Liangzhi Kou

List of Publications by Year
in descending order

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159 papers	9,449 citations	36203 51 h-index	42291 92 g-index
164 all docs	164 docs citations	164 times ranked	10352 citing authors

#	Article	IF	Citations
1	Phosphorene as a Superior Gas Sensor: Selective Adsorption and Distinct Iâ€“V Response. Journal of Physical Chemistry Letters, 2014, 5, 2675-2681.	2.1	877
2	Phosphorene: Fabrication, Properties, and Applications. Journal of Physical Chemistry Letters, 2015, 6, 2794-2805.	2.1	680
3	Twoâ€Dimensional Metal Oxide Nanomaterials for Nextâ€Generation Rechargeable Batteries. Advanced Materials, 2017, 29, 1700176.	11.1	317
4	Synthesis of WS_{2x}Se_{2â€“2x} Alloy Nanosheets with Composition-Tunable Electronic Properties. Nano Letters, 2016, 16, 264-269.	4.5	308
5	Tuning Magnetism and Electronic Phase Transitions by Strain and Electric Field in Zigzag MoS₂ Nanoribbons. Journal of Physical Chemistry Letters, 2012, 3, 2934-2941.	2.1	229
6	Tunable Photocatalytic Water Splitting by the Ferroelectric Switch in a 2D AgBiP₂Se₆ Monolayer. Journal of the American Chemical Society, 2020, 142, 1492-1500.	6.6	229
7	Structural and Electronic Properties of Layered Arsenic and Antimony Arsenide. Journal of Physical Chemistry C, 2015, 119, 6918-6922.	1.5	210
8	A Janus MoSSe monolayer: a superior and strain-sensitive gas sensing material. Journal of Materials Chemistry A, 2019, 7, 1099-1106.	5.2	187
9	Strain engineering of selective chemical adsorption on monolayer MoS₂. Nanoscale, 2014, 6, 5156-5161.	2.8	177
10	Tunable Magnetism in Strained Graphene with Topological Line Defect. ACS Nano, 2011, 5, 1012-1017.	7.3	176
11	Auxetic and Ferroelastic Borophane: A Novel 2D Material with Negative Possionâ€™s Ratio and Switchable Dirac Transport Channels. Nano Letters, 2016, 16, 7910-7914.	4.5	176
12	Two-Dimensional Topological Insulators: Progress and Prospects. Journal of Physical Chemistry Letters, 2017, 8, 1905-1919.	2.1	170
13	Hydrogenated borophene as a stable two-dimensional Dirac material with an ultrahigh Fermi velocity. Physical Chemistry Chemical Physics, 2016, 18, 27284-27289.	1.3	167
14	Robust Two-Dimensional Topological Insulators in Methyl-Functionalized Bismuth, Antimony, and Lead Bilayer Films. Nano Letters, 2015, 15, 1083-1089.	4.5	166
15	Single-Layer Ag₂S: A Two-Dimensional Bidirectional Auxetic Semiconductor. Nano Letters, 2019, 19, 1227-1233.	4.5	165
16	Strategies for designing metal oxide nanostructures. Science China Materials, 2017, 60, 1-24.	3.5	148
17	Nanoscale Multilayer Transition-Metal Dichalcogenide Heterostructures: Band Gap Modulation by Interfacial Strain and Spontaneous Polarization. Journal of Physical Chemistry Letters, 2013, 4, 1730-1736.	2.1	142
18	Electronic and Mechanical Coupling in Bent ZnO Nanowires. Advanced Materials, 2009, 21, 4937-4941.	11.1	137

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19	Quantum spin Hall effect and topological phase transition in two-dimensional square transition-metal dichalcogenides. Physical Review B, 2015, 92, .	1.1	117
20	Graphene-Based Topological Insulator with an Intrinsic Bulk Band Gap above Room Temperature. Nano Letters, 2013, 13, 6251-6255.	4.5	116
21	Controllable CO2 electrocatalytic reduction via ferroelectric switching on single atom anchored In2Se3 monolayer. Nature Communications, 2021, 12, 5128.	5.8	110
22	Anisotropic Ripple Deformation in Phosphorene. Journal of Physical Chemistry Letters, 2015, 6, 1509-1513.	2.1	106
23	New Family of Quantum Spin Hall Insulators in Two-dimensional Transition-Metal Halide with Large Nontrivial Band Gaps. Nano Letters, 2015, 15, 7867-7872.	4.5	104
