

Shengli Zhang

List of Publications by Year in descending order

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178
papers

15,304
citations

34076

52
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18115

120
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181
docs citations

181
times ranked

14669
citing authors

#	ARTICLE	IF	CITATIONS
1	CsPbX ₃ Quantum Dots for Lighting and Displays: Room-Temperature Synthesis, Photoluminescence Superiorities, Underlying Origins and White Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2016, 26, 2435-2445.	7.8	2,055
2	Atomically Thin Arsenene and Antimonene: Semimetal-Semiconductor and Indirect-Direct Band-Gap Transitions. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 3112-3115.	7.2	1,211
3	Two-dimensional antimonene single crystals grown by van der Waals epitaxy. <i>Nature Communications</i> , 2016, 7, 13352.	5.8	798
4	Recent progress in 2D group-VA semiconductors: from theory to experiment. <i>Chemical Society Reviews</i> , 2018, 47, 982-1021.	18.7	697
5	Tackling the Activity and Selectivity Challenges of Electrocatalysts toward the Nitrogen Reduction Reaction via Atomically Dispersed Biatom Catalysts. <i>Journal of the American Chemical Society</i> , 2020, 142, 5709-5721.	6.6	664
6	Semiconducting Group-V Monolayers: A Broad Range of Band Gaps and High Carrier Mobilities. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1666-1669.	7.2	651
7	Engineering surface states of carbon dots to achieve controllable luminescence for solid-luminescent composites and sensitive Be ²⁺ detection. <i>Scientific Reports</i> , 2014, 4, .	1.6	544
8	Atomically Thin Arsenene and Antimonene: Semimetal-Semiconductor and Indirect-Direct Band-Gap Transitions. <i>Angewandte Chemie</i> , 2015, 127, 3155-3158.	1.6	397
9	CsPbBr ₃ Quantum Dots 2.0: Benzenesulfonic Acid Equivalent Ligand Awakens Complete Purification. <i>Advanced Materials</i> , 2019, 31, e1900767.	11.1	329
10	Semiconducting Group-V Monolayers: A Broad Range of Band Gaps and High Carrier Mobilities. <i>Angewandte Chemie</i> , 2016, 128, 1698-1701.	1.6	315
11	Simultaneously Achieving High Activity and Selectivity toward Two-Electron O ₂ Electroreduction: The Power of Single-Atom Catalysts. <i>ACS Catalysis</i> , 2019, 9, 11042-11054.	5.5	314
12	2D Van-der-Waals Binary Materials: Status and Challenges. <i>Advanced Materials</i> , 2019, 31, e1902352.	11.1	303
13	Antimonene Oxides: Emerging Tunable Direct Bandgap Semiconductor and Novel Topological Insulator. <i>Nano Letters</i> , 2017, 17, 3434-3440.	4.5	250
14	2D Fe-containing cobalt phosphide/cobalt oxide lateral heterostructure with enhanced activity for oxygen evolution reaction. <i>Nano Energy</i> , 2019, 56, 109-117.	8.2	223
15	Black phosphorene as a hole extraction layer boosting solar water splitting of oxygen evolution catalysts. <i>Nature Communications</i> , 2019, 10, 2001.	5.8	222
16	A promising two-dimensional solar cell donor: Black arsenic-phosphorus monolayer with 1.54 eV direct bandgap and mobility exceeding 14,000 cm ² V ⁻¹ s ⁻¹ . <i>Nano Energy</i> , 2016, 28, 433-439.	8.2	212
17	Nonlinear Saturable Absorption of Liquid-Exfoliated Molybdenum/Tungsten Ditelluride Nanosheets. <i>Small</i> , 2016, 12, 1489-1497.	5.2	211
18	Boosting Two-Dimensional MoS ₂ /CsPbBr ₃ Photodetectors via Enhanced Light Absorbance and Interfacial Carrier Separation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 2801-2809.	4.0	207

