

Haijun Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7161076/publications.pdf>

Version: 2024-02-01

83
papers

20,513
citations

53794

45
h-index

60623

81
g-index

86
all docs

86
docs citations

86
times ranked

14422
citing authors

#	ARTICLE	IF	CITATIONS
1	Topological insulators in Bi ₂ Se ₃ , Bi ₂ Te ₃ and Sb ₂ Te ₃ with a single Dirac cone on the surface. Nature Physics, 2009, 5, 438-442.	16.7	5,240
2	Experimental Realization of a Three-Dimensional Topological Insulator, Bi ₂ Te ₃ . Science, 2009, 325, 178-181.	12.6	3,095
3	Quantized Anomalous Hall Effect in Magnetic Topological Insulators. Science, 2010, 329, 61-64.	12.6	1,770
4	Large-Gap Quantum Spin Hall Insulators in Tin Films. Physical Review Letters, 2013, 111, 136804.	7.8	1,140
5	High-precision realization of robust quantum anomalous Hall state in a hard ferromagnetic topological insulator. Nature Materials, 2015, 14, 473-477.	27.5	765
6	Model Hamiltonian for topological insulators. Physical Review B, 2010, 82, .	3.2	719
7	Experimental observation of topological Fermi arcs in type-II Weyl semimetal MoTe ₂ . Nature Physics, 2016, 12, 1105-1110.	16.7	663
8	Experimental Demonstration of Topological Surface States Protected by Time-Reversal Symmetry. Physical Review Letters, 2009, 103, 266803.	7.8	653
9	Competing orders and spin-density-wave instability in La(O _x) _{1-x} FeAs. Europhysics Letters, 2008, 83, 27006.	2.0	627
10	Topological Axion States in the Magnetic Insulator $MnBi_2$ with the Quantized Magnetoelectric Effect. Physical Review Letters, 2019, 122, 206401.	7.8	554
11	Oscillatory crossover from two-dimensional to three-dimensional topological insulators. Physical Review B, 2010, 81, .	3.2	459
12	Intrinsic Topological Insulator Bi ₂ Te ₃ Thin Films on Si and Their Thickness Limit. Advanced Materials, 2010, 22, 4002-4007.	21.0	376
13	Rapid Surface Oxidation as a Source of Surface Degradation Factor for Bi ₂ Se ₃ . ACS Nano, 2011, 5, 4698-4703.	14.6	320
14	Generation and electric control of spin-valley-coupled circular photogalvanic current in WSe ₂ . Nature Nanotechnology, 2014, 9, 851-857.	31.5	278
15	Intrinsic magnetic topological insulator phases in the Sb doped MnBi ₂ Te ₄ bulks and thin flakes. Nature Communications, 2019, 10, 4469.	12.8	212
16	Symmetry-protected ideal Weyl semimetal in HgTe-class materials. Nature Communications, 2016, 7, 11136.	12.8	206
17	Single Dirac Cone Topological Surface State and Unusual Thermoelectric Property of Compounds from a New Topological Insulator Family. Physical Review Letters, 2010, 105, 266401.	7.8	195
18	Pressure induced metallization with absence of structural transition in layered molybdenum diselenide. Nature Communications, 2015, 6, 7312.	12.8	193

#	ARTICLE	IF	CITATIONS
19	Quantum spin hall insulators in strain-modified arsenene. <i>Nanoscale</i> , 2015, 7, 19152-19159.	5.6	151
20	Theoretical prediction of topological insulators in thallium-based III-V-VI $\times 2$ ternary chalcogenides. <i>Europhysics Letters</i> , 2010, 90, 37002.	2.0	140
21	Quantum Anomalous Hall Effect with Higher Plateaus. <i>Physical Review Letters</i> , 2013, 111, 136801.	7.8	137
22	Spin-Orbital Texture in Topological Insulators. <i>Physical Review Letters</i> , 2013, 111, 066801.	7.8	120
23	Semiconductor-topological insulator transition of two-dimensional SbAs induced by biaxial tensile strain. <i>Physical Review B</i> , 2016, 93, .	3.2	118
24	Non-Hermitian nodal-line semimetals with an anomalous bulk-boundary correspondence. <i>Physical Review B</i> , 2019, 99, . <i>Ideal Weyl Semimetals in the Chalcopyrites</i>	3.2	118
25	CuTlSe $\times 2$	7.8	116
26	Photonic non-Hermitian skin effect and non-Bloch bulk-boundary correspondence. <i>Physical Review Research</i> , 2020, 2, . AgTlTe $\times 2$	3.6	116
27	Evidence of anisotropic Majorana bound states in 2M-WS ₂ . <i>Nature Physics</i> , 2019, 15, 1046-1051.	16.7	104
28	Discovery of Superconductivity in 2M WS ₂ with Possible Topological Surface States. <i>Advanced Materials</i> , 2019, 31, e1901942.	21.0	102
29	Observation of Anomalous Γ Modes in Photonic Floquet Engineering. <i>Physical Review Letters</i> , 2019, 122, 173901.	7.8	98
30	Topological Insulators from a Chemist's Perspective. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 7221-7225.	13.8	91
31	Topological Insulators in Ternary Compounds with a Honeycomb Lattice. <i>Physical Review Letters</i> , 2011, 106, 156402.	7.8	89
32	Actinide Topological Insulator Materials with Strong Interaction. <i>Science</i> , 2012, 335, 1464-1466.	12.6	85
33	Anomalous Edge Transport in the Quantum Anomalous Hall State. <i>Physical Review Letters</i> , 2013, 111, 086803.	7.8	78
34	Discovery of a single topological Dirac fermion in the strong inversion asymmetric compound BiTeCl. <i>Nature Physics</i> , 2013, 9, 704-708.	16.7	72
35	Topological insulators from the perspective of first-principles calculations. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013, 7, 72-81.	2.4	70
36	Topological States in Ferromagnetic CdO/EuO Superlattices and Quantum Wells. <i>Physical Review Letters</i> , 2014, 112, 096804.	7.8	70

