

Chavdar STOYANOV

SELECTED LIST OF PUBLICATIONS

May 07, 2021

1 MONOGRAPHS

Or large review paper; According to the status of the journal Physics Reports the following issue has to be interpreted as monographic issue

1. S. Gales, **Ch. STOYANOV**, A. I. Vdovin.

Damping of High - Lying Single - Particle Modes in Spherical Nuclei.

Phys. Rep., **v. C166** (1988) pp. 125-193.

2 Proceedings

1. Editor **Ch. STOYANOV**,

Selected Topics on Nuclear Methods for Non-Nuclear Applications

Heron Press Science, Coronet Books Incorporated, 2007 ISBN 954580209X,
9789545802096 378

2. Editors **Ch. STOYANOV**, N. Janeva

XVIII International School on Nuclear Physics, Neutron Physics and Applications, Varna 21 - 27 September, 2009

Journal of Physics: Conference Series, v. 205, 2010

3. Editors **Ch. STOYANOV**, S Dimitrova

XIX International School on Nuclear Physics, Neutron Physics and

Applications, Varna 1925 September, 2011

Journal of Physics: Conference Series v. 366 (2012)

4. Editors **Ch. STOYANOV**, S Dimitrova, V. Voronov

XX International School on Nuclear Physics, Neutron Physics and Applications, Varna 16-22 September, 2013

Journal of Physics: Conference Series v. 533 (2014)

5. Editors **Ch. STOYANOV**, S Dimitrova, Yu. Penionzhkevich

XXI International School on Nuclear Physics, and Applications & International Symposium on Exotic Nuclei, Varna 6-12 September, 2015

Journal of Physics: Conference Series v. 724 (2016)

3 REVIEW ARTICLES

1. A. I. Vdovin, V. V. Voronov, L. A. Malov, V. G. Soloviev,
Ch. STOYANOV.

Semimicroscopic Description of the Level Density in Complex Nuclei.

Sov. J. Particle and Nuclei, **v. 7** (1976) pp. 952-988.

2. A. I. Vdovin, V. V. Voronov, V. G. Soloviev, **Ch. STOYANOV.**

Quasiparticle - Phonon Nuclear Model. V. Odd Spherical Nuclei.

Sov. J. Part. and Nucl., **v. 16** (1985) pp. 245-279.

3. M. Grinberg, **Ch. STOYANOV**, N. Tsoneva.

Interplay of collective and noncollective modes at low excitation energy in spherical nuclei.

Rus. J. Part. and Nucl., **v. 29** (1998) pp 1456 - 1498.

4. N Lo Iudice, V Yu Ponomarev, **Ch STOYANOV**, A V Sushkov and
V V Voronov

Low-energy nuclear spectroscopy in a microscopic multiphonon approach

J. Phys. G: Nucl. Part. Phys., **v. 39** (2012) 043101 (37pp)

5. **Ch. STOYANOV**

QUASIPARTICLES, PHONONS AND BEYOND (NUCLEAR STRUCTURE CALCULATIONS IN A LARGE DOMAIN OF EXCITATION ENERGIES)

Source: ROMANIAN JOURNAL OF PHYSICS **Volume: 58** Issue: 9-10 Pages: 1096-1107 Published: 2013

4 ARTICLES

1. V. G. Soloviev, **Ch. STOYANOV**, A.I.Vdovin.
Semi-Microscopic Calculation of the Level Density in Spherical Nuclei.
Nucl. Phys., **v. A224** (1974) pp. 411-428.
2. D. Dambasuren, V. G. Soloviev, **Ch. STOYANOV**, A. I. Vdovin.
Semi-Microscopic Calculation of the Neutron Strength Function of Spherical Nuclei.
J. Phys. G: Nucl.Phys., **v. 2** (1976) pp.25-31.
3. V. G. Soloviev, **Ch. STOYANOV**, A. I. Vdovin.
Fragmentation of Giant Multipole Resonances over Two- Phonon States in Spherical Nuclei.
Nucl. Phys., **v. A288** (1977) pp. 376-396.
4. V. G. Soloviev, **Ch. STOYANOV**, V. V. Voronov.
The Influence of the Giant Dipole Resonance on the Radiative Strength Functions in Spherical Nuclei.
Nucl. Phys., **v. A304** (1978) pp. 503-519.
5. V. G. Soloviev, **Ch. STOYANOV**, V. V. Voronov.

