

Ziqiang Wang

List of Publications by Year in descending order

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101543

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all docs

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docs citations

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times ranked

3876
citing authors

#	ARTICLE	IF	CITATIONS
1	Unconventional chiral charge order in kagome superconductor KV3Sb5. Nature Materials, 2021, 20, 1353-1357.	27.5	391
2	Negative flat band magnetism in a spin-orbit-coupled correlated kagome magnet. Nature Physics, 2019, 15, 443-448.	16.7	283
3	Roton pair density wave in a strong-coupling kagome superconductor. Nature, 2021, 599, 222-228.	27.8	276
4	Giant and anisotropic many-body spin-orbit tunability in a strongly correlated kagome magnet. Nature, 2018, 562, 91-95.	27.8	255
5	Quantum-limit Chern topological magnetism in TbMn6Sn6. Nature, 2020, 583, 533-536.	27.8	253
6	Cascade of correlated electron states in the kagome superconductor CsV3Sb5. Nature, 2021, 599, 216-221.	27.8	251
7	Charge Density Waves and Electronic Properties of Superconducting Kagome Metals. Physical Review Letters, 2021, 127, 046401.	7.8	238
8	Chiral superconductivity in heavy-fermion metal UTe2. Nature, 2020, 579, 523-527.	27.8	193
9	Chiral flux phase in the Kagome superconductor AV3Sb5. Science Bulletin, 2021, 66, 1384-1388.	9.0	187
10	Possible interaction-driven topological phases in (111) bilayers of LaNiO ₃ . Physical Review B, 2011, 84, .	3.2	139
11	Observation of two distinct splittings in FeSe. Physical Review B, 2015, 91, .	3.2	130
12	Disorder and Metal-Insulator Transitions in Weyl Semimetals. Physical Review Letters, 2015, 115, 246603.	7.8	124
13	Orbital-selective Dirac fermions and extremely flat bands in frustrated kagome-lattice metal CoSn. Nature Communications, 2020, 11, 4002.	12.8	121
14	Surface phase separation in nanosized charge-ordered manganites. Applied Physics Letters, 2007, 90, 082508.	3.3	115
15	Correlated insulating phases of twisted bilayer graphene at commensurate filling fractions: A Hartree-Fock study. Physical Review B, 2020, 102, .	3.2	107
16	Rotation symmetry breaking in the normal state of a kagome superconductor KV3Sb5. Nature Physics, 2022, 18, 265-270.	16.7	102
17	Coexistence of Competing Orders with Two Energy Gaps in Real and Momentum Space in the High Temperature Superconductor Bi ₂ Sr ₂ As. Physical Review Letters, 2008, 101, 207002.	7.8	96
18	Effect of Uniaxial Strain on the Structural and Magnetic Phase Transitions in BaFe ₂ As ₂ . Physical Review Letters, 2012, 108, 087001.	7.8	95