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19	WS ₂ saturable absorber for dissipative soliton mode locking at 106 and 155 Åµm. Optics Express, 2015, 23, 27509.	1.7	187
20	Few-Layer Antimonene: Anisotropic Expansion and Reversible Crystalline-Phase Evolution Enable Large-Capacity and Long-Life Na-Ion Batteries. ACS Nano, 2018, 12, 1887-1893.	7.3	175
21	Near-Complete Suppression of Oxygen Evolution for Photoelectrochemical H ₂ O Oxidative H ₂ O ₂ Synthesis. Journal of the American Chemical Society, 2020, 142, 8641-8648.	6.6	168
22	Lateral black phosphorene Pâ€N junctions formed via chemical doping for high performance near-infrared photodetector. Nano Energy, 2016, 25, 34-41.	8.2	162
23	Optimizing Hybridization of 1T and 2H Phases in MoS ₂ Monolayers to Improve Capacitances of Supercapacitors. Materials Research Letters, 2015, 3, 177-183.	4.1	149
24	Ab Initio Study of the Adsorption of Small Molecules on Stanene. Journal of Physical Chemistry C, 2016, 120, 13987-13994.	1.5	149
25	GeSe monolayer semiconductor with tunable direct band gap and small carrier effective mass. Applied Physics Letters, 2015, 107, .	1.5	148
26	Advances of 2D bismuth in energy sciences. Chemical Society Reviews, 2020, 49, 263-285.	18.7	138
27	Hydrogenated arsenenes as planar magnet and Dirac material. Applied Physics Letters, 2015, 107, .	1.5	137
28	Ultrathin Bismuth Nanosheets for Stable Na-Ion Batteries: Clarification of Structure and Phase Transition by in Situ Observation. Nano Letters, 2019, 19, 1118-1123.	4.5	124
29	Two-dimensional BX (X = P, As, Sb) semiconductors with mobilities approaching graphene. Nanoscale, 2016, 8, 13407-13413.	2.8	122
30	Semiconductor-topological insulator transition of two-dimensional SbAs induced by biaxial tensile strain. Physical Review B, 2016, 93, .	1.1	118
31	Electronic structure and optical properties of graphene/stanene heterobilayer. Physical Chemistry Chemical Physics, 2016, 18, 16302-16309.	1.3	115
32	Nearâ€Infrared Plasmonic 2D Semimetals for Applications in Communication and Biology. Advanced Functional Materials, 2016, 26, 1793-1802.	7.8	114
33	Recent progress in 2D group IVâ€IV monochalcogenides: synthesis, properties and applications. Nanotechnology, 2019, 30, 252001.	1.3	104
34	Establishing a Theoretical Landscape for Identifying Basal Plane Active 2D Metal Borides (MBenes) toward Nitrogen Electroreduction. Advanced Functional Materials, 2021, 31, 2008056.	7.8	97
35	Van der Waals bilayer antimonene: A promising thermophotovoltaic cell material with 31% energy conversion efficiency. Nano Energy, 2017, 38, 561-568.	8.2	92
36	Tunable electronic properties of GeSe/phosphorene heterostructure from first-principles study. Applied Physics Letters, 2016, 109, .	1.5	87

