

Guang Bian

List of Publications by Year in descending order

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102
papers

14,124
citations

57681

46
h-index

38517

99
g-index

103
all docs

103
docs citations

103
times ranked

9568
citing authors

#	ARTICLE	IF	CITATIONS
1	Photon absorption of two-dimensional nonsymmorphic Dirac semimetals. <i>Physical Review B</i> , 2022, 105, .	1.1	1
2	Dirac Fermion Cloning, Moiré Flat Bands, and Magic Lattice Constants in Epitaxial Monolayer Graphene. <i>Advanced Materials</i> , 2022, 34, e2200625.	11.1	9
3	Self-Intercalation Tunable Interlayer Exchange Coupling in a Synthetic van der Waals Antiferromagnet. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	10
4	Weyl, Dirac and high-fold chiral fermions in topological quantum matter. <i>Nature Reviews Materials</i> , 2021, 6, 784-803.	23.3	82
5	Room-temperature intrinsic ferromagnetism in epitaxial CrTe ₂ ultrathin films. <i>Nature Communications</i> , 2021, 12, 2492.	5.8	179
6	Robust topological state against magnetic impurities observed in the superconductor PbTaSe_2 . <i>Physical Review B</i> , 2021, 104, .	1.1	21
7	Giant Topological Hall Effect in van der Waals Heterostructures of CrTe ₂ /Bi ₂ Te ₃ . <i>ACS Nano</i> , 2021, 15, 15710-15719.	7.3	34
8	Antimony oxide nanostructures in the monolayer limit: self-assembly of van der Waals-bonded molecular building blocks. <i>Nanotechnology</i> , 2021, 32, 125701.	1.3	2
9	Observation of symmetry-protected Dirac states in nonsymmorphic \hat{C}_2 -antimonene. <i>Physical Review B</i> , 2021, 104, .	1.1	11
10	Observation of Weyl fermions in a magnetic non-centrosymmetric crystal. <i>Nature Communications</i> , 2020, 11, 3356.	5.8	55
11	Field-free platform for Majorana-like zero mode in superconductors with a topological surface state. <i>Physical Review B</i> , 2020, 101, .	1.1	22
12	Recent Advances in Novel Topological Materials. <i>Crystals</i> , 2020, 10, 94.	1.0	0
13	Realization of Symmetry-Enforced Two-Dimensional Dirac Fermions in Nonsymmorphic \hat{C}_2 -Bismuthene. <i>ACS Nano</i> , 2020, 14, 1888-1894.	7.3	45
14	Atomic deuteration of epitaxial many-layer graphene on 4H-SiC(0001 \bar{A}). <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2019, 37, 041804.	0.6	1
15	UV-Ozone Modified Sol-Gel Processed ZnO for Improved Diketopyrrolopyrrole-Based Hybrid Photodetectors. <i>ACS Applied Electronic Materials</i> , 2019, 1, 2455-2462.	2.0	16
16	Discovery of topological Weyl fermion lines and drumhead surface states in a room temperature magnet. <i>Science</i> , 2019, 365, 1278-1281.	6.0	374
17	Band Topology of Bismuth Quantum Films. <i>Crystals</i> , 2019, 9, 510.	1.0	20
18	Quantum oscillations in the noncentrosymmetric superconductor and topological nodal-line semimetal PbTaSe_2 . <i>Physical Review B</i> , 2019, 99, .	1.1	21