#	ARTICLE	IF	CITATIONS
19	Electron Correlation and Fermi Surface Topology of Na_xCoO_2 . <i>Physical Review Letters</i> , 2005, 94, 206401.	7.8	83
20	Atomic line defects and zero-energy end states in monolayer $\text{Fe}(\text{Te},\text{Se})$ high-temperature superconductors. <i>Nature Physics</i> , 2020, 16, 536-540.	16.7	78
21	A distinct bosonic mode in an electron-doped high-transition-temperature superconductor. <i>Nature</i> , 2007, 450, 1058-1061.	27.8	73
22	Interatomic Coulomb interaction and electron nematic bond order in FeSe . <i>Physical Review B</i> , 2016, 93, .	3.2	72
23	Imaging the evolution of metallic states in a correlated iridate. <i>Nature Materials</i> , 2013, 12, 707-713.	27.5	71
24	Critical Conductance and Its Fluctuations at Integer Hall Plateau Transitions. <i>Physical Review Letters</i> , 1996, 77, 4426-4429.	7.8	62
25	Superconductivity near Itinerant Ferromagnetic Quantum Criticality. <i>Physical Review Letters</i> , 2001, 87, 257001.	7.8	59
26	Nanoscale decoupling of electronic nematicity and structural anisotropy in FeSe thin films. <i>Nature Communications</i> , 2021, 12, 10.	12.8	55
27	Localized spin-orbit polaron in magnetic Weyl semimetal $\text{Co}_3\text{Sn}_2\text{S}_2$. <i>Nature Communications</i> , 2020, 11, 5613.	12.8	53
28	Atomic-scale strain manipulation of a charge density wave. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6986-6990.	7.1	47
29	Geometry of the charge density wave in the kagome metal AV_3Sb_5 . <i>Physical Review B</i> , 2021, 104, .	3.2	47
30	Local Moment Formation in the Superconducting State of a Doped Mott Insulator. <i>Physical Review Letters</i> , 2002, 89, 217002.	7.8	44
31	Quantum Anomalous Vortex and Majorana Zero Mode in Iron-Based Superconductor $\text{Fe}(\text{Te},\text{Se})$. <i>Physical Review X</i> , 2019, 9, .	8.9	44
32	Nodal d -wave pairing and topological phases on the triangular lattice of Na_xCoO_2 . <i>Physical Review Letters</i> , 2008, 100, 217002.	7.8	43
33	Carrier localization and electronic phase separation in a doped spin-orbit-driven Mott phase in $\text{Sr}_3(\text{Ir}_{1-x}\text{Ru}_x)_2\text{O}_7$. <i>Nature Communications</i> , 2014, 5, 3377.	3.2	41
34	Vortices, Tunneling, and Deconfinement in Bilayer Quantum Hall Excitonic Superfluid. <i>Physical Review Letters</i> , 2005, 94, 176804.	7.8	38
36	Nodeless kagome superconductivity in LaRu_3Sb_5 . <i>Physical Review Materials</i> , 2021, 5, .	21.3	17

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37	Ordered and tunable Majorana-zero-mode lattice in naturally strained LiFeAs. Nature, 2022, 606, 890-895.	27.8	37
38	Antiferromagnetic Chern Insulators in Noncentrosymmetric Systems. Physical Review Letters, 2018, 120, 157205.	7.8	36
39	Correlating Off-Stoichiometric Doping and Nanoscale Electronic Inhomogeneity in the High-Tc Superconductor $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$. Physical Review Letters, 2007, 98, 076401.	7.8	35
40	Fermion-boson many-body interplay in a frustrated kagome paramagnet. Nature Communications, 2020, 11, 4003.	12.8	35
41	Electron Correlation and Spin Density Wave Order in Iron Pnictides. Physical Review Letters, 2010, 105, 096401.	7.8	34
42	Spin-orbit quantum impurity in a topological magnet. Nature Communications, 2020, 11, 4415.	12.8	34
43	Observation of magnetic adatom-induced Majorana vortex and its hybridization with field-induced Majorana vortex in an iron-based superconductor. Nature Communications, 2021, 12, 1348.	12.8	33
44	Nodeless High- T_c Superconductivity in the Highly Overdoped CuO Monolayer. Physical Review Letters, 2018, 121, 227002.	7.8	31
45	Charge-stripe crystal phase in an insulating cuprate. Nature Materials, 2019, 18, 103-107.	27.5	30
46	Correlation Effects and Hidden Spin-Orbit Entangled Electronic Order in Parent and Electron-Doped Iridates SrMn_2O_7 . Physical Review X, 2017, 7, .	8.9	27
47	Non-Abelian quantum Hall states and their quasiparticles: From the pattern of zeros to vertex algebra. Physical Review B, 2010, 81, .	3.2	25
48	Electron-spin excitation coupling in an electron-doped copper oxide superconductor. Nature Physics, 2011, 7, 719-724.	16.7	25
49	Doublon-holon binding, Mott transition, and fractionalized antiferromagnet in the Hubbard model. Physical Review B, 2014, 89, .	3.2	25
50	Interpretable machine learning study of the many-body localization transition in disordered quantum Ising spin chains. Physical Review B, 2019, 99, .	3.2	25
51	Zero-energy bound states in the high-temperature superconductors at the two-dimensional limit. Science Advances, 2020, 6, eaax7547.	10.3	25
52	Conductance Correlations near Integer Quantum Hall Transitions. Physical Review Letters, 1998, 81, 2767-2770.	7.8	24
53	Extended Hubbard model of superconductivity driven by charge fluctuations in iron pnictides. Physical Review B, 2011, 84, .	3.2	24
54	Many-Body Resonance in a Correlated Topological Kagome Antiferromagnet. Physical Review Letters, 2020, 125, 046401.	7.8	24

