

Tatyana Belyaeva

List of Publications by Year in descending order

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139
papers

3,335
citations

201658

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155644

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141
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141
times ranked

885
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonlinear dynamics of nonautonomous solitons in external potentials expressed by time-varying power series: exactly solvable higher-order nonlinear and dispersive models. <i>Nonlinear Dynamics</i> , 2022, 107, 1153-1162.	5.2	9
2	Interaction forces among solitons in external potentials. <i>Optik</i> , 2021, 227, 166106.	2.9	6
3	The spin-parities of the 13.35 MeV state and high-lying excited states around 20 MeV in ^{12}C nucleus. <i>European Physical Journal A</i> , 2021, 57, 1.	2.5	2
4	Fusion and proton transfer in the $B + \text{Al}$ system at sub-barrier energies. <i>Physical Review C</i> , 2021, 104, .	2.9	1
5	Symmetries of Schrödinger's cats and a formal analogy with the Pauli exclusion principle for "jumping off cats". <i>Optik</i> , 2020, 223, 165404.	2.9	1
6	Search for Signs of Neutron and Proton Halos in the Excited Isobaric Analog States of $A = 14$ Nuclei. <i>JETP Letters</i> , 2020, 112, 463-470.	1.4	2
7	Arbitrary-order even and odd winking states of excited Schrödinger's cats. <i>Optik</i> , 2020, 219, 165192.	2.9	4
8	Jumping up and down arbitrary-order excited Schrödinger's cats formally satisfying the Pauli exclusion principle. <i>Optik</i> , 2020, 223, 165604.	2.9	2
9	Possible neutron and proton halo structure in the isobaric analog states of $A = 12$ nuclei. <i>Physical Review C</i> , 2020, 102, .	2.9	1
10	States of the ^{12}N Nucleus with Increased Radii. <i>JETP Letters</i> , 2020, 111, 409-415.	1.4	4
11	Higher-energy Schrödinger's cats and their transformation into the winking states. <i>Optik</i> , 2020, 207, 164456.	2.9	8
12	Schrödinger's cat states and their nonlinear solitonic analogues. <i>Optik</i> , 2020, 205, 164211.	2.9	11
13	Halo-like structure in ^7He nucleus. <i>Journal of Physics: Conference Series</i> , 2020, 1643, 012128.	0.4	0
14	Isospin triplet $A=12$: search for states with enhanced radii. <i>Journal of Physics: Conference Series</i> , 2020, 1643, 012079.	0.4	0
15	Isospin triplet $A=14$: search for states with enhanced radii. <i>Journal of Physics: Conference Series</i> , 2020, 1690, 012034.	0.4	0
16	Nonlinear-optical analogies to the Moses sea parting effect: Dark soliton in forbidden dispersion or nonlinearity. <i>Optik</i> , 2019, 192, 162928.	2.9	13
17	The study of the ^{12}C states from the reaction $^{11}\text{B}(^3\text{He}, d)^{12}\text{C}$. <i>Journal of Physics: Conference Series</i> , 2019, 1390, 012009.	0.4	0
18	Application of Karpman-Maslov-Solov'ev soliton perturbation theory to systems with distributed gain or losses. <i>Optik</i> , 2019, 181, 99-104.	2.9	7

