

Rashid G Nazmitdinov

List of Publications by Year in descending order

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148
papers

1,702
citations

304743

22
h-index

377865

34
g-index

149
all docs

149
docs citations

149
times ranked

767
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-electron quantum dot in a magnetic field: Analytical results. <i>Physical Review B</i> , 1997, 55, 13707-13714.	3.2	142
2	Effects of symmetry breaking in finite quantum systems. <i>Physics Reports</i> , 2013, 526, 1-91.	25.6	90
3	DFT prediction of band gap in organic-inorganic metal halide perovskites: An exchange-correlation functional benchmark study. <i>Chemical Physics</i> , 2019, 516, 225-231.	1.9	62
4	The shape of the heated fast-rotating nuclei. <i>Nuclear Physics A</i> , 1980, 346, 191-215.	1.5	60
5	Conductance of open quantum billiards and classical trajectories. <i>Physical Review B</i> , 2002, 66, .	3.2	56
6	Chaos in axially symmetric potentials with octupole deformation. <i>Physical Review Letters</i> , 1994, 72, 2351-2354.	7.8	50
7	Semiclassical analysis of a two-electron quantum dot in a magnetic field: Dimensional phenomena. <i>Physical Review B</i> , 2002, 65, .	3.2	48
8	p-Polarized Nonlinear Surface Waves in Symmetric Layered Structures. <i>Physica Scripta</i> , 1984, 29, 269-275.	2.5	45
9	Whispering gallery modes in open quantum billiards. <i>Physical Review E</i> , 2001, 64, 056214.	2.1	38
10	Roto-vibrational spectrum and Wigner crystallization in two-electron parabolic quantum dots. <i>Physical Review B</i> , 2004, 69, .	3.2	37
11	Hidden symmetries of two-electron quantum dots in a magnetic field. <i>Physical Review B</i> , 2003, 67, .	3.2	30
12	Shape transitions in excited states of two-electron quantum dots in a magnetic field. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2012, 45, 205503.	1.5	30
13	Simple shell model for quantum dots in a tilted magnetic field. <i>Physical Review B</i> , 1997, 55, 16310-16317.	3.2	28
14	Symmetry breaking and the random-phase approximation in small quantum dots. <i>Physical Review B</i> , 2003, 68, .	3.2	27
15	Regular and chaotic motion in axially deformed nuclei. <i>Physical Review C</i> , 1995, 52, 3032-3042.	2.9	26
16	Magnetic field and symmetry effects in small quantum dots. <i>Physics of Particles and Nuclei</i> , 2009, 40, 71-92.	0.7	26
17	Ground state spin oscillations of a two-electron quantum dot in a magnetic field. <i>Journal of Physics Condensed Matter</i> , 1999, 11, L83-L88.	1.8	24
18	Statistical fluctuations of electromagnetic transition intensities and electromagnetic moments in pf-shell nuclei. <i>Physical Review C</i> , 2002, 65, .	2.9	24

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19	Shot noise and transport in small quantum cavities with large openings. <i>Physical Review B</i> , 2002, 66, .	3.2	24
20	Model for spin-orbit effects in two-dimensional semiconductors in magnetic fields. <i>Physical Review B</i> , 2006, 73, .	3.2	24
21	Octupole deformations in actinides at high spins within the cranking Skyrme–Hartree–Fock approach. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2002, 28, 2187-2206.	3.6	23
22	Finite-thickness effects in ground-state transitions of two-electron quantum dots. <i>Physical Review B</i> , 2007, 76, .	3.2	22
23	Quadrupole splitting of octupole vibrational states. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1992, 289, 238-244.	4.1	21
24	The microscopic description of the isovector dipole excitations at high spins. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1983, 121, 15-20.	4.1	20
25	Cranking anharmonic gamma vibrations. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1993, 300, 199-204.	4.1	20
26	Classical Analysis of Phenomenological Potentials for Metallic Clusters. <i>Physical Review Letters</i> , 1994, 73, 1235-1238.	7.8	19
27	Equilibrium properties of fast-rotating headed nuclei. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1978, 76, 543-546.	4.1	18
28	Dynamical screening of the Coulomb interaction for two confined electrons in a magnetic field. <i>Physical Review A</i> , 2008, 78, .	2.5	18
29	Spreading widths of giant resonances in spherical nuclei: Damped transient response. <i>Physical Review C</i> , 2017, 95, .	2.9	18
30	Shell effects in quantum dots in tilted magnetic fields. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1996, 222, 309-314.	2.1	17
31	Self-consistent harmonic oscillator model and tilted rotation. <i>Physical Review C</i> , 2002, 65, .	2.9	17
32	On octupole alignment in actinides. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1987, 188, 171-176.	4.1	16
33	Integral Representation of the Random-Phase Approximation Correlation Energy. <i>Physical Review Letters</i> , 1999, 83, 280-283.	7.8	16
34	Dynamical moment of inertia and quadrupole vibrations in rotating nuclei. <i>Physical Review C</i> , 2002, 65, .	2.9	16
35	Nonaxial octupole deformations and shell phenomena. <i>Physical Review C</i> , 1999, 60, .	2.9	14
36	Conformal Hamiltonian dynamics of general relativity. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2010, 691, 230-233.	4.1	14