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55	Superconducting proximity effect in a topological insulator using Fe(Te, Se). Physical Review B, 2018, 97, .	3.2 23
56	Atomic-scale fragmentation and collapse of antiferromagnetic order in a doped Mott insulator. Nature Physics, 2019, 15, 1267-1272.	16.7 23
57	Majorana Fermions in Spin-Singlet Nodal Superconductors with Coexisting Noncollinear Magnetic Order. Physical Review Letters, 2013, 110, 096403.	7.8 22
58	Field-free platform for Majorana-like zero mode in superconductors with a topological surface state. Physical Review B, 2020, 101, .	3.2 22
59	Tunable Anderson metal-insulator transition in quantum spin-Hall insulators. Physical Review B, 2015, 91, .	3.2 21
60	Compressibility of the Two-Dimensional Infinite-U Hubbard Model. Physical Review Letters, 1999, 83, 2046-2049.	7.8 20
61	An exactly soluble model with tunable p-wave paired fermion ground states. Europhysics Letters, 2008, 84, 57002.	2.0 19
62	Quantum Phase Transition of Correlated Iron-Based Superconductivity in LiFeAs . Physical Review Letters, 2019, 123, 217004.	7.8 19
63	Continuous doping of a cuprate surface: Insights from in situ angle-resolved photoemission. Physical Review B, 2018, 98, .	3.2 17
64	Robust short-range-ordered nematicity in FeSe evidenced by high-pressure NMR. Physical Review B, 2017, 96, .	3.2 16
65	Vector field controlled vortex lattice symmetry in LiFeAs using scanning tunneling microscopy. Physical Review B, 2019, 99, .	3.2 15
66	Chiral Spin Density Wave Order on the Frustrated Honeycomb and Bilayer Triangle Lattice Hubbard Model at Half-Filling. Physical Review Letters, 2015, 114, 216402.	7.8 14
67	Atomic Line Defects and Topological Superconductivity in Unconventional Superconductors. Physical Review X, 2021, 11, .	8.9 14
68	Nematic transition and nanoscale suppression of superconductivity in Fe(Te,Se). Nature Physics, 2021, 17, 903-908.	16.7 14
69	Tunneling, Dissipation, and Superfluid Transition in Quantum Hall Bilayers. Physical Review Letters, 2004, 92, 136803.	7.8 13
70	c -axis nodal lines induced by interlayer pairing in iron-based superconductors. Physical Review B, 2012, 85, .	3.2 13
71	Manipulation of Dirac band curvature and momentum-dependent g factor in a kagome magnet. Nature Physics, 2022, 18, 644-649.	16.7 13
72		