24	Computational Dissection of Two-Dimensional Rectangular Titanium Mononitride TiN: Auxetics and Promises for Photocatalysis. Nano Letters, 2017, 17, 4466-4472.	4.5	104
25	Gas sensing and capturing based on twoâ€dimensional layered materials: Overview from theoretical perspective. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2018, 8, e1361.	6.2	101
26	Predicting Single-Layer Technetium Dichalcogenides (TcX₂, X = S, Se) with Promising Applications in Photovoltaics and Photocatalysis. ACS Applied Materials & Interfaces, 2016, 8, 5385-5392.	4.0	100
27	Enhanced Ion Sieving of Graphene Oxide Membranes via Surface Amine Functionalization. Journal of the American Chemical Society, 2021, 143, 5080-5090.	6.6	99
28	Two-Dimensional Ferroics and Multiferroics: Platforms for New Physics and Applications. Journal of Physical Chemistry Letters, 2019, 10, 6634-6649.	2.1	95
29	Robust 2D Topological Insulators in van der Waals Heterostructures. ACS Nano, 2014, 8, 10448-10454.	7.3	88
30	Janus WSSe Monolayer: An Excellent Photocatalyst for Overall Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 29335-29343.	4.0	86
31	Endohedral metallofullerenes (M@C60) as efficient catalysts for highly active hydrogen evolution reaction. Journal of Catalysis, 2017, 354, 231-235.	3.1	84
32	Two-dimensional GeP₃ as a high capacity electrode material for Li-ion batteries. Physical Chemistry Chemical Physics, 2017, 19, 25886-25890.	1.3	81
33	Formation of ripples in atomically thin MoS₂ and local strain engineering of electrostatic properties. Nanotechnology, 2015, 26, 105705.	1.3	80
34	Janus transition metal dichalcogenides: a superior platform for photocatalytic water splitting. JPhys Materials, 2020, 3, 022004.	1.8	78
35	Toward Rational Design of Catalysts Supported on a Topological Insulator Substrate. ACS Catalysis, 2015, 5, 7063-7067.	5.5	73
36	Crystal symmetry induced structure and bonding manipulation boosting thermoelectric performance of GeTe. Nano Energy, 2020, 73, 104740.	8.2	71

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37	Two-dimensional ferroelastic topological insulators in single-layer Janus transition metal dichalcogenides <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>M</mml:mi><mml:mi>SSe</mml:mi></mml:mrow></mml:math> Physical Review B, 2018, 98, .	3.7	68
38	Quantum spin Hall states in graphene interacting with WS2 or WSe2. Applied Physics Letters, 2014, 105, .	1.5	67
39	Single-crystalline ultrathin 2D TiO2 nanosheets: A bridge towards superior photovoltaic devices. Materials Today Energy, 2017, 3, 32-39.	2.5	67
40	Room temperature quantum spin Hall states in two-dimensional crystals composed of pentagonal rings and their quantum wells. NPG Asia Materials, 2016, 8, e264-e264.	3.8	65
41	Predicting Novel 2D MB₂ (M = Ti, Hf, V, Nb, Ta) Monolayers with Ultrafast Dirac Transport Channel and Electron-Orbital Controlled Negative Poissonâ€™s Ratio. Journal of Physical Chemistry Letters, 2019, 10, 2567-2573.	2.1	65
42	Strainâ€Gradient Effect on Energy Bands in Bent ZnO Microwires. Advanced Materials, 2012, 24, 4707-4711.	11.1	62
43	Conductive Graphitic Carbon Nitride as an Ideal Material for Electrocatalytically Switchable CO2 Capture. Scientific Reports, 2015, 5, 17636.	1.6	60
44	Two-dimensional inversion-asymmetric topological insulators in functionalized III-Bi bilayers. Physical Review B, 2015, 91, .	1.1	60
45	Simplest MOF Units for Effective Photodriven Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2018, 140, 9159-9166.	6.6	59
46	Reversible gas capture using a ferroelectric switch and 2D molecule multiferroics on the In₂Se₃ monolayer. Journal of Materials Chemistry A, 2020, 8, 7331-7338.	5.2	59
