

Ziqiang Wang

List of Publications by Year in descending order

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99
papers

5,356
citations

101543

36
h-index

85541

71
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100
all docs

100
docs citations

100
times ranked

3876
citing authors

#	ARTICLE	IF	CITATIONS
1	Rotation symmetry breaking in the normal state of a kagome superconductor KV3Sb5. Nature Physics, 2022, 18, 265-270.	16.7	102
2	Two-band superconductivity through structural and electronic reconstruction on interface: YBa ₂ Cu ₃ O ₇ /LaAlO ₃ (001). Journal of Applied Physics, 2022, 131, 125303.	2.5	0
3	Manipulation of Dirac band curvature and momentum-dependent g factor in a kagome magnet. Nature Physics, 2022, 18, 644-649.	16.7	13
4	Universal topological quantum computation with strongly correlated Majorana edge modes. New Journal of Physics, 2022, 24, 043009.	2.9	2
5	Low-temperature magnetic crossover in the topological kagome magnet TbMn6Sn6. Communications Physics, 2022, 5, .	5.3	12
6	Chirality locking charge density waves in a chiral crystal. Nature Communications, 2022, 13, .	12.8	12
7	Yu-Shiba-Rusinov States in a Superconductor with Topological Z_2 Bands. Physical Review Letters, 2022, 128, .	7.8	2
8	Ordered and tunable Majorana-zero-mode lattice in naturally strained LiFeAs. Nature, 2022, 606, 890-895.	27.8	37
9	Nanoscale decoupling of electronic nematicity and structural anisotropy in FeSe thin films. Nature Communications, 2021, 12, 10.	12.8	55
10	The As-surface of an iron-based superconductor CaKFe4As4. Nano Research, 2021, 14, 3921-3925.	10.4	6
11	Nodeless kagome superconductivity in LaRu ₃ Sn ₇ . Physical Review Materials, 2021, 5, .	10.4	7
12	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
13	Atomic Line Defects and Topological Superconductivity in Unconventional Superconductors. Physical Review X, 2021, 11, .	8.9	14
14	Unconventional chiral charge order in kagome superconductor KV3Sb5. Nature Materials, 2021, 20, 1353-1357.	27.5	391
15	Nematic transition and nanoscale suppression of superconductivity in Fe(Te,Se). Nature Physics, 2021, 17, 903-908.	16.7	14
16	Charge Density Waves and Electronic Properties of Superconducting Kagome Metals. Physical Review Letters, 2021, 127, 046401.	7.8	238
17	Chiral flux phase in the Kagome superconductor AV3Sb5. Science Bulletin, 2021, 66, 1384-1388.	9.0	187
18	Roton pair density wave in a strong-coupling kagome superconductor. Nature, 2021, 599, 222-228.	27.8	276

