Binghai Yan

List of Publications by Citations

196 papers	13,404 citations	56 h-index	112 g-index
223 ext. papers	17,021 ext. citations	8.7 avg, IF	6.91 L-index

#	Paper	IF	Citations
196	Large-gap quantum spin Hall insulators in tin films. *Physical Review Letters*, **2013**, 111, 136804	7.4	952
195	Extremely large magnetoresistance and ultrahigh mobility in the topological Weyl semimetal candidate NbP. *Nature Physics*, **2015**, 11, 645-649	16.2	686
194	Topological Materials: Weyl Semimetals. *Annual Review of Condensed Matter Physics*, **2017**, 8, 337-354	19.7	659
193	Weyl semimetal phase in the non-centrosymmetric compound TaAs. *Nature Physics*, **2015**, 11, 728-732	16.2	649
192	Superconductivity in Weyl semimetal candidate MoTe2. *Nature Communications*, **2016**, 7, 11038	17.4	442
191	Prediction of Weyl semimetal in orthorhombic MoTe2. *Physical Review B*, **2015**, 92,	3.3	414
190	Oscillatory crossover from two-dimensional to three-dimensional topological insulators. *Physical Review B*, **2010**, 81,	3.3	389
189	Large anomalous Hall effect driven by a nonvanishing Berry curvature in the noncolinear antiferromagnet Mn3Ge. *Science Advances*, **2016**, 2, e1501870	14.3	345
188	High electron mobility and quantum oscillations in non-encapsulated ultrathin semiconducting BiOSe. *Nature Nanotechnology*, **2017**, 12, 530-534	28.7	332
187	Negative magnetoresistance without well-defined chirality in the Weyl semimetal TaP. *Nature Communications*, **2016**, 7, 11615	17.4	301
186	Signature of type-II Weyl semimetal phase in MoTe. *Nature Communications*, **2017**, 8, 13973	17.4	273
185	Topological materials. *Reports on Progress in Physics*, **2012**, 75, 096501	14.4	264
184	Topological antiferromagnetic spintronics. *Nature Physics*, **2018**, 14, 242-251	16.2	248
183	Linear magnetoresistance caused by mobility fluctuations in n-doped Cd(3)As(2). *Physical Review Letters*, **2015**, 114, 117201	7.4	237
182	Fermi-arc diversity on surface terminations of the magnetic Weyl semimetal CoSnS. *Science*, **2019**, 365, 1286-1291	33.3	222
181	Evolution of the Fermi surface of Weyl semimetals in the transition metal pnictide family. *Nature Materials*, **2016**, 15, 27-31	27	202
180	Prediction of near-room-temperature quantum anomalous Hall effect on honeycomb materials. *Physical Review Letters*, **2014**, 113, 256401	7.4	200

179	Topological Weyl semimetals in the chiral antiferromagnetic materials Mn3Ge and Mn3Sn. *New Journal of Physics*, **2017**, 19, 015008	2.9	170
178	Single Dirac cone topological surface state and unusual thermoelectric property of compounds from a new topological insulator family. *Physical Review Letters*, **2010**, 105, 266401	7.4	167
177	Experimental signatures of the mixed axial-gravitational anomaly in the Weyl semimetal NbP. *Nature*, **2017**, 547, 324-327	50.4	161
176	Giant facet-dependent spin-orbit torque and spin Hall conductivity in the triangular antiferromagnet IrMn. *Science Advances*, **2016**, 2, e1600759	14.3	135
175	Topological insulators and thermoelectric materials. *Physica Status Solidi - Rapid Research Letters*, **2013**, 7, 91-100	2.5	127
174	Topological surface states and Fermi arcs of the noncentrosymmetric Weyl semimetals TaAs, TaP, NbAs, and NbP. *Physical Review B*, **2015**, 92,	3.3	126
173	Theoretical prediction of topological insulators in thallium-based III-V-VI 2 ternary chalcogenides. *Europhysics Letters*, **2010**, 90, 37002	1.6	126
