Recent Advances in Ultrathin Two-Dimensional Nanom

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Citation Report

#	ARTICLE	IF	CITATIONS
3	Preparation of Ultrathin Twoâ€Dimensional Ti <sub><i>x</i></sub> C <sub><i>x</i></sub> Nanosheets as Highly Efficient Photothermal Agents. Angewandte Chemie - International Edition, 2017, 56, 7842-7846.	13.8	59
4	Preparation of Ultrathin Twoâ€Dimensional Ti <sub><i>x</i></sub> Ta <sub>1â°'<i>x</i></sub> S <sub><i>y</i></sub> O <sub><i>z</i></sub> Nanosheets as Highly Efficient Photothermal Agents. Angewandte Chemie, 2017, 129, 7950-7954.	2.0	11
5	Benzyl viologen-assisted simultaneous exfoliation and n-doping of MoS <sub>2</sub> nanosheets via a solution process. Journal of Materials Chemistry C, 2017, 5, 5395-5401.	5.5	12
6	Selfâ€Optimization of the Active Site of Molybdenum Disulfide by an Irreversible Phase Transition during Photocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2017, 56, 7610-7614.	13.8	221
7	Selfâ€Optimization of the Active Site of Molybdenum Disulfide by an Irreversible Phase Transition during Photocatalytic Hydrogen Evolution. Angewandte Chemie, 2017, 129, 7718-7722.	2.0	61
8	Kinetically Controlled Layerâ€byâ€Layer Stacking of Metal Oxide 2D Nanosheets. Angewandte Chemie - International Edition, 2017, 56, 7093-7096.	13.8	25
9	High-quality single-layer nanosheets of MS $<$ sub $>$ 2 $<$ /sub $>$ (M = Mo, Nb, Ta, Ti) directly exfoliated from AMS $<$ sub $>$ 2 $<$ /sub $>$ (A = Li, Na, K) crystals. Journal of Materials Chemistry C, 2017, 5, 5977-5983.	5.5	35
10	Kinetically Controlled Layerâ€byâ€Layer Stacking of Metal Oxide 2D Nanosheets. Angewandte Chemie, 2017, 129, 7199-7202.	2.0	10
11	Metal–Organicâ€Compoundâ€Modified MoS <sub>2</sub> with Enhanced Solubility for Highâ€Performance Perovskite Solar Cells. ChemSusChem, 2017, 10, 2869-2874.	6.8	50
12	Rapid mass production of two-dimensional metal oxides and hydroxides via the molten salts method. Nature Communications, 2017, 8, 15630.	12.8	258
13	A Generalized Strategy for the Synthesis of Largeâ€Size Ultrathin Twoâ€Dimensional Metal Oxide Nanosheets. Angewandte Chemie, 2017, 129, 8892-8896.	2.0	22
14	A Generalized Strategy for the Synthesis of Largeâ€Size Ultrathin Twoâ€Dimensional Metal Oxide Nanosheets. Angewandte Chemie - International Edition, 2017, 56, 8766-8770.	13.8	135
15	Molybdenum Disulfide–Black Phosphorus Hybrid Nanosheets as a Superior Catalyst for Electrochemical Hydrogen Evolution. Nano Letters, 2017, 17, 4311-4316.	9.1	211
16	Vertical Growth of 2D Amorphous FePO <sub>4</sub> Nanosheet on Ni Foam: Outer and Inner Structural Design for Superior Water Splitting. Advanced Materials, 2017, 29, 1704574.	21.0	278
17	A 2D self-assembled MoS <sub>2</sub> /ZnIn <sub>2</sub> S <sub>4</sub> heterostructure for efficient photocatalytic hydrogen evolution. Nanoscale, 2017, 9, 18290-18298.	5.6	121
18	Ultrathin molybdenum boride films for highly efficient catalysis of the hydrogen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 23471-23475.	10.3	104
19	Intercalating copper into layered TaS <sub>2</sub> van der Waals gaps. RSC Advances, 2017, 7, 46699-46703.	3.6	7
20	Recent advance in MXenes: A promising 2D material for catalysis, sensor and chemical adsorption. Coordination Chemistry Reviews, 2017, 352, 306-327.	18.8	484

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21	Two-Dimensional N,S-Codoped Carbon/Co <sub>9</sub> S <sub>8</sub> Catalysts Derived from Co(OH) <sub>2</sub> Nanosheets for Oxygen Reduction Reaction. ACS Applied Materials & Amp; Interfaces, 2017, 9, 36755-36761.	8.0	45
22	Silk fibroin-assisted exfoliation and functionalization of transition metal dichalcogenide nanosheets for antibacterial wound dressings. Nanoscale, 2017, 9, 17193-17198.	5.6	69
23	Atomically thin non-layered nanomaterials for energy storage and conversion. Chemical Society Reviews, 2017, 46, 7338-7373.	38.1	162
24	Recent progress in boron nanomaterials. Science and Technology of Advanced Materials, 2017, 18, 780-804.	6.1	70
25	Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> nanosquares@ultrathin carbon nanofilms on a large scale with enhanced properties in lithium-ion batteries. RSC Advances, 2017, 7, 48678-48682.	3.6	3
26	Atomic mechanism for the growth of wafer-scale single-crystal graphene: theoretical perspective and scanning tunneling microscopy investigations. 2D Materials, 2017, 4, 042002.	4.4	11
27	Two-dimensional nanomaterials for photocatalytic CO <sub>2</sub> reduction to solar fuels. Sustainable Energy and Fuels, 2017, 1, 1875-1898.	4.9	156
28	Single-band negative differential resistance in metallic armchair MoS <sub>2</sub> nanoribbons. Journal Physics D: Applied Physics, 2017, 50, 465302.	2.8	8
29	Anthracene-assisted inverse transport growth and superconductivity at 3.3 K in unsupported ultrathin {110} Nb and {0001} NbSe2nanoplates. Journal of Materials Chemistry C, 2017, 5, 9545-9551.	5.5	10
30	The Enhanced CO Tolerance of Platinum Supported on FeP Nanosheet for Superior Catalytic Activity Toward Methanol Oxidation. Electrochimica Acta, 2017, 254, 36-43.	5.2	44
31	Facile preparation of two-dimensional Bi2MoO6@Ag2MoO4 core-shell composite with enhanced visible light photocatalytic activity. Journal of Alloys and Compounds, 2017, 729, 100-108.	5.5	46
32	Two-dimensional metal phosphorus trisulfide nanosheet with solar hydrogen-evolving activity. Nano Energy, 2017, 40, 673-680.	16.0	91
33	Synthetic Nanosheets of Natural van der Waals Heterostructures. Angewandte Chemie, 2017, 129, 14753-14758.	2.0	11
34	Synthetic Nanosheets of Natural van der Waals Heterostructures. Angewandte Chemie - International Edition, 2017, 56, 14561-14566.	13.8	33
35	Cadmium Chalcogenide Nanoâ€Heteroplatelets: Creating Advanced Nanostructured Materials by Shell Growth, Substitution, and Attachment. Small, 2017, 13, 1702300.	10.0	35
36	Layer Structured Materials for Advanced Energy Storage and Conversion. Small, 2017, 13, 1701649.	10.0	129
37	3D self-assembly of ultrafine molybdenum carbide confined in N-doped carbon nanosheets for efficient hydrogen production. Nanoscale, 2017, 9, 15895-15900.	5.6	45
38	Efficient Photocatalytic Hydrogen Evolution via Band Alignment Tailoring: Controllable Transition from Typeâ€I to Typeâ€I. Small, 2017, 13, 1702163.	10.0	47

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39	Two-dimensional metal–organic frameworks with high oxidation states for efficient electrocatalytic urea oxidation. Chemical Communications, 2017, 53, 10906-10909.	4.1	328
40	Ultrathin Cobaltâ€Based Metal–Organic Framework Nanosheets with Both Metal and Ligand Redox Activities for Superior Lithium Storage. Chemistry - A European Journal, 2017, 23, 15984-15990.	3.3	77
41	Exploitation of the Largeâ€Area Basal Plane of MoS <sub>2</sub> and Preparation of Bifunctional Catalysts through Onâ€Surface Selfâ€Assembly. Advanced Science, 2017, 4, 1700356.	11.2	9
42	Self-Supported Nickel Iron Layered Double Hydroxide-Nickel Selenide Electrocatalyst for Superior Water Splitting Activity. ACS Applied Materials & Samp; Interfaces, 2017, 9, 33766-33774.	8.0	257
43	Two-dimensional black phosphorus: Synthesis, modification, properties, and applications. Materials Science and Engineering Reports, 2017, 120, 1-33.	31.8	130
44	Nanosheets of Two-Dimensional Magnetic and Conducting Fe(II)/Fe(III) Mixed-Valence Metal–Organic Frameworks. ACS Applied Materials & Ditterfaces, 2017, 9, 26210-26218.	8.0	89
45	Advancing Biocapture Substrates via Chemical Lift-Off Lithography. Chemistry of Materials, 2017, 29, 6829-6839.	6.7	24
46	Ultrathin Twoâ€Dimensional Multinary Layered Metal Chalcogenide Nanomaterials. Advanced Materials, 2017, 29, 1701392.	21.0	242
47	Synthesis of WO <sub><i>n</i></sub> â€WX <sub>2</sub> ( <i>n</i> =2.7, 2.9; X=S, Se) Heterostructures for Highly Efficient Green Quantum Dot Lightâ€Emitting Diodes. Angewandte Chemie, 2017, 129, 10622-10626.	2.0	7
48	Synthesis of WO <sub><i>n</i></sub> â€WX <sub>2</sub> ( <i>n</i> =2.7, 2.9; X=S, Se) Heterostructures for Highly Efficient Green Quantum Dot Lightâ€Emitting Diodes. Angewandte Chemie - International Edition, 2017, 56, 10486-10490.	13.8	21
49	Spinels: Controlled Preparation, Oxygen Reduction/Evolution Reaction Application, and Beyond. Chemical Reviews, 2017, 117, 10121-10211.	47.7	1,157
50	Simultaneous Noncovalent Modification and Exfoliation of 2D Carbon Nitride for Enhanced Electrochemiluminescent Biosensing. Journal of the American Chemical Society, 2017, 139, 11698-11701.	13.7	247
51	Cryo-mediated exfoliation and fracturing of layered materials into 2D quantum dots. Science Advances, 2017, 3, e1701500.	10.3	91
52	van der Waals Layered Materials: Opportunities and Challenges. ACS Nano, 2017, 11, 11803-11830.	14.6	394
53	Microwave-assisted rapid synthesis of graphene-analogue hexagonal boron nitride (h-BN) nanosheets and their application for the ultrafast and selective adsorption of cationic dyes from aqueous solutions. RSC Advances, 2017, 7, 53984-53995.	3.6	42
54	Synthesis of lithium metal silicates for lithium ion batteries. Chinese Chemical Letters, 2017, 28, 2195-2206.	9.0	19
55	Catalytically Active Boron Nitride in Acetylene Hydrochlorination. ACS Catalysis, 2017, 7, 8572-8577.	11.2	54
56	General and Scalable Solidâ€State Synthesis of 2D MPS <sub>3</sub> (M = Fe, Co, Ni) Nanosheets and Tuning Their Li/Na Storage Properties. Small Methods, 2017, 1, 1700304.	8.6	90

#	Article	IF	CITATIONS
57	Design, Synthesis, and Surface Modification of Materials Based on Transitionâ€Metal Dichalcogenides for Biomedical Applications. Small Methods, 2017, 1, 1700220.	8.6	86
58	Design, controlled synthesis, and properties of 2D CeO <sub>2</sub> /NiO heterostructure assemblies. CrystEngComm, 2017, 19, 7339-7346.	2.6	18
59	Achieving highly uniform two-dimensional PbI 2 flakes for photodetectors via space confined physical vapor deposition. Science Bulletin, 2017, 62, 1654-1662.	9.0	102
60	Analysis of graphene-like activated carbon derived from rice straw for application in supercapacitor. Chinese Chemical Letters, 2017, 28, 2290-2294.	9.0	51
61	Latest advances in supercapacitors: from new electrode materials to novel device designs. Chemical Society Reviews, 2017, 46, 6816-6854.	38.1	1,567
62	Engineering transition metal phosphide nanomaterials as highly active electrocatalysts for water splitting. Dalton Transactions, 2017, 46, 16770-16773.	3.3	28
63	Crystal lattice distortion in ultrathin Co(OH) <sub>2</sub> nanosheets inducing elongated Coâ€"O <sub>OH</sub> bonds for highly efficient oxygen evolution reaction. Green Chemistry, 2017, 19, 5809-5817.	9.0	43
64	High Photocatalytic Activity of Heptazine-Based g-C <sub>3</sub> N <sub>4</sub> /SnS <sub>2</sub> Heterojunction and Its Origin: Insights from Hybrid DFT. Journal of Physical Chemistry C, 2017, 121, 25827-25835.	3.1	142
65	Understanding the high-electrocatalytic performance of two-dimensional MoS <sub>2</sub> nanosheets and their composite materials. Journal of Materials Chemistry A, 2017, 5, 24540-24563.	10.3	183
66	Creation and bioapplications of porous organic polymer materials. Journal of Materials Chemistry B, 2017, 5, 9278-9290.	5.8	82
67	Electric field-modulated data storage in bilayer InSe. Journal of Materials Chemistry C, 2017, 5, 12228-12234.	5.5	49
68	Homogenous Dispersion of MoS <sub>2</sub> Nanosheets in Polyindole Matrix at Air–Water Interface Assisted by Langmuir Technique. Langmuir, 2017, 33, 13572-13580.	3.5	24
69	Analogous self-assembly and crystallization: a chloride-directed orientated self-assembly of Cu nanoclusters and subsequent growth of Cu <sub>2â°'x</sub> S nanocrystals. Nanoscale, 2017, 9, 10335-10343.	5.6	6
70	Fe4S4 Cubane Type Cluster Immobilized on a Graphene Support: A High Performance H2 Evolution Catalysis in Acidic Water. Scientific Reports, 2017, 7, 16948.	3.3	7
71	Construction of Z-scheme Ag3PO4/Bi2WO6 composite with excellent visible-light photodegradation activity for removal of organic contaminants. Chinese Journal of Catalysis, 2017, 38, 2021-2029.	14.0	117
72	Production of monolayer-rich gold-decorated 2Hâ $\in$ "WS2 nanosheets by defect engineering. Npj 2D Materials and Applications, 2017, 1, .	7.9	22
73	Enhancing Photonic Spin Hall Effect in the Surface Plasmon Resonance Structure Covered by the Graphene–MoS2 Heterostructure. IEEE Photonics Journal, 2017, 9, 1-10.	2.0	11
74	One-Step Facile Synthesis of Aptamer-Modified Graphene Oxide for Highly Specific Enrichment of Human A-Thrombin in Plasma. Sensors, 2017, 17, 1986.	3.8	5

#	Article	IF	Citations
75	Patterning of supported gold monolayers via chemical lift-off lithography. Beilstein Journal of Nanotechnology, 2017, 8, 2648-2661.	2.8	16
76	Solution Growth of Two-Dimensional Bi2Se3 Nanosheets for Two-Color All-Optical Switching. Materials, 2017, 10, 1332.	2.9	8
77	Subâ€3 nm Ultrafine Monolayer Layered Double Hydroxide Nanosheets for Electrochemical Water Oxidation. Advanced Energy Materials, 2018, 8, 1703585.	19.5	274
78	Electrochemical Exfoliation of Pillared‣ayer Metal–Organic Framework to Boost the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2018, 57, 4632-4636.	13.8	275
79	A polyoxometalate-functionalized two-dimensional titanium carbide composite MXene for effective cancer theranostics. Nano Research, 2018, 11, 4149-4168.	10.4	112
80	Ultrathin two-dimensional materials for photo- and electrocatalytic hydrogen evolution. Materials Today, 2018, 21, 749-770.	14.2	228
81	Two-dimensional transition metal dichalcogenides: interface and defect engineering. Chemical Society Reviews, 2018, 47, 3100-3128.	38.1	604
82	Interfacial engineering in graphene bandgap. Chemical Society Reviews, 2018, 47, 3059-3099.	38.1	153
83	"Stepwise Extraction―strategy-based injectable bioresponsive composite implant for cancer theranostics. Biomaterials, 2018, 166, 38-51.	11.4	26
84	Stable methylammonium-intercalated 1T′-MoS <sub>2</sub> for efficient electrocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 5613-5617.	10.3	38
85	Synthesis of ultrathin two-dimensional organic–inorganic hybrid perovskite nanosheets for polymer field-effect transistors. Journal of Materials Chemistry C, 2018, 6, 3945-3950.	5.5	36
86	2D Black Phosphorus: from Preparation to Applications for Electrochemical Energy Storage. Advanced Science, 2018, 5, 1700491.	11.2	174
87	Metalâ€Free Dehydrogenation of Nâ€Heterocycles by Ternary <i>h</i> à€BCN Nanosheets with Visible Light. Angewandte Chemie - International Edition, 2018, 57, 5487-5491.	13.8	146
88	Light and Matter Interaction in Two-Dimensional Atomically Thin Films. Bulletin of the Chemical Society of Japan, 2018, 91, 761-771.	3.2	22
89	Recent Advances on Nonâ€precious Metal Porous Carbonâ€based Electrocatalysts for Oxygen Reduction Reaction. ChemElectroChem, 2018, 5, 1775-1785.	3.4	146
90	Spatially controlled doping of two-dimensional SnS2 through intercalation for electronics. Nature Nanotechnology, 2018, 13, 294-299.	31.5	269
91	Nucleation front instability in two-dimensional (2D) nanosheet gadolinium-doped cerium oxide (CGO) formation. CrystEngComm, 2018, 20, 1405-1410.	2.6	5
92	Recent Developments in 2D Nanomaterials for Chemiresistive-Type Gas Sensors. Electronic Materials Letters, 2018, 14, 221-260.	2.2	197

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93	Defect engineering of two-dimensional materials for efficient electrocatalysis. Journal of Materiomics, 2018, 4, 95-107.	5.7	79
94	Shining Light on New-Generation Two-Dimensional Materials from a Computational Viewpoint. Journal of Physical Chemistry Letters, 2018, 9, 1605-1612.	4.6	22
95	Marriage of artificial catalase and black phosphorus nanosheets for reinforced photodynamic antitumor therapy. Journal of Materials Chemistry B, 2018, 6, 2057-2064.	5.8	58
96	Confinement of Aggregation-Induced Emission Molecular Rotors in Ultrathin Two-Dimensional Porous Organic Nanosheets for Enhanced Molecular Recognition. Journal of the American Chemical Society, 2018, 140, 4035-4046.	13.7	119
97	Metalâ€Free Dehydrogenation of Nâ€Heterocycles by Ternary <i>h</i> à€BCN Nanosheets with Visible Light. Angewandte Chemie, 2018, 130, 5585-5589.	2.0	40
98	A sensitive Potentiometric resolved ratiometric Photoelectrochemical aptasensor for Escherichia coli detection fabricated with non-metallic nanomaterials. Biosensors and Bioelectronics, 2018, 106, 57-63.	10.1	97
99	Large-scale controlled synthesis of porous two-dimensional nanosheets for the hydrogen evolution reaction through a chemical pathway. Nanoscale, 2018, 10, 6168-6176.	5.6	23
100	Electrochemical Exfoliation of Pillaredâ€Layer Metal–Organic Framework to Boost the Oxygen Evolution Reaction. Angewandte Chemie, 2018, 130, 4722-4726.	2.0	86
101	Positive carbon dots with dual roles of nanoquencher and reference signal for the ratiometric fluorescence sensing of DNA. Sensors and Actuators B: Chemical, 2018, 264, 193-201.	7.8	42
102	Uniform Ordered Two-Dimensional Mesoporous TiO <sub>2</sub> Nanosheets from Hydrothermal-Induced Solvent-Confined Monomicelle Assembly. Journal of the American Chemical Society, 2018, 140, 4135-4143.	13.7	242
103	Novel structured transition metal dichalcogenide nanosheets. Chemical Society Reviews, 2018, 47, 3301-3338.	38.1	303
104	Two-dimensional GeAs with a visible range band gap. Journal of Materials Chemistry A, 2018, 6, 9089-9098.	10.3	55
105	Frontâ€Endâ€ofâ€Line Integration of Graphene Oxide for Grapheneâ€Based Electrical Platforms. Advanced Materials Technologies, 2018, 3, 1700318.	5.8	16
106	A facile method for the synthesis of graphene-like 2D metal oxides and their excellent catalytic application in the hydrogenation of nitroarenes. Journal of Materials Chemistry A, 2018, 6, 9948-9961.	10.3	33
107	Rylene annulated phthalocyanine: a fully conjugated block for the construction of a supramolecular two-dimensional framework. Chemical Communications, 2018, 54, 7294-7297.	4.1	8
108	Metastable MoS <sub>2</sub> : Crystal Structure, Electronic Band Structure, Synthetic Approach and Intriguing Physical Properties. Chemistry - A European Journal, 2018, 24, 15942-15954.	3.3	133
109	Metallic Contact between MoS <sub>2</sub> and Ni via Au Nanoglue. Small, 2018, 14, e1704526.	10.0	32
110	Recent progress in ultrathin two-dimensional semiconductors for photocatalysis. Materials Science and Engineering Reports, 2018, 130, 1-39.	31.8	116

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111	Lanthanide Yb/Er co-doped semiconductor layered WSe <sub>2</sub> nanosheets with near-infrared luminescence at telecommunication wavelengths. Nanoscale, 2018, 10, 9261-9267.	5.6	62
112	Siligraphene as a promising anode material for lithium-ion batteries predicted from first-principles calculations. Nano Energy, 2018, 49, 67-76.	16.0	95
113	Circular Dichroism Control of Tungsten Diselenide (WSe <sub>2</sub> ) Atomic Layers with Plasmonic Metamolecules. ACS Applied Materials & Interfaces, 2018, 10, 15996-16004.	8.0	25
114	<i>Candida rugosa</i> lipase covalently immobilized on facilely-synthesized carbon nitride nanosheets as a novel biocatalyst. RSC Advances, 2018, 8, 14229-14236.	3.6	19
115	Surface Vacancy-Induced Switchable Electric Polarization and Enhanced Ferromagnetism in Monolayer Metal Trihalides. Nano Letters, 2018, 18, 2943-2949.	9.1	157
116	Multimetallic nanosheets: synthesis and applications in fuel cells. Chemical Society Reviews, 2018, 47, 6175-6200.	38.1	171
117	Hydrogenation of Fluorographite and Fluorographene: An Easy Way to Produce Highly Hydrogenated Graphene. Chemistry - A European Journal, 2018, 24, 8350-8360.	3.3	6
118	Defect-rich (Co–CoS <sub>2</sub> ) <sub>x</sub> @Co <sub>9</sub> S <sub>8</sub> nanosheets derived from monomolecular precursor pyrolysis with excellent catalytic activity for hydrogen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 7977-7987.	10.3	46
119	Ag-modified ultrathin Bi <sub>12</sub> O <sub>17</sub> Cl <sub>2</sub> nanosheets: photo-assisted Ag exfoliation synthesis and enhanced photocatalytic performance. Journal of Materials Chemistry A, 2018, 6, 9200-9208.	10.3	53
120	Photovoltaic high-performance broadband photodetector based on MoS2/Si nanowire array heterojunction. Solar Energy Materials and Solar Cells, 2018, 182, 272-280.	6.2	67
121	Controlling enzyme function through immobilisation on graphene, graphene derivatives and other two dimensional nanomaterials. Journal of Materials Chemistry B, 2018, 6, 3200-3218.	5.8	49
122	Embedding hydrophobic MoS 2 nanosheets within hydrophilic sodium alginate membrane for enhanced ethanol dehydration. Chemical Engineering Science, 2018, 185, 231-242.	3.8	35
123	Bottom-Up Fabrication of Ultrathin 2D Zr Metal–Organic Framework Nanosheets through a Facile Continuous Microdroplet Flow Reaction. Chemistry of Materials, 2018, 30, 3048-3059.	6.7	85
124	A general strategy for the synthesis of two-dimensional holey nanosheets as cathodes for superior energy storage. Journal of Materials Chemistry A, 2018, 6, 8374-8381.	10.3	27
125	Tunable ferroelectricity and anisotropic electric transport in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi><math>\hat{l}^2</math></mml:mi></mml:math> -GeSe. Physical Review B, 2018, 97, .	3.2	72
126	Superhierarchical Nickel–Vanadia Nanocomposites for Lithium Storage. ACS Applied Energy Materials, 2018, 1, 2056-2066.	5.1	9
127	A fluorescence and colorimetric dual-mode assay of alkaline phosphatase activity <i>via</i> destroying oxidase-like CoOOH nanoflakes. Journal of Materials Chemistry B, 2018, 6, 2843-2850.	5.8	92
128	A room-temperature near-infrared photodetector based on a MoS <sub>2</sub> /CdTe p–n heterojunction with a broadband response up to 1700 nm. Journal of Materials Chemistry C, 2018, 6, 4861-4865.	5.5	81

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129	In Situ Fabrication of Hierarchical MTW Zeolite via Nanoparticle Assembly by a Tailored Simple Organic Molecule. Chemistry - A European Journal, 2018, 24, 8133-8140.	3.3	7
130	The organic–2D transition metal dichalcogenide heterointerface. Chemical Society Reviews, 2018, 47, 3241-3264.	38.1	158
131	Sb <sub>2</sub> Te <sub>3</sub> and Its Superlattices: Optimization by Statistical Design. ACS Applied Materials & Samp; Interfaces, 2018, 10, 15040-15050.	8.0	23
132	Ultimate strength prediction of two-dimensional tri-axial braided composites based on an analytical laminate model. Journal of Reinforced Plastics and Composites, 2018, 37, 917-929.	3.1	8
133	Visualizing grain boundaries in monolayer MoSe2 using mild H2O vapor etching. Nano Research, 2018, 11, 4082-4089.	10.4	22
134	Vapor phase sulfurization synthesis of interlayer-expanded MoS2@C hollow nanospheres as a robust anode material for lithium-ion batteries. Journal of Alloys and Compounds, 2018, 745, 8-15.	5.5	27
135	Optically Switchable Photocatalysis in Ultrathin Black Phosphorus Nanosheets. Journal of the American Chemical Society, 2018, 140, 3474-3480.	13.7	210
136	Au nanoparticles on two-dimensional MoS <sub>2</sub> nanosheets as a photoanode for efficient photoelectrochemical miRNA detection. Analyst, The, 2018, 143, 1705-1712.	3.5	48
137	Epitaxial Growth of Flat Antimonene Monolayer: A New Honeycomb Analogue of Graphene. Nano Letters, 2018, 18, 2133-2139.	9.1	219
138	Photoelastic colloidal gel for a high-sensitivity strain sensor. Nanotechnology, 2018, 29, 175502.	2.6	1
139	Controllable Chemical Vapor Deposition Growth of Two-Dimensional Heterostructures. CheM, 2018, 4, 671-689.	11.7	84
140	Expanding the boundaries of metal deposition: High aspect ratio silver nanoplatelets created by merging nanobelts. Electrochimica Acta, 2018, 264, 233-243.	<b>5.</b> 2	16
141	Photogenerated charge transfer via interfacial internal electric field for significantly improved photocatalysis in direct Z-scheme oxygen-doped carbon nitrogen/CoAl-layered double hydroxide heterojunction. Applied Catalysis B: Environmental, 2018, 227, 530-540.	20.2	219
142	Highâ€Flux Membranes Based on the Covalent Organic Framework COFâ€LZU1 for Selective Dye Separation by Nanofiltration. Angewandte Chemie - International Edition, 2018, 57, 4083-4087.	13.8	584
143	Atomically Thin Two-Dimensional Solids: An Emerging Platform for CO <sub>2</sub> Electroreduction. ACS Energy Letters, 2018, 3, 624-633.	17.4	68
144	2D Intrinsic Ferromagnets from van der Waals Antiferromagnets. Journal of the American Chemical Society, 2018, 140, 2417-2420.	13.7	312
145	Sol–Gel-Derived 2D Nanostructures of Aluminum Hydroxide Acetate: Toward the Understanding of Nanostructure Formation. Journal of Physical Chemistry C, 2018, 122, 5141-5150.	3.1	15
146	A wafer-scale 1 nm Ni(OH) <sub>2</sub> nanosheet with superior electrocatalytic activity for the oxygen evolution reaction. Nanoscale, 2018, 10, 5054-5059.	5.6	31

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147	DFT study of structural and electronic properties of MoS2( $1\hat{a}^{*}x$ )Se2x alloy ( $x\hat{a}\in\%=\hat{a}\in\%$ 0.25). Journal of Applied Physics, 2018, 123, 161594.	2.5	11
148	Superior Selectivity and Sensitivity of C <sub>3</sub> N Sensor in Probing Toxic Gases NO <sub>2</sub> and SO <sub>2</sub> . IEEE Electron Device Letters, 2018, 39, 284-287.	3.9	108
149	2D Photovoltaic Devices: Progress and Prospects. Small Methods, 2018, 2, 1700294.	8.6	135
150	Thin CuO <sub>x</sub> -based nanosheets for efficient phenol removal benefitting from structural memory and ion exchange of layered double oxides. Journal of Materials Chemistry A, 2018, 6, 4167-4178.	10.3	34
151	Exploring Two-Dimensional Materials toward the Next-Generation Circuits: From Monomer Design to Assembly Control. Chemical Reviews, 2018, 118, 6236-6296.	47.7	410
152	Monolayered Silicon and Germanium Monopnictide Semiconductors: Excellent Stability, High Absorbance, and Strain Engineering of Electronic Properties. ACS Applied Materials & Interfaces, 2018, 10, 5133-5139.	8.0	89
153	Role of Interfaces in Two-Dimensional Photocatalyst for Water Splitting. ACS Catalysis, 2018, 8, 2253-2276.	11.2	773
154	Small stoichiometric (MoS <sub>2</sub> ) <sub>n</sub> clusters with the 1T phase. Physical Chemistry Chemical Physics, 2018, 20, 6365-6373.	2.8	29
155	Noble metal (Pt or Au)-doped monolayer MoS2 as a promising adsorbent and gas-sensing material to SO2, SOF2 and SO2F2: a DFT study. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	105
156	Photoluminescent two-dimensional SiC quantum dots for cellular imaging and transport. Nano Research, 2018, 11, 4074-4081.	10.4	38
157	Chemical Vapor Deposition Growth and Applications of Two-Dimensional Materials and Their Heterostructures. Chemical Reviews, 2018, 118, 6091-6133.	47.7	1,000
158	Few-layer NiPS <sub>3</sub> nanosheets as bifunctional materials for Li-ion storage and oxygen evolution reaction. Nanoscale, 2018, 10, 4890-4896.	5.6	82
159	Ce-Doped NiFe-Layered Double Hydroxide Ultrathin Nanosheets/Nanocarbon Hierarchical Nanocomposite as an Efficient Oxygen Evolution Catalyst. ACS Applied Materials & Diterfaces, 2018, 10, 6336-6345.	8.0	276
160	Enhancement of the selectivity of MXenes (M <sub>2</sub> C, M = Ti, V, Nb, Mo) <i>via</i> oxygen-functionalization: promising materials for gas-sensing and -separation. Physical Chemistry Chemical Physics, 2018, 20, 6073-6082.	2.8	99
161	Atomically Intercalating Tin Ions into the Interlayer of Molybdenum Oxide Nanobelt toward Long-Cycling Lithium Battery. Journal of Physical Chemistry Letters, 2018, 9, 817-824.	4.6	39
162	Improving the catalytic activity of amorphous molybdenum sulfide for hydrogen evolution reaction using polydihydroxyphenylalanine modified MWCNTs. Applied Surface Science, 2018, 439, 343-349.	6.1	21
163	Porous silaphosphorene, silaarsenene and silaantimonene: a sweet marriage of Si and P/As/Sb. Journal of Materials Chemistry A, 2018, 6, 3738-3746.	10.3	14
164	Largeâ€Scale Fabrication of MoS <sub>2</sub> Ribbons and Their Lightâ€Induced Electronic/Thermal Properties: Dichotomies in the Structural and Defect Engineering. Advanced Functional Materials, 2018, 28, 1704863.	14.9	25

