

# Binghai Yan

## List of Publications by Year in descending order

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Version: 2024-02-01

212  
papers

20,128  
citations

12330

69  
h-index

11052

137  
g-index

223  
all docs

223  
docs citations

223  
times ranked

13984  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Large-Gap Quantum Spin Hall Insulators in Tin Films. <i>Physical Review Letters</i> , 2013, 111, 136804.  | 7.8  | 1,140     |
| 2  | Topological Materials: Weyl Semimetals. <i>Annual Review of Condensed Matter Physics</i> , 2017, 8, 337-354.  | 14.5 | 1,110     |
| 3  | Extremely large magnetoresistance and ultrahigh mobility in the topological Weyl semimetal candidate NbP. <i>Nature Physics</i> , 2015, 11, 645-649.                              | 16.7 | 893       |
| 4  | Weyl semimetal phase in the non-centrosymmetric compound TaAs. <i>Nature Physics</i> , 2015, 11, 728-732.   | 16.7 | 796       |
| 5  | Superconductivity in Weyl semimetal candidate MoTe <sub>2</sub> . <i>Nature Communications</i> , 2016, 7, 11038.  | 12.8 | 611       |
| 6  | Large anomalous Hall effect driven by a nonvanishing Berry curvature in the noncolinear antiferromagnet Mn <sub>3</sub> Ge. <i>Science Advances</i> , 2016, 2, e1501870.          | 10.3 | 561       |
| 7  | Prediction of Weyl semimetal in orthorhombic MoTe <sub>2</sub> . <i>Physical Review B</i> , 2015, 92, .   | 13.2 | 515       |
| 8  | High electron mobility and quantum oscillations in non-encapsulated ultrathin semiconducting Bi <sub>2</sub> O <sub>2</sub> Se. <i>Nature Nanotechnology</i> , 2017, 12, 530-534. | 31.5 | 507       |
| 9  | Oscillatory crossover from two-dimensional to three-dimensional topological insulators. <i>Physical Review B</i> , 2010, 81, .  | 3.2  | 459       |
| 10 | Fermi-arc diversity on surface terminations of the magnetic Weyl semimetal Co <sub>3</sub> Sn <sub>2</sub> S <sub>2</sub> . <i>Science</i> , 2019, 365, 1286-1291.                | 12.6 | 441       |
| 11 | Negative magnetoresistance without well-defined chirality in the Weyl semimetal TaP. <i>Nature Communications</i> , 2016, 7, 11615.   | 12.8 | 429       |
| 12 | Topological antiferromagnetic spintronics. <i>Nature Physics</i> , 2018, 14, 242-251.   | 16.7 | 427       |
| 13 | Signature of type-II Weyl semimetal phase in MoTe <sub>2</sub> . <i>Nature Communications</i> , 2017, 8, 13973.   | 12.8 | 358       |
| 14 | Topological materials. <i>Reports on Progress in Physics</i> , 2012, 75, 096501.  | 20.1 | 339       |
| 15 | Linear Magnetoresistance Caused by Mobility Fluctuations in n-Doped Cd <sub>3</sub> As <sub>2</sub> . <i>Physical Review Letters</i> , 2015, 114, 117201.                         | 7.8  | 306       |
| 16 | Topological Weyl semimetals in the chiral antiferromagnetic materials Mn <sub>3</sub> Ge and Mn <sub>3</sub> Sn. <i>New Journal of Physics</i> , 2017, 19, 015008.                | 2.9  | 277       |
| 17 | Roton pair density wave in a strong-coupling kagome superconductor. <i>Nature</i> , 2021, 599, 222-228.   | 27.8 | 276       |
| 18 | Prediction of Near-Room-Temperature Quantum Anomalous Hall Effect on Honeycomb Materials. <i>Physical Review Letters</i> , 2014, 113, 256401.                                     | 7.8  | 263       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Evolution of the Fermi surface of Weyl semimetals in the transition metal pnictide family. Nature Materials, 2016, 15, 27-31.    | 27.5 | 245       |
| 20 | Higher-Order Topology, Monopole Nodal Lines, and the Origin of Large Fermi Arcs in Transition Metal Dichalcogenides $X\text{Te}$ |      |           |



