Shengyuan A Yang

List of Publications by Year
in descending order

205 papers	12,973 citations	22099 59 h-index	28224 105 g-index
206 all docs	206 docs citations	206 times ranked	10219 citing authors

#	Article	IF	Citations
1	Quantum anomalous Hall effect in graphene from Rashba and exchange effects. Physical Review B, 2010, 82, .	1.1	567
2	Borophene as an extremely high capacity electrode material for Li-ion and Na-ion batteries. Nanoscale, 2016, 8, 15340-15347.	2.8	396
3	Edge States in Graphene: From Gapped Flat-Band to Gapless Chiral Modes. Physical Review Letters, 2009, 102, 096801.	2.9	328
4	Nanostructured Carbon Allotropes with Weyl-like Loops and Points. Nano Letters, 2015, 15, 6974-6978.	4.5	302
5	Investigations on V₂C and V₂CX₂ (X = F, OH) Monolayer as a Promising Anode Material for Li Ion Batteries from First-Principles Calculations. Journal of Physical Chemistry C, 2014, 118, 24274-24281.	1.5	301
6	Regulating the polysulfide redox conversion by iron phosphide nanocrystals for high-rate and ultrastable lithium-sulfur battery. Nano Energy, 2018, 51, 340-348.	8.2	277
7	Evidence for topological type-II Weyl semimetal WTe2. Nature Communications, 2017, 8, 2150.	5.8	263
8	Theoretical prediction of MoN₂ monolayer as a high capacity electrode material for metal ion batteries. Journal of Materials Chemistry A, 2016, 4, 15224-15231.	5.2	259
9	Antimonene Oxides: Emerging Tunable Direct Bandgap Semiconductor and Novel Topological Insulator. Nano Letters, 2017, 17, 3434-3440.	4.5	250
10	Nodal surface semimetals: Theory and material realization. Physical Review B, 2018, 97, .	1.1	248
11	Dirac and Weyl Superconductors in Three Dimensions. Physical Review Letters, 2014, 113, 046401.	2.9	241
12	Large Spinâ€Valley Polarization in Monolayer MoTe₂ on Top of EuO(111). Advanced Materials, 2016, 28, 959-966.	11.1	239
13	Predicted Unusual Magnetoresponse in Type-II Weyl Semimetals. Physical Review Letters, 2016, 117, 077202.	2.9	211
14	Three-dimensional quantum Hall effect and metalâ€“insulator transition in ZrTe5. Nature, 2019, 569, 537-541.	13.7	205
15	Two-Dimensional Second-Order Topological Insulator in Graphdiyne. Physical Review Letters, 2019, 123, 256402.	2.9	193
16	Towards three-dimensional Weyl-surface semimetals in graphene networks. Nanoscale, 2016, 8, 7232-7239.	2.8	188
17	Field Induced Positional Shift of Bloch Electrons and Its Dynamical Implications. Physical Review Letters, 2014, 112, 166601.	2.9	181
18	2D Electrides as Promising Anode Materials for Na-Ion Batteries from First-Principles Study. ACS Applied Materials & Interfaces, 2015, 7, 24016-24022.	4.0	181