172	A large-energy-gap oxide topological insulator based on the superconductor BaBiO3. *Nature Physics*, **2013**, 9, 709-711	16.2	121
171	Strong anisotropic anomalous Hall effect and spin Hall effect in the chiral antiferromagnetic compounds Mn3X (X=Ge, Sn, Ga, Ir, Rh, and Pt). *Physical Review B*, **2017**, 95,	3.3	117
170	Higher-Order Topology, Monopole Nodal Lines, and the Origin of Large Fermi Arcs in Transition Metal Dichalcogenides XTe_{2} (X=Mo,W). *Physical Review Letters*, **2019**, 123, 186401	7.4	116
169	Topological states on the gold surface. *Nature Communications*, **2015**, 6, 10167	17.4	114
168	Extremely high magnetoresistance and conductivity in the type-II Weyl semimetals WP and MoP. *Nature Communications*, **2017**, 8, 1642	17.4	111
167	Weyl Semimetals as Hydrogen Evolution Catalysts. *Advanced Materials*, **2017**, 29, 1606202	24	107
166	Electronic structures and unusually robust bandgap in an ultrahigh-mobility layered oxide semiconductor, BiOSe. *Science Advances*, **2018**, 4, eaat8355	14.3	103
165	Graphene-based topological insulator with an intrinsic bulk band gap above room temperature. *Nano Letters*, **2013**, 13, 6251-5	11.5	102
164	Strong Intrinsic Spin Hall Effect in the TaAs Family of Weyl Semimetals. *Physical Review Letters*, **2016**, 117, 146403	7.4	98
163	Dirac line nodes and effect of spin-orbit coupling in the nonsymmorphic critical semimetals MSiS(M=Hf,Zr). *Physical Review B*, **2017**, 95,	3.3	93
162	New Family of Quantum Spin Hall Insulators in Two-dimensional Transition-Metal Halide with Large Nontrivial Band Gaps. *Nano Letters*, **2015**, 15, 7867-72	11.5	87

161	Spin-Polarized Current in Noncollinear Antiferromagnets. *Physical Review Letters*, **2017**, 119, 187204	7.4	82
160	Berry curvature dipole in Weyl semimetal materials: An ab initio study. *Physical Review B*, **2018**, 97,	3.3	79
159	Lattice instability and competing spin structures in the double perovskite insulator Sr2FeOsO6. *Physical Review Letters*, **2013**, 111, 167205	7.4	79
158	Topological insulators from a chemist's perspective. *Angewandte Chemie - International Edition*, **2012**, 51, 7221-5	16.4	78
157	Symmetry demanded topological nodal-line materials. *Advances in Physics: X*, **2018**, 3, 1414631	5.1	77
156	Topological insulators in ternary compounds with a honeycomb lattice. *Physical Review Letters*, **2011**, 106, 156402	7.4	77
155	Observation of unusual topological surface states in half-Heusler compounds LnPtBi (Ln=Lu, Y). *Nature Communications*, **2016**, 7, 12924	17.4	77
154	Multiple Dirac cones at the surface of the topological metal LaBi. *Nature Communications*, **2017**, 8, 13942	17.4	75
153	Visualizing weakly bound surface Fermi arcs and their correspondence to bulk Weyl fermions. *Science Advances*, **2016**, 2, e1600709	14.3	74
152	Robust 2D topological insulators in van der Waals heterostructures. *ACS Nano*, **2014**, 8, 10448-54	16.7	74
151	Prediction of weak topological insulators in layered semiconductors. *Physical Review Letters*, **2012**, 109, 116406	7.4	74
150	Dirac nodal lines and induced spin Hall effect in metallic rutile oxides. *Physical Review B*, **2017**, 95,	3.3	70
149	Observation of pseudo-two-dimensional electron transport in the rock salt-type topological semimetal LaBi. *Physical Review B*, **2016**, 93,	3.3	69