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|----|---|------|-----------|
| 55 | Topological Insulators in Ternary Compounds with a Honeycomb Lattice. <i>Physical Review Letters</i> , 2011, 106, 156402.   | 7.8  | 89        |
| 56 | Exchange bias and quantum anomalous Hall effect in the $\text{MnBi}_2\text{Te}_4/\text{CrI}_3$ heterostructure. <i>Science Advances</i> , 2020, 6, eaaz0948.  | 10.3 | 89        |
| 57 | Robust 2D Topological Insulators in van der Waals Heterostructures. <i>ACS Nano</i> , 2014, 8, 10448-10454.   | 14.6 | 88        |
| 58 | Prediction of Weak Topological Insulators in Layered Semiconductors. <i>Physical Review Letters</i> , 2012, 109, 116406.  | 7.8  | 85        |
| 59 | Chiral Weyl Pockets and Fermi Surface Topology of the Weyl Semimetal TaAs. <i>Physical Review Letters</i> , 2016, 117, 146401.  | 7.8  | 83        |
| 60 | Observation of pseudo-two-dimensional electron transport in the rock salt-type topological semimetal LaBi. <i>Physical Review B</i> , 2016, 93, .   | 3.2  | 83        |
| 61 | Visualizing weakly bound surface Fermi arcs and their correspondence to bulk Weyl fermions. <i>Science Advances</i> , 2016, 2, e1600709.  | 10.3 | 83        |
| 62 | Chirality-driven topological electronic structure of DNA-like materials. <i>Nature Materials</i> , 2021, 20, 638-644.   | 27.5 | 83        |
| 63 | Observation of charge to spin conversion in Weyl semimetal $\text{WTe}_2$ at room temperature. <i>Physical Review Research</i> , 2020, 2, .   | 7.8  | 83        |
| 64 | Photogalvanic effect in Weyl semimetals from first principles. <i>Physical Review B</i> , 2018, 97, .   | 3.2  | 77        |
| 65 | Superconductivity and magnetic order in the noncentrosymmetric half-Heusler compound $\text{ErPdBi}$ . <i>Europhysics Letters</i> , 2013, 104, 27001.   | 2.0  | 76        |
| 66 | Metal-insulator transition and the anomalous Hall effect in the layered magnetic materials $\text{VS}_2$ and $\text{VSe}_2$ . <i>New Journal of Physics</i> , 2016, 18, 113038.   | 2.9  | 75        |
| 67 | Prediction of Triple Point Fermions in Simple Half-Heusler Topological Insulators. <i>Physical Review Letters</i> , 2017, 119, 136401.  | 7.8  | 75        |
| 68 | Toward Rational Design of Catalysts Supported on a Topological Insulator Substrate. <i>ACS Catalysis</i> , 2015, 5, 7063-7067.  | 11.2 | 73        |
| 69 | 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". <i>Journal of Physical Chemistry B</i> , 2003, 107, 9159-9159. | 2.6  | 71        |
| 70 | Chiral magnetoresistance in the Weyl semimetal NbP. <i>Scientific Reports</i> , 2017, 7, 43394.   | 3.3  | 71        |
| 71 | Consequences of time-reversal-symmetry breaking in the light-matter interaction: Berry curvature, quantum metric, and diabatic motion. <i>Physical Review Research</i> , 2020, 2, .   | 3.6  | 71        |
| 72 | Large spin-orbit torque efficiency enhanced by magnetic structure of collinear antiferromagnet $\text{IrMn}$ . <i>Science Advances</i> , 2019, 5, eaau6696.   | 10.3 | 70        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 73 | Synthesis, Crystal Structure, and Physical Properties of $\text{Sr}_2\text{FeOsO}_6$ . Inorganic Chemistry, 2013, 52, 6713-6719.  | 4.0  | 68        |
| 74 | Half-Heusler topological insulators. MRS Bulletin, 2014, 39, 859-866.   | 3.5  | 68        |
| 75 | First-principles study of the structural stability of cubic, tetragonal and hexagonal phases in $\text{Mn}_3\text{Z}$ (Z=Ga, Sn and Ge) Heusler compounds. Journal of Physics Condensed Matter, 2013, 25, 206006. | 1.8  | 67        |
| 76 | Spin Hall effect emerging from a noncollinear magnetic lattice without spin-orbit coupling. New Journal of Physics, 2018, 20, 073028.   | 2.9  | 65        |
| 77 | Quantum oscillations and the Fermi surface topology of the Weyl semimetal NbP. Physical Review B, 2016, 93, .   | 3.2  | 64        |
| 78 | Self-modulation doping effect in the high-mobility layered semiconductor $\text{Bi}_2\text{O}_2\text{Se}$ . Physical Review B, 2018, 97, .  | 3.9  | 63        |
| 79 | Topological Hamiltonian as an exact tool for topological invariants. Journal of Physics Condensed Matter, 2013, 25, 155601.   | 1.8  | 62        |
| 80 | Topological insulators in filled skutterudites. Physical Review B, 2012, 85, .  | 3.2  | 61        |
| 81 | Two-dimensional inversion-asymmetric topological insulators in functionalized III-Bi bilayers. Physical Review B, 2015, 91, .   | 3.2  | 60        |
| 82 | Lattice-Site-Specific Spin Dynamics in Double Perovskite $\text{Sr}_2\text{FeOsO}_6$ . Physical Review Letters, 2014, 112, 147202.  | 7.8  | 59        |
| 83 | Resolving the topological classification of bismuth with topological defects. Science Advances, 2019, 5, eaax6996.<br>Graphene-like Dirac states and quantum spin Hall insulators in square-octagonal             | 10.3 | 59        |
| 84 |   |      |           |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 91  | Topological Quantum Phase Transition and Superconductivity Induced by Pressure in the Bismuth Tellurohalide BiTeI. <i>Advanced Materials</i> , 2017, 29, 1605965.   | 21.0 | 51        |
| 92  | Observation of nodal line in non-symmorphic topological semimetal InBi. <i>New Journal of Physics</i> , 2017, 19, 065007.   | 2.9  | 51        |
| 93  | Evidence of surface transport and weak antilocalization in a single crystal of the $\text{Bi}_2\text{Te}_2\text{Se}$ topological insulator. <i>Physical Review B</i> , 2014, 90, .  | 3.2  | 50        |
| 94  | Finite-temperature violation of the anomalous transverse Wiedemann-Franz law. <i>Science Advances</i> , 2020, 6, eaaz3522.  | 10.3 | 50        |
| 95  | Theoretical prediction of topological insulator in ternary rare earth chalcogenides. <i>Physical Review B</i> , 2010, 82, .   | 3.2  | 49        |
| 96  | First-principles calculations for topological quantum materials. <i>Nature Reviews Physics</i> , 2021, 3, 283-297.  | 26.6 | 48        |
| 97  | Magnetically Frustrated Double Perovskites: Synthesis, Structural Properties, and Magnetic Order of $\text{Sr}_2\text{BiOsO}_6$ ( $\text{Bi} = \text{Y, In, Sc}$ ). <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2015, 641, 197-205. | 1.2  | 47        |
| 98  | Geometry of the charge density wave in the kagome metal $\text{AV}_3\text{Sb}_5$ . <i>Physical Review B</i> , 2021, 104, .  | 3.2  | 47        |
| 99  | Weak topological insulators induced by the interlayer coupling: A first-principles study of stacked $\text{Bi}_2\text{Te}_3$ . <i>Physical Review B</i> , 2014, 89, .   | 3.2  | 46        |
| 100 | Pressure-driven superconductivity in the transition-metal pentatelluride $\text{HfTe}_5$ . <i>Physical Review B</i> , 2016, 94, .   | 3.2  | 46        |
| 101 | Intrinsic Anomalous Nernst Effect Amplified by Disorder in a Half-Metallic Semimetal. <i>Physical Review X</i> , 2019, 9, .   | 8.9  | 45        |
| 102 | Charge density wave order in the kagome metal $\text{AV}_3\text{Sb}_5$ .  |      |           |

