Alexander I Nesterov

List of Publications by Year
in descending order

60	393	840776 11	888059 17
papers	citations	h-index	g-index

63	63	63	224
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quench dynamics and defects formation in the Ising chain in a transverse magnetic field. European Physical Journal B, 2022, 95, 1.	1.5	1
2	Deep Learning for Gravitational-Wave Data Analysis: A Resampling White-Box Approach. Sensors, 2021, 21, 3174.	3.8	5
3	Dark matter spinâ€“spin interaction through the pseudo-scalar vacuum field. Modern Physics Letters A, 2020, 35, 2050117.	1.2	0
4	Complex networks in the framework of nonassociative geometry. Physical Review E, 2020, 101, 032302.	2.1	2
5	Decoherence as a detector of the Unruh effect. Physical Review Research, 2020, 2, .	3.6	6
6	Modeling of noise-assisted quantum transfer between donor and acceptor with finite bandwidths. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 435601.	2.1	1
7	How Nonassociative Geometry Describes a Discrete Spacetime. Frontiers in Physics, 2019, 7, .	2.1	4
8	Production of Entanglement Entropy by Decoherence. Open Systems and Information Dynamics, 2018, 25, 1850001.	1.2	3
9	Effect of the Interatomic Exchange Interaction on the Magnetic Phase Transitions in Spin Crossover Systems under High-Pressure. Physics of the Solid State, 2018, 60, 1177-1179.	0.6	1
10	Possible role of interference, protein noise, and sink effects in nonphotochemical quenching in photosynthetic complexes. Journal of Mathematical Biology, 2017, 74, 43-76.	1.9	1
11	Cooperative phenomena in spin crossover systems. Physical Review B, 2017, 96, .	3.2	12
12	Multi-scale exciton and electron transfer in multi-level donorâ€“acceptor systems. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 365601.	2.1	4
13	Magnetic and structural phase transitions in systems with spin crossover under pressure. JETP Letters, 2017, 105, 771-774.	1.4	6
14	On improving the performance of nonphotochemical quenching in CP29 light-harvesting antenna complex. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 1279-1283.	2.1	2
15	Nonlinear dynamics of dipoles in microtubules: Pseudospin model. Physical Review E, 2016, 93, 062412.	2.1	2
16	Dynamics of a chlorophyll dimer in collective and local thermal environments. Journal of Mathematical Chemistry, 2016, 54, 866-917.	1.5	15
17	Non-Hermitian Quantum AnnealingNon-Hermitian quantum annealing and SuperradianceSuperradiance. Springer Proceedings in Physics, 2016, , 329-344.	0.2	0
18	Decoherence and spin echo in biological systems. Physical Review E, 2015, 91, 052702.	2.1	1

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19	Role of protein fluctuation correlations in electron transfer in photosynthetic complexes. Physical Review E, 2015, 91, 042702.	2.1	12
20	Superradiance Transition and Nonphotochemical Quenching in Photosynthetic Complexes. Journal of Physical Chemistry C, 2015, 119, 22289-22296.	3.1	11
21	Superradiance transition in graphene. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 2951-2955.	2.1	2
22	Non-Hermitian quantum annealing in the antiferromagnetic Ising chain. Quantum Information Processing, 2014, 13, 371-389.	2.2	8
23	Nonâ€Hermitian approach for modeling of noiseâ€assisted quantum electron transfer in photosynthetic complexes. Fortschritte Der Physik, 2013, 61, 95-110.	4.4	10
24	Noise-assisted quantum electron transfer in photosynthetic complexes. Journal of Mathematical Chemistry, 2013, 51, 2514-2541.	1.5	10
25	Quench dynamics in spin crossover induced by high pressure. Open Physics, 2013, 11, .	1.7	0
26	Non-Hermitian quantum annealing in the ferromagnetic Ising model. Physical Review A, 2013, 87, .	2.5	9
27	Quantum search using non-Hermitian adiabatic evolution. Physical Review A, 2012, 86, .	2.5	9
28	Modeling of low- and high-frequency noise by slow and fast fluctuators. Physical Review A, 2012, 85, .	2.5	8
29	NON-HERMITIAN DESCRIPTION OF A SUPERCONDUCTING PHASE QUBIT MEASUREMENT. International Journal of Quantum Information, 2010, 08, 895-904.	1.1	3
30	NON-HERMITIAN ADIABATIC QUANTUM OPTIMIZATION. International Journal of Quantum Information, 2009, 07, 1469-1478.	1.1	2
31	SMOOTH LOOPS AND FIBER BUNDLES: THEORY OF PRINCIPAL Q-BUNDLES. International Journal of Geometric Methods in Modern Physics, 2009, 06, 77-97.	2.0	4
32	Spin crossover: the quantum phase transition induced by high pressure. JETP Letters, 2009, 90, 530-534.	1.4	18
33	An optimum Hamiltonian for non-Hermitian quantum evolution and the complex Bloch sphere. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 3629-3636.	2.1	7
34	Non-Hermitian Quantum Systems and Time-Optimal Quantum Evolution. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 2009, , .	0.5	6
35	Geometric phases and quantum phase transitions in open systems. Physical Review E, 2008, 78, 015202.	2.1	36
36	Complex magnetic monopoles, geometric phases and quantum evolution in the vicinity of diabolic and exceptional points. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 485304.	2.1	25