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37	Periodic orbits and shell structure in octupole deformed potentials. <i>Physical Review B</i> , 1995, 51, 1874-1884.	3.2	13
38	Nonaxial octupole deformations in light $N=Z$ nuclei at high spins. <i>Physical Review C</i> , 2001, 63, .	2.9	13
39	Backbending and $\hat{3}$ vibrations. <i>Physical Review C</i> , 2004, 69, .	2.9	13
40	Entanglement control in coupled two-mode boson systems. <i>Physical Review A</i> , 2008, 78, .	2.5	13
41	Representation of three-dimensional rotations in oscillator basis sets. <i>Nuclear Physics A</i> , 1996, 596, 53-66.	1.5	12
42	Shell effects in nonlinear magnetotransport through small quantum dots. <i>Physical Review B</i> , 2007, 75, .	3.2	12
43	Spin control in semiconductor quantum wires: Rashba and Dresselhaus interaction. <i>Physical Review B</i> , 2009, 79, .	3.2	12
44	Spin-orbit effects in carbon nanotubes – Analytical results. <i>European Physical Journal B</i> , 2014, 87, 1.	1.5	12
45	Magnetic alteration of entanglement in two-electron quantum dots. <i>Physical Review A</i> , 2015, 92, .	2.5	12
46	Cooperative phenomenon in a rippled graphene: Chiral spin guide. <i>Physical Review B</i> , 2015, 92, .	3.2	12
47	Thomson rings in a disk. <i>Physical Review E</i> , 2015, 91, 032312.	2.1	12
48	On the efficiency limit of $ZnO/CH_3NH_3PbI_3/CuI$ perovskite solar cells. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 19916-19921.	2.8	12
49	Microscopic analysis of shape-phase transitions in even-even $N=90$ rotating nuclei. <i>Physical Review C</i> , 2006, 73, .	2.9	11
50	Potential roots of the deep subbarrier heavy-ion fusion hindrance phenomenon within the sudden approximation approach. <i>Physical Review C</i> , 2021, 103, .	2.9	11
51	Statistical model of coexisting multiquark clusters. <i>Nuclear Physics A</i> , 1986, 449, 660-672.	1.5	10
52	Orbital magnetism in small quantum dots with closed shells. <i>JETP Letters</i> , 1998, 68, 915-921.	1.4	10
53	Self-organization of charged particles in circular geometry. <i>Physical Review E</i> , 2017, 95, 042603.	2.1	10
54	Near-barrier heavy-ion fusion: Role of boundary conditions in coupling of channels. <i>Physical Review C</i> , 2020, 101, .	2.9	10

