

СПИСЪК НА НЕЗАВИСИМИТЕ ЦИТИРАНИЯ НА ПУБЛИКАЦИИТЕ на член-кореспондент проф. дфн Александър Драйшу

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1974 цитирания към 31.05.2024 г. // h-индекс = 22 (Web of Science)
// h = 21 по представения списък

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Статия А3 – 2 цитата

S. G. Dinev and A. A. Dreischuh, "The induced phase modulation in the UV," *J. Phys. B*, vol. 24, pp. 319-323 (1991).

Цитирана в:

1. T. Yamada, A. Uchida, T. Nakata, and F. Kannari, "Subpicosecond pulse compression in the VUV region by induced-phase modulation in xenon" *IEEE J. Sel. Top. Quantum Electronics*, vol. 1, No.3, pp. 981-989 (1995).
2. Yamada, T. ; Nakata, T. ; Kannari, F., „Subpicosecond pulse compression in the VUV region with induced phase modulation in Xe”, *IEEE Conference Publications - CLEO/Pacific Rim'95*, Pacific Rim Conference on Lasers and Electro-Optics, Technical Digest (1995). DOI: 10.1109/CLEOPR.1995.527217

Статия А4 – 4 цитата

S. G. Dinev, A. A. Dreischuh and A. M. Naidenov, "Induced waveguiding in a medium with cubic nonlinearity," *J. Opt. Soc. Am.*, vol. B8, pp. 2128-2131 (1991).

Цитирана в:

1. E. L. Lago, R. DelaFuente, "Copropagation of two waves of different frequencies and arbitrary initial polarization states in an isotropic Kerr medium," *Phys. Rev. A*, vol. 60, pp. 549-558 (1999).
2. Q. Guo, Y. Tian, C.Y. Li, "Optimum parameters for focusing of optical beams in self-defocusing nonlinear media," *Acta Physica Sinica – Ch. Ed.*, vol. 51 (5), pp. 1057-1062 (2002).
3. Q. Guo, et al. "Influence of Beam Widths on the Induced Focusing of Optical Beams in Self-Defocusing Nonlinear Media," *Acta Optica Sinica*, vol.23, No.9, pp.1127-1132 (2003).
4. Li Hua-Gang, "The Deflexion of the Optical Beam in the Self-defocusing Media", *Journal of Guangdong Education Institute*, Vol. 27 (5), 53-55 (2007); ISSN 1007-8754

Статия А5 – 83 цитата

A. B. Blagoeva, S. G. Dinev, A. A. Dreischuh and A. M. Naidenov, "Light bullets formation in a bulk media," *IEEE J. Quant. Electron.*, vol. QE-27, pp. 2060-2065 (1991).

Цитирана в:

1. I. V. Mel'nikov, A. V. Nazarkin, "Non-envelope approach to an optical bullet flight," *IQEC'92 Technical Digest*, Paper Pth009, p. 420 (1992).
2. K. Hayata, M. Koshiba, "Solution of self-trapped multidimensional optical beams by Galerkin-method," *Optics Letters*, vol. 17, pp. 841-843 (1992).
3. N. Akhmediev, J. M. Sotocrespo, "Generation of a train of 3-dimensional optical solitons in a self-focusing medium," *Phys. Rev.*, vol. A47, pp. 1358-1364 (1993).
4. M. Karlson, *Nonlinear Propagation of Optical Pulses and Beams*, Technical Report #262 (1994), School of Electrical Engineering, Chalmers University of Technology, Göteborg, Sweden (ISBN 91-7197-028-2).
5. R. McLeod, K. Wagner, S. Blair, "(3+1)-Dimensional optical soliton dragging logic," *Phys. Rev.*, vol. A52, pp. 3254-3278 (1995).
6. Jean-Claude Diels, Wolfgang Rudolph, *Ultrafast Laser Pulse Phenomena* (Academic Press, New York, 1996).
7. D. Edmundson, H. Enns, *Light Bullets*, Dept. of Physics, Simon Fraser University, British Columbia, Canada; <http://www.sfu.ca/~renns/lbullets.html>
8. J. K. Ranka, R. W. Schirmer, A. L. Gaeta, "Observation of pulse splitting in nonlinear dispersive media," *Phys. Rev. Lett.*, vol. 77, No. 18, pp. 3783-3786 (1996).
9. Steve Blair, "Optical Soliton-Based Logic Gates", A thesis for the degree of Doctor of Philosophy, University of Colorado, 1998.
10. D. Mihalache, D. Mazilu, L.-C. Crasovan, B. A. Malomed, F. Lederer, "Azimuthal instability of spinning light bullets," *Phys. Rev.*, vol. E62, pp. R1505-R1508 (2000).
11. A. Desyatnikov, A. Maimitsov, B. Malomed, "Three-dimensional spinning solitons in dispersive media with the cubic-quintic nonlinearity," *Phys. Rev.*, vol. E61, pp. 3107-3113 (2000).
12. D. Funk, J. Nicholson, et al., "Optical wavepackets (optical bullets): A new diffraction free form of light travel", Technical Report, LA-UR-99-2338; TRN: AH200123%%324; Los Alamos National Lab., NM (US) (1999); DOI: 10.2172/768225

13. Десятников, Антон Сергеевич, "Взаимодействие многомерных оптических солитонов в средах с нелинейностью третьего и пятого порядков", Диссертация, кандидат физико-математических наук, Москва, 2000.
14. S. Blair, K. Wagner, "(2+1)-D propagation of spatio-temporal solitary waves including higher-order corrections," *Opt. Quant. Electron.*, vol. 30, pp. 697-737 (1998).
15. N. N. Akhmediev, "Spatial solitons in Kerr and Kerr-like media," *Opt. Quant. Electron.*, vol. 30, pp. 535-569 (1998).
16. D. Mihalache, D. Mazilu, L.-C. Crasovan, B. A. Malomed, F. Lederer, "Three-dimensional spinning solitons in the cubic-quintic nonlinear medium," *Phys. Rev. E*, vol. 61, pp. 7142-7145 (2000).
17. I. V. Mel'nikov, D. Mihalache, N.-C. Panoiu, "Localized multidimensional femtosecond optical pulses in an off-resonance two-level medium," *Opt. Commun.*, vol. 181, pp. 345-351 (2000).
18. D. Mihalache, L.-C. Crasovan, "Optical spatiotemporal solitons in quadratic media", *Proceedings of SPIE - The International Society for Optical Engineering*, vol.4430, pp. 451-459 (2000).
19. S. Blair, K. Wagner, "Spatial Soliton Interactions for Photonic Switching", AASERT Final report F49620-95-1-0432, University of Colorado (2000).
20. D. Mihalache, "Spinning optical spatiotemporal solitons in quadratic media," *Acta Physica Polonica*, vol. A99, #1, pp. 47-55 (2001).
21. Z. Jovanoski, "Gaussian beam propagation in d-dimensional cubic-quintic nonlinear medium," *J. Nonlin. Opt. Physics*, vol. 10, #1, pp. 79-111 (2001).
22. C. J. R. Sheppard, "Bessel pulse beams and focus wave modes," *J. Opt. Soc. Am. A*18, pp. 2594-2600 (2001).
23. L.-C. Crasovan, B. A. Malomed, D. Mihalache, "Spinning solitons in cubic-quintic nonlinear media," *Journal of Physics (Indian Acad. Sci.)* vol. 57, # 5&6, pp. 1041-1059 (2001).
24. A. Adamatzky, *Collision-based computing* (A. Adamatzky, Ed.), Chapter: "New media for collision-based computing", pp. 411-442, Springer-Verlag (London, UK, 2001, ISBN: 1-85223-540-8).
25. A. Adamatzky, *Computing in Nonlinear Media and Automata Collectives*, IoP Publishing, 2001, ISBN: 075030751X, DOI: 10.1887/075030751X.
26. B.A. Malomed, L.C. Crasovan, D. Michalache, "Stability of vortex solitons in the cubic-quintic model," *Physica D*161 (3-4), pp. 187-201 (2002).
27. D. Mihalache, D. Mazilu, L.C. Crasovan, "Stable spinning optical solitons in three dimensions," *Phys. Rev. Lett.* 88 (7), art. No. 073902 (2002).
28. D. Mihalache, D. Mazilu, L.C. Crasovan, I. Towers, B.A. Malomed, A.V. Buryak, L. Torner, F. Lederer, "Stable three-dimensional spinning optical solitons supported by competing quadratic and cubic nonlinearities," *Phys. Rev. E*66 (1), art. No. 016613 Part 2 (2002).
29. I. N. Towers, B. A. Malomed, F. W. Wise, "Light bullets in quadratic media with normal dispersion at the second harmonic," *Phys. Rev. Lett.* 90 (12), art. No. 123902 (2003).
30. K. Beckwitt, Y.-F. Chen, F. W. Wise, and B. A. Malomed "Temporal solitons in quadratic nonlinear media with opposite group-velocity dispersions at the fundamental and second harmonics," *Phys. Rev. E*68, art. No. 057601 (2003).
31. L. M. Kovachev, "Vortex solutions of the nonlinear Maxwell-Dirac equations", *Physica D* 190 (1-2), pp. 78-92 (2004).
32. L. M. Kovachev, "Optical leptons", *Internat. Journal of Mathematics and Mathematical Sciences*, vol. 27, pp. 1403-1422 (2004).
33. D. Mihalache, "Spatiotemporal optical solitons: An overview", *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 5581, pp. 564-570 (2004).
34. N. N. Akhmediev, A. Ankiewicz, *Solitons: Nonlinear Pulses and Beams* (Chapman & Hall, London, 1997); ISBN 0-412-75450-9 (Russian translation: FIZMATLIT, Moscow, 2003, ISBN 5-9221-0344-X).
35. A. Biswas, "Theory of optical bullets," *Progress In Electromagnetics Research (PIER)*, vol. 36, pp. 21– 59 (2002) (<http://ceta.mit.edu/PIER/pier36/02.0111052.Biswas.pdf>).
36. Li Jianhua , Zhang Zhengxian, "Optical logic based on (3+1)-dimension optical soliton dragging interaction," *Optical Communication Technology* No.3, P.212-216 (2001).; DOI: CNKI:SUN:GTXS.0.2001-03-015; http://en.cnki.com.cn/Article_en/CJFDTOTAL-GTXS200103015.htm
37. H. Li, Qi Guo, G. Xuebao, "Induced focusing of elliptic Gauss beam in self-defocusing media," *Acta Optica Sinica*, vol. 25, No. 4, pp. 520-524 (2005).
38. E. P. Fitrakis, H. E. Nistazakis, B. A. Malomed, D. J. Frantzeskakis, and P. G. Kevrekidis, "Spatiotemporal solitons in birefringent media near the zero-dispersion point," *J. Opt. Soc. Am. B* vol. 23, No. 9, pp. 1911-1919 (2006).
39. L. M. Kovachev, L. I. Pavlov, L. M. Ivanov, D. Y. Dakova, "Optical filaments and optical bullets in dispersive nonlinear media," *J. of Russian Laser Research*, vol. 27(3), pp. 185-203 (2006).
40. Frank J. Duarte, Ed., *Tunable Laser Applications*, Marcel Dekker: New Yourk (1995), ISBN 0824789288.
41. A. Biswas, S. Konar, *Introduction to Non-Kerr Law Optical Solitons*, Chapman & Hall/ CRC Applied Mathematics & Nonlinear Science, vol. 9, ISBN 9781584886389, 2006.
42. LI Hua-gang, "The Deflexion of the Optical Beam in the Self-defocusing Media", *Journal of Guangdong Education Institute*, Vol. 27, No.5, 53-55 (2007); ISSN 1007-8754

43. Rasmussen P.D., Sukhorukov A.A., Neshev D.N., Krolikowski W., Bang O., Laegsgaard J., Kivshar Y.S., "Spatiotemporal control of light by Bloch-mode dispersion in multi-core fibers", *Optics Express*, Volume: 16, Issue: 8, pp. 5878-5891 (2008)
44. Éric Louvergneaux, "Influence du bruit et de la brisure de symétrie de réflexion sur les instabilités dans les systèmes optiques spatialement étendus", pour obtenir l'Habilitation à Diriger des Recherches, Université des Sciences et Technologie de Lille - Lille I (2009)
45. Leblond, H., Kremer, D., Mihalache, D., "Collapse of ultrashort spatiotemporal pulses described by the cubic generalized Kadomtsev-Petviashvili equation", *Physical Review A - Atomic, Molecular, and Optical Physics* 81 (3), art. No. 033824 (2010).
46. Williams, M.O., McGrath, C.W., Kutz, J.N., "Light-bullet routing and control with planar waveguide arrays", *Optics Express* 18 (11), pp. 11671-11682 (2010).
47. Darran E. Edmundson, "A dynamic study of 3D optical envelope solitons", PhD Thesis, Department of Physics, University of Waterloo (1996).
48. Williams, M.O., McGrath, C.W., Kutz, J.N., "Light bullet creation, routing, and control with planar waveguide arrays", *Engineering Letters* 18 (3) (2010).
49. Minardi, S., Eilenberger, F., Kartashov, Y.V., Szameit, A., Röpke, U., Kobelke, J., Schuster, K., Bartelt, H., Nolte, S., Torner, L., Lederer, F., Tünnermann, A., Pertsch, T., "Three-dimensional light bullets in arrays of waveguides", *Physical Review Letters* 105 (26), art. No. 263901 (2010).
50. Christopher James Benton, "Solitons and nonlinear optics in silicon-on-insulator photonic wires", A thesis for the degree of Doctor of Philosophy, University of Bath, 2009.
51. Dror, N., Malomed, B.A., "Symmetric and asymmetric solitons and vortices in linearly coupled two-dimensional waveguides with the cubic-quintic nonlinearity", *Physica D: Nonlinear Phenomena* 240 (6), pp. 526-541 (2011).
52. Williams, M.O., McGrath, C.W., Kutz, J.N., "Light-bullet routing and logic in planar waveguide arrays", *Proceedings of SPIE - The International Society for Optical Engineering* 7941, art. no. 79410D (2011).
53. Mihalache, D., "Topological dissipative nonlinear modes in two and three-dimensional ginzburg-landau models with trapping potentials", *Romanian Reports on Physics* 63 (1), pp. 9-24 (2011).
54. Zhong, W.-P., Belić, M., Assanto, G., Huang, T., "Three-dimensional spatiotemporal vector solitary waves", *Journal of Physics B: Atomic, Molecular and Optical Physics* 44 (9), art. no. 095403 (2011).
55. A. Adamatzky, "Universal dynamical computation in multidimensional excitable lattices," *Internat. J. of Theoretical Physics*, vol. 37, pp. 3069-3108 (1998).
56. Mihalache, D., "Spiral solitons in two-dimensional complex cubic-quintic ginzburg-landau models", *Romanian Reports on Physics* 63 (2), pp. 325-338 (2011).
57. Minardi, S., Eilenberger, F., Kartashov, Y.V., Szameit, A., Röpke, U., Kobelke, J., Schuster, K., Bartelt, H., Nolte, S., Torner, L., Lederer, F., Tünnermann, A., Pertsch, T., "Three-dimensional light bullets", *Proceedings of SPIE - The International Society for Optical Engineering* 8240, art. no. 82400P (2012).
58. Williams, M.O., Kutz, J.N., "Generating and routing light-bullets using slab waveguide arrays", *Optical and Quantum Electronics* 44 (3-5), pp. 247-253 (2012).
59. Yang, Z.-P., Zhong, W.-P., "Self-trapping of three-dimensional spatiotemporal solitary waves in self-focusing Kerr media", *Chinese Physics Letters* 29 (6), art.no. 064211 (2012).
60. Arévalo, E., "Spatiotemporal collective excitations in photonic multiwire arrays", *Physical Review A - Atomic, Molecular, and Optical Physics* 86 (5), art. no. 053829 (2012)
61. Xu, S.-L., Belic, M.R., Zhong, W.-P., "Three-dimensional spatiotemporal vector solitary waves in coupled nonlinear Schrödinger equations with variable coefficients", *Journal of the Optical Society of America B: Optical Physics* 30 (1), pp. 113-122 (2013).
62. Khasanov, O., Smirnova, T., Fedotova O., Rusetsky G. and Voyar, A., "Powerful femtosecond singular pulses in the Kerr media with dispersion", *Ukrainian Journal of Physical Optics* 14 (2), pp. 74-84 (2013).
63. Triki, H., Azzouzi, F., Grelu, P., "Multipole solitary wave solutions of the higher-order nonlinear Schrödinger equation with quintic non-Kerr terms", *Optics Communications* 309, pp. 71-79 (2013).
64. Leblond, H., Mihalache, D., "Linear and nonlinear waveguiding of few-cycle optical solitons in a planar geometry", *Physical Review A - Atomic, Molecular, and Optical Physics* 88 (2), art. No. 023840 (2013).
65. Mihalache, D., "Linear and nonlinear light bullets: Recent developments", *Proceedings of SPIE - The International Society for Optical Engineering* 8882, art. no. 88820J (2013).
66. Leblond, H., Triki, H., Mihalache, D., "Theoretical studies of ultrashort-soliton propagation in nonlinear optical media from a general quantum model", *Romanian Reports in Physics* 65 (3), pp. 925-942 (2013).
67. Al Khawaja, U., Bahlouli, H., Asad-uz-zaman, M., Al-Marzoug, S.M., "Modulational instability analysis of the Peregrine soliton", *Communications in Nonlinear Science and Numerical Simulation*, Volume 19, Issue 8, Pages 2706-2714 (August 2014)
68. Mihalache, D., "Multidimensional localized structures in optics and Bose-Einstein condensates: A selection of recent studies", *Romanian Journal of Physics* Volume 59, Issue 3-4, Pages 295-312 (2014).
69. Kale Beckwitt, "Stationary and Non-stationary Cascaded Interactions in Quadratic Nonlinear Optical Media: Theory and Applications", PhD Thesis, Faculty of the Graduate School, Cornell University (2004)
70. Borovkova, Olga, "Soliton generation and control in engineered materials", PhD Thesis, Universitat Politècnica de Catalunya, Institut de Ciències Fotòniques (2013).

71. Alejandro B. Aceves, Olga V. Shtyrina, Alexander M. Rubenchik, Mikhail P. Fedoruk, and Sergei K. Turitsyn, "Spatiotemporal optical bullets in two-dimensional fiber arrays and their stability", *Phys. Rev. A* 91, 033810 (2015).
72. Xu, S., Belić, M.R., „Light bullets in coupled nonlinear Schrödinger equations with spatially modulated coefficients and Bessel trapping potential", *Journal of Modern Optics*, Vol. 62, Issue 9, 683-692 (2015).
73. Xu, S.-L. , Zhao, Y., Petrović, N.Z., Belić, M.R., "Spatiotemporal soliton supported by parity-time symmetric potential with competing nonlinearities", *EPL*, Volume 115, Issue 1, Article number 14006 (2016).
74. M.O. Williams, "Exploiting Low Dimensionality in Nonlinear Optics and Other Physical Systems", PhD Thesis, University of Washington (2012).
75. Huang, J. , Zhang, Y., Man, W., "Fast-Varying and Transient Nonlinear Equation for Microstructure Fibers", *IEEE Photonics Journal*, Volume 9, Issue 2, Article number 7880620 (2017).
76. Sergei K. Turitsyn, Aston University, "Nonlinear light dynamics in multi-core structures", Final Report, AFOSR award number: FA9550-14-1-0305; European office of aerospace research and development, 2017; AFRL-AFOSR-UK-TR-2017-0013
77. R McLeod, "Spectral-domain analysis and design of three-dimensional optical switching and computing systems", PhD Thesis, Faculty of the Graduate School of the University of Colorado (1995).
78. D. J. Funk, Jeff Nicholson, Miao Xin, Charlie E M Zhao, Strauss, Toni Taylor, Jeffrey P Roberts, R. Jason Jones, Miao Zhao, Charlie E. M. Strauss, Antoinette J Taylor, „Optical Wavepackets (Optical Bullets): A New Diffraction Free Form of Light Travel," Los Alamos National Laboratory, DOE Office of Scientific and Technical Information LA-UR-99-2338, Approved for public release; distribution is unlimited (May 2019). DOI: 10.13140/RG.2.2.22390.24644
79. Z. Jovanoski, "Variational analysis of beam propagation in nonlinear media", a Thesis submitted to the Department of Mathematics and Statistics University College, The University of New South Wales, Australian Defence Force Academy, for the Degree of Doctor of Philosophy (1995).
80. Stelios Tzortzakis, "Femtosecond laser pulse filamentation in nonlinear transparent media", Ph.D. Thesis, Ecole Polytechnique, 2001
81. Magnus Karlsson, "Nonlinear Propagation of Optical Pulses and Beams", Technical Report No. 262, School of Electrical and Computer Engineering, Chalmers University of Technology, Goeteborg, Sweden, 1994
82. B. Luo and J. R. He, "Light bullet solutions in a dual-core waveguide amplifier with different modulated coefficients and a varying source," *Indian J Phys* (2022).; <https://doi.org/10.1007/s12648-022-02553-3>
83. K. S. Al-Ghafri, E. V. Krishnan, S. Khan, A. Biswas, "Optical Bullets and Their Modulational Instability Analysis," *Appl. Sci.* 12, 9221 (2022).; <https://doi.org/10.3390/app12189221>

Статия А6 – 3 цитата

S. G. Dinev and A. A. Dreischuh, "Modeling the induced-phase modulation and compression of UV laser pulses," *IEEE J. Quant. Electron.*, vol. QE-28, pp. 1384-1388 (1992).

Цитирана в:

1. T. Yamada, A. Uchida, T. Nakata, and F. Kannari, "Subpicosecond pulse compression in the VUV region by induced-phase modulation in xenon," *IEEE J. Sel. Top. Quantum Electronics*, vol. 1, No.3, pp. 981-989 (1995).
2. T. Nakata, T. Yamada, F. Kannari, "Picosecond VUV pulse generation by dual-wavelength-pumped Raman-shifting," *Japanese J. Appl. Phys.*, Part 1, vol. 34, Nr. 12A, pp. 6401-6406 (1995)
3. E. L. Lago, R. DelaFuente, "Copropagation of two waves of different frequencies and arbitrary initial polarization states in an isotropic Kerr medium," *Phys. Rev. A*, vol. 60, pp. 549-558 (1999).

Статия А7 – 5 цитата

A. B. Blagoeva, S. G. Dinev and A. A. Dreischuh, "Modeling the subpicosecond pulse compression in the vacuum ultraviolet and the extreme ultraviolet," *J. Opt. Soc. Am.*, vol. B9, pp. 909-914 (1992).

Цитирана в:

1. T. Yamada, A. Uchida, T. Nakata, and F. Kannari, "Subpicosecond pulse compression in the VUV region by induced-phase modulation in xenon," *IEEE J. Sel. Top. Quantum Electronics*, vol. 1, No.3, pp. 981-989 (1995).
2. Mahesh R. Junnarkar; Naoshi Uesugi, "Near two-photon-resonance short pulse propagation in atomic xenon", *Proc. SPIE* 3609, Optical Pulse and Beam propagation, pp.227-237 (1999).
3. M. R. Junnarkar, N. Uesugi, "Near two-photon resonance short pulse compression in atomic noble gases," *Opt. Commun.*, Vol. 175, pp. 447-459 (2000).
4. Mahesh R. Junnarkar; Naoshi Uesugi, "Short-pulse propagation in the presence of multiple two-photon resonances of xenon", *Proc. SPIE* 3928, Nonlinear Materials, Devices, and Applications, pp. 285-298 (2000).
5. Mahesh R. Junnarkar; Naoshi Uesugi, "Short-pulse propagation in the presence of multiple two-photon resonances of xenon", *Proc. SPIE* 3927, Optical Pulse and Beam propagation, pp.102-116 (2000).

Статия А8 – 5 цитата

S. Dinev, A. Dreischuh, D. Kavaldjiev and K. Krastev, "Collimation and guiding of symbiotic light-beam pair," *J. Opt. Soc. Am.*, vol. **B9**, pp. 387-390 (1992).

Цитирана в:

1. Z. Jovanoski, "Variational analysis of beam propagation in nonlinear media", a Thesis submitted to the Department of Mathematics and Statistics University College, The University of New South Wales, Australian Defence Force Academy, for the Degree of Doctor of Philosophy (1995).
2. Z. Jovanoski, "Gaussian beam propagation in d-dimensional cubic-quintic nonlinear medium," *J. Nonlin. Opt. Physics*, vol. 10, pp. 79-111 (2001).
3. Y. Xiao, Q. Guo, "The mutually-trapped propagation of orthogonally polarized beam pair in planar waveguides," *Acta Physica Sinica*, vol.54 (11), pp. 5201-5209 (2005).
4. LI Hua-Gang, "The Deflexion of the Optical Beam in the Self-defocusing Media", *Journal of Guangdong Education Institute*, Vol. 27, No.5, 53-55 (2007); ISSN 1007-8754
5. Carlos-Javier Moran-Iglesias, "Großflächige quasi freistrahloptische Mikrospektrometer", Wissenschaftliche Berichte, FZKA-7211 (August 2006); Dissertation zur Erlangung des Akademischen Grades eines Doktors der Ingenieurwissenschaften; Universität Karlsruhe; Forschungszentrum Karlsruhe GmbH, Karlsruhe

Статия A9 – 2 цитата

S. G. Dinev, A. A. Dreischuh and I. Ivanova, "Induced deflection of optical beams in an off-axis geometry," *J. Modern Optics*, vol. **39**, pp. 667-671 (1992).

Цитирана в:

1. S. Saltiel, K. Koynov, K. Kirov, K. Petrova, "Cross-phase modulation caused by cascading third-order processes," *J. Opt. Soc. Am. B*, vol. 16, pp. 262-266 (1999).
2. Andrew T. Ryan, "Ultrafast Spatiotemporal Coupling in Nonlinear Dispersive Media", PhD Thesis, The Institute of Optics, The College School of Engineering and Applied Sciences, University of Rochester, Rochester, New York, 1997

Статия A10 – 2 цитата

S. G. Dinev, A. A. Dreischuh and I. Ivanova, "Spatio-temporal analysis of all-optical streaking," *Appl. Phys.*, vol. **B56**, pp.34-38 (1993).

Цитирана в:

1. H.-S. Albrecht, P. Heist, J. Kleinschmidt, D. V. Lap, "Ultrafast beam-deflection method and its application for measuring the transient refractive index of materials," *Appl. Phys.*, vol. B57, pp. 193-197 (1993).
2. Frederik Ossler, "Laser diagnostics in combustion. Elastic Scattering and picosecond laser-induced fluorescence", Doctoral Dissertation, Lund Institute of Technology, Lund University, Lund, Sweden, 1999

Статия A11 – 1 цитат

S. G. Dinev, A. A. Dreischuh and S. Balushev, "Symbiotic light pairs sustained by self-phase modulation and cross-phase modulation," *Physica Scripta*, vol. **47**, pp. 792-796 (1993).

Цитирана в:

1. Govind Agrawal, *Nonlinear Fiber Optics*, p. 295 (Elsevier, 2001, ISBN 0120451433, 467 pages).

Статия A12 – 7 цитата

A. Dreischuh, E. Eugenieva and S. Dinev, "Pulse shaping and shortening by spatial filtering of an induced-phase-modulated probe wave," *IEEE J. Quant. Electron.*, vol.**30**, pp.1656-1661 (1994).

Цитирана в:

1. A. T. Ryan, G. P. Agrawal, "Spatiotemporal Coupling in Dispersive Nonlinear Planar Waveguides," *J. Opt. Soc. Am.*, vol. B12, pp. 2382-2389 (1995).
2. J. M. Tang, K. A. Shore, "Active Picosecond Optical Pulse Compression in Semiconductor Optical Amplifiers," *IEEE J. Quant. Electron.*, vol. QE-35, pp. 93-100 (1999).
3. Andrew T. Ryan, "Ultrafast Spatiotemporal Coupling in Nonlinear Dispersive Media", PhD Thesis, The Institute of Optics, The College School of Engineering and Applied Sciences, University of Rochester, Rochester, New York, 1997
4. M. E. Pietrzyk, "Influence of Nonlinear Coupling of Pulses on Spatio-Temporal Compression," *J. Mod. Opt.* 48, pp. 303-317 (2001).
5. G. Dong, S. Edvardsson, W. Lu, and P. F. Barker, "Super-Gaussian mirror for high-field-seeking molecules," *Phys. Rev. A* 72, 031605(R) (2005).
6. Tan, C.S., Chai, T.Y., Chua, S.Y., Wang, X., Goi, B.M., Seet, G., "Range Reconstruction Model for 3D Gated Imaging", *Proceedings of SPIE - The International Society for Optical Engineering* 8842, art. no. 88420R (2013).
7. R M Arkhipov, M V Arkhipov, V S Egorov, I A Chekhonin, M A Chekhonin and S N Bagayev, "The new ultra high-speed all-optical coherent streak-camera", *J. Phys.: Conf. Ser.* **643** 012029 (2015).

Статия A14 – 12 цитата

S. Balushev, A. Dreischuh, I. Velchev, S. Dinev and O. Marazov, "Odd and even two-dimensional dark spatial solitons," *Appl. Phys.*, **vol. B61**, pp. 121-124 (1995).

Цитирана в:

1. Yu. S. Kivshar, B. Luther-Davies, "Dark Optical Solitons: Physics and Applications", *Physics Reports* 298, pp. 81-197 (1998).
2. G. Huang, M. G. Velarde, "Oblique interactions of dark spatial solitons in self-defocusing media," *J. Opt. Soc. Am.*, vol. B14, pp. 2850-2855 (1997)
3. V. Tikhonenko, Yu. S. Kivshar, V. V. Steblina, A. A. Zozulya, "Vortex solitons in a saturable optical medium," *J. Opt. Soc. Am.* B15, pp. 79-86 (1998).
4. S. Chavez-Cerda, M. Iturbe Castillo, D. Sanchez-de-la-Llave, and R. Delgado Macuil, "Generation and Propagation of Ring Dark Spatial Solitons," *Proc. of the Congress of the Canadian Association of Physics* 2002, paper WE-A4-2 (June 2-6, 2002).
5. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
6. Liu, S.-M., Yang, X.-M., Tian, G.-Y., Zhang, G.-Q., Sun, Q., Xu, J.-J., Zhang, G.-Y., "Circular and ring waveguides written and stored in LiNbO₃:Fe crystals", *Wuli Xuebao/Acta Physica Sinica* 47 (3), pp. 437 (1998).
7. Chávez Cerda, S., Iturbe Castillo, M.D., Sánchez-de-la-Llave, D., Delgado Macuil, R.J., "Generation and propagation of ring dark spatial solitons", *Proceedings of SPIE - The International Society for Optical Engineering*, vol.4833, pp. 378-382 (2002).
8. Iturbe Castillo, M.D., Chávez Cerda, S.C., De La Llave, D.S., Delgado Macuil, R.J., "Ring dark solitons generated by phase and amplitude jumps", *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 4829 I, pp. 388-389 (2003).
9. Darran E. Edmundson, "A dynamic study of 3D optical envelope solitons", PhD Thesis, Department of Physics, University of Waterloo (1990).
10. Болочагин, Владимир Юрьевич, "Моделирование процессов возбуждения, распространения и взаимодействия солитонов в нелинейных системах на основе нелинейного уравнения Шредингера, его обобщений и модификации", Диссертация на соискание ученой степени кандидата физико-математических наук, Самара, 1999
11. Kailash Kasala, "Nonlinear propagation of incoherent white light in a photopolymerisable medium: From single self-trapped beams to 2-D and 3-D lattices", PhD Thesis, McMaster University, Department of Chemistry, Hamilton, Ontario (2012). <http://hdl.handle.net/11375/12691>
12. Guo Hui, Wang Ya-Jun, Wang Lin-Xue, Zhang Xiao-Fei, "Dynamics of ring dark solitons in Bose-Einstein condensates", *Acta Physica Sinica* 69(1): 010302 (2020).; doi: 10.7498/aps.69.20191424.

Статия A15 – 24 цитата

S. Balushev, A. Dreischuh, I. Velchev, S. Dinev and O. Marazov, "Generation and evolution of two-dimensional dark spatial solitons", *Phys. Rev. E*, **vol. 52**, pp. 5517-5523 (1995).

Цитирана в:

1. G. X. Huang, M. G. Velarde, "Head-on collisions of dark solitons near the zero-dispersion point in optical fibers," *Phys. Rev. E*, vol. 54, No. 3, pp. 3048-3051 (1996)
2. Yu. S. Kivshar, B. Luther-Davies, "Dark Optical Solitons: Physics and Applications", *Physics Reports* 298, pp. 81-197 (1998).
3. B. Luther-Davies, J. Christou, V. Tikhonenko, and Yu. S. Kivshar, "Optical vortex solitons: experiments versus theory," *J. Opt. Soc. Am.*, vol. B14, pp. 3045-3053 (1997)
4. G. Huang, M. G. Velarde, "Oblique interactions of dark spatial solitons in self-defocusing media," *J. Opt. Soc. Am.*, vol. B14, pp. 2850-2855 (1997)
5. V. Tikhonenko, Yu. S. Kivshar, V. V. Steblina, A. A. Zozulya, "Vortex solitons in a saturable optical medium," *J. Opt. Soc. Am.* B15, pp. 79-86 (1998).
6. Yu. S. Kivshar, J. Christou, V. Tikhonenko, B. Luther-Davies, Len M. Pismen, "Dynamics of optical vortex solitons," *Opt. Commun.*, Vol. 152, pp. 198-206 (1998).
7. B. R. Wang, "Possible water wave solutions in a rectangular channel," *Acta Physica Sinica – Overseas edition*, vol. 8, pp. S269-S271 (1999).
8. P.G. Kevrekidis, H.E. Nistazakis, D.J. Frantzeskakis, B.A. Malomed, A.R. Bishop, "Ring solitons on vortices", *Phys. Rev. E* 64 (6), art. No. 066611, Part 2 (Dec. 2001).
9. Neshev, D., Nepomnyashchy, A.A., Kivshar, Y.S., "Optical vortex solitons and nonlinear Aharonov-Bohm effect", *Proceedings of SPIE - The International Society for Optical Engineering* 4403, pp. 192-199 (2001).
10. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
11. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.

12. Fei-Yu Wang, Xian-Feng Chen, Yu-Ping Chen, Yi Yang, and Yu-Xing Xia, "Evolution of Dark Spatial Soliton in Quasi-phase-matched Quadratic Media", *Commun. Theor. Phys.*, vol. 43 (2005) pp. 732–734.
13. Wang, F., Chen, X., Chen, Y., Xia, Y., "Evolution of Dark Spatial Soliton in Quasi-phase-matched Quadratic Media", *Proceedings of SPIE - The International Society for Optical Engineering* 5646, art. no. 65, pp. 369-377 (2005).
14. R. Sailaja, V. Sreeja, P. B. Bisht, "Studies of self-phase modulation under cw and picosecond laser pumping: white light continuum generation in water," *Indian Journal of Physics and Proc. of the Indian Assoc. for the Cultivation of Science*, vol. 79 (11), pp. 1299-1304 (2005).
15. Sukhorukov, A.P., Yangirova, V.V., "Spatio-temporal vortices: Properties, generation and recording", *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 5949, art. no. 594906 (2005).
16. В. В. Янгирова, А. П. Сухоруков, „Оптические фазовые дислокации импульсных пучков: пространственно-временные вихревые“, Ученые записки Казанского Государственного Университета, Том 148, кн.1, 185-191 (2006). ...
17. Brasselet, E., "Spin-orbit optical cross-phase-modulation", *Physical Review A - Atomic, Molecular, and Optical Physics* 82 (6), art. no. 063836 (2010).
18. Vaity, P., Singh, R.P., "Generation of quadrupoles through instability of dark rings in photorefractive media", *Journal of the Optical Society of America B: Optical Physics* 29 (8), pp. 2099-2102 (2012).
19. Ouyang, S.-G., "Optical vortex solitons in self-defocusing Kerr-type nonlocal medium", *Wuli Xuebao/Acta Physica Sinica* 62 (4) , art. no. 040504 (2013).
20. Li, H.-J., Zhang, K., "Spatial soliton pairs of the vectorial Thirring model realized in a coherent atomic system via electromagnetically induced transparency", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 95, Issue 1, Article number 013829 (2017).
21. Raphaël Saint-Jalm. *Exploring two-dimensional physics with Bose gases in box potentials: phase ordering and dynamical symmetry*. Quantum Physics [quant-ph]. Université Paris Sciences et Lettres, 2019. English.
22. Guo Hui, Wang Ya-Jun, Wang Lin-Xue, Zhang Xiao-Fei, "Dynamics of ring dark solitons in Bose-Einstein condensates", *Acta Physica Sinica* 69(1): 010302 (2020).; doi: 10.7498/aps.69.20191424.
23. Liu, W., Zhang, X., Wu, W., & Chen, Y. (2022). Cold atoms physics. *Advances in precision laser spectroscopy: Volume 2* (pp. 1-138); doi:10.1515/9783110304473-001; Retrieved from www.scopus.com
24. H. Tamura, C.-A. Chen, and C.-L. Hung, "Observation of Self-Patterned Defect Formation in Atomic Superfluids - from Ring Dark Solitons to Vortex Dipole Necklaces," *Phys. Rev. X* 13 (3), 031029 (2023); <https://link.aps.org/doi/10.1103/PhysRevX.13.031029>

Статия A16 – 8 цитата

N. Goutev, A. Dreischuh, S. Balushev and S. Dinev, " 2-D asymmetric induced phase modulation: Spatial and spatio-temporal aspects," *IEEE J. Quant. Electron.*, vol. QE-31, pp. 2114-2119 (1995).

Цитирана в:

1. T. Nakata, T. Yamada, F. Kannari, "Picosecond VUV pulse generation by dual- wavelength-pumped Raman-shifting," *Japanese J. Appl. Phys.*, Part 1, vol. 39, Nr. 12A, pp. 6401-6406 (1995).
2. Jiang XJ, Guo Q, Li HG, et al., "Induced focusing from counter-propagation of two optical beams in self-defocusing media," *Opt. Commun.*, vol. 233, pp. 1-6 (2004).
3. V. Renard, O. Faucher, B. Lavorel, "Measurement of laser-induced alignment of molecules by cross defocusing," *Optics Letters*, vol. 30, pp. 70-72 (2005).
4. Q. Guo, X. J. Jiang, "Induced focusing from co-propagation of a pair of bright-dark optical beams in self-defocusing Kerr media, *Opt. Commun.* Vol. 254 (1-3), pp. 19-29 (2005).
5. Li, H., Guo, Q., "Optimum parameters for focusing of optical beams in three-dimensional self-defocusing nonlinear media", *Guangxue Xuebao/Acta Optica Sinica* 24 (7), pp. 937-940 (2004).
6. Alencar, M.A.R.C., Araújo, C.B.D., "Two-beam conical diffraction in a Kerr medium", *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 5622 (PART 1), pp. 419-423 (2004).
7. Li, H., Guo, Q., "Induced focusing of elliptic Gauss beam in self-defocusing media", *Guangxue Xuebao/Acta Optica Sinica* 25 (4), pp. 520-524 (2005).
8. J Zhang, Y Xiang, L Zhang, Y Li, Z Luo, « Induced Focusing of Optical Wave From Cross-Phase Modulation in Nonlinear Metamaterials», *IEEE J. Quantum Electronics*, Vol. 50 (10), 823 - 830 (2014); DOI: 10.1109/JQE.2014.2351012

Статия A17 – 16 цитата

A. Dreischuh, W. Fließner, I. Velchev, S. Dinev, and L. Windholz, "Phase measurements of ring dark solitons," *Appl. Phys.*, vol. B62, pp. 139-142 (1996).

Цитирана в:

1. Yu. S. Kivshar, B. Luther-Davies, "Dark Optical Solitons: Physics and Applications", *Physics Reports* 298, pp. 81-197 (1998).
2. G. Huang, M. G. Velarde, "Oblique interactions of dark spatial solitons in self-defocusing media," *J. Opt. Soc. Am.*, vol. B14, pp. 2850-2855 (1997).

3. P.G. Kevrekidis, H.E. Nistazakis, D.J. Frantzeskakis, B.A. Malomed, A.R. Bishop, "Ring solitons on vortices", *Phys. Rev. E* 64 (6), art. No. 066611, Part 2 (Dec. 2001).
4. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
5. G. Theocharis, D. J. Frantzeskakis, P. G. Kevrekidis, B. A. Malomed, Yu. S. Kivshar, "Ring dark solitons and vortex necklaces in Bose-Einstein condensates," *Phys. Rev. Lett.* 90 (12), art. No. 120403 (1-4) (March 2003).
6. P.G. Kevrekidis, D.J. Frantzeskakis, "Pattern forming dynamical instabilities of Bose-Einstein condensates," *Modern Physics Lett.*, vol. B18 (5-6), pp. 173-202 (2004);
7. Ju-Kui Xue, "The nonlinear evolution of ring dark solitons in Bose-Einstein condensates," *J. Phys. A: Math. Gen.*, vol. 37, pp. 11223-11228 (2004).
8. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.
9. P. G. Kevrekidis, R. Carretero-González, D. J. Frantzeskakis, I. G. Kevrekidis, "Vortices in Bose-Einstein Condensates: Some Recent Developments," *Modern Phys. Lett. B*, vol.18 (30), pp. 1481-1505 (2004).
10. L. D. Carr, Charles W. Clark, "Vortices and ring solitons in Bose-Einstein condensates," *Phys. Rev. A* 74, art. No. 043613 (1-14) (2006).
11. L.D. Carr and J. Brand, "Multidimensional Solitons: Theory", in "Emergent Nonlinear Phenomena in Bose-Einstein Condensates. Theory and Experiment", *Springer Series on Atomic, Optical, and Plasma Physics*, Vol.45, Kevrekidis, Panayotis G.; Frantzeskakis, Dimitri J.; Carretero-González, Ricardo (Eds.), 2008, ISBN: 978-3-540-73590-8
12. Frantzeskakis, D.J., "Dark solitons in atomic Bose-Einstein condensates: From theory to experiments", *Journal of Physics A: Mathematical and Theoretical* 43 (21), art. no. 213001 (2010).
13. Li, J., Wang, D.-S., Wu, Z.-Y., Yu, Y.-M., Liu, W.-M., "Three-dimensional ring vortex solitons and their stabilities in Bose-Einstein condensates under magnetic confinement", *Physical Review A - Atomic, Molecular, and Optical Physics* 86 (2), art. no. 023628 (2012).
14. Wenlong Wang, P.G. Kevrekidis, R. Carretero-Gonzalez, D. J. Frantzeskakis, Tasso J. Kaper, Manjun Ma, "Stabilization of ring dark solitons in Bose-Einstein condensates", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 92, Issue 3, Article number 033611 (2015).
15. P. G. Kevrekidis, D. J. Frantzeskakis, and R. Carretero-González, "The Defocusing Nonlinear Schrödinger Equation: From Dark Solitons to Vortices and Vortex Rings", Philadelphia: Society for Industrial and Applied Mathematics, ISBN 9781611973938, 2015.
16. Jheng, S.-D., Cheng, S.-C., Chen, T.-W., "Ring dark solitons in microcavity polariton condensates", *Solid State Communications*, 300, 113695 (2019). <https://doi.org/10.1016/j.ssc.2019.113695>

Статия A19 – 20 цитата

I. Velchev, A. Dreischuh, D. Neshev and S. Dinev, "Interactions of optical vortex solitons superimposed on different background beams," *Optics Communications*, vol. 130, pp. 385-392 (1996).

Цитирана в:

1. Yu. S. Kivshar, B. Luther-Davies, "Dark Optical Solitons: Physics and Applications", *Physics Reports* 298, pp. 81-197 (1998).
2. G.-H. Kim, J.-H. Jeon, K.-H. Ko, H.-J. Moon, J.-H. Lee, and J.-S. Chang, "Optical Vortices produces with a nonspiral phase plate", *Applied Optics*, vol. 36, Nr. 33 (1997).
3. D. Rozas, C. T. Law, G. A. Swartzlander, Jr., "Propagation dynamics of optical vortices," *J. Opt. Soc. Am.*, vol. B14, pp. 3054-3065 (1997).
4. David Rozas, "Generation and propagation of optical vortices", Dissertation for the Degree of Doctor of Philosophy in Physics in Physics, Worcester Polytechnic Institute, 1999.
5. Болочагин, Владимир Юрьевич, "Моделирование процессов возбуждения, распространения и взаимодействия солитонов в нелинейных системах на основе нелинейного уравнения Шредингера, его обобщений и модификации", Диссертация на соискание ученой степени кандидата физико-математических наук, Самара, 1999
6. Z. Bouchal, "Resistance of nondiffracting vortex beam against amplitude and phase perturbations," *Opt. Commun.* 210, pp. 155-164 (2002).
7. D.V. Petrov, "Vortex-edge dislocation interaction in second-order nonlinear media," *Opt. Commun.* 200 (1-6), pp. 381-387 (2001).
8. D.R. Andersen, L.M. Kovachev, "Interaction of coupled-vector optical vortices," *J. Opt. Soc. Am.*, vol. B19 (3), pp. 376-384 (March 2002).
9. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003). - 2 citata
10. I.D. Maleev, G.A Swartzlander, Jr., "Composite optical vortices", *J. Opt. Soc. Am.*, Vol.B20, pp.1169-1176 (2003).
11. G.H.Kim, H.J. Lee, J.U.Kim, S.Hyyang, "Propagation dynamics of optical vortices with anisotropic phase profiles", *J.Opt.Soc.Am.*, vol.B20, pp.351-359 (2003).

12. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, pp.291-391 (2005).
13. D. Palacios, "An Optical Vortex Coherence Filter," Worcester Polytechnic Inst., Dissertation for the degree of Doctor of Philosophy (Worcester, June 9, 2004).
14. Chen, M., Roux, F.S., "Accelerating the annihilation of an optical vortex dipole in a Gaussian beam", *Journal of the Optical Society of America A: Optics and Image Science, and Vision* 25 (6), pp. 1279-1286 (2008).
15. Mingzhou Chen, "Optical vortex detection and strongly scintillated beam correction using vortex dipole annihilation", A thesis for the degree Philosophiae Doctor (Computer Engineering), Faculty of Engineering, University of Pretoria, 2008.
16. Miguel A. Porras and Francisco Ramos, "Quasi-ideal dynamics of vortex solitons embedded in flat-top nonlinear Bessel beams", *Optics Letters*, Vol. 42, Issue 17, pp. 3275-3278 (2017)
17. Huishan Li, Shiquan Lai, Yunli Qui, Xing Zhu, Jianing Xie, Dumitru Mihalache, and Yingji He, "Stable dissipative optical vortex clusters by inhomogeneous effective diffusion," *Opt. Express* **25**, 27948-27967 (2017)
18. Shiquan Lai, Huishan Li, Yunli Qui, Xing Zhu, Dumitru Mihalache, Boris A. Malomed, Yingji He, "Generation of ring-shaped optical vortices in dissipative media by inhomogeneous effective diffusion", *Nonlinear Dynamics*, Volume 93, 2159-2168 (2018); DOI: 10.1007/s11071-018-4316-9
19. Qiu, Y., Malomed, B.A., Mihalache, D., Zhu, X., Peng, J., He, Y., "Generation of multivortex ring beams by inhomogeneous effective diffusion", *Chaos, Solitons and Fractals* 117, pp. 30-36 (2018).
20. Y. Qiu, B. A. Malomed, D. Mihalache, X. Zhu, J. Peng, Y. He, "Generation of stable multi-vortex clusters in a dissipative medium with anti-cubic nonlinearity," *Physics Letters A* vol. 383, Issue 22, pp. 2579-2583 (2019). DOI: 10.1016/j.physleta.2019.05.022

Статия A20 – 1 цитат

A. Dreischuh, V. Marinov, I. Buchvarov, E. Eugenieva and S. Dinev, "T-scanner for measuring pulse durations," *Opt. Quant. Electron.*, vol. **28**, pp. 1187-1197 (1996).

Цитирана в:

1. S. Saltiel, K. Koynov, K. Kirov, K. Petrova, "Cross-phase modulation caused by cascading third-order processes," *J. Opt. Soc. Am. B*, vol. 16, pp. 262-266 (1999).

Статия A21 – 12 цитата

A. Dreischuh, V. Kamenov and S. Dinev, "Parallel guiding of signal beams by a ring dark soliton," *Appl. Phys. B*, vol. **B63**, pp. 145-150 (1996).

Цитирана в:

1. Yu. S. Kivshar, B. Luther-Davies, "Dark Optical Solitons: Physics and Applications", *Physics Reports* 298, pp. 81-197 (1998).
2. D. J. Frantzeskakis, B. A. Malomed, "Multiscale expansions for a generalized cylindrical nonlinear Schrödinger equation," *Phys. Lett. A*, vol. 264, pp. 179-185 (1999).
3. H. E. Nistazakis, D. J. Frantzeskakis, B. A. Malomed, P. G. Kevrekidis, "Head-on collisions of ring dark solitons," *Phys. Lett.*, vol. A285, pp. 157-164 (2001).
4. P.G. Kevrekidis, H.E. Nistazakis, D.J. Frantzeskakis, B.A. Malomed, A.R. Bishop, "Ring solitons on vortices", *Phys. Rev. E* 64 (6), art. No. 066611, Part 2 (2001).
5. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
6. I. E. Papacharalampous, P. G. Kevrekidis, H. E. Nistazakis, D. J. Frantzeskakis, B. A. Malomed, "Elliptic Dark Solitons," *Physica Scripta*, Vol. 69, Nr. 1, pp. 7-14 (2004).
7. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.
8. Ablowitz, M.J., Nixon, S.D., Horikis, T.P., Frantzeskakis, D.J., "Dark solitons of the power-energy saturation model: Application to mode-locked lasers", *Journal of Physics A: Mathematical and Theoretical* 46 (9) , art. no. 095201 (2013).
9. Wenlong Wang, P.G. Kevrekidis, R. Carretero-Gonzalez, D. J. Frantzeskakis, Tasso J. Kaper, Manjun Ma, "Stabilization of ring dark solitons in Bose-Einstein condensates", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 92, Issue 3, Article number 033611 (2015).
10. Theodoros P. Horikis and Dimitrios J. Frantzeskakis, "Ring dark and anti-dark solitons in nonlocal media", *Optics Letters*, Volume 41, Issue 3, 583-586 (2016).
11. Shih-Da Jheng, Szu-Cheng Cheng, Ting-Wei Chen, "Ring dark solitons in microcavity polariton condensates", *Solid State Communications* Vol. 300, at. Nr. 113695 (2019); <https://doi.org/10.1016/j.ssc.2019.113695>
12. David S Simon, „Optical solitons”, Chapter 7, „Tying Light in Knots. Applying topology to optics”, Morgan & Claypool Publishers (2018). <https://doi.org/10.1088/2053-2571/aadd5>

Статия A23 – 3 цитата

V. Kamenov, A. Dreischuh and S. Dinev, "Manipulation of the transverse dynamics of ring dark solitary waves," *Physica Scripta*, vol. 55, No.1, pp. 68-72 (1997).

Цитирана в:

1. Yu. S. Kivshar, B. Luther-Davies, "Dark Optical Solitons: Physics and Applications", *Physics Reports* 298, pp. 81-197 (1998).
2. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
3. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.

Статия A24 – 17 цитата

A. Dreischuh, I. Buchvarov, E. Eugenieva, A. Iliev, and S. Dinev, "Experimental demonstration of pulse shaping and shortening by spatial filtering of an induced-phase-modulated probe wave," *IEEE J. Quant. Electron.*, vol. QE-33, No.3, pp. 329-335 (1997).

Цитирана в:

1. J. M. Tang, K. A. Shore, "Active Picosecond Optical Pulse Compression in Semiconductor Optical Amplifiers," *IEEE J. Quant. Electron.*, vol. QE-35, pp. 93-10 (1999).
2. J. M. Tang, K. A. Shore, "Amplification of strong picosecond optical pulses in semiconductor optical amplifiers," *IEEE Proc. – Optoelectronics*, vol. 146, pp. 45-50 (1999).
3. M. E. Pietrzyk, "Influence of Nonlinear Coupling of Pulses on Spatio-Temporal Compression," *J. Mod. Opt.* 48, pp. 303-317 (2001).
4. Q. Guo, X. J. Jiang, "Induced focusing from co-propagation of a pair of bright-dark optical beams in self-defocusing Kerr media, *Opt. Commun.* vol. 254 (1-3), pp. 19-29 (2005).
5. Ralf Menzel, "*Photonics: Linear and Nonlinear Interactions of Laser Light and Matter*", Springer, 2001, ISBN 3540670742, 9783540670742, 873 pages.
6. Marcos Dantus, Igor Pastirk, Vadim V. Lozovoy, Matthew Comstock, "Control system and apparatus for use with ultra-fast laser", United States Patent No.US7567596 B2, Filing date Jul 8, 2005, Date of patent: Jul 28, 2009.
7. Marcos Dantus, Don Ahmasi Harris, Vadim V. Lozovoy, "Laser system employing harmonic generation", United States Patent No. US8208505 B2, Filing date May 14, 2009, Date of patent: Jun 26, 2012.
8. Marcos Dantus, Vadim V. Lozovoy, "Laser pulse shaping system", United States Patent No. US8208504 B2, Filing date Nov 4, 2008, Date of patent: Jun 26, 2012.
9. Matthew Comstock, Marcos Dantus, Vadim V. Lozovoy, "Laser and environmental monitoring method", United States Patent No. US8265110 B2, Filing date Jun 22, 2009, Date of patent: Sep 11, 2012.
10. Matthew Comstock, Marcos Dantus, Vadim Lozovoy, Igor Pastirk, "Control system and apparatus for use with ultra-fast laser", United States Patent No. US8300669 B2, Filing date Jun 23, 2009, Date of patent: Oct 30, 2012.
11. Tan, C.S., Chai, T.Y., Chua, S.Y., Wang, X., Goi, B.M., Seet, G., "Range Reconstruction Model for 3D Gated Imaging", *Proceedings of SPIE - The International Society for Optical Engineering* 8842, art. no. 88420R (2013).
12. Marcos Dantus, Vadim V. Lozovoy, "Laser based identification of molecular characteristics", United States Patent No. US 8618470 B2, Filing date Nov 29, 2006; Date of patent: Dec 31, 2013.
13. Marcos Dantus, Vadim V. Lozovoy, "Ultra-fast laser system", United States Patent No. US8633437 B2; Filing date Feb 14, 2006, Date of patent: Jan 21, 2014.
14. Marcos Dantus, Vadim V. Lozovoy, "Laser pulse synthesis system", United States Patent No. US8675699 B2, Filing date Jan 22, 2010; Date of patent: Mar 18, 2014.
15. Marcos Dantus, Vadim V. Lozovoy, "Laser system for output manipulation", United States Patent No. US8630322 B2, Filing date Feb 28, 2011; Publication date Jan 14, 2014.
16. Dantus; Marcos, Lozovoy; Vadim V., "Laser amplification system", United States Patent No. US 8861075B2, Filing date Mar 5, 2009, Date of patent: October 14, 2014
17. Dantus; Marcos, "Laser material processing system", United States Patent No. US 9018562B2, Filing date April 9, 2007, Date of patent: April 28, 2015

Статия A25 – 28 цитата

D. Neshev, A. Dreischuh, V. Kamenov, I. Stefanov, S. Dinev, W. Fließer, and L. Windholz, "Generation and intrinsic dynamics of ring dark solitary waves," *Appl. Phys.*, vol. B64, pp. 429-433 (1997).

Цитирана в:

1. Yu. S. Kivshar, B. Luther-Davies, "Dark Optical Solitons: Physics and Applications", *Physics Reports* 298, pp. 81-197 (1998).
2. P.G. Kevrekidis, H.E. Nistazakis, D.J. Frantzeskakis, B.A. Malomed, A.R. Bishop, "Ring solitons on vortices", *Phys. Rev. E* 64 (6), art. No. 066611, Part 2 (2001).

3. S. Chavez-Cerda, M. Iturbe Castillo, D. Sanchez-de-la-Llave, and R. Delgado Macuil, "Generation and Propagation of Ring Dark Spatial Solitons," *Proc. of the Congress of the Canadian Association of Physics* 2002, paper WE-A4-2 (June 2-6, 2002).
4. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
5. G. Theocharis, D. J. Frantzeskakis, P. G. Kevrekidis, B. A. Malomed, Yu. S. Kivshar, "Ring dark solitons and vortex necklaces in Bose-Einstein condensates," *Phys. Rev. Lett.* 90 (12), art. No. 120403 (1-4) (2003).
6. K. Staliunas, V. J. Sanchez-Morchoillo, "Transverse patterns in nonlinear optical resonators - Introduction", in *Springer Tracts in Modern Physics*, vol. 183, pp. 1-31 (2003) (Springer Verlag, 2003, ISBN 3540004343).
7. I. E. Papacharlampous, P. G. Kevrekidis, H. E. Nistazalis, D. J. Frantzeskakis, B. A. Malomed, "Elliptic Dark Solitons," *Physica Scripta*, Vol. 69, Nr. 1, pp. 7-14 (2004).
8. P. G. Kevrekidis, D. J. Frantzeskakis, "Pattern forming dynamical instabilities of Bose-Einstein condensates," *Modern Physics Lett.*, vol. B 18 (5-6), pp. 173-202 (2004);
9. Ju-Kui Xue, "The nonlinear evolution of ring dark solitons in Bose-Einstein condensates," *J. Phys. A: Math. Gen.*, vol. 37, pp. 11223-11228 (2004).
10. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp. 291-391.
11. P. G. Kevrekidis, R. Carretero-González, D. J. Frantzeskakis, I. G. Kevrekidis, "Vortices in Bose-Einstein Condensates: Some Recent Developments," *Modern Phys. Lett. B* vol. 18 (30), pp. 1481-1505 (2004);
12. L. D. Carr, Charles W. Clark, "Vortices and ring solitons in Bose-Einstein condensates," *Phys. Rev. A* 74, art. No. 043613 (1-14) (2006).
13. Chávez Cerda, S., Iturbe Castillo, M.D., Sánchez-de-la-Llave, D., Delgado Macuil, R.J., "Generation and propagation of ring dark spatial solitons", *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 4833, pp. 378-382 (2002).
14. Iturbe Castillo, M.D., Chávez Cerda, S.C., De La Llave, D.S., Delgado Macuil, R.J., "Ring dark solitons generated by phase and amplitude jumps", *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 4829, pp. 388-389 (2003).
15. L.D. Carr and J. Brand, "Multidimensional Solitons: Theory", in "Emergent Nonlinear Phenomena in Bose-Einstein Condensates. Theory and Experiment", Springer Series on Atomic, Optical, and Plasma Physics, Vol. 45, Kevrekidis, Panayotis G.; Frantzeskakis, Dimitri J.; Carretero-González, Ricardo (Eds.), 2008, ISBN: 978-3-540-73590-8
16. Frantzeskakis, D.J., "Dark solitons in atomic Bose-Einstein condensates: From theory to experiments", *Journal of Physics A: Mathematical and Theoretical* 43 (21), art. no. 213001 (2010).
17. Vaity, P., Singh, R.P., "Generation of quadrupoles through instability of dark rings in photorefractive media", *Journal of the Optical Society of America B: Optical Physics* 29 (8), pp. 2099-2102 (2012).
18. Elisabeth Rogl, "Spatial Rocking in a photorefractive cavity", MS Thesis, Graz University of Technology (2014).
19. Wenlong Wang, P.G. Kevrekidis, R. Carretero-Gonzalez, D. J. Frantzeskakis, Tasso J. Kaper, Manjun Ma, "Stabilization of ring dark solitons in Bose-Einstein condensates", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 92, Issue 3, Article number 033611 (2015).
20. S. K. Adhikari, "Stable and mobile two-dimensional dipolar ring-dark-in-bright Bose-Einstein condensate soliton", *Laser Physics Letters*, Volume 13, Issue 3, Article number 035502 (2016).
21. Danaila, I., Khamsehchi, M.A., Gokhroo, V., Engels, P., Kevrekidis, P.G., "Vector dark-antidark solitary waves in multicomponent Bose-Einstein condensates", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 94, Issue 5, Article number 053617 (2016).
22. P.G. Kevrekidis, Wenlong Wang, R. Carretero-Gonzalez, D.J. Frantzeskakis, "Adiabatic Invariant Approach to Transverse Instability: Landau Dynamics of Soliton Filaments", *Physical Review Letters*, Volume 118, Issue 24, Article number 244101 (2017).
23. Kevrekidis, P.G., Wang, W., Carretero-González, R., Frantzeskakis, D.J., "Adiabatic invariant analysis of dark and dark-bright soliton stripes in two-dimensional Bose-Einstein condensates", *Physical Review A*, Volume 97, Issue 6, Article number 063604 (2018).
24. Jheng, S.-D., Cheng, S.-C., Chen, T.-W., "Ring dark solitons in microcavity polariton condensates", *Solid State Communications*, 300, 113695 (2019). <https://doi.org/10.1016/j.ssc.2019.113695>
25. P. G. Kevrekidis, D. J. Frantzeskakis, and R. Carretero-González, "The Defocusing Nonlinear Schrödinger Equation: From Dark Solitons to Vortices and Vortex Rings", Philadelphia: Society for Industrial and Applied Mathematics, ISBN 9781611973938, 2015.
26. P. G. Kevrekidis, I. Danaila, J.-G. Caputo, R. Carretero-Gonzalez, "Planar and Radial Kinks in Nonlinear Klein-Gordon Models: Existence, Stability and Dynamics", *Physical Review E* 98(5) 052217 (2018); DOI: 10.1103/PhysRevE.98.052217
27. P. G. Kevrekidis, Wenlong Wang, G. Theocharis, D. J. Frantzeskakis, R. Carretero-González, and B. P. Anderson, "Dynamics of interacting dark soliton stripes," *Phys. Rev. A* 100, 033607 (2019); <https://doi.org/10.1103/PhysRevA.100.033607>

28. L. A. Cisneros-Ake, R. Carretero-González, and P. G. Kevrekidis, "Reduced dynamics for one and two dark soliton stripes in the defocusing nonlinear Schrödinger equation: A variational approach," *Physical Review Research* 1, 033043 (2019).; DOI: 10.1103/PhysRevResearch.1.033043

Статия A26 – 17 цитата

I. Velchev, A. Dreischuh, D. Neshev, S. Dinev, "Multiple-charged optical vortex solitons in bulk Kerr media," *Opt. Commun.*, vol. **140**, pp. 77-82 (1997).

Цитирана в:

1. Yu. S. Kivshar, B. Luther-Davies, "Dark Optical Solitons: Physics and Applications", *Physics Reports* 298, pp. 81-197 (1998).
2. A. A. Kalinovich, A. P. Sukhorukov, "Dynamics of parametrically coupled screw dislocations," *Izvestiya Akad. Nauk Seriya Fizicheskaya*, vol. 63, pp. 2411-2416 (1999).
3. L. Torner, J. P. Torres, D. V. Petrov, J. M. SotoCrespo, "From topological charge information to sets of solitons in quadratic non-linear media," *Opt. Quant. Electron.*, vol. 30, pp. 809-827 (1998).
4. I. G. Zakharova, A. A. Kalinovich, A. P. Sukhorukov, "Adaptation of transparent boundary conditions for simulation of wave mixing with walk-off," *Izvestiya Acad. Nauk Seriya Fizicheskaya*, vol. 64, pp. 2372-2375 (2000).
5. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
6. G.H.Kim, H.J. Lee, J.U.Kim, S.Hyyang, "Propagation dynamics of optical vortices with anisotropic phase profiles", *J.Opt.Soc.Am.*, vol.B20, pp.351-359 (2003).
7. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and VortexSolitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.
8. A. A. Mal'utin, "Gain saturation of laser beams and production and decay of phase dislocations," *Quant. Electron.*, vol. 36, No.2, pp. 139-144 (2006).
9. Yu. S. Kivshar, "Optical vortices and vortex solitons", *Proceedings of SPIE – The International Society for Optical Engineering*, vol. 5508, art.no. 03, pp. 16-31 (2004).
10. Sukhorukov, A.P., Yangirova, V.V., "Spatio-temporal vortices: Properties, generation and recording", *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 5949, art. no. 594906, pp. 1-9 (2005).
11. Калинович, Алексей Андреевич, "Динамика параметрического взаимодействия винтовых фазовых дислокаций", Диссертация, Ученая степень: кандидат физико-математических наук, Москва, 2005.
12. Romanov, O.G., Tolstik, A.L., "Multiwave mixing of singular light beams in resonant media", *Optics and Spectroscopy (English translation of Optika i Spektroskopiya)* 105 (5), pp. 753-757 (2008).
13. Ouyang, S.-G., "Optical vortex solitons in self-defocusing Kerr-type nonlocal medium", *Wuli Xuebao/Acta Physica Sinica* 62 (4) , art. no. 040504 (2013).
14. Zhong, W.-P., Belic, M., Zhang, Y., "Localized Airy Wave Packets in a Self-Defocusing Kerr Medium", *IEEE Photonics Journal*, 10(2), 6500709 (2018).
15. Braidotti, M.C., Faccio, D., Wright, E.M., "Penrose Superradiance in Nonlinear Optics", *Physical Review Letters* 125(19), 193902 (2020).
16. Miguel A. Porras, „Spatiotemporal optical vortex solitons: Dark solitons with transverse and tilted phase line singularities“, *Phys. Rev. A* 104, L061502 (2021); <https://doi.org/10.1103/PhysRevA.104.L061502>
17. Marcucci, G., Danieli, C., Conti, C., & Boyd, R. W. (2021). Vortex-beam Waveguide Lattices in Turbulent Kerr Media: Flat Bands, Anderson Localization of Light, and Topological Edge States. In *Nonlinear Optics* (pp. NM2A-2). Optica Publishing Group.

Статия A27 – 2 цитата

D. Neshev, A. Dreischuh, S. Dinev, L. Windholz, "Controllable branching of optical beams by quasi-two-dimensional dark spatial solitons," *J. Opt. Soc. Am.*, vol. **B14**, pp. 2869-2876 (1997).

Цитирана в:

1. Yu. S. Kivshar, B. Luther-Davies, "Dark Optical Solitons: Physics and Applications", *Physics Reports* 298, pp. 81-197 (1998).
2. Régis GRASSER, "Generation et propagation de reseaux periodiques de solitons spatiaux dans un milieu de Kerr massif," These présentée à L'U.F.R. des sciences et techniques de l'Université de Franche-Comte Pour obtenir le grade de Docteur, p. 204.

Статия A28 – 15 цитата

A. Dreischuh, V. Kamenov, S. Dinev, U. Reiter-Domiaty, D. Gruber, and L. Windholz, "Spectral and spatial evolution of a conical emission in Na vapor," *J. Opt. Soc. Am.*, vol. **B15**, pp. 34-40 (1998).