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|-----|---|------|-----------|
| 109 | Evidence of topological boundary modes with topological nodal-point superconductivity. Nature Physics, 2021, 17, 1413-1419.   | 16.7 | 40        |
| 110 | Surface superconductivity in the type II Weyl semimetal TaIrTe <sub>4</sub> . National Science Review, 2020, 7, 579-587.  | 9.5  | 39        |
| 111 | Model Hamiltonian and time reversal breaking topological phases of antiferromagnetic half-Heusler materials. Physical Review B, 2017, 95, .   | 3.2  | 37        |
| 112 | Two-dimensional ferroelectric topological insulators in functionalized atomically thin bismuth layers. Physical Review B, 2018, 97, .   | 3.2  | 37        |
| 113 | Chern mosaic and Berry-curvature magnetism in magic-angle graphene. Nature Physics, 2022, 18, 885-892.  | 16.7 | 37        |
| 114 | Berry phase and band structure analysis of the Weyl semimetal NbP. Scientific Reports, 2016, 6, 33859.  | 3.3  | 36        |
| 115 | Magnetic asymmetry induced anomalous spin-orbit torque in IrMn. Physical Review B, 2020, 101, .   | 3.2  | 36        |
| 116 | Pressure-induced superconductivity and topological quantum phase transitions in a quasi-one-dimensional topological insulator: Bi <sub>4</sub> I <sub>4</sub> . Npj Quantum Materials, 2018, 3, . | 5.2  | 34        |
| 117 | Observation of anomalous amplitude modes in the kagome metal CsV <sub>3</sub> Sb <sub>5</sub> . Nature Communications, 2022, 13, .  | 12.8 | 34        |
| 118 | Active role of nonmagnetic cations in magnetic interactions for double-perovskite   |      |           |