148	Comment on Simulation of the Optical Absorption Spectra of Gold Nanorods as a Function of Their Aspect Ratio and the Effect of the Medium Dielectric Constant *Journal of Physical Chemistry B*, **2003**, 107, 9159-9159	3.4	67
147	Tunable Weyl and Dirac states in the nonsymmorphic compound CeSbTe. *Science Advances*, **2018**, 4, eaar2317	14.1	61
146	Electrically tuneable nonlinear anomalous Hall effect in two-dimensional transition-metal dichalcogenides WTe 2 and MoTe 2. *2D Materials*, **2018**, 5, 044001	5.9	61
145	Anomalous Hall effect in Weyl semimetal half-Heusler compounds RPtBi (R = Gd and Nd). *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 9140-9144	11.5	61
144	Chiral Weyl Pockets and Fermi Surface Topology of the Weyl Semimetal TaAs. *Physical Review Letters*, **2016**, 117, 146401	7.4	61

143	Superconductivity and magnetic order in the noncentrosymmetric half-Heusler compound ErPdBi. *Europhysics Letters*, **2013**, 104, 27001	1.6	59
142	A native oxide high-κ gate dielectric for two-dimensional electronics. *Nature Electronics*, **2020**, 3, 473-478	28.4	58
141	Prediction of Triple Point Fermions in Simple Half-Heusler Topological Insulators. *Physical Review Letters*, **2017**, 119, 136401	7.4	56
140	Quantum oscillations and the Fermi surface topology of the Weyl semimetal NbP. *Physical Review B* , **2016**, 93,	3.3	56
139	Low Residual Carrier Concentration and High Mobility in 2D Semiconducting BiOSe. *Nano Letters*, **2019**, 19, 197-202	11.5	56
138	Chiral magnetoresistance in the Weyl semimetal NbP. *Scientific Reports*, **2017**, 7, 43394	4.9	55
137	Charge Density Waves and Electronic Properties of Superconducting Kagome Metals. *Physical Review Letters*, **2021**, 127, 046401	7.4	55
136	Topological insulators in filled skutterudites. *Physical Review B*, **2012**, 85,	3.3	53
135	Metal-insulator transition and the anomalous Hall effect in the layered magnetic materials VS2 and VSe2. *New Journal of Physics*, **2016**, 18, 113038	2.9	53
134	Half-Heusler topological insulators. *MRS Bulletin*, **2014**, 39, 859-866	3.2	52
133	Two-dimensional inversion-asymmetric topological insulators in functionalized III-Bi bilayers. *Physical Review B*, **2015**, 91,	3.3	51
132	First-principles study of the structural stability of cubic, tetragonal and hexagonal phases in Mn_2Z (Z=Ga, Sn and Ge) Heusler compounds. *Journal of Physics Condensed Matter*, **2013**, 25, 206006	1.8	50
131	Synthesis, crystal structure, and physical properties of Sr2FeOsO6. *Inorganic Chemistry*, **2013**, 52, 6713-9	5.1	49
130	Photogalvanic effect in Weyl semimetals from first principles. *Physical Review B*, **2018**, 97,	3.3	48
129	Lattice-site-specific spin dynamics in double perovskite Sr2CoOsO6. *Physical Review Letters*, **2014**, 112, 147202	7.4	47
128	Theoretical prediction of topological insulator in ternary rare earth chalcogenides. *Physical Review B*, **2010**, 82,	3.3	47
127	Roton pair density wave in a strong-coupling kagome superconductor. *Nature*, **2021**, 599, 222-228	50.4	47
126	Graphene-like Dirac states and quantum spin Hall insulators in square-octagonal MX2 (M=Mo, W; X=S, Se, Te) isomers. *Physical Review B*, **2015**, 92,	3.3	45

125	Topological Hamiltonian as an exact tool for topological invariants. *Journal of Physics Condensed Matter*, **2013**, 25, 155601	1.8	45