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19	Generalized Tappert transformation in femtosecond nonlinear optics. <i>Optik</i> , 2019, 179, 726-732.	2.9	23
20	Impact of losses or gain on interaction of the NLSE solitons: the interplay between direct computer experimentation and the generalized Karpmanâ€™Solovâ€™ev perturbation approach. <i>Optik</i> , 2019, 182, 148-158.	2.9	6
21	Nonlinear solitonic analogues of coherent and squeezed states: Graded-index fiber solitons and breathing spherically symmetric BEC clouds. <i>Optik</i> , 2019, 176, 38-48.	2.9	18
22	Search for States with Halo in 12B and 12N. , 2019, , .		1
23	The role of the psycho-physiological characteristics of a person in his professional development. <i>Education and Self Development</i> , 2019, 14, 63-71.	0.5	2
24	Exactly integrable nonisospectral models for femtosecond colored solitons and their reversible transformations. <i>Optik</i> , 2018, 158, 1289-1294.	2.9	35
25	Extreme nonlinear waves in external gravitational-like potentials: Possible applications for the optical soliton supercontinuum generation and the ocean coast line protection. <i>Optik</i> , 2018, 161, 187-195.	2.9	19
26	Schrödinger solitons in gravitational-like potentials with embedded barriers and wells: Possible applications for the optical soliton supercontinuum generation and the ocean coast line protection. <i>Optik</i> , 2018, 159, 315-323.	2.9	17
27	Nontrivial Galilean-like invariance of the generalized higher-order nonlinear Schrödinger equation model with gravitation-like potential and the soliton analogies of the cosmic dark energy and antigravitation effects. <i>Optik</i> , 2018, 160, 389-395.	2.9	18
28	Fusion measurements for the ${}^7\text{Li} + {}^{51}\text{V}$ system at energies around the Coulomb barrier. <i>Journal of Physics: Conference Series</i> , 2018, 1078, 012014.	0.4	0
29	Neutron halos in the excited states of B . <i>Physical Review C</i> , 2018, 98, .	2.9	16
30	Optimal control for soliton breathers of the Lakshmananâ€™Porsezianâ€™Daniel, Hirota, and cmKdV models. <i>Optik</i> , 2018, 175, 17-27.	2.9	39
31	Novel soliton breathers for the higher-order Ablowitzâ€™Kaupâ€™Newellâ€™Segur hierarchy. <i>Optik</i> , 2018, 174, 259-265.	2.9	24
32	Novel conditions for soliton breathers of the complex modified Kortewegâ€™de Vries equation with variable coefficients. <i>Optik</i> , 2018, 172, 1117-1122.	2.9	11
33	Optimal control of dark solitons. <i>Optik</i> , 2018, 168, 827-838.	2.9	12
34	Do N-soliton breathers exist for the Hirota equation models?. <i>Optik</i> , 2018, 173, 44-52.	2.9	13
35	Possible Existence of Neutron-Proton Halo in 6Li. <i>KnE Energy</i> , 2018, 3, 1.	0.3	0
36	NUCLEAR SIZE ISOMERS: THE EXCITED STATES OF LIGHT NUCLEI WITH CLUSTER STRUCTURE AND NONSTANDARD SIZES. , 2017, , 311-338.		9

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37	Do analogs of the Hoyle state exist in ^{16}O ? Physics of Atomic Nuclei, 2017, 80, 838-843.	0.4	2
38	Use of (^3He , t) charge-exchange reactions in determining radii of excited states of nuclei. Physics of Atomic Nuclei, 2017, 80, 831-837.	0.4	11
39	Sub-barrier fusion of weakly bound ^6Li with ^{58}Ni . Physical Review C, 2017, 96, .	2.9	10
40	Asymptotic normalization coefficients and halo radii of ^{12}B in the excited states. EPJ Web of Conferences, 2017, 165, 01004.	0.3	0
41	Breakup of ^8B on ^{58}Ni at energies around the Coulomb barrier and the astrophysical $S_{17}(0)$ factor revisited. EPJ Web of Conferences, 2017, 165, 01037.	0.3	0
42	Elastic scattering of $^9\text{Be}+^{51}\text{V}$ near the Coulomb barrier. EPJ Web of Conferences, 2016, 117, 07027.	0.3	5
43	Nuclear size isomers. EPJ Web of Conferences, 2016, 107, 09002.	0.3	1
44	Cluster rotational bands in ^{11}B . EPJ Web of Conferences, 2016, 117, 04011.	0.3	0
45	Proton halo in the ^{13}N nucleus. JETP Letters, 2016, 104, 526-530.	1.4	10
46	States of ^{13}C with abnormal radii. EPJ Web of Conferences, 2016, 117, 04012.	0.3	10
47	Nuclear states with anomalously large radius (size isomers). Physics of Atomic Nuclei, 2016, 79, 514-524.	0.4	7
48	Search for dilute excited states in ^{16}O . Physical Review C, 2016, 94, .	2.9	6
49	Inelastic $^9\text{Be} + ^{11}\text{B}$ scattering at 90 MeV: Whether the concept of the ^9Be structure should be changed?. JETP Letters, 2016, 104, 289-292.	1.4	4
50	Rotational bands in ^{11}B and identification of diluted states. Journal of Physics: Conference Series, 2016, 724, 012013.	0.4	1
51	Study of elastic and inelastic $^{11}\text{B} + ^{11}\text{B}$ scattering and search for cluster states of enlarged radius in ^{11}B . Physics of Atomic Nuclei, 2015, 78, 777-793.	0.4	15
52	Possible observation of an excited state with an anomalously small radius in the ^{13}C nucleus. JETP Letters, 2015, 102, 199-202.	1.4	8
53	Neutron halo in the exotic first excited state of ^9Be . JETP Letters, 2015, 102, 413-416.	1.4	16
54	Analogues of the exotic Hoyle state in the ^{12}C nucleus. Moscow University Physics Bulletin (English) 60(4) 107-110 (2015)	0.4	3