#	Article	IF	CITATIONS
165	Wearable energy sources based on 2D materials. Chemical Society Reviews, 2018, 47, 3152-3188.	38.1	226
166	Wasserâ∈Hochflussmembranen auf Basis der kovalenten organischen Gerüststruktur COFâ€LZU1 für die Farbstoffabtrennung durch Nanofiltration. Angewandte Chemie, 2018, 130, 4147-4151.	2.0	35
167	Structural Engineering of 2D Nanomaterials for Energy Storage and Catalysis. Advanced Materials, 2018, 30, e1706347.	21.0	297
168	lonic liquid auxiliary exfoliation of WS2 nanosheets and the enhanced effect of hollow gold nanospheres on their photoelectrochemical sensing towards human epididymis protein 4. Sensors and Actuators B: Chemical, 2018, 262, 982-990.	7.8	35
169	2D Nanomaterial Arrays for Electronics and Optoelectronics. Advanced Functional Materials, 2018, 28, 1706559.	14.9	101
170	Coupling of Bifunctional CoMnâ€Layered Double Hydroxide@Graphitic C <sub>3</sub> N <sub>4</sub> Nanohybrids towards Efficient Photoelectrochemical Overall Water Splitting. Chemistry - an Asian Journal, 2018, 13, 1045-1052.	3.3	135
171	Opacified graphene-doped silica aerogels with controllable thermal conductivity. Journal of Porous Materials, 2018, 25, 1697-1705.	2.6	27
172	Clayâ€Inspired MXeneâ€Based Electrochemical Devices and Photoâ€Electrocatalyst: Stateâ€ofâ€theâ€Art Progresses and Challenges. Advanced Materials, 2018, 30, e1704561.	21.0	431
173	Epitaxial growth of hybrid nanostructures. Nature Reviews Materials, 2018, 3, .	48.7	318
174	Engineering oxygen-containing and amino groups into two-dimensional atomically-thin porous polymeric carbon nitrogen for enhanced photocatalytic hydrogen production. Energy and Environmental Science, 2018, 11, 566-571.	30.8	304
175	Manipulating the Architecture of Atomically Thin Transition Metal (Hydr)oxides for Enhanced Oxygen Evolution Catalysis. ACS Nano, 2018, 12, 1878-1886.	14.6	57
176	Two-dimensional nanostructures for sodium-ion battery anodes. Journal of Materials Chemistry A, 2018, 6, 3284-3303.	10.3	224
177	Inâ€Plane Black Phosphorus/Dicobalt Phosphide Heterostructure for Efficient Electrocatalysis. Angewandte Chemie, 2018, 130, 2630-2634.	2.0	55
178	Zâ€Scheme Photocatalytic Water Splitting on a 2D Heterostructure of Black Phosphorus/Bismuth Vanadate Using Visible Light. Angewandte Chemie - International Edition, 2018, 57, 2160-2164.	13.8	506
179	Controlled synthesis of MgO with diverse basic sites and its CO2 capture mechanism under different adsorption conditions. Chemical Engineering Journal, 2018, 336, 710-720.	12.7	93
180	Graphite oxide electrical sensors are able to distinguish single nucleotide polymorphisms in physiological buffers. FlatChem, 2018, 7, 1-9.	5.6	5
181	Broadband Nonlinear Photoresponse of 2D TiS <sub>2</sub> for Ultrashort Pulse Generation and Allâ€Optical Thresholding Devices. Advanced Optical Materials, 2018, 6, 1701166.	7.3	248
182	Effect of graphene nanoplatelet edges on the iodide/triiodide redox reaction. Electrochemistry Communications, 2018, 87, 49-52.	4.7	3

#	Article	IF	CITATIONS
183	Photocatalytic activity of 3D flower-like MoS2 hemispheres. Materials Research Bulletin, 2018, 100, 249-253.	5.2	48
184	Recent progress in 2D group-VA semiconductors: from theory to experiment. Chemical Society Reviews, 2018, 47, 982-1021.	38.1	697
185	Wafer-scale synthesis of monolayer WS2 for high-performance flexible photodetectors by enhanced chemical vapor deposition. Nano Research, 2018, 11, 3371-3384.	10.4	190
186	Peroxidase-like activity of MoS <sub>2</sub> nanoflakes with different modifications and their application for H <sub>2</sub> O <sub>2</sub> and glucose detection. Journal of Materials Chemistry B, 2018, 6, 487-498.	5.8	130
187	Inâ€Plane Black Phosphorus/Dicobalt Phosphide Heterostructure for Efficient Electrocatalysis. Angewandte Chemie - International Edition, 2018, 57, 2600-2604.	13.8	209
188	Ultrathin nanosheets of cobalt-nickel hydroxides hetero-structure via electrodeposition and precursor adjustment with excellent performance for supercapacitor. Journal of Energy Chemistry, 2018, 27, 591-599.	12.9	74
189	Prussian Blue@MoS <sub>2</sub> Layer Composites as Highly Efficient Cathodes for Sodium―and Potassium―on Batteries. Advanced Functional Materials, 2018, 28, 1706125.	14.9	88
190	Reversible and fast Na-ion storage in MoO2/MoSe2 heterostructures for high energy-high power Na-ion capacitors. Energy Storage Materials, 2018, 12, 241-251.	18.0	117
191	Enhanced stability of smoothly electrodeposited amorphous Fe <sub>2</sub> O <sub>3</sub> @electrospun carbon nanofibers as self-standing anodes for lithium ion batteries. New Journal of Chemistry, 2018, 42, 1867-1878.	2.8	20
192	Extraction of nickel from NiFe-LDH into Ni <sub>2</sub> P@NiFe hydroxide as a bifunctional electrocatalyst for efficient overall water splitting. Chemical Science, 2018, 9, 1375-1384.	7.4	257
193	Tuning electronic and optical properties of arsenene/C <sub>3</sub> N van der Waals heterostructure by vertical strain and external electric field. Nanotechnology, 2018, 29, 075201.	2.6	89
194	Antimonene: A Novel 2D Nanomaterial for Supercapacitor Applications. Advanced Energy Materials, 2018, 8, 1702606.	19.5	153
195	Fabrication of two-dimensional (2D) ordered microsphere aligned by supramolecular self-assembly of Formyl-azobenzene and dipeptide. Journal of Colloid and Interface Science, 2018, 514, 491-495.	9.4	9
196	Tellurium: Fast Electrical and Atomic Transport along the Weak Interaction Direction. Journal of the American Chemical Society, 2018, 140, 550-553.	13.7	101
197	Covalently bonded 2D/2D O-g-C3N4/TiO2 heterojunction for enhanced visible-light photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2018, 237, 1130-1138.	20.2	129
198	Electrochemical Reaction Mechanism of the MoS <sub>2</sub> Electrode in a Lithium-Ion Cell Revealed by in Situ and Operando X-ray Absorption Spectroscopy. Nano Letters, 2018, 18, 1466-1475.	9.1	153
199	Synthesis of Wurtzite Cu2ZnSnS4 Nanosheets with Exposed High-Energy (002) Facets for Fabrication of Efficient Pt-Free Solar Cell Counter Electrodes. Scientific Reports, 2018, 8, 248.	3.3	30
200	Preparation of Highâ€Percentage 1Tâ€Phase Transition Metal Dichalcogenide Nanodots for Electrochemical Hydrogen Evolution. Advanced Materials, 2018, 30, 1705509.	21.0	341

#	Article	IF	CITATIONS
201	Ultrathin two-dimensional metallic nanomaterials. Materials Chemistry Frontiers, 2018, 2, 456-467.	5.9	73
202	Space-confined vapor deposition synthesis of two dimensional materials. Nano Research, 2018, 11, 2909-2931.	10.4	76
203	Coexistence of Co doping and strain on arsenene and antimonene: tunable magnetism and half-metallic behavior. RSC Advances, 2018, 8, 1320-1327.	3.6	24
204	The S-functionalized Ti <sub>3</sub> C <sub>2</sub> Mxene as a high capacity electrode material for Na-ion batteries: a DFT study. Nanoscale, 2018, 10, 3385-3392.	5.6	139
205	Tuning spin transport across two-dimensional organometallic junctions. Physical Review B, 2018, 97, .	3.2	2
206	Flexible ReS2 nanosheets/N-doped carbon nanofibers-based paper as a universal anode for alkali (Li, Na,) Tj ETQq1	10.78431 16.7	L4.rgBT /O
207	Two-dimensional nickel hydroxide/sulfides nanosheet as an efficient cocatalyst for photocatalytic H2 evolution over CdS nanospheres. Journal of Colloid and Interface Science, 2018, 514, 634-641.	9.4	37
208	Zâ€Scheme Photocatalytic Water Splitting on a 2D Heterostructure of Black Phosphorus/Bismuth Vanadate Using Visible Light. Angewandte Chemie, 2018, 130, 2182-2186.	2.0	356
209	NiSx Quantum Dots Accelerate Electron Transfer in Cd <sub>0.8</sub> Zn <sub>0.2</sub> S Photocatalytic System via an rGO Nanosheet "Bridge―toward Visible-Light-Driven Hydrogen Evolution. ACS Catalysis, 2018, 8, 1532-1545.	11,2	137
210	High Yield Exfoliation of WS <sub>2</sub> Crystals into 1–2 Layer Semiconducting Nanosheets and Efficient Photocatalytic Hydrogen Evolution from WS <sub>2</sub> /CdS Nanorod Composites. ACS Applied Materials & Diterfaces, 2018, 10, 2810-2818.	8.0	112
211	Electronic Structure and I-V Characteristics of InSe Nanoribbons. Nanoscale Research Letters, 2018, 13, 107.	5.7	12
212	Ultrathin Titanate Nanosheets/Graphene Films Derived from Confined Transformation for Excellent Na/K Ion Storage. Angewandte Chemie - International Edition, 2018, 57, 8540-8544.	13.8	170
213	Molecular Imprinting: Materials Nanoarchitectonics with Molecular Information. Bulletin of the Chemical Society of Japan, 2018, 91, 1075-1111.	3.2	215
214	Atomic-scale defects and electronic properties of a transferred synthesized MoS <sub>2</sub> monolayer. Nanotechnology, 2018, 29, 305703.	2.6	22
215	Half-metallicity in a honeycomb–kagome-lattice Mg <sub>3</sub> C <sub>2</sub> monolayer with carrier doping. Physical Chemistry Chemical Physics, 2018, 20, 14166-14173.	2.8	19
216	Evolution of Graphene Oxide and Graphene: From Imagination to Industrialization. ChemNanoMat, 2018, 4, 598-620.	2.8	80
217	CVD-grown monolayer MoS2 in bioabsorbable electronics and biosensors. Nature Communications, 2018, 9, 1690.	12.8	155
218	Development of functional black phosphorus nanosheets with remarkable catalytic and antibacterial performance. Nanoscale, 2018, 10, 10428-10435.	5.6	77

#	Article	IF	CITATIONS
219	Nanosheetâ€Assembled Hierarchical Carbon Nanoframeworks Bearing a Multiactive Center for Oxygen Reduction Reaction. Small Methods, 2018, 2, 1800068.	8.6	28
220	Metalâ€Free 2D/2D Phosphorene/g <sub>3</sub> N <sub>4</sub> Van der Waals Heterojunction for Highly Enhanced Visibleâ€Light Photocatalytic H <sub>2</sub> Production. Advanced Materials, 2018, 30, e1800128.	21.0	707
221	Half-metallicity and enhanced ferromagnetism in Li-adsorbed ultrathin chromium triiodide. Journal of Materials Chemistry C, 2018, 6, 5716-5720.	5.5	71
222	Harnessing electron-rich framework in cyclophosphazene derived hybrid nanoporous materials for organocatalytic C C bond formation and gas sorption applications. Journal of CO2 Utilization, 2018, 25, 302-309.	6.8	22
223	One-Pot Green Synthesis of Fe <sub>3</sub> O <sub>4</sub> /MoS <sub>2</sub> OD/2D Nanocomposites and Their Application in Noninvasive Point-of-Care Glucose Diagnostics. ACS Applied Nano Materials, 2018, 1, 1949-1958.	5.0	33
224	Suspended SnS <sub>2</sub> Layers by Light Assistance for Ultrasensitive Ammonia Detection at Room Temperature. Advanced Functional Materials, 2018, 28, 1801035.	14.9	81
225	GO-guided direct growth of highly oriented metal–organic framework nanosheet membranes for H <sub>2</sub> /CO <sub>2</sub> separation. Chemical Science, 2018, 9, 4132-4141.	7.4	116
226	Magnetic graphene enabled tunable microwave absorber via thermal control. Nanotechnology, 2018, 29, 245706.	2.6	42
227	Two-dimensional molybdenum disulfide (MoS2) with gold nanoparticles for biosensing of explosives by optical spectroscopy. Sensors and Actuators B: Chemical, 2018, 261, 279-287.	7.8	33
228	Epitaxially grown monolayer VSe 2 : an air-stable magnetic two-dimensional material with low work function at edges. Science Bulletin, 2018, 63, 419-425.	9.0	92
229	Bright monolayer tungsten disulfide <i>via</i> exciton and trion chemical modulations. Nanoscale, 2018, 10, 6294-6299.	5.6	18
230	One-step synthesis of ultrathin $\hat{l}_{\pm}$ -Co(OH) $<$ sub $>$ 2 $<$ /sub $>$ nanomeshes and their high electrocatalytic activity toward the oxygen evolution reaction. Chemical Communications, 2018, 54, 4045-4048.	4.1	71
231	Computational design and property predictions for two-dimensional nanostructures. Materials Today, 2018, 21, 391-418.	14.2	78
232	Al <sub>3</sub> (A = As, Sb) Single Layers and Their vdW Heterostructure for Photocatalysis and Solar Cell Applications. Journal of Physical Chemistry C, 2018, 122, 7656-7663.	3.1	34
233	Microwave-assisted synthesis of graphene-like cobalt sulfide freestanding sheets as an efficient bifunctional electrocatalyst for overall water splitting. Journal of Materials Chemistry A, 2018, 6, 7592-7607.	10.3	108
234	Two-Dimensional Oxides: Recent Progress in Nanosheets. Zeitschrift Fur Physikalische Chemie, 2018, 233, 117-165.	2.8	28
235	Molybdenum disulfide field-effect transistor biosensor for ultrasensitive detection of DNA by employing morpholino as probe. Biosensors and Bioelectronics, 2018, 110, 71-77.	10.1	69
236	Anion De/Intercalation in Nickel Hydroxychloride Microspheres: A Mechanistic Study of Structural Impact on Energy Storage Performance of Multianion-Containing Layered Materials. ACS Applied Energy Materials, 2018, 1, 1522-1533.	5.1	14

#	Article	IF	Citations
237	Design and fabrication of Ag-CuO nanoparticles on reduced graphene oxide for nonenzymatic detection of glucose. Sensors and Actuators B: Chemical, 2018, 265, 435-442.	7.8	86
238	Electrostatics of electron-hole interactions in van der Waals heterostructures. Physical Review B, 2018, 97, .	3.2	25
239	Two-dimensional halide perovskite nanomaterials and heterostructures. Chemical Society Reviews, 2018, 47, 6046-6072.	38.1	339
240	Formation of hollow MoS2/carbon microspheres for high capacity and high rate reversible alkali-ion storage. Journal of Materials Chemistry A, 2018, 6, 8280-8288.	10.3	62
241	Material Chemistry of Two-Dimensional Inorganic Nanosheets in Cancer Theranostics. CheM, 2018, 4, 1284-1313.	11.7	132
242	Ultrathin MXene nanosheets with rich fluorine termination groups realizing efficient electrocatalytic hydrogen evolution. Nano Energy, 2018, 47, 512-518.	16.0	243
243	Recent advances in two-dimensional transition metal dichalcogenides-graphene heterostructured materials for electrochemical applications. Progress in Materials Science, 2018, 96, 51-85.	32.8	132
244	Emerging Two-Dimensional Nanomaterials for Electrocatalysis. Chemical Reviews, 2018, 118, 6337-6408.	47.7	1,552
245	Bifunctional 2D Superlattice Electrocatalysts of Layered Double Hydroxide–Transition Metal Dichalcogenide Active for Overall Water Splitting. ACS Energy Letters, 2018, 3, 952-960.	17.4	140
246	Ultrathin 2D Zirconium Metal–Organic Framework Nanosheets: Preparation and Application in Photocatalysis. Small, 2018, 14, e1703929.	10.0	171
247	Twoâ€Dimensional Layered Materials as Catalyst Supports. ChemNanoMat, 2018, 4, 28-40.	2.8	61
248	MgFe hydrotalcites-derived layered structure iron molybdenum sulfide catalysts for eugenol hydrodeoxygenation to produce phenolic chemicals. Journal of Energy Chemistry, 2018, 27, 600-610.	12.9	24
249	Strategies for improving the lithium-storage performance of 2D nanomaterials. National Science Review, 2018, 5, 389-416.	9.5	108
250	Three-dimensional flower-like MoS2-CoSe2 heterostructure for high performance superccapacitors. Journal of Colloid and Interface Science, 2018, 512, 282-290.	9.4	35
251	Recent Applications of 2D Inorganic Nanosheets for Emerging Energy Storage System. Chemistry - A European Journal, 2018, 24, 4757-4773.	3.3	52
252	Chemistry of Graphene Derivatives: Synthesis, Applications, and Perspectives. Chemistry - A European Journal, 2018, 24, 5992-6006.	3.3	99
253	Two-dimensional metal oxide nanosheets for rechargeable batteries. Journal of Energy Chemistry, 2018, 27, 117-127.	12.9	105
254	Polyaniline-assisted growth of MnO2 ultrathin nanosheets on graphene and porous graphene for asymmetric supercapacitor with enhanced energy density. Chemical Engineering Journal, 2018, 334, 1-9.	12.7	154

#	Article	IF	CITATIONS
255	d10 coinage metal organic chalcogenolates: From oligomers to coordination polymers. Coordination Chemistry Reviews, 2018, 355, 240-270.	18.8	89
256	Zweidimensionale Chemie jenseits von Graphen: das aufstrebende Gebiet der Funktionalisierung von MolybdÃndisulfid und schwarzem Phosphor. Angewandte Chemie, 2018, 130, 4421-4437.	2.0	24
257	Postâ€Graphene 2D Chemistry: The Emerging Field of Molybdenum Disulfide and Black Phosphorus Functionalization. Angewandte Chemie - International Edition, 2018, 57, 4338-4354.	13.8	193
258	Black Phosphorus: Synthesis and Application for Solar Cells. Advanced Energy Materials, 2018, 8, 1701832.	19.5	118
259	2D Organic Materials for Optoelectronic Applications. Advanced Materials, 2018, 30, 1702415.	21.0	266
260	Scalable synthesis of quasi-monodispersed BN colloidal nanocrystals by "solvent cutting―and their anti-electrochemical corrosion coating. Chemical Engineering Journal, 2018, 333, 191-199.	12.7	25
261	Oxygen vacancy-rich 2D/2D BiOCl-g-C3N4 ultrathin heterostructure nanosheets for enhanced visible-light-driven photocatalytic activity in environmental remediation. Applied Catalysis B: Environmental, 2018, 220, 290-302.	20.2	490
262	Dreidimensionale Architekturen aus Übergangsmetallâ€Dichalkogenidâ€Nanomaterialien zur elektrochemischen Energiespeicherung und â€umwandlung. Angewandte Chemie, 2018, 130, 634-655.	2.0	37
263	Threeâ€Dimensional Architectures Constructed from Transitionâ€Metal Dichalcogenide Nanomaterials for Electrochemical Energy Storage and Conversion. Angewandte Chemie - International Edition, 2018, 57, 626-646.	13.8	398
264	High and Reversible Lithium Ion Storage in Selfâ€Exfoliated Triazoleâ€Triformyl Phloroglucinolâ€Based Covalent Organic Nanosheets. Advanced Energy Materials, 2018, 8, 1702170.	19.5	174
265	Synthesis of Lowâ€Dimensional Polyion Complex Nanomaterials via Polymerizationâ€Induced Electrostatic Selfâ€Assembly. Angewandte Chemie - International Edition, 2018, 57, 1053-1056.	13.8	167
266	Quantum Dots of 1T Phase Transitional Metal Dichalcogenides Generated <i>via</i> Electrochemical Li Intercalation. ACS Nano, 2018, 12, 308-316.	14.6	110
267	A novel two-dimensional coordination polymer-polypyrrole hybrid material as a high-performance electrode for flexible supercapacitor. Chemical Engineering Journal, 2018, 334, 2547-2557.	12.7	105
268	Two-dimensional nanosheets as building blocks to construct three-dimensional structures for lithium storage. Journal of Energy Chemistry, 2018, 27, 128-145.	12.9	23
269	A Waterâ€Processable and Bioactive Multivalent Graphene Nanoink for Highly Flexible Bioelectronic Films and Nanofibers. Advanced Materials, 2018, 30, 1705452.	21.0	50
270	Chemical Immobilization Effect on Lithium Polysulfides for Lithium–Sulfur Batteries. Small, 2018, 14, 1701986.	10.0	153
271	Aptamer-functionalized carbon nanomaterials electrochemical sensors for detecting cancer relevant biomolecules. Carbon, 2018, 129, 380-395.	10.3	135
272	Enhanced Electrocatalytic Hydrogen Evolution from Large-Scale, Facile-Prepared, Highly Crystalline WTe <sub>2</sub> Nanoribbons with Weyl Semimetallic Phase. ACS Applied Materials & Interfaces, 2018, 10, 458-467.	8.0	64

#	Article	IF	CITATIONS
273	Atomic structure and potential energy of $\hat{l}^2$ -Si3N4/diamond interface in the process of detachment: A first-principles study. Applied Surface Science, 2018, 434, 211-214.	6.1	8
274	Design lateral heterostructure of monolayer ZrS2 and HfS2 from first principles calculations. Applied Surface Science, 2018, 436, 919-926.	6.1	33
275	High-performance oxygen evolution catalyst using two-dimensional ultrathin metal-organic frameworks nanosheets. Nano Energy, 2018, 44, 345-352.	16.0	264
276	Acid-Assisted Exfoliation toward Metallic Sub-nanopore TaS <sub>2</sub> Monolayer with High Volumetric Capacitance. Journal of the American Chemical Society, 2018, 140, 493-498.	13.7	112
277	Group 6 transition metal dichalcogenide nanomaterials: synthesis, applications and future perspectives. Nanoscale Horizons, 2018, 3, 90-204.	8.0	309
278	Holey 2D Nanomaterials for Electrochemical Energy Storage. Advanced Energy Materials, 2018, 8, 1702179.	19.5	293
279	Synthesis of Lowâ€Dimensional Polyion Complex Nanomaterials via Polymerizationâ€Induced Electrostatic Selfâ€Assembly. Angewandte Chemie, 2018, 130, 1065-1068.	2.0	16
280	Electronic and magnetic properties of monolayer α-RuCl <sub>3</sub> : a first-principles and Monte Carlo study. Physical Chemistry Chemical Physics, 2018, 20, 997-1004.	2.8	57
281	Insights into enhanced visible light photocatalytic activity of t-Se nanorods/BiOCl ultrathin nanosheets 1D/2D heterojunctions. Chemical Engineering Journal, 2018, 338, 218-229.	12.7	69
282	Hydrogen Bonding Directed Colloidal Selfâ€Assembly of Nanoparticles into 2D Crystals, Capsids, and Supracolloidal Assemblies. Advanced Functional Materials, 2018, 28, 1704328.	14.9	53
283	MoB/gâ€C <sub>3</sub> N <sub>4</sub> Interface Materials as a Schottky Catalyst to Boost Hydrogen Evolution. Angewandte Chemie, 2018, 130, 505-509.	2.0	71
284	MoB/gâ€C <sub>3</sub> N <sub>4</sub> Interface Materials as a Schottky Catalyst to Boost Hydrogen Evolution. Angewandte Chemie - International Edition, 2018, 57, 496-500.	13.8	308
285	A multifunctional separator modified with cobalt and nitrogen co-doped porous carbon nanofibers for Li–S batteries. Journal of Membrane Science, 2018, 548, 247-253.	8.2	78
286	Tailoring Hybrid Layered Double Hydroxides for the Development of Innovative Applications. Advanced Functional Materials, 2018, 28, 1703868.	14.9	205
287	The electronic structure of two-dimensional transition metal hydroxide monolayers and heterostructures. Solid State Ionics, 2018, 314, 149-155.	2.7	6
288	Constructing magnetic catalysts with in-situ solid-liquid interfacial photo-Fenton-like reaction over Ag3PO4@NiFe2O4 composites. Applied Catalysis B: Environmental, 2018, 225, 40-50.	20.2	175
289	Ultrasmall Bismuth Quantum Dots: Facile Liquid-Phase Exfoliation, Characterization, and Application in High-Performance UV–Vis Photodetector. ACS Photonics, 2018, 5, 621-629.	6.6	230
290	Chemical vapor deposition growth of two-dimensional heterojunctions. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	52

#	Article	IF	CITATIONS
291	Few-layered titanate nanosheets with large lateral size and surface functionalization: potential for the controlled exfoliation of inorganic‰ organic layered composites. Chemical Communications, 2018, 54, 244-247.	4.1	23
292	Ab Initio Simulation of Attosecond Transient Absorption Spectroscopy in Two-Dimensional Materials. Applied Sciences (Switzerland), 2018, 8, 1777.	2.5	19
293	Effect of Flow Rate and Precursor Sublimation Temperature on the LPCVD Growth of Hexagonal Boron Nitride. , $2018,  \ldots$		0
294	Recent Progress on Layered Double Hydroxides and Their Derivatives for Electrocatalytic Water Splitting. Advanced Science, 2018, 5, 1800064.	11.2	515
295	Target construction of Co <sub>3</sub> O <sub>4</sub> with an improved layer structure for highly efficient Li-storage properties. Inorganic Chemistry Frontiers, 2018, 5, 3135-3139.	6.0	4
296	Facile scalable fabrication of ultra-thin freestanding SiO <sub>2</sub> -based hybrid nanosheets with multifunctional properties. Nanoscale, 2018, 10, 19351-19359.	5.6	6
297	Thermal insulation with 2D materials: liquid phase exfoliated vermiculite functional nanosheets. Nanoscale, 2018, 10, 23182-23190.	5.6	40
298	MoS <sub>2</sub> nanosheets with expanded interlayer spacing for enhanced sodium storage. Inorganic Chemistry Frontiers, 2018, 5, 3099-3105.	6.0	41
299	Enriched nucleation sites for Pt deposition on ultrathin WO <sub>3</sub> nanosheets with unique interactions for methanol oxidation. Journal of Materials Chemistry A, 2018, 6, 23028-23033.	10.3	60
300	Crystal-controlled polymerization: recent advances in morphology design and control of organic polymer materials. Journal of Materials Chemistry A, 2018, 6, 23197-23219.	10.3	35
301	Metallic MoN ultrathin nanosheets boosting high performance photocatalytic H <sub>2</sub> production. Journal of Materials Chemistry A, 2018, 6, 23278-23282.	10.3	37
302	2D bismuthene fabricated <i>via</i> acid-intercalated exfoliation showing strong nonlinear near-infrared responses for mode-locking lasers. Nanoscale, 2018, 10, 21106-21115.	5.6	115
303	Preparation of two-dimensional assembled Ni–Mn–C ternary composites for high-performance all-solid-state flexible supercapacitors. Journal of Materials Chemistry A, 2018, 6, 24086-24091.	10.3	89
304	Fullerene-regulated graphene oxide nanosheet membranes with well-defined laminar nanochannels for precise molecule sieving. Journal of Materials Chemistry A, 2018, 6, 22590-22598.	10.3	33
305	Emergence of high piezoelectricity along with robust electron mobility in Janus structures in semiconducting Group IVB dichalcogenide monolayers. Journal of Materials Chemistry A, 2018, 6, 24885-24898.	10.3	127
306	Two-dimensional $\hat{l}^2$ -phase group-VA binary compounds for versatile electronic and optical properties. Journal of Materials Chemistry C, 2018, 6, 11694-11700.	5.5	28
307	The Existence of Strong Solutions for a Class of Stochastic Differential Equations. International Journal of Differential Equations, 2018, 2018, 1-5.	0.8	0
308	Effect of Flow Rate and Precursor Sublimation Temperature on the LPCVD Growth of Hexagonal Boron Nitride. , 2018, , .		0

