

# Huaqing Huang

## List of Publications by Year in descending order

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54  
papers

3,635  
citations

186265  
28  
h-index

161849  
54  
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54  
all docs

54  
docs citations

54  
times ranked

4750  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental observation of topological Fermi arcs in type-II Weyl semimetal MoTe <sub>2</sub> . Nature Physics, 2016, 12, 1105-1110.	16.7	663
2	Lorentz-violating type-II Dirac fermions in transition metal dichalcogenide PtTe <sub>2</sub> . Nature Communications, 2017, 8, 257.	12.8	337
3	Type-II Dirac fermions in the $\text{PtSe}_2$ class of transition metal dichalcogenides. Physical Review B, 2016, 94, .	3.2	236
4	Topological nodal-line semimetals in alkaline-earth stannides, germanides, and silicides. Physical Review B, 2016, 93, .	3.2	201
5	Experimental evidence for type-II Dirac semimetal in $\text{PtSe}_2$ . Physical Review B, 2017, 96, .	3.2	154
6	Stable two-dimensional dumbbell stanene: A quantum spin Hall insulator. Physical Review B, 2014, 90, .	3.2	154
7	Direct observation of spin-layer locking by local Rashba effect in monolayer semiconducting PtSe <sub>2</sub> film. Nature Communications, 2017, 8, 14216.	12.8	151
8	Scanning Tunneling Microscopy of the $\text{PtSe}_2$ Magnetism of a Single Carbon Vacancy in Graphene. Physical Review Letters, 2016, 117, 166801.	7.8	122
9	The existence/absence of Dirac cones in graphynes. New Journal of Physics, 2013, 15, 023004.	2.9	112
10	Quantum Spin Hall Effect and Spin Bott Index in a Quasicrystal Lattice. Physical Review Letters, 2018, 121, 126401.	7.8	99
11	Valley splitting in the van der Waals heterostructure $\text{WSe}_2/\text{MoS}_2$ : The role of atom superposition. Physical Review B, 2019, 99, .	3.2	76
12	Two-dimensional Stiefel-Whitney insulators in liganded Xenes. Npj Computational Materials, 2022, 8, .	8.7	78
13	Emergence of a Chern-insulating state from a semi-Dirac dispersion. Physical Review B, 2015, 92, .	3.2	76
14	Theory of spin Bott index for quantum spin Hall states in nonperiodic systems. Physical Review B, 2018, 98, .	3.2	68
15	Topological Electride $\text{Y}_2\text{C}$ . Nano Letters, 2018, 18, 1972-1977.	9.1	67
16	Black-hole horizon in the Dirac semimetal $\text{Zn}_2\text{In}_2\text{S}_5$ . Physical Review B, 2018, 98, .	3.2	67
17	A Lieb-like lattice in a covalent-organic framework and its Stoner ferromagnetism. Nature Communications, 2019, 10, 2207.	12.8	67
18	Topological band evolution between Lieb and kagome lattices. Physical Review B, 2019, 99, .	3.2	66