124	Self-modulation doping effect in the high-mobility layered semiconductor Bi2O2Se. *Physical Review B*, **2018**, 97,	3.3	45
123	Toward Rational Design of Catalysts Supported on a Topological Insulator Substrate. *ACS Catalysis*, **2015**, 5, 7063-7067	13.1	43
122	Exchange bias and quantum anomalous nomalous Hall effect in the MnBiTe/CrI heterostructure. *Science Advances*, **2020**, 6, eaaz0948	14.3	43
121	Weak topological insulators induced by the interlayer coupling: A first-principles study of stacked Bi2TeI. *Physical Review B*, **2014**, 89,	3.3	43
120	Giant room temperature anomalous Hall effect and tunable topology in a ferromagnetic topological semimetal CoMnAl. *Nature Communications*, **2020**, 11, 3476	17.4	42
119	Evidence of surface transport and weak antilocalization in a single crystal of the Bi2Te2Se topological insulator. *Physical Review B*, **2014**, 90,	3.3	40
118	Ab initio study of low-temperature magnetic properties of double perovskite Sr2FeOsO6. *Physical Review B*, **2014**, 89,	3.3	40
117	Magnetically Frustrated Double Perovskites: Synthesis, Structural Properties, and Magnetic Order of Sr2BOsO6 (B = Y, In, Sc). *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2015**, 641, 197-205	1.3	40
116	Switchable magnetic bulk photovoltaic effect in the two-dimensional magnet CrI. *Nature Communications*, **2019**, 10, 3783	17.4	39
115	Observation of charge to spin conversion in Weyl semimetal WTe2 at room temperature. *Physical Review Research*, **2020**, 2,	3.9	39
114	Unusual magnetotransport from Si-square nets in topological semimetal HfSiS. *Physical Review B*, **2017**, 95,	3.3	38
113	Large spin-orbit torque efficiency enhanced by magnetic structure of collinear antiferromagnet IrMn. *Science Advances*, **2019**, 5, eaau6696	14.3	37
112	Spin Hall effect emerging from a noncollinear magnetic lattice without spin□orbit coupling. *New Journal of Physics*, **2018**, 20, 073028	2.9	37
111	Uniaxial-stress effects on electronic properties of silicon carbide nanowires. *Applied Physics Letters*, **2006**, 89, 023104	3.4	37
110	Topological Quantum Phase Transition and Superconductivity Induced by Pressure in the Bismuth Tellurohalide BiTeI. *Advanced Materials*, **2017**, 29, 1605965	24	36
109	Hydrogen-induced metallization of zinc oxide (21□1□0) surface and nanowires: The effect of curvature. *Physical Review B*, **2008**, 77,	3.3	36
108	Observation of nodal line in non-symmorphic topological semimetal InBi. *New Journal of Physics*, **2017**, 19, 065007	2.9	35

107	Giant intrinsic spin Hall effect in WTa and other A15 superconductors. *Science Advances*, **2019**, 5, eaav8575	14.3	34
106	Theoretical search for half-Heusler topological insulators. *Physical Review B*, **2015**, 91,	3.3	34
105	Pressure-driven superconductivity in the transition-metal pentatelluride HfTe5. *Physical Review B*, **2016**, 94,	3.3	34
104	Attosecond spectral singularities in solid-state high-harmonic generation. *Nature Photonics*, **2020**, 14, 183-187	33.9	33
103	Model Hamiltonian and time reversal breaking topological phases of antiferromagnetic half-Heusler materials. *Physical Review B*, **2017**, 95,	3.3	31
102	Direct observation of band bending in the topological insulator Bi2Se3. *Physical Review B*, **2013**, 88,	3.3	30
101	Photochemical Water Splitting by Bismuth Chalcogenide Topological Insulators. *ChemPhysChem*, **2017**, 18, 2322-2327	3.2	30
