

Jian Zhou

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251
papers

9,480
citations

44
h-index

91
g-index

270
ext. papers

11,659
ext. citations

6
avg, IF

6.81
L-index

#	Paper	IF	Citations
251	Band offsets and heterostructures of two-dimensional semiconductors. <i>Applied Physics Letters</i> , 2013 , 102, 012111	3.4	1131
250	Penta-graphene: A new carbon allotrope. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 2372-7	11.5	763
249	MXene: a promising photocatalyst for water splitting. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11446-11452	14.52	404
248	Magnetism of phthalocyanine-based organometallic single porous sheet. <i>Journal of the American Chemical Society</i> , 2011 , 133, 15113-9	16.4	289
247	Design of High-Efficiency Visible-Light Photocatalysts for Water Splitting: MoS ₂ /AlN(GaN) Heterostructures. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 17594-17599	3.8	269
246	Electronic and magnetic properties of a BN sheet decorated with hydrogen and fluorine. <i>Physical Review B</i> , 2010 , 81,	3.3	247
245	MXene and MXene-based composites: synthesis, properties and environment-related applications. <i>Nanoscale Horizons</i> , 2020 , 5, 235-258	10.8	240
244	Ultrathin N-Doped MoC Nanosheets with Exposed Active Sites as Efficient Electrocatalyst for Hydrogen Evolution Reactions. <i>ACS Nano</i> , 2017 , 11, 12509-12518	16.7	238
243	MoO ₂ nanobelts@nitrogen self-doped MoS ₂ nanosheets as effective electrocatalysts for hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 11358	13	232
242	2D Intrinsic Ferromagnets from van der Waals Antiferromagnets. <i>Journal of the American Chemical Society</i> , 2018 , 140, 2417-2420	16.4	196
241	Tunable Magnetism and Extraordinary Sunlight Absorbance in Indium Triphosphide Monolayer. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11125-11131	16.4	187
240	Tuning electronic and magnetic properties of graphene by surface modification. <i>Applied Physics Letters</i> , 2009 , 95, 103108	3.4	185
239	Node-surface and node-line fermions from nonsymmorphic lattice symmetries. <i>Physical Review B</i> , 2016 , 93,	3.3	167
238	Electronic structures and bonding of graphyne sheet and its BN analog. <i>Journal of Chemical Physics</i> , 2011 , 134, 174701	3.9	163
237	New two-dimensional transition metal borides for Li ion batteries and electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 23530-23535	13	132
236	Large-Gap Quantum Spin Hall State in MXenes: d-Band Topological Order in a Triangular Lattice. <i>Nano Letters</i> , 2016 , 16, 6584-6591	11.5	132
235	Experimental Observation of Topological Edge States at the Surface Step Edge of the Topological Insulator ZrTe ₅ . <i>Physical Review Letters</i> , 2016 , 116, 176803	7.4	126