#	Article	IF	Citations
310	Fabrication of Grapheneâ€Oxide (GO)â€Supported Sheetâ€Like CuO Nanostructures Derived from a Metalâ€Organicâ€Framework Template for Highâ€Performance Hybrid Supercapacitors. ChemistrySelect, 2018, 3, 11816-11823.	1.5	11
311	Highly Promoted Carrier Mobility and Intrinsic Stability by Rolling Up Monolayer Black Phosphorus into Nanoscrolls. Journal of Physical Chemistry Letters, 2018, 9, 6847-6852.	4.6	20
312	Zero-point motion and direct-indirect band-gap crossover in layered transition-metal dichalcogenides. Physical Review B, 2018, 98, .	3.2	11
313	Superior Compatibility of C <sub>2</sub> N with Human Red Blood Cell Membranes and the Underlying Mechanism. Small, 2018, 14, e1803509.	10.0	33
314	Nanoscale Metal–Organic Layers for Radiotherapy–Radiodynamic Therapy. Journal of the American Chemical Society, 2018, 140, 16971-16975.	13.7	102
315	Synthesis of Ultrathin Few-Layer 2D Nanoplates of Halide Perovskite Cs <sub>3</sub> Bi <sub>2</sub> I <sub>9</sub> and Single-Nanoplate Super-Resolved Fluorescence Microscopy. Inorganic Chemistry, 2018, 57, 15558-15565.	4.0	38
316	Hydrodynamic assembly of two-dimensional layered double hydroxide nanostructures. Nature Communications, 2018, 9, 4913.	12.8	38
317	Preparation and application of clay mineral films. Developments in Clay Science, 2018, 9, 377-396.	0.5	2
318	Novel 2D Nanosheets with Potential Applications in Heavy Metal Purification: A Review. Advanced Materials Interfaces, 2018, 5, 1801094.	3.7	67
319	2D Crystals in Three Dimensions: Electronic Decoupling of Singleâ€Layered Platelets in Colloidal Nanoparticles. Small, 2018, 14, e1803910.	10.0	6
320	A Promising Gas Sensor Based on Monolayer \$alpha \$-SbN to Detect SO <sub>2</sub> Among SF <sub>6</sub> Decompositions., 2018, 2, 1-4.		10
322	Recent advances in emerging 2D nanomaterials for biosensing and bioimaging applications. Materials Today, 2018, 21, 164-177.	14.2	145
323	Enhanced absorption of graphene with variable bandwidth in quarter-wavelength cavities. AIP Advances, 2018, 8, 125301.	1.3	4
324	Conductive 2D Metalâ€Organic Frameworks Decorated on Layered Double Hydroxides Nanoflower Surface for Highâ€Performance Supercapacitor. ChemistrySelect, 2018, 3, 13596-13602.	1.5	35
325	Graphene: Diversified Flexible 2D Material for Wearable Vital Signs Monitoring. Advanced Materials Technologies, 2019, 4, 1800574.	5.8	67
326	Two dimensional boron nanosheets: synthesis, properties and applications. Physical Chemistry Chemical Physics, 2018, 20, 28964-28978.	2.8	37
327	Dependence of h-BN Film Thickness as Grown on Nickel Single-Crystal Substrates of Different Orientations. ACS Applied Materials & Samp; Interfaces, 2018, 10, 44862-44870.	8.0	15
328	Silicon as a ubiquitous contaminant in graphene derivatives with significant impact on device performance. Nature Communications, 2018, 9, 5070.	12.8	42

#	Article	IF	CITATIONS
329	Basic Concepts and Recent Advances of Crystallographic Orientation Determination of Graphene by Raman Spectroscopy. Crystals, 2018, 8, 375.	2.2	21
330	Monolayer Attachment of Metallic MoS <sub>2</sub> on Restacked Titania Nanosheets for Efficient Photocatalytic Hydrogen Generation. ACS Applied Energy Materials, 2018, 1, 6912-6918.	5.1	15
331	Atomically Thin Two-Dimensional Nanosheets with Tunable Spin-Crossover Properties. Journal of Physical Chemistry Letters, 2018, 9, 7052-7058.	4.6	29
332	Polyphenol-Assisted Exfoliation of Transition Metal Dichalcogenides into Nanosheets as Photothermal Nanocarriers for Enhanced Antibiofilm Activity. ACS Nano, 2018, 12, 12347-12356.	14.6	147
333	1T-Phase Tungsten Chalcogenides (WS <sub>2</sub> , WSe <sub>2</sub> , WTe <sub>2</sub> ) Decorated with TiO <sub>2</sub> Nanoplatelets with Enhanced Electron Transfer Activity for Biosensing Applications. ACS Applied Nano Materials, 2018, 1, 7006-7015.	5.0	32
334	Laser Synthesis, Processing, and Spectroscopy of Atomically-Thin Two Dimensional Materials. Springer Series in Materials Science, 2018, , 1-37.	0.6	1
335	Hydrothermally assisted synthesis of pure-phase and well-dispersed forsterite nanopowders. Ceramics International, 2018, 44, 23339-23343.	4.8	9
336	A simple chemical solution synthesis of nanowire-assembled hierarchical CuO microspheres with enhanced photochemical properties. Dalton Transactions, 2018, 47, 15009-15016.	3.3	6
337	Exfoliation of Graphene by Dendritic Waterâ€Soluble Zinc Phthalocyanine Amphiphiles in Polar Media. Chemistry - A European Journal, 2018, 24, 18696-18704.	3.3	5
338	Constructing tunable dual active sites on two-dimensional C3N4@MoN hybrid for electrocatalytic hydrogen evolution. Nano Energy, 2018, 53, 690-697.	16.0	175
339	Superior role of MXene nanosheet as hybridization matrix over graphene in enhancing interfacial electronic coupling and functionalities of metal oxide. Nano Energy, 2018, 53, 841-848.	16.0	36
340	Understanding the electrochemical reaction mechanism of VS <sub>2</sub> nanosheets in lithium-ion cells by multiple <i>in situ</i> and <i>ex situ</i> x-ray spectroscopy. Journal Physics D: Applied Physics, 2018, 51, 494001.	2.8	14
341	Switchable fluorescence of MoS2 quantum dots: a multifunctional probe for sensing of chromium(VI), ascorbic acid, and alkaline phosphatase activity. Analytical and Bioanalytical Chemistry, 2018, 410, 7551-7557.	3.7	26
342	What Limits the Intrinsic Mobility of Electrons and Holes in Two Dimensional Metal Dichalcogenides?. Journal of the American Chemical Society, 2018, 140, 17895-17900.	13.7	121
343	Ultrasmall and Monolayered Tungsten Dichalcogenide Quantum Dots with Giant Spin–Valley Coupling and Purple Luminescence. ACS Omega, 2018, 3, 12188-12194.	3.5	15
344	Novel Two-Dimensional Semiconductor SnP <sub>3</sub> with High Carrier Mobility, Good Light Absorption, and Strong Interlayer Quantum Confinement. Journal of Physical Chemistry C, 2018, 122, 24359-24367.	3.1	42
345	Two dimensional XAs ( $X = Si$ , Ge, Sn) monolayers as promising photocatalysts for water splitting hydrogen production with high carrier mobility. Applied Materials Today, 2018, 13, 276-284.	4.3	51
346	Electronic and Hydrogen Storage Properties of Li-Terminated Linear Boron Chains Studied by TAO-DFT. Scientific Reports, 2018, 8, 13538.	3.3	32

#	Article	IF	CITATIONS
347	Solutionâ€Processable Twoâ€Dimensional In <sub>2</sub> Se <sub>3</sub> Nanosheets as Efficient Photothermal Agents for Elimination of Bacteria. Chemistry - A European Journal, 2018, 24, 19060-19065.	3.3	22
348	The Anionic Surfactant/Ionic Liquids Intercalated Reduced Graphene Oxide for High-performance Supercapacitors. Nanoscale Research Letters, 2018, 13, 215.	5.7	9
349	Two-dimensional nanomaterial based sensors for heavy metal ions. Mikrochimica Acta, 2018, 185, 478.	5.0	48
350	Fluorescent Ti <sub>3</sub> C <sub>2</sub> MXene quantum dots for an alkaline phosphatase assay and embryonic stem cell identification based on the inner filter effect. Nanoscale, 2018, 10, 19579-19585.	5.6	104
351	Electrochemical polymerization for two-dimensional conjugated polymers. Journal of Materials Chemistry C, 2018, 6, 10672-10686.	5.5	39
352	<i>In-Situ</i> Synthesis and High-Efficiency Photocatalytic Performance of Cu(I)/Cu(II) Inorganic Coordination Polymer Quantum Sheets. Inorganic Chemistry, 2018, 57, 13289-13295.	4.0	16
353	Neuron-Inspired Design of High-Performance Electrode Materials for Sodium-Ion Batteries. ACS Nano, 2018, 12, 11503-11510.	14.6	79
354	Ce-Directed Double-Layered Nanosheet Architecture of NiFe-Based Hydroxide as Highly Efficient Water Oxidation Electrocatalyst. ACS Sustainable Chemistry and Engineering, 2018, 6, 15411-15418.	6.7	32
355	Novel Cobalt-Doped Ni <sub>0.85</sub> Se Chalcogenides (Co <sub><i>x</i></sub> Ni <sub>0.85–<i>x</i></sub> Se) as High Active and Stable Electrocatalysts for Hydrogen Evolution Reaction in Electrolysis Water Splitting. ACS Applied Materials & Diterfaces, 2018, 10, 40491-40499.	8.0	84
356	Metallic 1T-MoS2 nanosheets and their composite materials: Preparation, properties and emerging applications. Materials Today Energy, 2018, 10, 264-279.	4.7	75
357	Atmosphericâ€Pressure Synthesis of 2D Nitrogenâ€Rich Tungsten Nitride. Advanced Materials, 2018, 30, e1805655.	21.0	104
358	CoSe <sub>2</sub> -Decorated NbSe <sub>2</sub> Nanosheets Fabricated via Cation Exchange for Li Storage. ACS Applied Materials & Samp; Interfaces, 2018, 10, 37773-37778.	8.0	18
359	Communication: Nickel hydroxide as an exceptional deviation from the quantum size effect. Journal of Chemical Physics, 2018, 149, 141103.	3.0	17
360	Two-Dimensional GaN: An Excellent Electrode Material Providing Fast Ion Diffusion and High Storage Capacity for Li-Ion and Na-Ion Batteries. ACS Applied Materials & Samp; Interfaces, 2018, 10, 38978-38984.	8.0	97
361	Visible―and NIRâ€Light Responsive Blackâ€Phosphorusâ€Based Nanostructures in Solar Fuel Production and Environmental Remediation. Advanced Materials, 2018, 30, e1804770.	21.0	61
362	2D Materials for Lithium/Sodium Metal Anodes. Advanced Energy Materials, 2018, 8, 1802833.	19.5	105
363	Monolayer Transition-Metal Dichalcogenide Mo <sub>1–<i>x</i></sub> W <i><sub>x</sub></i> S <sub>2</sub> Alloys as Efficient Anode Materials for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2018, 122, 25837-25848.	3.1	28
364	Strain-Modulated Band Engineering in Two-Dimensional Black Phosphorus/MoS <sub>2</sub> van der Waals Heterojunction. ACS Omega, 2018, 3, 14641-14649.	3.5	22

#	Article	IF	CITATIONS
365	Polymer Ionic Liquid Stabilized Black Phosphorus for Environmental Robust Flexible Optoelectronics. Advanced Functional Materials, 2018, 28, 1805311.	14.9	54
366	Hybrid Architectures based on 2D MXenes and Lowâ€Dimensional Inorganic Nanostructures: Methods, Synergies, and Energyâ€Related Applications. Small, 2018, 14, e1803632.	10.0	54
367	Synthetic Control of Two-Dimensional NiTe <sub>2</sub> Single Crystals with Highly Uniform Thickness Distributions. Journal of the American Chemical Society, 2018, 140, 14217-14223.	13.7	119
368	Two-Dimensional NiSe <sub>2</sub> /N-Rich Carbon Nanocomposites Derived from Ni-Hexamine Frameworks for Superb Na-lon Storage. ACS Applied Materials & Interfaces, 2018, 10, 34193-34201.	8.0	110
369	Surfaceâ€Confined Fabrication of Ultrathin Nickel Cobaltâ€Layered Double Hydroxide Nanosheets for Highâ€Performance Supercapacitors. Advanced Functional Materials, 2018, 28, 1803272.	14.9	215
370	Photocatalytic properties of two-dimensional graphene and layered transition-metal dichalcogenides based photocatalyst for photoelectrochemical hydrogen generation: An overview. International Journal of Hydrogen Energy, 2018, 43, 18925-18945.	7.1	83
371	A Zn <sub>0.5</sub> Cd <sub>0.5</sub> S Photocatalyst Modified by 2D Black Phosphorus for Efficient Hydrogen Evolution from Water. ChemCatChem, 2018, 10, 4395-4405.	3.7	34
372	Decoration of Cisplatin on 2D Metal–Organic Frameworks for Enhanced Anticancer Effects through Highly Increased Reactive Oxygen Species Generation. ACS Applied Materials & Diterfaces, 2018, 10, 30930-30935.	8.0	85
373	Two-dimensional metal-organic frameworks nanosheets: Synthesis strategies and applications. Inorganica Chimica Acta, 2018, 483, 550-564.	2.4	48
374	Orthorhombic NiSe <sub>2</sub> Nanocrystals on Si Nanowires for Efficient Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2018, 10, 33198-33204.	8.0	49
375	Ultrathin and Edge-Enriched Holey Nitride Nanosheets as Bifunctional Electrocatalysts for the Oxygen and Hydrogen Evolution Reactions. ACS Catalysis, 2018, 8, 9686-9696.	11.2	71
376	Membrane destruction and phospholipid extraction by using two-dimensional MoS <sub>2</sub> nanosheets. Nanoscale, 2018, 10, 20162-20170.	5.6	83
377	Crystal phase control in two-dimensional materials. Science China Chemistry, 2018, 61, 1227-1242.	8.2	42
378	Ultrathin Nanobelts as an Excellent Bifunctional Oxygen Catalyst: Insight into the Subtle Changes in Structure and Synergistic Effects of Bimetallic Metal–Organic Framework. Small Methods, 2018, 2, 1800240.	8.6	73
379	In Situ-Generated Volatile Precursor for CVD Growth of a Semimetallic 2D Dichalcogenide. ACS Applied Materials & Samp; Interfaces, 2018, 10, 34401-34408.	8.0	23
380	Spontaneous growth of 2D coordination polymers on functionalized ferromagnetic surfaces. Chemical Science, 2018, 9, 8819-8828.	7.4	6
381	Two-Dimensional Polycrystalline ZnO Hierarchical Structures as Single-atom Catalyst Supports. Microscopy and Microanalysis, 2018, 24, 1604-1605.	0.4	0
382	Heterostructured filler in mixed matrix membranes to coordinate physical and chemical selectivities for enhanced CO2 separation. Journal of Membrane Science, 2018, 567, 272-280.	8.2	60

#	Article	IF	CITATIONS
383	Insight the effect of crystallinity of natural graphite on the electrochemical performance of reduced graphene oxide. Results in Physics, 2018, 11, 131-137.	4.1	19
384	Holey MoS <sub>2</sub> Nanosheets with Photocatalytic Metal Rich Edges by Ambient Electrospray Deposition for Solar Water Disinfection. Global Challenges, 2018, 2, 1800052.	3.6	26
385	Controlled growth of dodecapod-branched CsPbBr3 nanocrystals and their application in white light emitting diodes. Nano Energy, 2018, 53, 559-566.	16.0	45
386	Construction of 3D architectures with Ni(HCO <sub>3</sub> ) <sub>2</sub> nanocubes wrapped by reduced graphene oxide for LIBs: ultrahigh capacity, ultrafast rate capability and ultralong cycle stability. Chemical Science, 2018, 9, 8682-8691.	7.4	34
387	Recent Progress of Janus 2D Transition Metal Chalcogenides: From Theory to Experiments. Small, 2018, 14, e1802091.	10.0	247
388	Fe-ZrO2 imbedded graphene like carbon nitride for acarbose (ACB) photo-degradation intermediate study. Advanced Powder Technology, 2018, 29, 3233-3240.	4.1	15
389	Ultrasensitive negative photoresponse in 2D Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> photodetector with light-induced carrier trapping. Nanotechnology, 2018, 29, 464002.	2.6	37
390	Synthesis and Functionalization of Nanomaterials. Springer Series in Materials Science, 2018, , 15-55.	0.6	12
391	Scalable one-step synthesis of hydroxylated boron nitride nanosheets for obtaining multifunctional polyvinyl alcohol nanocomposite films: Multi-azimuth properties improvement. Composites Science and Technology, 2018, 168, 74-80.	7.8	32
392	MXene Aerogel Scaffolds for Highâ€Rate Lithium Metal Anodes. Angewandte Chemie, 2018, 130, 15248-15253.	2.0	49
393	MXene Aerogel Scaffolds for Highâ€Rate Lithium Metal Anodes. Angewandte Chemie - International Edition, 2018, 57, 15028-15033.	13.8	279
394	Chromium sulfide halide monolayers: intrinsic ferromagnetic semiconductors with large spin polarization and high carrier mobility. Nanoscale, 2018, 10, 18036-18042.	5.6	117
395	Ultrathin two-dimensional metal-organic framework nanosheets for functional electronic devices. Coordination Chemistry Reviews, 2018, 377, 44-63.	18.8	182
396	WS <sub>2</sub> and Câ€TiO <sub>2</sub> Nanorods Acting as Effective Charge Separators on gâ€C <sub>3</sub> N <sub>4</sub> to Boost Visibleâ€Light Activated Hydrogen Production from Seawater. ChemSusChem, 2018, 11, 4077-4085.	6.8	77
397	Progress in Contact, Doping and Mobility Engineering of MoS2: An Atomically Thin 2D Semiconductor. Crystals, 2018, 8, 316.	2,2	118
398	Hopping conductivity-mediated O-shaped memory behaviour in gelatin–graphene oxide composite films. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	6
399	Engineering the High Concentration of N <sub>3C</sub> Nitrogen Vacancies Toward Strong Solar Light-Driven Photocatalyst-Based g-C <sub>3</sub> N <sub>4</sub> . ACS Applied Energy Materials, 2018, 1, 4716-4723.	5.1	45
400	The dimensional and hydrogenating effect on the electronic properties of ZnSe nanomaterials: a computational investigation. Physical Chemistry Chemical Physics, 2018, 20, 24453-24464.	2.8	4

#	Article	IF	CITATIONS
401	Efficient and scalable synthesis of highly aligned and compact two-dimensional nanosheet films with record performances. Nature Communications, 2018, 9, 3484.	12.8	165
402	Two-dimensional transitional metal dihydride crystals with anisotropic and spin-polarized Fermi Dirac cones. Journal of Materials Chemistry C, 2018, 6, 11243-11247.	5.5	7
403	A Novel CVD Growth of g <sub>3</sub> N <sub>4</sub> Ultrathin Film on NiCo <sub>2</sub> O <sub>4</sub> Nanoneedles/Carbon Cloth as Integrated Electrodes for Supercapacitors. ChemElectroChem, 2018, 5, 3383-3390.	3.4	20
404	Biofunctionalized two-dimensional Ti3C2 MXenes for ultrasensitive detection of cancer biomarker. Biosensors and Bioelectronics, 2018, 121, 243-249.	10.1	312
405	Tellurophene-based metal-organic framework nanosheets for high-performance organic solar cells. Journal of Power Sources, 2018, 401, 13-19.	7.8	44
406	Robust Half-Metallic Magnetism in Two-Dimensional Fe/MoS <sub>2</sub> . Journal of Physical Chemistry C, 2018, 122, 21617-21622.	3.1	18
407	BiOI/BiVO <sub>4</sub> Two-Dimensional Heteronanostructures for Visible-Light Photocatalytic Degradation of Rhodamine B. ACS Applied Nano Materials, 2018, 1, 5128-5141.	5.0	47
408	Mapping the elastic properties of two-dimensional MoS2 via bimodal atomic force microscopy and finite element simulation. Npj Computational Materials, $2018,4,.$	8.7	61
409	Tunable interlayer coupling and Schottky barrier in graphene and Janus MoSSe heterostructures by applying an external field. Physical Chemistry Chemical Physics, 2018, 20, 24109-24116.	2.8	86
410	A facile method for scalable synthesis of ultrathin g-C <sub>3</sub> N <sub>4</sub> nanosheets for efficient hydrogen production. Journal of Materials Chemistry A, 2018, 6, 18252-18257.	10.3	40
411	A black phosphorus based synergistic antibacterial platform against drug resistant bacteria. Journal of Materials Chemistry B, 2018, 6, 6302-6310.	5.8	105
412	Layered tin sulfide and selenide anode materials for Li- and Na-ion batteries. Journal of Materials Chemistry A, 2018, 6, 12185-12214.	10.3	245
413	Prediction of Isoelectric Point of Manganese and Cobalt Lamellar Oxides: Application to Controlled Synthesis of Mixed Oxides. Langmuir, 2018, 34, 6670-6677.	3.5	9
414	Understanding of the Ultrastable Kâ€lon Storage of Carbonaceous Anode. Advanced Functional Materials, 2018, 28, 1801989.	14.9	159
415	Economizing Production of Diverse 2D Layered Metal Hydroxides for Efficient Overall Water Splitting. Small, 2018, 14, e1800759.	10.0	46
416	Robust ferromagnetism in zigzag-edge rich MoS <sub>2</sub> pyramids. Nanoscale, 2018, 10, 11578-11584.	5.6	25
417	Bandgapâ€Tunable Preparation of Smooth and Large Twoâ€Dimensional Antimonene. Angewandte Chemie - International Edition, 2018, 57, 8668-8673.	13.8	101
418	Thickness-Tunable Synthesis of Ultrathin Type-II Dirac Semimetal PtTe <sub>2</sub> Single Crystals and Their Thickness-Dependent Electronic Properties. Nano Letters, 2018, 18, 3523-3529.	9.1	147

#	Article	IF	CITATIONS
419	Bandgapâ€Tunable Preparation of Smooth and Large Twoâ€Dimensional Antimonene. Angewandte Chemie, 2018, 130, 8804-8809.	2.0	51
420	General Strategy for the Growth of CsPbX <sub>3</sub> (X = Cl, Br, I) Perovskite Nanosheets from the Assembly of Nanorods. Chemistry of Materials, 2018, 30, 3854-3860.	6.7	75
421	Emerging trends in 2D nanotechnology that are redefining our understanding of "Nanocomposites― Nano Today, 2018, 21, 18-40.	11.9	59
422	Electrospun Î <sup>3</sup> -Fe2O3 nanofibers as bioelectrochemical sensors for simultaneous determination of small biomolecules. Analytica Chimica Acta, 2018, 1026, 125-132.	5.4	26
423	2D Ternary Chalcogenides. Advanced Optical Materials, 2018, 6, 1800058.	7.3	114
424	Two-dimensional GeAsSe with high and unidirectional conductivity. Nanoscale, 2018, 10, 15998-16004.	5.6	7
425	Adsorption of NOx (x = 1, 2) gas molecule on pristine and B atom embedded γ-graphyne based on first-principles study. Applied Surface Science, 2018, 455, 484-491.	6.1	35
426	Graphene oxide hydrogel particles from microfluidics for oil decontamination. Journal of Colloid and Interface Science, 2018, 528, 372-378.	9.4	16
427	Dynamic tungsten diselenide nanomaterials: supramolecular assembly-induced structural transition over exfoliated two-dimensional nanosheets. Chemical Science, 2018, 9, 5452-5460.	7.4	22
428	Terbiumâ€Doped Layered Yttrium Hydroxide Nanocone: Controlled Synthesis, Structure Variations, Phase Conversion to Oxide/Oxysulfate Nanocone and Their Luminescence Properties. Particle and Particle Systems Characterization, 2018, 35, 1800075.	2.3	2
429	Two-dimensional $\hat{l}^2$ -cobalt hydroxide phase transition exfoliated to atom layers as efficient catalyst for lithium-oxygen batteries. Electrochimica Acta, 2018, 281, 420-428.	<b>5.</b> 2	14
430	Tracking the Chemical and Structural Evolution of the TiS <sub>2</sub> Electrode in the Lithium-Ion Cell Using Operando X-ray Absorption Spectroscopy. Nano Letters, 2018, 18, 4506-4515.	9.1	51
431	Scalable synthesis of porous hollow CoSe <sub>2</sub> –MoSe <sub>2</sub> /carbon microspheres for highly efficient hydrogen evolution reaction in acidic and alkaline media. Journal of Materials Chemistry A, 2018, 6, 12701-12707.	10.3	106
432	Synthesis and electrocatalytic properties for oxygen reduction of Pd <sub>4</sub> Fe nanoflowers. Chemical Communications, 2018, 54, 7058-7061.	4.1	24
433	Makroskopische kristalline 2Dâ€Polymere. Angewandte Chemie, 2018, 130, 13942-13959.	2.0	23
434	Towards Macroscopic Crystalline 2D Polymers. Angewandte Chemie - International Edition, 2018, 57, 13748-13763.	13.8	113
435	Hierarchical Two-Dimensional Conductive Metal–Organic Framework/Layered Double Hydroxide Nanoarray for a High-Performance Supercapacitor. Inorganic Chemistry, 2018, 57, 6202-6205.	4.0	86
436	Ag-Nanoparticle-Decorated 2D Titanium Carbide (MXene) with Superior Electrochemical Performance for Supercapacitors. ACS Sustainable Chemistry and Engineering, 2018, 6, 7442-7450.	6.7	120

#	Article	IF	Citations
437	Intercalation of aromatic amine for the 2Hâ€"1T′ phase transition of MoS <sub>2</sub> by experiments and calculations. Nanoscale, 2018, 10, 11349-11356.	5.6	54
438	Sonication-assisted liquid-phase exfoliated $\hat{l}\pm$ -GeTe: a two-dimensional material with high Fe $<$ sup $>$ 3+ $<$ /sup $>$ sensitivity. Nanoscale, 2018, 10, 15989-15997.	5.6	48
439	Transition metal (Pd, Pt, Ag, Au) decorated InN monolayer and their adsorption properties towards NO2: Density functional theory study. Applied Surface Science, 2018, 455, 106-114.	6.1	48
440	Synthesis of transparent dispersions of aluminium hydroxide nanoparticles. Nanotechnology, 2018, 29, 305605.	2.6	4
441	Phase Modulation of (1Tâ€2H)â€MoSe2/TiCâ€C Shell/Core Arrays via Nitrogen Doping for Highly Efficient Hydrogen Evolution Reaction. Advanced Materials, 2018, 30, e1802223.	21.0	244
442	Carbon Nanosheets by Morphologyâ€Retained Carbonization of Twoâ€Dimensional Assembled Anisotropic Carbon Nanorings. Angewandte Chemie, 2018, 130, 9827-9831.	2.0	17
443	A nanoclay-induced defective g-C $<$ sub $>3sub>N<sub>4sub> photocatalyst for highly efficient catalytic reactions. Chemical Communications, 2018, 54, 8249-8252.$	4.1	33
444	2D holey cobalt sulfide nanosheets derived from metal–organic frameworks for high-rate sodium ion batteries with superior cyclability. Journal of Materials Chemistry A, 2018, 6, 14324-14329.	10.3	81
445	A Solidâ€State Fibriform Supercapacitor Boosted by Host–Guest Hybridization between the Carbon Nanotube Scaffold and MXene Nanosheets. Small, 2018, 14, e1801203.	10.0	158
446	Conversion reaction of vanadium sulfide electrode in the lithium-ion cell: Reversible or not reversible?. Nano Energy, 2018, 51, 391-399.	16.0	55
447	Semiconductor Nanomembrane Materials for High-Performance Soft Electronic Devices. Journal of the American Chemical Society, 2018, 140, 9001-9019.	13.7	34
448	Nitrogen anion-decorated cobalt tungsten disulfides solid solutions on the carbon nanofibers for water splitting. Nanotechnology, 2018, 29, 385602.	2.6	8
449	Effects of nonmetal elements doping on the electronic structures of InNbO4: first-principles calculations. Materials Research Express, 2018, 5, 075505.	1.6	3
450	Optical and Electrical Enhancement of Hydrogen Evolution by MoS <sub>2</sub> @MoO <sub>3</sub> Coreâ€"Shell Nanowires with Designed Tunable Plasmon Resonance. Advanced Functional Materials, 2018, 28, 1802567.	14.9	78
451	Exogenous/Endogenousâ€Triggered Mesoporous Silica Cancer Nanomedicine. Advanced Healthcare Materials, 2018, 7, e1800268.	7.6	48
452	Atomic Cobalt Covalently Engineered Interlayers for Superior Lithiumâ€lon Storage. Advanced Materials, 2018, 30, e1802525.	21.0	187
453	Defect-induced efficient dry reforming of methane over two-dimensional Ni/h-boron nitride nanosheet catalysts. Applied Catalysis B: Environmental, 2018, 238, 51-60.	20.2	118
454	Two-dimensional metal–organic framework nanosheets: synthesis and applications. Chemical Society Reviews, 2018, 47, 6267-6295.	38.1	978

#	Article	IF	CITATIONS
455	Lanthanideâ€Coordinated Black Phosphorus. Small, 2018, 14, e1801405.	10.0	65
456	Two-Dimensional Metal Nanomaterials: Synthesis, Properties, and Applications. Chemical Reviews, 2018, 118, 6409-6455.	47.7	711
457	Dimensionality of excitons in stacked van der Waals materials: The example of hexagonal boron nitride. Physical Review B, 2018, 97, .	3.2	31
458	Application of Exfoliated Inorganic Nanosheets for Strongly oupled Hybrid Photocatalysts. Solar Rrl, 2018, 2, 1800092.	5.8	22
459	Transforming ground mica into high-performance biomimetic polymeric mica film. Nature Communications, 2018, 9, 2974.	12.8	107
460	Cu dimer anchored on C <sub>2</sub> N monolayer: low-cost and efficient Bi-atom catalyst for CO oxidation. Nanoscale, 2018, 10, 15696-15705.	5.6	68
461	Noble metal nanostructure-decorated molybdenum disulfide nanocomposites: synthesis and applications. Journal of Materials Chemistry B, 2018, 6, 5323-5334.	5.8	24
462	Two-dimensional light-emitting materials: preparation, properties and applications. Chemical Society Reviews, 2018, 47, 6128-6174.	38.1	167
463	SnP <sub>3</sub> : A Previously Unexplored Two-Dimensional Material. Journal of Physical Chemistry C, 2018, 122, 18185-18191.	3.1	85
464	Structural Evolution of Molybdenum Disulfide Prepared by Atomic Layer Deposition for Realization of Large Scale Films in Microelectronic Applications. ACS Applied Nano Materials, 2018, 1, 4028-4037.	5.0	28
465	Tunable absorption as multi-wavelength at infrared on graphene/hBN/Al grating structure. Optics Express, 2018, 26, 18230.	3.4	12
466	Insights into 2D MXenes for Versatile Biomedical Applications: Current Advances and Challenges Ahead. Advanced Science, 2018, 5, 1800518.	11.2	397
467	More active sites exposed few-layer MoSe2 supported on nitrogen-doped carbon as highly efficient and durable electrocatalysts for water splitting. Electrochimica Acta, 2018, 285, 103-110.	5.2	18
468	Thermal-exfoliated synthesis of N-rich carbon-based nanosheets from layered bulk crystals of a metal–hexamine framework. Chemical Communications, 2018, 54, 9825-9828.	4.1	24
469	Black-phosphorus-analogue tin monosulfide: an emerging optoelectronic two-dimensional material for high-performance photodetection with improved stability under ambient/harsh conditions. Journal of Materials Chemistry C, 2018, 6, 9582-9593.	5.5	153
470	Ultrathin PtPdâ€Based Nanorings with Abundant Step Atoms Enhance Oxygen Catalysis. Advanced Materials, 2018, 30, e1802136.	21.0	107
471	Coupling Interface Constructions of MoS <sub>2</sub> /Fe <sub>5</sub> Ni <sub>4</sub> S <sub>8</sub> Heterostructures for Efficient Electrochemical Water Splitting. Advanced Materials, 2018, 30, e1803151.	21.0	230
472	Selfâ€Assemble and In Situ Formation of Ni <sub>1â^'</sub> <i><sub></sub></i> PS <sub>3</sub> Nanomosaicâ€Decorated MXene Hybrids for Overall Water Splitting. Advanced Energy Materials, 2018, 8, 1801127.	19.5	204

