

Jian Zhou

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3643781/publications.pdf>

Version: 2024-02-01

267
papers

13,761
citations

38742

50
h-index

24982

109
g-index

270
all docs

270
docs citations

270
times ranked

15423
citing authors

#	ARTICLE	IF	CITATIONS
1	Band offsets and heterostructures of two-dimensional semiconductors. Applied Physics Letters, 2013, 102, .	3.3	1,361
2	Penta-graphene: A new carbon allotrope. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2372-2377.	7.1	1,114
3	MXene and MXene-based composites: synthesis, properties and environment-related applications. Nanoscale Horizons, 2020, 5, 235-258.	8.0	588
4	MXene: a promising photocatalyst for water splitting. Journal of Materials Chemistry A, 2016, 4, 11446-11452.	10.3	569
5	Magnetism of Phthalocyanine-Based Organometallic Single Porous Sheet. Journal of the American Chemical Society, 2011, 133, 15113-15119.	13.7	350
6	Ultrathin N-Doped Mo ₂ C Nanosheets with Exposed Active Sites as Efficient Electrocatalyst for Hydrogen Evolution Reactions. ACS Nano, 2017, 11, 12509-12518.	14.6	350
7	Design of High-Efficiency Visible-Light Photocatalysts for Water Splitting: MoS ₂ /AlN(GaN) Heterostructures. Journal of Physical Chemistry C, 2014, 118, 17594-17599.	3.1	340
8	2D Intrinsic Ferromagnets from van der Waals Antiferromagnets. Journal of the American Chemical Society, 2018, 140, 2417-2420.	13.7	312
9	Electronic and magnetic properties of a BN sheet decorated with hydrogen and fluorine. Physical Review B, 2010, 81, .	3.2	278
10	Tunable Magnetism and Extraordinary Sunlight Absorbance in Indium Triphosphide Monolayer. Journal of the American Chemical Society, 2017, 139, 11125-11131.	13.7	265
11	MoO ₂ nanobelts@nitrogen self-doped MoS ₂ nanosheets as effective electrocatalysts for hydrogen evolution reaction. Journal of Materials Chemistry A, 2014, 2, 11358.	10.3	262
12	New two-dimensional transition metal borides for Li ion batteries and electrocatalysis. Journal of Materials Chemistry A, 2017, 5, 23530-23535.	10.3	253
13	Node-surface and node-line fermions from nonsymmorphic lattice symmetries. Physical Review B, 2016, 93, .	3.2	231
14	Tuning electronic and magnetic properties of graphene by surface modification. Applied Physics Letters, 2009, 95, .	3.3	199
15	Large-Gap Quantum Spin Hall State in MXenes: <i>d</i> -Band Topological Order in a Triangular Lattice. Nano Letters, 2016, 16, 6584-6591.	9.1	193
16	Electrochemically-mediated selective capture of heavy metal chromium and arsenic oxyanions from water. Nature Communications, 2018, 9, 4701.	12.8	193
17	Novel 2D Transition-Metal Carbides: Ultrahigh Performance Electrocatalysts for Overall Water Splitting and Oxygen Reduction. Advanced Functional Materials, 2020, 30, 2000570.	14.9	186
18	Electronic structures and bonding of graphyne sheet and its BN analog. Journal of Chemical Physics, 2011, 134, 174701.	3.0	182

#	ARTICLE	IF	CITATIONS
19	Mo ₂ B ₂ MBene-supported single-atom catalysts as bifunctional HER/OER and OER/ORR electrocatalysts. Journal of Materials Chemistry A, 2021, 9, 433-441.	10.3	175
20	Beyond Graphitic Carbon Nitride: Nitrogen-Rich Penta-CN ₂ Sheet. Journal of Physical Chemistry C, 2016, 120, 3993-3998.	3.1	167
21	Experimental Observation of Topological Edge States at the Surface Step Edge of the Topological Insulator $ZrTe_5$. Physical Review Letters, 2016, 116, 176803.	7.8	164
22	Strain-mediated type-I/type-II transition in MXene/Blue phosphorene van der Waals heterostructures for flexible optical/electronic devices. Journal of Materials Chemistry C, 2017, 5, 978-984.	5.5	155
23	Raman vibrational spectra of bulk to monolayer ReS_2 with lower symmetry. Physical Review B, 2015, 92, .	3.2	140
24	Computational mining of photocatalysts for water splitting hydrogen production: two-dimensional InSe-family monolayers. Catalysis Science and Technology, 2017, 7, 2744-2752.	4.1	123
25	Experimental Observation of Anisotropic Adler-Bell-Jackiw Anomaly in Type-II Weyl Semimetal Crystals at the Quasiclassical Regime. Physical Review Letters, 2017, 118, 096603.	7.8	114
26	Quantum anomalous Hall effect in ferromagnetic transition metal halides. Physical Review B, 2017, 95, .	3.2	110
27	Novel two-dimensional molybdenum carbides as high capacity anodes for lithium/sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 12145-12153.	10.3	106
28	Molybdenum carbide on hierarchical porous carbon synthesized from Cu-MoO ₂ as efficient electrocatalysts for electrochemical hydrogen generation. Nano Energy, 2017, 41, 749-757.	16.0	103
29	Cu single atoms on Ti ₂ CO ₂ as a highly efficient oxygen reduction catalyst in a proton exchange membrane fuel cell. Journal of Materials Chemistry A, 2019, 7, 26062-26070.	10.3	95
30	Large magneto-optical Kerr effect in noncollinear antiferromagnets Mn_3X		