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37	Two-dimensional GeS with tunable electronic properties via external electric field and strain. <i>Nanotechnology</i> , 2016, 27, 274001.	1.3	85
38	Modulating Epitaxial Atomic Structure of Antimonene through Interface Design. <i>Advanced Materials</i> , 2019, 31, e1902606.	11.1	84
39	Two-dimensional SiP: an unexplored direct band-gap semiconductor. <i>2D Materials</i> , 2017, 4, 015030.	2.0	78
40	A new 2D high-pressure phase of PdSe ₂ with high-mobility transport anisotropy for photovoltaic applications. <i>Journal of Materials Chemistry C</i> , 2019, 7, 2096-2105.	2.7	70
41	Designing sub-10-nm Metal-Oxide-Semiconductor Field-Effect Transistors via Ballistic Transport and Disparate Effective Mass: The Case of Two-Dimensional Bi_2Te_3 . <i>Physical Review Applied</i> , 2020, 13, .	1.5	69
42	A High-Performance Nitro-Explosives Schottky Sensor Boosted by Interface Modulation. <i>Advanced Functional Materials</i> , 2015, 25, 4039-4048.	7.8	67
43	Tinene: a two-dimensional Dirac material with a 72 meV band gap. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 12634-12638.	1.3	66
44	Ultrathin tellurium dioxide: emerging direct bandgap semiconductor with high-mobility transport anisotropy. <i>Nanoscale</i> , 2018, 10, 8397-8403.	2.8	66
45	A two-photon tandem black phosphorus quantum dot-sensitized BiVO ₄ photoanode for solar water splitting. <i>Energy and Environmental Science</i> , 2022, 15, 672-679.	15.6	64
46	Aligned Heterointerface-Induced 1Tâ€MoS ₂ Monolayer with Near-Ideal Gibbs Free for Stable Hydrogen Evolution Reaction. <i>Small</i> , 2019, 15, e1804903.	5.2	63
47	Identifying electrocatalytic activity and mechanism of Ce _{1/3} NbO ₃ perovskite for nitrogen reduction to ammonia at ambient conditions. <i>Applied Catalysis B: Environmental</i> , 2021, 280, 119419.	10.8	60
48	Quantum Dots: CsPbX ₃ Quantum Dots for Lighting and Displays: Room-Temperature Synthesis, Photoluminescence Superiorities, Underlying Origins and White Light-Emitting Diodes (Adv.) <i>Tj ETQq0700 rgBT /59verlock 1</i>	7.0	59
49	Switching excitonic recombination and carrier trapping in cesium lead halide perovskites by air. <i>Communications Physics</i> , 2018, 1, .	2.0	59
50	A class of Pb-free double perovskite halide semiconductors with intrinsic ferromagnetism, large spin splitting and high Curie temperature. <i>Materials Horizons</i> , 2018, 5, 961-968.	6.4	59
51	Anisotropic In-Plane Ballistic Transport in Monolayer Black Arsenic-Phosphorus FETs. <i>Advanced Electronic Materials</i> , 2020, 6, 1901281.	2.6	59
52	N- and p-type doping of antimonene. <i>RSC Advances</i> , 2016, 6, 14620-14625.	1.7	57
53	Structural and electronic properties of atomically thin germanium selenide polymorphs. <i>Science China Materials</i> , 2015, 58, 929-935.	3.5	54
54	Tailoring natural layered $\hat{2}$ -phase antimony into few layer antimonene for Li storage with high rate capabilities. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3238-3243.	5.2	54