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55	Analogies and distinctions between hydrodynamic and optical nonlinear waves. , 2015, , .		0
56	Scaling symmetry breaking and wave-particle duality of optical and matter-wave solitons. Proceedings of SPIE, 2015, , .	0.8	0
57	Dark-gray soliton transformations: possibility to study microscopic quantum phenomena by nonlinear optical methods. Proceedings of SPIE, 2015, , .	0.8	0
58	Analogies between solitonic bio-energy transport along polypeptide chains and nonautonomous optical solitons in structured nonuniform fibers. Proceedings of SPIE, 2015, , .	0.8	0
59	Breakup, fusion, and elastic scattering analysis of the $8\text{B} + 58\text{Ni}$ system at low energies with the continuum-discretized coupled channels method. EPJ Web of Conferences, 2014, 66, 03008.	0.3	2
60	Neutron asymptotic normalization coefficients and halo radii of the first excited states of ^{13}C and ^{11}Be . EPJ Web of Conferences, 2014, 66, 03009.	0.3	5
61	Determination of neutron halo radii in the first excited states of ^{13}C and ^{11}Be . EPJ Web of Conferences, 2014, 66, 03009.	2.9	36
62	Spectroscopy of exotic states of ^{13}C . EPJ Web of Conferences, 2014, 66, 02027.	0.3	18
63	Cluster states in ^{11}B . EPJ Web of Conferences, 2014, 66, 03007.	0.3	8
64	Spectroscopy of ^9Be and observation of neutron halo structure in the states of positive parity rotational band. EPJ Web of Conferences, 2014, 66, 02026.	0.3	12
65	Study of the structure of the Hoyle state by refractive $\hat{\Gamma}$ -scattering. EPJ Web of Conferences, 2014, 66, 03034.	0.3	5
66	Rotational band in ^{12}C based on the Hoyle state. EPJ Web of Conferences, 2014, 66, 02074.	0.3	23
67	Mapping Γ into Γ for the $8\text{B} + 58\text{Ni}$ system. Journal of Physics: Conference Series, 2014, 492, 012003.	0.4	3
68	Soliton self-induced sub-barrier transparency and the controllable $\hat{\Gamma}$ -shooting out effect. Journal of Modern Optics, 2013, 60, 444-451.	1.3	38
69	Radius of ^{12}C in the excited $2^2 +$ Hoyle state. European Physical Journal A, 2013, 49, 1.	2.5	14
70	Geiger's Nuttall law for Schrödinger solitons. Journal of Modern Optics, 2013, 60, 116-127.	1.3	38
71	Wave-particle duality of solitons and solitonic analog of the Ramsauer-Townsend effect. European Physical Journal D, 2012, 66, 1.	1.3	46
72	Generalized Lax Pair Operator Method and Nonautonomous Solitons. , 2012, , 57-76.		0

