Feng Pan

List of Publications by Year
in descending order

112 papers	1,234 citations	361413 20 h-index	454955 30 g-index
112 all docs	112 docs citations	112 times ranked	350 citing authors

#	Article	IF	Citations
1	New algebraic solutions for SO(6) â†" U(5) transitional nuclei in the interacting boson model. Nuclear Physics A, 1998, 636, 156-168.	1.5	104
2	A particle-number-conserving solution to the generalized pairing problem. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 422, 1-5.	4.1	78
3	Analytical solutions for the LMG model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 451, 1-10.	4.1	71
4	Heine-Stieltjes correspondence and the polynomial approach to the standard pairing problem. Physical Review C, 2012, 86, .	2.9	62
5	Pairing gaps in neutron stars. Physical Review C, 2004, 70, .	2.9	34
6	Algebraic Solutions of an Extended Pairing Model for Well Deformed Nuclei. Physical Review Letters, 2004, 92, 112503.	7.8	31
7	Quantum critical behavior of two coupled Boseâ€"Einstein condensates. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 339, 403-407.	2.1	31
8	Algebraic solutions of mean-field plus $T=1$ pairing interaction. Physical Review C, 2002, 66, .	2.9	29
9	Numerical algorithm for the standard pairing problem based on the Heineâ€"Stieltjes correspondence and the polynomial approach. Computer Physics Communications, 2014, 185, 2714-2723.	7.5	28
10	Quantum phase transitions in the U(5)â€"O(6) large-N limit. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, 1039-1044.	3.6	25
11	New algebraic approach for an exact solution of the nuclear mean-field plus orbit-dependent pairing hamiltonian. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 442, 7-13.	4.1	24
12	The extended Heineâ€"Stieltjes polynomials associated with a special LMG model. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 395305.	2.1	24
13	Quantum phase transitional patterns in the SD-pair shell model. Physical Review C, 2009, 80, .	2.9	23
14	Analytically solvable prolate-oblate shape phase transitional description within the SU(3) limit of the interacting boson model. Physical Review C, 2012, 85, .	2.9	23
15	Entropy product measure for multipartite pure states. Science in China Series G: Physics, Mechanics and Astronomy, 2006, 49, 606-615.	0.2	22
16	Simple Entanglement Measure for Multipartite Pure States. International Journal of Theoretical Physics, 2004, 43, 1241-1247.	1.2	21
17	New exact solutions of the standard pairing model for well-deformed nuclei. Physical Review C, 2009, 80, .	2.9	21
18	Heine-Stieltjes correspondence and a new angular momentum projection for many-particle systems. Physical Review C, 2013, 88, .	2.9	21

#	ARTICLE	IF	CITATIONS
19	Exact Solutions for Some Nuclear Many-Body Problems. Annals of Physics, 1999, 271, 120-140.	2.8	20
20	Vibration-rotation transitional patterns in theSD-pair shell model. Physical Review C, 2006, 73, .	2.9	20
21	Quantum phase transitions in the consistent-Q Hamiltonian of the interacting boson model. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 125105.	3.6	20
22	SD-pair shell model study forXe126andBa128. Physical Review C, 2008, 77, .	2.9	20
23	Ground-state phase transition in odd-A and odd-odd nuclei near$N = 90$. Physical Review C, 2013, 88, .	2.9	19
24	SD-pair shell model and the interacting boson model. Physical Review C, 2005, 71, .	2.9	18
25	CLASSIFICATION AND QUANTIFICATION OF ENTANGLED BIPARTITE QUTRIT PURE STATES. International Journal of Modern Physics B, 2006, 20, 1333-1342.	2.0	18
26	Analytical description of odd-A nuclei near the critical point of the spherical to axially deformed shape transition. Physical Review C, 2010, 82, .	2.9	18
27	Shape phase transition and phase coexistence in odd Sm nuclei. Physical Review C, 2013, 88, .	2.9	17
28	Emergent dynamical symmetry at the triple point of nuclear deformations. Physical Review C, 2014, 90, .	2.9	16
29	Simple description of odd-A nuclei around the critical point of the spherical to axially deformed shape phase transition. Physical Review C, 2011, 84, .	2.9	15
30	Generalized deformed algebrasF(A1) and their applications. Journal of Mathematical Physics, 1994, 35, 5065-5073.	1.1	14
31	Level statistical properties of the spherical mean-field plus standard pairing model. Physical Review C, 2013, 88, .	2.9	14
32	Nucleon pair shell model in M scheme. Physical Review C, 2020, 102, .	2.9	13
33	Construction of basis vectors for symmetric irreducible representations of O(5) $ supset$ O(3). European Physical Journal Plus, 2014, 129, 1.	2.6	12
34	A new procedure for constructing basis vectors of SU(3)âŠ⨏SO(3). Nuclear Physics A, 2016, 952, 70-99.	1.5	12
35	γ -rigid solution of the Bohr Hamiltonian for the critical point description of the spherical to γ -rigidly deformed shape phase transition. Physical Review C, 2017, 96, .	2.9	12
36	Triaxial rotor in the SU(3) limit of the interacting boson model. Physical Review C, 2014, 90, .	2.9	11