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55	The impact of Mg content on the structural, electrical and optical properties of MgZnO alloys: A first principles study. <i>Current Applied Physics</i> , 2015, 15, 423-428.	1.1	52
56	First-Principles Study of Field Emission Properties of Graphene-ZnO Nanocomposite. <i>Journal of Physical Chemistry C</i> , 2010, 114, 19284-19288.	1.5	51
57	First-principles study of SO ₂ sensors based on phosphorene and its isoelectronic counterparts: GeS, GeSe, SnS, SnSe. <i>Chemical Physics Letters</i> , 2017, 686, 83-87.	1.2	51
58	MoS ₂ nanoparticles coupled to SnS ₂ nanosheets: The structural and electronic modulation for synergetic electrocatalytic hydrogen evolution. <i>Journal of Catalysis</i> , 2018, 366, 8-15.	3.1	48
59	Two-dimensional transition metal diborides: promising Dirac electrocatalysts with large reaction regions toward efficient N ₂ fixation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25887-25893.	5.2	45
60	Noncovalent Molecular Doping of Two-Dimensional Materials. <i>ChemNanoMat</i> , 2015, 1, 542-557.	1.5	41
61	Building up the "Genome" of bi-atom catalysts toward efficient HER/OER/ORR. <i>Journal of Materials Chemistry A</i> , 2022, 10, 11600-11612.	5.2	40
62	The effect of electric field on Ti-decorated graphyne for hydrogen storage. <i>Computational and Theoretical Chemistry</i> , 2014, 1035, 68-75.	1.1	39
63	Modulating the phase transition between metallic and semiconducting single-layer MoS ₂ and WS ₂ through size effects. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 1099-1105.	1.3	38
64	Quantum confinement effect of two-dimensional all-inorganic halide perovskites. <i>Science China Materials</i> , 2017, 60, 811-818.	3.5	38
65	Mechanistic Understanding of Two-Dimensional Phosphorus, Arsenic, and Antimony High-Capacity Anodes for Fast-Charging Lithium/Sodium Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29559-29566.	1.5	38
66	A highly sensitive and selective SnS ₂ monolayer sensor in detecting SF ₆ decomposition gas. <i>Applied Surface Science</i> , 2021, 541, 148494.	3.1	38
67	DFT coupled with NEGF study of a promising two-dimensional channel material: black phosphorene-type GaTeCl. <i>Nanoscale</i> , 2018, 10, 3350-3355.	2.8	37
68	Considering the spin-orbit coupling effect on the photocatalytic performance of AlN/MX ₂ nanocomposites. <i>Journal of Materials Chemistry C</i> , 2017, 5, 9412-9420.	2.7	36
69	The structural, electrical and optical properties of Mg-doped ZnO with different interstitial Mg concentration. <i>Materials Chemistry and Physics</i> , 2016, 182, 15-21.	2.0	35
70	"Silent" Amino Acid Residues at Key Subunit Interfaces Regulate the Geometry of Protein Nanocages. <i>ACS Nano</i> , 2016, 10, 10382-10388.	7.3	35
71	First-principles calculations of the electronic properties of two-dimensional pentagonal structure XS ₂ (X=Ni, Pd, Pt). <i>Vacuum</i> , 2020, 174, 109176.	1.6	35
72	Theoretical investigation of growth, stability, and electronic properties of beaded ZnO nanoclusters. <i>Journal of Materials Chemistry</i> , 2011, 21, 16905.	6.7	34