#	Article	IF	Citations
19	Universal Electromotive Force Induced by Domain Wall Motion. Physical Review Letters, 2009, 102, 067201.	2.9	163
20	Type-II nodal loops: Theory and material realization. Physical Review B, 2017, 96, .	1.1	158
21	Electric-field-tuned topological phase transition in ultrathin Na3Bi. Nature, 2018, 564, 390-394.	13.7	155
22	Investigations on Nb₂C monolayer as promising anode material for Li or non-Li ion batteries from first-principles calculations. RSC Advances, 2016, 6, 27467-27474.	1.7	147
23	Type-II Symmetry-Protected Topological Dirac Semimetals. Physical Review Letters, 2017, 119, 026404.	2.9	145
24	Elemental Ferroelectricity and Antiferroelectricity in Groupâ€V Monolayer. Advanced Functional Materials, 2018, 28, 1707383.	7.8	145
25	Effects of strain on electronic and optic properties of holey two-dimensional C2N crystals. Applied Physics Letters, 2015, 107, .	1.5	144
26	Coexistence of four-band nodal rings and triply degenerate nodal points in centrosymmetric metal diborides. Physical Review B, 2017, 95, .	1.1	138
27	Advances of 2D bismuth in energy sciences. Chemical Society Reviews, 2020, 49, 263-285.	18.7	138
28	Strain-Induced Isostructural and Magnetic Phase Transitions in Monolayer MoN₂. Nano Letters, 2016, 16, 4576-4582.	4.5	129
29	Valley-dependent properties of monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">MoSi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:mo>,</mml:mo><mml:mo>Â</mml:mo><mml:msub><m mathvariant="normal">WSi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math> , and <mml:math xm	1.1	124
30	Encyclopedia of emergent particles in three-dimensional crystals. Science Bulletin, 2022, 67, 375-380.	4.3	123
31	Magnetic control of the valley degree of freedom of massive Dirac fermions with application to transition metal dichalcogenides. Physical Review B, 2013, 88, .	1.1	121
32	Low-energy effective Hamiltonian for giant-gap quantum spin Hall insulators in honeycomb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>X</mml:mi></mml:math>-hydride/halide<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>(</mml:mo><mml:mi>X</mml:mi><mml:mo>=</mml:mo><mml:mi) Tj 2014, 90, .	1.1	119
33	Artificial gravity field, astrophysical analogues, and topological phase transitions in strained topological semimetals. Npj Quantum Materials, 2017, 2, .	1.8	116
34	Nexus fermions in topological symmorphic crystalline metals. Scientific Reports, 2017, 7, 1688.	1.6	116
35	Hourglass Dirac chain metal in rhenium dioxide. Nature Communications, 2017, 8, 1844.	5.8	116
36	Nonsymmorphic-symmetry-protected hourglass Dirac loop, nodal line, and Dirac point in bulk and monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>X</mml:mi><mml:mn>3</mml:mn></mml:m (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>X</mml:mi></mml:math> =) Tj ETQq0 0 0 rgBT /Overlock	3.1	115

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37	Nodal loop and nodal surface states in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ti</mml:mi><mml:mn>3</mml:mn></mml:m family of materials. Physical Review B, 2018, 97, .	1.1	115
38	Blue Phosphorene Oxide: Strain-Tunable Quantum Phase Transitions and Novel 2D Emergent Fermions. Nano Letters, 2016, 16, 6548-6554.	4.5	114
39	Dirac and Weyl Materials: Fundamental Aspects and Some Spintronics Applications. Spin, 2016, 06, 1640003.	0.6	109
40	Geometrical effects in orbital magnetic susceptibility. Physical Review B, 2015, 91, .	1.1	108
41	Spin-momentum locking and spin-orbit torques in magnetic nano-heterojunctions composed of Weyl semimetal WTe2. Nature Communications, 2018, 9, 3990.	5.8	105
42	Multivariable Scaling for the Anomalous Hall Effect. Physical Review Letters, 2015, 114, 217203.	2.9	104
43	Three-dimensional Pentagon Carbon with a genesis of emergent fermions. Nature Communications, 2017, 8, 15641.	5.8	104
44	Valleytronics in merging Dirac cones: All-electric-controlled valley filter, valve, and universal reversible logic gate. Physical Review B, 2017, 96, .	1.1	104
45	Two-dimensional Weyl half-semimetal and tunable quantum anomalous Hall effect. Physical Review B, 2019, 100, .	1.1	101
46	Efficient Ohmic contacts and built-in atomic sublayer protection in MoSi2N4 and WSi2N4 monolayers. Npj 2D Materials and Applications, 2021, 5, .	3.9	98
47	Two-dimensional ferroelectricity and switchable spin-textures in ultra-thin elemental Te multilayers. Materials Horizons, 2018, 5, 521-528.	6.4	96
48	Universal Approach to Magnetic Second-Order Topological Insulator. Physical Review Letters, 2020, 125, 056402.	2.9	91
49	Quadratic and cubic nodal lines stabilized by crystalline symmetry. Physical Review B, 2019, 99, .	1.1	89
50	Two-dimensional honeycomb borophene oxide: strong anisotropy and nodal loop transformation. Nanoscale, 2019, 11, 2468-2475.	2.8	84
51	Electric control of topological phase transitions in Dirac semimetal thin films. Scientific Reports, 2015, 5, 14639.	1.6	75
52	Hybrid nodal loop metal: Unconventional magnetoresponse and material realization. Physical Review B, 2018, 97, .	1.1	75
53	Electronic, Dielectric and Plasmonic Properties of Two-Dimensional Electride Materials X2N (X=Ca,) Tj ETQq1 1 0.784314 rgBT /Overlock	1.6	73
54	Heterostructured TiO₂ Spheres with Tunable Interiors and Shells toward Improved Packing Density and Pseudocapacitive Sodium Storage. Advanced Materials, 2019, 31, e1904589.	11.1	73