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|-----|--|------|-----------|
| 127 | Topological nature and the multiple Dirac cones hidden in Bismuth high-Tc superconductors. Scientific Reports, 2015, 5, 10435.                                 | 3.3  | 30        |
| 128 | A case study for the formation of stanene on a metal surface. Communications Physics, 2019, 2, .   | 5.3  | 30        |
| 129 | Observation of light-driven band structure via multiband high-harmonic spectroscopy. Nature Photonics, 2022, 16, 428-432.                                      | 31.4 | 30        |
| 130 | Proximity enhanced quantum spin Hall state in graphene. Carbon, 2015, 87, 418-423.   | 10.3 | 29        |
| 131 | Pressure tuning the Fermi surface topology of the Weyl semimetal NbP. Physical Review B, 2016, 93, .   | 3.2  | 29        |
| 132 | Quantum oscillations in the type-II Dirac semi-metal candidate PtSe <sub>2</sub> . New Journal of Physics, 2018, 20, 043008.                                   | 2.9  | 28        |
| 133 | An electron-counting rule to determine the interlayer magnetic coupling of the van der Waals materials. 2D Materials, 2020, 7, 045010.                         | 4.4  | 27        |
| 134 | Origins of electronic bands in the antiferromagnetic topological insulator $MnBi_{2}Te_{4}$ . Physical Review B, 2021, 104, .                                  | 3.2  | 27        |
| 135 | Magnetic and superconducting phase diagram of the half-Heusler topological semimetal HoPdBi. Journal of Physics Condensed Matter, 2015, 27, 275701.            | 1.8  | 26        |
| 136 | Topological Dirac semimetal phase in Pd and Pt oxides. Physical Review B, 2017, 95, .  | 3.2  | 26        |
| 137 | Rashba spin splitting of $L$ -gap surface states on Ag(111) and Cu(111). Physical Review B, 2018, 98, .  | 3.2  | 24        |
| 138 | Visualizing coexisting surface states in the weak and crystalline topological insulator Bi <sub>2</sub> Te <sub>3</sub> . Nature Materials, 2020, 19, 610-616. | 27.5 | 23        |
| 139 | Ab initio study of topological surface states of strained HgTe. Europhysics Letters, 2014, 107, 57006.   | 2.0  | 21        |
| 140 | Two-dimensional rectangular tantalum carbide halides TaCX (X = Cl, Br, I): novel large-gap quantum spin Hall insulators. 2D Materials, 2016, 3, 035018.        | 4.4  | 21        |
| 141 | Observation of the topological surface state in the nonsymmorphic topological insulator KHgSb. Physical Review B, 2017, 96, .                                  | 3.2  | 21        |
| 142 | Quasiparticle Interference Studies of Quantum Materials. Advanced Materials, 2018, 30, e1707628.   | 21.0 | 21        |
| 143 | Chirality-Induced Giant Unidirectional Magnetoresistance in Twisted Bilayer Graphene. Innovation(China), 2021, 2, 100085.                                      | 9.1  | 21        |
| 144 | Exchange-biased topological transverse thermoelectric effects in a Kagome ferrimagnet. Nature Communications, 2022, 13, 1091.                                  | 12.8 | 21        |