#	ARTICLE	IF	CITATIONS
37	Stability of B_{12} (CN) $_{12}$ $^{2+}$: Implications for Lithium and Magnesium Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3704-3708.	13.8	72
38	Tuning magnetic properties of graphene nanoribbons with topological line defects: From antiferromagnetic to ferromagnetic. <i>Physical Review B</i> , 2012, 85, .	3.2	67
39	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.	10.4	67
40	Spin-Glass-Like Behavior and Topological Hall Effect in SrRuO ₃ /SrIrO ₃ Superlattices for Oxide Spintronics Applications. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 3201-3207.	8.0	64
41	Valley-Polarized Quantum Anomalous Hall Effect in Ferrimagnetic Honeycomb Lattices. <i>Physical Review Letters</i> , 2017, 119, 046403.	7.8	64
42	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.	3.1	62
43	Microscopic origin of MXenes derived from layered MAX phases. <i>RSC Advances</i> , 2015, 5, 25403-25408.	3.6	61
44	Vanishing Schottky Barriers in Blue Phosphorene/MXene Heterojunctions. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25164-25171.	3.1	60
45	Defect proliferation in CsPbBr ₃ crystal induced by ion migration. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	60
46	Tunable semimetallic state in compressive-strained $SrIrO_3$ films revealed by transport behavior. <i>Physical Review B</i> , 2015, 91, .	3.2	59
47	Ferromagnetic and Half-Metallic FeC ₂ Monolayer Containing C ₂ Dimers. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26207-26212.	8.0	58
48	Composition and temperature-dependent phase transition in miscible Mo _{1-x} W _x Te ₂ single crystals. <i>Scientific Reports</i> , 2017, 7, 44587.	3.3	58
49	Predicted Quantum Topological Hall Effect and Noncoplanar Antiferromagnetism in K_3O_5 . <i>Physical Review Letters</i> , 2016, 116, 256601.	7.8	57
50	Patterning Graphitic C ₆ N Sheets into a Kagome Lattice for Magnetic Materials. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 259-263.	4.6	55
51	Strain-Induced Spin Crossover in Phthalocyanine-Based Organometallic Sheets. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3109-3114.	4.6	54
52	Three-dimensional topological acoustic crystals with pseudospin-valley coupled saddle surface states. <i>Nature Communications</i> , 2018, 9, 4555.	12.8	53
53	Giant positive magnetoresistance in half-metallic double-perovskite Sr ₂ CrWO ₆ thin films. <i>Science Advances</i> , 2017, 3, e1701473.	10.3	52
54	Uranium In Situ Electrolytic Deposition with a Reusable Functional Graphene@Foam Electrode. <i>Advanced Materials</i> , 2021, 33, e2102633.	21.0	52

#	ARTICLE	IF	CITATIONS
55	Computational mining of Janus Sc ₂ C-based MXenes for spintronic, photocatalytic, and solar cell applications. Journal of Materials Chemistry A, 2021, 9, 10882-10892.	10.3	52
56	Abnormally Strong Electron-Phonon Scattering Induced Unprecedented Reduction in Lattice Thermal Conductivity of Two-Dimensional Nb ₂ C. Journal of the American Chemical Society, 2019, 141, 8503-8508.	13.7	51
57	Pure spin photocurrent in non-centrosymmetric crystals: bulk spin photovoltaic effect. Nature Communications, 2021, 12, 4330.	12.8	51
58	Metal-insulator transition in SrIrO ₃ with strong spin-orbit interaction. Journal of Physics Condensed Matter, 2013, 25, 125604.	1.8	48
59	Contacting MoS ₂ to MXene: Vanishing p-Type Schottky Barrier and Enhanced Hydrogen Evolution Catalysis. Journal of Physical Chemistry C, 2019, 123, 3719-3726.	3.1	47
60	High-temperature superconductivity in heavily N- or B-doped graphene. Physical Review B, 2015, 92, .	3.2	45
61	Quantum spin Hall phase in Mo ₂ M ₂ C ₃ O ₂ (M = Ti, Zr). $\frac{1}{5.5} \times 0.784314 \times 45$ rgBT	1.1	45
62	Carrier induced magnetic coupling transitions in phthalocyanine-based organometallic sheet. Nanoscale, 2014, 6, 328-333.	5.6	44
63	Bioreduction of Precious Metals by Microorganism: Efficient Gold@N-Doped Carbon Electrocatalysts for the Hydrogen Evolution Reaction. Angewandte Chemie, 2016, 128, 8556-8560.	2.0	44
64	Ultra-High-Temperature Ferromagnetism in Intrinsic Tetrahedral Semiconductors. Journal of the American Chemical Society, 2019, 141, 12413-12418.	13.7	44
65	MBenes: progress, challenges and future. Journal of Materials Chemistry A, 2022, 10, 15865-15880.	10.3	44
66	Mechanically modulated tunneling resistance in monolayer MoS ₂ . Applied Physics Letters, 2013, 103, .	3.3	43
67	Tailoring Li adsorption on graphene. Physical Review B, 2014, 90, .	3.2	42
68	Origin of p -type conductivity in layered n -GeTe m -Sb m -Intrinsic ferromagnetism in two-dimensional carbon structures: Triangular graphene nanoflakes linked by carbon chains. Physical Review B, 2011, 84, .	3.2	41
69	Intrinsic ferromagnetism in two-dimensional carbon structures: Triangular graphene nanoflakes linked by carbon chains. Physical Review B, 2011, 84, .	3.2	40
70	Topological states of non-Dirac electrons on a triangular lattice. Physical Review B, 2016, 93, .	3.2	40
71	Anisotropic intrinsic lattice thermal conductivity of borophane from first-principles calculations. Physical Chemistry Chemical Physics, 2017, 19, 2843-2849.	2.8	40
72	High-harmonic generation in Weyl semimetal $\hat{1}^2$ -WP2 crystals. Nature Communications, 2021, 12, 6437.	12.8	40