#	Article	IF	CITATIONS
473	Two-dimensional materials: Emerging toolkit for construction of ultrathin high-efficiency microwave shield and absorber. Frontiers of Physics, 2018, 13, 1.	5.0	44
474	Two-dimensional transistors beyond graphene and TMDCs. Chemical Society Reviews, 2018, 47, 6388-6409.	38.1	301
475	Unique physicochemical properties of two-dimensional light absorbers facilitating photocatalysis. Chemical Society Reviews, 2018, 47, 6410-6444.	38.1	178
476	Colloids of Holey Gd <sub>2</sub> O <sub>3</sub> Nanosheets Converted from Exfoliated Gadolinium Hydroxide Layers. Small, 2018, 14, e1802174.	10.0	5
477	Assembly of TiO2 ultrathin nanosheets with surface lattice distortion for solar-light-driven photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2018, 239, 317-323.	20.2	77
478	Surface Defect Engineering in 2D Nanomaterials for Photocatalysis. Advanced Functional Materials, 2018, 28, 1801983.	14.9	472
479	Single-Layered Two-Dimensional Metal–Organic Framework Nanosheets as an in Situ Visual Test Paper for Solvents. ACS Applied Materials & Samp; Interfaces, 2018, 10, 28860-28867.	8.0	64
480	Phosphate ion functionalization of Co(OH)2 nanosheets by a simple immersion method. Journal of Alloys and Compounds, 2018, 768, 57-64.	5.5	19
481	Theoretical Study of Monolayer PtSe <sub>2</sub> as Outstanding Gas Sensor to Detect SF <sub>6</sub> Decompositions. IEEE Electron Device Letters, 2018, 39, 1405-1408.	3.9	67
482	Oxygen Doping to Optimize Atomic Hydrogen Binding Energy on NiCoP for Highly Efficient Hydrogen Evolution. Small, 2018, 14, e1800421.	10.0	122
483	Role of Photogenerated Iodine on the Energy-Conversion Properties of MoSe <sub>2</sub> Nanoflake Liquid Junction Photovoltaics. ACS Applied Materials & Interfaces, 2018, 10, 27780-27786.	8.0	17
484	Facile urea-assisted precursor pre-treatment to fabricate porous g-C3N4 nanosheets for remarkably enhanced visible-light-driven hydrogen evolution. Journal of Colloid and Interface Science, 2018, 532, 280-286.	9.4	37
485	Surface topography control of NiS/Ni3S4 nanosheets for the promotion of electrochemical performance. Journal of Sol-Gel Science and Technology, 2018, 87, 546-553.	2.4	5
486	The Subâ€Nanometer Scale as a New Focus in Nanoscience. Advanced Materials, 2018, 30, e1802031.	21.0	99
487	Quad-Model Imaging-Guided High-Efficiency Phototherapy Based on Upconversion Nanoparticles and ZnFe <sub>2</sub> O <sub>4</sub> Integrated Graphene Oxide. Inorganic Chemistry, 2018, 57, 9988-9998.	4.0	35
488	Fluoride graphdiyne as a free-standing electrode displaying ultra-stable and extraordinary high Li storage performance. Energy and Environmental Science, 2018, 11, 2893-2903.	30.8	146
489	Nanoparticles of magnetite anchored onto few-layer graphene: A highly efficient Fenton-like nanocomposite catalyst. Journal of Colloid and Interface Science, 2018, 532, 161-170.	9.4	54
490	Host-Guest Engineering of Layered Double Hydroxides towards Efficient Oxygen Evolution Reaction: Recent Advances and Perspectives. Catalysts, 2018, 8, 214.	3.5	21

#	Article	IF	CITATIONS
491	Heterolayered 2D nanohybrids of uniformly stacked transition metal dichalcogenide–transition metal oxide monolayers with improved energy-related functionalities. Journal of Materials Chemistry A, 2018, 6, 15237-15244.	10.3	33
492	High-Performance Asymmetric Supercapacitors Based on the Surfactant/Ionic Liquid Complex Intercalated Reduced Graphene Oxide Composites. Applied Sciences (Switzerland), 2018, 8, 484.	2.5	6
493	Synthesis of Rectorite/Fe3O4/ZnO Composites and Their Application for the Removal of Methylene Blue Dye. Catalysts, 2018, 8, 107.	3.5	30
494	Production Methods of Van der Waals Heterostructures Based on Transition Metal Dichalcogenides. Crystals, 2018, 8, 35.	2.2	47
495	Zinc Oxide Nanostructures: From Chestnut Husk-Like Structures to Hollow Nanocages, Synthesis and Structure. Crystals, 2018, 8, 153.	2.2	14
496	Engineering Two-Dimensional Mass-Transport Channels of the MoS <sub>2</sub> Nanocatalyst toward Improved Hydrogen Evolution Performance. ACS Applied Materials & Samp; Interfaces, 2018, 10, 25409-25414.	8.0	23
497	Plasma-Induced Phase Transformation of SnS2 to SnS. Scientific Reports, 2018, 8, 10284.	3.3	35
498	Graphene-based nanosheets for stronger and more durable concrete: A review. Construction and Building Materials, 2018, 183, 642-660.	7.2	252
499	Graphene-Analogue Boron Nitride Modified Bismuth Oxyiodide with Increased Visible-Light Photocatalytic Performance. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800146.	1.8	2
500	Coincident modulation of lattice and electron thermal transport performance in MXenes <i>via</i> surface functionalization. Physical Chemistry Chemical Physics, 2018, 20, 19689-19697.	2.8	18
501	The Influence of the Interlayer Distance on the Performance of Thermally Reduced Graphene Oxide Supercapacitors. Materials, 2018, 11, 263.	2.9	10
502	Anisotropic-Cyclicgraphene: A New Two-Dimensional Semiconducting Carbon Allotrope. Materials, 2018, 11, 432.	2.9	11
503	Monolithic Solid Based on Single-Walled Carbon Nanohorns: Preparation, Characterization, and Practical Evaluation as a Sorbent. Nanomaterials, 2018, 8, 370.	4.1	8
504	Twoâ€Dimensional Materials for Antimicrobial Applications: Graphene Materials and Beyond. Chemistry - an Asian Journal, 2018, 13, 3378-3410.	3.3	104
505	Anchoring black phosphorus quantum dots on molybdenum disulfide nanosheets: a 0D/2D nanohybrid with enhanced visibleâ and NIR â light photoactivity. Applied Catalysis B: Environmental, 2018, 238, 444-453.	20.2	68
506	Covalent Organic Framework–Covalent Organic Framework Bilayer Membranes for Highly Selective Gas Separation. Journal of the American Chemical Society, 2018, 140, 10094-10098.	13.7	500
507	Synthesis of tellurium nanosheet for use in matrix assisted laser desorption/ionization time-of-flight mass spectrometry of small molecules. Mikrochimica Acta, 2018, 185, 368.	5.0	19
508	Boosting Lithium Storage Properties of MOF Derivatives through a Wetâ€Spinning Assembled Fiber Strategy. Chemistry - A European Journal, 2018, 24, 13792-13799.	3.3	68

#	Article	IF	CITATIONS
509	Theoretical Prediction of Two-Dimensional SnP <sub>3</sub> as a Promising Anode Material for Na-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 3850-3859.	5.1	54
510	Nitrogen-rich 1T′-MoS <sub>2</sub> layered nanostructures using alkyl amines for high catalytic performance toward hydrogen evolution. Nanoscale, 2018, 10, 14726-14735.	5.6	39
511	Conductive two-dimensional metal–organic frameworks as multifunctional materials. Chemical Communications, 2018, 54, 7873-7891.	4.1	373
512	The Effect of Graphene Oxide Concentration on Luminescence Properity of Tb3+-Complexes. Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 2596-2602.	3.7	7
513	In Situ Growth of Pd Nanosheets on g <sub>3</sub> N <sub>4</sub> Nanosheets with Well ontacted Interface and Enhanced Catalytic Performance for 4â€Nitrophenol Reduction. Small, 2018, 14, e1801812.	10.0	74
514	Redoxâ€Responsive and Thermoresponsive Supramolecular Nanosheet Gels with High Young's Moduli. Macromolecular Rapid Communications, 2018, 39, e1800282.	3.9	8
515	Noble-metal-free heterostructure for efficient hydrogen evolution in visible region: Molybdenum nitride/ultrathin graphitic carbon nitride. Applied Catalysis B: Environmental, 2018, 238, 318-327.	20.2	158
516	Sulfur dioxide adsorbed on pristine and Au dimer decorated $\hat{l}^3$ -graphyne: A density functional theory study. Applied Surface Science, 2018, 458, 781-789.	6.1	25
517	Molybdenum Disulfide Nanoflakes Covered Carbonized Catkin Microtube Hybrids as Superior Catalysts for Electrochemical Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2018, 6, 11255-11264.	6.7	15
518	Thickness controllable single-crystal WO 3 nanosheets: Highly selective sensor for triethylamine detection at room temperature. Materials Letters, 2018, 226, 59-62.	2.6	34
519	Phospholipid-Tailored Titanium Carbide Nanosheets as a Novel Fluorescent Nanoprobe for Activity Assay and Imaging of Phospholipase D. Analytical Chemistry, 2018, 90, 6742-6748.	6.5	52
520	Recent progress in two-dimensional polymers for energy storage and conversion: design, synthesis, and applications. Journal of Materials Chemistry A, 2018, 6, 21676-21695.	10.3	78
521	Templated synthesis of plate-like MoS2 nanosheets assisted with HNTs and their tribological performance in oil. Journal of Nanoparticle Research, 2018, 20, 1.	1.9	10
522	An ultrasensitive electrochemiluminescence immunosensor based on platinum nickel nanocubes-L-cysteine-luminol nanocomposite. Talanta, 2018, 186, 322-329.	5.5	17
523	[Hg 4 Te 8 (Te 2 ) 4 ] 8â^': A Heavy Metal Porphyrinoid Embedded in a Lamellar Structure. Angewandte Chemie - International Edition, 2018, 57, 8770-8774.	13.8	26
524	Ultrathin Titanate Nanosheets/Graphene Films Derived from Confined Transformation for Excellent Na/K lon Storage. Angewandte Chemie, 2018, 130, 8676-8680.	2.0	36
525	Engineering graphene and TMDs based van der Waals heterostructures for photovoltaic and photoelectrochemical solar energy conversion. Chemical Society Reviews, 2018, 47, 4981-5037.	38.1	344
526	Atomically Thin 2D Multinary Nanosheets for Energyâ€Related Photo, Electrocatalysis. Advanced Science, 2018, 5, 1800244.	11.2	54

#	Article	IF	CITATIONS
527	Colloidal synthesis of 1T' phase dominated WS2 towards endurable electrocatalysis. Nano Energy, 2018, 50, 176-181.	16.0	123
528	Synthesis of 2D Metal Chalcogenide Thin Films through the Process Involving Solutionâ€Phase Deposition. Advanced Materials, 2018, 30, e1707577.	21.0	43
529	Core/shell design of efficient electrocatalysts based on NiCo <sub>2</sub> O <sub>4</sub> nanowires and NiMn LDH nanosheets for rechargeable zinc–air batteries. Journal of Materials Chemistry A, 2018, 6, 10243-10252.	10.3	158
530	Photoinduced Orientationâ€Dependent Interlayer Carrier Transportation in Crossâ€Stacked Black Phosphorus van der Waals Junctions. Advanced Materials Interfaces, 2018, 5, 1800964.	3.7	8
531	Boron-Doped C <sub>3</sub> N Monolayer as a Promising Metal-Free Oxygen Reduction Reaction Catalyst: A Theoretical Insight. Journal of Physical Chemistry C, 2018, 122, 20312-20322.	3.1	78
532	Preparation and Characterization of Chiral Transition-Metal Dichalcogenide Quantum Dots and Their Enantioselective Catalysis. ACS Applied Materials & Samp; Interfaces, 2018, 10, 30680-30688.	8.0	42
533	Diffusion controlled multilayer electrocatalysts <i>via</i> graphene oxide nanosheets of varying sizes. Nanoscale, 2018, 10, 16159-16168.	5.6	22
534	Two-Dimensional Nanosheets by Rapid and Efficient Microwave Exfoliation of Layered Materials. Chemistry of Materials, 2018, 30, 5932-5940.	6.7	76
535	Integrating MoS2 on sulfur-doped porous g-C3N4 iostype heterojunction hybrids enhances visible-light photocatalytic performance. Journal of Alloys and Compounds, 2018, 768, 766-774.	5 <b>.</b> 5	54
536	Hydraulic Power Manufacturing for Highly Scalable and Stable 2D Nanosheet Dispersions and Their Film Electrode Application. Advanced Functional Materials, 2018, 28, 1802952.	14.9	24
537	Structural effects on optoelectronic properties of halide perovskites. Chemical Society Reviews, 2018, 47, 7045-7077.	38.1	108
538	Degradation behaviors and mechanisms of MoS2 crystals relevant to bioabsorbable electronics. NPG Asia Materials, 2018, 10, 810-820.	7.9	36
539	Liquid-exfoliated molybdenum telluride nanosheets with superior electrocatalytic hydrogen evolution performances. Ceramics International, 2018, 44, 21205-21209.	4.8	29
540	Twoâ€Dimensional Tellurium Nanosheets Exhibiting an Anomalous Switchable Photoresponse with Thickness Dependence. Angewandte Chemie, 2018, 130, 13721-13725.	2.0	3
541	Design of 2D Layered PtSe <sub>2</sub> Heterojunction for the High-Performance, Room-Temperature, Broadband, Infrared Photodetector. ACS Photonics, 2018, 5, 3820-3827.	6.6	144
542	Enhanced Solar-Driven Gaseous CO <sub>2</sub> Conversion by CsPbBr <sub>3</sub> Nanocrystal/Pd Nanosheet Schottky-Junction Photocatalyst. ACS Applied Energy Materials, 2018, 1, 5083-5089.	5.1	135
543	In-situ gas reduction in reversible SnS-SnO2@N-doped graphene anodes for high-rate and lasting lithium storage. Journal of Alloys and Compounds, 2018, 769, 1007-1018.	5 <b>.</b> 5	17
544	Research Update: Recent progress on 2D materials beyond graphene: From ripples, defects, intercalation, and valley dynamics to straintronics and power dissipation. APL Materials, 2018, 6, .	5.1	30

#	Article	IF	CITATIONS
545	Beyond Phototherapy: Recent Advances in Multifunctional Fluorescent Nanoparticles for Lightâ€Triggered Tumor Theranostics. Advanced Functional Materials, 2018, 28, 1803733.	14.9	54
546	Stressâ€Transferâ€Induced Inâ€Situ Formation of Ultrathin Nickel Phosphide Nanosheets for Efficient Hydrogen Evolution. Angewandte Chemie, 2018, 130, 13266-13269.	2.0	26
547	Stressâ€Transferâ€Induced Inâ€Situ Formation of Ultrathin Nickel Phosphide Nanosheets for Efficient Hydrogen Evolution. Angewandte Chemie - International Edition, 2018, 57, 13082-13085.	13.8	97
548	Twoâ€Dimensional Tellurium Nanosheets Exhibiting an Anomalous Switchable Photoresponse with Thickness Dependence. Angewandte Chemie - International Edition, 2018, 57, 13533-13537.	13.8	67
549	Colloidal Synthesis of Ultrathin Monoclinic BiVO <sub>4</sub> Nanosheets for Z-Scheme Overall Water Splitting under Visible Light. ACS Catalysis, 2018, 8, 8649-8658.	11.2	151
550	Carbon doped hexagonal BN as a highly efficient metal-free base catalyst for Knoevenagel condensation reaction. Applied Catalysis B: Environmental, 2018, 239, 254-259.	20.2	102
551	Edgeâ€Terminated MoS <sub>2</sub> Nanoassembled Electrocatalyst via In Situ Hybridization with 3D Carbon Network. Small, 2018, 14, e1802191.	10.0	15
552	Graphene-Oxide-Assisted Synthesis of Ga <sub>2</sub> O <sub>3</sub> Nanosheets/Reduced Graphene Oxide Nanocomposites Anodes for Advanced Alkali-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 4708-4715.	5.1	61
553	Controllable Synthesis of Fewâ€Layer Bismuth Subcarbonate by Electrochemical Exfoliation for Enhanced CO <sub>2</sub> Reduction Performance. Angewandte Chemie - International Edition, 2018, 57, 13283-13287.	13.8	141
554	Site-Specific Positioning and Patterning of MoS <sub>2</sub> Monolayers: The Role of Au Seeding. ACS Nano, 2018, 12, 8970-8976.	14.6	50
555	An azine-linked covalent organic framework ACOF-1 membrane for highly selective CO <sub>2</sub> /CH <sub>4</sub> separation. Journal of Materials Chemistry A, 2018, 6, 16849-16853.	10.3	107
556	Progress in piezotronic and piezo-phototronic effect of 2D materials. 2D Materials, 2018, 5, 042003.	4.4	62
557	Coupled exciton-trion spin dynamics in a MoSe <sub>2</sub> monolayer. 2D Materials, 2018, 5, 045024.	4.4	5
558	Controllable Synthesis of Fewâ€Layer Bismuth Subcarbonate by Electrochemical Exfoliation for Enhanced CO <sub>2</sub> Reduction Performance. Angewandte Chemie, 2018, 130, 13467-13471.	2.0	42
559	Recent Progress on Two-Dimensional Nanoflake Ensembles for Energy Storage Applications. Nano-Micro Letters, 2018, 10, 66.	27.0	71
560	Nanosheets of Two-Dimensional Neutral Coordination Polymers Based on Near-Infrared-Emitting Lanthanides and a Chlorocyananilate Ligand. Chemistry of Materials, 2018, 30, 6575-6586.	6.7	36
561	Hydrothermal Exfoliation for Two-Dimension Boron Nitride Nanosheets., 2018,,.		1
562	Hybrid 0D–2D black phosphorus quantum dots–graphitic carbon nitride nanosheets for efficient hydrogen evolution. Nano Energy, 2018, 50, 552-561.	16.0	148

#	Article	IF	CITATIONS
563	Optimizing Pd and Au-Pd decorated Bi2WO6 ultrathin nanosheets for photocatalytic selective oxidation of aromatic alcohols. Journal of Catalysis, 2018, 364, 154-165.	6.2	100
564	Controlled ambipolar charge transport of polymer semiconductors by viologen-doping for complementary-like electronic circuits. Organic Electronics, 2018, 59, 224-229.	2.6	11
565	Preparation of 1T′-Phase ReS <sub>2<i>x</i></sub> Se <sub>2(1-<i>x</i>)</sub> ( <i>x</i> = 0–1) Nanodots for Highly Efficient Electrocatalytic Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2018, 140, 8563-8568.	13.7	104
566	Ultrathin porous nanosheet-assembled hollow cobalt nickel oxide microspheres with optimized compositions for efficient oxygen evolution reaction. Inorganic Chemistry Frontiers, 2018, 5, 1886-1893.	6.0	21
567	Co <sub>3</sub> O <sub>4</sub> nanobelt arrays assembled with ultrathin nanosheets as highly efficient and stable electrocatalysts for the chlorine evolution reaction. Journal of Materials Chemistry A, 2018, 6, 12718-12723.	10.3	55
568	Highly anisotropic solar-blind UV photodetector based on large-size two-dimensional <i>α</i> -MoO <sub>3</sub> atomic crystals. 2D Materials, 2018, 5, 035033.	4.4	49
569	Controlled synthesis of ordered sandwich CuCo2O4/reduced graphene oxide composites via layer-by-layer heteroassembly for high-performance supercapacitors. Chemical Engineering Journal, 2018, 350, 627-636.	12.7	51
570	Enhanced Electrocatalytic Oxygen Evolution by Exfoliation of a Metal–Organic Framework Containing Cationic One-Dimensional [Co <sub>4</sub> (OH) <sub>2</sub> ] <sup>6+</sup> Chains. ACS Applied Energy Materials, 2018, 1, 2446-2451.	5.1	19
571	Preparation of 2D material dispersions and their applications. Chemical Society Reviews, 2018, 47, 6224-6266.	38.1	459
572	Theoretical investigation of zirconium carbide MXenes as prospective high capacity anode materials for Na-ion batteries. Journal of Materials Chemistry A, 2018, 6, 13652-13660.	10.3	111
573	Building Close Ties Between CO <sub>2</sub> and Functional Twoâ€Dimensional Nanomaterials with Green Chemistry Strategy. Energy and Environmental Materials, 2018, 1, 46-60.	12.8	26
574	Synthesis and Characterization of Rectorite/ZnO/TiO2 Composites and Their Properties of Adsorption and Photocatalysis for the Removal of Methylene Blue Dye. Journal Wuhan University of Technology, Materials Science Edition, 2018, 33, 729-735.	1.0	11
575	Recent advances on metal-free graphene-based catalysts for the production of industrial chemicals. Frontiers of Chemical Science and Engineering, 2018, 12, 855-866.	4.4	27
576	Potassium compound-assistant synthesis of multi-heteroatom doped ultrathin porous carbon nanosheets for high performance supercapacitors. Nano Energy, 2018, 51, 366-372.	16.0	289
577	Interband Transitions in Monolayer and Few-Layer WSe <sub>2</sub> Probed Using Photoexcited Charge Collection Spectroscopy. ACS Applied Materials & Interfaces, 2018, 10, 20213-20218.	8.0	8
578	Biodegradable Black Phosphorus Nanosheets Mediate Specific Delivery of hTERT siRNA for Synergistic Cancer Therapy. ACS Applied Materials & Samp; Interfaces, 2018, 10, 21137-21148.	8.0	90
579	[Hg 4 Te 8 (Te 2 ) 4 ] 8â^' : ein Schwermetallâ€Porphyrinoid in einer lamellaren Struktur. Angewandte Chemie, 2018, 130, 8906-8910.	2.0	9
580	Ultrafast Anisotropic Exciton Dynamics in Nanopatterned MoS <sub>2</sub> Sheets. ACS Photonics, 2018, 5, 3363-3371.	6.6	17

#	ARTICLE	IF	CITATIONS
581	Synthesis of a 2D phosphorus material in a MOF-based 2D nano-reactor. Chemical Science, 2018, 9, 5912-5918.	7.4	14
582	Two-dimensional pentagonal CrX (X = S, Se or Te) monolayers: antiferromagnetic semiconductors for spintronics and photocatalysts. Physical Chemistry Chemical Physics, 2018, 20, 18348-18354.	2.8	26
583	Photoelectrocatalytic Materials for Solar Water Splitting. Advanced Energy Materials, 2018, 8, 1800210.	19.5	364
584	Transformation of Bismuth and β-Bi <sub>2</sub> O <sub>3</sub> Nanoparticles into (BiO) <sub>2</sub> CO <sub>3</sub> by Capturing CO <sub>2</sub> : The Role of Halloysite Nanotubes and "Sunlight―on the Crystal Shape and Size, Crystal Growth and Design, 2018, 18, 4334-4346.	3.0	20
585	Solution Processed Metal Oxide Highâ€P Dielectrics for Emerging Transistors and Circuits. Advanced Materials, 2018, 30, e1706364.	21.0	158
586	Reduced graphene oxide coupled with g-C3N4 nanodots as 2D/0D nanocomposites for enhanced photocatalytic activity. Journal of Physics and Chemistry of Solids, 2018, 122, 104-108.	4.0	27
587	Interface-Assisted Synthesis of 2D Materials: Trend and Challenges. Chemical Reviews, 2018, 118, 6189-6235.	47.7	505
588	Solution-Synthesized High-Mobility Tellurium Nanoflakes for Short-Wave Infrared Photodetectors. ACS Nano, 2018, 12, 7253-7263.	14.6	298
589	Carbon Nanosheets by Morphologyâ€Retained Carbonization of Twoâ€Dimensional Assembled Anisotropic Carbon Nanorings. Angewandte Chemie - International Edition, 2018, 57, 9679-9683.	13.8	80
590	Ultra-thin bimetallic alloy nanowires with porous architecture/monolayer MoS2 nanosheet as a highly sensitive platform for the electrochemical assay of hazardous omethoate pollutant. Journal of Hazardous Materials, 2018, 357, 466-474.	12.4	34
591	Ultrathin two-dimensional metallic nanocrystals for renewable energy electrocatalysis. Materials Today, 2019, 23, 45-56.	14.2	64
592	Sulfonated highly ordered mesoporous graphitic carbon nitride as a super active heterogeneous solid acid catalyst for Biginelli reaction. Microporous and Mesoporous Materials, 2019, 274, 83-93.	4.4	39
593	Manyâ∈Body Complexes in 2D Semiconductors. Advanced Materials, 2019, 31, e1706945.	21.0	255
594	2D Oxide Nanomaterials to Address the Energy Transition and Catalysis. Advanced Materials, 2019, 31, e1801712.	21.0	88
595	Enhanced catalytic reduction of nitrophenols by sodium borohydride over highly recyclable Au@graphitic carbon nitride nanocomposites. Applied Catalysis B: Environmental, 2019, 240, 337-347.	20.2	153
596	Antimonene: From Experimental Preparation to Practical Application. Angewandte Chemie - International Edition, 2019, 58, 1574-1584.	13.8	111
597	Face-to-face engineering of ultrathin Pd nanosheets on amorphous carbon nitride for efficient photocatalytic hydrogen production. Science China Materials, 2019, 62, 351-358.	6.3	48
598	Engineering 2D Architectures toward Highâ€Performance Microâ€6upercapacitors. Advanced Materials, 2019, 31, e1802793.	21.0	202

#	Article	IF	CITATIONS
599	Core-shell materials for advanced batteries. Chemical Engineering Journal, 2019, 355, 208-237.	12.7	156
600	Nitrogen-doped hierarchical porous carbons from used cigarette filters for supercapacitors. Journal of the Taiwan Institute of Chemical Engineers, 2019, 95, 315-323.	5.3	26
601	Antimonen: von der experimentellen Herstellung zur praktischen Anwendung. Angewandte Chemie, 2019, 131, 1588-1599.	2.0	4
602	Atomic layer deposition of stable 2D materials. 2D Materials, 2019, 6, 012001.	4.4	65
603	A review of recent advances in two-dimensional natural clay vermiculite-based nanomaterials. Materials Research Express, 2019, 6, 102002.	1.6	31
604	Electronic Properties of Linear and Cyclic Boron Nanoribbons from Thermally-Assisted-Occupation Density Functional Theory. Scientific Reports, 2019, 9, 12139.	3.3	13
605	Monitoring the electronic, thermal and optical properties of two-dimensional MoO <sub>2</sub> under strain <i>via</i> vibrational spectroscopies: a first-principles investigation. Physical Chemistry Chemical Physics, 2019, 21, 19904-19914.	2.8	24
606	Prediction of strain-induced phonon-mediated superconductivity in monolayer YS. Journal of Materials Chemistry C, 2019, 7, 11184-11190.	5.5	11
607	Confinement Catalysis with 2D Materials for Energy Conversion. Advanced Materials, 2019, 31, e1901996.	21.0	257
608	A Strategic High Yield Synthesis of 2,5-Dihydroxy-1,4-benzoquinone Based MOFs. Inorganic Chemistry, 2019, 58, 10756-10760.	4.0	15
609	Recent advances in exfoliation techniques of layered and non-layered materials for energy conversion and storage. Journal of Materials Chemistry A, 2019, 7, 23512-23536.	10.3	89
610	Unidirectional Spin–Orbit Interaction Induced by the Line Defect in Monolayer Transition Metal Dichalcogenides for High-Performance Devices. Nano Letters, 2019, 19, 6005-6012.	9.1	21
611	Van der Waals 2D Transition Metal Tellurides. Advanced Materials Interfaces, 2019, 6, 1900741.	3.7	48
612	Oxidized graphitic carbon nitride nanosheets as an effective adsorbent for organic dyes and tetracycline for water remediation. Journal of Alloys and Compounds, 2019, 809, 151783.	5.5	60
613	Solution-Processed Large-Area Ultrathin Films of Metal-Coordinated Electron-Rich Adenine-Based Ligand. Journal of Physical Chemistry C, 2019, 123, 20922-20927.	3.1	2
614	Effect of surface termination on the lattice thermal conductivity of monolayer Ti3C2Tz MXenes. Journal of Applied Physics, 2019, 126, .	2.5	55
615	A Novel Route to Manufacture 2D Layer MoS2 and g-C3N4 by Atmospheric Plasma with Enhanced Visible-Light-Driven Photocatalysis. Nanomaterials, 2019, 9, 1139.	4.1	19
616	Defectâ€Rich Graphene Nanomesh Produced by Thermal Exfoliation of Metal–Organic Frameworks for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2019, 58, 13354-13359.	13.8	247

#	Article	IF	CITATIONS
617	PbSe Quantum Dots Sensitized High-Mobility Bi <sub>2</sub> O <sub>2</sub> Se Nanosheets for High-Performance and Broadband Photodetection Beyond 2 νm. ACS Nano, 2019, 13, 9028-9037.	14.6	149
618	2D Metal–Organic Frameworks as Multifunctional Materials in Heterogeneous Catalysis and Electro/Photocatalysis. Advanced Materials, 2019, 31, e1900617.	21.0	309
619	Synthesis of Ultrathin Biotite Nanosheets as an Intelligent Theranostic Platform for Combination Cancer Therapy. Advanced Science, 2019, 6, 1901211.	11.2	130
620	Phase-controlled large-area growth of MoTe2 and MoTe2-xOx/MoTe2 heterostructures for tunable memristive behavior. Applied Surface Science, 2019, 496, 143687.	6.1	21
621	2D Crystal–Based Fibers: Status and Challenges. Small, 2019, 15, e1902691.	10.0	35
622	2D metal chalcogenides with surfaces fully covered with an organic "promoter―for high-performance biomimetic catalysis. Chemical Communications, 2019, 55, 10444-10447.	4.1	19
623	Facile fabrication of 3D ferrous ion crosslinked graphene oxide hydrogel membranes for excellent water purification. Environmental Science: Nano, 2019, 6, 3060-3071.	4.3	18
624	Defectâ€Rich Graphene Nanomesh Produced by Thermal Exfoliation of Metal–Organic Frameworks for the Oxygen Reduction Reaction. Angewandte Chemie, 2019, 131, 13488-13493.	2.0	54
625	2D Poly(arylene vinylene) Covalent Organic Frameworks via Aldol Condensation of Trimethyltriazine. Angewandte Chemie, 2019, 131, 13891-13895.	2.0	24
626	Synthesis of centimeter-size free-standing perovskite nanosheets from single-crystal lead bromide for optoelectronic devices. Scientific Reports, 2019, 9, 11738.	3.3	9
627	A Câ^'N Coupling Polymerization on Iceâ€Surface towards Decimeterâ€Sized 2D Covalent Materials with High Catalytic Activity for Waterâ€Splitting. Chemistry - A European Journal, 2019, 25, 13860-13864.	3.3	6
628	Multifunctional anti-ambipolar p-n junction based on MoTe2/MoS2 heterostructure. Applied Physics Letters, 2019, 115, .	3.3	35
629	Controlled synthesis of bifunctional 3D BiOBr:Eu3+ hierarchitectures with tunable thickness for enhanced visible light photocatalytic activities and mechanism insight. Catalysis Science and Technology, 2019, 9, 5011-5021.	4.1	8
630	Scattering of phonons by quantum-dislocation segments in an elastic continuum. Physical Review B, 2019, 99, .	3.2	19
631	Biofunctionalized Nanostructured Yttria Modified Non-Invasive Impedometric Biosensor for Efficient Detection of Oral Cancer. Nanomaterials, 2019, 9, 1190.	4.1	26
632	The good performance of bilayer $\hat{l}^2$ -antimoneneas an anode material for the Li-ion battery study. Applied Surface Science, 2019, 495, 143549.	6.1	17
633	Role of intrinsic dipole on photocatalytic water splitting for Janus MoSSe/nitrides heterostructure: A first-principles study. Progress in Natural Science: Materials International, 2019, 29, 335-340.	4.4	28
634	A Perspective on Recent Advances in 2D Stanene Nanosheets. Advanced Materials Interfaces, 2019, 6, 1900752.	3.7	54