Цитирана в:

1. B. D. Paul, "Cone emission from single filaments: Theory and experiment", Ph.D.-Thesis, University of Colorado (1999).
2. B. DeBoo, D. F. Kimball, D. Budker, "Nonlinear optics in atomic Ytterbium", *CLEO/QELS* 1999.
3. B. D. Paul, M. L. Dowell, A. Gallagher, J. Cooper, "Observation of conical emission from a single self-trapped beam," *Phys. Rev.*, vol. A 59, pp.4784-4796 (1999).
4. B. DeBoo, D. F. Kimball, C.-H. Li, D. Budker, "Multichannel conical emission and parametric and nonparametric nonlinear optical processes in ytterbium vapour," *J. Opt. Soc. Am. B*, vol. B18, pp. 639-645 (2001).
5. B.D. Paul, J. Cooper, A. Gallagher, "Theory of optical near-resonant cone emission in atomic vapor", *Phys. Rev.*, vol. A66, art. No.063816 (Dec. 2002).
6. D. Aumiler, T.A. Ban, G. Pichler, "Conical emission in dense cesium vapor," *Digest of the Brijuni Conf. Expl. Fundamental Problems in Science* (Brijuni, Croatia, 30.07-03.09.2004, <http://www.brijuni-conference.irb.hr/aumiler04.htm>).
7. D. Aumiler, T.A. Ban, G. Pichler, "Femtosecond laser-induced cone emission in dense cesium vapor," *Phys. Rev. A* **71** (6), Art. No. 063803 (2005).
8. H. Skenderović, N. Vujičić, T. Ban, D. Aumiler, G. Pichler, "Conical emission from rubidium vapor pumped by fs laser," *Skradin'06 Workshop „Recent developments in low dimensional charge density wave conductors“*, Skradin, Croatia, June 29.-July 3. 2006, Book of Abstracts, p. 101.
9. Вислобоков, Никита Юрьевич, "Каналирование и сверхуширение частотного спектра мощных оптических импульсов при генерации электронной плазмы в прозрачных диэлектриках", Диссертация на соискание ученой степени кандидата физико-математических наук, Московский Государственный Университет, Москва, 2007.
10. Skenderović, H., Ban, T., Vujičić, N., Aumiler, D., Vdović, S., Pichler, G., "Cone emission induced by femtosecond excitation in rubidium vapor", *Physical Review A - Atomic, Molecular, and Optical Physics* **77** (6), art. no. 063816 (2008)
11. Zerom, P., Boyd, R.W., "Self-focusing, conical emission, and other self-action effects in atomic vapors", *Topics in Applied Physics* **114**, pp. 231-251 (2009).
12. Damir Aumiler, "Rezonantna interakcija atoma i molekula s femtosekundnim laserskim frekventnim češljem" (Resonant interaction of atoms and molecules with femtosecond laser frequency comb), PhD Thesis, Doktorska disertacija predložena Fizičkom odsjeku Prirodoslovno-matematičkog fakulteta Sveučilišta u Zagrebu radi stjecanja akademskog stupnja doktora prirodnih znanosti (fizika), Zagreb, 2006.
13. Silvije Vdović, "Nelinearni efekti interakcije lasera i atomskih para", PhD Thesis, Doktorska disertacija predložena Fizičkom odsjeku Prirodoslovno-matematičkog fakulteta Sveučilišta u Zagrebu radi stjecanja akademskog stupnja doktora prirodnih znanosti (fizika), Zagreb (2010).
14. Silvije Vdović, Hrvoje Skenderović, Goran Pichler, "Pulse reshaping in nearly resonant interaction of femtosecond pulses with dense rubidium vapor", *Optics Communications*, Volume 371, 231-237 (2016).
15. Smetanin, I.V.; Shutov, A.V.; Ustinovskii, N.N.; Zvorykin, V.D.; Bogatskaya, A.V.; Popov, A.M., "Monochromatic Conical IR Emission from Decaying KrF Laser Filaments in Xenon as Coherent Stimulated Four-Wave Mixing Process," *Photonics* **8**, 47 (2021); <https://doi.org/10.3390/photonics8020047>

Статия A29 – 5 цитата

A. Dreischuh, U. Reiter-Domiaty, D. Gruber, L. Windholz, and S. Dinev, "Nonlinear alignment between conical emissions generated in a four-wave parametric mixing process," *Appl. Phys. B*, vol. **B66**, pp. 175-180 (1998).

Цитирана в:

1. B. DeBoo, D. F. Kimball, C.-H. Li, D. Budker, "Multichannel conical emission and parametric and nonparametric nonlinear optical processes in ytterbium vapour," *J. Opt. Soc. Am. B*, vol. B18, pp. 639-645 (2001).
2. P. Gauthier, O. Gobert, M. Comte, "Modulational instability in atomic vapors," *Phys. Rev. A* **65** (3), art. No. 033834 Part B (March 2002).
3. D. Aumiler, T. Ban, and G. Pichler, "Femtosecond laser-induced cone emission in dense cesium vapor," *Phys. Rev. A* **71**, art. No. 063803-1(6) (2005).
4. Damir Aumiler, "Rezonantna interakcija atoma i molekula s femtosekundnim laserskim frekventnim češljem" (Resonant interaction of atoms and molecules with femtosecond laser frequency comb), PhD Thesis, Doktorska disertacija predložena Fizičkom odsjeku Prirodoslovno-matematičkog fakulteta Sveučilišta u Zagrebu radi stjecanja akademskog stupnja doktora prirodnih znanosti (fizika), Zagreb, 2006.
5. Li, Y., Ji, Z., Liu, J., Zeng, Z., Ge, X., Li, X., Li, R., Xu, Z., "Conical emission by femtosecond pulses with different spectral bandwidths", *Optics Communications* **281** (18), pp. 4780-4783 (2008).

Статия A30 – 17 цитата

D. Neshev, A. Dreischuh, M. Assa, S. Dinev, "Motion control of ensembles of ordered optical vortices generated on finite-extent background," *Opt. Commun.*, vol. **151**, pp. 413-421 (1998).

Цитирана в:

1. David Rozas, "Generation and propagation of optical vortices", Dissertation for PhD in Physics, Worcester Polytechnic Institute, 1999.
2. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
3. G.H.Kim, H.J. Lee, J.U.Kim, S.Hyyang, "Propagation dynamics of optical vortices with anisotropic phase profiles", *J. Opt. Soc. Am.*, vol.B20, pp.351-359 (2003).
4. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.
5. M. J. Paz-Alonso, H. Michinel, "Superfluidlike motion of vortices in light condensates," *Phys. Rev. Lett.* **94** (9), Art. No. 093901 (2005)
6. I. Maleev, "Partial coherence and optical vortices", Dissertation for PhD in Physics, Worcester Polytechnic Institute, 2004.
7. Chen, M., Roux, F.S., "Accelerating the annihilation of an optical vortex dipole in a Gaussian beam", *Journal of the Optical Society of America A: Optics and Image Science, and Vision* **25** (6), pp. 1279-1286 (2008).
8. Mingzhou Chen, "Optical vortex detection and strongly scintillated beam correction using vortex dipole annihilation", A thesis for the degree Philosophiae Doctor (Computer Engineering), Faculty of Engineering, University of Pretoria, 2008.
9. Shwa, D., Shtravasser, E., Shalibo, Y., Katz, N., "Controllable motion of optical vortex arrays using electromagnetically induced transparency", *Optics Express* **20** (22), pp. 24835-24842 (2012).
10. David Shwa, "Spatial and temporal control of light in atomic vapor", Thesis submitted for the degree of "Doctor of Philosophy", Hebrew University of Jerusalem (2014).
11. Miguel A. Porras and Francisco Ramos, "Quasi-ideal dynamics of vortex solitons embedded in flattop nonlinear Bessel beams", *Optics Letters*, Vol. 42, Issue 17, pp. 3275-3278 (2017)
12. Huishan Li, Shiquan Lai, Yunli Qui, Xing Zhu, Jianing Xie, Dumitru Mihalache, and Yingji He, "Stable dissipative optical vortex clusters by inhomogeneous effective diffusion," *Opt. Express* **25**, 27948-27967 (2017)
13. Shiquan Lai, Huishan Li, Yunli Qui, Xing Zhu, Dumitru Mihalache, Boris A. Malomed, Yingji He, "Generation of ring-shaped optical vortices in dissipative media by inhomogeneous effective diffusion", *Nonlinear Dynamics* Volume 93, Pages 2159-2168 (2018); ; DOI: 10.1007/s11071-018-4316-9
14. Qiu, Y., Malomed, B.A., Mihalache, D., Zhu, X., Peng, J., He, Y., "Generation of multivortex ring beams by inhomogeneous effective diffusion", *Chaos, Solitons and Fractals* **117**, pp. 30-36 (2018).
15. Y. Qiu, B. A. Malomed, D. Mihalache, X. Zhu, J. Peng, Y. He, "Generation of stable multi-vortex clusters in a dissipative medium with anti-cubic nonlinearity," *Physics Letters, Section A: General, Atomic and Solid State Physics*, Volume 383, Issue 22, Pages 2579-2583 (2019)
16. J. C. Tung, B. H. Chen, and C. K. Sung, "Adjustable rotation of multiple vortices produced by diode-pumped Nd:YVO₄ lasers using intracavity second harmonic generation," *Opt. Express* **31**, 40836-40844 (2023).; <https://doi.org/10.1364/OE.508108>
17. A. Paredes and H. Michinel, "Self-trapping of vortex crystals via competing nonlinearities," *Phys. Rev. E* **109**, 024216 (2024).; <https://link.aps.org/doi/10.1103/PhysRevE.109.024216>

Статья A32– 1 цитат

A. Dreischuh, G. Paulus, F. Zacher, I. Velchev, "Steering one-dimensional odd dark beams of finite length", *Appl. Phys.* vol. **B69**, pp. 113-117 (1999).

Цитирана в:

1. Sharma, M.K., Joseph, J., Senthikumar, P., "Fractional vortex dipole phase filter", *Applied Physics B: Lasers and Optics*, Volume 117, Issue 1, 325-332 (2014).

Статья A33 – 4 цитата

A. Dreischuh, G. G. Paulus, F. Zacher, "Quasi-two-dimensional dark spatial solitons and generation of mixed phase dislocations," *Appl. Phys.* vol. **B69**, pp.107-111 (1999).

Цитирана в:

1. K.Staliunas, V.J.Sanchez-Morchillo, "Transverse patterns in nonlinear optical resonators - Introduction", in *Springer Tracts in Modern Physics*, vol.183, pp.1-31 (2003) (Springer Verlag, 2003, ISBN 3540004343).
2. Sharma, M.K., Joseph, J., Senthikumar, P., "Fractional vortex dipole phase filter", *Applied Physics B: Lasers and Optics*, Volume 117, Issue 1, 325-332 (2014).
3. Sabatyan, A. & Gharbi, S., "Appearance of fractional vortex dipoles by using spiral linear zone plate", *Opt. Quant. Electron.*, Volume 49, Issue 6, Article number 226 (2017). doi:10.1007/s11082-017-1062-z
4. Arash Sabatyan, Maryam Fatehi, "Azimuthal-segmented linear zone plate: 1D beam structuring and topological charge detecting", *JOSA B*, Vol. 35, Issue 8, pp. 1747-1753 (2018).

Статья A34 – 45 цитата

A. Dreischuh, G. G. Paulus, F. Zacher, F. Grasbon, H. Walther, "Generation of multiple-charged optical vortex solitons in a saturable nonlinear medium," *Phys. Rev.* **E60**, pp. 6111-6117 (1999).

Цитирана в:

1. W. Krolikowski, O. Bang, "Solitons in nonlocal nonlinear media: exact results," *Phys. Rev. E* vol. 63, Art. No. 016610(1-6) (2000);
2. M. Soljačić, M. Segev, "Integer and Fractional Angular Momentum Borne on Self-Trapped Necklace-Ring Beams," *Phys. Rev. Lett.* **86**, pp. 420-423 (2001).
3. W. Krolikowski, O. Bang, J. Wyller, "Optical beams in nonlocal nonlinear media", *Acta Phys. Pol.*, vol. A103, pp.133-147 (2003).
4. M. Peccianti, C. Conti, G. Assanto, "Optical modulational instability in a nonlocal medium," *Physical Review E*, vol. **68**, Issue 2, Art. No. 025602 (2003).
5. C. Conti, M. Peccianti, G. Assanto, "Route to Nonlocality and Observation of Accessible Solitons," *Physical Review Letters*, vol. **91**, Issue 7, id. 073901 (2003).
6. W. Krolikowski, O. Bang, N. Nikolov, D. Neshev, J. Wyller, J. Rasmussen, D. Edmundson, "Modulational instability, solitons and beam propagation in spatially nonlocal nonlinear media," *J. Opt. B: Quantum Semiclass. Opt.*, vol. 6, pp. S288-S294 (2004).
7. G. Assanto, C. Conti, M. Peccianti, "Highly nonlocal optical solitons and their observation in nematic liquid crystals," *Internat. J. of Modern Physics*, vol. B 18 (20-21), pp. 2819-2828 (2004).
8. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
9. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.
10. M. Soljačić, "Instabilities in non-linear wave systems in optics," Dissertation presented to the Faculty of Princeton University in candidacy for the degree of Doctor of Philosophy, Department of Physics, Princeton (2000).
11. N. Nikolov, "Distributed nonlinear optical response", PhD Thesis, Technical University of Denmark, Informatics and Mathematical Modelling, Denmark (2004)
12. C. Rotschild, O. Cohen, O. Manela, M. Segev, and T. Carmon, "Solitons in Nonlinear Media with an Infinite Range of Nonlocality: First Observation of Coherent Elliptic Solitons and of Vortex-Ring Solitons," *Phys. Rev. Lett.* **95**, 213904(1-4) (2005).
13. Richard K. Owusu-Apenten, *Introduction to Food Chemistry*, CRC Press (2005), ISBN 084931724X.
14. L. Allen, S. Barnett, M.J. Padgett, Eds., *Optical Angular Momentum*, CRC Press (2003), ISBN 0750309016.
15. E. V. Doktorov, M. A. Molchan, "Modulational instability in nonlocal Kerr-type media with random parameters," *Phys. Rev. A* **75**, 053819 (2007).
16. M. A. Molchan, "Stability analysis of continuous waves in nonlocal random nonlinear media," *Symmetry, Integrability and geometry: Methods and Applications (SIGMA)* **3**, paper 083 (9 pages) (2007).
17. Kivshar, Y.S., "Optical vortices and vortex solitons", *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 5508, art.no. 03, pp. 16-31 (2004).
18. Rotschild, C., Cohen, O., Manela, O., Segev, M., Carmon, T., "Solitons in nonlinear media with infinite range of nonlocality: First observation of coherent elliptic solitons and vortex-ring solitons", *2005 Quantum Electronics and Laser Science Conference (QELS)*; Baltimore, MD; United States; 22 May 2005 through 27 May 2005 art. no. QTuL1, pp. 386-388 (2005)
19. W. Krolikowski, G. McCarthy, M. Saffman, O. Bang, J. Wyller, and J. Rasmussen, "Modulation instability in generalized nonlinear optical media", In: W. T. Arkin, Ed., "Trends in Laser and Electro-Optics Research", Nova Science Publishers Inc., New York (2006) pp. 257-275. ISBN 1-59454-498-0.
20. Rotschild, C., Cohen, O., Manela, O., Segev, M., Carmon, T., "Solitons in nonlinear media with infinite range of nonlocality: First observation of coherent elliptic solitons and bright vortex-ring solitons", *Nonlinear Guided Waves and Their Applications, NLGW 2005*; Dresden; Germany; 6 September 2005 through 6 September 2005; Code 107748 (2005)
21. E. V. Doktorov, M. A. Molchan, "Modulational instability of plane waves in non- Kerr media with random diffraction and nonlinearity," *Proceedings of SPIE - The International Society for Optical Engineering*, vol.6581, art. no. 65810M (2007).
22. Passier, R., Devaux, F., Chauvet, M., "Impact of tensorial nature of the electro-optic effect on vortex beam propagation in photorefractive media", *Optics Express* **16** (10), pp. 7134-7141 (2008).
23. Soto-Crespo, J.M., Akhmediev, N., Mejía-Cortés, C., Devine, N., "Dissipative ring solitons with vorticity", *Optics Express* **17** (6), pp. 4236-4250 (2009).
24. Doktorov, E.V., "Internal vibrations of nonlocal nonlinear Schrödinger soliton", *Physics Letters, Section A: General, Atomic and Solid State Physics* **374** (2), pp. 247-251 (2009).
25. Molchan, M.A., "Nonlocal solitons in the parametrically driven nonlinear Schrödinger equation: Stability analysis", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* **84** (5), art. no. 056603 (2011).
26. Ouyang, S.-G., "Optical vortex solitons in self-defocusing Kerr-type nonlocal medium", *Wuli Xuebao/Acta Physica Sinica* **62** (4), art. no. 040504 (2013).
27. Zhang, H., Xu, F., Zhu, D., Zhang, L., Xu, D., Tian, Y., "Soliton controlling and steering in asymmetric nonlocal media with optical lattices", *Optics Express* **22**(1), 995-1007 (2014).

28. L. Kavitha, M. Venkatesh, Saravanan M., Dhamayanthi S. and D. Gopi, "Breather-like director reorientations in a nematic liquid crystal with nonlocal nonlinearity", *Wave Motion*, Volume 51, Issue 3, Pages 476-488 (2014).
29. Feng-De Zong, Yu-Sheng Yan, and Sen-Ting Shen, "Higher-Order Modes of Modulation Instability in Bose-Einstein Condensates with a Time-Dependent Three-Dimensional Parabolic Potential", *J. Phys. Soc. Jpn.* 83 104002 (9 Pages) (2014).
30. Christian Kern, "Extreme nonlinear optics with spatially controlled light fields", Doctoral dissertation, Friedrich-Schiller-Universität Jena (2014). ISBN: 978-3-8325-3817-0.
31. L. Kavitha, M. Venkatesh, D. Gopid, "Shape changing nonlocal molecular deformations in a nematic liquid crystal system", *Journal of the Association of Arab Universities for Basic and Applied Sciences*, Volume 18, 1, Pages 29-45 (October 2015); DOI: 10.1016/j.jaubas.2014.03.002
32. W. Zhong, M. R. Belic and Y. Zhang, "Localized Airy wave-packets in a self-defocusing Kerr medium," *IEEE Photonics Journal*, vol. 10, no. 2, 6500709. doi: 10.1109/JPHOT.2018.2807920
33. Zhang, K., Liang, Y.-Z., Lin, J., Li, H.-J., "Controlling the stability of nonlinear optical modes via electromagnetically induced transparency", *Physical Review A*, Volume 97, Article number 023844 (2018).
34. Zhong, W.-P., Belic, M., Zhang, Y., "Localized Airy Wave Packets in a Self-Defocusing Kerr Medium", *IEEE Photonics Journal*, 10(2), 6500709 (2018).
35. Anna Butsch, "Optomechanical interactions in microstructured silica fibers", PhD Thesis, Fakultät der Friedrich-Alexander-Universität Erlangen-Nürnberg (2012).
36. Cristian Mejía-Cortés, "Two-Dimensional Optical Solitons in Dissipative Systems", for the degree of Doctor of Philosophy, Universidad Complutense de Madrid, Facultad de Ciencias Físicas, Madrid, 2012
37. Soljačić, M., Segev, M., "Integer and fractional angular momentum borne on self-trapped necklace-ring beams (Book Chapter), *Optical Angular Momentum*, Taylor & Francis Group, LLC., 2016; pp. 281-284
38. David S Simon, "Optical solitons", Chapter 7, "Tying Light in Knots", Morgan & Claypool Publishers (2018). <https://doi.org/10.1088/2053-2571/aaddd5>
39. Louis, Simon A., Thermal Solitary Waves, Doctor of Philosophy thesis, School of Mathematics and Applied Statistics, University of Wollongong, 2018. <https://ro.uow.edu.au/theses1/455>
40. Paredes, A., Olivieri, D.N., Michinel, H., "From optics to dark matter: A review on nonlinear Schrödinger-Poisson systems", *Physica D: Nonlinear Phenomena* 403, 132301 (2020).
41. Changming Huang, Hanying Deng, Liangwei Dong, Ce Shang, Bo Zhao, Qiangbo Suo and Xiaofang Zhou, "Optical solitons supported by finite waveguide lattices with diffusive nonlocal nonlinearity", *Chinese Physics B*, (2021); <https://doi.org/10.1088/1674-1056/abf555>
42. D. Simon, "Topology in Optics", IOP Publishing Ltd (2021); <https://doi.org/10.1088/978-0-7503-3471-6>
43. Zhang, K., Wen, W., Lin, J., & Li, H.-J., "Stability and controllability of various spatial solitons in Exciton-Polariton condensates by a composite pumping", *Frontiers in Physics*, 10 (2022).; doi:10.3389/fphy.2022.798562
44. Rao, A. S., "Saturation effects in nonlinear absorption, refraction, and frequency conversion: A review", *Optik* 267, 169638 (2022).; doi:10.1016/j.ijleo.2022.169638
45. F. Guo, W. Dai, "Model and numerical method for soliton propagation through thermal medium based on nonlinear Schrödinger and heat transfer equations," *Communications in Nonlinear Science and Numerical Simulation* 131, 107790 (2024).; <https://doi.org/10.1016/j.cnsns.2023.107790>

Статия А35 –19 цитата

A. Dreischuh, F. Grasbon, G. G. Paulus, F. Zacher, D. Neshev, H. Walther, "Modulational instability of multiple-charged optical vortex solitons under saturation of the nonlinearity," *Phys. Rev.* **E60**, pp. 7518-7524 (1999).

Цитирана в:

1. V.I. Berezhiani, S.M. Mahajan, Z. Yoshida, M. Pekker, "Dynamics of self-trapped singular beams in an underdense plasma," *Phys. Rev.* E65 (4), art. No. 046415 Part 2B (April 2002).
2. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
3. A. I. Maimitsov, "Propagation of an ultimately short electromagnetic pulse in nonlinear medium described by the fifth-order Duffing model," *Opt. & Spectroscopy* vol. 94, pp. 251-257 (2003) (Russian original: *Оптика и спектроскопия* т. 94, стр. 281-287 (2003)).
4. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.
5. E. V. Kazantseva, "The description of extremely short pulses in non-resonant media in frame of Maxwell-Duffing model," in *Nonlinear Waves: Classical and Quantum Aspects*, pp.361-372, F. Abdullaev, V. V. Konotop, Eds. (Springer Verlag, 2004, ISBN 1402021895).
6. Kivshar, Y.S., "Optical vortices and vortex solitons", *Proceedings of SPIE - The International Society for Optical Engineering*, vol.5508, art.no. 03, pp. 16-31 (2004).
7. Romanov, O.G., Tolstik, A.L., "Multiwave mixing of singular light beams in resonant media", *Optics and Spectroscopy (English translation of Optika i Spektroskopiya)* 105 (5), pp. 753-757 (2008).

8. Romanov, O.G., Tolstik, A.L., "Transformation of singular light beam transverse structure in resonant media", *Journal of Applied Spectroscopy* 75 (4), pp. 532-538 (2008).
9. Romanov, O.G., Tolstik, A.L., "Wave front transformation of optical vortices with multiwave interactions in resonant media", *Journal of Applied Spectroscopy* 76 (3), pp. 370-376 (2009).
10. Romanov, O.G., Tolstik, A.L., "Propagation, interaction, and instabilities of optical vortices in resonant media", *Nonlinear Phenomena in Complex Systems* 15 (4), pp. 326-338 (2012).
11. Ouyang, S.-G., "Optical vortex solitons in self-defocusing Kerr-type nonlocal medium", *Wuli Xuebao/Acta Physica Sinica* 62 (4), art. no. 040504 (2013).
12. Valery Serov, "Inverse fixed energy scattering problem for the generalized nonlinear Schrödinger operator", *Inverse Problems* 28 (2) (2012).
13. Fotopoulos, G., Serov, V., "Inverse fixed energy scattering problem for the two-dimensional nonlinear Schrödinger operator", *Inverse Problems in Science and Engineering*, Volume 24, Issue 4, Pages 692-710 (2016).
14. Valery Serov, "Fixed energy problem for nonlinear Schrödinger operator," *Journal of Physics Conference Series* vol. 1141, art. No. 012112 (2018). DOI: 10.1088/1742-6596/1141/1/012112
15. Saifollah Rasouli and Davud Hebri, "Theory of diffraction of vortex beams from 2D orthogonal periodic structures and Talbot self-healing under vortex beam illumination," *Journal of the Optical Society of America A* 36, pp. 800-808 (2019); <https://doi.org/10.1364/JOSAA.36.000800>
16. Boughdad, Omar. "Fluids of light in a nonlinear photorefractive medium." PhD diss., Ph. D. thesis, Université Côte d'Azur, 2020.
17. Miguel A. Porras, "Spatiotemporal optical vortex solitons: Dark solitons with transverse and tilted phase line singularities," *Phys. Rev. A* 104, L061502 (2021); <https://doi.org/10.1103/PhysRevA.104.L061502>
18. Simon, David S. *Topology in Optics: Tying light in knots*. IOP Publishing, 2021.
19. Kartashov, Y. V., Lashkin, V. M., Modugno, M., & Torner, L., "Spinor-induced instability of kinks, holes and quantum droplets", *New Journal of Physics*, 24(7) 073012 (2022).; doi:10.1088/1367-2630/ac7b9b

Статия A36 – 4 цитата

A. Dreischuh, D. Neshev, G. G. Paulus, H. Walther, "Experimental generation of steering odd dark beams of finite length," *J. Opt. Soc. Am. B*, vol. B17, pp. 2011-2017 (2000).

Цитирана в:

1. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
2. Baluyot, S.A.C., Hermosa II, N.P., "Intensity profiles and propagation of optical beams with bored helical phase", *Optics Express* 17 (18), pp. 16244-16254 (2009).
3. Sharma, M.K., Joseph, J., Senthikumar, P., "Fractional vortex dipole phase filter", *Applied Physics B: Lasers and Optics*, Volume 117, Issue 1, 325-332 (2014).
4. Sabatyan, A. & Gharbi, S., "Appearance of fractional vortex dipoles by using spiral linear zone plate", *Opt. Quant. Electron.*, Volume 49, Issue 6, Article number 226 (2017). doi:10.1007/s11082-017-1062-z

Статия A37– 3 цитата

D. Neshev, A. Dreischuh, G. G. Paulus, H. Walther, "Directional coupling of optical signals by odd dark beams with mixed phase dislocations," *Appl. Phys. B.*, vol. B72, pp. 849-854 (2001).

Цитирана в:

1. Sharma, M.K., Joseph, J., Senthikumar, P., "Fractional vortex dipole phase filter", *Applied Physics B: Lasers and Optics*, Volume 117, Issue 1, 325-332 (2014).
2. Alon Harel and Boris A. Malomed, "Interactions of spatial solitons with fused couplers" *Phys. Rev. A* 89, 043809 (2014).
3. Sabatyan, A. & Gharbi, S., "Appearance of fractional vortex dipoles by using spiral linear zone plate", *Opt. Quant. Electron.*, Volume 49, Issue 6, Article number 226 (2017). doi:10.1007/s11082-017-1062-z

Статия A38 – 49 цитата

A. Dreischuh, D. Neshev, G. G. Paulus, F. Grasbon, H. Walther, "Ring dark solitary waves: Experiment versus theory," *Phys. Rev. E* 66, art. No. 066611 (1-7) (2002).

Цитирана в:

1. H. E. Nistazakis, D. J. Frantzeskakis, B. A. Malomed, P. G. Kevrekidis, "Head-on collisions of ring dark solitons," *Phys. Lett.*, vol. A285, pp. 157-164 (2001).
2. P.G. Kevrekidis, H.E. Nistazakis, D.J. Frantzeskakis, B.A. Malomed, A.R. Bishop, "Ring solitons on vortices," *Phys. Rev. E* 64 (6), art. No. 066611 Part 2 (Dec. 2001).
3. G. Theocharis, D. J. Frantzeskakis, P. G. Kevrekidis, B. A. Malomed, Yu. S. Kivshar, "Ring dark solitons and vortex necklaces in Bose-Einstein condensates", *Phys. Rev. Lett.* 90 (12), art. No. 120403 (1-4) (March 2003).
4. I. E. Papacharlampous, P. G. Kevrekidis, H. E. Nistazakis, D. J. Frantzeskakis, B. A. Malomed, "Elliptic Dark Solitons," *Physica Scripta*, Vol. 69, Nr. 1, pp. 7-14 (2004).

5. P.G. Kevrekidis, D.J. Frantzeskakis, "Pattern forming dynamical instabilities of Bose-Einstein condensates: A short overview," *Modern Physics Lett.*, vol. B 18 (5-6), pp. 173-202 (2004);
6. N. P. Proukakis, N. G. Parker, D.J. Frantzeskakis, C. S. Adams, "Analogies between dark solitons in atomic Bose-Einstein condensates and optical systems," *J. Opt. B: Quantum Semiclass. Opt.*, vol. 6, pp. S380-S391 (2004).
7. Ju-Kui Xue, "The nonlinear evolution of ring dark solitons in Bose-Einstein condensates," *J. Phys. A: Math. Gen.*, vol. 37, pp. 11223-11228 (2004).
8. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and VortexSolitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.
9. P. G. Kevrekidis, R. Carretero-González, D. J. Frantzeskakis, I. G. Kevrekidis, "Vortices in Bose-Einstein Condensates: Some Recent Developments," *Modern Phys. Lett. B* vol.18 (30), pp. 1481-1505 (2004);
10. N. Parker, "Numerical Studies of Vortices and Dark Solitons in Atomic Bose-Einstein Condensates," Thesis for the degree of Doctor of Philosophy, Department of Physics, University of Durham (2004).
11. L. D. Carr, Charles W. Clark, "Vortices and ring solitons in Bose-Einstein condensates," *Phys. Rev. A* 74, art. No. 043613 (1-14) (2006).
12. S.-J. Yang, Q.-S. Wu, S.-N. Zhang, S. Feng, W. Guo, Y.-C. Wen, Y. Yu, "Generating ring dark solitons in an evolving Bose-Einstein condensate," *Physical Review A - Atomic, Molecular, and Optical Physics* 76 (6), art. no. 063606 (2007).
13. N.G. Parker, N.P. Proukakis, C.S. Adams, "Dark Soliton Dynamics in Confined Bose-Einstein Condensates, in: L.V. Chen, Ed., "Focus on Soliton Research", pp.1-49, (Nova Science Publishers, Inc., 2006). ISBN 1594545596
14. Leblond, H., "The reductive perturbation method and some of its applications", *Journal of Physics B: Atomic, Molecular and Optical Physics* 41 (4), art. no. 043001 (2008).
15. Hu, X.-H., Zhang, X.-F., Zhao, D., Luo, H.-G., Liu, W.M., "Dynamics and modulation of ring dark solitons in two-dimensional Bose-Einstein condensates with tunable interaction", *Physical Review A - Atomic, Molecular, and Optical Physics* 79 (2), art. no. 023619 (2009).
16. L.D. Carr and J. Brand, "Multidimensional Solitons: Theory", in "Emergent Nonlinear Phenomena in Bose-Einstein Condensates. Theory and Experiment", Springer Series on Atomic, Optical, and Plasma Physics , Vol.45, Kevrekidis, Panayotis G.; Frantzeskakis, Dimitri J.; Carretero-González, Ricardo (Eds.), 2008, ISBN: 978-3-540-73590-8.
17. Frantzeskakis, D.J., "Dark solitons in atomic Bose-Einstein condensates: From theory to experiments", *Journal of Physics A: Mathematical and Theoretical* 43 (21), art. no. 213001 (2010).
18. Kamchatnov, A.M., Korneev, S.V., "Dynamics of ring dark solitons in Bose-Einstein condensates and nonlinear optics", *Physics Letters, Section A: General, Atomic and Solid State Physics* 374 (45), pp. 4625-4628 (2010).
19. Shou, Q., Guo, Q., "Theoretical study on large phase shift of strongly nonlocal spatial optical soliton and its application design", *Wuli Xuebao/Acta Physica Sinica* 60 (7), art. no. 074215 (2011).
20. Song, S.-W., Wang, D.-S., Wang, H., Liu, W.M., "Generation of ring dark solitons by phase engineering and their oscillations in spin-1 Bose-Einstein condensates", *Physical Review A - Atomic, Molecular, and Optical Physics* 85 (6), art. no. 063617 (2012).
21. Toikka, L.A., Suominen, K.-A., "Snake instability of ring dark solitons in toroidally trapped Bose-Einstein condensates", *Physical Review A - Atomic, Molecular, and Optical Physics* 87 (4), art. no. 043601 (2013).
22. Song, S.-W., Wen, L., Liu, C.-F., Gou, S.-C., Liu, W.-M., Ground states, solitons and spin textures in spin-1 Bose-Einstein condensates", *Frontiers of Physics* 8 (3), pp. 302-318 (2013).
23. Toikka, L.A., "Self-interference of a toroidal Bose-Einstein condensate", *New Journal of Physics*, Volume 16, Article number 043011 (2014).
24. Корнеев, Святослав Вячеславович, „Нелинейная динамика атомных и поляритонных бозе-конденсатов“, Диссертация на соискание ученой степени кандидата физико-математических наук, Троицк, 2011
25. Wenlong Wang, P.G. Kevrekidis, R. Carretero-Gonzalez, D. J. Frantzeskakis, Tasso J. Kaper, Manjun Ma, "Stabilization of ring dark solitons in Bose-Einstein condensates", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 92, Issue 3, Article number 033611 (2015).
26. Theodoros P. Horikis and Dimitrios J. Frantzeskakis, "Ring dark and anti-dark solitons in nonlocal media", *Optics Letters*, Volume 41, Issue 3, 583-586 (2016).
27. Theodoros P. Horikis, Dimitrios J. Frantzeskakis, "Asymptotic reductions and solitons of nonlocal nonlinear Schrödinger equations", *Journal of Physics A: Mathematical and Theoretical*, Volume 49, Issue 20, Article number 205202 (2016).
28. Danaila, I., Khamehchi, M.A., Gokhroo, V., Engels, P., Kevrekidis, P.G., "Vector dark-antidark solitary waves in multicomponent Bose-Einstein condensates", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 94, Issue 5, Article number 053617 (2016).
29. Chen, W., Wang, Q., Shi, J., Kong, Q., Chen, Y., Shen, M., "Stabilization of two-dimensional dark and anti-dark solitons in a nonlocal media", *Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume 50, Issue 13, Article number 135401 (2017).

30. P.G. Kevrekidis, Wenlong Wang, R. Carretero-Gonzalez, D.J. Frantzeskakis, "Adiabatic Invariant Approach to Transverse Instability: Landau Dynamics of Soliton Filaments", *Physical Review Letters*, Volume 118, Issue 24, Article number 244101 (2017).
31. Kevrekidis, P.G., Wang, W., Carretero-González, R., Frantzeskakis, D.J., "Adiabatic invariant analysis of dark and dark-bright soliton stripes in two-dimensional Bose-Einstein condensates", *Physical Review A*, Volume 97, Issue 6, Article number 063604 (2018).
32. Jheng, S.-D., Cheng, S.-C., Chen, T.-W., "Ring dark solitons in microcavity polariton condensates", *Solid State Communications*, 300, 113695 (2019).
33. Wang, L.-X., Dai, C.-Q., Wen, L., Liu, T., Jiang, H.-F., Saito, H., Zhang, S.-G., Zhang, X.-F., "Dynamics of vortices followed by the collapse of ring dark solitons in a two-component Bose-Einstein condensate", *Physical Review A*, Volume 97, Article number 063607 (2018).
34. T.P. Horikis, D.J. Frantzeskakis, "On the Properties of a Nonlocal Nonlinear Schrödinger Model and Its Soliton Solutions". In: Rassias T. (eds) Applications of Nonlinear Analysis. Springer Optimization and Its Applications, vol 134, Pages 403-446 (Springer, Cham, 2018).
35. P. G. Kevrekidis, D. J. Frantzeskakis, and R. Carretero-González, "The Defocusing Nonlinear Schrödinger Equation: From Dark Solitons to Vortices and Vortex Rings", *Philadelphia: Society for Industrial and Applied Mathematics*, ISBN 9781611973938, 2015.
36. P. G. Kevrekidis, I. Danaila, J.-G. Caputo, R. Carretero-Gonzalez, "Planar and Radial Kinks in Nonlinear Klein-Gordon Models: Existence, Stability and Dynamics", *Physical Review E* 98(5) 052217 (2018); DOI: 10.1103/PhysRevE.98.052217
37. Ward, C.B., Mylonas, I.K., Kevrekidis, P.G., Frantzeskakis, D.J., "Solitary waves of the two-dimensional Camassa-Holm - Nonlinear Schrödinger equation", *Journal of Physics A: Mathematical and Theoretical* 51(49), 495202 (2018).
38. P. G. Kevrekidis, Wenlong Wang, G. Theocharis, D. J. Frantzeskakis, R. Carretero-González, and B. P. Anderson, „Dynamics of interacting dark soliton stripes,” *Phys. Rev. A* 100, 033607 (2019); <https://doi.org/10.1103/PhysRevA.100.033607>
39. Zhang-Ming He, L. Wen, Ya-Jun Wang, G. P. Chen, R.-B. Tan, C.-Q. Dai, and Xiao-Fei Zhang, "Dynamics and pattern formation of ring dark solitons in a two-dimensional binary Bose-Einstein condensate with tunable interactions," *Phys. Rev. E* 99, 062216 (2019). DOI: 10.1103/PhysRevE.99.062216
40. L. A. Cisneros-Ake, R. Carretero-González, and P. G. Kevrekidis, "Reduced dynamics for one and two dark soliton stripes in the defocusing nonlinear Schrödinger equation: A variational approach," *Physical Review Research* 1, 033043 (2019).; DOI: 10.1103/PhysRevResearch.1.033043
41. Koutsokostas, G.N., Horikis, T.P., Frantzeskakis, D.J., Prinari, B., Biondini, G., "Multiscale expansions and vector solitons of a two-dimensional nonlocal nonlinear Schrödinger system", *Studies in Applied Mathematics* Volume145, Issue4 739-764 (2020). <https://doi.org/10.1111/sapm.12334>
42. Koutsokostas, G. N., Horikis, T. P., Frantzeskakis, D. J., Antar, N., & Bakırtaş, İ., "Water Waves and Light: Two Unlikely Partners," Book chapter in *Nonlinear Optics - From Solitons to Similaritons*, IntechOpen (2021); <http://dx.doi.org/10.5772/intechopen.95431>
43. G. Yang, S. Xie, Y. Zhao, J. Jin, S. Zhang, „Dynamics of ring dark solitons in a two-dimensional dipolar Bose–Einstein condensate,” *Physica A: Statistical Mechanics and its Applications*, 609, 128398 (2022).; <https://doi.org/10.1016/j.physa.2022.128398>.
44. Gao, K., Liu, W., Yin, J., Wang, J., & Zhan, M. (2022). *Advances in Precision Laser Spectroscopy*. Walter de Gruyter GmbH & Co KG.
45. Liu, Wuming, Zhang, Xiaopei, Wu, Wei and Chen, Yaohua. "1 Cold atoms physics". *Volume 2 Advances in Precision Laser Spectroscopy*, Berlin, Boston: De Gruyter, 2022, pp. 1-138. <https://doi.org/10.1515/9783110304473-001>
46. Tu, P., Wang, Q., Shao, K., Zhao, Y., Ma, J., Su, R., & Shi, Y., "Rydberg-dressed Bose–Einstein condensate with spin–orbit coupling confined in a radially periodic potential," *Journal of Physics B: Atomic, Molecular and Optical Physics* 56, 15LT01 (2023).; <https://iopscience.iop.org/article/10.1088/1361-6455/ace66e>
46. H. Tamura, C.-A. Chen, and C.-L. Hung, "Observation of Self-Patterned Defect Formation in Atomic Superfluids - from Ring Dark Solitons to Vortex Dipole Necklaces," *Phys. Rev. X* 13 (3), 031029 (2023).; <https://link.aps.org/doi/10.1103/PhysRevX.13.031029>
47. L. Wang, H. Liu, H. Yang, S. Chen, P. Tu, L. Wen, X. Yang, X.-F. Zhang, "Exploring ring dark soliton dynamics in Rydberg-dressed Bose–Einstein condensate," *Chaos, Solitons & Fractals* 181, 114664 (2024).; <https://doi.org/10.1016/j.chaos.2024.114664>.
48. L.-Y. Chen, H.-Y. Wu, L.-H. Jiang, "Partially nonlocal ring-like spatiotemporal superimposed second-order breathers under a harmonic potential," *Chaos, Solitons & Fractals* 181, 114657 (2024).; <https://doi.org/10.1016/j.chaos.2024.114657>.
49. Yu Zhu, Jing Yang, Zezhou Chen, Wei Qin, and Jitao Li, "Ring-like partially nonlocal extreme wave of a (3+1)-dimensional NLS system with partially nonlocal nonlinearity and external potential," *Chaos, Solitons & Fractals* 182, 114750 (2024).; <https://doi.org/10.1016/j.chaos.2024.114750>.

G. G. Paulus, F. Grasbon, A. Dreischuh, H. Walther, R. Kopold, W. Becker, "Above-threshold ionization by an elliptically polarized field: Interplay between electronic quantum trajectories", *Phys. Rev. Lett.* **vol. 84**, pp. 3791-3794 (2000).

Цитирана в:

1. R. M. Portvliege, N. J. Kylstra, C. J. Joachain, "Photon emission by He^+ in intense ultrashort laser pulses," *J. Phys. B*, vol. 33, # 20, pp. L743-L748 (2000).
2. E. Cornier, D. Garzella, P. Breger, P. Agostini, G. Cheriaux, C. Leblanc, *J. Phys. B*, vol. 34, # 2, pp. L9-L17 (2001).
3. V. D. Mur, S. V. Popruzhenko, V. S. Popov, "Energy and momentum spectra of photoelectrons under conditions of ionization by strong laser radiation (The case of elliptic polarization)," *J. of Exp. And Theor. Physics*, vol. 95, # 5, pp. 777-788 (2001).
4. B. Borca, M. V. Frolov, N. L. Manakov, A. F. Starace, "Threshold effects on angular distributions for multiphoton detachment by intense elliptically polarized light," *Phys. Rev. Lett.* 8713 (13), p. 3001-+ (Sept. 2001), art. No. 133001.
5. R. Reichle, H. Helm, I.Y. Kiyan, "Photodetachment of H^- in a strong infrared laser field," *Phys. Rev. Lett.* 87 (24), art. No. 243001 (Dec. 2001).
6. H. Bachau, E. Cornier, P. Decleva, J.E. Hansen, F. Martín, "Application of B-splines in atomic and molecular physics," *Reports on Progress in Physics* 64 (12), pp. 1815-1943 (Dec. 2001).
7. Bogdan Borca, Channel coupling and threshold effects on multiphoton processes involving a weakly bound electron interacting with an intense laser field", PhD Thesis, University of Nebraska, Lincoln, Nebraska (2001).
8. W. M. H. Stremme, "Erzeugung kohärenter kurzwelliger Strahlung mit ultrakurzen Laserpulsen, " Diplomarbeit der Fakultät für Physik der Ludwig-Maximilians-Universität München, 2002.
9. Rainer Reichle, "Exotic Species of Hydrogen", Inaugural-Dissertation zur Erlangung des Doktorgrades der Fakultät für Mathematik und Physik der Albert-Ludwigs-Universität Freiburg i.Br., 2002
10. N. L. Manakov, M. V. Frolov, B. Borca, A. F. Starace, "Topical review: Multiphoton detachment of a negative ion by an elliptically polarized, monochromatic laser field," *Journal of Physics B: Atomic, Molecular, and Optical Physics*, vol. 36, Issue 9, pp. R49-R124 (2003).
11. N. I. Shvetsov-Shilovski, S. V. Popruzhenko, S. P. Goreslavski, "Asymmetric emission of rescattered photoelectrons in intense laser fields with elliptical polarization," *Laser Phys.* vol. 13 (8), pp. 1054-1063 (2003).
12. A. Pukhov, S. Gordienko, T. Baeva, "Temporal structure of attosecond pulses from intense laser-atom interactions," *Phys. Rev. Lett.* vol. 91 (17): Art. No. 173002 (2003).
13. D. B. Milosevic, F. Ehlotzky, "Scattering and reaction processes in powerful laser fields," *Adv. Atom Mol. Opt. Phys.* vol. 49, pp. 373-532 (2003).
14. J. G. Eden, "High-order harmonic generation and other intense optical field-matter interactions: Review of recent experimental and theoretical advances," *Progress in Quant. Electron.*, vol. 28 (3-4), pp. 197-246 (2004).
15. A. Becker, F. H. M. Faisal, "Intense-field many-body S-matrix theory," *J. Phys. B: At. Mol. Opt. Phys.*, vol. B 38, pp. R1-R56 (2005).
16. V. S. Popov, "Tunnel and multiphoton ionization of atoms and ions in a strong laser field (Keldysh theory)," *Physics-uspekhi*, vol. 47 (9), pp. 855-885 (2004).
17. F. Lindner, "Atoms in intense ultrashort laser pulses and the absolute phase," Fakultät für Physik der Ludwig-Maximilians-Universität München, Dissertation for the degree of Doctor of Philosophy (München, April 2004).
18. A. Scrinzi, M.Yu. Ivanov, R. Kienberger, and D. M. Villeneuve, "Attosecond physics," *J. Phys. B: At. Mol. Opt. Phys.* 39, pp. R1-R37 (2006); DOI:10.1088/0953-4075/39/1/R01.
19. A. Popa, "On the classical approximation of the interaction between electrons and very intense laser beam," *Romanian Reports in Physics*, vol. 57, No. 4, pp. 913-918 (2005).
20. E. Brunetti, R. Isaac, D. A. Jaroszynski, "Quantum path interference in high harmonic generation," *31st EPS Conference on Plasma Phys.* London, 28 June - 2 July 2004 ECA, vol.28G, P-5.018 (2004).
21. R. Reichle, I. Yu. Kiyan, H. Helm, "Two-slit interference in strong-field photodetachment of H^- ," *Journal of Modern Optics*, vol. 50, pp. 461-470 (2003).
22. E. Gubbini, "Multiple Ionization of Heavy Atoms in Super Strong Laser Fields," Dissertation zur Erlangung des akademischen Grades Doktorin der Naturwissenschaften (Dr. rer. nat.), Technische Universität Berlin (2005).
23. S. Moßmann, "Resonanzen in Stark- und Wannier-Stark-Systemen," Diplomarbeit am Fachbereich Physik der Universität Kaiserslautern (2001).
24. V. V. Strelkov, "Theory of high-order harmonic generation and attosecond pulse emission by a low-frequency elliptically polarized laser field," *Phys. Rev. A* vol. 74 (1): Art. No. 01305 (2006).
25. Pierre Jaeglé, *Coherent Sources of Xuv Radiation: Soft X-ray Lasers And High-order Harmonic Generation*, Springer Verlag (2006); ISBN 0387230076.
26. J. C. Retamal, M. Orszag, *Modern Challenges in Quantum Optics: Selected Papers of the First International Meeting in Quantum Optics*, Santiago, Chile, 13-16 Aug. 2000, Springer Verlag (2001), ISBN 3540419578.

27. Xie, X., Wickenhauser, M., Boutu, W., Merdji, H., Salières, P., Scrinzi, A., “Subcycle dynamics in the laser ionization of molecules”, *Physical Review A - Atomic, Molecular, and Optical Physics* 76 (2), art. no. 023426 (2007)
28. Chen, L., She, W., “Arbitrary-to-linear or linear-to-arbitrary polarization controller based on Faraday and Pockels effects in a single BGO crystal”, *Optics Express* 15 (23), pp. 15589-15594 (2007).
29. A. S. Alnaser, D.Comtois, A.T. Hasan, D.M.Villeneuve, J.-C. Kieffer and I.V. Litvinyuk, “Strong-field non-sequential double ionization: wavelength dependence of ion momentum distributions for neon and argon”, *J. Phys. B: At. Mol. Opt. Phys.* 41 (3), 1-5 (2008); doi:10.1088/0953-4075/41/3/031001
30. E. Brunetti, R. Isaac, D. A. Jaroszynski, “Quantum path contribution to high-order harmonic spectra”, *Physical Review A - Atomic, Molecular, and Optical Physics* 77 (2), Article number 023422 (29 February 2008).
31. Popruzhenko, S.V., Bauer, D. ‘Strong field approximation for systems with Coulomb interaction “, *Journal of Modern Optics* 55 (16), pp. 2573-2589(2008).
32. Maciej Lewenstein and Anne L’Huillier, “Principles of single atom physics: High-order harmonic generation, above-threshold ionization and non-sequential ionization“, in Brabec, Thomas (Ed.), “Strong Field Laser Physics”, *Springer Series in Optical Sciences* vol.134, pp. 147-183 (2008), Springer Berlin / Heidelberg, ISBN: 978-0-387-40077-8
33. Karnakov, B.M., Mur, V.D., Popov, V.S., “On the keldysh ionization theory for ultrashort laser pulses “, *JETP Letters* 88 (7), pp. 423-427 (2008).
34. Magrakvelidze, M., He, F., De, S., Bocharova, I., Ray, D., Thumm, U., Litvinyuk, I.V., “Angular dependence of the strong-field ionization measured in randomly oriented hydrogen molecules“, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 79, Issue 3, , Article number 033408 (2009).
35. Martiny, C.P.J., Abu-Samha, M., Madsen, L.B., “Counterintuitive angular shifts in the photoelectron momentum distribution for atoms in strong few-cycle circularly polarized laser pulses”, *Journal of Physics B: Atomic, Molecular and Optical Physics* 42 (16), art. no. 161001 (2009).
36. Wang, H., Chini, M., Khan, S.D., Chen, S., Gilbertson, S., Feng, X., Mashiko, H., Chang, Z., “Practical issues of retrieving isolated attosecond pulses”, *Journal of Physics B: Atomic, Molecular and Optical Physics* 42 (13), art. no. 134007 (2009).
37. Légaré, F., Bocharova, I.A., Lassonde, P., Karimi, R., Sanderson, J.H., Johnston, T., Kieffer, J.-C., Litvinyuk, I.V., “Inelastic rescattering processes in molecules measured with few-cycle laser pulses”, *Journal of Physics B: Atomic, Molecular and Optical Physics* 42 (23), art. no. 235601 (2009).
38. Maia Magrakvelidze, “Nuclear dynamics and ionization of diatomic molecules in intense laser fields”, A Thesis for the degree Master of Science, Department of Physics, College of Arts and Sciences , Kansas State University, Manhattan, Kansas, 2009 .
39. Irina A. Bocharova, “Laser coulomb explosion imaging of molecular dynamics”, A Thesis for the degree Doctor of Philosophy (Ph. D.) -- Department of Physics, College of Arts and Sciences , Kansas State University, Manhattan, Kansas, 2009 .
40. Wang, He, “From few-cycle femtosecond pulse to single attosecond pulse-controlling and tracking electron dynamics with attosecond precision”, A Thesis for the degree Doctor of Philosophy (Ph. D.) -- Department of Physics, College of Arts and Sciences , Kansas State University, Manhattan, Kansas, 2010 .
41. Huismans, Y., Rouzée, A., Gijsbertsen, A., Jungmann, J.H., Smolkowska, A.S., Logman, P.S.W.M., Lépine, F., Cauchy, C., Zamith, S., Marchenko, T., Bakker, J.M., Berden, G., Redlich, B., Van Der Meer, A.F.G., Muller, H.G., Vermin, W., Schafer, K.J., Spanner, M., Ivanov, M.Yu., Smirnova, O., Bauer, D., Popruzhenko, S.V., Vrakking, M.J.J., “Time-resolved holography with photoelectrons”, *Science* 331 (6013), pp. 61-64 (2011).
42. Karnakov, B.M., Mur, V.D., Popov, V.S., Popruzhenko, S.V., “Ionization of atoms and ions by intense laser radiation”, *JETP Letters* 93 (4), pp. 238-249 (2011).
43. Швецов-Шиловский, Николай Иванович, “Эффекты взаимодействия в конечном состоянии в спектрах надпороговой ионизации атомов и отрицательных ионов интенсивным лазерным полем”, Диссертация кандидата физико-математических наук : 01.04.02 Москва, 2005 115 с. : 61 06-1/237
44. Christian Per Juul Martiny, “Strong-field ionization of atoms and molecules by short femtosecond laser pulses”, PhD thesis, Department of Physics and Astronomy, Aarhus University, August 2010.
45. Zhang, D.-L., Tang, Q.-B., Yu, B.-H., Chen, D., “Nonsequential double ionization of argon atom below the recollision threshold”, *Wuli Xuebao/Acta Physica Sinica* 60 (5), art. no. 053205 (2011).
46. Bian, X.-B., Huismans, Y., Smirnova, O., Yuan, K.-J., Vrakking, M.J.J., Bandrauk, A.D., “Subcycle interference dynamics of time-resolved photoelectron holography with midinfrared laser pulses”, *Physical Review A - Atomic, Molecular, and Optical Physics* 84 (4), art. no. 043420 (2011).
47. Фролов, Михаил Владимирович, „Аналитическая теория взаимодействия атомных систем с сильным световым полем“, Диссертация на соискание ученой степени доктора физико-математических наук, Воронеж, 2011
48. Liu, C., Hatsagortyan, K.Z., “Coulomb focusing in above-threshold ionization in elliptically polarized midinfrared strong laser fields”, *Physical Review A - Atomic, Molecular, and Optical Physics* 85 (2) , art. no. 023413 (2012).

49. Shvetsov-Shilovski, N.I., Dimitrovski, D., Madsen, L.B., "Ionization in elliptically polarized pulses: Multielectron polarization effects and asymmetry of photoelectron momentum distributions", *Physical Review A - Atomic, Molecular, and Optical Physics* 85 (2) , art. no. 023428 (2012).
50. Huismans, Y., "Probing structure and dynamics with photoelectrons generated in strong fields", A Thesis for the degree Doctor of Philosophy (Ph. D.), Radboud Universiteit Nijmegen, 2012
51. Wu, J., Meckel, M., Voss, S., Sann, H., Kunitski, M., Schmidt, L.Ph.H., Czasch, A., Kim, H., Jahnke, T., Dörner, R., "Coulomb asymmetry in strong field multielectron ionization of diatomic molecules", *Physical Review Letters* 108 (4) , art. no. 043002 (2012).
52. Spanner, M., Gräfe, S., Chelkowski, S., Pavičić, D., Meckel, M., Zeidler, D., Bardon, A.B., Ulrich, B., Bandrauk, A.D., Villeneuve, D.M., Dörner, R., Corkum, P.B., Staudte, A., "Coulomb asymmetry and sub-cycle electron dynamics in multiphoton multiple ionization of H²", *Journal of Physics B: Atomic, Molecular and Optical Physics* 45 (19), art. no. 194011 (2012).
53. Yu Ben-Hai Li Ying-Bin Tang Qing-Bin, „The nonsequential double ionization of argon atoms with elliptically polarized laser pulse”, *Wuli Xuebao/Acta Physica Sinica* 61 (20) , art. no. 203201 (2012).
54. Yu, B.-H., Li, Y.-B., "Laser intensity dependence of nonsequential double ionization of argon atoms by elliptically polarized laser pulses", *Wuli Xuebao/Acta Physica Sinica* 61 (23), art. no. 233201 (2012).
55. C. J. Joachain, N. J. Kylstra, R. M. Portvliege, "Atoms in intense laser fields", Cambridge University Press, Cambridge, ISBN: 978-051199345-9;978-052179301-8 (2012).
56. Саранцева, Татьяна Сергеевна, "Аналитическая теория генерации высших гармоник лазерного излучения атомными системами в приближении эффективного радиуса", Диссертация на соискание ученой степени кандидата физико-математических наук, Воронеж, 2012
57. Yu, B., Li, Y., "Dependence of strong-field double ionization of xenon atoms by elliptically polarized laser pulses on carrier-envelope phase", *Guangxue Xuebao/Acta Optica Sinica* 33 (2) , art. no. 0202001 (2013).
58. Yu, B., Li, Y., Li, F., „Nonsequential double ionization of Xe atoms by elliptically polarized few-cycle laser pulses", *Guangxue Xuebao/Acta Optica Sinica* 33 (6) , art. no. 0602001 (2013).
59. Т. С. Саранцева, М. В. Фролов, "Генерация высших гармоник эллиптически поляризованным полем: метод эффективного радиуса", Вестник ВГУ, Серия Физика, Математика, 2012, No.1, 58- 65, УДК 539.122.2
60. Huismans, Y., Cormier, E., Cauchy, C., Hervieux, P.-A., Gademann, G., Gijbbersen, A., Ghafur, O., Johnsson, P., Logman, P., Barillot, T., Bordas, C., Lépine, F., Vrakking, M.J.J., „Macro-atom versus many-electron effects in ultrafast ionization of C⁶⁰", *Physical Review A - Atomic, Molecular, and Optical Physics* 88 (1) , art. no. 013201 (2013).
61. Doblhoff-Dier, K., Dimitriou, K.I., Staudte, A., Gräfe, S., „Classical analysis of Coulomb effects in strong-field ionization of H² + by intense circularly polarized laser fields", *Physical Review A - Atomic, Molecular, and Optical Physics* 88 (3) , art. no. 033411 (2013).
62. Tian-Min Yan, "Trajectory-Based Coulomb-Corrected Strong Field Approximation", PhD Thesis, Universitaet Rostock, 18051 Rostock, Germany (2013).
63. Lépine, F., Ivanov, M.Y., Vrakking, M.J.J., "Attosecond molecular dynamics: Fact or fiction? (Review)", *Nature Photonics*, Volume 8, Issue 3, Pages 195-204 (2014).
64. Bian, X.-B., Bandrauk, A.D., "Orientation-dependent forward-backward photoelectron holography from asymmetric molecules", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 89, Issue 3, Article number 033423 (2014).
65. Frolov, M.V., Knyazeva, D.V., Manakov, N.L., Geng, J.-W., Peng, L.-Y., Starace, A.F., "Analytic model for the description of above-threshold ionization by an intense short laser pulse", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 89, Issue 6, Article number 063419 (2014).
66. Hart, N.A., Strohaber, J., Kaya, G., Kaya, N., Kolomenskii, A.A., Schuessler, H.A., "Intensity-resolved above-threshold ionization of xenon with short laser pulses", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 89, Issue 5, Article number 053414 (2014).
67. Bian, X.-B., Bandrauk, A.D., "Atomic and molecular photoelectron holography in strong laser fields", *Chinese Journal of Physics*, Volume 52, Issue 1, Pages 569-577 (2014).
68. S V Popruzhenko, "Keldysh theory of strong field ionization: history, applications, difficulties and perspectives", *J. Phys. B: At. Mol. Opt. Phys.* 47 204001 (2014).
69. Karnakov, B.M., Mur, V.D., Popruzhenko, S.V., Popov, V.S., "Current progress in developing the nonlinear ionization theory of atoms and ions", *Physics-Uspekhi*, Volume 58, Issue 1, Pages 3-32 (2015)
70. Li, Z.L., Lu, D., Xie, B.S., Shen, B.F., Fu, L.B., Liu, J., "Nonperturbative signatures in pair production for general elliptic polarization fields", *EPL*, Volume 110, Issue 5, 1 June 2015, Article number 51001 (2015).
71. Sergei V. Popruzhenko (Сергей Васильевич Попруженко), Doctor of Science degree. Thesis "Nonperturbative methods in theory of nonlinear ionization and generation of high harmonics in intense laser fields", National Research Nuclear University *Moscow Engineering Physics Institute*, Moscow, Russia, 2011, <http://theor.mephi.ru/documents/poprz-thesis-final.pdf>
72. Strelkov, V.V., Platonenko, V.T., Sterzhantov, A.F., Yu Ryabikin, M., " Attosecond electromagnetic pulses: Generation, measurement, and application. Generation of high-order harmonics of an intense laser field for attosecond pulse production (Review)", *Physics-Uspekhi*, Volume 59, Issue 5, Pages 425-445 (2016).

73. Song, Q., Li, Z., Cui, S., Lu, P., Gong, X., Ji, Q., Lin, K., Zhang, W., Ma, J., Pan, H., Ding, J., Kling, M.F., Zeng, H., He, F., Wu, J., “Disentangling the role of laser coupling in directional breaking of molecules (Article)”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 94, Issue 5, Article number 053419 (2016).
74. Xiao, X.-R., Wang, M.-X., Li, M., Geng, J.-W., Liu, Y., Peng, L.-Y., “ Semiclassical methods for strong field ionization of atoms”, *Wuli Xuebao/Acta Physica Sinica*, Volume 65, Issue 22, Article number 220203 (2016).
75. Raphael Kuhnen, “Electron wave packet interference and directed emission of electrons in a two color laser field”, PhD Thesis, Fakultät fuer Mathematik und Physik der Albert-Ludwigs-Universität, Freiburg im Breisgau (2012).
76. C.M. Maharjan, “Momentum imaging studies of electron and ion dynamics in a strong laser field”, PhD Thesis, Department of Physics, College of Arts and Sciences, Kansas State University, Manhattan, Kansas, 2007.
77. Tong, X.-M., „A three-dimensional time-dependent Schrödinger equation solver: An application to hydrogen atoms in an elliptical laser field”, *Journal of Physics B: Atomic, Molecular and Optical Physics*, 50(14), 144004 (2017).
78. N. I. Shvetsov-Shilovski, M. Lein, “Effects of the Coulomb potential in interference patterns of strong-field holography with photoelectrons”, *Physical Review A*, Volume 97, Article number 013411 (2018)
79. Christian Kohlfürst, Reinhard Alkofer, “Ponderomotive effects in multiphoton pair production”, *Phys. Rev. D* 97, 036026 (2018).
80. Facheng Jin, Fei Li, Yujun Yang, Jing Chen, Xiaojun Liu, and Bingbing Wang, “Angle-resolved photoelectron energy spectrum from the high-order above-threshold ionization process in IR+XUV two-color laser fields,” *Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume 51, Number 24, art. Nr. 245601 (2018). <https://iopscience.iop.org/article/10.1088/1361-6455/aaecdc>
81. Simon Brennecke, Manfred Lein, “High-order above-threshold ionization beyond the electric dipole approximation”, *Journal of Physics B Atomic Molecular and Optical Physics*, Volume 51, Issue 9, Article number 094005 (2018); doi: 10.1088/1361-6455/aab91f
82. J. Hofbrucker, A. V. Volotka, and S. Fritzsche, „Maximum Elliptical Dichroism in Atomic Two-Photon Ionization”, *Phys. Rev. Lett.* 121, 053401 (2018).
83. Brennecke, S., Lein, M., “High-order above-threshold ionization beyond the electric dipole approximation: Dependence on the atomic and molecular structure”, *Physical Review A*, Volume 98, Issue 6, Article number 063414 (2018).
84. Jin, F., Li, F., Yang, Y., Chen, J., Liu, X., Wang, B., „ Angle-resolved photoelectron energy spectrum from the high-order above-threshold ionization process in IR+XUV two-color laser fields”, *Journal of Physics B: Atomic, Molecular and Optical Physics* 51(24), 245601 (2018).
85. Renping Sun, Xuanyang Lai, Shaogang Yu, Yanlan Wang, SongPo Xu, Wei Quan, and Xiaojun Liu, “Tomographic Extraction of the Internuclear Separation Based on Two-Center Interference with Aligned Diatomic Molecules,” *Physical Review Letters* 122(19), art. # 193202 (2019); DOI: 10.1103/PhysRevLett.122.193202
86. Brennecke, S., Eicke, N., Lein, M., “Gouy's Phase Anomaly in Electron Waves Produced by Strong-Field Ionization”, *Physical Review Letters*, Volume 124, Issue 15, Article number 153202 (2020).
87. Emilio Pisanty, Marcelo F. Ciappina, and Maciej Lewenstein, „The imaginary part of the high-harmonic cutoff,” *J. Phys. Photonics* 2, 034013 (2020).
88. Janko Nauta, Jan-Hendrik Oelmann, Alexander Ackermann, Patrick Knauer, Ronja Pappenberger, Andrii Borodin, Isa Shams Muhammad, Hans Ledwa, Thomas Pfeifer, and José Crespo López-Urrutia, “100 MHz frequency comb for low-intensity multi-photon studies: intra-cavity velocity-map imaging of xenon”, *Optics Letters* 45(8), pp. 2156-2159 (2020)
89. Satya Sainadh, U., Sang, R.T., Litvinyuk, I.V., “Attoclock and the quest for tunnelling time in strong-field physics”, *J. Phys. Photonics* 2, 042002 (2020).
90. Hofbrucker, J. (2020). *Two-photon ionization of many-electron atoms* (Doctoral dissertation), Jena. <https://doi.org/10.22032/dbt.44410>
91. B.P. Acharya, M. Dodson, S. Dubey, K.L. Romans, A.H.N.C. De Silva, K. Foster, O. Russ, K. Bartschat, N. Douguet, D. Fischer, “Magnetic Dichroism in Few-Photon Ionization of Polarized Atoms”, *Phys. Rev. A* 104, 053103 (2021).; <https://doi.org/10.1103/PhysRevA.104.053103>
92. Acharya, B. P. *Complete experiments on multi-photon ionizations of ultra-cold and polarized atoms*. Missouri University of Science and Technology ProQuest Dissertation & Theses, (2021). 28652705.
93. Sánchez, A., “Laser-induced electron interferences from atoms and molecules”, Tesi doctoral, UPC, Institut de Ciències Fotòniques, 2022. DOI 10.5821/dissertation-2117-376734.
94. Brennecke, S. (2023). Electron momentum distributions from strong-field-induced ionization of atoms and molecules”, Hannover: Gottfried Wilhelm Leibniz Universität, Diss., 2023, viii, 270 S., DOI: <https://doi.org/10.15488/13718>
95. C. Granados, C.-. Hsiao, M. F. Ciappina, and K. J. Karki, „Decoding phase and time-dependent interferograms of high-order harmonics,” (2023). *arXiv preprint arXiv:2308.04631*.

Статия А40 – 45 цитата

A. Dreischuh, S. Chervenkov, D. Neshev, G. G. Paulus, H. Walther, "Generation of lattice structures of optical vortices," *J. Opt. Soc. Am.*, vol. B19, pp. 550-556 (2002).

Цитирана в:

1. Yu. S. Kivshar, G. P. Agrawal, *Optical Solitons: From Fibers to Photonic Crystals*, (Academic Press, San Diego, CA, USA, 2003).
2. K.Staliunas, V.J.Sanchez-Morchillo, "Transverse patterns in nonlinear optical resonators - Introduction", in Springer Tracts in Modern Physics, vol.183, pp.1-31 (2003). (Springer Verlag, 2003, ISBN 3540004343).
3. E. F. Schonbrun, R. Piestun, "Optical lattice site manipulation by vortex phase singularities," *Proc. SPIE*, Vol. 5508, pp. 32-40 (2004).
4. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and VortexSolitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.
5. J. Courtial, R. Zambrini, M. R. Dennis, and M. Vasnetsov, "Angular momentum of optical vortex arrays," *Opt. Express*, vol. 14, pp. 938-949 (2006).
6. E. Schonbrun, R. Piestun, "Optical vortices for localized optical lattice site manipulation," *Optical Engineering*, vol. 45 (2), art. # 028001 (2006).
7. Roux, F.S. "Optical vortex density limitation", *Optics Communications* 223 (1-3), pp. 31-37 (2003).
8. E. Schonbrun, R. Piestun, "Optical vortices in quasi-periodic optical lattices", *Quantum Electronics and Laser Science Conference (QELS)* 1, art. no. QThK2, pp. 679-681 (2005).
9. Jia, S., Fleischer, J.W., "Nonlinear light propagation in rotating waveguide arrays", *Conference on Quantum Electronics and Laser Science (QELS) - Technical Digest Series*, art. no. 4553121 (2008).
10. Chu, S.-C., Yang, C.-S., Otsuka, K., "Vortex array laser beam generation from a Dove prism-embedded unbalanced Mach-Zehnder interferometer", *Optics Express* 16 (24), pp. 19934-19949 (2008).
11. Bekshaev, A.Ya., Karamoch, A.I., "Astigmatic telescopic transformation of a high-order optical vortex", *Optics Communications* 281 (23), pp. 5687-5696 (2008).
12. Chu, S.-C., "Generation of vortex array laser beams with Dove prism embedded unbalanced Mach-Zehnder interferometer", *Proceedings of SPIE - The International Society for Optical Engineering* 7227, art. no. 72270L (2009)
13. Jia, S., Fleischer, J.W., "Nonlinear light propagation in rotating waveguide arrays", *Physical Review A - Atomic, Molecular, and Optical Physics* 79 (4), art. no. 041804 (2009)
14. Wei, G.-X., Lu, L.-L., Guo, C.-S., "Generation of optical vortex array based on the fractional Talbot effect", *Optics Communications* 282 (14), pp. 2665-2669 (2009).
15. Middelkamp, S., Kevrekidis, P.G., Frantzeskakis, D.J., Carretero-González, R., Schmelcher, P., "Bifurcations, stability, and dynamics of multiple matter-wave vortex states", *Physical Review A - Atomic, Molecular, and Optical Physics* 82 (1), art. no. 013646 (2010).
16. Law, K.J.H., Kevrekidis, P.G., Tuckerman, L.S., "Stable vortex-bright-soliton structures in two-component bose-einstein condensates", *Physical Review Letters* 105 (16), art. no. 160405 (2010).
17. J. Stockhofe, S. Middelkamp, P. G. Kevrekidis and P. Schmelcher, Impact of anisotropy on vortex clusters and their dynamics", *EPL (Europhysics Letters)* 93(2), art. no. 20008 doi: 10.1209/0295-5075/93/20008 (2011).
18. Roux, F.S., "Evolution of optical vortex distributions in stochastic vortex fields", *Proceedings of SPIE - The International Society for Optical Engineering* 7950, art. No. 79500T (2011).
19. Torres, P.J., Carretero-González, R., Middelkamp, S., Schmelcher, P., Frantzeskakis, D.J., Kevrekidis, P.G., "Vortex interaction dynamics in trapped bose-einstein condensates", *Communications on Pure and Applied Analysis* 10 (6), pp. 1589-1615 (2011).
20. Xavier, J., Vyas, S., Senthilkumar, P., Joseph, J., "Complex 3D vortex lattice formation by phase-engineered multiple beam interference", *International Journal of Optics* vol. 2012, art. No. 863875 (2012).
21. Xavier, J., Vyas, S., Senthilkumar, P., Joseph, J., "Tailored complex 3D vortex lattice structures by perturbed multiples of three-plane waves", *Applied Optics* 51 (12), pp. 1872-1878 (2012).
22. Yu, J., Zhou, C., Jia, W., Hu, A., Cao, W., Wu, J., Wang, S., "Three-dimensional Dammann vortex array with tunable topological charge", *Applied Optics* 51 (13), pp. 2485-2490 (2012).
23. Gaididei, Y., Volkov, O.M., Kravchuk, V.P., Sheka, D.D., "Magnetic vortex-antivortex crystals generated by spin-polarized current", *Physical Review B - Condensed Matter and Materials Physics* 86 (14), art. no. 144401 (2012).
24. M. Pola, J. Stockhofe, P. Schmelcher, and Panos Kevrekidis, "Vortex-bright-soliton dipoles: Bifurcations, symmetry breaking, and soliton tunneling in a vortex-induced double well" *Physical Review A* 86.5 (2012).
25. Yan, D., Carretero-González, R., Frantzeskakis, D.J., Kevrekidis, P.G., Proukakis, N.P., Spirn, D., "Exploring vortex dynamics in the presence of dissipation: Analytical and numerical results", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 89, Issue 4, Article number 043613 (2014).
26. Cheng, K., Jiao, L., Zhong, X., "A comparison of far-field properties of radial noncanonical vortex airy beam arrays and radial noncanonical vortex Gaussian beam arrays", *Optics Communications*, Vol. 367, 112-122 (2016).
27. Alexey P. Porfirev and Svetlana N. Khonina, "Simple method for efficient reconfigurable optical vortex beam splitting", *Optics Express*, Vol. 25, Issue 16, pp. 18722-18735 (2017).

