

L S Brizhik

List of Publications by Year in descending order

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86
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86
times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Static solutions of aD-dimensional modified nonlinear Schrödinger equation. <i>Nonlinearity</i> , 2003, 16, 1481-1497.	1.4	78
2	Delayed luminescence of biological systems arising from correlated many-soliton states. <i>Physical Review E</i> , 2001, 64, 031902.	2.1	58
3	Electron self-trapping in a discrete two-dimensional lattice. <i>Physica D: Nonlinear Phenomena</i> , 2001, 159, 71-90.	2.8	56
4	Solitons in \pm -helical proteins. <i>Physical Review E</i> , 2004, 70, 031914.	2.1	56
5	Soliton excitations in one-dimensional molecular systems. <i>Physica Status Solidi (B): Basic Research</i> , 1983, 115, 615-630.	1.5	46
6	Soliton dynamics and Peierls-Nabarro barrier in a discrete molecular chain. <i>Physical Review B</i> , 2000, 61, 1129-1141.	3.2	45
7	The role of electromagnetic potentials in the evolutionary dynamics of ecosystems. <i>Ecological Modelling</i> , 2009, 220, 1865-1869.	2.5	32
8	Charge and energy transfer by solitons in low-dimensional nanosystems with helical structure. <i>Chemical Physics</i> , 2006, 324, 259-266.	1.9	31
9	Michael Kasha: From Photochemistry and Flowers to Spectroscopy and Music. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 14316-14324.	13.8	30
10	Electron autolocalized states in molecular chains. <i>Physica D: Nonlinear Phenomena</i> , 1995, 81, 295-304.	2.8	27
11	Electron pairing and Coulomb repulsion in one-dimensional anharmonic lattices. <i>Physical Review B</i> , 2012, 85, .	3.2	26
12	Nonlinear Model of the Origin of Endogenous Alternating Electromagnetic Fields and Selfregulation of Metabolic Processes in Biosystems. <i>Electromagnetic Biology and Medicine</i> , 2003, 22, 31-39.	1.4	23
13	On the Dynamics of Self-Organization in Living Organisms. <i>Electromagnetic Biology and Medicine</i> , 2009, 28, 28-40.	1.4	23
14	Influence of electromagnetic field on soliton-mediated charge transport in biological systems. <i>Electromagnetic Biology and Medicine</i> , 2015, 34, 123-132.	1.4	23
15	The soliton mechanism of the delayed luminescence of biological systems. <i>Europhysics Letters</i> , 2000, 52, 238-244.	2.0	22
16	Soliton Generation in Semi-infinite Molecular Chains. <i>Physica Status Solidi (B): Basic Research</i> , 1988, 146, 605-612.	1.5	20
17	Influence of electromagnetic radiation on molecular solitons. <i>Journal of Biological Physics</i> , 1998, 24, 19-40.	1.5	19
18	Nonlinear dependence of the delayed luminescence yield on the intensity of irradiation in the framework of a correlated soliton model. <i>Physical Review E</i> , 2003, 67, 021902.	2.1	19

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19	The ground state of an electron or exciton in the Holstein model. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 200, 213-218.	2.1	18
20	Electromagnetic radiation influence on nonlinear charge and energy transport in biosystems. Journal of Biological Physics, 1999, 24, 223-232.	1.5	18
21	Soliton Mechanism of Superconductivity in Organic Quasi-One-Dimensional Crystals. Physica Status Solidi (B): Basic Research, 1987, 143, 689-698.	1.5	17
22	Delayed luminescence from collagen as arising from soliton and small polaron states. International Journal of Quantum Chemistry, 2010, 110, 221-229.	2.0	17
23	The ground state of an extra electron interacting with acoustic phonons in a molecular chain. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 205, 90-96.	2.1	15
24	Electron pairing in one-dimensional anharmonic crystal lattices. International Journal of Quantum Chemistry, 2012, 112, 551-565.	2.0	13
25	Soliton generation in molecular chains. Physical Review B, 1993, 48, 3142-3144.	3.2	12
26	Spontaneous localization of electrons in lattices with nonlocal interactions. Physical Review B, 2003, 68, .	3.2	11
27	Ratchet dynamics of large polarons in asymmetric diatomic molecular chains. Journal of Physics Condensed Matter, 2010, 22, 155105.	1.8	11
28	Quartic lattice interactions, soliton-like excitations, and electron pairing in one-dimensional anharmonic crystals. International Journal of Quantum Chemistry, 2012, 112, 2591-2598.	2.0	10
29	Spontaneously localized electron states in a discrete anisotropic two-dimensional lattice. Physica D: Nonlinear Phenomena, 2000, 146, 275-288.	2.8	9
30	Ratchet behaviour of polarons in molecular chains. Journal of Physics Condensed Matter, 2008, 20, 255242.	1.8	9
31	The role of water in the information exchange between the components of an ecosystem. Ecological Modelling, 2011, 222, 2869-2877.	2.5	9
32	Modeling Meridians Within the Quantum Field Theory. JAMS Journal of Acupuncture and Meridian Studies, 2019, 12, 29-36.	0.7	9
33	Bisoliton mechanism of electron transport in biological systems. Journal of Biological Physics, 1993, 19, 123-131.	1.5	8
34	Self-trapped electron states in nanotubes. Physica D: Nonlinear Phenomena, 2007, 228, 130-139.	2.8	8
35	Donor-acceptor electron transport mediated by solitons. Physical Review E, 2014, 90, 052915.	2.1	8
36	Role of Bisolitons and their Correlations in Charge Transfer Processes. , 1999, 24, 233-244.		7

