

# Leszek Prochniak

## List of Publications by Year in descending order

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58  
papers

1,025  
citations

516710

16  
h-index

414414

32  
g-index

59  
all docs

59  
docs citations

59  
times ranked

591  
citing authors

#	ARTICLE	IF	CITATIONS
1	Beyond the relativistic mean-field approximation. III. Collective Hamiltonian in five dimensions. <i>Physical Review C</i> , 2009, 79, .	2.9	162
2	Quadrupole collective states within the Bohr collective Hamiltonian. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2009, 36, 123101.	3.6	105
3	A self-consistent approach to the quadrupole dynamics of medium heavy nuclei. <i>Nuclear Physics A</i> , 2004, 730, 59-79.	1.5	69
4	Collective quadrupole excitations in the $50 < Z, N < 82$ nuclei with the general Bohr Hamiltonian. <i>Nuclear Physics A</i> , 1999, 648, 181-202.	1.5	67
5	Experimental and theoretical investigations of quadrupole collective degrees of freedom in $^{104}\text{Ru}$ . <i>Nuclear Physics A</i> , 2006, 766, 25-51.	1.5	67
6	Electromagnetic properties of $^{100}\text{Mo}$ : Experimental results and theoretical description of quadrupole degrees of freedom. <i>Physical Review C</i> , 2012, 86, .	2.9	60
7	Development of axial asymmetry in the neutron-rich nucleus $^{110}\text{Mo}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2011, 704, 270-275.	4.1	43
8	Chiral bands in odd-odd nuclei with rigid or soft cores. <i>European Physical Journal A</i> , 2009, 42, 79.	2.5	41
9	Superdeformed and Triaxial States in $^{42}\text{Ca}$ . <i>Physical Review Letters</i> , 2016, 117, 062501.	7.8	39
10	The low-lying quadrupole collective excitations of Ru and Pd isotopes. <i>Nuclear Physics A</i> , 1999, 653, 71-87.	1.5	32
11	Low-spin structure of $^{113}\text{Ru}$ and $^{113}\text{Rh}$ . <i>European Physical Journal A</i> , 2007, 33, 307-316.	2.5	25
12	Deformation and mixing of coexisting shapes in neutron-deficient polonium isotopes. <i>Physical Review C</i> , 2015, 92, .	2.9	25
13	Quadrupole collectivity in $^{42}\text{Ca}$ from low-energy Coulomb excitation with $^{130}\text{Xe}$ . <i>Physical Review C</i> , 2019, 80, .	2.9	22
14	Quadrupole deformation of $^{130}\text{Xe}$ measured in a Coulomb excitation experiment. <i>Physical Review C</i> , 2020, 102, .	2.9	22
15	First Measurement of the $^{130}\text{Xe}$ Factor in the Chiral Band: The Case of the $^{130}\text{Xe}$ in $^{130}\text{Xe}$ . <i>Physical Review C</i> , 2020, 102, .	2.9	20
16	Chiral Bands in $^{128}\text{Cs}$ . <i>Physical Review Letters</i> , 2017, 118, 082501.	2.9	19
17	Description of $^{111}\text{Ru}$ within the Core-Quasiparticle Coupling model. <i>European Physical Journal A</i> , 2004, 22, 179-188.	2.5	13
18	MICROSCOPIC STUDY OF COLLECTIVE STATES OF EVEN-EVEN MOLYBDENUM ISOTOPES. <i>International Journal of Modern Physics E</i> , 2010, 19, 705-712.	1.0	13

#	ARTICLE	IF	CITATIONS
19	Electromagnetic properties of low-lying states in neutron-deficient Hg isotopes: Coulomb excitation of $^{182}\text{Hg}$ , $^{184}\text{Hg}$ , $^{186}\text{Hg}$ and $^{188}\text{Hg}$ . <i>European Physical Journal A</i> , 2019, 55, 1.	2.5	13
20	Solution of universal nonrelativistic nuclear DFT equations in the Cartesian deformed harmonic-oscillator basis. (IX) HFODD (v3.06h): a new version of the program. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2021, 48, 102001.	3.6	13
21	Decay study of $^{114}\text{Tc}$ with a Penning trap. <i>Physical Review C</i> , 2011, 83, .	2.9	12
22	COLLECTIVE PROPERTIES OF STABLE EVEN-EVEN Cd ISOTOPES. <i>International Journal of Modern Physics E</i> , 2012, 21, 1250036.	1.0	12
23	THE RELATIVISTIC MEAN FIELD THEORY AND LOW ENERGY QUADRUPOLE COLLECTIVE EXCITATIONS. <i>International Journal of Modern Physics E</i> , 2004, 13, 217-224.	1.0	11
24	Odd-odd nuclei as the core-particle-hole systems and chirality. <i>European Physical Journal A</i> , 2011, 47, 1.	2.5	11
25	COLLECTIVE PAIRING HAMILTONIAN IN A SELF-CONSISTENT APPROACH. <i>International Journal of Modern Physics E</i> , 2007, 16, 352-359.	1.0	10
26	SHAPE EVOLUTION IN HEAVIEST STABLE EVEN-EVEN MOLYBDENUM ISOTOPES STUDIED VIA COULOMB EXCITATION. <i>International Journal of Modern Physics E</i> , 2011, 20, 443-450.	1.0	8
27	Microscopic description of collective properties of even-even Xe isotopes. <i>Physica Scripta</i> , 2015, 90, 114005.	2.5	8
28	Electromagnetic Properties of Chiral Bands in $^{124}\text{Cs}$ . <i>Acta Physica Polonica B</i> , 2015, 46, 689.	0.8	8
29	QUADRUPOLE COLLECTIVE HAMILTONIAN WITH PAIRING VARIABLES INCLUDED. <i>International Journal of Modern Physics E</i> , 2005, 14, 463-469.	1.0	7
30	COLLECTIVE EXCITATIONS OF TRANSACTINIDE NUCLEI IN A SELF-CONSISTENT MEAN FIELD THEORY. <i>International Journal of Modern Physics E</i> , 2008, 17, 160-167.	1.0	7
31	COMPARISON OF SELF-CONSISTENT SKYRME AND GOGNY CALCULATIONS FOR LIGHT Hg ISOTOPES. <i>International Journal of Modern Physics E</i> , 2010, 19, 787-793.	1.0	6
32	Quadrupole Deformation of $^{110}\text{Cd}$ Studied with Coulomb Excitation. <i>Acta Physica Polonica B</i> , 2020, 51, 789.	0.8	6
33	COLLECTIVE QUADRUPOLE EXCITATIONS WITHIN A SELF-CONSISTENT APPROACH. <i>International Journal of Modern Physics E</i> , 2006, 15, 379-386.	1.0	5
34	COLLECTIVE STATES IN LIGHT Kr ISOTOPES. <i>International Journal of Modern Physics E</i> , 2009, 18, 1044-1048.	1.0	5
35	Title is missing!. <i>Acta Physica Polonica B</i> , 2011, 42, 465.	0.8	5
36	Lifetime of the recently identified isomeric state at 3279 keV in the $^{136}\text{Nd}$ nucleus. <i>Physical Review C</i> , 2019, 100, .	2.9	5