28. David Shwa, "Spatial and temporal control of light in atomic vapor", Thesis submitted for the degree of "Doctor of Philosophy", Hebrew University of Jerusalem (2014).
29. Stephan Middelkamp, "Nonlinear excitations in Bose-Einstein condensates", PhD Thesis, Universität Hamburg, Hamburg (2010).
30. Knyazev, B., Kameshkov, O., Vinokurov, N., Cherkassky, V., Choporova, Y., Pavelyev, V. "Quasi-Talbot effect with vortex beams and formation of vortex beamlet arrays", *Optics Express*, Volume 26, Issue 11, Pages 14174-14185 (2018).
31. S. Supp, J. Jahns, "Coaxial superposition of Bessel beams by discretized spiral axicons", *Journal of the European Optical Society*, Volume 14, Article number 18 (2018).
32. P. G. Kevrekidis, D. J. Frantzeskakis, and R. Carretero-González, "*The Defocusing Nonlinear Schrödinger Equation: From Dark Solitons to Vortices and Vortex Rings*", Philadelphia: Society for Industrial and Applied Mathematics, ISBN 9781611973938, 2015.
33. Čubrović, M. & Petrović, M., "Vortex dynamics of counterpropagating laser beams in photorefractive materials", *Opt. Quant. Electron.* 50: 406 (2018). <https://doi.org/10.1007/s11082-018-1667-x>
34. A. B. Ortega, S. Bucio-Pacheco, S. Lopez-Huidobro, L. Perez-Garcia, F. J. Poveda-Cuevas, J. A. Seman, A. V. Arzola, and K. Volke-Sepúlveda, "Creation of optical speckle by randomizing avortex-lattice," *Optics Express* 27, No. 4, pp. 4105-4115 (2019). DOI: 10.1364/OE.27.004105
35. Karen Volke-Sepúlveda, Argelia Balbuena Ortega, Sebastián Bucio-Pacheco, Santiago López-Huidobro, Laura Pérez-García, Alejandro V. Arzola, Adrián Huerta-Hernández, Jorge A. Seman, Alexis Domínguez-Castro, and Rosario Paredes "Dynamics of vortex propagation in wave fields: from order to disorder and beyond", *Proc. SPIE* 10935, Complex Light and Optical Forces XIII, 109350S (1 March 2019); doi: 10.1117/12.2512303; <https://doi.org/10.1117/12.2512303>
36. Ruchi, P. Senthilkumaran, and Sushanta Kumar Pal, „Phase Singularities to Polarization Singularities,“ *International Journal of Optics* vol. 2020, 2812803, (2020). <https://doi.org/10.1155/2020/2812803>
37. Malomed, B. A., "Two-dimensional solitons in nonlocal media: a brief review", *Symmetry*, 14(8), 1565 (2022).
38. Ortega, A. B., Vélez-Juárez, E., & Volke-Sepúlveda, K., "Structure transitions in arrays of point-vortices upon free space propagation", *Journal of Optics*, 24(12), 124004 (2022).
39. Wang, H., Szekerczes, K., & Afanasev, A., "Electromagnetic vortex topologies from sparse circular phased arrays", *Journal of Physics Communications*, 6(2), 025005 (2022).
40. Chen, S., & Su, G., "Existence of vortices for Schrödinger equations with logarithmic and saturable nonlinearity", *Journal of Mathematical Physics*, 63(10) (2022).
41. Malomed, B. A. (2022). Multidimensional Solitons in Nonlocal Media. In *Multidimensional Solitons* (pp. 13-1). Melville, New York: AIP Publishing LLC.; DOI: https://doi.org/10.1063/9780735425118_013
42. Malomed, B. A. (2022). Spatially Periodic Potentials (Lattices): Experiments. In *Multidimensional Solitons* (pp. 8-1). Melville, New York: AIP Publishing LLC.
43. Zhang, S., Ma, J., Li, P., Zhou, Z., Gu, Y., & Wu, Z., "Hexagonal optical lattices formed by coherent interference among three fundamental Gaussian beams with oblique incidence", *Results in Physics*, 45, 106245 (2023).
44. Liang, Z., Li, S., & Li, X., "Periodic and quasi-periodic solutions of a four-dimensional singular differential system describing the motion of vortices". *Advances in Nonlinear Analysis*, 12(1), 20220287 (2023).
45. Liang, Z., Wang, F., & Zhu, H., "Twist dynamics of vortex interaction in a time-periodic deformation flow," *Annali di Matematica Pura ed Applicata (1923-)*, 1-19. (2024).

Статья A41 – 23 цитата

F. Lindner, G. G. Paulus, F. Grasbon, A. Dreischuh, H. Walther, "Dispersion control in a 100-kHz-repetition-rate 30-fs Ti:sapphire regenerative amplifier system," *IEEE J. Quant. Electron.*, vol. QE-38, pp. 1465-1470 (2002).

Цитирана в:

1. Wolfgang M. H. Stremme, "Erzeugung kohärenter kurzwelliger Strahlung mit ultrakurzen Laserpulsen, " Diplomarbeit der Fakultät für Physik der Ludwig-Maximilians-Universität München, 2002.
2. Delmar Photonics Inc., Chirped-Pulse Amplification, Site: http://www.femtosecondsystems.com/products/display_terms.php/1/1/5/39
3. E. Eremina, "Electron correlation in multiple ionization of atoms and molecules by intense ultra-short laser pulses," Dissertation zur Erlangung des akademischen Grades Doktorin der Naturwissenschaften (Dr. rer. nat.), Technische Universität Berlin, Berlin (2005).
4. K. Hong, S. Kostritsa, T. Yu, J. Sung, I. Choi, Y. Noh, D. Ko, and J. Lee, "100-kHz high-power femtosecond Ti:Sapphire laser based on downchirped regenerative amplification," *Opt. Express*, vol. 14, pp. 970-978 (2006).
5. Yu Oishi, A. Suda, K. Midorikawa, F. Kannari, "Sub-10 fs, multimillijoule laser system," *Rev. Sci. Instrum.*, vol. 76, art. # 093114 (2005).
6. K. H. Hong, S. Kostritsa, T. J. Yu, J. H. Sung, I. W. Choi, Y. C. Noh, D. K. Ko, J. Lee, "Development and characterization of 100-kHz high-peak-power femtosecond laser based on downchirped regenerative amplification," *J. of the Korean Physical Society* vol. 49 (1), pp. 424-429, Part 1 (2006).

7. Stephen J. Walker, "Development and Characterization of a Regeneratively Amplified Ultrafast Laser System with an All-Glass Stretcher and Compressor," A thesis presented to the University of Waterloo in fulfillment of the thesis requirement for the degree of Master of Science in Physics, Waterloo, Ontario, Canada, 2006.
8. I. Pastirk, B. Resan, A. Fry, J. MacKay, M. Dantus, "No loss spectral phase correction and arbitrary phase shaping of regeneratively amplified femtosecond pulses using MIIPS," *Opt. Express*, vol. **14**, pp. 9537-9543 (2006).
9. M. G. Schätzel, "Mehrphotonen-Ionisationsprozesse mit intensiven Laserpulsen," Dissertation an der Fakultät für Physik der Ludwig-Maximilians-Universität München, Deutschland (2006).
10. J. Zheng, C. Zhou, E. Dai, "Double-line-density gratings structure for compression and generation of double femtosecond laser pulses," *J. Opt. Soc. Am. B* 24 (4), pp. 979-984 (2007).
11. K. H. Hong, T. J. Yu, S. Kostitsa, J. H. Sung, I. W. Choi, Y. C. Noh, D. K. Ko, J. Lee, "Development of a 100-kHz femtosecond high-power laser using down-chirped regenerative amplification," *Laser Physics* 16 (4), pp. 673-677 (2006).
12. I. Pastirk, M. Dantus, "No loss spectral phase correction and arbitrary phase shaping of regeneratively amplified femtosecond pulses using MIIPS", Conference on Lasers and Electro-Optics and 2006 Quantum Electronics and Laser Science Conference, *CLEO/QELS 2006*; Long Beach, CA; United States; 21 May 2006 - 26 May 2006; Article number 4628148
13. J.J. Field, T.A. Planchon, W. Amir, C.G. Durfee, J.A. Squier, "Characterization of a high efficiency, ultrashort pulse shaper incorporating a reflective 4096-element spatial light modulator", *Optics Communications* 278 (2), pp. 368-376 (2007).
14. K. Osvay, K. Varjú, G. Kurdi, "High order dispersion control for femtosecond CPA lasers", *Applied Physics B: Lasers and Optics* 89 (4), pp. 565-572 (2007).
15. Hong, K.-H., Yu, T.J., Kostitsa, S., Sung, J.H., Choi, I.W., Noh, Y.-C., Ko, D.-K., Lee, J., "Downchirped regenerative amplification of femtosecond laser pulses at 100 khz repetition rate", *Springer Series in Optical Sciences* 132, pp. 493-501 (2007).
16. Juergen Kolenda, Christian Maus, "Pulse Shaping with the MIIPS-Process", *Photonik International*, pp.68-70 (2008); www.coherent.com/Downloads/PulseShaping_photonik07.pdf
17. Impulse Optics, Inc., Femtosecond Lasers, Pulse Measurement, Site <http://www.impulsoptics.com/terms/prism-compressor.html>
18. Borchers, B., Anderson, A., Steinmeyer, G., "On the role of shot noise in carrier-envelope phase stabilization", *Laser and Photonics Reviews*, Volume 8, Issue 2, Pages 303-315 (2014).
19. Martin Glimtoft, "Contrast Enhancement of Femtosecond Terawatt Laser Pulses by Preamplification and Temporal Pulse Cleaning", Lund Reports on Atomic Physics, LRAP-352, Lund, January 2006
20. A. Beyertt, „Yb:KYW regenerativer Verstärker für ultrakurze Pulse“, „Laser in der Materialbearbeitung Forschungsberichte des IFSW“ Serie, Herbert Utz Verlag GmbH, München (2010); ISBN 978-3-8316-4002-7
21. Bastian Borchers, "Pushing Frontiers in Carrier-Envelope Phase Stabilization of Ultrashort Laser Pulses", Dissertation zur Erlangung des akademischen Grades Dr. rer. nat. im Fach Physik, Humboldt-Universität zu Berlin (2014).
22. Rune Lausten, „Probing Molecular Dynamics with Non-linear Optical Techniques“, PhD Thesis, Queen's University, Kingston, Ontario, Canada (2011).
23. Sung, J.H., Lee, H.W., Nam, C.H., Lee, S.K., "100-kHz 22-fs Ti:sapphire regenerative amplification laser with programmable spectral control", *Applied Physics B: Lasers and Optics*, Volume 122, Issue 5, Article number 125 (2016).

Статья A42 –103 цитата

E. Eremina, X. Liu, H. Rottke, W. Sandner, A. Dreischuh, F. Lindner, F. Grasbon, G.G. Paulus, H. Walther, R. Moshhammer, B. Feuerstein, J. Ullrich, "Laser-induced non-sequential double ionization investigated at and below the threshold for electron impact ionization," *J. Phys. B: At. Mol. Opt. Phys.* vol. **36**, pp. 3269-3280 (2003).

Цитирана в:

1. A. M. Popov, O. V. Tikhonova, E. A. Volkova, "Scattering of an electron wave packet by an atom and two-electron photoionization in the presence of a strong laser field," *Laser Phys.* vol. 14 (2), pp. 200-208 (2004).
2. D. B. Milosevic, W. Becker, "Classical cutoffs for laser-induced non-sequential double ionization," *Phys. Rev. A* 68 (6): Art. No. 065401 (2003).
3. M. Weckenbrock, D. Zeidler, A. Staudte, Th. Weber, M. Schöffler, M. Meckel, S. Kammer, M. Smolarski, O. Jagutzki, V. R. Bhardwaj, D. M. Rayner, D. M. Villeneuve, P. B. Corkum, R. Dörner, "Fully differential rates for femtosecond multiphoton double ionization of neon," *Phys. Rev. Lett.*, vol. 92, No. 21, Art. No. 213002 (1-4) (2004).
4. C. F. D. Faria, H. Schomerus, X. Liu, et al. "Electron-electron dynamics in laser-induced nonsequential double ionization," *Phys. Rev.*, vol A69 (4): Art. No. 043405 (2004).
5. S. L. Haan, J. C. Cully, K. Hoekema, "Speed-up collisions in strong-field double ionization," *Optics Express*, vol. 12 (20), pp. 4758-4767 (2004).
6. C. F. D. Faria, X. Liu, A. Sanpera, A. Lewenstein, "Classical and quantum-mechanical treatments of nonsequential double ionization with few-cycle laser pulses," *Phys. Rev.*, vol. A70 (4): Art. No. 043406 (2004).

7. P. J. Ho, R. Panfili, S. L. Haan, J. H. Eberly, "Nonsequential double ionization as a completely classical photoelectric effect," *Phys. Rev. Lett.* 94 (9): Art. No. 093002 (2005).
8. J. S. Prauzner-Bechcicki, K. Sacha, B. Eckhardt, J. Zakrzewski, "Nonsequential double ionization of molecules," *Phys. Rev. A*, vol. 71 (3): Art. No. 033407 Part B (2005).
9. J. S. Prauzner-Bechcicki, K. Sacha, B. Eckhardt, "Nonsequential double ionization of molecules in a strong laser field," *Laser Physics*, vol. 15 (4), pp. 497-501 (2005).
10. D. Zeidler, M. Weckenbrock, A. Staudte, Th. Weber, M. Schöder, M. Meckel, S. Kammer, M. Smolarski, O. Jagutzki, V. R. Bhardwaj, D. M. Rayner, D. M. Villeneuve, P. B. Corkum, and R. Dörner, "Fully differential rates for femtosecond multiphoton double ionization of neon," *Proc. SPIE*, vol. 5579, pp. 708-714 (2004).
11. R. Wiehle, "Experimental Examination of Ionization Processes of Noble Gases in Strong Laser Fields," Dissertation zur Erlangung des Doktorgrades der Fakultät für Mathematik und Physik, Albert-Ludwigs-Universität, Freiburg (2005).
12. K. Zrost, "Wechselwirkung von Atomen und kleinen Molekülen mit intensiven, ultra-kurzen Laserpulsen," Dissertation zur Erlangung der Doktorwürde der Naturwissenschaftlich-Mathematischen Gesamtfakultät der Ruprecht-Karls-Universität, Heidelberg (2005).
13. M. G. Schätzel, "Mehrphotonen-Ionisationsprozesse mit intensiven Laserpulsen," Dissertation an der Fakultät für Physik der Ludwig-Maximilians-Universität München, Deutschland (2006).
14. P. J. Ho, "Laser intensity dependence of ion momentum distribution in strong-field double ionization," *Physical Review A - Atomic, Molecular, and Optical Physics* 72 (4), Art. No. 045401 (2005).
15. D. Zeidler, A. B. Bardon, A. Staudte, D. M. Villeneuve, R. Dörner, P. B. Corkum, "Alignment independence of the instantaneous ionization rate for nitrogen molecules," *Journal of Physics B* vol. 39 (7), pp. L159-L166 (2006).
16. C. Beylerian, S. Saugout, C. Cornaggia, "Non-sequential double ionization of H₂ using ultrashort 10 fs laser pulses," *Journal of Physics B* vol. 39 (6), pp. L105-L112 (2006).
17. J. S. Parker, B. J. S. Doherty, K. T. Taylor, K. D. Schultz, C. I. Blaga, L. F. DiMauro, "High-energy cutoff in the spectrum of strong-field nonsequential double ionization," *Phys. Rev. Lett.* vol. 96 (13), Art. No. 133001 (2006).
18. Sebastian Dewald, „Erzeugung intensiver Lichtfelder mit einem Laseroszillator und deren Wechselwirkung mit Atomen,” Dissertation zur Erlangung der Doktorwürde der Naturwissenschaftlich-Mathematischen Gesamtfakultät der Ruprecht-Karls-Universität Heidelberg, Deutschland, 2006.
19. S. L. Haan, L. Breen, A. Karim, and J. H. Eberly, "Variable Time Lag and Backward Ejection in Full-Dimensional Analysis of Strong-Field Double Ionization," *Phys. Rev. Lett.* vol. 97, Art. No. 103008 (2006).
20. Wu, J., Zeng, H., Guo, C. "Polarization effects on nonsequential double ionization of molecular fragments in strong laser fields", *Physical Review A - Atomic, Molecular, and Optical Physics* 75 (4), art. no. 043402 (2007)
21. Parker, J.S., Meharg, K.J., McKenna, G.A., Taylor, K.T. "Single-ionization of helium at Ti:Sapphire wavelengths: Rates and scaling laws", *Journal of Physics B: Atomic, Molecular and Optical Physics* 40 (10), art. no. 008, pp. 1729-1743 (2007).
22. Haan, S.L., Smith, Z.S., "Classical explanation for electrons above energy 2 Up in strong-field double ionization at 390 nm", *Physical Review A - Atomic, Molecular, and Optical Physics* 76 (5), art. no. 053412 (2007).
23. A. Staudte, C. Ruiz, M. Schöffler, S. Schössler, D. Zeidler, Th. Weber, M. Meckel, D. M. Villeneuve, P. B. Corkum, A. Becker, R. Dörner, "Binary and recoil collisions in strong field double ionization of helium", *Physical Review Letters* 99 (26), art. no. 263002 (2007).
24. Haan, S.L., Van Dyke, J.S., Smith, Z.S., "Recollision excitation, electron correlation, and the production of high-momentum electrons in double ionization", *Physical Review Letters* 101 (11), art. no. 113001 (2008).
25. Haan, S.L., Smith, Z.S., Shomsky, K.N., Plantinga, P.W., "Anticorrelated electrons from weak recollisions in nonsequential double ionization", *Journal of Physics B: Atomic, Molecular and Optical Physics* 41 (21), art. no. 211002 (2008)
26. Ye, D.F., Liu, X., Liu, J., "Classical trajectory diagnosis of a fingerlike pattern in the correlated electron momentum distribution in strong field double ionization of helium", *Physical Review Letters* 101 (23), art. no. 233003 (2008).
27. Li, H., Chen, J., Jiang, H., Liu, J., Fu, P., Gong, Q., Yan, Z.-C., Wang, B., "Carrier-envelope phase dependence of non-sequential double ionization in few-cycle pulses", *Optics Express* 16 (25), pp. 20562-20570 (2008).
28. Krausz, F., Ivanov, M., "Attosecond physics", *Reviews of Modern Physics* 81 (1), pp. 163-234 (2009).
29. Shomsky, K.N., Smith, Z.S., Haan, S.L., "Frustrated nonsequential double ionization: A classical model", *Physical Review A - Atomic, Molecular, and Optical Physics* 79 (6), art. no. 061402 (2009).
30. Li, H., Chen, J., Jiang, H., Liu, J., Fu, P., Gong, Q., Yan, Z.-C., Wang, B., "Laser-assisted collision effect on non-sequential double ionization of helium in a few-cycle laser pulse", *Journal of Physics B: Atomic, Molecular and Optical Physics* 42 (12), art. no. 125601 (2009).
31. Zhou, Y., Liao, Q., Lu, P., "Mechanism for high-energy electrons in nonsequential double ionization below the recollision-excitation threshold", *Physical Review A - Atomic, Molecular, and Optical Physics* 80 (2), art. no. 023412 (2009).

32. Wang, X., Eberly, J.H., "Effects of elliptical polarization on strong-field short-pulse double ionization", *Physical Review Letters* 103 (10), art. no. 103007 (2009).
33. Emmanouilidou, A., Staudte, A., "Intensity dependence of strong-field double-ionization mechanisms: From field-assisted recollision ionization to recollision-assisted field ionization", *Physical Review A - Atomic, Molecular, and Optical Physics* 80 (5), art. no. 053415 (2009).
34. Ye, D.F., Liu, J., "Strong-field double ionization at the transition to below the recollision threshold", *Physical Review A - Atomic, Molecular, and Optical Physics* 81 (4), art. no. 043402 (2010).
35. Shaaran, T., Nygren, M.T., Figueira De Morisson Faria, C., "Laser-induced nonsequential double ionization at and above the recollision-excitation-tunneling threshold", *Physical Review A - Atomic, Molecular, and Optical Physics* 81 (6), art. no. 063413 (2010).
36. Chen, Z., Liang, Y., Lin, C.D., "Quantum theory of recollisional (e, 2e) process in strong field nonsequential double ionization of Helium", *Physical Review Letters* 104 (25), art. no. 253201 (2010).
37. Shaaran, T., De Morisson Faria, C.F., "Laser-induced nonsequential double ionization: Kinematic constraints for the recollision-excitation-tunneling mechanism", *Journal of Modern Optics* 57 (11), pp. 984-991 (2010).
38. Chen, Z., Liang, Y., Lin, C.D., "Quantitative rescattering theory of correlated two-electron momentum spectra for strong-field nonsequential double ionization of helium", *Physical Review A - Atomic, Molecular, and Optical Physics* 82 (6), art. no. 063417 (2010).
39. Denys Bondar, "Applications of Adiabatic Approximation to One- and Two-electron Phenomena in Strong Laser Fields", A thesis for the degree of Doctor of Philosophy in Physics, University of Waterloo, Waterloo, Ontario, Canada, 2010
40. André Staudte, "Subfemtosecond Electron Dynamics of H₂ in Strong Fields or The Quest for the Molecular Clock", Dissertation zur Erlangung des Doktorgrades der Naturwissenschaften, Johann Wolfgang Goethe – Universität, Frankfurt am Main (2005).
41. Manuel Kremer, "Einfluß der Traeger-Einhuellenden-Phase auf die Wechselwirkung ultrakurzer Laserpulse mit Molekuelen", Inaugural-Dissertation zur Erlangung der Doktorwuerde der Naturwissenschaftlich-Mathematischen Gesamtfakultaet der Ruprecht-Karls-Universitaet, Heidelberg (2009).
42. Xu, J., Liang, Y., Chen, Z., Lin, C.D., "Elastic scattering and impact ionization by returning electrons induced in a strong laser field", *Journal of Physics: Conference Series* 288 (1), art. no. 012017 (2011).
43. De Morisson Faria, C.F., Liu, X., "Electron-electron correlation in strong laser fields", *Journal of Modern Optics* 58 (13), pp. 1076-1131 (2011).
44. Shaaran, T., Augstein, B.B., Figueira De Morisson Faria, C., "Excitation two-center interference and the orbital geometry in laser-induced nonsequential double ionization of diatomic molecules", *Physical Review A - Atomic, Molecular, and Optical Physics* 84 (1), art. no. 013429 (2011).
45. Zhou, Y., Huang, C., Lu, P., "Coulomb-tail effect of electron-electron interaction on nonsequential double ionization", *Physical Review A - Atomic, Molecular, and Optical Physics* 84 (2), art. no. 023405 (2011).
46. Emmanouilidou, A., Tchitcheкова, D.S., "Strongly driven molecules: Traces of soft recollisions for intermediate intensities in the over-the-barrier regime", *Physical Review A - Atomic, Molecular, and Optical Physics* 84 (3), art. no. 033407 (2011).
47. Matsuda, A., Fushitani, M., Tseng, C.-M., Hikosaka, Y., Eland, J.H.D., Hishikawa, A., "A magnetic-bottle multi-electron-ion coincidence spectrometer", *Review of Scientific Instruments* 82 (10), art. no. 103105 (2011).
48. Shaaran, T., Figueira De Morisson Faria, C., Schomerus, H., "Causality and quantum interference in time-delayed laser-induced nonsequential double ionization", *Physical Review A - Atomic, Molecular, and Optical Physics* 85 (2), art. no. 023423 (2012).
49. Yu, B., Zhang, D., Li, Y., Tang, Q., "Electron correlations in nonsequential double ionization of helium at intensity below the recollision threshold", *Journal of Modern Optics* 59 (8), pp. 679-685 (2012).
50. Wang, B., Guo, Y., Chen, J., Yan, Z.-C., Fu, P., "Frequency-domain theory of nonsequential double ionization in intense laser fields based on nonperturbative QED", *Physical Review A - Atomic, Molecular, and Optical Physics* 85 (2), art. no. 023402 (2012).
51. Zhou, Y., Zhang, Q., Huang, C., Lu, P., "Classical description of strong-field double ionization by elliptical laser pulses", *Physical Review A - Atomic, Molecular, and Optical Physics* 86 (4), art. no. 043427 (2012).
52. Wang, X., Tian, J., Eberly, J.H., "Angular correlation in strong-field double ionization under circular polarization", *Physical Review Letters* 110 (7), art. no. 073001 (2013).
53. Chen, L., Zhou, Y., Huang, C., Zhang, Q., Lu, P., "Attosecond-resolved electron emission in nonsequential double ionization", *Physical Review A - Atomic, Molecular, and Optical Physics* 88 (4), art. no. 043425 (2013).
54. C. J. Joachain, N. J. Kylstra, R. M. Portvliege, "Atoms in intense laser fields", Cambridge University Press, Cambridge, ISBN: 978-051199345-9; 978-052179301-8 (2012).
55. Nora G. Kling, "Controlling the dynamics of electrons and nuclei in ultrafast strong laser fields", A Dissertation submitted in partial fulfillment of the requirements for the degree Doctor of philosophy, Department of Physics College of Arts and Sciences, Kansas State University, Manhattan, Kansas, 2013
56. Xu Wang, "Theory of Strong-Field Atomic Ionization for Elliptical or Circular Polarization", A Dissertation submitted in partial fulfillment of the requirements for the degree Doctor of philosophy, University of Rochester, Rochester, New York (2013).

57. Emily R. Peterson, "Non-Sequential Double Ionization Spectroscopy of Argon and Spectrally Resolved Transient Alignment of Gaseous Iodine Molecules", A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy (Physics) in The University of Michigan 2005
58. Shaaran, Tahir, "A rigorous treatment of excitation and quantum interference in laser-induced nonsequential double ionization of atoms and molecules", Doctoral thesis, Department of Physics and Astronomy, University College London (2011).
59. Baier, Silvio, "Numerical simulations of single and double ionization of H₂ in short intense laser pulses", Diss. (Dr.rer.nat.), Fakultät fuer Physik, Bielefeld Univ. (Germany) (2008).
60. Matthias Weckenbrock, "Mehrelektronenprozesse in starken Laserfeldern", Dissertation zur Erlangung des Doktorgrades der Naturwissenschaften, Institut für Kernphysik Frankfurt, Frankfurt am Main, 2004
61. Kasprowicz, Peter Antoni, "Crapola physics : modelling the non-sequential double-ionisation of helium", Thesis (Ph.D.), University of Oxford (2004).
62. Elena Gubbini, "Multiple Ionization of Heavy Atoms in Super Strong Laser Fields", Thesis (Ph.D.) Fakultät II - Mathematik und Naturwissenschaften der Technischen Universität Berlin (2005).
63. Arvid Requate, "S-Matrix Analysis of Vibrational and Alignment Effects in Intense-Field Multiphoton Ionization of Molecules", Dissertation zur Erlangung des Doktorgrades der Naturwissenschaften an der Fakultät für Physik der Universität Bielefeld, 2007.
64. Sun, X., Li, M., Ye, D., Xin, G., Fu, L., Xie, X., Deng, Y., Wu, C., Liu, J., Gong, Q., Liu, Y., "Mechanisms of strong-field double ionization of Xe", *Physical Review Letters*, Volume 113, Issue 10, Art. # 103001 (2014).
65. Maxwell, A.S., Faria, C.F.D.M., "Quantum interference in time-delayed nonsequential double ionization", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 92, Issue 2, Art. number 023421 (2015).
66. Matthias Kübel, "Single-Cycle Non-Sequential Double Ionization", Dissertation an der Fakultät fuer Physik der Ludwig-Maximilians-Universität München (2014).
67. Chen, Z., Zheng, Y., Yang, W., Song, X., Xu, J., DiMauro, L.F., Zatsarinny, O., Bartschat, K., Morishita, T., Zhao, S.-F., Lin, C.D., "Numerical simulation of the double-to-single ionization ratio for the helium atom in strong laser fields", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 92, Issue 6, Art. number 063427 (2015).
68. Ma, X., Zhou, Y., Lu, P., "Multiple recollisions in strong-field nonsequential double ionization", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 93, Issue 1, Article number 013425 (2016).
69. Winney, A.H., Lin, Y.F., Lee, S.K., Adhikari, P., Li, W., "State-resolved three-dimensional electron-momentum correlation in nonsequential double ionization of benzene", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 93, Issue 3, Article number 031402 (2016).
70. Maxwell, A.S., Faria, C.F.D.M., "Controlling Below-Threshold Nonsequential Double Ionization via Quantum Interference", *Physical Review Letters*, Volume 116, Issue 14, Article number 143001 (2016).
71. Zuo, W., Ben, S., Lv, H., Zhao, L., Guo, J., Liu, X.-S., Xu, H., Jin, M., Ding, D., "Experimental and theoretical study on nonsequential double ionization of carbon disulfide in strong near-IR laser fields", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 93, Issue 5, Article number 053402 (2016).
72. Jin, F.-C., Wang, B.-B., "Frequency-domain view of nonsequential double ionization in intense laser fields", *Wuli Xuebao/Acta Physica Sinica*, Volume 65, Issue 22, Article number 224205 (2016).
73. Phay Jo Ho, "e-e Correlated Intense-field Multiple Ionization as a Completely Classical Photo-electric Effect", PhD Thesis, Department of Physics and Astronomy, The College Arts and Sciences, University of Rochester, Rochester, New York (2007).
74. A. Chacón, L. Ortmann, F. Cucchietti, N. Suárez, J. A. Pérez-Hernández, M. F. Ciappina, A. S. Landsman, M. Lewenstein, "Double-electron ionization driven by inhomogeneous fields", *Applied Physics B: Lasers and Optics*, Volume 123, Issue 4, Article number 116 (2017).
75. Qing Liao, Alexander H. Winney, Suk Kyoung Lee, Yun Fei Lin, Pradip Adhikari, and Wen Li, "Coulomb-repulsion-assisted double ionization from doubly excited states of argon", *Phys. Rev. A* 96, 023401 (2017).
76. Zhangjin Chen, Xiaojin Li, Xiaoli Sun, Xiaolei Hao and Jing Chen, "Identification of doubly excited states in nonsequential double ionization of Ar in strong laser fields", *Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume 50, Issue 24, Article Number 245601 (2017)
77. Zhangjin Chen, Xiaojin Li, Oleg Zatsarinny, Klaus Bartschat, and C. D. Lin, "Ratios of double to single ionization of He and Ne by strong 400-nm laser pulses using the quantitative rescattering theory", *Phys. Rev. A* 97, 013425 (2018)
78. Ye, Difan; Fu, Libin; Liu, Jie, "Nonsequential Double Ionization of Atoms in Strong Laser Field: Identifying the Mechanisms behind the Correlated-Electron Momentum Spectra", In: *Advances of atoms and molecules in strong laser fields*, World Scientific Publ.: Singapore, Pages: 81-110 (2016).
79. H. Kang, K. Henrichs, M. Kunitski, Y. Wang, X. Hao, K. Fehre, A. Czasch, S. Eckart, L.Ph.H. Schmidt, M. Schoffler, T. Jahnke, X. Liu, R. Dörner, "Timing Recollision in Nonsequential Double Ionization by Intense Elliptically Polarized Laser Pulses", *Phys. Rev. Lett.* 120, 223204 (2018).
80. A. Chacón, L. Ortmann, F. Cucchietti, N. Suárez, J. A. Pérez-Hernández, M. F. Ciappina, A. S. Landsman, M. Lewenstein, "Double-electron ionization driven by inhomogeneous fields", Chapter in Book: *Exploring the World with the Laser: Dedicated to Theodor Hänsch on his 75th Birthday*, edited by Dieter Meschede, Thomas Udem, Tilman Esslinger, Springer International Publishing, ISBN: 978-331964346-5;978-331964345-8, Pages 491-508 (2018).

81. Dominic Jude Anthony Kearney, “The bimolecular reactivity of gas phase dications”, PhD Thesis, University College London (2004).
82. Ma, X., Zhou, Y., Li, N., Li, M., Lu, P., “Attosecond control of correlated electron dynamics in strong-field nonsequential double ionization by parallel two-color pulses”, *Optics and Laser Technology*, Volume 108, Pages 235-240 (2018).
83. Chen, X., Han, Q., Zhang, J., “Effect of electron excitation in nonsequential double ionization by intense laser fields”, *Chinese Physics B*, Volume 27, Article number 073202 (2018).
84. Shaaran, T., Hatsagortsyan, K.Z., Keitel, C.H., „Coulomb effect in laser-induced recollision excitation”, *Physical Review A*, 98(2) 023410 (2018).
85. Zhangjin Chen, Yali Wang, Lina Zhang, and Xiangfu Jia, “Revisiting the recollisional (e, 2e) process in strong-field nonsequential double ionization of helium,” *Phys. Rev. A* 99, 033401 (2019); DOI: 10.1103/PhysRevA.99.033401
86. Thu D. H. Truong, T. V. Nhan Hao and Vinh N. T. Pham, “The role of electron-electron repulsion to the nonsequential double ionization mechanisms,” *Journal of Physics: Conf. Series* 1274 (2019) 012007. doi:10.1088/1742-6596/1274/1/012007
87. Chuan Cheng, Patricia Vindel-Zandbergen, Spiridoula Matsika, and Thomas Weinacht, „Electron correlation in channel-resolved strong-field molecular double ionization,” *Phys. Rev. A* 100, 053405 (2019).; DOI: 10.1103/PhysRevA.100.053405
88. Janko Nauta, Jan-Hendrik Oelmann, Alexander Ackermann, Patrick Knauer, Ronja Pappenberger, Andrii Borodin, Isa Shams Muhammad, Hans Ledwa, Thomas Pfeifer, and José Crespo López-Urrutia, “100 MHz frequency comb for low-intensity multi-photon studies: intra-cavity velocity-map imaging of xenon”, *Optics Letters* 45(8), pp. 2156-2159 (2020).
89. K. Amini, J. Biegert, F. Calegari, A. Chacón, M. F. Ciappina, A. Dauphin, D. K. Efimov, C. F. de Morisson Faria, K. Giergiel, P. Gniewek, A. S. Landsman, M. Lesiuk, M. Mandrysz, A. S. Maxwell, R. Moszyński, L. Ortmann, J. A. Pérez-Hernández, A. Picón, E. Pisanty, J. Prauzner-Bechcicki, K. Sacha, N. Suárez, A. Zair, J. Zakrzewski, and M. Lewenstein, „Symphony on strong field approximation,” *Reports on Progress in Physics*, Volume 82, Number 11 (2019); <https://iopscience.iop.org/article/10.1088/1361-6633/ab2bb1>
90. Zhangjin Chen, Fang Liu, Hua Wen, Toru Morishita, Oleg Zatsarinny, and Klaus Bartschat, “Nonsequential double ionization of Ar in near-single-cycle laser pulses,” *Optics Express* Vol. 28, Issue 15, pp. 22231-22246 (2020); <https://doi.org/10.1364/OE.398035>
91. Hu, H., Kangaparambi, S., Dorner-Kirchner, M., Hanus, V., Baltuška, A., Kitzler-Zeiler, M., Xie, X., “Quantitative retrieval of the angular dependence of laser-induced electron rescattering in molecules”, *Physical Review A* 103(1), 013114 (2021).
92. Yang, Y., Liu, M., Hao, X., Chen, J., “Quantum interferences between rescattering orbits with multiexcitation channels in the recollision excitation process of nonsequential double ionization”, *Physical Review A* 103(3), 033111 (2021).
93. Fang Liu, Zhangjin Chen, Toru Morishita, Klaus Bartschat, Birger Böning, and Stephan Fritzsche, „Single-cycle versus multicycle nonsequential double ionization of argon,” *Phys. Rev. A* 104, 013105 (2021); <https://doi.org/10.1103/PhysRevA.104.013105>
94. C. Li, J. Liu, X. Hao et al., “Ionic-state-resolved electron–electron correlation in strong-field double ionization”, *Results in Physics* 29, 104647 (2021), doi: <https://doi.org/10.1016/j.rinp.2021.104647>.
95. Henrik R. Larsson and David J. Tannor, “Control of concerted back-to-back double ionization dynamics in helium,” *J. Chem. Phys.* 155, 144105 (2021); <https://doi.org/10.1063/5.0063056>
96. Ma, X. M., Tong, A. H., Wang, Z., & Zhai, C. Y., “Multiple recollisions in nonsequential double ionization below the recollision-ionization threshold,” *Chinese Physics B*, 30(12), 123402 (2021). <http://dx.doi.org/10.1088/1674-1056/ac2d1e>
97. Truong, T. D., Nguyen, H. H., Le, H. B., Tran, H. M., Vy, N. D., Anh-Tai, T. D., & Pham, V. N., “Soft parameters in Coulomb potential of noble atoms for nonsequential double ionization: Classical ensemble model and simulations”, *Computer Physics Communications* 276, 108372 (2022); doi:10.1016/j.cpc.2022.108372
98. Z. Chen, Q. Chen, H. Kang and T. Morishita, “Simulations of the correlated momentum distributions for nonsequential double ionization of neon in elliptically polarized laser fields,” *J. Phys. B: At. Mol. Opt. Phys.* 57, 055401 (2024).; DOI 10.1088/1361-6455/ad285d
99. Younis, D., Xie, S., & Eberly, J. H., “Quantum entanglement during single-cycle nonsequential ionization”, arXiv preprint arXiv:2403.09854 (2024).
100. Qiao, X., Li, N., Sun, R., Lu, X., Gao, F., Jin, B., & Xin, P., “Pulsed-Laser Induced Multiple Recollisions Dynamics in Nonsequential Double Ionization of Argon Atom,” Available at SSRN: <https://ssrn.com/abstract=4796387> or <http://dx.doi.org/10.2139/ssrn.4796387> (2024)
101. Xin Yue Xie, Wei-Wei Yu, Jun Wang, and Xi Zhao, „Impact of electronic correlation on strong laser induced bound-state transitions,” Preprint (May 2024).; https://www.researchgate.net/publication/380699086_Impact_of_electronic_correlation_on_strong_laser_induced_bound-state_transitions/references
102. Shunning Gao, Jia Hao Liu, Jun Wang, and Xi Zhao, “Quantum Complex Analysis Model on Dipole Phase in Gas HHG: Revisit of three step model,” Preprint (May 2024).;

https://www.researchgate.net/publication/380698982_Quantum_Complex_Analysis_Model_on_Dipole_Phase_in_Gas_HHG_Revisit_of_three_step_model/references

103. Zhaoyue Meng, Xi Zhao, and Jun Wang, "Fraunhofer diffraction pattern in High Order Harmonic Generation," Preprint (May 2024).;
https://www.researchgate.net/publication/380698985_Fraunhofer_diffraction_pattern_in_High_Order_Harmonic_Generation

Статия А43 – 109 цитата

E. Eremina, X. Liu, H. Rottke, W. Sandner, A. Dreischuh, M. Schätzel, G.G. Paulus, H. Walther, R. Moshhammer, J. Ullrich, "Influence of molecular structure on double ionization of N₂ and O₂ by high intensity ultra-short laser pulses," *Phys. Rev. Lett.* **vol. 92**, art. 173001 (2004).

Цитирана в:

1. A. S. Alnaser, S. Voss, X.-M. Tong, C. M. Maharjan, P. Ranitovich, B. Ulrich, T. Osipov, B. Shan, Z. Chang, C. L. Cocke, "Effects of molecular structure on ion desintegration patterns in ionization of O₂ and N₂ by short laser pulses," *Phys. Rev. Lett.* **93**, art. No. 113003 (2004).
2. J. S. Prauzner-Bechcicki, K. Sacha, B. Eckhardt, J. Zakrzewski, "Non-sequential double ionization of molecules," *Physical Review A - Atomic, Molecular, and Optical Physics* **71**, art. No. 033407 (2005).
3. A Becker, F H M Faisal, "Intense-field many-body S-matrix theory," *J. Phys. B: At. Mol. Opt. Phys.*, vol. **B 38**, pp. R1-R56 (2005).
4. T. Osipov, A. S. Alnaser, S. Voss, M. H. Prior, T. Weber, O. Jagutzki, L. Schmidt, H. Schmidt-Bocking, R. Dorner, A. Landers, E. Wells, B. Shan, C. Maharjan, B. Ulrich, P. Ranitovic, X. M. Tong, C. D. Lin, C. L. Cocke, "Photon-ion collisions and molecular clocks," *Journal of Modern Optics*, vol. **52** (2-3), pp. 439-451 (2005).
5. S. Selstø, M. Førre, J. P. Hansen, L. B. Madsen, "Strong orientation effects in ionization of H₂⁺ by short, intense, high-frequency light pulses," *Phys. Rev. Lett.*, vol. **95**, 093002 (2005); DOI:10.1103/PhysRevLett.95.093002;
6. Th. K. Kjeldsen, Ch. Z. Bisgaard, L. B. Madsen, H. Stapelfeldt "Influence of molecular symmetry on strong-field ionization: Studies on ethylene, benzene, fluorobenzene, and chlorofluorobenzene," *Phys. Rev. A*, vol. **71**, art. No. 013418 (2005).
7. F. Lindner, "Atoms in intense ultrashort laser pulses and the absolute phase," Fakultät für Physik der Ludwig-Maximilians-Universität München, Dissertation for the degree of Doctor of Philosophy (München, April 2004).
8. A. Bhattacharjee, K. R. Dastidar, "Control of (1+1+1'')-photon dissociation dynamics in the NaH molecule using three delayed ultrashort pulses," *Phys. Rev. A* vol. **72** (2), Art. No. 023419 (2005).
9. D. Zeidler, A. Staudte, A. B. Bardon, D. M. Villeneuve, R. Dorner, P. B. Corkum, "Controlling attosecond double ionization dynamics via molecular alignment," *Phys. Rev. Lett.* vol. **95** (20): Art. No. 203003 (2005).
10. J. Liu, J. Chen, "Semiclassical approach to non-sequential double ionization of diatomic molecules in strong laser field," *Chinese Physics Letters* vol. **23** (1), pp. 91-94 (2006).
11. Y. I. Salamin, S. X. Hu, K. Z. Hatsagortsyan, C. H. Keitel, "Relativistic high-power laser-matter interactions," *Physics Reports-Review Section of Physics Letters*, vol. **427** (2-3), pp. 41-155 (2006).
12. A. Staudt, C. H. Keitel, "Two-electron ionization and stabilization beyond the dipole approximation," *Phys. Rev. A* vol. **73** (4), Art. No. 043412 (2006).
13. J. McKenna, M. Suresh, B. Srigengan, I. D. Williams, W. A. Bryan, E. M. L. English, S. L. Stebbings, W. R. Newell, I. C. E. Turcu, J. M. Smith, E. J. Divall, C. J. Hooker, A. J. Langley, J. L. Collier, "Ultrafast ionization study of N₂ in intense linearly and circularly polarized laser fields," *Phys. Rev. A* vol. **73**(4), Art. No. 043401 (2006).
14. D. Zeidler, A. B. Bardon, A. Staudte, D. M. Villeneuve, R. Dorner, P. B. Corkum, "Alignment independence of the instantaneous ionization rate for nitrogen molecules," *Journal of Physics B* vol. **39** (7), pp. L159-L166 (2006).
15. Jian Wu, H. Zeng, Chunlei Guo, "Triple-ionization-induced dissociation of NO in strong laser fields," *Phys. Rev. A* vol. **74**(3), Art. No. 031404R (1-4) (2006).
16. S. Baier, C. Ruiz, L. Plaja, and A. Becker, "Nonsequential double ionization of the hydrogen molecule in a few-cycle laser pulse," *Phys. Rev. A* vol. **74**, Art. No. 033405 (1-4) (2006).
17. Prauzner-Bechcicki, J.S., Sacha, K., Eckhardt, B., "Nonsequential double ionization of molecules in a strong laser field", *Laser Physics* **15** (4), pp. 497-501 (2005)
18. Wasserman, A., Burke, K., "Scattering amplitudes", in "Time-Dependent Density Functional Theory", *Lecture Notes in Physics Series* **706**, Marques, M.A.L.; Ullrich, C.A.; Nogueira, F.; Rubio, A.; Burke, K.; Gross, E.K.U. (Eds.), pp. 493-505 (2006)
19. Milošević, D.B., "Strong-field approximation for ionization of a diatomic molecule by a strong laser field", *Physical Review A - Atomic, Molecular, and Optical Physics* **74** (6), art. no. 063404 (2006)
20. Li, Y., Chen, J., Yang, S.P., Liu, J., "Alignment effect in nonsequential double ionization of diatomic molecules in strong laser fields", *Physical Review A - Atomic, Molecular, and Optical Physics* **76** (2), art. no. 023401 (2007)

21. Chen, J., Fan, J., Li, Y., Yang, S.P., “Semiclassical theory of molecular nonsequential double ionization”, *Physical Review A - Atomic, Molecular, and Optical Physics* 76 (1), art. no. 013418 (2007)
22. Liu, J., Ye, D.F., Chen, J., Liu, X., “Complex dynamics of correlated electrons in molecular double ionization by an ultrashort intense laser pulse”, *Physical Review Letters* 99 (1), art. no. 013003 (2007)
23. Li, Y., Chen, J., Yang, S.-P., Liu, J., “Study on non-sequential double ionization of aligned diatomic molecules in strong laser fields”, *Chinese Physics Letters* 24 (5), art. no. 029, pp. 1231-1233 (2007)
24. Heidenreich, A., Last, I., Jortner, J., “Control of cluster multielectron ionization in ultraintense laser fields”, *Laser Physics* 17 (5), pp. 608-617 (2007)
25. Wu, J., Zeng, H., Guo, C., “Polarization effects on nonsequential double ionization of molecular fragments in strong laser fields”, *Physical Review A - Atomic, Molecular, and Optical Physics* 75 (4), art. no. 043402 (2007)
26. Baier, S., Ruiz, C., Plaja, L., Becker, A., “Single and double ionization of the hydrogen molecule in an intense few-cycle laser pulse”, *Laser Physics* 17 (4), pp. 358-367 (2007)
27. Ma, R., Wu, C., Huang, J., Li, X., Chen, J., Yang, H., Gong, Q., “Double ionization of C₂H₄ and C₂H₆ molecules irradiated by an intense femtosecond laser field”, *Chemical Physics Letters* 404 (4-6), pp. 370-373 (2005).
28. A. Staudte, C. Ruiz, M. Schöffler, S. Schössler, D. Zeidler, Th. Weber, M. Meckel, D. M. Villeneuve, P.B. Corkum, A. Becker, R. Dörner, “Binary and recoil collisions in strong field double ionization of helium”, *Physical Review Letters* 99 (26), art. no. 263002 (2007).
29. Martin, F., “Molecular ionization and dissociation using synchrotron radiation and ultrashort laser pulses”, *Journal of Physics: Conference Series* 88 (1), art. no. 012001(2007).
30. D. F. Ye, J. Chen, and J. Liu, “Classical trajectory perspective on double-ionization dynamics of diatomic molecules irradiated by ultrashort intense laser pulses”, *Physical Review A - Atomic, Molecular, and Optical Physics* 77, 013403 (2008) (10 pages)
31. Jia, X.Y., Li, W.D., Fan, J., Liu, J., Chen, J., “Suppression effect in the nonsequential double ionization of molecules by an intense laser field”, *Physical Review A - Atomic, Molecular, and Optical Physics* 77 (6), art. no. 063407 (2008)
32. Figueira De Morisson Faria, C., Shaaran, T., Liu, X., Yang, W., “Quantum interference in laser-induced nonsequential double ionization in diatomic molecules: Role of alignment and orbital symmetry”, *Physical Review A - Atomic, Molecular, and Optical Physics* 78 (4), art. no. 043407 (2008).
33. Jortner, J., in “*Analysis and Control of Ultrafast Photoinduced Reactions*”, Springer Series in Chemical Physics, Volume 87, 2007, Kühn, Oliver; Wöste, Ludger (Eds.), Pages 1-23, DOI: 10.1007/978-3-540-68038-3-1
34. Eckhardt, B., Prauzner-Bechcicki, J.S., Sacha, K., Zakrzewski, J., “Suppression of correlated electron escape in double ionization in strong laser fields”, *Physical Review A - Atomic, Molecular, and Optical Physics* 77 (1), art. no. 015402 (2008).
35. Krausz, F., Ivanov, M., “Attosecond physics”, *Reviews of Modern Physics* 81 (1), pp. 163-234 (2009).
36. Liao, Q., Lu, P., “Manipulating nonsequential double ionization via alignment of asymmetric molecules”, *Optics Express* 17 (18), pp. 15550-15557 (2009).
37. De Morisson Faria, C.F., “Laser-induced nonsequential double ionization in diatomic molecules: One- and two-centre rescattering scenarios”, *Journal of Physics B: Atomic, Molecular and Optical Physics* 42 (10), art. no. 105602 (2009).
38. A.I. Pegarkov, J. Zanghellini, Ch. Jungreuthmayer, T. Brabec, “Ionization dynamics of Multi-electron systems in strong laser pulses”, in “New research in Lasers and Electro-Optics”, W.T. Arkin, Ed., Nova Science Publishers, 2007, pp.195-230.
39. A. Heidenreich, I. Last, and J. Jortner, “Nanoplasma dynamics in Xe clusters driven by ultraintense laser fields”, *The European Physical Journal D* 46, 195–202 (2008).
40. Liang, Q., Wu, C., Wu, Z., Liu, M., Deng, Y., Gong, Q., “Field-assisted bond stretching of CO in intense laser fields”, *Physical Review A - Atomic, Molecular, and Optical Physics* 79 (4), art. no. 045401 (2009).
41. Wu, Z., Wu, C., Liu, X., Liu, Y., Deng, Y., Gong, Q., “Multiple ionization of oxygen studied by coincident measurement”, *Optics Express* 18 (10), pp. 10395-10403 (2010).
42. Shaaran, T., Nygren, M.T., Figueira De Morisson Faria, C., “Laser-induced nonsequential double ionization at and above the recollision-excitation-tunneling threshold”, *Physical Review A - Atomic, Molecular, and Optical Physics* 81 (6), art. no. 063413 (2010).
43. Wu, Z., Wu, C., Liu, X., Deng, Y., Gong, Q., Song, D., Su, H., “Double ionization of nitrogen from multiple orbitals”, *Journal of Physical Chemistry A* 114 (25), pp. 6751-6756 (2010).
44. Shaaran, T., De Morisson Faria, C.F., “Laser-induced nonsequential double ionization: Kinematic constraints for the recollision-excitation-tunneling mechanism”, *Journal of Modern Optics* 57 (11), pp. 984-991 (2010).
45. Kloda, T., Matsuda, A., Karlsson, H.O., Elshakre, M., Linusson, P., Eland, J.H.D., Feifel, R., Hansson, T., “Strong-field photoionization of O₂ at intermediate light intensity”, *Physical Review A - Atomic, Molecular, and Optical Physics* 82 (3), art. no. 033431 (2010).
46. Huang, C., Zhou, Y., Tong, A., Liao, Q., Hong, W., Lu, P., “The effect of molecular alignment on correlated electron dynamics in nonsequential double ionization”, *Optics Express* 19 (6), pp. 5627-5634 (2011).

47. Stefan Voss, "Orientierungseffekte bei der Doppelionisation von kleinen Molekülen", Diplomarbeit, Kansas State University, Manhattan, KS, USA und Institut fuer Kernphysik, der Johann Wolfgang Goethe Universitaet, Frankfurt am Main, Deutschland (2004).
48. De Morisson Faria, C.F., Liu, X., "Electron-electron correlation in strong laser fields", *Journal of Modern Optics* 58 (13), pp. 1076-1131 (2011).
49. Shaaran, T., Augstein, B.B., Figueira De Morisson Faria, C., "Excitation two-center interference and the orbital geometry in laser-induced nonsequential double ionization of diatomic molecules", *Physical Review A - Atomic, Molecular, and Optical Physics* 84 (1), art. no. 013429 (2011).
50. Li, X., "Intensity dependence of nonsequential double ionization of aligned asymmetric molecules", *Journal of Modern Optics* 58 (17), pp. 1572-1578 (2011).
51. Matsuda, A., Fushitani, M., Tseng, C.-M., Hikosaka, Y., Eland, J.H.D., Hishikawa, A., "A magnetic-bottle multi-electron-ion coincidence spectrometer", *Review of Scientific Instruments* 82 (10), art. no. 103105 (2011).
52. Marques, M.A.L., Maitra, N.T., Nogueira, F.M.S., Gross, E.K.U., Rubio, A., "Fundamentals of time-dependent density functional theory", *Lecture Notes in Physics* 837, pp. 1-559 (2012).
53. Tang, Q., Zhou, Y., Huang, C., Liao, Q., Lu, P., "Correlated electron dynamics in nonsequential double ionization of molecules by mid-infrared fields", *Optics Express* 20 (17), pp. 19580-19588 (2012).
54. Li, W., Liu, J., "Two-center interference effects on the orientation dependence of the strong-field double-ionization yields for hydrogen molecules", *Physical Review A - Atomic, Molecular, and Optical Physics* 86 (3), art. no. 033414 (2012).
55. Jia, X.-Y., Fan, D.-H., Li, W.-D., Chen, J., "Nonsequential double ionization of nonaligned diatomic molecules N and O₂", *Chinese Physics B* 22 (1), art. no. 013303 (2013).
56. Zhang, D.-L., Tang, Q.-B., Gao, Y., "Suppression of recollision-excitation ionization in nonsequential double ionization of molecules by mid-infrared laser pulses", *Chinese Physics Letters* 30 (2), art. no. 023203 (2013).
57. Chen, L., Zhou, Y., Huang, C., Zhang, Q., Lu, P., "Attosecond-resolved electron emission in nonsequential double ionization", *Physical Review A - Atomic, Molecular, and Optical Physics* 88 (4), art. no. 043425 (2013).
58. Nora G. Kling, "Controlling the dynamics of electrons and nuclei in ultrafast strong laser fields", A Dissertation submitted in partial fulfillment of the requirements for the degree Doctor of philosophy, Department of Physics College of Arts and Sciences, Kansas State University, Manhattan, Kansas, 2013
59. Li, Y., Yang, S.P., Chen, J., Fan, J., "Non-sequential double ionization of diatomic molecules: Alignment dependence of electron correlation", *Journal of Physics B: Atomic, Molecular and Optical Physics* 47 (4), Article number 045601 (2014).
60. Malte Oppermann, "Molecules in Strong Laser Fields", in "Resolving Strong Field Dynamics in Cation States of CO₂ via Optimised Molecular Alignment", Springer Theses 2014, pp 9-50.
61. Selstø, Sølve, "Contributions to the Theory of Atoms and Molecules in Strong Electromagnetic Fields", Dissertation for the degree of philosophiae doctor, Department of Physics and Technology, The University of Bergen (2006).
62. Shaaran, Tahir, "A rigorous treatment of excitation and quantum interference in laser-induced nonsequential double ionization of atoms and molecules", Doctoral thesis, Department of Physics and Astronomy, University College London (2011).
63. Baier, Silvio, "Numerical simulations of single and double ionization of H₂ in short intense laser pulses", Diss. (Dr.rer.nat.), Fakultät fuer Physik, Bielefeld Univ. (Germany) (2008).
64. David Staedter, "Femtosecond time-resolved spectroscopy in polyatomic systems investigated by velocity-map imaging and high-order harmonic generation", Ph.D. Thesis, Univerist'e de Toulouse (2013).
65. Jie Liu, "Double Ionization in Strong Laser Fields", Classical Trajectory Perspective of Atomic Ionization in Strong Laser Fields, SpringerBriefs in Physics 2014, pp 33-57
66. Rudenko, A., "Strong-Field Interactions at EUV and X-Ray Wavelengths", in *Attosecond and XUV Physics: Ultrafast Dynamics and Spectroscopy*, Thomas Schultz, Marc Vrakking (Editors), Chapter15, pp. 463-528, (Wiley Blackwell, 2014); ISBN: 978-3-527-41124-5
67. Zilong Zhang, Jingtao Zhang, Lihua Bai, and Xu Wang, "Transition of correlated-electron emission in nonsequential double ionization of Ar atoms", *Optics Express*, Vol. 23, Issue 6, pp. 7044-7052 (2015).
68. Boris Bergues, Matthias Kübel-Schwarz, Nora G. Kling, Christian Burger, and Matthias F. Kling, "Single-Cycle Non-Sequential Double Ionization", *IEEE Journal of Selected Topics in Quantum Electronics*, Volume:21, Issue: 5 Article#: 8701009 (2015), DOI: 10.1109/JSTQE.2015.2443976.
69. Wang, S., Chen, Y., "Attosecond double-ionization dynamics of aligned H₂: Two-dimensional quantum simulations", *Physical Review A - Atomic, Molecular, and Optical Physics*, Vol.92, Issue 2, Art. number 023418 (2015).
70. Matthias Kübel, "Single-Cycle Non-Sequential Double Ionization", Dissertation an der Fakultät fuer Physik der Ludwig-Maximilians-Universitaet Muenchen (2014).
71. Zhang, J.-F., Lü, H., Zuo, W.-L., Xu, H.-F., Jin, M.-X., Ding, D.-J., "Ionizations and fragmentations of benzene, methylbenzene, and chlorobenzene in strong IR and UV laser fields", *Chinese Physics B*, Volume 24, Issue 11, Article number 113301 (2015).

72. Winney, A.H., Lin, Y.F., Lee, S.K., Adhikari, P., Li, W., “State-resolved three-dimensional electron-momentum correlation in nonsequential double ionization of benzene”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 93, Issue 3, Article number 031402 (2016).
73. Zuo, W., Ben, S., Lv, H., Zhao, L., Guo, J., Liu, X.-S., Xu, H., Jin, M., Ding, D., “Experimental and theoretical study on nonsequential double ionization of carbon disulfide in strong near-IR laser fields”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 93, Issue 5, Article number 053402 (2016).
74. Ben, S., Zuo, W., Song, K., Xu, T., Guo, J., Xu, H., Yan, B., Liu, X.-S., “Exploration of strong-field double ionization of CS₂ molecule in bichromatic counterrotating circularly polarized laser fields”, *Optics Communications*, Volume 380, Pages 462-468 (2016).
75. Song, K.-L., Yu, W.-W., Ben, S., Xu, T.-T., Zhang, H.-D., Guo, P.-Y., Guo, J., “Theoretical study on non-sequential double ionization of carbon disulfide with different bond lengths in linearly polarized laser fields”, *Chinese Physics B*, Volume 26, Issue 2, Article number 023204 (2017).
76. Yan Shi, Kai-Li Song, Jing Guo & Ming-Xing Jin, “Exploration of strong-field double ionisation of a A₂B molecule in parallel and perpendicular laser fields”, *Molecular Physics*, <http://dx.doi.org/10.1080/00268976.2017.1287968> (2017).
77. Bruno Eugen Schmidt, “White Light Filamentation: Tailoring & Application for Charge Reversal of Ag³⁺”, PhD Thesis, Freien Universität Berlin (2008).
78. Phay Jo Ho, “e-e Correlated Intense-field Multiple Ionization as a Completely Classical Photo-electric Effect”, PhD Thesis, Department of Physics and Astronomy, The College Arts and Sciences, University of Rochester, Rochester, New York (2007).
79. Qian Cheng, Xiguo Xie, Zongqiang Yuan, Xunqi Zhong, Yunquan Liu, Qihuang Gong, and Chengyin Wu, “Dissociative Ionization of Argon Dimer by Intense Femtosecond Laser Pulses”, *J. Phys. Chem. A*, Volume 121, Issue 20, Pages 3891-3897 (2017).
80. Zhong, Xunqi; Miao, Zhiming; Zhang, Linlin; et al., “Vibrational and electronic excitation of ionized nitrogen molecules in intense laser fields”, *Physical Review A*, Vol. 96, Art. number: 043422 (2017).
81. Lin, Kang; Jia, Xinyan; Yu, Zuqing; et al., “Comparison Study of Strong-Field Ionization of Molecules and Atoms by Bicircular Two-Color Femtosecond Laser Pulses”, *Physical Review Letters*, Vol.119, Art. number: 203202 (2017)
82. Ayadi, V., Benedict, M.G., Dombi, P., Földi, P., “Atomic coherence effects in few-cycle pulse induced ionization”, *European Physical Journal D*, Volume 70, Issue 12, Article number 266 (2016).
83. Pei, M., Yang, Y., Zhang, J., Sun, Z., “Dehydrogenation involved Coulomb explosion of molecular C₂H₄FBr in an intense laser field”, *Chemical Physics Letters*, 697, pp. 53-60 (2018).
84. Arthur Zhao, Chuan Cheng, Spiridoula Matsika, Thomas Weinacht, “Quadruple coincidence measurement of electron correlation in strong-field molecular double ionization”, *Phys. Rev. A* 97, 043412 (2018).
85. H. Kang, K. Henrichs, M. Kunitski, Y. Wang, X. Hao, K. Fehre, A. Czasch, S. Eckart, L.Ph.H. Schmidt, M. Schöffler, T. Jahnke, X. Liu, R. Dörner, “Timing Recollision in Nonsequential Double Ionization by Intense Elliptically Polarized Laser Pulses”, *Physical Review Letters*, Volume 120, Article number 223204 (2018).
86. Oliver Herrwerth, “Atomic and molecular ionization dynamics in strong IR and XUV fields probed by time-resolved coincidence spectroscopy”, Ludwig-Maximilians-Universitaet, Munchen (2011).
87. G. P. Katsoulis, A. Hadjipittas, B. Bergues, M. F. Kling, A. Emmanouilidou, “Slingshot Nonsequential Double Ionization as a Gate to Anticorrelated Two-Electron Escape,” *Physical Review Letters* 121(26), art. 263203 (2018). DOI: 10.1103/PhysRevLett.121.263203.
88. Kang, H., Henrichs, K., Wang, Y., Hao, X., Eckart, S., Kunitski, M., Schöffler, M., Jahnke, T., Liu, X., Dörner, R. “Double ionization of neon in elliptically polarized femtosecond laser fields”, *Physical Review A*, Volume 97, Article number 063403 (2018).
89. Feng, F., Bai, L., Zheng, X. , “Nonsequential Double Ionization of Mg Atoms Below Threshold Laser Power Density”, *Guangxue Xuebao/Acta Optica Sinica*, Volume 38, Issue 7, Article number 0702003 (2018).
90. Sigaud, L., Montenegro, E.C., “Highly selective mechanisms for the production of N₂ and O₂ dications by electron impact”, *Physical Review A* 98(5), 052701 (2018).
91. Kang, H., Zhou, Y., Lu, P., “Steering electron correlation time by elliptically polarized femtosecond laser pulses”, *Optics Express*, Volume 26, Issue 25, 33400-33408 (2018).
92. Xiaomeng Ma, Yueming Zhou, Yinbo Chen, Min Li, Yang Li, Qingbin Zhang, Peixiang Lu, “Timing the release of the correlated electrons in strong-field nonsequential double ionization by circularly polarized two-color laser fields,” *Optics Express* vol. 27(3), pp. 1825-1837 (2019); DOI:10.1364/OE.27.001825
93. Aihong Tong, Qianguang Li, Xiaomeng Ma, Yueming Zhou, and Peixiang Lu, “Internal collision induced strong-field nonsequential double ionization in molecules,” *Optics Express* 27(5), pp. 6415-6425 (2019). DOI: 10.1364/OE.27.006415 .
94. Thu D. H. Truong, T. V. Nhan Hao and Vinh N. T. Pham, “The role of electron-electron repulsion to the nonsequential double ionization mechanisms,” *Journal of Physics: Conf. Series* 1274 (2019) 012007. doi:10.1088/1742-6596/1274/1/012007
95. Mikhail Osolodkov, Federico J. Furch, Felix Schell, Peter Susnjar, Fabio Cavalcante, Carmen S. Menoni, Claus P. Schulz, Tobias Witting, Marc J. J. Vrakking, “Generation and characterisation of few-pulse attosecond pulse trains at 100 kHz repetition rate”, *Journal of Physics B: Atomic, Molecular and Optical Physics* 53(19), 194003 (2020).

96. HuiPeng Kang, Shi Chen, YanLan Wang, Wei Chu, JinPing Yao, Jing Chen, XiaoJun Liu, Ya Cheng, and ZhiZhan Xu, "Wavelength-dependent nonsequential double ionization of magnesium by intense femtosecond laser pulses," *Phys. Rev. A* 100, 033403 (2019).
97. Yuexin Wan, Bo Xu, Jinping Yao, Jinming Chen, Zhaoxiang Liu, Fangbo Zhang, Wei Chu, and Ya Cheng, "Polarization ellipticity dependence of N_2^+ air lasing: the role of coupling between the ground state and a photo-excited intermediate state," *Journal of the Optical Society of America B* Vol. 36, Issue 10, pp. G57-G61 (2019); <https://doi.org/10.1364/JOSAB.36.000G57>
98. Baoqin Li, Xie Yang, Xianghe Ren, and Jingtao Zhang, "Enhanced double ionization rate from O_2 molecules driven by counter-rotating circularly polarized two-color laser fields," *Opt. Express* 27, 32700-32708 (2019). <https://doi.org/10.1364/OE.27.032700>
99. Chuan Cheng, Patricia Vindel-Zandbergen, Spiridoula Matsika, and Thomas Weinacht, "Electron correlation in channel-resolved strong-field molecular double ionization," *Phys. Rev. A* 100, 053405 (2019).; DOI: 10.1103/PhysRevA.100.053405
100. Katsoulis, G.P., Emmanouilidou, A., "Fingerprints of slingshot non-sequential double ionization on two-electron probability distributions," *Scientific Reports* 9, 18855 (2019); doi:10.1038/s41598-019-55066-1
101. Hui Peng Kang, Shi Chen, Wei Chu, Jin Ping Yao, Jing Chen, Xiao Jun Liu, Ya Cheng, and Zhi Zhan Xu, "Nonsequential double ionization of alkaline-earth metal atoms by intense mid-infrared femtosecond pulses," *Optics Express* Vol. 28, Issue 13, pp. 19325-19333 (2020). <https://doi.org/10.1364/OE.397488>
102. Osolodkov, M., Furch, F. J., Schell, F., Šušnjar, P., Cavalcante, F., Menoni, C. S., ... & Vrakking, M. J., "Generation and characterisation of few-pulse attosecond pulse trains at 100 kHz repetition rate", *Journal of Physics B: Atomic, Molecular and Optical Physics*, 53(19), 194003 (2020).
103. Habibović, D., Becker, W., & Milošević, D. B., "Symmetries and Selection Rules of the Spectra of Photoelectrons and High-Order Harmonics Generated by Field-Driven Atoms and Molecules," *Symmetry* 13, 1566 (2021) ; <https://doi.org/10.3390/sym13091566>
104. Katsoulis, G. P. (2021). *Attosecond phenomena in atoms and molecules driven by intense and ultra-fast laser pulses* (Doctoral dissertation, UCL (University College London)).
105. Chan Li, XiaoLei Hao, XinYan Jia, WeiDong Li, and Jing Chen, "Intensity dependence of ionic-state-resolved electron-electron correlation in strong-field double ionization," *Physica Scripta*, Vol. 96, Nr. 12, 125403 (2021); DOI: 10.1088/1402-4896/ac1fac
106. Q. Jing, H. Qian, and P. Xu, "Revealing and controlling nuclear dynamics following inner-shell of N_2 ," *Phys. Rev. A* 106, 033122 (2022).; <https://link.aps.org/doi/10.1103/PhysRevA.106.033122>
107. Basnayake, G., Fernando, S., Lee, S. K., Debrah, D. A., Stewart, G. A., & Li, W. (2022). The lack of electron momentum correlation in strong-field triple ionisation of molecules. *Molecular Physics*, 120(1-2); doi:10.1080/00268976.2021.1931722
108. Liu Keying, Bai Lihua, Guo Zhen, and Ge Zhenjie, "Yield of Non-Sequential Double Ionization of CO_2 Molecules Driven by Intense Laser Fields," *Acta Optica Sinica* 43(20), 2002001 (2023).; DOI: 10.3788/AOS230692
109. Botong Liu, Zhipeng Li, Zhenrong Sun, and Yan Yang, "Multi-Electron Ionization and Coulomb Explosion of the IBr Molecule in the Near-Infrared Femtosecond Laser Field," *Applied Sciences* 13, no. 24, 13185 (2023).; <https://doi.org/10.3390/app132413185>

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K. Besuhanov, A. Dreischuh, G.G. Paulus, M. Schätzel, H. Walther, "Vortices in femtosecond laser fields," *Optics Letters*, vol. 29, No. 16, pp. 1942-1944 (2004).