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73	Two-Dimensional Pnictogen for Field-Effect Transistors. <i>Research</i> , 2019, 2019, 1046329.	2.8	34
74	Conversion of the Native 24 μ m Ferritin Nanocage into Its Non-Native 16 μ m Analogue by Insertion of Extra Amino Acid Residues. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 16064-16070.	7.2	33
75	Ferroelastic lattice rotation and band-gap engineering in quasi 2D layered-structure PdSe ₂ under uniaxial stress. <i>Nanoscale</i> , 2019, 11, 12317-12325.	2.8	32
76	Dipole controlled Schottky barrier in the blue-phosphorene-phase of GeSe based van der Waals heterostructures. <i>Nanoscale Horizons</i> , 2019, 4, 480-489.	4.1	32
77	Two-Dimensional BAs/InTe: A Promising Tandem Solar Cell with High Power Conversion Efficiency. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6074-6081.	4.0	32
78	Efficient Full-Color Boron Nitride Quantum Dots for Thermostable Flexible Displays. <i>ACS Nano</i> , 2021, 15, 14610-14617.	7.3	32
79	Uncovering the Anisotropic Electronic Structure of 2D Group VA-VA Monolayers for Quantum Transport. <i>IEEE Electron Device Letters</i> , 2021, 42, 66-69.	2.2	31
80	Pentagonal two-dimensional noble-metal dichalcogenide PdSSe for photocatalytic water splitting with pronounced optical absorption and ultrahigh anisotropic carrier mobility. <i>Journal of Materials Chemistry C</i> , 2021, 9, 7753-7764.	2.7	30
81	A Perovskite Light-Emitting Device Driven by Low-Frequency Alternating Current Voltage. <i>Advanced Optical Materials</i> , 2018, 6, 1800206.	3.6	29
82	A promising two-dimensional channel material: monolayer antimonide phosphorus. <i>Science China Materials</i> , 2016, 59, 648-656.	3.5	28
83	Tunable electronic structure and enhanced optical properties in quasi-metallic hydrogenated/fluorinated SiC heterobilayer. <i>Journal of Materials Chemistry C</i> , 2016, 4, 7406-7414.	2.7	27
84	Layer-controlled band alignment, work function and optical properties of few-layer GeSe. <i>Physica B: Condensed Matter</i> , 2017, 519, 90-94.	1.3	27
85	Metallic oxide nanocrystals with near-infrared plasmon resonance for efficient, stable and biocompatible photothermal cancer therapy. <i>Journal of Materials Chemistry B</i> , 2017, 5, 7393-7402.	2.9	25
86	An Ångström-level <i>c</i> -spacing controlling synthetic route for MoS ₂ towards stable intercalation of sodium ions. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22513-22518.	5.2	24
87	Influences of Stone-Wales defects on the structure, stability and electronic properties of antimonene: A first principle study. <i>Physica B: Condensed Matter</i> , 2016, 503, 126-129.	1.3	23
88	Multilayer Cascade Charge Transport Layer for High-Performance Inverted Mesoscopic All-Inorganic and Hybrid Wide-Bandgap Perovskite Solar Cells. <i>Solar Rrl</i> , 2020, 4, 2000344.	3.1	23
89	Structural transition, metallization, and superconductivity in quasi-two-dimensional layered PdS ₂ under compression. <i>Physical Review B</i> , 2020, 101, .	1.1	22
90	Sensing Performance of SO ₂ , SO _x and NO _x Gas Molecules on 2D Pentagonal PdSe ₂ : A First-Principle Study. <i>IEEE Electron Device Letters</i> , 2021, 42, 573-576.	2.2	22

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109	Enhanced interband tunneling in two-dimensional tunneling transistors through anisotropic energy dispersion. <i>Physical Review B</i> , 2022, 105, .	1.1	16
110	Dual In Situ Laser Techniques Underpin the Role of Cations in Impacting Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	16
111	Field-Emission Mechanism of Island-Shaped Grapheneâ€“BN Nanocomposite. <i>Journal of Physical Chemistry C</i> , 2011, 115, 9471-9476.	1.5	15
112	Density functional theory studies of Yb-, Ca- and Sr-substituted Mg ₂ NiH ₄ hydrides. <i>Computational Materials Science</i> , 2013, 74, 55-64.	1.4	15
113	Band engineering realized by chemical combination in 2D group VAâ€“VA materials. <i>Nanoscale Horizons</i> , 2019, 4, 1145-1152.	4.1	15
114	Pressurized Alloying Assisted Synthesis of High Quality Antimonene for Capacitive Deionization. <i>Advanced Functional Materials</i> , 2021, 31, 2102766.	7.8	15
115	High-Performance and Low-Power Transistors Based on Anisotropic Monolayer Te_2O . <i>Physical Review Applied</i> , 2022, 17, .	1.5	15
116	The effect of electric field on hydrogen storage for B/N-codoped graphyne. <i>RSC Advances</i> , 2014, 4, 54879-54884.	1.7	14
117	Porous silaphosphorene, silarsenene and silaantimonene: a sweet marriage of Si and P/As/Sb. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3738-3746.	5.2	14
118	Ballistic Quantum Transport of Sub-10 nm 2D Sb ₂ Te ₂ Se Transistors. <i>Advanced Electronic Materials</i> , 2019, 5, 1900813.	2.6	14
119	Ballistic Transport in High-Performance and Low-Power Sub-5 nm Two-Dimensional ZrNBr MOSFETs. <i>IEEE Electron Device Letters</i> , 2020, 41, 1029-1032.	2.2	14
120	Halide ion migration in lead-free all-inorganic cesium tin perovskites. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	14
121	Defect Regulating of Few-Layer Antimonene from Acid-Assisted Exfoliation for Enhanced Electrocatalytic Nitrogen Fixation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 40618-40628.	4.0	14
122	First-principles study of structural, electronic and vibrational properties of aluminum-doped silica nanotubes. <i>Chemical Physics Letters</i> , 2010, 498, 172-177.	1.2	13
123	First-principles investigation of thiophene adsorption on Ni ₁₃ and Zn@Ni ₁₂ nanoclusters. <i>Computational and Theoretical Chemistry</i> , 2013, 1020, 136-142.	1.1	13
124	Significant effects of graphite fragments on hydrogen storage performances of LiBH ₄ : A first-principles approach. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 13717-13727.	3.8	13
125	Robust two-dimensional topological insulators in derivatives of group-VA oxides with large band gap: Tunable quantum spin Hall states. <i>Applied Materials Today</i> , 2019, 15, 163-170.	2.3	13
126	Dependence of Tunneling Mechanism on Two-Dimensional Material Parameters: A High-Throughput Study. <i>Physical Review Applied</i> , 2022, 17, .	1.5	13