#	ARTICLE	IF	CITATIONS
73	Enhanced Hydrogen Storage on Li Functionalized BC ₃ Nanotube. Journal of Physical Chemistry C, 2011, 115, 6136-6140.	3.1	38
74	Opto-Mechanics Driven Fast Martensitic Transition in Two-Dimensional Materials. Nano Letters, 2018, 18, 7794-7800.	9.1	38
75	Fast crystallization of chalcogenide glass for rewritable memories. Applied Physics Letters, 2008, 93, .	3.3	36
76	Modulation engineering of 2D MXene-based compounds for metal-ion batteries. Nanoscale, 2019, 11, 23092-23104.	5.6	36
77	Two-dimensional molybdenum carbides: active electrocatalysts for the nitrogen reduction reaction. Journal of Materials Chemistry A, 2020, 8, 23947-23954.	10.3	36
78	Pressure-induced topological insulating behavior in the ternary chalcogenide Ge ₂ Sb ₂ Te ₅ . Applied Physics Letters, 2008, 93, .	3.2	35
79	Atomic Mixing in Metals Under Shear Deformation. Jom, 2013, 65, 382-389.	1.9	35
80	Dual-regulation strategy to enhance electrochemical catalysis ability of NiCo ₂ O _{4-x} for polysulfides conversion in Li-S batteries. Chemical Engineering Journal, 2022, 428, 131109.	12.7	35
81	Stable nitride complex and molecular nitrogen in N doped amorphous Ge ₂ Sb ₂ Te ₅ . Applied Physics Letters, 2008, 93, .	3.3	34
82	How to fabricate a semihydrogenated graphene sheet? A promising strategy explored. Applied Physics Letters, 2012, 101, 073114.	3.3	34
83	Synergistic Resistive Switching Mechanism of Oxygen Vacancies and Metal Interstitials in Ta ₂ O ₅ . Journal of Physical Chemistry C, 2016, 120, 2456-2463.	3.1	34
84	Sulfophobic and Vacancy Design Enables Self-Cleaning Electrodes for Efficient Desulfurization and Concurrent Hydrogen Evolution with Low Energy Consumption. Advanced Functional Materials, 2021, 31, 2101922.	14.9	34
85	Pure bulk orbital and spin photocurrent in two-dimensional ferroelectric materials. Npj Computational Materials, 2021, 7, .	8.7	34
86	Quantum Phase Transition in Germanene and Stanene Bilayer: From Normal Metal to Topological Insulator. Journal of Physical Chemistry Letters, 2016, 7, 1919-1924.	4.6	33
87	Sc-phthalocyanine sheet: Promising material for hydrogen storage. Applied Physics Letters, 2011, 99, .	3.3	32
88	Sensitively Temperature-Dependent Spin-Orbit Coupling in SrIrO ₃ Thin Films. Journal of the Physical Society of Japan, 2014, 83, 054707.	1.6	32
89	Dramatically decreased magnetoresistance in non-stoichiometric WTe ₂ crystals. Scientific Reports, 2016, 6, 26903.	3.3	32
90	MXenes: promising donor and acceptor materials for high-efficiency heterostructure solar cells. Sustainable Energy and Fuels, 2021, 5, 135-143.	4.9	32