#	ARTICLE	IF	CITATIONS
19	Topological superconducting phase in high-Tc superconductor MgB2 with Dirac nodal-line fermions. Npj Computational Materials, 2019, 5, .	8.7	52
20	Theory of the Dirac half metal and quantum anomalous Hall effect in Mn-intercalated epitaxial graphene. Physical Review B, 2015, 92, .	3.2	50
21	Tuning thermal conduction via extended defects in graphene. Physical Review B, 2013, 87, .	3.2	48
22	Tensile strained gray tin: Dirac semimetal for observing negative magnetoresistance with Shubnikov-de Haas oscillations. Physical Review B, 2017, 95, .	3.2	45
23	Kagome bands disguised in a coloring-triangle lattice. Physical Review B, 2019, 99, .	3.2	42
24	Alloy Engineering of Topological Semimetal Phase Transition in $MgTaN_2$ . Physical Review Letters, 2018, 120, 136403.	3.2	38
25	Nontrivial $Z_2$ topology in bismuth-based III-V compounds. Physical Review B, 2014, 90, .	3.2	32
26	Quantum anomalous Hall phase in (001) double-perovskite monolayers via intersite spin-orbit coupling. Physical Review B, 2014, 90, .	3.2	30
27	Topological nodal-line semimetal in noncentrosymmetric $Cmcc$ -phase $Ag_2S$ . Physical Review B, 2017, 96, .	3.2	29
28	Intrinsic quantum anomalous hall effect in a two-dimensional anilato-based lattice. Nanoscale, 2018, 10, 11901-11906.	5.6	29
29	Ubiquitous Spin-Orbit Coupling in a Screw Dislocation with High Spin Coherency. Physical Review Letters, 2018, 121, 066401.	7.8	29
30	Emerging topological states in quasi-two-dimensional materials. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2017, 7, e1296.	14.6	28
31	Comparison of quantum spin Hall states in quasicrystals and crystals. Physical Review B, 2019, 100, .	3.2	27
32	Magnetic Weyl semimetals with diamond structure realized in spinel compounds. Physical Review B, 2020, 101, .	3.2	27
33	Structural Amorphization-Induced Topological Order. Physical Review Letters, 2022, 128, 056401.	7.8	26
34	Weyl points created by a three-dimensional flat band. Physical Review B, 2019, 99, .	3.2	23
35	Robustness of topological insulating phase against vacancy, vacancy cluster, and grain boundary bulk defects. Physical Review B, 2020, 101, .	3.2	23
36	Topological states in quasicrystals. Frontiers of Physics, 2022, 17, 1.	5.0	22

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37	Tunable topological semimetal states with ultraflat nodal rings in strained YN. <i>Physical Review B</i> , 2018, 98, .	3.2	21
38	Unidirectional Spin-Orbit Interaction Induced by the Line Defect in Monolayer Transition Metal Dichalcogenides for High-Performance Devices. <i>Nano Letters</i> , 2019, 19, 6005-6012.	9.1	21
39	Electronic properties of SnTe-class topological crystalline insulator materials. <i>Chinese Physics B</i> , 2016, 25, 117313.	1.4	18
40	Time-reversal symmetry protected chiral interface states between quantum spin and quantum anomalous Hall insulators. <i>Physical Review B</i> , 2015, 92, .	3.2	17
41	A Unified View of Topological Phase Transition in Band Theory. <i>Research</i> , 2020, 2020, 7832610.	5.7	17
42	Topological semimetals from the perspective of first-principles calculations. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	15
43	Generic Orbital Design of Higher-Order Topological Quasicrystalline Insulators with Odd Five-Fold Rotation Symmetry. <i>Nano Letters</i> , 2021, 21, 7056-7062.	9.1	15
44	Pressure-induced Lifshitz transition in the type II Dirac semimetal PtTe <sub>2</sub> . <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	5.1	13
45	Aperiodic topological crystalline insulators. <i>Physical Review B</i> , 2020, 101, .	3.2	13
46	Higher-order topology induced by structural buckling. <i>National Science Review</i> , 2022, 9, .	9.5	11
47	Quasi-1D topological insulators. <i>Nature Materials</i> , 2016, 15, 129-130.	27.5	10
48	Emergence of a Two-Dimensional Topological Dirac Semimetal Phase in a Phthalocyanine-Based Covalent Organic Framework. <i>Chemistry of Materials</i> , 2022, 34, 3178-3184.	6.7	9
49	Visualization of edge-modulated charge-density-wave orders in monolayer transition-metal-dichalcogenide metal. <i>Communications Physics</i> , 2022, 5, .	5.3	9
50	Theory of Epitaxial Growth of Borophene on Layered Electride: Thermodynamic Stability and Kinetic Pathway. <i>Journal of Physical Chemistry C</i> , 2020, 124, 6063-6069.	3.1	7
51	Effect of extended line defects on thermal conduction of carbon nanotubes: analyzing phonon structures by band unfolding. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 305402.	1.8	6
52	Li doped kagome spin liquid compounds. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 21693-21698.	2.8	6
53	Finite-size effects and spin texture of hourglass fermions in KHgSb films. <i>Physical Review B</i> , 2017, 95, .	3.2	1
54	Angular momentum invoked band inversions in mirror symmetry protected topological states. <i>Physical Review B</i> , 2022, 105, .	3.2	1