., Sobolev, A.V., Presniakov, I.A., Belik, A.A.  
High-Pressure Synthesis, Crystal Structures, and Properties of CdMn<sub>7</sub>O<sub>12</sub> and SrMn<sub>7</sub>O<sub>12</sub> Perovskites  
INORGANIC CHEMISTRY Volume: 54 Issue: 18 Pages: 9081-9091 DOI: 10.1021/acs.inorgchem.5b01472 Published: SEP 21 2015

3. Yuan, Renliang; Duan, Lian; Du, Xinyu; et al.  
Identification and mechanical control of ferroelastic domain structure in rhombohedral CaMn<sub>7</sub>O<sub>12</sub>  
PHYSICAL REVIEW B Volume: 91 Issue: 5 Article Number: 054102 Published: FEB 3 2015

2. Nonato, A.; Araujo, B. S.; Ayala, A. P.; et al.  
Spin-phonon and magnetostriction phenomena in CaMn<sub>7</sub>O<sub>12</sub> helimagnet probed by Raman spectroscopy  
APPLIED PHYSICS LETTERS Volume: 105 Issue: 22 Article Number: 222902 Published: DEC 1 2014

1.Du, Xinyu; Yuan, Renliang; Duan, Lian; et al.  
Soft vibrational mode associated with incommensurate orbital order in multiferroic CaMn<sub>7</sub>O<sub>12</sub>  
PHYSICAL REVIEW B 90 (10), Art. No. 104414 SEP 17 2014

89. "Microwave plasmas applied for the synthesis of free standing graphene sheets"  
E Tatarova, A Dias, J Henriques, A M Botelho do Rego, A M Ferraria, M V Abrashev, C C Luhrs, J Phillips, F M Dias and C M Ferreira  
J. Phys. D: Appl. Phys. **47**, 385501 (2014) (11pp)

48. 2D materials coated on etched optical fibers as humidity sensor  
Owji, E., Mokhtari, H., Ostovari, F., Darazereski, B., Shakiba, N.  
Scientific Reports 11(1), 1771 (2021)

47. Controlled high temperature stability of microwave plasma synthesized graphene nanosheets  
 Jasek, Ondrej; Toman, Jozef; Vsiansky, Dalibor; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 54 Issue: 16 Article Number: 165201 Published: APR 22 2021
46. Super heating/cooling rate enabled by microwave shock on polymeric graphene foam for high performance Lithium-Sulfur batteries  
 Liu, Yiyang; Zhang, Yan; Liu, Yang; et al.  
**CARBON** Volume: 173 Pages: 809-816 Published: MAR 2021
45. A critical review on the production and application of graphene and graphene-based materials in anti-corrosion coatings  
 Kulyk, Bohdan; Freitas, Maria A.; Santos, Nuno F.; et al.  
**CRITICAL REVIEWS IN SOLID STATE AND MATERIALS SCIENCES** Early Access: FEB 2021
44. Optimizing high-quality graphene nanoflakes production through organic (bio)-precursor plasma decomposition  
 Casanova, A.; Rincon, R.; Munoz, J.; et al.  
**FUEL PROCESSING TECHNOLOGY** Volume: 212 Article Number: 106630 Published: FEB 2021
43. Pressure-dependent synthesis of graphene nanoflakes using Ar/H-2/CH4 non-thermal plasma based on rotating arc discharge  
 Wang, Cheng; Lu, ZhongShan; Ma, Jing; et al.  
**DIAMOND AND RELATED MATERIALS** Volume: 111 Article Number: 108176 Published: JAN 2021
42. Synthesis of carbon nanoparticles in a non-thermal plasma process  
 Wang, Cheng; Li, Dongning; Lu, ZhongShan; et al.  
**CHEMICAL ENGINEERING SCIENCE** Volume: 227 Article Number: 115921 Published: DEC 14 2020
41. Effects of hydrogen/carbon molar ratio on graphene nano-flakes synthesis by a non-thermal plasma process  
 Lu, Zhongshan; Li, Dongning; Wang, Cheng; et al.  
**DIAMOND AND RELATED MATERIALS** Volume: 108 Article Number: 107932 Published: OCT 2020
40. Optical emission spectroscopy of non-equilibrium microwave plasma torch sustained by focused radiation of gyrotron at 24 GHz  
 Sintsov, Sergey; Tabata, Kuniyoshi; Mansfeld, Dmitry; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 53 Issue: 30 Article Number: 305203 Published: JUL 22 2020
39. Graphene based polymer electrolyte membranes for electro-chemical energy applications  
 Gahlot, Swati; Kulshrestha, Vaibhav  
**INTERNATIONAL JOURNAL OF HYDROGEN ENERGY** Volume: 45 Issue: 34 Special Issue: SI Pages: 17029-17056  
 Published: JUL 3 2020
38. Non-equilibrium Atmospheric-Pressure Plasma Torch Sustained in a Quasi-optical Beam of Subterahertz Radiation  
 Sintsov, S. V.; Vodopyanov, A. V.; Viktorov, M. E.; et al.  
**JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES** Volume: 41 Issue: 6 Pages: 711-727 Published: JUN 2020
37. Spectroscopic Study of a Helium Plasma Jet with Hydrocarbon Additives  
 Shavelkina, M. B.; Amirov, R. Kh.; Kavyrshin, D. I.; et al.  
**HIGH TEMPERATURE** Volume: 58 Issue: 3 Pages: 309-316 Published: MAY 2020
36. Study of graphene layer growth on dielectric substrate in microwave plasma torch at atmospheric pressure  
 Jasek, Ondrej; Toman, Jozef; Jurmanova, Jana; et al.  
**DIAMOND AND RELATED MATERIALS** Volume: 105 Article Number: 107798 Published: MAY 2020
35. Synthesis of few-layer graphene flakes by magnetically rotating arc plasma: effects of input power and feedstock injection position  
 Wang, Cheng; Song, Ming; Chen, Xianhui; et al.  
**APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING** Volume: 126 Issue: 3 Published: FEB 19 2020
34. Effects of Buffer Gases on Graphene Flakes Synthesis in Thermal Plasma Process at Atmospheric Pressure  
 Wang, Cheng; Song, Ming; Chen, Xianhui; et al.  
**NANOMATERIALS** Volume: 10 Issue: 2 Article Number: 309 Published: FEB 2020
33. Deposition of vertical carbon nanosheets by MPECVD at atmospheric pressure  
 Marinov, S.; Vachkov, V.; Kiss'ovski, Zh  
**Journal of Physics Conference Series** Volume: 1492 Article Number: 012032 Published: 2020
32. A 3D numerical analysis on magnetic field enhanced microwave linear plasma  
 Zhang, Wenjin; Chen, Longwei; Jiang, Yiman; et al.  
**AIP ADVANCES** Volume: 10 Issue: 1 Article Number: 015220 Published: JAN 2020
31. 1D modeling of the equilibrium plasma flow in the scope of direct current plasma torch assisted graphene synthesis  
 Shavelkina, M. B.; Ivanov, P. P.; Bocharov, A. N.; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 52 Issue: 49 Article Number: 495202 Published: DEC 4 2019
30. Plasma Jet-Assisted Synthesis of Graphene Using a DC Plasma Torch  
 Shavelkina, M. B.; Amirov, R. Kh; Kavyrshin, D., I; et al.  
**PLASMA PHYSICS REPORTS** Volume: 45 Issue: 11 Pages: 1080-1086 Published: NOV 2019
29. Co and CeO<sub>2</sub> co-decorated N-doping carbon nanofibers for rechargeable Zn-air batteries

- Zhang, Zhengmei; Gao, Daqian; Xue, Desheng; et al.  
**NANOTECHNOLOGY** Volume: 30 Issue: 39 Article Number: 395401 Published: SEP 27 2019
28. Experimental characteristics of 2.45 GHz microwave reconfigurable plasma antennas  
Zhao, Jiansen; Sun, Zhen; Ren, Yuxiang; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 52 Issue: 29 Article Number: 295202 Published: JUL 17 2019
27. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel microwave plasma torch at atmospheric pressure  
Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019
26. Durability study of platinum nanoparticles supported on gas-phase synthesized graphene in oxygen reduction reaction conditions  
Bertin, Erwan; Muenzer, Adrian; Reichenberger, Sven; et al.  
**APPLIED SURFACE SCIENCE** Volume: 467 Pages: 1181-1186 Published: FEB 15 2019
25. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert  
**JOURNAL OF MATERIALS RESEARCH** Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019
24. A synergistic effect of Co and CeO<sub>2</sub> in nitrogen-doped carbon nanostructure for the enhanced oxygen electrode activity and stability  
Sivanantham, Arumugam; Ganeshan, Pandian; Shanmugam, Sangaraju  
**APPLIED CATALYSIS B-ENVIRONMENTAL** Volume: 237 Pages: 1148-1159 Published: DEC 5 2018
23. "Snowing" Graphene using Microwave Ovens  
Sun, Yangyong; Yang, Liangwei; Xia, Kailun; et al.  
**ADVANCED MATERIALS** Volume: 30 Issue: 40 Article Number: 1803189 Published: OCT 4 2018
22. Methane/nitrogen plasma-assisted synthesis of graphene and carbon nanotubes  
Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 51 Issue: 29 Article Number: 294005 Published: JUL 25 2018
21. Methane/nitrogen plasma-assisted synthesis of graphene and carbon nanotubes  
Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 51 Issue: 29 Article Number: 294005 Published: JUL 25 2018
20. Continuous Synthesis of Hydrogenated Graphene in Thermal Plasma  
Shavelkina, M. B.; Amirov, R. Kh.; Alikhanov, N. R.; et al.  
**JOURNAL OF STRUCTURAL CHEMISTRY** Volume: 59 Issue: 4 Pages: 773-779 Published: JUL 2018
19. All gas-phase synthesis of graphene: Characterization and its utilization for silicon-based lithium-ion batteries  
Muenzer, Adrian; Xiao, Lisong; Sehlieier, Yee Hwa; et al.  
**ELECTROCHIMICA ACTA** Volume: 272 Pages: 52-59 Published: MAY 10 2018
18. One-step synthesis of TiC/multilayer graphene composite by thermal plasma  
Kim, Dong-Wook; Heo, Un Seon; Kim, Kyo-Seon; et al.  
**CURRENT APPLIED PHYSICS** Volume: 18 Issue: 5 Pages: 551-558 Published: MAY 2018
17. High electrocatalytic activity of metal-free and non-doped hierarchical carbon nanowalls towards oxygen reduction reaction  
Lehmann, Karsten; Yurchenko, Olena; Melke, Julia; et al.  
**ELECTROCHIMICA ACTA** Volume: 269 Pages: 657-667 Published: APR 10 2018
16. ELECTROCHEMICAL PROPERTIES OF GRAPHENE NANOSHEETS SYNTHESISED IN MICROWAVE PLASMA TORCH DISCHARGE  
Toman, Jozef; Jasek, Ondrej; Prasek, Jan; et al.  
9TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2017) Pages: 88-93 Published: 2018
15. Investigations of novel high power atmospheric pressure microwave plasma source designed for gas processing  
Miotk, Robert; Jasinski, Mariusz; Mizeraczyk, Jerzy  
**PRZEGLAD ELEKTROTECHNICZNY** Volume: 94 Issue: 7 Pages: 98-101 Published: 2018
14. Thermal Growth of Graphene: A Review  
Tan, Hai; Wang, Deguo; Guo, Yanbao  
**COATINGS** Volume: 8 Issue: 1 Article Number: 40 Published: JAN 2018
13. Melero, C.; Rincon, R.; Munoz, J.; et al.  
Scalable graphene production from ethanol decomposition by microwave argon plasma torch  
**PLASMA PHYSICS AND CONTROLLED FUSION** Volume: 60 Issue: 1 Article Number: 014009 Published: JAN 2018
12. Viveiros, Raquel; Dias, Francisco M.; Maia, Luisa B.; et al.  
Green strategy to produce large core-shell affinity beads for gravity-driven API purification processes  
**JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY** Volume: 54 Pages: 341-349 Published: OCT 25 2017
11. Shashurin, A.; Fang, X.; Zemlyanov, D.; et al.  
Substrate independent approach for synthesis of graphene platelet networks

10. Kovacevic, E.; Hussain, S.; Berndt, J.; et al.

Plasma Synthesis of Conductive Carbon Based Nanomaterials

PLASMA NANO SCIENCE AND TECHNOLOGY Book Series: ECS Transactions Volume: 77 Issue: 3 Pages: 37-39 Published: 2017

9. Park, Choon-Sang; Kim, Dong Ha; Shin, Bhum Jae; et al.

Conductive Polymer Synthesis with Single-Crystallinity via a Novel Plasma Polymerization Technique for Gas Sensor Applications MATERIALS Volume: 9 Issue: 10 Article Number: 812 Published: OCT 2016

8. Loureiro, Jorge; Amorim, Jayr

Applications of Low-Temperature Plasmas

KINETICS AND SPECTROSCOPY OF LOW TEMPERATURE PLASMAS Book Series: Graduate Texts in Physics Pages: 413-440

Published: 2016

7. Park, C.-S., Kim, D.H., Shin, B.J., Kim, D.Y., Lee, H.-K., Tae, H.-S.

Conductive Polymer Synthesis with Single-Crystallinity via a Novel Plasma Polymerization Technique for Gas Sensor Applications MATERIALS Volume: 9 Issue: 10 Article Number: 812 DOI: 10.3390/ma9100812 Published: OCT 2016

6. Rincón, R., Marinas, A., Muñoz, J., Melero, C., Calzada, M.D.

Experimental research on ethanol-chemistry decomposition routes in a microwave plasma torch for hydrogen production

CHEMICAL ENGINEERING JOURNAL Volume: 284 Pages: 1117-1126 DOI: 10.1016/j.cej.2015.09.062 Published: JAN 15 2016

5. Park, C.-S., Kim, D.H., Shin, B.J., Tae, H.-S.

Synthesis and Characterization of Nanofibrous Polyaniline Thin Film Prepared by Novel Atmospheric Pressure Plasma Polymerization Technique

MATERIALS Volume: 9 Issue: 1 Article Number: 39 DOI: 10.3390/ma9010039 Published: JAN 2016

4. Campos, J.M., Ferraria, A.M., Botelho Do Rego, A.M., Ribeiro, M.R., Barros-Timmons, A.

Studies on PLA grafting onto graphene oxide and its effect on the ensuing composite films

MATERIALS CHEMISTRY AND PHYSICS Volume: 166 Pages: 122-132 DOI: 10.1016/j.matchemphys.2015.09.036 Published: SEP 15 2015

3. Bozduman, F., Gulec, A., Noree, S., Durmaz, Y., Ismael, M., Oksuz, AU

GRAPHENE SYNTHESIS BY ATMOSPHERIC PRESSURE MICROWAVE PLASMA

2015 42ND IEEE INTERNATIONAL CONFERENCE ON PLASMA SCIENCES (ICOPS) Published: 2015

2. Shashurin, A.; Keidar, M.

Synthesis of 2D materials in arc plasmas

JOURNAL OF PHYSICS D-APPLIED PHYSICS 48(31) Article Number: 314007 AUG 12 2015

1. Rincon, R.; Melero, C.; Jimenez, M.; et al.

Synthesis of multi-layer graphene and multi-wall carbon nanotubes from direct decomposition of ethanol by microwave plasma without using metal catalysts

PLASMA SOURCES SCIENCE & TECHNOLOGY 24 (3) Article Number: 032005 MAY 2015

90. "Raman spectra of  $R_2O_3$  ( $R$ —rare earth) sesquioxides with C-type bixbyite crystal structure: A comparative study"

M. V. Abrashev, N. D. Todorov, and J. Geshev

Journal of Applied Physics **116**, 103508 (2014) (8pp)

76. Lattice dynamics study of  $(Gd_{1-x}Ybx)(2)O_3(x=0.11)$  at high pressure

Mari-Guaita, Julia; Gallego-Parra, S.; Sans, J. A.; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 871 Article Number: 159525 Published: AUG 5 2021

75. Growth and spectroscopy of  $Tm^{3+}, Ho^{3+}$  co-doped  $LuYO_3$  single crystal for 2.1  $\mu m$  laser

Chen, Guangzhu; Li, Shanming; Zhang, Yuhang; et al.