Цитирана в:

1. V. Shvedov, W. Krolikowski, A. Volyar, D. N. Neshev, A. S. Desyatnikov, and Yu. S. Kivshar, "Focusing and correlation properties of white-light optical vortices," *Optics Express*, vol. 13, No. 19, pp. 7393 - 7398 (2005).
2. I. G. Mariyenko, J. Strohaber, and C. J. G. J. Uiterwaal, "Creation of optical vortices in femtosecond pulses," *Optics Express* vol. 13, No. 19, pp. 7599 - 7608 (2005).
3. G. B. Jung, K. Kanaya, T. Omatsu, "Highly efficient phase-conjugation of a 1 μm pico-second Laguerre-Gaussian beam," *Optics Express*, vol. 14, No. 6, pp. 2250-2255 (2006).
4. K. J. Moh, X.-C. Yuan, D. Y. Tang, W. C. Cheong, L. S. Zhang, D. K. Y. Low, X. Peng, H. B. Niu, and Z. Y. Lin, "Generation of femtosecond optical vortices using a single refractive optical element," *Appl. Phys. Lett.* 88, 091103(1-3) (2006).
5. A. S. Desyatnikov, L. Torner, Yu. S. Kivshar, "Optical Vortices and Vortex Solitons", in *Progress in Optics*, vol. 47, Edited by E. Wolf, North-Holland, Amsterdam, 2005, pp.291-391.
6. X.-C. Yuan, B. P. S. Ahluwalia, S. H. Tao, W. C. Cheong, L. S. Zhang, J. Lin, J. Bu, R. E. Burge, "Wavelength-scalable micro-fabricated wedge for generation of optical vortex beam in optical manipulation," *Appl. Phys. B* 86, pp. 209-213 (2007).
7. Sztul, H.I., Kartazayev, V., Alfano, R.R., "Laguerre-Gaussian supercontinuum" *Proceedings of SPIE - The International Society for Optical Engineering* 6483, art. no. 64830Q (2007)

8. Niv, A., Biener, G., Kleiner, V., Hasman, E., „Polychromatic vectorial vortex formed by geometric phase elements”, *Optics Letters* 32 (7), pp. 847-849 (2007)
9. Toda, Y., Nagaoka, K., Shimatake, K., Morita, R., “Generation and spatio-temporal evolution of optical vortices in femtosecond laser pulses”, *IEEE Transactions on Electronics, Information and Systems* 127 (9), pp. 1308-1313+4 (2007).
10. A. S. Desyatnikov, “Vortex Flows in Optical Fields”, in “Lecture Notes on Turbulence and Coherent Structures in Fluids, Plasmas and Nonlinear Media”, Michael Shats, Horst Punzmann, Eds., World Scientific, Singapore, 2006.
11. Strohaber, J., Scarborough, T.D., Uiterwaal, C.J.G.J. “Ultrashort intense-field optical vortices produced with laser-etched mirrors”, *Applied Optics* 46 (36), pp. 8583-8590 (2007)
12. I. Zeylikovich, H. Sztul, V. Kartazhev, T. Le and R. R. Alfano, “Ultrashort Lagguere-Gaussian Pulses With Angular and Group Velocity Dispersion Compensation”, CLEO/QELS Conference: May 6–11, 2007, Baltimore Convention Center, Baltimore, Maryland, USA; Conference Proceeding, ISBN: 978-155752834-6, DOI: 10.1109/CLEO.2007. Article number 4452827
13. Strohaber, J., Petersen, C., Uiterwaal, C.J.G.J., “Efficient angular dispersion compensation in holographic generation of intense ultrashort paraxial beam modes” *Optics Letters* 32 (16), pp. 2387-2389 (2007).
14. I. Zeylikovich, H. I. Sztul, V. Kartazhev, T. Le, R. R. Alfano, “Ultrashort Lagguere-Gaussian Pulses With Angular and Group Velocity Dispersion Compensation,” *Optics Letters* (14), 2025-2027 (2007).
15. Sola, I.J., Collados, V., Plaja, L., Méndez, C., San Román, J., Ruiz, C., Arias, I., Villamarín, A., Atencia, J., Quintanilla, M., Roso, L. “High power vortex generation with volume phase holograms and non-linear experiments in gases”, *Applied Physics B: Lasers and Optics* 91 (1), pp. 115-118 (2008)
16. Roso, L., San Román, J., Sola, I.J., Ruiz, C., Collados, V., Pérez, J.A., Méndez, C., De Aldana, J.R.V., Arias, I. Plaja, L., “Propagation of terawatt laser pulses in the air”, *Applied Physics A: Materials Science and Processing* 92 (4), pp. 865-871 (2008).
17. Martínez-León, L., Clemente, P., Tajahuerce, E., Mínguez-Vega, G., Mendoza-Yero, O., Fernández-Alonso, M., Lancis, J., Climent, V. Andrés, P., “Spatial-chirp compensation in dynamical holograms reconstructed with ultrafast lasers”, *Applied Physics Letters* 94 (1), art. no. 011104 (2009).
18. Y Toda, K Nagaoka, K Shimatake, R Morita, “Generation and spatiotemporal evolution of optical vortices in femtosecond laser pulses”, *Electrical Engineering in Japan*, Volume 167 Issue 4, Pages 39 – 46 (2009).
19. Dennis, M.R., O'Holleran, K., Padgett, M.J., “Chapter 5 Singular Optics: Optical Vortices and Polarization Singularities”, *Progress in Optics* 53, pp. 293-363 (2009).
20. Tokizane, Y., Oka, K., Morita, R., “Supercontinuum optical vortex pulse generation without spatial or topological-charge dispersion”, *Optics Express* 17 (17), pp. 14517-14525 (2009)
21. Liang, H.C., Huang, Y.J., Lin, Y.C., Lu, T.H., Chen, Y.F., Huang, K.F., “Picosecond optical vortex converted from multigigahertz self-mode-locked high-order Hermite-Gaussian Nd:GdVO₄ lasers”, *Optics Letters* 34 (24), pp. 3842-3844 (2009).
22. Thomas, J.-L., Brunet, T., Coulouvrat, F., “Generalization of helicoidal beams for short pulses”, *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* 81 (1), art. no. 016601 (2010).
23. Martínez-Matos, Ó., Rodrigo, J.A., Hernández-Garay, M.P., Izquierdo, J.G., Weigand, R., Calvo, M.L., Cheben, P., Vaveliuk, P., Bañares, L., “Generation of femtosecond paraxial beams with arbitrary spatial distribution”, *Optics Letters* 35 (5), pp. 652-654 (2010).
24. Richter, A., Bock, M., Jahns, J., Grunwald, R., “Orbital angular momentum experiments with broadband few cycle pulses”, *Proceedings of SPIE - The International Society for Optical Engineering* 7613, art. no. 761308 (2010).
25. Syouji, A., Kurihara, K., Otomo, A., Saito, S., “Diffraction-grating-type phase converters for conversion of Hermite-Laguerre-Gaussian mode into Gaussian mode”, *Applied Optics* 49 (9), pp. 1513-1517 (2010).
26. Ran, L.-L., Qu, S.-L., Guo, Z.-Y., “Surface micro-structures on amorphous alloys induced by vortex femtosecond laser pulses”, *Chinese Physics B* 19 (3), art. no. 034204 (2010).
27. Marienko, I., Denisenko, V., Slusar, V., Soskin, M., “Dynamic space shaping of intense ultrashort laser light with blazed-type gratings”, *Optics Express* 18 (24), pp. 25143-25150 (2010).
28. Hernández-Garay, M.P., Martínez-Matos, O., Izquierdo, J.G., Calvo, M.L., Vaveliuk, P., Cheben, P., Bañares, L., “Femtosecond spectral pulse shaping with holographic gratings recorded in photopolymerizable glasses”, *Optics Express* 19 (2), pp. 1516-1527 (2011).
29. Hwang, S.I., Song, D.H., Ko, D.-K., “Composition and characterization of femtosecond optical lattices using double axicon holographic pattern”, *Japanese Journal of Applied Physics* 50 (4 PART 1), art. no. 042701 (2011).
30. Hernández-Garay, M.P., Martínez-Matos, O., Izquierdo, J.G., Calvo, M.L., Cheben, P., Bañares, L., “Holographic gratings implemented in a photopolymerizable glass: Application to femtosecond laser pulses shaping”, *Proceedings of SPIE - The International Society for Optical Engineering* 8011, art. no. 801101 (2011).
31. Yue, Y., Zhang, L., Yan, Y., Ahmed, N., Yang, J.-Y., Huang, H., Ren, Y., Dolinar, S., Tur, M., Willner, A.E., “Octave-spanning supercontinuum generation of vortices in an As₂S₃ ring photonic crystal fiber”, *Optics Letters* 37 (11), pp. 1889-1891 (2012).

32. Zhao, Y., Wang, Z., Yu, H., Zhuang, S., Zhang, H., Xu, X., Xu, J., Xu, X., Wang, J., ‘Direct generation of optical vortex pulses’, *Applied Physics Letters* 101 (3) , art. no. 031113 (2012).
33. Gubin, M.Yu., Prokhorov, A.V., Gladush, M.G., Leksin, A.Yu., Arakelian, S.M., “Formation and optical control of dissipative vortex solitons in hollow-core optical fibres filled with a cold atomic gas”, *Quantum Electronics* 42 (7) , pp. 616-624 (2012).
34. Anderson, M.E., Bigman, H., De Araujo, L.E.E., Chaloupka, J.L., “Measuring the topological charge of ultrabroadband, optical-vortex beams with a triangular aperture”, *Journal of the Optical Society of America B: Optical Physics* 29 (8) , pp. 1968-1976 (2012).
35. Bock, M., Jahns, J., Grunwald, R., “Few-cycle high-contrast vortex pulses”, *Optics Letters* 37 (18) , pp. 3804-3806 (2012).
36. Heath Howie Bigman, “Zero spatial chirp vortices from supercontinuum modulation”, A Thesis Presented to the Faculty of San Diego State University In Partial Fulfillment of the Requirements for the Degree Master of Science in Physics, San Diego State University, 2012
37. Bock, M., Jahns, J., Grunwald, R., “8-fs High-contrast vortex pulses”, *IEEE Conference Publications - 2012 Conference on Lasers and Electro-Optics, CLEO 2012* , art. no. 6325977 (2012).
38. Yue, Y., Zhang, L., Yan, Y., Ahmed, N., Yang, J.-Y., Huang, H., Ren, Y., Dolinar, S., Tur, M., Willner, A.E., “Octave-spanning supercontinuum generation of vortices in a As₂S₃ ring photonic crystal fiber”, *IEEE Conference Publications - 2012 Conference on Lasers and Electro-Optics, CLEO 2012*, art. no. 6325932 (2012).
39. Gubin, M.Yu., Prokhorov, A.V., Gladush, M.G., Leksin, A.Yu., Arakelian, S.M., „The optical control of spatial dissipative solitons in optical fibers filled with a cold atomic gas”, *Proceedings of SPIE - The International Society for Optical Engineering* 8772, art. no. 87720L (2013).
40. Ionel, L., „An alternative method for the compensation of laser beam spatial distortions based on computer generated holograms”, *Romanian Reports in Physics* 65 (3) , pp. 984-996 (2013).
41. Errmann, R., Minardi, S., Pertsch, T., „A broad-band scalar vortex coronagraph“, *Monthly Notices of the Royal Astronomical Society* 435 (1) , pp. 565-569 (2013).
42. Martínez-Matos, Ó., Vaveliuk, P., Izquierdo, J.G., Lorient, V., “Femtosecond spatial pulse shaping at the focal plane”, *Optics Express* 21 (21) , pp. 25010-25025 (2013).
43. Liao, J., Wang, X., Sun, W., Tan, Y., Kong, D., Nie, Y., Qi, J., Jia, H., Liu, J., Yang, J., Tan, J., Li, X., “Analysis of femtosecond optical vortex beam generated by direct wave-front modulation”, *Optical Engineering* 52 (10) , art. no. 130877P (2013).
44. Zhi, M., Wang, K., Hua, X., Schuessler, H., Strohaber, J., Sokolov, A.V., „Generation of femtosecond optical vortices by molecular modulation in a Raman-active crystal”, *Optics Express* 21 (23), pp. 27750-27758 (2013).
45. Martin Bock, “ Programmable ultrashort highly localized wave packets”, Dissertation zur Erlangung des akademischen Grades doctor rerum naturalium (Dr. rer. nat.) im Fach Physik eingereicht an der Mathematisch-Naturwissenschaftlichen Fakultät I der Humboldt-Universität zu Berlin, 25.06.2013
46. Anderson, M.E., Bigman, H., De Araujo, L.E.E., Chaloupka, J.L., “Measuring the topological charge of ultra-broadband, optical-vortex beams with a triangular aperture”, *Frontiers in Optics, FIO 2012*; Rochester, NY; United States; 14 October 2012 through 18 October 2012; Code 102355
47. Huang, S., He, C., Wang, T., “Generation of sidelobe-free optical vortices utilizing object-oriented computer generated holograms”, *Journal of Optics (United Kingdom)*, Volume 16, Issue 3, Article number 035402 (2014).
48. Ronny Errmann, Stefano Minardi, and Thomas Pertsch, “A broadband scalar optical vortex coronagraph”, *Proc. SPIE* 9151, 91515M (July 18, 2014); doi:10.1117/12.2054875
49. Mendoza-Yero, O., Pérez-Vizcaino, J., Martínez-León, L., Mínguez-Vega, G., Climent, V., Lancis, J. and Andrés, P. (2014) Dispersion Compensation in Holograms Reconstructed by Femtosecond Light Pulses, in Multi-Dimensional Imaging (eds B. Javidi, E. Tajahuerce and P. Andrés), John Wiley & Sons, Ltd, Chichester, UK. doi: 10.1002/9781118705766.ch5
50. Alexey V. Prokhorov, Maxim G. Gladush, Mikhail Yu. Gubin, Andrey Yu. Leksin, Sergey M. Arakelian, “The effect of atomic and optical perturbations on formation and propagation of vortex solitons in a dense atomic media of gas-filled hollow-core optical fibers”, *The European Physical Journal D* 68:158, June 2014
51. Takashige Omatsu and Ryuji Morita, “Chiral Nanostructures Fabricated by Twisted Light with Spin”, Ch.10 in Singular and Chiral Nanoplasmonics, Eds. Svetlana V. Boriskina (MIT, USA), Nikolay I. Zheludev (Southampton University, UK), PanStanford Publishing Pte.Ltd., USA (2015).
52. M.W. Zürch, “High-Resolution Extreme Ultraviolet Microscopy - Imaging of Artificial and Biological Specimens with Laser-Driven Ultrafast XUV Sources”, Springer Theses - Recognizing Outstanding Ph.D. Research, Springer International Publishing (2015); ISBN: 978-3-319-12387-5 (Print) 978-3-319-12388-2 (Online), DOI 10.1007/978-3-319-12388-2
53. Hua, Xia (2014). Highly Efficient Coherent Raman Generation. Doctoral dissertation, Texas A & M University. Available electronically from <http://hdl.handle.net/1969.1/153639>.
54. Marco Ornigotti, Claudio Conti, Alexander Szameit, “Effect of Orbital Angular Momentum on Nondiffracting Ultrashort Optical Pulses”, *Physical Review Letters*, Volume 115, Issue 10, Article number 100401 (2015).

55. Marco Ornigotti, Claudio Conti, Alexander Szameit, “Universal form of the carrier frequency of scalar and vector paraxial X waves with orbital angular momentum and arbitrary frequency spectrum”, *Physical Review A*, Volume: 92 , Article Number: 043801 (2015).
56. Manfred Musigmann, Jürgen Jahns, Martin Bock, and Ruediger Grunwald, „Refractive–diffractive dispersion compensation for optical vortex beams with ultrashort pulse durations“, *Applied Optics*, Vol. 53, Issue 31, pp. 7304-7311 (2014).
57. Strohaber, J., Abul, J., Richardson, M., Zhu, F., Kolomenskii, A.A., Schuessler, H.A., “Cascade Raman sideband generation and orbital angular momentum relations for paraxial beam modes”, *Optics Express*, Volume 23, Issue 17, 22463-22476 (2015).
58. Han, Y., Wang, J., Ma, J., Liao, G., Li, Y., Chen, L., Zhang, J., “ Production of a broadband femtosecond optical vortex by use of a continuous spiral phase plate”, *Chinese Optics Letters*, Volume 13, Article number S22602 (2015).
59. Zhao, Y., Liu, Q., Zhou, W., Deyuan, S., “~1 mJ pulsed vortex laser at 1645 nm with well-defined helicity”, *Optics Express*, Volume 24, Issue 14, Pages 15596-15602 (2016).
60. Müller, R.A., Seipt, D., Beerwerth, R., Ornigotti, M., Szameit, A., Fritzsche, S., Surzhykov, A., “ Photoionization of neutral atoms by X waves carrying orbital angular momentum”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 94, Issue 4, Article number 041402 (2016).
61. Lin, Y.-C. , Nabekawa, Y., Midorikawa, K., “Conical third-harmonic generation of optical vortex through ultrashort laser filamentation in air”, *Optics Express*, Volume 24, Issue 13, Pages 14857-14870 (2016).
62. Lin, Y.-C. , Nabekawa, Y., Midorikawa, K., “Generation of intense femtosecond optical vortex pulses with blazed-phase grating in chirped-pulse amplification system of Ti:sapphire laser”, *Applied Physics B: Lasers and Optics*, Volume 122, Issue 11, Article number 280 (2016).
63. Liu, Q., Zhang, B., Qi, S., Li, Y., Fan, X., Zhao, Y., Zhou, W., Shen, D., “ Integration of helicity-control and pulsemodulation for vortex laser based on a black phosphorus plate”, *Optics Express*, Volume 24, Issue 26, Pages 30031-30037 (2016).
64. M. Bock and R. Grunwald, " Mapping the spectral twist of few-cycle vortex pulses ", *Proc. SPIE* 9764, Complex Light and Optical Forces X, 97640O (2016); doi:10.1117/12.2208023.
65. Mariia Shutova, Alexandra A. Zhdanova, Alexei V. Sokolov, “Detection of mixed OAM states via vortex breakup”, *Physics Letters A*, Volume 381, Issue 4, 408–412 (2017).
66. María-Victoria Collados, Íñigo J. Sola, Julia Marín-Sáez, Warein Holgado and Jesús Atencia, “Holographic Optical Elements to Generate Achromatic Vortices with Ultra-Short and Ultra-Intense Laser Pulses”, Ch.8 in "Vortex Dynamics and Optical Vortices", Hector Perez-de-Tejada (Ed.), Intech (2017); DOI: 10.5772/66314
67. Shiwen Tan, Changhe Zhou, Akira Shirakawa, Ken-ichi Ueda, Jianlang Li, “Vortex Ti:Sapphire laser by using an intracavity spot-defect spatial filter”, *Optics & Laser Technology*, Volume 96, Pages 76–80 (2017).
68. M. Liebmann, A. Treffer, M. Bock, T. Elsaesser, and R. Grunwald, "Spectral anomalies and Gouy rotation around the singularity of ultrashort vortex pulses," *Opt. Express* **25**, 26076-26088 (2017)
69. Zhang, WD (Zhang, Wending); Wei, KY (Wei, Keyan); Wang, H (Wang, Heng); Mao, D (Mao, Dong); Gao, F (Gao, Feng); Huang, LG (Huang, Ligang); Mei, T (Mei, Ting); Zhao, JL (Zhao, Jianlin), “Tunable-wavelength picosecond vortex generation in fiber and its application in frequency-doubled vortex”, *Journal of Optics*, Volume 20, Article Number: 014004 (2018).
70. Tom Bolze and Patrick Nuernberger, “Temporally shaped Laguerre-Gaussian femtosecond laser beams”, *Applied Optics*, Volume 57, Issue 13, 3624-3628 (2018)
71. Karimi, Y., Scopelliti, M.G., Do, N., Alam, M.-R., Chamanzar, M., „In situ 3D reconfigurable ultrasonically sculpted optical beam paths,” *Optics Express* 27(5), pp. 7249-7265 (2019). DOI: 10.1364/OE.27.007249
72. Yasin Karimi, Matteo Giuseppe Scopelliti, Maysamreza Chamanzar, "In situ acousto-optic 3D beam shaping," *Proc. SPIE* 10944, 1094407 (2019); doi: 10.1117/12.2510483
73. Miguel A. Porras, “Effects of orbital angular momentum on few-cycle and sub-cycle pulse shape: Coupling between the temporal and angular momentum degrees of freedom,” *Optics Letters* 44(10), pp. 2538-2541 (2019). DOI: 10.1364/OL.44.002538
74. Porras, M.A., “Upper Bound to the Orbital Angular Momentum Carried by an Ultrashort Pulse”, *Physical Review Letters* 122(12), 123904 (2019).
75. Mengdi Luo and Haoying Wang, “Fractional vortex ultrashort pulsed beams with modulating vortex strength,” *Optics Express* 27 (25), pp. 36259-36268 (2019); <https://doi.org/10.1364/OE.27.036259>
76. Porras, M.A. and Conti, C., „Couplings between the temporal and orbital angular momentum degrees of freedom in ultrafast optical vortices,” *Phys. Rev. A* 101, at. Nr. 063803 (2020); <https://doi.org/10.1103/PhysRevA.101.063803> .
77. Chen, Y., Ding, M., Wang, J., Wang, L., Liu, Q., Zhao, Y., Liu, Y., Shen, D., Wang, Z., Xu, X. and Petrov, V., “High-energy 2 μm pulsed vortex beam excitation from a Q-switched Tm:LuYAG laser,” *Optics Letters* 45(3), 722-725 (2020); <https://doi.org/10.1364/OL.384201>
78. Miguel A. Porras, “Effects of orbital angular momentum on the pulse shape at the most intense ring of ultrafast vortices,” *Appl. Sci.* 10, 1957 (2020); doi:10.3390/app10061957
79. Hasnaoui, A., Ait-Ameur, K., “Kerr lens effect induced by a vortex LG_{0m} laser beam”, *Optik* 207, 164452 (2020).

80. Yuting, G., Lanqin, L., Yuanchao, G., Xibo, S., "Research progress on ultra short vortex pulse generation methods", *Laser and Optoelectronics Progress* 57(5), 050008 (2020).
81. Miguel A. Porras, "Effects of the Coupling between the Orbital Angular Momentum and the Temporal Degrees of Freedom in the Most Intense Ring of Ultrafast Vortices," *Appl. Sci.* 10(6), 1957 (2020).
<https://doi.org/10.3390/app10061957>
82. Porras, M.A. and García-Álvarez, R., "General laws of the propagation of few-cycle optical pulses with orbital angular momentum in free space," *Phys. Rev. A* 102, 033522 (2020);
<https://doi.org/10.1103/PhysRevA.102.033522>
83. Zheng, S., Chen, Z., Lin, Q., Cai, Y., Lu, X., Gao, Y., Xu, S. and Fan, D., "High-gain amplification for femtosecond optical vortex with mode-control regenerative cavity," *Photonics Research* Vol. 8, Issue 8, pp. 1375-1380 (2020). <https://doi.org/10.1364/PRJ.390963>
84. Porras, M.A., Conti, C., Conti, C., "Couplings between the temporal and orbital angular momentum degrees of freedom in ultrafast optical vortices", *Physical Review A* 101(6), 063803 (2020).
85. Eickhoff, K., Rathje, C., Köhnke, D., Kerbstadt, S., Englert, L., Bayer, T., Schäfer, S. and Wollenhaupt, M., "Orbital angular momentum superposition states in transmission electron microscopy and bichromatic multiphoton ionization", *New Journal of Physics* 22(10), 103045 (2020).
86. Sha, W., Zhicheng, Z., Guoliang, D., & Shouhuan, Z. (2020). "Research progress on direct generation of ultrashort pulse OAM vortex beams". *红外与激光工程*, 49(12), 20201061-1.
87. S. Minardi, R. Harris, L. Labadie, "Astrophotonics: astronomy and modern optics", *Astron. Astrophys. Rev.* **29**, 6 (2021). <https://doi.org/10.1007/s00159-021-00134-7>
88. Eickhoff, K., Köhnke, D., Feld, L., Englert, L., Bayer, T. and Wollenhaupt, M., „Tailored holograms for superimposed vortex states“, *New J. Phys.* 22 123015 (2020); DOI: 10.1088/1367-2630/abc8b0
89. Njemuwa Nwaji, Benjamin Jones, John Mack, David O.Oluwole, Tebello Nyokong, „Nonlinear optical dynamics of benzothiazole derivatized phthalocyanines in solution, thin films and when conjugated to nanoparticles“, *Journal of Photochemistry and Photobiology A: Chemistry*, 346, 46-59 (2017).
<https://doi.org/10.1016/j.jphotochem.2017.05.042>
90. Bahamran, Alaa A., "Coupling of Light's Orbital Angular Momentum to a Quantum Dot Ensemble" (2019). *Electronic Theses and Dissertations* 1548. <https://digitalcommons.du.edu/etd/1548>
91. François Gatty, Arnaud Grisard, Christian Larat, Dominique Papillon, Muriel Schwarz, Bruno Gérard, Ralf Ostendorf, Joachim Wagner, and Eric Lallier, „High peak-power laser system tuneable from 8 to 10 μm “, *Advanced Optical Technologies* vol. 6 (2), pp. 95–101 (2017).; <https://doi.org/10.1515/aot-2016-0062>
92. Zhao, Y., Wang, L., Chen, W., Loiko, P., Mateos, X., Xu, X., Liu, Y., Shen, D., Wang, Z., Xu, X., Griebner, U., Petrov, V., "Structured laser beams: toward 2- μm femtosecond laser vortices," *Photon. Res.* 9, 357-363 (2021).; <https://doi.org/10.1364/PRJ.413276>
93. Wang, S., Zhang, Z., Deng, G., Zhou, S., "Research progress on direct generation of ultrashort pulse OAM vortex beams (Invited)", *Hongwai yu Jiguang Gongcheng/Infrared and Laser Engineering* 49(12), 20201061 (2020).
94. Liu, E., Yan, B., Zhou, H., Liu, Y., Liu, G. and Liu, J., "OAM mode-excited surface plasmon resonance for refractive index sensing based on a photonic quasi-crystal fiber," *Journal of the Optical Society of America B* Vol. 38, Issue 12, pp. F16-F22 (2021); <https://doi.org/10.1364/JOSAB.435571>
95. L. Tong, Y. Yuan, W. Zhang, C. Chen, Y. Cai, L. Zhao, „High-power picosecond structured optical vortices directly generated in an all-solid-state laser“, *Optics & Laser Technology* 155, 108396 (2022).; <https://doi.org/10.1016/j.optlastec.2022.108396> .
96. S. Awasthi and S.Y. Kang, "Generation of few μm high optical vortex using tunable spiral plates," *Journal of Physics: Photonics* 4, 034001 (2022).; <https://doi.org/10.1088/2515-7647/ac699b>
97. Y. Zhao, C. Zheng, Z. Huang, Q. Gao, J. Dong, K. Tian, Z. Yang, W. Chen, V. Petrov, "Twisted Light in a Single-Crystal Fiber: Toward Undistorted Femtosecond Vortex Amplification," *Laser & Photonics Reviews*, 6(12), 2200503 (2022).; <https://doi.org/10.1002/lpor.202200503>
98. Yang, Y., Li, Y. & Wang, C., "Generation and expansion of Laguerre–Gaussian beams", *J Opt* 51, 910–926 (2022). <https://doi.org/10.1007/s12596-022-00857-5>
99. Petrov, N. V., Sokolenko, B., Kulya, M. S., Gorodetsky, A., & Chernykh, A. V., "Design of broadband terahertz vector and vortex beams: I. Review of materials and components," *Light: Advanced Manufacturing* 3(4), 752-770 (2022).; <https://doi.org/10.37188/lam.2022.043>
100. Yu, B.S., Li, C.Y., Yang, Y., Rosales- Guzmán, C. and Zhu, Z.H., "Directly Determining Orbital Angular Momentum of Ultrashort Laguerre–Gauss Pulses via Spatially- Resolved Autocorrelation Measurement", *Laser & Photonics Reviews*, 16(9), 2200260 (2022). <https://doi.org/10.1002/lpor.202200260>
101. Chalmiani, Y. K. *In situ spatiotemporal patterning of light using ultrasonic virtual tunable optical waveguides* (Doctoral dissertation, Carnegie Mellon University) (2022).
102. Singh, S., and Mishra, A. K., "Spatio-temporal evolution dynamics of ultrashort Laguerre–Gauss vortices in a dispersive and nonlinear medium", *Journal of Optics*, 24(7), 075501 (2022); DOI 10.1088/2040-8986/ac6df4
103. Tong, L., Chen, C., Cai, Y. and Zhao, L., "Nonlinear mirror mode-locked dual-wavelength vortex laser generation," *Optics & Laser Technology* 161, 109160 (2023).; <https://doi.org/10.1016/j.optlastec.2023.109160>.

104. H. Liu, L. Yan, H. Chen, X. Liu, H. Liu, S. H. Chew, A. Gliserin, Q. Wang, and J. Zhang „High-order femtosecond vortices up to the 30th order generated from a powerful mode-locked Hermite-Gaussian laser,” *Light: Science & Applications* **12**, 207 (2023).; <https://doi.org/10.1038/s41377-023-01241-z>
105. Liu, X., Yan, L., Chen, H., Liu, H., Liu, H., Wang, Q. and Zhang, J., "Generation of femtosecond optical vortices with multiple separate phase singularities from a Kerr-lens mode-locked Yb:KGW oscillator," *Opt. Express* **31**, 39738-39746 (2023).; <https://doi.org/10.1364/OE.506944>
106. Y.-C. Lin, K. Midorikawa, and Y. Nabekawa, “Wavefront control of subcycle vortex pulses via carrier-envelope-phase tailoring,” *Light: Science & Applications* **12**, 279 (2023).; <https://doi.org/10.1038/s41377-023-01328-7>
107. C. Zheng, T. Du, L. Zhu, Z. Wang, K. Tian, Y. Zhao, Z. Yang, H. Yu, and V. Petrov, "Direct amplification of femtosecond optical vortices in a single-crystal fiber," *Photon. Res.* **12**, 27-32 (2024).; <https://doi.org/10.1364/PRJ.507488>
108. Furch, F.J. and Arisholm, G., "Toward high-energy few-cycle optical vortices with minimized topological charge dispersion," *Opt. Lett.* **49**, 1672-1675 (2024).; <https://doi.org/10.1364/OL.509316>
109. Hakobyan, V. and Brasselet, E., "Hyperspectral optical orbital angular momentum modulation from tunable structured waveplates," *Opt. Lett.* **49**, 2089-2092 (2024).; <https://doi.org/10.1364/OL.521749>
110. Singh, S. and Mishra, A.K., “Space-time non-separable dynamics of ultrashort vortex pulse with power exponential spectrum”. arXiv preprint arXiv:2405.16521 (2024).; <https://doi.org/10.48550/arXiv.2405.16521>

Статия А45 –24 цитата

K. Besuhanov, A. Dreischuh, G. G. Paulus, M. G. Schätzel, H. Walther, D. Neshev, W. Krolikowski, Yu. Kivshar, "Spatial phase dislocations in femtosecond laser pulses", *J. Opt. Soc. Am. B* **vol. 23**, No. 1, pp. 26-35 (2006).

Цитирана в:

1. I. Zeylikovich, H. I. Sztul, V. Kartazhev, T. Le, R. R. Alfano, “Ultrashort Laguerre-Gaussian Pulses With Angular and Group Velocity Dispersion Compensation,” *Optics Letters* (14), 2025-2027 (2008).
2. Strohaber, J., Petersen, C., Uiterwaal, C.J.G.J., “Efficient angular dispersion compensation in holographic generation of intense ultrashort paraxial beam modes” *Optics Letters* **32** (16), pp. 2387-2389 (2007).
3. Enrique J. Galvez, “Singular Optics and Phase Properties”, in David L. Andrews (Ed.), *Structured Light and Its Applications: An Introduction to Phase-Structured Beams and Nanoscale Optical Forces*, Academic Press, 2008, ISBN 0123740274, 780123740274, 400 pages
4. Schwarz, A., Rudolph, W., “Dispersion-compensating beam shaper for femtosecond optical vortex beams“, *Optics Letters* **33** (24), pp. 2970-2972 (2008).
5. Tokizane, Y., Oka, K., Morita, R., “Supercontinuum optical vortex pulse generation without spatial or topological-charge dispersion”, *Optics Express* **17** (17), pp. 14517-14525 (2009).
6. Martínez-Matos, Ó., Rodrigo, J.A., Hernández-Garay, M.P., Izquierdo, J.G., Weigand, R., Calvo, M.L., Cheben, P., Vaveliuk, P., Bañares, L., “Generation of femtosecond paraxial beams with arbitrary spatial distribution”, *Optics Letters* **35** (5), pp. 652-654 (2010).
7. David L. Andrews, “*Structured Light and its Applications: an introduction to phase-structured beams and nanoscale optical forces*”, Academic Press, 2008, ISBN: 978-0-12-374 027-4
8. Hwang, S.I., Song, D.H., Ko, D.-K., “Composition and characterization of femtosecond optical lattices using double axicon holographic pattern”, *Japanese Journal of Applied Physics* **50** (4 PART 1), art. no. 042701 (2011).
9. Anderson, M.E., Bigman, H., De Araujo, L.E.E., Chaloupka, J.L., “Measuring the topological charge of ultrabroadband, optical-vortex beams with a triangular aperture”, *Journal of the Optical Society of America B: Optical Physics* **29** (8) , pp. 1968-1976 (2012).
10. Martínez-Matos, Ó., Vaveliuk, P., Izquierdo, J.G., Lorient, V., “Femtosecond spatial pulse shaping at the focal plane”, *Optics Express* **21** (21) , pp. 25010-25025 (2013).
11. Liao, J., Wang, X., Sun, W., Tan, Y., Kong, D., Nie, Y., Qi, J., Jia, H., Liu, J., Yang, J., Tan, J., Li, X., “Analysis of femtosecond optical vortex beam generated by direct wave-front modulation”, *Optical Engineering* **52** (10) , art. no. 130877P (2013).
12. Anderson, M.E., Bigman, H., De Araujo, L.E.E., Chaloupka, J.L., “Measuring the topological charge of ultra-broadband, optical-vortex beams with a triangular aperture”, *Frontiers in Optics*, FIO 2012; Rochester, NY; United States; 14 October 2012 through 18 October 2012; Code 102355
13. Schwarz, A., Weber, R., Emmert, L.A., Rudolph, W., „Simultaneous beam shaping and dispersion tuning for femtosecond optical vortex beams”, *Optics InfoBase Conference Papers 2009*, Conference on Lasers and Electro-Optics, CLEO 2009; Baltimore, MD; United States; 31 May - 5 June 2009; Code 102749, ISSN: 21622701 ISBN: 978-155752869-8
14. Christian Kern, “Extreme nonlinear optics with spatially controlled light fields”, Doctoral dissertation, Friedrich-Schiller-Universität Jena (2014). ISBN: 978-3-8325-3817-0.
15. Zhang, WD (Zhang, Wending); Wei, KY (Wei, Keyan); Wang, H (Wang, Heng); Mao, D (Mao, Dong); Gao, F (Gao, Feng); Huang, LG (Huang, Ligang); Mei, T (Mei, Ting); Zhao, JL (Zhao, Jianlin), “Tunable-wavelength

- picosecond vortex generation in fiber and its application in frequency-doubled vortex”, *Journal of Optics*, Volume 20, Article Number: 014004 (2018).
16. S. Wang, S. Zhang, H. Yang, J. Xie, S. Jiang, G. Feng, and S. Zhou, “Direct emission of chirality controllable femtosecond LG₀₁ vortex beam”, *Appl. Phys. Lett.* 112, 201110 (2018).
 17. Titas Gertus, “Yb:KGW femtosecond laser material micromachining system and applications”, Doctoral dissertation, Vilnius University, Vilnius, Lithuania, 2012
 18. Bahamran, Alaa A., "Coupling of Light's Orbital Angular Momentum to a Quantum Dot Ensemble" (2019). *Electronic Theses and Dissertations* 1548. <https://digitalcommons.du.edu/etd/1548>
 19. Wang, S., Zhao, Z., Ito, I., Kobayashi, Y., "Direct generation of femtosecond vortex beam from a Yb:KYW oscillator featuring a defect-spot mirror," *OSA Continuum* 2, 523-530 (2019)
 20. Miguel A. Porras, “Effects of orbital angular momentum on the pulse shape at the most intense ring of ultrafast vortices,” *Appl. Sci.* 10(6), 1957 (2020); <https://doi.org/10.3390/app10061957>
 21. Yuting, G., Lanqin, L., Yuanchao, G., Xibo, S., “Research progress on ultra short vortex pulse generation methods”, *Laser and Optoelectronics Progress* 57(5), 050008 (2020).
 22. Miguel A. Porras and Raúl García-Álvarez, “General laws of the propagation of few-cycle optical pulses with orbital angular momentum in free space,” *Phys. Rev. A* 102, 033522 (2020); <https://doi.org/10.1103/PhysRevA.102.033522>
 23. Дергачев, А. А. And Шленов, С. А., “Формирование аксиально-несимметричных оптических вихрей из гауссовых пучков за спиральной фазовой пластинкой”, *Квантовая электроника*, 53(5), 406-410 (2023).
 24. Miguel A. Porras, “Effects of the Coupling between the Orbital Angular Momentum and the Temporal Degrees of Freedom in the Most Intense Ring of Ultrafast Vortices,” *Appl. Sci.* 10(6), 1957 (2020); <https://doi.org/10.3390/app10061957>

Статья A46 – 262 цитата

A. Dreischuh, D. Neshev, D. E. Petersen, O. Bang, W. Krolikowski, "Observation of attraction between dark solitons, " *Phys. Rev. Lett.* **vol. 96**, 043901 (2006).

Цитирана в:

1. Zh. Xu, Y. V. Kartashov, and L. Torner, "Upper threshold for stability of multipole-mode solitons in nonlocal nonlinear media," *Optics Letters* 30, pp. 3171-3173 (2005);
2. Y. V. Kartashov, L. Torner, V. A. Vysloukh, D. Mihalache, "Multipole vector solitons in nonlocal nonlinear media," *Optics Letters* 31 (10), pp. 1483-1485 (2006).
3. M. Shen, Q. Wang, J. L. Shi, P. Hou, Q. Kong, "Partially coherent accessible solitons in strongly nonlocal media," *Physical Review E* 73 (5), Art. No. 056602 Part 2 (2006).
4. Y. V. Kartashov, L. Torner, V. A. Vysloukh, "Lattice-supported surface solitons in nonlocal nonlinear media," *Optics Letters* 31 (17), pp. 2595-2597 (2006).
5. Y. V. Kartashov, L. Torner, "Gray spatial solitons in nonlocal nonlinear media," *Optics Letters* 32 (8), pp. 946-948 (2007).
6. L. Zhao-Hong, L. Si-Min, G. Ru, G. Yuan-Mei, S. Tao, Z. Nan, Q. Di, "Interaction between Two-Dimensional White-Light Photovoltaic Dark Spatial Solitons," *Chinese Phys. Lett.*, Vol. 24, pp. 446-449 (2007); doi:10.1088/0256-307X/24/2/040.
7. D. Mihalache, D. Mazilu, F. Lederer, L.-C. Crasovan, Y. V. Kartashov, L. Torner, B. A. Malomed, "Stable solitons of even and odd parities supported by competing nonlocal nonlinearities," *Physical Review E* 74(6), art. no. 066614 (2006).
8. E. V. Doktorov, M. A. Molchan, "Modulational instability in nonlocal Kerr-type media with random parameters," *Physical Review A* 75, 053819 (2007).
9. M. A. Molchan, "Stability analysis of continuous waves in nonlocal random nonlinear media," *Symmetry, Integrability and geometry: Methods and Applications (SIGMA)* 3, paper 083 (9pages) (2007).
10. Hek, G., Valkhoff, N., "Pulses in a complex Ginzburg-Landau system: Persistence under coupling with slow diffusion", *Physica D: Nonlinear Phenomena* 232 (1), pp. 62-85 (2007)
11. A. Picozzi, "Towards a nonequilibrium thermodynamic description of incoherent nonlinear optics" *Optics Express* 15 (14), pp. 9063-9083 (2007)
12. Rotschild, C., Segev, M., Xu, Z., Kartashov, Y.V., Torner, L., Cohen, O., „Two-dimensional multipole solitons in nonlocal nonlinear media”, *Optics Letters* 31 (22), pp. 3312-3314 (2006)
13. Huang, C.-F., Guo, Q., "Interaction of nonlocal incoherent spatial solitons", *Optics Communications* 277 (2), pp. 414-422 (2007).
14. Nienke Jeltje Marjoke Valkhoff, "Stabilization by Competing Instability Mechanisms", *Academisch Proefschrift ter verkrijging van de graad van doctor aan de Universiteit van Amsterdam*, Amsterdam, The Netherlands (2006).
15. Kartashov, Y.V., Torner, L., "Gray spatial solitons in nonlocal nonlinear media ", *Optics Letters* 32 (8), pp. 946-948 (2007)
16. Liu, Z.-H., Liu, S.-M., Guo, R., Gao, Y.-M., Song, T., Zhu, N., Qu, D., "Interaction between two-dimensional white-light photovoltaic dark spatial solitons", *Chinese Physics Letters* 24 (2), art. no. 040, pp. 446-449 (2007)

17. Alfassi, B., Rotschild, C., Manela, O., Segev, M., Christodoulides, D.N., "Boundary force effects exerted on solitons in highly nonlocal nonlinear media", *Optics Letters* 32 (2), pp. 154-156 (2007)
18. Huang, C.-F., Guo, R., Liu, S.-M., Liu, Z.-H., "Interaction of incoherent white-light solitons", *Optics Communications* 269 (1), pp. 174-178 (2007)
19. Ye, F., Kartashov, Y.V., Torner, L., "Enhanced soliton interactions by inhomogeneous nonlocality and nonlinearity", *Physical Review A - Atomic, Molecular, and Optical Physics* 76 (3), art. no. 033812 (2007)
20. Alberucci, A., Assanto, G., "Dissipative self-confined optical beams in doped nematic liquid crystals", *Journal of Nonlinear Optical Physics and Materials* 16 (3), pp. 295-305 (2007).
21. Deng, D., Zhao, X., Guo, Q., Lan, S., "Hermite-Gaussian breathers and solitons in strongly nonlocal nonlinear media" *Journal of the Optical Society of America B: Optical Physics* 24 (9), pp. 2537-2544 (2007).
22. Deng, D., Guo, Q., "Ince-Gaussian solitons in strongly nonlocal nonlinear media", *Optics Letters*, Vol. 32, Issue 21, pp. 3206-3208 (2007).
23. Alberucci, A., Assanto, G., "Propagation of optical spatial solitons in finite-size media: Interplay between nonlocality and boundary conditions", *Journal of the Optical Society of America B: Optical Physics* 24 (9), pp. 2314-2320 (2007).
24. E. V. Doktorov. M. A. Molchan, "Modulational instability of plane waves in non- Kerr media with random diffraction and nonlinearity," *Proceedings of SPIE - The International Society for Optical Engineering*, vol.6581, art. no. 65810M (2007).
25. Lopez-Aguayo, S., Gutiérrez-Vega, J.C., "Elliptically modulated self-trapped singular beams in nonlocal nonlinear media: Ellipticons", *Optics Express* 15(26), pp. 18326-18338 (24 December 2007).
26. Zhiyong Xu, "All-optical Soliton Control in Photonic Lattices", PhD Thesis, ICFO – Institut de Ciències Fotòniques & Teoria del Senyal i Comunicacions - Universitat Politècnica de Catalunya, 2007.
27. Q. Kong, M. Shen, J. Shi, Q. Wang, "Incoherent solitons in strongly nonlocal media: The coherent density theory", *Physics Letters, Section A: General, Atomic and Solid State Physics* 372(3), pp.244-251 (14 January 2008).
28. Q. Kong, J. Shi, M. Shen, Q. Wang, "Elliptic incoherent solitons in strongly nonlocal media with anisotropic Kerr nonlinearity", *Optics Communications* 281 (4), pp. 760-768 (2008).
29. Ming Shen, Qian Kong, Jielong Shi, and Qi Wang, "Incoherently coupled two-color Manakov vector solitons in nonlocal media", *Physical Review A - Atomic, Molecular, and Optical Physics* 77, 015811 (2008) (4 pages)
30. Hongyan Ren, Shigen Ouyang, Qi Guo, Wei Hu and Longgui Cao, "A perturbed (1 + 2)-dimensional soliton solution in nematic liquid crystals", *J. Opt. A: Pure Appl. Opt.* 10 025102 (2008) (6pp)
31. Barak, A., Rotschild, C., Alfassi, B., Segev, M., Christodoulides, D.N. "Random-phase surface-wave solitons in nonlocal nonlinear media", *Optics Letters* 32 (16), pp. 2450-2452 (2007)
32. Kartashov, Y.V., Ye, F., Vysloukh, V.A., Torner, L., "Surface waves in defocusing thermal media" *Optics Letters* 32 (15), pp. 2260-2262 (2008)
33. Xiao-Fei Zhang, Qin Yang, Jie-Fang Zhang, X. Z. Chen, and W. M. Liu, "Controlling soliton interactions in Bose-Einstein condensates by synchronizing the Feshbach resonance and harmonic trap", *Phys. Rev. A* 77, 023613 (2008) (7 pages)
34. Dongmei Deng and Qi Guo, "Propagation of Laguerre–Gaussian beams in nonlocal nonlinear media", *Journal Of Optics A: Pure And Applied Optics* 10, 035101 (2008) (7pp)
35. M. Shen, J.L. Shi, and Q. Wang, "Breathing modes of two-color, Manakov vector solitons in nonlocal media", *The European Physical Journal D* (2008); DOI: 10.1140/epjd/e2008-00008-4
36. F. Ye, Y.V. Kartashov, L. Torner, "Nonlocal surface dipoles and vortices", *Physical Review A - Atomic, Molecular, and Optical Physics* 77 (3), Article number 033829 (2008).
37. Hu, W., Ouyang, S., Yang, P., Guo, Q., Lan, S., "Short-range interactions between strongly nonlocal spatial solitons", *Physical Review A - Atomic, Molecular, and Optical Physics* 77 (3), art. no. 033842 (2008).
38. Lin, Y., Chen, I.-H., Lee, R.-K., "Breather-like collision of gap solitons in Bragg gap regions within nonlocal nonlinear photonic crystals", *Journal of Optics A: Pure and Applied Optics* 10 (4), art. no. 044017 (2008)
39. Deng, D., Guo, Q., "Ince-Gaussian beams in strongly nonlocal nonlinear media", *Journal of Physics B: Atomic, Molecular and Optical Physics* 41 (14), art. no. 145401 (2008)
40. Martinez, J.C., Shutler, P.M.E., Toon, A., "Theory of dark optical solitons", *Journal of Applied Physics* 104 (4), art. no. 043102 (2008).
41. Cao, L., Zhu, Y., Lu, D., Hu, W., Guo, Q., "Propagation of nonlocal optical solitons in lossy media with exponential-decay response", *Optics Communications* 281 (19), pp. 5004-5008 (2008).
42. Nie, H., Zhang, H., Li, L., "Propagation and interaction of beams with initial phase-front curvature in highly nonlocal media", *Optics Communications* 281 (21), pp. 5429-5438 (2008).
43. Zhong, W., Yi, L., "Influence of linear focusing and defocusing effects on interaction between spatial solitons", *Guangxue Xuebao/Acta Optica Sinica* 28 (5), pp. 960-964 (2008).
44. Stellmer, S., Becker, C., Soltan-Panahi, P., Richter, E.-M., Dörscher, S., Baumert, M., Kronjäger, J., Bongs, K., Sengstock, K., "Collisions of dark solitons in elongated bose-einstein condensates", *Physical Review Letters* 101 (12), art. no. 120406 (2008)
45. Weller, A., Ronzheimer, J.P., Gross, C., Esteve, J., Oberthaler, M.K., Frantzeskakis, D.J., Theocharis, G., Kevrekidis, P.G., "Experimental observation of oscillating and interacting matter wave dark solitons", *Physical Review Letters* 101 (13), art. no. 130401 (2008).

46. Lu, D., Hu, W., Zheng, Y., Liang, Y., Cao, L., Lan, S., Guo, Q., "Self-induced fractional Fourier transform and revivable higher-order spatial solitons in strongly nonlocal nonlinear media", *Physical Review A - Atomic, Molecular, and Optical Physics* 78 (4), art. no. 043815 (2008)
47. Shuyu, C., Qin, Y., Juan, Y., Ren, H., "Interaction of spatial solitons in biased photorefractive photovoltaic media", *International Conference on Communication Technology Proceedings, ICCT*, art. no. 4716278, pp. 402-405 (2008)
48. Jens-Philipp Ronzheimer, "Interactions of Dark Solitons in cigar shaped Bose-Einstein Condensates", Diploma-Thesis, Kirchhoff-Institut für Physik, University of Heidelberg (2008).
49. Zhong, W.-P., Belić, M., "Kummer solitons in strongly nonlocal nonlinear media", *Physics Letters, Section A: General, Atomic and Solid State Physics* 373 (2), pp. 296-298 (2009).
50. Caplan, R.M., Hoq, Q.E., Carretero-González, R., Kevrekidis, P.G., "Azimuthal modulational instability of vortices in the nonlinear Schrödinger equation", *Optics Communications* 282 (7), pp. 1399-1405 (2009).
51. Conti, C., Fratalocchi, A., Peccianti, M., Ruocco, G., Trillo, S., "Observation of a gradient catastrophe generating solitons", *Physical Review Letters* 102 (8), art. no. 083902 (2009)
52. Ye, F., Dong, L., Hu, B., "Localization of light in a parabolically bending waveguide array in thermal nonlinear media", *Optics Letters* 34 (5), pp. 584-586 (2009).
53. Shigen Ouyang and Qi Guo, "Dark and gray spatial optical solitons in Kerr-type nonlocal media", *Optics Express*, Vol. 17, Issue 7, pp. 5170-5175 (2009); doi:10.1364/OE.17.005170
54. Lijuan Ge, Qi Wang, Ming Shen, Jielong Shi, Qian Kong and Peng Hou, "Dark solitons in nonlocal media: variational analysis", *J. Opt. A: Pure Appl. Opt.* 11 065207 (2009); doi: 10.1088/1464-4258/11/6/065207
55. Ge Li-Juan, Wang Qi, Shen Ming, Shi Jie-Long, Kong Qian and Hou Peng, "Solitons in optical lattices with nonlocal nonlinearity", *Chinese Phys. B* 18, pp. 616-623 (2009); doi: 10.1088/1674-1056/18/2/038
56. Belić, M.R., Zhong, W.-P., "Two-dimensional spatial solitons in highly nonlocal nonlinear media", *European Physical Journal D* 53 (1), pp. 97-106 (2009).
57. Martinez, J.C., Jalil, M.B.A., "Semiclassical quantization of the one- and two-kink dark solitons", *Physical Review A-Atomic, Molecular, and Optical Physics* 79 (4), art. no. 043805 (2009).
58. Lu, D., Hu, W., "Multiringed breathers and rotating breathers in strongly nonlocal nonlinear media under the off-waist incident condition", *Physical Review A - Atomic, Molecular, and Optical Physics* 79 (4), art. no. 043833 (2009).
59. Liu, W.-J., Tian, B., Zhang, H.-Q., Xu, T., Li, H., "Solitary wave pulses in optical fibers with normal dispersion and higher-order effects", *Physical Review A - Atomic, Molecular, and Optical Physics* 79 (6), art. no. 063810 (2009).
60. Chen, S., "Two-dimensional self-similar soliton waves in highly nonlocal media", *Guangxue Xuebao/Acta Optica Sinica* 29 (6), pp. 1653-1658 (2009).
61. He, Y.J., Luo, L., Zhu, W.L., Wang, H.Z., "Formation and collision of (1+1)-dimensional dipole solitons in the strongly non-local non-linear media", *Journal of Nonlinear Optical Physics and Materials* 18 (1), pp. 121-128 (2009).
62. Long-Gui, C., Ya-Jian, Z., Wei, H., Ping-Bao, Y., Qi, G., "Long-range interactions between nematicons", *Chinese Physics Letters* 26 (6), art. no. 064209 (2009).
63. Dong-Feng, B., Chang-Chun, H., Jun-Feng, H., Yi, W., "Variational solutions for hermite-gaussian solitons in nonlocal nonlinear media", *Chinese Physics B* 18 (7), pp. 2853-2857 (2009).
64. Ming, S., Ning, X., Qian, K., Li-Juan, G., Jie-Long, S., Qi, W., "Gaussian solitons in nonlocal media: Variational analysis", *Chinese Physics B* 18 (7), pp. 2822-2827 (2009).
65. Zheng, Y., Lu, D., Zheng, R., Hu, W., Guo, Q., "Incoherently coupled Hermite-Gaussian breather and soliton pairs in strongly nonlocal nonlinear media", *Optics Communications* 282 (22), pp. 4423-4430 (2009).
66. Armaroli, A., Trillo, S., Fratalocchi, A., "Suppression of transverse instabilities of dark solitons and their dispersive shock waves", *Physical Review A - Atomic, Molecular, and Optical Physics* 80 (5), art. no. 053803 (2009).
67. Ge, L., Wang, Q., Shen, M., Shi, J., Kong, Q., Hou, P., "Dark solitons in nonlocal media: Variational analysis", *Journal of Optics A: Pure and Applied Optics* 11 (6), art. no. 065207 (2009).
68. Lu, D., Hu, W., "Theory of multibeam interactions in strongly nonlocal nonlinear media", *Physical Review A - Atomic, Molecular, and Optical Physics* 80 (5), art. no. 053818 (2009).
69. Kruglov, V.G., Shandarov, V.M., Tan, Y., Chen, F., Kip, D., "Investigation of the mutual repelling and attraction of dark spatial solitons in a proton-implanted planar waveguide in lithium niobate", *Bulletin of the Russian Academy of Sciences: Physics* 73 (12), pp. 1590-1593 (2009).
70. Gelens, L., Gomila, D., Van Der Sande, G., Matías, M.A., Colet, P., "Nonlocality-induced front-interaction enhancement", *Physical Review Letters* 104 (15), art. no. 154101 (2010).
71. Ye, F., Malomed, B.A., He, Y., Hu, B., "Collapse suppression and stabilization of dipole solitons in two-dimensional media with anisotropic semilocal nonlinearity", *Physical Review A - Atomic, Molecular, and Optical Physics* 81 (4), art. no. 043816 (2010).
72. Zhao, J.-Y., Wang, Q., Shen, M., Shi, J.-L., Kong, Q., Ge, L.-J., "The propagation of dipole solitons in highly nonlocal medium", *Chinese Physics B* 19 (5), pp. 0542111-0542115 (2010).
73. Zhong, W.-P., Belić, M., Huang, T.W., Xie, R.H., "Accessible solitary wave families of the generalized nonlocal nonlinear Schrödinger equation", *European Physical Journal D* 59 (2), pp. 301-304 (2010).

74. Zhong, W.-P., Yang, Z.-P., "Spatial solitary waves in generalized non-local nonlinear media", *Journal of Nonlinear Optical Physics and Materials* 19 (2), pp. 311-317 (2010).
75. Yang, Z.-J., Li, S.-H., Lu, D.-Q., Hu, W., "Variational analysis of dipole soliton in nonlocal nonlinear Kerr media", *Wuli Xuebao/Acta Physica Sinica* 59 (7), pp. 4707-4714 (2010).
76. Yang, Z., Lu, D., Hu, W., Zheng, Y., Gao, X., Guo, Q., "Propagation of optical beams in strongly nonlocal nonlinear media", *Physics Letters, Section A: General, Atomic and Solid State Physics* 374 (39), pp. 4007-4013 (2010).
77. Conti, C., Delre, E., "Optical supercavitation in soft matter", *Physical Review Letters* 105 (11), art. no. 118301 (2010).
78. Armando Piccardi, Alessandro Alberucci, Assanto, G., "Power-dependent nematicon steering via walk-off", *Journal of the Optical Society of America B: Optical Physics* 27 (11), pp. 2398-2404 (2010).
79. Shen, M., Ding, H., Kong, Q., Ruan, L., Pang, S., Shi, J., Wang, Q., "Self-trapping of two-dimensional vector dipole solitons in nonlocal media", *Physical Review A - Atomic, Molecular, and Optical Physics* 82 (4), art. no. 043815 (2010).
80. Lendert Gelens, "Nonlinear Dynamics in Photonic Systems: Generic models for semiconductor ring lasers & dissipative solitons", Joint PhD thesis, Vrije Universiteit Brussel, Universitat de les Illes Balears, May 2010.
81. Du, Y., Zhou, Z., Tian, H., Liu, D., "Bright solitons and repulsive in-phase interaction in media with competing nonlocal Kerr nonlinearities", *Journal of Optics* 13 (1), art. no. 015201 (2011).
82. Yan, L.F., Jin, Q.L., Zhang, D., Zhang, Y.J., "Interactions of dark solitons in photovoltaic photorefractive crystals with diffusion nonlinearity", *Optics Communications* 284 (6), pp. 1682-1685 (2011).
83. Zhong, W.-P., Belić, M., Huang, T., "Spatial optical solitons in generic nonlocal nonlinear media", *Applied Physics B: Lasers and Optics* 102 (1), pp. 53-58 (2011).
84. Ge, L., Wang, Q., Shen, M., Shi, J., "Dipole solitons in nonlocal nonlinear media with anisotropy", *Optics Communications* 284 (9), pp. 2351-2356 (2011).
85. Li, S.-H., Yang, Z.-J., Lu, D.-Q., Hu, W., "Numerical study of Hermite-Gaussian beams in nonlocal thermal media", *Wuli Xuebao/Acta Physica Sinica* 60 (2), art. no. 024214 (2011).
86. Yang, Z., Ma, X., Lu, D., Zheng, Y., Gao, X., Hu, W., "Relation between surface solitons and bulk solitons in nonlocal nonlinear media", *Optics Express* 19 (6), pp. 4890-4901 (2011).
87. Ge, L., Wang, Q., Shen, M., Shi, J., Kong, Q., "Vortex solitons with inhomogeneous polarization in nonlocal self-focusing nonlinear media", *Optik* 122 (9), pp. 749-753 (2011).
88. Batz, S., Peschel, U., "Frustrated quantum phase diffusion and increased coherence of solitons due to nonlocality", *Physical Review A - Atomic, Molecular, and Optical Physics* 83 (3), art. no. 033826 (2011).
89. Zhou, L.-H., Gao, X.-H., Yang, Z.-J., Lu, D.-Q., Guo, Q., Cao, W.-W., Hu, W., "Experimental and theoretical investigations of spatial dark solitons in nonlocal nonlinear medium", *Wuli Xuebao/Acta Physica Sinica* 60 (4), art. no. 044208 (2011).
90. Piccardi, A., Alberucci, A., Tabiryan, N., Assanto, G., "Dark nematicons", *Optics Letters* 36 (8), pp. 1356-1358 (2011).
91. Christoph Becker, "Multi component Bose-Einstein condensates. From mean field physics to strong correlations", Dissertation zur Erlangung des Doktorgrades des Departments Physik der Universitaet Hamburg, Hamburg, 2008
92. Zhang, X., Liu, Y., "Three-dimensional interaction of strongly nonlocal optical spatial solitons", *Optik* 122 (15), pp. 1332-1336 (2011).
93. Zhou, Z., Du, Y., Hou, C., Tian, H., Wang, Y., "Dark-type solitons in media with competing nonlocal non-Kerr nonlinearities", *Journal of the Optical Society of America B: Optical Physics* 28 (6), pp. 1583-1590 (2011).
94. Mishra, M., Hong, W.P., "Investigation on propagation characteristics of super-Gaussian beam in highly non-local medium", *Progress In Electromagnetics Research B* (31), pp. 175-188 (2011).
95. Liu, W.-J., Tian, B., Li, M., Jiang, Y., Qu, Q.-X., Wang, P., Sun, K., "Symbolic computation of solitons in the normal dispersion regime of inhomogeneous optical fibres", *Quantum Electronics* 41 (6), pp. 545-551 (2011).
96. Ma, X., Yang, Z., Lu, D., Hu, W., "Interface solitons in thermal nonlinear media", *Physical Review A - Atomic, Molecular, and Optical Physics* 83 (5), art. no. 053831 (2011).
97. Gao, X.-H., Yang, Z.-J., Zhou, L.-H., Zheng, Y.-Z., Lu, D.-Q., Hu, W., "Influence of nonlocalization degree on the interaction between spatial dark solitons", *Wuli Xuebao/Acta Physica Sinica* 60 (8), art. no. 084213 (2011).
98. Rogerio Fernandes de Souza, "Caracterização das propriedades ópticas não lineares de vidros teluretos, líquidos orgânicos e colóides de nanopartículas de ouro", PhD Thesis, Universidade Federal de Alagoas, Brasil, 2008
99. Круглов Виталий Геннадьевич, "Интерферометрические термочувствительные и оптически индуцированные управляющие волноводные элементы на основе ниобата лития", Диссертация на соискание ученой степени кандидата технических наук, Томский государственный университет, Томск, 2011.
100. Jones, Michael William, Propagation of low power low divergence Gaussian fields in unbiased self-defocusing photorefractive media and their interactions. PhD Thesis, Queensland University of Technology (2011).
101. Shi, Z., Li, H., Guo, Q., "(2 + 1)D surface solitons at the interface between a linear medium and a nonlocal nonlinear medium", *Journal of the Optical Society of America B: Optical Physics* 28 (10), 2472-2477 (2011).

102. Molchan, M.A., "Nonlocal solitons in the parametrically driven nonlinear Schrödinger equation: Stability analysis", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* 84 (5), art. no. 056603 (2011).
103. Rodríguez-Rosales, A.A., Ordoñez, E., Ortega-Martínez, R., Román, C.J., Kolokoltsev, O., "Observation of the commutation between bright and dark spatial optical solitons", *Proceedings of SPIE - The International Society for Optical Engineering* 8011, art. no. 80114G (2011).
104. Huang, C., "Numerical simulation of attraction of partially spatially incoherent dark solitons", *Optik* 123 (2), pp. 140-143 (2012).
105. Pu, S., Hou, C., Zhan, K., Yuan, C., "Dark and gray solitons in nematic liquid crystals", *Physica Scripta* 85 (1), art. no. 015402 (2012).
106. Ma, X., Yang, Z., Lu, D., Hu, W., "Solitons in thermal media with periodic modulation of linear refractive index", *Optics Communications* 285 (5), pp. 774-778 (2012).
107. Pu, S., Hou, C., Zhan, K., Yuan, C., Du, Y., "Spatial solitons in nonlocal materials with defocusing defects", *Optics Communications* 285 (6), pp. 1456-1460 (2012).
108. Jia, J., Lin, J., "Solitons in nonlocal nonlinear kerr media with exponential response function", *Optics Express* 20 (7), pp. 7469-7479 (2012).
109. Maluckov, A., Gligorić, G., Hadievski, L., Malomed, B.A., Pfau, T., "Stable periodic density waves in dipolar Bose-Einstein condensates trapped in optical lattices", *Physical Review Letters* 108 (14), art. no. 140402 (2012).
110. Ou-Yang, S.-G., Hu, W., Guo, Q., "Bound states of spatial optical dark solitons in nonlocal media", *Chinese Physics B* 21 (4), art. no. 040505 (2012).
111. Wang, J., Zheng, Y.-Z., Zhou, L.-H., Yang, Z.-J., Lu, D.-Q., Guo, Q., Hu, W., "Theoretical and experimental investigations of spatial optical dark soliton filamentization in nonlocal self-defocusing Kerr medium", *Wuli Xuebao/Acta Physica Sinica* 61 (8), art. no. 084210 (2012).
112. Shi, X., Malomed, B.A., Ye, F., Chen, X., "Symmetric and asymmetric solitons in a nonlocal nonlinear coupler", *Physical Review A - Atomic, Molecular, and Optical Physics* 85 (5), art. no. 053839 (2012).
113. Shen, M., Lin, Y., Jeng, C.-C., Lee, R.-K., "Vortex pairs in nonlocal nonlinear media", *Journal of Optics (United Kingdom)* 14 (6), art. no. 065204 (2012).
114. Pu, S., Hou, C., Zhan, K., Yuan, C., Du, Y., "Lagrangian approach for dark soliton in nonlocal nonlinear media", *Optics Communications* 285 (17), pp. 3631-3635 (2012).
115. Shi, Z., Li, H., Zhu, X., Jiang, X., "Nonlocal bright spatial solitons in defocusing Kerr media supported by PT symmetric potentials", *EPL* 98 (6), art. no. 64006 (2012).
116. Shi, Z., Li, H., Guo, Q., "Multipole surface solitons supported by the interface between linear media and nonlocal nonlinear media", *Physics Letters, Section A: General, Atomic and Solid State Physics* 376 (36), pp. 2509-2514 (2012).
117. Я. В. Каргашов, „Уединенные нелинейные волны в микроструктурированных средах: формирование, стабилизация и контроль“, Диссертация на соискание ученой степени доктора физико-математических наук, Троицк, 2012.
118. Usero, D., "Dark solitary waves in nonlocal nonlinear schrödinger systems", *Discrete and Continuous Dynamical Systems - Series S* 4 (5), pp. 1327-1340 (2011).
119. Chen, Z., Segev, M., Christodoulides, D.N., "Optical spatial solitons: Historical overview and recent advances", *Reports on Progress in Physics* 75 (8), art. no. 086401 (2012).
120. Pu, S., Hou, C., Zhan, K., Du, Y., "Beam splitters in inhomogeneous nonlocal media", *Physica Scripta* 86 (2), art. no. 025404 (2012).
121. Garnier, J., Lisak, M., Picozzi, A., "Toward a wave turbulence formulation of statistical nonlinear optics", *Journal of the Optical Society of America B: Optical Physics* 29 (8), pp. 2229-2242 (2012).
122. Pu, S., Hou, C., Zhan, K., Yuan, C., Du, Y., "Beam steering in a nonlocal medium with inhomogeneous nonlinearity", *Journal of Optics (United Kingdom)* 14 (10), art. no. 10520 (2012).
123. Picozzi, A., Rica, S., "Condensation of classical optical waves beyond the cubic nonlinear Schrödinger equation", *Optics Communications* 285 (24), pp. 5440-5448 (2012).
124. Wamba, E., Porsezian, K., Mohamadou, A., Kofané, T.C., "Instability domain of Bose-Einstein condensates with quantum fluctuations and three-body interactions", *Physics Letters, Section A: General, Atomic and Solid State Physics* 377 (3-4), pp. 262-271 (2013).
125. Bar-Ad, S., Schilling, R., Fleurov, V., "Nonlocality and fluctuations near the optical analog of a sonic horizon", *Physical Review A - Atomic, Molecular, and Optical Physics* 87 (1), art. no. 013802 (2013).
126. Li, Y., Liu, J., Pang, W., Malomed, B.A., "Symmetry breaking in dipolar matter-wave solitons in dual-core couplers", *Physical Review A - Atomic, Molecular, and Optical Physics* 87 (1), art. no. 013604 (2013).
127. Chen, W., Kong, Q., Shen, M., Wang, Q., Shi, J., "Polarized vector dark solitons in nonlocal Kerr-type self-defocusing media", *Physical Review A - Atomic, Molecular, and Optical Physics* 87 (1), art. no. 013809 (2013).
128. Lu, D., Zhan, Q., Duan, Q., Hu, W., "Power-variation-induced three-dimensional nonuniform scaling of beams in strongly nonlocal nonlinear media", *Physical Review A - Atomic, Molecular, and Optical Physics* 87 (2), art. no. 023815 (2013).

