

# Bin Zhou

## List of Publications by Year in descending order

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75  
papers

1,344  
citations

430874

18  
h-index

345221

36  
g-index

76  
all docs

76  
docs citations

76  
times ranked

1166  
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite Size Effects on Helical Edge States in a Quantum Spin-Hall System. Physical Review Letters, 2008, 101, 246807.	7.8	405
2	Higher-Order Topological Insulators in Quasicrystals. Physical Review Letters, 2020, 124, 036803.	7.8	133
3	Spin-bias driven magnetization reversal and nondestructive detection in a single molecular magnet. Physical Review B, 2009, 79, .	3.2	55
4	Quantum computing of molecular magnet Mn <sub>12</sub> . Physical Review A, 2002, 66, .	2.5	45
5	Floquet Weyl semimetals in light-irradiated type-II and hybrid line-node semimetals. Physical Review B, 2018, 97, .	3.2	45
6	Finite-size effects in non-Hermitian topological systems. Physical Review B, 2019, 99, .	3.2	43
7	Crossover from Majorana edge- to end-states in quasi-one-dimensional $p$ -wave superconductors. Physical Review B, 2011, 84, .	3.2	37
8	Higher-order topological insulator in a dodecagonal quasicrystal. Physical Review B, 2020, 102, .	3.2	36
9	Spin transverse force and intrinsic quantum transverse transport. Physical Review B, 2006, 73, .	3.2	32
10	Deduction of pure spin current from the linear and circular spin photogalvanic effect in semiconductor quantum wells. Physical Review B, 2007, 75, .	3.2	29
11	Topological Anderson insulator phase in a quasicrystal lattice. Physical Review B, 2019, 100, .	3.2	29
12	Realization of quasicrystalline quadrupole topological insulators in electrical circuits. Communications Physics, 2021, 4, .	5.3	26
13	Topological Anderson insulator phase in a Dirac-semimetal thin film. Physical Review B, 2017, 95, .	3.2	24
14	Disorder-induced topological phase transitions on Lieb lattices. Physical Review B, 2017, 96, .	3.2	22
15	Floquet topological insulator phase in a Weyl semimetal thin film with disorder. Physical Review B, 2018, 98, .	3.2	21
16	Disorder-induced Majorana zero modes in a dimerized Kitaev superconductor chain. Physical Review B, 2019, 100, .	3.2	21
17	Thermal entanglement in a four-qubit Heisenberg spin model with external magnetic fields. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 362, 381-389.	2.1	19
18	Chern insulator in a hyperbolic lattice. Physical Review B, 2022, 105, .	3.2	19