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19	Cascade of correlated electron states in the kagome superconductor CsV ₃ Sb ₅ . Nature, 2021, 599, 216-221.	27.8	251
20	Electronic structure and two-band superconductivity in unconventional high- T_c cuprates Ba ₂ As ₂ F ₂ O ₈ and Ba ₂ CuO ₃ . Physical Review B, 2021, 104, .	3.2	9
21	Three-dimensional stacking of canted antiferromagnetism and pseudospin current in undoped Sr ₂ VO ₄ : Symmetry analysis and microscopic model realization. Physical Review B, 2021, 104, .	3.2	1
22	Imaging antiferromagnetic domain fluctuations and the effect of atomic scale disorder in a doped spin-orbit Mott insulator. Science Advances, 2021, 7, eabi6468.	10.3	5
23	Geometry of the charge density wave in the kagome metal AV ₃ Sb ₅ . Physical Review B, 2021, 104, .	3.2	47
24	Correlated insulating phases of twisted bilayer graphene at commensurate filling fractions: A Hartree-Fock study. Physical Review B, 2020, 102, .	3.2	107
25	Many-Body Resonance in a Correlated Topological Kagome Antiferromagnet. Physical Review Letters, 2020, 125, 046401.	7.8	24
26	Quantum-limit Chern topological magnetism in TbMn ₆ Sn ₆ . Nature, 2020, 583, 533-536.	27.8	253
27	Fermion-boson many-body interplay in a frustrated kagome paramagnet. Nature Communications, 2020, 11, 4003.	12.8	35
28	Orbital-selective Dirac fermions and extremely flat bands in frustrated kagome-lattice metal CoSn. Nature Communications, 2020, 11, 4002.	12.8	121
29	Spin-orbit quantum impurity in a topological magnet. Nature Communications, 2020, 11, 4415.	12.8	34
30	Localized spin-orbit polaron in magnetic Weyl semimetal Co ₃ Sn ₂ S ₂ . Nature Communications, 2020, 11, 5613.	12.8	53
31	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
32	Atomic line defects and zero-energy end states in monolayer Fe(Te,Se) high-temperature superconductors. Nature Physics, 2020, 16, 536-540.	16.7	78
33	Chiral superconductivity in heavy-fermion metal UTe ₂ . Nature, 2020, 579, 523-527.	27.8	193
34	Field-free platform for Majorana-like zero mode in superconductors with a topological surface state. Physical Review B, 2020, 101, .	3.2	22
35	Zero-energy bound states in the high-temperature superconductors at the two-dimensional limit. Science Advances, 2020, 6, eaax7547.	10.3	25
36	Featureless quantum paramagnet with frustrated criticality and competing spiral magnetism on spin-1 honeycomb lattice magnet. Physical Review Research, 2020, 2, .	3.6	9

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37	Doping induced Mott collapse and possible density wave instabilities in $(\text{Sr}_{1-x}\text{La}_x)_3\text{Ir}_2\text{O}_7$. Npj Quantum Materials, 2019, 4, .	5.2	11
38	Quantum oscillations turn $\log(B)$ -periodic in Dirac semimetals: "Who ordered that?". National Science Review, 2019, 6, 378-379.	9.5	1
39	Optical study on the possible Slater insulator $\text{SrIr}_0.8\text{Sn}_0.2\text{O}_3$. Physical Review B, 2019, 100, .	3.2	1
40	Atomic-scale fragmentation and collapse of antiferromagnetic order in a doped Mott insulator. Nature Physics, 2019, 15, 1267-1272.	16.7	23
41	Vector field controlled vortex lattice symmetry in LiFeAs using scanning tunneling microscopy. Physical Review B, 2019, 99, .	3.2	15
42	Negative flat band magnetism in a spin-orbit-coupled correlated kagome magnet. Nature Physics, 2019, 15, 443-448.	16.7	283
43	Double-peak specific heat and spin freezing in the spin-2 triangular lattice antiferromagnet FeAl_2 . Physical Review B, 2019, 99, .	3.2	22
44	Interpretable machine learning study of the many-body localization transition in disordered quantum Ising spin chains. Physical Review B, 2019, 99, .	3.2	25
45	Quantum Anomalous Vortex and Majorana Zero Mode in Iron-Based Superconductor $\text{Fe}(\text{Te},\text{Se})$. Physical Review X, 2019, 9, .	8.9	44
46	Quantum Phase Transition of Correlated Iron-Based Superconductivity in LiFe_2O_4 . Physical Review Letters, 2019, 123, 217004.	7.8	19
47	Charge-stripe crystal phase in an insulating cuprate. Nature Materials, 2019, 18, 103-107.	27.5	30
48	Antiferromagnetic Chern Insulators in Noncentrosymmetric Systems. Physical Review Letters, 2018, 120, 157205.	7.8	36
49	Nodeless High- T_c Superconductivity in the Highly Overdoped CuO_2 Monolayer. Physical Review Letters, 2018, 121, 227002.	7.8	31
50	Continuous doping of a cuprate surface: Insights from in situ angle-resolved photoemission. Physical Review B, 2018, 98, .	3.2	17
51	Giant and anisotropic many-body spin-orbit tunability in a strongly correlated kagome magnet. Nature, 2018, 562, 91-95.	27.8	255
52	Atomic-scale strain manipulation of a charge density wave. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6986-6990.	7.1	47
53	Superconducting proximity effect in a topological insulator using $\text{Fe}(\text{Te}, \text{Se})$. Physical Review B, 2018, 97, .	3.2	23
54	Robust short-range-ordered nematicity in FeSe evidenced by high-pressure NMR. Physical Review B, 2017, 96, .	3.2	16