#	ARTICLE	IF	CITATIONS
37	Quantum Anomalous Hall Effect in Magnetically Doped InAs/GaSb Quantum Wells. Physical Review Letters, 2014, 113, 147201.	7.8	66
38	Helicity dependent photocurrent in electrically gated (Bi $_{1-x}$ Sb $_x$) $_2$ Te $_3$ thin films. Nature Communications, 2017, 8, 1037.	12.8	66
39	Classification of stable Dirac and Weyl semimetals with reflection and rotational symmetry. Physical Review B, 2016, 93, .	3.2	60
40	Observation of Coulomb gap in the quantum spin Hall candidate single-layer 1T TM -WTe $_2$. Nature Communications, 2018, 9, 4071.	12.8	60
41	Experimental Observation of the Gate-Controlled Reversal of the Anomalous Hall Effect in the Intrinsic Magnetic Topological Insulator MnBi $_2$ Te $_4$ Device. Nano Letters, 2020, 20, 709-714.	9.1	60
42	Electron-hole asymmetry and quantum critical point in hole-doped BaFe $_2$ As $_2$. Europhysics Letters, 2008, 84, 67015.	2.0	53
43	Three-dimensional topological acoustic crystals with pseudospin-valley coupled saddle surface states. Nature Communications, 2018, 9, 4555.	12.8	53
44	Predicting a new phase (T^2) of two-dimensional transition metal di-chalcogenides and strain-controlled topological phase transition. Nanoscale, 2016, 8, 4969-4975.	5.6	50
45	On the Munn $\tilde{\text{S}}$ ilbey Approach to Polaron Transport with Off-Diagonal Coupling and Temperature-Dependent Canonical Transformations. Journal of Physical Chemistry B, 2011, 115, 5312-5321.	2.6	47
46	Engineering topological phases in the Luttinger semimetal In_2Sn . Physical Review B, 2018, 97, .	3.2	47
47	Quantum Spin Hall and Quantum Anomalous Hall States Realized in Junction Quantum Wells. Physical Review Letters, 2014, 112, .	7.8	46
48	Observation of topological superconductivity in a stoichiometric transition metal dichalcogenide 2M-WS $_2$. Nature Communications, 2021, 12, 2874.	12.8	43
49	Large Dynamical Axion Field in Topological Antiferromagnetic Insulator Mn $_2$ Bi $_2$ Te $_5$. Chinese Physics Letters, 2020, 37, 077304.	3.3	42
50	Strain-induced quantum topological phase transitions in Na $_3$ Bi. Physical Review B, 2017, 96, .	3.2	37
51	Disentangling the magnetoelectric and thermoelectric transport in topological insulator thin films. Physical Review B, 2015, 91, .	3.2	32
52	Dynamical axion state with hidden pseudospin Chern numbers in MnBi_2Te_4 -based heterostructures. Physical Review B, 2020, 101, .	3.2	31
53	Interface-induced sign reversal of the anomalous Hall effect in magnetic topological insulator heterostructures. Nature Communications, 2021, 12, 79.	12.8	31
54	Half-metallic surface states and topological superconductivity in NaCoO $_2$ from first principles. Physical Review B, 2011, 84, .	3.2	28