#	ARTICLE	IF	CITATIONS
91	Significant ferrimagnetism observed in Aurivillius Bi ₄ Ti ₃ O ₁₂ doped by antiferromagnetic LaFeO ₃ . Applied Physics Letters, 2011, 98, .	3.3	30
92	Pre-combustion CO ₂ capture by transition metal ions embedded in phthalocyanine sheets. Journal of Chemical Physics, 2012, 136, 234703.	3.0	30
93	Strain-induced ferromagnetism in zigzag edge graphene nanoribbon with a topological line defect. Physical Review B, 2012, 86, .	3.2	29
94	An efficient polysulfide trapper of an nitrogen and nickel-decorating amyllum scaffold-coated separator for ultrahigh performance in lithium-sulfur batteries. Journal of Materials Chemistry A, 2020, 8, 1238-1246.	10.3	29
95	Computational design of double transition metal MXenes with intrinsic magnetic properties. Nanoscale Horizons, 2022, 7, 276-287.	8.0	29
96	Stability of B ₁₂ (CN) ₁₂ ²⁺ : Implications for Lithium and Magnesium Ion Batteries. Angewandte Chemie, 2016, 128, 3768-3772.	2.0	28
97	2D Magnetic Janus Semiconductors with Exotic Structural and Quantum-Phase Transitions. Journal of Physical Chemistry Letters, 2019, 10, 3922-3928.	4.6	28
98	Layer number dependent ferroelasticity in 2D Ruddlesden-Popper organic-inorganic hybrid perovskites. Nature Communications, 2021, 12, 1332.	12.8	28
99	Colossal switchable photocurrents in topological Janus transition metal dichalcogenides. Npj Computational Materials, 2021, 7, .	8.7	27
100	Self-consistent determination of Hubbard U for explaining the anomalous magnetism of the Gd ₁₃ cluster. Physical Review B, 2014, 89, .	3.2	26
101	Like Charges Attract?. Journal of Physical Chemistry Letters, 2016, 7, 2689-2695.	4.6	26
102	Dislocation network with pair-coupling structure in {111} $\sqrt{3}\times\sqrt{3}$ interface of Ni-based single crystal superalloy. Scientific Reports, 2016, 6, 29941.	3.3	26
103	Infrared and Raman spectra of Bi ₂ O ₂ X and Bi ₂ O ₂ OX ₂ (X= S, Se, and Te) studied from first principles calculations. RSC Advances, 2019, 9, 18042-18049.	3.6	26
104	First-principles calculations of the $\sqrt{2}\times\sqrt{2}$ -Mg ₇ Gd precipitate in Mg-Gd binary alloys. Science Bulletin, 2011, 56, 1142-1146.	1.7	25
105	The electrical and magnetic properties of epitaxial orthorhombic YMnO ₃ thin films grown under various oxygen pressures. Applied Surface Science, 2011, 257, 8033-8037.	6.1	25
106	Sub-Angstrom Characterization of the Structural Origin for High In-Plane Anisotropy in 2D GeS ₂ . ACS Nano, 2020, 14, 4456-4462.	14.6	25
107	Terahertz Driven Reversible Topological Phase Transition of Monolayer Transition Metal Dichalcogenides. Advanced Science, 2021, 8, e2003832.	11.2	25
108	Microstructure, growth mechanism and anisotropic resistivity of quasi-one-dimensional ZrTe ₅ crystal. Journal of Crystal Growth, 2017, 457, 250-254.	1.5	24

#	ARTICLE	IF	CITATIONS
109	Role of ligands in the stability of B_nX_n and $CB_n^{-1}X_n$ ($n = 5-10$; $X = H, F, CN$) and their potential as building blocks of electrolytes in lithium ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 17937-17943.	2.8	24
110	Effect of Substrate symmetry on the dendrite morphology of MoS ₂ Film synthesized by CVD. <i>Scientific Reports</i> , 2017, 7, 15166.	3.3	24
111	Lattice Dynamic and Instability in Pentasilicene: A Light Single-Element Ferroelectric Material With High Curie Temperature. <i>Physical Review Applied</i> , 2019, 11, .	3.8	24
112	Synergy effect of co-doping Sc and Y in Sb_2Te_3 for phase-change memory. <i>Journal of Materials Chemistry C</i> , 2020, 8, 6672-6679.	5.5	24
113	Colossal Stability of Gas-Phase Trianions: Superpnictogens. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13421-13425.	13.8	23
114	Shubnikov-de Haas oscillations in bulk $ZrTe_5$ single crystals: Evidence for a weak topological insulator. <i>Physical Review B</i> , 2018, 97, compensated	3.2	22
115	$W\hat{\pm}P_2$	3.2	22
116	Experimental and Theoretical Analysis of Fast Lithium Ionic Conduction in a $LiBH_4@C_{60}$ Nanocomposite. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21755-21761.	3.1	21
117	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.	7.3	21
118	Reduction of thermal conductivity in $Y_xSb_2-xTe_3$ for phase change memory. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	21
119	Robust Design of High-Performance Optoelectronic Chalcogenide Crystals from High-Throughput Computation. <i>Journal of the American Chemical Society</i> , 2022, 144, 5878-5886.	13.7	21
120	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.	1.7	20
121	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.	5.5	20
122	Optomechanical control of stacking patterns of h-BN bilayer. <i>Nano Research</i> , 2019, 12, 2634-2639.	10.4	20
123	Giant magnetocrystalline anisotropy of 5d transition metal-based phthalocyanine sheet. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 17182-17189.	2.8	19
124	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.	4.6	19
125	First-principles study of lattice thermal conductivity in $ZrTe_5$ and $HfTe_5$. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	19
126	Experimental observation of conductive edge states in weak topological insulator candidate $HfTe_5$. <i>APL Materials</i> , 2018, 6, .	5.1	19