129. Maluckov, A., Gligorić, G., Hadžievski, L., Malomed, B.A., Pfau, T., “High- and low-frequency phonon modes in dipolar quantum gases trapped in deep lattices”, *Physical Review A - Atomic, Molecular, and Optical Physics* 87 (2), art. no. 023623 (2013).
130. Lu, D.-Q., Hu, W., “Breather for weak beam induced by strong beam in strongly nonlocal nonlinear medium”, *Wuli Xuebao/Acta Physica Sinica* 62 (3) , art. no. 034205 (2013).
131. Li, Q., Zhai, Y.-H., Liang, G., Guo, Q., “The characteristics of elliptical optical soliton in anisotropic medium”, *Wuli Xuebao/Acta Physica Sinica* 62 (2) , art. no. 024202 (2013).
132. Gao, X.-H., Zhang, C.-Y., Tang, D., Zheng, H., Lu, D.-Q., Hu, W., “Nonlocal dark soliton and its linear stability analysis”, *Wuli Xuebao/Acta Physica Sinica* 62 (4), art. no. 044214 (2013).
133. Mishra, M., Paltani, P.P., Singh, B., Singh, K., “Gaussian beam in highly nonlocal nonlinear medium”, *International Journal of Pure and Applied Mathematics* 83 (5), pp. 673-677 (2013).
134. Qi, X.-Y., Cao, Z., Bai, J.-T., “The beam propagation based on one-dimensional separation modulated photonic lattices”, *Wuli Xuebao/Acta Physica Sinica* 62(6), art.no.064217 (2013).
135. Lu, D.-Q., Qi, L.-M., Yang, Z.-J., Zhang, C., Hu, W., “Numerical study of long-range interaction between two beams in (1+2)-dimensional thermal nonlocal media”, *Wuli Xuebao/Acta Physica Sinica* 62 (6) , art. no. 064213 (2013).
136. Lu, D.-Q., Hu, W., “Two-dimensional asynchronous fractional Fourier transform and propagation properties of beams in strongly nonlocal nonlinear medium with an elliptically symmetric response”, *Wuli Xuebao/Acta Physica Sinica* 62 (8) , art. no. 084211 (2013).
137. Beličev, P.P., Gligorić, G., Maluckov, A., Stepić, M., “Dynamics of dark solitons localized at structural defect in one-dimensional photonic lattices with defocusing saturable nonlinearity”, *EPL* 104 (1) , art. no. 14006 (2013).
138. Gao, X., Zhang, C., Tang, D., Zheng, H., Lu, D., Hu, W., “High-order dark solitons in nonlocal nonlinear media”, *Journal of Modern Optics* 60 (15) , pp. 1281-1286 (2013).
139. Chen, H., Hu, S., “The solitons in Bessel lattice potential with nonlocal nonlinearity”, *European Physical Journal D* 67(11), Article number 225 (2013).
140. Gaetano Assanto, “*Nematicons: Spatial Optical Solitons in Nematic Liquid Crystals*”, John Wiley & Sons, Hoboken, New Jersey (2013).
141. Xu, S.-L., Belić, M.R., „Three-dimensional Hermite-Bessel solitons in strongly nonlocal media with variable potential coefficients”, *Optics Communications* 313 , pp. 62-69 (2014).
142. Tsilifis, P.A., Kevrekidis, P.G., Rothos, V.M., “Cubic-quintic long-range interactions with double well potentials”, *Journal of Physics A: Mathematical and Theoretical* 47 (3) , art. no. 035201 (2014).
143. Pu, S., Hou, C., Yuan, C., „Soliton switching in inhomogeneous nonlocal media”, *Optik* 125 (3) , pp. 1075-1078 (2014).
144. Gao, X.-H., Tang, D., Zhang, C.-Y., Zheng, H., Lu, D.-Q., Hu, W., „Nonlocal surface dark solitons and their stability analysis”, *Wuli Xuebao/Acta Physica Sinica*, Volume 63, Issue 2, Article number 024204 (2014).
145. Gao, X.H., Wang, J., Zhou, L., Yang, Z.J., Ma, X., Lu, D., Guo, Q., Hu, W., “Observation of surface dark solitons in nonlocal nonlinear media”, *Optics Letters*, Volume 39, Issue 13, Pages 3760-3763.
146. Wang, Q., Li, J., “Large phase difference of soliton-like mutually-trapped beam pairs in strong nonlocal media”, *Optics Communications*, Volume 329, Pages 119-124 (2014).
147. Wang, J., Li, Y., Guo, Q., Hu, W., “Stabilization of nonlocal solitons by boundary conditions”, *Optics Letters*, Volume 39, Issue 2, Pages 405-408 (2014).
148. Valton Smith, Brian Leung, Phillip Cala, Zhigang Chen, and Weining Man, “Giant tunable self-defocusing nonlinearity and dark soliton attraction observed in m-cresol/nylon thermal solutions”, *Optical Materials Express*, Vol. 4, Issue 9, pp. 1807-1812 (2014)
149. Valton Smith, Phillip Cala, Zhigang Chen, and Weining Man, “Dark Soliton Attraction and Optical Spatial Shock Waves Observed in M-cresol/Nylon Solutions”, *Optics InfoBase Conference Papers 2014, CLEO: QELS Fundamental Science*, San Jose, CA; United States, June 8-13, 2014, Code 106735 ISBN: 978-1-55752-999-2, http://dx.doi.org/10.1364/CLEO_QELS.2014.FW3D.1
150. Shen, M., Wu, D., Zhao, H., Li, B., „Vortex solitons under competing nonlocal cubic and local quintic nonlinearities”, *Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume 47, Issue 15, Article number 155401 (2014).
151. Picozzi, A., Garnier, J., Hansson, T., Suret, P., Randoux, S., Millot, G., Christodoulides, D.N., “Optical wave turbulence: Towards a unified nonequilibrium thermodynamic formulation of statistical nonlinear optics”, *Physics Reports*, Volume 542, Issue 1, 1-132 (2014).
152. Pere Colet, Manuel A. Matías, Lendert Gelens, and Damià Gomila, “Formation of localized structures in bistable systems through nonlocal spatial coupling. I. General framework”, *Phys. Rev. E* 89, 012914 (2014).
153. Sciberras, Luke W., “Propagation of nonlinear optical beams in finite liquid crystal cells”, Doctor of Philosophy thesis, School of Mathematics and Applied Statistics, University of Wollongong, 2013. <http://ro.uow.edu.au/theses/3902>
154. Y. Lin, “Nonlocal Nonlinear Optical System”, PhD Thesis, National Tsing Hua University (2008).
155. Mishra, M.; Hong, W.P.; Konar, S., “Investigation on propagation characteristics of flat-top beam in highly nonlocal medium”, *IEEE Conference Publications - International Conference on Fiber Optics and Photonics (PHOTONICS)*, Chennai 2012, Print ISBN: 978-1-4673-4718-1

156. Dai, Z., Yang, Z., Zhang, S., Pang, Z., You, K., “Propagation of hyperbolic-cosine Gaussian beams in strongly nonlocal media”, *Guangxue Xuebao/Acta Optica Sinica*, Volume 34, Issue 8, Article number 0819002, 9p (2014).
157. В. Г. Крутлов, В.М.Шандаров, Я.Тан, Ф.Чен, Д.Кип, “Экспериментальное исследование формирования и взаимодействия темных пространственных солитонов в протонно-имплантированном планарном волноводе в ниобате лития”, Сборник трудов XII Всероссийской школы-семинара «Физика и применение микроволн» (Волны-2009), Часть 6 (Когерентная и нелинейная оптика. Фотоника), МГУ Москва, Россия, 75-79 (2009).
158. Shou, Q., Wu, M., Guo, Q., “Large phase shift of (1+1)-dimensional nonlocal spatial solitons in lead glass”, *Optics Communications*, Volume 338, Pages 133-137 (1 March 2015).
159. Horikis, T.P., “Small-amplitude defocusing nematicons”, *Journal of Physics A: Mathematical and Theoretical*, Volume 48, Issue 2, 16 January 2015, Article number 02FT01
160. Chandroth P. Jisha, Alessandro Alberucci, and Gaetano Assanto, “PT-symmetric nonlocal gap solitons in optical lattices”, *J. Nonlinear Optic. Phys. Mat.* 23, 1450041 (2014); DOI: 10.1142/S0218863514500416
161. Shi Zhiwei, Xue Jing, Chen Jilong, Li Yang, Li Huagang, “Goos-Hänchen shifts of Helmholtz solitons at nonlocal nonlinear interfaces”, *The European Physical Journal D*, 69:49 (2015); DOI: 10.1140/epjd/e2015-50753-0
162. Jing Wang, Zhenlei Ma, Junzhu Chen, Jinlong Liu, Zhuo Wang, Yiheng Li, Qi Guo, Wei Hu, Li Xuan, “Observation of Optical Solitons and Abnormal Modulation Instability in Liquid Crystals with Negative Dielectric Anisotropy”, arXiv:1503.01953 [nlin.PS] (2015)
163. Lianzhong Gu, Zhenfeng Yang, “Interaction of Two Anomalous Hollow Gaussian Beams in SNNM”, in: *Proceedings of the 2015 International Conference on Intelligent Systems Research and Mechatronics Engineering*, Editors: Junhong Liu, Yongfei Wang, Huaying Xu, pp.835-838, Atlantis Press, ISBN: 978-94-62520-59-2, ISSN: part of the series AISR, ISSN 1951-6851, volume 121 (2015).
164. M Shen, J Gao, L Ge, “Solitons shedding from Airy beams and bound states of breathing Airy solitons in nonlocal nonlinear media”, *Scientific Reports* 5, Article number 9814, doi:10.1038/srep09814 (2015);
165. Wei Chen, Ming Shen, Qian Kong, Qi Wang, „The interaction of dark solitons with competing nonlocal cubic nonlinearities”, *Journal of Optics (India)*, Vol. 44, Issue 3, 271-280 (2015). DOI: 10.1007/s12596-015-0255-8
166. Ivan Oreshnikov, Rodislav Driben, Alexey Yulin, “Weak and strong interactions between dark solitons and dispersive waves”, *Optics Letters*, Vol. 40, Issue 21, pp. 4871-4874 (2015) •doi: 10.1364/OL.40.004871
167. T. Bland, M. J. Edmonds, N. P. Proukakis, A. M. Martin, D. H. J. O'Dell, N. G. Parker, “Controllable nonlocal interactions between dark solitons in dipolar condensates”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 92, Issue 6, Article number 063601 (2015).
168. H. Tagwo, C.G.L. Tiofack, O. Dafounansou, A. Mohamadou & T.C. Kofane, “Effect of competing cubic-quintic nonlinearities on the modulational instability in nonlocal Kerr-type media”, *Journal of Modern Optics*, Volume 63, Issue 6, 558-565 (2016); DOI: 10.1080/09500340.2015.1085105
169. Qing Wang, JingZhen Li, “Elliptic Hermite–Gaussian soliton in anisotropic strong nonlocal media”, *Optics Communications*, Volume 359, Pages 31–37 (2016); doi:10.1016/j.optcom.2015.09.049
170. Guo Liang, Weiyl Hong, Yahong Hu, Jing Wang, Zhuo Wang, Yingbing Li, Qi Guo, Wei Hu, Senyue Lou, Demetrios N. Christodoulides, “Transition between self-focusing and self-defocusing in nonlocally nonlinear system”, *Phys. Rev. A* 99, art. Nr. 063808 (2019); <https://doi.org/10.1103/PhysRevA.99.063808>
171. Hu, Y.-H., Lou, S.-Y., “Analytical Descriptions of Dark and Gray Solitons in Nonlocal Nonlinear Media”, *Communications in Theoretical Physics*, Volume 64, Issue 6, Pages 665-670 (2015).
172. Theodoros P. Horikis, Dimitrios J. Frantzeskakis, “Asymptotic reductions and solitons of nonlocal nonlinear Schrödinger equations”, *Journal of Physics A: Mathematical and Theoretical*, Volume 49, Issue 20, Article number 205202 (2016).
173. Ming Shen, Wei Li, and Ray-Kuang Lee, “Control on the anomalous interactions of Airy beams in nematic liquid crystals”, *Optics Express*, Volume 24, Issue 8, 8501-8511 (2016).
174. Zuxing Zhang , Chengbo Mou, Zhijun Yan, Zhongyuan Sun, Lin Zhang, “Orthogonally polarized bright–dark pulse pair generation in mode-locked fiber laser with a large-angle tilted fiber grating”, *Applied Physics B: Lasers and Optics*, Volume 122, Issue 6, Article number 161 (2016).
175. Edmonds, M.J., Bland, T., O'Dell, D.H.J., Parker, N.G., “Exploring the stability and dynamics of dipolar matter-wave dark solitons”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 93, Issue 6, Article number 063617 (2016).
176. Wang, Y., Zhou, Y., Zhou, S., Zhang, Y., “Dark soliton pair of ultracold Fermi gases for a generalized Gross-Pitaevskii equation model”, *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics*, Volume 94, Issue 1, Article number 012225 (2016).
177. Zezyulin, D.A.; Konotop, V.V. Small-Amplitude Nonlinear Modes under the Combined Effect of the Parabolic Potential, Nonlocality and PT Symmetry. *Symmetry* 2016, 8(8), 72; doi:10.3390/sym8080072
178. Antonio Picozzi , Josselin Garnier, Gang Xu, Sergio Rica, “Introduction to Wave Turbulence Formalisms for Incoherent Optical Waves”, Chapter in “*Rogue and Shock Waves in Nonlinear Dispersive Media*”, Volume 926 of the series Lecture Notes in Physics, Eds. Miguel Onorato, Stefania Resitori, Fabio Baronio, pp 205-276 (2016).

179. Annette L. Worthy, "Various studies to generate and control solitons in nematic liquid crystals", *Mathematics for Materials Science and Processing Institute for Advanced Study*, La Trobe University, Australia, February 15-17, 2016; <http://catalog.lib.kyushu-u.ac.jp/handle/2324/1566252/p004.pdf>
180. JML MacNeil, "Solitary Waves in Focussing and Defocussing Nonlinear, Nonlocal Optical Media", Doctor of Philosophy Thesis, University of Edinburgh, May 12, 2016
181. Stefano Giaccari, Jun Nian, "Dark Solitons, D-branes and Noncommutative Tachyon Field Theory", *Int. J. Mod. Phys. A* 32, 1750201 (2017); <https://doi.org/10.1142/S0217751X17502013>
182. Guo Liang, Weiyi Hong, and Qi Guo, "Spatial solitons with complicated structure in nonlocal nonlinear media", *Optics Express*, Vol. 24, pp. 28784-28793 (2016)
183. Si-Liu Xu, Li Xue, Milivoj R. Belić, Jun-Rong He, "Spatiotemporal soliton clusters in strongly nonlocal media with variable potential coefficients", *Nonlinear Dyn.*, Vol. 87, 827–834 (2017). doi:10.1007/s11071-016-3081-x
184. Yahong Hu and Quanyong Zhu, "Dark and gray solitons of (2+1)-dimensional nonlocal nonlinear media with periodic response function", *Nonlinear Dyn.*, Volume 89, Issue 1, pp 225–233 (2017). doi:10.1007/s11071-017-3448-7
185. T. Bland, K. Pawłowski, M. J. Edmonds, K. Rzazewski, N. G. Parker, "Interaction-sensitive oscillations of dark solitons in trapped dipolar condensates", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 95, 063622 (2017); DOI: <https://doi.org/10.1103/PhysRevA.95.063622>
186. Gang XU, "Emergence of incoherent solitons and shock-like singularities in optical turbulence", Thèse présentée pour obtenir le titre de Docteur en Physique, Université de Bourgogne Franche-Comté (2015).
187. Alessandro Alberucci, "Solitons in Nonlocal Media", PhD Thesis, Università degli studi Roma Tre (2008). <http://hdl.handle.net/2307/138>
188. Kailash Kasala, "Nonlinear propagation of incoherent white light in a photopolymerisable medium: From single self-trapped beams to 2-D and 3-D lattices", PhD Thesis, McMaster University, Department of Chemistry, Hamilton, Ontario (2012). <http://hdl.handle.net/11375/12691>
189. Xinhang Song, Chunyu Yang, Weitian Yu, Yujia Zhang, Mengli Liu, Ming Lei & Wen-Jun Liu, "Inelastic interaction between dark solitons for fourth-order variable-coefficient nonlinear Schrödinger equation", *Journal of Electromagnetic Waves and Applications*, Vol. 31, 762-767; <http://dx.doi.org/10.1080/09205071.2017.1319302>
190. Chen, Wei; Wang, Qi; Shi, Jielong; Shen, Ming, "Analytical theory of two-dimensional ring dark soliton in nonlocal nonlinear media", *Optics Communications*, Vol. 403, 22-26 (2017).
191. Guo Liang, Wenjing Cheng, Zhiping Dai, Tingjian Jia, Meng Wang, and Huangxin Li, "Spiraling elliptic solitons in lossy nonlocal nonlinear media", *Optics Express*, Volume 25, Issue 10, pp. 11717-11724 (2017).
192. Chen, W., Wang, Q., Shi, J., Kong, Q., Chen, Y., Shen, M., "Stabilization of two-dimensional dark and anti-dark solitons in a nonlocal media", *Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume 50, Issue 13, Article number 135401 (2017).
193. Mutzafi M, Kaminer I, Harari G, Segev M, "Non-diffracting multi-electron vortex beams balancing their electron–electron interactions", *Nature Communications* 8:650 (2017);. doi:10.1038/s41467-017-00651-z.
194. Fusaro, A.; Garnier, J.; Xu, G.; et al., "Emergence of long-range phase coherence in nonlocal fluids of light", *Physical Review A*, Vol. 95, Art. number: 063818 (2017).
195. Manna Chen, Xiaorou Ping, Guo Liang, Qi Guo, Daquan Lu, and Wei Hu, "Dark-bright quadratic solitons with a focusing effective Kerr nonlinearity", *Phys. Rev. A* 97, 013829 (2018); DOI: <https://doi.org/10.1103/PhysRevA.97.013829>
196. Xu, G.; Garnier, J.; Faccio, D.; et al. "Incoherent shock waves in long-range optical turbulence", *Physica D-Nonlinear Phenomena*, Vol. 333, Special Issue: SI, Pages: 310-322 (2016).
197. Yang, Z., Zhong, W.-P., Belić, M., Zhang, Y., "Dark ring soliton in two-dimensional nonlinear self-defocusing medium", *Optik* 156, pp. 447-452 (2018).
198. Xinghui Gao, Chengyun Zhang, Qing Wang, "Relation between nonlocal surface and bulk dark solitons", *Results in Physics*, Volume 9, Pages 364-370 (2018).
199. Fang-Ping Wang, Juan-fang Han, Jie Zhang, Dong-Ning Gao, Zhong-Zheng Li, Wen-Shan Duan, and Heng Zhang, "Numerical simulation of dark envelope soliton in plasma", *Physics of Plasmas* 25, 032121 (2018).
200. Guo Liang, "Spiraling elliptic breathers in nonlocal nonlinear media with linear anisotropy", *Journal of Modern Optics*, (2018), doi: 10.1080/09500340.2018.1456573
201. Wang, Q., Li, J. & Xie, W., „Spiraling elliptic Laguerre–Gaussian soliton in isotropic nonlocal competing cubic-quintic nonlinear media", *Appl. Phys. B* 124: 104 (2018).
202. Q. C. Wu, Y.-L. Gu, Y. Yao, Y.-F. Yang, H.-B. Lei, Y.-T. Tian, J.-J. Tian, and B. Guo, "Convertible Dark Pulse and Bright Pulse Fiber Ring Laser by Adjusting the Polarization" *IEEE Photonics Technology Letters* 30 (14), 1285 - 1288 (2018); doi: 10.1109/LPT.2018.2844325.
203. T.P. Horikis, D.J. Frantzeskakis, "On the Properties of a Nonlocal Nonlinear Schrödinger Model and Its Soliton Solutions". In: Rassias T. (eds) *Applications of Nonlinear Analysis*. Springer Optimization and Its Applications, vol 134, Pages 403-446 (Springer, Cham, 2018).
204. Ming Shen, Liang Wu, Mingming Gao and Wei Li, "Incoherent interactions of Airy beams in nonlocal nonlinear media", *Journal of Physics B: Atomic, Molecular and Optical Physics* (2018); <https://doi.org/10.1088/1361-6455/aad14c>

205. Suneera, T.P., Subha, P.A., “Nonlocal gap solitons in parity-time symmetric coupler with transverse real potential”, *Journal of Optics (United Kingdom)*, 20(9), 095504 (2018).
206. Guo Liang, Weiyi Hong, Tao Luo, Jing Wang, Yingbing Li, Qi Guo, Wei Hu, and Demetrios N. Christodoulides, “Transition between self-focusing and self-defocusing in a nonlocally nonlinear system,” *Phys. Rev. A* 99, art. Nr. 063808 (2019). DOI: 10.1103/PhysRevA.99.063808
207. L. Zhong, C. Chen, W. Hu, W. Xie, and Q. Guo, “Chaoticons in nonlocal thermal nonlinear media,” *J. Opt. Soc. Am. B* vol. 36, Issue 8, pp. 2062-2068 (2019); <https://doi.org/10.1364/JOSAB.36.002062>
208. YuanhangWeng, JingHuang, HongWang, “Beat patterns of vector solitons in nonlocal nonlinear lattices with PT symmetry”, *Optics Communications*, Volume 451, 276-280 (2019).
209. Guan, S., Zou, Y., Zhong, L., “Chaotic self-trapped optical beams produced by interaction of solitons in strongly nonlocal nonlinear medial”, *Optik*, Volume 194, Article number 163092 (2019).
210. Ryan Plestid and D. H. J. O'Dell, “Balancing long-range interactions and quantum pressure: Solitons in the Hamiltonian mean-field model,” *Phys. Rev. E* 100, art. No. 022216 (2019).
211. Wen, B., Deng, Y., Fu, X., “Evolution of shedding soliton generated by tvvo space-reversed shapes of airy beams in strongly nonlocal nonlinear medium”, *Laser and Optoelectronics Progress*, 55(4),041902 (2018).
212. Jing Huang, Yuanhang Weng, Peijun Chen, and Hong Wang, “Dynamics of Multipole Solitons and Vortex Solitons in PT-Symmetric Triangular Lattices with Nonlocal Nonlinearity,” *Appl. Sci.* 2019, 9(18), 3731; <https://doi.org/10.3390/app9183731>
213. Ioannou-Sougleridis, I., Frantzeskakis, D.J., Horikis, T.P., “A Davey–Stewartson description of two dimensional solitons in nonlocal media”, *Studies in Applied Mathematics*, 1-15 (2019); <https://doi.org/10.1111/sapm.12283>
214. Weng Yuan-hang, Wang Hong, Chen Pei-jun,et al., “Propagation of Nonlocal Vector Solitons under Gauss Barrier or Trap [J]., *Acta Photonica Sinica*, 48(10):1048001 (2019).
215. Weng, Y., Wang, H., Chen, P., Tang, G., “(2 + 1) dimensional all-optical logical gates based on soliton interaction in bulk nonlocal nonlinear media”, *Results in Physics* 15,102730 (2019).
216. Valton Doyle Smith II, “Nonlinear optical wave phenomenon, observed in defocusing m-cresol/nylon solutions“, MsScience in Physics Thesis, San Francisco State University (2019). <http://hdl.handle.net/10211.3/214020>
217. Fang-Ping Wang, Heng Zhang, Xiao-Ying Zhao, Zhong-Zheng Li, Wen-Shan Duan, and Lei Yang, “Confinement of proton beam in a magnetic mirror,” *The European Physical Journal D* 73: 130 (2019); <https://doi.org/10.1140/epjd/e2019-90587-0>
218. Ward, C.B., Kevrekidis, P.G., Horikis, T.P. and Frantzeskakis, D.J., “ Rogue Waves and Periodic Solutions of a Nonlocal Nonlinear Schrödinger Model”, *Phys. Rev. Research* 2, 013351 (2020).
219. Z. Geng, K. J. H. Peters, A. A. P. Trichet, K. Malmir, R. Kolkowski, J. M. Smith, S. R. K. Rodriguez, “Universal Scaling in the Dynamic Hysteresis, and Non-Markovian Dynamics, of a Tunable Optical Cavity”, *Physical Review Letters* 124(15), 153603 (2020).
220. Gao, M., Chen, Y. and Shen, M., “Elliptic fundamental, dipole and vortex solitons in nonlocal nonlinear media with linear anisotropic diffraction,” *Journal of Optics* 22, 025502 (2020); <https://doi.org/10.1088/2040-8986/ab6427> .
221. Ioannou-Sougleridis, I., Frantzeskakis, D.J., Horikis, T.P., “A Davey–Stewartson description of two-dimensional solitons in nonlocal media”, *Studies in Applied Mathematics* 144(1), pp. 3-17 (2020).
222. Maitre, A., Lerario, G., Medeiros, A., Claude, F., Glorieux, Q., Giacobino, E., Pigeon, S. and Bramati, A., „Dark-Soliton Molecules in an Exciton-Polariton Superfluid,” *Physical Review X* 10, 041028 (2020).; DOI: 10.1103/PhysRevX.10.041028
223. Weng, Y., Chen, P., Tang, G. and Wang, H., „Asymmetric propagation of solitons in nonlinear media with gradual nonlocality,” *Journal of Optics* 22 (6), 065501 (2020); DOI: 10.1088/2040-8986/ab8613
224. Koutsokostas, G.N., Horikis, T.P., Frantzeskakis, D.J. *et al.*, „Transverse dynamics of vector solitons in defocusing nonlocal media,” *Eur. Phys. J. Plus* 135, 546 (2020). <https://doi.org/10.1140/epjp/s13360-020-00544-z>
225. Koutsokostas, G.N., Horikis, T.P., Frantzeskakis, D.J., Prinari, B., Biondini, G., “Multiscale expansions and vector solitons of a two-dimensional nonlocal nonlinear Schrödinger system”, *Studies in Applied Mathematics* 145(4), 739-764 (2020). <https://doi.org/10.1111/sapm.12334>
226. Mabou, W.K., Nguewawe, C.P., Yemele, D., “Gaussian pulse behavior in nonlocal Kerr-like media: Application to the generation of compact bright pulses”, *Journal of the Optical Society of America B: Optical Physics* 37(11), pp. 3358-3369 (2020).
227. Ryan Plestid, “Quantum effects in the hamiltonian mean field model”, McMaster University doctor of philosophy, Hamilton, Ontario (2019)
228. Liang, G., Kong, X., Li, Y. and Wang, Q., “Adiabatic evolution of optical beams in nonlocal nonlinear media of gradual nonlocality,” *Optics Express* 29(6), pp.9618-9623. (2021) ; <https://doi.org/10.1364/OE.419118>
229. Weng, Y., Wang, H., Chen, P., Tang, G., “Families of solitons under nonlocal and PT symmetric competing nonlinearity“, *Optics Communications* 480, 126491 (2021).
230. Elhadj, K.M., Boudjemâa, A., “Equilibrium and scattering properties of a nonlocal three-soliton molecule in Bose-Einstein condensates with competing nonlinearities”, *Physica Scripta*, 96(2), 025212 (2021).

231. Koutsokostas, G.N., Horikis, T.P., Kevrekidis, P.G., Frantzeskakis, D.J., "Universal reductions and solitary waves of weakly nonlocal defocusing nonlinear Schrödinger equations", *Journal of Physics A: Mathematical and Theoretical* 54(8), 085702 (2021).
232. Zhang, H., Weng, Z., Yuan, J., "Vector vortex breathers in thermal nonlocal media", *Optics Communications* 492, 126978 (2021).
233. Wang, X.F., Liu, D.X., Han, H.H. and Mao, H.Y., "Generation of cavity-birefringence-dependent multi-wavelength bright-dark pulse pair in a figure-eight thulium-doped fiber laser," *Chinese Physics B* 30(5), 054205 (2021); DOI: 10.1088/1674-1056/abd68f
234. Koutsokostas, G.N., Theocharis, G., Horikis, T.P., Kevrekidis, P.G. and Frantzeskakis, D.J., "Transverse instability and dynamics of nonlocal bright solitons," *Phys. Rev. E* 104, 064205 (2021). <https://doi.org/10.1103/PhysRevE.104.064205>
235. Triki, H. and Kruglov, V.I., "Chirped periodic and localized waves in a weakly nonlocal media with cubic-quintic nonlinearity," *Chaos, Solitons & Fractals* 153(6), 111496 (2021); <https://doi.org/10.1016/j.chaos.2021.111496>
236. Li Sen-Qing, Zhang Xiao Ji, Lin Ji Lin, "Propagation of dark soliton in nonlocal nonlinear coupler," *Acta Physica Sinica -Chinese Edition-* 70(18):184206-184206 (2021); DOI: 10.7498/aps.70.20210275
237. Yu-Han Deng, Xiang-Hua Meng, Gui-Min Yue, Yu-Jia Shen, "Soliton solutions for the nonlocal reverse space Kundu-Eckhaus equation via symbolic calculation," *Optik*, 168379 (2021); <https://doi.org/10.1016/j.ijleo.2021.168379>.
238. Wenjing Cheng, Hongzhen Qiao, Meng Wang, Shaoshuo Ma, Fangjie Shu, Chuanqi Xie, Guo Liang, "Propagation characteristics of elliptic vortex beams in nonlocal nonlinear media," *Optics Communications* 508, 127799 (2022); <https://doi.org/10.1016/j.optcom.2021.127799>.
239. Sharma, M., Kajala, S.K., Singh, B. and Mishra, M., "Effect of Super Gaussian Parameter on Soliton Interaction Length in Highly Nonlocal Media", In *International Conference on Optical and Wireless Technologies* (pp. 11-16). Singapore: Springer Nature Singapore (2021).
240. Mishra, M., Kajala, S.K., Sharma, M., Singh, B. and Jana, S., "Stabilizing the Optical Beam in Higher-order Nonlocal Nonlinear Media," in *Frontiers in Optics + Laser Science 2022 (FIO, LS)*, Technical Digest Series (Optica Publishing Group, 2022), paper JTU5A.42.; <https://opg.optica.org/abstract.cfm?URI=FiO-2022-JTu5A.42>
241. Jana, S., Sharma, M., Singh, B., Kajala, S.K. and Mishra, M., "Interaction Dynamics of Accessible Solitons in Highly Nonlocal Cubic-Quintic Nonlinear Media," in *Frontiers in Optics + Laser Science 2022 (FIO, LS)*, Technical Digest Series (Optica Publishing Group, 2022), paper JTU5A.21.; <https://doi.org/10.1364/FIO.2022.JTu5A.21>
242. Mishra, M., Kajala, S.K., Sharma, M., Konar, S. and Jana, S., "Energy optimization of diffraction managed accessible solitons," *J. Opt. Soc. Am. B* 39, 2804-2812 (2022).; <https://doi.org/10.1364/JOSAB.470144>
243. Geng, Z. "Strong light-matter interactions and nonlinear dynamics in coherently driven optical resonators." Ph.D. Thesis, University of Amsterdam (2022).
244. Deng, Y.-H., Meng, X -H., Yue, G.-M., Shen, Y.-J., "Soliton solutions for the nonlocal reverse space Kundu-Eckhaus equation via symbolic calculation", *Optik*, 252 168379 (2022). [doi:10.1016/j.ijleo.2021.168379](https://doi.org/10.1016/j.ijleo.2021.168379)
245. Liang, G., Shu, F., Cheng, W., & Jiao, L., "Nonlinearity-mediated collimation of optical beams," *Optics Express* 30(7), 10770-10778 (2022).; [doi:10.1364/OE.455935](https://doi.org/10.1364/OE.455935)
246. Cheng, W., Qiao, H., Wang, M., Ma, S., Shu, F., Xie, C., & Liang, G., "Propagation characteristics of elliptic vortex beams in nonlocal nonlinear media", *Optics Communications*, 508, 127799. (2022).; <https://doi.org/10.1016/j.optcom.2021.127799>
247. Zhou, Q., Zhong, Y., Triki, H., Sun, Y., Xu, S., Liu, W., & Biswas, A. Chirped bright and kink solitons in nonlinear optical fibers with weak nonlocality and cubic-quantic-septic nonlinearity. *Chinese Physics Letters*, 39(4), 044202 (2022).; [doi:10.1088/0256-307X/39/4/044202](https://doi.org/10.1088/0256-307X/39/4/044202)
248. Mishra, M., Kajala, S. K., Sharma, M., Konar, S., & Jana, S., "Generation, dynamics and bifurcation of high power soliton beams in cubic-quintic nonlocal nonlinear media," *Journal of Optics* 24(5) 055504 (2022).; [doi:10.1088/2040-8986/ac5e52](https://doi.org/10.1088/2040-8986/ac5e52)
249. Zhang, D., & Zhong, L., "Long-range interaction between solitons in strongly nonlocal nonlinear media with oscillatory response", *Journal of the Optical Society of America B* 39(11), 3029-3034 (2022).; [doi:10.1364/JOSAB.472056](https://doi.org/10.1364/JOSAB.472056)
250. Sharma, M., Kajala, S. K., Singh, B., & Mishra, M. "Effect of super gaussian parameter on soliton interaction length in highly nonlocal media", *Lecture Notes in Electrical Engineering* 892, pp.11-16 (2023).
251. Liang, G., Shu, F., Qiao, H. and Cheng, W., "Solitons train in nonlocally nonlinear system with oscillatory responses," *Chaos, Solitons & Fractals* 168, 113146 (2023).; <https://doi.org/10.1016/j.chaos.2023.113146>
252. Wu, L., Ge, L., Kong, Q. and Shen, M., " Nonlocal two-color vector dark solitons," *Results in Physics* 48, 2211-3797 (2023).; <https://doi.org/10.1016/j.rinp.2023.106433>
253. Tatsagoum, A.T., Felenou, E.T., Tchokouansi, H.T., Djazet, A. and Jiotsa, A.K., "Dynamics of Gaussian and Super-Gaussian optical beams in weakly nonlinear nonlocal media," *Results in Physics* 51, 106731 (2023).; <https://doi.org/10.1016/j.rinp.2023.106731>

254. Mishra, M., Meena, K., Yadav, D., and Jana, S., "The dynamics, stability and modulation instability of Gaussian beams in nonlocal nonlinear media," *Eur. Phys. J. B* **96**, 109 (2023).; <https://doi.org/10.1140/epjb/s10051-023-00577-0>
255. Zheng, Y., Chen, X., Liang, G. and Guo, Q., "Adiabatic propagation of beams in nonlocal nonlinear media with gradual linear loss/gain," *Results in Physics* **52**, 106909 (2023).; <https://doi.org/10.1016/j.rinp.2023.106909>
256. Jana, S., Sharma, M., Singh, B. and Mishra, M., "Identifying Stable Zones for Propagation of Optical Solitons in Cubic-Quintic Nonlocal Nonlinear Media," in *Optica Quantum 2.0 Conference and Exhibition*, Technical Digest Series (Optica Publishing Group, 2023), paper QTh2A.15.
257. Che, J., Zheng, Y., Liang, G. and Guo, Q., „Adiabatic evolution of optical beams of arbitrary shapes in nonlocal nonlinear media," *Chinese Physics B* **32**(10), 104207 (2023).; <https://dx.doi.org/10.1088/1674-1056/acd689>
258. Mishra, M., Kajala, S.K., Shwetanshumala, S., Sharma, M. and Jana, S., "Asymmetric impact of higher order diffraction on narrow beam dynamics in nonlocal nonlinear media," *Appl. Phys. B* **129**, 194 (2023).; <https://doi.org/10.1007/s00340-023-08137-1259>.
259. Liang, G., Chen, X. and Xu, H., "Defocusing-based generation and control of chaotic self-trapped patterns in nonlocal nonlinear system with sine-oscillatory response," *Nonlinear Dyn* **112**, 2969–2978 (2024). <https://doi.org/10.1007/s11071-023-09210-2>
260. Du, B., Ge, L. and Shen, M., "Two-dimensional modulation instability and higher-order soliton clusters in nematic liquid crystals with competing re-orientational and thermal nonlocal nonlinearities," *Results in Physics* **57**, 107433 (2024).; <https://doi.org/10.1016/j.rinp.2024.107433>.
261. Raju, T.S. and Triki, H., "Jacobian elliptic wave trains in fourth-order dispersive nonlinear Schrödinger equation and the modulational instability," *Optik* **302**, 171698 (2024).; <https://doi.org/10.1016/j.ijleo.2024.171698>
262. Yang, Y., Ge, L., & Shen, M., "Two-dimensional modulation instability and soliton clusters in nonlocal media with competing cubic–quintic nonlinearities", *Optics Communications* **564**, 130617 (2024).; <https://doi.org/10.1016/j.optcom.2024.130617>

Статия А47 – 27 цитата

A. S. Desyatnikov, N. Sagemerten, R. Fisher, B. Terhalle, D. Träger, D. N. Neshev, A. Dreischuh, C. Denz, W. Krolikowski, Yu. S. Kivshar, "Two-dimensional self-trapped nonlinear photonic lattices," *Optics Express*, vol. **14** (7), pp. 2851-2863 (2006).

Цитирана в:

1. M. S. Petrovic, "Vortex-induced rotating structures in optical photonic lattices," *Opt. Express* vol. 14 (20), pp. 9415-9420 (2006)
2. Fressengeas, N., Khelifaoui, N., Dan, C., Wolfersberger, D., Montemezzani, G., Leblond, H., Chauvet, M. "Roles of resonance and dark irradiance for infrared photorefractive self-focusing and solitons in bipolar InP:Fe", *Physical Review A - Atomic, Molecular, and Optical Physics* **75** (6), art. no. 063834 (2007)
3. Liu, Z., Liu, S., Guo, R., Song, T., Zhu, N., "Interaction between a dark spot and a two-dimensional nonlinear photonic lattice with fully incoherent white light", *Physics Letters, Section A: General, Atomic and Solid State Physics* **363** (3), pp. 243-249 (2007)
4. Cuevas, J., Malomed, B.A., Kevrekidis, P.G., "Two-dimensional discrete solitons in rotating lattices", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* **76** (4), art. no. 046608 (2007).
5. Alvarado-Mendez, E., Trejo-Durán, M., Cano-Lara, M., Huerta-Mascotte, E., Castaño, V.M., "Dark periodic lattices in nonlinear liquid media", *Applied Physics Letters* **91** (19), art. no. 191101 (2007).
6. Aceves, A.B., "Localization and trapping of light in one- and two-dimensional nonlinear periodic structures", *Wave Motion* **45** (1-2), pp. 48-58 (2007).
7. Driben, R., Malomed, B.A., Gubeskys, A., Zyss, J. "Cubic-quintic solitons in the checkerboard potential", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* **76** (6), Article number 066604 (2007).
8. Kartashov, Y.V., Vysloukh, V.A., Torner, L., "Soliton Shape and Mobility Control in Optical Lattices", *Progress in Optics* **52**, pp. 63-148 (2008).
9. Maytevarunyoo, T., Malomed, B.A., Baizakov, B.B., Salerno, M., "Matter-wave vortices and solitons in anisotropic optical lattices", *Physica D: Nonlinear Phenomena* **238** (15), pp. 1439-1448 (2009).
10. Apolinar-Irbe, A., Marroquín Gutierrez, F., Korneev, N., Vysloukh, V.A., "Laser beam guiding by self-tightening photonic lattice", *IEEE Journal of Quantum Electronics* **44** (11), pp. 1028-1032 (2008).
11. Tobias Richter, "Stability of Anisotropic Gap Solitons in Photorefractive Media", Dissertation zur Erlangung des Grades eines Doktors der Naturwissenschaften (Dr. rer. nat.), Universität Darmstadt, Darmstadt 2008.
12. Gorbach, A.V., Hartley, R., Skryabin, D.V., "Vortex lattices in coherently pumped polariton microcavities", *Physical Review Letters* **104** (21), art. no. 213903 (2010).
13. Ruelas, A., Lopez-Aguayo, S., Gutiérrez-Vega, J.C., "Soliton dynamics in modulated Bessel photonic lattices", *Physical Review A - Atomic, Molecular, and Optical Physics* **82** (6), art. no. 063808 (2010).
14. Kenichiro Kusudo, "Exciton polariton condensation in two dimensional periodic lattice potentials", A Doctoral Dissertation, The University of Tokio, December 2010.

15. Li, Y., Malomed, B.A., Feng, M., Zhou, J., "Double symmetry breaking of solitons in one-dimensional virtual photonic crystals", *Physical Review A - Atomic, Molecular, and Optical Physics* 83 (5), 053832 (2011).
16. Kailash Kasala, "Nonlinear propagation of incoherent white light in a photopolymerisable medium: From single self-trapped beams to 2-D and 3-D lattices", PhD Thesis, McMaster University, Department of Chemistry, Hamilton, Ontario (2012). <http://hdl.handle.net/11375/12691>
17. Zheng, Y., Meng, Y., Liu, Y., „Solitons in Gaussian potential with spatially modulated nonlinearity", *Optics Communications* 315 , pp. 63-68 (2014).
18. Julien Armijo, Raphaël Allio, Cristian Mejía-Cortés, "Absolute calibration of the refractive index in photo-induced photonic lattices", *Optics Express* 22, 17, 20574-20587 (2014).
19. Allio, Raphael; Guzman-Silva, Diego; Cantillano, Camilo; et al., "Photorefractive writing and probing of anisotropic linear and nonlinear lattices", *Journal of Optics*, Volume 17, Article Number: 025101 (2015).
20. Falk Eilenberger, "Spatiotemporal, Nonlinear Optics and the Quest for the Observation of Discrete Light Bullets", Dissertation zur Erlangung des akademischen Grades doctor rerum naturalium (Dr. rer. nat.), Friedrich-Schiller-Universität Jena (2014).
21. Nemanja M. Lucić, "Light propagation in deterministic aperiodic waveguide arrays", Doctoral Dissertation, University of Belgrade, Belgrade, 2016.
22. Cheng, K., Jiao, L., Zhong, X., "A comparison of far-field properties of radial noncanonical vortex airy beam arrays and radial noncanonical vortex Gaussian beam arrays", *Optics Communications*, Vol. 367, 112-122 (2016).
23. Dzedolik, I.V., Lapayeva, S., Pereskokov, V., "Vortex lattice of surface plasmon polaritons", *Journal of Optics (United Kingdom)*, Volume 18, Issue 7, Article number 074007 (2016).
24. Miguel Ángel García-March, Ángel Paredes, Mario Zacarés, Humberto Michinel, Albert Ferrando, "Photonic Nambu-Goldstone bosons", *Physical Review A*, Volume 96, Article Number: 053848 (2017).
25. Jin, W., Song, M., Yue, X., Gao, Y., "Optical induced area-controllable two-dimensional eight-fold symmetric photonic quasicrystal microstructures", *Optical Materials* 100, 109719 (2020).
26. Fan, Z., Puzyrev, D. N., & Skryabin, D. V., "Topological soliton metacrystals", *Communications Physics* 5(1) 248 (2022).; doi:10.1038/s42005-022-01028-5
27. Debnath, D., Bhattacharyya, K. and Chatterjee, A., "Self-trapping transition in a two dimensional extended Holstein-Hubbard model: A mean-field study," *Physica B: Condensed Matter* 661, 414909 (2023).; <https://doi.org/10.1016/j.physb.2023.414909> .

Статия А48 – 21 цитата

A. Sukhorukov, D. Neshev, A. Dreischuh, R. Fischer, S. Ha, W. Krolikowski, J. Bolger, A. Mitchell, B. Eggleton, and Yu. Kivshar, "Polychromatic nonlinear surface modes generated by supercontinuum light," *Optics Express*, vol. **14** (23), pp. 11265-11270 (2006).

Цитирана в:

1. Kominis, Y., Papadopoulos, A., Hizanidis, K., "Surface solitons in waveguide arrays: Analytical solutions", *Optics Express* 15 (16), pp. 10041-10051 (2007)
2. Kartashov, Y.V., Vysloukh, V.A., Torner, L., "Dynamics of surface solitons at the edge of chirped optical lattices", *Physical Review A - Atomic, Molecular, and Optical Physics* 76 (1), art. no. 013831 (2007)
3. Kominis, Y., Papadopoulos, A., Tsopelas, I., Droulias, S., Efremidis, N., Papazisimos, G., Hizanidis, K. "Surface lattice solitons: Analytical solutions", *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 6581, art.no. 65810M (2007).
4. Wang, X., Samodurov, A., Chen, Z., "Demonstration of surface soliton arrays at the edge of a two-dimensional photonic lattice", *Optics Letters* 33 (11), pp. 1240-1242 (2008).
5. Dreisow, F., Heinrich, M., Szameit, A., Döring, S., Nolte, S., Tünnermann, A., Fahr, S., Lederer, F., "Spectral resolved dynamic localization in curved fs laser written waveguide arrays", *Optics Express* 16 (5), pp. 3474-3483 (2008).
6. Lederer, F., Stegeman, G.I., Christodoulides, D.N., Assanto, G., Segev, M., Silberberg, Y., "Discrete solitons in optics", *Physics Reports* 463 (1-3), pp. 1-126 (2008).
7. Suntsov, S., Makris, K.G., Christodoulides, D.N., Stegeman, G.I., Morandotti, R., Volatier, M., Aimez, V., Aimez, V., Ares, R., Yang, E.H., Salamo, G., "Optical spatial solitons at the interface between two dissimilar periodic media: Theory and experiment", *Optics Express* 16 (14), pp. 10480-10492 (2008).
8. Szameit, A., Kartashov, Y.V., Heinrich, M., Dreisow, F., Pertsch, T., Noite, S., Tünnermann, A., Lederer, F., Vysloukh, V.A., Torner, L., "Observation of two-dimensional defect surface solitons", *Optics Letters* 34 (6), pp. 797-799 (2009).
9. Zhu, W.L., Luo, L., He, Y.J., "Surface gap solitons in one-dimensional dual-frequency lattices", *Journal of Modern Optics* 56 (9), pp. 1078-1082 (2009).
10. Zhu, W.-L., Luo, L., He, Y.-J., Wang, H.-Z., "Surface defect gap solitons in one-dimensional dual-frequency lattices", *Chinese Physics B* 18 (10), pp. 4319-4325 (2009).
11. Ying-Ji He and Boris A. Malomed, "Surface Waves and Boundary Effects in DNLS Equations", in "The Discrete Nonlinear Schrödinger Equation. Mathematical Analysis, Numerical Computations and Physical

Perspectives”, *Springer Tracts in Modern Physics*, Vol. 232, Kevrekidis, Panayotis G. (ed.), 2009, ISBN: 978-3-540-89198-7, pp. 259-276.

12. Xie, J.-N., He, Y.-J., Wang, H.-Z., “Surface defect gap solitons in one-dimensional chirped optical lattices”, *Journal of the Optical Society of America B: Optical Physics* 27 (3), pp. 484-487 (2010).
13. Hu, Y., Egger, R., Zhang, P., Wang, X., Chen, Z., “Interface solitons excited between a simple lattice and a superlattice”, *Optics Express* 18 (14), pp. 14409-14415 (2010).
14. Chen, Z., Segev, M., Christodoulides, D.N., “Optical spatial solitons: Historical overview and recent advances”, *Reports on Progress in Physics* 75 (8), art. no. 086401 (2012).
15. Cao, Z., Qi, X., Feng, X., Ren, Z., Zhang, G., Bai, J., “Light controlling in transverse separation modulated photonic lattices”, *Optics Express* 20 (17), pp. 19119-19124 (2012).
16. Qi, X.-Y., Cao, Z., Bai, J.-T., “The beam propagation based on one-dimensional separation modulated photonic lattices”, *Wuli Xuebao/Acta Physica Sinica* 62(6), art.no.064217 (2013).
17. Lan, Lou, Wen Feng, Qin Meng-Zhe, He Jia-Nan, Zhang Yan-Peng, and Xiao Min. "Coherent Control of Multi-Wave Mixing in Atomic Media." *Advances in Physics*, 33, no. 3, p.87 (2013).
18. Xinyuan Qi, Zheng Cao, Luqi Wang, Yang Lu, Yongqi Liu, Meiling Gao, Ping'an Gao, and Jintao Bai. "Bending photonics waveguide directional coupler." *Journal of Northwestern University: Natural Science Edition* 44, no. 2 197-200 (2014).
19. Cao, Z., Tan, Q., Li, X., Qi, X., “Nonlinear evolution of Airy-like beams generated by modulated waveguide arrays”, *Applied Optics*, Volume 55, Issue 24, Pages 6601-6605 (2016).
20. Cao, Z., Li, X., Tan, Q., Jiang, W., Liang, D., Dou, J., “Trajectory variations of optical Bloch oscillations for Airy beams in transversely and longitudinally modulated photonic lattices”, *Applied Optics*, Volume 56, Issue 12, Pages 3484-3490 (2017).
21. Ihar Babushkin, „Light-matter interaction on the few-and sub-cycle timescale”, Habilitationsschrift zur Erlangung der Venia Legendi für das Fach Physik, Gottfried Wilhelm Leibniz Universität Hannover (2018).

Статия А49 – 67 цитата

A. Minovich, D. N. Neshev, A. Dreischuh, W. Krolikowski, Yu. S. Kivshar, “Experimental reconstruction of nonlocal response of nonlinear optical media,” *Optics Letters*, vol. **32** (12), pp. 1599-1601 (2007).

Цитирана в:

1. Lopez-Aguayo, S., Gutiérrez-Vega, J.C., “Self-trapped modes in highly nonlocal nonlinear media”, *Physical Review A - Atomic, Molecular, and Optical Physics* 76 (2), art. no. 023814 (2007)
2. Kartashov, Y.V., Vysloukh, V.A., Torner, L., “Ring surface waves in thermal nonlinear media”, *Optics Express* 15 (24), pp. 16216-16221 (2007)
3. Kartashov, Y.V., Ye, F., Vysloukh, V.A., Torner, L., “Surface waves in defocusing thermal media”, *Optics Letters* 32 (15), pp. 2260-2262 (2008)
4. Ye, F., Kartashov, Y.V., Torner, L., “Stabilization of dipole solitons in nonlocal nonlinear media”, *Physical Review A - Atomic, Molecular, and Optical Physics* 77 (4), art. no. 043821 (2008).
5. Souza, R.F., Alencar, M.A.R.C., Da Silva, E.C., Meneghetti, M.R., Hickmann, J.M., “Nonlinear optical properties of Au nanoparticles colloidal system: Local and nonlocal responses”, *Applied Physics Letters* 92 (20), art. no. 201902 (2008).
6. Nie, H., Zhang, H., Li, L., “Propagation and interaction of beams with initial phase-front curvature in highly nonlocal media”, *Optics Communications* 281 (21), pp. 5429-5438 (2008).
7. Sun, C., Barsi, C., Fleischer, J.W., “Peakon profiles and collapse-bounce cycles in self-focusing spatial beams”, *Optics Express* 16 (25), pp. 20676-20686 (2008).
8. Kartashov, Y.V., Vysloukh, V.A., Torner, L., “Stabilization of higher-order vortices and multihump solitons in media with synthetic nonlocal nonlinearities”, *Physical Review A - Atomic, Molecular, and Optical Physics* 79 (1), art. no. 013803 (2009).
9. Kartashov, Y.V., Vysloukh, V.A., Torner, L., “Multipole surface solitons in thermal media”, *Optics Letters* 34 (3), pp. 283-285 (2009).
10. Souza, R.F., Alencar, M.A.R.C., Meneghetti, M.R., Hickmann, J.M., “Large nonlocal nonlinear optical response of castor oil”, *Optical Materials* 31 (11), pp. 1591-1594 (2009).
11. Sun, C., Fleischer, J.W., “Beam interaction in self-defocusing nonlinear media with nonlocal response”, *Optics InfoBase Conference Papers*, 2009 Conference on Lasers and Electro-Optics, CLEO 2009; Baltimore, MD; United States; 31 May - 5 June 2009; Code 102749, art. no. 5225462; ISSN: 21622701 ISBN: 978-155752869-8.
12. Ye, F., Kartashov, Y.V., Hu, B., Torner, L., “Twin-vortex solitons in nonlocal nonlinear media”, *Optics Letters* 35 (5), pp. 628-630 (2010).
13. Li, H., Shi, Z., Jiang, X., Deng, D., Zhu, X., “Surface solitons at the interface between semi-infinite linear and thermal nonlinear optical media”, *Optics Communications* 284 (21), pp. 5203-5207 (2011).
14. Petrović, M.S., Strinić, A.I., Belić, M.R., “Breathers in biased highly nonlocal uniaxial nematic liquid crystals”, *Physica Scripta* 85 (1), art. no. 015403 (2012).
15. Stefanov, I.L., Hadjichristov, G.B., “Interferometric pump-probe characterization of the nonlocal response of optically transparent ion implanted polymers”, *Applied Surface Science* 258 (10), pp. 4770-4776 (2012).

16. Strinić, A.I., Petrović, M.S., "Finite-size effects in fundamental solitons in highly nonlocal nematic liquid crystals", *Physica Scripta* (T149) , art. no. 014038 (2012).
17. Ghofraniha, N., Amato, L.S., Folli, V., Trillo, S., DelRe, E., Conti, C., "Measurement of scaling laws for shock waves in thermal nonlocal media", *Optics Letters* 37 (12) , pp. 2325-2327 (2012).
18. Santos, C.E.A., Alencar, M.A.R.C., Migowski, P., Dupont, J., Hickmann, J.M., "Anionic and cationic influence on the nonlocal nonlinear optical response of ionic liquids", *Chemical Physics* 403 , pp. 33-36 (2012).
19. Barsi, C., Wan, W., Jia, S., Fleischer, J.W., "Spatially dispersive shock waves in nonlinear optics", *Springer Series in Optical Sciences* 170 , pp. 231-257 (2012).
20. I. Severiano Carrillo, E. V. García Ramírez, M.L. Arroyo Carrasco, M. M. Méndez Otero, E. Reynoso Lara, S. Chávez Cerda, M.D. Iturbe Castillo, "Modelo Numérico para Incluir más de una Respuesta Óptica No Lineal en un Medio Delgado No Local", en *Memorias Arbitradas de la XXV Reunión Anual de Óptica*, Carlos G Treviño, Maximino Avendaño, Ricardo Legarda, Agustín Santiago editores (Academia Mexicana de Óptica, 2012), FO-2.
21. Bar-Ad, S., Schilling, R., Fleurov, V., "Nonlocality and fluctuations near the optical analog of a sonic horizon", *Physical Review A - Atomic, Molecular, and Optical Physics* 87 (1) , art. no. 013802 (2013).
22. Santos, C.E.A., Alencar, M.A.R.C., Migowski, P., Dupont, J., Hickmann, J.M., "Nonlocal nonlinear optical response of ionic liquids under violet excitation", *Advances in Materials Science and Engineering* 2013 , art. no. 104914 (2013).
23. Kartashov, Y.V., Vysloukh, V.A., Torner, L., "Light dynamics in materials with radially inhomogeneous thermal conductivity", *Optics Letters* 38 (21) , pp. 4417-4420 (2013).
24. Gelens, L., Matías, M.A., Gomila, D., Dorissen, T., Colet, P., "Formation of localized structures in bistable systems through nonlocal spatial coupling. II. the nonlocal Ginzburg-Landau equation", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* 89 (1), 012915 (2014).
25. Escaff, Daniel, Italo'Ivo Lima Dias Pinto, and Katja Lindenberg. "Arrays of stochastic oscillators: Nonlocal coupling, clustering, and wave formation.", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics*, Volume 90, Issue 5, Article number 052111 (10 November 2014).
26. Milan S Petrović, Aleksandra I Strinić, Najdan B Aleksić and Milivoj R Belić, "Dipole solitons in highly nonlocal nematic liquid crystals: finite size effects", *Phys. Scr.* **2014** 014004 (2014).
27. Fernandez-Oto C., Tlidi M, Escaff D, Clerc M.G., "Strong interaction between plants induces circular barren patches: fairy circles", *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Science*, vol. 372: Issue 2027, Article number 0009 (2014).
28. Fernandez-Oto, C., Tlidi, M., Escaff, D., Clerc, M., Kockaert, P., "Strong nonlocal interaction stabilizes cavity solitons with a varying size plateau", *Nonlinear Optics and Its Applications VIII; and Quantum Optics III*; Brussels; Belgium; 14 April 2014 through 16 April 2014, *Proceedings of SPIE*, Vol.9136, Art. 91360K (2014).
29. David Vocke, Thomas Roger, Francesco Marino, Ewan M. Wright, Iacopo Carusotto, M. Clerici, Daniele Faccio, "Experimental characterisation of nonlocal photon fluids", *Optica*, Vol. 2, Issue 5, 484-490 (2015).
30. Escaff, D., Fernandez-Oto, C., Clerc, M.G., Tlidi, M., "Localized vegetation patterns, fairy circles, and localized patches in arid landscapes", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* Volume 91, Issue 2, Article number 022924 (2015).
31. Xu, G., Vocke, D., Faccio, D., Garnier, J., Roger, T., Trillo, S., Picozzi, A., "From coherent shocklets to giant collective incoherent shock waves in nonlocal turbulent flows", *Nature Communications*, Volume 6, Article number 8131 (2015).
32. Tlidi, M., Fernandez-Oto, C., Clerc, M.G., Escaff, D., Kockaert, P., "Localized plateau beam resulting from strong nonlocal coupling in a cavity filled by metamaterials and liquid-crystal cells", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 92, Issue 5, Article number 053838 (2015).
33. Michael Karpov, Thibault Congy, Yonatan Sivan, Victor Fleurov, Nicolas Pavloff, and Shimshon Bar-Ad, "Spontaneously formed autofocusing caustics in a confined self-defocusing medium", *Optica*, Vol. 2, Issue 12, 1053-1057 (2015).
34. Vocke, D., Wilson, K., Marino, F., Carusotto, I., Wright, E.M., Roger, T., Anderson, B.P., Öhberg, P., Faccio, D., "Role of geometry in the superfluid flow of nonlocal photon fluids", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 94, Issue 1, Article number 013849 (2016).
35. Jiang, X., Fan, Z., Chen, Z., Pang, W., Li, Y., Malomed, B.A., "Two-dimensional solitons in dipolar Bose-Einstein condensates with spin-orbit coupling", *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 93, Issue 2, Art. 023633 (2016).
36. Marino, F., Maitland, C., Vocke, D., Ortolan, A., Faccio, D., "Emergent geometries and nonlinear-wave dynamics in photon fluids", *Scientific Reports*, Volume 6, Article number 23282 (2016).
37. Theodoros P. Horikis, Dimitrios J. Frantzeskakis, "Asymptotic reductions and solitons of nonlocal nonlinear Schrödinger equations", *Journal of Physics A: Mathematical and Theoretical*, Volume 49, Issue 20, Article number 205202 (2016).
38. Hadjichristov, G.B., Marinov, Y.G., "Optical diffraction by using electrically-controlled spatially patterned nematic pentylcyanobiphenyl films under static electric field", *Molecular Crystals and Liquid Crystals*, Volume 632, Issue 1, Pages 9-20 (2016).

39. Roger, T., Maitland, C., Wilson, K., Westerberg, N., Vocke, D., Wright, E.M., Faccio, D., “Optical analogues of the Newton-Schrödinger equation and boson star evolution”, *Nature Communications*, Volume 7, Article number 13492 (2016).
40. Xu, G., Vocke, D., Faccio, D., Garnier, J., Roger, T., Trillo, S., Picozzi, A., “Giant collective incoherent shock waves in strongly nonlinear turbulent flows”, 2016 Conference on Lasers and Electro-Optics, CLEO 2016, 16 December 2016, Article number 7787458 (2016)
41. Roger, T., Maitland, C., Wilson, K., Wright, E.M., Faccio, D., “Optical analogues of the Schrödinger-Newton equation and rotating boson stars”, 2016 Conference on Lasers and Electro-Optics, CLEO 2016, 16 December 2016, Article number 7787459 (2016).
42. Kali E. Wilson, David Vocke, Ewan Wright, Francesco Marino, Iacopo Carusotto, Brian P. Anderson, and Daniele Faccio, “The role of geometry in nonlocal superfluids”, Conference on Lasers and Electro-Optics OSA Technical Digest (online) (Optical Society of America, 2016), paper JW2A.53 (2016); https://doi.org/10.1364/CLEO_AT.2016.JW2A.53
43. Gang Xu, “Emergence of incoherent solitons and shock-like singularities in optical turbulence”, Thèse présentée pour obtenir le titre de Docteur en Physique, Université de Bourgogne Franche-Comté (2015).
44. Torres Romero, R., Méndez Otero, M.M., Arroyo Carrasco, M.L., Reynoso Lara, E., Iturbe Castillo, M.D., “Z-scan for thick nonlinear media and particular nonlocal response”, Latin America Optics and Photonics Conference, LAOP 2016; Ruta NMedellin; Colombia; 22 August 2016 through 26 August 2016; Code 134278, *Optics InfoBase Conference Papers*, Volume Part F1-LAOP 2016 (2016).
45. Xu, G., Guasoni, M., Vocke, D., Faccio, D., Garnier, J., Roger, T., Trillo, S., Picozzi, A., “Giant collective incoherent shock waves in strong turbulence”, Nonlinear Photonics, NP 2016; SMC Conference and Function CentreSydney; Australia; 5 September 2016 through 8 September 2016; Code 134238, *Optics InfoBase Conference Papers*, Volume Part F12-NP 2016 (2016).
46. M. Tlidi, K. Panajotov, “Cavity solitons: dissipative structures in nonlinear photonics”, *Romanian Reports in Physics*, 70, 406 (2018)
47. Niclas Westerberg, Kali E. Wilson, Callum W. Duncan, Daniele Faccio, Ewan M. Wright, Patrik Öhberg, Manuel Valiente, “Self-bound droplets of light with orbital angular momentum”, *Phys. Rev. A* 98, art. Nr. 053835 (2018); <https://doi.org/10.1103/PhysRevA.98.053835>
48. Agostino Aprà, “Superfluidity of light in a nonlinear atomic medium”, Master thesis. Sapienza – University of Rome (2017).
49. Alessandro Alberucci, Jisha Pannian, Stefan Nolte, and Raouf Barboza, “Temporal dynamics of light-written waveguides in unbiased liquid crystals”, *JOSA B*, Volume 35, Issue 8, 1878-1887 (2018).
50. T.P. Horikis, D.J. Frantzeskakis, “On the Properties of a Nonlocal Nonlinear Schrödinger Model and Its Soliton Solutions”. In: Rassias T. (eds) Applications of Nonlinear Analysis. Springer Optimization and Its Applications, vol 134, Pages 403-446 (Springer, Cham, 2018).
51. Vocke, D., Maitland, C., Prain, A., Wilson, K.E., Biancalana, F., Wright, E.M., Marino, F., Faccio, D., “Rotating black hole geometries in a two-dimensional photon superfluid”, *Optica*, 5(9), pp. 1099-1103 (2018).
52. Gang Xu, David Vocke, Daniele Faccio, Josselin Garnier, J. Barre, Stefano Trillo, Antonio Picozzi, “Shock-induced complex phase-space dynamics of strongly turbulent flows”, 2017 Conference on Lasers and Electro-Optics Europe & European Quantum Electronics Conference (CLEO/Europe-EQEC), IEEE, DOI: 10.1109/CLEOE-EQEC.2017.8087578 (2017).
53. Simon A. Louis, Tim R. Marchan, and Noel F. Smyth, “2-D solitary waves in thermal media with nonsymmetric boundary conditions,” *Studies in Applied Mathematics* 142(4), pp. 586-607 (2019); DOI: 10.1111/sapm.12243 <https://doi.org/10.1111/sapm.12243>
54. Westerberg, N., Wilson, K.E., Duncan, C.W., Faccio, D., Wright, E.M., Öhberg, P., Valiente, M., “Self-bound droplets of light with orbital angular momentum”, *Physical Review A*, Volume 98, Issue 5, Article number 053835 (2018).
55. Vocke, D., Roger, T., Faccio, D., Marino, F., Carusotto, I., Wright, E.M., Picozzi, A., “Analogue gravity in photon fluids”, Proceedings of 14th Marcel Grossman Meeting On Recent Developments in Theoretical and Experimental General Relativity, Astrophysics and Relativistic Field Theories, Pages 1679-1684 (2018).
56. J. Qin, Zh. Liang, B. A. Malomed, G. Dong, Guangjiong Dong, “Tail-free self-accelerating solitons and vortices,” *Phys. Rev. A* 99, 023610 (2019). DOI: 10.1103/PhysRevA.99.023610
57. Quentin Fontaine, „Paraxial fluid of light in hot atomic vapors,“ Thèse De Doctorat De Sorbonne Université, Spécialité : Physique, École doctorale n°564: Physique en Île-de-France, pour obtenir le grade de : docteur de Sorbonne Université, soutenue le 31/01/2019.
58. Nazareno N.S.Leal, Antônio CarlosBrandão-Silva, CristianoFantini, Jandir M.Hickmann, Eduardo J.S.Fonseca, Márcio A.R.C.Alencar “Thermo-optical response of colloidal metallic and semiconducting single-walled carbon nanotubes”, *Optics & Laser Technology* Volume 116, Pages 315-321 (2019).
59. Francesco Marino, “Massive phonons and gravitational dynamics in a photon-fluid model”, *Physical Review A*, Volume 100, Issue 6, Article number 063825 (2019); doi: 10.1103/PhysRevA.100.063825.
60. Giulia Marcucci, Phillip Cala, Weining Man, Davide Pierangeli, Claudio Conti, Zhigang Chen, “Anisotropic Optical Shock Waves in Isotropic Media with Giant Nonlocal Nonlinearity”, Conference Nonlinear Optics (NLO), *OSA Technical Digest* (Optical Society of America, 2019), paper NW2A.5 (2019); <https://doi.org/10.1364/NLO.2019.NW2A.5>

61. Marcucci, G., Pierangeli, D., Gentilini, S., Ghofraniha, N., Chen, Z., Conti, C., "Optical spatial shock waves in nonlocal nonlinear media", *Advances in Physics: X*, Volume 4, Issue 1, Article number 1662733 (2019).
62. Marcucci, G., Hu, X., Cala, P., Weining, M., Pierangeli, D., Conti, C., Chen, Z., "Anisotropic Optical Shock Waves in Isotropic Media with Giant Nonlocal Nonlinearity", *Physical Review Letters* 125(24), 243902 (2020)
63. Marcucci, G., "Complex extreme nonlinear waves: classical and quantum theory for new computing models", Ph. D. Thesis, Physics Department, Faculty of Mathematical, Physical and Natural Sciences Sapienza University of Rome (2019)
64. Ciszak, M. and Marino, F., "Bound Bogoliubov quasiparticles in photon superfluids", *arXiv preprint arXiv:2311.07228* (2023).
65. Silva, H. D., "Nonlinear dynamics in quantum fluids of light", PhD thesis, Natal - Rio Grande do Norte (2023).
66. Savotchenko, S. E. "Solitons in optical thermal medium with power nonlinearity and feedback", *Physics Letters A* 508 129498 (2024).
67. J. B. Khurgin, "Nonlinear optics from the viewpoint of interaction time," *Nature Photonics*, 17(7), 545-551 (2023). <https://doi.org/10.1038/s41566-023-01191-3>

Статья A50 – 20 цитата

D. N. Neshev, A. A. Sukhorukov, A. Dreischuh, R. Fischer, S. Ha, W. Krolikowski, J. Bolger, B. J. Eggleton, A. Mitchell, M. W. Austin, Yu. S. Kivshar, "Nonlinear spectral-spatial control and localization of supercontinuum radiation," *Phys. Rev. Lett.*, vol. 99 (12):123901-4 (2007).