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19	Realization of a Type-II Nodal-Line Semimetal in Mg_3Bi_2 . <i>Advanced Science</i> , 2019, 6, 1800897.	5.6	84
20	Survey of electronic structure of Bi and Sb thin films by first-principles calculations and photoemission measurements. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 128, 109-117.	1.9	11
21	Pt-Bi Antibonding Interaction: The Key Factor for Superconductivity in Monoclinic $BaPt_2Bi_2$. <i>Inorganic Chemistry</i> , 2018, 57, 1698-1701.	1.9	6
22	Gapped electronic structure of epitaxial stanene on InSb(111). <i>Physical Review B</i> , 2018, 97, . Magnetic and noncentrosymmetric Weyl fermion semimetals in the	1.1	91
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37	Identification and properties of the non-cubic phases of Mg ₂ Pb. AIP Advances, 2016, 6, 125108.	0.6	3
38	Discovery of a new type of topological Weyl fermion semimetal state in Mo _x W _{1-x} Te ₂ . Nature Communications, 2016, 7, 13643.	5.8	163
39	Experimental observation of two massless Dirac-fermion gases in graphene-topological insulator heterostructure. 2D Materials, 2016, 3, 021009.	2.0	21
40	Topological phase transitions in stanene and stanene-like systems by scaling the spin-orbit coupling. Europhysics Letters, 2016, 115, 37010.	0.7	6
41	Fermi arc electronic structure and Chern numbers in the type-II Weyl semimetal candidate W_1-xMox . Physical Review B, 2016, 94, .	1.1	15
42	Superconducting properties in single crystals of the topological nodal semimetal $PbTaSe_2$. Physical Review B, 2016, 93, .	1.1	15
43	Drumhead surface states and topological nodal-line fermions in $TiTaSe_2$. Physical Review B, 2016, 93, .	1.1	15
44	Observation of metallic surface states in the strongly correlated Kitaev-Heisenberg candidate Na_2S_2 . Physical Review B, 2016, 93, .	1.1	16
45	Signatures of Fermi Arcs in the Quasiparticle Interferences of the Weyl Semimetals TaAs and NbP. Physical Review Letters, 2016, 116, 066601.	2.9	54
46	Spin Polarization and Texture of the Fermi Arcs in the Weyl Fermion Semimetal TaAs. Physical Review Letters, 2016, 116, 096801.	2.9	102
47	Topological Dirac surface states and superconducting pairing correlations in $PbTaSe_2$. Physical Review B, 2016, 93, .	1.1	15
48	A strongly robust type II Weyl fermion semimetal state in Ta ₃ S ₂ . Science Advances, 2016, 2, e1600295.	4.7	114
49	Signatures of the Adler-Bell-Jackiw chiral anomaly in a Weyl fermion semimetal. Nature Communications, 2016, 7, 10735.	5.8	603
50	An Effective Approach to Improving Cadmium Telluride (111)A Surface by Molecular-Beam-Epitaxy Growth of Tellurium Monolayer. ACS Applied Materials & Interfaces, 2016, 8, 726-735.	4.0	2
51	Atomic-Scale Visualization of Quantum Interference on a Weyl Semimetal Surface by Scanning Tunneling Microscopy. ACS Nano, 2016, 10, 1378-1385.	7.3	112
52	Prediction of an arc-tunable Weyl Fermion metallic state in Mo _x W _{1-x} Te ₂ . Nature Communications, 2016, 7, 10639.	5.8	249
53	Topological nodal-line fermions in spin-orbit metal PbTaSe ₂ . Nature Communications, 2016, 7, 10556.	5.8	688
54	Criteria for Directly Detecting Topological Fermi Arcs in Weyl Semimetals. Physical Review Letters, 2016, 116, 066802.	2.9	134

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55	New type of Weyl semimetal with quadratic double Weyl fermions. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1180-1185.	3.3	291
56	Engineering Electronic Structure of a Two-Dimensional Topological Insulator Bi(111) Bilayer on Sb Nanofilms by Quantum Confinement Effect. ACS Nano, 2016, 10, 3859-3864.	7.3	29
57	Spectroscopic studies of CdTe(111) bulk and surface electronic structure. Physical Review B, 2015, 91, .	1.1	11
58	Surface versus bulk Dirac state tuning in a three-dimensional topological Dirac semimetal. Physical Review B, 2015, 91, .	1.1	16
59	Lifshitz transition and Van Hove singularity in a three-dimensional topological Dirac semimetal. Physical Review B, 2015, 92, .	1.1	31
60	Topological phase diagram and saddle point singularity in a tunable topological crystalline insulator. Physical Review B, 2015, 92, .	1.1	25
61	Fermi surface topology and hot spot distribution in the Kondo lattice system CeB_6 . Physical Review B, 2015, 92, .	1.1	29
62	Tunable spin helical Dirac quasiparticles on the surface of three-dimensional HgTe. Physical Review B, 2015, 92, .	1.1	19
63	Fermi surface interconnectivity and topology in Weyl fermion semimetals TaAs, TaP, NbAs, and NbP. Physical Review B, 2015, 92, .	1.1	127
64	Direct transition resonance in atomically uniform topological Sb(111) thin films. Physical Review B, 2015, 92, .	1.1	3
65	Gigantic Surface Lifetime of an Intrinsic Topological Insulator. Physical Review Letters, 2015, 115, 116801.	2.9	84
66	Origin of the moiré pattern in thin Bi films deposited on HOPG. Physical Review B, 2015, 91, .	1.1	18
67	Dirac semimetal films as spin conductors on topological substrates. Physical Review B, 2015, 91, .	1.1	3
68	Experimental discovery of a topological Weyl semimetal state in TaP. Science Advances, 2015, 1, e1501092.	4.7	337
69	Topological phase transitions in antimony without gap parity reversal. Europhysics Letters, 2015, 109, 17005.	0.7	0
70	Non-Kondo-like Electronic Structure in the Correlated Rare-Earth Hexaboride BY_6 . Physical Review Letters, 2015, 114, 016403.	2.9	46
71	A Weyl Fermion semimetal with surface Fermi arcs in the transition metal monpnictide TaAs class. Nature Communications, 2015, 6, 7373.	5.8	1,336
72	Discovery of a Weyl fermion semimetal and topological Fermi arcs. Science, 2015, 349, 613-617.	6.0	2,753

