

# Haijun Zhang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

80 papers	16,393 citations	40 h-index	86 g-index
86 ext. papers	18,784 ext. citations	8.7 avg, IF	6.42 L-index

#	Paper	IF	Citations
80	Pressure-Driven Ne-Bearing Polynitrides with Ultrahigh Energy Density. <i>Chinese Physics Letters</i> , <b>2022</b> , 39, 056102	1.8	0
79	Magnetism-induced ideal Weyl state in bulk van der Waals crystal MnSb <sub>2</sub> Te <sub>4</sub> . <i>Applied Physics Letters</i> , <b>2021</b> , 118, 192105	3.4	3
78	Observation of topological superconductivity in a stoichiometric transition metal dichalcogenide 2M-Ws. <i>Nature Communications</i> , <b>2021</b> , 12, 2874	17.4	2
77	Electrostatic and electrochemical charging mechanisms for electric-double-layer gating media based on a crystalline LaF <sub>3</sub> solid electrolyte. <i>APL Materials</i> , <b>2021</b> , 9, 061107	5.7	1
76	Nonlinear Hall Effect in Antiferromagnetic Half-Heusler Materials. <i>Chinese Physics Letters</i> , <b>2021</b> , 38, 057302	3.0	0
75	A Programmable k · p Hamiltonian Method and Application to Magnetic Topological Insulator MnBi <sub>2</sub> Te <sub>4</sub> . <i>Chinese Physics Letters</i> , <b>2021</b> , 38, 077105	1.8	0
74	Tunable dynamical magnetoelectric effect in antiferromagnetic topological insulator MnBi <sub>2</sub> Te <sub>4</sub> films. <i>Npj Computational Materials</i> , <b>2021</b> , 7,	10.9	2
73	Interface-induced sign reversal of the anomalous Hall effect in magnetic topological insulator heterostructures. <i>Nature Communications</i> , <b>2021</b> , 12, 79	17.4	15
72	Pressure-stabilized GdN <sub>6</sub> with an armchair-antiarmlchair structure as a high energy density material. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 16751-16758	13	2
71	Evidence of topological nodal lines and surface states in the centrosymmetric superconductor SnTaS <sub>2</sub> . <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	5
70	Coexistence of ferromagnetism and topology by charge carrier engineering in the intrinsic magnetic topological insulator MnBi <sub>4</sub> Te <sub>7</sub> . <i>Physical Review B</i> , <b>2021</b> , 104,	3.3	1
69	Nonlinear level attraction of cavity axion polariton in antiferromagnetic topological insulator. <i>Physical Review B</i> , <b>2021</b> , 104,	3.3	2
68	Band engineering in epitaxial monolayer transition metal dichalcogenides alloy Mo <sub>x</sub> W <sub>1-x</sub> Se <sub>2</sub> thin films. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 193101	3.4	4
67	The mechanism exploration for zero-field ferromagnetism in intrinsic topological insulator MnBi <sub>2</sub> Te <sub>4</sub> by Bi <sub>2</sub> Te <sub>3</sub> intercalations. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 221902	3.4	6
66	Large Dynamical Axion Field in Topological Antiferromagnetic Insulator Mn <sub>2</sub> Bi <sub>2</sub> Te <sub>5</sub> . <i>Chinese Physics Letters</i> , <b>2020</b> , 37, 077304	1.8	17
65	Dynamical axion state with hidden pseudospin Chern numbers in MnBi <sub>2</sub> Te <sub>4</sub> -based heterostructures. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	12
64	Photonic non-Hermitian skin effect and non-Bloch bulk-boundary correspondence. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	29