Цитирана в:

1. Dreisow, F., Heinrich, M., Szameit, A., Döring, S., Nolte, S., Tünnermann, A., Fahr, S., Lederer, F., "Spectral resolved dynamic localization in curved fs laser written waveguide arrays", *Optics Express* 16 (5), pp. 3474-3483 (2008).
2. Kumar, R.S.S., Deepak, K.L.N., Rao, D.N., "Control of the polarization properties of the supercontinuum generation in a noncentrosymmetric crystal", *Optics Letters* 33 (11), pp. 1198-1200 (2008).
3. Lederer, F., Stegeman, G.I., Christodoulides, D.N., Assanto, G., Segev, M., Silberberg, Y., "Discrete solitons in optics", *Physics Reports* 463 (1-3), pp. 1-126 (2008).
4. Kartashov, Y.V., Vysloukh, V.A., Torner, L., "Soliton Shape and Mobility Control in Optical Lattices", *Progress in Optics* 52, pp. 63-148 (2008).
5. Longhi, S., "Rectification of light refraction in curved waveguide arrays", *Optics Letters* 34 (4), pp. 458-460 (2009).
6. Д.Гапонов, А.Прямыков, А.Сысолятин, "Новые типы световодов: революция в волоконной оптике", *Фотоника* No.2, 30-38 (2009).
7. Yoav Linzon, "Wave propagation and interactions in homogeneous, periodically modulated and locally modulated nonlinear waveguides", Thesis submitted towards the degree "Doctor of Philosophy" (Ph.D.), Raymond and Beverly Sackler faculty of exact sciences, School of Physics & Astronomy, Tel Aviv University (2008).
8. Hudson, D.D., Kutz, J.N., Schibli, T.R., Chao, Q., Christodoulides, D.N., Morandotti, R., Cundiff, S.T., "Fixed-point attractor for chirp in nonlinear waveguide arrays", *Physical Review A - Atomic, Molecular, and Optical Physics* 85 (3), art. no. 031806 (2012).
9. Chen, Z., Segev, M., Christodoulides, D.N., "Optical spatial solitons: Historical overview and recent advances", *Reports on Progress in Physics* 75 (8), art. no. 086401 (2012)
10. Wang, Y., Ni, H., Zhan, W., Yuan, J., Wang, R., "Electro-optical detection of THz radiation in Fe implanted LiNbO₃", *Optical Materials* 35 (3), pp. 596-599 (2013).
11. Wang, Y.-H., Ni, H.-W., Zhan, W.-T., Yuan, J., Wang, R.-W., "Supercontinuum and THz generation from Ni implanted LiNbO₃ under 800 nm laser excitation", *Optics Communications* 291, pp. 334-336 (2013).
12. Wang, Y., Wang, R., Yuan, J., Wang, Y., "Terahertz generation from Cu ion implantation into lithium niobate", *Journal of Luminescence* 147, pp. 242-244 (2014).
13. Tran, T.X., Duong, D.C., Biancalana, F., "Supercontinuum generation in both frequency and wavenumber domains in nonlinear waveguide arrays", *Physical Review A - Atomic, Molecular, and Optical Physics* 89(1), 013826 (2014).
14. Xiangxiang Yu, Yuhua Wang and Yumei Wang, "Nonlinear optical refraction of Al₂O₃ single crystal doping with nickel nanoparticles measured by the Kerr-lens autocorrelation technique", *Laser Physics*, Volume 24, Number 5 (2014).
15. TX Tran, DC Duong, F Biancalana, "Light bullets in nonlinear waveguide arrays under the influence of dispersion and the Raman effect", *Physical Review A - Atomic, Molecular, and Optical Physics* 90, 023857 (2014).
16. K. Krupa, A. Labruyère, A. Tonello, B. M. Shalaby, V. Couderc, F. Baronio, and A. B. Aceves, "Polychromatic filament in quadratic media: spatial and spectral shaping of light in crystals", *Optica*, Volume 2, Issue 12, 1058-1064 (2015); doi: 10.1364/OPTICA.2.001058
17. AA Kalinovich, IG Zakharova, VA Trofimov, „New mechanism of solitons formation at diffraction on a periodic inhomogeneity induced in a cubic nonlinear medium", *Physics of Wave Phenomena*, Volume 25, Issue 2, pp 90–94 (2017). DOI: 10.3103/S1541308X17020029

18. V. A. Trofimov, Alexei A. Kalinovich, and Irina G. Zakharova, "Aberrated Soliton Forming at Femtosecond Pulse Propagation in Cubic Nonlinear Medium with Inhomogeneous Refraction Index", *Frontiers in Optics* 2017 OSA Technical Digest (online) (Optical Society of America, 2017), paper JTu3A.40; <https://doi.org/10.1364/FIO.2017.JTu3A.40>
19. Kalinovich, A.A., Zakharova, I.G. & Trofimov, V.A. "Formation of chirped solitons when a femtosecond pulse passes through a layer with an inhomogeneous refractive index in a medium with cubic nonlinearity", *Bull. Russ. Acad. Sci. Phys.*, Volume 82, 13–16 (2018). <https://doi.org/10.3103/S1062873818010094>
20. L. Xia, P. J. M. van der Slot, M. Timmerkamp, H. M. J. Bastiaens, C. Fallnich, and K.-J. Boller, "On-chip phase-shift induced control of supercontinuum generation in a dual-core Si₃N₄ waveguide," *Opt. Express* **31**, 37472-37482 (2023).; <https://doi.org/10.1364/OE.501938>

Статия A51 – 15 цитата

K. Bezuharov, A. A. Dreischuh, W. Krolikowski, "Bright optical beams in weakly nonlocal media: Variational analysis," *Phys. Rev. A*, vol. **77**, art # 033825 (1-7) (2008).

Цитирана в:

1. Lijuan Ge, Qi Wang, Ming Shen, Jielong Shi, Qian Kong and Peng Hou, "Dark solitons in nonlocal media: variational analysis" *J. Opt. A: Pure Appl. Opt.* **11** 065207 (6pp) (2009); doi: 10.1088/1464-4258/11/6/065207.
2. Ming, S., Ning, X., Qian, K., Li-Juan, G., Jie-Long, S., Qi, W., "Gaussian solitons in nonlocal media: Variational analysis", *Chinese Physics B* **18** (7), pp. 2822-2827 (2009).
3. Cheng, S., Wang, Q., Ge, L.-J., Shi, J.-L., Ding, H.-X., Shen, M., "Elliptical Gaussian solitons in synthetic nonlocal nonlinear media", *Chinese Physics B* **20** (5), art. no. 054206 (2011).
4. Assanto, G., Garca-Reimbert, C., Minzoni, A.A., Smyth, N.F., Worthy, A.L., "Lagrange solution for three wavelength solitary wave clusters in nematic liquid crystals", *Physica D: Nonlinear Phenomena* **240** (14-15), pp. 1213-1219 (2011).
5. Grado-Caffaro, M.A., Grado-Caffaro, M., "Estimation of the solitary-wave energy content in solid dielectric media with optical strong nonlinearity in the far-infrared range", *Physica B: Condensed Matter* **406** (19), pp. 3562-3563 (2011).
6. Grado-Caffaro, M.A., Grado-Caffaro, M., "Analytical Dynamics on the Optical Lossless Cubic-Quintic Schrödinger Equation", *Reports on Mathematical Physics*, Volume 69, Issue 2, Pages 229–234 (2012).
7. Yang, G., Wang, Y., Qin, Z., Malomed, B.A., Mihalache, D., Li, L., "Breatherlike solitons extracted from the Peregrine rogue wave", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics*, Volume 90, Issue 6, Article number 062909 (2014).
8. Umarov, B.A. , Busul Aklan, N.A., " Soliton scattering on the external potential in weakly nonlocal nonlinear media", *Malaysian Journal of Mathematical Sciences*, Volume 10, Pages 219-226 (2016).
9. C. Liu, H. Zhu, R. Chen, C. Dai and S. He, "Polarization Evolution of a Vector Vortex Optical Field in a Strongly Nonlocal Nonlinear Medium," *IEEE Photonics Journal*, **11** (2), 6101210 (2019). doi: 10.1109/JPHOT.2019.2902597
10. Liu, C., Chew, K.H., Wu, Y. and Chen, R.P., "Vectorial effect on the evolution of fractional order vector vortex beams in a strongly nonlocal nonlinear medium," *J. Opt. Soc. Am. A* **37**(2), pp. 327-335 (2020). <https://doi.org/10.1364/JOSAA.380433>
11. Aklan, N.A.B., Faizar, F.A. and Umarov, B.A., „Interactions of Soliton in Weakly Nonlocal Nonlinear Media," *Journal of Physics: Conference Series* **1988** 012016 (2021); doi:10.1088/1742-6596/1988/1/012016
12. Liu, C., Li, Y., Wu, F. and Chen, R.P., "Polarization state evolution of a twisted vector optical field in a strongly nonlocal nonlinear medium," *J. Opt. Soc. Am. A* **40**, 620-628 (2023).; <https://doi.org/10.1364/JOSAA.484221>
13. Kabadiang Ngon, G.F., Tabi, C.B., Kofané, T.C., „Dissipative light bullets in a doped and weakly nonlocal optical fiber," *Physics Letters A* **494**, 129291 (2024).; <https://doi.org/10.1016/j.physleta.2023.129291>.
14. Savotchenko, S. E., "Solitons in optical thermal medium with power nonlinearity and feedback", *Physics Letters A*, **508**, 129498 (2024).
15. Tabi, C. B., Latchio Tiofack, C. G., Tagwo, H., & Kofané, T. C., "Effect of weak nonlocal nonlinearity on generalized sixth-order dispersion modulational instability in optical media", *Nonlinear Dynamics*, 1-14. (2024).

Статия A52 – 17 цитата

A. Dreischuh, D. N. Neshev, V. Z. Kolev, S. Saltiel, M. Samoc, W. Krolikowski, and Yu. S. Kivshar, "Nonlinear dynamics of two-color optical vortices in lithium niobate crystals," *Optics Express* vol. **16**, pp. 5406-5420 (2008).

Цитирана в:

1. Holt, G.C., "Negative index of refraction and metamaterials", *Nanotechnology Perceptions* **4** (2), pp. 201-205 (2008).
2. Ueno, Y., Toda, Y., Adachi, S., Morita, R., Tawara, T., "Coherent transfer of orbital angular momentum to excitons by optical four-wave mixing", *Optics Express* **17** (22), pp. 20567-20574 (2009).

3. D.V. Gorbach, O.G. Romanov and A.L. Tolstik, "Transformation of singular light beams at nondegenerated four-wave mixing in dye solutions", *Bulletin of the Russian Academy of Sciences: Physics*, 73 (12), pp. 1638-1641 (2009).
4. Romanov, O.G., Gorbach, D.V., Tolstik, A.L., "Frequency transformation of optical vortices upon nondegenerate multiwave interaction in dye solutions", *Optics and Spectroscopy (English translation of Optika i Spektroskopiya)* 108 (5), pp. 768-773 (2010).
5. Toda, Y., Honda, S., Morita, R., "Dynamics of a paired optical vortex generated by second-harmonic generation", *Optics Express* 18 (17), pp. 17796-17804 (2010).
6. Горбач Д.В., Романов О.Г., Толстик А.Л., "Преобразование оптических вихрей тонкими и объемными динамическими голограммами", VI Международного оптического конгресса "Оптика - XXI век": Сборник трудов Международной конференции и семинаров (Санкт-Петербург, 2010), 126-128; ISBN 978-5-7577-0362-6.
7. Bovino, F.A., Braccini, M., Bertolotti, M., Sibilia, C., "Management of the orbital angular momentum of vortex beams in a quadratic nonlinear interaction", *Optics Communications* 284 (10-11), pp. 2587-2593 (2011).
8. Bovino, F.A., Braccini, M., Giardina, M., Sibilia, C., "Orbital angular momentum in noncollinear second-harmonic generation by off-axis vortex beams", *Journal of the Optical Society of America B: Optical Physics* 28 (11), pp. 2806-2811 (2011).
9. Wenjun Xia. "Refraction of Nonlinear Light Beams in Nematic Liquid Crystals", Doctor of Philosophy Thesis, University of Edinburgh, 2012
10. Grigoriev, K.S., Makarov, V.A., Perezhogin, I.A., "Formation of the lines of circular polarization in a second harmonic beam generated from the surface of an isotropic medium with nonlocal nonlinear response in the case of normal incidence", *Journal of Optics (United Kingdom)*, Volume 18, Issue 1, Art. number 014004 (2015).
11. Matteo Braccini, "Optical control of the orbital angular momentum of light: techniques and devices", PhD Thesis, Sapienza – Università di Roma (2012).
12. К. С. Григорьев, "Генерация и преобразование световых пучков и импульсов, содержащих сингулярности поляризации, в средах с нелокальностью нелинейно-оптического отклика", Диссертация на соискание ученой степени кандидата физико-математических наук, Москва, 2018
13. K. S. Grigoriev, I.A. Perezhogin, N. Potravkin, V. A. Makarov, „Generation and Transformation of Light Beams with Polarization Singularities in Three-Wave Mixing Processes in Isotropic Nonlocal Medium: Recent Advances“, *Springer Series in Chemical Physics*, Volume 119, 2019, Pages 19-41; DOI: 10.1007/978-3-030-05974-3_2.
14. Vladimir A. Makarov, "Nonlinear Optics with Elliptically Polarized Singular Beams and Short Pulses in Media with Spatial Dispersion," In book: Quantum Photonics: Pioneering Advances and Emerging Applications, *Springer Series in Optical Sciences*, Volume 217, 2019, Pages 317-384 (2019). DOI: 10.1007/978-3-319-98402-5_9
15. K. S. Grigoriev, V. A. Makarov, "Generation and Transformation of Light Beams and Pulses, Containing Polarization Singularities, in Media with Nonlocality of Nonlinear Optical Response (Scientific Summary)," *JETP Letters* 109(10), pp. 642-651 (2019); DOI: 10.1134/S0021364019100084
16. Lv, X., Wu, S., Tian, Z., Li, Y., Yang, T., Qiu, W., Guan, H. and Lu, H., "Chiral metasurfaces in anisotropic thin film lithium niobate and its nonlinear effect," *J. Opt. Soc. Am. B* **40**, D15-D20 (2023).; <https://doi.org/10.1364/JOSAB.481591>
17. Shi, F., Hou, M., Wang, W. and Zeng, X., „Direct Emission of Two-Color Vortex Beams at 1.0 μm and 1.5 μm Wavebands From an All-Fiber Laser“, *IEEE Photonics Technology Letters* 35(9), 473-476 (2023).; DOI: 10.1109/LPT.2023.3240299

Статья A53 – 5 цитата

A. A. Sukhorukov, D. N. Neshev, A. Dreischuh, W. Krolikowski, J. Bolger, B. J. Eggleton, Lam Bui, A. Mitchell, and Yu. S. Kivshar, "Observation of polychromatic gap solitons," *Optics Express*, vol. **16**, pp. 5991-5996 (2008).

Цитирана в:

1. A. Szameit, Y. V. Kartashov, M. Heinrich, F. Dreisow, T. Pertsch, S. Nolte, A. Tünnermann, F. Lederer, V. A. Vysloukh, and L. Torner, „Observation of two-dimensional defect surface solitons“, *Optics Letters*, Vol. 34, Issue 6, pp. 797-799 (2009); doi:10.1364/OL.34.000797
2. Б. И. Манцызов, „Когерентная и нелинейная оптика фотонных кристаллов“, Физматлит Москва, 2009, ISBN: 978-5-9221-1201-7
3. Chen, Z., Segev, M., Christodoulides, D.N., "Optical spatial solitons: Historical overview and recent advances", *Reports on Progress in Physics* 75 (8), art. no. 086401 (2012)
4. Setzpfandt, Frank. "Nonlinear dynamics in multimode optical waveguide arrays." PhD diss., Friedrich-Schiller-Universität Jena, Physikalisch-Astronomische Fakultät (2012).
5. V. Feshchenko, G. Feshchenko, "Polarization Simultons in CARS by Polaritons," *Journal of Applied Mathematics and Physics* 11, 582-597 (2023).; <https://www.scirp.org/journal/jamp>

Статья A54 – 11 цитата

D. N. Neshev, A. Dreischuh, V. Shvedov, A. S. Desyatnikov, W. Krolikowski, and Yu. S. Kivshar, “Observation of polychromatic vortex solitons,” *Opt. Letters*, vol. **33**, pp. 1851-1853 (2008).

Цитирана в:

1. Soto-Crespo, J.M., Akhmediev, N., Mejía-Cortés, C., Devine, N., “Dissipative ring solitons with vorticity”, *Optics Express* 17 (6), pp. 4236-4250 (2009).
2. D.V. Gorbach, O.G. Romanov and A.L. Tolstik, “Transformation of singular light beams at nondegenerated four-wave mixing in dye solutions”, *Bulletin of the Russian Academy of Sciences: Physics*, 73 (12), pp. 1638-1641 (2009).
3. Romanov, O.G., Gorbach, D.V., Tolstik, A.L., “Frequency transformation of optical vortices upon nondegenerate multiwave interaction in dye solutions”, *Optics and Spectroscopy (English translation of Optika i Spektroskopiya)* 108 (5), pp. 768-773 (2010).
4. Горбач Д.В., Романов О.Г., Толстик А.Л., “Преобразование оптических вихрей тонкими и объемными динамическими голограммами”, VI Международного оптического конгресса “Оптика - XXI век”: Сборник трудов Международной конференции и семинаров (Санкт-Петербург, 2010), 126-128; ISBN 978-5-7577-0362-6.
5. Cristian Mejía-Cortés, „Two-Dimensional Optical Solitons in Dissipative Systems”, Doctoral dissertation, Universidad Complutense de Madrid, Facultad de Ciencias Físicas, Madrid, 2012.
6. Lu, X., Chen, L., “Spin-orbit interactions of a Gaussian light propagating in biaxial crystals”, *Optics Express* 20 (11), pp. 11753-11766 (2012)
7. Chen, Z., Segev, M., Christodoulides, D.N., “Optical spatial solitons: Historical overview and recent advances”, *Reports on Progress in Physics* 75 (8), art. no. 086401 (2012)
8. Krupa, K., Labruyère, A., Tonello, A., Shalaby, B.M., Couderc, V., Baronio, F. and Aceves, A.B., “Polychromatic filament in quadratic media: spatial and spectral shaping of light in crystals”, *Optica*, Volume 2, Issue 12, 1058-1064 (2015); doi: 10.1364/OPTICA.2.0010588.
9. Angelsky, O. V., Zenkova, C. Y., & Hanson, S. G., “Survey of crystal singular optics”, In O. V. Angelsky (Ed.), *Introduction to Singular Correlation Optics* (Vol. PM295). SPIE-International Society for Optical Engineering. (2019).
10. Y. Egorov and A. Rubass, “Spin-Orbit Coupling in Quasi-Monochromatic Beams,” *Photonics* 10(3), 305 (2023).; <https://doi.org/10.3390/photonics10030305>
11. Egorov, Y.A. and Rubass, A.F., “Spin-orbit interaction in quasi-monochromatic singular beams”, *Computer Optics*, 48(1), pp.18-25 (2024).

Статья A55 – 2 цитата

P. Hansinger, A. Dreischuh, and G. G. Paulus, “Optical vortices in self-focusing Kerr nonlinear media,” *Optics Communications*, vol.282 (16), pp. 3349-3355 (2009).

Цитирана в:

1. Mushref, Muhammad Abdulrahman, "Propagation of an Optical Vortex in Fiber Arrays with Triangular Lattices", PhD Thesis, University of Wisconsin Milwaukee (2014).
2. José L. García Riquelme, Francisco Ramos, Miguel A. Porras, “Optical vortex trapping and annihilation by means of nonlinear Bessel beams in nonlinearly absorbing media”, *Journal of the Optical Society of America B*, 35(12):3030 (2018). ; DOI: 10.1364/JOSAB.35.003030

Статья A56 – 16 цитата

G. Maleshkov, D. N. Neshev, and A. Dreischuh, “Nonlinear beam steering by fractional vortex dipoles,” *Phys. Rev. A* vol. **80**, art. # 053828 (1-5) (2009).

Цитирана в:

1. Mitri, F.G., “Potential-well model in acoustic tweezers-comment”, *IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control*, Vol. 58 (3), pp. 662 – 665 (2011), DOI: 10.1109/TUFFC.2011.1850
2. Shen, Ming; Lin, YuanYao; Jeng, Chien-Chung; et al., ”Vortex pairs in nonlocal nonlinear media”, *Journal of Optics* 14, 065204 (2012).
3. Zhu Mudan, Ding Panfeng, “Research on Dipole Vortex Beam and its Propagation”, *Laser & Optoelectronics Progress*, 49(6), 62603-1 (2012).
4. Sharma, M.K., Joseph, J., Senthilkumaran, P., “Fractional vortex dipole phase filter”, *Applied Physics B: Lasers and Optics*, Volume 117, Issue 1, 325-332 (2014).
5. Sabatyan, A. & Gharbi, S., “Appearance of fractional vortex dipoles by using spiral linear zone plate”, *Opt. Quant. Electron.*, Volume 49, Issue 6, Article number 226 (2017). doi:10.1007/s11082-017-1062-z
6. C. N. Alexeyev, Yu. A. Egorov, and A. V. Volyar, “Mutual transformations of fractional-order and integer-order optical vortices”, *Phys. Rev. A* 96, 063807 (2017).
7. Volyar, A.V. and Alexeyev, C.N., “Fractional optical vortices: stability decay and transformation”, *Вестник Физико-технического института Крымского федерального университета имени В.И. Вернадского*, 1(2), pp.19-44 (2017).

8. Sabatyan, A. and Fatehi, M., “Azimuthal-segmented linear zone plate: 1D beam structuring and topological charge detecting”, *JOSA B*, Vol. 35, Issue 8, pp. 1747-1753 (2018).
9. Akimova, Y.E. and Egorov, Y.A., “Измерение Орбитального Углового Момент Пучков с Дробным Топологическим Зарядом”. In VII Международная Конференция по Фотонике и Информационной Оптике: Сборник Научных Трудов. М.: НИЯУ МИФИ 2018 (p. 334).
10. Ma, H., Li, X., Zhang, H., Tang, J., Li, H., Tang, M., Wang, J. and Cai, Y., “Optical vortex shaping via a phase jump factor”, *Optics Letters* vol. 44, pp 1379-1382 (2019). DOI:10.1364/OL.44.001379
11. Arash Sabatyan, “Comprehensive focusing analysis of bi-segment spiral zone plate in producing a variety of structured light beams,” *Journal of the Optical Society of America B*, Vol. 36, Issue 11, pp. 3111-3116 (2019); <https://doi.org/10.1364/JOSAB.36.003111>
12. Ebrahimi, H., Sabatyan, A., “Multi-region spiral photon sieve to produce tailorable multiple vortex”, *Optics and Laser Technology* 126, 106137 (2020).
13. Golbandi, M., Sabatyan, A., “Controlling and shaping topological charge by means of spiral petal-like zone plate”, *Optics and Laser Technology* 134, 106574 (2021).
14. Ebrahimi, H., Sabatyan, A., “Focusing properties of composite spiral photon sieve”, *Optics Communications* 490, 126910 (2021).
15. Argelia Balbuena Ortega, Felix E. Torres-González, Valentin López Gayou, Raul Delgado Macuil, Gaetano Assanto, and Karen Volke-Sepulveda, „Light Confinement with Structured Beams in Gold Nanoparticle Suspensions,” *Photonics* 8, 221 (2021); <https://www.researchgate.net/publication/352461248>
16. Roozbeh, B., & Sabatyan, A., “Diffractive analysis of spiral checkerboard zone plate”, *Optics and Laser Technology* 158, 108927 (2023).; doi:10.1016/j.optlastec.2022.108927

Статья A57 – 56 цитата

D. N. Neshev, A. Dreischuh, G. Maleshkov, M. Samoc, and Yu. S. Kivshar, “Supercontinuum generation with optical vortices,” *Optics Express*, vol. 18, # 17, pp.18368-18373 (2010).

Цитирана в:

1. Chen, Z., Segev, M., Christodoulides, D.N., “Optical spatial solitons: Historical overview and recent advances”, *Reports on Progress in Physics* 75 (8) , art. no. 086401 (2012)
2. Vlasov, R.A., Volkov, V.M., Dedkov, D.Yu., “Spectrum superbroadening in self-focusing of pulsed vortex beams in air”, *Quantum Electronics* 43 (2) , pp. 157-161 (2013).
3. Blonskyi, I.V., Kadan, V.M., Dergachev, A.A., Shlenov, S.A., Kandidov, V.P., Puzikov, V.M., Grin, L.O., “Filamentation of femtosecond vortex beam in sapphire”, *Ukrainian Journal of Physics* 58 (4) , pp. 341-344 (2013).
4. Kul'chin, Yu.N., Mayor, A.Yu., Golik, S.S., Proschenko, D.Yu., Chekhlenok, A.A., Postnova, I.V., Shchipunov, Yu.A., “Supercontinuum generation and filamentation of ultrashort laser pulses in hybrid silicate nanocomposite materials on the basis of polysaccharides and hyperbranched polyglycidols”, *Quantum Electronics* 43 (4) , pp. 370-373 (2013).
5. Liao, J., Wang, X., Sun, W., Tan, Y., Kong, D., Nie, Y., Qi, J., Jia, H., Liu, J., Yang, J., Tan, J., Li, X., “Analysis of femtosecond optical vortex beam generated by direct wave-front modulation”, *Optical Engineering* 52 (10) , art. no. 130877P (2013).
6. Ni, J., Cheng, Y., “Several new phenomena in femtosecond laser filamentation”, *Shenzhen Daxue Xuebao (Ligong Ban)/Journal of Shenzhen University Science and Engineering* 31(1), January 2014, Pages 1-15
7. Liu, T., Chen, S., Zhang, B., Qi, X., Liu, W., Hou, J., „ Visible supercontinuum generation through hollow beams in a two-mode photonic crystal fiber”, *Applied Physics Express*, Volume 7, Issue 6, Article number 062502 (2014).
8. D.J. Frantzeskakis, H. Leblond, D. Mihalache, “Nonlinear Optics of Intense Few-Cycle Pulses: An Overview of Recent Theoretical and Experimental Developments”, *Rom. Journ. Phys.*, Vol. 59, 7–8, 767–784 (2014).
9. Christian Kern, “Extreme nonlinear optics with spatially controlled light fields”, Doctoral dissertation, Friedrich-Schiller-Universität Jena (2014). ISBN: 978-3-8325-3817-0.
10. Song Hong-Sheng, Liu Gui-Yuan, Zhang Ning-Yu, Zhuang Qiao, Cheng Chuan-Fu, “New features of the speckle phase singularity produced in large angle scattering”, *Wuli Xuebao/Acta Physica Sinica*. Vol. 64, No. 8, 084210 (2015).
11. Васильев Е.В., “Уширение частотно-углового спектра при самовоздействии фемтосекундного лазерного импульса на длине волны 800 нм в кольцевом пучке с фазовой сингулярностью в плавленом кварце”, Международный молодёжный научный форум «Ломоносов», XXII Международная научная конференция студентов, аспирантов и молодых учёных «Ломоносов-2015», Москва, 2015
12. Y. S. Rumala, R. Dorsinville, Robert R. Alfano, “Current Applications of Supercontinuum Light”, in Robert R. Alfano, “*The Supercontinuum Laser Source. The Ultimate White Light*”, ISBN: 978-1-4939-3324-2 (Print) 978-1-4939-3326-6 (Online), Springer New York (2016); pp 405-424; DOI:10.1007/978-1-4939-3326-6_11
13. Zhao, Y., Liu, Q., Zhou, W., Deyuan, S., “~1 mJ pulsed vortex laser at 1645 nm with well-defined helicity”, *Optics Express*, Volume 24, Issue 14, Pages 15596-15602 (2016).

14. Panov, N.A., Makarov, V.A., Grigoriev, K.S., Yatskevitch, M.S., Kosareva, O.G., "Generation of polarization singularities in the self-focusing of an elliptically polarized laser beam in an isotropic Kerr medium", *Physica D: Nonlinear Phenomena*, Volume 332, Pages 73-78 (2016).
15. Lin, Y.-C. , Nabekawa, Y., Midorikawa, K., "Conical third-harmonic generation of optical vortex through ultrashort laser filamentation in air", *Optics Express*, Volume 24, Issue 13, Pages 14857-14870 (2016).
16. Lin, Y.-C. , Nabekawa, Y., Midorikawa, K., "Generation of intense femtosecond optical vortex pulses with blazed-phase grating in chirped-pulse amplification system of Ti:sapphire laser", *Applied Physics B: Lasers and Optics*, Volume 122, Issue 11, Article number 280 (2016).
17. Vasil'ev, E.V., Shlenov, S.A., "Filamentation of an annular laser beam with a vortex phase dislocation in fused silica", *Quantum Electronics*, Volume 46, Issue 11, Pages 1002-1008 (2016).
18. Lin, Y.-C. , Nabekawa, Y., Midorikawa, K., "Observation of conical third-harmonic emission of vortex beams via ultrashort laser pulse filamentation in air", 2016 Conference on Lasers and Electro-Optics, CLEO 2016, 16 December 2016, Article number 7787814 (2016).
19. Васильев Е.В., "Пространственно-временная динамика и частотно-угловые спектры при самовоздействии фемтосекундного лазерного импульса в плавленом кварце на длине волны 800 нм в кольцевом пучке с фазовой сингулярностью", Сборник трудов IX международной конференции молодых ученых и специалистов «ОПТИКА – 2015», 158-160, Министерство образования и науки Российской Федерации, Санкт – Петербург (2015).
20. Audrius Dubietis, Gintaras Tamošauskas, Rosvaldas Šuminas, Vytautas Jukna, Arnaud Couairon, "Ultrafast supercontinuum generation in bulk condensed media (Invited Review)", *Lithuanian Journal of Physics*, Vol. 57, No. 3, pp. 113–157 (2017).
21. Antoine Camper, Hyunwook Park, Yu Hang Lai, Hiroyuki Kageyama, Sha Li, Bradford K. Talbert, Cosmin I. Baga, Pierre Agostini, Thierry Ruchon, and Louis F. DiMauro, "Tunable mid-infrared source of light carrying orbital angular momentum in the femtosecond regime", *Optics Letters* Vol. 42, Issue 19, pp. 3769-3772 (2017).
22. Rostami, Shermineh. "Polarization characterization of nonlinear laser propagation." PhD Thesis, University of New Mexico (2016).
23. Zhan, L., Xu, M., Xi, T., Hao, Z., "Contributions of leading and tailing pulse edges to filamentation and supercontinuum generation of femtosecond pulses in air", *Physics of Plasmas*, 25(10), 103102 (2018).
24. Прощенко, Дмитрий Юрьевич, "Нелинейно-оптические свойства новых нанокompозитных материалов на основе биосиликатов и полимеров", Диссертация на соискание ученой степени кандидата физико-математических наук, Владивосток, 2015.
25. S. A. Shlenov, E. V. Vasilyev, V. P. Kandidov, "Spatio-Temporal and Spectral Transformation of Femtosecond Pulsed Beams with Phase Dislocation Propagating Under Conditions of Self-action in Transparent Solid-State Dielectrics: Recent Advances," *Springer Series in Chemical Physics*, Volume 119, 2019, Pages 43-61, DOI: 10.1007/978-3-030-05974-3_3
26. Vladimir Makarov, Kirill S. Grigoriev, Nikolai A. Panov, Olga G. Kosareva, Georgy M. Shishkov, "Polarization Singularities Nucleation in the Self-focusing of an Elliptically Polarized Laser Beam in Kerr Medium and Isotropic Phase of Nematic Liquid Crystal: Recent Advances," *Springer Series in Chemical Physics*, 119, pp. 3-17 (2019). DOI: 10.1007/978-3-030-05974-3_1
27. Sharma, M., Pradhan, P., Ung, B., „Endlessly mono-radial annular core photonic crystal fiber for the broadband transmission and supercontinuum generation of vortex beams”, *Scientific Reports*, Volume 9, Issue 1, Article number 2488 (2019).
28. Dubietis A., Couairon A. *New Developments*. In: *Ultrafast Supercontinuum Generation in Transparent Solid-State Media*. SpringerBriefs in Physics. Springer, Cham (2019).; <https://doi.org/10.1007/978-3-030-14995-6>
29. G. Prabhakar, P. Gregg, L. Rishoj, P. Kristensen, and S. Ramachandran, "Octave-wide supercontinuum generation of light-carrying orbital angular momentum", *Opt. Express* 27(8), 11547-11556 (2019).
30. Vasilyev, E.V., Shlenov, S.A., Kandidov, V.P., "The Multifocus Structure of Radiation upon Femtosecond Filamentation of an Optical Vortex in a Medium with an Anomalous Group Velocity Dispersion", *Optics and Spectroscopy* 126(1), pp. 16-24 (2019).
31. Mengning Xu, Lindi Zhan, Tingting Xi, and Zuoqiang Hao, "Supercontinuum generation by femtosecond flat-top laser pulses in fused silica", *J. Opt. Soc. Am. B* 36, issue 10, pp. G6-G12 (2019); <https://doi.org/10.1364/JOSAB.36.0000G6>.
32. Rao, A.S., „Characterization of off-axis phase singular optical vortex and its nonlinear wave-mixing to generate control broad OAM spectra, *Physica Scripta* 95(5), 055508 (2020); <https://doi.org/10.1088%2F1402-4896%2F5508>
33. Ben Salem, A., "Annular chalcogenide photonic crystal fiber for broadband mid-IR optical vortex modes supercontinuum generation", *Proc. SPIE* 11547, 115471W (2020); <https://doi.org/10.1117/12.2583419>
34. Feng, Z., Lan, J., Li, W., Liu, X., Yu, C., Li, J. and Liu, Y., „Supercontinuum generated by a femtosecond annular Gaussian beam in air,” *Phys. Plasmas* 27, 023515 (2020); <https://doi.org/10.1063/1.5139720>
35. Zhang, Xingwen, "Supercontinuum Generation by Ghost Pulse", Dissertation zur Erlangung des Grades eines Doktors der Naturwissenschaften (Dr. rer. nat.), Freie Universität Berlin, Berlin (2021).
36. Fazea, Y., Amphawan, A., Al-Gumaei, Y.A., Al-Samman, A.M. and Al-Rahmi, W.M., „Modes power equalization based-singular value decomposition in mode division multiplexing systems for multi-hungry

- bandwidth applications," *Optical Fiber Technology* 61, 102389 (2021); <https://doi.org/10.1016/j.yofte.2020.102389>
37. Shlenov, S.A., Vasilyev, E.V., Chekalin, S.V., Kompanets, V.O., Skidanov, R.V., „Spectral Broadening of Femtosecond Optical Vortices at Filamentation in Fused Silica under the Conditions of the Anomalous Group Velocity Dispersion“, *Journal of Experimental and Theoretical Physics* 132(3), pp. 334-340 (2021).
 38. Guo, Y., Wang, J., Song, X. and Lin, J., “Gaseous pre-lattice assisted supercontinuum enhancement of femtosecond laser filamentation”, *Physics of Plasmas* 28, 072303 (2021); <https://doi.org/10.1063/5.0055780>
 39. Shlenov S.A., Vasilyev E.V., Kandidov V.P., Dergachev A.A., Soyfer F.I., “Self-action of Femtosecond Optical Vortex in a Medium with Kerr Nonlinearity”. In: Yamanouchi K., Manshina A.A., Makarov V.A. (eds) *Progress in Photon Science. Springer Series in Chemical Physics*, vol 125. Springer, Cham. (2021) https://doi.org/10.1007/978-3-030-77646-6_1
 40. Zhang, H., Zhang, Y., Lin, S., Chang, M., Yu, M., Wang, Y., Chen, A., Jiang, Y., Li, S. and Jin, M., „Testing the coherence of supercontinuum generated by optical vortex beam in water,” *Journal of Physics B: Atomic, Molecular and Optical Physics*, 54(16), 165401 (2021).
 41. Ma, L., Chen, C., Zhan, Z., Dong, Q., Cheng, C. and Liu, C., "Generation of spatiotemporal optical vortices in ultrashort laser pulses using rotationally interleaved multispirals," *Opt. Express* 30, 47287-47303 (2022).; <https://doi.org/10.1364/OE.474592>
 42. Yang, J., Wang, Y., Fang, Y., Geng, W., Zhao, W., Bao, C., Ren, Y., Wang, Z., Liu, Y., Pan, Z. and Yue, Y., “Over-Two-Octave Supercontinuum Generation of Light-Carrying Orbital Angular Momentum in Germania-Doped Ring-Core Fiber,” *Sensors* 22(17), 6699 (2022).; <https://doi.org/10.3390/s22176699>
 43. Zhao, Y., Zheng, C., Huang, Z., Gao, Q., Dong, J., Tian, K., Yang, Z., Chen, W. and Petrov, V., “Twisted Light in a Single-Crystal Fiber: Toward Undistorted Femtosecond Vortex Amplification,” *Laser & Photonics Reviews* 16(12), 2200503 (2022).; <https://doi.org/10.1002/lpor.202200503>
 44. Xu, L., Li, D., Chang, J., Xi, T. and Hao, Z., “Few-cycle vortex beam generated from self-compression of midinfrared femtosecond vortices in thin plates,” *Phys. Rev. A* 106, 053516 (2022).; DOI: 10.1103/PhysRevA.106.053516
 45. Yang, J., Wang, Y., Fang, Y., Geng, W., Zhao, W., Bao, C., Ren, Y., Wang, Z., Liu, Y.G., Pan, Z. and Yue, Y., “1.3-Octave Coherent Supercontinuum Generation of OAM Mode in Ring-Core Fiber With All-Normal Dispersion”, *IEEE Access*, 10, 76990-76997 (2022).; doi:10.1109/ACCESS.2022.3190631
 46. Xu, L., Li, D., Chang, J., Li, D., Xi, T., & Hao, Z., “Powerful supercontinuum vortices generated by femtosecond vortex beams with thin plates”, *Photonics Research*, 10(3), 802-809 (2022).; doi:10.1364/PRJ.443501
 47. Wang, H., Xu, S., Chen, Y.Y. and Shen, B., “Generation of terahertz radiation with fractional or integer OAMs from a fractional-order vortex two-color field”, *New Journal of Physics*, 24(8) 083027 (2022).; doi:10.1088/1367-2630/ac87c8
 48. Tian, Y., Gong, C., Kong, D., & Hu, X., “Avalanche ionization during UV filamentation in fused silica: Suppression of blueshifted spectra extent”, *Journal of the Optical Society of America B: Optical Physics* 39(9), 2435-2442 (2022).; doi:10.1364/JOSAB.457350
 49. Geng, W., Fang, Y., Wang, Y., Wang, Z., Liu, Y.G., Zhang, L., Bao, C., Ren, Y., Pan, Z. and Yue, Y., "Dual Concentric-Ring-Core Fiber With Four Zero-Dispersion Wavelengths for Beyond Three-Octave OAM Supercontinuum Generation," *Journal of Lightwave Technology*, vol. 41, no. 7, pp. 2138-2144 (2023).; doi: 10.1109/JLT.2022.3202703 .
 50. Wen, Y. and Jia, H., "Multi-octave supercontinuum generation of optical vortices in an As₂S₃ photonic crystal fibers with all-normal dispersion," *Optical Engineering* 62(3), 036106 (2023).; <https://doi.org/10.1117/1.OE.62.3.036106>
 51. Zhang Zeliang, Qian Wenqi, Qi Pengfei, and Weiwei Liu, „Research Progress in Supercontinuum Generation and Regulation Based on Femtosecond Laser Filamentation“, *Chinese Journal of Lasers* 50(7): 0708004 (2023).; DOI: 10.3788/CJL221530
 52. Y.-C. Lin, K. Midorikawa, and Y. Nabekawa, “Wavefront control of subcycle vortex pulses via carrier-envelope-phase tailoring,” *Light: Science & Applications* 12, 279 (2023).; <https://doi.org/10.1038/s41377-023-01328-7>
 54. Zheng, C., Du, T., Zhu, L., Wang, Z., Tian, K., Zhao, Y., Yang, Z., Yu, H. and Petrov, V., "Direct amplification of femtosecond optical vortices in a single-crystal fiber," *Photon. Res.* **12**, 27-32 (2024).; <https://doi.org/10.1364/PRJ.507488>
 55. K. Heyne, X. Zhang, V. Kozich, A. Lindinger, T. Nagy, M. Vrakking, „Negatively chirped, self-compressing supercontinuum generation by ghost pulses“, Posted Date: April 9th, 2024; DOI: <https://doi.org/10.21203/rs.3.rs-3925197/v1>
 56. Geng, W., Fang, Y., Bao, C., Pan, Z. and Yue, Y., “Emission of five OAM dispersive waves in dispersion-engineered double-ring core fiber,” *Sci. Rep.* **14**, 8474 (2024).; <https://doi.org/10.1038/s41598-024-57587-w>

Статия A58 – 8 цитата

- N. Gorunski, N. Dimitrov, A. Dreischuh, and G. G. Paulus, “Pulse-front tilt created in misaligned dispersionless optical systems and correct interferometric autocorrelation,” *Optics Communications*, vol. **283**, pp. 5192-5198 (2010);

Цитирана в:

1. Li, S., Li, Z., Wang, C., Xu, Y., Li, Y., Leng, Y., Li, R., “Broadband spectrographic method for precision alignment of compression gratings”, *Optical Engineering*, Volume 55, Issue 8, Article number 086105 (2016).
2. A. Patel, “Phenomena of Ultrafast Laser Material Modification with Respect to Spatio-Temporal Couplings of the Laser Pulse”, PhD Thesis, University of Southampton (2016).
3. Yanjun Ma, “Nonlinear optical properties of semiconductor and oxide nanostructures”, PhD Thesis, University of Pittsburgh (2013).
4. Wu, X., Guo, F., Ma, J., Ouyang, C., Wang, T., Zhang, B., Wang, X., Li, S., Kong, D., Chai, S., Ruan, C., Miao, J., Li, Y., “High-Energy Strong-Field Terahertz Pulses Based on Tilted-Pulse-Front Technique(Review)”, *Zhongguo Jiguang/Chinese Journal of Lasers*, Volume 46, Issue 6, Art. 0614008 (2019).
5. Vinogradov, I.V., 2019. Technological improvements in two-dimensional infrared spectroscopy and their applications to biological systems. PhD Thesis, University of California, Irvine.
6. Wang, C., Wang, Y., Li, L., Bian, Y., Tian, Y., “Influence of laser intensity on pulse width of nonlinear Thomson scattering in circularly polarized tightly focused laser pulses”, *Proceedings of SPIE - The International Society for Optical Engineering*, 11717, 117170L (2020).
7. Rasulova, G.K., Pentin, I.V., Vakhtomin, Y.B., Smirnov, K.V., Khabibullin, R.A., Klimov, E.A., Klochkov, A.N. and Goltsman, G.N., “Pulsed terahertz radiation from a double-barrier resonant tunneling diode biased into self-oscillation regime”, *Journal of Applied Physics*, 128(22) (2020).
8. Li Yuedong, Yin Weiyi, Dai Ye, “Research Progress on Spatio-Temporal Coupling of Femtosecond Pulse Laser for Direct-Writing Nanograting”, *Laser & Optoelectronics Progress*, 57(11), p.111403 (2020).

Статия A59 – 15 цитата

G. Maleshkov, D. N. Neshev, E. Petrova, and A. Dreischuh, "Filamentation and supercontinuum generation by singular beams in self-focusing nonlinear media," *Journal of Optics*, **vol. 13**, Art. No. 064015 (1-8) (2011).

Цитирана в:

1. Vlasov, R.A., Volkov, V.M., Dedkov, D.Yu., “Spectrum superbroadening in self-focusing of pulsed vortex beams in air”, *Quantum Electronics* 43 (2) , pp. 157-161 (2013).
2. K S Grigoriev, V A Makarov and I A Perezhogin, „Interaction of laser-generated polarization singularities in a nonlinear isotropic gyrotropic medium”, *Journal of Optics*, 16 105201 (2014).
3. Xie, C., Jukna, V., Milián, C., Giust, R., Ouadghiri-Idrissi, I., Itina, T., Dudley, J.M., Couairon, A., Courvoisier, F., “Tubular filamentation for laser material processing”, *Scientific Reports*, Volume 5, Article number 8914 (2015).
4. Lin, Y.-C. , Nabekawa, Y., Midorikawa, K., “Observation of conical third-harmonic emission of vortex beams via ultrashort laser pulse filamentation in air”, 2016 Conference on Lasers and Electro-Optics, *CLEO* 2016, 16 December 2016, Article number 7787814 (2016).
5. Audrius Dubietis, Gintaras Tamošauskas, Rosvaldas Šuminas, Vytautas Jukna, Arnaud Couairon, “Ultrafast supercontinuum generation in bulk condensed media (Invited Review)”, *Lithuanian Journal of Physics*, Vol. 57, No. 3, pp. 113–157 (2017).
6. Makarov, V., “Evolution of polarization singularities of two monochromatic beams in their collinear interaction in an isotropic medium with spatial dispersion of cubic nonlinearity” (Book Chapter), *Springer Series in Chemical Physics*, 115, pp. 71-83 (2017).
7. A. Dakova, D. Dakova, V. Slavchev, L. Kovachev, M. Kolev, “Cnoidal waves in single-mode fibers”, Scientific Works of the Union of Scientists in Bulgaria-Plovdiv, series C. Technics and Technologies, Vol. XV, pp. 205-209, 2017, ISSN 1311 -9419 (Print), ISSN 2534-9384 (On- line)
8. К. С. Григорьев, “Генерация и преобразование световых пучков и импульсов, содержащих сингулярности поляризации, в средах с нелокальностью нелинейно-оптического отклика“, Диссертация на соискание ученой степени кандидата физико-математических наук, Москва, 2018
9. K. S. Grigoriev, I.A. Perezhogin, N. Potravkin, V. A. Makarov, „Generation and Transformation of Light Beams with Polarization Singularities in Three-Wave Mixing Processes in Isotropic Nonlocal Medium: Recent Advances“, *Springer Series in Chemical Physics*, Volume 119, 2019, Pages 19-41; DOI: 10.1007/978-3-030-05974-3_2.
10. Dubietis A., Couairon A. *New Developments*. In: *Ultrafast Supercontinuum Generation in Transparent Solid-State Media*. SpringerBriefs in Physics. Springer, Cham (2019).; <https://doi.org/10.1007/978-3-030-14995-6>
11. K. S. Grigoriev, V. A. Makarov, “Generation and Transformation of Light Beams and Pulses, Containing Polarization Singularities, in Media with Nonlocality of Nonlinear Optical Response (Scientific Summary),” *JETP Letters* 109(10), pp. 642-651 (2019); DOI: 10.1134/S0021364019100084
12. Zhang, Xingwen, “Supercontinuum Generation by Ghost Pulse”, Dissertation zur Erlangung des Grades eines Doktors der Naturwissenschaften (Dr. rer. nat.), Freie Universität Berlin, Berlin (2021).
13. Xu, L., Li, D., Chang, J., Li, D., Xi, T., & Hao, Z., “Powerful supercontinuum vortices generated by femtosecond vortex beams with thin plates,” *Photonics Research* 10(3), 802-809 (2022).; doi:10.1364/PRJ.443501

14. M. Asma, A. K. S. Ali, A. K. Alzahrani, M. Z. Ullah, and S. Shateyi, "Filamentation of a Hollow Gaussian Beam in a Nonlinear Optical Medium," *Mathematics* **11**, 4130 (2023).; <https://doi.org/10.3390/math11194130>
15. K. Heyne, X. Zhang, V. Kozich, A. Lindinger, T. Nagy, M. Vrakking, „Negatively chirped, self-compressing supercontinuum generation by ghost pulses,“ Posted Date: April 9th, 2024; DOI: <https://doi.org/10.21203/rs.3.rs-3925197/v1>

Статья A60 – 10 цитата

P. Hansinger, A. Dreischuh, and G. G. Paulus, "Vortices in ultrashort laser pulses," *Appl. Physics B*, vol. **104**, pp. 561-567 (2011).

Цитирана в:

1. Blonskyi, I.V., Kadan, V.M., Dergachev, A.A., Shlenov, S.A., Kandidov, V.P., Puzikov, V.M., Grin, L.O., "Filamentation of femtosecond vortex beam in sapphire", *Ukrainian Journal of Physics* **58** (4) , pp. 341-344 (2013).
2. Martínez-Matos, Ó., Vaveliuk, P., Izquierdo, J.G., Lorient, V., "Femtosecond spatial pulse shaping at the focal plane", *Optics Express* **21** (21) , pp. 25010-25025 (2013).
3. Manfred Musigmann, Jürgen Jahns, Martin Bock, and Ruediger Grunwald, „Refractive–diffractive dispersion compensation for optical vortex beams with ultrashort pulse durations“, *Applied Optics*, Vol. 53, Issue 31, pp. 7304-7311 (2014).
4. Васильев Е.В., "Уширение частотно-углового спектра при самовоздействии фемтосекундного лазерного импульса на длине волны 800 нм в кольцевом пучке с фазовой сингулярностью в плавленом кварце", Международный молодёжный научный форум «Ломоносов», XXII Международная научная конференция студентов, аспирантов и молодых учёных «Ломоносов-2015», Москва, 2015
5. Васильев, Е. and Шленов, С., "Частотно-угловые спектры оптических полей с фазовой дислокацией при самовоздействии в плавленом кварце". In *V Международная конференция по фотонике и информационной оптике* (pp. 143-144) (2016).
6. Vasil'ev, E.V., Shlenov, S.A., "Filamentation of an annular laser beam with a vortex phase dislocation in fused silica", *Quantum Electronics*, Volume 46, Issue 11, Pages 1002-1008 (2016).
7. Васильев Е.В., "Пространственно-временная динамика и частотно-угловые спектры при самовоздействии фемтосекундного лазерного импульса в плавленом кварце на длине волны 800 нм в кольцевом пучке с фазовой сингулярностью", Сборник трудов IX международной конференции молодых ученых и специалистов «ОПТИКА – 2015», 158-160, Министерство образования и науки Российской Федерации, Санкт – Петербург (2015).
8. Bolze, T. and Nuernberger, P., "Temporally shaped Laguerre-Gaussian femtosecond laser beams", *Applied Optics*, Volume 57, Issue 13, 3624-3628 (2018)
9. S. A. Shlenov, E. V. Vasilyev, V. P. Kandidov, "Spatio-Temporal and Spectral Transformation of Femtosecond Pulsed Beams with Phase Dislocation Propagating Under Conditions of Self-action in Transparent Solid-State Dielectrics: Recent Advances," *Springer Series in Chemical Physics*, Volume 119, 2019, Pages 43-61, DOI: 10.1007/978-3-030-05974-3_3
10. Byunghyuck Moon, Hee Dong Yang, Byeong-kwon Ju, Young Min Jhon, „Wavelength tunable intra-cavity nonlinear polarization rotation mode-locked single pulse laser,“ Published in: 2018 23rd Opto-Electronics and Communications Conference (OECC), 2-6 July 2018, Jeju Island, Korea (South), Korea (South), INSPEC Accession Number: 18739138; DOI: 10.1109/OECC.2018.8729897 (2018).

Статья A61 – 3 цитата

G. Maleshkov; P. Hansinger; N. Dimitrov; A. Dreischuh, and G. G Paulus, "Branching optical signals by fractional vortex dipoles," *Optics Communications*, vol. **285**, pp. 3529–3534 (2012).

Цитирана в:

1. X Li, Y Tai, F Lv, Z Nie, „Measuring the fractional topological charge of LG beams by using interference intensity analysis“, *Optics Communications* **334**, 235–239 (2015); Available online 2 September 2014, DOI: 10.1016/j.optcom.2014.08.020
2. Sabatyan, A. & Gharbi, S., "Appearance of fractional vortex dipoles by using spiral linear zone plate", *Opt. Quant. Electron.*, Volume 49, Issue 6, Article number 226 (2017). doi:10.1007/s11082-017-1062-z
3. Sabatyan, A. and Fatehi, M., "Azimuthal-segmented linear zone plate: 1D beam structuring and topological charge detecting", *JOSA B*, Vol. 35, Issue 8, pp. 1747-1753 (2018).

Статья A62– 204 цитата

M. Zürch, C. Kern, P. Hansinger, A. Dreischuh, and Ch. Spielmann, "Strong-field physics with singular light beams," *Nature Physics*, vol. **8**, pp. 743-746 (2012).

Цитирана в:

1. Patchkovskii, S., Spanner, M., "High harmonics with a twist", *Nature Physics* **8** (10), pp. 707-708 (2012).

2. Caullet, V., Marsal, N., Wolfersberger, D., Sciamanna, M., “Nonlocal effect on vortex-induced pattern dynamics”, *Optics Letters* 38 (11) , pp. 1823-1825 (2013).
3. Hernández-García, C., Picón, A., San Román, J., Plaja, L., “Attosecond extreme ultraviolet vortices from high-order harmonic generation”, *Physical Review Letters* 111 (8), art. no. 083602 (2013).
4. Yu, H., Xu, M., Zhao, Y., Wang, Y., Han, S., Zhang, H., Wang, Z., Wang, J., „Dual-wavelength laser with topological charge”, *AIP Advances* 3 (9) , art. no. 092129 (2013).
5. Yu, H., Zhang, H., Wang, Y., Han, S., Yang, H., Xu, X., Wang, Z., Petrov, V., Wang, J., “Optical orbital angular momentum conservation during the transfer process from plasmonic vortex lens to light”, *Scientific Reports* 3 , art. no. 3191 (2013).
6. Roger, T., Heitz, J.J.F., Wright, E.M., Faccio, D., “Non-collinear interaction of photons with orbital angular momentum”, *Scientific Reports* 3 , art. no. 3491 (2013).
7. Leblond, Hervé, Mihalache, Dumitru, Triki, Houria, “Studies of existence and stability of circularly polarized few-cycle solitons beyond the slowly-varying envelope approximation”, in Malomed, Boris A. (ed.), “Spontaneous symmetry breaking, self-trapping, and Josephson oscillations”, Berlin: *Springer. Progress in Optical Science and Photonics* 1, 247-275 (2013). ISBN 978-3-642-21206-2/hbk; ISBN 978-3-642-21207-9/ebook; <http://dx.doi.org/10.1007/10091>
8. Shi, Y., Shen, B., Zhang, L., Zhang, X., Wang, W., Xu, Z., „Light fan driven by a relativistic laser pulse”, *Physical Review Letters*, Volume 112, Issue 23, Article number 235001 (2014).
9. Ribič, P.R., Gauthier, D., De Ninno, G., “Generation of coherent extreme-ultraviolet radiation carrying orbital angular momentum”, *Physical Review Letters*, Volume 112, Issue 20, Article number 203602 (2014).
10. Ding, Y., Xu, M., Zhao, Y., Yu, H., Zhang, H., Wang, Z., Wang, J., „Thermally driven continuous-wave and pulsed optical vortex”, *Optics Letters*, Volume 39, Issue 8, 15 April 2014, Pages 2366-2369
11. Hernández-García, C., Picón, A., Román, J.S., Plaja, L., “Coherent attosecond beams carrying orbital angular momentum”, Optics InfoBase Conference Papers, CLEO: Applications and Technology, CLEO_AT 2014; San Jose, CA; United States; 8 June 2014 through 13 June 2014; Code 106734
12. Emilio Pisanty, Suren Sukiasyan, and Misha Ivanov, " Spin conservation in high-order-harmonic generation using bicircular fields", *Phys. Rev. A* 90, 043829 (2014).
13. Xinzhong Li, Yuping Tai, Liping Zhang, Huijuan Li, Liben Li, “Characterization of dynamic random process using optical vortex metrology”, *Applied Physics B*, Volume 116, Issue 4, pp 901-909 (2014).
14. Christian Schulze, Angela Dudley, Robert Brünig, Michael Duparré, and Andrew Forbes, “Measurement of the orbital angular momentum density of Bessel beams by projection into a Laguerre–Gaussian basis”, *Applied Optics*, Vol. 53, Issue 26, pp. 5924-5933 (2014)
15. Gui Xin Li, Shu Mei Chen, Yuan Cai, Shuang Zhang, and Kok Wai Cheah, “Third Harmonic Generation of Optical Vortices Using Holography-Based Gold-Fork Microstructure”, *Advanced Optical Materials*, Volume 2, Issue 4, 389–393, April 2014
16. D.J. Frantzeskakis, H. Leblond, D. Mihalache, “Nonlinear Optics of Intense Few-Cycle Pulses: An Overview of Recent Theoretical and Experimental Developments”, *Rom. Journ. Phys.*, Vol. 59, 7–8, 767–784 (2014).
17. Genevieve Gariépy, Jonathan Leach, Kyung Taec Kim, T.J. Hammond, E. Frumker, Robert W. Boyd, and P.B. Corkum, “Creating High-Harmonic Beams with Controlled Orbital Angular Momentum”, *Phys. Rev. Lett.* 113, 153901 (2014).
18. Changhe Zhou, Jianyong Ma, Jin Wang, Junjie Yu, Wei Jia, Hongchao Cao, Jun Wu, “Design and applications of digital diffractive gratings”, *Proc. SPIE* 9271, 92711A (2014); doi:10.1117/12.2071429.
19. Hernández-García, C., Picón, A., Román, J.S., Plaja, L., “Coherent attosecond extreme ultraviolet vortices from high-order harmonic generation”, *Laser Science, LS 2014*; Tucson; United States; 19 October 2014 through 23 October 2014; Code 107738
20. Gariépy, G. , Leach, J., Kim, K.T., Hammond, T.J., Frumker, E., Boyd, R.W., Corkum, P.B, “Creating high-harmonic beams with controlled orbital angular momentum”, *Frontiers in Optics*, FiO 2014 14 October 2014; ISBN: 1557522863
21. Li, Y., Zhou, Z.-Y., Ding, D.-S., Shi, B.-S., “Sum frequency generation with two orbital angular momentum carrying laser beams”, *JOSA B*, Vol. 32 (3), 407-411 (2015).
22. Walter Harm, Stefan Bernet, Monika Ritsch-Marte, Irina Harder, and Norbert Lindlein, „Adjustable diffractive spiral phase plates”, *Optics Express*, Vol. 23, Issue 1, pp. 413-421 (2015).
23. Junjie Yu, Changhe Zhou, Wei Jia, Jun Wu, Linwei Zhu, Yancong Lu, Changcheng Xiang, and Shubin Li, "Generation of controllable rotating petal-like modes using composited Dammann vortex gratings," *Appl. Opt.* 54, 1667-1672 (2015).
24. Miguel Miranda, Marija Kotur, Piotr Rudawski, Chen Guo, Anne Harth, Anne L'Huillier, and Cord L. Arnold, “Spatiotemporal characterization of ultrashort optical vortex pulses”, *Journal of Modern Optics*, vol. 64, Pages: S1-S6 (2017), <http://dx.doi.org/10.1080/09500340.2016.1257751>
25. Peng Chen, Bing-Yan Wei, Wei Ji, Shi-Jun Ge, Wei Hu, Fei Xu, Vladimir Chigrinov, and Yan-Qing Lu, “Arbitrary and reconfigurable optical vortex generation: a high-efficiency technique using director-varying liquid crystal fork gratings”, *Photon. Res.* Vol. 3, No. 4, 133-139 (2015).
26. Zhang, X., Shen, B., Shi, Y., Wang, X., Zhang, L., Wang, W., Xu, J., Yi, L., Xu, Z., “Generation of intense high-order vortex harmonics”, *Physical Review Letters*, Volume 114, Issue 17, Art. 173901 (28 April 2015).

27. Lin, H., Liu, C.P., Wang, C., Shen, B.F., „Vacuum propagation of a shaped laser beam and direct vacuum acceleration”, *Applied Physics B: Lasers and Optics*, Volume 120, Issue 1, 61-68 (2015).
28. Han, Y.-J., Liao, G.-Q., Chen, L.-M., Li, Y.-T., Wang, W.-M., Zhang, J., „ High-order optical vortex harmonics generated by relativistic femtosecond laser pulse”, *Chinese Physics B*, Vol. 24, Issue 6, Art. number 065202 (2015).
29. Juanying Zhao, Ioannis D. Chremmos, Daohong Song, Demetrios N. Christodoulides, Nikolaos K. Efremidis & Zhigang Chen, “Curved singular beams for three-dimensional particle manipulation”, *Scientific Reports* 5, Article number: 12086 (2015); doi:10.1038/srep12086
30. Stock, S., Surzhykov, A., Fritzsche, S., Seipt, D., “Compton scattering of twisted light: Angular distribution and polarization of scattered photons”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 92, Issue 1, Article number 013401 (2015).
31. Chen, Shumei “Photon manipulation in plasmonic crystal” – HKBU, PhD Thesis, Hong Kong (2014).
32. Hernández-García, C., Román, J.S., Plaja, L., Picón, A., “Quantum-path signatures in attosecond helical beams driven by optical vortices”, *New Journal of Physics*, Volume 17, Issue 9, Article number 093029.
33. Han Yu-Jing, Han Yu-Jing, Liao Guo-Qian, Chen Li-Ming, Li Yu-Tong, Wang Wei-Min and Zhang Jie, “Production of intense attosecond vector beam pulse trains based on harmonics”, *Chinese Phys. B*, Vol. 24, Issue 11, Article number 115203 (2015).
34. J. T. Mendonça and J. Vieira, “High harmonic generation in underdense plasmas by intense laser pulses with orbital angular momentum”, *Phys. Plasmas* 22, 123106 (2015); <http://dx.doi.org/10.1063/1.4936824>
35. J. Wätzel, Y. Pavlyukh, A. Schäffer, J. Berakdar, “Optical vortex driven charge current loop and optomagnetism in fullerenes”, *Carbon*, Volume 99, Pages 439–443 (2016).
36. Grigoriev, K.S., Makarov, V.A., Perezhogin, I.A., “Formation of the lines of circular polarization in a second harmonic beam generated from the surface of an isotropic medium with nonlocal nonlinear response in the case of normal incidence”, *Journal of Optics (United Kingdom)*, Volume 18, Issue 1, Art. number 014004 (2015).
37. Angela Dudley, Nombuso Majola, Naven Chetty, Andrew Forbes, “Implementing digital holograms to create and measure complex-plane optical fields”, *American Journal of Physics*, Volume 84, Issue 2, 106-112 (2016).
38. Zhang, Y., Yu, H., Zhang, H., Xu, X., Xu, J., Wang, J., “Self-mode-locked Laguerre-Gaussian beam with staged topological charge by thermal-optical field coupling”, *Optics Express*, Volume 24, Issue 5, Pages 5514-5522 (2016).
39. Wei Ji, Chun-Hong Lee, Peng Chen, Wei Hu, Yang Ming, Lijian Zhang, Tsung-Hsien Lin, Vladimir Chigrinov & Yan-Qing Lu, “Meta-q-plate for complex beam shaping”, *Scientific Reports* 6, Article number: 25528 (2016); doi:10.1038/srep25528
40. James Strohaber, “A perturbative quantized twist embedded in Minkowski spacetime”, *Laser Physics*, Volume 26, Issue 11, Article number 116201 (2016).
41. Chen Liu, Baifei Shen, Xiaomei Zhang, Yin Shi, Liangliang Ji, Wenpeng Wang, Longqing Yi, Lingang Zhang, Tongjun Xu, Zhikun Pei, Zhizhan Xu, “Generation of Gamma-ray Beam with Orbital Angular Momentum in the QED Regime”, *Physics of Plasmas* 23, 093120 (2016); doi: <http://dx.doi.org/10.1063/1.4963396>
42. Chang, Z., Corkum, P.B., Leone, S.R., “Attosecond optics and technology: Progress to date and future prospects [Invited]”, *Journal of the Optical Society of America B: Optical Physics*, Volume 33, Issue 6, Pages 1081-1097 (2016).
43. Chen, Y.-Y., Feng, X.-L., Liu, C., „Generation of Nonlinear Vortex Precursors“, *Physical Review Letters*, Volume 117, Issue 2, Article number 023901 (2016).
44. Müller, R.A., Seipt, D., Beerwerth, R., Ornigotti, M., Szameit, A., Fritzsche, S., Surzhykov, A., “Photoionization of neutral atoms by X waves carrying orbital angular momentum”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 94, Issue 4, Article number 041402 (2016).
45. Rego, L. , Román, J.S., Picón, A., Plaja, L., Hernández-García, C., “ Nonperturbative twist in the generation of extreme-ultraviolet vortex beams”, *Physical Review Letters*, Volume 117, Issue 16, Article number 163202 (2016).
46. J. Wätzel, J. Berakdar, “Discerning on a sub-optical-wavelength the attosecond time delays in electron emission from magnetic sublevels by optical vortices”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 94, Issue 3, Article number 033414 (2016).
47. Zhang, L., Shen, B., Zhang, X. , Huang, S., Shi, Y., Liu, C., Wang, W., Xu, J., Pei, Z., Xu, Z., “ Deflection of a Reflected Intense Vortex Laser Beam”, *Physical Review Letters*, Volume 117, Issue 11, Article number 113904 (2016).
48. Géneaux, R., Camper, A., Auguste, T., Gobert, O., Caillat, J., Taïeb, R., Ruchon, T., “Synthesis and characterization of attosecond light vortices in the extreme ultraviolet”, *Nature Communications*, Volume 7, Article number 12583 (2016).
49. Seipt, D. , Müller, R.A., Surzhykov, A., Fritzsche, S., “Two-color above-threshold ionization of atoms and ions in XUV Bessel beams and intense laser light”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 94, Issue 5, Article number 053420 (2016).
50. Vicuña-Hernández, V., Santiago, J.T., Jerónimo-Moreno, Y., Ramírez-Alarcón, R., Cruz-Ramírez, H., U'Ren, A.B., Jáuregui-Renaud, R., “Double transverse wave-vector correlations in photon pairs generated by spontaneous parametric down-conversion pumped by Bessel-Gauss beams”, *Physical Review A - Atomic, Molecular, and Optical Physics*, Volume 94, Issue 6, Article number 063863 (2016).