#	Article	IF	CITATIONS
635	Ultrathin Twoâ€Dimensional Metalâ€Organicâ€Frameworkâ€Derived CoO/Nitrogen and Sulfur Coâ€doped Ultrathin Porous Carbon Nanoplates for Highly Efficient Water Electrolysis. ChemElectroChem, 2019, 6, 3940-3948.	3.4	9
636	Recent progress on synthesis, structure and electrocatalytic applications of MXenes. FlatChem, 2019, 17, 100129.	5.6	33
637	Fe2O3 and Co bimetallic decorated nitrogen doped graphene nanomaterial for effective electrochemical water split hydrogen evolution reaction. Journal of Electroanalytical Chemistry, 2019, 849, 113345.	3.8	14
638	Auto-programmed heteroarchitecturing: Self-assembling ordered mesoporous carbon between two-dimensional Ti3C2Tx MXene layers. Nano Energy, 2019, 65, 103991.	16.0	70
639	Subâ€Nanometer Thick Gold Nanosheets as Highly Efficient Catalysts. Advanced Science, 2019, 6, 1900911.	11.2	56
640	Energy Gap Modulation of SnCH3 Nanomaterials Under Elastic Strain. Journal of Electronic Materials, 2019, 48, 5125-5130.	2.2	2
641	Facile Exfoliation of 3D Pillared Metal–Organic Frameworks (MOFs) to Produce MOF Nanosheets with Functionalized Surfaces. Inorganic Chemistry, 2019, 58, 11020-11027.	4.0	51
642	Creating Sandwich-like Ti <sub>3</sub> C <sub>2</sub> /TiO <sub>2</sub> /rGO as Anode Materials with High Energy and Power Density for Li-lon Hybrid Capacitors. ACS Sustainable Chemistry and Engineering, 2019, 7, 15394-15403.	6.7	57
643	Graphene/GeTe van der Waals heterostructure: Functional Schottky device with modulated Schottky barriers via external strain and electric field. Computational Materials Science, 2019, 170, 109200.	3.0	26
644	Plasmonic Nanohybrid with High Photothermal Conversion Efficiency for Simultaneously Effective Antibacterial/Anticancer Photothermal Therapy. ACS Applied Bio Materials, 2019, 2, 3942-3953.	4.6	49
645	Synthesis and Imaging of Biocompatible Graphdiyne Quantum Dots. ACS Applied Materials & Samp; Interfaces, 2019, 11, 32798-32807.	8.0	49
646	2D molecular crystal lattices: advances in their synthesis, characterization, and application. Journal of Materials Chemistry A, 2019, 7, 23537-23562.	10.3	33
647	Spin–Orbit Coupling-Dominated Catalytic Activity of Two-Dimensional Bismuth toward CO <sub>2</sub> Electroreduction: Not the Thinner the Better. Journal of Physical Chemistry Letters, 2019, 10, 4663-4667.	4.6	41
648	A novel Cu-metal-organic framework with two-dimensional layered topology for electrochemical detection using flexible sensors. Nanotechnology, 2019, 30, 424002.	2.6	31
649	Oxygen Vacancy Enhanced Photoreduction Cr(VI) on Few-Layers BiOBr Nanosheets. Catalysts, 2019, 9, 558.	3.5	25
650	Ultralarge interlayer distance and C,N-codoping enable superior sodium storage capabilities of MoS2 nanoonions. Chemical Engineering Journal, 2019, 378, 122249.	12.7	39
651	Unveiling chemical reactivity and oxidation of 1T-phased group VI disulfides. Physical Chemistry Chemical Physics, 2019, 21, 17010-17017.	2.8	7
652	Electrocatalytic/photocatalytic properties and aqueous media applications of 2D transition metal carbides (MXenes). Current Opinion in Solid State and Materials Science, 2019, 23, 100760.	11.5	47

#	Article	IF	CITATIONS
653	Kinetics, Isotherm, Thermodynamics, and Recyclability of Exfoliated Graphene-Decorated MnFe <sub>2</sub> O <sub>4</sub> Nanocomposite Towards Congo Red Dye. Journal of Chemistry, 2019, 2019, 1-16.	1.9	9
654	Electronic structure, optical and thermodynamic studies on 2D SnSe2 nanosheet: A first-principles investigation. Superlattices and Microstructures, 2019, 133, 106182.	3.1	7
655	Surface-coating engineering for flame retardant flexible polyurethane foams: A critical review. Composites Part B: Engineering, 2019, 176, 107185.	12.0	163
656	Recent progress of nanomaterials for microwave absorption. Journal of Materiomics, 2019, 5, 503-541.	5.7	318
657	Recent progress in black phosphorus and black-phosphorus-analogue materials: properties, synthesis and applications. Nanoscale, 2019, 11, 14491-14527.	5.6	239
658	Flexible Memristive Device Based on WSe <sub>2</sub> Quantum Dots Sandwiched Between Two Poly (Methyl Methacrylate) Layers. IEEE Electron Device Letters, 2019, 40, 1088-1091.	3.9	9
659	Dissolution of silver nanoparticles in colloidal consumer products: effects of particle size and capping agent. Journal of Nanoparticle Research, 2019, 21, 1-155.	1.9	24
660	Inlaying Ultrathin Bimetallic MOF Nanosheets into 3D Ordered Macroporous Hydroxide for Superior Electrocatalytic Oxygen Evolution. Small, 2019, 15, e1902218.	10.0	77
661	Controlled one step thinning and doping of two-dimensional transition metal dichalcogenides. Science China Materials, 2019, 62, 1837-1845.	6.3	10
662	Ti3C2 nanosheets modified Zr-MOFs with Schottky junction for boosting photocatalytic HER performance. Solar Energy, 2019, 188, 750-759.	6.1	39
663	A New Strategy for Preparing Two-dimensional Nanomaterials by Exfoliating LDH Using Supercritical Ethanol. Chemistry Letters, 2019, 48, 1148-1151.	1.3	9
664	Nanocatalytic Medicine. Advanced Materials, 2019, 31, e1901778.	21.0	396
665	Ultrasensitive label-free detection of circulating tumor cells using conductivity matching of two-dimensional semiconductor with cancer cell. Biosensors and Bioelectronics, 2019, 142, 111520.	10.1	30
666	Black phosphorus quantum dot based all-optical signal processing: ultrafast optical switching and wavelength converting. Nanotechnology, 2019, 30, 415202.	2.6	30
667	Annealing-enhanced interlayer coupling interaction in GaS/MoS2 heterojunctions. Chinese Physics B, 2019, 28, 078101.	1.4	2
668	Two-dimensional semiconductor transition metal based chalcogenide based heterostructures for water splitting applications. Dalton Transactions, 2019, 48, 12772-12802.	3.3	76
669	Hierarchical Structure: An effective Strategy to Enhance the Mechanical Performance and Fire Safety of Unsaturated Polyester Resin. ACS Applied Materials & Samp; Interfaces, 2019, 11, 29436-29447.	8.0	66
670	Transport gap engineering in zigzag graphene nanoribbons through topological design of deposited oxygen atoms: a new way to control the quantum transport in graphene-like materials. Materials Research Express, 2019, 6, 0950b6.	1.6	О

#	Article	IF	CITATIONS
671	Emerging Twoâ€Dimensional Nanomaterials for Cancer Therapy. ChemPhysChem, 2019, 20, 2417-2433.	2.1	24
672	Insight into the excellent catalytic activity of (CoMo)S2/graphene for hydrogen evolution reaction. Applied Catalysis B: Environmental, 2019, 258, 118012.	20.2	44
673	Inorganic scaling in reverse osmosis (RO) desalination: Mechanisms, monitoring, and inhibition strategies. Desalination, $2019$ , $468$ , $114065$ .	8.2	82
674	Ultrathin Free-Standing Nanosheets of Bi <sub>2</sub> O <sub>2</sub> Se: Room Temperature Ferroelectricity in Self-Assembled Charged Layered Heterostructure. Nano Letters, 2019, 19, 5703-5709.	9.1	117
675	Novel Ni–Fe‣ayered Double Hydroxide Microspheres with Reduced Graphene Oxide for Rechargeable Aluminum Batteries. Energy Technology, 2019, 7, 1900649.	3.8	8
676	Two-dimensional nanomaterials for biosensing applications. TrAC - Trends in Analytical Chemistry, 2019, 119, 115610.	11.4	113
677	Contrast Mechanisms of Solution-Dispersed Graphene Compounds in Twilight Fluorescence Microscopy. Langmuir, 2019, 35, 10334-10340.	3.5	2
678	Colloidal Template Synthesis of Nanomaterials by Using Microporous Organic Nanoparticles: The Case of C@MoS 2 Nanoadsorbents. Chemistry - an Asian Journal, 2019, 14, 3173-3180.	3.3	12
679	Constructing bimetal-complex based hydrogen-bonded framework for highly efficient electrocatalytic water splitting. Applied Catalysis B: Environmental, 2019, 258, 117973.	20.2	55
680	Bidirectional charge-transfer behavior in carbon-based hybrid nanomaterials. Nanoscale, 2019, 11, 14978-14992.	5.6	20
681	Aging amorphous/crystalline heterophase PdCu nanosheets for catalytic reactions. National Science Review, 2019, 6, 955-961.	9.5	75
682	2D Poly(arylene vinylene) Covalent Organic Frameworks via Aldol Condensation of Trimethyltriazine. Angewandte Chemie - International Edition, 2019, 58, 13753-13757.	13.8	137
683	Two Dimensional Transition Metal Dichalcogenides. , 2019, , .		7
684	Two-dimensional Acetate-based Light Lanthanide Fluoride Nanomaterials (F–Ln, Ln = La, Ce, Pr, and Nd): Morphology, Structure, Growth Mechanism, and Stability. Journal of the American Chemical Society, 2019, 141, 13134-13142.	13.7	17
685	Porous 3D flower-like CoAl-LDH nanocomposite with excellent performance for NO <sub>2</sub> detection at room temperature. RSC Advances, 2019, 9, 21911-21921.	3.6	28
686	Electronic and Optical Properties of Two-Dimensional Tellurene: From First-Principles Calculations. Nanomaterials, 2019, 9, 1075.	4.1	40
687	Topological Characterization of Nanosheet Covered by C3 and C6. Processes, 2019, 7, 462.	2.8	7
688	Transition Metal Dichalcogenides for Biomedical Applications. , 2019, , 241-292.		5

#	Article	IF	CITATIONS
689	Application of electrospray spreading to a modified Langmuir–Blodgett technique for organo-clay hybrid film preparation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 580, 123714.	4.7	4
690	NiCoFe oxide amorphous nanohetrostructres for oxygen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 22991-23001.	7.1	39
691	Nanocomposite membranes embedded with functionalized MoS2 nanosheets for enhanced interfacial compatibility and nanofiltration performance. Journal of Membrane Science, 2019, 591, 117316.	8.2	107
692	2D Vâ€V Binary Materials: Status and Challenges. Advanced Materials, 2019, 31, e1902352.	21.0	303
693	Enzymatic and Nonenzymatic Electrochemical Biosensors. , 2019, , 259-300.		11
694	Electrochemical Sensing Platform Based on Graphene-Metal/Metal Oxide Hybrids for Detection of Metal Ions Contaminants., 2019,, 301-327.		2
695	Ag-functionalized exfoliated V2O5 nanosheets: a flexible and binder-free cathode for lithium-ion batteries. Journal of Materials Science, 2019, 54, 12713-12722.	3.7	19
696	Elastic behavior and intrinsic carrier mobility for monolayer SnS and SnSe: First-principles calculations. Applied Surface Science, 2019, 492, 435-448.	6.1	44
697	Synthesis of urchin-like Ni3Si2O5(OH)4 hierarchical hollow spheres/GO composite with enhanced electrochemical properties for high-performance hybrid supercapacitors. Dalton Transactions, 2019, 48, 11749-11762.	3.3	30
698	A "Phase Separation―Molecular Design Strategy Towards Largeâ€Area 2D Molecular Crystals. Advanced Materials, 2019, 31, e1901437.	21.0	44
699	Multifunctional two-dimensional nanocomposites for photothermal-based combined cancer therapy. Nanoscale, 2019, 11, 15685-15708.	5.6	74
700	Novel Ultrathin Layered Double Hydroxide Nanosheets with In Situ Formed Oxidized Phosphorus as Anions for Simultaneous Fire Resistance and Mechanical Enhancement of Thermoplastic Polyurethane. ACS Applied Polymer Materials, 2019, 1, 1979-1990.	4.4	24
701	A universal approach for the synthesis of two-dimensional binary compounds. Nature Communications, 2019, 10, 2957.	12.8	93
702	Removal of Hg( <scp>ii</scp> ) in aqueous solutions through physical and chemical adsorption principles. RSC Advances, 2019, 9, 20941-20953.	3.6	66
703	Preparation of and research on bioinspired graphene oxide/nanocellulose/polydopamine ternary artificial nacre. Materials and Design, 2019, 181, 107961.	7.0	28
704	Potassium Hydroxide Mixed with Lithium Hydroxide: An Advanced Electrolyte for Oxygen Evolution Reaction. Solar Rrl, 2019, 3, 1900195.	5.8	4
705	Pd Nanoparticles Immobilized in Layered ZIFs as Efficient Catalysts for Heterogeneous Catalysis. Industrial & Description of the Catalysis of the Catalysts for Heterogeneous Catalysis.	3.7	10
706	Characteristics of popular photon beam collimators. Journal of Physics: Conference Series, 2019, 1305, 012060.	0.4	0

#	Article	IF	CITATIONS
707	Effects of defects on the electronic and optical properties of TiO <sub>2</sub> nanosheet. Electronic Structure, 2019, 1, 044002.	2.8	6
708	Binary Phosphorene Redox Behavior in Oxidoreductase Enzymatic Systems. ACS Nano, 2019, 13, 13217-13224.	14.6	22
709	Recent Progress on 2D Nobleâ€Transitionâ€Metal Dichalcogenides. Advanced Functional Materials, 2019, 29, 1904932.	14.9	186
710	From Highly Purified Boron Nitride to Boron Nitrideâ€Based Heterostructures: An Inorganic Precursorâ€Based Strategy. Advanced Functional Materials, 2019, 29, 1906284.	14.9	22
711	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS <sub>2</sub> as a Replacement for PEDOT:PSS. Advanced Materials, 2019, 31, e1902965.	21.0	500
712	Van der Waals Heterostructures for Highâ€Performance Device Applications: Challenges and Opportunities. Advanced Materials, 2020, 32, e1903800.	21.0	304
713	Colloidal Single‣ayer Photocatalysts for Methanolâ€Storable Solar H <sub>2</sub> Fuel. Advanced Materials, 2019, 31, e1905540.	21.0	39
714	Functionalized Hybridization of 2D Nanomaterials. Advanced Science, 2019, 6, 1901837.	11.2	77
715	Synergistic Doping and Intercalation: Realizing Deep Phase Modulation on MoS∢sub>2∢/sub> Arrays for Highâ€Efficiency Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 16289-16296.	13.8	201
716	In Situ Transmission Electron Microscopy Study of Nanocrystal Formation for Electrocatalysis. ChemNanoMat, 2019, 5, 1439-1455.	2.8	14
717	Protonationâ€Assisted Exfoliation of Nâ€Containing 2D Conjugated Polymers. Small, 2019, 15, e1903643.	10.0	25
718	Two-dimensional transition-metal dichalcogenides for electrochemical hydrogen evolution reaction. FlatChem, 2019, 18, 100140.	5.6	39
719	Natural bauxite nanosheets: A multifunctional and sustainable 2D nano-reinforcement for high performance polymer nanocomposites. Composites Science and Technology, 2019, 184, 107868.	7.8	9
720	Recent advances in synthetic methods and applications of photo-luminescent molecularly imprinted polymers. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2019, 41, 100315.	11.6	40
721	Two-dimensional nanomaterials: fascinating materials in biomedical field. Science Bulletin, 2019, 64, 1707-1727.	9.0	171
722	A Scalable General Synthetic Approach toward Ultrathin Imine-Linked Two-Dimensional Covalent Organic Framework Nanosheets for Photocatalytic CO <sub>2</sub> Reduction. Journal of the American Chemical Society, 2019, 141, 17431-17440.	13.7	418
723	2D GeSe <sub>2</sub> amorphous monolayer. Pure and Applied Chemistry, 2019, 91, 1787-1796.	1.9	5
724	Strain Improving the Performance of a Flexible Monolayer MoS <sub>2</sub> Photodetector. Advanced Electronic Materials, 2019, 5, 1900803.	5.1	48

#	Article	IF	Citations
725	Electrochemically accessing ultrathin Co (oxy)-hydroxide nanosheets and <i>operando</i> identifying their active phase for the oxygen evolution reaction. Energy and Environmental Science, 2019, 12, 739-746.	30.8	163
726	Interfacial synthesis of ultrathin two-dimensional 2PbCO <sub>3</sub> ·Pb(OH) <sub>2</sub> nanosheets with high enzyme mimic catalytic activity. Inorganic Chemistry Frontiers, 2019, 6, 498-503.	6.0	1
727	Zn nanosheets coated with a ZnS subnanometer layer for effective and durable CO <sub>2</sub> reduction. Journal of Materials Chemistry A, 2019, 7, 1418-1423.	10.3	63
728	Evaluation of coal and shale reservoir in Permian coal-bearing strata for development potential: A case study from well LC-1# in the northern Guizhou, China. Energy Exploration and Exploitation, 2019, 37, 194-218.	2.3	8
729	Cationic Copolymerâ€Chaperoned 2D–3D Reversible Conversion of Lipid Membranes. Advanced Materials, 2019, 31, e1904032.	21.0	10
730	Cryogenic Exfoliation of Nonâ€layered Magnesium into Twoâ€Dimensional Crystals. Angewandte Chemie, 2019, 131, 8906-8910.	2.0	2
731	Perforated Pd Nanosheets with Crystalline/Amorphous Heterostructures as a Highly Active Robust Catalyst toward Formic Acid Oxidation. Small, 2019, 15, e1904245.	10.0	81
732	BiOCl:Er3+ Nanosheets with Tunable Thickness for Photon Avalanche Phosphors. ACS Applied Nano Materials, 2019, 2, 7652-7660.	5.0	16
733	Gas sensing with heterostructures based on two-dimensional nanostructured materials: a review. Journal of Materials Chemistry C, 2019, 7, 13367-13383.	5.5	197
734	A phase transformation route to porous 2D Mn3O4 nanosheets with promising anode performance for Li-ion batteries. Emergent Materials, 2019, 2, 487-494.	5.7	6
735	Photoinduced Carrier Dynamics at the Interface of Black Phosphorus and Bismuth Vanadate. Journal of Physical Chemistry A, 2019, 123, 10019-10029.	2.5	5
736	Structural, electronic, and electromechanical properties of MoSSe/blue phosphorene heterobilayer. AIP Advances, 2019, 9, 115302.	1.3	19
737	Interlayer Photoelectron Transfer Boosted by Bridged Ru <sup>IV</sup> Atoms in GaS Nanosheets for Efficient Water Splitting. ACS Applied Materials & Interfaces, 2019, 11, 45561-45567.	8.0	8
738	Metal Nanoclusters Modify the Band Gap and Maintain the Ultrathin Nature of Semiconducting Two-Dimensional Materials. Journal of Physical Chemistry C, 2019, 123, 29856-29865.	3.1	3
739	Toward Realistic Amorphous Topological Insulators. Nano Letters, 2019, 19, 8941-8946.	9.1	44
740	Enhanced Ferromagnetism from Organic–Cerium Oxide Hybrid Ultrathin Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 44601-44608.	8.0	8
741	Cytotoxicity Assessment of Ti–Al–C Based MAX Phases and Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i>2</sub> MXenes on Human Fibroblasts and Cervical Cancer Cells. ACS Biomaterials Science and Engineering, 2019, 5, 6557-6569.	5.2	65
742	Environmental application of nanomaterials: A promise to sustainable future. Comprehensive Analytical Chemistry, 2019, , 1-54.	1.3	29

#	Article	IF	CITATIONS
743	2020 Roadmap on two-dimensional nanomaterials for environmental catalysis. Chinese Chemical Letters, 2019, 30, 2065-2088.	9.0	90
744	Synergistic Doping and Intercalation: Realizing Deep Phase Modulation on MoS 2 Arrays for Highâ€Efficiency Hydrogen Evolution Reaction. Angewandte Chemie, 2019, 131, 16435-16442.	2.0	16
745	One-pot electrosynthesis of silver nanorods/graphene nanocomposite using 4-sulphocalix[4] arene for selective detection of oxalic acid. Sensors and Actuators B: Chemical, 2019, 301, 127132.	7.8	25
746	Electrochemical Lithiation Mechanism of Two-Dimensional Transition-Metal Dichalcogenide Anode Materials: Intercalation versus Conversion Reactions. Journal of Physical Chemistry C, 2019, 123, 2139-2146.	3.1	47
747	Photocurrent Direction Control and Increased Photovoltaic Effects in All-2D Ultrathin Vertical Heterostructures Using Asymmetric h-BN Tunneling Barriers. ACS Applied Materials & Interfaces, 2019, 11, 40274-40282.	8.0	10
748	Hierarchical Bimetallic Ni–Co–P Microflowers with Ultrathin Nanosheet Arrays for Efficient Hydrogen Evolution Reaction over All pH Values. ACS Applied Materials & Interfaces, 2019, 11, 42233-42242.	8.0	70
749	Wet-Chemical Synthesis and Applications of Semiconductor Nanomaterial-Based Epitaxial Heterostructures. Nano-Micro Letters, 2019, 11, 86.	27.0	37
750	General Water-Induced Self-Exfoliation Strategy for the Ultrafast and Large-Scale Synthesis of Metal Hydroxide Nanosheets. Journal of Physical Chemistry Letters, 2019, 10, 6695-6700.	4.6	5
751	Molecularly Thin Electrolyte for All Solid-State Nonvolatile Two-Dimensional Crystal Memory. Nano Letters, 2019, 19, 8911-8919.	9.1	6
752	Enhanced Photoelectrocatalytic Reduction and Removal of Atrazine: Effect of Co-Catalyst and Cathode Potential. ACS Applied Materials & Samp; Interfaces, 2019, 11, 38663-38673.	8.0	9
753	Single- and dual-wavelength switchable mode-locked dissipative soliton Yb-doped fiber laser based on graphene/WS <sub>2</sub> nanocomposites modelocker and polarization controller. Applied Physics Express, 2019, 12, 112006.	2.4	8
754	Seedâ€Induced Vertical Growth of 2D Bi <sub>2</sub> O <sub>2</sub> Se Nanoplates by Chemical Vapor Transport. Advanced Functional Materials, 2019, 29, 1906639.	14.9	39
755	Targeted Construction of Amorphous MoS <sub><i>x</i></sub> with an Inherent Chain Molecular Structure for Improved Pseudocapacitive Lithiumâ€lon Response. Chemistry - A European Journal, 2019, 25, 15173-15181.	3.3	5
756	Two-dimensional Polycrystalline Co <sub>3</sub> O <sub>4</sub> Supported High-Number-Density Metal Single Atoms and Clusters. Microscopy and Microanalysis, 2019, 25, 2210-2211.	0.4	2
757	Performance Improvement of Multilayered SnS <sub>2</sub> Field Effect Transistors through Synergistic Effect of Vacancy Repairing and Electron Doping Introduced by EDTA. ACS Applied Electronic Materials, 2019, 1, 2380-2388.	4.3	24
758	Recent progress on the prediction of two-dimensional materials using CALYPSO. Chinese Physics B, 2019, 28, 107306.	1.4	24
759	Influence of uniaxial strain on the electronic properties of doped graphene mono-sheets: a theoretical study. Materials Research Express, 2019, 6, 115617.	1.6	11
760	Theory-Driven Design and Targeting Synthesis of a Highly-Conjugated Basal-Plane 2D Covalent Organic Framework for Metal-Free Electrocatalytic OER. ACS Energy Letters, 2019, 4, 2251-2258.	17.4	124

#	Article	IF	CITATIONS
761	Two-dimensional lead-free halide perovskite materials and devices. Journal of Materials Chemistry A, 2019, 7, 23563-23576.	10.3	65
762	Iridescence in nematics: Photonic liquid crystals of nanoplates in absence of long-range periodicity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18322-18327.	7.1	43
763	Stability and electronic structure of tricycle-type allotropes of pnictogen monolayers. AlP Conference Proceedings, 2019, , .	0.4	1
764	2D optical materials and the implications for photonics. APL Photonics, 2019, 4, .	5.7	21
765	Graphene-like monolayer monoxides and monochlorides. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17213-17218.	7.1	54
766	DFT calculations: A powerful tool for better understanding of electrocatalytic oxygen reduction reactions on Pt-based metallic catalysts. Computational Materials Science, 2019, 170, 109202.	3.0	59
767	Recent progress in two-dimensional nanomaterials: Synthesis, engineering, and applications. FlatChem, 2019, 18, 100133.	5.6	52
768	Recent advances in nanostructure/nanomaterial-assisted laser desorption/ionization mass spectrometry of low molecular mass compounds. Analytica Chimica Acta, 2019, 1090, 1-22.	5.4	52
769	Phosphorene: A promising candidate for H2 storage at room temperature. International Journal of Hydrogen Energy, 2019, 44, 24829-24838.	7.1	23
770	Nanomaterials meet zebrafish: Toxicity evaluation and drug delivery applications. Journal of Controlled Release, 2019, 311-312, 301-318.	9.9	105
771	Electronic Properties of Armchair Black Phosphorene Nanoribbons Edge-Modified by Transition Elements V, Cr, and Mn. Nanoscale Research Letters, 2019, 14, 145.	5.7	12
772	Stability and electronic properties of two dimensional pentagonal layers of palladium chalcogenides. AIP Conference Proceedings, 2019, , .	0.4	0
773	Broadband photodetection of 2D Bi2O2Se–MoSe2 heterostructure. Journal of Materials Science, 2019, 54, 14742-14751.	3.7	46
774	Complex Optical Conductivity of Two-Dimensional MoS <sub>2</sub> : A Striking Layer Dependency. Journal of Physical Chemistry Letters, 2019, 10, 6246-6252.	4.6	35
775	High-throughput droplet microfluidic synthesis of hierarchical metal-organic framework nanosheet microcapsules. Nano Research, 2019, 12, 2736-2742.	10.4	23
776	Theoretical insights into tunable optical and electronic properties of graphene quantum dots through phosphorization. Carbon, 2019, 155, 491-498.	10.3	34
777	Hollow In <sub>2</sub> O <sub>3</sub> @ZnFe <sub>2</sub> O <sub>4</sub> heterojunctions for highly efficient photocatalytic degradation of tetracycline under visible light. Environmental Science: Nano, 2019, 6, 3123-3132.	4.3	50
778	Computational screening of transition-metal single atom doped C <sub>9</sub> N <sub>4</sub> monolayers as efficient electrocatalysts for water splitting. Nanoscale, 2019, 11, 18169-18175.	5.6	56

#	Article	IF	CITATIONS
779	First-Principles Study of Structural and Electronic Properties of MoS1.5Se0.5 Alloy. International Journal of Nanoscience, 2019, 18, 1940006.	0.7	0
780	Prediction of electronic structures and transport properties of SnS <sub>2</sub> /BN heterostructures by the density functional theory. AIP Advances, 2019, 9, 085125.	1.3	0
781	Salt-assisted chemical vapor deposition of two-dimensional materials. Science China Chemistry, 2019, 62, 1300-1311.	8.2	66
782	Recent advances in MXene–based electrochemical sensors and biosensors. TrAC - Trends in Analytical Chemistry, 2019, 120, 115643.	11.4	220
783	Phase transition, optical and dielectric properties regulated by anion-substitution in a homologous series of 2D hybrid organic–inorganic perovskites. Journal of Materials Chemistry C, 2019, 7, 11964-11971.	5.5	48
784	Si-based materials derived from biomass: synthesis and applications in electrochemical energy storage. Journal of Materials Chemistry A, 2019, 7, 22123-22147.	10.3	95
785	Comprehensive understanding of intrinsic mobility in the monolayers of Ill–VI group 2D materials. Physical Chemistry Chemical Physics, 2019, 21, 21898-21907.	2.8	32
786	Discovery of Weyl Nodal Lines in a Single-Layer Ferromagnet. Physical Review Letters, 2019, 123, 116401.	7.8	70
787	Spherical cactus-like composite based on transition metals Ni, Co and Mn with 1D / 2D bonding heterostructure for electrocatalytic overall water splitting. Electrochimica Acta, 2019, 323, 134845.	5.2	25
788	Ultrathin WO <sub>3</sub> Nanosheets Converted from Metallic WS <sub>2</sub> Sheets by Spontaneous Formation and Deposition of PdO Nanoclusters for Visible Light-Driven C–C Coupling Reactions. ACS Applied Materials & Deposition of PdO Nanoclusters for Visible Light-Driven C–C Coupling Reactions. ACS Applied Materials & Deposition of PdO Nanoclusters for Visible Light-Driven C–C Coupling Reactions. ACS Applied Materials & Deposition of PdO Nanoclusters for Visible Light-Driven C–C Coupling Reactions. ACS Applied Materials & Deposition of PdO Nanoclusters for Visible Light-Driven C–C Coupling Reactions. ACS Applied Materials & Deposition of PdO Nanoclusters for Visible Light-Driven C–C Coupling Reactions. ACS Applied Materials & Deposition of PdO Nanoclusters for Visible Light-Driven C—C Coupling Reactions.	8.0	29
789	Massive Vacancy Concentration Yields Strong Room-Temperature Ferromagnetism in Two-Dimensional ZnO. Nano Letters, 2019, 19, 7085-7092.	9.1	31
790	Facile Synthesis of Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> â€"Poly(vinylpyrrolidone) Nanocomposites for Nonvolatile Memory Devices with Low Switching Voltage. ACS Applied Materials & Interfaces, 2019, 11, 38061-38067.	8.0	28
791	Homo- and Heterosolvent Modifications of Hofmann-Type Flexible Two-Dimensional Layers for Colossal Interlayer Thermal Expansions. Inorganic Chemistry, 2019, 58, 12739-12747.	4.0	12
792	Photocharge Trapping in Two-Sheet Reduced Graphene Oxide–Ti <sub>0.87</sub> O <sub>2</sub> Heterostructures and Their Photoreduction and Photomemory Applications. ACS Applied Nano Materials, 2019, 2, 6378-6386.	5.0	6
793	Emerging 2D material-based nanocarrier for cancer therapy beyond graphene. Coordination Chemistry Reviews, 2019, 400, 213041.	18.8	103
794	Aqueous Cathodic Exfoliation Strategy toward Solution-Processable and Phase-Preserved MoS <sub>2</sub> Nanosheets for Energy Storage and Catalytic Applications. ACS Applied Materials & Amp; Interfaces, 2019, 11, 36991-37003.	8.0	43
795	A Modular Approach to Phosphorescent π-Extended Heteroacenes. Inorganic Chemistry, 2019, 58, 13323-13336.	4.0	20
796	Mass-producible 2D-WS <sub>2</sub> bulk modified screen printed electrodes towards the hydrogen evolution reaction. RSC Advances, 2019, 9, 25003-25011.	3.6	13