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37	Infinite-dimensional representations of the rotation group and Dirac monopole problem. Journal of Mathematical Physics, 2008, 49, .	1.1	3
38	ON OBSERVABILITY OF DIRAC'S STRING. Modern Physics Letters A, 2008, 23, 623-635.	1.2	1
39	NONASSOCIATIVITY, DIRAC MONOPOLE AND AHARONOVâ€"BOHM EFFECT. International Journal of Geometric Methods in Modern Physics, 2007, 04, 717-726.	2.0	4
40	NONASSOCIATIVE GEOMETRY: FRIEDMANNâ€"ROBERTSONâ€"WALKER SPACETIME. International Journal of Geometric Methods in Modern Physics, 2006, 03, 1481-1491.	2.0	8
41	On representations of the rotation group and magnetic monopoles. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 324, 9-13.	2.1	5
42	Three-cocycles, nonassociative gauge transformations and Dirac's monopole. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 328, 110-115.	2.1	17
43	Magnetic monopoles with generalized quantization condition. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 302, 253-260.	2.1	13
44	Principal Loop Bundles: Toward Nonassociative Gauge Theories. International Journal of Theoretical Physics, 2001, 40, 339-350.	1.2	12
45	Nonassociative geometry: Towards discrete structure of spacetime. Physical Review D, 2000, 62, .	4.7	13
46	Riemann normal coordinates, Fermi reference system and the geodesic deviation equation. Classical and Quantum Gravity, 1999, 16, 465-477.	4.0	33
47	On angular momentum of gravitational radiation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 250, 55-61.	2.1	4
48	Quasigroups, asymptotic symmetries, and conservation laws in general relativity. Physical Review D, 1997, 56, R7498-R7502.	4.7	5
49	Topology Change in (2+1)-Dimensional Gravity with Non-Abelian Higgs Field. General Relativity and Gravitation, 1997, 29, 1115-1122.	2.0	0
50	Smooth loops, generalized coherent states, and geometric phases. International Journal of Theoretical Physics, 1997, 36, 1981-1989.	1.2	6
51	Geometric phase shift for detection of gravitational radiation. International Journal of Theoretical Physics, 1996, 35, 2645-2659.	1.2	1
52	Possible gravitational radiation detection using the geometric phase of a light beam. General Relativity and Gravitation, 1995, 27, 361-366.	2.0	5
53	An invariant criterion of proximity to the horizon of a black hole. Classical and Quantum Gravity, 1991, 8, L45-L47.	4.0	1
54	Two-dimensional self-dual solutions in the gauge theory of metal glasses. Soviet Physics Journal (English Translation of Izvestiia Vysshykh Uchebnykh Zavedenii, Fizika), 1989, 32, 964-968.	0.0	0

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55	The Gauge Theory of Point Defects. Physica Status Solidi (B): Basic Research, 1989, 156, 403-410.	1.5	15
56	Gauge theory of amorphous magnets. Theoretical and Mathematical Physics(Russian Federation), 1988, 76, 704-709.	0.9	0
57	Geometric approach to dislocation and disclination theory. Soviet Physics Journal (English) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	0.0	0
58	Canonical formulation of the theory of gravitation and a general-covariant separation of space and time. Soviet Physics Journal (English Translation of Izvestiia Vysshykh Uchebnykh Zavedenii, Fizika), 1977, 20, 289-293.	0.0	0
59	Energetic correspondence principle in gravitation theory. Soviet Physics Journal (English Translation) Tj ETQq1 1 0.784314 rgBT /Over	0.0	0
60	Hidden symmetries, spin and charge of artificial magnetic monopoles. Quantum Studies: Mathematics and Foundations, 0, , 1.	0.9	0