51. Denoeud, A., Chopineau, L., Leblanc, A., Quéré, F., “Interaction of Ultraintense Laser Vortices with Plasma Mirrors”, *Physical Review Letters*, Volume 118, Issue 3, Article number 033902 (2017).
52. T. Kaneyasu, Y. Hikosaka, M. Fujimoto, T. Konomi, M. Katoh, H. Iwayama, and E. Shigemasa, “Limitations in photoionization of helium by an extreme ultraviolet optical vortex”, *Phys. Rev. A* 95, 023413 (2017).
53. Carlos Hernández-García, Laura Rego, Julio San Román, Antonio Picón and Luis Plaja, "Attosecond twisted beams from high-order harmonic generation driven by optical vortices", *High Power Laser Science and Engineering*, Vol. 5, e3 (2017). doi:10.1017/hpl.2017.1
54. Carlos Hernández-García, Laura Rego, Julio San Román, Antonio Picón and Luis Plaja, „Non-perturbative twist of attosecond extreme-ultraviolet vortex beams”, *Proc. SPIE*, vol. 10102, Ultrafast Phenomena and Nanophotonics XXI, 101021C (2017); doi:10.1117/12.2263388
55. J. Vieira, R.M.G.M. Trines, E.P. Alves, R.A. Fonseca, J.T. Mendonça, R. Bingham, P. Norreys, and L.O. Silva, “High Orbital Angular Momentum Harmonic Generation”, *Phys. Rev. Lett.* 117, 265001 (2016).
56. D. Gauthier, P. Rebernik Ribič, G. Adhikary, A. Camper, C. Chappuis, R. Cucini, L. F. DiMauro, G. Dovillaire, F. Frassetto, R. Gèneaux, P. Miotti, L. Poletto, B. Ressel, C. Spezzani, M. Stupar, T. Ruchon, G. De Ninno, “Tunable orbital angular momentum in high-harmonic generation”, *Nature Communications*, Volume 8, Article number 14971 (2017).
57. A. Aadhi, G. K. Samanta, S. Chaitanya Kumar, and M. Ebrahim-Zadeh, „Controlled switching of orbital angular momentum in an optical parametric oscillator”, *Optica*, Vol. 4, Issue 3, pp. 349-355 (2017).
58. Turpin, A., Rego, L., Picón, A., San Román, J., Hernández-García, C., “Extreme Ultraviolet Fractional Orbital Angular Momentum Beams from High Harmonic Generation”, *Scientific Reports*, Volume 7, Article number 438 (2017).
59. Emilio Pisanty Alatorre, “Electron dynamics in complex time and complex space”, PhD Thesis, Department of Physics, Imperial College London (2016).
60. Naty Citlali Cabrera Gutiérrez, “Modes de Laguerre-Gauss et canalisation d’atomes froids”, PhD Thesis, Université Paris Sud - Paris XI, 2014. Français.
61. Guixin Li, Shuang Zhang & Thomas Zentgraf, „Nonlinear photonic metasurfaces”, *Nature Reviews Materials* Volume 2, Issue 5, Article number 17010 (2017); doi:10.1038/natrevmats.2017.10
62. Andrew Vikartofsky, Liang-Wen Pi, Anthony F. Starace, „Discontinuities in the electromagnetic fields of vortex beams in the complex source-sink model”, *Physical Review A*, 95, 053826 (2017)
63. María-Victoria Collados, Íñigo J. Sola, Julia Marín-Sáez, Warein Holgado and Jesús Atencia, “Holographic Optical Elements to Generate Achromatic Vortices with Ultra-Short and Ultra-Intense Laser Pulses”, Ch.8 in "Vortex Dynamics and Optical Vortices", Hector Perez-de-Tejada (Ed.), Intech (2017); DOI: 10.5772/66314
64. Carlos Hernández-García, “High harmonic generation: A twist in coherent X-rays”, *Nature Physics* 13, 327–329 (2017); doi:10.1038/nphys4088
65. Fanqi Kong, Chunmei Zhang, Frédéric Bouchard, Zhengyan Li, Graham G. Brown, Dong Hyuk Ko, T. J. Hammond, Ladan Arissian, Robert W. Boyd, Ebrahim Karimi & P. B. Corkum, “Controlling the orbital angular momentum of high harmonic vortices”, *Nature Communications* 8, Article number: 14970 (2017); doi:10.1038/ncomms14970
66. Carlos Hernández-García, Jorge Vieira, Jose T. Mendonça, Laura Rego, Julio San Román, Luis Plaja, Primoz R. Ribic, David Gauthier and Antonio Picón, “Generation and Applications of Extreme-Ultraviolet Vortices”, *Photonics*, 4(2), 28 (2017); doi:10.3390/photonics4020028
67. Carlos Hernández-García, Alex Turpin, Julio San Román, Antonio Picón, Rokas Drevinskas, Ausra Cerkauskaitė, Peter G. Kazansky, Charles G. Durfee, and Íñigo J. Sola, “Extreme ultraviolet vector beams driven by infrared lasers”, *Optica*, Vol. 4, Issue 5, pp. 520-526 (2017)
68. Alex Turpin; Laura Rego, Julio San Román; Antonio Picón; Luis Plaja, Carlos Hernández-García, "Tunable orbital angular momentum beams in the extreme ultraviolet/soft x-ray regimes ", *Proc. SPIE* 10243, X-ray Lasers and Coherent X-ray Sources: Development and Applications, 102430V (May 17, 2017); doi:10.1117/12.2265811
69. Laura Rego, Julio San Roman, Antonio Picon, Luis Plaja, and Carlos Hernandez-Garcia, “Nonperturbative Orbital Angular Momentum Buildup of Extreme-Ultraviolet Vortex Beams”, Conference on Lasers and Electro-Optics, *OSA Technical Digest* (online) (Optical Society of America, 2017), paper JT5A.56 https://doi.org/10.1364/CLEO_AT.2017.JT5A.56
70. Romain Gèneaux, Céline Chappuis, Thierry Auguste, Samuel Beaulieu, Timothy T. Gorman, Fabien Lepetit, Louis F. DiMauro, and Thierry Ruchon, “Radial index of Laguerre-Gaussian modes in high-order-harmonic generation”, *Phys. Rev. A* 95, 051801 (2017).
71. A. Leblanc, A. Denoeud, L. Chopineau, G. Mennerat, Ph. Martin, F. Quéré, “Plasma holograms for ultrahigh-intensity optics”, *Nature Physics*, 13, 440–443 (2017); doi:10.1038/nphys4007
72. Deng Jun-Hong, Li Gui-Xin, “Nonlinear photonic metasurfaces”, *Acta Phys. Sin.* Vol. 66, No. 14, 147803 (2017); DOI: 10.7498/aps.66.147803
73. A Longman, R Fedosejevs, “Mode conversion efficiency to Laguerre-Gaussian OAM modes using spiral phase optics”, *Optics Express*, Vol. 25, Issue 15, pp. 17382-17392 (2017); doi: 10.1364/OE.25.017382
74. Chaojin Zhang, Erheng Wu, Mingliang Gu, and Chengpu Liu, “Propagation effects in the generation process of high-order vortex harmonics”, *Optics Express*, Vol. 25, Issue 18, pp. 21241-21246 (2017)

75. Antoine Camper, Hyunwook Park, Yu Hang Lai, Hiroyuki Kageyama, Sha Li, Bradford K. Talbert, Cosmin I. Baga, Pierre Agostini, Thierry Ruchon, and Louis F. DiMauro, "Tunable mid-infrared source of light carrying orbital angular momentum in the femtosecond regime", *Optics Letters* Vol. 42, Issue 19, pp. 3769-3772 (2017)
76. Dmitry A. Telnov and Shih-I Chu, "High-order-harmonic generation by Laguerre-Gaussian laser modes: Control of the spectra by manipulating the spatial medium distribution", *Phys. Rev. A* 96, 033807 (2017)
77. Fanqi Kong, Chumei Zhang, Frédéric Bouchard, Zhengyan Li, Graham Brown, Donghyuk Ko, Thomas Hammond, Ladan Arissian, Robert Boyd, Ebrahim Karimi, and Paul Corkum, "Holographic generation of high-harmonic vortex beams", *Frontiers in Optics 2017 OSA Technical Digest* (online) (Optical Society of America, 2017), paper LM4F.5; <https://doi.org/10.1364/LS.2017.LM4F.5>
78. M. Liebmann, A. Treffer, M. Bock, T. Elsaesser, and R. Grunwald, "Spectral anomalies and Gouy rotation around the singularity of ultrashort vortex pulses," *Opt. Express* **25**, 26076-26088 (2017)
79. Guixin LI, Lin Wu, King Fai Li, Shumei Chen, Christian Schlickriede, Zhengji XU, Siya Huang, Wen-Di Li, Yan Jun Liu, Edwin Yue-Bun Pun, Thomas Zentgraf, Kok Wai Cheah, Yu Luo, and Shuang Zhang, "Nonlinear Metasurface for Simultaneous Control of Spin and Orbital Angular Momentum in Second Harmonic Generation", *Nano Lett.*, Volume: 17 Issue: 12 Pages: 7974-7979 (2017).
80. Boening, Birger; Paufler, Willi; Fritzsche, Stephan, "Attosecond streaking with twisted X waves and intense infrared pulses", *Phys. Rev. A* 96, 043423 (2017).
81. Chaojin Zhang, Erheng Wu, Mingliang Gu, and Chengpu Liu, "Characterization method of unusual second-order-harmonic generation based on vortex transformation," *Phys. Rev. A* 96, 033854 (2017)
82. Antonio Picón, Laura Rego, Julio San Román, Luis Plaja, and Carlos Hernández-García, "Harnessing the orbital angular momentum of attosecond vortices through the nonperturbative nature of high harmonic generation", 2017 European Conference on Lasers and Electro-Optics and European Quantum Electronics Conference (Optical Society of America, 2017), paper CG_1_4.
83. Guo, C., "A High Repetition Rate Attosecond Light Source Based on Optical Parametric Amplification", Doctoral dissertation, Department of Physics, Division of Atomic Physics, Lund University (2018).
84. Tom Bolze and Patrick Nuernberger, "Temporally shaped Laguerre-Gaussian femtosecond laser beams", *Applied Optics*, Volume 57, Issue 13, 3624-3628 (2018)
85. Zhengyan Li, Fanqi Kong, Graham Brown, TJ Hammond, Dong Hyuk Ko, Chunmei Zhang and Paul B Corkum, "Perturbing laser field dependent high harmonic phase modulations", *Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume 51, Issue 12, Article number 125601 (2018).
86. Genevieve Garipey, "Conservation of orbital angular momentum in high-harmonic generation", Thesis Master of Science in Physics Ottawa-Carleton Institute of Physics, Department of Physics, University of Ottawa (2013).
87. Eduardo-Warein Holgado Lage, "Study of high-order harmonic generation effects under variations of focusing conditions of few cycle laser pulses", PhD Thesis, Universidad de Salamanca (2016).
88. Fabrice Sanson, Alok Pandey, Fabrice Harms, Guillaume Dovillaire, Baynard Elsa, Julien Demailly, Olivier Guilbaud, Bruno Lucas, Olivier Neveu, Moana Pittman, David Ros, Martin Richardson, Eric Johnson, Philippe Balcou, Sophie Kazamias, and Wenzhe Li, "Hartmann wavefront sensor characterization of a high charge vortex beam in the XUV spectral range", *Optics Letters*, Vol. 43, 2780-2783 (2018).
89. Guixin Li, "Geometric phase and nonlinear photonic metasurfaces", *Proc. SPIE*, Vol. 10639, Micro- and Nanotechnology Sensors, Systems, and Applications X, 106390O (2018).
90. Zhou Xu, Zhongyu Lin, Zhilin Ye, Yan Chen, Xiaopeng Hu, Yaodong Wu, Yong Zhang, Peng Chen, Wei Hu, Yanqing Lu, Min Xiao, and Shining Zhu, "Control the orbital angular momentum in third-harmonic generation using quasi-phase-matching", *Optics Express*, Vol. 26, Issue 13, pp. 17563-17570 (2018).
91. W. Paufler, B. Böning, and S. Fritzsche, "Tailored orbital angular momentum in high-order harmonic generation with bicircular Laguerre-Gaussian beams," *Phys. Rev. A* 98, 011401(R) (2018).
92. Judy Kupferman and Shlomi Arnon, "Direct Detection Receiver for Vortex Beam", *Journal of the Optical Society of America A*, Volume 35, Issue 9, Pages 1543-1548 (2018).
93. Shasha Li, Baifei Shen, Xiaomei Zhang, Zhigang Bu, and Weifeng Gong, "Conservation of orbital angular momentum for high harmonic generation of fractional vortex beams", *Opt. Express* 26(18), 23460-23470 (2018).
94. E. Pisanty, L. Rego, J. San Román, A. Picón, K. M. Dorney, H. C. Kapteyn, M. M. Murnane, L. Plaja, M. Lewenstein, and C. Hernández-García, "Conservation of Torus-knot Angular Momentum in High-order Harmonic Generation," *Phys. Rev. Lett.* 122, art. Nr. 203201 (2019).
95. Kevin M. Dorney, Laura Rego, Nathan J. Brooks, Julio San Roman, Chen-Ting Liao, Jennifer Ellis, Dmitriy Zusin, Christian Gentry, Quynh L. Nguyen, Justin M. Shaw, Antonio Picón, Luis Plaja, Henry C. Kapteyn, Margaret M. Murnane, Carlos Hernández-García, "Controlling the polarization and vortex charge of attosecond high-harmonic beams via simultaneous spin-orbit momentum conservation," *Nature Photonics* **13**, 123-130 (2019); doi:10.1038/s41566-018-0304-3
96. Miguel A. Porras, "An upper limit to the orbital angular momentum of a vortex-carrying ultrashort pulse", *Physical Review Letters* 122, 123904 (2019). <https://doi.org/10.1103/PhysRevLett.122.123904>
97. K. S. Grigoriev, I.A. Perezhogin, N. Potravkin, V. A. Makarov, „Generation and Transformation of Light Beams with Polarization Singularities in Three-Wave Mixing Processes in Isotropic Nonlocal Medium: Recent

- Advances,” *Springer Series in Chemical Physics*, Volume 119, 2019, Pages 19-41; DOI: 10.1007/978-3-030-05974-3_2.
98. Yun Xu, Jingbo Sun, Jesse A. Frantz, Mikhail I. Shalaev, Wiktor Walasik, Apra Pandey, Jason D. Myers, Robel Bekele, Alexander Tsukernik, Jasbinder Litchinitser, “Nonlinear Metasurface for Structured Light with Tunable Orbital Angular Momentum,” *Applied Sciences* vol. 9(5), art. Nr. 958 (2019); DOI: 10.3390/app9050958
 99. F. Kong, C. Zhang, H. Larocque, Z. Li, F. Bouchard, D. H. Ko, G. G. Brown, A. Korobenko, T. J. Hammond, R. W. Boyd, E. Karimi, and P. B. Corkum, “Vectorizing the spatial structure of high-harmonic radiation from gas,” *Nature Communications*, vol. 10, Art. number: 2020 (2019); DOI: 10.1038/s41467-019-10014-5 .
 100. K. S. Grigoriev, V. A. Makarov, “Generation and Transformation of Light Beams and Pulses, Containing Polarization Singularities, in Media with Nonlocality of Nonlinear Optical Response (Scientific Summary),” *JETP Letters* 109(10), pp. 642-651 (2019); DOI: 10.1134/S0021364019100084
 101. L. Rego, K. M. Dorney, N. J. Brooks, Q. L. Nguyen, C.-T. Liao, J. San R, D. E. Couch, A. Liu, E. Pisanty, M. Lewenstein, L. Plaja, H. C. Kapteyn, M. M. Murnane, and C. Hernández-García, “Generation of extreme-ultraviolet beams with time-varying orbital angular momentum,” *Science* vol. 364, Issue 6447:eaaw9486 (2019); DOI: 10.1126/science.aaw9486
 102. Giri, S., Ivanov, M., Dixit, G., “Signatures of the orbital angular momentum of an infrared light beam in the two-photon transition matrix element: A step toward attosecond chronoscopy of photoionization”, *Physical Review A* 101(3), 033412 (2020).
 103. Willi Paufler, Birger Böning and Stephan Fritzsche, “High harmonic generation with Laguerre-Gaussian beams,” *J. Opt.* 21, 094001 (2019). <https://doi.org/10.1088/2040-8986/ab31c3>
 104. L.B. Ju, C.T. Zhou, T.W. Huang, K. Jiang, C.N. Wu, T.Y. Long, L. Li, H. Zhang, M.Y. Yu, and S.C. Ruan, “Generation of Collimated Bright Gamma Rays with Controllable Angular Momentum Using Intense Laguerre-Gaussian Laser Pulses,” *Phys. Rev. Applied* 12, art. 014054 (2019); DOI: 10.1103/PhysRevApplied.12.014054.
 105. Longqing Yi, Ke Hu, Tünde Fülöp, “Spin-orbit interaction in a high-power laser irradiated micro-scale plasma waveguide”, arXiv:1909.02887 [physics.plasm-ph] (2019).
 106. Yijie Shen, Xuejiao Wang, Zhenwei Xie, Changjun Min, Xing Fu, Qiang Liu, Mali Gong, and Xiacong Yuan, “Optical vortices 30 years on: OAM manipulation from topological charge to multiple singularities,” *Light: Science & Applications* (2019) 8:90; <https://doi.org/10.1038/s41377-019-0194-2>
 107. Junjie Yu, Chaofeng Miao, Jun Wu, Changhe Zhou, “A generalized perfect vortex beam with controllable impulse ring profile”, arXiv:1909.13592 [physics.optics] (2019)
 108. Xing-Long Zhu, Min Chen, Su-Ming Weng, Paul McKenna, Zheng-Ming Sheng, and Jie Zhang, „Single-Cycle Terawatt Twisted-Light Pulses at Midinfrared Wavelengths above 10 μ m,” *Physical Review Applied* 12, 054024 (2019). DOI: 10.1103/PhysRevApplied.12.054024
 109. Mengdi Luo and Haoying Wang, “Fractional vortex ultrashort pulsed beams with modulating vortex strength,” *Optics Express* 27 (25), pp. 36259-36268 (2019); <https://doi.org/10.1364/OE.27.036259>
 110. J.W. Wang, M. Zepf, S.G. Rykovanov, “Intense attosecond pulses carrying orbital angular momentum using laser plasma interactions,” *Nature Communications* 10(1):5554 (2019); DOI: 10.1038/s41467-019-13357-1
 111. Chaojin Zhang, Chengpu Liu, “Carrier-envelope-phase dependence of harmonics induced by a few-cycle vortex laser,” *Laser Physics Letters* 16(12):125401 (2019); DOI: 10.1088/1612-202X/ab5644-1
 112. Zhang, C., Liu, C., “Origin of unusual even-order harmonic generation by a vortex laser”, *Optics Express* 27(25), pp. 37034-37040 (2019).
 113. Dorney, Kevin M., “A Twist in Strong-Field Physics: Structured, Ultrafast Optical and Extreme Ultraviolet Waveforms with Tailored Spin and Orbital Angular Momentum”, PhD Thesis, University of Colorado at Boulder, ProQuest Dissertations Publishing, 2019.
https://scholar.colorado.edu/concern/graduate_thesis_or_dissertations/zs25x844t
 114. Yun Xu “Optical beam shaping by linear and nonlinear metasurfaces”, PhD Thesis, University at Buffalo, The State University of New York (2019); <https://ubir.buffalo.edu/xmlui/handle/10477/79904>
 115. Singh, M., Fareed, M.A., Laramée, A., Isgandarov, E., Ozaki, T., “Intense vortex high-order harmonics generated from laser-ablated plume”, *Applied Physics Letters* 115(23), 231105 (2019).
 116. J. Yu, C. Miao, J. Wu, C. Zhou, “Circular Dammann gratings for enhanced control of the ring profile of perfect optical vortices,” *Photonics Research* Vol. 8, No. 5, pp. 648-658 (2020); <https://doi.org/10.1364/PRJ.387527>
 117. Márcio Bruno da Silva Matos Carvalho, “Stability And Instability In The Nonlinear Propagation Of Optical Bessel Beams With Orbital Angular Momentum,” Dissertation presented for the Ph.D Degree, Universidad Politécnica de Madrid escuela técnica superior de ingeniería agronómica, alimentaria y de biosistemas (2019). <https://doi.org/10.20868/UPM.thesis.56276>
 118. Ruchi, P. Senthilkumaran and Sushanta Kumar Pal, „Phase Singularities to Polarization Singularities,” *International Journal of Optics* vol. 2020, Article ID 2812803, 33 pages (June 2020). <https://doi.org/10.1155/2020/2812803>
 119. Wätzel, J., Berakdar, J., “Topological light fields for highly non-linear charge quantum dynamics and high harmonic generation”, *Optics Express* 28(13), pp. 19469-19481 (2020).
 120. Geng, H., Wu, H., Chen, J., Zhao, Z. “Proposal for X-ray vortices production based on nonlinear laser Compton scattering”, *He Jishu/Nuclear Techniques*, Volume 43, Issue 7, Article number 070201 (2020).

121. Liu, P., Yan, J., Hao, H., Wu, Y.K., “Phase retrieval for short wavelength orbital angular momentum beams using knife-edge diffraction”, *Optics Communications* 474, 126077 (2020).
122. Wätzel, J., Berakdar, J., “Multipolar, polarization-shaped high-order harmonic generation by intense vector beams”, *Physical Review A* 101(4), 043409 (2020).
123. Yoshiki Kohmura, Kei Sawada, Masaichiro Mizumaki, Kenji Ohwada, Tetsu Watanuki, and Tetsuya Ishikawa, “X-ray microscope for imaging topological charge and orbital angular momentum distribution formed by chirality”, *Optics Express* Vol. 28, Issue 16, pp. 24115-24122 (2020) <https://doi.org/10.1364/OE.392135>
124. Dixit, G., Ansari, I. and Jadoun, D., “Angle-Resolved Attosecond Streaking of Twisted Attosecond Pulses”, *Bulletin of the American Physical Society*, 66 (2021).
125. Hsiao-Chih Huang, “Uncertainty principle for orbital angular momentum and angular position with infinity”, arXiv:2005.09259 [physics.optics] (2020).
126. Wang, J., Li, X.B., Gan, L.F., Xie, Y., Zhong, C.L., Zhou, C.T., Zhu, S.P., He, X.T., Qiao, B., “Generation of Intense Vortex Gamma Rays via Spin-to-Orbital Conversion of Angular Momentum in Relativistic Laser-Plasma Interactions”, *Physical Review Applied* 14, Issue 1, Article number 014094 (2020).
127. Chaojin Zhang and Chengpu Liu, „Enhancement of second-order vortex harmonics in polar molecular media,” *Laser Phys. Lett.* 17, 085404 (2020). <https://doi.org/10.1088/1612-202X/ab9837>
128. Cheng Jin, Baochang Li, Kan Wang, Chenhui Xu, Xiangyu Tang, Chao Yu, and C. D. Lin, „Phase-matching analysis in high-order harmonic generation with nonzero orbital angular momentum Laguerre-Gaussian beams,” *Physical Review A* 102, 033113 (2020).; DOI: 10.1103/PhysRevA.102.033113
129. Maxwell, A.S., Armstrong, G.S.J., Ciappina, M.F., Pisanty, E., Kang, Y., Brown, A.C., Lewenstein, M. and de Morisson Faria, C.F. „Manipulating Twisted Electrons in Strong-Field Ionization,” *Faraday Discussions* 228, 394-412 (2021). <https://doi.org/10.1039/D0FD00105H>
130. Xun Shi, Chen-Ting Liao, Zhensheng Tao, Emma Cating-Subramanian, Margaret M. Murnane, Carlos Hernández-García and Henry C. Kapteyn, “Attosecond light science and its application for probing quantum materials,” *J. Phys. B: At. Mol. Opt. Phys.* 53, art. No. 184008 (2020); <https://doi.org/10.1088/1361-6455/aba2fb>
131. K. Eickhoff, D. Köhnke, L. Feld, L. Englert, T. Bayer and M. Wollenhaupt, „Tailored holograms for superimposed vortex states,” *New J. Phys.* 22 123015; DOI: 10.1088/1367-2630/abc8b0
132. Zhao, Y., Wang, L., Chen, W., Loiko, P., Mateos, X., Xu, X., Liu, Y., Shen, D., Wang, Z., Xu, X., Griebner, U., Petrov, V., "Structured laser beams: toward 2- μ m femtosecond laser vortices," *Photon. Res.* 9, 357-363 (2021).; <https://doi.org/10.1364/PRJ.413276>
133. Shumei Chen, Kingfai Li, Junhong Deng, Guixin Li, and Shuang Zhang, “High-Order Nonlinear Spin–Orbit Interaction on Plasmonic Metasurfaces,” *Nano Lett.* 20, 12, 8549–8555 (2020); <https://doi.org/10.1021/acs.nanolett.0c03100>
134. Wang, B., Tanksalvala, M., Zhang, Z., Esashi, Y., Jenkins, N.W., Murnane, M.M., Kapteyn, H.C. and Liao, C.T., „Coherent Fourier scatterometry using orbital angular momentum beams for defect detection,” *Optics Express*, vol. 29, pp. 3342-3358 (2021); <https://doi.org/10.1364/OE.414584>
135. He-Ping Geng, Jian-Hui Chen, and Zhen-Tang Zhao „Scheme for generating 1 nm X-ray beams carrying orbital angular momentum at the SXFEL,” *Nuclear Science and Techniques*, vol. 31, Art. Nr. 88 (2020). <https://doi.org/10.1007/s41365-020-00794-7>
136. de La Rochefoucauld, O., Dovillaire, G., Harms, F., Idir, M., Huang, L., Levecq, X., Piponnier, M. and Zeitoun, P., „EUV and Hard X-ray Hartmann Wavefront Sensing for Optical Metrology, Alignment and Phase Imaging,” *Sensors* 21(3), 874 (2021). <https://doi.org/10.3390/s21030874>
137. Kang, Y., Pisanty, E., Ciappina, M., Lewenstein, M., Figueira de Morisson Faria, C. and Maxwell, A.S., “Conservation laws for Electron Vortices in Strong-Field Ionisation”, *The European Physical Journal D* 75, Art. Nr. 199 (2021).; DOI: 10.1140/epjd/s10053-021-00214-4
138. Fanqi Kong, “High-Order Harmonic Generation with Structured Beams”, Department of Physics, Faculty of Science, University of Ottawa, Ottawa, Canada, 2019
139. Pengfei Lan, Peixiang Lu, „Generation and control of attosecond laser pulse,” *Chinese Science Bulletin*, Volume 66 , Issue 8: 847-855 (2021); <https://doi.org/10.1360/TB-2020-0725>
140. Wang, H., Cao, H., Pi, L., Huang, P., Wang, X., Xu, P., Yuan, H., Liu, X., Wang, Y., Zhao, W., Fu, Y., “Research Progress of Attosecond Pulse Generation and Characterization (Invited)”, *Guangzi Xuebao/Acta Photonica Sinica* 50(1), 0132001 (2021).
141. Zhe Wang, Weiyi Hong, Feng Wang, and Qing Liao, “Tuning the orbital angular momentum of high harmonics by manipulating the collinear photon channels in two-color high-harmonic generation,” *Physical Review Research* 2, 033482 (2020); DOI: 10.1103/PhysRevResearch.2.033482
142. Yi, L., „High-Harmonic Generation and Spin-Orbit Interaction of Light in a Relativistic Oscillating Window,” *Physical Review Letters* 126, 134801 (2021); DOI: 10.1103/PhysRevLett.126.134801
143. Brooks, N.J.M., 2022. *Structured High-Harmonic Light Sources for Enhanced Extreme Ultraviolet Microscopy* (Doctoral dissertation, University of Colorado at Boulder).
144. Fang, Y., Guo, Z., Ge, P., Ma, X., Han, M., Yu, X., Deng, Y., Gong, Q. and Liu, Y., “Strong-field photoionization of intense laser fields by controlling optical singularities”, *Sci. China Phys. Mech. Astron.* 64, 274211 (2021). <https://doi.org/10.1007/s11433-021-1689-7>

145. Guilbaud, O., Pandey, A.K., Baynard, E., Sanson, F., Demailly, J., Kazamias, S., Pittman, M., Neveu, O., Lucas, B., Calisti, A. and Le Marec, A., "Solid-target seeded soft X-ray laser for short pulses and optical vortex amplification," *Proceedings SPIE* Vol. 11886, 18860B (2021); <https://doi.org/10.1117/12.2593356>
146. Pandey, A.K., Guilbaud, O., Sanson, F., Papagiannouli, I., Kabacinski, A., Tissandier, F., Harms, F., Beaugrand, G., Dovillaire, G., Baynard, E. and Demailly, J., "Single-shot wavefront characterization of high topological charge extreme ultraviolet vortex," *Proc. SPIE* 11886, 118860L (2021); doi: 10.1117/12.2592326
147. Korobenko, A., Rashid, S., Heide, C., Naumov, A.Y., Reis, D.A., Berini, P., Corkum, P.B. and Vampa, G., "Generation of structured coherent extreme ultraviolet beams from an MgO crystal," *Opt. Express* 29, 24161-24168 (2021); <https://doi.org/10.1364/OE.431974>
148. Liu, Peifan. "Experimental Study of Structured Light Using a Free-electron Laser Oscillator." PhD diss., Duke University, 2021.
149. Pisanty, E., "Knotted topologies in the polarization state of bichromatic light", *Proc. SPIE* 11818, 1181809 (2021); <https://doi.org/10.1117/12.2596834>
150. Bansal S., Pal S.K., Senthilkumaran P. (2021) A Method to Distinguish C-Point from V-Point. In: Singh K., Gupta A.K., Khare S., Dixit N., Pant K. (eds) ICOL-2019. *Springer Proceedings in Physics*, vol 258. Springer, Singapore. https://doi.org/10.1007/978-981-15-9259-1_129
151. Rego Cabezas, L., "Structuring high-order harmonic generation with the angular momentum of light", PhD Thesis, Universidad De Salamanca, 2021.
152. W. Eschen, L. Loetgering, V. Schuster, R. Klas, A. Kirsche, L. Berthold, M. Steinert, Th. Pertsch, H. Gross, M. Krause, J. Limpert, and J. Rothhardt, "Material-specific high-resolution table-top extreme ultraviolet microscopy," PREPRINT (December 2021); https://www.researchgate.net/publication/357365774_Material-specific_high-resolution_table-top_extreme_ultraviolet_microscopy/references
153. Han, J., Tang, X., Yin, Z., Wang, K., Fu, Y., Wang, B., Chen, Y., Zhang, C. and Jin, C., "Role of fractional high harmonics with non-integer OAM on the generation of a helical attosecond pulse train," *Opt. Express* 30, 47942-47956 (2022).; <https://doi.org/10.1364/OE.479226>
154. A. L. Harris, "High-Order Above Threshold Ionization of Noble Gas Atoms Using Sculpted Laser Pulses," (preprint 2022).; <https://doi.org/10.48550/arXiv.2209.06759>
155. Xu, L., Li, D., Chang, J., Xi, T. and Hao, Z., "Few-cycle vortex beam generated from self-compression of midinfrared femtosecond vortices in thin plates," *Phys. Rev. A* 106, 053516 (2022).; DOI: 10.1103/PhysRevA.106.053516
156. Yi, L. (2021). High-harmonic generation and spin-orbit interaction of light in a relativistic oscillating window. *Physical Review Letters*, 126(13); doi:10.1103/PhysRevLett.126.134801
157. Fang, Y., & Liu, Y. (2021). Progress on the interaction between intense spatially structured light fields and atoms (invited). *Guangzi Xuebao/Acta Photonica Sinica*, 50(8); doi:10.3788/gzxb20210008.0850209
158. Andreev, A. V., Shoutova, O. A., & Stremoukhov, S. Y., "Harmonic generation in optical vortex fields", *Moscow University Physics Bulletin*, 76(5), 342-355 (2021).; doi:10.3103/S0027134921050039
159. Fang, Y., Lu, S., & Liu, Y., "Controlling photon transverse orbital angular momentum in high harmonic generation", *Physical Review Letters*, 127(27) (2021).; doi:10.1103/PhysRevLett.127.273901
160. Yan, B., Wang, Y.C., Gao, Q.H., Cheng, F.J., Jing, Q.S., Liang, H.J. and Ma, R., "Minimum structure of high-harmonic spectra from aligned O₂ and N₂ molecules", *Chinese Physics B*, 30(11) 114213 (2021).; doi:10.1088/1674-1056/abfbd9
161. Rego, L., Brooks, N.J., Nguyen, Q.L., Román, J.S., Binnie, I., Plaja, L., Kapteyn, H.C., Murnane, M.M. and Hernández-García, C., "Necklace-structured high-harmonic generation for low-divergence, soft x-ray harmonic combs with tunable line spacing", *Science Advances* 8(5) eabj7380 (2022).; doi:10.1126/sciadv.abj7380
161. Guan, Z., Yin, Z., & Jin, C., "Macroscopic phase-matching mechanism for orbital angular momentum spectra of high-order harmonics by mixing two laguerre-gaussian vortex modes", *Physical Review A*, 105(2) 023107. (2022).; doi:10.1103/PhysRevA.105.023107
162. Wang, B., Han, J., & Jin, C., "Features of vortex high harmonics generated by the Laguerre-Gaussian beam with nonzero radial node", *Infrared and Laser Engineering* 51(2) 20210895; (2022). doi:10.3788/IRLA20210895
163. Pandey, A.K., de las Heras, A., Larrieu, T., San Román, J., Serrano, J., Plaja, L., Baynard, E., Pittman, M., Dovillaire, G., Kazamias, S. and Hernández-García, C., "Characterization of extreme ultraviolet vortex beams with a very high topological charge", *ACS Photonics* 9(3), 944-951 (2022).; doi:10.1021/acsp Photonics.1c01768
164. Iqbal, M., Boltaev, G. S., Abbasi, N., Ganeev, R. A., & Alnaser, A. S. Spatial and spectral variations of high-order harmonics generated in noble gases. *Journal of Physics B: Atomic, Molecular and Optical Physics* 55(10) 105601 (2022).; doi:10.1088/1361-6455/ac69c1
165. Huang, H.C., "Lower bound of constant product $0.2\hbar$ between the pair of periodically angular uncertainties in a set of numerous singular light beams and its utility", *Physics Open*, 12, 100115. (2022). doi:10.1016/j.physo.2022.100115
166. Fang, Y., Guo, Z., Ge, P., Dou, Y., Deng, Y., Gong, Q., & Liu, Y., "Probing the orbital angular momentum of intense vortex pulses with strong-field ionization", *Light: Science and Applications* 11(1) 34; (2022). doi:10.1038/s41377-022-00726-7

167. Eschen, W., Loetgering, L., Schuster, V., Klas, R., Kirsche, A., Berthold, L., Steinert, M., Pertsch, T., Gross, H., Krause, M. and Limpert, J., "Material-specific high-resolution table-top extreme ultraviolet microscopy", *Light: Science and Applications* 11(1) 117 (2022).; doi:10.1038/s41377-022-00797-6
168. Maxwell, A.S., Madsen, L.B., Lewenstein, M., "Entanglement of orbital angular momentum in non-sequential double ionization," *Nature Communications* 13(1), 4706 (2022).
169. Pan, J., Chen, Y., Huang, Z., Zhang, C., Chen, T., Liu, D., Wang, D., Pang, M., Leng, Y., "Self-Referencing 3D Characterization of Ultrafast Optical-Vortex Beams Using Tilted Interference TERMITES Technique," *Laser & Photonics Reviews* 2200697 (2023).; <https://doi.org/10.1002/lpor.202200697>
170. Wu, Y., Xu, X., Zhang, C., Nie, Z., Sinclair, M., Farrell, A., Marsh, K.A., Hua, J., Lu, W., Mori, W.B. and Joshi, C., "Efficient generation of tunable magnetic and optical vortices using plasmas," *Phys. Rev. Research* 5, L012011 (2023).; DOI: 10.1103/PhysRevResearch.5.L012011
171. Shen, F., Pang, Z., Wang, C. and Hong, W., "High-order vortex harmonic generation with circular Airy vortex beams," *J. Opt. Soc. Am. B* **40**, 398-405 (2023).; <https://doi.org/10.1364/JOSAB.480843>
172. Nagai, K., Okamoto, T., Shinohara, Y., Sanada, H. and Oguri, K., 2023. High harmonic spin-orbit angular momentum generation in crystalline solids preserving multiscale dynamical symmetry. arXiv preprint arXiv:2311.18500.
173. Zhang, C., Zhang, Y., Du, H. and Liu, C., "Enhancement and redshift of vortex harmonic radiation in epsilon-near-zero materials," *Opt. Express* 31, 7725-7733 (2023).; <https://doi.org/10.1364/OE.484941>
174. Chen, Y., Man, X., Liu, B. and Lin, Z., "Nitrogen fluorescence emission pumped by femtosecond optical vortex beams," *Frontiers in Physics* 11, 01-09 (2023).; <https://doi.org/10.3389/fphy.2023.1124026>
175. Shi, F., Hou, M., Wang, W. and Zeng, X., "Direct Emission of Two-Color Vortex Beams at 1.0 μm and 1.5 μm Wavebands From an All-Fiber Laser," *IEEE Photonics Technology Letters*, 35(9), pp.473-476 (2023).; DOI: 10.1109/LPT.2023.3240299
176. Liu, M., Chen, W., Hu, G., Fan, S., Christodoulides, D.N., Zhao, C. and Qiu, C.W., "Spectral phase singularity and topological behavior in perfect absorption," *Phys. Rev. B* 107, L241403 (2023).; <https://link.aps.org/doi/10.1103/PhysRevB.107.L241403>
177. Wu, J., Lai, Z., Zhou, Y., Xie, Y., Lei, H., Liu, D., Li, N., Zhao, C., Fan, D. and Chen, Y., "High Energy Singular Beams Generation From a Dissipative Soliton Resonance Raman Fiber Laser," *Journal of Lightwave Technology* 41 (15), 5091 – 5096 (2023).; DOI: 10.1109/JLT.2023.3250005
178. Bhattacharya, U., Lamprou, T., Maxwell, A.S., Ordonez, A., Pisanty, E., Rivera-Dean, J., Stammer, P., Ciappina, M.F., Lewenstein, M. and Tzallas, P., "Strong-laser-field physics, non-classical light states and quantum information science," *Rep. Prog. Phys.* 86, 094401 (2023).; DOI 10.1088/1361-6633/acea31
179. Fang, Y. and Liu, Y., "Generation and control of extreme ultraviolet free-space optical skyrmions with high harmonic generation," *Advanced Photonics Nexus*, Vol. 2, Issue 4, 046009 (2023).; <https://doi.org/10.1117/1.APN.2.4.046009>
180. Nagai, K., Okamoto, T., Shinohara, Y., Sanada, H. and Oguri, K., "Generation of high-order vortex harmonics in solids through spin-orbit interaction of light," IEEE Proceedings of the 2023 Conference on Lasers and Electro-Optics Europe & European Quantum Electronics Conference (CLEO/Europe-EQEC, Munich, 26-30 June 2023).; DOI: 10.1109/CLEO/Europe-EQEC57999.2023.10232553 .
181. Rego, L. and Ayuso, D., "Structuring the local handedness of synthetic chiral light: global chirality versus polarization of chirality," *New Journal of Physics* 25, 093005 (2023).; DOI 10.1088/1367-2630/acf150 .
182. Schaap, B.H., Smorenburg, P.W. and Luiten, O.J., "Few-cycle vortices from superradiant nonlinear Thomson scattering by a relativistic chirped mirror," *Physical Review Research* 5(3), L032034 (2023).; <https://link.aps.org/doi/10.1103/PhysRevResearch.5.L032034>
183. Sun, W., Liu, Y., Romero, C., de Aldana, J.R.V., Ren, F., Jia, Y., Sun, X. and Chen, F., "Q-switched vortex waveguide laser generation based on LNOI thin films with implanted Ag nanoparticles," *Opt. Express* 31, 36725-36735 (2023).; <https://doi.org/10.1364/OE.503501>
184. Dong Jiahao, Liang Qingqing, Xu Liang, Liu Yi, "Angular Momentum Conservation for High-Harmonic Generation in Gases," *Laser & Optoelectronics Progress* 60(15):1526001 (2023).; DOI: 10.3788/LOP230511
185. Lin, Y.C., Midorikawa, K. and Nabekawa, Y., "Wavefront control of subcycle vortex pulses via carrier-envelope-phase tailoring," *Light: Science & Applications* 12, 279 (2023).; <https://doi.org/10.1038/s41377-023-01328-7>
186. Pasquinilli, H., Schimmoller, A., Walker, S. and Landsman, A.S., "Determining the Orbital Angular Momentum of a Vortex Beam Using Strong Field Ionization," *Photonics* 10(12), 1322 (2023).; <https://doi.org/10.3390/photonics10121322>
187. K. M. Dorney, L. Rego, N. J. Brooks, J. S. Román, E. Pisanty, C. Liao, J. L. Ellis, D. Zusin, C. Gentry, Q. L. Nguyen, J. M. Shaw, A. Picón, L. Plaja, M. Lewenstein, H. C. Kapteyn, M. M. Murnane, and C. Hernández-García, "Attosecond, High-Harmonic Optical Vortices with Tailored Spin and Orbital Angular Momentum," in Nonlinear Optics (NLO), OSA Technical Digest (Optica Publishing Group, 2019), paper NW2A.2.; <https://doi.org/10.1364/NLO.2019.NW2A.2>
188. Serrano Naranjo, L.M., "Caracterización del momento angular orbital de la luz", PhD Thesis, Universidad De Salamanca, 2021.

189. Han, J., Tang, X., Fu, Y., Wang, B., Yin, Z. and Jin, C., "Control of the annular spatial profile of high harmonics using a Bessel-Gaussian beam carrying the nonzero orbital angular momentum," *Opt. Express* 31, 43732-43747 (2023).; <https://doi.org/10.1364/OE.502772>
190. Han, J., Guan, Z., Wang, B. and Jin, C., "Calibration of quantitative rescattering model for simulating vortex high-order harmonic generation driven by Laguerre-Gaussian beam with nonzero orbital angular momentum," *Chinese Physics B* 32 (12), 124210 (2023).; DOI 10.1088/1674-1056/acfa86
191. Becheker, R., Ranély-Vergé-Dépré, C.A., Fsaïfes, I., Boer, G. and Chanteloup, J.C., "Orbital angular momentum beams engineering with liquid-crystal converter and a kW fs digital laser," in Laser Congress 2023 (ASSL, LAC), Technical Digest Series (Optica Publishing Group, 2023), paper ATh3A.3.; <https://doi.org/10.1364/ASSL.2023.ATH3A.3>
192. Gao, J., Yang, C., Ge, X., Zheng, Y., Zeng, Z. and Li, R., "Phase-matching of high-order harmonic generation in the extreme ultraviolet region with orbital angular momentum," *Opt. Express* 32, 871-878 (2024).; <https://doi.org/10.1364/OE.504806>
193. Zang, H., Wang, B., Zheng, C., Wei, L., Fan, Q., Wang, S., Yang, Z., Zhou, W., Cao, L. and Guo, H., "Performance analysis of single-focus phase singularity based on elliptical reflective annulus quadrangle-element coded spiral zone plates," *Chinese Physics B* 33 014209 (2023).; DOI 10.1088/1674-1056/acde4f
194. Zhang, L., Zhang, H., Huang, H., Wang, J., Zhou, H. and Yu, T., "Generation of ultra-intense vortex laser from a binary phase square spiral zone plate," *Opt. Express* 32, 5161-5173 (2024).; <https://doi.org/10.1364/OE.509509>
195. Zhang, C., Jiang, Y., Du, H. and Liu, C., "Vortex harmonic generation in indium tin oxide thin film irradiated by a two-color field," *Opt. Express* 32, 8950-8958 (2024); <https://doi.org/10.1364/OE.518419>
196. Tapani, T., Lin, H., De Andres, A., Jolly, S.W., Bhuvanendran, H. and Maccaferri, N., „Vortex plate retarder-based approach for the generation of sub-20 fs light pulses carrying orbital angular momentum," *J. Opt.* 26 045502 (2024).; DOI 10.1088/2040-8986/ad2e1f
197. Furch, F.J. and Arisholm, G., "Toward high-energy few-cycle optical vortices with minimized topological charge dispersion," *Opt. Lett.* 49, 1672-1675 (2024).; <https://doi.org/10.1364/OL.509316>
198. Xiao, B., Zhao, Y.W., Cheng, F.J., Wang, G.W., Jiang, W., Wang, Y.C., Hu, J., Liang, H.J. and Ma, R., „Optimization of extreme ultraviolet vortex beam based on high harmonic generation," *Chinese Physics B* 33 (5), 054209 (2024).; DOI 10.1088/1674-1056/ad2bf0
199. Shi, Y., Zhang, X., Arefiev, A. and Shen, B., 2024. Advances in laser-plasma interactions using intense vortex laser beams. *arXiv preprint arXiv:2405.17852*; <https://doi.org/10.48550/arXiv.2405.17852>
200. Granados, C., Das, B.K. and Ciappina, M.F., 2024. Orbital Angular Momentum Beam assisted High-Order Harmonic Generation in Semiconductor Materials. *arXiv preprint arXiv:2404.10293*; <https://doi.org/10.48550/arXiv.2404.10293>
201. Heras, A.D.L., Schmidt, D., Román, J.S., Serrano, J., Adams, D., Plaja, L., Durfee, C.G. and Hernández-García, C., 2024. Attosecond vortex pulse trains. *arXiv preprint arXiv:2402.15225*. <https://doi.org/10.48550/arXiv.2402.15225>
202. Sun, X., Sun, W., Liu, F., Guan, J., Romero, C., de Aldana, J.R.V., Ren, F., Jia, Y. and Chen, F., Compact Q-Switched Vortex Waveguide Laser Modulated by Buried Ag Nanoparticles in Sio2. *Available at SSRN* 4785781.
203. Piccoli, R., Bardellini, M., Vovla, S., Oberti, L., Abedin, K.A., Ciriolo, A.G., Vázquez, R.M., Osellame, R., Poletto, L., Frassetto, F. and Faccialá, D., "Synthesizing extreme-ultraviolet vector beams in a chip." *arXiv preprint arXiv:2403.11006* (2024).
204. Ju, L., Wu, C., Li, R., Zhang, H., Wu, S., Yu, M., Huang, T., Zhou, C. and Ruan, S., "Ultrabright attosecond gamma ray from irradiating solid foil with tailored vortex laser pulse." *Plasma Physics and Controlled Fusion* Volume 66, Issue 7, Article number 075002 (2024).

Статия A63– 2 цитата

P. Hansinger, G. Maleshkov, N. Gorunski, N. Dimitrov, A. Dreischuh and G. G. Paulus, "Interaction Between One-dimensional Dark Spatial Solitons and Semi-infinite Dark Stripes," *Optics Communications*, vol. 313, pp. 106-112 (2014).

Цитирана в:

1. Yuejun Chen, Hu Cui, Aiping Luo, Zhichao Luo and Chengzhang Zheng, "Influence of lattice defects on the coherent interaction of photovoltaic lattice solitons", *Journal of Optics*, Volume 17, 105902 (2015).
2. Lanxiao Huang, Zhiguo Wang, Yanyong Sun, Xinghua Li, and Yanpeng Zhang, "Dressed optical vortex in a hot atomic medium," *Laser Physics Letters* 6 (2019) 096001 (7pp); <https://doi.org/10.1088/1612-202X/ab33f9>

Статия A64– 6 цитата

L. Stoyanov, G. Maleshkov, I. Stefanov, A. Dreischuh, "Initiating self-focusing of beams carrying spatial phase singularities," *J. Opt. Soc. Am. B*, vol. 31, pp. 1159-1164 (2014).

Цитирана в:

1. Давыдовская, В. В., “Энергетический обмен между взаимодействующими пучками в фоторефрактивном кристалле SBN”, Вестник Полоцкого государственного университета. Серия С, Фундаментальные науки- № 4. - С. 101-108 (2019).
2. Давыдовская, В.В., “Выбор оптимальной ориентации внешнего электрического поля, приложенного к фоторефрактивному кристаллу SBN для достижения максимальной степени самофокусировки двумерного гауссового светового пучка”, Оптика неоднородных структур – 2019 : материалы V Международной научной конференции, Могилев, 28–29 мая 2019 г. / ред. кол.: А. Б. Сотский (отв. ред.) [и др.]. – Могилев : МГУ имени А. А. Кулешова, 2019. – С. 36–41.
3. Nawaz Sarif Mallick, Tarak Nath Dey, “Microwave assisted optical waveguide in Rydberg atoms,” arXiv:1911.01111 [physics.optics] (2020)
4. Nawaz Sarif Mallick, “Coherent generation and control of electro-magnetic fields in atomic systems”, PhD Thesis, Department of Physics, Indian Institute of Technology Guwahati, Guwahati 781039, India (2020).
5. Давыдовская, В., Навныко, В., Бушко, А., Величко, В., “Выбор оптимальной геометрии распространения и взаимодействия двумерных световых пучков в фоторефрактивном кристалле SBN”. In *XI Международная Конференция По Фотонике И Информационной Оптике 2022* (pp. 455-456).
6. Davydouskaya, V.V., Naunya, V.N. & Velichko, V.A., “Optimal Focusing Conditions for Two-Dimensional Gaussian Light Beams with Arbitrary Input Polarization in a Strontium–Barium Niobate Photorefractive Crystal,” *J. Appl. Spectrosc.* 89 (6), 1137-1142 (2023). <https://doi.org/10.1007/s10812-023-01478-x> (*Russian Original Vol. 89, No. 6, November–December, 2022*).

Статья A65 – 20 цитата

P. Hansinger, G. Maleshkov, I. L. Garanovich, D. Skryabin, D. N. Neshev, A. Dreischuh, and G. G. Paulus, “Vortex algebra by multiply cascaded four-wave mixing of femtosecond optical beams,” *Optics Express*, vol. 22, pp. 11079-11089 (2014).

Цитирана в:

1. Li, Y., Zhou, Z.-Y., Ding, D.-S., Shi, B.-S., “Sum frequency generation with two orbital angular momentum carrying laser beams”, *JOSA B*, Vol. 32 (3), 407-411 (2015).
2. Strohaber, J., Abul, J., Richardson, M., Zhu, F., Kolomenskii, A.A., Schuessler, H.A., “Cascade Raman sideband generation and orbital angular momentum relations for paraxial beam modes”, *Optics Express*, Volume 23, Issue 17, 22463-22476 (2015).
3. Strohaber, J., “A perturbative quantized twist embedded in Minkowski spacetime”, *Laser Physics*, Volume 26, Issue 11, Article number 116201 (2016).
4. Strohaber, J., Boran, Y., Sayrac, M., Johnson, L., Zhu, F., Kolomenskii, A.A., Schuessler, H.A., “Nonlinear mixing of optical vortices with fractional topological charge in Raman sideband generation”, *Journal of Optics*, Volume 19, Issue 1, Article number 015607 (2017).
5. Trofimov, V.A. and Kuchik, I.E., “Co-propagating FWM of axial symmetric laser pulse with femtosecond duration”, *Proc. SPIE*, vol. 10091, Laser Applications in Microelectronic and Optoelectronic Manufacturing (LAMOM) XXII, 1009108 (2017); doi:10.1117/12.2253652
6. Camper, A., Park, H., Lai, Y.H., Kageyama, H., Li, S., Talbert, B.K., Blaga, C.I., Agostini, P., Ruchon, T. and DiMauro, L.F. “Tunable mid-infrared source of light carrying orbital angular momentum in the femtosecond regime”, *Optics Letters* Vol. 42, Issue 19, 3769-3772 (2017).
7. Trofimov, V. A.; Kuchik, I.E., “Explicit solution of FWM problem under the interaction of co-propagating laser beams in medium with cubic nonlinear response”, *Proceedings of SPIE*, Volume: 9503, Art. Number: 95030Q (2015).
8. Nojiri, H. ; Okoshi, M. “Co-propagating FWM of axial symmetric laser pulse with femtosecond duration”, in “Laser applications in microelectronic and optoelectronic manufacturing (LAMOM) XXII, *Proceedings of SPIE*, Volume: 10091, Art.Number: UNSP 1009108 (2017).
9. James Strohaber, “General relativistic manifestations of orbital angular and intrinsic hyperbolic momentum in electromagnetic radiation”, *Bulletin of the American Physical Society* Volume 63, Number 13 (2018), 71st Annual Meeting of the APS Division of Fluid Dynamics, November 18–20, 2018; Atlanta, Georgia, Abstract ID: BAPS.2018.DFD.KP1.48; <https://meetings.aps.org/Meeting/DFD18/Session/KP1.48>
10. Wang, Z., Yang, J., Sun, Y., Zhang, Y., „Interference patterns of vortex beams based on photonic band gap structure”, *Optics Letters*, 43(18), pp. 4354-4357 (2018).
11. Guoping Lin, Yaqin Cao, Zehuang Lu, Zehuang Lu, Yanne K. Chembo, “Spontaneous generation of orbital angular momentum crystals using a monolithic Nd:YAG nonplanar ring laser,” *Optics Letters* 44(2), 203-206 (2019). DOI: 10.1364/OL.44.000203
12. Lin, G., Cao, Y., Lu, Z., Chembo, Y.K., “Spontaneous generation of orbital angular momentum crystals using a monolithic Nd:YAG nonplanar ring laser”, *Optics Letters* 44(2), pp. 203-206 (2019).
13. Huang, L., Wang, Z., Sun, Y., Li, X. and Zhang, Y., “Dressed optical vortex in a hot atomic medium”, *Laser Physics Letters*, 16(9), p.096001 (2019).
14. Davtyan, S., Chen, Y., Frosz, M.H., Russell, P.S.J. and Novoa, D., “Robust excitation and Raman conversion of guided vortices in chiral gas-filled photonic crystal fiber”, *Optics Letters* Vol. 45, No. 7, 1766-1769 (2020).

15. Strohaber, J. „General relativistic manifestations of orbital angular and intrinsic hyperbolic momentum in electromagnetic radiation,” *General Relativity and Gravitation* 52, article number 56 (2020). <https://doi.org/10.1007/s10714-020-02702-1>
16. Sona Loewe (Geb. Davtyan) “Angular Momentum Control via Raman Conversion in Twisted Gas-Filled Photonic Crystal Fibre”, Der Naturwissenschaftlichen Fakultät der Friedrich-Alexander-Universität Erlangen-Nürnberg zur Erlangung des Doktorgrades Dr. rer. nat. (2021).
17. Xuenan Li, Zhiguo Wang, Runding Luo, Yafen Wang, and Yanpeng Zhang, „Spatial modulation on vortex FWM induced by the nonlinear Kerr effect,” *Physica Scripta* 96 (8), 085503 (2021); DOI: 10.1088/1402-4896/abfde5
18. Huang, S., Wang, P., Shen, X., Liu, J., & Li, R., “Multicolor concentric ultrafast vortex beams with controllable orbital angular momentum”, *Applied Physics Letters* 120, 061102 (2022); doi:10.1063/5.0081005
19. Xu, L., Li, D., Chang, J., Xi, T. and Hao, Z., “Few-cycle vortex beam generated from self-compression of midinfrared femtosecond vortices in thin plates,” *Phys. Rev. A* 106, 053516 (2022).; DOI: 10.1103/PhysRevA.106.053516
20. Xu, L., Li, D., Chang, J., Li, D., Xi, T., & Hao, Z. “Powerful supercontinuum vortices generated by femtosecond vortex beams with thin plates”, *Photonics Research* 10(3), 802-809 (2022).; doi:10.1364/PRJ.443501

Статья А66–42 цитата

L. Stoyanov, S. Topuzoski, I. Stefanov, L. Janicijevic, A. Dreischuh, “Far field diffraction of an optical vortex beam by a fork-shaped grating,” *Optics Communications*, **350**, pp. 301-308 (2015).

Цитирана в:

1. Bareza Jr, N. and Hermosa, N., “Propagation dynamics of vortices in Helico-Conical optical beams”, *Optics Communications*, Volume 356, Pages 236–242 (2015).
2. Zhao, H., Peng, X., Ma, L., Sun, M., „Design of the multiplexing communication system with non-coherent vortex beams”, *Optics Communications*, Volume 378, Pages 5-9 (2016).
3. Saad, F., El Halba, E.M., Belafhal, A., “Generation of generalized spiraling Bessel beams of arbitrary order by curved fork-shaped holograms”, *Optical and Quantum Electronics*, Volume 48, Issue 10, Article number 454 (2016).
4. Ebrahim, A.A.A., Saad, F., Ez-zariy, L. and Belafhal, A., “Theoretical conversion of the hypergeometric-Gaussian beams family into a high-order spiraling Bessel beams by a curved fork-shaped hologram”, *Optical and Quantum Electronic*, Volume 49, Article number 169 (2017); doi:10.1007/s11082-017-0987-6
5. El Halba, E.M., Ez-zariy, L. and Belafhal, A., “Creation of generalized spiraling bessel beams by fresnel diffraction of Bessel-Gaussian laser beams”, *Opt Quant Electron*, vol. 49, art. 236 (2017) <https://doi.org/10.1007/s11082-017-1071-y>
6. Ji, Z.Y. and Zhou, G.Q., “Orbital angular momentum density and spiral spectra of Lorentz-Gauss vortex beams passing through a single slit”, *Chinese Physics B*, Vol. 26, Art. 094202 (2017).
7. Chen, R. and Zhou, G., "Orbital angular momentum density and spiral spectrum of Lorentz–Gauss vortex beams diffracted by a rectangular aperture." *Journal of Modern Optics* 64, no. 18 (2017): 1876-1884.
8. El Halba, E. M., M. Khouilid, M. Boustimi, and A. Belafhal, “Generation of generalized spiraling Bessel beams by a curved fork-shaped hologram with Bessel-Gaussian laser beams modulated by a Bessel grating”, *Optik* 154, 331-343 (2018).
9. Porfirev, A.P., Fomchenkov, S.A., Gridin, G.E. and Khonina, S.N., “Binary diffractive optics for 3D-demultiplexing of OAM beams,” *Journal of Physics Conference Series* vol. 1124(5), art. No. 051015 (2018). DOI: 10.1088/1742-6596/1124/5/051015
10. Moreno, J.C.Q., 2015. Estudio y generación de un haz láser con momento angular orbital definido (Doctoral dissertation, Universidad del Valle Santiago).
11. Sang, B., Ke, Y., Wu, J., Luo, H., Shu, W., Wen, S., “ Generation of pure Laguerre-Gaussian vector beams on the higher-order Poincaré sphere by hollow Gaussian beams through dielectric metasurfaces“, *Optics Communications* 439, pp. 27-33 (2019). <https://doi.org/10.1016/j.optcom.2019.01.053>
12. Liang, Y., Wang, E., Li, H. and Xie, C., “Tailoring focused optical vortices by using spiral forked plates,” *Optics Letters* 44(4), pp. 935-938 (2019). DOI: 10.1364/OL.44.000935
13. Volyar, A.V., Bretsko, M.V., Akimova, Y.E., Egorov, Y.A., “Avalanche instability of the orbital angular momentum higher order optical vortices”, *Computer Optics*, Volume 43, Issue 1, Pages 14-24 (2019)
14. Yaalou, M., El Halba, E.M., Hricha, Z. and Belafhal, A., “Generation of spiraling Bessel beams from dark/antidark Gaussian beams diffracted by a curved fork-shaped hologram,” *Opt. Quant. Electron.* vol. 51, art. Nr. 242 (2019). <https://doi.org/10.1007/s11082-019-1959-9>
15. Porfirev, A., Khonina, S., Azizian-Kalandaragh, Y., Kirilenko, M., “Efficient generation of arrays of closed-packed high-quality light rings”, *Photonics and Nanostructures - Fundamentals and Applications* 37, 100736 (2019).
16. Fernández, R., Gallego, S., Márquez, A., Neipp, C., Calzado, E.M., Francés, J., Morales-Vidal, M. and Beléndez, A., “Complex Diffractive Optical Elements Stored in Photopolymers,” *Polymers* 11, 1920 (2019). DOI: 10.3390/polym11121920

17. Pachava, S., Dharmavarapu, R., Vijayakumar, A., Jayakumar, S., Manthalkar, A., Dixit, A., Viswanathan, N.K., Srinivasan, B. and Bhattacharya, S., "Generation and decomposition of scalar and vector modes carrying orbital angular momentum: a review," *Opt. Eng.* 59(4), 041205 (2019), doi: 10.1117/1.OE.59.4.041205.
18. Zongyi Peng, Fan Huang, Xinting Jia „Evolution properties of vector vortex beams passing through a paraxial optical system," *Optical Engineering* 59(04):1 (2020); DOI: 10.1117/1.OE.59.4.041207
19. Lyu, Z. and Wang, C., "All-optically phase-induced polarization modulation by means of holographic method," *Scientific Reports* 10, 5657 (2020); <https://www.nature.com/articles/s41598-020-62549-z>
20. Khonina, S.N., Ustinov, A.V., Kirilenko, M.S., Kuchmizhak, A.A. and Porfirev, A.P., „Application of a binary curved fork grating for the generation and detection of optical vortices outside the focal plane," *Journal of the Optical Society of America B* Vol. 37, No. 6, pp. 1714-1721 (2020); <https://doi.org/10.1364/JOSAB.388431>
21. Eickhoff, K., Köhnke, D., Feld, L., Englert, L., Bayer, T. and Wollenhaupt, M., „Tailored holograms for superimposed vortex states," *New J. Phys.* 22, 123015 (2020); DOI: 10.1088/1367-2630/abc8b0
22. Cazac, V., Achimova, E., Abashkin, V., Prisacar, A., Loshmanschi, C., Meshalkin, A. and Egiazarian, „Polarization holographic recording of vortex diffractive optical elements on azopolymer thin films and 3D analysis via phase-shifting digital holographic microscopy," *Optics Express* 29 (6), 9217-9230 (2021). DOI: 10.1364/OE.415639
23. Chen, T.-Y., Wang, C.-S., Pan, Y.-J., Sun, L.-L., "Recording optical vortices in azo polymer films by applying holographic method", *Wuli Xuebao/Acta Physica Sinica* 70(5), 054204 (2021).
24. Yang, Y. and Qiu, C.W., „Generation of Optical Vortex Beams," in *Electromagnetic Vortices: Wave Phenomena and Engineering Applications* (eds Z.H. Jiang and D.H. Werner), pp.223-244 (2021). <https://doi.org/10.1002/9781119662945.ch7>
25. Lv, H., Bai, Y., Yao, J. and Yang, Y., "Generation of optical vortices using the metasurface combining dynamic and geometric phases," *Proc. SPIE* 12072, 1207205 (2021); <https://doi.org/10.1117/12.2604457>
26. Jefferson-Brain, T., 2021. *Optimisation and power scaling of annular transverse laser modes* (Doctoral dissertation, University of Southampton).
27. J. Qi, W. Yi, M. Fu, J. Liu, M. Zhu, S. Zhu, X. Chen, H. Zhang, H. Zhang, B. Shi, W. Pu, H. Deng, W. Wang, and X. Li, "Continuously adjustable cylindrical vector and vortex beams by programming vortex half-wave plates and detection based on coaxial or small-angle interference," *Phys. Rev. Applied* 18, 034086 (2022).; <https://doi.org/10.1103/PhysRevApplied.18.034086>
28. Bai, Y., Lv, H., Fu, X. and Yang, Y., "Vortex beam: generation and detection of orbital angular momentum," *Chinese Optics Letters* 20(1), 012601 (2022).; DOI: 10.3788/COL202220.012601
29. Ikonnikov, D. A., Kotlyar, V. V., Kovalev, A. A., & Vyunishev, A. M., "Optical vortices with A quadratic azimuthal phase dependence", *Annalen Der Physik*, 534(10), 2200276 (2022).; doi:10.1002/andp.202200276
30. Qi, J., Yi, W., Fu, M., Liu, J., Zhu, M., Zhu, S., Chen, X., Zhang, H., Zhang, H., Shi, B. and Pu, W., "Continuously adjustable cylindrical vector and vortex beams by programming vortex half-wave plates and detection based on coaxial or small-angle interference", *Physical Review Applied* 18(3), 034086. (2022).; doi:10.1103/PhysRevApplied.18.034086
31. Lian, Y., Qi, X., Wang, Y., Bai, Z., Wang, Y., & Lu, Z., "OAM beam generation in space and its applications: A review", *Optics and Lasers in Engineering*, 151, 106923 (2022).; doi:10.1016/j.optlaseng.2021.106923
32. Porfirev, A.P., Kuchmizhak, A.A., Gurbatov, S.O., Juodkakis, S., Khonina, S.N. and Kulchin, Y.N., "Phase singularities and optical vortices in photonics." *Phys. Usp* 192, no. 8 841-866 (2022).
33. Ivliev, N.A.; Khonina, S.N.; Podlipnov, V.V.; Karpeev, S.V., "Holographic Writing of Forked Diffraction Gratings on the Surface of a Chalcogenide Glass Semiconductor," *Photonics* 10, 125 (2023).; <https://doi.org/10.3390/photonics10020125>
34. Gui, L., Wang, C., Ding, F., Chen, H., Xiao, X., Bozhevolnyi, S.I., Zhang, X. and Xu, K., „60 nm Span Wavelength-Tunable Vortex Fiber Laser with Intracavity Plasmon Metasurfaces," *ACS Photonics* 10, 623–631 (2023).; <https://doi.org/10.1021/acsphotonics.2c01625>
35. Chen, M.H., Chen, B.W., Xu, K.L. and Su, V.C., "Wide-Angle Optical Metasurface for Vortex Beam Generation," *Nanomaterials* 13, no. 19, 2680 (2023).; <https://doi.org/10.3390/nano13192680>
36. Rodríguez, C., Arlt, S., Möckl, L. and Krenn, M., 2023. XLuminA: An Auto-differentiating Discovery Framework for Super-Resolution Microscopy. *arXiv preprint arXiv:2310.08408*.
37. Liu, J., Zhang, H., Ai, S., Yang, Q. and Liu, H., "Femtosecond-laser micromachining fork gratings in LN crystal with different mechanisms," *Microwave and Optical Technology Letters* 66(1), e33945 (2024).; <https://doi.org/10.1002/mop.33945>
38. Ebrahimi, H. and Sabatyan, A., "Diffractive Beam-Shaping Element for Generating Multiple Structured Beams with Distinct Spatial Structures," *Annalen der Physik*, 535(12), 2300296 (2023).; <https://doi.org/10.1002/andp.202300296>
39. Su, V.C. and Xu, K.L., "GaN vortex metasurface for interference and broadband characteristics," *Opt. Express* 31, 43089-43099 (2023).; <https://doi.org/10.1364/OE.509177>
40. Lyu, Z., Wang, P. and Wang, C., „Multi-channel generation of vortex beams with controllable polarization states and orbital angular momentum," *Chinese Physics B* 32 (12), 124209 (2023).; DOI 10.1088/1674-1056/ace767
41. Chen, M.H., Liu, Y.L. and Su, V.C., "Gallium nitride-based geometric and propagation metasurfaces for vortex beam emissions," *Heliyon*, 10(3), e25436 (2024), doi: <https://doi.org/10.1016/j.heliyon.2024.e25436>.

42. Zhang, Y., Nan, T., "Generation of Structured Light", *Laser and Optoelectronics Progress*, 61(1), 0126001 (2024).

Статия A67 – 6 цитата

P. Hansinger., Ph. Töpfer, N. Dimitrov, D. Adolph, D. Hoff, T. Rathje, A. Max Sayler, A. Dreischuh, and G.G. Paulus, "Refractive index dispersion measurement using carrier-envelope phasemeters," *New Journal of Physics*, **vol. 19**, Art. No. 023040 (2017).

Цитирана в:

1. Nasrin, S., Tada, H., Yuda, L. and Shioda, T., "Dispersion spectroscopy with optical frequency comb-based single-shot dual-heterodyne mixing," *Applied Optics* Vol. 58, No. 33, 9044-9050 (2019). DOI: 10.1364/AO.58.009044
2. Zhou, Y., Guo, L., Quan, W., Wei, M., Zhao, M., Xu, S., Xiao, Z., Sun, R., Wang, Y., Lai, X. and Chen, J., "Carrier-envelope phase dependence of high-order above-threshold ionization by few-cycle laser pulses," *J. Phys. B: At. Mol. Opt. Phys.* vol. 54 (14), 144008 (2021).; DOI: 10.1088/1361-6455/ac19f7
3. Sazonkin, S.G., Orekhov, I.O., Dvoretzkiy, D.A., Lazdovskaia, U.S., Ismaeel, A., Denisov, L.K. and Karasik, V.E., "Analysis of the Passive Stabilization Methods of Optical Frequency Comb in Ultrashort-Pulse Erbium-Doped Fiber Lasers," *Fibers* 10, 88 (2022).; <https://doi.org/10.3390/fib10100088>
4. Zhou, Y., Quan, W., Zhao, M., Wang, Z., Wang, M., Cheng, S., Chen, J. and Liu, X., "Improved carrier-envelope phase determination method for few-cycle laser pulses using high-order above-threshold ionization", *Photonics*, 9(8), p. 528 (2022).; doi:10.3390/photonics9080528
5. Seeger, M., 2023. *Development of high power CEP-stable light sources*, Doctoral dissertation, LMU München: Faculty of Physics
6. Behera, B.K., Gour, S.K. and Biswas, S., "Refractive index for the mechanical refraction of a relativistic particle," *Eur. Phys. J. D* 78, 60 (2024).; <https://doi.org/10.1140/epjd/s10053-024-00849-z>

Статия A68– 10 цитата

N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, and G. G. Paulus, "Pulse front tilt measurement of femtosecond laser pulses," *Optics Communications*, **vol. 371**, pp. 51-58 (2016).