100	Topological origin of the type-II Dirac fermions in PtSe2. *Physical Review Materials*, **2017**, 1,	3.2	30
99	Berry phase and band structure analysis of the Weyl semimetal NbP. *Scientific Reports*, **2016**, 6, 33859	4.9	29
98	Extremely high conductivity observed in the triple point topological metal MoP. *Nature Communications*, **2019**, 10, 2475	17.4	28
97	Encapsulated Silicene: A Robust Large-Gap Topological Insulator. *ACS Applied Materials & Interfaces*, **2015**, 7, 19226-33	9.5	28
96	Active role of nonmagnetic cations in magnetic interactions for double-perovskite Sr2BOsO6(B=Y,In,Sc). *Physical Review B*, **2016**, 93,	3.3	28
95	Resolving the topological classification of bismuth with topological defects. *Science Advances*, **2019** , 5, eaax6996	14.3	28
94	Topological nature and the multiple Dirac cones hidden in Bismuth high-Tc superconductors. *Scientific Reports*, **2015**, 5, 10435	4.9	27
93	Proximity enhanced quantum spin Hall state in graphene. *Carbon*, **2015**, 87, 418-423	10.4	26
92	Two-dimensional ferroelectric topological insulators in functionalized atomically thin bismuth layers. *Physical Review B*, **2018**, 97,	3.3	26
91	Topological superconductivity at the edge of transition-metal dichalcogenides. *Physical Review B*, **2014**, 90,	3.3	26
90	Gas doping on the topological insulator Bi2Se3 surface. *Physical Review Letters*, **2013**, 110, 016403	7.4	26

89	Finite-temperature violation of the anomalous transverse Wiedemann-Franz law. *Science Advances*, **2020**, 6, eaaz3522	14.3	25
88	Quantum oscillations in the type-II Dirac semi-metal candidate PtSe2. *New Journal of Physics*, **2018**, 20, 043008	2.9	24
87	Topological surface states of Bi2Se3 coexisting with Se vacancies. *Physica Status Solidi - Rapid Research Letters*, **2013**, 7, 148-150	2.5	24
86	Chirality-driven topological electronic structure of DNA-like materials. *Nature Materials*, **2021**, 20, 638-644	27	24
85	A case study for the formation of stanene on a metal surface. *Communications Physics*, **2019**, 2,	5.4	23
84	Magnetic and superconducting phase diagram of the half-Heusler topological semimetal HoPdBi. *Journal of Physics Condensed Matter*, **2015**, 27, 275701	1.8	22
83	Pressure-induced superconductivity and topological quantum phase transitions in a quasi-one-dimensional topological insulator: Bi4I4. *Npj Quantum Materials*, **2018**, 3,	5	22
82	Pressure tuning the Fermi surface topology of the Weyl semimetal NbP. *Physical Review B*, **2016**, 93,	3.3	22
81	Prediction of the quantum spin Hall effect in monolayers of transition-metal carbides MC (M = Ti, Zr, Hf). *2D Materials*, **2016**, 3, 035022	5.9	21
80	Emergent Weyl Fermion Excitations in TaP Explored by ^{181}Ta Quadrupole Resonance. *Physical Review Letters*, **2017**, 118, 236403	7.4	21
79	Topological Insulators from a Chemist□ Perspective. *Angewandte Chemie*, **2012**, 124, 7333-7337	3.6	21
78	Consequences of time-reversal-symmetry breaking in the light-matter interaction: Berry curvature, quantum metric, and diabatic motion. *Physical Review Research*, **2020**, 2,	3.9	21
77	Intrinsic Anomalous Nernst Effect Amplified by Disorder in a Half-Metallic Semimetal. *Physical Review X*, **2019**, 9,	9.1	21
76	Topological Dirac semimetal phase in Pd and Pt oxides. *Physical Review B*, **2017**, 95,	3.3	20