On the Enhancement of M1 - Transitions from Neutron Resonances in the Ba and Ce Isotopes.

Phys. Lett., **v. 79B** (1978) pp. 187-189.

6. **Ch. STOYANOV.**

Interaction Method for Solving the Equations of the Quasiparticle-Phonon Model in Spherical Nuclei.

Sov. J. Theor. Math. Fiz., **v. 40** (1979) pp. 422-428.

7. V. Yu. Ponomarev, V. G. Soloviev, **Ch. STOYANOV**, A. I. Vdovin.

Magnetic Quadrupole Resonance in Spherical Nuclei.

Nucl. Phys., **v. A323** (1979) pp. 446-460.

8. V. G. Soloviev, **Ch. STOYANOV**, A. I. Vdovin.

The Description of the Fragmentation of One Quasiparticle States in Spherical Nuclei.

Nucl. Phys., **v. A342** (1980) pp. 261-282.

9. **Ch. STOYANOV.**

Study of Deep - Lying Hole States in Odd Spherical Nuclei.

Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 45** (1981) pp. 1820-1826.

10. V. G. Soloviev, **Ch. STOYANOV.**

Radiative Strength Functions in Odd - A Spherical Nuclei.

Nucl. Phys., **v. A382** (1982) pp. 206-220.

11. V. Yu. Ponomarev, **Ch. STOYANOV**, A. I. Vdovin.

High - Lying M1 - States of Spherical Nuclei.

Z. Phys., v.308 **v. 308** (1982) pp. 157-164.

12. V. G. Soloviev, **Ch. STOYANOV**, R. Nikolaeva.

The Influence of Pauli Principle on the Two-Phonon States in Spherical Nuclei.

Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 47** (1983) pp. 2082-2088.

13. V. G. Soloviev, **Ch. STOYANOV**, V. V. Voronov.

Nuclear Properties in the Lead Region Within the Quasiparticle - Phonon Nuclear Model.

Nucl. Phys., **v. A399** (1983) pp. 141-162.

14. **Ch. STOYANOV**, A. I. Vdovin.

High - Lying Single - Proton States in Spherical Nuclei.

Phys. Lett., **v. 130B** (1983) pp.134-138.

15. A. I. Vdovin, **Ch. STOYANOV**.

Damping of Highly - Excited Single - Particle States in Odd - A Nuclei Near ^{90}Zr .

Sov. J. Nucl. Phys., **v. 41** (1985) pp. 1134-1140.

16. A. I. Vdovin, **Ch. STOYANOV**, W. Andrejtscheff.

Core Polarization for M2 - Transitions in Odd - A Tin Isotopes.

Nucl. Phys., **v. A440** (1985) pp. 437-444.

17. V. V. Voronov, **Ch. STOYANOV**.

Neutron Strength Functions in $^{205,209}\text{Pb}$.

J. Phys. G: Nucl. Phys., **v. 11** (1985) pp. L97-L100.

18. V. Yu. Ponomarev, V. G. Soloviev, **Ch. STOYANOV**, A. I. Vdovin.

The Role of "Quasiparticle \otimes Phonon" Components in Gamma Decay of High - Lying States.

Phys. Lett., **v. B183** (1987) pp. 237-241.

19. **Ch. STOYANOV**, Y. Sy Savane.

Description of $B(E2, 4_1^+ \Rightarrow 6_1^+)$ Values in the Light Tin Isotopes in the

Quasiparticle - Phonon Nuclear Model.

Bulg. J. Phys., **v. 14** (1987) pp. 310 - 316.

20. R. Nikolaeva, **Ch. STOYANOV**, A. I. Vdovin.

Microscopic Description of Low - Lying Izovector Quadrupole States in ^{56}Fe .