JOURNAL OF LUMINESCENCE Volume: 234 Article Number: 117951 Published: JUN 2021

74. Intra-4f transitions-induced red emission in  $ZnO-Eu_2O_3$  ceramic

Martins, D., Santos, D.A.A., Macêdo, M.A.

Radiation Physics and Chemistry 183, 109392 (2021)

73. Antimony substitution leading to structural transformation (Bixbyite  $\rightarrow$  Fluorite) and altering the optical band gap in  $Y_2O_3$

Nagarajan, Rajamani; Kumari, Promila

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 863 Article Number: 158733 Published: MAY 15 2021

72. Modification of the spectroscopic properties of  $Tb_2O_3$  phosphor under the high-pressure phase transitions sequence

Candela, M. T.; Aguado, F.; Gonzalez-Lavin, J.; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 859 Article Number: 157899 Published: APR 5 2021

71. Lattice dynamics of yttria: A combined investigation from spectrum measurements and first-principle calculations

Wang, Chun-Hai; Shu, Wenhua; Qing, Yuchang; et al.

JOURNAL OF THE AMERICAN CERAMIC SOCIETY Volume: 104 Issue: 4 Pages: 1797-1805 Published: APR 2021

70. Influence of varying thermodynamic parameters on the structural behavior of nano-crystalline europium sesquioxide  
Bura, Neha; Yadav, Deepa; Bhoriya, Ankit; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 856 Article Number: 158129 Published: MAR 5 2021
69. Unraveling microstrain-promoted structural evolution and thermally driven phase transition in c-Sc<sub>2</sub>O<sub>3</sub> nanocrystals at high pressure  
Zou, Yongtao; Li, Mu; Zhang, Wei; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 21 Article Number: 214115 Published: DEC 31 2020
68. KLi<sub>2</sub>RE(BO<sub>3</sub>)(2) (RE = Dy, Ho, Er, Tm, Yb, and Y): Structural, Spectroscopic, And Thermogravimetric Studies on a Series of Mixed-Alkali Rare-Earth Orthoborates  
Chen, Pengyun; Mursched, M. Mangir; Fischer, Michael; et al.  
INORGANIC CHEMISTRY Volume: 59 Issue: 24 Pages: 18214-18224 Published: DEC 21 2020
67. Photoluminescence, thermoluminescence, and cathodoluminescence of optimized cubic Gd<sub>2</sub>O<sub>3</sub>:Bi phosphor powder  
Abdelrehman, Mogahid H. M.; Kroon, Robin E.; Yousif, Abdelrhman; et al.  
JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A Volume: 38 Issue: 6 Article Number: 063207 Published: DEC 2020
66. Defect structure and vibrational states in Eu-doped cubic gadolinium oxide  
Kislov, Alexey N.; Zatsepin, Anatoly F.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 22 Issue: 42 Pages: 24498-24505 Published: NOV 14 2020
65. Eu<sub>x</sub>O<sub>y</sub>-PdO catalyst concerted efficiently catalyzes Suzuki-Miyaura coupling reaction  
Wang, Jing; Fan, Xiaoye; Liu, Bo; et al.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 252 Article Number: 123227 Published: SEP 15 2020
64. Ultra-wide-bandgap (ScGa)(2)O<sub>3</sub> alloy thin films and related sensitive and fast responding solar-blind photodetectors  
Wang, Qile; Huang, Pan; Liu, Qi; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 834 Article Number: 155036 Published: SEP 5 2020
63. Growth and spectra of Tm<sup>3+</sup> doped LuYO<sub>3</sub> single crystal for 2 μm lasers  
Chen, Guangzhu; Li, Shanning; Zhang, Lianhan; et al.  
INFRARED PHYSICS & TECHNOLOGY Volume: 109 Article Number: 103431 Published: SEP 2020
62. X-ray absorption spectroscopy and Eu<sup>3+</sup>-emission characteristics in GaAs/SnO<sub>2</sub> heterostructure  
Bueno, Cristina F.; Ramos, Aline Y.; Baily, Aude; et al.  
SN APPLIED SCIENCES Volume: 2 Issue: 9 Article Number: 1579 Published: AUG 28 2020
61. A Comparative Study on Luminescence Properties of Y<sub>2</sub>O<sub>3</sub>: Pr(3+)-Nanocrystals Prepared by Different Synthesis Methods  
Diego-Rucabado, Andrea; Candela, Marina T.; Aguado, Fernando; et al.  
NANOMATERIALS Volume: 10 Issue: 8 Article Number: 1574 Published: AUG 2020
60. Structure, mechanical, optical, and imaging contrast features of Yb<sup>3+</sup>, Dy<sup>3+</sup>, Tb<sup>3+</sup>, Gd<sup>3+</sup>, Eu<sup>3+</sup>, and Nd<sup>(3+)</sup>-substituted Y<sub>2</sub>O<sub>3</sub>-Ln<sub>2</sub>O<sub>3</sub>(3)solid solution  
Kalaivani, Srigurunathan; Kannan, Sanjeevi  
JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS Volume: 108 Issue: 6 Pages: 2656-2669 Published: AUG 2020
59. Structural and Lattice-Dynamical Properties of Tb<sub>2</sub>O<sub>3</sub> under Compression: A Comparative Study with Rare Earth and Related Sesquioxides  
Ibanez, Jordi; Angel Sans, Juan; Cuenca-Gotor, Vanesa; et al.  
INORGANIC CHEMISTRY Volume: 59 Issue: 14 Pages: 9648-9666 Published: JUL 20 2020
58. Preparation of In-doped Y<sub>2</sub>O<sub>3</sub> ceramics through a sol-gel process: Effects on the structural and electronic properties  
Richard, Diego; Renteria, Mario; Carbonari, Artur W.; et al.  
CERAMICS INTERNATIONAL Volume: 46 Issue: 10 Pages: 16088-16095 Part: B Published: JUL 2020
57. Gaseous Reduction of Manganese Ores: A Review and Theoretical Insight  
Cheraghi, Alireza; Yoozbashizadeh, Hossein; Safarian, Jafar  
MINERAL PROCESSING AND EXTRACTIVE METALLURGY REVIEW Volume: 41 Issue: 3 Pages: 198-215 Published: MAY 3 2020
56. Yb:Lu<sub>2</sub>O<sub>3</sub> hydrothermally grown single-crystal high-resolution absorption spectra obtained between 8 and 300 K  
Brown, David C.; Fleischman, Zackery; Merkle, Larry D.; et al.  
APPLIED PHYSICS B-LASERS AND OPTICS Volume: 126 Issue: 4 Article Number: 62 Published: MAR 13 2020
55. High-mobility nanometer-thick crystalline In-Sm-O thin-film transistors via aqueous solution processing  
Li, Yanwei; Zhu, Deliang; Xu, Wangying; et al.  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 8 Issue: 1 Pages: 310-318 Published: JAN 7 2020
54. Optimization of Deposition Parameter Of Cr Doped Eu<sub>2</sub>O<sub>3</sub> Thin Films  
Prakash, Ram; Kumar, Sandeep  
AIP Conference Proceedings Volume: 2220 Article Number: 090004 Published: 2020
53. Rare-Earth-Doped Y<sub>4</sub>Al<sub>2</sub>O<sub>9</sub> Nanoparticles for Stable Light-Converting Phosphors  
Liu, Chenyang; Pokhrel, Suman; Tessarek, Christian; et al.

ACS APPLIED NANO MATERIALS Volume: 3 Issue: 1 Pages: 699-710 Published: JAN 2020

52. Phonon variations in nano-crystalline lutetium sesquioxide under the influence of varying temperature and pressure  
Bura, Neha; Yadav, Deepa; Singh, Jasveer; et al.

JOURNAL OF APPLIED PHYSICS Volume: 126 Issue: 24 Article Number: 245901 Published: DEC 28 2019

51. Shape control over microwave hydrothermally grown Y<sub>2</sub>O<sub>3</sub>:Eu by europium concentration adjustment  
Kaszewski, Jaroslaw; Rosowska, Julita; Witkowski, Bartlomiej S.; et al.  
JOURNAL OF RARE EARTHS Volume: 37 Issue: 11 Pages: 1206-1212 Published: NOV 2019

50. Structural and Electronic Characterization Through Spectroscopy Analysis of Gd-Gd<sub>2</sub>O<sub>3</sub> Nanoparticles  
Perdigon-Lagunes, Pedro; Estevez, Octavio; Zorrilla, Cristina; et al.  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY Volume: 19 Issue: 11 Pages: 7345-7355 Published: NOV 2019

49. Bulk Yttria as a Host for Lanthanides in Biomedical Applications: Influence of Concentration Gradients on Structural, Mechanical, Optical, and in Vitro Imaging Behavior  
Kalaivani, Srigurunathan; Guleria, Anupam; Kumar, Dinesh; et al.  
ACS APPLIED BIO MATERIALS Volume: 2 Issue: 10 Pages: 4634-4647 Published: OCT 21 2019

48. Growth, structure, and spectroscopic properties of a Tm<sup>3+</sup>, Ho<sup>3+</sup> co-doped Lu<sub>2</sub>O<sub>3</sub> crystal for similar to 2.1 μm lasers  
Li, Shanning; Zhang, Lianhan; Tan, Xiaojun; et al.  
OPTICAL MATERIALS Volume: 96 Article Number: 109277 Published: OCT 2019

47. Insight into the pressure effect on the structural stability and physical properties of cubic sesquioxides X<sub>2</sub>O<sub>3</sub> (X = Sc, Y and In)  
Li, Dongzhi; Zhang, Xudong; Liu, Cong; et al.  
VACUUM Volume: 168 Article Number: 108855 Published: OCT 2019

46. Luminescence decay-based Y<sub>2</sub>O<sub>3</sub>:Er phosphor thermometry: Temperature sensitivity governed by multiphonon emission with an effective phonon energy transition  
Eldridge, Jeffrey, I  
JOURNAL OF LUMINESCENCE Volume: 214 Article Number: 116535 Published: OCT 2019

45. Yb-doping effect on structure and lattice dynamics of Gd<sub>2</sub>O<sub>3</sub>  
Kislov, A. N.; Zatsepин, A. F.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 31 Issue: 38 Article Number: 385402 Published: SEP 25 2019

44. Collective substitutions of selective rare earths (Yb<sup>3+</sup>, Dy<sup>3+</sup>, Tb<sup>3+</sup>, Gd<sup>3+</sup>, Eu<sup>3+</sup>, Nd<sup>3+</sup>) in ZrO<sub>2</sub>: an exciting prospect for biomedical applications  
Kalaivani, S.; Kannan, S.  
DALTON TRANSACTIONS Volume: 48 Issue: 25 Pages: 9291-9302 Published: JUL 7 2019

43. Development of Y<sub>2</sub>O<sub>3</sub>: Ho<sup>3+</sup>/Yb<sup>3+</sup> Upconverting Nanophosphors for Enhancing Solar Cell Efficiency of Dye-Sensitized Solar Cells  
Dutta, Joydip; Rai, Vineet Kumar; Durai, M. Malai; et al.  
IEEE JOURNAL OF PHOTOVOLTAICS Volume: 9 Issue: 4 Pages: 1040-1045 Published: JUL 2019

42. Ammonium oxalate-assisted synthesis of Gd<sub>2</sub>O<sub>3</sub> nanopowders  
Foo, Yuan-Teng; Abdullah, Ahmad Zuhairi; Horri, Bahman Amini; et al.  
CERAMICS INTERNATIONAL Volume: 45 Issue: 7 Pages: 9082-9091 Part: A Published: MAY 2019

41. Ce-Sm-xCu cost-efficient catalysts for H<sub>2</sub> production through the glycerol steam reforming reaction  
Polychronopoulou, Kyriaki; Charisiou, Nikolaos D.; Siakavelas, Georgios I.; et al.  
SUSTAINABLE ENERGY & FUELS Volume: 3 Issue: 3 Pages: 673-691 Published: MAR 1 2019

40. Eu-induced lattice vibrations in Gd<sub>2</sub>O<sub>3</sub> crystals  
Kislov, A. N.; Zatsepин, A. F.  
Journal of Physics Conference Series Volume: 1391 Article Number: 012018 Published: 2019

39. Simulation of static and dynamic lattice properties of Yb-doped gadolinium oxide  
Kislov, A. N.; Zatsepин, A. F.  
MATERIALS TODAY-PROCEEDINGS Volume: 18 Pages: 520-524 Part: 2 Published: 2019

38. A novel conductometric sensor based on hierarchical self-assembly nanoparticles Sm<sub>2</sub>O<sub>3</sub> for VOCs monitoring  
Jamnani, S.R., Moghaddam, H.M., Leonardi, S.G., Neri, G.  
Ceramics International 44(14), pp. 16953-16959 (2018)

37. Lattice dynamics study of cubic Tb<sub>2</sub>O<sub>3</sub>  
Ibanez, Jordi; Blazquez, Oriol; Hernandez, Sergi; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 12 Pages: 2021-2027 Published: DEC 2018

36. Tuning the activity of Cu-containing rare earth oxide catalysts for CO oxidation reaction: Cooling while heating paradigm in microwave-assisted synthesis  
AlKetbi, M.; Polychronopoulou, K.; Zedan, Abdallah F.; et al.  
MATERIALS RESEARCH BULLETIN Volume: 108 Pages: 142-150 Published: DEC 2018

35. Phase transformations induced by heavy ion irradiation in Gd<sub>2</sub>O<sub>3</sub>: Comparison between ballistic and electronic excitation regimes  
Bilgen, S.; Sattonnay, G.; Grygiel, C.; et al.

34. Synthesis, spectroscopic characterization and laser operation of Ho<sup>3+</sup> in "mixed" (Lu,Sc)(2)O<sub>3</sub> ceramics  
Jing, Wei; Loiko, Pavel; Maria Serres, Josep; et al.

JOURNAL OF LUMINESCENCE Volume: 203 Pages: 145-151 Published: NOV 2018

33. Sub-solidus phase equilibria in the YO<sub>1.5</sub>-TaO<sub>2.5</sub> system

Fernandez, Abel N.; Macauley, Chandra A.; Park, Daesung; et al.

JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 38 Issue: 14 Pages: 4786-4798 Published: NOV 2018

32. Pressure induced structural phase transition in rare earth sesquioxide Tm<sub>2</sub>O<sub>3</sub>: Experiment and ab initio calculations  
Irshad, K. A.; Anees, P.; Sahoo, Shradhanjali; et al.

JOURNAL OF APPLIED PHYSICS Volume: 124 Issue: 15 Article Number: 155901 Published: OCT 21 2018

31. Phase equilibria in the ZrO<sub>2</sub>-YO<sub>1.5</sub>-TaO<sub>2.5</sub> system at 1250 degrees C

Macauley, Chandra A.; Fernandez, Abel N.; Van Sluytman, Jason S.; et al.

JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 38 Issue: 13 Pages: 4523-4532 Published: OCT 2018

30. Density functional study of the phase stability and Raman spectra of Yb<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>SiO<sub>5</sub> and Yb<sub>2</sub>Si<sub>2</sub>O<sub>7</sub> under pressure

Ogawa, Takafumi; Otani, Noriko; Yokoi, Taishi; et al.

PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 20 Issue: 24 Pages: 16518-16527 Published: JUN 28 2018

29. RAMAN SCATTERING IN GLASSY Li<sub>2</sub>B<sub>4</sub>O<sub>7</sub>

Puga, Pavlo P.; Danyliuk, Pavlo S.; Rizak, Galina, V; et al.

JOURNAL OF CHEMISTRY AND TECHNOLOGIES Volume: 26 Issue: 2 Pages: 31-38 Published: 2018

28. Raman scattering in glassy Li<sub>2</sub>B<sub>4</sub>O<sub>7</sub> doped with Er<sub>2</sub>O<sub>3</sub>

Puga, P. P.; Danyliuk, P. S.; Gomonai, A., I; et al.

UKRAINIAN JOURNAL OF PHYSICAL OPTICS Volume: 19 Issue: 4 Pages: 211-219 Published: 2018

27. Loiko, P., Koopmann, P., Mateos, X., (...), Petrov, V., Krinkel, C.

Highly Efficient, Compact Tm<sup>3+</sup>:RE<sub>2</sub>O<sub>3</sub> (RE = Y, Lu, Sc) Sesquioxide Lasers Based on Thermal Guiding

IEEE Journal of Selected Topics in Quantum Electronics 24(5), 1600713, 2018

26. Kumar, S., Prakash, R., Choudhary, R.J., Phase, D.M.

Photoemission studies on (1 1 1) textured Cr doped Eu<sub>2</sub>O<sub>3</sub>thin film

Journal of Alloys and Compounds 738, pp. 233-238, 2018

25. Polychronopoulou, K., Zedan, A.F., AlKetbi, M., (...), Isakovic, A.F., AlHassan, S.

Tailoring the efficiency of an active catalyst for CO abatement through oxidation reaction: The case study of samarium-doped ceria  
Journal of Environmental Chemical Engineering 6(1), pp. 266-280, 2018

24. Perdigon-Lagunes, P., Estevez, O., Zorrilla Cangas, C., Herrera-Becerra, R.

Gd - Gd<sub>2</sub>O<sub>3</sub>mimodal nanoparticles as labeling agents

MRS Advances 3(14), pp. 761-766, 2017

23. Bordun, O.M., Bordun, I.O., Kukharskyy, I.J., (...), Tsapovska, Z.I., Leonov, D.S.

Structure and vibrational spectra of thin films Y<sub>2</sub>O<sub>3</sub>:Eu

Nanosistemi, Nanomateriali, Nanotecnologii 15(1), pp. 27-36, 2017

22. Bispo, A.G., Ceccato, D.A., Lima, S.A.M., Pires, A.M.

Red phosphor based on Eu<sup>3+</sup>-isoelectronically doped Ba<sub>2</sub>SiO<sub>4</sub>obtained via sol-gel route for solid state lightning  
RSC Advances 7(85), pp. 53752-53762, 2017

21. Lahiri, Rini; Ghosh, Anupam; Dwivedi, Shyam Murli Manohar Dhar; et al.

Performance of Erbium-doped TiO<sub>2</sub> thin film grown by physical vapor deposition technique

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 123 Issue: 9 Article Number: 573 Published: SEP 2017

20. Raj, Athira K. V.; Rao, P. Prabhakar; Sreena, T. S.; et al.

Influence of local structure on photoluminescence properties of Eu<sup>3+</sup> doped CeO<sub>2</sub> red phosphors through induced oxygen vacancies by contrasting rare earth substitutions

PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 19 Issue: 30 Pages: 20110-20120 Published: AUG 14 2017

19. Anbarasu, V.; Dhilip, M.; Kumar, K. Saravana; et al.

Effect of transition metal ion substitution on structural and magnetic properties of Eu<sub>2</sub>O<sub>3</sub> sesquioxide system

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 16 Pages: 12197-12206 Published: AUG 2017

18. Anbarasu, V., Dhilip, M., Saravana Kumar, K., Sivakumar, K.

Effect of trivalent transition metal ion substitution in multifunctional properties of Dy<sub>2</sub>O<sub>3</sub> system

Journal of Materials Science: Materials in Electronics 28(12), pp. 8976-8985, 2017

17. Wu Qian; Weng Wei-Zhang; Liu Chun-Li; et al.

Effect of Preparation Methods on Photo-Induced Formation of Peroxide Species on Nd<sub>2</sub>O<sub>3</sub>

ACTA PHYSICO-CHEMICA SINICA Volume: 33 Issue: 10 Pages: 2064-2071 Published: JUL 17 2017

16. El Ghoul, J.; El Mir, L.  
 Structural and optical properties of Tb<sup>3+</sup> doped Y<sub>2</sub>O<sub>3</sub> nanoparticles  
 JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 12 Pages: 9066-9071 Published: JUN 2017
15. Tomar, Renu; Kumar, Parmod; Kumar, Ashish; et al.  
 Investigations on structural and magnetic properties of Mn doped Er<sub>2</sub>O<sub>3</sub>  
 SOLID STATE SCIENCES Volume: 67 Pages: 8-12 Published: MAY 2017
14. Zhang, Xian; Gui, Wenhua; Zeng, Qingfeng  
 First-principles study of structural, mechanical, and thermodynamic properties of cubic Y<sub>2</sub>O<sub>3</sub> under high pressure  
 CERAMICS INTERNATIONAL Volume: 43 Issue: 3 Pages: 3346-3355 Published: FEB 15 2017
13. Irshad K.A., Chandra Shekar N.V., Ravindran T.R., Srihari V., K.K. Pandey  
 X-ray diffraction and Raman studies on Ho: Eu<sub>2</sub>O<sub>3</sub>  
 Journal of Molecular Structure 1128, 325-329 DOI: 10.1016/j.molstruc.2016.08.077 (2017)
12. Sharma, Nita Dilawar; Singh, Jasveer; Vijay, Aditi; et al.  
 Pressure-Induced Structural Transition Trends in Nanocrystalline Rare-Earth Sesquioxides: A Raman Investigation  
 JOURNAL OF PHYSICAL CHEMISTRY C Volume: 120 Issue: 21 Pages: 11679-11689 Published: JUN 2 2016
11. Kishimura, Hiroaki; Hamada, Sho; Aruga, Atsushi; et al.  
 Effect of shock compression on optical and structural properties of Eu<sub>2</sub>O<sub>3</sub> and Y<sub>2</sub>O<sub>3</sub>:Eu<sup>3+</sup> powders  
 JOURNAL OF APPLIED PHYSICS Volume: 119 Issue: 20 Article Number: 205111 Published: MAY 28 2016
10. Ahuja, Babu Lal; Sharma, Sonu; Heda, Narayan Lal; et al.  
 Electronic and optical properties of ceramic Sc<sub>2</sub>O<sub>3</sub> and Y<sub>2</sub>O<sub>3</sub>: Compton spectroscopy and first principles calculations  
 JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume: 92 Pages: 53-63 Published: MAY 2016
9. Sattonnay, G., Bilgen, S., Thomé, L., Grygiel, C., Monnet, I., Plantevin, O., Huet, C., Miro, S., Simon, P.  
 Structural and microstructural tailoring of rare earth sesquioxides by swift heavy ion irradiation  
 Physica Status Solidi (B) Basic Research 253(11), 2110-2114 DOI: 10.1002/pssb.201600451 (2016)
8. Dilawar Sharma, N., Singh, J., Vijay, A., Samanta, K., Dogra, S., Bandyopadhyay, A.K.  
 Pressure-Induced Structural Transition Trends in Nanocrystalline Rare-Earth Sesquioxides: A Raman Investigation  
 Journal of Physical Chemistry C 120(21), 11679-11689 DOI: 10.1021/acs.jpcc.6b02104 (2016)
7. Jiang, J., Yao, B.-L., Gao, X.-R., Wang, L.-K., Li, H.-P., Deng, L.-D.  
 Synthesis and optical properties of copper doped Y<sub>2</sub>Ba<sub>2</sub>O<sub>5</sub> pigments with high near-infrared reflectance  
 Wuji Cailiao Xuebao/Journal of Inorganic Materials 31(6), 641-646 DOI: 10.15541/jim20150562 (2016)
6. Popov, V.V., Menušenkov, A.P., Yastrebsev, A.A., Korovin, S.A., Tumarkin, A.V., Pisarev, A.A., Tsarenko, N.A., Arzhatkina, L.A., Arzhatkina, O.A.  
 The effect of synthesis conditions on the structure of compounds formed in the Dy<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> system  
 Russian Journal of Inorganic Chemistry 61(4), 403-411 DOI: 10.1134/S003602361604015X (2016)
5. Du, P., Lim, J.H., Leem, J.W., Cha, S.M., Yu, J.S.  
 Enhanced Photovoltaic Performance of Dye-Sensitized Solar Cells by Efficient Near-Infrared Sunlight Harvesting using Upconverting Y<sub>2</sub>O<sub>3</sub>:Er<sup>3+</sup>/Yb<sup>3+</sup> Phosphor Nanoparticles  
 Nanoscale Research Letters Volume 10, Issue 1, 14 December 2015, Article number 321, 6p
4. Quesada, Adrian; del Campo, Adolfo; Fernandez, Jose F.  
 Stabilization of cubic phase in dense Eu<sub>2</sub>O<sub>3</sub> ceramics  
 MATERIALS LETTERS Volume: 157 Pages: 77-80 Published: OCT 15 2015
3. Kumar, Sandeep; Prakash, Ram; Choudhary, R. J.; et al.  
 Structural, XPS and magnetic studies of pulsed laser deposited Fe doped Eu<sub>2</sub>O<sub>3</sub> thin film  
 MATERIALS RESEARCH BULLETIN Volume: 70 Pages: 392-396 Published: OCT 2015
2. Du, Peng; Luo, Laihui; Yue, Qingying; et al.  
 The simultaneous realization of high- and low-temperature thermometry in Er<sup>3+</sup>/Yb<sup>3+</sup>-codoped Y<sub>2</sub>O<sub>3</sub> nanoparticles  
 MATERIALS LETTERS 143, 209-211 MAR 15 2015
1. Khomenkova, L., Kushnirenko, V.I., Osipyonok, N.M., (...), Strelchuk, V.V., Borkovska, L.V.  
 Effect of rare-earth doping on structural and luminescent properties of screen-printed ZnO films  
 ECS Transactions Volume 66, Issue 1, 2015, Pages 321-332
91. “Simple procedure for an estimation of the coal rank using micro-Raman spectroscopy”  
 Ruth Hinrichs, Matthew T. Brown, Marcos A.Z. Vasconcellos, Miroslav V. Abrashev, and Wolfgang Kalkreuth  
 International Journal of Coal Geology 136, 52–58 (2014) (7 pages)
78. The applicability of Raman spectroscopy in the assessment of palaeowildfire intensity

Theurer, Thomas; Muirhead, David K.; Jolley, David; et al.  
PALAEOGEOGRAPHY PALAECLIMATOLOGY PALAOECOLOGY Volume: 570 Article Number: 110363 Published:  
MAY 15 2021

77. Maturity and thermal evolution differences between two sets of Lower Palaeozoic shales and its significance for shale gas formation in south-western Sichuan Basin, China  
Wang, Ye; Qiu, Nansheng; Xie, Xiaomin; et al.  
GEOLOGICAL JOURNAL Early Access: MAR 2021

76. First evidence of microplastic contamination in the freshwater of Lake Guaiiba, Porto Alegre, Brazil  
Bertoldi, Crislaine; Lara, Larissa Z.; Mizushima, Fernanda A. de L.; et al.  
SCIENCE OF THE TOTAL ENVIRONMENT Volume: 759 Article Number: 143503 Published: MAR 10 2021

75. Raman Spectroscopy as a Versatile Tool for Investigating Thermochemical Processing of Coal, Biomass, and Wastes: Recent Advances and Future Perspectives  
Xu, Jun; He, Qichen; Xiong, Zhe; et al.  
ENERGY & FUELS Volume: 35 Issue: 4 Pages: 2870-2913 Published: FEB 18 2021

74. Raman mapping of coal halos induced by uranium mineral radiation  
Machovic, Vladimir; Havelcova, Martina; Sykorova, Ivana; et al.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY Volume: 246 Article Number: 118996 Published: FEB 5 2021

73. Research on Molecular Structure Characteristics of Vitrinite and Inertinite from Bituminous Coal with FTIR, Micro-Raman, and XRD Spectroscopy  
Zhou, He; Wu, Caifang; Pan, Jienan; et al.  
ENERGY & FUELS Volume: 35 Issue: 2 Special Issue: SI Pages: 1322-1335 Published: JAN 21 2021

72. Maturity Assessment of the Lower Cambrian and Sinian Shales Using Multiple Technical Approaches  
Yang, Wei; He, Sheng; Zhai, Gangyi; et al.  
JOURNAL OF EARTH SCIENCE Early Access: JAN 2021

71. Micro-Raman Spectroscopy of Selected Macerals of the Huminite Group: An Example from the Szczercow Lignite Deposit (Central Poland)  
Bielowicz, Barbara; Morga, Rafal  
ENERGIES Volume: 14 Issue: 2 Article Number: 281 Published: JAN 2021

70. The effects of char and potassium on the fast pyrolysis behaviors of biomass in an infrared-heating condition  
Zhu, Haodong; Yi, Baojun; Hu, Hongyun; et al.  
ENERGY Volume: 214 Article Number: 119065 Published: JAN 1 2021

69. Raman spectroscopy as a tool for provenancing black limestones (bigi morati) used in antiquity  
Raneri, Simona; Kosek, Filip; Lazzarini, Lorenzo; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 52 Issue: 1 Special Issue: SI Pages: 241-250 Published: JAN 2021

68. Effect of chemical structure and sulfur speciation of high-sulfur coking coals on sulfur transformation during pyrolysis  
Shen, Y.-F., Wang, M.-J., Hu, Y.-F., (...), Bao, W.-R., Chang, L.-P.  
Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology 48(2), pp. 144-153 (2020)

67. Application of Micro-Raman Spectroscopy for the Quantitative Analysis of Vitrinite Reflectance in Medium and High Rank Colombian Coals  
Urbano-Noguera, Ruben-Dario; Estupinan-Duran, Hugo-Armando; Neira-Arenas, Gustavo  
REVISTA FACULTAD DE INGENIERIA, UNIVERSIDAD PEDAGOGICA Y TECNOLOGICA DE COLOMBIA Volume: 29 Issue: 54 Article Number: e12241 Published: DEC 15 2020

66. An integrated platform for thermal maturity assessment of polyphase, long-lasting sedimentary basins, from classical to brand-new thermal parameters and models: An example from the on-shore Baltic Basin (Poland)  
Corrado, S.; Schito, A.; Romano, C.; et al.  
MARINE AND PETROLEUM GEOLOGY Volume: 122 Article Number: 104547 Published: DEC 2020

65. Paleogeothermal Gradients Across an Inverted Hyperextended Rift System: Example of the Mauleon Fossil Rift (Western Pyrenees)  
Saspiturry, N.; Lahfid, A.; Baudin, T.; et al.  
TECTONICS Volume: 39 Issue: 10 Article Number: e2020TC006206 Published: OCT 2020

64. Validating Structural Styles in the Flysch Basin Northern Rif (Morocco) by Means of Thermal Modeling  
Atouabat, Achraf; Corrado, Sveva; Schito, Andrea; et al.  
GEOSCIENCES Volume: 10 Issue: 9 Article Number: 325 Published: SEP 2020

63. Progress of Raman spectroscopic investigations on the structure and properties of coal  
Xu, Yanmei; Chen, Xia; Wang, Liang; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 9 Special Issue: SI Pages: 1874-1884 Published: SEP 2020

62. Backtracking to Parent Maceral from Produced Bitumen with Raman Spectroscopy  
Khatibi, Seyedalireza; Abarghani, Arash; Liu, Kouqi; et al.  
MINERALS Volume: 10 Issue: 8 Article Number: 679 Published: AUG 2020