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37	Ground state diagram of a 1D electron-phonon system. Synthetic Metals, 2000, 109, 117-121.	3.9	7
38	Dynamics of a self-trapped quasiparticle in a one-dimensional molecular lattice with two phonon modes. Physica Status Solidi (B): Basic Research, 2007, 244, 545-557.	1.5	7
39	Light as a Trigger and a Probe of the Internal Dynamics of Living Organisms. JAMS Journal of Acupuncture and Meridian Studies, 2010, 3, 291-297.	0.7	7
40	Spin eigen-states of Dirac equation for quasi-two-dimensional electrons. Annals of Physics, 2015, 361, 423-439.	2.8	7
41	General solution of the Dirac equation for quasi-two-dimensional electrons. Annals of Physics, 2016, 369, 85-101.	2.8	7
42	Impact of structure on the delayed luminescence of d-Glucose-based polymer chains. Journal of Photochemistry and Photobiology B: Biology, 2019, 198, 111589.	3.8	7
43	Long-range donor-acceptor electron transport mediated by $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle \hat{I} \pm \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ helices. Physical Review E, 2019, 100, 062205.	2.1	7
44	Spontaneous localization of electrons in two-dimensional lattices within the adiabatic approximation. Journal of Mathematical Physics, 2003, 44, 3689.	1.1	6
45	Ratchet effect of Davydov's solitons in nonlinear low-dimensional nanosystems. International Journal of Quantum Chemistry, 2010, 110, 25-37.	2.0	6
46	Soliton states in a chain with two atoms per elementary cell. Physica Status Solidi (B): Basic Research, 1991, 164, 525-536.	1.5	5
47	Title is missing!. Journal of Superconductivity and Novel Magnetism, 1999, 12, 239-241.	0.5	5
48	Polaron dynamics and Peierls-Nabarro barrier in a discrete molecular chain. Synthetic Metals, 2000, 109, 113-116.	3.9	5
49	Thermal enhancement and stochastic resonance of polaron ratchets. Physical Review E, 2014, 89, 062905.	2.1	5
50	Nonlinearity, coherence and complexity: Biophysical aspects related to health and disease. Electromagnetic Biology and Medicine, 2017, 36, 315-324.	1.4	5
51	The Magnetic Field Influence on a Superconducting Bisoliton Condensate. Physica Status Solidi (B): Basic Research, 1990, 157, 417-424.	1.5	4
52	Electron self-trapping on a nanocircle. Physica D: Nonlinear Phenomena, 2006, 218, 36-55.	2.8	4
53	Effects of Periodic Electromagnetic Field on Charge Transport in Macromolecules. Electromagnetic Biology and Medicine, 2009, 28, 15-27.	1.4	4
54	On the theory of the Schrödinger equation with the full set of relativistic corrections. Low Temperature Physics, 2018, 44, 573-583.	0.6	4