75	Topological Lifshitz transitions and Fermi arc manipulation in Weyl semimetal NbAs. *Nature Communications*, **2019**, 10, 3478	17.4	20
74	Electron emission originated from free-electron-like states of alkali-doped boron-nitride nanotubes. *Journal of the American Chemical Society*, **2008**, 130, 17012-5	16.4	19
73	Ab initio study of topological surface states of strained HgTe. *Europhysics Letters*, **2014**, 107, 57006	1.6	18
72	Comment on "Valence surface electronic states on Ge(001)". *Physical Review Letters*, **2009**, 103, 189701; author reply 189702	7.4	17

71	Bonding modes and electronic properties of single-crystalline silicon nanotubes. *Physical Review B*, **2006**, 73,	3.3	17
70	Impurity screening and stability of Fermi arcs against Coulomb and magnetic scattering in a Weyl monopnictide. *Physical Review B*, **2017**, 95,	3.3	16
69	Surface superconductivity in the type II Weyl semimetal TaIrTe. *National Science Review*, **2020**, 7, 579-587	10.8	16
68	Two-dimensional rectangular tantalum carbide halides TaCX (X = Cl, Br, I): novel large-gap quantum spin Hall insulators. *2D Materials*, **2016**, 3, 035018	5.9	16
67	Pressure-induced topological insulator in NaBaBi with right-handed surface spin texture. *Physical Review B*, **2016**, 93,	3.3	15
66	Exploiting Two-Dimensional Bi O Se for Trace Oxygen Detection. *Angewandte Chemie - International Edition*, **2020**, 59, 17938-17943	16.4	14
65	Weak orbital ordering of Ir t2g states in the double perovskite Sr2CeIrO6. *Physical Review B*, **2016**, 93,	3.3	14
64	Spectroscopic evidence for the gapless electronic structure in bulk ZrTe 5. *Journal of Electron Spectroscopy and Related Phenomena*, **2017**, 219, 45-52	1.7	14
63	Theory of Chirality Induced Spin Selectivity: Progress and Challenges.. *Advanced Materials*, **2022**, e2106629	24	14
62	Rashba spin splitting of L-gap surface states on Ag(111) and Cu(111). *Physical Review B*, **2018**, 98,	3.3	13
61	Structure and electronic properties of the (3□)R30?SnAu2/Au(111) surface alloy. *Physical Review B*, **2018**, 98,	3.3	13
60	Experimental observation of conductive edge states in weak topological insulator candidate HfTe5. *APL Materials*, **2018**, 6, 121111	5.7	13
59	Topological nematic phase in Dirac semimetals. *Physical Review B*, **2016**, 93,	3.3	12
58	Local vibrational excitation through extended electronic states at a germanium surface. *Physical Review Letters*, **2009**, 103, 266102	7.4	12
57	Strong spin-orbit coupling and Dirac nodal lines in the three-dimensional electronic structure of metallic rutile IrO2. *Physical Review B*, **2019**, 99,	3.3	11
56	Magnetic asymmetry induced anomalous spin-orbit torque in IrMn. *Physical Review B*, **2020**, 101,	3.3	11
55	Weyl semimetals: Magnetically induced. *Nature Materials*, **2016**, 15, 1149-1150	27	11
54	Quasiparticle Interference Studies of Quantum Materials. *Advanced Materials*, **2018**, 30, e1707628	24	11

53	Opening a band gap without breaking lattice symmetry: a new route toward robust graphene-based nanoelectronics. *Nanoscale*, **2014**, 6, 7474-9	7.7	11
52	Observation of the topological surface state in the nonsymmorphic topological insulator KHgSb. *Physical Review B*, **2017**, 96,	3.3	11
51	Time-reversal-breaking topological phases in antiferromagnetic Sr2FeOsO6 films. *Physical Review B* , **2016**, 94,	3.3	11
50	AgRuO , a Strongly Exchange-Coupled Honeycomb Compound Lacking Long-Range Magnetic Order. *Chemistry - A European Journal*, **2017**, 23, 4680-4686	4.8	10