#	ARTICLE	IF	CITATIONS
19	Kink and bell-shape solitons in hydrogen-bonded chains. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 210, 307-312.	2.1	18
20	Current-induced spin polarization in a two-dimensional hole gas. Physical Review B, 2008, 77, .	3.2	18
21	A high aspect ratio silicon-fin FinFET fabricated upon SOI wafer. Solid-State Electronics, 2016, 126, 46-50.	1.4	17
22	Spin Chern number and topological phase transition on the Lieb lattice with spin-orbit coupling. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 944-948.	2.1	16
23	Topological excitonic corner states and nodal phase in bilayer quantum spin Hall insulators. Physical Review B, 2021, 103, .	3.2	15
24	Quenching of Spin Polarization Switching in Organic Multiferroic Tunnel Junctions by Ferroelectric $\pi$ -Ailing-Channel in Organic Barrier. ACS Applied Materials & Interfaces, 2018, 10, 30614-30622.	8.0	14
25	Phase diagrams of Weyl semimetals with competing intraorbital and interorbital disorders. Physical Review B, 2018, 97, .	3.2	14
26	Higher-order topological Anderson insulators in quasicrystals. Physical Review B, 2021, 104, .	3.2	14
27	Topological quantum phase transition and the Berry phase near the Fermi surface in hole-doped quantum wells. Europhysics Letters, 2007, 79, 47010.	2.0	12
28	Finite size effects on the helical edge states on the Lieb lattice. Chinese Physics B, 2016, 25, 067204.	1.4	12
29	Topological Anderson insulators in an Ammann-Beenker quasicrystal and a snub-square crystal. Physical Review B, 2021, 103, .	3.2	12
30	Entanglement teleportation via a couple of quantum channels in Ising-Heisenberg spin chain model of a heterotrimetallic Fe-Mn-Cu coordination polymer*. Chinese Physics B, 2019, 28, 120307.	1.4	10
31	Disorder-induced chiral and helical Majorana edge modes in a two-dimensional Ammann-Beenker quasicrystal. Physical Review B, 2021, 104, .	3.2	10
32	Quantum-classical transition of the escape rate in ferrimagnetic or antiferromagnetic particles with an applied magnetic field. Physical Review B, 2001, 64, .	3.2	8
33	Majorana zero modes in a ladder of density-modulated Kitaev superconductor chains. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 2426-2431.	2.1	7
34	Thermal quantum correlations of a spin-1/2 Ising-Heisenberg diamond chain with Dzyaloshinskii-Moriya interaction. Chinese Physics B, 2018, 27, 090306.	1.4	7
35	Intrinsic anomalous Hall effect in spin-polarized two-dimensional electron gases with Dresselhaus spin-orbit interaction. Physical Review B, 2010, 81, .	3.2	6
36	Topological phase transition in a ladder of the dimerized Kitaev superconductor chains. Chinese Physics B, 2016, 25, 107401.	1.4	6

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37	Ionic and bonding defects in hydrogen-bonded chains. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1997, 236, 322-328.	2.1	5
38	Bounces and the calculation of quantum tunneling effects for the asymmetric double-well potential. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2000, 271, 26-30.	2.1	5
39	Phase transition in quantum tunneling for a parameterized double-well potential. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2001, 278, 243-248.	2.1	5
40	Multiqubit maximally entangled states in the NMR model. <i>Physical Review A</i> , 2004, 70, .	2.5	5
41	Electrosoliton and lattice defects in hydrogen-bonded chains. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 7929-7935.	1.8	4
42	Quantum tunneling for the asymmetric double-well potential at finite energy. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2001, 281, 105-112.	2.1	4
43	Quantum-classical crossover of the escape rate of a biaxial spin system with an applied magnetic field. <i>Physica B: Condensed Matter</i> , 2001, 301, 180-185.	2.7	4
44	Quantum-classical crossover for biaxial antiferromagnetic particles with a magnetic field along the hard axis. <i>Physical Review B</i> , 2004, 70, .	3.2	4
45	Finite size effects on helical edge states in HgTe quantum wells with the spin-orbit coupling due to bulk- and structure-inversion asymmetries. <i>Chinese Physics B</i> , 2014, 23, 037304.	1.4	4
46	Quantum-classical transition of the escape rate of uniaxial antiferromagnetic particles in an arbitrarily directed field. <i>Physical Review B</i> , 2003, 68, .	3.2	3
47	THERMAL ENTANGLEMENT IN THE ANISOTROPIC XXZ MODEL UNDER AN INHOMOGENEOUS MAGNETIC FIELD. <i>International Journal of Modern Physics B</i> , 2006, 20, 2117-2127.	2.0	3
48	Theory of magnetoelectric photocurrent generated by direct interband transitions in a semiconductor quantum well. <i>Physical Review B</i> , 2011, 83, .	3.2	3
49	PAIRWISE ENTANGLEMENT IN THE N-QUBIT XX MODEL WITH DZHALOSHINSKI-MORIYA INTERACTION AND MAGNETIC FIELD. <i>International Journal of Modern Physics B</i> , 2011, 25, 2135-2148.	2.0	3
50	Finite size effects on the quantum spin Hall state in HgTe quantum wells under two different types of boundary conditions. <i>Chinese Physics B</i> , 2015, 24, 067304.	1.4	3
51	Thermal entanglement of the Ising-Heisenberg diamond chain with Dzyaloshinski-Moriya interaction. <i>Chinese Physics B</i> , 2015, 24, 110306.	1.4	3
52	Effect of dissipation on the decay-rate transition on a circle. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 496, 218-225.	4.1	2
53	Structure evolution, magnetic domain structures and magnetic properties of CoPt-C nanocomposite films. <i>Physica B: Condensed Matter</i> , 2004, 351, 77-82.	2.7	2
54	Spin-dependent Breit-Wigner and Fano resonances in photon-assisted electron transport through a semiconductor heterostructure. <i>Chinese Physics B</i> , 2011, 20, 067201.	1.4	2