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37	Search for supersymmetry in light nuclei. Nuclear Physics A, 1988, 487, 301-318.	1.5	4
38	SIGNATURES OF CHIRALITY IN THE CORE-PARTICLE-HOLE SYSTEMS. International Journal of Modern Physics E, 2011, 20, 364-372.	1.0	4
39	Binding energy of the sd shell nuclei in the supersymmetric model. Journal of Physics G: Nuclear and Particle Physics, 1997, 23, 705-715.	3.6	3
40	Collective Quadrupole Excitations in Transitional Nuclei. Physica Scripta, 2000, T88, 111.	2.5	3
41	Evidence of Rotational Behaviour in $^{120}\text{Te}$ Isotope. Acta Physica Polonica B, 2018, 49, 541.	0.8	3
42	Collective states of transitional nuclei. Physics of Atomic Nuclei, 2001, 64, 1005-1010.	0.4	2
43	Superdeformed Oblate Superheavy Nuclei in the Self-consistent Approach. Acta Physica Polonica B, 2013, 44, 287.	0.8	2
44	Supersymmetry and electromagnetic E2 transitions. Zeitschrift für Physik A, Atomic Nuclei, 1990, 335, 289-292.	0.3	1
45	Quadrupole collective dynamics of medium-“heavy even” even nuclei within the highly truncated diagonalization approach. Physica Scripta, 2014, 89, 054025.	2.5	1
46	Decay of the $\pi=8^+$ isomeric state in $\text{Nd}134$ and $\text{Pt}184$ studied by electron and $\hat{I}^3$ spectroscopy. Physical Review C, 2017, 95, .	2.9	1
47	Study of Octupole Collectivity in $^{146}\text{Nd}$ and $^{148}\text{Sm}$ Using the New Coulomb Excitation Set-up at ALTO. Acta Physica Polonica B, 2016, 47, 923.	0.8	1
48	Deformation in $^{120}\text{Te}$ Described Experimentally by Quadrupole Invariants. Acta Physica Polonica B, 2019, 50, 417.	0.8	1
49	Covariant density functional theory with spectroscopic properties and a microscopic theory of quantum phase transitions in nuclei. Journal of Physics: Conference Series, 2011, 267, 012043.	0.4	0
50	Low-spin levels in $\text{Sm}140$ : Five $0^+$ states and the question of softness against nonaxial deformation. Physical Review C, 2021, 104, .	2.9	0
51	Application of the Supersymmetric Model to Exotic Oxygen Nuclei. , 1997, , 325-330.		0
52	Pairing and Deformed Pairing Interaction for System of Protons and Neutrons. , 1998, , 401-409.		0
53	Nuclear Structure Study of $^{104}\text{Pd}$ by Coulomb Excitation at the Warsaw Heavy Ion Laboratory. Acta Physica Polonica B, 2016, 47, 917.	0.8	0
54	On the Collective Octupole Degrees of Freedom. Acta Physica Polonica B, Proceedings Supplement, 2017, 10, 191.	0.1	0

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55	Question of $\gamma$ -softness of a Core and Possible Wobbling in the Light of Rich Experimental Data on $^{119}\text{I}$ . Acta Physica Polonica B, Proceedings Supplement, 2018, 11, 157.	0.1	0
56	Electromagnetic Properties of $^{45}\text{Sc}$ Studied by Low-energy Coulomb Excitation. Acta Physica Polonica B, 2018, 49, 567.	0.8	0
57	Structure of Krypton Isotopes using the Generalised Bohr Hamiltonian Method. Journal of Physics: Conference Series, 2020, 1643, 012147.	0.4	0
58	On Collective Octupole Degrees of Freedom – Next Pieces of the Formal Background. Acta Physica Polonica B, Proceedings Supplement, 2020, 13, 481.	0.1	0