234	Beyond Graphitic Carbon Nitride: Nitrogen-Rich Penta-CN ₂ Sheet. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3993-3998	3.8	125
233	Strain-mediated type-I/type-II transition in MXene/Blue phosphorene van der Waals heterostructures for flexible optical/electronic devices. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 978-984 ¹	7.1	117
232	Electrochemically-mediated selective capture of heavy metal chromium and arsenic oxyanions from water. <i>Nature Communications</i> , 2018 , 9, 4701	17.4	114
231	Raman vibrational spectra of bulk to monolayer ReS ₂ with lower symmetry. <i>Physical Review B</i> , 2015 , 92,	3.3	110
230	Computational mining of photocatalysts for water splitting hydrogen production: two-dimensional InSe-family monolayers. <i>Catalysis Science and Technology</i> , 2017 , 7, 2744-2752	5.5	94
229	Molybdenum carbide on hierarchical porous carbon synthesized from Cu-MoO ₂ as efficient electrocatalysts for electrochemical hydrogen generation. <i>Nano Energy</i> , 2017 , 41, 749-757	17.1	88
228	Experimental Observation of Anisotropic Adler-Bell-Jackiw Anomaly in Type-II Weyl Semimetal WTe ₂ Crystals at the Quasiclassical Regime. <i>Physical Review Letters</i> , 2017 , 118, 096603	7.4	81
227	Bioreduction of Precious Metals by Microorganism: Efficient Gold@N-Doped Carbon Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 8416-20	16.4	80
226	Novel 2D Transition-Metal Carbides: Ultrahigh Performance Electrocatalysts for Overall Water Splitting and Oxygen Reduction. <i>Advanced Functional Materials</i> , 2020 , 30, 2000570	15.6	78
225	Extremely large and significantly anisotropic magnetoresistance in ZrSiS single crystals. <i>Applied Physics Letters</i> , 2016 , 108, 244101	3.4	71
224	Quantum anomalous Hall effect in ferromagnetic transition metal halides. <i>Physical Review B</i> , 2017 , 95,	3.3	69
223	Large magneto-optical Kerr effect in noncollinear antiferromagnets Mn ₃ X(X=Rh,Ir,Pt). <i>Physical Review B</i> , 2015 , 92,	3.3	60
222	Transition between strong and weak topological insulator in ZrTe and HfTe. <i>Scientific Reports</i> , 2017 , 7, 45667	4.9	59
221	Tuning magnetic properties of graphene nanoribbons with topological line defects: From antiferromagnetic to ferromagnetic. <i>Physical Review B</i> , 2012 , 85,	3.3	59
220	Stability of B ₁₂ (CN) ₁₂ (²⁻): Implications for Lithium and Magnesium Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 3704-8	16.4	57
219	Novel two-dimensional molybdenum carbides as high capacity anodes for lithium/sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12145-12153	13	56
218	Unexpected elastic isotropy in a black phosphorene/TiC ₂ van der Waals heterostructure with flexible Li-ion battery anode applications. <i>Nano Research</i> , 2017 , 10, 3136-3150	10	55
217	Simultaneous Detection and Removal of Formaldehyde at Room Temperature: Janus Au@ZnO@ZIF-8 Nanoparticles. <i>Nano-Micro Letters</i> , 2018 , 10, 4	19.5	55

216	Microscopic origin of MXenes derived from layered MAX phases. <i>RSC Advances</i> , 2015 , 5, 25403-25408	3-7	53
215	Patterning Graphitic C-N Sheets into a Kagome Lattice for Magnetic Materials. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 259-63	6-4	52
214	Mo2B2 MBene-supported single-atom catalysts as bifunctional HER/OER and OER/ORR electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 433-441	13	51
213	Tunable semimetallic state in compressive-strained SrIrO3 films revealed by transport behavior. <i>Physical Review B</i> , 2015 , 91,	3-3	50
212	High-Performance X-ray Detection Based on One-Dimensional Inorganic Halide Perovskite CsPbI. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 432-437	6-4	47
211	Strain-Induced Spin Crossover in Phthalocyanine-Based Organometallic Sheets. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 3109-14	6-4	46
210	Spin-Glass-Like Behavior and Topological Hall Effect in SrRuO/SrIrO Superlattices for Oxide Spintronics Applications. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 3201-3207	9-5	45
209	Ferromagnetic and Half-Metallic FeC Monolayer Containing C Dimers. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 26207-26212	9-5	44
208	Predicted Quantum Topological Hall Effect and Noncoplanar Antiferromagnetism in $K_{0.5}RhO_2$. <i>Physical Review Letters</i> , 2016 , 116, 256601	7-4	44
207	Cu single atoms on Ti2CO2 as a highly efficient oxygen reduction catalyst in a proton exchange membrane fuel cell. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 26062-26070	13	44
206	Bioreduction of Precious Metals by Microorganism: Efficient Gold@N-Doped Carbon Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , 2016 , 128, 8556-8560	3-6	43
205	Composition and temperature-dependent phase transition in miscible MoWTe single crystals. <i>Scientific Reports</i> , 2017 , 7, 44587	4-9	41
204	Carrier induced magnetic coupling transitions in phthalocyanine-based organometallic sheet. <i>Nanoscale</i> , 2014 , 6, 328-33	7-7	39
203	Intrinsic ferromagnetism in two-dimensional carbon structures: Triangular graphene nanoflakes linked by carbon chains. <i>Physical Review B</i> , 2011 , 84,	3-3	38
202	Metal-insulator transition in SrIrO3 with strong spin-orbit interaction. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 125604	1-8	37
201	Mechanically modulated tunneling resistance in monolayer MoS2. <i>Applied Physics Letters</i> , 2013 , 103, 183105	3-4	36
200	Tailoring Li adsorption on graphene. <i>Physical Review B</i> , 2014 , 90,	3-3	36
199	Enhanced Hydrogen Storage on Li Functionalized BC3 Nanotube. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 6136-6140	3-8	36