#	ARTICLE	IF	CITATIONS
127	Hydrogenated C ₆₀ as High-Capacity Stable Anode Materials for Li Ion Batteries. ACS Applied Energy Materials, 2019, 2, 6453-6460.	5.1	19
128	Near-infrared optical properties and proposed phase-change usefulness of transition metal disulfides. Applied Physics Letters, 2019, 115, .	3.3	19
129	Magnetism of two-dimensional triangular nanoflake-based kagome lattices. New Journal of Physics, 2012, 14, 033043.	2.9	18
130	Insight into the role of oxygen in the phase-change material GeTe. Journal of Materials Chemistry C, 2017, 5, 3592-3599.	5.5	18
131	Low lattice thermal conductivity and high thermoelectric figure of merit in Na ₂ Co ₂ Te ₃ . Physical Review B, 2019, 99, .	3.2	18
132	Spring-roll-like Ti ₃ C ₂ MXene/carbon-coated Fe ₃ O ₄ composite as a long-life Li-ion storage material. Inorganic Chemistry Frontiers, 2020, 7, 3491-3499.	6.0	18
133	Giant Photonic Response of Mexican-Hat Topological Semiconductors for Mid-infrared to Terahertz Applications. Journal of Physical Chemistry Letters, 2020, 11, 6119-6126.	4.6	18
134	Mottness collapse in monolayer 1T-TaSe ₂ with persisting charge density wave order. Journal of Materials Chemistry C, 2020, 8, 9742-9747.	5.5	18
135	Normal-to-topological insulator martensitic phase transition in group-IV monochalcogenides driven by light. NPG Asia Materials, 2020, 12, .	7.9	18
136	Using carbon chains to mediate magnetic coupling in zigzag graphene nanoribbons. Applied Physics Letters, 2012, 100, 173106.	3.3	17
137	Effect of rare earth elements on the structures and mechanical properties of magnesium alloys. Science Bulletin, 2013, 58, 816-820.	1.7	17
138	Absorption induced modulation of magnetism in two-dimensional metal-phthalocyanine porous sheets. Journal of Chemical Physics, 2013, 138, 204706.	3.0	17
139	Strong correlation of the growth mode and electrical properties of BiCuSeO single crystals with growth temperature. CrystEngComm, 2015, 17, 6136-6141.	2.6	17
140	Toggling Valley-Spin Locking and Nonlinear Optical Properties of Single-Element Multiferroic Monolayers via Light. Physical Review Applied, 2020, 14, .	3.8	17
141	Ferromagnetism in a graphene nanoribbon with grain boundary defects. Physical Review B, 2012, 86, .	3.2	16
142	Tuning the properties of graphene using a reversible gas-phase reaction. NPG Asia Materials, 2012, 4, e31-e31.	7.9	16
143	Intermediate Phases during Decomposition of Metal Borohydrides, M(BH ₄) _n (M = Na, Mg, Y). Journal of Physical Chemistry C, 2014, 118, 28456-28461.	3.1	16
144	Unusual stability of multiply charged organo-metallic complexes. RSC Advances, 2015, 5, 44003-44008.	3.6	16

#	ARTICLE	IF	CITATIONS
163	Comparisons of electrical/magneto-transport properties of degenerate semiconductors BiCuXO (X = S, Te). <i>Journal of Applied Physics</i> , 2019, 125, 124101.	2.5	12
164	Enhanced Li-ion Storage Performance of MoS ₂ through Multistage Structural Design. <i>ChemElectroChem</i> , 2019, 6, 1475-1484.	3.4	12
165	Composition-Gradient-Mediated Semiconductor-Metal Transition in Ternary Transition-Metal-Dichalcogenide Bilayers. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 45184-45191.	8.0	12
166	Materials Data toward Machine Learning: Advances and Challenges. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 3965-3977.	4.6	12
167	Microstructure and ferromagnetic property in CaRuO ₃ thin films with pseudoheterostructure. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	11
168	Structural stability of layered <i>Ln</i> -LaFeO ₃ and Bi ₄ Ti ₃ O ₁₂ , BiFeO ₃ and Bi ₄ Ti ₃ O ₁₂ , and SrTiO ₃ and Bi ₄ Ti ₃ O ₁₂ thin films. <i>Journal of Materials Research</i> , 2012, 27, 2956-2964.	2.6	11
169	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.	3.1	11
170	Lattice dynamics of K _x RhO ₂ single crystals. <i>AIP Advances</i> , 2015, 5, .	1.3	11
171	From Halogen to Superhalogen Behavior of Organic Molecules Created by Functionalizing Benzene. <i>ChemPhysChem</i> , 2016, 17, 184-189.	2.1	11
172	Temperature effect on lattice and electronic structures of WTe ₂ from first-principles study. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	11
173	Light-induced static magnetization: Nonlinear Edelstein effect. <i>Physical Review B</i> , 2021, 103, .	3.2	11
174	Light-Induced Quantum Anomalous Hall Effect on the 2D Surfaces of 3D Topological Insulators. <i>Advanced Science</i> , 2021, 8, e2101508.	11.2	11
175	Coherence control of directional nonlinear photocurrent in spatially symmetric systems. <i>Physical Review B</i> , 2021, 104, .	3.2	11
176	Self-assembly of metal atoms (Na, K, Ca) on graphene. <i>Nanoscale</i> , 2015, 7, 2352-2359.	5.6	10
177	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.	5.8	10
178	Metal-Metal Bonding Stabilized Ground State Structure of Early Transition Metal Monoxide TM-MO (TM = Ti, Hf, V, Ta). <i>Journal of Physical Chemistry C</i> , 2016, 120, 10009-10014.	3.1	10
179	Two-dimensional topological crystalline quantum spin Hall effect in transition metal intercalated compounds. <i>Physical Review B</i> , 2017, 95, .	3.2	10
180	Synthesis and characterization of Cr ₂ AlC with nanolaminated particles. <i>Science Bulletin</i> , 2014, 59, 3266-3270.	1.7	9