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|-----|---|------|-----------|
| 145 | Bonding modes and electronic properties of single-crystalline silicon nanotubes. Physical Review B, 2006, 73, .   | 3.2  | 20        |
| 146 | Electron Emission Originated from Free-Electron-like States of Alkali-Doped Boron Nitride Nanotubes. Journal of the American Chemical Society, 2008, 130, 17012-17015.              | 13.7 | 20        |
| 147 | Eightfold fermionic excitation in a charge density wave compound. Physical Review B, 2020, 102, .   | 3.2  | 20        |
| 148 | Spin and Charge Interconversion in Dirac-Semimetal Thin Films. Physical Review Applied, 2021, 16, .   | 3.8  | 20        |
| 149 | Spectroscopic evidence for the gapless electronic structure in bulk ZrTe5. Journal of Electron Spectroscopy and Related Phenomena, 2017, 219, 45-52.                                | 1.7  | 19        |
| 150 | Experimental observation of conductive edge states in weak topological insulator candidate HfTe5. APL Materials, 2018, 6, .   | 5.1  | 19        |
| 151 | Comment on "Valence Surface Electronic States on Ge(001)". Physical Review Letters, 2009, 103, 189701; author reply 189702.<br>Weak orbital ordering of Ir in the double perovskite | 7.8  | 18        |
| 152 | Strong spin-orbit coupling and Dirac nodal lines in the three-dimensional electronic structure of metallic rutile CeIrO <sub>6</sub> .  | 3.2  | 18        |
| 153 | Strong spin-orbit coupling and Dirac nodal lines in the three-dimensional electronic structure of metallic rutile CeIrO <sub>6</sub> . Physical Review B, 2019, 99, .               | 3.2  | 18        |
| 154 | Nonvanishing Subgap Photocurrent as a Probe of Lifetime Effects. Physical Review Letters, 2020, 125, 227401.  | 7.8  | 18        |
| 155 | Band inversion and topology of the bulk electronic structure in FeSe <sub>1-x</sub> S <sub>x</sub> . Physical Review B, 2020, 101, .  | 3.2  | 18        |
| 156 | Pressure-induced topological insulator in NaBaBi with right-handed surface spin texture. Physical Review B, 2016, 93, .   | 3.2  | 17        |
| 157 | Opening a band gap without breaking lattice symmetry: a new route toward robust graphene-based nanoelectronics. Nanoscale, 2014, 6, 7474.   | 5.6  | 16        |
| 158 | Impurity screening and stability of Fermi arcs against Coulomb and magnetic scattering in a Weyl mononictide. Physical Review B, 2017, 95, .  | 3.2  | 16        |
| 159 | Observation of topological surface states and strong electron/hole imbalance in extreme magnetoresistance compound LaBi. Physical Review Materials, 2018, 2, .                      | 2.4  | 16        |
| 160 | Induced anomalous Hall effect of massive Dirac fermions in ZrTe <sub>5</sub> and thin flakes. Physical Review B, 2021, 103, .   | 3.2  | 15        |
| 161 | Twisted photovoltaics at terahertz frequencies from momentum shift current. Physical Review Research, 2022, 4, .  | 3.6  | 15        |
| 162 | Magnetically induced. Nature Materials, 2016, 15, 1149-1150.  | 27.5 | 14        |