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73	Effect of neutron halos on excited states of nuclei. <i>Physical Review C</i> , 2011, 84, .	2.9	34
74	OBSERVATION OF NEUTRON HALOS IN THE EXCITED STATES OF NUCLEI. <i>International Journal of Modern Physics E</i> , 2011, 20, 823-826.	1.0	5
75	Evaporation protons from $^{8B}+^{58Ni}$ at near barrier energies. <i>Journal of Physics: Conference Series</i> , 2011, 322, 012007.	0.4	0
76	Hidden features of the soliton adaptation law to external potentials: Optical and matter-wave 3D nonautonomous soliton bullets. <i>Laser Physics</i> , 2011, 21, 258-263.	1.2	42
77	Role of 8Be heavy stripping mechanism in the $\hat{I}_{\pm} + ^{12}C$ inelastic scattering to the near- $3\hat{I}_{\pm}$ -threshold states in ^{12}C . <i>Physics of Atomic Nuclei</i> , 2011, 74, 1537-1542.	0.4	3
78	Observation of abnormally large radii of nuclei in excited states in the vicinity of neutron thresholds. <i>Physics of Atomic Nuclei</i> , 2011, 74, 1548-1561.	0.4	17
79	Compacton anti-compacton pair for hydrogen bonds and rotational waves in DNA dynamics. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2011, 16, 3071-3080.	3.3	16
80	Near-Barrier Fusion of the $^{8B}+^{58Ni}$ Proton-Halo System. <i>Physical Review Letters</i> , 2011, 107, 092701.	7.8	81
81	8Be DIRECT TRANSFER IN $\hat{I}_{\pm}+^{12}C$ INELASTIC SCATTERING AND SIGNATURES OF THE ALPHA PARTICLE CONDENSATION IN THE NEAR- $3\hat{I}_{\pm}$ THRESHOLD STATES OF ^{12}C . <i>International Journal of Modern Physics E</i> , 2011, 20, 966-970.	1.0	2
82	RADII OF CLUSTER STATES IN ^{11}B AND ^{13}C . <i>International Journal of Modern Physics E</i> , 2011, 20, 915-918.	1.0	23
83	Enhanced soliton spectral tunneling effect of self-compressing nonautonomous colored femtosecond solitons. , 2010, , .		0
84	Hidden features of soliton adaptation law to external potentials: optical and matter-wave soliton bullets in nonautonomous and nonlinear systems. , 2010, , .		0
85	Solitary waves in nonautonomous nonlinear and dispersive systems: nonautonomous solitons. <i>Journal of Modern Optics</i> , 2010, 57, 1456-1472.	1.3	188
86	Measuring the radii of particle unstable nuclear states and search for the signatures of alpha condensation in light nuclei. <i>Nuclear Physics A</i> , 2010, 834, 143c-146c.	1.5	9
87	3D soliton-like bullets in nonlinear optics and Bose-Einstein condensates. <i>Proceedings of SPIE</i> , 2010, , .	0.8	0
88	Nuclear Threshold States: Yesterday, Today, Tomorrow. <i>AIP Conference Proceedings</i> , 2010, , .	0.4	6
89	Enigmas of optical and matter-wave nonlinear soliton tunneling effects. <i>Proceedings of SPIE</i> , 2010, , .	0.8	0
90	Determination of the radii of some threshold states in light nuclei and observation of neutron halos in the excited states of ^{13}C and ^{9}Be . <i>AIP Conference Proceedings</i> , 2010, , .	0.4	1