#	Article	IF	CITATIONS
797	Production of carbon dots during the liquid phase exfoliation of MoS2 quantum dots. Carbon, 2019, 155, 243-249.	10.3	11
798	Trickle Flow Aided Atomic Layer Deposition (ALD) Strategy for Ultrathin Molybdenum Disulfide (MoS <sub>2</sub> ) Synthesis. ACS Applied Materials & Interfaces, 2019, 11, 36270-36277.	8.0	26
799	Two-Dimensional Mesoporous Heterostructure Delivering Superior Pseudocapacitive Sodium Storage via Bottom-Up Monomicelle Assembly. Journal of the American Chemical Society, 2019, 141, 16755-16762.	13.7	99
800	First-principles insight into Ni-doped InN monolayer as a noxious gases scavenger. Applied Surface Science, 2019, 494, 859-866.	6.1	250
801	Multifield-resolved phonon spectrometrics: structured crystals and liquids. Progress in Solid State Chemistry, 2019, 55, 20-66.	7.2	23
802	Bioinspired supramolecular nanosheets of zinc chlorophyll assemblies. Scientific Reports, 2019, 9, 14006.	3.3	15
803	Metal–Organic Layers as Multifunctional Two-Dimensional Nanomaterials for Enhanced Photoredox Catalysis. Journal of the American Chemical Society, 2019, 141, 15767-15772.	13.7	89
804	Two-dimensional non-layered materials. Materials Today Nano, 2019, 8, 100051.	4.6	62
805	Single-micelle-directed synthesis of mesoporous materials. Nature Reviews Materials, 2019, 4, 775-791.	48.7	208
806	Fabrication of 2D metal–organic framework nanosheets with tailorable thickness using bio-based surfactants and their application in catalysis. Green Chemistry, 2019, 21, 54-58.	9.0	66
807	Synthesis of high-quality black phosphorus sponges for all-solid-state supercapacitors. Materials Horizons, 2019, 6, 176-181.	12.2	53
808	Transport and photogalvanic properties of covalent functionalized monolayer black phosphorus. New Journal of Chemistry, 2019, 43, 377-385.	2.8	10
809	Exfoliation of amorphous phthalocyanine conjugated polymers into ultrathin nanosheets for highly efficient oxygen reduction. Journal of Materials Chemistry A, 2019, 7, 3112-3119.	10.3	87
810	Atomicâ€Scale Structural Modification of 2D Materials. Advanced Science, 2019, 6, 1801501.	11.2	39
811	Space-confined synthesis of monolayer molybdenum disulfide using tetrathiomolybdate intercalated layered double hydroxide as precursor. Journal of Colloid and Interface Science, 2019, 541, 183-191.	9.4	13
812	Constructing organic superacids from superhalogens is a rational route as verified by DFT calculations. Physical Chemistry Chemical Physics, 2019, 21, 2804-2815.	2.8	15
813	Achieving a direct band gap and high power conversion efficiency in an Sbl <sub>3</sub> /Bil <sub>3</sub> type-II vdW heterostructure <i>via</i> interlayer compression and electric field application. Physical Chemistry Chemical Physics, 2019, 21, 2619-2627.	2.8	13
814	Nanoporous 2D semiconductors encapsulated by quantum-sized graphitic carbon nitride: tuning directional photoinduced charge transfer <i>via</i> nano-architecture modulation. Catalysis Science and Technology, 2019, 9, 672-687.	4.1	19

#	Article	IF	CITATIONS
815	Thickness-tunable growth of ultra-large, continuous and high-dielectric h-BN thin films. Journal of Materials Chemistry C, 2019, 7, 1871-1879.	5.5	17
816	Synthesis of BiVO4 nanoflakes decorated with AuPd nanoparticles as selective oxidation photocatalysts. Journal of Colloid and Interface Science, 2019, 541, 300-311.	9.4	37
817	A 2D metal–organic framework/Ni(OH) <sub>2</sub> heterostructure for an enhanced oxygen evolution reaction. Nanoscale, 2019, 11, 3599-3605.	5.6	131
818	MoS2-capped CuxS nanocrystals: a new heterostructured geometry of transition metal dichalcogenides for broadband optoelectronics. Materials Horizons, 2019, 6, 587-594.	12.2	18
819	Three dimensional nanoscale analysis reveals aperiodic mesopores in a covalent organic framework and conjugated microporous polymer. Nanoscale, 2019, 11, 2848-2854.	5.6	17
820	Ultrathin 2D TiS <sub>2</sub> Nanosheets for High Capacity and Longâ€Life Sodium Ion Batteries. Advanced Energy Materials, 2019, 9, 1803210.	19.5	100
821	Iron incorporation affecting the structure and boosting catalytic activity of Cox-Fey-P for efficient hydrogen evolution. Applied Surface Science, 2019, 478, 103-109.	6.1	4
822	Configurable multi-state non-volatile memory behaviors in Ti <sub>3</sub> C <sub>2</sub> nanosheets. Nanoscale, 2019, 11, 7102-7110.	5.6	69
823	Coordination Nanosheets of Phthalocyanine as Multifunctional Platform for Imaging-Guided Synergistic Therapy of Cancer. ACS Applied Materials & Samp; Interfaces, 2019, 11, 6840-6849.	8.0	40
824	Tuning Pb(II) Adsorption from Aqueous Solutions on Ultrathin Iron Oxychloride (FeOCl) Nanosheets. Environmental Science & Environmental Science & Envi	10.0	121
825	Black Phosphorus, a Rising Star 2D Nanomaterial in the Postâ€Graphene Era: Synthesis, Properties, Modifications, and Photocatalysis Applications. Small, 2019, 15, e1804565.	10.0	244
826	Synergistic Antibacterial Activity of Black Phosphorus Nanosheets Modified with Titanium Aminobenzenesulfanato Complexes. ACS Applied Nano Materials, 2019, 2, 1202-1209.	5.0	36
827	Electron-Driven <i>In Situ</i> Transmission Electron Microscopy of 2D Transition Metal Dichalcogenides and Their 2D Heterostructures. ACS Nano, 2019, 13, 978-995.	14.6	51
828	Terahertz surface and interface emission spectroscopy for advanced materials. Journal of Physics Condensed Matter, 2019, 31, 153001.	1.8	59
829	Review on structural control and modification of graphene oxide-based membranes in water treatment: From separation performance to robust operation. Chinese Journal of Chemical Engineering, 2019, 27, 1348-1360.	3.5	33
830	Single-Metal Atom Anchored on Boron Monolayer ( $\hat{l}^2$ <sub>12</sub> ) as an Electrocatalyst for Nitrogen Reduction into Ammonia at Ambient Conditions: A First-Principles Study. Journal of Physical Chemistry C, 2019, 123, 4274-4281.	3.1	86
831	An Overview of Molecular Packing Mode in Twoâ€Dimensional Organic Nanomaterials via Supramolecular Assembly. Chinese Journal of Chemistry, 2019, 37, 405-416.	4.9	8
832	Evaluation of self-cleaning and photocatalytic properties of modified g-C3N4 based PVDF membranes driven by visible light. Journal of Colloid and Interface Science, 2019, 541, 356-366.	9.4	93

#	Article	IF	CITATIONS
833	Confinement preparation of Au nanoparticles embedded in ZIF-67-derived N-doped porous carbon for high-performance detection of hydrazine in liquid/gas phase. Sensors and Actuators B: Chemical, 2019, 285, 607-616.	7.8	49
834	Stabilities and novel electronic structures of three carbon nitride bilayers. Scientific Reports, 2019, 9, 1025.	3.3	13
835	Metal/graphene heterobilayers as hydrogen evolution reaction cathodes: a first-principles study. Physical Chemistry Chemical Physics, 2019, 21, 4594-4599.	2.8	6
836	High selectivity n-type InSe monolayer toward decomposition products of sulfur hexafluoride: A density functional theory study. Applied Surface Science, 2019, 479, 852-862.	6.1	20
837	Rapid synthesis of ultrathin 2D materials through liquid-nitrogen and microwave treatments. Journal of Materials Chemistry A, 2019, 7, 5209-5213.	10.3	89
838	Microwave-assisted synthesis of three-dimensional MXene derived metal oxide/carbon nanotube/iron hybrids for enhanced lithium-ions storage. Journal of Electroanalytical Chemistry, 2019, 835, 205-211.	3.8	22
839	Recent progress in ligand-centered homogeneous electrocatalysts for hydrogen evolution reaction. Inorganic Chemistry Frontiers, 2019, 6, 343-354.	6.0	69
840	Sonochemical synthesis of a 2D–2D MoSe <sub>2</sub> /graphene nanohybrid electrode material for asymmetric supercapacitors. Sustainable Energy and Fuels, 2019, 3, 467-477.	4.9	110
841	Two-dimensional extended π-conjugated triphenylene-core covalent organic polymer. Journal of Materials Chemistry A, 2019, 7, 3066-3071.	10.3	17
842	Achieving high energy density for lithium-ion battery anodes by Si/C nanostructure design. Journal of Materials Chemistry A, 2019, 7, 2165-2171.	10.3	113
843	A novel hydrogenated boron–carbon monolayer with high stability and promising carrier mobility. Physical Chemistry Chemical Physics, 2019, 21, 2572-2577.	2.8	6
844	Half-metal state of a Ti <sub>2</sub> C monolayer by asymmetric surface decoration. Physical Chemistry Chemical Physics, 2019, 21, 3318-3326.	2.8	22
845	MoS2 with Organic Fragment - a New Hybrid Material for Laser Writing. Scientific Reports, 2019, 9, 7839.	3.3	3
846	2D-enabled membranes: materials and beyond. BMC Chemical Engineering, 2019, $1, \dots$	3.4	27
847	In situ fabrication of nitrogen doped porous carbon nanorods derived from metal-organic frameworks and its application as supercapacitor electrodes. Journal of Solid State Chemistry, 2019, 277, 100-106.	2.9	21
848	Encapsulation and Protection of Ultrathin Two-Dimensional Porous Organic Nanosheets within Biocompatible Metal–Organic Frameworks for Live-Cell Imaging. Chemistry of Materials, 2019, 31, 4897-4912.	6.7	23
849	A nickel oxide nanoflakes/reduced graphene oxide composite and its high-performance lithium-storage properties. Journal of Solid State Electrochemistry, 2019, 23, 2173-2180.	2.5	7
850	Few-Layer Antimonene Nanosheet: A Metal-Free Bifunctional Electrocatalyst for Effective Water Splitting. ACS Applied Energy Materials, 2019, 2, 4774-4781.	5.1	46

#	Article	IF	CITATIONS
851	Thickness-dependent bandgap and electrical properties of GeP nanosheets. Journal of Materials Chemistry A, 2019, 7, 16526-16532.	10.3	45
852	Antimicrobial Gold Nanoclusters: Recent Developments and Future Perspectives. International Journal of Molecular Sciences, 2019, 20, 2924.	4.1	110
853	Chemical Mass Production of MoS <sub>2</sub> /Graphene van der Waals Heterostructure as a Highâ€Performance Liâ€ion Intercalation Host. ChemElectroChem, 2019, 6, 3393-3400.	3.4	12
854	Underlying mechanism of CO <sub>2</sub> adsorption onto conjugated azacyclo-copolymers: N-doped adsorbents capture CO <sub>2</sub> chiefly through acid–base interaction?. Journal of Materials Chemistry A, 2019, 7, 17842-17853.	10.3	63
855	Anomalous lattice vibrations of CVD-grown monolayer MoS <sub>2</sub> probed using linear polarized excitation light. Nanoscale, 2019, 11, 13725-13730.	5.6	24
856	First Principles Study of Gas Molecules Adsorption on Monolayered β-SnSe. Coatings, 2019, 9, 390.	2.6	11
857	The Accelerating World of Graphdiynes. Advanced Materials, 2019, 31, e1804211.	21.0	86
858	Identification of Nonâ€Carbonaceous Cathodes in Al Batteries: Potential Applicability of Black and Blue Phosphorene Monolayers. Chemistry - an Asian Journal, 2019, 14, 2831-2837.	3.3	6
859	Coexisting Few-Layer Assemblies of NiO and MoO <sub>3</sub> Deposited on Vulcan Carbon as an Efficient and Durable Electrocatalyst for Water Oxidation. ACS Applied Energy Materials, 2019, 2, 4987-4998.	5.1	15
860	Cobalt Diselenide@Reduced graphene oxide based nanohybrid for supercapacitor applications. Composites Part B: Engineering, 2019, 174, 107001.	12.0	18
861	Chlorine doped graphitic carbon nitride nanorings as an efficient photoresponsive catalyst for water oxidation and organic decomposition. Journal of Materials Science and Technology, 2019, 35, 2288-2296.	10.7	61
862	Application of lasers in the synthesis and processing of two-dimensional quantum materials. Journal of Laser Applications, 2019, 31, 031202.	1.7	9
863	Integrated Nanostructural Electrodes Based on Layered Double Hydroxides. Energy and Environmental Materials, 2019, 2, 158-171.	12.8	46
864	Preparation of monolayer HSr <sub>2</sub> Nb <sub>3</sub> O <sub>10</sub> nanosheets for photocatalytic hydrogen evolution. Dalton Transactions, 2019, 48, 11136-11141.	3.3	11
865	Ag plasmon resonance promoted 2D AgBr-δ-Bi2O3 nanosheets with enhanced photocatalytic ability. Journal of Alloys and Compounds, 2019, 803, 565-575.	5.5	28
866	Atomic Structure and Dynamics of Defects and Grain Boundaries in 2D Pd <sub>2</sub> Se <sub>3</sub> Monolayers. ACS Nano, 2019, 13, 8256-8264.	14.6	38
867	Hierarchicalâ€dimensional Material: A Co(OH) 2 Superstructure with Hybrid Dimensions for Enhanced Water Oxidation. ChemCatChem, 2019, 11, 5969-5975.	3.7	12
868	Charge-Induced Lattice Compression in Monolayer MoS2. Journal of Physical Chemistry C, 2019, 123, 17943-17950.	3.1	14

#	Article	IF	CITATIONS
869	Insights into the Exfoliation Process of V $<$ sub $>2<$  sub $>0<$ sub $>5<$  sub $>\hat{A}\cdot (i>n<$   $i>H<$ sub $>2<$  sub $>0$ Nanosheet Formation Using Real-Time $<$ sup $>51<$  sup $>V$ NMR. ACS Omega, 2019, 4, 10899-10905.	3.5	12
870	Optical and electrical properties of two-dimensional palladium diselenide. Applied Physics Letters, 2019, 114, .	3.3	74
871	Coupled Biphase (1Tâ€2H)â€MoSe <sub>2</sub> on Mold Spore Carbon for Advanced Hydrogen Evolution Reaction. Small, 2019, 15, e1901796.	10.0	87
872	Enhancing optical absorption and charge transfer: Synthesis of S-doped h-BN with tunable band structures for metal-free visible-light-driven photocatalysis. Applied Catalysis B: Environmental, 2019, 256, 117827.	20.2	110
873	Metal-organic framework nanosheets: An emerging family of multifunctional 2D materials. Coordination Chemistry Reviews, 2019, 395, 25-45.	18.8	184
874	Biomass-derived porous carbon materials with different dimensions for supercapacitor electrodes: a review. Journal of Materials Chemistry A, 2019, 7, 16028-16045.	10.3	694
875	Recent advances in fabrication strategies and protein preservation application of protein-nanomaterial hybrids: Integration and synergy. TrAC - Trends in Analytical Chemistry, 2019, 118, 434-443.	11.4	12
876	Conversion of a 2D Lepidocrocite-Type Layered Titanate into Its 1D Nanowire Form with Enhancement of Cation Exchange and Photocatalytic Performance. Inorganic Chemistry, 2019, 58, 7989-7996.	4.0	41
877	Protecting Single Atom Catalysts with Graphene/Carbon-Nitride "Chainmail― Journal of Physical Chemistry Letters, 2019, 10, 3129-3133.	4.6	33
878	Developing two-dimensional solid superacids with enhanced mass transport, extremely high acid strength and superior catalytic performance. Chemical Science, 2019, 10, 5875-5883.	7.4	37
879	Facile fabrication of $\hat{l}$ ±-Fe2O3/porous g-C3N4 heterojunction hybrids with enhanced visible-light photocatalytic activity. Materials Chemistry and Physics, 2019, 234, 75-80.	4.0	34
880	Ultrafast Cathodic Exfoliation of Few-Layer Black Phosphorus in Aqueous Solution. ACS Applied Nano Materials, 2019, 2, 3793-3801.	5.0	35
881	Structure and stability of graphene-like layers built from heterocyclic units. Carbon, 2019, 152, 128-133.	10.3	10
882	Aqueous dispersions of highly luminescent boron-rich nanosheets by the exfoliation of polycrystalline titanium diboride. New Journal of Chemistry, 2019, 43, 9953-9960.	2.8	19
883	Construction of a Nanoporous Highly Crystalline Hexagonal Boron Nitride from an Amorphous Precursor for Catalytic Dehydrogenation. Angewandte Chemie - International Edition, 2019, 58, 10626-10630.	13.8	55
884	Scalable Epitaxial Growth of WSe2 Thin Films on SiO2/Si via a Self-Assembled PtSe2 Buffer Layer. Scientific Reports, 2019, 9, 8017.	3.3	8
885	Unravelling the synergy effects of defect-rich 1T-MoS <sub>2</sub> /carbon nanotubes for the hydrogen evolution reaction by experimental and calculational studies. Sustainable Energy and Fuels, 2019, 3, 2100-2110.	4.9	34
886	An ultra-dense NiS <sub>2</sub> /reduced graphene oxide composite cathode for high-volumetric/gravimetric energy density nickel–zinc batteries. Journal of Materials Chemistry A, 2019, 7, 15654-15661.	10.3	108

#	Article	IF	CITATIONS
887	Recent Advances in 2D Lateral Heterostructures. Nano-Micro Letters, 2019, 11, 48.	27.0	109
888	Earth-abundant transition metal and metal oxide nanomaterials: Synthesis and electrochemical applications. Progress in Materials Science, 2019, 106, 100574.	32.8	184
889	Construction of a Nanoporous Highly Crystalline Hexagonal Boron Nitride from an Amorphous Precursor for Catalytic Dehydrogenation. Angewandte Chemie, 2019, 131, 10736-10740.	2.0	7
890	A Review of Recent Applications of Ion Beam Techniques on Nanomaterial Surface Modification: Design of Nanostructures and Energy Harvesting. Small, 2019, 15, e1901820.	10.0	72
891	Dynamics of surface graphene ripplocations on a flat graphite substrate. Physical Review B, 2019, 99, .	3.2	50
892	A First-Principles Study of the SF <sub>6</sub> Decomposed Products Adsorbed Over Defective WS <sub>2</sub> Monolayer as Promising Gas Sensing Device. IEEE Transactions on Device and Materials Reliability, 2019, 19, 473-483.	2.0	90
893	Graphene-Based Sensors for Human Health Monitoring. Frontiers in Chemistry, 2019, 7, 399.	3.6	218
894	Theoretical and Experimental Investigation of 2D Hematite. Journal of Physical Chemistry C, 2019, 123, 16359-16365.	3.1	17
895	On the spin-1/2 Aharonov-Bohm problem for modified PÃ $\P$ schl-Teller potential, physical regularization and self-adjoint extensions. European Physical Journal Plus, 2019, 134, 1.	2.6	2
896	Effect of interlayer cations on exfoliating 2D montmorillonite nanosheets with high aspect ratio: From experiment to molecular calculation. Ceramics International, 2019, 45, 17054-17063.	4.8	16
897	Water treatment and environmental remediation applications of two-dimensional metal carbides (MXenes). Materials Today, 2019, 30, 80-102.	14.2	390
898	Using ligands to control reactivity, size and phase in the colloidal synthesis of WSe <sub>2</sub> nanocrystals. Chemical Communications, 2019, 55, 8856-8859.	4.1	27
899	Visible light active Bi <sub>3</sub> TaO <sub>7</sub> nanosheets for water splitting. Dalton Transactions, 2019, 48, 9284-9290.	3.3	14
900	Structural features and electronic properties of Group-IIIB pnictides nanosheets and nanoribbons. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2744-2750.	2.1	1
901	Intracellular MicroRNA Imaging with MoS <sub>2</sub> -Supported Nonenzymatic Catassembly of DNA Hairpins. ACS Applied Materials & Samp; Interfaces, 2019, 11, 20725-20733.	8.0	63
902	<i>Ab initio</i> simulation studies on the room-temperature ferroelectricity in two-dimensional <b> <i><math>\hat{l}^2</math></i> </b> -phase GeS. Applied Physics Letters, 2019, 114, .	3.3	72
903	A Theoretical Perspective on Charge Separation and Transfer in Metal Oxide Photocatalysts for Water Splitting. ChemCatChem, 2019, 11, 3688-3715.	3.7	27
904	Heterostructures in two-dimensional colloidal metal chalcogenides: Synthetic fundamentals and applications. Nano Research, 2019, 12, 1750-1769.	10.4	33

#	Article	IF	CITATIONS
905	Boosting the Energy Density of Flexible Solid-State Supercapacitors via Both Ternary NiV <sub>2</sub> Se <sub>4</sub> Nanosheet Arrays. Chemistry of Materials, 2019, 31, 4490-4504.	6.7	138
906	Ultrafast Excitonic Behavior in Two-Dimensional Metal–Semiconductor Heterostructure. ACS Photonics, 2019, 6, 1379-1386.	6.6	23
907	Core–shell assembly of carbon nanofibers and a 2D conductive metal–organic framework as a flexible free-standing membrane for high-performance supercapacitors. Inorganic Chemistry Frontiers, 2019, 6, 1824-1830.	6.0	70
908	Surface Modified MXeneâ€Based Nanocomposites for Electrochemical Energy Conversion and Storage. Small, 2019, 15, e1901503.	10.0	159
909	Multilayer hybrid nanosheet of mesoporous carbonâ^layered metal oxide as a highly efficient electrocatalyst for Liâ^O2 batteries. Applied Catalysis B: Environmental, 2019, 254, 523-530.	20.2	27
910	Surface functionalization of bulk MoS2 sheets for efficient liquid phase exfoliation in polar micromolecular solvents. Applied Surface Science, 2019, 486, 362-370.	6.1	31
911	Recent progress in the design fabrication of metal-organic frameworks-based nanozymes and their applications to sensing and cancer therapy. Biosensors and Bioelectronics, 2019, 137, 178-198.	10.1	249
912	Optical and Optoelectronic Properties of Black Phosphorus and Recent Photonic and Optoelectronic Applications. Small Methods, 2019, 3, 1900165.	8.6	68
913	Facile and Scalable Fabrication of Nitrogen-Doped Porous Carbon Nanosheets for Capacitive Energy Storage with Ultrahigh Energy Density. ACS Applied Materials & Samp; Interfaces, 2019, 11, 20029-20036.	8.0	19
914	Laser Annealing Improves the Photoelectrochemical Activity of Ultrathin MoSe <sub>2</sub> Photoelectrodes. ACS Applied Materials & Interfaces, 2019, 11, 19207-19217.	8.0	29
915	Recent Advances on Black Phosphorus for Biomedicine and Biosensing. Advanced Functional Materials, 2019, 29, 1900318.	14.9	171
916	Trisâ€Stabilized MoS <sub>2</sub> Nanosheets with Robust Dispersibility and Facile Surface Functionalization. Advanced Materials Interfaces, 2019, 6, 1900585.	3.7	8
917	A first-principles study of Cl2, PH3, AsH3, BBr3 and SF4 gas adsorption on MoS2 monolayer with S and Mo vacancy. Applied Surface Science, 2019, 489, 841-848.	6.1	24
918	Laserâ€Induced Graphene Composites for Printed, Stretchable, and Wearable Electronics. Advanced Materials Technologies, 2019, 4, 1900162.	5.8	55
919	Ultrathin MoSSe alloy nanosheets anchored on carbon nanotubes as advanced catalysts for hydrogen evolution. International Journal of Hydrogen Energy, 2019, 44, 16110-16119.	7.1	23
920	Critical Aspects and Recent Advances in Structural Engineering of Photocatalysts for Sunlightâ€Driven Photocatalytic Reduction of CO <sub>2</sub> into Fuels. Advanced Functional Materials, 2019, 29, 1901825.	14.9	315
921	Direct Monitoring of Cell Membrane Vesiculation with 2D AuNP@MnO <sub>2</sub> Nanosheet Supraparticles at the Singleâ€Particle Level. Angewandte Chemie, 2019, 131, 10652-10656.	2.0	13
922	Direct Monitoring of Cell Membrane Vesiculation with 2D AuNP@MnO <sub>2</sub> Nanosheet Supraparticles at the Singleâ€Particle Level. Angewandte Chemie - International Edition, 2019, 58, 10542-10546.	13.8	58

#	Article	IF	CITATIONS
923	2D Metal Chalcogenides for IR Photodetection. Small, 2019, 15, e1901347.	10.0	121
924	Chemical and structural stability of 2D layered materials. 2D Materials, 2019, 6, 042001.	4.4	94
925	Recent Advances in Quantum Effects of 2D Materials. Advanced Quantum Technologies, 2019, 2, 1800111.	3.9	32
926	Advances in DNA/RNA detection using nanotechnology. Advances in Clinical Chemistry, 2019, 91, 31-98.	3.7	16
927	Chemically Robust, Cu-based Porous Coordination Polymer Nanosheets for Efficient Hydrogen Evolution: Experimental and Theoretical Studies. ACS Applied Materials & Samp; Interfaces, 2019, 11, 21086-21093.	8.0	22
928	ReS <sub>2</sub> -Based electrode materials for alkali-metal ion batteries. CrystEngComm, 2019, 21, 3755-3769.	2.6	58
929	Construction of two-dimensional supramolecular nanostructure with aggregation-induced emission effect ⟨i⟩via⟨ i⟩ host–guest interactions. Materials Chemistry Frontiers, 2019, 3, 1532-1537.	5.9	22
930	2D Laminar Membranes for Selective Water and Ion Transport. Advanced Functional Materials, 2019, 29, 1902014.	14.9	212
931	Nonlayered Two-Dimensional Defective Semiconductor $\hat{I}^3$ -Ga <sub>2</sub> S <sub>3</sub> toward Broadband Photodetection. ACS Nano, 2019, 13, 6297-6307.	14.6	72
932	Ultrathin nanosheet-assembled hollow microplate CoMoO4 array derived from metal-organic framework for supercapacitor with ultrahigh areal capacitance. Journal of Power Sources, 2019, 430, 51-59.	7.8	98
933	Low cost and rapid fabrication of copper sulfides nanoparticles for selective and efficient capture of noble metal ions. Chemical Engineering Journal, 2019, 373, 1168-1178.	12.7	44
934	Super-stretchability in two-dimensional RuCl3 and RuBr3 confirmed by first-principles simulations. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 113, 79-85.	2.7	9
935	Determining the Surface Tension of Two-Dimensional Nanosheets by a Low-Rate Advancing Contact Angle Measurement. Langmuir, 2019, 35, 8308-8315.	3.5	9
936	Ti-fraction-induced electronic and magnetic transformations in titanium oxide films. Journal of Chemical Physics, 2019, 150, 154704.	3.0	2
937	Theoretical prediction of tunable electronic and magnetic properties of monolayer antimonene by vacancy and strain. Applied Surface Science, 2019, 488, 98-106.	6.1	20
938	Optical anisotropy and strain tunable optical, electronic and structural properties in monolayer GeP: A computational study. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 113, 172-180.	2.7	14
939	Defectâ€Driven Enhancement of Electrochemical Oxygen Evolution on Fe–Co–Al Ternary Hydroxides. ChemSusChem, 2019, 12, 2564-2569.	6.8	28
940	A Double Support Layer for Facile Clean Transfer of Two-Dimensional Materials for High-Performance Electronic and Optoelectronic Devices. ACS Nano, 2019, 13, 5513-5522.	14.6	29