#	ARTICLE	IF	CITATIONS
55	Hybrid Acoustic Topological Insulator in Three Dimensions. <i>Physical Review Letters</i> , 2019, 123, 195503.	7.8	26
56	Pressure-induced structural transitions and metallization in AgMn_2Te . <i>Physical Review B</i> , 2013, 88, .	3.2	22
57	Revealing Fermi arcs and Weyl nodes in MoTe_2 by quasiparticle interference mapping. <i>Physical Review B</i> , 2017, 95, .	3.2	21
58	Pressure-stabilized GdN_6 with an armchair-antiarmlchair structure as a high energy density material. <i>Journal of Materials Chemistry A</i> , 2021, 9, 16751-16758.	10.3	18
59	The mechanism exploration for zero-field ferromagnetism in intrinsic topological insulator MnBi_2Te_4 by Bi_2Te_3 intercalations. <i>Applied Physics Letters</i> , 2020, 116, 221902.	3.3	17
60	Growth and characterization of the dynamical axion insulator candidate Mn_2Bi intrinsic antiferromagnetism. <i>Physical Review B</i> , 2021, 104, .	3.2	17
61	Evidence of topological nodal lines and surface states in the centrosymmetric superconductor SnTaS_2 . <i>Physical Review B</i> , 2021, 103, .	3.2	15
62	Coexistence of ferromagnetism and topology by charge carrier engineering in the intrinsic magnetic topological insulator Mn_2Bi . <i>Physical Review B</i> , 2021, 104, .	3.2	15
63	Experimental evidence for dissipationless transport of the chiral edge state of the high-field Chern insulator in MnBi_2Te_4 nanodevices. <i>Physical Review B</i> , 2022, 105, .	3.2	15
64	Structural transition and amorphization in compressed Sb_2O_3 . <i>Physical Review B</i> , 2015, 91, .	3.2	14
65	Magnetism-induced ideal Weyl state in bulk van der Waals crystal MnSb_2Te_4 . <i>Applied Physics Letters</i> , 2021, 118, .	3.3	14
66	Tunable dynamical magnetoelectric effect in antiferromagnetic topological insulator MnBi_2Te_4 films. <i>Npj Computational Materials</i> , 2021, 7, .	8.7	14
67	Topological Phase Transition-Induced Triaxial Vector Magnetoresistance in $(\text{Bi}_2\text{In})_2\text{Se}_3$ Nanodevices. <i>ACS Nano</i> , 2018, 12, 1537-1543.	14.6	13
68	Electric Field Tuning of Interlayer Coupling in Noncentrosymmetric 3R-MoS_2 with an Electric Double Layer Interface. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 46900-46907.	8.0	10
69	PT -symmetry-protected Dirac states in strain-induced hidden MoS_2 monolayer. <i>Physical Review B</i> , 2019, 100, .	3.2	9
70	Large magnetoresistance in topological insulator candidate TaSe_3 . <i>AIP Advances</i> , 2020, 10, .	1.3	9
71	Nonlinear level attraction of cavity axion polariton in antiferromagnetic topological insulator. <i>Physical Review B</i> , 2021, 104, .	3.2	9
72	Band engineering in epitaxial monolayer transition metal dichalcogenides alloy MoW_1Se_2 thin films. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	8

#	ARTICLE	IF	CITATIONS
73	Pressure-Driven Ne-Bearing Polynitrides with Ultrahigh Energy Density. Chinese Physics Letters, 2022, 39, 056102.	3.3	7
74	Evolution of surface states of antiferromagnetic topological insulator MnBi_2Te_4 with tuning the surface magnetization. New Journal of Physics, 2022, 24, 073034.	2.9	7
75	Strain-Engineered Nonlinear Hall Effect in HgTe. Spin, 2019, 09, .	1.3	6
76	Theoretical and experimental evidence for the intrinsic three-dimensional Dirac state in $\text{Cu}_2\text{HgSnS}_4$. Physical Review B, 2019, 100, .	3.2	3
77	Nonlinear Hall Effect in Antiferromagnetic Half-Heusler Materials. Chinese Physics Letters, 2021, 38, 057302.	3.3	3
78	A Programmable $k \cdot p$ Hamiltonian Method and Application to Magnetic Topological Insulator MnBi_2Te_4 . Chinese Physics Letters, 2021, 38, 077105.	3.3	3
79	Electrostatic and electrochemical charging mechanisms for electric-double-layer gating media based on a crystalline LaF_3 solid electrolyte. APL Materials, 2021, 9, .	5.1	2
80	Study on a negative hydrogen ion source with hot cathode arc discharge. Review of Scientific Instruments, 2014, 85, 02B120.	1.3	1
81	Coexistence of pressure-induced superconductivity and topological surface states in elementary substance Sb. Physical Review Materials, 2022, 6, .	2.4	1
82	Topological Insulators from a Chemist's Perspective. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 1641-1641.	1.2	0
83	Topological insulators from the perspective of first-principles calculations. , 2019, , 205-214.		0