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55	Vibrational excitations and tilted rotation in ^{163}Lu . <i>Physica Scripta</i> , 2006, T125, 139-141.	2.5	9
56	Analysis of nucleus-nucleus collisions at high energies and random matrix theory. <i>Physical Review C</i> , 2009, 79, .	2.9	9
57	Quantum nonequilibrium approach for fast electron transport in open systems: Photosynthetic reaction centers. <i>Physical Review E</i> , 2011, 84, 051912.	2.1	9
58	Conformal and affine Hamiltonian dynamics of general relativity. <i>General Relativity and Gravitation</i> , 2012, 44, 2745-2783.	2.0	9
59	Triplet absorption spectroscopy and electromagnetically induced transparency. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 175502.	1.5	9
60	Damped transient response of the giant dipole resonance in the lead region. <i>Physical Review C</i> , 2018, 98, .	2.9	9
61	Quantum fluctuation and statistical properties of a two-mode boson system. <i>Journal of the European Optical Society Part B: Quantum Optics</i> , 1991, 3, 1-6.	1.2	8
62	Time scales in nuclear giant resonances. <i>Physical Review C</i> , 2010, 81, .	2.9	8
63	Nuclear shell structure and chaotic dynamics in hexadecapole deformation. <i>Physical Review C</i> , 1995, 52, R1179-R1183.	2.9	7
64	Minimal energy solutions in the three-dimensional rotating harmonic oscillator. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1997, 397, 1-5.	4.1	7
65	Electronic shell structure of large metallic clusters in the modified harmonic oscillator. <i>Physica D: Nonlinear Phenomena</i> , 1998, 118, 134-150.	2.8	7
66	Particle Number Projection and Pairing-RPA Calculations in Rotating Nuclei. <i>Physica Scripta</i> , 2000, T88, 62.	2.5	7
67	Tilted rotation and wobbling motion in nuclei. <i>JETP Letters</i> , 2000, 72, 106-110.	1.4	7
68	Signature inversion in axially deformed $^{160,162}\text{Tm}$. <i>Physical Review C</i> , 2001, 63, .	2.9	7
69	Collective magnetic excitations and backbending in fast rotating nuclei. <i>Physical Review C</i> , 2004, 69, .	2.9	7
70	Nonlinear transport at the strong intra-dot Coulomb interaction. <i>Journal of Physics Condensed Matter</i> , 2006, 18, L55-L61.	1.8	7
71	Random matrix theory and analysis of nucleus-nucleus collision at high energies. <i>Physics of Atomic Nuclei</i> , 2006, 69, 142-146.	0.4	7
72	Random matrix analysis of the monopole strength distribution in ^{208}Pb . <i>Physics of Atomic Nuclei</i> , 2016, 79, 835-841.	0.4	7

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73	Synergy of the ray tracing+carrier transport approach: On efficiency of perovskite solar cells with a back reflector. <i>Solar Energy Materials and Solar Cells</i> , 2019, 200, 110050.	6.2	7
74	Calculations of low-lying collective excitation energies in ^{168}Yb at high angular momenta. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1978, 79, 347-350.	4.1	6
75	Microscopic description of collective states near the yrast line of nuclei with stable octupole deformation. <i>Nuclear Physics A</i> , 1985, 439, 86-116.	1.5	6
76	TIME EVOLUTION OF VARIANCES OF QUADRATURE OPERATORS IN A TWO-MODE BOSON SYSTEM. <i>International Journal of Modern Physics B</i> , 1990, 04, 2335-2343.	2.0	6
77	Quadrupole correlations and inertial properties of rotating nuclei. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2003, 29, 2193-2206.	3.6	6
78	Interaction effects in quantum dots in a vertical magnetic field. <i>Journal of Physics: Conference Series</i> , 2010, 248, 012017.	0.4	6
79	Resonance scattering and singularities of the scattering function. <i>European Physical Journal D</i> , 2010, 58, 53-56.	1.3	6
80	Spectral singularities and zero energy bound states. <i>European Physical Journal D</i> , 2011, 63, 369-373.	1.3	6
81	Radiative breaking of conformal symmetry in the Standard Model. <i>Europhysics Letters</i> , 2016, 113, 31001.	2.0	5
82	Klein collimation by rippled graphene superlattice. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 495301.	1.8	5
83	Spin-dependent electron transmission across the corrugated graphene. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2020, 118, 113846.	2.7	5
84	On the efficiency of perovskite solar cells with a back reflector: effect of a hole transport material. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 26250-26262.	2.8	5
85	Solution of the cranked harmonic oscillator model at non-zero temperatures. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 1995, 21, 1205-1216.	3.6	4
86	Triaxial octupole deformations and shell structure. <i>JETP Letters</i> , 1999, 69, 563-569.	1.4	4
87	On the confinement potential formation in a two-electron quantum dot. <i>Journal of Experimental and Theoretical Physics</i> , 2001, 92, 1049-1059.	0.9	4
88	Reply to "Comment on "Thomson rings in a disk" ". <i>Physical Review E</i> , 2017, 95, 026602.	2.1	4
89	Reply to "Comment on "Spreading widths of giant resonances in spherical nuclei: Damped transient response" ". <i>Physical Review C</i> , 2018, 97, .	2.9	4
90	From Chaos to Order in Mesoscopic Systems. <i>Physics of Particles and Nuclei Letters</i> , 2019, 16, 159-169.	0.4	4

