

# Zhi-Jun Wang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8219767/publications.pdf>

Version: 2024-02-01

115  
papers

21,327  
citations

44444

50  
h-index

24511

114  
g-index

124  
all docs

124  
docs citations

124  
times ranked

11507  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Topological materials discovery from crystal symmetry. Nature Reviews Materials, 2022, 7, 196-216.  | 23.3 | 65        |
| 2  | Unconventional materials: the mismatch between electronic charge centers and atomic positions. Science Bulletin, 2022, 67, 598-608.                                       | 4.3  | 32        |
| 3  | Multiple mobile excitons manifested as sidebands in quasi-one-dimensional metallic TaSe <sub>3</sub> . Nature Materials, 2022, 21, 423-429.                               | 13.3 | 8         |
| 4  | Unprotected quadratic band crossing points and quantum anomalous Hall effect in FeB <sub>2</sub> monolayer. Science China: Physics, Mechanics and Astronomy, 2022, 65, 1. | 2.0  | 4         |
| 5  | NdAlSi: A magnetic Weyl semimetal candidate with rich magnetic phases and atypical transport properties. Physical Review B, 2022, 105, .                                  | 1.1  | 17        |
| 6  | Twisted nodal wires and three-dimensional quantum spin Hall effect in distorted square-net compounds. Physical Review B, 2022, 105, .                                     | 1.1  | 7         |
| 7  | Electronic structures and topological properties in nickelates $\text{LnNiO}_2$ . National Science Review, 2021, 8, nwaa218.  | 4.6  | 33        |
| 8  | Irvsp: To obtain irreducible representations of electronic states in the VASP. Computer Physics Communications, 2021, 261, 107760.  | 3.0  | 151       |
| 9  | Fabrication and cold test of prototype of spatially periodic radio frequency quadrupole focusing linac. Nuclear Science and Techniques/Hewuli, 2021, 32, 1.               | 1.3  | 3         |
| 10 | Superconductivity and Charge Density Wave in Iodine-Doped $\text{CuR}_2\text{Te}_4$ . Chinese Physics Letters, 2021, 38, 037401.  | 1.3  | 15        |
| 11 | Sixfold excitations in electriles. Physical Review Research, 2021, 3, .   | 1.3  | 37        |
| 12 | Quantum spin Hall effect in $\text{Ta}_2$ . Physical Review B, 2021, 103, 220401.   | 1.1  | 22        |
| 13 | Topological insulators in the NaCaBi family with large spin-orbit coupling gaps. Physical Review Research, 2021, 3, .   | 1.3  | 7         |
| 14 | The wakefield and energy loss study of microbunch trains passing through plasmas. Contributions To Plasma Physics, 2021, 61, e202000187.                                  | 0.5  | 0         |
| 15 | Crystalline symmetry-protected non-trivial topology in prototype compound BaAl <sub>4</sub> . Npj Quantum Materials, 2021, 6, .   | 1.8  | 7         |
| 16 | Surface charge induced Dirac band splitting in a charge density wave material $\text{M}_2\text{X}_2$ . Physical Review Research, 2021, 3, .                               | 1.1  | 18        |
| 17 | Discovery of $\hat{C}_2$ rotation anomaly in topological crystalline insulator SrPb. Nature Communications, 2021, 12, 2052.   | 5.8  | 5         |
| 18 | Charge-four Weyl phonons. Physical Review B, 2021, 103, .   | 1.1  | 59        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | High-throughput screening for Weyl semimetals with $S_4$ symmetry. Science Bulletin, 2021, 66, 667-675.   | 4.3 | 16        |
| 20 | Research of beam matching on RFQ for CADS proton linac. International Journal of Modern Physics E, 2021, 30, 2150027.   | 0.4 | 2         |
| 21 | Time-Reversal Symmetry Breaking Driven Topological Phase Transition in $\text{EuB}_6$ . Physical Review X, 2021, 11, .  | 2.8 | 14        |
| 22 | Application of topological quantum chemistry in electrides. Physical Review B, 2021, 103, .   | 1.1 | 23        |
| 23 | Physics design of the CiADS MEBT. International Journal of Modern Physics A, 2021, 36, 2150127.   | 0.5 | 1         |