198	Quantum spin Hall phase in Mo ₂ M ₂ C ₃ O ₂ (M = Ti, Zr, Hf) MXenes. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 11524-11529	7.1	36
197	Pressure-induced topological insulating behavior in the ternary chalcogenide Ge ₂ Sb ₂ Te ₅ . <i>Physical Review B</i> , 2011 , 84,	3.3	35
196	Three-dimensional topological acoustic crystals with pseudospin-valley coupled saddle surface states. <i>Nature Communications</i> , 2018 , 9, 4555	17.4	35
195	MoS ₂ /Ti ₂ CT ₂ (T = F, O) Heterostructures as Promising Flexible Anodes for Lithium/Sodium Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 11493-11499	3.8	34
194	Fast crystallization of chalcogenide glass for rewritable memories. <i>Applied Physics Letters</i> , 2008 , 93, 061913	3.1	34
193	High-temperature superconductivity in heavily N- or B-doped graphene. <i>Physical Review B</i> , 2015 , 92,	3.3	33
192	Origin of p-type conductivity in layered nGeTe _{1-x} InSb ₂ Te ₃ chalcogenide semiconductors. <i>Physical Review B</i> , 2011 , 83,	3.3	33
191	Giant positive magnetoresistance in half-metallic double-perovskite SrCrWO thin films. <i>Science Advances</i> , 2017 , 3, e1701473	14.3	32
190	Vanishing Schottky Barriers in Blue Phosphorene/MXene Heterojunctions. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 25164-25171	3.8	32
189	Stable nitride complex and molecular nitrogen in N doped amorphous Ge ₂ Sb ₂ Te ₅ . <i>Applied Physics Letters</i> , 2008 , 93, 241908	3.4	32
188	Anisotropic intrinsic lattice thermal conductivity of borophane from first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 2843-2849	3.6	31
187	How to fabricate a semihydrogenated graphene sheet? A promising strategy explored. <i>Applied Physics Letters</i> , 2012 , 101, 073114	3.4	31
186	Defect proliferation in CsPbBr ₃ crystal induced by ion migration. <i>Applied Physics Letters</i> , 2020 , 116, 063504	3.4	30
185	Contacting MoS ₂ to MXene: Vanishing p-Type Schottky Barrier and Enhanced Hydrogen Evolution Catalysis. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 3719-3726	3.8	29
184	Atomic Mixing in Metals Under Shear Deformation. <i>Jom</i> , 2013 , 65, 382-389	2.1	29
183	Abnormally Strong Electron-Phonon Scattering Induced Unprecedented Reduction in Lattice Thermal Conductivity of Two-Dimensional NbC. <i>Journal of the American Chemical Society</i> , 2019 , 141, 8503-8508	16.4	28
182	Topological states of non-Dirac electrons on a triangular lattice. <i>Physical Review B</i> , 2016 , 93,	3.3	28
181	Strain-induced ferromagnetism in zigzag edge graphene nanoribbon with a topological line defect. <i>Physical Review B</i> , 2012 , 86,	3.3	28