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37	Alternative solvable description of the E(5) critical point symmetry in the interacting boson model. Physical Review C, 2015, 91, .	2.9	11
38	Excited-state quantum phase transitions in the interacting boson model: Spectral characteristics of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mn>0</mml:mn><mml:mo>+</mml:mo></mml:msup></mml and effective order parameter. Physical Review C, 2016, 93, .	2.9	11
39	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math> -soft rotor with configuration mixing in the O(6) limit of the interacting boson model. Physical Review C, 2018, 97, .	2.9	10
40	Ground-state properties of rare-earth nuclei in the Nilsson mean-field plus extended-pairing model. Physical Review C, 2015, 92, .	2.9	9
41	Exact solution of the mean-field plus separable pairing model reexamined. Physical Review C, 2017, 95, .	2.9	9
42	An exact solution of spherical mean-field plus a special separable pairing model. Nuclear Physics A, 2017, 957, 51-59.	1.5	9
43	Simple exact solutions of one-dimensional finite-chain hard-core Bose-Hubbard and Fermi-Hubbard models. Journal of Physics A, 2000, 33, 9095-9100.	1.6	8
44	Reconsideration of enhancement ofsddominance in interacting boson models. Physical Review C, 2003, 68, .	2.9	8
45	Exact solutions of an extended Dicke model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 341, 94-100.	2.1	8
46	Ground state phase transition in the Nilsson mean-field plus standard pairing model. Physical Review C, 2016, 94, .	2.9	8
47	Nuclear structure and band mixing in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Pt</mml:mi><mml:mprescripts></mml:mmultiscripts></mml:math>. Physical Review C, 2021, 103, .	2.9	8
48	Bosonic algebraic approach applied to the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mo stretchy="false">[</mml:mo><mml:mi>Q</mml:mi><mml:mi>Q</mml:mi><mml:mo stretchy="false">]</mml:mo><mml:mo stretchy="false">[</mml:mo><mml:mover accent="true"><mml:mi>Q</mml:mi><mml:mo stretchy="false">Â¯</mml:mo></mml:mover><mml:mover accent="true"><mml:mi>Q</mml:mi><mml:mo stretchy="false">Â¯</mml:mo></mml:mover><mml:mo stre	4.7	8
49	Magnetic excitations in the nucleon-pair shell model. Physical Review C, 2001, 64, .	2.9	7
50	QUANTUM PHASE TRANSITIONAL BEHAVIOR IN THE EXTENDED CASTEN TRIANGLE OF THE INTERACTING BOSON MODEL. International Journal of Modern Physics E, 2006, 15, 1723-1733.	1.0	7
51	Critical point symmetries in deformed odd-Anuclei. Physical Review C, 2011, 84, .	2.9	7
52	An exactly solvable spherical mean-field plus extended monopole pairing model. Nuclear Physics A, 2016, 947, 234-247.	1.5	7
53	Exactly solvable configuration mixing scheme in the vibrational limit of the interacting boson model. Physical Review C, 2018, 97, .	2.9	7
54	An exact solution of spherical mean-field plus orbit-dependent non-separable pairing model with two non-degenerate j-orbits. Nuclear Physics A, 2019, 984, 68-76.	1.5	7