| 24 | Pressure-induced a partial disorder and superconductivity in quasi-one-dimensional Weyl semimetal (NbSe <sub>4</sub> ) <sub>2</sub> I. Materials Today Physics, 2021, 21, 100509. | 2.9 | 13        |
| 25 | A charge-density-wave topological semimetal. Nature Physics, 2021, 17, 381-387.   | 6.5 | 76        |
| 26 | Ferromagnetic and ferroelectric insulator $\text{Ba}_5\text{S}$ . Physical Review Materials, 2021, 5, .   | 0.9 | 0         |
| 27 | Beam dynamics design of HIAF RFQ. International Journal of Modern Physics E, 2021, 30, .  | 0.4 | 1         |
| 28 | Observation of topological edge states in the quantum spin Hall insulator $\text{Ta}_2\text{Te}_5$ . Physical Review B, 2021, 104, .  | 1.0 | 2         |
| 29 | Mapping Dirac fermions in the intrinsic antiferromagnetic topological insulators  |     |           |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | Glide-resolved photoemission spectroscopy: Measuring topological invariants in nonsymmorphic space groups. Physical Review B, 2020, 101, . | 1.1  | 2         |
| 38 | Signatures of Sixfold Degenerate Exotic Fermions in a Superconducting Metal PdSb <sub>2</sub> . Advanced Materials, 2020, 32, e1906046.    | 11.1 | 36        |
| 39 | Magnetic Semimetals and Quantized Anomalous Hall Effect in EuB <sub>6</sub> . Physical Review Letters, 2020, 124, 076403.                  | 2.9  | 65        |
| 40 | Strong and fragile topological Dirac semimetals with higher-order Fermi arcs. Nature Communications, 2020, 11, 627.                        | 5.8  | 152       |
| 41 | Weyl semimetals with $S_4$ symmetry. Physical Review B, 2020, 101, .   | 2.9  | 218       |
| 42 | BaHgSn: A Dirac semimetal with surface hourglass fermions. Physical Review B, 2020, 101, .   | 1.1  | 6         |
| 43 | Influence of the solenoid magnetic field on the self-modulation mechanism. Laser and Particle Beams, 2020, 38, 135-140.                    | 0.4  | 2         |
| 44 | Magnetic and electronic properties of a topological nodal line semimetal candidate: HoSbTe. Physical Review Materials, 2020, 4, .          | 0.9  | 16        |
| 45 | All Magic Angles in Twisted Bilayer Graphene are Topological. Physical Review Letters, 2019, 123, 036401.                                  | 2.9  | 327       |
| 46 | Higher-Order Topology of the Axion Insulator $EuIn_2Sb_2$ . Physical Review Letters, 2019, 122, 256402.                                    | 2.9  | 218       |
| 47 | Twisted Bilayer Graphene: A Phonon-Driven Superconductor. Physical Review Letters, 2019, 122, 257002.                                      | 2.9  | 255       |
| 48 | Higher-Order Topology, Monopole Nodal Lines, and the Origin of Large Fermi Arcs in Transition Metal Dichalcogenides $XTe_2$ .              |      |           |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 55 | Physics design of the superconducting section of the CiADS linac. International Journal of Modern Physics A, 2019, 34, 1950178.                                | 0.5  | 5         |
| 56 | Topological electronic states in HfRuP family superconductors. Npj Computational Materials, 2019, 5, .   | 3.5  | 21        |
| 57 | Axionic charge-density wave in the Weyl semimetal (TaSe <sub>4</sub> ) <sub>2</sub> I. Nature, 2019, 575, 315-319.   | 13.7 | 143       |
| 58 | Multiple topological states in iron-based superconductors. Nature Physics, 2019, 15, 41-47.  | 6.5  | 170       |
| 59 | Topological crystalline insulators with $C_2$ rotation anomaly. Physical Review Research, 2019, 1, .   | 4.6  | 16        |
| 60 | Observation of topological superconductivity on the surface of an iron-based superconductor. Science, 2018, 360, 182-186.                                      | 6.0  | 500       |
| 61 | Magnetic and electronic properties of the Cu-substituted Weyl semimetal candidate ZrCo <sub>2</sub> Sn. Journal of Physics Condensed Matter, 2018, 30, 075701. | 0.7  | 20        |
| 62 | Band connectivity for topological quantum chemistry: Band structures as a graph theory problem. Physical Review B, 2018, 97, .                                 | 1.1  | 49        |