Europhys. Lett., **v. 8** (1989) pp.117-121.

21. W. Andrejtscheff, L. K. Kostov, P. Petkov, Y. Sy Savane, **Ch. STOYANOV**,
P. von Brentano, J. Eberth, R. Reinhardt, K. O. Zell.

Electric Quadrupole Transition Strength of the Type $6_1^+ \Rightarrow 4_1^+$ in $^{106-112}\text{Sn}$.

Nucl. Phys., **v. A505** (1989) pp. 397-416.

22. Nguyen Van Giai, **Ch. STOYANOV**.

Nucleon Escape Widths of Giant Dipole and Quadrupole Resonances.

Phys. Lett., **v. B252** (1990) pp. 9-12.

23. Nguyen Van Giai, **Ch. STOYANOV**.

Non-Statistical Neutron Decay of High-Lying States in Odd Nuclei.

Phys. Lett. **v. B272** (1991) pp. 178 - 182.

24. Thai Khac Dinh, M. Grinberg, **Ch. STOYANOV**.

Interplay of Collective and Non-Collective Modes in Low-Lying Quadrupole States of ^{140}Ba , ^{142}Ce , ^{144}Nd and ^{146}Sm .

J. Phys. G: Nucl. Part. Phys. **v. 18** (1992) pp. 329-337.

25. M. Grinberg, **Ch. STOYANOV**.

Distribution of Two-Phonon Strength in Even $N = 82$ Nuclei.

Nucl. Phys **v. A573** (1994) pp. 231 - 244.

26. R. Georgii, T. von Egidy, J. Klor, H. Lindner, U. Mayerhofer,

- J. Ott, W. Schauer, P. von Neumann-Cosel, A. Richter, C. Schlegel, R. Schulz, V. A. Khitrov, A. M. Sukhovej, A. I. Vojnov, J. Berzins, V. Bondarenko, P. Prokofjevs, L. J. Simonova, M. Grinberg, **Ch. STOYANOV**.
Complete Level Scheme of ^{124}Te up to 3 MeV.
 Nucl. Phys. **v. A592** (1995) pp. 307 - 337.
27. Nguyen Van Giai, **Ch. STOYANOV**, V. V. Voronov, S. Fortier.
Neutron Decay of High Angular Momentum States Excited in Transfer Reactions.
 Phys. Rev. **v. C53** (1996) pp. 730 - 739.
28. R. Schwengner, G. Winter, W. Schauer, M. Grinberg, F. Becker, P. von Brentano, J. Eberth, J. Enders, T. von Egidy, R.-D. Herzberg, N. Huxel, L. Kaubler, P. von Neumann-Cosel, N. Nicolay, J. Ott, N. Pietralla, H. Prade, S. Raman, J. Reif, A. Richter, C. Schlegel, H. Schnare, T. Servene, S. Skoda, T. Steinhardt, **Ch. STOYANOV**, H. G. Thomas, I. Weidenhover, A. Zilges.
Two-Phonon $J = 1$ States in Even-Mass Te Isotopes with $A = 122 - 130$.
 Nucl. Phys. **v. A620** (1997) pp. 122 - 130.
29. Nguyen Van Giai, **Ch. STOYANOV**, V. V. Voronov.
Finite Rank Approximation for Random Phase Approximation Calculations with Skyrme Interactions: An Application to Ar Isotopes.
 Phys. Rev. **v. C57** (1998) pp. 1204 - 1209.
30. V. Yu. Ponomarev, **Ch. STOYANOV**, N. Tsoneva, M. Grinberg.
Boson Forbidden Low-Energy E1-Transitions in Spherical Nuclei.
 Nucl. Phys. **v. A635** (1998) pp. 470 - 483.
 Nucl. Phys. **v. A652** (1999) pp. 339 - 369.
31. **Ch. STOYANOV**, I. Rotter, N. Van Giai.