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55	Chirality-Dependent Hall Effect in Weyl Semimetals. Physical Review Letters, 2015, 115, 156603.	2.9	72
56	Tunable ferroelectricity and anisotropic electric transport in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math> -GeSe. Physical Review B, 2018, 97, .	1.1	72
57	Two-dimensional spin-orbit Dirac point in monolayer HfGeTe. Physical Review Materials, 2017, 1, .	0.9	70
58	Valley-Layer Coupling: A New Design Principle for Valleytronics. Physical Review Letters, 2020, 124, 037701.	2.9	69
59	d Orbital Topological Insulator and Semimetal in the Antifluorite Cu₂S Family: Contrasting Spin Helicities, Nodal Box, and Hybrid Surface States. Journal of Physical Chemistry Letters, 2017, 8, 3506-3511.	2.1	65
60	Weyl-loop half-metal in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mi>Li</mml:mi></mml:mrow><mm Physical Review B, 2019, 99, .	1.1	61
61	Thermal conductivity of biaxial-strained MoS₂: sensitive strain dependence and size-dependent reduction rate. Nanotechnology, 2015, 26, 465707.	1.3	60
62	Electronic correlations in the normal state of the kagome superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>KV</mml:mi><mml:mn>3</mml:mn></mml: Physical Review B, 2021, 103, .	1.3	60
63	Observation of a topological nodal surface and its surface-state arcs in an artificial acoustic crystal. Nature Communications, 2019, 10, 5185.	5.8	59
64	Ternary wurtzite CaAgBi materials family: A playground for essential and accidental, type-I and type-II Dirac fermions. Physical Review Materials, 2017, 1, .	0.9	59
65	Perfect valley filter in a topological domain wall. Physical Review B, 2015, 92, .	1.1	58
66	Multiple unpinned Dirac points in group-Va single-layers with phosphorene structure. Npj Computational Materials, 2016, 2, .	3.5	57
67	Quadratic contact point semimetal: Theory and material realization. Physical Review B, 2018, 98, .	1.1	57
68	Tunable hyperbolic dispersion and negative refraction in natural electride materials. Physical Review B, 2017, 95, .	1.1	56
69	Higher-order Dirac fermions in three dimensions. Physical Review B, 2020, 101, .	1.1	56
70	Scattering universality classes of side jump in the anomalous Hall effect. Physical Review B, 2011, 83, .	1.1	55
71	Two-dimensional nodal-loop half-metal in monolayer MnN. Physical Review Materials, 2019, 3, .	0.9	55
72	Correlation-driven topological and valley states in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>VSi</mml:mi><mml:mn>2</mml:mn></mml mathvariant="normal">P</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2021, 104, .	1.1	54