| 63 | Building blocks of topological quantum chemistry: Elementary band representations. Physical Review B, 2018, 97, .  | 1.1  | 160       |
| 64 | Temperature-driven topological transition in 1T'-MoTe <sub>2</sub> . Npj Quantum Materials, 2018, 3, .   | 1.8  | 36        |
| 65 | Quasiparticle interference of Fermi arc states in the type-II Weyl semimetal candidate $WT_2e_2$ . Physical Review B, 2018, 97, .                              | 1.1  | 14        |
| 66 | Beam dynamics, RF measurement, and commissioning of a CW heavy ion IH-DTL. Nuclear Science and Techniques/Hewuli, 2018, 29, 1.                                 | 1.3  | 7         |
| 67 | Topological phases in the $TaSe_3$ compound. Physical Review B, 2018, 98, .  | 1.1  | 14        |
| 68 | Higher-order topological insulators. Science Advances, 2018, 4, eaat0346.  | 4.7  | 1,066     |
| 69 | Topology of Disconnected Elementary Band Representations. Physical Review Letters, 2018, 120, 266401.  | 2.9  | 102       |
| 70 | Higher-order topology in bismuth. Nature Physics, 2018, 14, 918-924.   | 6.5  | 590       |
| 71 | Wallpaper fermions and the nonsymmorphic Dirac insulator. Science, 2018, 361, 246-251.   | 6.0  | 125       |
| 72 | Experimental evidence of hourglass fermion in the candidate nonsymmorphic topological insulator KHgSb. Science Advances, 2017, 3, e1602415.                    | 4.7  | 121       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 73 | Crystal growth and stoichiometry-dependent properties of the ferromagnetic Weyl semimetal $ZrCo_2\bar{a}^xSn$ . Journal of Physics Condensed Matter, 2017, 29, 225702.                             | 0.7  | 7         |
| 74 | Topological Dirac semimetal phase in Pd and Pt oxides. Physical Review B, 2017, 95, .  | 1.1  | 26        |
| 75 | Double crystallographic groups and their representations on the Bilbao Crystallographic Server. Journal of Applied Crystallography, 2017, 50, 1457-1477.   | 1.9  | 177       |
| 76 | Distinguishing a Majorana zero mode using spin-resolved measurements. Science, 2017, 358, 772-776.   | 6.0  | 191       |
| 77 | Graph theory data for topological quantum chemistry. Physical Review E, 2017, 96, 023310.  | 0.8  | 84        |
| 78 | Topological quantum chemistry. Nature, 2017, 547, 298-305.   | 13.7 | 947       |
| 79 | Chiral anomaly factory: Creating Weyl fermions with a magnetic field. Physical Review B, 2017, 95, .   | 1.1  | 94        |
| 80 | High-resolution studies of the Majorana atomic chain platform. Nature Physics, 2017, 13, 286-291.  | 6.5  | 180       |
| 81 | Time-Reversal-Breaking Weyl Fermions in Magnetic Heusler Alloys. Physical Review Letters, 2016, 117, 236401.   | 2.9  | 282       |
| 82 | Angle-resolved photoemission observation of Mn-pnictide hybridization and negligible band structure renormalization in $BaMn_2$ and $BaMn_2$ . Physical Review B, 2016, 94, .                      | 1.1  | 16        |
| 83 | Two-dimensional chiral topological superconductivity in Shiba lattices. Nature Communications, 2016, 7, 12297.   | 5.8  | 105       |
| 84 | Hourglass fermions. Nature, 2016, 532, 189-194.  | 13.7 | 343       |
| 85 | $MoTe_2$ : A Type-II Weyl Topological Metal. Physical Review Letters, 2016, 117, 056805.   | 2.9  | 16        |
| 86 | Composite Icosahedron/Cube Endohedral Clusters in $Rh_2Cd_{15}$ . Inorganic Chemistry, 2016, 55, 7605-7609.  | 1.9  | 6         |
| 87 | Electronic structure, Dirac points and Fermi arc surface states in three-dimensional Dirac semimetal $Na_3Bi$ from angle-resolved photoemission spectroscopy. Chinese Physics B, 2016, 25, 077101. | 0.7  | 20        |
| 88 | Universal signatures of Fermi arcs in quasiparticle interference on the surface of Weyl semimetals. Physical Review B, 2016, 93, .   | 1.1  | 54        |
| 89 | Topological Insulators from Group Cohomology. Physical Review X, 2016, 6, .  | 2.8  | 100       |
| 90 | Beyond Dirac and Weyl fermions: Unconventional quasiparticles in conventional crystals. Science, 2016, 353, aaf5037.   | 6.0  | 881       |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 91  | Imaging electronic states on topological semimetals using scanning tunneling microscopy. <i>New Journal of Physics</i> , 2016, 18, 105003.  | 1.2  | 23        |