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55	Analytical study of the γ-unstable Bohr Hamiltonian with quasi-exactly solvable decatic potential. European Physical Journal A, 2020, 56, 1.	2.5	7
56	High spin states in stable nucleus 84Sr. Science China: Physics, Mechanics and Astronomy, 2010, 53, 1861-1867.	5.1	6
57	High-spin states and level structure inRb84. Physical Review C, 2010, 82, .	2.9	6
58	Critical-point symmetries in intermediately deformed odd-Anuclei. Physical Review C, 2012, 86, .	2.9	6
59	A simple procedure for construction of the orthonormal basis vectors of irreducible representations of O(5) in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>O</mml:mi></mml:mrow><mml:mrow><mml:mi>T</mml:mi></mml:mrow></mm stretchy="false">(</mml:mo><mml:mn>3</mml:mn><mml:mo) Ti ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 562 Td (stretchy="false	1.5	6
60	Properties of giant dipole resonances within an extended pairing model with a focus on spectral statistics. Physical Review C, 2021, 104, .	2.9	6
61	The matrix representation of U4 in the U2Ã—U2 basis and some isoscalar factors for Up+q âŠ‡UpÃ—Uq. Journal of Mathematical Physics, 1990, 31, 1333-1339.	1.1	5
62	Complementary group resolution of the SU(n) outer multiplicity problem. II. Recoupling approach for SU(3)âŠƒU(2) reduced Wigner coefficients. Journal of Mathematical Physics, 1998, 39, 5642-5662.	1.1	5
63	Possible deviations from the O(4) limit of the vibron model in diatomic molecules. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 316, 84-90.	2.1	5
64	Quantum phase transition in the spherical mean-field plus quadrupole-quadrupole and pairing model in a single-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>j</mml:mi></mml:math>shell. Physical Review C, 2016, 93, .	2.9	5
65	Exact solution of spherical mean-field plus special orbit-dependent non-separable pairing model with multi non-degenerate j-orbits. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 165-171.	4.1	5
66	Ground-state shape evolution in Er and Yb isotopes. Nuclear Physics A, 2019, 986, 86-97.	1.5	5
67	Neutron-proton pairing correction in the extended isovector and isoscalar pairing model. Physical Review C, 2020, 102, .	2.9	5
68	Structure of rotational bands in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Rh</mml:mi><mml:mprescripts /><mml:none /><mml:mn>109</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2021, 104, .	2.9	5
69	Partial dynamical symmetry versus quasi dynamical symmetry examination within a quantum chaos analyses of spectral data for evenâ€"even nuclei. Scientific Reports, 2021, 11, 16417.	3.3	5
70	Nilsson mean-field plus the extended pairing model description of rare earth nuclei. Chinese Physics C, 2011, 35, 747-752.	3.7	4
71	Exact solutions of mean-field plus various pairing interactions and shape phase transitions in nuclei. European Physical Journal: Special Topics, 2020, 229, 2497-2526.	2.6	4
72	APPLICATIONS OF A HARD-CORE BOSEâ€"HUBBARD MODEL TO WELL-DEFORMED NUCLEI. International Journal of Modern Physics B, 2002, 16, 2071-2077.	2.0	3

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73	Exact solution of mean-field plus an extended T = 1 nuclear pairing Hamiltonian in the seniority-zero symmetric subspace. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 780, 1-6.	4.1	3
74	Quantum phase transitions and band mixing in ^{135}Ba. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 125107.	3.6	3
75	Complementary group resolution of the SU(n) outer multiplicity problem. I. The Littlewood rules and a complementary U(2nâ^2) group structure. Journal of Mathematical Physics, 1998, 39, 5631-5641.	1.1	2
76	INTRUDER LEVELS AND VIBRATIONAL MODES IN THE SD-PAIR SHELL MODEL. International Journal of Modern Physics E, 2005, 14, 1205-1212.	1.0	2
77	Mean-field plus various types of pairing models and an exact boson mapping of the standard pairing model. AIP Conference Proceedings, 2011, , .	0.4	2
78	The progressive solutions for the Dicke Hamiltonian. European Physical Journal Plus, 2015, 130, 1.	2.6	2
79	Exact solution of the extended dimer Boseâ€"Hubbard model with multi-body interactions. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 043102.	2.3	2
80	On the importance of np-pairs in the isovector pairing model. Europhysics Letters, 2020, 132, 32001.	2.0	2
81	The SO(6)-reduced matrix elements in the SO(8) fermion dynamical symmetry model. Nuclear Physics A, 1992, 537, 117-133.	1.5	1
82	Analytical expressions for some multiplicity-free isoscalar factors of SfâŠƒSfâ^'1. Journal of Mathematical Physics, 2002, 43, 6296-6306.	1.1	1
83	Application of the extended pairing model to heavy isotopes. European Physical Journal A, 2005, 25, 515-516.	2.5	1
84	ON THE SURVIVAL OF THE SD-PAIR SHELL MODEL UNDER PSEUDO-SPIN TRANSFORMATION. International Journal of Modern Physics E, 2006, 15, 101-108.	1.0	1
85	MEAN-FIELD PLUS VARIOUS TYPES OF PAIRING INTERACTIONS AND AN EXACT BOSON MAPPING OF THE REDUCED BCS PAIRING INTERACTION. International Journal of Modern Physics E, 2008, 17, 386-397.	1.0	1
86	SD-PAIR SHELL MODEL FOR EVEN-EVEN SYSTEMS. International Journal of Modern Physics E, 2008, 17, 245-255.	1.0	1
87	Exact Solutions of an Extended Bose-Hubbard Model with E 2 Symmetry. International Journal of Theoretical Physics, 2015, 54, 2204-2217.	1.2	1
88	Angular momentum projection for a Nilsson mean-field plus pairing model. Nuclear Physics A, 2016, 950, 1-28.	1.5	1
89	A nucleon-pair and boson coexistent description of nuclei. Chinese Physics C, 2017, 41, 074103.	3.7	1
90	A close look at the competition of isovector and isoscalar pairing in A=18 and 20 even-even Nâ‰ˆZ nuclei *. Chinese Physics C, 2019, 43, 074106.	3.7	1

