Nikolay Minkov

List of Publications by Year
in descending order

89 papers	**1,456** citations	361413 **20** h-index	345221 **36** g-index
90 all docs	**90** docs citations	**90** times ranked	**513** citing authors

#	Article	IF	Citations
1	A study of some aspects of the nuclear structure in the even–even Yb isotopes. European Physical Journal Plus, 2022, 137, 1.	2.6	4
2	Microscopic origin of shape coexistence in the N=90, Z=64 region. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 829, 137099.	4.1	7
3	K-isomeric states in well-deformed heavy even-even nuclei. Physical Review C, 2022, 105, .	2.9	5
4	Nuclear coherent population transfer to the ^{229m}Th isomer using x-ray pulses. Physical Review C, 2022, 105, .	2.9	4
5	^{229m}Th isomer from a nuclear model perspective. Physical Review C, 2021, 103, .	2.9	15
6	The islands of shape coexistence within the Elliott and the proxy-SU(3) Models. European Physical Journal A, 2021, 57, 1.	2.5	27
7	Why nuclear forces favor the highest weight irreducible representations of the fermionic SU(3) symmetry. European Physical Journal A, 2021, 57, 1.	2.5	11
8	Energy differences of ground state and $\beta 1$ bands as a hallmark of collective behavior. Nuclear Physics A, 2021, 1009, 122158.	1.5	2
9	Mass Measurements of Neutron-Deficient Yb Isotopes and Nuclear Structure at the Extreme Proton-Rich Side of the $N=82$ Shell. Physical Review Letters, 2021, 127, 112501.	7.8	18
10	Shape and electromagnetic properties of the 229mTh isomer. EPJ Web of Conferences, 2021, 252, 02003.	0.3	0
11	Connecting the proxy-SU(3) symmetry to the shell model. EPJ Web of Conferences, 2021, 252, 02004.	0.3	4
12	Parameter-free predictions for the collective deformation variables $\beta 2$ and $\beta 3$ within the pseudo-SU(3) scheme. European Physical Journal: Special Topics, 2020, 229, 2367-2387.	2.6	11
13	Signatures of enhanced octupole correlations at high spin in Nd136. Physical Review C, 2020, 102, .	2.9	4
14	Vibrational-rotational spectra of even–even nuclei with quadrupole and octupole deformations. International Journal of Modern Physics E, 2020, 29, 2050031.	1.0	1
15	Proxy-SU(3) symmetry in the shell model basis. European Physical Journal A, 2020, 56, 1.	2.5	20
16	Pear-shape Effects in $(^{130-136})$Nd Isotopes. Acta Physica Polonica B, Proceedings Supplement, 2020, 13, 443.	0.1	0
17	Theoretical Predictions for the Magnetic Dipole Moment of ^{229m}Th. Physical Review Letters, 2019, 122, 162502.	7.8	24
18	The Magnetic Moment as a Constraint in Determining the ^{229m}Th Isomer Decay Rates. Acta Physica Polonica B, Proceedings Supplement, 2019, 12, 629.	0.1	1

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19	Electric quadrupole channel of the 7.8 eV Th229 transition. Physical Review C, 2018, 97, .	2.9	17
20	Effects of the shape and Coriolis interaction in nuclear electromagnetic properties. EPJ Web of Conferences, 2018, 194, 01005.	0.3	1
21	B(E1)- and B(E2)-transition probabilities in alternating–parity spectra of lanthanide and actinide nuclei. International Journal of Modern Physics E, 2018, 27, 1850069.	1.0	1
22	Proxy-SU(3) symmetry in heavy deformed nuclei. Physical Review C, 2017, 95, .	2.9	38
23	Analytic predictions for nuclear shapes, prolate dominance, and the prolate-oblate shape transition in the proxy-SU(3) model. Physical Review C, 2017, 95, .	2.9	38
24	Reduced Transition Probabilities for the Gamma Decay of the 7.8 eV Isomer in ^{229}Th. Physical Review Letters, 2017, 118, 212501.	7.8	66
25	Octupole deformations in high-Kisomeric states of heavy and superheavy nuclei. EPJ Web of Conferences, 2016, 107, 03008.	0.3	1
26	Application of the triaxial quadrupole–octupole rotor to the ground and negative-parity levels of actinide nuclei. International Journal of Modern Physics E, 2016, 25, 1650022.	1.0	4
27	Octupole deformation in light actinides within an analytic quadrupole octupole axially symmetric model with a Davidson potential. Physical Review C, 2015, 91, .	2.9	20
28	Effect of core polarization on magnetic dipole moments in deformed odd-mass nuclei. Physical Review C, 2015, 91, .	2.9	18
29	Bohr Hamiltonian with deformation-dependent mass. Journal of Physics: Conference Series, 2015, 590, 012004.	0.4	0
30	Bohr Hamiltonian with a deformation-dependent mass term: physical meaning of the free parameter. Journal of Physics G: Nuclear and Particle Physics, 2015, 42, 095104.	3.6	20
31	Complete Solution of Nuclear Quadrupole–Octupole Model in Two Dimensions. Acta Physica Polonica B, Proceedings Supplement, 2015, 8, 619.	0.1	0
32	Influence of the octupole mode on nuclear high-K isomeric properties. Physica Scripta, 2014, 89, 054021.	2.5	8
33	Submicrosecond isomer in $^{117}_{45}\text{Rh}_{72}$ and the role of triaxiality in its electromagnetic decay rate. Physical Review C, 2013, 88, .	2.9	11
34	A model for quasi-parity-doublet spectra in odd-mass nuclei. Physica Scripta, 2013, T154, 014017.	2.5	10
35	Non-yrast spectra of odd-A nuclei in a model of coherent quadrupole-octupole motion. Physical Review C, 2013, 88, .	2.9	8
36	Bohr Hamiltonian with a deformation-dependent mass term for the Kratzer potential. Physical Review C, 2013, 88, .	2.9	89