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73	Intrinsic Second-Order Anomalous Hall Effect and Its Application in Compensated Antiferromagnets. Physical Review Letters, 2021, 127, 277202.	2.9	54
74	Spin-polarized and valley helical edge modes in graphene nanoribbons. Physical Review B, 2011, 84, .	1.1	53
75	Boundary Criticality of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="script">PT</mml:mi></mml:mrow></mml:math> -Invariant Topology and Second-Order Nodal-Line Semimetals. Physical Review Letters, 2020, 125, 126403.	2.9	53
76	Ideal Unconventional Weyl Point in a Chiral Photonic Metamaterial. Physical Review Letters, 2020, 125, 143001.	2.9	51
77	Circumventing the no-go theorem: A single Weyl point without surface Fermi arcs. Physical Review B, 2019, 100, .	1.1	50
78	Third-order nonlinear Hall effect induced by the Berry-connection polarizability tensor. Nature Nanotechnology, 2021, 16, 869-873.	15.6	50
79	Germagraphene as a promising anode material for lithium-ion batteries predicted from first-principles calculations. Nanoscale Horizons, 2019, 4, 457-463.	4.1	48
80	Three-dimensional honeycomb carbon: Junction line distortion and novel emergent fermions. Carbon, 2019, 141, 417-426.	5.4	48
81	Combination of heterostructure with oxygen vacancies in Co@CoO1-x nanosheets array for high-performance lithium sulfur batteries. Chemical Engineering Journal, 2021, 411, 128546.	6.6	48
82	Anisotropic Quantum Confinement Effect and Electric Control of Surface States in Dirac Semimetal Nanostructures. Scientific Reports, 2015, 5, 7898.	1.6	46
83	Auâ€Decorated Cracked Carbon Tube Arrays as Binderâ€Free Catalytic Cathode Enabling Guided Li₂O₂ Inner Growth for Highâ€Performance Liâ€O₂ Batteries. Advanced Functional Materials, 2016, 26, 7725-7732.	7.8	45
84	Realization of Symmetry-Enforced Two-Dimensional Dirac Fermions in Nonsymmorphic Î±-Bismuthene. ACS Nano, 2020, 14, 1888-1894.	7.3	45
85	Intrinsic relative magnetoconductivity of nonmagnetic metals. Physical Review B, 2017, 95, .	1.1	44
86	Hourglass Weyl loops in two dimensions: Theory and material realization in monolayer GaTeI family. Physical Review Materials, 2019, 3, .	0.9	44
87	Valley-polarized quantum anomalous Hall phase and disorder-induced valley-filtered chiral edge channels. Physical Review B, 2015, 91, .	1.1	43
88	Pressure-Stabilized Semiconducting Electrides in Alkaline-Earth-Metal Subnitrides. Journal of the American Chemical Society, 2017, 139, 13798-13803.	6.6	43
89	Multiple Dirac Points and Hydrogenation-Induced Magnetism of Germanene Layer on Al (111) Surface. Journal of Physical Chemistry Letters, 2015, 6, 4936-4942.	2.1	41
90	A two-dimensional h-BN/C₂N heterostructure as a promising metal-free photocatalyst for overall water-splitting. Physical Chemistry Chemical Physics, 2020, 22, 24446-24454.	1.3	41

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91	Topological electromotive force from domain-wall dynamics in a ferromagnet. Physical Review B, 2010, 82, .	1.1	40
92	Tunable half-metallic magnetism in an atom-thin holey two-dimensional C₂N monolayer. Journal of Materials Chemistry C, 2017, 5, 8424-8430.	2.7	39
93	Nitrogen-doped graphene oxide for effectively removing boron ions from seawater. Nanoscale, 2017, 9, 326-333.	2.8	39
94	Projectively Enriched Symmetry and Topology in Acoustic Crystals. Physical Review Letters, 2022, 128, 116802.	2.9	39
95	Enhancing and controlling valley magnetic response in MoS2/WS2 heterostructures by all-optical route. Nature Communications, 2019, 10, 4226.	5.8	38
96	Propagating Chiral Phonons in Three-Dimensional Materials. Nano Letters, 2021, 21, 3060-3065.	4.5	38
97	Unlocking Rapid and Robust Sodium Storage Performance of Zinc-Based Sulfide <i>via</i> Indium Incorporation. ACS Nano, 2021, 15, 8507-8516.	7.3	36
98	Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mg</mml:mi><mml:mn>2</mml:mn></mml mathvariant="normal">C</mml:mi></mml:mrow></mml:math> : Negative Poisson's ratio and unconventional two-dimensional emergent fermions. Physical Review Materials, 2018, 2, .	0.9	36
99	How is Honeycomb Borophene Stabilized on Al(111)?. Journal of Physical Chemistry C, 2019, 123, 14858-14864.	1.5	35
100	Nonsymmorphic cubic Dirac point and crossed nodal rings across the ferroelectric phase transition in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LiOsO</mml:mi><mml:mn>3</mml:mn></mml:msub></m Physical Review Materials, 2018, 2, .	0.9	35
101	Tunable Topological Energy Bands in 2D Dialkaliâ€Metal Monoxides. Advanced Science, 2020, 7, 1901939.	5.6	34
102	Second-Order Real Nodal-Line Semimetal in Three-Dimensional Graphdiyne. Physical Review Letters, 2022, 128, 026405.	2.9	34
103	Ferroelectric control of single-molecule magnetism in 2D limit. Science Bulletin, 2020, 65, 1252-1259.	4.3	33
104	Engineering Topological Surface States and Giant Rashba Spin Splitting in BiTeI/Bi2Te3 Heterostructures. Scientific Reports, 2015, 4, 3841.	1.6	32
105	Magnetic higher-order nodal lines. Physical Review B, 2021, 103, .	1.1	32
106	Almost ideal nodal-loop semimetal in monoclinic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="bold">CuTeO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> material. Physical Review B, 2018, 97, .	1.1	30
107	Quantized Circulation of Anomalous Shift in Interface Reflection. Physical Review Letters, 2020, 125, 076801.	2.9	30
108	Colossal Anomalous Hall Effect in Ferromagnetic van der Waals CrTe₂. ACS Nano, 2021, 15, 9759-9763.	7.3	30

