

Zhipan Li

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3980217/publications.pdf>

Version: 2024-02-01

72
papers

2,445
citations

218677

26
h-index

206112

48
g-index

72
all docs

72
docs citations

72
times ranked

826
citing authors

#	ARTICLE	IF	CITATIONS
1	New parametrization for the nuclear covariant energy density functional with a point-coupling interaction. Physical Review C, 2010, 82, .	2.9	463
2	Beyond the relativistic mean-field approximation. III. Collective Hamiltonian in five dimensions. Physical Review C, 2009, 79, .	2.9	162
3	Microscopic analysis of nuclear quantum phase transitions in the $N \approx 90$ region. Physical Review C, 2009, 79, .	2.9	145
4	Future of nuclear fission theory. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 113002.	3.6	105
5	Microscopic benchmark study of triaxiality in low-lying states of ^{76}Kr . Physical Review C, 2014, 89, .	2.9	85
6	Microscopic description of spherical to β^3 -soft shape transitions in Ba and Xe nuclei. Physical Review C, 2010, 81, .	2.9	76
7	Beyond relativistic mean-field studies of low-lying states in neutron-deficient krypton isotopes. Physical Review C, 2013, 87, .	2.9	67
8	Energy density functional analysis of shape evolution in $N = 28$ isotone. Physical Review C, 2011, 84, .	2.9	66
9	Microscopic study of induced fission dynamics of ^{226}Th with covariant energy density functionals. Physical Review C, 2017, 96, .	2.9	61
10	Nuclear mass table in deformed relativistic Hartree-Bogoliubov theory in continuum, I: Even-even nuclei. Atomic Data and Nuclear Data Tables, 2022, 144, 101488.	2.4	60
11	Microscopic analysis of order parameters in nuclear quantum phase transitions. Physical Review C, 2009, 80, .	2.9	56
12	Relativistic energy density functionals: Low-energy collective states of ^{240}Pu and ^{240}Er . Physical Review C, 2015, 91, .	2.9	55
13	Global study of beyond-mean-field correlation energies in covariant energy density functional theory using a collective Hamiltonian method. Physical Review C, 2015, 91, .	2.9	55
14	Rapid structural change in low-lying states of neutron-rich Sr and Zr isotopes. Physical Review C, 2012, 85, .	2.9	53
15	Global dynamical correlation energies in covariant density functional theory: Cranking approximation. Frontiers of Physics, 2014, 9, 529-536.	5.0	53
16	Deformed relativistic Hartree-Bogoliubov theory in continuum with a point-coupling functional: Examples of even-even Nd isotopes. Physical Review C, 2020, 102, .	2.9	53
17	Beyond relativistic mean-field approach for nuclear octupole excitations. Physical Review C, 2015, 92, .	2.9	48
18	Coexistence of nuclear shapes: self-consistent mean-field and beyond. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 024005.	3.6	46

#	ARTICLE	IF	CITATIONS
19	Spectroscopy of reflection-asymmetric nuclei with relativistic energy density functionals. Physical Review C, 2017, 96, .	2.9	40
20	Octupole degree of freedom for the critical-point candidate nucleus ^{152}Sm in a reflection-asymmetric relativistic mean-field approach. Physical Review C, 2010, 81, .	2.9	38
21	Single-particle resonances in a deformed Dirac equation. Physical Review C, 2010, 81, .	2.9	33
22	Studies of chirality in the mass 80, 100 and 190 regions. International Journal of Modern Physics E, 2014, 23, 1461001.	1.0	30
23	Low-energy structure and anti-bubble effect of dynamical correlations in ^{46}Ar . Physical Review C, 2014, 89, .	2.9	30
24	Spectroscopies of rod- and pear-shaped nuclei in covariant density functional theory. International Journal of Modern Physics E, 2018, 27, 1830007.	1.0	30
25	Effect of time-odd mean fields on inertial parameters of the quadrupole collective Hamiltonian. Physical Review C, 2012, 85, .	2.9	28
26	Nuclear quantum shape-phase transitions in odd-mass systems. Physical Review C, 2018, 97, .	2.9	28
27	Triaxially deformed relativistic point-coupling model for hypernuclei: A quantitative analysis of the hyperon impurity effect on nuclear collective properties. Physical Review C, 2015, 91, .	2.9	26
28	Nuclear landscape in a mapped collective Hamiltonian from covariant density functional theory. Physical Review C, 2021, 104, .	2.9	26
29	Efficient method for computing the Thouless-Valatin inertia parameters. Physical Review C, 2012, 86, .	2.9	24
30	Novel triaxial structure in low-lying states of neutron-rich nuclei around ^{100}Zr . Physical Review C, 2016, 93, .	2.9	23
31	Green's function method for the single-particle resonances in a deformed Dirac equation. Physical Review C, 2020, 101, .	2.9	23
32	Global analysis of quadrupole shape invariants based on covariant energy density functionals. Physical Review C, 2017, 95, .	2.9	22
33	Superheavy nuclei in a microscopic collective Hamiltonian approach: The impact of beyond-mean-field correlations on ground state and fission properties. Physical Review C, 2019, 99, .	2.9	22
34	Microscopic description of quantum shape fluctuation in C isotopes. Physical Review C, 2011, 84, .	2.9	21
35	Analytical continuation from bound to resonant states in the Dirac equation with quadrupole-deformed potentials. Physical Review C, 2015, 92, .	2.9	20
36	Covariant density functional analysis of shape evolution in $N=40$ isotones. Journal of Physics G: Nuclear and Particle Physics, 2015, 42, 045108.	3.6	19