47	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CoB</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math> monolayer: A robust two-dimensional ferromagnet. Physical Review B, 2019, 99, .	1.1	58
48	Electrostatic Functionalization and Passivation of Water-Exfoliated Few-Layer Black Phosphorus by Poly Dimethyldiallyl Ammonium Chloride and Its Ultrafast Laser Application. ACS Applied Materials & Interfaces, 2018, 10, 9679-9687.	4.0	57
49	Two-dimensional transition metal dichalcogenides with a hexagonal lattice: Room-temperature quantum spin Hall insulators. Physical Review B, 2016, 93, .	1.1	56
50	Distorted Janus Transition Metal Dichalcogenides: Stable Two-Dimensional Materials with Sizable Band Gap and Ultrahigh Carrier Mobility. Journal of Physical Chemistry C, 2018, 122, 19153-19160.	1.5	55
51	Effect of the intra- and inter-triazine N-vacancies on the photocatalytic hydrogen evolution of graphitic carbon nitride. Chemical Engineering Journal, 2019, 369, 263-271.	6.6	55
52	Alkaline-earth bis(trifluoromethanesulfonimide) additives for efficient and stable perovskite solar cells. Nano Energy, 2020, 69, 104412.	8.2	54
53	Tuning Magnetism in Zigzag ZnO Nanoribbons by Transverse Electric Fields. ACS Nano, 2010, 4, 2124-2128.	7.3	52
54	Linear strain-gradient effect on the energy bandgap in bent CdS nanowires. Nano Research, 2011, 4, 308-314.	5.8	51

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55	Novel Excitonic Solar Cells in Phosphoreneâ€“TiO₂ Heterostructures with Extraordinary Charge Separation Efficiency. Journal of Physical Chemistry Letters, 2016, 7, 1880-1887.	2.1	51
56	Controlled growth of atomically thin MoSe ₂ films and nanoribbons by chemical vapor deposition. 2D Materials, 2019, 6, 025002.	2.0	51
57	Rational Electronic and Structural Designs Advance BiCuSeO Thermoelectrics. Advanced Functional Materials, 2021, 31, 2101289.	7.8	48
58	Stacking-Dependent Interlayer Magnetic Coupling in 2D CrI₃/CrGeTe₃ Nanostructures for Spintronics. ACS Applied Nano Materials, 2020, 3, 1282-1288.	2.4	47
59	Proposed two-dimensional topological insulator in SiTe. Physical Review B, 2016, 94, .	1.1	45
60	2D Janus Transition Metal Dichalcogenides: Properties and Applications. Physica Status Solidi (B): Basic Research, 2022, 259, .	0.7	44
61	Layered Grapheneâ€“Hexagonal BN Nanocomposites: Experimentally Feasible Approach to Chargeâ€Induced Switchable CO₂ Capture. ChemSusChem, 2015, 8, 2987-2993.	3.6	43
62	Electric-Field- and Hydrogen-Passivation-Induced Band Modulations in Armchair ZnO Nanoribbons. Journal of Physical Chemistry C, 2010, 114, 1326-1330.	1.5	42
63	Tension-induced phase transition of single-layer molybdenum disulphide (MoS2) at low temperatures. Nanotechnology, 2014, 25, 295701.	1.3	42
64	Self-doped pâ€“n junctions in two-dimensional In₂X₃ van der Waals materials. Materials Horizons, 2020, 7, 504-510.	6.4	42
65	Conduction-band valley spin splitting in single-layer H- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">T</mml:mi><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">O</mml:mi></mml:mrow></mml:math>. Physical Review B, 2018, 97, .	1.1	41
66	Stacking orders induced direct band gap in bilayer MoSe2-WSe2 lateral heterostructures. Scientific Reports, 2016, 6, 31122.	1.6	39
67	Thermal Transport Along the Dislocation Line in Silicon Carbide. Physical Review Letters, 2014, 113, 124301.	2.9	38
68	Charge Modulation in Graphitic Carbon Nitride as a Switchable Approach to Highâ€Capacity Hydrogen Storage. ChemSusChem, 2015, 8, 3626-3631.	3.6	37
69	Two-dimensional ferroelectric topological insulators in functionalized atomically thin bismuth layers. Physical Review B, 2018, 97, .	1.1	37
