

# Chong Qi

## List of Publications by Year in descending order

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107  
papers

2,229  
citations

257450  
24  
h-index

243625  
44  
g-index

107  
all docs

107  
docs citations

107  
times ranked

1073  
citing authors

#	ARTICLE	IF	CITATIONS
1	Universal Decay Law in Charged-Particle Emission and Exotic Cluster Radioactivity. Physical Review Letters, 2009, 103, 072501.	7.8	286
2	Microscopic mechanism of charged-particle radioactivity and generalization of the Geiger-Nuttall law. Physical Review C, 2009, 80, .	2.9	173
3	Evidence for a spin-aligned neutron-proton paired phase from the level structure of $^{92}\text{Pd}$ . Nature, 2011, 469, 68-71. Signatures of the $\Delta Z \pm \Delta N$ shell closure in the $\Delta N = 2$ -decay process. Physical Review Letters, 2013, 110, 242502.	27.8	140
4	Recent developments in radioactive charged-particle emissions and related phenomena. Progress in Particle and Nuclear Physics, 2019, 105, 214-251.	7.8	93
5	Spin-aligned neutron-proton pair mode in atomic nuclei. Physical Review C, 2011, 84, .	2.9	75
6	Effects of formation properties in one-proton radioactivity. Physical Review C, 2012, 85, .	2.9	65
7	Monopole-optimized effective interaction for tin isotopes. Physical Review C, 2012, 86, .	2.9	64
8	New short-lived isotope $^{223}\text{Np}$ and the absence of the $Z=92$ subshell closure near $N=126$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 771, 303-308.	4.1	54
9	New $\Delta Z = \Delta N = 1$ shell closure in the $\Delta N = 1$ -decay process. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 734, 203-206.	7.8	47
10	On the validity of the Geiger-Nuttall alpha-decay law and its microscopic basis. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 734, 203-206.	4.1	45
11	Empirical pairing gaps, shell effects, and di-neutron spatial correlation in neutron-rich nuclei. Nuclear Physics A, 2015, 940, 210-226.	1.5	43
12	Transition probabilities near $Z=100$ and the stability of the $N=Z$ shell. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 734, 203-206.	2.9	39
13	Alpha decay as a probe for the structure of neutron-deficient nuclei. Reviews in Physics, 2016, 1, 77-89.	8.9	37
14	Partial conservation of seniority in the $\Delta Z = \Delta N = 1$ shell. Nuclear Physics A, 2011, 833, 219-232.	1.5	31
15	Density dependence of the pairing interaction and pairing correlation in unstable nuclei. Physical Review C, 2015, 91, .	2.9	32
16	Multistep shell model description of spin-aligned neutron-proton pair coupling. Nuclear Physics A, 2012, 877, 51-58.	1.5	30
17	Abrupt changes in the $\Delta Z = \Delta N = 1$ shell. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 81, .	2.9	30

#	ARTICLE	IF	CITATIONS
19	Mirror energy difference and the structure of loosely bound proton-rich nuclei around $A=20$ . Physical Review C, 2014, 89, .	2.9	20
20	Theoretical uncertainties of the Duflo-Zuker shell-model mass formulae. Journal of Physics G: Nuclear and Particle Physics, 2015, 42, 045104. Lifetime measurement of the first excited state	3.6	30
21	$\lambda = \frac{1}{2} \ln \left( \frac{m_{108}}{m_{110}} \right)$ . Physical Review C, 2011, 84, .	2.9	29
22	Exact solution of the pairing problem for spherical and deformed systems. Physical Review C, 2015, 92, .	2.9	26
23	$i>N</i>=<math>i>Z</i>nuclei: a laboratory for neutron-proton collective mode. Physica Scripta, 2016, 91, 013009.Lifetime Measurements of Excited States in$	2.5	26
24	$\lambda = \frac{1}{2} \ln \left( \frac{m_{172}}{m_{174}} \right)$ . and the Variation of Quadrupole Transition Strength with Angular Momentum. Physical Review Letters, 2010, 104, 062501.	7.8	24
25	$i>N</i>=<math>i>Z</i>nucleus and the Variation of Quadrupole Transition Strength with Angular Momentum. Physical Review Letters, 2020, 124, 062501.$	7.8	24
26	Extended universal decay law formula for the $\Lambda$ and cluster decays. Nuclear Physics A, 2021, 1013, 122221. Anomalous transition strength in the proton-unbound nucleus	1.5	24
27	$\lambda = \frac{1}{2} \ln \left( \frac{m_{56}}{m_{53}} \right)$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 704, 118-122.	4.1	22
28	Shell evolution and its indication on the isospin dependence of the spin-orbit splitting. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 724, 247-252.	4.1	22
29	Alternate proof of the Rowe-Rosensteel proposition and seniority conservation. Physical Review C, 2010, 82, .	2.9	21
30	Double binding energy differences: Mean-field or pairing effect?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 717, 436-440.	4.1	21
31	Global calculations of microscopic energies and nuclear deformations: Isospin dependence of the spin-orbit coupling. Physical Review C, 2015, 92, .	2.9	21
32	Systems in a single-nucleus model. Physical Review C, 2015, 91, .	2.9	20
33	$\lambda = \frac{1}{2} \ln \left( \frac{m_{112}}{m_{110}} \right)$ . Physical Review C, 2015, 91, .	2.9	20
34	Shell-model configuration-interaction description of quadrupole collectivity in Te isotopes. Physical Review C, 2016, 94, .	2.9	19
35	Shell evolution in neutron-rich carbon isotopes: Unexpected enhanced role of neutron-neutron correlation. Nuclear Physics A, 2012, 883, 25-34.	1.5	18
36	Character of particle-hole excitations in $\lambda = \frac{1}{2} \ln \left( \frac{m_{94}}{m_{92}} \right)$ . Ru deduced from $\lambda = \frac{1}{2} \ln \left( \frac{m_{112}}{m_{110}} \right)$ -ray angular correlation and linear polarization measurements. Physical Review C, 2014, 89, .	2.9	18