63	Experimental Observation of the Gate-Controlled Reversal of the Anomalous Hall Effect in the Intrinsic Magnetic Topological Insulator MnBiTe Device. <i>Nano Letters</i> , <b>2020</b> , 20, 709-714	11.5	31
62	Large magnetoresistance in topological insulator candidate TaSe3. <i>AIP Advances</i> , <b>2020</b> , 10, 095314	1.5	6
61	Electric Field Tuning of Interlayer Coupling in Noncentrosymmetric 3R-MoS with an Electric Double Layer Interface. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 46900-46907	9.5	5
60	Intrinsic magnetic topological insulator phases in the Sb doped MnBiTe bulks and thin flakes. <i>Nature Communications</i> , <b>2019</b> , 10, 4469	17.4	122
59	Discovery of Superconductivity in 2M WS with Possible Topological Surface States. <i>Advanced Materials</i> , <b>2019</b> , 31, e1901942	24	44
58	Topological Axion States in the Magnetic Insulator MnBi <sub>2</sub> Te <sub>4</sub> with the Quantized Magnetoelectric Effect. <i>Physical Review Letters</i> , <b>2019</b> , 122, 206401	7.4	277
57	Observation of Anomalous $\pi$ Modes in Photonic Floquet Engineering. <i>Physical Review Letters</i> , <b>2019</b> , 122, 173901	7.4	39
56	Evidence of anisotropic Majorana bound states in 2M-WS <sub>2</sub> . <i>Nature Physics</i> , <b>2019</b> , 15, 1046-1051	16.2	44
55	Hybrid Acoustic Topological Insulator in Three Dimensions. <i>Physical Review Letters</i> , <b>2019</b> , 123, 195503	7.4	16
54	Topological insulators from the perspective of first-principles calculations <b>2019</b> , 205-214		
53	Non-Hermitian nodal-line semimetals with an anomalous bulk-boundary correspondence. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	84
52	Strain-Engineered Nonlinear Hall Effect in HgTe. <i>Spin</i> , <b>2019</b> , 09, 1940017	1.3	2
51	PT-symmetry-protected Dirac states in strain-induced hidden MoS <sub>2</sub> monolayer. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	6
50	Theoretical and experimental evidence for the intrinsic three-dimensional Dirac state in Cu <sub>2</sub> HgSnSe <sub>4</sub> . <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	1
49	Topological Phase Transition-Induced Triaxial Vector Magnetoresistance in (BiIn)Se Nanodevices. <i>ACS Nano</i> , <b>2018</b> , 12, 1537-1543	16.7	11
48	Observation of Coulomb gap in the quantum spin Hall candidate single-layer 1T'-WTe <sub>2</sub> . <i>Nature Communications</i> , <b>2018</b> , 9, 4071	17.4	32
47	Three-dimensional topological acoustic crystals with pseudospin-valley coupled saddle surface states. <i>Nature Communications</i> , <b>2018</b> , 9, 4555	17.4	35
46	Engineering topological phases in the Luttinger semimetal Hg <sub>1-x</sub> Sn. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	28

45	Helicity dependent photocurrent in electrically gated (Bi Sb )Te thin films. <i>Nature Communications</i> , <b>2017</b> , 8, 1037	17.4	40
44	Strain-induced quantum topological phase transitions in Na <sub>3</sub> Bi. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	25
43	Revealing Fermi arcs and Weyl nodes in MoTe <sub>2</sub> by quasiparticle interference mapping. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	13
42	Classification of stable Dirac and Weyl semimetals with reflection and rotational symmetry. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	45
41	Semiconductor-topological insulator transition of two-dimensional SbAs induced by biaxial tensile strain. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	111
40	Ideal Weyl Semimetals in the Chalcopyrites CuTlSe <sub>2</sub> , AgTlTe <sub>2</sub> , AuTlTe <sub>2</sub> , and ZnPbAs <sub>2</sub> . <i>Physical Review Letters</i> , <b>2016</b> , 116, 226801	7.4	85
39	Symmetry-protected ideal Weyl semimetal in HgTe-class materials. <i>Nature Communications</i> , <b>2016</b> , 7, 11136	17.4	169
38	Predicting a new phase (T'') of two-dimensional transition metal di-chalcogenides and strain-controlled topological phase transition. <i>Nanoscale</i> , <b>2016</b> , 8, 4969-75	7.7	44
37	Experimental observation of topological Fermi arcs in type-II Weyl semimetal MoTe <sub>2</sub> . <i>Nature Physics</i> , <b>2016</b> , 12, 1105-1110	16.2	506
36	Disentangling the magnetoelectric and thermoelectric transport in topological insulator thin films. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	28
35	Structural transition and amorphization in compressed Sb <sub>2</sub> O <sub>3</sub> . <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	12
34	Pressure induced metallization with absence of structural transition in layered molybdenum diselenide. <i>Nature Communications</i> , <b>2015</b> , 6, 7312	17.4	141
33	High-precision realization of robust quantum anomalous Hall state in a hard ferromagnetic topological insulator. <i>Nature Materials</i> , <b>2015</b> , 14, 473-7	27	581
32	Quantum spin hall insulators in strain-modified arsenene. <i>Nanoscale</i> , <b>2015</b> , 7, 19152-9	7.7	133
31	Quantum Spin Hall and Quantum Anomalous Hall States Realized in Junction Quantum Wells. <i>Physical Review Letters</i> , <b>2014</b> , 112,	7.4	36
30	Topological states in ferromagnetic CdO/EuO superlattices and quantum wells. <i>Physical Review Letters</i> , <b>2014</b> , 112, 096804	7.4	62
29	Quantum anomalous Hall effect in magnetically doped InAs/GaSb quantum wells. <i>Physical Review Letters</i> , <b>2014</b> , 113, 147201	7.4	50
28	Generation and electric control of spin-valley-coupled circular photogalvanic current in WSe <sub>2</sub> . <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 851-7	28.7	216