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|-----|---|------|-----------|
| 163 | Lifshitz Transitions Induced by Temperature and Surface Doping in Type-II Weyl Semimetal Candidate $\text{Te}_{1-x}\text{WTe}_2$ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2017, 11, 1700209.             | 2.4  | 14        |
| 164 | Structure and electronic properties of the $(3\sqrt{3}\times 3\sqrt{3})\text{SnAu}_2/\text{Au}(111)$ surface alloy. <i>Physical Review B</i> , 2018, 98, .  | 3.2  | 14        |
| 165 | Active learning algorithm for computational physics. <i>Physical Review Research</i> , 2020, 2, .   | 3.6  | 14        |
| 166 | $\text{Na}_4\text{IrO}_4$ : Square Planar Coordination of a Transition Metal in $d^{5/5}$ Configuration due to Weak On-Site Coulomb Interactions. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 5417-5420. | 13.8 | 13        |
| 167 | Topological nematic phase in Dirac semimetals. <i>Physical Review B</i> , 2016, 93, .   | 3.2  | 13        |
| 168 | Superconductivity in Alkaline Earth Metal-Filled Skutterudites $\text{Ba}_4\text{Ir}_4\text{X}_{12}$ (X = As, P). <i>Journal of the American Chemical Society</i> , 2017, 139, 8106-8109.                                 | 13.7 | 13        |
| 169 | Quantum confinement of crystalline silicon nanotubes with nonuniform wall thickness: Implication to modulation doping. <i>Applied Physics Letters</i> , 2007, 91, 103107.   | 3.3  | 12        |
| 170 | Local Vibrational Excitation through Extended Electronic States at a Germanium Surface. <i>Physical Review Letters</i> , 2009, 103, 266102.   | 7.8  | 12        |
| 171 | Magnetic phase transitions and iron valence in the double perovskite $\text{Sr}_2\text{FeOsO}_6$ . <i>Hyperfine Interactions</i> , 2014, 226, 289-297.  | 0.5  | 12        |
| 172 | Time-reversal-breaking topological phases in antiferromagnetic $\text{Sr}_2\text{Ir}_2\text{O}_7$ films. <i>Physical Review B</i> , 2016, 94, .   | 2.2  | 12        |
| 173 | $\text{AgRuO}_3$ , a Strongly Exchange-Coupled Honeycomb Compound Lacking Long-Range Magnetic Order. <i>Chemistry - A European Journal</i> , 2017, 23, 4680-4686.   | 3.3  | 12        |
| 174 | Topological Lifshitz transition of the intersurface Fermi-arc loop in $\text{NbIrTe}_4$ . <i>Physical Review B</i> , 2020, 102, .   | 3.2  | 12        |
| 175 | Quantum oscillations, magnetic breakdown and thermal Hall effect in $\text{Co}_3\text{Sn}_2\text{S}_2$ . <i>Journal Physics D: Applied Physics</i> , 2021, 54, 454003.  | 2.8  | 12        |
| 176 | Spin texture and mirror Chern number in Hg-based chalcogenides. <i>Physical Review B</i> , 2015, 91, .  | 3.2  | 11        |
| 177 | Possibility of a Field Effect Transistor Based on Dirac Particles in Semiconducting Anatase- $\text{TiO}_2$ Nanowires. <i>Nano Letters</i> , 2013, 13, 1073-1079.   | 9.1  | 10        |
| 178 | Anomalous Hall effect in the weak-itinerant ferrimagnet $\text{FeCr}_2$ . <i>Physical Review B</i> , 2021, 103, .   | 3.2  | 10        |
| 179 | Unconventional anomalous Hall effect from magnetization parallel to the electric field. <i>Physical Review B</i> , 2021, 103, .   | 3.2  | 10        |
| 180 | Topological Insulators. <i>Springer Series in Materials Science</i> , 2013, , 123-139.  | 0.6  | 9         |