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55	Charge and energy transport by Holstein solitons in anharmonic one-dimensional systems. <i>Chaos, Solitons and Fractals</i> , 2019, 119, 343-354.	5.1	4
56	Bound State of Electrons in a One-Dimensional Chain. <i>Physica Status Solidi (B): Basic Research</i> , 1994, 182, 89-96.	1.5	3
57	SOLITON MECHANISM OF CHARGE, ENERGY AND INFORMATION TRANSFER IN BIOSYSTEMS. , 2003, , .		3
58	Adiabatic self-trapped states in zigzag nanotubes. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 306205.	1.8	3
59	Davydov's solitons in zigzag carbon nanotubes. <i>International Journal of Quantum Chemistry</i> , 2010, 110, 11-24.	2.0	3
60	Nonlinear mechanism for weak photon emission from biosystems. <i>Indian Journal of Experimental Biology</i> , 2008, 46, 353-7.	0.0	3
61	Dynamics of a soliton in a constant magnetic field. <i>Theoretical and Mathematical Physics(Russian) Tj ETQq1 1 0.784314 rgBT₂/Overlook</i>	0.9	2
62	Bisoliton in Constant Magnetic Field. <i>Physica Status Solidi (B): Basic Research</i> , 1990, 157, 649-655.	1.5	2
63	On the dependence of the critical temperature on pressure in the bisoliton model of high temperature superconductors. <i>High Pressure Research</i> , 1994, 11, 375-383.	1.2	2
64	A cross-correlated experimental setup for probing normal and abnormal vital processes that are endogenous or induced by xenobiotic agents. , 2003, 5143, 250.		2
65	Copper ion fluxes through the floating water bridge under strong electric potential. <i>Electromagnetic Biology and Medicine</i> , 2015, 34, 167-169.	1.4	2
66	Electron Correlations in Molecular Chains. , 2017, , 215-232.		2
67	Spin relevant invariants and the general solution of the Dirac equation for the Coulomb fields. <i>Annals of Physics</i> , 2022, 439, 168786.	2.8	2
68	Quantum theory of strong localization of a quasiparticle in a linear molecular system. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 1988, 77, 1129-1136.	0.9	1
69	Bisolitons in a layered crystal. <i>Chaos, Solitons and Fractals</i> , 1993, 3, 61-65.	5.1	1
70	Bound States of Electrons in Harmonic and Anharmonic Crystal Lattices. <i>Springer Series in Materials Science</i> , 2015, , 291-319.	0.6	1
71	Stabilizing Role of Lattice Anharmonicity in the Bisoliton Dynamics. <i>Ukrainian Journal of Physics</i> , 2013, 58, 562-572.	0.2	1
72	On the role and impact of electromagnetic fields in ecosystems. <i>International Journal of Design and Nature and Ecodynamics</i> , 2011, 6, 272-281.	0.5	1

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73	Hydration Effects on Photophysical Properties of Collagen. NATO Science for Peace and Security Series A: Chemistry and Biology, 2009, , 359-383.	0.5	1
74	Generalized Spin-Orbit Interaction and Its Manifestation in Two-Dimensional Electron Systems. Ukrainian Journal of Physics, 2019, 64, 464.	0.2	1
75	Localized electron states and a modified nonlinear Schrödinger equation. AIP Conference Proceedings, 2001, , .	0.4	0
76	Correlation between large polarons in molecular chains. Macromolecular Symposia, 2004, 212, 529-538.	0.7	0
77	Correlation between large polarons in molecular chains. Macromolecular Symposia, 2004, 212, 131-140.	0.7	0
78	Energy Supply and Photon Emission by Solitons in Alpha-Helical Proteins. Electromagnetic Biology and Medicine, 2005, 24, 243-253.	1.4	0
79	Directed Transport of the Davydov Solitons by Unbiased a.c. Forces. NATO Science for Peace and Security Series A: Chemistry and Biology, 2009, , 89-102.	0.5	0
80	Field Driven Current in Nonlinear Low-Dimensional Nanosystems. NATO Science for Peace and Security Series B: Physics and Biophysics, 2009, , 165-184.	0.3	0
81	Publisher's Note: Thermal enhancement and stochastic resonance of polaron ratchets [Phys. Rev. E89, 062905 (2014)]. Physical Review E, 2014, 90, .	2.1	0
82	Some Properties of Solitons. NATO Science for Peace and Security Series A: Chemistry and Biology, 2009, , 103-121.	0.5	0
83	On the non-thermal effects of electromagnetic fields on charge transport processes in ecosystems. WIT Transactions on Ecology and the Environment, 2011, , .	0.0	0
84	Delayed luminescence and its dependence on nonlinear organized structures based glucose monomers. , 2018, , .		0