61. Spectral manifestations of coal metamorphism: Insights from coal microstructural framework  
 Ghosh, Santanu; Ojha, Anwita; Varma, Atul Kumar  
 INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 228 Article Number: 103549 Published: AUG 1 2020
60. Thermal maturation as revealed by micro-Raman spectroscopy of mineral-organic aggregation (MOA) in marine shales with high and over maturities  
 Xiao, Xianming; Zhou, Qin; Cheng, Peng; et al.  
 SCIENCE CHINA-EARTH SCIENCES Volume: 63 Issue: 10 Pages: 1540-1552 Published: OCT 2020
59. Molecular structure characterization of lignite treated with ionic liquid via FTIR and XRD spectroscopy  
 Li Zhao; Ni Guanhua; Wang Hui; et al.  
 FUEL Volume: 272 Article Number: 117705 Published: JUL 15 2020
58. Raman spectroscopy of biochar from the pyrolysis of three typical Chinese biomasses: A novel method for rapidly evaluating the biochar property  
 Xu, Jun; Liu, Jiawei; Ling, Peng; et al.  
 ENERGY Volume: 202 Article Number: 117644 Published: JUL 1 2020
57. Geochemistry of shear zone-hosted uranium mineralisation at the Zadni Chodov uranium deposit (Bohemian Massif)  
 Havelcova, Martina; Machovic, Vladimir; Rene, Milos; et al.  
 ORE GEOLOGY REVIEWS Volume: 120 Article Number: 103428 Published: MAY 2020
56. Evaluation of terrestrial carbonaceous matter aromatization by Raman spectroscopy and its application to C chondrites  
 Schmidt, Jaques S.; Hinrichs, Ruth  
 METEORITICS & PLANETARY SCIENCE Volume: 55 Issue: 4 Pages: 800-817 Published: APR 2020
55. Chemical imaging of coal in micro-scale with Raman mapping technology  
 Xu, Jun; Liu, Jiawei; Zhang, Xin; et al.  
 FUEL Volume: 264 Article Number: 116826 Published: MAR 15 2020
54. Raman spectroscopy of intruded coals from the Illinois Basin: Correlation with rank and estimated alteration temperature  
 Li, Kuo; Rimmer, Susan M.; Presswood, Severin M.; et al.  
 INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 219 Article Number: 103369 Published: FEB 15 2020
53. Structural order evaluation and structural evolution of coal derived natural graphite during graphitization  
 Zhang, Shuai; Liu, Qinfu; Zhang, Hao; et al.  
 CARBON Volume: 157 Pages: 714-723 Published: FEB 2020
52. An automatic approach for characterization of the thermal maturity of dispersed organic matter Raman spectra at low diagenetic stages  
 Schito, Andrea; Corrado, Sveva  
 APPLICATION OF ANALYTICAL TECHNIQUES TO PETROLEUM SYSTEMS Book Series: Geological Society Special Publication Volume: 484 Pages: 107-119 Published: 2020
51. Raman spectroscopy: an effective thermal marker in low temperature carbonaceous fold-thrust belts  
 Muirhead, D. K.; Bond, C. E.; Watkins, H.; et al.  
 FOLD AND THRUST BELTS: STRUCTURAL STYLE, EVOLUTION AND EXPLORATION Book Series: Geological Society Special Publication Volume: 490 Pages: 135-151 Published: 2020
50. Thermal history of the Carboniferous strata in the northern part of the Intra-Sudetic Basin (SW Poland): A combined Raman spectroscopy and organic petrography study  
 Botor, Dariusz; Tobola, Tomasz; Waliczek, Marta  
 ACTA GEOLOGICA POLONICA Volume: 70 Issue: 3 Pages: 363-396 Published: 2020
49. About the Microstructure of the Graptolite Periderm - Examples from the Holy Cross Mountains (Poland)  
 Morga, R.  
 IOP Conference Series: Earth and Environmental Science 362(1),012076 (2019)
48. Utility of Raman spectroscopy in estimates of the thermal maturity of Ediacaran organic matter: An example from the East European Craton  
 Goryl, M., Banasik, K., Smolarek-Lach, J., Marynowski, L.  
 Chemie der Erde 79(3), pp. 467-474 (2019)
47. Crystallite Structure Characteristics and Its Influence on Methane Adsorption for Different Rank Coals  
 Meng, Junging; Li, Shichao; Niu, Jiaxing  
 ACS OMEGA Volume: 4 Issue: 24 Pages: 20762-20772 Published: DEC 10 2019
46. Raman spectroscopy as a tool to determine the thermal maturity of organic matter: Application to sedimentary, metamorphic and structural geology  
 Henry, Delano G.; Jarvis, Ian; Gillmore, Gavin; et al.  
 EARTH-SCIENCE REVIEWS Volume: 198 Article Number: 102936 Published: NOV 2019
45. Quantitative evaluation of vitrinite reflectance in shale using Raman spectroscopy and multivariate analysis  
 Lupoi, Jason S.; Hackley, Paul C.; Birsic, Erin; et al.  
 FUEL Volume: 254 Article Number: 115573 Published: OCT 15 2019
44. Difference in structural chemistry of non-coking and coking coal using acid treatment demineralization technique

43. Utility of Raman spectroscopy in estimates of the thermal maturity of Ediacaran organic matter: An example from the East European Craton  
Goryl, Magdalena; Banasik, Kamila; Smolarek-Lach, Justyna; et al.

GEOCHEMISTRY Volume: 79 Issue: 3 Special Issue: SI Pages: 467-474 Published: SEP 2019

42. Thermal maturity determination for oil prone organic matter based on the Raman spectra of artificial matured samples  
Mi, Jingkui; He, Kun; Fan, Junjia; et al.

VIBRATIONAL SPECTROSCOPY Volume: 104 Article Number: 102940 Published: SEP 2019

41. Raman spectroscopy of graptolite periderm and its potential as an organic maturity indicator for the Lower Paleozoic in southwestern China  
Hao, Jingyue; Zhong, Ningning; Luo, Qingyong; et al.

INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 213 Article Number: 103278 Published: SEP 1 2019

40. On the difference of graphitization behavior between vitrinite- and inertinite-rich anthracites during heat treatment  
Wang, Lu; Qin, Rongfang; Li, Yu; et al.

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS Early Access: AUG 2019

39. Natural and experimental structural evolution of dispersed organic matter in mudstones: The Shimanto accretionary complex, southwest Japan  
Nakamura, Yoshihiro; Hara, Hidetoshi; Kagi, Hiroyuki

ISLAND ARC Volume: 28 Issue: 5 Article Number: e12318 Published: SEP 2019

38. Comparing optical and Raman spectroscopic investigations of phytoclasts and sporomorphs for thermal maturity assessment: the case study of Hettangian continental facies in the Holy cross Mts. (central Poland)  
Schito, A.; Spina, A.; Corrado, S.; et al.

MARINE AND PETROLEUM GEOLOGY Volume: 104 Pages: 331-345 Published: JUN 2019

37. Effects of chemical composition, disorder degree and crystallite structure of coal macromolecule on nanopores (0.4-150 nm) in different rank naturally-matured coals  
Liu, Yu; Zhu, Yanming; Chen, Shangbin

FUEL Volume: 242 Pages: 553-561 Published: APR 15 2019

36. Raman spectroscopic study of chemical structure and thermal maturity of vitrinite from a suite of Australia coals  
Zhang, Yulong; Li, Zhongsheng

FUEL Volume: 241 Pages: 188-198 Published: APR 1 2019

35. Coal microcrystalline structural changes related to methane adsorption/desorption  
Pan, Jienan; Lv, Minmin; Hou, Quanlin; et al.

FUEL Volume: 239 Pages: 13-23 Published: MAR 1 2019

34. A rapid method for determining organic matter maturity using Raman spectroscopy: Application to Carboniferous organic-rich mudstones and coals  
Henry, D. G.; Jarvis, I.; Gillmore, G.; et al.

INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 203 Pages: 87-98 Published: FEB 2 2019

33. Changes in the structure of lignite macerals during the gasification process determined by Raman spectroscopy  
Bielowicz, Barbara

PRZEMYSŁ CHEMICZNY Volume: 98 Issue: 2 Pages: 241-245 Published: FEB 2019

32. Micro-Raman Spectroscopy of Microscopically Distinguishable Components of Naturally Graphitized Coals from Central Hunan Province, China  
Li, Kuo; Rimmer, Susan M.; Liu, Qinfu; et al.

ENERGY & FUELS Volume: 33 Issue: 2 Pages: 1037-1048 Published: FEB 2019

31. Integrated assessment of thermal maturity of the Upper Ordovician-Lower Silurian Wufeng-Longmaxi shale in Sichuan Basin, China  
Wang, Ye; Qiu, Nansheng; Borjigin, Tenger; et al.

MARINE AND PETROLEUM GEOLOGY Volume: 100 Pages: 447-465 Published: FEB 2019

30. The fluorescence interference in Raman spectrum of raw coals and its application for evaluating coal property and combustion characteristics  
Xiang, Jun; Liu, Jiawei; Xu, Jun; et al.

PROCEEDINGS OF THE COMBUSTION INSTITUTE Volume: 37 Issue: 3 Pages: 3053-3060 Published: 2019

29. Quantitative evaluation of vitrinite reflectance and atomic O/C in coal using Raman spectroscopy and multivariate analysis  
Lupoi, Jason S.; Fritz, Luke P.; Hackley, Paul C.; et al.

FUEL Volume: 230 Pages: 1-8 Published: OCT 15 2018

28. Ultrasonic-assisted cleaning of Indian low-grade coal for clean and sustainable energy  
Barma, Santosh Deb; Sathish, R.; Baskey, Prasanta Kumar

JOURNAL OF CLEANER PRODUCTION Volume: 195 Pages: 1203-1213 Published: SEP 10 2018

27. Evaluating Molecular Evolution of Kerogen by Raman Spectroscopy: Correlation with Optical Microscopy and Rock-Eval Pyrolysis

26. Jason S. Lupoi, Luke P. Fritz, Paul C. Hackley, Logan Solotky, Amy Weislogel, Steve Schlaegle  
Quantitative evaluation of vitrinite reflectance and atomic O/C in coal using Raman spectroscopy and multivariate analysis  
Fuel 230, 1-8 (2018).
25. Henry, D.G., Jarvis, I., Gillmore, G., Stephenson, M., Emmings, J.F.  
Assessing low-maturity organic matter in shales using Raman spectroscopy: Effects of sample preparation and operating procedure  
International Journal of Coal Geology 191, pp. 135-151, 2018.
24. Liu, Xianfeng; Song, Dazhao; He, Xueqiu; et al.  
Coal macromolecular structural characteristic and its influence on coalbed methane adsorption  
FUEL Volume: 222 Pages: 687-694 Published: JUN 15 2018
23. Morga, Rafal; Pawlyta, Miroslawa  
Microstructure of graptolite periderm in Silurian gas shales of Northern Poland  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 189 Pages: 1-7 Published: MAR 15 2018
21. Wilkins, Ronald W. T.; Sherwood, Neil; Li, Zhongsheng  
RaMM (Raman maturity method) study of samples used in an interlaboratory exercise on a standard test method for determination of vitrinite reflectance on dispersed organic matter in rocks  
MARINE AND PETROLEUM GEOLOGY Volume: 91 Pages: 236-250 Published: MAR 2018
20. Xu, Jun; Tang, Hao; Su, Sheng; et al.  
A study of the relationships between coal structures and combustion characteristics: The insights from micro-Raman spectroscopy based on 32 kinds of Chinese coals  
APPLIED ENERGY Volume: 212 Pages: 46-56 Published: FEB 15 2018
19. Wang, Qi; Zhang, Jianliang; Wang, Guangwei; et al.  
Thermal and Kinetic Analysis of Coal with Different Waste Plastics (PVC) in Cocombustion  
ENERGY & FUELS Volume: 32 Issue: 2 Pages: 2145-2155 Published: FEB 2018
18. Lima, Demetrius W.; Fiegenbaum, Fernanda; Trombetta, Fernanda; et al.  
Influence of graphitic materials microstructure in the hydrogen evolution in aqueous solution of tetra-alkylammonium-sulfonic acid ionic liquid  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 43 Issue: 3 Pages: 1239-1250 Published: JAN 18 2018
17. Khatibi, Seyedalireza; Ostadhassan, Mehdi; Tuschel, David; et al.  
Raman spectroscopy to study thermal maturity and elastic modulus of kerogen  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 185 Pages: 103-118 Published: JAN 2 2018
16. Luensdorf, N. Keno; Dunkl, Istvan; Schmidt, Burkhard C.; et al.  
Towards a Higher Comparability of Geothermometric Data Obtained by Raman Spectroscopy of Carbonaceous Material. Part 2: A Revised Geothermometer  
GEOSTANDARDS AND GEOANALYTICAL RESEARCH Volume: 41 Issue: 4 Pages: 593-612 Published: DEC 2017
15. Wu, Dun; Chen, Binyu; Sun, Ruoyu; et al.  
Thermal behavior and Raman spectral characteristics of step-heating perhydrous coal: Implications for thermal maturity process  
JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS Volume: 128 Pages: 143-155 Published: NOV 2017
14. Lupoi, Jason S.; Fritz, Luke P.; Parris, Thomas M.; et al.  
Assessment of Thermal Maturity Trends in Devonian-Mississippian Source Rocks Using Raman Spectroscopy: Limitations of Peak-Fitting Method  
FRONTIERS IN ENERGY RESEARCH Volume: 5 Article Number: UNSP 24 Published: SEP 27 2017
13. Xu, Jun; Tang, Hao; Su, Sheng; et al.  
Micro-Raman Spectroscopy Study of 32 Kinds of Chinese Coals: Second-Order Raman Spectrum and Its Correlations with Coal Properties  
ENERGY & FUELS Volume: 31 Issue: 8 Pages: 7884-7893 Published: AUG 2017
12. Schito, Andrea; Romano, Claudia; Corrado, Sveva; et al.  
Diagenetic thermal evolution of organic matter by Raman spectroscopy  
ORGANIC GEOCHEMISTRY Volume: 106 Pages: 57-67 Published: APR 2017
11. Schito, A.; Corrado, S.; Trolese, M.; et al.  
Assessment of thermal evolution of Paleozoic successions of the Holy Cross Mountains (Poland)  
MARINE AND PETROLEUM GEOLOGY Volume: 80 Pages: 112-132 Published: FEB 2017
10. Pan, Jienan; Lv, Minmin; Bai, Heling; et al.  
Effects of Metamorphism and Deformation on the Coal Macromolecular Structure by Laser Raman Spectroscopy  
ENERGY & FUELS Volume: 31 Issue: 2 Pages: 1136-1146 Published: FEB 2017
9. Jiang, Jingyu; Wu, Dun; Mou, Junhui; et al.  
Macromolecular structure evolution and its significance for perhydrous coal under drying and pyrolysis conditions  
DRYING TECHNOLOGY Volume: 35 Issue: 11 Special Issue: SI Pages: 1398-1411 Published: 2017