#	Article	IF	Citations
941	Organic Solvent-Assisted Lyophilization: A Universal Method of Preparing Two-Dimensional Material Nanoscrolls. ACS Omega, 2019, 4, 7420-7427.	3.5	6
942	Layered photochromic films stacked from spiropyran-modified montmorillonite nanosheets. RSC Advances, 2019, 9, 12325-12330.	3.6	18
943	Unique nanosheet–nanowire structured CoMnFe layered triple hydroxide arrays as self-supporting electrodes for a high-efficiency oxygen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 13130-13141.	10.3	67
944	Band engineering realized by chemical combination in 2D group VA–VA materials. Nanoscale Horizons, 2019, 4, 1145-1152.	8.0	15
945	Two-dimensional hexagonal boron–carbon–nitrogen atomic layers. Nanoscale, 2019, 11, 10454-10462.	5.6	34
946	Structural Engineering of Lowâ€Dimensional Metal–Organic Frameworks: Synthesis, Properties, and Applications. Advanced Science, 2019, 6, 1802373.	11.2	214
947	Structure-controlled Co-Al layered double hydroxides/reduced graphene oxide nanomaterials based on solid-phase exfoliation technique for supercapacitors. Journal of Colloid and Interface Science, 2019, 549, 236-245.	9.4	61
948	In-situ preparation of porous carbon nanosheets loaded with metal chalcogenides for a superior oxygen evolution reaction. Carbon, 2019, 149, 144-151.	10.3	32
949	<i>In situ</i> synthesis of BiOCl nanosheets on three-dimensional hierarchical structures for efficient photocatalysis under visible light. Nanoscale, 2019, 11, 10203-10208.	5.6	32
950	A comparative study on photocatalytic hydrogen evolution activity of synthesis methods of CDs/ZnIn2S4 photocatalysts. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 574, 105-114.	4.7	26
951	Two-Dimensional Nanomaterials in Cancer Theranostics. , 2019, , 263-288.		12
952	Glyco-Platelets with Controlled Morphologies via Crystallization-Driven Self-Assembly and Their Shape-Dependent Interplay with Macrophages. ACS Macro Letters, 2019, 8, 596-602.	4.8	63
953	Black phosphorus electronic and optoelectronic devices. 2D Materials, 2019, 6, 032003.	4.4	76
954	Emerging approach in semiconductor photocatalysis: Towards 3D architectures for efficient solar fuels generation in semi-artificial photosynthetic systems. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2019, 39, 142-160.	11.6	34
955	Cryogenic Exfoliation of Nonâ€layered Magnesium into Twoâ€Dimensional Crystals. Angewandte Chemie - International Edition, 2019, 58, 8814-8818.	13.8	18
956	Stepping towards Solar Water Splitting: Recent Progress in Bismuth Vanadate Photoanodes. ChemElectroChem, 2019, 6, 3227-3243.	3.4	42
957	A novel label-free strategy for the ultrasensitive miRNA-182 detection based on MoS2/Ti3C2 nanohybrids. Biosensors and Bioelectronics, 2019, 137, 45-51.	10.1	79
958	Nonvolatile Electrical Control and Heterointerfaceâ€Induced Halfâ€Metallicity of 2D Ferromagnets. Advanced Functional Materials, 2019, 29, 1901420.	14.9	109

#	Article	IF	CITATIONS
959	Repairing the N-vacancy in an InN monolayer using NO molecules: a first-principles study. Nanoscale Advances, 2019, 1, 2003-2008.	4.6	14
960	Separated and intermixed phases of borophene as anode material for lithium-Ion batteries. Journal Physics D: Applied Physics, 2019, 52, 245501.	2.8	19
961	Interfacial transmetallation synthesis of a platinadithiolene nanosheet as a potential 2D topological insulator. Chemical Science, 2019, 10, 5218-5225.	7.4	41
962	Elastic properties and intrinsic strength of two-dimensional InSe flakes. Nanotechnology, 2019, 30, 335703.	2.6	27
963	Highâ€Performance, Room Temperature, Ultraâ€Broadband Photodetectors Based on Airâ€Stable PdSe <sub>2</sub> . Advanced Materials, 2019, 31, e1807609.	21.0	223
964	Bottom-up synthesis of 2D Co-based metal–organic framework nanosheets by an ammonia-assisted strategy for tuning the crystal morphology. CrystEngComm, 2019, 21, 3199-3208.	2.6	30
965	Nanomechanics of low-dimensional materials for functional applications. Nanoscale Horizons, 2019, 4, 781-788.	8.0	29
966	Transition metal-embedded two-dimensional C <sub>3</sub> N as a highly active electrocatalyst for oxygen evolution and reduction reactions. Journal of Materials Chemistry A, 2019, 7, 12050-12059.	10.3	123
967	A review on graphene-based nanocomposites for electrochemical and fluorescent biosensors. RSC Advances, 2019, 9, 8778-8881.	3.6	546
968	New Simultaneous Exfoliation and Doping Process for Generating MX <sub>2</sub> Nanosheets for Electrocatalytic Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 14786-14795.	8.0	54
969	Optimizing Dispersion, Exfoliation, Synthesis, and Device Fabrication of Inorganic Nanomaterials Using Hansen Solubility Parameters. ChemPhysChem, 2019, 20, 1069-1097.	2.1	29
970	Yeast-derived carbon sphere as a bridge of charge carriers towards to enhanced photocatalytic activity of 2D/2D Cu2WS4/g-C3N4 heterojunction. Journal of Colloid and Interface Science, 2019, 546, 262-275.	9.4	70
971	Two-dimensional amorphous nanomaterials: synthesis and applications. 2D Materials, 2019, 6, 032002.	4.4	69
972	Modifying the Band Gap of Semiconducting Two-Dimensional Materials by Polymer Assembly into Different Structures. Langmuir, 2019, 35, 4956-4965.	3.5	5
973	Insights into the Crystallinity of Layerâ€Structured Transition Metal Dichalcogenides on Potassium Ion Battery Performance: A Case Study of Molybdenum Disulfide. Small, 2019, 15, e1900497.	10.0	62
974	Tuning copper sulfide nanosheets by cation exchange reactions to realize two-dimensional CZTS dielectric layers. Journal of Materials Chemistry A, 2019, 7, 9782-9790.	10.3	14
975	Solvent-Tuned Synthesis of Mesoporous Nickel Cobaltite Nanostructures and Their Catalytic Properties. Applied Sciences (Switzerland), 2019, 9, 1100.	2.5	8
976	Two-dimensional magnetic materials of cobalt(ii) triangular lattices constructed by a mixed benzimidazole–dicarboxylate strategy. CrystEngComm, 2019, 21, 2596-2604.	2.6	12

#	Article	IF	CITATIONS
977	Modulating the Electronic Structure of Singleâ€Atom Catalysts on 2D Nanomaterials for Enhanced Electrocatalytic Performance. Small Methods, 2019, 3, 1800438.	8.6	88
978	Synergistic effect of artificial enzyme and 2D nano-structured Bi2WO6 for eco-friendly and efficient biomimetic photocatalysis. Applied Catalysis B: Environmental, 2019, 250, 52-62.	20.2	340
979	Solvent exfoliation stabilizes TiS <sub>2</sub> nanosheets against oxidation, facilitating lithium storage applications. Nanoscale, 2019, 11, 6206-6216.	5.6	44
980	Importance of Electrocatalyst Morphology for the Oxygen Reduction Reaction. ChemElectroChem, 2019, 6, 2600-2614.	3.4	45
981	Cobalt oxide-based nanoarchitectures for electrochemical energy applications. Progress in Materials Science, 2019, 103, 596-677.	32.8	166
982	Formation of the quasi-planar B <sub>50</sub> boron cluster: topological path from B <sub>10</sub> and disk aromaticity. Physical Chemistry Chemical Physics, 2019, 21, 7039-7044.	2.8	17
983	Current and future envision on developing biosensors aided by 2D molybdenum disulfide (MoS2) productions. Biosensors and Bioelectronics, 2019, 132, 248-264.	10.1	83
984	A review of graphene-based 3D van der Waals hybrids and their energy applications. Nano Today, 2019, 25, 27-37.	11.9	59
985	Facile method preparation of oil-soluble tungsten disulfide nanosheets and their tribological properties over a wide temperature range. Tribology International, 2019, 135, 287-295.	5.9	13
986	Magnetic and electronic properties of Cr2Ge2Te6 monolayer by strain and electric-field engineering. Applied Physics Letters, 2019, 114, .	3.3	69
987	First-principle study on the conductance of benzene-based molecules with various bonding characteristics. Computational and Theoretical Chemistry, 2019, 1154, 1-10.	2.5	5
988	Templated Synthesis of Gold Nanoparticles on Surface-Aminated 2D Cellulose Assemblies. Bulletin of the Chemical Society of Japan, 2019, 92, 982-988.	3.2	25
989	Progress in Electrocatalytic Hydrogen Evolution Based on Monolayer Molybdenum Disulfide. Frontiers in Chemistry, 2019, 7, 131.	3.6	17
990	Electromagnetic plasmonic field of nanoparticles tune the band gap of two-dimensional semiconducting materials. Journal of Materials Chemistry C, 2019, 7, 3675-3687.	5 <b>.</b> 5	7
991	Ill–VI van der Waals heterostructures for sustainable energy related applications. Nanoscale, 2019, 11, 6431-6444.	5.6	88
992	Multifield-tunable magneto-optical effects in electron- and hole-doped nitrogen–graphene crystals. Journal of Materials Chemistry C, 2019, 7, 3360-3368.	5.5	10
993	Recent advances in black phosphorus-based optical sensors. Applied Spectroscopy Reviews, 2019, 54, 275-284.	6.7	12
994	Largeâ€Scale, Bottomâ€Up Synthesis of Binary Metal–Organic Framework Nanosheets for Efficient Water Oxidation. Angewandte Chemie, 2019, 131, 7125-7130.	2.0	98

#	Article	IF	CITATIONS
995	Largeâ€Scale, Bottomâ€Up Synthesis of Binary Metal–Organic Framework Nanosheets for Efficient Water Oxidation. Angewandte Chemie - International Edition, 2019, 58, 7051-7056.	13.8	386
996	Carbon sheet-decorated graphite felt electrode with high catalytic activity for vanadium redox flow batteries. Carbon, 2019, 148, 9-15.	10.3	40
997	Metalâ^'organic frameworks-derived MnO2/Mn3O4 microcuboids with hierarchically ordered nanosheets and Ti3C2 MXene/Au NPs composites for electrochemical pesticide detection. Journal of Hazardous Materials, 2019, 373, 367-376.	12.4	202
998	In-situ grown covalent organic framework nanosheets on graphene for membrane-based dye/salt separation. Journal of Membrane Science, 2019, 581, 321-330.	8.2	150
999	2D kaolin ultrafiltration membrane with ultrahigh flux for water purification. Water Research, 2019, 156, 425-433.	11.3	34
1000	Efficient Ultrathin Liquid Junction Photovoltaics Based on Transition Metal Dichalcogenides. Nano Letters, 2019, 19, 2960-2967.	9.1	36
1001	Ultrathin 2D metal–organic framework nanosheets prepared ⟨i⟩via⟨ i⟩ sonication exfoliation of membranes from interfacial growth and exhibition of enhanced catalytic activity by their gold nanocomposites. RSC Advances, 2019, 9, 9386-9391.	3.6	31
1002	Chemically exfoliated 1T-phase transition metal dichalcogenide nanosheets for transparent antibacterial applications. 2D Materials, 2019, 6, 025025.	4.4	45
1003	Self-assembled intercalation of 8-hydroxyquinoline into metal ions exchanged magadiites via solid-solid reaction and their optical properties. Applied Clay Science, 2019, 174, 47-56.	5.2	9
1004	Two dimensional bismuth-based layered materials for energy-related applications. Energy Storage Materials, 2019, 19, 446-463.	18.0	89
1005	Tuning the n-type contact of graphene on Janus MoSSe monolayer by strain and electric field. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 110, 148-152.	2.7	20
1006	A self-powered high-performance photodetector based on a MoS <sub>2</sub> /GaAs heterojunction with high polarization sensitivity. Journal of Materials Chemistry C, 2019, 7, 3817-3821.	5.5	83
1007	Controlled Growth of an Mo2Câ€"Graphene Hybrid Film as an Electrode in Self-Powered Two-Sided Mo2Câ€"Graphene/Sb2S0.42Se2.58/TiO2 Photodetectors. Sensors, 2019, 19, 1099.	3.8	28
1008	Production and Patterning of Liquid Phase–Exfoliated 2D Sheets for Applications in Optoelectronics. Advanced Functional Materials, 2019, 29, 1901126.	14.9	71
1009	Edgeâ€Exposed Molybdenum Disulfide with Nâ€Doped Carbon Hybridization: A Hierarchical Hollow Electrocatalyst for Carbon Dioxide Reduction. Advanced Energy Materials, 2019, 9, 1900072.	19.5	62
1010	Versatile Crystal Structures and (Opto)electronic Applications of the 2D Metal Monoâ€, Diâ€, and Triâ€Chalcogenide Nanosheets. Advanced Functional Materials, 2019, 29, 1900040.	14.9	58
1011	Fabrication of h-BN-rGO@PDA nanohybrids for composite coatings with enhanced anticorrosion performance. Progress in Organic Coatings, 2019, 130, 124-131.	3.9	89
1012	Self-Assembly Route to TiO <sub>2</sub> and TiC with a Liquid Crystalline Order. Chemistry of Materials, 2019, 31, 2174-2181.	6.7	28

#	Article	IF	CITATIONS
1013	Bull's eye grating integrated with optical nanoantennas for plasmonic enhancement of graphene long-wave infrared photodetectors. Applied Physics Letters, 2019, 114, .	3.3	15
1014	Quantitative analysis of the electronic decoupling of an organic semiconductor molecule at a metal interface by a monolayer of hexagonal boron nitride. Physical Review B, 2019, 99, .	3.2	9
1015	Three-dimensional ordered porous electrode materials for electrochemical energy storage. NPG Asia Materials, 2019, 11, .	7.9	215
1016	Honeycombâ€Inspired Heterogeneous Bimetallic Co–Mo Oxide Nanoarchitectures for Highâ€Rate Electrochemical Lithium Storage. Small Methods, 2019, 3, 1900055.	8.6	40
1017	The effects of ion implantation on rhenium and tin dichalcogenide ultrathin films. Surface and Coatings Technology, 2019, 366, 131-137.	4.8	1
1018	Molybdenum disulfide-integrated photonic barcodes for tumor markers screening. Biosensors and Bioelectronics, 2019, 133, 199-204.	10.1	47
1019	Designing vertical channels with expanded interlayers for Li-ion batteries. Chemical Communications, 2019, 55, 4258-4261.	4.1	23
1020	2D Freeâ€Standing Nitrogenâ€Doped Niâ€Ni <sub>3</sub> S <sub>2</sub> @Carbon Nanoplates Derived from Metal–Organic Frameworks for Enhanced Oxygen Evolution Reaction. Small, 2019, 15, e1900348.	10.0	88
1021	Role of SnS <sub>2</sub> in 2D–2D SnS <sub>2</sub> /TiO <sub>2</sub> Nanosheet Heterojunctions for Photocatalytic Hydrogen Evolution. ACS Applied Nano Materials, 2019, 2, 2144-2151.	5.0	69
1022	A MXeneâ€Based Wearable Biosensor System for Highâ€Performance In Vitro Perspiration Analysis. Small, 2019, 15, e1901190.	10.0	280
1023	Synthesis of carbon-doped boron nitride nanosheets and enhancement of their room-temperature ferromagnetic properties. Journal of Alloys and Compounds, 2019, 792, 1206-1212.	5.5	11
1024	Fast Desalination by Multilayered Covalent Organic Framework (COF) Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 16847-16854.	8.0	135
1025	Direct Synthesis of Metalâ€Doped Phosphorene with Enhanced Electrocatalytic Hydrogen Evolution. Small Methods, 2019, 3, 1900083.	8.6	56
1026	"Plate-anchor―shaped POSS-functionalized graphene oxide with self-fixing effect in polyimide matrix: Molecular dynamic simulations and experimental analysis. Composites Science and Technology, 2019, 176, 103-110.	7.8	21
1027	Solution-Based Synthesis and Processing of Metal Chalcogenides for Thermoelectric Applications. Applied Sciences (Switzerland), 2019, 9, 1511.	2.5	12
1028	Fluorometric determination of HIV DNA using molybdenum disulfide nanosheets and exonuclease III-assisted amplification. Mikrochimica Acta, 2019, 186, 286.	5.0	22
1029	Metal–organic layer derived metal hydroxide nanosheets for highly efficient oxygen evolution. Chemical Communications, 2019, 55, 5467-5470.	4.1	33
1030	Persian waxing of graphite: towards green large-scale production of graphene. Chemical Communications, 2019, 55, 5331-5334.	4.1	9

#	Article	IF	CITATIONS
1031	Sandwich-type nanoporous CoO/N-doped carbon multi-layers with ultrahigh lithium storage and long-life stability. Journal of Materials Chemistry A, 2019, 7, 10610-10618.	10.3	22
1032	Centimeterâ€scale growth of twoâ€dimensional layered highâ€mobility bismuth films by pulsed laser deposition. InformaĀnĀ-Materiály, 2019, 1, 98-107.	17.3	77
1033	First-principles study on the influence of compressive deformation on the oxygen adsorption energy and electrical properties of phosphorene. Physica B: Condensed Matter, 2019, 563, 72-78.	2.7	2
1034	A two-dimensional metal–organic framework accelerating visible-light-driven H <sub>2</sub> production. Nanoscale, 2019, 11, 8304-8309.	5.6	26
1035	Tips and Tricks for the Surface Engineering of Wellâ€Ordered Morphologically Driven Silverâ€Based Nanomaterials. ChemistryOpen, 2019, 8, 508-519.	1.9	6
1036	Template-directed growth of hierarchically structured MOF-derived LDH cage hybrid arrays for supercapacitor electrode. Journal of Electroanalytical Chemistry, 2019, 840, 174-181.	3.8	39
1037	Permeation of Fullerenes through Graphynes: Theoretical Design of Nanomechanical Oscillators. Journal of Physical Chemistry C, 2019, 123, 10544-10556.	3.1	6
1038	2D MOF induced accessible and exclusive Co single sites for an efficient <i>O</i> -silylation of alcohols with silanes. Chemical Communications, 2019, 55, 6563-6566.	4.1	34
1039	Mixed Ion and Electronâ€Conducting Scaffolds for Highâ€Rate Lithium Metal Anodes. Advanced Energy Materials, 2019, 9, 1900193.	19.5	91
1040	Crystalline boron nitride nanosheets by sonication-assisted hydrothermal exfoliation. Journal of Advanced Ceramics, 2019, 8, 72-78.	17.4	42
1041	Hierarchical heterostructure based on molybdenum dichalcogenide nanosheets assembled nitrogen doped graphene layers for efficient hydrogen evolution reaction. Materials Research Bulletin, 2019, 115, 201-210.	5.2	12
1042	Electronic and magnetic properties of the one-dimensional interfaces of two-dimensional lateral GeC/BP heterostructures. Physical Chemistry Chemical Physics, 2019, 21, 8856-8864.	2.8	7
1043	Twinning in two-dimensional materials and its application to electronic properties. Electronic Structure, 2019, 1, 025001.	2.8	7
1044	Unconventional Nanofabrication for Supramolecular Electronics. Advanced Materials, 2019, 31, e1900599.	21.0	42
1045	Environmentallyâ€Friendly Exfoliate and Active Site Selfâ€Assembly: Thin 2D/2D Heterostructure Amorphous Nickel–Iron Alloy on 2D Materials for Efficient Oxygen Evolution Reaction. Small, 2019, 15, e1805435.	10.0	64
1046	Biochar-based materials and their applications in removal of organic contaminants from wastewater: state-of-the-art review. Biochar, 2019, 1, 45-73.	12.6	255
1047	Rapid identification of two-dimensional materials via machine learning assisted optic microscopy. Journal of Materiomics, 2019, 5, 413-421.	5.7	36
1048	Atomically Thin Nanoribbons by Exfoliation of Hydrogen-Bonded Organic Frameworks for Drug Delivery. ACS Applied Nano Materials, 2019, 2, 2437-2445.	5.0	52

#	Article	IF	CITATIONS
1049	2D nanoporous materials: membrane platform for gas and liquid separations. 2D Materials, 2019, 6, 042002.	4.4	37
1050	Different doping of penta-graphene as adsorbent and gas sensing material for scavenging and detecting SF6 decomposed species. Sustainable Materials and Technologies, 2019, 21, e00100.	3.3	11
1051	Ultrathin transition-metal dichalcogenide nanosheet-based colorimetric sensor for sensitive and label-free detection of DNA. Sensors and Actuators B: Chemical, 2019, 290, 565-572.	7.8	43
1052	High-resolution, spatially-resolved surface potential investigations of high-strength metallurgical graphene using scanning tunnelling potentiometry. Microelectronic Engineering, 2019, 212, 1-8.	2.4	1
1053	A direct one-step synthesis of ultrathin g-C3N4 nanosheets from thiourea for boosting solar photocatalytic H2 evolution. International Journal of Hydrogen Energy, 2019, 44, 7194-7204.	7.1	164
1054	Convincing Synthesis of Atomically Thin, Single-Crystalline InVO <sub>4</sub> Sheets toward Promoting Highly Selective and Efficient Solar Conversion of CO <sub>2</sub> into CO. Journal of the American Chemical Society, 2019, 141, 4209-4213.	13.7	199
1055	2D–Organic Hybrid Heterostructures for Optoelectronic Applications. Advanced Materials, 2019, 31, e1803831.	21.0	86
1056	Energyâ€Converting Nanomedicine. Small, 2019, 15, e1805339.	10.0	82
1057	Elastic Anisotropy and Optic Isotropy in Black Phosphorene/Transition-Metal Trisulfide van der Waals Heterostructures. ACS Omega, 2019, 4, 4101-4108.	3.5	15
1058	Mesoporous silica/organosilica nanoparticles: Synthesis, biological effect and biomedical application. Materials Science and Engineering Reports, 2019, 137, 66-105.	31.8	119
1059	Cluster nuclearity control and modulated hydrothermal synthesis of functionalized Zr <sub>12</sub> metal–organic frameworks. Dalton Transactions, 2019, 48, 7069-7073.	3.3	29
1060	Low Power Single Laser Activated Synergistic Cancer Phototherapy Using Photosensitizer Functionalized Dual Plasmonic Photothermal Nanoagents. ACS Nano, 2019, 13, 2544-2557.	14.6	89
1061	Monolayer tellurenyne assembled with helical telluryne: structure and transport properties. Nanoscale, 2019, 11, 4053-4060.	5.6	7
1062	Efficient Production of Phosphorene Nanosheets via Shear Stress Mediated Exfoliation for Lowâ€Temperature Perovskite Solar Cells. Small Methods, 2019, 3, 1800521.	8.6	58
1063	Unveiling the Critical Role of Surface Oxidation of Electroresponsive Behaviors in Two-Dimensional Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXenes. Journal of Physical Chemistry C, 2019, 123, 5479-5487.	3.1	17
1064	The impact of hexagonal boron nitride encapsulation on the structural and vibrational properties of few layer black phosphorus. Nanotechnology, 2019, 30, 195201.	2.6	18
1065	Semimetallic Si3C as a high capacity anode material for advanced lithium ion batteries. Applied Surface Science, 2019, 479, 519-524.	6.1	33
1066	Recent advancement in the performance of solar cells by incorporating transition metal dichalcogenides as counter electrode and photoabsorber. International Journal of Energy Research, 2019, 43, 3058-3079.	4.5	30

#	Article	IF	CITATIONS
1067	Enhanced photocatalytic degradation of RhB by two-dimensional composite photocatalyst. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 568, 429-435.	4.7	36
1068	Exploring Approaches for the Synthesis of Few‣ayered Graphdiyne. Advanced Materials, 2019, 31, e1803758.	21.0	67
1069	Surface chemical-functionalization of ultrathin two-dimensional nanomaterials for electrocatalysis. Materials Today Energy, 2019, 12, 250-268.	4.7	48
1070	Fabrication of a magnetically separable Cu2ZnSnS4/ZnFe2O4 p-n heterostructured nano-photocatalyst for synergistic enhancement of photocatalytic activity combining with photo-Fenton reaction. Applied Surface Science, 2019, 479, 86-95.	6.1	29
1071	Nanomaterials With Different Dimensions for Electrocatalysis. , 2019, , 435-464.		10
1072	Phase Control in Inorganic Nanocrystals through Finely Tuned Growth at an Ultrathin Scale. Accounts of Chemical Research, 2019, 52, 780-790.	15.6	27
1073	Hierarchical Ni <sub>2</sub> P@NiFeAlO <sub><i>x</i></sub> Nanosheet Arrays as Bifunctional Catalysts for Superior Overall Water Splitting. Inorganic Chemistry, 2019, 58, 3247-3255.	4.0	47
1074	Layer-Dependent Electronic Structure of Atomically Resolved Two-Dimensional Gallium Selenide Telluride. Nano Letters, 2019, 19, 1782-1787.	9.1	12
1075	Template-Free One-Step Synthesis of g-C <sub>3</sub> N <sub>4</sub> Nanosheets with Simultaneous Porous Network and S-Doping for Remarkable Visible-Light-Driven Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2019, 7, 5801-5807.	6.7	127
1076	Ultrathin HNb <sub>3</sub> O <sub>8</sub> nanosheets with oxygen vacancies for enhanced photocatalytic oxidation ofÂamines under visible light irradiation. Journal of Materials Chemistry A, 2019, 7, 5493-5503.	10.3	81
1077	Nanoparticle-Hydrogel Composites: From Molecular Interactions to Macroscopic Behavior. Polymers, 2019, 11, 275.	4.5	142
1078	Fabrication of transition metal dichalcogenides quantum dots based on femtosecond laser ablation. Scientific Reports, 2019, 9, 2931.	3.3	53
1079	Phase engineering of two-dimensional transition metal dichalcogenides. Science China Materials, 2019, 62, 759-775.	6.3	106
1080	Tunable electronic properties in stanene and two dimensional silicon-carbide heterobilayer: A first principles investigation. AIP Advances, 2019, 9, .	1.3	37
1081	Exfoliation of Two-Dimensional Materials: The Role of Entropy. Journal of Physical Chemistry Letters, 2019, 10, 981-986.	4.6	30
1082	Recent progress in 2D group IV–IV monochalcogenides: synthesis, properties and applications. Nanotechnology, 2019, 30, 252001.	2.6	104
1083	Alendronate-Anionic Clay Nanohybrid for Enhanced Osteogenic Proliferation and Differentiation. Journal of Korean Medical Science, 2019, 34, e37.	2.5	17
1084	Investigation of twoâ€dimensional hfâ€based MXenes as the anode materials for li/naâ€ion batteries: A DFT study. Journal of Computational Chemistry, 2019, 40, 1352-1359.	3.3	38

#	Article	IF	CITATIONS
1085	Enhanced humidity sensing of functionalized reduced graphene oxide with 4-chloro-3-sulfophenylazo groups. Sensors and Actuators B: Chemical, 2019, 287, 258-266.	7.8	17
1086	Visualization of Local Conductance in MoS <sub>2</sub> /WSe <sub>2</sub> Heterostructure Transistors. Nano Letters, 2019, 19, 1976-1981.	9.1	36
1087	Enhanced Superoxide Generation on Defective Surfaces for Selective Photooxidation. Journal of the American Chemical Society, 2019, 141, 3797-3801.	13.7	285
1088	Flower-like MoS2@Bi2Fe4O9 microspheres with hierarchical structure as electromagnetic wave absorber. Applied Surface Science, 2019, 479, 1226-1235.	6.1	98
1089	MoS <sub>2</sub> -Based Optoelectronic Gas Sensor with Sub-parts-per-billion Limit of NO <sub>2</sub> Gas Detection. ACS Nano, 2019, 13, 3196-3205.	14.6	349
1090	Penta-MX $<$ sub $>$ 2 $<$ /sub $>$ (M = Ni, Pd and Pt; X = P and As) monolayers: direct band-gap semiconductors with high carrier mobility. Journal of Materials Chemistry C, 2019, 7, 3569-3575.	5.5	34
1091	Fully Conjugated Twoâ€Dimensional sp <sup>2</sup> â€Carbon Covalent Organic Frameworks as Artificial Photosystemâ€I with High Efficiency. Angewandte Chemie - International Edition, 2019, 58, 5376-5381.	13.8	230
1092	Fully Conjugated Twoâ€Dimensional sp <sup>2</sup> â€Carbon Covalent Organic Frameworks as Artificial Photosystemâ€I with High Efficiency. Angewandte Chemie, 2019, 131, 5430-5435.	2.0	59
1093	Defect chemistry in 2D materials for electrocatalysis. Materials Today Energy, 2019, 12, 215-238.	4.7	110
1094	Cocatalysts for Selective Photoreduction of CO <sub>2</sub> into Solar Fuels. Chemical Reviews, 2019, 119, 3962-4179.	47.7	1,591
1095	A label-free colorimetric strategy for facile and low-cost sensing of ascorbic acid using MnO <sub>2</sub> nanosheets. Analytical Methods, 2019, 11, 1469-1474.	2.7	15
1096	An Investigation in Phase Transition of MoTe2 Film with Continuous Tellurization Reaction. IOP Conference Series: Materials Science and Engineering, 2019, 677, 022123.	0.6	1
1097	Transformation between Hexagonal Prism and Antiprism of the Singly and Doubly Cr-Doped Ge <sub>12</sub> Clusters. Journal of Physical Chemistry A, 2019, 123, 10721-10729.	2.5	7
1098	Facile Synthesis of Cobalt Phosphate Hydrate Nanosheets with Enhanced Nonenzymatic Glucose Sensing. International Journal of Electrochemical Science, 2019, , 11541-11548.	1.3	0
1099	2D Layered Materials: Synthesis, Nonlinear Optical Properties, and Device Applications. Laser and Photonics Reviews, 2019, 13, 1800327.	8.7	353
1100	Hierarchical Composite of Roseâ€Like VS <sub>2</sub> @S/Nâ€Doped Carbon with Expanded (001) Planes for Superior Liâ€lon Storage. Small, 2019, 15, e1903904.	10.0	64
1101	Facile self-template fabrication of hierarchical nickel-cobalt phosphide hollow nanoflowers with enhanced hydrogen generation performance. Science Bulletin, 2019, 64, 1675-1684.	9.0	43
1102	Defective glycerolatocobalt( <scp>ii</scp> ) for enhancing the oxygen evolution reaction. Chemical Communications, 2019, 55, 12861-12864.	4.1	8