180	Sc-phthalocyanine sheet: Promising material for hydrogen storage. <i>Applied Physics Letters</i> , 2011 , 99, 163104	3.4	28
179	Significant ferrimagnetism observed in Aurivillius Bi ₄ Ti ₃ O ₁₂ doped by antiferromagnetic LaFeO ₃ . <i>Applied Physics Letters</i> , 2011 , 98, 212501	3.4	27
178	Pre-combustion CO ₂ capture by transition metal ions embedded in phthalocyanine sheets. <i>Journal of Chemical Physics</i> , 2012 , 136, 234703	3.9	27
177	Sensitively Temperature-Dependent Spin-Orbit Coupling in SrIrO ₃ Thin Films. <i>Journal of the Physical Society of Japan</i> , 2014 , 83, 054707	1.5	26
176	Quantum Phase Transition in Germanene and Stanene Bilayer: From Normal Metal to Topological Insulator. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 1919-24	6.4	26
175	The electrical and magnetic properties of epitaxial orthorhombic YMnO ₃ thin films grown under various oxygen pressures. <i>Applied Surface Science</i> , 2011 , 257, 8033-8037	6.7	25
174	Dramatically decreased magnetoresistance in non-stoichiometric WTe ₂ crystals. <i>Scientific Reports</i> , 2016 , 6, 26903	4.9	25
173	Opto-Mechanics Driven Fast Martensitic Transition in Two-Dimensional Materials. <i>Nano Letters</i> , 2018 , 18, 7794-7800	11.5	25
172	Synergistic Resistive Switching Mechanism of Oxygen Vacancies and Metal Interstitials in Ta ₂ O ₅ . <i>Journal of Physical Chemistry C</i> , 2016 , 120, 2456-2463	3.8	24
171	Modulation engineering of 2D MXene-based compounds for metal-ion batteries. <i>Nanoscale</i> , 2019 , 11, 23092-23104	7.7	24
170	Microstructure, growth mechanism and anisotropic resistivity of quasi-one-dimensional ZrTe ₅ crystal. <i>Journal of Crystal Growth</i> , 2017 , 457, 250-254	1.6	23
169	Like Charges Attract?. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 2689-95	6.4	23
168	Valley-Polarized Quantum Anomalous Hall Effect in Ferrimagnetic Honeycomb Lattices. <i>Physical Review Letters</i> , 2017 , 119, 046403	7.4	22
167	Ultra-High-Temperature Ferromagnetism in Intrinsic Tetrahedral Semiconductors. <i>Journal of the American Chemical Society</i> , 2019 , 141, 12413-12418	16.4	20
166	Directly Metering Light Absorption and Heat Transfer in Single Nanowires Using Metal-Insulator Transition in VO ₂ . <i>Advanced Optical Materials</i> , 2015 , 3, 336-341	8.1	20
165	Self-consistent determination of Hubbard U for explaining the anomalous magnetism of the Gd ₁₃ cluster. <i>Physical Review B</i> , 2014 , 89,	3.3	20
164	Reduction of thermal conductivity in YxSb ₂ Te ₃ for phase change memory. <i>Journal of Applied Physics</i> , 2017 , 122, 195107	2.5	19
163	Stability of B ₁₂ (CN) ₁₂ —Implications for Lithium and Magnesium Ion Batteries. <i>Angewandte Chemie</i> , 2016 , 128, 3768-3772	3.6	19