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91	Spin transport in a rippled graphene periodic chain. Journal of Physics: Conference Series, 2019, 1416, 012035.	0.4	4
92	On Electron Scattering through a Single Corrugated Graphene Structure. Physics of Particles and Nuclei Letters, 2019, 16, 729-733.	0.4	4
93	Effect of contact barrier heights on the power conversion efficiency of a perovskite photovoltaic element. Mendeleev Communications, 2021, 31, 459-461.	1.6	4
94	Two-phase model of rotating nuclei. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1978, 73, 271-273.	4.1	3
95	Shell structures and chaos in nuclei and large metallic clusters. Physica Scripta, 1995, T56, 182-191.	2.5	3
96	On electromagnetic properties of rotating nuclei in crpa. European Physical Journal D, 1998, 48, 21-28.	0.4	3
97	Instabilities, nonhermiticity and exceptional points in the cranking model. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 9475-9481.	2.1	3
98	Reflection symmetry instability at high spins in $^{162,164}\text{Yb}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 657, 159-164.	4.1	3
99	Microscopic analysis of wobbling excitations in ^{156}Dy and ^{162}Yb . Journal of Experimental and Theoretical Physics, 2007, 105, 962-981.	0.9	3
100	MAGNETO-ABSORPTION IN ELLIPSOIDAL QUANTUM DOT. International Journal of Modern Physics Conference Series, 2012, 15, 40-47.	0.7	3
101	A geometrical crossover in excited states of two-electron quantum dots in a magnetic field. Journal of Physics: Conference Series, 2012, 393, 012009.	0.4	3
102	Quantum entanglement in a two-electron quantum dot in magnetic field. Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), 2012, 112, 319-322.	0.6	3
103	Entanglement as an indicator of a geometrical crossover in a two-electron quantum dot in a magnetic field. JETP Letters, 2013, 97, 199-204.	1.4	3
104	On Symmetry Properties of The Corrugated Graphene System. Symmetry, 2020, 12, 533.	2.2	3
105	Strength-function algorithm for stationary problems. Theoretical and Mathematical Physics(Russian) Tj ETQq1 1 0.784314 rgBT / Overlo	0.9	2
106	Quantum phase transitions and backbending in even-even $N \hat{=} 90$ nuclei. JETP Letters, 2006, 83, 187-191.	1.4	2
107	Wobbling excitations at high spins in $^{162,164}\text{Yb}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 657, 159-164.	4.1	2
108	Central nucleus-nucleus collisions at relativistic energies with a new method based on Random Matrix Theory. Chinese Physics C, 2010, 34, 1076-1081.	3.7	2

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109	The general relativity with conformal units. <i>Physics of Particles and Nuclei</i> , 2012, 43, 682-688.	0.7	2
110	Orbital entanglement in an exactly solvable two-electron quantum dot model. <i>Journal of Physics: Conference Series</i> , 2012, 343, 012023.	0.4	2
111	Effects of plasmonic resonances and transparency of nanoshells for optical filtering. <i>JETP Letters</i> , 2012, 95, 122-126.	1.4	2
112	Application of extsf {KANTBP} Program of Finite Element Method in the Coupled-channels Calculations for Heavy-ion Fusion Reactions. <i>Acta Physica Polonica B, Proceedings Supplement</i> , 2020, 13, 549.	0.1	2
113	Hybrid model for the damped transient response of giant dipole resonances. <i>Physical Review C</i> , 2021, 104, .	2.9	2
114	Classical conformal blocks, Coulomb gas integrals and Richardson-Gaudin models. <i>Journal of High Energy Physics</i> , 2022, 2022, 1.	4.7	2
115	Spin Interference Effects in a Ring with Rashba Spin-Orbit Interaction Subject to Strong Light-Matter Coupling in Magnetic Field. <i>Symmetry</i> , 2022, 14, 1194.	2.2	2
116	Interplay between symmetries and residual interactions in rotating nuclei. <i>European Physical Journal D</i> , 1990, 40, 864-874.	0.4	1
117	A simple model of a rapidly rotating hot nucleus. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1990, 238, 131-136.	4.1	1
118	Quantum correlations in rotating nuclei. <i>Physics of Atomic Nuclei</i> , 2001, 64, 1076-1080.	0.4	1
119	Collective excitations and a backbending phenomenon in ^{156}Dy . <i>Physics of Atomic Nuclei</i> , 2004, 67, 1650-1655.	0.4	1
120	Octupole excitations at high spins in $A \approx 160$ nuclei. <i>Physics of Atomic Nuclei</i> , 2007, 70, 1386-1391.	0.4	1
121	An orbital entanglement in two-electron quantum dots in a magnetic field. <i>Journal of Physics: Conference Series</i> , 2010, 248, 012021.	0.4	1
122	Universe as a representation of affine and conformal symmetries. <i>Physics of Particles and Nuclei Letters</i> , 2011, 8, 187-201.	0.4	1
123	Narrow optical band-pass filters and nanoplasmonics. <i>Journal of Physics: Conference Series</i> , 2012, 393, 012007.	0.4	1
124	Interplay between electromagnetically induced transparency and Autler-Townes effect in fivelevel atomic systems. <i>EPJ Web of Conferences</i> , 2019, 204, 03013.	0.3	1
125	Kramers Degeneracy and Spin Inversion in a Lateral Quantum Dot. <i>Symmetry</i> , 2020, 12, 2043.	2.2	1
126	Inertial parameters of nuclear rotation in microscopic theory. <i>Soviet Physics Journal (English)</i> Tj ETQq0 0 0 rgBT /Overlock 10 Jf 50 62 To	0.0	0