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37	Non-yrast nuclear spectra in a model of coherent quadrupole-octupole motion. Physical Review C, 2012, 85, .	2.9	42
38	NUCLEAR ALTERNATING-PARITY BANDS AND TRANSITION RATES IN A MODEL OF COHERENT QUADRUPOLEâ€"OCTUPOLE MOTION. International Journal of Modern Physics E, 2012, 21, 1250021.	1.0	1
39	COLLECTIVE EXCITED STATES IN EVENâ€"EVEN NUCLEI WITH QUADRUPOLE AND OCTUPOLE DEFORMATIONS. International Journal of Modern Physics E, 2012, 21, 1250044.	1.0	12
40	Non-yrast quadrupole-octupole spectra. EPJ Web of Conferences, 2012, 38, 12001.	0.3	1
41	Fixing the moment of inertia in the Bohr Hamiltonian through Supersymmetric Quantum Mechanics. Journal of Physics: Conference Series, 2012, 366, 012017.	0.4	0
42	Magnetic moments of K isomers as indicators of octupole collectivity. European Physical Journal A, 2012, 48, 1.	2.5	8
43	Bohr Hamiltonian with a deformation-dependent mass term for the Davidson potential. Physical Review C, 2011, 83, .	2.9	92
44	EFFECTS OF CORE POLARIZATION AND PAIRING CORRELATIONS ON SOME GROUND-STATE PROPERTIES OF DEFORMED ODD-MASS NUCLEI WITHIN THE HIGHER TAMMâ€"DANCOFF APPROACH. International Journal of Modern Physics E, 2011, 20, 252-258.	1.0	10
45	PARITY EFFECTS IN NUCLEAR COLLECTIVE AND SINGLE PARTICLE MOTION. International Journal of Modern Physics E, 2011, 20, 228-234.	1.0	1
46	Parity mixing in the single particle states of quadrupole-octupole deformed nuclei. Journal of Physics: Conference Series, 2010, 205, 012009.	0.4	0
47	Bohr Hamiltonian with deformation-dependent mass term. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 683, 264-271.	4.1	33
48	High-K isomers as probes of octupole collectivity in heavy nuclei. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 694, 119-122.	4.1	20
49	Coriolis interaction in nuclear single-particle states with mixed parity. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 025103.	3.6	11
50	Time-odd effects and the spectroscopic properties of odd-mass fission fragments. , 2009, , .		0
51	Coriolis interaction in quadrupoleâ€"octupole deformed nuclei. Journal of Physics G: Nuclear and Particle Physics, 2009, 36, 025108.	3.6	9
52	Octupole collectivity inMo98,100,102. Physical Review C, 2007, 75, .	2.9	22
53	Intrinsic origin of the high order angular momentum terms in a nuclear rotation Hamiltonian. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, 299-313.	3.6	1
54	Exactly separable version of the Bohr Hamiltonian with the Davidson potential. Physical Review C, 2007, 76, .	2.9	83