27	Study on a negative hydrogen ion source with hot cathode arc discharge. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 02B120	1.7	1
26	Spin-orbital texture in topological insulators. <i>Physical Review Letters</i> , <b>2013</b> , 111, 066801	7.4	101
25	Pressure-induced structural transitions and metallization in Ag <sub>2</sub> Te. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	18
24	Anomalous edge transport in the quantum anomalous Hall state. <i>Physical Review Letters</i> , <b>2013</b> , 111, 086803	7.4	65
23	Quantum anomalous Hall effect with higher plateaus. <i>Physical Review Letters</i> , <b>2013</b> , 111, 136801	7.4	95
22	Discovery of a single topological Dirac fermion in the strong inversion asymmetric compound BiTeCl. <i>Nature Physics</i> , <b>2013</b> , 9, 704-708	16.2	59
21	Large-gap quantum spin Hall insulators in tin films. <i>Physical Review Letters</i> , <b>2013</b> , 111, 136804	7.4	952
20	Topological insulators from the perspective of first-principles calculations. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2013</b> , 7, 72-81	2.5	58
19	Actinide topological insulator materials with strong interaction. <i>Science</i> , <b>2012</b> , 335, 1464-6	33.3	76
18	Topological Insulators from a Chemist's Perspective. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , <b>2012</b> , 638, 1641-1641	1.3	
17	Topological Insulators from a Chemist's Perspective. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 7333-7337	3.6	21
16	Topological insulators from a chemist's perspective. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 7221-5	16.4	78
15	On the Munn-Silbey approach to polaron transport with off-diagonal coupling and temperature-dependent canonical transformations. <i>Journal of Physical Chemistry B</i> , <b>2011</b> , 115, 5312-21	3.4	42
14	Half-metallic surface states and topological superconductivity in NaCoO <sub>2</sub> from first principles. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	27
13	Topological insulators in ternary compounds with a honeycomb lattice. <i>Physical Review Letters</i> , <b>2011</b> , 106, 156402	7.4	77
12	Rapid surface oxidation as a source of surface degradation factor for Bi <sub>2</sub> Se <sub>3</sub> . <i>ACS Nano</i> , <b>2011</b> , 5, 4698-703	16.7	279
11	Theoretical prediction of topological insulators in thallium-based III-V-VI 2 ternary chalcogenides. <i>Europhysics Letters</i> , <b>2010</b> , 90, 37002	1.6	126
10	Model Hamiltonian for topological insulators. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	563

9	Single Dirac cone topological surface state and unusual thermoelectric property of compounds from a new topological insulator family. <i>Physical Review Letters</i> , <b>2010</b> , 105, 266401	7.4	167
8	Oscillatory crossover from two-dimensional to three-dimensional topological insulators. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	389
7	Quantized anomalous Hall effect in magnetic topological insulators. <i>Science</i> , <b>2010</b> , 329, 61-4	33.3	1382
6	Intrinsic topological insulator Bi <sub>2</sub> Te <sub>3</sub> thin films on Si and their thickness limit. <i>Advanced Materials</i> , <b>2010</b> , 22, 4002-7	24	335
5	Topological insulators in Bi <sub>2</sub> Se <sub>3</sub> , Bi <sub>2</sub> Te <sub>3</sub> and Sb <sub>2</sub> Te <sub>3</sub> with a single Dirac cone on the surface. <i>Nature Physics</i> , <b>2009</b> , 5, 438-442	16.2	4411
4	Experimental demonstration of topological surface states protected by time-reversal symmetry. <i>Physical Review Letters</i> , <b>2009</b> , 103, 266803	7.4	586
3	Experimental realization of a three-dimensional topological insulator, Bi <sub>2</sub> Te <sub>3</sub> . <i>Science</i> , <b>2009</b> , 325, 178-81	33.3	2650
2	Electron-hole asymmetry and quantum critical point in hole-doped BaFe <sub>2</sub> As <sub>2</sub> . <i>Europhysics Letters</i> , <b>2008</b> , 84, 67015	1.6	52
1	Competing orders and spin-density-wave instability in La(O <sub>1-x</sub> F <sub>x</sub> )FeAs. <i>Europhysics Letters</i> , <b>2008</b> , 83, 27006	1.6	598