70	Two dimensional boron nanosheets: synthesis, properties and applications. Physical Chemistry Chemical Physics, 2018, 20, 28964-28978.	1.3	37
71	Two-dimensional Janus van der Waals heterojunctions: A review of recent research progresses. Frontiers of Physics, 2021, 16, 1.	2.4	37
72	2D/2D Black Phosphorus/Nickel Hydroxide Heterostructures for Promoting Oxygen Evolution via Electronic Structure Modulation and Surface Reconstruction. Advanced Energy Materials, 2022, 12, .	10.2	37

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73	Enhanced sensitivity of MoSe₂ monolayer for gas adsorption induced by electric field. Journal of Physics Condensed Matter, 2019, 31, 445301.	0.7	35
74	Tetragonal bismuth bilayer: a stable and robust quantum spin hall insulator. 2D Materials, 2015, 2, 045010.	2.0	34
75	Two-dimensional topological insulators in group-11 chalcogenide compounds:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>M</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi width="0.28em" /><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:mi>M</mml:mi><mml:mo>=</mml:mo><mml:mi>Cu</mml:mi><mml:mo>,	11	34
76	Hydroxyl-Boosted Nitrogen Reduction Reaction: The Essential Role of Surface Hydrogen in Functionalized MXenes. ACS Applied Materials & Interfaces, 2021, 13, 14283-14290.	4.0	34
77	Negative Poisson Ratio in Two-Dimensional Tungsten Nitride: Synergistic Effect from Electronic and Structural Properties. Journal of Physical Chemistry Letters, 2020, 11, 9643-9648.	2.1	32
78	Encapsulated Silicene: A Robust Large-Gap Topological Insulator. ACS Applied Materials & Interfaces, 2015, 7, 19226-19233.	4.0	31
79	Multiferroic and Ferroic Topological Order in Ligand-Functionalized Germanene and Arsenene. Physical Review Applied, 2018, 10, .	1.5	31
80	Group 14 element-based non-centrosymmetric quantum spin Hall insulators with large bulk gap. Nano Research, 2015, 8, 3412-3420.	5.8	30
81	Tunable Surface Chemistry in Heterogeneous Bilayer Singleâ€Atom Catalysts for Electrocatalytic NO_x Reduction to Ammonia. Advanced Functional Materials, 2022, 32, .	7.8	30
82	Proximity enhanced quantum spin Hall state in graphene. Carbon, 2015, 87, 418-423.	5.4	29
83	Two dimensional ferroelectrics: Candidate for controllable physical and chemical applications. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2021, 11, e1496.	6.2	28
84	Tuning Magnetism of Metal Porphyrazine Molecules by a Ferroelectric In₂Se₃ Monolayer. ACS Applied Materials & Interfaces, 2020, 12, 39561-39566.	4.0	27
85	Catalysis based on ferroelectrics: controllable chemical reaction with boosted efficiency. Nanoscale, 2021, 13, 7096-7107.	2.8	27
86	Predicting New Two-Dimensional Pd₃(PS₄)₂ as an Efficient Photocatalyst for Water Splitting. Journal of Physical Chemistry C, 2018, 122, 21927-21932.	1.5	26
87	Deliberate Design of TiO₂ Nanostructures towards Superior Photovoltaic Cells. Chemistry - A European Journal, 2016, 22, 11357-11364.	1.7	25
88	Atomically thin NiB₆ monolayer: a robust Dirac material. Physical Chemistry Chemical Physics, 2019, 21, 617-622.	1.3	25
89	Strain engineering of selective chemical adsorption on monolayer black phosphorous. Applied Surface Science, 2020, 503, 144033.	3.1	25
90	Two-dimensional non-van der Waals magnetic layers: functional materials for potential device applications. Journal Physics D: Applied Physics, 2021, 54, 413001.	1.3	25

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91	2D ferroelectric devices: working principles and research progress. Physical Chemistry Chemical Physics, 2021, 23, 21376-21384.	1.3	25