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55	Two-dimensional topological superconducting phases emerged from d-wave superconductors in proximity to antiferromagnets. <i>Europhysics Letters</i> , 2017, 118, 37004.	2.0	9
56	Correlation Effects and Hidden Spin-Orbit Entangled Electronic Order in Parent and Electron-Doped Iridates $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Sr} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mrow} \rangle$ Physical Review X, 2017, 7, .	8.9	27
57	Interatomic Coulomb interaction and electron nematic bond order in FeSe. <i>Physical Review B</i> , 2016, 93, .	3.2	72
58	Tunable Anderson metal-insulator transition in quantum spin-Hall insulators. <i>Physical Review B</i> , 2015, 91, .	3.2	21
59	Observation of two distinct $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle d \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle x \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle y \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle z \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle$ splittings in FeSe. <i>Physical Review B</i> , 2015, 91, .	3.2	130
60	Disorder and Metal-Insulator Transitions in Weyl Semimetals. <i>Physical Review Letters</i> , 2015, 115, 246603.	7.8	124
61	Chiral Spin Density Wave Order on the Frustrated Honeycomb and Bilayer Triangle Lattice Hubbard Model at Half-Filling. <i>Physical Review Letters</i> , 2015, 114, 216402.	7.8	14
62	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
63	Textured electronic states of the triangular-lattice Hubbard model and $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{Na} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle x \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle y \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle z \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle$ Evolution of antiferromagnetic susceptibility under uniaxial pressure in Ba($\langle \text{mml:math} \rangle Tj ETQq0 0 0 rgBT / \text{Overlock 10 Tf 50 407 Td} \langle \text{mml:math} \rangle$) Evolution of antiferromagnetic susceptibility under uniaxial pressure in Ba($\langle \text{mml:math} \rangle Tj ETQq0 0 0 rgBT / \text{Overlock 10 Tf 50 407 Td} \langle \text{mml:math} \rangle$)	7.8	124
64	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{As} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle$ Physical Review B, 2014, 89, .	3.2	23
65	Carrier localization and electronic phase separation in a doped spin-orbit-driven Mott phase in $\text{Sr}_3(\text{Ir} \hat{1} \hat{e} \hat{x} \text{Ru}_x)\text{O}_7$. <i>Nature Communications</i> , 2014, 5, 3377.	12.8	40
66	doublon-holon binding, Mott transition, and fractionalized antiferromagnet in the Hubbard model. <i>Physical Review B</i> , 2014, 89, .	3.2	25
67	Distinct-symmetry spin-liquid states and phase diagram of the Kitaev-Hubbard model. <i>Physical Review B</i> , 2014, 90, .	3.2	2
68	Majorana Fermions in Spin-Singlet Nodal Superconductors with Coexisting Noncollinear Magnetic Order. <i>Physical Review Letters</i> , 2013, 110, 096403.	7.8	22
69	Imaging the evolution of metallic states in a correlated iridate. <i>Nature Materials</i> , 2013, 12, 707-713.	27.5	71
70	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
71	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mi} \rangle c \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle$ axis nodal lines induced by interlayer pairing in $\text{Sr}_3(\text{Ir} \hat{1} \hat{e} \hat{x} \text{Ru}_x)\text{O}_7$. <i>Physical Review Letters</i> , 2013, 110, 096403.	3.2	13
72	Spin ordering and electronic texture in the bilayer iridate $\text{Sr}_3(\text{Ir} \hat{1} \hat{e} \hat{x} \text{Ru}_x)\text{O}_7$. <i>Physical Review Letters</i> , 2013, 110, 096403.	3.2	41

