Yi Zhou

List of Publications by Year
in descending order

60 papers	2,801 citations	279487 23 h-index	168136 53 g-index
60 all docs	60 docs citations	60 times ranked	3447 citing authors

#	Article	IF	Citations
1	Quantum spin liquid states. Reviews of Modern Physics, 2017, 89, .	16.4	904
2	Majorana Zero Mode Detected with Spin Selective Andreev Reflection in the Vortex of a Topological Superconductor. Physical Review Letters, 2016, 116, 257003.	2.9	494
3	Helicity-protected ultrahigh mobility Weyl fermions in NbP. Physical Review B, 2016, 93, .	1.1	168
4	Even Parity, Orbital Singlet, and Spin Triplet Pairing for Superconducting<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LaFeAsO</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">F</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:math>. Physical Review Letters, 2008, 101, 057008.	2.9	109
5	Electric field control of superconductivity at the LaAlO ₃ /KTaO ₃ (111) interface. Science, 2021, 372, 721-724.	6.0	82
6	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Na</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:msub><mml:mi>Ir</mml:mi><mml:mn mathvariant="normal">O</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:math>as a 3D Spin Liquid with Fermionic Spinons. Physical Review Letters, 2008, 101, 197201.	2.9	80
7	Strong Coupling Theory for Superconducting Iron Pnictides. Physical Review Letters, 2009, 102, 047006.	2.9	80
8	Theory for superconductivity in (Tl,K)Fe x Se 2 as a doped Mott insulator. Europhysics Letters, 2011, 95, 17003.	0.7	60
9	Two-Dimensional Superconductivity at the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow><mml:mi>LaAlO</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:math>/SrTiO ₃ (111) Interface. Physical Review Letters, 2021, 126, 076802.	2.9	58
10	Exact Solution for the Interacting Kitaev Chain at the Symmetric Point. Physical Review Letters, 2017, 118, 267701.	2.9	53
11	Theory of spin-selective Andreev reflection in the vortex core of a topological superconductor. Physical Review B, 2016, 94, .	1.1	47
12	Self-doping effect and successive magnetic transitions in superconducting<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Sr</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:math>Physical Review B, 2010, 82, .	1.1	46
13	Theory for superconductivity in alkali chromium arsenides A2Cr3As3 (A = K, Rb, Cs). Science Bulletin, 2017, 62, 208-211.	4.3	40
14	Designing an artificial Lieb lattice on a metal surface. Physical Review B, 2016, 94, .	1.1	39
15	Spin-triplet superconductivity in K ₂ Cr ₃ As ₃. Science Advances, 2021, 7, eabl4432.	4.7	34
16	Magnetic impurity in a Weyl semimetal. Physical Review B, 2015, 92, .	1.1	32
17	Possibility of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>S</mml:mi><mml:mo>=</mml:mo><mml:mn>1</mml:mn></mml:mrow></mml:math>spin liquids with fermionic spinons on triangular lattices. Physical Review B, 2010, 81, .	1.1	31
18	Symmetry of superconducting states with two orbitals on a tetragonal lattice: Application to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>LaFeAsO</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub></mml:math>Physical Review B, 2008, 78, .	1.1	30

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19	Exotic Cooper pairing in multiorbital models of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Sr</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2019, 100, .	1.1	30
20	Fermionic theory for quantum antiferromagnets with spin<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>S</mml:mi><mml:mo>></mml:mo><mml:mstyle scriptlevel="1"><mml:mfrac bevelled="false"><mml:mn>1</mml:mn><mml:mn>2</mml:mn></mml:mfrac></mml:mstyle></mml:mrow></mml:math>. Physical Review B, 2010, 82, .	1.1	29
21	Spinon Phonon Interaction and Ultrasonic Attenuation in Quantum Spin Liquids. Physical Review Letters, 2011, 106, 056402.	2.9	27
22	Stacking order, interaction, and weak surface magnetism in layered graphene sheets. Physical Review B, 2012, 86, .	1.1	25
23	Gutzwiller projected wave functions in the fermionic theory ofS=1spin chains. Physical Review B, 2012, 85, .	1.1	23
24	Effect of in-plane magnetic field and applied strain in quantum spin Hall systems: Application to InAs/GaSb quantum wells. Physical Review B, 2016, 94, .	1.1	21
25	Pressure induced superconductivity bordering a charge-density-wave state in NbTe4 with strong spin-orbit coupling. Scientific Reports, 2018, 8, 6298.	1.6	21
26	Instability of three-band Tomonaga-Luttinger liquid: Renormalization group analysis and possible application to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">K</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Cr</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2016, 94, .	1.1	19
27	Two-dimensional superconductivity at the surfaces of KTaO ₃ gated with ionic liquid. Science Advances, 2022, 8, .	4.7	19
28	Efficient tensor network representation for Gutzwiller projected states of paired fermions. Physical Review B, 2020, 101, .	1.1	16
29	Spin liquid states in the vicinity of a metal-insulator transition. Physical Review B, 2013, 88, .	1.1	15
30	Majorana zero modes and long range edge correlation in interacting Kitaev chains: analytic solutions and density-matrix-renormalization-group study. Scientific Reports, 2018, 8, 488.	1.6	15
31	Possible half-metallic phase in bilayer graphene: Calculations based on mean-field theory applied to a two-layer Hubbard model. Physical Review B, 2013, 88, .	1.1	13
32	Non-Abelian <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>S</mml:mi><mml:mo>=</mml:mo><mml:mn>1</mml:mn></mml:math> chiral spin liquid on the kagome lattice. Physical Review B, 2018, 97, .	1.1	13
33	Density matrix renormalization group boosted by Gutzwiller projected wave functions. Physical Review B, 2021, 104, .	1.1	12
34	Electric control of inverted gap and hybridization gap in type-II InAs/GaSb quantum wells. Physical Review B, 2016, 94, .	1.1	11
35	Localized in-gap states and quantum spin Hall effect in Si-doped InAs/GaSb quantum wells. Physical Review B, 2014, 89, .	1.1	9
36	Unveiling a critical stripy state in the triangular-lattice SU(4) spin-orbital model. Science Bulletin, 2022, 67, 918-923.	4.3	9