162	Dislocation network with pair-coupling structure in {111} Σ interface of Ni-based single crystal superalloy. <i>Scientific Reports</i> , 2016 , 6, 29941	4.9	18
161	Electronic origin of the anomalous solid solution hardening of Y and Gd in Mg: A first-principles study. <i>Science Bulletin</i> , 2011 , 56, 1038-1042		18
160	Novel Two-Dimensional Janus MoSiGeN and WSiGeN as Highly Efficient Photocatalysts for Spontaneous Overall Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 28090-28097	9.5	18
159	Role of ligands in the stability of BX and CBX (n = 5-10; X = H, F, CN) and their potential as building blocks of electrolytes in lithium ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 17937-17943	3.6	17
158	Experimental and Theoretical Analysis of Fast Lithium Ionic Conduction in a LiBH ₄ /SiO ₂ Nanocomposite. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 21755-21761	3.8	17
157	Giant Valley Splitting and Valley Polarized Plasmonics in Group V Transition-Metal Dichalcogenide Monolayers. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 5764-5770	6.4	17
156	Design principles of tuning oxygen vacancy diffusion in SrZrO ₃ for resistance random access memory. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 4081-4085	7.1	17
155	First-principles calculations of the η -Mg ₇ Gd precipitate in Mg-Gd binary alloys. <i>Science Bulletin</i> , 2011 , 56, 1142-1146		17
154	Magnetism of two-dimensional triangular nanoflake-based kagome lattices. <i>New Journal of Physics</i> , 2012 , 14, 033043	2.9	17
153	Insight into the role of oxygen in the phase-change material GeTe. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 3592-3599	7.1	16
152	Synergy effect of co-doping Sc and Y in Sb ₂ Te ₃ for phase-change memory. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 6672-6679	7.1	16
151	Shubnikov-de Haas oscillations in bulk ZrTe ₅ single crystals: Evidence for a weak topological insulator. <i>Physical Review B</i> , 2018 , 97,	3.3	16
150	Effect of Substrate symmetry on the dendrite morphology of MoS ₂ Film synthesized by CVD. <i>Scientific Reports</i> , 2017 , 7, 15166	4.9	16
149	Using carbon chains to mediate magnetic coupling in zigzag graphene nanoribbons. <i>Applied Physics Letters</i> , 2012 , 100, 173106	3.4	16
148	An efficient polysulfide trapper of an nitrogen and nickel-decorating amyllum scaffold-coated separator for ultrahigh performance in lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 1238-1246	13	16
147	Optomechanical control of stacking patterns of h-BN bilayer. <i>Nano Research</i> , 2019 , 12, 2634-2639	10	15
146	Colossal Stability of Gas-Phase Trianions: Super-Pnictogens. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 13421-13425	16.4	15
145	Giant magnetocrystalline anisotropy of 5d transition metal-based phthalocyanine sheet. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 17182-9	3.6	15