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73	Effect of Uniaxial Strain on the Structural and Magnetic Phase Transitions in BaFe_2As_2 . Physical Review Letters, 2012, 108, 087001.	7.8	95
74	Electron-spin excitation coupling in an electron-doped copper oxide superconductor. Nature Physics, 2011, 7, 719-724.	16.7	25
75	Extended Hubbard model of superconductivity driven by charge fluctuations in iron pnictides. Physical Review B, 2011, 84, .	3.2	24
76	Abelian and non-Abelian anyons in integer quantum anomalous Hall effect and topological phase transitions via superconducting proximity effect. Physical Review B, 2011, 83, .	3.2	12
77	Possible interaction-driven topological phases in (111) bilayers of LaNiO_3 . Physical Review B, 2011, 84, .	3.2	139
78	Correlation-Hole Induced Paired Quantum Hall States in the Lowest Landau Level. Physical Review Letters, 2010, 105, 216801.	7.8	5
79	Electron Correlation and Spin Density Wave Order in Iron Pnictides. Physical Review Letters, 2010, 105, 096401.	7.8	34
80	Non-Abelian quantum Hall states and their quasiparticles: From the pattern of zeros to vertex algebra. Physical Review B, 2010, 81, .	3.2	25
81	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
82	Mott and Wigner-Mott transitions in doped correlated electron systems: Effects of superlattice potential and intersite correlation. Physical Review B, 2009, 80, .	3.2	6
83	An exactly soluble model with tunable p-wave paired fermion ground states. Europhysics Letters, 2008, 84, 57002.	2.0	19
84	Coexistence of Competing Orders with Two Energy Gaps in Real and Momentum Space in the High Temperature Superconductor $\text{Bi}_2\text{Sr}_2\text{CuO}_8$. Physical Review Letters, 2008, 101, 207002.	7.8	96
85	Pairing and Topological Phases on the Triangular Lattice of Na_xCoO_2 . Physical Review Letters, 2008, 100, 217002.	7.8	43
86	Correlating Off-Stoichiometric Doping and Nanoscale Electronic Inhomogeneity in the High-Tc Superconductor $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\text{f}$. Physical Review Letters, 2007, 98, 076401.	7.8	35
87	Surface phase separation in nanosized charge-ordered manganites. Applied Physics Letters, 2007, 90, 082508.	3.3	115
88	A distinct bosonic mode in an electron-doped high-transition-temperature superconductor. Nature, 2007, 450, 1058-1061.	27.8	73
89	Electron Correlation and Fermi Surface Topology of Na_xCoO_2 . Physical Review Letters, 2005, 94, 206401.	7.8	83
90	Vortices, Tunneling, and Deconfinement in Bilayer Quantum Hall Excitonic Superfluid. Physical Review Letters, 2005, 94, 176804.	7.8	38

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91	Tunneling, Dissipation, and Superfluid Transition in Quantum Hall Bilayers. Physical Review Letters, 2004, 92, 136803.	7.8	13
92	Local Moment Formation in the Superconducting State of a Doped Mott Insulator. Physical Review Letters, 2002, 89, 217002.	7.8	44
93	Role of disorder in half-filled high Landau levels. Physical Review B, 2002, 66, .	3.2	5
94	Thermodynamic and tunneling density of states of the integer quantum Hall critical state. Physical Review B, 2001, 65, .	3.2	7
95	Superconductivity near Itinerant Ferromagnetic Quantum Criticality. Physical Review Letters, 2001, 87, 257001.	7.8	59
96	Bulk Tunneling at Integer Quantum Hall Transitions. Physical Review Letters, 1999, 83, 828-831.	7.8	6
97	Compressibility of the Two-Dimensional Infinite-U Hubbard Model. Physical Review Letters, 1999, 83, 2046-2049.	7.8	20
98	Conductance Correlations near Integer Quantum Hall Transitions. Physical Review Letters, 1998, 81, 2767-2770.	7.8	24
99	Critical Conductance and Its Fluctuations at Integer Hall Plateau Transitions. Physical Review Letters, 1996, 77, 4426-4429.	7.8	62