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109	Switching Spinless and Spinful Topological Phases with Projective <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>P</mml:mi><mml:mi>T</mml:mi></mml:mrow></mml:math> Symmetry. Physical Review Letters, 2021, 126, 196402.	2.9	30
110	Graphyne as a second-order and real Chern topological insulator in two dimensions. Physical Review B, 2021, 104, .	1.1	30
111	Anderson Localization from the Berry-Curvature Interchange in Quantum Anomalous Hall Systems. Physical Review Letters, 2016, 117, 056802.	2.9	29
112	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="double-struck">Z</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> -projective translational symmetry protected topological phases. Physical Review B, 2020, 102, .	1.1	29
113	Half-Auxeticity and Anisotropic Transport in Pd Decorated Two-Dimensional Boron Sheets. Nano Letters, 2021, 21, 2356-2362.	4.5	29
114	Two-dimensional topological semimetals*. Chinese Physics B, 2021, 30, 107304.	0.7	29
115	Nonvolatile ferroelectric control of topological states in two-dimensional heterostructures. Physical Review B, 2020, 102, .	1.1	28
116	Atomically Thin Quantum Spin Hall Insulators. Advanced Materials, 2021, 33, e2008029.	11.1	28
117	Vacuum level dependent photoluminescence in chemical vapor deposition-grown monolayer MoS 2. Scientific Reports, 2017, 7, 16714.	1.6	27
118	Significant perpendicular magnetic anisotropy in room-temperature layered ferromagnet of Cr-intercalated CrTe₂. 2D Materials, 2021, 8, 031003.	2.0	27
119	Chiral phonons in kagome lattices. Physical Review B, 2019, 100, .	1.1	26
120	Berry connection polarizability tensor and third-order Hall effect. Physical Review B, 2022, 105, .	1.1	26
121	Electrically tunable valley polarization in Weyl semimetals with tilted energy dispersion. Scientific Reports, 2019, 9, 4480.	1.6	25
122	Systematic investigation of emergent particles in type-III magnetic space groups. Physical Review B, 2022, 105, .	1.1	25
123	Encyclopedia of emergent particles in type-IV magnetic space groups. Physical Review B, 2022, 105, .	1.1	25
124	Tunable anomalous Hall transport in bulk and two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi></mml:mrow><mml:m mathvariant="normal">CrTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> : A first-principles study. Physical Review B, 2021, 103, .	1.1	24
125	Gauge-Field Extended <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>k</mml:mi><mml:mo>Â·</mml:mo><mml:mi>p</mml:mi></mml:mrow></mml:math Method and Novel Topological Phases. Physical Review Letters, 2021, 127, 076401.	2.9	24
126	Chiral Phonon Diode Effect in Chiral Crystals. Nano Letters, 2022, 22, 1688-1693.	4.5	24