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91	Nonautonomous matter-wave solitons near the Feshbach resonance. Physical Review A, 2010, 81, .	2.5	163
92	Large-angle \pm -particle scattering on ^{12}C and search for signatures of \pm -particle Bose condensation. Physical Review C, 2010, 82, .	2.9	27
93	Enigmas of optical and matter-wave soliton nonlinear tunneling. Journal of Modern Optics, 2010, 57, 1087-1099.	1.3	60
94	Astrophysical factor extraction from breakup of $^7\text{Li} + ^{12}\text{C}$ scattering at 110 MeV: Has exotic $7.65\text{ MeV Hoyle}^{\text{TM}}$ s state signatures α -condensate structure?. Physics of Atomic Nuclei, 2009, 72, 1611-1616.	2.9	18
95	Determination of nuclear radii for unstable states in ^{12}C and ^{16}O with diffraction scattering. Physical Review C, 2009, 80, 044601.	0.4	13
96	with diffraction scattering. Physical Review C, 2009, 80, 044601.	2.9	93
97	with diffraction scattering. Physical Review C, 2009, 80, 044601.	2.9	169
98	New measurements on breakup of $8\text{B} + ^{58}\text{Ni}$ at energies around the coulomb barrier. Physics of Atomic Nuclei, 2008, 71, 1163-1167.	0.4	11
99	STUDY OF "CONDENSATE" STATES IN ^{12}C AND ^{16}O BY INELASTIC SCATTERING. International Journal of Modern Physics E, 2008, 17, 2118-2123.	1.0	36
100	Soliton dynamics in confining time-dependent potentials. Proceedings of SPIE, 2008, , .	0.8	0
101	Nonautonomous solitons in nonlinear optics and Bose-Einstein condensates. Proceedings of SPIE, 2008, , .	0.8	0
102	Spectroscopic factors within an algebraic model and an application to $^{12}\text{C} + ^{12}\text{C}$. AIP Conference Proceedings, 2007, , .	0.4	0
103	<title>Exactly integrable models for optical solitons amplification: analytical and computational studies</title>. , 2007, , .		0
104	<title>Soliton management: from optical solitons to matter-wave solitons</title>. , 2007, , .		0
105	Nonautonomous Solitons in External Potentials. Physical Review Letters, 2007, 98, 074102.	7.8	589
106	Parametric resonance for solitons in the nonlinear Schrödinger equation model with time-dependent harmonic oscillator potential. Physica B: Condensed Matter, 2007, 398, 460-463.	2.7	38
107	Dispersion and nonlinear management for femtosecond optical solitons. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 361, 504-508.	2.1	72
108	Dispersion and Nonlinear Management for Femtosecond Optical Solitons. , 2006, , .		2