#	ARTICLE		IF	CITATIONS
37	Empirical residual neutron-proton interaction in odd-odd nuclei. Physical Review C, 2016, 93, .	2.9	18	
38	Magnetic moments of low-lying states in tin isotopes within the nucleon-pair approximation. Physical Review C, 2014, 89, .	2.9	17	
39	Large-scale shell-model calculations on the spectroscopy of $\text{mml:math}$ isotopes. Physical Review C, 2016, 94, .	2.9	17	
40	Partial conservation of seniority and its unexpected influence on E2 transitions in g 9/2 nuclei. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 773, 616-619.	4.1	15	
41	Generalized-seniority pattern and thermal properties in even Sn isotopes. Physical Review C, 2016, 94, .	2.9	14	
42	$\text{mml:math}$ decay half-life estimation and uncertainty analysis. Physical Review C, 2020, 101, .	2.9	14	
43	Shell-model study of spectroscopies and isospin structures in odd-odd $\text{mml:math}$ nuclei employing realistic NN interaction. Nuclear Physics A, 2008, 800, 47-62.	1.5	13	
44	Analytic proof of partial conservation of seniority in shells. Nuclear Physics A, 2012, 884-885, 21-35.	1.5	13	
45	Probing shape coexistence by $\text{mml:math}$ decays to $\text{mml:math}$ . Physical Review C, 2014, 90, .	2.9	13	
46	Isospin asymmetry effects in mirror nuclei with modern charge-dependent NN potential. Nuclear Physics A, 2008, 814, 48-65.	1.5	12	
47	Nucleon pair approximation description of the low-lying structure of $^{108,109}\text{Te}$ and $^{109}\text{I}$ . Physical Review C, 2013, 88, .	2.9	12	
48	Spectroscopic factor and proton formation probability for the d3/2 proton emitter $^{151}\text{Lu}$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 770, 83-87.	4.1	12	
49	Nature of seniority symmetry breaking in the semimagic nucleus $\text{mml:math}$ . Molecular structure of highly excited resonant states in $\text{mml:math}$ . Physical Review C, 2022, 105, .	2.9	12	
50	Electromagnetic transition strengths in $\text{mml:math}$ . Physical Review C, 2012, 86, .	2.9	11	
51	Generalization of the Geiger-Nuttall law and alpha clustering in heavy nuclei. Journal of Physics: Conference Series, 2012, 381, 012131.	0.4	11	
53	Coherence features of the spin-aligned neutron-proton pair coupling scheme. Physica Scripta, 2012, T150, 014031.	2.5	11	
54	Multiparticle configurations of excited states in $\text{mml:math}$ . Physical Review C, 2016, 94, .	2.9	11	