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127	Interfacial Multiferroics of TiO₂/PbTiO₃ Heterostructure Driven by Ferroelectric Polarization Discontinuity. ACS Applied Materials & Interfaces, 2017, 9, 1899-1906.	4.0	23
128	Electrical Contact between an Ultrathin Topological Dirac Semimetal and a Two-Dimensional Material. Physical Review Applied, 2020, 13, .	1.5	23
129	Second harmonic generation from tetragonal centrosymmetric crystals. Physical Review B, 2009, 80, .	1.1	22
130	Tailoring lanthanide doping in perovskite CaTiO₃ for luminescence applications. Physical Chemistry Chemical Physics, 2017, 19, 16189-16197.	1.3	22
131	Transverse shift in Andreev reflection. Physical Review B, 2017, 96, .	1.1	22
132	Circular dichroism and radial Hall effects in topological materials. Physical Review B, 2018, 97, .	1.1	22
133	Two-dimensional antiferromagnetic Dirac fermions in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>TaCoTe</mml:mi><mml:mn>2</mml:mn></mml:msub></ Physical Review B, 2019, 100, .	1.1	22
134	Layer-engineered interlayer excitons. Science Advances, 2021, 7, .	4.7	22
135	Topological Properties of Atomic Lead Film with Honeycomb Structure. Scientific Reports, 2016, 6, 21723.	1.6	21
136	Gate-tunable current partition in graphene-based topological zero lines. Physical Review B, 2017, 95, .	1.1	21
137	Unusual Electronic Transitions in Two-dimensional Layered <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>Sn</mml:mi><mml:mi>Sb</mml:mi></mml:mrow><mml:mn>2</mml:mn></m Driven by Electronic State Rehybridization. Physical Review Applied, 2019, 11, .	1.5	21
138	Directional massless Dirac fermions in a layered van der Waals material with one-dimensional long-range order. Nature Materials, 2020, 19, 27-33.	13.3	21
139	Thermoelectric generation of orbital magnetization in metals. Physical Review B, 2021, 103, .	1.1	20
140	Ferroelectricity coexisted with p-orbital ferromagnetism and metallicity in two-dimensional metal oxynitrides. Npj Computational Materials, 2022, 8, .	3.5	20
141	Theory of orbital magnetization in disordered systems. Physical Review B, 2012, 86, .	1.1	19
142	Topological metallic phases in spinâ€“orbit coupled bilayer systems. New Journal of Physics, 2014, 16, 123015.	1.2	19
143	Symmetry-enforced nodal chain phonons. Npj Quantum Materials, 2022, 7, .	1.8	19
144	Room temperature ferromagnetism and antiferromagnetism in two-dimensional iron arsenides. Nanoscale, 2019, 11, 16508-16514.	2.8	18