49	Na4IrO4 : square-planar coordination of a transition metal in d(5) configuration due to weak on-site coulomb interactions. *Angewandte Chemie - International Edition*, **2015**, 54, 5417-20	16.4	10
48	Possibility of a field effect transistor based on Dirac particles in semiconducting anatase-TiO2 nanowires. *Nano Letters*, **2013**, 13, 1073-9	11.5	10
47	Quantum confinement of crystalline silicon nanotubes with nonuniform wall thickness: Implication to modulation doping. *Applied Physics Letters*, **2007**, 91, 103107	3.4	10
46	First-principles calculations for topological quantum materials. *Nature Reviews Physics*, **2021**, 3, 283-297	23.6	10
45	Lifshitz Transitions Induced by Temperature and Surface Doping in Type-II Weyl Semimetal Candidate Td-WTe2. *Physica Status Solidi - Rapid Research Letters*, **2017**, 11, 1700209	2.5	9
44	Visualizing coexisting surface states in the weak and crystalline topological insulator BiTeI. *Nature Materials*, **2020**, 19, 610-616	27	9
43	Magnetic phase transitions and iron valence in the double perovskite Sr 2 FeOsO 6. *Hyperfine Interactions*, **2014**, 226, 289-297	0.8	9
42	Superconductivity in Alkaline Earth Metal-Filled Skutterudites BaIrX (X = As, P). *Journal of the American Chemical Society*, **2017**, 139, 8106-8109	16.4	9
41	Spin texture and mirror Chern number in Hg-based chalcogenides. *Physical Review B*, **2015**, 91,	3.3	9
40	Stacking-dependent energetics and electronic structure of ultrathin polymorphic V2VI3 topological insulator nanofilms. *Physical Review B*, **2014**, 90,	3.3	8
39	Geometry of the charge density wave in the kagome metal AV3Sb5. *Physical Review B*, **2021**, 104,	3.3	8
38	Giant c-axis nonlinear anomalous Hall effect in T-MoTe and WTe. *Nature Communications*, **2021**, 12, 2049	17.4	8
37	Hidden type-II Weyl points in the Weyl semimetal NbP. *Physical Review B*, **2017**, 96,	3.3	7
36	An electron-counting rule to determine the interlayer magnetic coupling of the van der Waals materials. *2D Materials*, **2020**, 7, 045010	5.9	7

35	Hot Electrons Regain Coherence in Semiconducting Nanowires. *Physical Review X*, **2017**, 7,	9.1	7
34	Observation of topological surface states and strong electron/hole imbalance in extreme magnetoresistance compound LaBi. *Physical Review Materials*, **2018**, 2,	3.2	7
33	Eightfold fermionic excitation in a charge density wave compound. *Physical Review B*, **2020**, 102,	3.3	7
32	Na4IrO4: Square-Planar Coordination of a Transition Metal in d5 Configuration due to Weak On-Site Coulomb Interactions. *Angewandte Chemie*, **2015**, 127, 5507-5510	3.6	6
31	Ab initio study of phosphorus donors acting as quantum bits in silicon nanowires. *Nano Letters*, **2012**, 12, 3460-5	11.5	6
30	Origins of electronic bands in the antiferromagnetic topological insulator MnBi2Te4. *Physical Review B*, **2021**, 104,	3.3	6
29	Formation of H3+ from hydrocarbon dications induced by collisions with charged particles. *Physical Review A*, **2019**, 100,	2.6	6
28	Chirality-Induced Giant Unidirectional Magnetoresistance in Twisted Bilayer Graphene. *Innovation(China)*, **2021**, 2, 100085	17.8	6
27	Topological Insulators. *Springer Series in Materials Science*, **2013**, 123-139	0.9	5
26	Non-vanishing Berry phase in chiral insulators. *Europhysics Letters*, **2013**, 104, 30001	1.6	5