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55	Odd-even staggering in neutron drip line nuclei. Nuclear Physics A, 2016, 951, 97-115.	1.5	11
56	High-spin structures in the $\text{Xe}$ nucleus. Physical Review C, 2016, 93, .	2.9	11
57	Nucleon-pair states of even-even Sn isotopes based on realistic effective interactions. Physical Review C, 2016, 94, .	2.9	11
58	Partial seniority conservation and solvability of single- $\text{Xe}$ systems. Physical Review C, 2018, 98, .	2.9	10
59	Isomer-tagged differential-plunger measurements in $\text{Xe}$ . Physical Review C, 2013, 87, .	2.9	9
60	Correlated-basis method for shell-model calculations. Physical Review C, 2014, 90, .	2.9	9
61	Spin-dependent evolution of collectivity in $\text{Te}$ . Physical Review C, 2017, 96, .	2.9	8
62	The Stellar $\beta^2$ -decay Rate of $^{134}\text{Cs}$ and Its Impact on the Barium Nucleosynthesis in the s-process. Astrophysical Journal Letters, 2021, 919, L19.	8.3	8
63	Analysis of the unbound spectrum of $^{12}\text{Li}$ . Nuclear Physics A, 2011, 850, 53-68.	1.5	7
64	The $\text{B}(\text{E}2; 0^+ \rightarrow 2^+)_{\text{gs}}$ systematics of Sn and Te isotopes in light of data in the light Sn region including a recent measurement in $^{108}\text{Te}$ using the combined recoil-tagging-recoil-distance Doppler technique. Physica Scripta, 2012, T150, 014003.	2.5	7
65	-decay rate of $\text{Fe}$ in shell burning environment and its influence on the production of $\text{Fe}$ . Physica Scripta, 2012, T150, 014004.	2.9	7
66	PairDiag: An exact diagonalization program for solving general pairing Hamiltonians. Computer Physics Communications, 2021, 259, 107349.	7.5	7
67	Isovector channel of quark-meson-coupling model and its effect on symmetry energy. Nuclear Physics A, 2011, 865, 57-68.	1.5	6
68	Spin-Aligned Neutron-Proton Pair Coupling Scheme. Progress of Theoretical Physics Supplement, 2012, 196, 414-420.	0.1	6
69	Spectroscopy of the neutron-deficient $\text{N}=50$ nucleus $\text{Rh}^{95}$ . Physical Review C, 2014, 89, .	2.9	6
70	Recoil-decay tagging spectroscopy of $^{74}\text{W}^{162}$ . Physical Review C, 2015, 92, .	2.9	6
71	Theoretical studies of proton capture reactions in $A = 25$ proton-rich nuclei. Science in China Series G: Physics, Mechanics and Astronomy, 2009, 52, 1464-1470.	0.2	5
72	Alpha-particle decays from excited states in $^{24}\text{Mg}$ . Science China: Physics, Mechanics and Astronomy, 2011, 54, 130-135.	5.1	5

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73	Competition of different coupling schemes in atomic nuclei. Journal of Physics: Conference Series, 2012, 338, 012027.	0.4	5
74	Collective band structures in the $\langle \text{mml:math} \rangle$ $\text{mathvariant}=\text{"normal"}$ $T_c$ $\langle \text{mml:mi} \rangle$ $\langle \text{mml:mprescripts} / \rangle$ $\langle \text{mml:none} / \rangle$ $\langle \text{mml:mrow} \rangle$ $\langle \text{mml:mn} \rangle$ 99 $\langle \text{mml:mn} \rangle$ $\langle \text{mml:mrow} \rangle$ $\langle \text{mml:mmultiscripts} / \rangle$ $\langle \text{mml:math} \rangle$ nucleus. $\text{Physical Review C}$ , 2015, 92, 014315.	2.9	5
75	Tensor force effect on the exotic structure of neutron-rich Ca isotopes *. Chinese Physics C, 2019, 43, 114101.	2.9	5
76	M1 and E2 transition rates from core-excited states in semi-magic 94Ru. European Physical Journal A, 2018, 54, 1.	2.5	5
77	Reinvestigation of the collective band structures in odd-odd 138Pm nucleus. European Physical Journal A, 2015, 51, 1.	3.7	5
78	Alpha decay measured in single-particle units as a manifestation of nuclear collectivity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 818, 136373.	4.1	5
79	Pairing Effects on Bubble Nuclei. Chinese Physics Letters, 2019, 36, 032101.	3.3	4
80	New Fe59 Stellar Decay Rate with Implications for the Fe60 Radioactivity in Massive Stars. Physical Review Letters, 2021, 126, 152701.	7.8	4
81	PairDiagSph: Generalization of the exact pairing diagonalization program for spherical systems. Computer Physics Communications, 2021, 263, 107897.	7.5	4
82	PROTON RESONANCE PROPERTIES IN LIGHT NUCLEI WITH MEAN-FIELD TYPE POTENTIALS. International Journal of Modern Physics E, 2008, 17, 1955-1964.	1.0	3
83	Lifetime measurement in the proton-unbound nucleus $[109]\text{I}$ . , 2011, , .	3	
84	Configuration mixing effects in neutron-rich carbon isotopes. Journal of Physics: Conference Series, 2013, 420, 012049.	0.4	3
85	Evidence for enhanced neutron-proton correlations from the level structure of the $\langle \text{mml:math} \rangle$ $\text{mathvariant}=\text{"normal"}$ $N$ $\langle \text{mml:mi} \rangle$ $\langle \text{mml:mo} = \rangle$ $\langle \text{mml:mo} \rangle$ $\langle \text{mml:mi} \rangle Z$ $\langle \text{mml:mo} \rangle$ $\langle \text{mml:math} \rangle$ nucleus $\langle \text{mml:math} \rangle$ $\text{mathvariant}=\text{"normal"}$ $T_c$ $\langle \text{mml:mi} \rangle$ $\langle \text{mml:mn} \rangle$ 44 $\langle \text{mml:mn} \rangle$ $\langle \text{mml:mprescripts} / \rangle$ $\langle \text{mml:mn} \rangle$ 43 $\langle \text{mml:mn} \rangle$ $\langle \text{mml:mn} \rangle$ 87 $\langle \text{mml:mn} \rangle$ $\langle \text{mml:mmultiscripts} / \rangle$ $\langle \text{mml:math} \rangle$ . $\text{Physical Review C}$ , 2021, 104, .	2.9	3
86	An iterative approach for the exact solution of the pairing Hamiltonian. Computer Physics Communications, 2022, 275, 108310.	7.5	3
87	ISOSPIN SYMMETRY AND GAMOW TELLER TRANSITION STRENGTHS IN MIRROR NUCLEI. International Journal of Modern Physics E, 2006, 15, 1563-1568.	1.0	2
88	High-spin study of $^{162}\text{Ta}$ . Physical Review C, 2011, 84, .	2.9	2
89	Lifetimes of core-excited states in semi-magic $\text{Rh}$ . European Physical Journal A, 2020, 56, 1.	2.5	2