144	Intermediate Phases during Decomposition of Metal Borohydrides, $M(BH_4)_n$ ($M = Na, Mg, Y$). <i>Journal of Physical Chemistry C</i> , 2014 , 118, 28456-28461	3.8	15
143	Absorption induced modulation of magnetism in two-dimensional metal-phthalocyanine porous sheets. <i>Journal of Chemical Physics</i> , 2013 , 138, 204706	3.9	15
142	Two-dimensional molybdenum carbides: active electrocatalysts for the nitrogen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 23947-23954	13	15
141	MXenes: promising donor and acceptor materials for high-efficiency heterostructure solar cells. <i>Sustainable Energy and Fuels</i> , 2021 , 5, 135-143	5.8	15
140	Infrared and Raman spectra of $BiOX$ and $BiOX$ ($X = S, Se, \text{ and } Te$) studied from first principles calculations.. <i>RSC Advances</i> , 2019 , 9, 18042-18049	3.7	14
139	Strong correlation of the growth mode and electrical properties of $BiCuSeO$ single crystals with growth temperature. <i>CrystEngComm</i> , 2015 , 17, 6136-6141	3.3	14
138	Unusual stability of multiply charged organo-metallic complexes. <i>RSC Advances</i> , 2015 , 5, 44003-44008	3.7	14
137	First-principles study of lattice thermal conductivity in $ZrTe_5$ and $HfTe_5$. <i>Journal of Applied Physics</i> , 2018 , 123, 175104	2.5	14
136	Hydrogenated C_{60} as High-Capacity Stable Anode Materials for Li Ion Batteries. <i>ACS Applied Energy Materials</i> , 2019 , 2, 6453-6460	6.1	14
135	Lattice Dynamic and Instability in Pentasilicene: A Light Single-Element Ferroelectric Material With High Curie Temperature. <i>Physical Review Applied</i> , 2019 , 11,	4.3	14
134	2D Magnetic Janus Semiconductors with Exotic Structural and Quantum-Phase Transitions. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 3922-3928	6.4	14
133	High temperature solution growth, chemical depotassiation and growth mechanism of K_xRhO_2 crystals. <i>CrystEngComm</i> , 2013 , 15, 5050	3.3	14
132	Tuning the properties of graphene using a reversible gas-phase reaction. <i>NPG Asia Materials</i> , 2012 , 4, e31-e31	10.3	14
131	Quantitative control of Fe/Mo anti-site defect and its effects on the properties of Sr_2FeMoO_6 . <i>CrystEngComm</i> , 2013 , 15, 4601	3.3	14
130	Ferromagnetism in a graphene nanoribbon with grain boundary defects. <i>Physical Review B</i> , 2012 , 86,	3.3	14
129	First principles study of $CuAlO_2$ doping with S. <i>Science China: Physics, Mechanics and Astronomy</i> , 2010 , 53, 1261-1265	3.6	14
128	Computational mining of Janus Sc_2C -based MXenes for spintronic, photocatalytic, and solar cell applications. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 10882-10892	13	14
127	Metastable Stacking-Polymorphism in $GeSbTe$. <i>Inorganic Chemistry</i> , 2017 , 56, 11990-11997	5.1	13

126	Sub-Angstrom Characterization of the Structural Origin for High In-Plane Anisotropy in 2D GeS. <i>ACS Nano</i> , 2020 , 14, 4456-4462	16.7	13
125	Mobility-controlled extremely large magnetoresistance in perfect electron-hole compensated Wp2 crystals. <i>Physical Review B</i> , 2018 , 97,	3.3	13
124	Structure and physical properties of K0.63RhO2 single crystals. <i>AIP Advances</i> , 2012 , 2, 042140	1.5	13
123	Experimental observation of conductive edge states in weak topological insulator candidate HfTe5. <i>APL Materials</i> , 2018 , 6, 121111	5.7	13
122	Tunable Resistance or Magnetoresistance Cusp and Extremely Large Magnetoresistance in Defect-Engineered HfTe5 Single Crystals. <i>Physical Review Applied</i> , 2018 , 9,	4.3	12
121	Near-infrared optical properties and proposed phase-change usefulness of transition metal disulfides. <i>Applied Physics Letters</i> , 2019 , 115, 161902	3.4	12
120	Pure bulk orbital and spin photocurrent in two-dimensional ferroelectric materials. <i>Npj Computational Materials</i> , 2021 , 7,	10.9	12
119	Intrinsic quantum spin Hall and anomalous Hall effects in h-Sb/Bi epitaxial growth on a ferromagnetic MnO2 thin film. <i>Nanoscale</i> , 2016 , 8, 11202-9	7.7	12
118	Pure spin photocurrent in non-centrosymmetric crystals: bulk spin photovoltaic effect. <i>Nature Communications</i> , 2021 , 12, 4330	17.4	12
117	Electron-electron scattering dominated electrical and magnetotransport properties in the quasi-two-dimensional Fermi liquid single-crystal Bi2O2Se. <i>Physical Review B</i> , 2019 , 99,	3.3	11
116	Electronic Structure and Stability of Mono- and Bimetallic Borohydrides and Their Underlying Hydrogen-Storage Properties: A Cluster Study. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 11056-11061	3.8	11
115	Spring-roll-like Ti3C2 MXene/carbon-coated Fe3O4 composite as a long-life Li-ion storage material. <i>Inorganic Chemistry Frontiers</i> , 2020 , 7, 3491-3499	6.8	11
114	Terahertz Driven Reversible Topological Phase Transition of Monolayer Transition Metal Dichalcogenides. <i>Advanced Science</i> , 2021 , 8, e2003832	13.6	11
113	Temperature effect on lattice and electronic structures of WTe2 from first-principles study. <i>Journal of Applied Physics</i> , 2017 , 121, 045104	2.5	10
112	Self-assembly of metal atoms (Na, K, Ca) on graphene. <i>Nanoscale</i> , 2015 , 7, 2352-9	7.7	10
111	From Halogen to Superhalogen Behavior of Organic Molecules Created by Functionalizing Benzene. <i>ChemPhysChem</i> , 2016 , 17, 184-9	3.2	10
110	Effect of rare earth elements on the structures and mechanical properties of magnesium alloys. <i>Science Bulletin</i> , 2013 , 58, 816-820		10
109	Interaction-driven quantum anomalous Hall effect in halogenated hematite nanosheets. <i>Physical Review B</i> , 2017 , 96,	3.3	10