#	ARTICLE	IF	CITATIONS
181	Manipulating carriers' spin polarization in the Heusler alloy Mn ₂ CoAl. RSC Advances, 2015, 5, 73814-73819.	3.6	9
182	Preparation, Structure Evolution, and Metal-Insulator Transition of NaRhO ₂ Crystals (0.25 at% Na). Inorganic Chemistry, 2018, 57, 2730-2735.	4.0	9
183	MnO ₂ nanoflowers grown on a polypropylene separator for use as both a barrier and an accelerator of polysulfides for high-performance Li-S batteries. Dalton Transactions, 2020, 49, 9719-9727.	3.3	9
184	Pressure-mediated structural phase transitions and ultrawide indirect-direct bandgaps in novel rare-earth oxyhalides. Journal of Materials Chemistry C, 2021, 9, 547-554.	5.5	9
185	Subtle effect of doping on the charge density wave in Ta ₂ Te ₃ ($T_{CDW} = 10.784314$ K). Physical Review Letters, 2021, 126, 077401.	5.5	9
186	Noncontacting optostriction driven anisotropic and inhomogeneous strain in two-dimensional materials. Physical Review Research, 2020, 2, .	3.6	9
187	First-Principles Study on Electronic Structure of Gd-Doped HfO ₂ High k Gate Dielectrics. Integrated Ferroelectrics, 2012, 134, 3-9.	0.7	8
188	Significant ferrimagnetisms observed in superlattice composed of antiferromagnetic LaFeO ₃ and YMnO ₃ . Applied Physics Letters, 2013, 102, 042403.	3.3	8
189	Photo-magnetization in two-dimensional sliding ferroelectrics. Npj 2D Materials and Applications, 2022, 6, .	7.9	8
190	Magnetism of triangular nanoflakes with different compositions and edge terminations. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	7
191	18-Electron rule inspired Zintl-like ions composed of all transition metals. Physical Chemistry Chemical Physics, 2014, 16, 20241-20247.	2.8	7
192	Anisotropic electrical and thermal conductivity in Bi ₂ Ae ₂ Co ₂ O ₈ + δ [Ae = Ca, Sr; $x = 0.0, 0.25, 0.5$]. Physical Review Letters, 2015, 115, 077401.	2.5	7
193	Valley contrasting in epitaxial growth of In/Tl homoatomic monolayer with anomalous Nernst conductance. Physical Review B, 2016, 94, .	3.2	7
194	The relationship between anisotropic magnetoresistance and topology of Fermi surface in Td-MoTe ₂ crystal. Journal of Applied Physics, 2017, 122, .	2.5	7
195	Measurement of surface acoustic wave resonances in ferroelectric domains by microwave microscopy. Journal of Applied Physics, 2017, 122, 074101.	2.5	7
196	Quantifying the composition dependency of the ground-state structure, electronic property and phase-transition dynamics in ternary transition-metal-dichalcogenide monolayers. Journal of Materials Chemistry C, 2020, 8, 721-733.	5.5	7
197	Intercalation induced ferromagnetism in group-V transition metal dichalcogenide bilayer. AIP Advances, 2020, 10, .	1.3	7
198	Synthesis of two-dimensional phenylethylamine tin-lead halide perovskites with bandgap bending behavior. Nanoscale Advances, 2021, 3, 3875-3880.	4.6	7

#	ARTICLE	IF	CITATIONS
199	Synergistic Role of Eg Filling and Anionâ€‘Cation Hybridization in Enhancing the Oxygen Evolution Reaction Activity in Nickelates. ACS Applied Energy Materials, 0, , .	5.1	7
200	Tripyrrylmethane based 2D porous structure for hydrogen storage. Frontiers of Physics, 2011, 6, 220-223.	5.0	6
201	Electrical, magnetic, and magneto-electrical properties in quasi-two-dimensional K0.58RhO2 single crystals doped with rare-earth elements. Applied Physics Letters, 2014, 105, 062408.	3.3	6
202	Strain and carrier-induced coexistence of topologically insulating and superconducting phase in iodized Si(111) films. Nano Research, 2016, 9, 1578-1589.	10.4	6
203	Colossal Stability of Gasâ€‘Phase Trianions: Superâ€‘pnictogens. Angewandte Chemie, 2017, 129, 13606-13610.	2.0	6
204	Ultralow cross-plane lattice thermal conductivity caused by Biâ€‘O/Biâ€‘O interfaces in natural superlattice-like single crystals. CrystEngComm, 2019, 21, 6261-6268.	2.6	6
205	One-Order Decrease of Thermal Conductivity in Nanostructured ZrTe₅ and HfTe₅ Crystals. Crystal Growth and Design, 2020, 20, 680-687.	3.0	6
206	Exchange-biased nanocomposite ferromagnetic insulator. Physical Review B, 2020, 101, .	3.2	6
207	Rewritable High-Mobility Electrons in Oxide Heterostructure of Layered Perovskite/Perovskite. ACS Applied Materials & Interfaces, 2021, 13, 7812-7821.	8.0	6
208	Switchable topological phase transition and nonlinear optical properties in a ReC_2H monolayer. Physical Review B, 2022, 105, .	3.2	6
209	Magnetic properties of two dimensional silicon carbide triangular nanoflakes-based kagome lattices. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	5
210	Origin of the abnormal diffusion of transition metal atoms in rutile. Physical Review B, 2017, 95, .	3.2	5
211	Atomically dispersed tungsten on metal halide monolayer as a ferromagnetic Chern insulator. Physical Review B, 2018, 98, .	3.2	5
212	Tunable charge density wave in a lateral black/blue phosphorene heterostructure: A first-principles calculation. Physical Review B, 2020, 102, .	3.2	5
213	2D Transitionâ€‘Metal Carbides: Novel 2D Transitionâ€‘Metal Carbides: Ultrahigh Performance Electrocatalysts for Overall Water Splitting and Oxygen Reduction (Adv. Funct. Mater. 47/2020). Advanced Functional Materials, 2020, 30, 2070311.	14.9	5
214	Modulating electrical transport properties of SnSe crystal to improve the thermoelectric power factor by adjusting growth method. Applied Physics Letters, 2020, 116, .	3.3	5
215	Antibonding-Induced Anomalous Temperature Dependence of the Band Gap in Crystalline Ge2Sb2Te5. Journal of Physical Chemistry C, 2021, 125, 19537-19543.	3.1	5
216	An electronic phase diagram of hole-doped BiCuSeO crystals determined by transport characterization under various growth conditions. CrystEngComm, 2021, 23, 273-281.	2.6	5