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127	VARIATIONAL DESCRIPTION OF THE ROTATING NUCLEI. International Journal of Modern Physics E, 1994, 03, 183-193.	1.0	0
128	Representation of the three-dimensional rotation operator in the anisotropic Gaussian basis. Journal of Physics A, 1997, 30, 1253-1257.	1.6	0
129	Shell phenomena in mesoscopic systems: From nuclei to quantum dots. European Physical Journal D, 1998, 48, 853-857.	0.4	0
130	Electromagnetic modes in deformed nuclei. European Physical Journal D, 1999, 49, 253-258.	0.4	0
131	The microscopic analysis of signature inversion in odd-odd nuclei. AIP Conference Proceedings, 2000, , .	0.4	0
132	COLLECTIVE MODES IN FAST ROTATING NUCLEI. , 2005, , .		0
133	Dimensionality effects in vertical two-electron quantum dots in a perpendicular magnetic field. Journal of Physics: Conference Series, 2008, 129, 012014.	0.4	0
134	Quantum phase transitions in rotating nuclei. , 2009, , .		0
135	SYMMETRY BREAKING PHENOMENA IN MESOSCOPIC SYSTEMS: QUANTUM DOTS AND ROTATING NUCLEI. International Journal of Modern Physics E, 2009, 18, 1014-1021.	1.0	0
136	Applying a new method for analyzing experimental data on nuclear reactions at high energies. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 1089-1092.	0.6	0
137	Geometrical crossover in two-body systems in a magnetic field. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 325304.	2.1	0
138	Shape transitions in two-body systems in a magnetic field: a classical limit. Physics of Atomic Nuclei, 2014, 77, 362-369.	0.4	0
139	Ground state configurations of charged particles in a disk at zero temperature. Journal of Physics: Conference Series, 2014, 563, 012007.	0.4	0
140	100 years of general relativity: From equations to symmetry principles. , 2016, , .		0
141	Von Neumann's quantization of general relativity. Physics of Atomic Nuclei, 2017, 80, 491-504.	0.4	0
142	Two-phonon structures for beta-decay theory. EPJ Web of Conferences, 2018, 194, 02008.	0.3	0
143	Effect of the magnetic field on electron density distributions in two-electron quantum dots. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 435303.	2.1	0
144	Cyclic symmetry and self-organization of charged particles in circular geometry. Journal of Physics: Conference Series, 2019, 1194, 012079.	0.4	0

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145	On Statistical Properties of the Gamow-Teller Strength Distribution in ${}^{60}\text{Ca}$. Physics of Atomic Nuclei, 2020, 83, 171-178.	0.4	0
146	SELF-CONSISTENT HARMONIC OSCILLATOR MODEL AND TILTED ROTATION. , 2003, , .		0
147	Solar and Heat Pump Systems, Analysis of Several Cases in Russia. , 2016, , .		0
148	Study of Photovoltaics and Solar Thermal for Nearly Zero Energy Mediterranean Villas. , 2017, , .		0