108	Sulfophobic and Vacancy Design Enables Self-Cleaning Electrodes for Efficient Desulfurization and Concurrent Hydrogen Evolution with Low Energy Consumption. <i>Advanced Functional Materials</i> , 2021 , 31, 2101922	15.6	10
107	Logic Control of Interface-Induced Charge-Trapping Effect for Ultrasensitive Gas Detection with All-Mirror-Image Symmetry. <i>Advanced Materials Technologies</i> , 2016 , 1, 1600067	6.8	10
106	Layer number dependent ferroelasticity in 2D Ruddlesden-Popper organic-inorganic hybrid perovskites. <i>Nature Communications</i> , 2021 , 12, 1332	17.4	10
105	Uranium In Situ Electrolytic Deposition with a Reusable Functional Graphene-Foam Electrode. <i>Advanced Materials</i> , 2021 , 33, e2102633	24	10
104	Structural stability and thermoelectric property optimization of Ca ₂ Si. <i>RSC Advances</i> , 2017 , 7, 8936-8943	3.7	9
103	Manipulating carriers spin polarization in the Heusler alloy Mn ₂ CoAl. <i>RSC Advances</i> , 2015 , 5, 73814-73817	3.7	9
102	Normal-to-topological insulator martensitic phase transition in group-IV monochalcogenides driven by light. <i>NPG Asia Materials</i> , 2020 , 12,	10.3	9
101	Engineering of octahedral rotations and electronic structure in ultrathin SrIrO ₃ films. <i>Physical Review B</i> , 2020 , 101,	3.3	9
100	Enhanced Li-Ion-Storage Performance of MoS ₂ through Multistage Structural Design. <i>ChemElectroChem</i> , 2019 , 6, 1475-1484	4.3	9
99	Two-dimensional topological crystalline quantum spin Hall effect in transition metal intercalated compounds. <i>Physical Review B</i> , 2017 , 95,	3.3	8
98	Preparation, Structure Evolution, and Metal-Insulator Transition of Na RhO Crystals (0.25 \times ∞). <i>Inorganic Chemistry</i> , 2018 , 57, 2730-2735	5.1	8
97	Structural stability of layered n-LaFeO ₃ -Bi ₄ Ti ₃ O ₁₂ , BiFeO ₃ -Bi ₄ Ti ₃ O ₁₂ , and SrTiO ₃ -Bi ₄ Ti ₃ O ₁₂ thin films. <i>Journal of Materials Research</i> , 2012 , 27, 2956-2964	2.5	8
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