#	ARTICLE	IF	CITATIONS
217	A multiferroic iron arsenide monolayer. <i>Nanoscale Advances</i> , 2022, 4, 1324-1329.	4.6	5
218	Enhanced photothermoelectric detection in Co:BiCuSeO crystals with tunable Seebeck effect. <i>Optics Express</i> , 2022, 30, 8356.	3.4	5
219	Tailoring Photoinduced Nonequilibrium Magnetizations in In_2Se_3 Bilayers. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	5
220	Investigation on $\text{Ge}_5\text{Sb}_x\text{Te}_5$ phase-change materials by first-principles method. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 99, 961-964.	2.3	4
221	Room temperature ferromagnetism in triple perovskite $\text{Sr}_3\text{CrFeMoO}_9$. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 4970-4973.	2.2	4
222	Substituent-Stabilized Organic Dianions in the Gas Phase and Their Potential Use as Electrolytes in Lithium-Ion Batteries. <i>ChemPhysChem</i> , 2016, 17, 2992-2997.	2.1	4
223	Integrating superconducting phase and topological crystalline quantum spin Hall effect in hafnium intercalated gallium film. <i>Applied Physics Letters</i> , 2016, 108, 253102.	3.3	4
224	Topological insulators double perovskites: A_2TePoO_6 (A = Ca, Sr, Ba). <i>Journal of Applied Physics</i> , 2017, 122, 224902.	2.5	4
225	Effect of Coulomb Correlation on the Magnetic Properties of Mn Clusters. <i>Journal of Physical Chemistry A</i> , 2018, 122, 4350-4356.	2.5	4
226	First-principles calculations of structural and electronic properties of layered AxRhO_2 (A = Li, Na, K). <i>Journal of Applied Physics</i> , 2017, 122, 224902.	1.3	4
227	Thermal property and lattice thermal conductivity of three-dimensional pentagonal silicon. <i>Physica B: Condensed Matter</i> , 2021, 618, 413178.	2.7	4
228	Rational Design of Stable Dianions by Functionalizing Polycyclic Aromatic Hydrocarbons. <i>ChemPhysChem</i> , 2017, 18, 1937-1942.	2.1	3
229	The Microstructural Characterization of Multiferroic $\text{LaFeO}_3\text{-YMnO}_3$ Multilayers Grown on (001)- and (111)- SrTiO_3 Substrates by Transmission Electron Microscopy. <i>Materials</i> , 2017, 10, 839.	2.9	3
230	Reversible formation-dissociation of polaron in rutile driven by electric field. <i>Materials Research Letters</i> , 2018, 6, 165-170.	8.7	3
231	Theoretical and experimental evidence for the intrinsic three-dimensional Dirac state in C_2HgSnS_4 . <i>Physical Review B</i> , 2019, 100, .	3.2	3
232	Solution-Grown Hypervalent CsI_3 Crystal for High-Sensitive X-Ray Detection. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 1900290.	1.5	3
233	Non-hydrostatic pressure-dependent structural and transport properties of BiCuSeO and BiCuSO single crystals. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 105702.	1.8	3
234	Rational Design of Endohedral Superhalogens without Using Metal Cations and Electron Counting Rules. <i>Journal of Physical Chemistry A</i> , 0, .	2.5	3