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91	Exact solution of spherical mean-field plus multi-pair interaction model with two non-degenerate j-orbits. European Physical Journal A, 2020, 56, 1.	2.5	1
92	Extended Heine-Stieltjes polynomials related to the isovector pairing model. European Physical Journal A, 2021, 57, 1.	2.5	1
93	Random Matrix Theory in Cd isotopes. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 105107.	3.6	1
94	The matrix representation of SO7 in an (SU2)3 basis. Journal of Mathematical Physics, 1991, 32, 386-391.	1.1	0
95	Exact solutions of the high dimensional hard-core Fermi-Hubbard model. Science in China Series A: Mathematics, 2001, 44, 83-88.	0.5	0
96	Exactly Solvable Pairing Plus Mean Field Model. AIP Conference Proceedings, 2004, , .	0.4	0
97	EXACTLY SOLVABLE PAIRING MODELS. , 2005, , .		0
98	Extended pairing model revisited. European Physical Journal A, 2005, 25, 511-513.	2.5	0
99	THE SD-PAIR SHELL MODEL AND INTERACTING BOSON MODEL. , 2011, , .		0
100	Understanding nuclear shape phase transitions within SD-pair shell model. , 2014, , .		0
101	Exactly Solvable Pairing in a Mean-field Framework: Models and Applications. , 2017, , 327-355.		0
102	Mean-field plus quadrupole–quadrupole and pairing model in the ds-shell. European Physical Journal Plus, 2021, 136, 1.	2.6	0
103	np-Pair Correlations in the Isovector Pairing Model. Symmetry, 2021, 13, 1405.	2.2	0
104	Exact solution of the two-axis two-spin Hamiltonian. Journal of Statistical Mechanics: Theory and Experiment, 2021, 2021, 103104.	2.3	0
105	ROTATIONAL AND VIBRATIONAL MOTION IN NUCLEI. , 2001, , .		0
106	APPLICATIONS OF A HARD-CORE BOSE-HUBBARD MODEL TO WELL-DEFORMED NUCLEI. , 2002, , .		0
107	EXACT SOLUTIONS OF THE ISOVECTOR PAIRING INTERACTION. , 2004, , .		0
108	On Solutions of the One-dimensional Holstein Model. , 2006, , .		0

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109	ANGULAR MOMENTUM PROJECTION OF THE NILSSON MEAN-FIELD PLUS NEAREST-ORBIT PAIRING INTERACTION MODEL. , 2011, , .		0
110	APPLICATIONS OF NILSSON MEAN-FIELD PLUS EXTENDED PAIRING MODEL TO RARE-EARTH NUCLEI. , 2011, , .		0
111	GROUND STATE OCCUPATION PROBABILITIES OF VALENCE NUCLEON PAIRS IN EVEN-EVEN NUCLEI IN THE NILSSON MEAN-FIELD PLUS THE NEAREST-ORBIT PAIRING MODEL. , 2013, , .		0
112	A NEW POLYNOMIAL APPROACH WITH HEINE-STIELTJES CORRESPONDENCE TO THE STANDARD PAIRING PROBLEM. , 2016, , .		0