8. Botor, Dariusz; Tobola, Tomasz; Jelonek, Iwona  
 THERMAL HISTORY OF THE LOWER CARBONIFEROUS CULM BASIN IN THE NIZKY JESENIK MTS. (NE BOHEMIAN MASSIF, CZECH REPUBLIC AND POLAND)  
 ANNALES SOCIETATIS GEOLOGORUM POLONIAE Volume: 87 Issue: 1 Pages: 13-40 Published: 2017
7. Xie, Ying-Fang; You, Jing-Lin; Lu, Li-Ming  
 In-Situ Temperature Dependent Raman Spectra of Coal  
 PROCEEDINGS OF THE 3RD INTERNATIONAL CONFERENCE ON MATERIAL ENGINEERING AND APPLICATION (ICMEA 2016) Book Series: AER-Advances in Engineering Research Volume: 103 Pages: 303-309 Published: 2016
6. Li, X., Zeng, F.-G., Wang, W., Dong, K.  
 Raman characterization of structural evolution in the low-middle rank coals  
 Meitan Xuebao/Journal of the China Coal Society 41(9), 2298-2304 DOI: 10.13225/j.cnki.jccs.2016.0053 (2016)
5. Schmidt Mumm, A., Inan, S.  
 Microscale organic maturity determination of graptolites using Raman spectroscopy  
 INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 162 Pages: 96-107 DOI: 10.1016/j.coal.2016.05.002 Published: MAY 15 2016
4. Lunsdorf, NK, Lunsdorf, JO  
 Evaluating Raman spectra of carbonaceous matter by automated, iterative curve-fitting  
 INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 160 Pages: 51-62 DOI: 10.1016/j.coal.2016.04.008 Published: APR 15 2016
3. Rantitsch, G., Lämmerer, W., Fisslthaler, E., Mitsche, S., Kaltenböck, H.  
 On the discrimination of semi-graphite and graphite by Raman spectroscopy  
 INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 159 Pages: 48-56 DOI: 10.1016/j.coal.2016.04.001 Published: APR 1 2016
2. Inan, S., Goodarzi, F., Schmidt Mumm, A., Arouri, K., Qathami, S., Ardakani, O.H., Inan, T., Tuwailib, A.A.  
 The Silurian Qusaiba Hot Shales of Saudi Arabia: An integrated assessment of thermal maturity  
 INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 159 Pages: 107-119 DOI: 10.1016/j.coal.2016.04.004 Published: APR 1 2016
1. Lünsdorf, N.K.  
 Raman spectroscopy of dispersed vitrinite - Methodical aspects and correlation with reflectance  
 INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 153 Pages: 75-86 DOI: 10.1016/j.coal.2015.11.010 Published: JAN 1 2016
- 92. "Two dimensional polymerization of graphene oxide: Bottom-up approach"**  
 Victor Atanasov, Stoyan Russev, Lyudmil Lyutov, Yulian Zagranjarsky, Iglika Dimitrova, Georgy Avdeev, Ivalina Avramova, Evgenia Vulcheva, Kiril Kirilov, Atanas Tzonev, Miroslav Abrashev, and Gichka Tsutsumanova  
 Materials Chemistry and Physics **163**, 172-181 (2015) (10 pages)
1. A novel composite based on pyrene thiazole grafted on graphene oxide: physico-chemical characterization and electrochemical investigations  
 Tudose, Madalina; Baratoiu-Carpent, Rodica D.; Anghel, Elena Maria; et al.  
 MATERIALS CHEMISTRY AND PHYSICS Volume: 262 Article Number: 124315 Published: APR 1 2021
- 93. "On the plasma-based growth of 'flowing' graphene sheets at atmospheric pressure conditions"**  
 Tsyganov, D., Bundaleska, N., Tatarova, E., Dias, A., Henriques, J., Rego, A., Ferraria, A., Abrashev, M.V., Dias, F.M., Luhrs, C.C., Phillips, J.  
 Plasma Sources Sci. Technol. **25**, 015013 (2016) (22 pages) DOI: 10.1088/0963-0252/25/1/015013
24. Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma  
 Song, M., Wang, C., Chen, X., Ma, J., Xia, W.  
 Diamond and Related Materials 116,108417 (2021)
23. Controlled high temperature stability of microwave plasma synthesized graphene nanosheets  
 Jasek, Ondrej; Toman, Jozef; Vsiansky, Dalibor; et al.  
 JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 54 Issue: 16 Article Number: 165201 Published: APR 22 2021
22. Optimizing high-quality graphene nanoflakes production through organic (bio)-precursor plasma decomposition  
 Casanova, A.; Rincon, R.; Munoz, J.; et al.  
 FUEL PROCESSING TECHNOLOGY Volume: 212 Article Number: 106630 Published: FEB 2021
21. The role of microwave plasma temperature during graphene nanosheets deposition on dielectric substrate: Modelling and experiment  
 Kubec̄ka, M., Toman, J., Šnírer, M., (...), Kudrle, V., Jurmanová, J.  
 NANOCON Conference Proceedings - International Conference on Nanomaterials  
 2020-October, pp. 80-84 (2020)

20. Effect of charging solid particles on their growth process and parameters of microwave discharge in liquidn-heptane  
 Lebedev, Yu A.; Tatarinov, A., V; Epstein, I. L.  
**PLASMA SOURCES SCIENCE & TECHNOLOGY** Volume: 29 Issue: 6 Article Number: 065013 Published: JUN 2020
19. Effect of Plasma Ignition on the Growth Temperature Decrease of Single-Walled Carbon Nanotubes in a Plasma-Coupled Hybrid Chemical-Vapor-Deposition System  
 Jo, Sung-II; Lee, Byeong-Joo; Jeong, Goo-Hwan  
**JOURNAL OF THE KOREAN PHYSICAL SOCIETY** Volume: 76 Issue: 12 Pages: 1110-1115 Published: JUN 2020
18. Study of graphene layer growth on dielectric substrate in microwave plasma torch at atmospheric pressure  
 Jasek, Ondrej; Toman, Jozef; Jurmanova, Jana; et al.  
**DIAMOND AND RELATED MATERIALS** Volume: 105 Article Number: 107798 Published: MAY 2020
17. Simulation of Microwave Discharge in Liquid n-Heptane in the Presence of Argon in the Discharge Region  
 Lebedev, Yu A.; Tatarinov, A., V; Epshtain, I. L.  
**HIGH ENERGY CHEMISTRY** Volume: 54 Issue: 3 Pages: 217-226 Published: MAY 2020
16. Distinctive Features of Graphene Synthesized in a Plasma Jet Created by a DC Plasma Torch  
 Shavelkina, Marina; Ivanov, Peter; Bocharov, Aleksey; et al.  
**MATERIALS** Volume: 13 Issue: 7 Article Number: 1728 Published: APR 2020
15. Influence of molecular admixtures on filamentation in microwave plasma torch  
 Snirer, M., Kudrle, V., Toman, J., (...), Faltýnek, J., Jurmanová, J.  
 46th EPS Conference on Plasma Physics, EPS 2019 (2019)
14. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel microwave plasma torch at atmospheric pressure  
 Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019
13. Graphene synthesis by microwave plasma chemical vapor deposition: analysis of the emission spectra and modeling  
 Pashova, K.; Hinkov, I.; Aubert, X.; et al.  
**PLASMA SOURCES SCIENCE & TECHNOLOGY** Volume: 28 Issue: 4 Article Number: 045001 Published: APR 2019
12. Modeling of plasma-enhanced chemical vapor deposition growth of graphene on cobalt substrates  
 Hinkov, Ivaylo; Pashova, Katya; Farhat, Samir  
**DIAMOND AND RELATED MATERIALS** Volume: 93 Pages: 84-95 Published: MAR 2019
11. Direct synthesis of hydrogenated graphene via hydrocarbon decomposition in plasmas  
 Shavelkina, M. B.; Amirov, R. H.  
**NANOSYSTEMS-PHYSICS CHEMISTRY MATHEMATICS** Volume: 10 Issue: 1 Pages: 102-106 Published: FEB 2019
10. Graphene synthesized in atmospheric plasmas-A review  
 Dato, Albert  
**JOURNAL OF MATERIALS RESEARCH** Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019
- 9. GRAPHENE NANOSHEETS SYNTHESIZED IN MICROWAVE PLASMA AND LIQUID EXFOLIATED GRAPHENE: STRUCTURAL CHARACTERIZATION STUDY**  
 Jurmanova, Jana; Jasek, Ondrej; Toman, Jozef; et al.  
 10TH ANNIVERSARY INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2018 (R)) Pages: 63-68 Published: 2019
8. Plasma diagnostics during microwave plasma synthesis of graphene nanosheets  
 Snirer, M., Toman, J., Kudrle, V., (...), Faltýnek, J., Jurmanová, J.  
 45th EPS Conference on Plasma Physics, EPS 2018 2018-July, pp. 537-540 (2018)
7. Methane/nitrogen plasma-assisted synthesis of graphene and carbon nanotubes  
 Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 51 Issue: 29 Article Number: 294005 Published: JUL 25 2018
- 6. ELECTROCHEMICAL PROPERTIES OF GRAPHENE NANOSHEETS SYNTHESISED IN MICROWAVE PLASMA TORCH DISCHARGE**  
 Toman, Jozef; Jasek, Ondrej; Prasek, Jan; et al.  
 9TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2017) Pages: 88-93 Published: 2018
5. Averin, Konstantin A.; Lebedev, Yuri A.; Shchegolikhin, Alexander N.; et al.  
 Nanosize carbon products formed in microwave discharge in liquid alkanes  
**PLASMA PROCESSES AND POLYMERS** Volume: 14 Issue: 9 Article Number: e1600227 Published: SEP 2017
- 4. THE INFLUENCE OF GAS ADMIXTURES ON THE SYNTHESIS OF GRAPHENE NANOSHEETS IN ARGON MICROWAVE PLASMA TORCH DISCHARGE**  
 Toman, Jozef; Jasek, Ondrej; Jurmanova, Jana  
 8TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2016) Pages: 122-126 Published: 2017

3. Park, CS (Park, Choon-Sang); Kim, DH (Kim, Dong Ha); Shin, BJ (Shin, Bhum Jae); Kim, DY (Kim, Do Yeob); Lee, HK (Lee, Hyung-Kun); Tae, HS (Tae, Heung-Sik)  
 Conductive Polymer Synthesis with Single-Crystallinity via a Novel Plasma Polymerization Technique for Gas Sensor Applications  
 MATERIALS Volume: 9 Issue: 10 Article Number: 812 DOI: 10.3390/ma9100812 Published: OCT 2016
2. Arias-Monje, Pedro J.; Menon, Sarath K.; Zea, Hugo; et al.  
 Nitrogen Doped Graphene Generated by Microwave Plasma and Reduction Expansion Synthesis  
 NANOSCIENCE AND NANOTECHNOLOGY LETTERS Volume: 8 Issue: 2 Pages: 120-128 Published: FEB 2016
1. Park, C.-S., Kim, D.H., Shin, B.J., Kim, D.Y., Lee, H.-K., Tae, H.-S.  
 Synthesis and Characterization of Nanofibrous Polyaniline Thin Film Prepared by Novel Atmospheric Pressure Plasma Polymerization Technique  
 MATERIALS Volume: 9 Issue: 1 Article Number: 39 DOI: 10.3390/ma9010039 Published: JAN 2016
94. *"Vibrational spectroscopy of Ga+ ion implanted ta-C films"*  
 Berova, M., Sandulov, M., Tsvetkova, T., Bischoff, L., Boettger, R., Abrashev, M.  
 Journal of Physics: Conference Series **682**, 012020 (2016) (6 pages) DOI: 10.1088/1742-6596/682/1/012020
95. *"Phase composition identification and microstructure of BaTiO<sub>3</sub>-containing sodium-aluminoborosilicate glass-ceramics"*  
 Harizanova, R., Abrashev, M., Avramova, I., Vladislavova, L., Bocker, C., Tsutsumanova, G., Avdeev, G., Rüssel, C.  
 Solid State Sciences **52**, 49-56 (2016) DOI: 10.1016/j.solidstatesciences.2015.12.007
2. Rapid removal of ammonia nitrogen in low-concentration from wastewater by amorphous sodium titanate nano-particles  
 Zhang, Wenlong; Fu, Rao; Wang, Li; et al.  
 SCIENCE OF THE TOTAL ENVIRONMENT Volume: 668 Pages: 815-824 Published: JUN 10 2019
1. Gamma Irradiation and Heat Treatment Effects on Barium Borosilicate Glasses Doped Titanium Oxide  
 El-Alaily, N. A.; Abou Hussein, E. M.; Eldin, F. M. Ezz  
 JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS Volume: 28 Issue: 6 Pages: 2662-2676 Published: NOV 2018
96. *"Production of N-graphene by microwave N<sub>2</sub>-Ar plasma"*  
 Dias, A., Bundaleski, N., Tatarova, E., Dias, F.M., Abrashev, M., Cvelbar, U., Teodoro, O.M.N.D., Henriques, J.  
 Journal of Physics D – Applied Physics **49**(5), 055307 (2016) DOI: 10.1088/0022-3727/49/5/055307
14. Calculation of two-temperature thermodynamic and transport properties of argon-nitrogen plasma  
 Pan Zi-Han; Chen Xian-Hui; Wang Cheng; et al.  
 ACTA PHYSICA SINICA Volume: 70 Issue: 8 Article Number: 085201 Published: APR 20 2021
13. One-Step Plasma Synthesis of Nitrogen-Doped Carbon Nanomesh  
 Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.  
 NANOMATERIALS Volume: 11 Issue: 4 Article Number: 837 Published: APR 2021
12. Incorporation-limiting mechanisms during nitrogenation of monolayer graphene films in nitrogen flowing afterglows  
 Robert Bigras, G.; Martel, R.; Stafford, L.  
 NANOSCALE Volume: 13 Issue: 5 Pages: 2891-2901 Published: FEB 7 2021
11. Scalable and fast fabrication of holey multilayer graphene via microwave and its application in supercapacitors  
 Bai, Yuge; Yin, Yuting; Xuan, Yingying; et al.  
 NANOTECHNOLOGY Volume: 32 Issue: 4 Article Number: 045602 Published: JAN 22 2021
10. Active-screen plasma multi-functionalization of graphene oxide for supercapacitor application  
 Jing, Zhiyuan; Qi, Shaojun; Tao, Xiao; et al.  
 JOURNAL OF MATERIALS SCIENCE Volume: 56 Issue: 4 Pages: 3296-3311 Published: FEB 2021
9. A Review of Strategies for the Synthesis of N-Doped Graphene-Like Materials  
 Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.  
 NANOMATERIALS Volume: 10 Issue: 11 Article Number: 2286 Published: NOV 2020
8. Nitrogen functionalization of MWCNTs in Ar-N<sub>2</sub> dielectric barrier discharge - Gas ratio effect  
 Abdel-Fattah, E.; Ogawa, D.; Nakamura, K.  
 MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS Volume: 261 Article Number: 114680 Published: NOV 2020
7. Synthesis of plasma treated nitrogen-doped graphite oxide for supercapacitor applications

Ghanashyam, Gyawali; Jeong, Hae Kyung  
JOURNAL OF ENERGY STORAGE Volume: 26 Article Number: 100923 Published: DEC 2019

6. One-step growth of reduced graphene oxide on arbitrary substrates  
Chen, Mingguang; Yengel, Emre; Zhang, Junwei; et al.  
CARBON Volume: 144 Pages: 457-463 Published: APR 2019

5. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert  
JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019

4. Treatment of graphene films in the early and late afterglows of N<sub>2</sub> plasmas: comparison of the defect generation and N-incorporation dynamics  
Bigras, Germain Robert; Glad, Xavier; Martel, Richard; et al.  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 27 Issue: 12 Article Number: 124004 Published: DEC 2018

3. Oriented Carbon Nanostructures by Plasma Processing: Recent Advances and Future Challenges  
Santhosh, Neelakandan M.; Filipic, Gregor; Tatarova, Elena; et al.  
MICROMACHINES Volume: 9 Issue: 11 Article Number: 565 Published: NOV 2018

2. Bjeljac, Andjelika; Djokic, Veljko; Petrovic, Rada; et al.  
Absorption boost of TiO<sub>2</sub> nanotubes by doping with N and sensitization with CdS quantum dots  
CERAMICS INTERNATIONAL Volume: 43 Issue: 17 Pages: 15040-15046 Published: DEC 1 2017