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91	Nuclear clustering and generalization of the Geiger-Nuttall law 100 years after its formulation. Journal of Physics: Conference Series, 2011, 321, 012048.	0.4	1
92	Eigen-Property of Single- <i>j</i> System and Seniority Conservation Condition. Plasma Science and Technology, 2012, 14, 383-385.	1.5	1
93	Spin-aligned neutron-proton pair coupling in the era of large scale computing. Journal of Physics: Conference Series, 2012, 381, 012106.	0.4	1
94	Multistep shell model in the complex energy plane. Journal of Physics: Conference Series, 2012, 338, 012029.	0.4	1
95	The structure of tin isotopes with a global optimized effective interaction. Journal of Physics: Conference Series, 2013, 413, 012037.	0.4	1
96	Large-scale configuration interaction description of the structure of nuclei around $^{100}\text{Sn}$ and $^{208}\text{Pb}$ . Journal of Physics: Conference Series, 2016, 742, 012030.	0.4	1
97	Reinvestigation of the excited states in the proton emitter $\text{Lu}^{151}$ : Particle-hole excitations across the $N=Z=64$ subshell. Physical Review C, 2017, 96, .	2.9	1
98	Investigation of high spin states in $^{133}\text{Cs}$ . European Physical Journal A, 2018, 54, 1.	2.5	1
99	Lifetime measurements of excited states in $^{169,171,173}\text{Os}$ : Persistence of anomalous $B(E2)$ ratios in transitional rare earth nuclei in the presence of a decoupled $i13/2$ valence neutron. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 820, 136527.	4.1	1
100	Shell-Model Calculations of f p-shell Nuclei with Realistic NN Interactions. , 2010, ,.	0	
101	Suppression of alpha formation probability around the $N=126$ shell closure. , 2011, ,.	0	
102	Differential evolution algorithm for global optimizations in nuclear physics. Journal of Physics G: Nuclear and Particle Physics, 2017, 44, 045107.	3.6	0
103	Shell model description of heavy nuclei and abnormal collective motions. EPJ Web of Conferences, 2018, 178, 02015.	0.3	0
104	Evidence for octupole collectivity in $^{172}\text{Pt}$ . European Physical Journal A, 2020, 56, 1.	2.5	0
105	np-Pair Correlations in the Isovector Pairing Model. Symmetry, 2021, 13, 1405.	2.2	0
106	IN-BEAM $\beta^3$ -RAY SPECTROSCOPY ABOVE THE HIGH-SPIN ISOMERIC STATE IN $^{155}\text{Lu}$ . , 2013, ,.	0	
107	Identification of excited states in $\text{Lu}^{151}$ . Physical Review C, 2021, 104, .	2.9	0