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55	Coherent quadrupole-octupole modes and split parity-doublet spectra in odd-A nuclei. Physical Review C, 2007, 76, .	2.9	24
56	Collective states of odd nuclei in a model with quadrupole-octupole degrees of freedom. Physics of Atomic Nuclei, 2007, 70, 1470-1475.	0.4	1
57	Shape Phase Transition from Octupole Deformation to Octupole Vibrations: The Analytic Quadrupole Octupole Axially Symmetric Model. AIP Conference Proceedings, 2006, , .	0.4	0
58	Coupling of nuclear quadrupole and octupole degrees of freedom in an angular momentum dependent potential of two deformation variables. AIP Conference Proceedings, 2006, , .	0.4	0
59	Parity shift and beat staggering structure of octupole bands in a collective model for quadrupole–octupole-deformed nuclei. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, 497-509.	3.6	31
60	Nuclear collective motion with a coherent coupling interaction between quadrupole and octupole modes. Physical Review C, 2006, 73, .	2.9	50
61	ANALYTIC DESCRIPTION OF THE SHAPE PHASE TRANSITION FROM OCTUPOLE DEFORMATION TO OCTUPOLE VIBRATIONS. , 2006, , .		0
62	Inversion of parity splitting in alternating parity bands at high angular momenta. Physical Review C, 2005, 72, .	2.9	20
63	Analytic description of critical-point actinides in a transition from octupole deformation to octupole vibrations. Physical Review C, 2005, 71, .	2.9	59
64	Evolution of collectivity in a ground–γ-band mixing scheme for even–even transitional nuclei. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, 427-444.	3.6	11
65	Sequence of potentials lying between the U(5) and X(5) symmetries. Physical Review C, 2004, 69, .	2.9	70
66	E(5) and X(5) critical point symmetries obtained from Davidson potentials through a variational procedure. Physical Review C, 2004, 70, .	2.9	42
67	Complex shape effects in nuclear rotational spectra. Physics of Atomic Nuclei, 2004, 67, 1760-1765.	0.4	2
68	Extended E(5) and X(5) symmetries: Series of models providing parameter-independent predictions. Physics of Atomic Nuclei, 2004, 67, 1767-1775.	0.4	2
69	Ground state bands of the E(5) and X(5) critical symmetries obtained from Davidson potentials through a variational procedure. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 584, 40-47.	4.1	75
70	Sequence of potentials interpolating between the U(5) and E(5) symmetries. Physical Review C, 2004, 69, .	2.9	67
71	Relativistic mean field theory with the pion for finite nuclei. Nuclear Physics A, 2003, 722, C360-C365.	1.5	0
72	Staggering Behavior of the First Excited 2+States of Even-Even Nuclei in aSp(4,R) Classification Scheme. Progress of Theoretical Physics Supplement, 2002, 146, 555-556.	0.1	0

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73	Quadrupole-Octupole Collectivity and Fine Structure of Nuclear Rotational Spectra. Progress of Theoretical Physics Supplement, 2002, 146, 597-598.	0.1	4
74	Staggering behavior of the low-lying excited states of even-even nuclei in aSp(4,R)classification scheme. Physical Review C, 2002, 65, .	2.9	3
75	Rotations of nuclei with reflection asymmetry correlations. Physics of Atomic Nuclei, 2001, 64, 1098-1104.	0.4	0
76	"Beat"patterns for the odd-even staggering in octupole bands from a quadrupole-octupole Hamiltonian. Physical Review C, 2001, 63, .	2.9	13
77	FINE STRUCTURE OF ROTATIONAL BANDS AND QUADRUPOLE–OCTUPOLE COLLECTIVITY IN HEAVY NUCLEI. , 2001, , .		0
78	SYMMETRIES AND STAGGERING EFFECTS IN NUCLEAR ROTATIONAL SPECTRA. , 2001, , .		0
79	Ground∼γband mixing and odd-even staggering in heavy deformed nuclei. Physical Review C, 2000, 61, .	2.9	19
80	ΔI=1staggering in octupole bands of light actinides: "Beat"patterns. Physical Review C, 2000, 62, .	2.9	41
81	Ground-γband coupling in heavy deformed nuclei and SU(3) contraction limit. Physical Review C, 1999, 60, .	2.9	12
82	ΔI=2staggering in rotational bands of diatomic molecules as a manifestation of interband interactions. Physical Review A, 1999, 60, 253-261.	2.5	9
83	Broken SU(3) symmetry in deformed even-even nuclei. Physical Review C, 1997, 55, 2345-2360.	2.9	16
84	ΔI=4andΔI=8bifurcations in rotational bands of diatomic molecules. Physical Review A, 1996, 54, R2533-R2536.	2.5	18
85	The rotator model in excited collective bands of even deformed nuclei. Journal of Physics G: Nuclear and Particle Physics, 1996, 22, 1633-1641.	3.6	1
86	Nuclear deformation in the SUq(2) rotor model. Journal of Physics G: Nuclear and Particle Physics, 1995, 21, 557-563.	3.6	2
87	Shell correlations in the SUq(2) rotor model. Journal of Physics G: Nuclear and Particle Physics, 1994, 20, L67-L72.	3.6	5
88	Magic numbers for shape coexistence. HNPS Advances in Nuclear Physics, 0, 26, 9.	0.0	1
89	Nucleon numbers for nuclei with shape coexistence. HNPS Advances in Nuclear Physics, 0, 26, 96.	0.0	4