#	ARTICLE	IF	CITATIONS
37	Possible bound nuclei beyond the two-neutron drip line in the $Z < N < 50$ region. Physical Review C, 2021, 104, .	2.9	17
38	Effect of pairing correlations on nuclear low-energy structure: BCS and general Bogoliubov transformation. Physical Review C, 2013, 88, .	2.9	17
39	Microscopic analysis of prolate-oblate shape phase transition and shape coexistence in the Er-Pt region. Physical Review C, 2021, 103, .	2.9	17
40	A novel method for stellar electron-capture rates of excited nuclear states. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 805, 135432.	4.1	16
41	Description of β -decay chains for $^{293,294}117$ within covariant density functional theory. Physical Review C, 2013, 88, .	2.9	15
42	Microscopic core-quasiparticle coupling model for spectroscopy of odd-mass nuclei. Physical Review C, 2017, 96, .	2.9	15
43	Shape evolution and coexistence in neutron-deficient Nd and Sm nuclei. Physical Review C, 2018, 98, .	2.9	15
44	Microscopic core-quasiparticle coupling model for spectroscopy of odd-mass nuclei with octupole correlations. Physical Review C, 2019, 100, .	2.9	14
45	Coupling of shape and pairing vibrations in a collective Hamiltonian based on nuclear energy density functionals. Physical Review C, 2020, 101, .	2.9	13
46	Single-particle resonances in a deformed relativistic potential. Science China: Physics, Mechanics and Astronomy, 2010, 53, 773-778.	5.1	12
47	Urca Cooling in Neutron Star Crusts and Oceans: Effects of Nuclear Excitations. Physical Review Letters, 2021, 127, 172702.	7.8	12
48	Microscopic analysis of spherical to β -soft shape transitions in Zn isotopes. Science China: Physics, Mechanics and Astronomy, 2011, 54, 222-226.	5.1	11
49	Microscopic description of triaxiality in Ru isotopes with covariant energy density functional theory. Physical Review C, 2018, 97, .	2.9	10
50	β^2 and β^3 bands in $N=88$, 90 , and 92 isotones investigated with a five-dimensional collective Hamiltonian based on covariant density functional theory: Vibrations, shape coexistence, and superdeformation. Physical Review C, 2019, 100, .	2.9	10
51	Pairing vibrations in the interacting boson model based on density functional theory. Physical Review C, 2020, 102, .	2.9	10
52	Energy-dependent Lorentz covariant parameterization of the NN interaction between 50 and 200 MeV. Physical Review C, 2008, 77, .	2.9	7
53	Single-particle resonant states with Green's function method *. Chinese Physics C, 2020, 44, 084105.	3.7	7
54	Description of ^{93}Nb stellar electron-capture rates by the projected shell model. Physical Review C, 2021, 104, .	2.9	6

#	ARTICLE	IF	CITATIONS
55	Validity of the relativistic impulse approximation for elastic proton-nucleus scattering at energies lower than 200 MeV. Physical Review C, 2008, 78, .	2.9	5
56	Comparison of the confined \hat{I}^2 -soft rotor model and a microscopic collective Hamiltonian based on the relativistic mean field model in $^{150, 152}\text{Nd}$. Journal of Physics G: Nuclear and Particle Physics, 2011, 38, 065102.	3.6	4
57	Coupling of pairing and triaxial shape vibrations in collective states of \hat{I}^3 -soft nuclei. Physical Review C, 2021, 103, .	2.9	4
58	Interplay between pairing and triaxial shape degrees of freedom in Os and Pt nuclei. Physical Review C, 2021, 104, .	2.9	4
59	Analysis of Nuclear Quantum Phase Transitions. , 2009, , .		3
60	Studies of positive-parity low-spin states in the $A = 150$ region. EPJ Web of Conferences, 2018, 178, 02012.	0.3	3
61	Refined description of the positive-parity bands and the extent of octupole correlations in ^{120}Ba . Physical Review C, 2022, 105, .	2.9	2
62	IMPURITY EFFECT OF \hat{I} HYPERON ON SHAPE-COEXISTENCE NUCLEUS ^{44}S IN THE ENERGY FUNCTIONAL BASED COLLECTIVE HAMILTONIAN. International Journal of Modern Physics E, 2012, 21, 1250024.	1.0	1
63	Mass and lifetime of unstable nuclei in covariant density functional theory. Physica Scripta, 2013, T154, 014010.	2.5	1
64	Octupole degree of freedom for nuclei near ^{152}Sm in a reflection-asymmetric relativistic mean-field approach. Journal of Physics: Conference Series, 2011, 312, 092066.	0.4	0
65	A new covariant density functional with point-coupling and its application. Journal of Physics: Conference Series, 2011, 321, 012016.	0.4	0
66	Energy density functional analysis of shape coexistence in ^{44}S . , 2012, , .		0
67	Covariant density functional theory and applications in nuclear physics and r-process. EPJ Web of Conferences, 2012, 38, 02001.	0.3	0
68	Energy density functional description of low-lying states in neutron-deficient Sn isotopes. Physica Scripta, 2013, T154, 014012.	2.5	0
69	Covariant density functional theory for exotic nuclei near the neutron drip-line. Journal of Physics: Conference Series, 2013, 413, 012005.	0.4	0
70	Studies of chirality in the MASS 80, 100 and 190 regions. , 2014, , .		0
71	COVARIANT DESCRIPTION OF THE LOW-LYING STATES IN NEUTRON-DEFICIENT ^{80}Kr ISOTOPES. , 2011, , .		0
72	BEYOND THE RELATIVISTIC MEAN-FIELD APPROXIMATION FOR LOW-LYING STATES: LIMITATION OF CURRENT IMPLEMENTATION. , 2013, , .		0