92	Charge-modulated permeability and selectivity in graphdiyne for hydrogen purification. Molecular Simulation, 2016, 42, 573-579.	0.9	24
93	Multiferroic decorated Fe₂O₃ monolayer predicted from first principles. Nanoscale, 2020, 12, 14847-14852.	2.8	24
94	Screw dislocation induced phonon transport suppression in SiGe superlattices. Physical Review B, 2019, 100, .	1.1	23
95	In situ crystal-amorphous compositing inducing ultrahigh thermoelectric performance of p-type Bi0.5Sb1.5Te3 hybrid thin films. Nano Energy, 2020, 78, 105379.	8.2	23
96	Controlled growth of large-scale uniform 1Tâ€² MoTe₂ crystals with tunable thickness and their photodetector applications. Nanoscale Horizons, 2020, 5, 954-959.	4.1	22
97	Intrinsic triferroicity in a two-dimensional lattice. Physical Review B, 2021, 103, .	1.1	22
98	Charge carrier separation induced by intrinsic surface strain in pristine ZnO nanowires. Applied Physics Letters, 2010, 97, .	1.5	21
99	Theoretical investigation of calcium-decorated Î²12 boron sheet for hydrogen storage. Chemical Physics Letters, 2018, 695, 211-215.	1.2	21
100	Predicting multiple Dirac-cones and ultrahigh Fermi velocity in perovskiteR3Ì„cphase LaCuO₃. Journal of Materials Chemistry C, 2018, 6, 6132-6137.	2.7	21
101	Tunable band gap and magnetism in C2-(BN) sheets and ribbons. Chemical Physics Letters, 2012, 523, 98-103.	1.2	18
102	Nanowires with dislocations for ultralow lattice thermal conductivity. Physical Chemistry Chemical Physics, 2016, 18, 9888-9892.	1.3	18
103	Doubleâ€sided surface functionalization: An effective approach to stabilize and modulate the electronic structure of grapheneâ€like borophene. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 327-336.	8.5	18
104	Electrically Active Screw Dislocations in Helical ZnO and Si Nanowires and Nanotubes. ACS Nano, 2012, 6, 10042-10049.	7.3	17
105	Opening a band gap without breaking lattice symmetry: a new route toward robust graphene-based nanoelectronics. Nanoscale, 2014, 6, 7474.	2.8	16
106	Controllable magnetic correlation between two impurities by spin-orbit coupling in graphene. Scientific Reports, 2015, 5, 8943.	1.6	16
107	Local-Strain-Induced Charge Carrier Separation and Electronic Structure Modulation in Zigzag ZnO Nanotubes: Role of Built-In Polarization Electric Field. Journal of Physical Chemistry C, 2011, 115, 2381-2385.	1.5	15
108	H₂S Sensing and Splitting on Atomâ€Functionalized Carbon Nanotubes: A Theoretical Study. Advanced Theory and Simulations, 2018, 1, 1700033.	1.3	15

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109	Asymmetrically flexoelectric gating effect of Janus transition-metal dichalcogenides and their sensor applications. Journal of Materials Chemistry C, 2020, 8, 11457-11467.	2.7	15
110	Robust Magnetoelectric Effect in the Decorated Graphene/In₂Se₃ Heterostructure. ACS Applied Materials & Interfaces, 2021, 13, 3033-3039.	4.0	15
111	Hybrid W-shaped graphene nanoribbons: Distinct electronic and transport properties. Journal of Applied Physics, 2011, 110, 124312.	1.1	14
112	High-mobility anisotropic transport in few-layer Î³-B₂₈films. Nanoscale, 2016, 8, 20111-20117.	2.8	14
113	2D Metal Oxides: Twoâ€Dimensional Metal Oxide Nanomaterials for Nextâ€Generation Rechargeable Batteries (Adv. Mater. 48/2017). Advanced Materials, 2017, 29, 1770344.	11.1	14
114	Two-dimensional functional materials: from properties to potential applications. International Journal of Smart and Nano Materials, 2020, 11, 247-264.	2.0	14
115	Intrinsic Charge Separation and Tunable Electronic Band Gap of Armchair Graphene Nanoribbons Encapsulated in a Double-Walled Carbon Nanotube. Journal of Physical Chemistry Letters, 2013, 4, 1328-1333.	2.1	13