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73	Unconventional transformation of spin Dirac phase across a topological quantum phase transition. Nature Communications, 2015, 6, 6870.	5.8	34
74	Topological insulators, topological superconductors and Weyl fermion semimetals: discoveries, perspectives and outlooks. Physica Scripta, 2015, T164, 014001.	1.2	123
75	Discovery of a Weyl fermion state with Fermi arcs in niobium arsenide. Nature Physics, 2015, 11, 748-754.	6.5	817
76	Observation of Fermi arc surface states in a topological metal. Science, 2015, 347, 294-298.	6.0	603
77	Rashba splitting and dichroism of surface states in Bi/Ag surface alloy. Journal of Electron Spectroscopy and Related Phenomena, 2015, 201, 36-41.	0.8	6
78	First-principles and spectroscopic studies of Bi(110) films: Thickness-dependent Dirac modes and property oscillations. Physical Review B, 2014, 90, .	1.1	32
79	Electronic structure of the quantum spin Hall parent compound CdTe and related topological issues. Physical Review B, 2014, 90, .	1.1	11
80	Observation of a three-dimensional topological Dirac semimetal phase in high-mobility Cd ₃ As ₂ . Nature Communications, 2014, 5, 3786.	5.8	1,166
81	Observation of quantum-tunnelling-modulated spin texture in ultrathin topological insulator Bi ₂ Se ₃ films. Nature Communications, 2014, 5, 3841.	5.8	112
82	Momentum-space imaging of Cooper pairing in a half-Dirac-gas topological superconductor. Nature Physics, 2014, 10, 943-950.	6.5	134
83	Fermi-level electronic structure of a topological-insulator/cuprate-superconductor based heterostructure in the superconducting proximity effect regime. Physical Review B, 2014, 90, .	1.1	34
84	Observation of monolayer valence band spin-orbit effect and induced quantum well states in MoX ₂ . Nature Communications, 2014, 5, 4673.	5.8	121
85	STM driven modification of bismuth nanostructures. Surface Science, 2014, 621, 140-145.	0.8	9
86	Topological quantum well resonances in metal overlayers. Physical Review B, 2013, 87, .	1.1	7
87	Origin of giant Rashba spin splitting in Bi/Ag surface alloys. Physical Review B, 2013, 88, .	1.1	34
88	Topological spin-polarized electron layer above the surface of Ca-terminated Bi ₂ Se ₃ . Physical Review B, 2013, 87, .	1.1	8
89	Electronic Size Effects in Three-Dimensional Nanostructures. Nano Letters, 2013, 13, 43-47.	4.5	49
90	Topological phase transition and Dirac fermion transfer in Bi ₂ Se ₃ films. Europhysics Letters, 2013, 101, 27004.	0.7	11

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91	Oscillatory surface dichroism of the insulating topological insulator Bi_2Te_3 . Physical Review Letters, 2013, 110, 226103.	1.1	38
92	Interfacial Bonding and Structure of Bi_2Te_3 Insulator Films on Si(111) Determined by Surface X-Ray Scattering. Physical Review Letters, 2013, 110, 226103.	2.9	11
93	Topological limit of ultrathin quasi-free-standing Bi_2Te_3 films grown on Si(111). Physical Review B, 2012, 85, 041404.	1.1	26
94	Illuminating the Surface Spin Texture of the Giant Rashba Quantum-Well System Bi_2Te_3 on Si(111). Physical Review Letters, 2012, 108, 096404.	2.9	38
95	Fragility of Surface States and Robustness of Topological Order in Bi_2Te_3 Oxidation. Physical Review Letters, 2012, 108, 096404.	2.9	49
96	Interfacial Protection of Topological Surface States in Ultrathin Sb Films. Physical Review Letters, 2012, 108, 176401.	2.9	69
97	Passage from Spin-Polarized Surface States to Unpolarized Quantum Well States in Topologically Nontrivial Sb Films. Physical Review Letters, 2011, 107, 036802.	2.9	61
98	Visualizing Electronic Chirality and Berry Phases in Graphene Systems Using Photoemission with Circularly Polarized Light. Physical Review Letters, 2011, 107, 166803.	2.9	175
99	Symmetry-constrained reorganization of Dirac cones in topological insulators by surface modification. Physical Review B, 2011, 84, .	1.1	9
100	Phonon-Induced Gaps in Graphene and Graphite Observed by Angle-Resolved Photoemission. Physical Review Letters, 2010, 105, 136804.	2.9	36
101	Electronic structure and surface-mediated metastability of Bi films on Si(111)- $\sqrt{7}\times\sqrt{7}$ studied by angle-resolved photoemission spectroscopy. Physical Review B, 2009, 80, .	1.1	41
102	Wedgebox analysis of four-lepton events from neutralino pair production at the LHC. European Physical Journal C, 2008, 53, 429-446.	1.4	12