| 92  | The chiral anomaly and thermopower of Weyl fermions in the half-Heusler $\text{GdPtBi}$ . <i>Nature Materials</i> , 2016, 15, 1161-1165.  | 13.3 | 436       |
| 93  | Noninterceptive transverse emittance measurements using BPM for Chinese ADS R&D project. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2016, 816, 171-175. | 0.7  | 3         |
| 94  | Quasiparticle interference of the Fermi arcs and surface-bulk connectivity of a Weyl semimetal. <i>Science</i> , 2016, 351, 1184-1187.  | 6.0  | 156       |
| 95  | Interaction-induced quantum anomalous Hall phase in (111) bilayer of $\text{LaCoO}_3$ . <i>Physical Review B</i> , 2015, 91, .  | 1.7  | 47        |
| 96  | Topological nature of the $\text{FeSe}$ . <i>Physical Review B</i> , 2015, 92, .  | 1.2  | 21        |
| 97  | Large linear magnetoresistance in Dirac semimetal $\text{Cd}_3\text{As}_2$ . Fermi surfaces close to the Dirac points. <i>Physical Review B</i> , 2015, 92, .   | 1.3  | 20        |
| 98  | Surface State Bands in Superconducting $(\text{Pt} \times \text{Ir} \hat{x})_2\text{Te}$ . <i>Chinese Physics Letters</i> , 2015, 32, 077402.   | 1.3  | 2         |
| 99  | Landau level splitting in $\text{Cd}_3\text{As}_2$ under high magnetic fields. <i>Nature Communications</i> , 2015, 6, 7779.  | 5.8  | 126       |
| 100 | Type-II Weyl semimetals. <i>Nature</i> , 2015, 527, 495-498.  | 13.7 | 1,977     |
| 101 | Topological insulator to Dirac semimetal transition driven by sign change of spin-orbit coupling in thallium nitride. <i>Physical Review B</i> , 2014, 90, .  | 1.1  | 43        |
| 102 | Structural phase transition associated with van Hove singularity in 5d transition metal compound $\text{IrTe}_2$ . <i>New Journal of Physics</i> , 2014, 16, 123038.  | 1.2  | 21        |
| 103 | A stable three-dimensional topological Dirac semimetal $\text{Cd}_3\text{As}_2$ . <i>Nature Materials</i> , 2014, 13, 677-681.  | 13.3 | 1,242     |
| 104 | Topological Crystalline Kondo Insulator in Mixed Valence Ytterbium Borides. <i>Physical Review Letters</i> , 2014, 112, 016403.   | 2.9  | 148       |
| 105 | Discovery of a Three-Dimensional Topological Dirac Semimetal, $\text{Na}_3\text{Bi}$ . <i>Science</i> , 2014, 343, 864-867.   | 6.0  | 1,889     |
| 106 | Strong Anisotropy of Dirac Cones in $\text{SrMnBi}_2$ and $\text{CaMnBi}_2$ Revealed by Angle-Resolved Photoemission Spectroscopy. <i>Scientific Reports</i> , 2014, 4, 5385.   | 1.6  | 105       |
| 107 | Evidence of Topological Surface State in Three-Dimensional Dirac Semimetal $\text{Cd}_3\text{As}_2$ . <i>Scientific Reports</i> , 2014, 4, 6106.  | 1.6  | 159       |
| 108 | Three-dimensional Dirac semimetal and quantum transport in $\text{Cd}_3\text{As}_2$ . <i>Physical Review B</i> , 2013, 88, .  | 1.1  | 1,357     |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 109 | Ferromagnetism and antiferromagnetism in hydrogenated g-C <sub>3</sub> N <sub>4</sub> : A first-principles study. Physica B: Condensed Matter, 2013, 421, 46-49.  | 1.3 | 14        |
| 110 | First-principles prediction of an intrinsic half-metallic graphitic hydrogenated carbon nitride. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 347-350.<br><a href="#">Dirac semimetal and topological phase transitions in</a> | 0.9 | 30        |
| 111 | Chern Semimetal and the Quantized Anomalous Hall Effect in<br>Physical Review Letters, 2011, 107, 186806.   | 2.8 | 1,529     |
| 112 | Effect of substrate temperature on the structural and optical properties of ZnO and Al-doped ZnO thin films prepared by dc magnetron sputtering. Optics Communications, 2009, 282, 247-252.   | 1.0 | 193       |
| 113 | Determination of the optimal thickness of inserted LiF in bilayer organic light-emitting devices. Solid State Communications, 2007, 144, 445-449.   | 0.9 | 6         |
| 115 | Development and cold-test of an RFQ-DTL coupled cavity. International Journal of Modern Physics A, 0,   | 0.5 | 0         |