- Trapping effect and high-lying single-particle modes.*
 Phys. Rev. **v. C60** (1999) p. 064321 (9 pages).
32. N. Tsoneva, **Ch. STOYANOV**, Yu. P. Gangrsky, V. Yu. Ponomarev, N. P. Balabanov, A. P. Tonchev.
Population of isomers in the decay of the giant dipole resonance.
 Phys. Rev. **v. C61** (2000) p. 044303 (9 pages).
33. Nguyen Van Giai, **Ch. STOYANOV** , V. V. Voronov.
Proton decay of high-lying states in odd nuclei.
 Nucl. Phys. **v. A672** (2000) pp. 141 - 152.
34. N. Lo Iudice, **Ch. STOYANOV**.
Microscopic description of newly discovered mixed symmetry states.
 Phys. Rev. C **v. 62** (2000) pp. 047302, 4p.
35. L. Kaubler, H. Schnare, R. Schwengner, P. von Brentano, F. Donau, J. Eberth, J. Enders, A. Fitzler, C. Fransen, M. Grinberg, E. Grosse, R.-D. Herzberg, H. Kaiser, P. von Neumann-Cosel, N. Pietralla, H. Prade, A. Richter, S. Skoda, **Ch. STOYANOV**, H. -G. Thomas, H. Tiesler, D. Weisshaar, I. Weidenhover.
Is the 4.742 MeV state in ^{88}Sr the 1^- two-phonon state ?
 Eur. Phys. J. A **v. 7** (2000) pp. 15 - 18.
36. A. G. Belov, Yu. P. Gangrsky, L. M. Melnykova, V. Yu. Ponomarev, N. Tsoneva, **Ch. STOYANOV**, A. Tonchev, N. Balabanov.
Excitation of the Isomeric States $1h_{11/2}$ in the Nuclear Reactions with γ -Rays and at β -Decay.
 Preprint Dubna, P15-2000-139,
 Phys. Atom. Nucl. **v. 64** (2001) pp. 1901 - 1908.
37. N. Lo Iudice, **Ch. STOYANOV**.

Microscopic Structure of Low-Lying Positive Parity States in Nuclei near Shell Closure .

Phys. Rev. C **v. 65** (2002) pp. 064304, 9p.

38. A. P. Severyukhin, **Ch. STOYANOV**, V. V. Voronov, Nguyen Van Giai.

Quasiparticle Random Phase Approximation with Finite Rank Approximation for Skyrme Interaction .

Phys. Rev. C **v. 66** (2002) pp. 034304, 7 p.

39. N. Tsoneva, H. Lenske, **Ch. STOYANOV**.

Probing the nuclear skin by low-energy dipole modes. Phys.

Lett. **v. B586** (2004) pp. 213 - 218

40. N. Lo Iudice, **Ch. STOYANOV**.

A Microscopic Study of the Proton-Neutron Symmetry and Phonon Structure of the Low-Lying States in ^{92}Zr .

Phys. Rev. C **v. 69** (2004) p. 044312, 6p.

41. **Ch. STOYANOV**, V. Zelevinsky.

High-lying single-particle modes, chaos, correlational entropy, and doubling phase transition.

Phys. Rev. C **v. 70** (2004) p. 014302, 7p.

42. M. Scheck, H. von Garret, N. Tsoneva, D. Belic, P. von Brentano, C. Fransen, A. Gade, J. Jolie, U. Kneissl, C. Kohstall, A. Linnemann, A. Nord, N. Pietralla, H. H. Pitz, F. Stedile, **Ch. STOYANOV** , V. Werner

Dipole strength distribution in the stable Ba isotopes $^{134-138}\text{Ba}$: A study in the mass region of a nuclear shape transition.

Phys. Rev. C **v. 70** (2004) p. 044319, 18 p.