25	Gate-controlled donor activation in silicon nanowires. *Nano Letters*, **2010**, 10, 3791-5	11.5	5
24	Active learning algorithm for computational physics. *Physical Review Research*, **2020**, 2,	3.9	5
23	Exploiting Two-Dimensional Bi2O2Se for Trace Oxygen Detection. *Angewandte Chemie*, **2020**, 132, 18094-18099	3.6	5
22	Tunable quantum order in bilayer Bi2Te3: Stacking dependent quantum spin Hall states. *Applied Physics Letters*, **2018**, 112, 243103	3.4	4
21	Preparing spin-polarized scanning tunneling microscope probes on capped carbon nanotubes by Fe doping: A first-principles study. *Applied Physics Letters*, **2009**, 94, 193106	3.4	4
20	Spin and Charge Interconversion in Dirac-Semimetal Thin Films. *Physical Review Applied*, **2021**, 16,	4.3	4
19	Topological Lifshitz transition of the intersurface Fermi-arc loop in NbIrTe4. *Physical Review B*, **2020**, 102,	3.3	4
18	Nonvanishing Subgap Photocurrent as a Probe of Lifetime Effects. *Physical Review Letters*, **2020**, 125, 227401	7.4	4

17	Induced anomalous Hall effect of massive Dirac fermions in ZrTe5 and HfTe5 thin flakes. *Physical Review B*, **2021**, 103,	3.3	4
16	Quantum oscillations, magnetic breakdown and thermal Hall effect in Co3Sn2S2. *Journal Physics D: Applied Physics*, **2021**, 54, 454003	3	4
15	Topological crystalline insulators from stacked graphene layers. *Physical Review B*, **2019**, 99,	3.3	3
14	Electronic structure and spatial inhomogeneity of iron-based superconductor FeS. *Chinese Physics B* , **2020**, 29, 047401	1.2	3
13	Evidence of topological boundary modes with topological nodal-point superconductivity. *Nature Physics*,	16.2	3
12	Band inversion and topology of the bulk electronic structure in FeSe0.45Te0.55. *Physical Review B*, **2020**, 101,	3.3	2
11	Flip motion of heterogeneous buckled dimers on Ge(001) by electron injection from STM tip. *Surface Science*, **2009**, 603, 781-787	1.8	2
10	Scattering potentials at Si-Ge and Sn-Ge impurity dimers on Ge(001) studied by scanning tunneling microscopy and ab initio calculations. *Physical Review B*, **2008**, 78,	3.3	2
9	Topological Insulators From Materials Design to Reality. *Physica Status Solidi - Rapid Research Letters*, **2013**, 7, 13-14	2.5	1
8	Structural and electronic properties of Ge-Si, Sn-Si, and Pb-Si dimers on Si(001) from density-functional calculations. *Physical Review B*, **2009**, 79,	3.3	1
7	Induced half-metallicity and gapless chiral topological superconductivity in the CrI3Pb interface. *Physical Review B*, **2020**, 102,	3.3	1
6	Weyl Nodes Close to the Fermi Energy in NbAs. *Physica Status Solidi (B): Basic Research*,2100165	1.3	0
5	Exchange-biased topological transverse thermoelectric effects in a Kagome ferrimagnet.. *Nature Communications*, **2022**, 13, 1091	17.4	0
4	TiO2 Nanowires as a Wide Bandgap Dirac Material: a numerical study of impurity scattering and Anderson disorder. *Materials Research Society Symposia Proceedings*, **2014**, 1659, 187-191		
3	Topological Insulators from a Chemist's Perspective. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2012**, 638, 1641-1641	1.3	
2	Crystal Structure and Evaluation of the Anti-Gastric Cancer Activity of a New Sr(II)-Based Coordination Polymer. *Journal of Structural Chemistry*, **2020**, 61, 566-573	0.9	
1	Detection of the Orbital Hall Effect by the OrbitalSpin Conversion **2021**, 353-364		