#	ARTICLE	IF	CITATIONS
73	Abelian and non-Abelian anyons in integer quantum anomalous Hall effect and topological phase transitions via superconducting proximity effect. <i>Physical Review B</i> , 2011, 83, .	3.2	12
74	Nanoscale determination of the mass enhancement factor in the lightly doped bulk insulator lead selenide. <i>Nature Communications</i> , 2015, 6, 6559.	12.8	12
75	Low-temperature magnetic crossover in the topological kagome magnet TbMn6Sn6. <i>Communications Physics</i> , 2022, 5, .	5.3	12
76	Chirality locking charge density waves in a chiral crystal. <i>Nature Communications</i> , 2022, 13, .	12.8	12
77	Textured electronic states of the triangular-lattice Hubbard model and $\text{Na}_x\text{Mn}_2\text{M}_2\text{O}_{10}$. <i>Physical Review B</i> , 2014, 90, .		
78	Doping induced Mott collapse and possible density wave instabilities in $(\text{Sr}_{1-x}\text{La}_x)_3\text{Ir}_2\text{O}_7$. <i>Npj Quantum Materials</i> , 2019, 4, .	5.2	11
79	Two-dimensional topological superconducting phases emerged from d-wave superconductors in proximity to antiferromagnets. <i>Europhysics Letters</i> , 2017, 118, 37004.	2.0	9
80	Electronic structure and two-band superconductivity in unconventional high- T_c cuprates Ba_2CuO_7 and CuO . <i>Physical Review B</i> , 2021, 103, .	3.2	9
81	Featureless quantum paramagnet with frustrated criticality and competing spiral magnetism on spin-1 honeycomb lattice magnet. <i>Physical Review Research</i> , 2020, 2, .	3.6	9
82	Thermodynamic and tunneling density of states of the integer quantum Hall critical state. <i>Physical Review B</i> , 2001, 65, .	3.2	7
83	Bulk Tunneling at Integer Quantum Hall Transitions. <i>Physical Review Letters</i> , 1999, 83, 828-831.	7.8	6
84	Mott and Wigner-Mott transitions in doped correlated electron systems: Effects of superlattice potential and intersite correlation. <i>Physical Review B</i> , 2009, 80, .	3.2	6
85	Double-peak specific heat and spin freezing in the spin-2 triangular lattice antiferromagnet FeAl_2 . <i>Physical Review B</i> , 2019, 99, .		
86	The As-surface of an iron-based superconductor $\text{CaKFe}_4\text{As}_4$. <i>Nano Research</i> , 2021, 14, 3921-3925.	10.4	6
87	Role of disorder in half-filled high Landau levels. <i>Physical Review B</i> , 2002, 66, .	3.2	5
88	Correlation-Hole Induced Paired Quantum Hall States in the Lowest Landau Level. <i>Physical Review Letters</i> , 2010, 105, 216801.	7.8	5
89	Imaging antiferromagnetic domain fluctuations and the effect of atomic scale disorder in a doped spin-orbit Mott insulator. <i>Science Advances</i> , 2021, 7, eabi6468.	10.3	5
90	Dynamical mass generation of composite Dirac fermions and fractional quantum Hall effects near charge neutrality in graphene. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 305601.	1.8	4

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91	Dynamical slave-boson mean-field study of the Mott transition in the Hubbard model in the large- z limit. Physical Review B, 2020, 101, .	3.2	4
92	Valence Bond Glass Theory of Electronic Disorder and the Pseudogap State of High-Temperature Cuprate Superconductors. Physical Review Letters, 2009, 102, 107001.	7.8	3
93	Distinct-symmetry spin-liquid states and phase diagram of the Kitaev-Hubbard model. Physical Review B, 2014, 90, .	3.2	2
94	Universal topological quantum computation with strongly correlated Majorana edge modes. New Journal of Physics, 2022, 24, 043009.	2.9	2
95	Yu-Shiba-Rusinov States in a Superconductor with Topological \mathbb{Z}_2 Bands. Physical Review Letters, 2022, 128, .	7.8	2
96	Quantum oscillations turn $\log(B)$ -periodic in Dirac semimetals: "Who ordered that?". National Science Review, 2019, 6, 378-379.	9.5	1
97	Optical study on the possible Slater insulator $\text{Sr}_{1-x}\text{La}_x\text{SnO}_3$. Physical Review B, 2019, 100, .	3.2	1
98	Three-dimensional stacking of canted antiferromagnetism and pseudospin current in undoped Sr_2ZrO_7 : Symmetry analysis and microscopic model realization. Physical Review B, 2021, 104, .	3.2	1
99	Two-band superconductivity through structural and electronic reconstruction on interface: $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}/\text{LaAlO}_3(001)$. Journal of Applied Physics, 2022, 131, 125303.	2.5	0