43. L. Käubler, H. Schnare, R. Schwengner, H. Prade, F. Dönnau, P. vonBrentano, J. Eberth, J. Enders, A. Fitzler, C. Fransen, M. Grinberg,

- R.-D. Herzberg, H. Kaiser, P. von Neumann-Cosel, N. Pietralla, A. Richter, G. Rusev, **Ch. STOYANOV** and I. Wiedenhoöver *Dipole and quadrupole excitations in ^{88}Sr up to 6.8 MeV.*
 Phys. Rev. C **v. 70** (2004) p. 064307, 10 p.
44. N. Tsoneva, H. Lenske, **Ch. STOYANOV**.
Pygmy Dipole Resonances as a Manifestation of the Structure of the Neutron Rich Nuclei.
 Nucl. Phys. **v. A731** (2004) pp. 273 - 280
45. N. Lo Iudice, **Ch. STOYANOV**.
A Microscopic Study of collectivity and proton-neutron symmetry in ^{92}Zr .
 Phys. Rev. C **v. 73** (2006) p. 037305, 4p.
46. N. Lo Iudice, **Ch. STOYANOV**, D. Tarpanov.
Fine structure of proton-neutron mixed symmetry states in some $N = 80$ isotones.
 Phys. Rev. C **v. 77** (2008) p. 044310, 7p.
47. D. Tarpanov, Haozhao Liang, N. Van Giai, **Ch. STOYANOV**.
Mean-field study of single-particle spectra evolution in $Z = 14$ and $N = 28$ chain.
 Phys. Rev. C **v. 77** (2008) p. 054316, 5p.
48. N. Lo Iudice, **Ch. STOYANOV**, N. Pietralla.
Splitting of the 2^+ mixed symmetry mode in the proximity of the $N = 82$ shell closure.
 Phys. Rev. C **v. 80** (2009) p. 024311, 7p.
49. N. Lo Iudice, **Ch. STOYANOV**, and D. Tarpanov

E2 transitions in Sn isotopes within the quasiparticle-phonon model

PHYSICAL REVIEW C **v. 84**, (2011) p. 044314

50. N. Auerbach, **Ch. STOYANOV**, M. R. Anders and S. Shlomo

Isoscalar and isovector dipole strength distributions in nuclei and the Schiff moment

PHYSICAL REVIEW C **v. 89** (2014) 014335

51. **Ch. STOYANOV**

Quasiparticles, Phonons and Beyond. Nuclear Structure Calculations in a Large Domain of Excitation Energies

Bulg. J. Phys. **v. 42** (2014) 5164

Dedicated to the memory of Christo Ya. Christov on the 100-th anniversary of his birth

52. Alan A. Dzhioev, A. I. Vdovin, G. Martnez-Pinedo, J. Wambach, and **Ch. STOYANOV**

Thermal quasiparticle random-phase approximation with Skyrme interactions and supernova neutral-current neutrino-nucleus reactions

PHYSICAL REVIEW C **94**, 015805 (2016)

53. Alan A. Dzhioev¹, A. I. Vdovin, and **Ch Stoyanov**

The Skyrme-Tqrpa Calculations of Electron Capture on Hot Nuclei in Pre-Supernova Environment

Physics of Atomic Nuclei, 2016, Vol. 79, No. 6, pp 1019 1029.

54. R.Stegmann, C.Stahl, G.Rainovski, N.Pietralla, **C.Stoyanov**,
M.P.Carpenter,

R.V.F.Janssens, M.Lettmann, T.Moller, O.Moller, V.Werner, S.Zhu

Identification of the one-quadrupole phonon $2^+_{1,ms}$ state of ^{204}Hg

Physics Letters B **770** (2017) pp 77 82

55. **Ch. Stoyanov**

Two-Phonon Mixed-Symmetry States in the Domain $N = 52$

Exotic Nuclei: EXON-2016 Proceedings of the International Symposium on Exotic ... Yu E Penionzhkevich, Yu G Sobolev, World Scientific, 2017, pp 119 - 124

Stoyanov, C. (2017, June). TWO-PHONON MIXED-SYMMETRY STATES IN THE DOMAIN $N = 52$. In Exotic Nuclei: EXON-2016 Proceedings of the International Symposium on Exotic Nuclei (p. 119).