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127	Theoretical investigations of sp-sp ² hybridized zero-dimensional fullerenynes. <i>Nanoscale</i> , 2012, 4, 2839.	2.8	12
128	First-principles study of cubane-type ZnO: Another ZnO polymorph. <i>Chemical Physics Letters</i> , 2013, 557, 102-105.	1.2	12
129	Transferable High-Quality Inorganic Perovskites for Optoelectronic Devices by Weak Interaction Heteroepitaxy. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 19674-19681.	4.0	12
130	Confinement effects on structural, electronic properties and dehydrogenation thermodynamics of LiBH ₄ . <i>International Journal of Hydrogen Energy</i> , 2013, 38, 8367-8375.	3.8	11
131	Structural, magnetic and electronic properties of FePt ₁₃ clusters with n=0~13: A first-principle study. <i>Journal of Magnetism and Magnetic Materials</i> , 2014, 369, 27-33.	1.0	11
132	High-performance monolayer Na ₃ Sb shrinking transistors: a DFT-NEGF study. <i>Nanoscale</i> , 2020, 12, 18931-18937.	2.8	11
133	DFT coupled with NEGF study of the electronic properties and ballistic transport performances of 2D SbSiTe ₃ . <i>Nanoscale</i> , 2020, 12, 9958-9963.	2.8	11
134	A Machine Learning Approach for Optimization of Channel Geometry and Source/Drain Doping Profile of Stacked Nanosheet Transistors. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 3568-3574.	1.6	10
135	Stability enhancement and electronic tunability of two-dimensional SbIV compounds via surface functionalization. <i>Applied Surface Science</i> , 2018, 427, 363-368.	3.1	8
136	Cu ₂ O~Cu ₂ Se Mixed~Phase Nanoflake Arrays: pH~Universal Hydrogen Evolution Reactions with Ultralow Overpotential. <i>ChemElectroChem</i> , 2019, 6, 5014-5021.	1.7	8
137	Highly sensitive detection and imaging of ultraviolet-B light for precisely controlling vitamin D generation in the human body. <i>Journal of Materials Chemistry C</i> , 2019, 7, 4503-4508.	2.7	8
138	Electronic structure and transport properties of 2D RhTeCl: a NEGF-DFT study. <i>Nanoscale</i> , 2019, 11, 20461-20466.	2.8	8
139	Research on metallic chalcogen-functionalized monolayer-puckered V ₂ CX ₂ (X) Tj ETQq1 1 0.784314 rgBT / 4672-4681.	3.2	8
140	Theoretical investigation of assembled (CdTe) ₁₂ ~N (N=1~5) multi-cage nanochains. <i>Computational Materials Science</i> , 2013, 68, 238-244.	1.4	7
141	New ultra-incompressible phases of NbB ₄ predicted from first principles. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 362-367.	0.9	7
142	Electronic band structures and optical properties of atomically thin AuSe: first-principle calculations. <i>Journal of Semiconductors</i> , 2019, 40, 062004.	2.0	7
143	In~Situ and Reversible Enhancement of Photoluminescence from CsPbBr ₃ Nanoplatelets by Electrical Bias. <i>Advanced Optical Materials</i> , 2021, 9, 2100346.	3.6	7
144	Dissipative transport and phonon scattering suppression via valley engineering in single-layer antimonene and arsenene field-effect transistors. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	7