116	Versatile two-dimensional stanene-based membrane for hydrogen purification. International Journal of Hydrogen Energy, 2017, 42, 5577-5583.	3.8	13
117	Lateral and Vertical MoSe₂â€“MoS₂ Heterostructures via Epitaxial Growth: Triggered by High-Temperature Annealing and Precursor Concentration. Journal of Physical Chemistry Letters, 2019, 10, 5027-5035.	2.1	13
118	High efficient arsenic removal by In-layer sulphur of layered double hydroxide. Journal of Colloid and Interface Science, 2022, 608, 2358-2366.	5.0	13
119	Emergent properties and trends of a new class of carbon nanocomposites: graphene nanoribbons encapsulated in a carbon nanotube. Nanoscale, 2013, 5, 3306.	2.8	12
120	Electrostatic properties of two-dimensional WSe2 nanostructures. Journal of Applied Physics, 2016, 119, .	1.1	12
121	Intertwined ferroelectricity and topological state in two-dimensional multilayer. Npj Computational Materials, 2021, 7, .	3.5	12
122	Electrochemical sensor for the discrimination of bilirubin in real human blood based on Au nanoparticles/ tetrathiafulvalene â€“carboxylate functionalized reduced graphene oxide 0D-2D heterojunction. Analytica Chimica Acta, 2019, 1072, 46-53.	2.6	11
123	Highly effective and selective molecular nanowire catalysts for hydrogen and ammonia synthesis. Journal of Materials Chemistry A, 2020, 8, 26075-26084.	5.2	11
124	Enhanced Hardness in Transition-Metal Monocarbides via Optimal Occupancy of Bonding Orbitals. ACS Applied Materials & Interfaces, 2021, 13, 14365-14376.	4.0	11
125	Hybrid Density Functional Calculations of Formic Acid on Anatase TiO2(101) Surfaces. Journal of Physical Chemistry C, 2017, 121, 17417-17420.	1.5	10
126	Modifying optical properties of ZnO nanowires via strain-gradient. Frontiers of Physics, 2013, 8, 509-515.	2.4	9

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127	Calculations of helium separation via uniform pores of stanene-based membranes. Beilstein Journal of Nanotechnology, 2015, 6, 2470-2476.	1.5	9
128	First principles study of trirutile magnesium bismuth oxide: Ideal bandgap for photovoltaics, strain-mediated band-inversion and semiconductor-to-semimetal transition. Computational Materials Science, 2018, 149, 158-161.	1.4	9
129	Strain robust spin gapless semiconductors/half-metals in transition metal embedded MoSe₂ monolayer. Journal of Physics Condensed Matter, 2020, 32, 365305.	0.7	9
130	Controllable epitaxial growth of MoSe₂â€“MoS₂ lateral heterostructures with tunable electrostatic properties. Nanotechnology, 2018, 29, 484003.	1.3	8
131	Robust staggered band alignment in one-dimensional van der Waals heterostructures: binary compound nanoribbons in nanotubes. Journal of Materials Chemistry C, 2019, 7, 3829-3836.	2.7	8
132	2D auxetic material with intrinsic ferromagnetism: a copper halide (CuCl₂) monolayer. Physical Chemistry Chemical Physics, 2021, 23, 22078-22085.	1.3	7
133	Electronic and effective mass modulation in 2D BCN by strain engineering. Nanotechnology, 2020, 31, 455702.	1.3	7
134	Charging assisted structural phase transitions in monolayer InSe. Physical Chemistry Chemical Physics, 2017, 19, 22502-22508.	1.3	6
135	Tunable quantum order in bilayer Bi2Te3: Stacking dependent quantum spin Hall states. Applied Physics Letters, 2018, 112, 243103.	1.5	6
136	Predicting ultrafast Dirac transport channel at the one-dimensional interface of the two-dimensional coplanar <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ZnO</mml:mi><mml:mo>/</mml:mo><mml:mi>Mo</mml:mi><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> heterostructure. Physical Review B, 2019, 99, .	1.1	6