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55	Thermal entanglement of the spin-1 Ising-Heisenberg diamond chain with biquadratic interaction. Chinese Physics B, 2017, 26, 070302.	1.4	2
56	Optimal quantum state transformations based on machine learning. Quantum Information Processing, 2021, 20, 1.	2.2	2
57	Random clique evolving network model and their communicability. Scientia Sinica: Physica, Mechanica Et Astronomica, 2014, 44, 299-304.	0.4	2
58	Orientational soliton defect in an inhomogeneous hydrogen-bonded chain. Chaos, Solitons and Fractals, 1998, 9, 429-436.	5.1	1
59	Calculation of tunnel splitting in a biaxial spin particle without instanton technique. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 278, 95-98.	2.1	1
60	QUANTUM-CLASSICAL PHASE TRANSITION OF NUCLEATION RATE IN A ONE-DIMENSIONAL UNIAXIAL HEISENBERG MODEL WITH A MAGNETIC FIELD AT AN ARBITRARY DIRECTION. International Journal of Modern Physics B, 2001, 15, 3143-3151.	2.0	1
61	STATE EVOLUTION AND INFORMATION PROCESSING IN Mn <sub>12</sub> QUANTUM MAGNET. International Journal of Modern Physics B, 2004, 18, 2401-2408.	2.0	1
62	Calculation of tunnel splitting in a biaxial spin particle with an applied magnetic field. European Physical Journal B, 2004, 40, 87-92.	1.5	1
63	Quantum-classical crossover of the escape rate in the two-parameter doubly periodic potential. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 338, 439-445.	2.1	1
64	Quantum-classical crossover of the escape rate for ferric wheels with excess spin. Physica B: Condensed Matter, 2005, 357, 472-477.	2.7	1
65	SPIN TRANSVERSE FORCE AND QUANTUM TRANSVERSE TRANSPORT. International Journal of Modern Physics B, 2008, 22, 76-81.	2.0	1
66	Global entanglement in ground state of {Cu <sub>3</sub> } single-molecular magnet with magnetic field. Chinese Physics B, 2014, 23, 070302.	1.4	1
67	Hybrid evolving clique-networks and their communicability. Physica A: Statistical Mechanics and Its Applications, 2014, 407, 198-203.	2.6	1
68	Optimal dense coding and quantum phase transition in Ising-XXZ diamond chain. Physica A: Statistical Mechanics and Its Applications, 2022, 585, 126444.	2.6	1
69	Thermal entanglement in a spin-1/2 Ising-Heisenberg butterfly-shaped chain with impurities. Chinese Physics B, 2020, 29, 110308.	1.4	1
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#	ARTICLE	IF	CITATIONS
73	Crossover from quantum tunneling to classical hopping of domain walls in ferromagnets. Physica B: Condensed Matter, 2001, 304, 141-146.	2.7	0
74	Current-induced Spin Polarization in 2-Dimensional Hole Gas. , 2010, , .		0
75	Spin-Orbit Torque-Driven Magnetic Switching of Co/Pt-CoFeB Exchange Spring Ferromagnets. IEEE Transactions on Magnetism, 2019, 55, 1-4.	2.1	0