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145	Topologically protected states and half-metal behaviors: Defect-strain synergy effects in two-dimensional antimonene. <i>Physical Review Materials</i> , 2019, 3, .	0.9	7
146	Dual In Situ Laser Techniques Underpin the Role of Cations in Impacting Electrocatalysts. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	7
147	High-Performance Monolayer BeN ₂ Transistors With Ultrahigh On-State Current: A DFT Coupled With NEGF Study. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 4501-4506.	1.6	7
148	Structural, electronic and thermodynamic properties of R ₃ ZnH ₅ (R=K, Rb, Cs): A first-principle calculation. <i>Journal of Solid State Chemistry</i> , 2013, 198, 433-439.	1.4	6
149	Structure, electronic characteristic and thermodynamic properties of K ₂ ZnH ₄ hydride crystal: A first-principles study. <i>Journal of Alloys and Compounds</i> , 2013, 549, 30-37.	2.8	6
150	Ru ₅₅ nanoparticles catalyze the dissociation of H ₂ O monomer and dimer to produce hydrogen: A comparative DFT study. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 3844-3853.	3.8	6
151	Quantum Transport in Monolayer InCS Field Effect Transistors. <i>Advanced Electronic Materials</i> , 2021, 7, 2001169.	2.6	6
152	Optical detection of quantum geometric tensor in intrinsic semiconductors. <i>Science China: Physics, Mechanics and Astronomy</i> , 2021, 64, 1.	2.0	6
153	High-Performance p-type 2D FET Based on Monolayer GeC with High Hole Mobility: A DFT-NEGF Study. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	6
154	Theoretical insights into the CO dimerization and trimerization on Pt nanocluster. <i>RSC Advances</i> , 2016, 6, 4354-4364.	1.7	5
155	Tunable conductance and spin filtering in twisted bilayer copper phthalocyanine molecular devices. <i>Nanoscale Advances</i> , 2021, 3, 3497-3501.	2.2	5
156	Perovskite oxides as a 2D dielectric. <i>Nature Electronics</i> , 2022, 5, 199-200.	13.1	5
157	Donor-acceptor units modulate the electronic and photoluminescence characteristics of thiophene oligomers. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	4
158	First-principle study of puckered arsenene MOSFET. <i>Journal of Semiconductors</i> , 2020, 41, 082006.	2.0	4
159	Unexpected band gap evolution and high carrier mobility sparked by the orbital variation in two-dimensional GaGeX (X = S, Se, Te). <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022, 138, 115112.	1.3	4
160	Atom Substitution Defects of Hexagonal Boron Phosphide Suppress Charge Recombination. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 6455-6461.	2.1	4
161	Molecular Dynamics Simulations of Silica Nanotube: Structural and Vibrational Properties Under Different Temperatures. <i>Chinese Journal of Chemical Physics</i> , 2010, 23, 497-503.	0.6	3
162	Physical properties of tetragonal transition-metal borides Nb ₂ MB ₂ (M=Mo, W, Re or Os) with a new superstructure. <i>Current Applied Physics</i> , 2015, 15, 970-976.	1.1	3

