Konstantin G Zloshchastiev

List of Publications by Year
in descending order

59 papers	937 citations	516710 16 h-index	454955 30 g-index
59 all docs	59 docs citations	59 times ranked	365 citing authors

#	Article	IF	Citations
1	Logarithmic nonlinearity in theories of quantum gravity: Origin of time and observational consequences. Gravitation and Cosmology, 2010, 16, 288-297.	1.1	109
2	NON-HERMITIAN QUANTUM DYNAMICS OF A TWO-LEVEL SYSTEM AND MODELS OF DISSIPATIVE ENVIRONMENTS. International Journal of Modern Physics B, 2013, 27, 1350163.	2.0	88
3	Coexistence of Black Holes and a Long-Range Scalar Field in Cosmology. Physical Review Letters, 2005, 94, 121101.	7.8	79
4	Quantum Bose liquids with logarithmic nonlinearity: self-sustainability and emergence of spatial extent. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 195303.	1.5	65
5	Title is missing!. Acta Physica Polonica B, 2011, 42, 261.	0.8	58
6	Comparison and unification of non-Hermitian and Lindblad approaches with applications to open quantum optical systems. Journal of Modern Optics, 2014, 61, 1298-1308.	1.3	54
7	Time correlation functions for non-Hermitian quantum systems. Physical Review A, 2015, 91, .	2.5	48
8	Volume element structure and roton-maxon-phonon excitations in superfluid helium beyond the Gross-Pitaevskii approximation. European Physical Journal B, 2012, 85, 1.	1.5	36
9	Quantum entropy of systems described by non-Hermitian Hamiltonians. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 033102.	2.3	30
10	Noncommutative quantum mechanics—a perspective on structure and spatial extent. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 345302.	2.1	21
11	Non-Hermitian Hamiltonians and stability of pure states. European Physical Journal D, 2015, 69, 1.	1.3	21
12	On the Dynamical Nature of Nonlinear Coupling of Logarithmic Quantum Wave Equation, Everett-Hirschman Entropy and Temperature. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2018, 73, 619-628.	1.5	21
13	New approach to the classification and solving of Einstein-Maxwell-dilaton gravity and its application for a particular set of exactly solvable models. Physical Review D, 2001, 64, .	4.7	20
14	Vacuum Cherenkov effect in logarithmic nonlinear quantum theory. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 2305-2308.	2.1	19
15	Nonlinear wave-mechanical effects in Korteweg fluid magma transport. Europhysics Letters, 2018, 122, 39001.	2.0	19
16	Singularity-free model of electric charge in physical vacuum: non-zero spatial extent and mass generation. Open Physics, 2013, 11, 325-335.	1.7	18
17	Stability and Metastability of Trapless Bose-Einstein Condensates and Quantum Liquids. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2017, 72, 677-687.	1.5	18
18	Singularity-free model of electrically charged fermionic particles and gauged Q-balls. Physical Review D, 2016, 94, .	4.7	16

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19	An Alternative to Dark Matter and Dark Energy: Scale-Dependent Gravity in Superfluid Vacuum Theory. Universe, 2020, 6, 180.	2.5	16
20	Resolving the puzzle of sound propagation in liquid helium at low temperatures. Low Temperature Physics, 2019, 45, 1231-1236.	0.6	16
21	Schrödinger Equations with Logarithmic Self-Interactions: From Antilinear PT-Symmetry to the Nonlinear Coupling of Channels. Symmetry, 2017, 9, 165.	2.2	15
22	Temperature-driven dynamics of quantum liquids: Logarithmic nonlinearity, phase structure and rising force. International Journal of Modern Physics B, 2019, 33, 1950184.	2.0	15
23	Quantum-statistical approach to electromagnetic wave propagation and dissipation inside dielectric media and nanophotonic and plasmonic waveguides. Physical Review B, 2016, 94, .	3.2	14
24	Sustainability of Environment‐Assisted Energy Transfer in Quantum Photobiological Complexes. Annalen Der Physik, 2017, 529, 1600185.	2.4	12
25	Monopole and electrically charged dust thin shells in general relativity: Classical and quantum comparison of hollow and atomlike configurations. Physical Review D, 1998, 57, 4812-4820.	4.7	10
26	Superfluid vacuum theory and deformed dispersion relations. International Journal of Modern Physics A, 2020, 35, 2040032.	1.5	9
27	Kink solutions in logarithmic scalar field theory: Excitation spectra, scattering, and decay of bions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 823, 136776.	4.1	9
28	Superfluid stars and Q-balls in curved spacetime. Low Temperature Physics, 2021, 47, 89-95.	0.6	8
29	Matrix logarithmic wave equation and multi-channel systems in fluid mechanics. Journal of Theoretical and Applied Mechanics, 2019, 57, 843-852.	0.5	8
30	EXTENDED PARTICLE MODELS BASED ON HOLLOW SINGULAR HYPERSURFACES IN GENERAL RELATIVITY: CLASSICAL AND QUANTUM ASPECTS OF CHARGED TEXTURES. International Journal of Modern Physics D, 1999, 08, 165-176.	2.1	7
31	Nonminimal particle-like solutions in cubic scalar field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 450, 397-404.	4.1	7
32	SINGULAR SHELLS OF QUARK-GLUON MATTER. International Journal of Modern Physics D, 1999, 08, 363-371.	2.1	4
33	CLASSICAL AND QUANTUM COMPARISON OF KINK AND BELL SOLITONS AS ZERO-BRANES. Modern Physics Letters A, 2000, 15, 67-81.	1.2	4
34	Field-to-particle transition based on the zero-brane approach to quantization of multiscalar field theories and its application for Jackiw-Teitelboim gravity. Physical Review D, 2000, 61, .	4.7	4
35	Field-to-particle transition and nonminimal particles in sigma model, dilaton gravity and gauged supergravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 519, 111-120.	4.1	4
36	Phase space formulation of density operator for non-Hermitian Hamiltonians and its application in quantum theory of decay. International Journal of Modern Physics B, 2018, 32, 1850276.	2.0	4