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37	Gutzwiller approach for elementary excitations inS= 1 antiferromagnetic chains. New Journal of Physics, 2014, 16, 083031.	1.2	8
38	Non-Kitaev spin liquids in Kitaev materials. Physical Review B, 2019, 99, .	1.1	8
39	Classical and quantum order in hyperkagome antiferromagnets. Physical Review B, 2020, 101, .	1.1	8
40	Topological charge-density and spin-density waves in InAs/GaSb quantum wells under an in-plane magnetic field. Physical Review B, 2017, 96, .	1.1	7
41	Matrix product states for Hartree-Fock-Bogoliubov wave functions. Physical Review B, 2022, 105, .	1.1	7
42	The compound cavity optical parametric oscillator: theory and experiment. IEEE Journal of Quantum Electronics, 1998, 34, 439-446.	1.0	6
43	Phase interference of spin tunneling in an arbitrarily directed magnetic field. Physical Review B, 2000, 62, 11661-11666.	1.1	6
44	Edge superconducting correlation in the attractive-UKane-Mele-Hubbard model. Physical Review B, 2012, 86, .	1.1	6
45	Emergence of high-temperature superconductivity at the interface of two Mott insulators. Physical Review B, 2022, 105, .	1.1	6
46	Pristine Mott insulator from an exactly solvable spin- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mfrac><mml:mn>1</mml:mn><mml:mn>2</mml:mn></mml:mfrac></mml Kitaev model. Physical Review B, 2019, 99, .	1.1	6
47	Exact solution to a class of generalized Kitaev spin-1/2 models in arbitrary dimensions. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	2.0	5
48	Electrically controllable magnetic order in the bilayer Hubbard model on honeycomb lattice: A determinant quantum Monte Carlo study. Physical Review B, 2014, 90, .	1.1	4
49	Selective equal spin Andreev reflection at vortex core center in magnetic semiconductor-superconductor heterostructure. Scientific Reports, 2018, 8, 7853.	1.6	4
50	Topological glass states. Europhysics Letters, 2009, 86, 10003.	0.7	2
51	Inhomogeneous superconducting states in two weakly linked superconducting ultrathin films. Physical Review B, 2022, 105, .	1.1	2
52	Left up right down. Nature Physics, 2012, 8, 448-449.	6.5	1
53	Probe Majorana zero modes through their spins. National Science Review, 2019, 6, 197-199.	4.6	1
54	Material Search for Quantum Spin Liquids on the Simplest Frustrated Lattice. Chinese Physics Letters, 2022, 39, 050102.	1.3	1

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55	U(1) symmetry in the current algebra and N-fermionic massless Thirring model. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 260, 468-474.	0.9	0
56	Wess-Zumino-Berry phase interference in spin tunnelling at excited levels with a magnetic field. Journal of Physics Condensed Matter, 2000, 12, 7781-7794.	0.7	0
57	Fermi-edge problem in the presence of AC electric field. Europhysics Letters, 2009, 86, 17004.	0.7	0
58	Theory for superconductivity in iron pnictides at large Coulomb U limit. Frontiers of Physics in China, 2009, 4, 447-454.	1.0	0
59	Hidden SU(2) symmetries, the symmetry hierarchy, and the emergent eightfold way in spin-1 quantum magnets. Physical Review B, 2019, 100, .	1.1	0
60	Electron-nuclear hyperfine coupling in quantum kagome antiferromagnets from first-principles calculation and a reflection of the defect effect. Science Bulletin, 2019, 64, 1584-1591.	4.3	0