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|-----|---|-----|-----------|
| 181 | Hidden type-II Weyl points in the Weyl semimetal NbP. <i>Physical Review B</i> , 2017, 96, .  | 3.2 | 9         |
| 182 | Formation of $H_3^+$ from hydrocarbon dications induced by collisions with charged particles. <i>Physical Review A</i> , 2019, 100,   | 2.5 | 9         |
| 183 | Stacking-dependent energetics and electronic structure of ultrathin polymorphic $V_2V_3$ insulator nanofilms. <i>Physical Review B</i> , 2014, 90, .                                | 3.2 | 8         |
| 184 | Hot Electrons Regain Coherence in Semiconducting Nanowires. <i>Physical Review X</i> , 2017, 7, .   | 8.9 | 8         |
| 185 | Coexistence of Surface Superconducting and Three-Dimensional Topological Dirac States in Semimetal KZnBi. <i>Physical Review X</i> , 2021, 11, .                                    | 8.9 | 8         |
| 186 | Exploiting Two-Dimensional Bi <sub>2</sub> O <sub>2</sub> Se for Trace Oxygen Detection. <i>Angewandte Chemie</i> , 2020, 132, 18094-18099.   | 2.0 | 7         |
| 187 | Ab Initio Study of Phosphorus Donors Acting as Quantum Bits in Silicon Nanowires. <i>Nano Letters</i> , 2012, 12, 3460-3465.  | 9.1 | 6         |
| 188 | Non-vanishing Berry phase in chiral insulators. <i>Europhysics Letters</i> , 2013, 104, 30001.  | 2.0 | 6         |
| 189 | Tunable quantum order in bilayer Bi <sub>2</sub> Te <sub>3</sub> : Stacking dependent quantum spin Hall states. <i>Applied Physics Letters</i> , 2018, 112, 243103.                 | 3.3 | 6         |
| 190 | Topological crystalline insulators from stacked graphene layers. <i>Physical Review B</i> , 2019, 99, .   | 3.2 | 6         |
| 191 | Facet dependent surface energy gap on magnetic topological insulators. <i>Physical Review B</i> , 2022, 105, .  | 3.2 | 6         |
| 192 | Gate-Controlled Donor Activation in Silicon Nanowires. <i>Nano Letters</i> , 2010, 10, 3791-3795.   | 9.1 | 5         |
| 193 | Topological Insulators - From Materials Design to Reality. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013, 7, 13-14.  | 2.4 | 5         |
| 194 | Preparing spin-polarized scanning tunneling microscope probes on capped carbon nanotubes by Fe doping: A first-principles study. <i>Applied Physics Letters</i> , 2009, 94, 193106. | 3.3 | 4         |
| 195 | Electronic structure and spatial inhomogeneity of iron-based superconductor FeS. <i>Chinese Physics B</i> , 2020, 29, 047401.   | 1.4 | 4         |
| 196 | Scattering potentials at Si-Ge and Sn-Ge impurity dimers on Ge(001) studied by scanning tunneling microscopy and ab initio calculations. <i>Physical Review B</i> , 2008, 78, .     | 3.2 | 3         |
| 197 | Weyl monopoles dance with the spin waves. <i>Science China: Physics, Mechanics and Astronomy</i> , 2021, 64, 1.   | 5.1 | 3         |
| 198 | Flip motion of heterogeneous buckled dimers on Ge(001) by electron injection from STM tip. <i>Surface Science</i> , 2009, 603, 781-787.   | 1.9 | 2         |

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|-----|--|-----|-----------|
| 199 | Publisher's Note: Unusual magnetotransport from Si-square nets in topological semimetal HfSiS [Phys. Rev. B <b>95</b> , 121109(R) (2017)]. Physical Review B, 2017, 95, .                          | 3.2 | 2         |
| 200 | Induced half-metallicity and gapless chiral topological superconductivity in the $\text{CrI}_3$ interface. Physical Review B, 2020, 102, .   | 3.2 | 2         |
| 201 | Weyl Nodes Close to the Fermi Energy in NbAs. Physica Status Solidi (B): Basic Research, 0, , 2100165.   | 1.5 | 2         |
| 202 | Detection of the Orbital Hall Effect by the Orbital "Spin Conversion. , 2021, , 353-364.   |     | 2         |
| 203 | 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, .   | 3.2 | 1         |
| 204 | A Design Scheme for Topological Insulators based Bonds, Bands, Symmetry and Spin Orbit Coupling. ECS Transactions, 2013, 50, 663-666.  | 0.5 | 1         |
| 205 | Surface conductivity in antiferromagnetic semiconductor $\text{CrSb}_2$ . Physical Review Research, 2020, 2, .   | 3.6 | 1         |
| 206 | Topological Insulators from a Chemist's Perspective. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 1641-1641.   | 1.2 | 0         |
| 207 | TiO <sub>2</sub> 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. | 0.1 | 0         |
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