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37	Title is missing!. Journal of Physics G: Nuclear and Particle Physics, 1999, 25, 2177-2187.	3.6	3
38	Density Operator Approach to Turbulent Flows in Plasma and Atmospheric Fluids. Universe, 2020, 6, 216.	2.5	3
39	Resolving the puzzle of sound propagation in a dilute Bose–Einstein condensate. International Journal of Modern Physics B, 2022, 36, .	2.0	3
40	MASS OF PERFECT FLUID BLACK SHELLS. Modern Physics Letters A, 1998, 13, 1419-1425.	1.2	2
41	Radiation fluid singular hypersurfaces with de Sitter interior as models of charged extended particles in general relativity. Classical and Quantum Gravity, 1999, 16, 1737-1744.	4.0	2
42	BAROTROPIC THIN SHELLS WITH LINEAR EOS AS MODELS OF STARS AND CIRCUMSTELLAR SHELLS IN GENERAL RELATIVITY. International Journal of Modern Physics D, 1999, 08, 549-555.	2.1	2
43	Core structure and exactly solvable models in dilaton gravity coupled to Maxwell and antisymmetric tensor fields. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 527, 215-225.	4.1	2
44	Non-Hamiltonian Modeling of Squeezing and Thermal Disorder in Driven Oscillators. Journal of Statistical Physics, 2015, 159, 255-273.	1.2	2
45	Applications of wave equations with logarithmic nonlinearity in fluid mechanics. Journal of Physics: Conference Series, 2018, 1101, 012051.	0.4	2
46	Acoustic oscillations in cigar-shaped logarithmic Bose–Einstein condensate in the Thomas–Fermi approximation. International Journal of Modern Physics B, 2021, 35, .	2.0	2
47	Quantum kink model and SU(2) symmetry: spin interpretation andT-violation. Journal of Physics A, 1998, 31, 6081-6085.	1.6	1
48	Letter: Classical and Quantum Evolution of Non-Isentropic Hot Singular Layers in Finite-Temperature General Relativity. General Relativity and Gravitation, 1999, 31, 571-577.	2.0	1
49	Evolution of Thin-wall Configurations ofTexture Matter. General Relativity and Gravitation, 1999, 31, 1821-1835.	2.0	1
50	Zero-brane approach to quantization of biscalar field theory about topological kink-bell solution. Europhysics Letters, 2000, 49, 20-26.	2.0	1
51	Logarithmic nonlinearity in theories of quantum gravity: Origin of time and observational consequences. , 2010, , .		1
52	Logarithmic quantum wave equation with variable nonlinear coupling. Journal of Physics: Conference Series, 2018, 1039, 012014.	0.4	1
53	Master equation approach for non-Hermitian quadratic Hamiltonians: Original and phase space formulations. Journal of Physics: Conference Series, 2019, 1194, 012090.	0.4	1
54	Logarithmic wave-mechanical effects in polycrystalline metals: theory and experiment. Indian Journal of Physics, 2022, 96, 2385-2392.	1.8	1

#	Article	IF	Citations
55	Why do we live in a 4D world: Can cosmology, black holes and branes give an answer?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 638, 89-93.	4.1	0
56	Non-Hermitian Hamiltonian approach for electromagnetic wave propagation and dissipation in dielectric media. , 2016, , .		0
57	Quantum-statistical description of electromagnetic waves in dissipative media. , 2017, , .		0
58	Is sustainability of light-harvesting and waveguiding systems a quantum phenomenon?. Journal of Physics: Conference Series, 2019, 1276, 012052.	0.4	0
59	Wave-mechanical phenomena in optical coupled-mode structures. Journal of Physics: Conference Series, 2019, 1400, 044028.	0.4	0