1. Georgieva, Violeta; Berthelot, Antonin; Silva, Tiago; et al.  
Understanding Microwave Surface-Wave Sustained Plasmas at Intermediate Pressure by 2D Modeling and Experiments  
PLASMA PROCESSES AND POLYMERS Volume: 14 Issue: 4-5 Special Issue: SI Article Number: 1600185 Published: APR 2017

97. *“Estimation of the oxygen content of RBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> (R = Er, Y, Eu, Dy) superconducting samples by spectrophotometry and Raman spectroscopy: a comparison between chemical and physical methods for oxygen determination”*  
Stela Georgieva, Angelina Stoyanova-Ivanova and Miroslav Abrashev  
Mediterranean Journal of Physics 1(1), 16-21 (2016)

98. *“Biogenic nanosized iron oxides obtained from cultivation of iron bacteria from the genus Leptothrix”*  
Nedkov, I., Slavov, L., Angelova, R., Blagoev, B., Kovacheva, D., Abrashev, M.V., Iliev, M., Groudeva, V.  
Journal of Biological Physics 42(4), 587-600 (2016) DOI: 10.1007/s10867-016-9426-3

3. Preparation and Characterization of Additional Metallic Element-Containing Tubular Iron Oxides of Bacterial Origin  
Tamura, Katsunori; Kunoh, Tatsuki; Nakanishi, Makoto; et al.  
ACS OMEGA Volume: 5 Issue: 42 Pages: 27287-27294 Published: OCT 27 2020

2. High-Quality Inorganic Red Pigment Prepared by Aluminum Deposition on Biogenous Iron Oxide Sheaths  
Tamura, Katsunori; Kunoh, Tatsuki; Nagaoka, Noriyuki; et al.  
ACS APPLIED BIO MATERIALS Volume: 3 Issue: 9 Pages: 5699-5707 Published: SEP 21 2020

1. Characterization of iron oxide nanoparticle films at the air-water interface in Arctic tundra waters  
Jubb, Aaron M.; Eskelsen, Jeremy R.; Yin, Xiangping; et al.  
SCIENCE OF THE TOTAL ENVIRONMENT Volume: 633 Pages: 1460-1468 Published: AUG 15 2018

99. *“Optical, structural and electrochromic properties of sputter-deposited W-Mo oxide thin films”*  
K. Gesheva, M. A. Arvizu, G. Bodurov, T. Ivanova, G. A. Niklasson, M..Iliev, T. Vlakhov, P. Terzijska, G. Popkirov, M. Abrashev, S. Boyadjiev, G. Jágerszki, I. M. Szilágyi, and Y. Marinov  
Journal of Physics: Conference Series 764, 012010 (2016) DOI:10.1088/1742-6596/764/1/012010

3. Mesoporous Molybdenum-Tungsten Mixed Metal Oxide: A Solid Acid Catalyst for Green, Highly Efficient sp<sub>3</sub>-sp<sub>2</sub> C-C Coupling Reactions  
Thalgaspitiya, W.R.K., Kapuge, T.K., He, J., (...), Kerns, P., Suib, S.L.  
ACS Applied Materials and Interfaces 12(5), pp. 5990-5998 (2020)

2. The Single Cells and Cell Populations Viability Estimation in vitro by the Time-Domain Impedance Spectroscopy  
Stupin, D. D.  
TECHNICAL PHYSICS Volume: 63 Issue: 9 Pages: 1384-1389 Published: SEP 2018

1. Khan, G. R.; Ahmad, Bilal  
Effect of quantum confinement on thermoelectric properties of vanadium dioxide nanofilms  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 123 Issue: 12 Article Number: 795 Published: DEC 2017

100. "Towards large-scale in freestanding graphene and N-graphene sheets" E. Tatarova, A. Dias, J. Henriques, M. Abrashev, N. Bundaleska, E. Kovacevic, N. Bundaleski, U. Cvelbar, E. Valcheva, B. Arnaudov, A. M. Botelho do Rego, A. M. Ferraria, J. Berndt, E. Felizardo, O. M. N. D. Teodoro, Th. Strunskus, L. L. Alves, and B. Gonçalves  
Scientific Reports 7, 10175 (2017) DOI: 10.1038/s41598-017-10810-3
28. Deactivation study of the BICOVOX catalysts used in low temperature steam reforming of ethanol for H<sub>2</sub> production Sharma, S., Yashwanth, P.K., Roy, B.  
Journal of Physics and Chemistry of Solids 156,110138 (2021)
27. Advances of microwave plasma-enhanced chemical vapor deposition in fabrication of carbon nanotubes: a review Liu, Yanjing; He, Jiawei; Zhang, Nan; et al.  
JOURNAL OF MATERIALS SCIENCE Volume: 56 Issue: 22 Pages: 12559-12583 Published: AUG 2021
26. Engineering tunable conductivity, p-n junction and light-harvesting semi-conductivity of graphene oxide by fixing reduction mood only Karim, Mohammad Razaul; Uddin, Md. Nizam; Shaikh, Md. Aslam; et al.  
JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS Volume: 120 Pages: 325-335 Published: MAR 2021
25. A critical review on the production and application of graphene and graphene-based materials in anti-corrosion coatings Kulyk, Bohdan; Freitas, Maria A.; Santos, Nuno F.; et al.  
CRITICAL REVIEWS IN SOLID STATE AND MATERIALS SCIENCES Early Access: FEB 2021
24. Optimizing high-quality graphene nanoflakes production through organic (bio)-precursor plasma decomposition Casanova, A.; Rincon, R.; Munoz, J.; et al.  
FUEL PROCESSING TECHNOLOGY Volume: 212 Article Number: 106630 Published: FEB 2021
23. Pure electric and magnetic fields applied to reduced graphene oxide for defect repair and oxygen removal Miyata, Takeshi; Gohda, Syun; Fujii, Takashi; et al.  
CARBON Volume: 171 Pages: 10-15 Published: JAN 2021
22. Low temperature steam reforming of ethanol over cobalt doped bismuth vanadate [Bi-4(V0.90Co0.10)(2)O11-delta (BICOVOX)] catalysts for hydrogen production Sharma, Shweta; Aich, Shampa; Roy, Banasri  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume: 148 Article Number: 109754 Published: JAN 2021
21. Numerical and Experimental Study of the Multichannel Nature of the Synthesis of Carbon Nanostructures in DC Plasma Jets Shavelkina, M. B.; Ivanov, P. P.; Bocharov, A. N.; et al.  
PLASMA CHEMISTRY AND PLASMA PROCESSING Volume: 41 Issue: 1 Pages: 171-189 Published: JAN 2021
20. A Review of Strategies for the Synthesis of N-Doped Graphene-Like Materials Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.  
NANOMATERIALS Volume: 10 Issue: 11 Article Number: 2286 Published: NOV 2020
19. Self-sustained solid -state exothermic reaction for scalable graphene production Yang, Min; Liu, Jinxu; Li, Shukui; et al.  
MATERIALS & DESIGN Volume: 196 Article Number: 109135 Published: NOV 2020
18. Low-temperature low-power PECVD synthesis of vertically aligned graphene Hussain, Shahzad; Kovacevic, Eva; Berndt, Johannes; et al.  
NANOTECHNOLOGY Volume: 31 Issue: 39 Article Number: 395604 Published: SEP 25 2020
17. Effect of BN dimers on the stability, electronic, and thermal properties of monolayer graphene Abdullah, Nzar Rauf; Abdalla, Danyal A.; Ahmed, Taha Y.; et al.  
RESULTS IN PHYSICS Volume: 18 Article Number: 103282 Published: SEP 2020
16. Effect of preparation on opto-electrical properties of CdS /N, S-rGO photocatalyst for splitting of water by visible light Alam, Zahoor; Verma, Bhawna; Sinha, A. S. K.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 249 Article Number: 123212 Published: JUL 15 2020
15. Bifunctional electron conductive solid electrolyte and dye degrading photocatalyst from rGO-aminoalkane non-metallic origin Karim, Mohammad Razaul; Rahman, Mohammed M.; Asiri, Abdullah M.  
JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS Volume: 112 Pages: 87-96 Published: JUL 2020
14. Synthesis of a zinc oxide/graphene hybrid material by the direct thermal decomposition of oxalate Little, Daniel J.; Pfund, Jacob D.; McLain, Avery A.; et al.  
MATERIALS RESEARCH EXPRESS Volume: 7 Issue: 6 Article Number: 065005 Published: JUN 2020
13. Branched Alkylamine-Reduced Graphene Oxide Hybrids as a Dual Proton-Electron Conductor and Organic-Only Water-Splitting Photocatalyst Karim, Mohammad Razaul; Rahman, Mohammed M.; Asiri, Abdullah M.; et al.  
ACS APPLIED MATERIALS & INTERFACES Volume: 12 Issue: 9 Pages: 10829-10838 Published: MAR 4 2020
12. Design of a 1D/2D C<sub>3</sub>N<sub>4</sub>/rGO composite as an anode material for stable and effective potassium storage

Adekoya, David; Li, Meng; Hankel, Marlies; et al.  
ENERGY STORAGE MATERIALS Volume: 25 Pages: 495-501 Published: MAR 2020

11. N-Graphene Nanowalls via Plasma Nitrogen Incorporation and Substitution: The Experimental Evidence  
Santhosh, Neelakandan M.; Filipic, Gregor; Kovacevic, Eva; et al.  
NANO-MICRO LETTERS Volume: 12 Issue: 1 Article Number: 53 Published: FEB 17 2020

10. Effective PEGylation method to improve biocompatibility of graphene derivatives  
Demirel, Erhan; Karaca, Ezgi; Durmaz, Yasemin Yuksel  
EUROPEAN POLYMER JOURNAL Volume: 124 Article Number: 109504 Published: FEB 5 2020

9. Effect of helium/propane-butane atmosphere on the synthesis of graphene in plasma jet system  
Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 29 Issue: 2 Article Number: 025024 Published: FEB 2020

8. Deposition of vertical carbon nanosheets by MPECVD at atmospheric pressure  
Marinov, S.; Vachkov, V.; Kiss'ovski, Zh  
Journal of Physics Conference Series Volume: 1492 Article Number: 012032 Published: 2020

7. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel microwave plasma torch at atmospheric pressure  
Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019

6. Understanding the structural and chemical changes in vertical graphene nanowalls upon plasma nitrogen ion implantation  
Manojkumar, P. A.; Krishna, Nanda Gopala; Mangamma, G.; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 21 Issue: 20 Pages: 10773-10783 Published: MAY 28 2019

5. Kinetic study of Z-scheme C<sub>3</sub>N<sub>4</sub>/CuWO<sub>4</sub> photocatalyst towards solar light inactivation of mixed populated bacteria  
Gupta, Rimzhim; Boruah, Bhanupriya; Modak, Jayant M.; et al.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY Volume: 372 Pages: 108-121 Published: MAR 1 2019

4. Collagen functionalized graphene sheets decorated with in situ synthesized nano hydroxyapatite electrospun into fibers  
Yadav, Balram Singh; Sahu, Ranjan Kumar; Pramanick, Ashit Kumar; et al.  
MATERIALS TODAY COMMUNICATIONS Volume: 18 Pages: 167-175 Published: MAR 2019

3. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert  
JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019

2. Oriented Carbon Nanostructures by Plasma Processing: Recent Advances and Future Challenges  
Santhosh, Neelakandan M.; Filipic, Gregor; Tatarova, Elena; et al.  
MICROMACHINES Volume: 9 Issue: 11 Article Number: 565 Published: NOV 2018

1. From nanometre to millimetre: a range of capabilities for plasma-enabled surface functionalization and nanostructuring  
Baranov, O.; Levchenko, I.; Bell, J. M.; et al.  
MATERIALS HORIZONS Volume: 5 Issue: 5 Published: SEP 1 2018

101. *"Microwave plasma enabled synthesis of free standing carbon nanostructures at atmospheric pressure conditions"*

N. Bundaleska, D. Tsyanov, A. Dias, E. Felizardo, J. Henriques, F. M. Dias, M. Abrashev, J. Kisssovski and E. Tatarova  
Phys.Chem.Chem.Phys. **20**, 13810 (2018) DOI: 10.1039/c8cp01896k IF = 4.123

22. Carbon-enabled microwave chemistry: From interaction mechanisms to nanomaterial manufacturing  
Wang, Z., Yu, C., Huang, H., (...), Yu, J., Qiu, J.  
Nano Energy 85, 106027 (2021)

21. Experiments and modeling of atmospheric pressure microwave plasma reforming of a methane-carbon dioxide mixture  
Sun, Hojoong; Lee, Jungwun; Bak, Moon Soo  
JOURNAL OF CO<sub>2</sub> UTILIZATION Volume: 46 Article Number: 101464 Published: APR 2021

20. Influence of hydrogen addition on methane coupling in a moderate pressure microwave plasma  
Wnukowski, M.; van de Steeg, A. W.; Hrycak, B.; et al.  
FUEL Volume: 288 Article Number: 119674 Published: MAR 15 2021

19. Experiments on Atmospheric Pressure Microwave Plasmas Produced in a He/CH<sub>4</sub> Mixture  
Heo, Seonil; Sun, Hojoong; Lee, Jungwun; et al.  
TRANSACTIONS OF THE KOREAN SOCIETY OF MECHANICAL ENGINEERS B Volume: 45 Issue: 3 Pages: 173-179  
Published: MAR 2021

18. Pressure-dependent synthesis of graphene nanoflakes using Ar/H<sub>2</sub>/CH<sub>4</sub> non-thermal plasma based on rotating arc discharge  
Wang, Cheng; Lu, ZhongShan; Ma, Jing; et al.

DIAMOND AND RELATED MATERIALS Volume: 111 Article Number: 108176 Published: JAN 2021

17. Advance in Using Plasma Technology for Modification or Fabrication of Carbon-Based Materials and Their Applications in Environmental, Material, and Energy Fields  
Sun, Xin; Bao, Jiacheng; Li, Kai; et al.

ADVANCED FUNCTIONAL MATERIALS Volume: 31 Issue: 7 Article Number: 2006287 Published: FEB 2021

16. Numerical and Experimental Study of the Multichannel Nature of the Synthesis of Carbon Nanostructures in DC Plasma Jets  
Shavelkina, M. B.; Ivanov, P. P.; Bocharov, A. N.; et al.

PLASMA CHEMISTRY AND PLASMA PROCESSING Volume: 41 Issue: 1 Pages: 171-189 Published: JAN 2021

15. The role of microwave plasma temperature during graphene nanosheets deposition on dielectric substrate: Modelling and experiment  
Kubečka, M., Toman, J., Šnárlík, M., (...), Kudrle, V., Jurmanová, J.  
NANOCON Conference Proceedings - International Conference on Nanomaterials 2020-October, pp. 80-84 (2020)

14. Synthesis of carbon nanoparticles in a non-thermal plasma process  
Wang, Cheng; Li, Dongning; Lu, ZhongShan; et al.

CHEMICAL ENGINEERING SCIENCE Volume: 227 Article Number: 115921 Published: DEC 14 2020

13. Microwave Plasma Formation of Nanographene and Graphitic Carbon Black  
Kumal, Raju R.; Gharpure, Akshay; Viswanathan, Vignesh; et al.

C-JOURNAL OF CARBON RESEARCH Volume: 6 Issue: 4 Article Number: 70 Published: DEC 2020

12. Progress in waste utilization via thermal plasma  
Sikarwar, Vineet Singh; Hrabovsky, Milan; Van Oost, Guido; et al.

PROGRESS IN ENERGY AND COMBUSTION SCIENCE Volume: 81 Article Number: 100873 Published: NOV 2020

11. Characterization of few-layer graphene aerosols by laser-induced incandescence  
Musikhin, Stanislav; Fortugno, Paolo; Corbin, Joel C.; et al.