56. **Ch. Stoyanov**

The structure of mixed symmetry states within microscopic multiphonon approach

AIP Conference Proceedings **1912** 020017 (2017)

57. M. Thürauf, **Ch. STOYANOV**, M. Scheck, M. Jentschel, C. Bernards, A. Blanc, N. Cooper, G. De France, E. T. Gregor, C. Henrich, S. F. Hicks, J. Jolie, O. Kaleja, U. Köster, T. Kröll, R. Leguillon, P. Mutti, D. O'Donnell, C. M. Petrache, G. S. Simpson, J. F. Smith, T. Soldner, M. Tezgel, W. Urban, J. Vanhoy, M. Werner, V. Werner, K. O. Zell, and T. Zerrouki

Low-lying octupole isovector excitation in ^{144}Nd

PHYSICAL REVIEW C **99**, 011304(R) (2019)

58. Alan A. Dzhiyev, A. I. Vdovin, and **Ch. STOYANOV**

Thermal quasiparticle random-phase approximation calculations of stellar electron capture rates with the Skyrme effective interaction

PHYSICAL REVIEW C **100**, 025801 (2019)

59. Alan A. Dzhiyev, K. Langanke, G. Martínez-Pinedo, A. I. Vdovin, and **Ch. STOYANOV**

Unblocking of stellar electron capture for neutron-rich $N = 50$ nuclei at finite

temperature

PHYSICAL REVIEW C 101, 025805 (2020)

APPLICATION OF NUCLEAR METHODS

1. M. I. Krivopustov,.....S. Batzev, L. Kostov, Ch. Protochristov, **Ch. STOYANOV**, O. Yordanov, P. Zivkov....,

Collaboration "Energy plus Transmutation"

First results studying the transmutation of ^{129}I , ^{237}Np , ^{238}Pu , and ^{239}Pu in the irradiation of an extended natU/Pb-assembly with 2.52 GeV neutrons

J. Radioanalytical and Nuclear Chemistry, **v. 279 (2)** (2009) pp. 567-584 DOI:10.1007/s10967-007-7265-1

2. Ruslan I. Kostov, Christo Protochristov, **Chavdar STOYANOV**, Lszl Csedreki, Alz Simon, Zita Szikszai, Imre Uzonyi, Bissarka Gaydarska and John Chapman

Micro-PIXE Geochemical Fingerprinting of Nephrite Neolithic Artifacts from Southwest Bulgaria

Geoarchaeology: An International Journal 27 (2012) 113, John Wiley and Sons

3. Dimiter Tonev, Elena Geleva, Anna Damianova, Todor Grigorov, Nikolai Goutev, Hristo Protohristov, **Ch. STOYANOV**, Vladimir Bashev, Evgeni Popov, Ivanka TringovskaA, Dimitrina Kostova.

RADIOLOGICAL AND MICROANALYTICAL STUDIES OF FINE MELNIK WINES

Comptes rendus de l'Acad´emie bulgare des Sciences Tome 69, No 6, 2016

4. Latchesar Kostov, Roumen Kobilarov, Hristo Protohristov, **Chavdar Stoyanov**
CONCENTRATIONS OF ^{137}Cs AND ^{40}K RADIONUCLIDES IN SOIL SAMPLES FROM CENTRAL BALKAN NATIONAL PARK, BULGARIA
 Comptes rendus de l'Acad'emie bulgare des Sciences Tome 69, No 9, (2016) pp 1121 - 1128

5. Petar Zhivkov, **C. Stoyanov**, Sergey Tyutyunnikov, Walter Furman, Valeriy Chilap, Dimitar Tarpanov
SPATIAL DISTRIBUTIONS OF ^{235}U AND ^{238}U REACTION RATES AND ENERGY DEPOSITION IN A MASSIVE URANIUM TARGET INDUCED BY HIGH ENERGY ION BEAMS
 Comptes rendus de l'Acad'emie bulgare des Sciences Tome 70, No 6, p.777

6. P. Zhivkov, W. Furman **Ch STOYANOV**
Calculations of ADS with deep subcritical uranium active cores comparison with experiments and predictions
 Journal of Physics: Conference Series 533 (2014) 012053