Цитирана в:

1. Kosuke Murate, Mehraveh Javan Roshtkhari, Xavier Ropagnol, and Francois Blanchard, "Adaptive spatiotemporal optical pulse front tilt using MEMS mirrors and its THz application", *Optics Letters*, Doc. ID 323279 (2018)
2. K. Murate, M. Lavan, X. Ropagnol and F. Blanchard, "Pulse Front Tilt Derived from a Digital Micromirror Device and its THz Application," International Conference on Infrared, Millimeter, and Terahertz Waves, IRMMW-THz Volume 2018-September, 25 October 2018, Article number 8509955 (2018). doi: 10.1109/IRMMW-THz.2018.8509955
3. Figueira, G., Braga, L., Ahmed, S., Boyle, A., Galimberti, M., Galletti, M. and Oliveira, P., "Simultaneous measurement of pulse front tilt and pulse duration with a double trace autocorrelator," *J. Opt. Soc. Am. B* 36(2):366-373 (2019); DOI: 10.1364/JOSAB.36.000366
4. Dorrer, C., "Spatiotemporal Metrology of Broadband Optical Pulses", *IEEE Journal of Selected Topics in Quantum Electronics* 25(4), 8640125 (2019).
5. Ma, Q., Chai, L., Song, Q., Liu, W., Chen, J., Hu, M., "Modulation characteristics of terahertz generation by dual-beam interference in conventional system using tilted-pulse-front pumped LiNbO₃", *Infrared Physics and Technology* 109, 103434 (2020)
6. G. K. Rasulova, I. V. Pentin, Yu. B. Vakhtomin, K. V. Smirnov, R. A. Khabibullin, E. A. Klimov, A. N. Klochkov, and G. N. Goltsman, „Pulsed terahertz radiation from a double-barrier resonant tunneling diode biased into self-oscillation regime,” *Journal of Applied Physics* 128, 224303 (2020); <https://doi.org/10.1063/5.0022052>
7. Li, Z., Leng, Y., & Li, R., "Further development of the short-pulse petawatt laser: Trends, technologies, and bottlenecks", *Laser and Photonics Reviews*, 17(1). 2100705 (2023).; doi:10.1002/lpor.202100705
8. Hwangbo, Y., Kim, K., Jeon, S., and Kim, J., „Measurement and minimization of angular chirp of stretcher in chirp pulse amplification laser,” *J. Korean Phys. Soc.* 82, no. 11 1055-1061 (2023).; <https://doi.org/10.1007/s40042-023-00817-7>
9. Chlouba, T., Shiloh, R., Kraus, S., Brückner, L., Litzel, J. and Hommelhoff, P., „Coherent nanophotonic electron accelerator,” *Nature* **622**, 476–480 (2023).; <https://doi.org/10.1038/s41586-023-06602-7>
10. Buck, S., Reid, D. and Galimberti, M., "Automated control and stabilization of ultrabroadband laser pulse angular dispersion," *Appl. Opt.* **63**, 1613-1617 (2024).; <https://doi.org/10.1364/AO.514074>

Статия A69– 22 цитата

P. Hansinger, G. Maleshkov, I. L. Garanovich, D. Skryabin, D. N. Neshev, A. Dreischuh, and G. G. Paulus, "White light generated by femtosecond optical vortex beams," *J. Opt. Soc. Am. B*, **vol. 33**(4), pp. 681-690 (2016).

Цитирана в:

1. Shutova, M., Zhdanova, A.A. and Sokolov, A.V., "Detection of mixed OAM states via vortex breakup", *Physics Letters A*, Volume 381, Issue 4, 408–412 (2017).
2. A. Dakova, D. Dakova, V. Slavchev, L. Kovachev, M. Kolev, "Cnoidal waves in single-mode fibers", Scientific Works of the Union of Scientists in Bulgaria-Plovdiv, series C. Technics and Technologies, Vol. XV, pp. 205-209, 2017, ISSN 1311 -9419 (Print), ISSN 2534-9384 (On- line)
3. Zhan, L., Xu, M., Xi, T., Hao, Z., "Contributions of leading and tailing pulse edges to filamentation and supercontinuum generation of femtosecond pulses in air", *Physics of Plasmas*, 25(10),103102 (2018).
4. S. A. Shlenov, E. V. Vasilyev V. P. Kandidov, "Spatio-Temporal and Spectral Transformation of Femtosecond Pulsed Beams with Phase Dislocation Propagating Under Conditions of Self-action in Transparent Solid-State Dielectrics: Recent Advances," *Springer Series in Chemical Physics*, Volume 119, 2019, Pages 43-61, DOI: 10.1007/978-3-030-05974-3_3
5. Bozhikoliev, I., Kovachev, K., Dakova, A., Slavchev, V., Dakova, D., Kovachev, L., "Vortex solutions of vector nonlinear amplitude equations in optics", *Proceedings of SPIE* 11047, Article number 110471C (2019).
6. Sharma, M., Pradhan, P., Ung, B., „Endlessly mono-radial annular core photonic crystal fiber for the broadband transmission and supercontinuum generation of vortex beams", *Scientific Reports*, Volume 9, Issue 1, Article number 2488 (2019).
7. Xu, M., Zhan, L., Xi, T. and Hao, Z., "Supercontinuum generation by femtosecond flat-top laser pulses in fused silica", *J. Opt. Soc. Am. B* 36, issue 10, pp. G6-G12 (2019); <https://doi.org/10.1364/JOSAB.36.0000G6>.
8. Wang, Z., Sun, Y., Mahesar, A.R., Zhang, Y., "Interaction between helical phase and Kerr nonlinear phase in vortex four- And six-wave mixing", *EPL*, Volume 124, Issue 3, Article number 34004 (2018).
9. Zang, H., Ding, S., Wei, L., Wang, C., Fan, Q. and Cao, L., "Fractal spiral zone plate with high-order harmonics suppression," *Appl. Opt.* **58**, 8680-8686 (2019). <https://doi.org/10.1364/AO.58.008680>
10. Dakova, A., Dakova, D., Slavchev, V., Likov, N., Kovachev, L., "Vortex structures in optical fibers with spatial dependence of the refractive index", *Journal of Optoelectronics and Advanced Materials*, 21(7-8), 492-498 (2019).
11. Васильев, Е.В., Шленов, С.А. and Кандидов, В.П., 2019. Многофокусная структура излучения при фемтосекундной филаментации оптического вихря в среде с аномальной дисперсией групповой скорости. *Оптика и спектроскопия*, 126(1), pp.24-32.
12. Feng, Z., Lan, J., Li, W., Liu, X., Yu, C., Li, J. and Liu, Y., „Supercontinuum generated by a femtosecond annular Gaussian beam in air," *Phys. Plasmas* 27, 023515 (2020); <https://doi.org/10.1063/1.5139720>
13. Anderson, M.E., Serrano, A., Stinson, C., Talamantes, A., Miller, N. and Chaloupka, J.L., "Spatial Manipulation of a Supercontinuum Beam for the Study of Vortex Interference Effects," *Appl. Sci.* 10(6), 1966 (2020). <https://doi.org/10.3390/app10061966>
14. Slavchev, V., Dakova, A., Bozhikoliev, I., Dakova, D., Kovachev, L., "Generation of vector type vortices in gradient fiber with spatial dependence of the refractive index", *Journal of Optoelectronics and Advanced Materials* 22(9-10), pp. 445-451 (2020).
15. Zhang, H., Zhang, Y., Lin, S., Chang, M., Yu, M., Wang, Y., Chen, A., Jiang, Y., Li, S. and Jin, M., „Testing the coherence of supercontinuum generated by optical vortex beam in water," *Journal of Physics B: Atomic, Molecular and Optical Physics*, Vol. 54, Nr 16., 165401 (2021).
16. Slavchev, V., Dakova, D., Dakova, A., Kasapeteva, Z. and Kovachev, L., "Method for solving vector nonlinear differential equations with application in waveguide optics," *AIP Conference Proceedings* 2505, 030012 (2022); <https://doi.org/10.1063/5.0100692>
17. Slavchev, V., Dakova, A., Gocheva, N., Bozhikoliev, I., Kovachev, K. and Biswas, A., "Laser ring structures in step-index fibers," *Journal of Physics: Conference Series* 2339, 012007 (2022).; <http://dx.doi.org/10.1088/1742-6596/2339/1/012007>
18. Zang, H., Miao, Z., Liang, E., Li, Y., Fan, Q., Wei, L., Zhou, W. and Cao, L., "Single-focus phase singularity generated by spiral zone plate with quasi-random distributed quantum dots", *Journal of Physics D: Applied Physics*, 55(28), 284003 (2022).; doi:10.1088/1361-6463/ac66a6
19. Slavchev, V., Bozhikoliev, I., Zamanchev, Z., Dakova, A., Kovachev, K., & Biswas, A. Optical vortices in waveguides with spatial dependence of the nonlinear refractive index. *Optical and Quantum Electronics*, 54(6), 346 (2022).; doi:10.1007/s11082-022-03707-7
20. Xu, L., Li, D., Chang, J., Li, D., Xi, T., & Hao, Z., "Powerful supercontinuum vortices generated by femtosecond vortex beams with thin plates", *Photonics Research*, 10(3), 802-809(2022).; doi:10.1364/PRJ.443501
21. Slavchev, V., Dakova, A., Dakova, D., Bozhikoliev, I., Kovachev, L. and Biswas, A., "New vector type optical vortex structures in isotropic media," *Journal of Physics: Conference Series* 2487 (2023) 012030.; doi:10.1088/1742-6596/2487/1/012030
22. Zhang Zeliang, Qian Wenqi, Qi Pengfei, and Weiwei Liu, „Research Progress in Supercontinuum Generation and Regulation Based on Femtosecond Laser Filamentation," *Chinese Journal of Lasers* 50(7): 0708004 (2023).; DOI: 10.3788/CJL221530

L. Stoyanov, N. Dimitrov, I. Stefanov, A. Dreischuh, "Optical waveguiding by necklace and azimuthon beams in nonlinear media," *J. Opt. Soc. Am. B*, vol. **34** (4), pp. 801-807 (2017).

Цитирана в:

1. Wang, H., Ciret, C., Godet, J.L., Cassagne, C. and Boudebs, G., "Measurement of the optical nonlinearities of water, ethanol and tetrahydrofuran (THF) at 355 nm", *Applied Physics B: Lasers and Optics*, Volume 124, Article number 95 (2018).
2. Wang, H., Bai, Y., Wu, E., Wang, Z., Liu, P., Liu, C., „Terahertz necklace beams generated from two-color vortex-laser-induced air plasma", *Physical Review A*, Volume 98, Article number 013857 (2018).
3. Crego, A., Jarque, E.C. and San Roman, J., "Ultrashort visible energetic pulses generated by nonlinear propagation of necklace beams in capillaries," *Optics Express* 29(2), 929-937 (2021). <https://doi.org/10.1364/OE.411338>
4. Balbuena Ortega, A., Torres-González, F.E., López Gayou, V., Delgado Macuil, R., Cardoso Sakamoto, J.E.H., Arzola, A.V., Assanto, G. and Volke-Sepulveda, K., „Guiding light with singular beams in nanoplasmonic colloids," *Appl. Phys. Lett.* 118, 061102 (2021); <https://doi.org/10.1063/5.0041198>
5. Balbuena Ortega, A., Torres-González, F.E., López Gayou, V., Delgado Macuil, R., Assanto, G. and Volke-Sepulveda, K., „Light Confinement with Structured Beams in Gold Nanoparticle Suspensions," *Photonics* 8, 221 (2021); <https://www.researchgate.net/publication/352461248>
6. Malomed, B.A., *Multidimensional Solitons* (AIP Publishing LLC, 2022), Chapter 8: Spatially Periodic Potentials (Lattices): Experiments.; DOI: https://doi.org/10.1063/9780735425118_008
7. Malomed, B.A., *Multidimensional Solitons* (AIP Publishing LLC, 2022), Chapter 4: The Use of Higher-Order Nonlinearities: Experiments in Optical Media; DOI: https://doi.org/10.1063/9780735425118_004

Статия A71– 8 цитата

Lj. Janicijevic, S. Topuzoski, L. Stoyanov, A. Dreischuh, „Diffraction of a Gaussian beam by a four-sector binary grating with a shift between adjacent sectors," *Optics Communications*, vol. **389**, pp. 203–211 (2017).

Цитирана в:

1. Hebri, D., Rasouli, S. and Yeganeh, M., "Intensity based measuring of the topological charge alteration by the diffraction of vortex beams from amplitude sinusoidal radial gratings", *Journal of the Optical Society of America B*, Vol. 35, No. 4, 724-730 (2018).
2. Rasouli, S. and Hebri, D., "Theory of diffraction of vortex beams from 2D orthogonal periodic structures and Talbot self-healing under vortex beam illumination," *Journal of the Optical Society of America A* 36, pp. 800-808 (2019); <https://doi.org/10.1364/JOSAA.36.000800>
3. Hebri, D., Rasouli, S. and Dezfouli, A.M., "Theory of diffraction of vortex beams from structured apertures and generation of elegant elliptical vortex Hermite–Gaussian beams," *Journal of the Optical Society of America A* Vol. 36, Issue 5, pp. 839-852 (2019); <https://doi.org/10.1364/JOSAA.36.000839>
4. Amiri, P., Dezfouli, A.M. and Rasouli, S., "Efficient characterization of optical vortices via diffraction from parabolic-line linear gratings," *J. Opt. Soc. Am. B* 37 (9), 2668-2677 (2020); <https://doi.org/10.1364/JOSAB.398143>
5. Rasouli, S., Amiri, P., Kotlyar, V.V. and Kovalev, A.A., „Characterization of a pair of superposed vortex beams having different winding numbers via diffraction from a quadratic curved-line grating," *J. Opt. Soc. Am. B* 38(7) 2267-2276 (2021); DOI: 10.1364/JOSAB.428390
6. Soria-Garcia, A., del Hoyo, J., Sanchez-Brea, L.M., Pastor-Villarrubia, V., Gonzalez-Fernandez, V., Elshorbagy, M.H. and Alda, J., "Vector diffractive optical element as a full-Stokes analyzer," *Optics & Laser Technology* 163, 109400 (2023).; <https://doi.org/10.1016/j.optlastec.2023.109400>
7. A. Soria-Garcia, J. del Hoyo, L. M. Sanchez-Brea, V. Pastor-Villarrubia, V. Gonzalez-Fernandez, M. H. Elshorbagy, and J. Alda, "Stokes polarimeter using vector diffractive optical elements," *Proceedings SPIE* Vol. 12572, 125720A (2023).; <https://doi.org/10.1117/12.2664854>
8. Ke, X. and Xie, Y., Ke, Xizheng, and Yanchen Xie. "Diffraction characterization of non-zero radial index optical vortices using gradually changing-period annular radial gratings combined with phase diagrams." *Optics & Laser Technology* 175 110713 (2024).

Статия A72– 13 цитата

L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, D. N. Neshev, G. G. Paulus, and A. Dreischuh, "Far-field pattern formation by manipulating the topological charges of square-shaped optical vortex lattices," *J. Opt. Soc. Am. B* vol. **35**, pp. 402-409 (2018).

Цитирана в:

1. Li, X., Ma, H., Zhang, H., Tai, Y., Li, H., Tang, M., Wang, J., Tang, J. and Cai, Y., "Close-packed optical vortex lattices with controllable structures", *Optics Express*, Vol. 26, Issue 18, pp. 22965-22975 (2018).
2. Wan, Z., Shen, Y., Gong, M. and Fu, X., "Quadrant-separable multi-singularity vortices manipulation by coherent superposed mode with spatial-energy mismatch," *Optics Express* vol. 26, 34940-34953 (2018).

3. Enrique Augusto Calisto Leiva, "Vortices induced by topological forcing in nematic liquid crystal layers", Tesis para optar al grado de magíster en ciencias, mención física memoria para optar al título de ingeniero civil matemático, Santiago de Chile (2019).
4. Calisto, E., Clerc, M.G., Kowalczyk, M. and Smyrnelis, P., "On the origin of the optical vortex lattices in a nematic liquid crystal light valve," *Optics Letters* 44(12), pp. 2947-2951 (2019). DOI: 10.1364/OL.44.002947
5. Clerc, M.G., Kowalczyk, M. and Zambra, V., "Topological transitions in an oscillatory driven liquid crystal cell," *Scientific Reports* 10, 19324 (2020).; <https://doi.org/10.1038/s41598-020-75165-8>
6. Gao, C., Wang, H., Fu, S., "Tailoring a complex perfect optical vortex array with multiple selective degrees of freedom", *Optics Express* 29(7), pp. 10811-10824 (2021).
7. Kumar, P. and Nishchal, N.K., "Array formation of optical vortices using in-line phase modulation," *Optics Communications* vol. 493, 127020 (2021); <https://doi.org/10.1016/j.optcom.2021.127020>.
8. H. Wang, S. Fu, and C. Gao, "Multi-dimension Control on Complex Perfect Vortex Array," in *Conference on Lasers and Electro-Optics*, J. Kang, S. Tomasulo, I. Ilev, D. Müller, N. Litchinitser, S. Polyakov, V. Podolskiy, J. Nunn, C. Dorrer, T. Fortier, Q. Gan, and C. Saraceno, eds., *OSA Technical Digest* (Optical Society of America, 2021), paper STh1B.5.; https://doi.org/10.1364/CLEO_SI.2021.STh1B.5
9. Liu, D., Gao, B., Wang, F., Wen, J. and Wang, L.G., "Experimental realization of tunable finite square optical arrays", *Optics and Laser Technology*, 153, 108220 (2022).; doi:10.1016/j.optlastec.2022.108220
10. Kumar, N., Arora, A., & Krishnan, A., "Plasmonically enhanced composite vortex beam generation using ultra-thin dielectric fork gratings", *Journal of the Optical Society of America B: Optical Physics*, 39(8), 2084-2090 (2022).; doi:10.1364/JOSAB.460366
11. Wang, H., Fu, S. and Gao, C., "Tailoring a complex perfect optical vortex array with multiple selective degrees of freedom." *Optics Express* 29, no. 7 10811-10824 (2021).
12. Xu, J., Li, H., Zhang, H., Li, S., Cheng, W., Yao, X., Xu, G., Xiao, Y., Tang, X. and Qin, Y., "A general phase-modulating solution for generating optical array with arbitrary dimensions via mapping space," *Appl. Phys. Lett.* 122, 091102 (2023); <https://doi.org/10.1063/5.0138992>
13. Shikder, A. and Nishchal, N.K., "Generation of optical vortex lattices by in-line phase modulation with partially coherent light," *J. Opt. Soc. Am. A* 40, 1231-1236 (2023).; <https://doi.org/10.1364/JOSAA.489469>

Статья A73– 1 цитат

- S. Topuzoski, Lj. Janicijevic, L. Stoyanov, I. Stefanov, A. Dreischuh, "Five-vortex spot patterns generated by diffraction of azimuthally X-shaped beam by the fork-shaped grating," *Optics Communications* vol. 428, pp. 206-215 (2018). <https://doi.org/10.1016/j.optcom.2018.07.059>

Цитирана в:

1. Hu, H., Niu, J., Li, H. and Xie, C., "Binary square spiral zone plates trimmed with quasi-random dots for single-order focusing," *Optik* 278, 170745 (2023).; <https://doi.org/10.1016/j.ijleo.2023.170745>

Статья A74– 4 цитата

- S. Topuzoski, Lj. Janicijevic, L. Stoyanov, A. Dreischuh, "Fraunhofer diffraction of a Gaussian beam by a four-sector binary grating with a half period fringes shift between adjacent sectors", *Opt. Quant. Electron.* vol. 51, art. Nr. 71 (2019).

Цитирана в:

1. Victor Kotlyar, A. A. Kovalev, E. G. Abramochkin „Asymmetric hypergeometric laser beams,” *Computer Optics* 43(5):735-740 (2019).
2. Victor V. Kotlyar, Alexey Andreevich Kovalev, and Eugeny G. Abramochkin, „Kummer laser beams with a transverse complex shift,” *Journal of Optics* 22 015606 (2020); DOI: 10.1088/2040-8986/ab5ef1
3. Котляр, В.В. and Ковалев, А.А., "Топологический заряд оптических вихрей." Самара: ООО "Новая техника" (2021); ISBN: 978-5-88940-157-5.
4. Котляр, В.В., Ковалев, А.А. and Хонина, С.Н., "Вращающиеся вихревые лазерные пучки." ООО Издательская фирма "Физико-математическая литература" (Москва) (2021); ISBN: 978-5-9221-1915-3.

Статья A75– 4 цитата

- L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh, "Far-field beam reshaping by manipulating the topological charges of hexagonal optical vortex lattices," *Journal of Optics* vol. 20, Art. No. 095601 (2018).

Цитирана в:

1. Li, X., Ma, H., Zhang, H., Tai, Y., Li, H., Tang, M., Wang, J., Tang, J. and Cai, Y., "Close-packed optical vortex lattices with controllable structures", *Optics Express*, Vol. 26, Issue 18, pp. 22965-22975 (2018).
2. Marcel G. Clerc, Michal Kowalczyk, Valeska Zambra, "Exotic states of matter in an oscillatory driven liquid crystal cell", arXiv:2009.06528 [cond-mat.soft] (2020).
3. Liu, D., Gao, B., Wang, F., Wen, J. and Wang, L.G., „Experimental realization of tunable finite square optical arrays“, *Optics and Laser Technology*, 153, 108220 (2022).; doi:10.1016/j.optlastec.2022.108220

4. Zhang, S., Ma, J., Li, P., Zhou, Z., Gu, Y. and Wu, Z., “Hexagonal optical lattices formed by coherent interference among three fundamental Gaussian beams with oblique incidence,” *Results in Physics* 45, 106245 (2023).; <https://doi.org/10.1016/j.rinp.2023.106245>.

Статия А76– 4 цитата

L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh, “Controllable beam reshaping by mixing square-shaped and hexagonal optical vortex lattices,” *Scientific Reports* **vol. 9**, Art. # 9:2128 (2019).

Цитирана в:

1. Kumar, P. and Nishchal, N.K., “Array formation of optical vortices using in-line phase modulation,” *Optics Communications* vol. 493, 127020 (2021); <https://doi.org/10.1016/j.optcom.2021.127020>
2. Liu, D., Gao, B., Wang, F., Wen, J. and Wang, L.G., “Experimental realization of tunable finite square optical arrays”, *Optics and Laser Technology*, 153 108220 (2022).; doi:10.1016/j.optlastec.2022.108220
3. Shikder, A. and Nishchal, N.K., "Generation of optical vortex lattices by in-line phase modulation with partially coherent light," *J. Opt. Soc. Am. A* 40, 1231-1236 (2023).; <https://doi.org/10.1364/JOSAA.489469>
4. Shikder, A. and Nishchal, N.K., "Generation of controllable optical vortex array by in-line phase modulation with a light emitting diode," in *Frontiers in Optics + Laser Science 2023 (FiO, LS)*, Technical Digest Series (Optica Publishing Group, 2023), paper JM7A.106.; <https://doi.org/10.1364/FIO.2023.JM7A.106>

Статия А77– 4 цитата

M. Zhekova; G. Maleshkov; L. Stoyanov, I. Stefanov; G. G. Paulus, and A. Dreischuh, “Formation of multi-spot focal arrays by square-shaped optical vortex lattices,” *Optics Communications* **vol. 449**, pp. 110-116 (2019).

Цитирана в:

1. Jialei Tang, Jinhan Ren and Kyu Young Han, „Fluorescence imaging with tailored light,” *De Gruyter – Nanophotonics* 2019; aop (2019); <https://doi.org/10.1515/nanoph-2019-0227>
2. Liu, D., Gao, B., Wang, F., Wen, J., & Wang, L. -. (2022). Experimental realization of tunable finite square optical arrays. *Optics and Laser Technology*, 153; doi:10.1016/j.optlastec.2022.108220
3. Hua-Feng Xu, Xing-Yu Zhang, "Flexible tailoring of multifocal spot arrays of partially coherent radially polarized beam with periodical spatial coherence," *Optics Communications* 129617 (2023).; <https://doi.org/10.1016/j.optcom.2023.129617> .
4. G. B. Hadjichristov, “Control of Coherent Light through Microperiodic Director Modulation in Nematic Films under Low-Voltage DC Electric Field,” *Materials* 16(17), 6014 (2023).; <https://doi.org/10.3390/ma16176014>

Статия А78– 10 цитата

N. Dimitrov, M. Zhekova, G. G. Paulus, and A. Dreischuh, “Inverted field interferometer for measuring the topological charges of optical vortices,” *Optics Communications* vol. 456, art. 1245301 (2020); <https://doi.org/10.1016/j.optcom.2019.124530>.

Цитирана в:

1. Victor V. Kotlyar and Alexey A. Kovalev, “Topological charge of asymmetric optical vortices,” *Optics Express* Vol. 28, No. 14, 20449-20460 (2020). <https://doi.org/10.1364/OE.394273>
2. Kotlyar, V.V., Kovalev, A.A., „Topological charge of optical vortices devoid of radial symmetry“, *Computer Optics*, 44(4), pp. 510-518 (2020) DOI: 10.18287/2412-6179-CO-719
3. Kovalev, A.A. and Kotlyar, V.V., "Topological charge and orbital angular momentum of optical signals with asymmetric optical vortices", *Proc. SPIE* 11793, 117930K (2021); <https://doi.org/10.1117/12.2592961>
4. Sorakrai Srisuphaphon, Sitti Buathong, Sarayut Deachapunya, „Realization of an optical vortex from light-emitting diode source by a vortex half-wave retarder and using Talbot effect based detection,” *Optics & Laser Technology* 148, 107746 (2022); <https://doi.org/10.1016/j.optlastec.2021.107746>.
5. Deachapunya, S., Srisuphaphon, S., & Buathong, S. (2022). Production of orbital angular momentum states of optical vortex beams using a vortex half-wave retarder with double-pass configuration. *Scientific Reports*, 12(1); doi:10.1038/s41598-022-10131-0
6. Buathong, S., Srisuphaphon, S., & Deachapunya, S. (2022). Probing vortex beams based on talbot effect with two overlapping gratings. *Journal of Optics (United Kingdom)*, 24(2); doi:10.1088/2040-8986/ac477c
7. Kotlyar, V.V., Kovalev, A.A. and Nalimov, A.G., 2022. *Topological charge of optical vortices*. CRC Press.
8. Singh, S.K.; Adachi, Y.; Kinashi, K.; Tsutsumi, N.; Sakai, W.; Jackin, B.J., “ Tailoring Large Asymmetric Laguerre–Gaussian Beam Array Using Computer-Generated Holography,” *Photonics* 10, 247 (2023).; <https://doi.org/10.3390/photonics10030247>
9. V. Slavchev, A. Dakova, D. Dakova, I. Bozhikoliev, L. Kovachev, and A. Biswas, “New vector type optical vortex structures in isotropic media,” *Journal of Physics: Conference Series* 2487 (2023) 012030.; doi:10.1088/1742-6596/2487/1/012030

10. J. Janpool, P. Deechuen, S. Srisuphaphon, S. Buathong, and S. Deachapunya, "Tests of optical vortex detection based on the Talbot effect at fractional Talbot lengths and with grating rotation: realization for practical uses," *Eur. Phys. J. D* 77, 138 (2023). <https://doi.org/10.1140/epjd/s10053-023-00723-4>

Статия A79 - 10 цитата

L. Stoyanov, M. Zhekova, A. Stefanov, I. Stefanov, G. G. Paulus, and A. Dreischuh, „Zeroth- and first-order long range non-diffracting Gauss-Bessel beams generated by annihilating multiple-charged optical vortices,” *Scientific Reports* 10, art. 21981 (2020).; <https://doi.org/10.1038/s41598-020-78613-7>

Цитирана в:

1. Z. Chen, Z. Cai, W. Liu, and Z. Yan, „Optical trapping and manipulation for single-particle spectroscopy and microscopy,” *J. Chem. Phys.* 157, 050901 (2022); <https://doi.org/10.1063/5.0086328>
2. C.-K. Chang, R.-W. Hsu, and D.-Z. Lin, „Enhancement of focusing properties of Bessel-like beam by metallic surface nanostructure,” *Applied Physics Express* 15, 072001 (2022).; <https://doi.org/10.35848/1882-0786/ac749f>
3. Z. Lu, Z. Guo, M. Fan, M. Guo, C. Li, Y. Yao, H. Zhang, W. Lin, H. Liu, and B. Liu, „Tunable Bessel Beam Shaping for Robust Atmospheric Optical Communication,” *Journal of Lightwave Technology* 40, 5097 – 5106 (2022).; DOI: 10.1109/JLT.2022.3172134
4. R. Aghbolaghi, H. S. Charehjaloo, and V. Fallahi, "Simulation of near ideal-Bessel beam generation by a thin-disk laser configuration," *J. Opt. Soc. Am. B* 39, 1186-1194 (2022).; <https://doi.org/10.1364/JOSAB.447485>
5. Zhai, Z., He, X., Yu, X., Liu, D., Lv, Q., Xiong, Z., . . . Xu, Z., „Parallel bessel beam arrays generated by envelope phase holograms,” *Optics and Lasers in Engineering*, 161 (2022); doi:10.1016/j.optlaseng.2022.107348 ; Available at SSRN: <https://ssrn.com/abstract=4200176> or <http://dx.doi.org/10.2139/ssrn.4200176> .
6. Banerjee, D., Akkanaboina, M., Ghosh, S., & Soma, V. R. (2022). Picosecond bessel beam fabricated pure, gold-coated silver nanostructures for trace-level sensing of multiple explosives and hazardous molecules. *Materials*, 15(12); doi:10.3390/ma15124155
7. Christian Lutz, Simon Schwarz, Jan Marx, Cemal Esen, and Ralf Hellmann, "Multi-Bessel Beams Generated by an Axicon and a Spatial Light Modulator for Drilling Applications," *Photonics* 10, no. 4: 413 (2023).; <https://doi.org/10.3390/photonics10040413>
8. G. B. Hadjichristov, “Control of Coherent Light through Microperiodic Director Modulation in Nematic Films under Low-Voltage DC Electric Field,” *Materials* 16(17), 6014 (2023).; <https://doi.org/10.3390/ma16176014>
9. S.A. Pourhashemi, P. Parvin, J. Khalilzadeh, B. Dibaei, and R. Khoei, “Design and fabrication of a Nd:YAG unstable multi-pass telescopic amplifier”, *Optics & Laser Technology* 168, 109851 (2024).; <https://doi.org/10.1016/j.optlastec.2023.109851>
10. C. Lutz, S. Schwarz, J. Marx, C. Esen, R. Hellmann, „Combination of an axicon and a spatial light modulator for the generation of multi-Bessel beams for microdrilling using ultrashort pulsed laser,” *Proceedings of SPIE*, vol. 12873, 1287313 (2024).; Event: SPIE LASE, Laser-based Micro- and Nanoprocessing XVIII; 2024, San Francisco, California, United States; <https://doi.org/10.1117/12.3000946>

Статия A80 - 1 цитат

L. Stoyanov, M. Zhekova, A. Stefanov, B. Ivanov, I. Stefanov, G. G. Paulus, A. Dreischuh, “Generation of long range low-divergent Gauss–Bessel beams by annihilating optical vortices,” *Optics Communications* vol. 480, art. 126510 (2021).

Цитирана в:

1. Zhongsheng Zhai, Xin Yu, Xuan He, Luo Zhang, and Qinghua Lv, "High uniformity Bessel beam generated by the axicon with a high-order curved surface," *Optical Engineering* 62(8), 085105 (2023).; <https://doi.org/10.1117/1.OE.62.8.085105>

Статия A81– 9 цитата

L. Stoyanov, Y. Zhang, A. Dreischuh, and G. G. Paulus, “Long-range quasi-non-diffracting Gauss-Bessel beams in few-cycle laser field,” *Optics Express* vol. 29 (7), 10997-11008 (2021)

Цитирана в:

1. Khonina, S.N., Kazanskiy, N.L., Khorin, P.A., Butt, M.A., “Modern Types of Axicons: New Functions and Applications,” *Sensors* 21, 6690 (2021). <https://doi.org/10.3390/s21196690>
2. L. A. Hall, M. A. Romer, B. L. Turo, T. M. Hayward, R. Menon, A. F. Abouraddy, “Space-time wave packets propagating a kilometer in air,” *arXiv:2209.03309 [physics.optics]*; <https://doi.org/10.48550/arXiv.2209.03309>
3. J. Marx, C. Lutz, R. Hellmann, C. Esen, “Holographic multi-spot generation for ultra-short pulse Bessel beam processing of stainless steel,” *Procedia CIRP* 111, 648-652 (2022).; <https://doi.org/10.1016/j.procir.2022.08.003> .
4. Benstiti, A., Bencheikh, A., Ferria, K., Chabou, S., & Boumeddine, O. C. (2022). Gaussian laser beam structuring using acousto-optic effect: A parametric characterization. *Applied Physics B: Lasers and Optics*, 128(8); doi:10.1007/s00340-022-07857-0

5. Han, H., Ma, J., Tao, B., Xu, C., Hu, Y., & Chu, J. (2022). Characterization of white-light non-diffracting beams generated using a deformable mirror. *Optics Express*, 30(8), 13148-13158.; doi:10.1364/OE.452830
6. R. Aghbolaghi, H. Sahebghoran Charehjaloo, and V. Fallahi, "Self-consistency equations in axicon-based thin-disk laser resonators," *Appl. Phys. B* 129, 131 (2023).; <https://doi.org/10.1007/s00340-023-08070-3>
7. L. A. Hall, M. A. Romer, B. L. Turo, T. M. Hayward, R. Menon, and A. F. Abouraddy, "Observation of Kilometer Propagation of Space-time Wavepackets," in *CLEO 2023, Technical Digest Series* (Optica Publishing Group, 2023), paper SF1R.5.; https://doi.org/10.1364/CLEO_SI.2023.SF1R.5
8. Seth Holladay and Zhili Zhang, "Programmable focused laser differential interferometer with a spatial light modulator as a dynamic diffractive optical element," *Opt. Lett.* 48, 5001 (2023).; <https://doi.org/10.1364/OL.496541>
9. Marx, J., Esen, C., Lutz, C., Hellmann, R. and Ostendorf, A., "Holographic tuning of physical axicons." *Proc. of LiM (Lasers in Manufacturing) conference*, Munich, Germany, 26-29 June 2023, paper 154; https://wlt.de/sites/default/files/2023-09/Contribution_154.pdf

Статия A82– 36 цитата

R. Camacho-Morales, D. Rocco, L. Xu, V. F. Gili, N. Dimitrov, L. Stoyanov, Z. Ma, A. Komar, M. Lysevych, F. Karouta, A. Dreischuh, H. H. Tan, G. Leo, C. De Angelis, C. Jagadish, A. E. Miroshnichenko, M. Rahmani, and D. N. Neshev, "Infrared up-conversion imaging in nonlinear metasurfaces," *Advanced Photonics* 3 (3), 036002 (2021). <https://doi.org/10.1117/1.AP.3.3.036002>

Цитирана в:

1. Grinblat, G., „Nonlinear Dielectric Nanoantennas and Metasurfaces: Frequency Conversion and Wavefront Control," *ACS Photonics* (2021); <https://doi.org/10.1021/acsp Photonics.1c01356>
2. Zhao, T., Hu, L. and Ren, J., "Fluorophosphate Upconversion-Luminescent Glass-Ceramics Containing Ba2LaF7: Er3+ Nanocrystals: An Advanced Solid-State Nuclear Magnetic Resonance Study." *The Journal of Physical Chemistry C* 125, no. 48, 26901-26915 (2021); doi:10.1021/acs.jpcc.1c08154..
3. Xiang, Y., Yan, C., Stanescu, T.D., Ma, Y., Sooriyagoda, R., Shi, F., Bristow, A.D., Li, L. and Cen, C., "Giant third-harmonic optical generation from topological insulator heterostructures." *Nano letters* 21(20), 8872-8879 (2021).
4. Barreda, Á., Vitale, F., Minovich, A.E., Ronning, C. and Staude, I., "Applications of hybrid metal- dielectric nanostructures: state of the art." *Advanced Photonics Research* 3, no. 4, 2100286 (2022).
5. Chen, L. and Hong, M., "Functional nonlinear optical nanoparticles synthesized by laser ablation." *Opto-Electronic Science* 1, no. 5, 210007-1 (2022).
6. Mi, C., Guan, M., Zhang, X., Yang, L., Wu, S., Yang, Z., Guo, Z., Liao, J., Zhou, J., Lin, F. and Ma, E., "High spatial and temporal resolution NIR-IIb gastrointestinal imaging in mice", *Nano Letters* 22(7), 2793-2800 (2022).; doi:10.1021/acs.nanolett.1c04909
7. Liu, W., Liang, Z., Qin, Z., Shi, X., Yang, F., & Meng, D., „Polarization-insensitive dual-band response governed by quasi bound states in the continuum for high-performance refractive index sensing," *Results in Physics* 32, 105125 (2022).; doi:10.1016/j.rinp.2021.105125
8. Hao, L., Chen, X., Yan, X., Li, Y., Zhang, L., Xie, Y., Pang, S. and Chen, Z., "Flexible Manipulation of the Reflected Wavefront Using Acoustic Metasurface with Split Hollow Cuboid." *Materials* 15, no. 3, 1189 (2022); doi:10.3390/ma15031189
9. Zhou, Z., Liu, W., Yan, H., Chen, X. and Wan, W., "Nonlinear thermal emission and visible thermometry." *Advanced Photonics* 4, no. 4, 045001-045001 (2022); doi:10.1117/1.AP.4.4.045001.
10. Hardhienata, H., Faci, S., Alejo-Molina, A., Priatama, M.R., Alatas, H. and Birowosuto, M.D., "Quo Vadis Nonlinear Optics? An Alternative and Simple Approach to Third Rank Tensors in Semiconductors." *Symmetry* 14, no. 1, 127 (2022).; doi:10.3390/sym14010127
11. Lerer, A.M., Makeeva, G.S. and Cherepanov, V.V., "Terahertz-to-Infrared Up-Conversion by Plasmonic-Enhanced Sum Frequency Generation in Graphene Gratings." In *2022 International Conference on Actual Problems of Electron Devices Engineering (APEDE)*, vol. 1, pp. 96-100. IEEE, 2022.; doi:10.1109/APEDE53724.2022.9913020
12. Buranasiri, P., Plaipichit, S., Puttharugsa, C. and Wicharn, S., "Recursive-formula for second-harmonic generation problem in photonic hypercrystal." *Optik* 265, 169440 (2022).; doi:10.1016/j.ijleo.2022.169440
13. Xie, D., Liu, Y., Li, F., Tian, Y., Tang, L., & Zhou, R., "Filtered back-projection reconstruction for wide field of view micro-computed tomography based on array microfocus X-ray source", *Acta Optica Sinica*, 42(11), 1134023; (2022). doi:10.3788/AOS202242.1134023
14. Xu, Q., Lang, Y., Jiang, X., Yuan, X., Xu, Y., Gu, J., Tian, Z., Ouyang, C., Zhang, X., Han, J. and Zhang, W., "Meta-optics inspired surface plasmon devices." *Photonics Insights* 2 (1), R02 (2023); DOI: 10.3788/PI.2023.R02.
15. Vabishchevich, P. and Kivshar, Y., "Nonlinear photonics with metasurfaces." *Photonics Research* 11, no. 2 B50-B64 (2023).
16. Vermeulen, N., Espinosa, D., Ball, A., Ballato, J., Boucaud, P., Boudebs, G., Campos, C.L., Dragic, P., Gomes, A.S., Huttunen, M.J. and Kinsey, N., "Post-2000 nonlinear optical materials and measurements: data tables and best practices." *Journal of Physics: Photonics* 5, no. 3 035001 (2023).

17. Feng, S., Liu, T., Chen, W., Wu, F. and Xiao, S., "Enhanced sum-frequency generation from etchless lithium niobate empowered by dual quasi-bound states in the continuum." *Science China Physics, Mechanics & Astronomy* 66, no. 12, 124214 (2023).; DOI: 10.1007/s11433-023-2223-5
18. Zhao, Y., Kusama, S., Furutani, Y., Huang, W.H., Luo, C.W. and Fuji, T., "High-speed scanless entire bandwidth mid-infrared chemical imaging." *Nature Communications* 14, no. 1, 3929 (2023).; <https://doi.org/10.1038/s41467-023-39628-6>
19. Abdelwahab, I., Tilmann, B., Zhao, X., Verzhbitskiy, I., Berté, R., Eda, G., Wilson, W.L., Grinblat, G., de S. Menezes, L., Loh, K.P. and Maier, S.A., "Highly Efficient Sum-Frequency Generation in Niobium Oxydichloride NbOCl₂ Nanosheets." *Advanced Optical Materials* 11, no. 7, 2202833 (2023).; <https://doi.org/10.1002/adom.202202833>
20. Haggren, T., Tan, H.H. and Jagadish, C., "III–V Thin Films for Flexible, Cost-Effective, and Emerging Applications in Optoelectronics and Photonics." *Accounts of Materials Research* 4, no. 12, 1046-1056 (2023).; <https://doi.org/10.1021/accountsmr.3c00138>
21. Hu, X., Xiao, G., Li, Y., Wu, S.E., Chen, Q., Li, N. and Sui, X., "Infrared-Light Visualization by Organic Upconversion Devices," *ACS Applied Electronic Materials* 5 (10), 5378-5385 (2023).; DOI: 10.1021/acsaelm.3c00943
22. Zhang, Y., Li, H., Ge, J., Zhang, C., Li, J., Zhang, C., Deng, R., Zhang, Y., Dong, H. and Zhang, L., "Highly Visible–NIR Transparent Metamaterial-Window for Broadband Microwave Absorption and Shielding," *Adv. Mater. Technol.* 8, 2301014 (2023). <https://doi.org/10.1002/admt.202301014>
23. Wang, H., Chen, Y.Y., Zhang, X. and Shen, B., "Generation and periodic evolution of third harmonics carrying transverse orbital angular momentum in air-plasma filaments," *Opt. Express* 31, 36810-36823 (2023).; <https://doi.org/10.1364/OE.501771>
24. Hu, X., Li, N., Hong, W., Gu, G., Chen, Q. and Sui, X., "Long-wave infrared to short-wave infrared upconversion through sum-frequency generation in a silicon symmetric metasurface integrated with two-dimensional material." *Applied Surface Science* 611, 155619 (2023).; <https://doi.org/10.1016/j.apsusc.2022.155619>
25. Liu, Y.H., Wang, S.Y., Hu, W.S. and Li, Y.B., "Simultaneous manipulation of spatial fundamental and harmonic electromagnetic waves by microwave nonlinear metasurfaces," *Opt. Express* 31, 24412-24422 (2023).; <https://doi.org/10.1364/OE.497650>
26. Zhang, Q., He, Z., Xie, Z., Tan, Q., Sheng, Y., Jin, G., Cao, L. and Yuan, X., "Diffractive optical elements 75 years on: from micro-optics to metasurfaces," *Photonics Insights* 2(4), R09 (2023).; DOI: 10.3788/PI.2023.R09
27. Rocco, D., Leon, U.A., Pashina, O., Zograf, G., Makarov, S., Petrov, M., Della Valle, G., Zilli, A., Celebrano, M., Finazzi, M. and Gandolfi, M., "Harmonic generation in all-dielectric metasurfaces." In *Advances in Nonlinear Photonics*, pp. 287-318. Woodhead Publishing, 2023.
28. Saerens, G., 2023. *From classical to quantum nonlinear photonics with GaAs nanostructures* (Doctoral dissertation, ETH Zurich).
29. Zhu Haiyong, Zeng Zhijiang, Li Xue, Ji Peng, Chen Junlin, Zhang Qi, and Luo Shaobo, "Application Design of Dewar Window for Cold Optical Large-Aperture Long-Wave Infrared Detectors," *Chinese Journal of Lasers* 50(14): 1410003 (2023).; DOI: 10.3788/CJL2215492023
30. Jiang Mai, Sha Guijun, and Li Ning, "Infrared and Visible Image Fusion with Guided Filtering and Dual-Tree Complex Wavelet Transform," *Laser & Optoelectronics Progress* 60 (10): 1010008 (2023).; DOI: 10.3788/LOP212755
31. Tang Yutao, Zhang Xuecai, Hu Zixian, Hu Yue, Liu Xuan, and Li Guixin, "Nonlinear Photonic Metasurfaces: Fundamentals and Applications," *Acta Optica Sinica* 43(8): 0822002 (2023).; DOI: 10.3788/AOS230428
32. Adam Ball, Dhruv Fomra, Nathaniel Kinsey, Jacob B. Khurgin, "Nonlinearities in epsilon-near-zero media," *Advances in Nonlinear Photonics – Chapter 11*, Editor(s): Giancarlo C. Righini, Luigi Sirleto, In Woodhead Publishing Series in Electronic and Optical Materials, Woodhead Publishing, 2023, Pages 319-348, (2023).; <https://doi.org/10.1016/B978-0-32-398384-6.00018-8>
33. Shen, J., Chen, H., He, J., Li, Y., Yang, X., Zhu, M. and Yuan, X., "Enhanced surface passivation of GaAs nanostructures via an optimized SiO₂ sol-gel shell growth," *Appl. Phys. Lett.* 124, 121112 (2024).; <https://doi.org/10.1063/5.0185838>
34. Tang, Y., Li, J.L., Li, C. and Wu, J.F., "Sum and difference frequency generation in a valley-photonic-crystal-like topological system," *Opt. Express* 32, 14594-14606 (2024).; <https://doi.org/10.1364/OE.518339>
35. Sanderson, G., Zheng, Z., Melik-Gaykazyan, E., Gordon, G.S., Cousins, R., Ying, C., Rahmani, M. and Xu, L., "Infrared imaging with nonlinear silicon resonator governed by high-Q quasi-BIC states," *J. Opt.* 26, 065505 (2024).; DOI 10.1088/2040-8986/ad44a9
36. Hu, X., Li, N., Li, Y., Ren, M., Lu, Y., Li, H., Chen, Q. and Sui, X., "Tunable and narrowband shortwave infrared light sensing enabled by dual-Fano resonance enhanced sum-frequency generation," *Appl. Phys. Lett.* 124, 201108 (2024).; <https://doi.org/10.1063/5.0206311>

Статья A83– 3 цитата

L. Stoyanov, G. Maleshkov, I. Stefanov, G. G. Paulus, and A. Dreischuh, "Focal beam structuring by triple mixing of optical vortex lattices," *Optical and Quantum Electronics* 54, art. 34 (2022).
<https://doi.org/10.1007/s11082-021-03399-5>

Цитирана в:

1. Patnala Vanitha, Gangi Reddy Salla and Ravindra Pratap Singh, "Correlations in Scattered Phase Singular Beams," In *Holography - Recent Advances and Applications*, edited by Joseph Rosen. London: IntechOpen, 2022. DOI: 10.5772/intechopen.106484
2. Liu, D., Gao, B., Wang, F., Wen, J., & Wang, L., "Experimental realization of tunable finite square optical arrays," *Optics and Laser Technology* **153** (2022).; doi:10.1016/j.optlastec.2022.108220
3. Zhang, S., Ma, J., Li, P., Zhou, Z., Gu, Y. and Wu, Z., "Hexagonal optical lattices formed by coherent interference among three fundamental Gaussian beams with oblique incidence", *Results in Physics*, 45, p.106245 (2023).

Статия A85 – 4 цитата

L. Stoyanov, A. Stefanov, A. Dreischuh, and G. G. Paulus, „Gouy phase of Bessel-Gaussian beams: theory vs. experiment,” *Optics Express* 31, 13683-13699 (2023).; <https://doi.org/10.1364/OE.480761>

Цитирана в:

1. F. Wen-Xin, W. Min-Jie, J. Hao-Le, L. Jia-Jin, L. Hai-Long, Y. Zhi-Fang, X. Meng-Qi, L. Shu-Jing, and W. Hai, "Dependence of retrieval efficiency on the waist ratio of read beam and anti-Stokes photon modes in cavity-enhanced quantum memory," *Acta Physica Sinica* (2023).; doi: 10.7498/aps.72.20230966
2. Cruz y Cruz, Sara, Zulema Gress, Pedro Jiménez-Macías, and Oscar Rosas-Ortiz, "Bessel-Gauss Beams of Arbitrary Integer Order: Propagation Profile, Coherence Properties, and Quality Factor," *Photonics* 10, no. 10: 1162 (2023).; <https://doi.org/10.3390/photonics10101162>
3. Allam, S.R., "A conceptual review on Bessel beams," *Physica Scripta* 99 (6), 062007 (2024).; DOI 10.1088/1402-4896/ad4921
4. Du, G., Yu, F., Waqas, A. and Chen, F., "Ultrafast thermalization dynamics in silicon wafer excited by femtosecond laser double-pulse vortex beam." *Optics & Laser Technology* 174 (2024): 110619.

Статия A86 – 1 цитат

L. Stoyanov, S. Topuzoski, G. G. Paulus, and A. Dreischuh, „Optical vortices in brief: introduction for experimentalists,” *Eur. Phys. J. Plus* 138, art. Nr. 702 (2023).; <https://doi.org/10.1140/epjp/s13360-023-04227-3>

Цитирана в:

1. Bergé, L., Djordjević, G.S. & Popović, Z.V., „Focus point on physics in the Balkans: perspectives and challenges,” *Eur. Phys. J. Plus* **139**, 271 (2024).; <https://doi.org/10.1140/epjp/s13360-024-05083-5>

Статия B6 – 2 цитата

F. Grasbon, A. Dreischuh, F. Zacher, G.G. Paulus, H. Walther, "Femtosecond interferometric autocorrelations in the presence of pulse front distortions," *Proc. SPIE*, vol. 3571, pp. 164-168 (1999).

Цитирана в:

1. Heiko Kollmann, "Aufbau und Charakterisierung eines spektral abstimmbaren Femtosekunden-Lasersystems", Masterarbeit, Carl von Ossietzky Universität Oldenburg, 2010.
2. He, W., Cui, M., Song, D., Qin, C., Jiang, Y., "Collinear Autocorrelation Measurement of Ultrashort Laser Pulse Based on Michelson Interferometer", *Zhongguo Jiguang/Chinese Journal of Lasers* 45(12),1204001 (2009).

Статия B8 – 2 цитата

G. G. Paulus, F. Grasbon, A. Dreischuh, H. Walther, "Quantum effects in above-threshold ionization," Multiphoton Processes: ICOMP VIII, L.F. DiMauro, R.R. Freeman, K.C. Kulander (Eds), *American Institute of Physics Conference Proceedings* vol. **525**, pp. 24-35 (2000).

Цитирана в:

1. N.I. Shvetsov-Shilovski, S.V. Popruzhenko, S.P.Goreslavski, "Asymmetric emission of rescattered photoelectrons in intense laser fields with elliptical polarization", *IQEC 2002 Technical Digest*, Moscow, June 22-27, 2002, p.200.
2. Ciprian Constantin Chirila, "Analysis of the strong field approximation for harmonic generation and multiphoton ionization in intense ultrashort laser pulses", A thesis submitted for the degree of Doctor of Philosophy, The University of Durham, Department of Physics, 2004

Статия B15 – 3 цитата

A. Dreischuh, S. Chervenkov, D. Neshev, G. G. Paulus, and H. Walther, "Generation of lattices of optical vortices," *Proc. SPIE*, vol. 5226, pp. 104-108 (2003). SJR=0.215
<https://doi.org/10.1117/12.519084>

Цитирана в:

1. Bansal S., Pal S.K., Senthilkumaran P. (2021) A Method to Distinguish C-Point from V-Point. In: Singh K., Gupta A.K., Khare S., Dixit N., Pant K. (eds) ICOL-2019. *Springer Proceedings in Physics*, vol 258. Springer, Singapore. https://doi.org/10.1007/978-981-15-9259-1_129
2. A. B. Ortega, E. Vélez-Juárez, K. Volke-Sepúlveda, "Structure transitions in arrays of point-vortices upon free space propagation," *Journal of Optics* 24(12), 124004 (2022).; <https://dx.doi.org/10.1088/2040-8986/ac9f56>
3. Boris A. Malomed, *Multidimensional Solitons* (AIP Publishing LLC, 2022), Chapter 8: Spatially Periodic Potentials (Lattices): Experiments.; DOI: https://doi.org/10.1063/9780735425118_008

Статия В18 – 4 цитата

G. Maleshkov, K. Bezuharov, A. Dreischuh, "Variational analysis of SPM- and IPM-based interactions in cubic non-local nonlinear media," *Proc. SPIE* vol. **5830**, pp. 216-220 (2005).

Цитирана в:

1. Deng, D., Guo, Q., "Propagation of self-trapped circular beams in strongly nonlocal nonlinear media," *Optics Communications* 283 (19), pp. 3777-3783 (2010).
2. Antonio Moro, "On the nonlocal nonlinear Schrodinger equation and its integrable regimes", E. Barletta (eds). *Lecture Notes of SIM* vol.5 . Potenza: Dipartimento di Matematica, Università della Basilicata, pp. 173-197 (2006).
3. Deng, D., Guo, Q., "Propagation of elliptic-Gaussian beams in strongly nonlocal nonlinear media", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* 84 (4), art. no. 046604 (2011).
4. I. Darti, Suhariningsih, Marjono, A. Suryanto, "A conservative finite difference scheme for simulation of soliton in inhomogeneous medium with nonlocal nonlinearity", *International Journal of Mathematics and Computation*, Vol. 13; No. D11; 69-77 (2011)

Статия В19 – 9 цитата

W. Krolikowski, O. Bang, D. Briedis, A. Dreischuh, D. Edmundson, B. Luther-Davies, D. Neshev, N. Nikolov, D. E. Petersen, J. J. Rasmussen, and J. Wyller, "Nonlocal solitons," *Proc. SPIE* vol. 5949, art. # 59490B - 10 pages (2005)

Цитирана в:

1. Deng, D., Guo, Q., "Propagation of self-trapped circular beams in strongly nonlocal nonlinear media", *Optics Communications* 283(19), pp. 3777-3783 (2010).
2. Deng, D., Guo, Q., "Propagation of elliptic-Gaussian beams in strongly nonlocal nonlinear media", *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics* 84(4), 046604 (2011).
3. Guo Liang, Weiyi Hong, Tao Luo, Jing Wang, Yingbing Li, Qi Guo, Wei Hu, and Demetrios N. Christodoulides, "Transition between self-focusing and self-defocusing in a nonlocally nonlinear system," *Phys. Rev. A* 99, art. Nr. 063808 (2019). DOI: 10.1103/PhysRevA.99.063808
4. Guo Liang, Xiangwei Kong, Yuan Li, and Qing Wang, "Adiabatic evolution of optical beams in nonlocal nonlinear media of gradual nonlocality," *Optics Express* Vol. 29, Issue 6, pp. 9618-9623 (2021) ; <https://doi.org/10.1364/OE.419118>
5. Liang, G., Shu, F., Cheng, W., & Jiao, L. (2022). Nonlinearity-mediated collimation of optical beams. *Optics Express*, 30(7), 10770-10778.; doi:10.1364/OE.455935
6. Guo Liang, Fangjie Shu, Hongzhen Qiao, and Wenjing Cheng, "Solitons train in nonlocally nonlinear system with oscillatory responses," *Chaos, Solitons & Fractals* 168, 113146 (2023).; <https://doi.org/10.1016/j.chaos.2023.113146>
7. El-Nabulsi, R.A., Anukool, W. A generalized nonlinear cubic-quartic Schrodinger equation and its implications in quantum wire. *Eur. Phys. J. B* 96, 52 (2023). <https://doi.org/10.1140/epjb/s10051-023-00518-x>
8. Yuxin Zheng, Xiangwei Chen, Guo Liang, Qi Guo, "Adiabatic propagation of beams in nonlocal nonlinear media with gradual linear loss/gain," *Results in Physics* 106909 (2023).; <https://doi.org/10.1016/j.rinp.2023.106909>
9. Jiarui Che, Yuxin Zheng, Guo Liang, Qi Guo, „Adiabatic evolution of optical beams of arbitrary shapes in nonlocal nonlinear media,“ *Chinese Physics B* 32, 1674-1056 (2023).; <https://dx.doi.org/10.1088/1674-1056/acd689>

Статия В21 – 3 цитата

A. S. Desyatnikov, D. N. Neshev, R. Fischer, W. Krolikowski, N. Sagemerten, D. Träger, C. Denz, A. Dreischuh, and Yu. S. Kivshar, "Two-dimensional nonlinear optically induced photonic lattices in photorefractive crystals," *Proc.SPIE* vol. **6023**, art. # 60230H (2006).

Цитирана в:

1. Daniel James Gallardo, "Novel phenomena in optical periodic structures", Master of Science Thesis, San Francisco State University, San Francisco, California (2015).
2. Kailash Kasala, "Nonlinear propagation of incoherent white light in a photopolymerisable medium: From single self-trapped beams to 2-D and 3-D lattices", PhD Thesis, McMaster University, Department of Chemistry, Hamilton, Ontario (2012). <http://hdl.handle.net/11375/12691>.

3. Carlo Danieli, "Advances in classical and quantum wave dynamics on quasiperiodic lattices", PhD Thesis, Center for Theoretical Chemistry and Physics, New Zealand Institute for Advanced Study, Massey University, Albany, New Zealand (2016).

Статия В22 – 1 цитат

A. Minovich, K. Bezuhanov, D. Neshev, A. Dreischuh, Wieslaw Krolikowski, and Yu. Kivshar, "Experimental reconstruction of a nonlocal nonlinear response function of a thermal medium," *Proc. SPIE* vol. **6604**, art. # 66041U (2007).

Цитирана в:

1. Sibbers, F., Imbrock, J., Denz, C., „Sum-frequency generation in disordered quadratic nonlinear media“, *Proceedings of SPIE - The International Society for Optical Engineering* 7728, art. no. 77280Y (2010).

Статия В24 – 3 цитата

D. N. Neshev, A. A. Sukhorukov, A. Mitchell, Ch. R. Rosberg, R. Fischer, A. Dreischuh, Wieslaw Z. Krolikowski, Yuri S. Kivshar, "Optical lattices as nonlinear photonic crystals," *Proc. SPIE* vol. **6604**, art. # 66041B (2007).

Цитирана в:

1. Asmi, R., Ben Ali, N., Kanzari, M., "Numerical investigation of light localization in generalized Thue-Morse one-dimensional photonic crystal", *Journal of Photonics for Energy*, Volume 6, Issue 3, Article number 034501 (2016).
2. Kailash Kasala, "Nonlinear propagation of incoherent white light in a photopolymerisable medium: From single self-trapped beams to 2-D and 3-D lattices", PhD Thesis, McMaster University, Department of Chemistry, Hamilton, Ontario (2012). <http://hdl.handle.net/11375/12691>
3. Arkhipkin, V.G., Myslivets, S.A., "Coherent control of light-pulse propagation in a Raman induced grating", *Journal of Optics* 19(5), 055501 (2017).

Статия В28 –1 цитат

G. Maleshkov, D. N. Neshev, A. Dreischuh, "Self-focusing and filamentation of optical vortex beams: Spatio-temporal analysis," *Proc. SPIE*, vol.**7501**, art. # 75010G (2009). <https://doi.org/10.1117/12.851352>

Цитирана в:

1. Shlenov S.A., Vasilyev E.V., Kandidov V.P., Dergachev A.A., Soyfer F.I. (2021) Self-action of Femtosecond Optical Vortex in a Medium with Kerr Nonlinearity. In: Yamanouchi K., Manshina A.A., Makarov V.A. (eds) *Progress in Photon Science. Springer Series in Chemical Physics*, vol 125. Springer, Cham. https://doi.org/10.1007/978-3-030-77646-6_1

Статия В31 – 3 цитата

N. Dimitrov, I. Stefanov, A. Dreischuh, "Tuning the pulse duration, spectral position and bandwidth of femtosecond pulses by the beam's penetration in an intracavity prism," *Proc of SPIE* vol. **7747**, art. # 77471K (2011).

Цитирана в:

1. H.Y. Liu, T. Lan, Z.M. Shen, "Study of dispersions for the prism compressor in arbitrary case", *Optik - International Journal for Light and Electron Optics*, Volume 126, Issue 24, , Pages 5984–5987 (2015).
2. Nicolò Moschera, "Mid-infrared Kerr lens mode-locked chromium-doped chalcogenide lasers", Master Thesis, Matr. 841464, Politecnico di Milano, 27-Jul-2017
3. Liu, H., Lan, T., Chen, X., Ni, G., "Dispersion compensation based on prism compressor", *Proceedings of SPIE*, vol. 10252, 102521D (2017).

Статия В39 – 2 цитата

Maria Camacho Morales, Davide Rocco, Lei Xu, Mohsen Rahmani, Valerio Flavio Gili, Andrei Komar, Nikolay Dimitrov, Lyubomir Stoyanov, Mykhaylo Lysevych, Fouad Karouta, Alexander Dreischuh, H. Hoe Tan, Giuseppe Leo, Costantino De Angelis, Chennupati Jagadish, Andrey E. Miroshnichenko, and Dragomir N. Neshev, "Infrared imaging in nonlinear GaAs metasurfaces," *Proc. SPIE* vol. 11201, art. # 112011S (2019); doi: 10.1117/12.2541224

Цитирана в:

1. Luigi Bonacina, Pierre-François Brevet, Marco Finazzi, and Michele Celebrano, „Harmonic generation at the nanoscale,” *J. Appl. Phys.* 127, 230901 (2020); <https://doi.org/10.1063/5.0006093>
2. A. M. Lerer, G. S. Makeeva, V. V. Cherepanov, S. V. Krutiev, P. V. Makhno, D. V. Lonkina, A. S. Makhno, "Electrically Controllable Infrared Frequency Conversion in Nonlinear Multilayer Graphene Ribbon Arrays," 2021 Photonics & Electromagnetics Research Symposium (PIERS), 2021, pp. 663-669, doi: 10.1109/PIERS53385.2021.9695092

Статия ВВ2 – 1 цитат

A. Dreischuh, K. Bezuhanov, G. G. Paulus, M. Schätzel, H. Walther, D. Neshev, W. Królikowski, and Yu. Kivshar, "Femtosecond optical vortices", Supplement to Bulgarian J. Phys., vol. **33** (3), pp. 186-193 (2006) (*Proceedings of the*

Alexander von Humboldt Conference “Advances in Physics and Astrophysics of the 21st Century,” ed. I. Zhelyazkov, Heron Press, Sofia, 2006).

Цитирана в:

1. Heath Howie Bigman, “Zero spatial chirp vortices from supercontinuum modulation”, A Thesis Presented to the Faculty of San Diego State University In Partial Fulfillment of the Requirements for the Degree Master of Science in Physics, San Diego State University, 2012

Статия ВВ3 – 2 цитата

N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, and G. G. Paulus, “Measuring the relation between pulse-front-tilt angle and beam size for ultrashort laser pulses,” *Bulg. J. Phys.*, vol. 41, #1, pp. 21-29 (2016).

Цитирана в:

1. Давыдовская, В. В., “Энергетический обмен между взаимодействующими пучками в фоторефрактивном кристалле SBN”, Вестник Полоцкого государственного университета. Серия С, Фундаментальные науки- № 4. - С. 101-108 (2019).
2. Davydouskaya, V.V., Naunya, V.N. & Velichko, V.A. Optimal Focusing Conditions for Two-Dimensional Gaussian Light Beams with Arbitrary Input Polarization in a Strontium-Barium Niobate Photorefractive Crystal. *J Appl Spectrosc* 89 (6), 1137-1142 (2023). <https://doi.org/10.1007/s10812-023-01478-x> (*Russian Original Vol. 89, No. 6, November–December, 2022*).

Статия ВВ4 – 1 цитат

N. Dimitrov, L. Stoyanov, I. Stefanov, I. P. Christov, A. Dreischuh, “Generation of high harmonics of coherent radiation in the extreme ultraviolet spectral range in the low-intensity regime,” *Bulg. J. Phys.*, vol. 44, pp. 99–108 (2017).

Цитирана в:

1. S. Mohanty, E. Flores, C.-H. Chang, „A study on EUV patterning with colloidal nanoparticles,“ *Proc. SPIE* vol. 12750, International Conference on Extreme Ultraviolet Lithography 2023; 1275011 (2023).; <https://doi.org/10.1117/12.2687727>

Статия С12 – 2 цитата

P. Hansinger, G. Maleshkov, I. Garanovich, D. Skryabin, D.N. Neshev, Yu. S. Kivshar, A. Dreischuh, G.G. Paulus, “Generation of White-Light Optical Vortices through Cascaded Four-Wave Mixing,” International Quantum Electronics Conference / Conference on Lasers and Electro-Optics IQEC/CLEO Pacific Rim, 28.08-01.09.2011, Sydney, Australia. (Talk 4460-CT-3); 2011 IEEE Conference Publications, pp. 808-810, DOI: 10.1109/IQEC-CLEO.2011.6194055.

Цитирана в:

1. Adad Yepiz, Pablo Brubeck, Benjamin Perez-Garcia, Raul Hernandez-Aranda, “Spatial coherence properties of digitally generated partially coherent vortex beams,” *Proc. SPIE* 10744, Laser Beam Shaping XVIII, 1074413 (14 September 2018); doi: 10.1117/12.2322784
2. Yepiz, A., Garza-Alanis, J.A., Perez-Garcia, B., Hernandez-Aranda, R.I., “Partially coherent non-canonical vortex beams”, *Proceedings of SPIE - The International Society for Optical Engineering* 11486,1148603 (2020).

Доклад D36 - 1 цитат

X. Liu, E. Eremina, H. Rottke, W. Sandner, A. Dreischuh, F. Lindner, F. Grasbon, G.G. Paulus, H. Walther, R. Moshammer, J. Ullrich, “Corelation in strong field double ionization of molecules,” XXIII Internat. Conf. On Photonic, Electronic and Atomic Collisions (ICPEAC’2003), July 23-29, 2003, Stockholm, Sweden, [<http://atomlx04.physto.se/~icpeac/webpdf/Tu030.pdf>]

Цитирана в:

1. M. Medhi Tarisien, “Dynamique de la fragmentation de molecules simples induite par impact d'ion multichargé,” Doctorat de l'Universite de Caen/Basse-Normandie, Centre Interdisciplinaire de Recherche Ions Lasers (CIRIL), 2003.

Доклад D47 - 1 цитат

D.E. Petersen, D. Neshev, W.Z. Krolikowski, A. Dreischuh, O. Bang, "Observation of attraction of dark solitons" (oral presentation EB2-6-WED), CLEO/Europe-EQEC'2005 (June 12-17, 2005, Munich, Germany), Book of abstracts p.51. <https://doi.org/10.1109/EQEC.2005.1567223>

Цитирана в:

1. Zhao, W., Lei, M., & Hon, Y. -. (2022). An improved finite integration method for nonlocal nonlinear schrödinger equations. *Computers and Mathematics with Applications*, 113, 24-33.; doi:10.1016/j.camwa.2022.03.004

Доклад D67 - 1 цитат

N. Dimitrov, I. Stefanov, A. Dreischuh, "Tuning femtosecond laser pulses and their correct autocorrelation measurement," Meetings in Physics'2011, Feb. 24, 2011, Sofia University, Sofia, Bulgaria.

Цитирана в:

1. Escalante, A.Y., Perez-Garcia, B., Hernandez-Aranda, R.I., Swartzlander Jr., G.A., "Determination of angular momentum content in partially coherent beams through cross correlation measurements", *Proceedings of SPIE - The International Society for Optical Engineering* 8843 , art. no. 884302 (2013).

Доклад D69 - 1 цитат

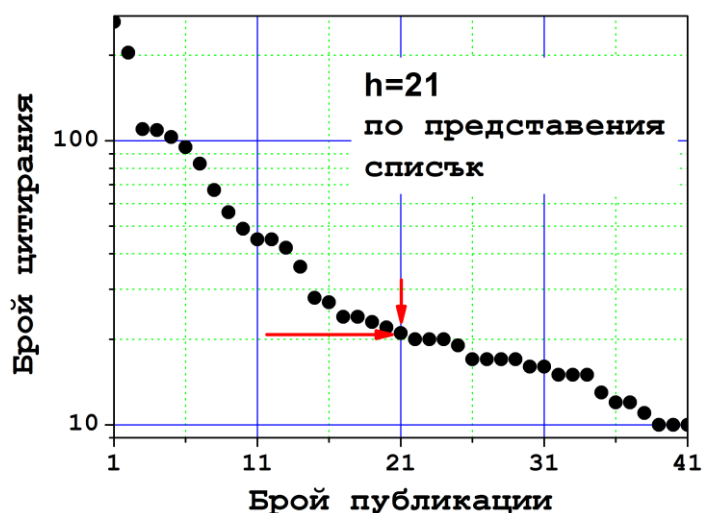
P. Hansinger, G. Maleshkov, I. Garanovich, D. Skryabin, D. N. Neshev, Y. S. Kivshar, A. Dreischuh, G. G. Paulus, "Generation of white-light optical vortices through four-wave mixing," Conference on Lasers and Electro-Optics Europe and 12th European Quantum Electronics Conference, CLEO EUROPE/EQEC 2011, art. no. 5943477, 22-26 May 2011, Munich, Germany.; <https://doi.org/10.1109/CLEOE.2011.5943477>

Цитирана в:

1. Escalante, A. Y., Perez-Garcia, B., Hernandez-Aranda, R. I., & Swartzlander Jr., G. A. (2013). Determination of angular momentum content in partially coherent beams through cross correlation measurements. Paper presented at the Proceedings of SPIE - the International Society for Optical Engineering, , 8843; doi:10.1117/12.2024683; Retrieved from www.scopus.com

ЦИТИРАНИЯ В ОБЩ ПЛАН (НЕВКЛЮЧЕНИ В ОБЩИЯ БРОЙ):

- Z1.** Prof. Herbert Walther (Director of the Max Planck Institute of Quantum Optics, Garching)
 "Examples of Good Cooperation with Partners in the Central and East European Countries," Conference "Science and Art in Europe", Conference Proceedings pp.19-20
 (May 22 -24, 2005, Berlin, Germany).
<http://www.mpg.de/-snnm-0135020272-1120309833-0000008416-0000031482-1120781195-enm-pdf/scienceArt/scienceArtEurope.pdf>



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