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109	Picosecond Optical Soliton Compression: Exactly Integrable Models. , 2006, , .		1
110	Alpha-particle condensation in nuclei: Experimental problems. Physics of Atomic Nuclei, 2006, 69, 1149-1154.	0.4	13
111	Fusion and elastic-scattering cross-section analysis of the $^{12}\text{C} + ^{12}\text{C}$ system at low energies. Physics of Atomic Nuclei, 2006, 69, 1372-1382.	0.4	14
112	New $\hat{\Gamma}^3$ -ray measurements for $\text{C}^{12} + \text{C}^{12}$ sub-Coulomb fusion: Toward data unification. Physical Review C, 2006, 73, .	2.9	123
113	Optical Soliton Amplification in Fiber Optics Systems with Varying Dispersion. , 2006, , .		1
114	Spectroscopic Factors in an Algebraic Model. AIP Conference Proceedings, 2005, , .	0.4	0
115	Dynamics of solitons in the model of nonlinear Schrödinger equation with an external harmonic potential: II. Dark Solitons. Quantum Electronics, 2005, 35, 929-937.	1.0	60
116	Dynamics of solitons in the model of nonlinear Schrödinger equation with an external harmonic potential: I. Bright solitons. Quantum Electronics, 2005, 35, 778-786.	1.0	44
117	Comment on "Exact Self-Similar Solutions of the Generalized Nonlinear Schrödinger Equation with Distributed Coefficients". Physical Review Letters, 2004, 92, 199401; author reply 199402.	7.8	79
118	Stimulated Raman self-scattering of femtosecond pulses. II. The self-compression of Schrödinger solitons in a spectrally inhomogeneous dispersion medium. Quantum Electronics, 2003, 33, 456-459.	1.0	19
119	Stimulated Raman self-scattering of femtosecond pulses. I. Soliton and non-soliton regimes of coherent self-scattering. Quantum Electronics, 2003, 33, 325-330.	1.0	42
120	Quasimolecular states in ^{24}Mg and d^{\pm} angular correlations in the $^{12}\text{C}(^{14}\text{N}, d)^{24}\text{Mg}^*(\hat{\Gamma}^{\pm})^{20}\text{Ne}$ reaction. Physical Review C, 2002, 66, .	2.9	5
121	Investigation of quasimolecular states in $^{24}\text{Mg}^*$ through the analysis of the angular d^{\pm} correlations in the $^{12}\text{C}(^{14}\text{N}, d)^{24}\text{Mg}(\hat{\Gamma}^{\pm})^{20}\text{Ne}$ reaction. Physics of Atomic Nuclei, 2002, 65, 1616-1627.	0.4	3
122	Interaction forces among spatial and temporal optical solitons in inhomogeneous media. , 2001, , .		0
123	Nonlinear tunneling of temporal and spatial optical solitons through organic thin films and polymeric waveguides. Optics Communications, 2001, 192, 237-244.	2.1	117
124	Bright and dark solitary nonlinear Bloch waves in dispersion managed fiber systems and soliton lasers. Optics Communications, 2001, 196, 159-171.	2.1	80
125	Nonlinear Bloch waves. JETP Letters, 2001, 73, 59-62.	1.4	4
126	High-energy optical Schrödinger solitons. JETP Letters, 2001, 74, 573-577.	1.4	158

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127	Novel topological quasi-soliton solutions for the nonlinear cubic-quintic Schrodinger equation model. , 2001, , .		43
128	Optimal compression of chirped solitary waves: importance of Raman self-scattering effect and high-order dispersion. , 2001, 4271, 280.		4
129	Optimal control of optical soliton parameters: Part 2. Concept of nonlinear Bloch waves in the problem of soliton management. Quantum Electronics, 2001, 31, 1016-1022.	1.0	10
130	Optimal control of optical soliton parameters: Part 1. The Lax representation in the problem of soliton management. Quantum Electronics, 2001, 31, 1007-1015.	1.0	63
131	Solitary nonlinear Bloch waves. , 2001, 4271, 303.		0
132	<title>Maxwell's solitary waves: optical video solitons and wave second harmonics solitons</title>. , 2000, 3927, 323.		6
133	Study of high-lying cluster states of nuclei by the method of particleâ€“particle angular correlations. Physics of Particles and Nuclei, 1998, 29, 107.	0.7	2
134	Femtosecond Maxwellian solitons. I. Modelling of the dynamics of Maxwellian solitons on a personal computer. Quantum Electronics, 1997, 27, 897-902.	1.0	4
135	Femtosecond Maxwellian solitons. II. Verification of a model of the nonlinear Schroedinger equation in the theory of optical solitons. Quantum Electronics, 1997, 27, 940-943.	1.0	2
136	Tensor polarization of ${}^6\text{Li}^{\hat{-}}$ (2.186 MeV, 3+) in the ${}^9\text{Be}(p, \hat{\pm}){}^6\text{Li}$ reaction at 40 MeV. Nuclear Physics A, 1997, 624, 370-390.	1.5	5
137	Maxwell soliton nonlinear dynamics on personal computers. , 1996, , .		1
138	Computation of correlation characteristics of nuclear reactions induced by semi-heavy ions. Computer Physics Communications, 1992, 73, 161-169.	7.5	20
139	Computation of Nuclear Reactions with Light-Heavy Ions. International Journal of Modern Physics C, 1991, 02, 238-242.	1.7	0