CARBON Volume: 167 Pages: 870-880 Published: OCT 15 2020

10. Performance analysis of a 2.45 GHz microwave plasma torch for CO(2)decomposition in gas swirl configuration  
D'Isa, F. A.; Carbone, E. A. D.; Hecimovic, A.; et al.

PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 29 Issue: 10 Article Number: 105009 Published: OCT 2020

9. Synthesis of few-layer graphene flakes by magnetically rotating arc plasma: effects of input power and feedstock injection position  
Wang, Cheng; Song, Ming; Chen, Xianhui; et al.

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 126 Issue: 3 Published: FEB 19 2020

8. Effects of Buffer Gases on Graphene Flakes Synthesis in Thermal Plasma Process at Atmospheric Pressure  
Wang, Cheng; Song, Ming; Chen, Xianhui; et al.

NANOMATERIALS Volume: 10 Issue: 2 Article Number: 309 Published: FEB 2020

7. One-step Synthesis of Carbon Nanotubes Network with Rich Oxygenated Functional Groups via Microwave Plasma in Atmospheric Pressure  
Li, Dashuai; Tong, Ling; Gao, Bo

MRS ADVANCES Volume: 5 Issue: 52-53 Special Issue: SI Pages: 2679-2684 Article Number: PII S2059852120002157  
Published: 2020

6. Influence of N-2, O-2, and H-2 admixtures on the electron power balance and neutral gas heating in microwave Ar plasmas at atmospheric pressure  
Durocher-Jean, Antoine; Delnour, Nicolas; Stafford, Luc

JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 47 Article Number: 475201 Published: NOV 20 2019

5. Conversion of coalbed methane surrogate into hydrogen and graphene sheets using rotating gliding arc plasma  
Wu, Angjian; Chen, Hang; Zheng, Jiageng; et al.

PLASMA SCIENCE & TECHNOLOGY Volume: 21 Issue: 11 Article Number: 115501 Published: NOV 2019

4. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel microwave plasma torch at atmospheric pressure  
Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.

JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019

3. Energy conversion efficiency in low- and atmospheric-pressure plasma polymerization processes with hydrocarbons  
Hegemann, Dirk; Nisol, Bernard; Gaiser, Sandra; et al.

PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 21 Issue: 17 Pages: 8698-8708 Published: MAY 7 2019

2. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert

JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019

1. Investigation on the growth mechanism of SiC whiskers during microwave synthesis  
Song, Bozhen; Zhao, Biao; Lu, Yanfei; et al.

PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 20 Issue: 40 Pages: 25799-25805 Published: OCT 28 2018

102. "Omphacite-bearing axes from the Early Neolithic site Galabnik (Western Bulgaria): mineral identification by Raman spectroscopy"

Aneta Bakamska, Miroslav Abrashev, Ruslan I. Kostov

Review of the Bulgarian Geological Society, vol. 79, part 1, 51–57 (2018).

103. "Large-scale synthesis of freestanding N-doped graphene using microwave plasma"

N. Bundaleska, J. Henriques, M. Abrashev, A. M. Botelho do Rego, A. M. Ferraria, A. Almeida, F. M.

Dias, E. Valcheva, B. Arnaudov, K. K. Upadhyay, M. F. Montemor & E. Tatarova

Scientific Reports 8, 12595 (2018) DOI: 10.1038/s41598-018-30870-3 IF = 3.998

34. Graphene-based 3D XNOR-VRRAM with ternary precision for neuromorphic computing

Alimkhanuly, B., Sohn, J., Chang, I.-J., Lee, S.

npj 2D Materials and Applications 5(1), 55 (2021)

33. Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma

Song, M., Wang, C., Chen, X., Ma, J., Xia, W.

Diamond and Related Materials 116, 108417 (2021)

32. Engineering hydrogenation active sites on graphene oxide and N-doped graphene by plasma treatment

Magureanu, Monica; Mandache, N. B.; Rizescu, C.; et al.

APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 287 Article Number: 119962 Published: JUN 15 2021

31. Tunable Synthesis of Predominant Semi-Ionic and Covalent Fluorine Bonding States on a Graphene Surface

Lee, Jae-Won; Jeong, Seung-Pil; You, Nam-Ho; et al.

NANOMATERIALS Volume: 11 Issue: 4 Article Number: 942 Published: APR 2021

30. One-Step Plasma Synthesis of Nitrogen-Doped Carbon Nanomesh

Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.

NANOMATERIALS Volume: 11 Issue: 4 Article Number: 837 Published: APR 2021

29. Effects of Doped N, B, P, and S Atoms on Graphene toward Oxygen Evolution Reactions

Priyadarsini, Adyasa; Mallik, Bhabani S.

ACS OMEGA Volume: 6 Issue: 8 Pages: 5368-5378 Published: MAR 2 2021

28. Hybridized Graphene for Supercapacitors: Beyond the Limitation of Pure Graphene

Zhang, Huihui; Yang, Dan; Lau, Alan; et al.

SMALL Volume: 17 Issue: 12 Article Number: 2007311 Published: MAR 2021

27. Investigation of L-Tryptophan Electrochemical Oxidation with a Graphene-Modified Electrode

Pogacean, Florina; Varodi, Codruta; Coros, Maria; et al.

BIOSENSORS-BASEL Volume: 11 Issue: 2 Article Number: 36 Published: FEB 2021

26. Assigning XPS features in B,N-doped graphene: input from ab initio quantum chemical calculations

Costa, Ramon; Morales-Garcia, Angel; Figueras, Marc; et al.

PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 23 Issue: 2 Pages: 1558-1565 Published: JAN 14 2021

25. Electrochemical exfoliation-streamline method for synthesis of nitrogen doped graphene

Olins, Roberts; Lesnicenoks, Peteris; Kleperis, Janis; et al.

CHEMIJA Volume: 32 Issue: 1 Pages: 9-16 Published: 2021

24. Exploring reactivity and product formation in N(S-4) collisions with pristine and defected graphene with direct dynamics simulations

Nieman, Reed; Spezia, Riccardo; Jayee, Bhumika; et al.

JOURNAL OF CHEMICAL PHYSICS Volume: 153 Issue: 18 Article Number: 184702 Published: NOV 14 2020

23. A Review of Strategies for the Synthesis of N-Doped Graphene-Like Materials

Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.

NANOMATERIALS Volume: 10 Issue: 11 Article Number: 2286 Published: NOV 2020

22. Surface coordination chemistry of graphene: Understanding the coordination of single transition metal atoms

Grasseschi, Daniel; Silva, Walner Costa; Paiva, Ronald de Souza; et al.

COORDINATION CHEMISTRY REVIEWS Volume: 422 Article Number: 213469 Published: NOV 1 2020

21. Tungsten nitride-coated graphene fibers for high-performance wearable supercapacitors

Salman, Ali; Padmajan Sasikala, Suchithra; Kim, In Ho; et al.

NANOSCALE Volume: 12 Issue: 39 Pages: 20239-20249 Published: OCT 21 2020

20. Preparation of graphene-based nanomaterials by pulsed RF discharges on liquid organic compounds

Amaro-Gahete, Juan; Mora, Manuel; Gutierrez, Pablo; et al.

JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 43 Article Number: 435202 Published: OCT 21 2020

19. Perspectives on plasma-assisted synthesis of N-doped nanoparticles as nanopesticides for pest control in crops

Quoc Hue Pho; Lasic, Dusan; Ostrikov, Kostya (Ken); et al.

REACTION CHEMISTRY & ENGINEERING Volume: 5 Issue: 8 Pages: 1374-1396 Published: AUG 1 2020

18. Study of graphene layer growth on dielectric substrate in microwave plasma torch at atmospheric pressure  
 Jasek, Ondrej; Toman, Jozef; Jurmanova, Jana; et al.  
**DIAMOND AND RELATED MATERIALS** Volume: 105 Article Number: 107798 Published: MAY 2020
17. Composites of thiol-grafted PEDOT with N-doped graphene or graphitic carbon nitride as an electrochemical sensor for the detection of paracetamol  
 Yan, Yinqiang; Jamal, Ruxangul; Yu, Zongna; et al.  
**JOURNAL OF MATERIALS SCIENCE** Volume: 55 Issue: 13 Pages: 5571-5586 Published: MAY 2020
16. Nanostructured manganese oxides electrode with ultra-long lifetime for electrochemical capacitors  
 Gaire, Madhu; Liang, Kun; Luo, Sijun; et al.  
**RSC ADVANCES** Volume: 10 Issue: 28 Pages: 16817-16825 Published: APR 28 2020
15. Nitrogen-Doped Graphene: The Influence of Doping Level on the Charge-Transfer Resistance and Apparent Heterogeneous Electron Transfer Rate  
 Coros, Maria; Varodi, Codruta; Pogacean, Florina; et al.  
**SENSORS** Volume: 20 Issue: 7 Article Number: 1815 Published: APR 2020
14. Plasma-assisted nitrogen fixation in nanomaterials: fabrication, characterization, and application  
 Lin, Liangliang; Xu, Hujun; Gao, Haiyan; et al.  
**JOURNAL OF PHYSICS D-APPLIED PHYSICS** Volume: 53 Issue: 13 Article Number: 133001 Published: MAR 25 2020
13. Thermal Conversion of Triazine-Based Covalent Organic Frameworks to Nitrogen-Doped Nanoporous Carbons and Their Capacitor Performance  
 Kim, Gayoung; Shiraki, Tomohiro; Fujigaya, Tsuyohiko  
**BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN** Volume: 93 Issue: 3 Pages: 414-420 Published: MAR 2020
12. Cytotoxicity mechanisms of nitrogen-doped graphene obtained by electrochemical exfoliation of graphite rods, on human endothelial and colon cancer cells  
 Baldea, Ioana; Olteanu, Diana; Filip, Gabriela Adriana; et al.  
**CARBON** Volume: 158 Pages: 267-281 Published: MAR 2020
11. Effect of helium/propane-butane atmosphere on the synthesis of graphene in plasma jet system  
 Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh  
**PLASMA SOURCES SCIENCE & TECHNOLOGY** Volume: 29 Issue: 2 Article Number: 025024 Published: FEB 2020
10. Heteroatom doped 3D graphene aerogel supported catalysts for formic acid and methanol oxidation  
 Cogenli, M. Selim; Yurtcan, Ayse Bayrakceken  
**INTERNATIONAL JOURNAL OF HYDROGEN ENERGY** Volume: 45 Issue: 1 Pages: 650-666 Published: JAN 1 2020
9. Microplasmas for Advanced Materials and Devices  
 Chiang, Wei-Hung; Mariotti, Davide; Sankaran, R. Mohan; et al.  
**ADVANCED MATERIALS** Volume: 32 Issue: 18 Special Issue: SI Article Number: 1905508 Published: MAY 2020
8. Synthesis of plasma treated nitrogen-doped graphite oxide for supercapacitor applications  
 Ghanashyam, Gyawali; Jeong, Hae Kyung  
**JOURNAL OF ENERGY STORAGE** Volume: 26 Article Number: 100923 Published: DEC 2019
7. Nitrogen-doped metal-free carbon catalysts for (electro)chemical CO<sub>2</sub> conversion and valorisation  
 Fernandes, Diana M.; Peixoto, Andreia F.; Freire, Cristina  
**DALTON TRANSACTIONS** Volume: 48 Issue: 36 Pages: 13508-13528 Published: SEP 28 2019
6. Multifunctional Solar Waterways: Plasma-Enabled Self-Cleaning Nanoarchitectures for Energy-Efficient Desalination  
 Wu, Shenghao; Xiong, Guoping; Yang, Huachao; et al.  
**ADVANCED ENERGY MATERIALS** Volume: 9 Issue: 30 Article Number: 1901286 Published: AUG 14 2019
5. Synthesis of nitrogen-doped plasma treated graphite for supercapacitor applications  
 Ghanashyam, Gyawali; Jeong, Hae Kyung  
**CHEMICAL PHYSICS LETTERS** Volume: 725 Pages: 31-37 Published: JUN 16 2019
4. Correcting Flaws in the Assignment of Nitrogen Chemical Environments in N-Doped Graphene  
 Figueras, Marc; Villar-Garcia, Ignacio J.; Vines, Francesc; et al.  
**JOURNAL OF PHYSICAL CHEMISTRY C** Volume: 123 Issue: 17 Pages: 11319-11327 Published: MAY 2 2019
3. Heteroatom-doped graphene and its application as a counter electrode in dye-sensitized solar cells  
 Ngidi, Nonjabulo P. D.; Ollengo, Moses A.; Nyamori, Vincent O.  
**INTERNATIONAL JOURNAL OF ENERGY RESEARCH** Volume: 43 Issue: 5 Pages: 1702-1734 Published: APR 2019
2. Gas diffusion layers based on graphene flakes doped with nitrogen  
 Shavelkina, M. B.; Kleimenov, B., V; Zhuk, A. Z.; et al.  
**Journal of Physics Conference Series** Volume: 1281 Article Number: 012072 Published: 2019
1. Properties of Nitrogen/Silicon Doped Vertically Oriented Graphene Produced by ICP CVD Roll-to-Roll Technology  
 Rozel, Petr; Radziuk, Darya; Mikhnavets, Lubov; et al.  
**COATINGS** Volume: 9 Issue: 1 Article Number: 60 Published: JAN 2019

104. "Microwave N<sub>2</sub>-Ar plasmas applied for N-graphene post synthesis"  
N Bundaleska, N Bundaleski, A Dias, F M Dias, M Abrashev, G Filipič, U Cvelbar, Z Rakočević, Zh Kissovski, J Henriques, and E Tatarova  
Materials Research Express **5**, 095605 (2018) DOI:10.1088/2053-1591/aad7e9 IF = 1.929

5. Incorporation-limiting mechanisms during nitrogenation of monolayer graphene films in nitrogen flowing afterglows  
Robert Bigras, G.; Martel, R.; Stafford, L.

NANOSCALE Volume: 13 Issue: 5 Pages: 2891-2901 Published: FEB 7 2021

4. Influence of the bonding of rebar dowel with adhesive on wood-concrete composite specimens  
Molina, Julio Cesar; Barros Oliveira, Carolina Aparecida; Christoforo, Andre Luis; et al.

PROCEEDINGS OF THE INSTITUTION OF CIVIL ENGINEERS-STRUCTURES AND BUILDINGS Volume: 173 Issue: 12  
Pages: 904-913 Article Number: 1900058 Published: DEC 2020

3. Testing methods for shear strength of bond line between concrete and different types of engineered wood  
Fu, Qiuni; Yan, Libo; Kasal, Bohumil  
INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES Volume: 102 Article Number: 102671 Published: OCT 2020

2. Study of graphene layer growth on dielectric substrate in microwave plasma torch at atmospheric pressure  
Jasek, Ondrej; Toman, Jozef; Jurmanova, Jana; et al.  
DIAMOND AND RELATED MATERIALS Volume: 105 Article Number: 107798 Published: MAY 2020

1. Oriented Carbon Nanostructures by Plasma Processing: Recent Advances and Future Challenges  
Santhosh, Neelakandan M.; Filipic, Gregor; Tatarova, Elena; et al.  
MICROMACHINES Volume: 9 Issue: 11 Article Number: 565 Published: NOV 2018

105. "Phase composition and crystal structure determination of cobalt ferrite, modified with Ce, Nd and Dy ions by X-ray and neutron diffraction"

M. Tsvetkov, M. Milanova, I. Ivanova, D. Neov, Z. Cherkezova-Zheleva, J. Zaharieva, and M. Abrashev

Journal of Molecular Structure **1179**, 233-241(2019) DOI: 10.1016/j.molstruc.2018.07.083 IF = 2.463

8. Cobalt ferrite nanoparticles and nanocomposites: Photocatalytic, antimicrobial activity and toxicity in water treatment  
Mmelesi, Olga Kelebogile; Masunga, Ngondzashe; Kuvarega, Alex; et al.

MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING Volume: 123 Article Number: 105523 Published: MAR 1 2021

7. Mixed Mg-Co spinel ferrites: Structure, morphology, magnetic and photocatalytic properties  
Dojcinovic, Milena P.; Vasiljevic, Zorka Z.; Pavlovic, Vera P.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 855 Article Number: 157429 Part: 1 Published: FEB 25 2021

6. Effect of aqueous electrolytes on the supercapacitive performance of glycol-mediated CoFe(2)O(4)nanoparticles  
Rani, Barkha; Sahu, Niroj Kumar  
ASIA-PACIFIC JOURNAL OF CHEMICAL ENGINEERING Volume: 15 Issue: 5 Article Number: e2548 Published: SEP 2020

5. Correlating the size and cation inversion factor in context of magnetic and optical behavior of CoFe<sub>2</sub>O<sub>4</sub> nanoparticles  
Singh, Jitendra Pal; Park, Jae Yeon; Singh, Varsha; et al.  
RSC ADVANCES Volume: 10 Issue: 36 Pages: 21259-21269 Published: JUN 7 2020

4. Neutron diffraction and Mossbauer spectroscopy studies for Ce doped CoFe<sub>2</sub>O<sub>4</sub> nanoparticles  
Hashhash, A.; Bobrikov, I; Yehia, M.; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 503 Article Number: 166624 Published: JUN 1 2020

3. Lanthanum-doped spinel cobalt ferrite (CoFe<sub>2</sub>O<sub>4</sub>) nanoparticles for environmental applications  
Mariosi, Fabricio Ravanello; Venturini, Janio; Viegas, Alexandre da Cas; et al.  
CERAMICS INTERNATIONAL Volume: 46 Issue: 3 Pages: 2772-2779 Published: FEB 15 2020

2. Nd 3+ Ion-Substituted Co 1–2x Ni x Mn x Fe 2–y Nd y O 4 Nanoparticles: Structural, Morphological, and Magnetic Investigations  
Almessiere, M.A., Slimani, Y., Ali, S., (...), Ercan, I., Sozeri, H.  
Journal of Inorganic and Organometallic Polymers and Materials 29(3), pp. 783-791 (2019)

1. Structural and magnetic study of Sm doped NiFe<sub>2</sub>O<sub>4</sub> nanoparticles  
Yehia, M., Hashhash, A.  
Journal of Materials Science: Materials in Electronics 30(7), pp. 6768-6775 (2019)

106. "Origin of the heat-induced improvement of catalytic activity and stability of MnO<sub>x</sub> electrocatalysts for water oxidation"

Miroslav V. Abrashev, Petko Chernev, Paul Kubella, Mohammad Reza Mohammadi, Chiara Pasquini, Holger Dau, and Ivelina Zaharieva

J. Mater. Chem. A **7**, 17022 (2019) DOI: 10.1039/c9ta05108b IF = 11.301

10. Combination of Highly Efficient Electrocatalytic Water Oxidation with Selective Oxygenation of Organic Substrates using Manganese Borophosphates  
 Menezes, P.W., Walter, C., Chakraborty, B., (...), Dau, H., Driess, M.  
 Advanced Materials 33(9),2004098 (2021)
9. The photocatalytic overall water splitting hydrogen production of g-C<sub>3</sub>N<sub>4</sub>/CdS hollow core-shell heterojunction via the HER/OER matching of Pt/MnO<sub>x</sub>  
 Pan, Jiaqi; Wang, Panhong; Wang, Peipei; et al.  
 CHEMICAL ENGINEERING JOURNAL Volume: 405 Article Number: 126622 Published: FEB 1 2021
8. Capturing Manganese Oxide Intermediates in Electrochemical Water Oxidation at Neutral pH by In Situ Raman Spectroscopy  
 Cho, Kang Hee; Park, Sunghak; Seo, Hongmin; et al.  
 ANGEWANDTE CHEMIE-INTERNATIONAL EDITION Volume: 60 Issue: 9 Pages: 4673-4681 Published: FEB 23 2021
7. Strategies to Develop Earth-Abundant Heterogeneous Oxygen Evolution Reaction Catalysts for pH-Neutral or pH-Near-Neutral Electrolytes  
 Dong, Yan; Komarneni, Sridhar  
 SMALL METHODS Volume: 5 Issue: 1 Article Number: 2000719 Published: JAN 2021
6. Valence-induced distortion controls the resistivity and thermal stability of Co<sub>2.77</sub>Mn<sub>1.71</sub>Fe<sub>1.10</sub>Zn<sub>0.42</sub>O<sub>8</sub> ceramics  
 Wang, Bing; Yao, Jincheng; Wang, Junhua; et al.  
 MATERIALS & DESIGN Volume: 192 Article Number: 108736 Published: AUG 2020
5. Manganese oxide-based heterogeneous electrocatalysts for water oxidation  
 Park, Sunghak; Lee, Yoon Ho; Choi, Seungwoo; et al.  
 ENERGY & ENVIRONMENTAL SCIENCE Volume: 13 Issue: 8 Pages: 2310-2340 Published: AUG 1 2020
4. Boosting water oxidation activity by tuning the proton transfer process of cobalt phosphonates in neutral solution  
 Lv, Jiangquan; Guan, Xiangfeng; Yu, Muxin; et al.  
 PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 22 Issue: 25 Pages: 14255-14260 Published: JUL 7 2020
3. Reversible and irreversible processes during cyclic voltammetry of an electrodeposited manganese oxide as catalyst for the oxygen evolution reaction  
 Villalobos, Javier; Golnak, Ronny; Xi, Lifei; et al.  
 JOURNAL OF PHYSICS-ENERGY Volume: 2 Issue: 3 Article Number: 034009 Published: JUL 2020
2. Surface-Guided Formation of Amorphous Mixed-Metal Oxyhydroxides on Ultrathin MnO<sub>2</sub> Nanosheet Arrays for Efficient Electrocatalytic Oxygen Evolution  
 Fang, Ming; Han, Dong; Xu, Wen-Bo; et al.  
 ADVANCED ENERGY MATERIALS Volume: 10 Issue: 27 Article Number: 2001059 Published: JUL 2020
1. Enhanced water oxidation performances of birnessite and magnetic birnessite nanocomposites by transition metal ion doping  
 Elmaci, Gokhan; Ozgenc, Gokhan; Kurz, Philipp; et al.  
 SUSTAINABLE ENERGY & FUELS Volume: 4 Issue: 6 Pages: 3157-3166 Published: JUN 1 2020
107. „Phase composition and structure of TiO<sub>2</sub> powders: Effect of phosphorus dopant“  
 Irina D. Stambolova, Daniela D. Stoyanova, Miroslav V. Abrashev, Vladimir N. Blaskov, Maria G. Shipochka, Sasho V. Vassilev, and Alexander E. Eliyas  
*Comptes rendus de l'Acad'emie bulgare des Sciences* **72**, 1195-2010 (2019)  
 DOI:10.7546/CRABS.2019.09.05 IF = 0.343
108. “Free-standing N-Graphene as conductive matrix for Ni(OH)<sub>2</sub> based supercapacitive electrodes”  
 Kush K. Upadhyay, N. Bundaleska, M. Abrashev, N. Bundaleski, O.M.N.D. Teodoro, I. Fonseca, Andre Mao de Ferro, Rui Pedro Silva, E. Tatarova, and M. F. Montemor  
*Electrochimica Acta* **334**, 135592 (2020) DOI: 10.1016/j.electacta.2019.135592 IF = 6.215
11. Fabrication of a NiO@NF supported free-standing porous carbon supercapacitor electrode using temperature-controlled phase separation method  
 Deng, Bo-wen; Yang, Yi; Yin, Bo; et al.  
 JOURNAL OF COLLOID AND INTERFACE SCIENCE Volume: 594 Pages: 770-780 Published: JUL 15 2021
10. Ni on graphene oxide: a highly active and stable alkaline oxygen evolution catalyst  
 Fruehwald, Holly M.; Moghaddam, Reza B.; Melino, Peter D.; et al.  
 CATALYSIS SCIENCE & TECHNOLOGY Early Access: APR 2021
9. Direct Growth of Oxygen Vacancy-Enriched Co<sub>3</sub>O<sub>4</sub> Nanosheets on Carbon Nanotubes for High-Performance Supercapacitors  
 Zhang, Xiaoyu; Ma, Ge; Shui, Lingling; et al.  
 ACS APPLIED MATERIALS & INTERFACES Volume: 13 Issue: 3 Pages: 4419-4428 Published: JAN 27 2021
8. Self-assembled PANI/CeO<sub>2</sub>/Ni(OH)<sub>2</sub> hierarchical hybrid spheres with improved energy storage capacity for high-performance supercapacitors  
 Guo, Qingfu; Yuan, Jinzhong; Tang, Yubao; et al.

7. Promising Rice-Husk-Derived Carbon/Ni(OH)(2) Composite Materials as a High-Performing Supercapacitor Electrode  
Cai, Jie; Zhang, Die; Ding, Wen-Ping; et al.  
ACS OMEGA Volume: 5 Issue: 46 Pages: 29896-29902 Published: NOV 24 2020

6. Versatility of Amide-Functionalized Co(II) and Ni(II) Coordination Polymers: From Thermochromic-Triggered Structural Transformations to Supercapacitors and Electrocatalysts for Water Splitting  
Paul, Anup; Upadhyay, Kush K.; Backovic, Gordana; et al.  
INORGANIC CHEMISTRY Volume: 59 Issue: 22 Pages: 16301-16318 Published: NOV 16 2020

5. Advance in Using Plasma Technology for Modification or Fabrication of Carbon-Based Materials and Their Applications in Environmental, Material, and Energy Fields  
Sun, Xin; Bao, Jiacheng; Li, Kai; et al.  
ADVANCED FUNCTIONAL MATERIALS Volume: 31 Issue: 7 Article Number: 2006287 Published: FEB 2021

4. A facile preparation of Nickel Foam-supported Ni(OH)(2) nano arrays via in-situ etching method with superior bendable electrochemical performance for wearable power supply  
Nie, Yajing; Pan, Junli; Jiang, Wenchao; et al.

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 835 Article Number: 155293 Published: SEP 15 2020

3. Ultrathin Ni(OH)(2) layer coupling with graphene for fast electron/ion transport in supercapacitor  
Zhang, Xiaoyu; Wang, Hongsen; Shui, Lingling; et al.  
SCIENCE CHINA-MATERIALS Volume: 64 Issue: 2 Pages: 339-348 Published: FEB 2021

2. Graphene and Lithium-Based Battery Electrodes: A Review of Recent Literature  
Lavagna, Luca; Meligrana, Giuseppina; Gerbaldi, Claudio; et al.  
ENERGIES Volume: 13 Issue: 18 Article Number: 4867 Published: SEP 2020

1. Nickel hydroxide nanoparticles and their hybrids with carbon nanotubes for electrochemical energy storage applications  
Shakir, Imran; Almutairi, Zeyad; Shar, Sahar Saad; et al.  
RESULTS IN PHYSICS Volume: 17 Article Number: 103117 Published: JUN 2020

109. *"Microwave plasma-based direct synthesis of free-standing N-graphene"*  
D. Tsyganov, N. Bundaleska, A. Dias, J. Henriques, E. Felizardo, M. Abrashev, J. Kissovski, A. M. Botelho do Rego, A. M. Ferraria, and E. Tatarova  
Phys. Chem. Chem. Phys. **22**, 4772-4787 (2020) DOI: 10.1039/c9cp05509f IF = 3.430

6. Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma  
Song, M., Wang, C., Chen, X., Ma, J., Xia, W.  
Diamond and Related Materials 116, 108417 (2021)

5. Electron concentration in the non-luminous part of the atmospheric pressure filamentary discharge  
Faltynek, J.; Kudrle, V; Snirer, M.; et al.  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 30 Issue: 1 Article Number: 015001 Published: JAN 2021

4. Recent Advancements of N-Doped Graphene for Rechargeable Batteries: A Review  
Ikram, Rabia; Jan, Badrul Mohamed; Pervez, Syed Atif; et al.  
CRYSTALS Volume: 10 Issue: 12 Article Number: 1080 Published: DEC 2020

3. Graphene Flakes for Electronic Applications: DC Plasma Jet-Assisted Synthesis  
Antonova, Irina V.; Shavelkina, Marina B.; Ivanov, Artem I.; et al.  
NANOMATERIALS Volume: 10 Issue: 10 Article Number: 2050 Published: OCT 2020

2. Effect of the Plasma Gas Composition on the Properties of Graphene  
Shavelkina, M. B.; Ivanov, P. P.; Bocharov, A. N.; et al.  
HIGH ENERGY CHEMISTRY Volume: 54 Issue: 5 Pages: 374-377 Published: SEP 2020

1. Improving the Performance of Zn-Air Batteries with N-Doped Electroexfoliated Graphene  
Ilnicka, Anna; Skorupska, Małgorzata; Romanowski, Piotr; et al.  
MATERIALS Volume: 13 Issue: 9 Article Number: 2115 Published: MAY 2020

110. *"Raman spectroscopy of alpha-FeOOH (goethite) near antiferromagnetic to paramagnetic phase transition"*

M. V. Abrashev, V. G. Ivanov, B. S. Stefanov, N. D. Todorov, J. Rosell, and V. Skumryev  
J. Appl. Phys. **127**, 205108 (2020) DOI: 10.1063/5.0006352 IF = 2.286

111. *"Prospects for microwave plasma synthesized N-graphene in secondary electron emission mitigation applications"*

N. Bundaleska, A. Dias, N. Bundaleski, E. Felizardo, J. Henriques, D. Tsyganov, M. Abrashev, E. Valcheva, J. Kissovski, A. M. Ferraria, A. M. Botelho do Rego, A. Almeida, J. Zavašnik, U. Cvelbar, O. M. N. D. Teodoro, Th. Strunskus, and E. Tatarova

Scientific Reports 10, 13013 (2020) DOI: 10.1038/s41598-020-69844-9 IF = 3.998

112. „*Simultaneous Synthesis and Nitrogen Doping of Free-Standing Graphene Applying Microwave Plasma*“

D. Tsyanov, N. Bundaleska, J. Henriques, E. Felizardo, A. Dias, M. Abrashev, J. Kissovski, A. M. Botelho do Rego, A. M. Ferraria, and E. Tatarova  
Materials **13**, 4213 (2020) DOI: 10.3390/ma13184213 IF = 3.057

2. Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma

Song, M., Wang, C., Chen, X., Ma, J., Xia, W.

Diamond and Related Materials 116, 108417 (2021)

1. Atmospheric pressure plasmas in material science

Ptasínska, S.

Materials 14(8), 1963 (2021)

113. “*Enhanced effect of combination of new hybrid TiO<sub>2</sub> phase and phosphorus dopant on the physicochemical properties and UV/Visible light photocatalytic activity*”

I. Stambolova, D. Stoyanova, M. Shipochka, V. Blaskov, D. Nihtianova, P. Markov, A. Eliyas, R. Mladenova, L. Dimitrov, M. Abrashev, G. Avdeev, and K. Zaharieva

Materials Characterization **172**, 110775 (2021) DOI: 10.1016/j.matchar.2020.110775 IF = 3.562

114. “*Catalytic and photocatalytic properties of zinc-nickel ferrites*”

M. P. Tsvetkov, M. M. Milanova, Z. P. Cherkezova-Zheleva, T. S. Tsoncheva, J. Ts. Zaharieva, M. V. Abrashev and I. G. Mitov

J. Chem. Sci. **133**, 24 (2021) DOI: 10.1007/s12039-020-01882-2 IF = 1.406