137	Tensile Performance of Polymer Nanocomposites with Randomly Dispersed Carbon Nanothreads. Macromolecules, 2021, 54, 11486-11496.	2.2	6
138	Stacking-Dependent Interlayer Ferroelectric Coupling and MoirÃ© Domains in a Twisted AgBiP₂Se₆ Bilayer. Journal of Physical Chemistry Letters, 2022, 13, 2027-2032.	2.1	6
139	Superhigh moduli and tension-induced phase transition of monolayer gamma-boron at finite temperatures. Scientific Reports, 2016, 6, 23233.	1.6	5
140	First-principles thermodynamics and experimental study of interface oxidation in Ni/Ni₃Al structures. Physical Chemistry Chemical Physics, 2019, 21, 18316-18327.	1.3	5
141	Enhanced stability and stacking dependent magnetic/electronic properties of 2D monolayer FeTiO₃ on a Ti₂CO₂ substrate. Journal of Materials Chemistry C, 2019, 7, 15308-15314.	2.7	5
142	Intercalation-Induced Disintegrated Layer-By-Layer Growth of Ultrathin Ternary Mo(Te_{1â€“x}S_x)₂ Plates. ACS Applied Materials & Interfaces, 2020, 12, 30980-30989.	4.0	5
143	Mechanical properties of CNT-reinforced Ni3Al composites: the role of chirality, temperature, and volume fraction. Journal of Physics Condensed Matter, 2020, 32, 205301.	0.7	5
144	Computational Investigation of Orderly Doped Transition Metal Dichalcogenides: Implications for Nanoscale Optoelectronic Devices. ACS Applied Nano Materials, 2022, 5, 3824-3831.	2.4	5

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145	MAXâ€phase Derived Tin Diselenide for 2D/2D Heterostructures with Ultralow Surface/Interface Transport Barriers toward Liâ€/Naâ€ions Storage. Small Methods, 2022, 6, .	4.6	5
146	Ferroelectric Controlled Gas Adsorption in Doped Graphene/In 2 Se 3 Heterostructure. Advanced Materials Technologies, 0, , 2100463.	3.0	4
147	Buckling of blue phosphorus nanotubes under axial compression: Insights from molecular dynamics simulations. Journal of Applied Physics, 2020, 127, 014301.	1.1	3
148	Strain-tuned magnetism and half-metal to metal transition in defective BCN monolayer. Journal of Physics Condensed Matter, 2021, 33, 235502.	0.7	3
149	Exceptional Deformability of Wurtzite Zinc Oxide Nanowires with Growth Axial Stacking Faults. Nano Letters, 2021, 21, 4327-4334.	4.5	3
150	Mechanical Behaviors in Janus Transition-Metal Dichalcogenides: A Molecular Dynamics Simulation. Nanomaterials, 2022, 12, 1910.	1.9	3
151	Controllable Valley Polarization and Strain Modulation in 2D 2Hâ€“VS2/CuInP2Se6 Heterostructures. Nanomaterials, 2022, 12, 2461.	1.9	3
152	Mechano-Ferroelectric Coupling: Stabilization Enhancement and Polarization Switching in Bent AgBiP2Se6 Monolayer. Nanoscale Horizons, 2021, 6, 971-978.	4.1	2
153	Atomistic Insights on the Rheological Property of Polycaprolactone Composites with the Addition of Graphene. Advanced Materials Technologies, 0, , 2100507.	3.0	2
154	Stable valley-layer coupling and design principle in 2D lattice. Applied Physics Letters, 2021, 119, 073101.	1.5	2
155	Passivation of Transition Metal Dichalcogenides Monolayers with a Surfaceâ€Confined Atomically Thick Sulfur Layer. Small Structures, 2022, 3, .	6.9	2
156	Revealing the Mechanical Bending Mechanisms of Single-Crystalline Rutile TiO₂ Nanowires Near Room Temperature: Implications for Nanostructured Semiconductors. ACS Applied Nano Materials, 2021, 4, 10354-10359.	2.4	1
157	Progress of two-dimensional ferroelectrics in physical and chemical applications. Chinese Science Bulletin, 2021, 66, 580-590.	0.4	1
158	Cover Image, Volume 11, Issue 2. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2021, 11, e1522.	6.2	0
159	Ferroelectric Controlled Gas Adsorption in Doped Graphene/In₂Se₃ Heterostructure (Adv. Mater. Technol. 4/2022). Advanced Materials Technologies, 2022, 7, .	3.0	0