#	ARTICLE	IF	CITATIONS
235	Microstructure and Deformability of Sn-Zn-Bi Alloys. , 2006, , .		2
236	Crystal growth and magneto-transport behavior of PdS _{1-x} Te _x . Journal of Crystal Growth, 2018, 487, 116-119.	1.5	2
237	Tailoring geometric phases of two-dimensional functional materials under light: a brief review. International Journal of Smart and Nano Materials, 2020, 11, 191-206.	4.2	2
238	Anomalous transport and magnetic properties induced by slight Cu valence alternation in layered oxytelluride BiCuTeO. RSC Advances, 2020, 10, 18753-18759.	3.6	2
239	Ultralow Lattice Thermal Conductivity of A _{0.5} RhO ₂ (A = K, Rb, Cs) Induced by Interfacial Scattering and Resonant Scattering. Journal of Physical Chemistry C, 2021, 125, 11648-11655.	3.1	2
240	Epitaxial growth and transport properties of compressively-strained Ba ₂ IrO ₄ films*. Chinese Physics B, 2021, 30, 087401.	1.4	2
241	The electrical- and magneto-transport properties of Rb-, Sn-, and Co-doped BiCuSeO crystals. AIP Advances, 2021, 11, 105207.	1.3	2
242	Realization of adjustable electron concentration and its effect on electrical- and Seebeck-property of n-type SnSe crystals. Applied Physics Letters, 2022, 120, 022102.	3.3	2
243	Optical generation and electric control of pure spin photocurrent in ferroelectric Ruddlesden-Popper perovskite (MA) ₂ Pb(SCN) ₂ monolayer. Journal of Materials Chemistry C, 0, , .	5.5	2
244	Magnetic and electrical transport properties of Pb _{1-x} La _x Ti _{1-x} Mn _x O ₃ ceramics. AIP Advances, 2012, 2, .	1.3	1
245	Pressure-Induced Destabilization and Anomalous Lattice Distortion in TcO ₂ . Inorganic Chemistry, 2017, 56, 9973-9978.	4.0	1
246	Solution-grown Hypervalent Cs ₃ Crystal for High-sensitive X-ray Detection. Physica Status Solidi (B): Basic Research, 2020, 257, 2070012.	1.5	1
247	Role of Anharmonic Interactions for Vibration Density of States in ±-Cristobalite. Materials, 2021, 14, 617.	2.9	1
248	Growth, Structure, Electrical Transport and Thermal Stability of New Allotropic MoC ₄ Crystals. Crystal Growth and Design, 2021, 21, 4909-4913.	3.0	1
249	Atomic-resolution study of charge transfer effects at the LaTiO ₃ /La ₂ O ₃ interface. Physical Review B, 2021, 104, .	1.2	1
250	First-principles study on the electronic and magnetic properties of ThMnAsN and ThMnPN. Modern Physics Letters B, 2021, 35, .	1.9	1
251	Robust ferromagnetic insulating and large exchange bias in LaMnO ₃ :CoO composite thin films. Journal Physics D: Applied Physics, 0, , .	2.8	1
252	Origin of the concentration-dependent effects of N on the stability and electrical resistivity in polycrystalline Ge ₁ Sb ₂ Te ₄ . Journal of Materials Chemistry C, 0, , .	5.5	1

#	ARTICLE	IF	CITATIONS
253	Magnetic Field Tuning of Magnetic- and Structure-Phase Transition in $Mn_2V_2O_7$ Crystals. <i>Journal of Physical Chemistry C</i> , 2022, 126, 5055-5063.	3.1	1
254	Growth and Thermal Conductivity Study of $CuCr_2Se_4$ - $CuCrSe_2$ Hetero-Composite Crystals. <i>Crystals</i> , 2022, 12, 433.	2.2	1
255	Quasi-1D Antiferroelectricity in Centrosymmetric $CsTaS_3$ Crystal. <i>Advanced Theory and Simulations</i> , 0, , 2200022.	2.8	1
256	Growth and Electrical Properties of Polymorphs of Mo-Te Crystals. <i>Materials Research Bulletin</i> , 2022, 151, 111796.	5.2	1
257	Anisotropic terahertz optostriction in group-IV monochalcogenide compounds. <i>Physical Review B</i> , 2022, 105, .	3.2	1
258	Initial growth of $Bi_4LaTi_3FeO_{15}$ thin films on $SrTiO_3$, MgO and YSZ substrates. <i>Crystal Research and Technology</i> , 2012, 47, 663-670.	1.3	0
259	The microstructure and magnetic property of TiO_2 -terminated $SrTiO_3$ substrate selected growth cubic phase $CaRuO_3$ film. <i>Crystal Research and Technology</i> , 2013, 48, 546-554.	1.3	0
260	Two-dimensional topological nanomaterials and related Hall effects. , 2016, , .		0
261	Titelbild: Colossal Stability of Gas-Phase Trianions: Superpnictogens (<i>Angew. Chem.</i> 43/2017). <i>Angewandte Chemie</i> , 2017, 129, 13333-13333.	2.0	0
262	Synthesis, structure, and electronic properties of the $Li_{11}RbGd_4Te_6O_{30}$ single crystal. <i>RSC Advances</i> , 2020, 10, 11450-11454.	3.6	0
263	Covalent states and spin-orbit coupling in electronic and magnetic properties of $Ba_6Y_2Rh_2Ti_2O_{17}$. <i>Physical Review B</i> , 2021, 104, .	3.2	0
264	Designing stable B_{12} dianions in silico for Li- and Mg-ion battery applications. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 5201-5208.	6.0	0
265	First-Principles Calculations on the Elastic, Electronic, and Phononic Properties of $Sc_2Al_2C_3$. <i>Physica Status Solidi (B): Basic Research</i> , 0, , 2100336.	1.5	0
266	Molecular dynamics and density functional theory study on the potassium distribution and lattice thermal conductivity of $KRhO_2$. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 441, 128151.	2.1	0
267	Strain-tunable magnetic and electronic properties of a $CuCl_3$ monolayer. <i>Physical Chemistry Chemical Physics</i> , 0, , .	2.8	0