7. Zhivkov P., Baznat M., Chilap V., Furman W., **Ch STOYANOV**, Tutunnikov S
Influence of High Energy Tail of Neutron Spectrum Formed within the Quasi-Infinite Active Target Assembly BURAN Irradiated by Relativistic Protons or Deutrons on Beam Energy Release
 ISINN-22
 Neutron Spectroscopy, Nuclear Structure, Related Topics,
 XXII International Seminar on Interaction of Neutrons with Nuclei, Dubna, May 27 - 30, 2014, Proceedings p.370 JINR 2015, ISBN 978-59530-0403-9

8. A. Polanski, P. Zhivkov, **Ch. STOYANOV**

Simulation of Energy Deposition and Neutron Spectrum of Subcritical Assembly Irradiated with Proton Beam with MCNPX Transport Code

"Progress in High Physics and Nuclear Safety", Proceedings NATO Advanced Research Workshop program "Science for Peace and Security Series", ed. by V. Begun, L. Jenkovszky and A. Polanski, Springer Science+Business Media B. V, 2009, pp 333 - 341

9. M.I.Krivopustov*), A.V.Pavliouk, A.I.Malakhov, A.D.Kovalenko, I.I.Mariin, A.F.Elishev, J.Adam, A.Kovalik, Yu.A.Batusov, V.G.Kalinnikov, V.B.Brudanin, P.Chaloun, V.M.Tsoupko-Sitnikov, A.A.Solnyshkin, V.I.Stegailov, Sh.Gerbish Joint Institute for Nuclear Research, Dubna, Russia O.Svoboda, Z.Dubnicka, M.Kala, M.Kloc, A.Krasa, A.Kugler, M.Majerle, V.Wagner Nuclear Physics Institute, Rez near Praha, Czech Republic R.Brandt, W.Westmeier, H.Robotham, K.Simon Kernchemie Institute, Philipps-University, Marburg, Germany M.Bielewicz, S.Kilim, M.Szuta, E.Strugalska-Gola, A.Wojeciechowski Institute of Atomic Energy, Otwock-Swierk near Warszawa, Poland M.Manolopoulou, M.Fragopolou, S.Stoulos, M.Zamani-Valasiadou Aristotle University, Thessaloniki, Greece S.Jokic Vinca Institute of Nuclear Sciences, Belgrad, Serbia S.R.Hashemi-Nezhad University, Department of High Energy Physics, Sydney, Australia K.Katovsky, O.Schastny Czech Technical University in Praha, Czech Republic I.V.Zhuk, A.S.Potapenko, A.A.Ternova, Zh.A.Lukashevich Joint Institute of Power and Nuclear Research, Sosny near Minsk, Belarus V.A.Voronko, V.V.Sotnikov, V.V.Sidorenko Kharkov Institute of Physics and Technology, Kharkov, Ukraine W.Ensinger, D.Severin Technical University, Darmstadt, Germany S.Batzev, L.Kostov, **Ch. STOYANOV**, O.Yordanov, P.K.Zhivkov Institute Nuclear Research and Nuclear Energy, Sofia, Bulgaria V.Kumar, M.Sharma University of Rajasthan, Jaipur, India A.M.Khilmanovich, B.A.Marcinkevich, S.V.Korneev Stepanov Institute of Physics, Minsk, Belarus Ts.Damdinsuren, G.Gansorig, Ts.Togoo National University, Ulan-Bator, Mongolia H.Kumawat Bhabha Atomic Research Centre, Mumbai, India

The "ENERGY plus TRANSMUTATION" collaboration

About the first experiment on investigation transmutation I-129, Np237, Pu-238 and Pu-239 at deuteron beam nuclotron JINR (Dubna) in field neutrons generated in natU/Pb-assembly "Energy plus transmutation" setup by energy 2.52 GeV.

Preprint JINR, **E1-2007-7**, Dubna 2007, pp. 1-26.

10. "E & T RAW" Collaboration

*STUDY OF DEEP SUBCRITICAL ELECTRONUCLEAR SYSTEMS
AND FEASIBILITY OF THEIR APPLICATION FOR ENERGY PRO-
DUCTION AND RADIOACTIVE WASTE TRANSMUTATION*

Preprint JINR, **E1-2010-61**, Dubna 2010, pp. 1-18.