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145	Type-II topological metals. Frontiers of Physics, 2020, 15, 1.	2.4	18
146	Progress in Epitaxial Thinâ€Film Na₃Bi as a Topological Electronic Material. Advanced Materials, 2021, 33, e2005897.	11.1	18
147	Coexistence of Ferroelectricity and Ferromagnetism in One-Dimensional SbN and BiN Nanowires. ACS Applied Materials & Interfaces, 2021, 13, 13517-13523.	4.0	18
148	Hexagonal supertetrahedral boron: A topological metal with multiple spin-orbit-free emergent fermions. Physical Review Materials, 2019, 3, .	0.9	18
149	Highly anisotropic two-dimensional metal in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoOCl</mml:mi><mml:mn>2</mml:mn></mml:msub></ Physical Review B, 2020, 102, .	1.1	17
150	Extending Channel Scaling Limit of p-MOSFETs Through Antimonene With Heavy Effective Mass and High Density of State. IEEE Transactions on Electron Devices, 2022, 69, 857-862.	1.6	17
151	2D honeycomb borophene oxide: a promising anode material offering super high capacity for Li/Na-ion batteries. Journal of Physics Condensed Matter, 2020, 32, 065001.	0.7	16
152	Phononic real Chern insulator with protected corner modes in graphynes. Physical Review B, 2022, 105, .	1.1	16
153	Hybrid Structures and Strain-Tunable Electronic Properties of Carbon Nanothreads. Journal of Physical Chemistry C, 2018, 122, 3101-3106.	1.5	15
154	A tunable and unidirectional one-dimensional electronic system Nb2n+1SinTe4n+2. Npj Quantum Materials, 2020, 5, .	1.8	15
155	Super-Andreev reflection and longitudinal shift of pseudospin-1 fermions. Physical Review B, 2020, 101, .	1.1	15
156	Strong Coupled Magnetic and Electric Ordering in Monolayer of Metal Thio(seleno)phosphates. Chinese Physics Letters, 2021, 38, 077501.	1.3	15
157	Progress on topological nodal line and nodal surface. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 227101.	0.2	15
158	High-Performance and Low-Power Transistors Based on Anisotropic Monolayer <i>Î²</i> - <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>Te</mml:mi><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Applied, 2022, 17, .	1.5	15
159	Composite Dirac semimetals. Physical Review B, 2019, 100, .	1.1	14
160	Index Theorem on Chiral Landau Bands for Topological Fermions. Physical Review Letters, 2021, 126, 046401.	2.9	14
161	One-Dimensional Metal Embedded in Two-Dimensional Semiconductor in Nb₂Si_{<i>x</i>â€“1}Te₄. ACS Nano, 2021, 15, 7149-7154.	7.3	14
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163	Anomalous spatial shifts in interface electronic scattering. Frontiers of Physics, 2019, 14, 1.	2.4	13
164	Unconventional Pairing Induced Anomalous Transverse Shift in Andreev Reflection. Physical Review Letters, 2018, 121, 176602.	2.9	12
165	Inherited weak topological insulator signatures in the topological hourglass semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Nb</mml:mi><mml:mn>3</mml:mn></mml <mml:math		

#	Article	IF	Citations
181	Importance of interactions for the band structure of the topological Dirac semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Na</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi>Bi</mml:mi></mml:mrow></mml:math>. Physical Review B, 2020, 102, .	1.1	7
182	Nonsymmorphic nodal-line metals in the two-dimensional rare earth monochalcogenides MX (Mâ€‰=â€‰Sc, Y;) Tj ETQq0 0 0 rgBT /Ov	1.7	7
183	Triply degenerate point in three-dimensional spinless systems. Physical Review B, 2021, 104, .	1.1	7
184	Spontaneous symmetry lowering of Si (001) towards two-dimensional ferro/antiferroelectric behavior. Physical Review Materials, 2019, 3, .	0.9	7
185	Chiral phonons in lattices with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>C</mml:mi><mml:mn>4</mml:mn></mml:msub></mm symmetry. Physical Review B, 2022, 105, .	1.1	7
186	Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>RhB</mml:mi><mml:mn>4</mml:mn></mml:msub></mm : Half-auxeticity and almost ideal spin-orbit Dirac point semimetal. Physical Review B, 2021, 104, .	1.1	7
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190	Ternary FePSe 3 Atomic Layers with Competitive Temperature Coefficient of Resistance for Uncooled Infrared Bolometers. Advanced Materials Interfaces, 2021, 8, 2100491.	1.9	6
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192	Topological band transition between hexagonal and triangular lattices with (px, py) orbitals. Journal of Physics Condensed Matter, 2022, , .	0.7	5
193	First-principles study of bulk and two-dimensional structures of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>A</mml:mi><mml:mi mathvariant="normal">MnBi</mml:mi></mml:math> family of materials <mml:math		

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199	Electronic correlations and absence of superconductivity in the collapsed phase of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>LaFe</mml:mi><mml:mn>2</mml:mn></mm Physical Review B, 2021, 103, .	1.1	3
200	Topological properties of noncentrosymmetric superconductors <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>T</mml:mi><mml:msub><mml:mi mathvariant="normal">Ir</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.1	3
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204	Theory of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>I</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi>V</mml:mi></mml:mrow></mml:math>chara of magnetic Josephson junctions. Physical Review B, 2010, 82, .	1.1	1
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