#	Article	IF	CITATIONS
1103	Strain engineering of the electronic and transport properties of monolayer tellurenyne. Physical Chemistry Chemical Physics, 2019, 21, 23119-23128.	2.8	2
1104	Control of highly anisotropic electrical conductance of tellurene by strain-engineering. Nanoscale, 2019, 11, 21775-21781.	5.6	11
1105	3D architectures with Co <sub>2</sub> (OH) <sub>2</sub> CO <sub>3</sub> nanowires wrapped by reduced graphene oxide as superior rate anode materials for Li-ion batteries. Nanoscale, 2019, 11, 21180-21187.	5.6	25
1106	Durable Antimicrobial Behaviour from Silver-Graphene Coated Medical Textile Composites. Polymers, 2019, 11, 2000.	4.5	31
1107	A kinetics study on intercalation pseudocapacitance of layered TiS <sub>2</sub> in K-ion batteries. Physical Chemistry Chemical Physics, 2019, 21, 25940-25944.	2.8	11
1108	An amino-functionalized metal–organic framework nanosheet array as a battery-type electrode for an advanced supercapattery. Dalton Transactions, 2019, 48, 17163-17168.	3.3	40
1109	Orbital design of topological insulators from two-dimensional semiconductors. Nanoscale, 2019, 11, 22743-22747.	5.6	11
1110	Colloidal nanoparticle inks for printing functional devices: emerging trends and future prospects. Journal of Materials Chemistry A, 2019, 7, 23301-23336.	10.3	94
1111	Emerging two-dimensional noncarbon nanomaterials for flexible lithium-ion batteries: opportunities and challenges. Journal of Materials Chemistry A, 2019, 7, 25227-25246.	10.3	44
1112	Two-dimensional group-VA nanomaterials beyond black phosphorus: synthetic methods, properties, functional nanostructures and applications. Journal of Materials Chemistry A, 2019, 7, 25712-25771.	10.3	49
1113	Freestanding ultrathin bismuth-based materials for diversified photocatalytic applications. Journal of Materials Chemistry A, 2019, 7, 25203-25226.	10.3	90
1114	Highly polarization-sensitive, visible-blind and self-powered ultraviolet photodetection based on two-dimensional wide bandgap semiconductors: a theoretical prediction. Journal of Materials Chemistry A, 2019, 7, 27503-27513.	10.3	42
1115	Janus electrochemical exfoliation of two-dimensional materials. Journal of Materials Chemistry A, 2019, 7, 25691-25711.	10.3	41
1116	Valine adsorption on pristine and N-doped graphenes: DFT, AIM, and IGM study. Materials Research Express, 2019, 6, 125061.	1.6	6
1117	In Situ Compositing CsPbBr <sub>3</sub> with Exfoliated Layered-Perovskite CsCa <sub>2</sub> Ta <sub>3</sub> O <sub>10</sub> : Interfacial Interaction and Enhanced Stability. ACS Applied Materials & Date: Ap	8.0	9
1118	Broadband multi-wavelength optical sensing based on photothermal effect of 2D MXene films. Nanophotonics, 2020, 9, 123-131.	6.0	38
1119	Two-Dimensional Nanomaterials-Based Polymer Composites: Fabrication and Energy Storage Applications. Advances in Polymer Technology, 2019, 2019, 1-15.	1.7	13
1120	Optically Active Nanomaterials for Bioimaging and Targeted Therapy. Frontiers in Bioengineering and Biotechnology, 2019, 7, 320.	4.1	44

#	Article	IF	CITATIONS
1121	Exonuclease III-Regulated Target Cyclic Amplification-Based Single Nucleotide Polymorphism Detection Using Ultrathin Ternary Chalcogenide Nanosheets. Frontiers in Chemistry, 2019, 7, 844.	3.6	2
1122	Advanced Ultrathin RuPdM (M = Ni, Co, Fe) Nanosheets Electrocatalyst Boosts Hydrogen Evolution. ACS Central Science, 2019, 5, 1991-1997.	11.3	78
1123	Precisely Controlling the Structure of Ultrathin Semiconducting Films by a Laminating Method for High-Performance Organic Field-Effect Transistors. ACS Applied Materials & Samp; Interfaces, 2019, 11, 48147-48154.	8.0	8
1124	Fluorescence imaging of a potential diagnostic biomarker for breast cancer cells using a peptide-functionalized fluorogenic 2D material. Chemical Communications, 2019, 55, 13235-13238.	4.1	7
1125	Fluorescence enhancement of fungicide thiabendazole by van der Waals interaction with transition metal dichalcogenide nanosheets for highly specific sensors. Nanoscale, 2019, 11, 23156-23164.	5.6	6
1126	Bidirectional heterostructures consisting of graphene and lateral MoS <sub>2</sub> /WS <sub>2</sub> composites: a first-principles study. RSC Advances, 2019, 9, 34986-34994.	3.6	4
1127	Femtosecond Laser-assisted Fabrication of Fluorescent Boron Nitride Quantum Dots., 2019,,.		1
1128	Ferromagnetism and microwave absorption properties of Cr-doped MoS2 nanosheets. Journal of Materials Science, 2019, 54, 552-559.	3.7	21
1129	Enhanced electrocatalytic activity of WO3@NPRGO composite in a hydrogen evolution reaction. Applied Surface Science, 2019, 463, 275-282.	6.1	55
1130	Density functional theory study of small Ag cluster adsorbed on graphyne. Applied Surface Science, 2019, 465, 93-102.	6.1	46
1131	In-situ fabrication of PtSe2/GaN heterojunction for self-powered deep ultraviolet photodetector with ultrahigh current on/off ratio and detectivity. Nano Research, 2019, 12, 183-189.	10.4	189
1132	Rational design of few-layered ReS2 nanosheets/N-doped mesoporous carbon nanocomposites for high-performance pseudocapacitive lithium storage. Chemical Engineering Journal, 2019, 356, 1052-1061.	12.7	19
1133	Synchronous regulation of morphology and crystal phase of TiO2 via a facile green hydrothermal approach and their photocatalytic activity. Materials Research Bulletin, 2019, 109, 90-97.	5.2	8
1134	Nanoarchitectonicâ€Based Material Platforms for Environmental and Bioprocessing Applications. Chemical Record, 2019, 19, 1891-1912.	5.8	17
1135	Hybrids of Fullerenes and 2D Nanomaterials. Advanced Science, 2019, 6, 1800941.	11.2	98
1136	Carbon Nanomaterials., 2019,, 3-38.		5
1137	Molybdenum and tungsten chalcogenides for lithium/sodium-ion batteries: Beyond MoS2. Journal of Energy Chemistry, 2019, 33, 100-124.	12.9	174
1138	Room-temperature synthesis of novel polymeric nanoclusterwith emissions and its Cu2+ recognition performance. Journal of Luminescence, 2019, 205, 142-147.	3.1	4

#	Article	IF	CITATIONS
1139	Exploring the electronic and magnetic properties of new metal halides from bulk to two-dimensional monolayer: RuX3 (X = Br, I). Journal of Magnetism and Magnetic Materials, 2019, 476, 111-119.	2.3	48
1140	Tribology of two-dimensional materials: From mechanisms to modulating strategies. Materials Today, 2019, 26, 67-86.	14.2	250
1141	Antimicrobial Peptide-Conjugated MoS <sub>2</sub> -Based Nanoplatform for Multimodal Synergistic Inactivation of Superbugs. ACS Applied Bio Materials, 2019, 2, 769-776.	4.6	29
1142	Fabrication of highly fluorescent multiple Fe3O4 nanoparticles core-silica shell nanoparticles. Journal of Nanoparticle Research, 2019, 21, .	1.9	48
1143	Ultrathin MOF nanosheet assembled highly oriented microporous membrane as an interlayer for lithium-sulfur batteries. Energy Storage Materials, 2019, 21, 14-21.	18.0	182
1144	Two-dimensional titanium carbide MXenes as efficient non-noble metal electrocatalysts for oxygen reduction reaction. Science China Materials, 2019, 62, 662-670.	6.3	74
1145	Using Single-Layer HfS <sub>2</sub> as Prospective Sensing Device Toward Typical Partial Discharge Gas in SF <sub>6</sub> -Based Gas-Insulated Switchgear. IEEE Transactions on Electron Devices, 2019, 66, 689-695.	3.0	26
1146	Thicknessâ€Dependent Structural Stability and Anisotropy of Black Phosphorus. Advanced Electronic Materials, 2019, 5, 1800712.	5.1	11
1147	Efficient Bifunctional Polyalcohol Oxidation and Oxygen Reduction Electrocatalysts Enabled by Ultrathin PtPdM (M = Ni, Fe, Co) Nanosheets. Advanced Energy Materials, 2019, 9, 1800684.	19.5	112
1148	Novel Insights and Perspectives into Weakly Coupled ReS2 toward Emerging Applications. CheM, 2019, 5, 505-525.	11.7	68
1149	Manganese( <scp>ii</scp> ) phosphate nanosheet assembly with native out-of-plane Mn centres for electrocatalytic water oxidation. Chemical Science, 2019, 10, 191-197.	7.4	44
1150	Photocatalyst design based on two-dimensional materials. Materials Today Chemistry, 2019, 11, 197-216.	3.5	103
1151	Colloidally Stable Monolayer Nanosheets with Colorimetric Responses. Small, 2019, 15, e1804975.	10.0	38
1152	Pt nanoparticles embedded metal-organic framework nanosheets: A synergistic strategy towards bifunctional oxygen electrocatalysis. Applied Catalysis B: Environmental, 2019, 245, 389-398.	20.2	66
1153	Ultrathin Bi2WO6 nanosheets loaded g-C3N4 quantum dots: A direct Z-scheme photocatalyst with enhanced photocatalytic activity towards degradation of organic pollutants under wide spectrum light irradiation. Journal of Colloid and Interface Science, 2019, 539, 654-664.	9.4	132
1154	Electrically-Transduced Chemical Sensors Based on Two-Dimensional Nanomaterials. Chemical Reviews, 2019, 119, 478-598.	47.7	521
1155	Dual Tuning of Ultrathin $\hat{l}$ ±-Co(OH) <sub>2</sub> Nanosheets by Solvent Engineering and Coordination Competition for Efficient Oxygen Evolution. ACS Sustainable Chemistry and Engineering, 2019, 7, 3527-3535.	6.7	56
1156	Welding Metallophthalocyanines into Bimetallic Molecular Meshes for Ultrasensitive, Low-Power Chemiresistive Detection of Gases. Journal of the American Chemical Society, 2019, 141, 2046-2053.	13.7	225

#	Article	IF	Citations
1157	Graphene Oxide and Derivatives: The Place in Graphene Family. Frontiers in Physics, 2019, 6, .	2.1	256
1158	Raman Characterization on Two-Dimensional Materials-Based Thermoelectricity. Molecules, 2019, 24, 88.	3.8	19
1159	X3N (X=C and Si) monolayers and their van der Waals Heterostructures with graphene and h-BN: Emerging tunable electronic structures by strain engineering. Carbon, 2019, 145, 1-9.	10.3	36
1160	Probing C3N/Graphene heterostructures as anode materials for Li-ion batteries. Journal of Power Sources, 2019, 413, 117-124.	7.8	68
1161	Manipulating the assembled structure of atomically thin CoSe2 nanomaterials for enhanced water oxidation catalysis. Nano Energy, 2019, 57, 371-378.	16.0	23
1162	Catalysis with Two-Dimensional Materials Confining Single Atoms: Concept, Design, and Applications. Chemical Reviews, 2019, 119, 1806-1854.	47.7	745
1163	Preparation of urchin-like NiCo <sub>2</sub> O <sub>4</sub> material and studies of its electrochemical performance for supercapacitors. Functional Materials Letters, 2019, 12, 1950026.	1.2	3
1164	Cycloaddition of Carbon Dioxide to Epoxides for the Synthesis of Cyclic Carbonates with a Mixed Catalyst of Layered Double Hydroxide and Tetrabutylammonium Bromide at Ambient Temperature. Advanced Synthesis and Catalysis, 2019, 361, 335-344.	4.3	38
1165	Pnictogenâ€Based Enzymatic Phenol Biosensors: Phosphorene, Arsenene, Antimonene, and Bismuthene. Angewandte Chemie - International Edition, 2019, 58, 134-138.	13.8	96
1166	Ferrocenyl-functionalized carbon nanotubes with greatly improved surface reactivity for enhancing electrocapacitance. Journal of Organometallic Chemistry, 2019, 880, 349-354.	1.8	13
1167	Two-dimensional materials for lithium/sodium-ion capacitors. Materials Today Energy, 2019, 11, 30-45.	4.7	88
1168	Pnictogenâ€Based Enzymatic Phenol Biosensors: Phosphorene, Arsenene, Antimonene, and Bismuthene. Angewandte Chemie, 2019, 131, 140-144.	2.0	4
1169	Ultrathin Sb2S3 nanosheet anodes for exceptional pseudocapacitive contribution to multi-battery charge storage. Energy Storage Materials, 2019, 20, 36-45.	18.0	51
1170	2D Metal–Organic Framework Nanosheets with Timeâ€Dependent and Multilevel Memristive Switching. Advanced Functional Materials, 2019, 29, 1806637.	14.9	101
1171	Two-dimensional perovskite materials: From synthesis to energy-related applications. Materials Today Energy, 2019, 11, 61-82.	4.7	133
1172	Disassembly of 2D Vertical Heterostructures. Advanced Materials, 2019, 31, e1805976.	21.0	12
1173	Printing of NiO-YSZ nanocomposites: From continuous synthesis to inkjet deposition. Journal of the European Ceramic Society, 2019, 39, 1279-1286.	5.7	9
1174	MnO <sub>2</sub> Nanostructures Deposited on Graphene-Like Porous Carbon Nanosheets for High-Rate Performance and High-Energy Density Asymmetric Supercapacitors. ACS Sustainable Chemistry and Engineering, 2019, 7, 3101-3110.	6.7	66

#	Article	IF	CITATIONS
1175	Highly Efficient Adsorption of Oils and Pollutants by Porous Ultrathin Oxygen-Modified BCN Nanosheets. ACS Sustainable Chemistry and Engineering, 2019, 7, 3234-3242.	6.7	14
1176	Molecule Self-Assembly Synthesis of Porous Few-Layer Carbon Nitride for Highly Efficient Photoredox Catalysis. Journal of the American Chemical Society, 2019, 141, 2508-2515.	13.7	685
1177	Electronic structure and magnetic behaviors of exfoliated MoS <sub>2</sub> nanosheets. Journal of Physics Condensed Matter, 2019, 31, 135501.	1.8	13
1178	From Lead Iodide to a Radical Form Leadâ€lodide Superlattice: High Conductance Gain and Broader Band for Photoconductive Response. Angewandte Chemie, 2019, 131, 2718-2721.	2.0	5
1179	From Lead Iodide to a Radical Form Lead″odide Superlattice: High Conductance Gain and Broader Band for Photoconductive Response. Angewandte Chemie - International Edition, 2019, 58, 2692-2695.	13.8	34
1180	Two-dimensional-related catalytic materials for solar-driven conversion of CO <sub>x</sub> into valuable chemical feedstocks. Chemical Society Reviews, 2019, 48, 1972-2010.	38.1	350
1181	Maximizing the Current Output in Self-Aligned Graphene–InAs–Metal Vertical Transistors. ACS Nano, 2019, 13, 847-854.	14.6	23
1182	Open-source automated chemical vapor deposition system for the production of two- dimensional nanomaterials. PLoS ONE, 2019, 14, e0210817.	2.5	7
1183	Recent Progress in Two-Dimensional Nanomaterials for Laser Protection. Chemistry, 2019, 1, 17-43.	2.2	22
1184	Novel Nanomaterials for Protein Analysis. , 2019, , 37-88.		2
1185	Vibrations of van der Waals heterostructures: A study by molecular dynamics and continuum mechanics. Journal of Applied Physics, 2019, 125, .	2.5	5
1186	SnSe2 Field-Effect Transistor with High On/Off Ratio and Polarity-Switchable Photoconductivity. Nanoscale Research Letters, 2019, 14, 17.	5.7	13
1187	Multilayer-graphene-stabilized lithium deposition for anode-Free lithium-metal batteries. Nanoscale, 2019, 11, 2710-2720.	5.6	118
1188	Modulation of Mesenchymal Stem Cells Mechanosensing at Fluid Interfaces by Tailored Selfâ€Assembled Protein Monolayers. Small, 2019, 15, e1804640.	10.0	58
1189	Microwave-anion-exchange route to ultrathin cobalt-nickel-sulfide nanosheets for hybrid supercapacitors. Chemical Engineering Journal, 2019, 362, 576-587.	12.7	75
1190	Quantum and Dielectric Confinement Effects in Lower-Dimensional Hybrid Perovskite Semiconductors. Chemical Reviews, 2019, 119, 3140-3192.	47.7	525
1191	Ultrathin GeSe Nanosheets: From Systematic Synthesis to Studies of Carrier Dynamics and Applications for a High-Performance UVâ€"Vis Photodetector. ACS Applied Materials & Diterfaces, 2019, 11, 4278-4287.	8.0	105
1192	Inâ€situ Platinum Plasmon Resonance Effect Prompt Titanium Dioxide Nanocube Photocatalytic Hydrogen Evolution. Chemistry - an Asian Journal, 2019, 14, 592-596.	3.3	6

#	Article	IF	CITATIONS
1193	2D-porphrinic covalent organic framework-based aptasensor with enhanced photoelectrochemical response for the detection of C-reactive protein. Biosensors and Bioelectronics, 2019, 129, 64-71.	10.1	86
1194	Carbon-based derivatives from metal-organic frameworks as cathode hosts for Li–S batteries. Journal of Energy Chemistry, 2019, 38, 94-113.	12.9	104
1195	Ultrathin two-dimension metal-organic framework nanosheets/multi-walled carbon nanotube composite films for the electrochemical detection of H2O2. Journal of Electroanalytical Chemistry, 2019, 835, 178-185.	3.8	48
1196	Two-dimensional metal-organic framework and covalent-organic framework: synthesis and their energy-related applications. Materials Today Chemistry, 2019, 12, 34-60.	3.5	105
1197	Recent Advances of 2D Nanomaterials in the Electrode Materials of Lithium-Ion Batteries. Nano, 2019, 14, 1930001.	1.0	22
1198	Rice-husk-derived mesoporous OD/2D C3N4 isotype heterojunction with improved quantum effect for photodegradation of tetracycline antibiotics. Ceramics International, 2019, 45, 2234-2240.	4.8	18
1199	Detecting Decompositions of Sulfur Hexafluoride Using MoS <sub>2</sub> Monolayer as Gas Sensor. IEEE Sensors Journal, 2019, 19, 39-46.	4.7	51
1200	Atomically thin two-dimensional metal oxide nanosheets and their heterostructures for energy storage. Energy Storage Materials, 2019, 16, 455-480.	18.0	109
1201	Tuning the organization of the interlayer organic moiety in a hybrid layered perovskite. Journal of Solid State Chemistry, 2019, 269, 532-539.	2.9	1
1202	Enhanced removal of ionic dyes by hierarchical organic three-dimensional layered double hydroxide prepared via soft-template synthesis with mechanism study. Chemical Engineering Journal, 2019, 360, 1137-1149.	12.7	53
1203	Potential 2D Materials with Phase Transitions: Structure, Synthesis, and Device Applications. Advanced Materials, 2019, 31, e1804682.	21.0	60
1204	Efficient detoxication of heterocyclics by layered double hydroxides contained different cobalt components as photocatalysts based on controllable application of active free radicals. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 371, 33-43.	3.9	12
1205	Geometry and bonding of small binary boron-aluminum clusters BnAln (n = 1–7): Electron donation and interlocking aromaticity. Chemical Physics Letters, 2019, 714, 87-93.	2.6	6
1206	Nanoporous gold induced vertically standing 2D NiCo bimetal-organic framework nanosheets for non-enzymatic glucose biosensing. Sensors and Actuators B: Chemical, 2019, 281, 652-658.	7.8	72
1207	Ultrathin molybdenum phosphide films as high-efficiency electrocatalysts for hydrogen evolution reaction. Materials Research Express, 2019, 6, 016418.	1.6	8
1208	Phaseâ€Controlled Synthesis of 1Tâ€MoSe <sub>2</sub> /NiSe Heterostructure Nanowire Arrays via Electronic Injection for Synergistically Enhanced Hydrogen Evolution. Small Methods, 2019, 3, 1800317.	8.6	67
1209	Electrochemical exfoliation of graphene-like two-dimensional nanomaterials. Nanoscale, 2019, 11, 16-33.	5.6	184
1210	MoS2 quantum dots-modified porous $\hat{l}^2$ -Bi2O3 microspheres with enhanced visible-light-induced photocatalytic activity for Bisphenol A degradation and NO removal. Journal of Materials Science: Materials in Electronics, 2019, 30, 2610-2621.	2.2	10

#	Article	IF	CITATIONS
1211	Hydrothermal Approach to Spinel-Type 2D Metal Oxide Nanosheets. Inorganic Chemistry, 2019, 58, 549-556.	4.0	23
1212	Ultrathin Nickel-Based Metal–Organic Framework Nanosheets as Reusable Heterogeneous Catalyst for Ethylene Dimerization. ACS Applied Nano Materials, 2019, 2, 136-142.	5.0	24
1213	Gram-Scale Preparation of 2D Transition Metal Hydroxide/Oxide Assembled Structures for Oxygen Evolution and Zn-Air Battery. ACS Applied Energy Materials, 2019, 2, 579-586.	5.1	32
1214	Waferâ€Scale Fabrication of Highâ€Performance nâ€Type Polymer Monolayer Transistors Using a Multiâ€Level Selfâ€Assembly Strategy. Advanced Materials, 2019, 31, e1806747.	21.0	68
1215	Oxygen vacancy-rich ultrathin sulfur-doped bismuth oxybromide nanosheet as a highly efficient visible-light responsive photocatalyst for environmental remediation. Chemical Engineering Journal, 2019, 360, 838-847.	12.7	79
1216	Growth of 1T′ MoTe <sub>2</sub> by Thermally Assisted Conversion of Electrodeposited Tellurium Films. ACS Applied Energy Materials, 2019, 2, 521-530.	5.1	30
1217	Zero-energy-state-oriented tunability of spin polarization in zigzag-edged bowtie-shaped graphene nanoflakes under an electric field. Nanotechnology, 2019, 30, 085201.	2.6	2
1218	High Selective SO <sub>2</sub> Gas Sensor Based on Monolayer <inline-formula> <tex-math notation="LaTeX">\$eta\$ </tex-math> </inline-formula>-AsSb to Detect SF <sub>6</sub> Decompositions. IEEE Sensors Journal, 2019, 19, 1215-1223.	4.7	21
1219	Solid-state energy storage devices based on two-dimensional nano-materials. Energy Storage Materials, 2019, 20, 269-290.	18.0	50
1220	Sulfur-doped porous graphitic carbon nitride heterojunction hybrids for enhanced photocatalytic H2 evolution. Journal of Materials Science, 2019, 54, 4811-4820.	3.7	60
1221	Molybdenum Oxide Nanosheets with Tunable Plasmonic Resonance: Aqueous Exfoliation Synthesis and Charge Storage Applications. Advanced Functional Materials, 2019, 29, 1806699.	14.9	55
1222	Van der Waals Heteroepitaxial Growth of Monolayer Sb in a Puckered Honeycomb Structure. Advanced Materials, 2019, 31, e1806130.	21.0	<b>7</b> 5
1223	Impact of Postâ€Lithography Polymer Residue on the Electrical Characteristics of MoS <sub>2</sub> and WSe <sub>2</sub> Field Effect Transistors. Advanced Materials Interfaces, 2019, 6, 1801321.	3.7	56
1224	Layerâ€Dependent Dielectric Function of Waferâ€Scale 2D MoS <sub>2</sub> . Advanced Optical Materials, 2019, 7, 1801250.	7.3	58
1225	A Perspective on Recent Advances in Phosphorene Functionalization and Its Applications in Devices. European Journal of Inorganic Chemistry, 2019, 2019, 1476-1494.	2.0	49
1226	BSA modified, disulfide-bridged mesoporous silica with low biotoxicity for dual-responsive drug delivery. Microporous and Mesoporous Materials, 2019, 278, 257-266.	4.4	20
1227	ZnS Nanotubes/Carbon Cloth as a Reversible and High apacity Anode Material for Lithiumâ€ion Batteries. ChemElectroChem, 2019, 6, 461-466.	3.4	27
1228	Structure and Chemistry of 2D Materials. , 2019, , 55-90.		17

#	Article	IF	CITATIONS
1229	Functional Nanomaterials and Nanostructures Enhancing Electrochemical Biosensors and Lab-on-a-Chip Performances: Recent Progress, Applications, and Future Perspective. Chemical Reviews, 2019, 119, 120-194.	47.7	436
1230	Pristine and Cu decorated hexagonal InN monolayer, a promising candidate to detect and scavenge SF6 decompositions based on first-principle study. Journal of Hazardous Materials, 2019, 363, 346-357.	12.4	146
1231	Improving p-to-n transition and detection range of bimodal hydrogen-sensitive nanohybrids of hole-doped rGO and chemochromic Pd-decorated-MoO3 nanoflakes. Journal of Alloys and Compounds, 2019, 774, 111-121.	5.5	15
1232	Photothermal therapy and photoacoustic imaging <i>via</i> nanotheranostics in fighting cancer. Chemical Society Reviews, 2019, 48, 2053-2108.	38.1	2,033
1233	Recent progress on graphene-analogous 2D nanomaterials: Properties, modeling and applications. Progress in Materials Science, 2019, 100, 99-169.	32.8	235
1234	Engineered nanomaterials for water decontamination and purification: From lab to products. Journal of Hazardous Materials, 2019, 363, 295-308.	12.4	147
1235	Template Synthesis of an Ultrathin $\hat{l}^2$ -Graphdiyne-Like Film Using the Eglinton Coupling Reaction. ACS Applied Materials & Samp; Interfaces, 2019, 11, 2734-2739.	8.0	69
1236	Defects remodeling of g-C3N4 nanosheets by fluorine-containing solvothermal treatment to enhance their photocatalytic activities. Applied Surface Science, 2019, 474, 194-202.	6.1	42
1237	2D inorganic nanosheet-based hybrid photocatalysts: Design, applications, and perspectives. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2019, 40, 150-190.	11.6	89
1238	Strength nature of two-dimensional woven nanofabrics under biaxial tension. International Journal of Damage Mechanics, 2019, 28, 367-379.	4.2	2
1239	Molybdenum disulfide (MoS2) nanosheets vertically coated on titanium for disinfection in the dark. Arabian Journal of Chemistry, 2020, 13, 1612-1623.	4.9	33
1240	Atomâ€Thick Membranes for Water Purification and Blue Energy Harvesting. Advanced Functional Materials, 2020, 30, 1902394.	14.9	58
1241	The magnetism enhancement and spin transport in zigzag borophene nanoribbons edge-passivated by N atoms. Applied Nanoscience (Switzerland), 2020, 10, 29-35.	3.1	7
1242	Molten salt-assisted synthesis of bulk CoOOH as a water oxidation catalyst. Journal of Energy Chemistry, 2020, 42, 5-10.	12.9	38
1243	Ultrathin 2D Rareâ€Earth Nanomaterials: Compositions, Syntheses, and Applications. Advanced Materials, 2020, 32, e1806461.	21.0	92
1244	Confined Synthesis of 2D Nanostructured Materials toward Electrocatalysis. Advanced Energy Materials, 2020, 10, 1900486.	19.5	123
1245	Hexagonal boron nitride adsorbent: Synthesis, performance tailoring and applications. Journal of Energy Chemistry, 2020, 40, 99-111.	12.9	59
1246	Controlling electronic structure of single-layered \$\${hbox {HfX}}_{3}\$\$ (\$\$hbox {X=S}\$\$, Se) trichalcogenides through systematic Zr doping. Journal of Materials Science, 2020, 55, 660-669.	3.7	12

#	Article	IF	CITATIONS
1247	Photocatalytic selective oxidation of benzyl alcohol over ZnTi-LDH: The effect of surface OH groups. Applied Catalysis B: Environmental, 2020, 260, 118185.	20.2	122
1248	Adsorption enhanced photocatalytic degradation sulfadiazine antibiotic using porous carbon nitride nanosheets with carbon vacancies. Chemical Engineering Journal, 2020, 382, 123017.	12.7	83
1249	New opportunities for emerging 2D materials in bioelectronics and biosensors. Current Opinion in Biomedical Engineering, 2020, 13, 32-41.	3.4	48
1250	Intrinsic properties of nitrogen-rich carbon nitride for oxygen reduction reaction. Applied Surface Science, 2020, 500, 144020.	6.1	21
1251	Extending suitability of physisorption strategy in fluorescent platforms design: Surface passivation and covalent linkage on MOF nanosheets with enhanced OTC detection sensitivity. Sensors and Actuators B: Chemical, 2020, 303, 127230.	7.8	18
1252	Study on the adsorption orientation of DNA on two-dimensional MoS2 surface via molecular dynamics simulation: A vertical orientation phenomenon. Chemical Physics, 2020, 529, 110546.	1.9	14
1253	Crucial roles of interfacial coupling and oxygen defect in multifunctional 2D inorganic nanosheets. Nano Energy, 2020, 67, 104192.	16.0	35
1254	Pd-ZIF-L-GO ternary nanolaminates for enhanced heterogeneous catalysis. 2D Materials, 2020, 7, 015001.	4.4	4
1255	Going green with batteries and supercapacitor: Two dimensional materials and their nanocomposites based energy storage applications. Progress in Solid State Chemistry, 2020, 58, 100254.	7.2	87
1256	Layered Transition Metal Dichalcogenideâ€Based Nanomaterials for Electrochemical Energy Storage. Advanced Materials, 2020, 32, e1903826.	21.0	329
1257	2D Electrocatalysts for Converting Earthâ€Abundant Simple Molecules into Valueâ€Added Commodity Chemicals: Recent Progress and Perspectives. Advanced Materials, 2020, 32, e1904870.	21.0	76
1258	Recent Advanced Materials for Electrochemical and Photoelectrochemical Synthesis of Ammonia from Dinitrogen: One Step Closer to a Sustainable Energy Future. Advanced Energy Materials, 2020, 10, 1902020.	19.5	113
1259	Miniaturized Energy Storage Devices Based on Twoâ€Dimensional Materials. ChemSusChem, 2020, 13, 1420-1446.	6.8	30
1260	Metal–Organic Frameworkâ€Derived Nâ€Rich Porous Carbon as an Auxiliary Additive of Hole Transport Layers for Highly Efficient and Longâ€Term Stable Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900380.	5.8	14
1261	The effect of crystal facet $(3\hat{a} \in 1\hat{a} \in 2)$ exposure intensity of Ni12P5 nanoparticle on its hydrodechlorination catalytic activity. Inorganic Chemistry Communication, 2020, 111, 107595.	3.9	4
1262	Direct fabrication of two-dimensional ReS <sub>2</sub> on SiO <sub>2</sub> /Si substrate by a wide-temperature-range atomic layer deposition. Nanotechnology, 2020, 31, 055602.	2.6	6
1263	Dualâ€Additive Assisted Chemical Vapor Deposition for the Growth of Mnâ€Doped 2D MoS <sub>2</sub> with Tunable Electronic Properties. Small, 2020, 16, e1903181.	10.0	54
1264	Toward Sustainable Chemical Processing With Graphene-Based Materials. , 2020, , 195-229.		0

#	Article	IF	CITATIONS
1265	Mn2C monolayer: A superior anode material offering good conductivity, high storage capacity and ultrafast ion diffusion for Li-ion and Na-ion batteries. Applied Surface Science, 2020, 503, 144091.	6.1	51
1266	String of pyrolyzed ZIF-67 particles on carbon fibers for high-performance electrocatalysis. Energy Storage Materials, 2020, 25, 137-144.	18.0	102
1267	Facile synthesis of 1T-WS2/graphite nanocomposite for efficient solar-driven oxygen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 24045-24053.	7.1	16
1268	A first-principles investigation of double transition metal atoms embedded C2N monolayer as a promising SF6 gas adsorbent and scavenger. Materials Chemistry and Physics, 2020, 240, 122184.	4.0	17
1269	Two-dimensional nanostructure colloids in novel nano drug delivery systems. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 585, 124077.	4.7	15
1270	Twoâ€Dimensional Electrocatalysts for Efficient Reduction of Carbon Dioxide. ChemSusChem, 2020, 13, 59-77.	6.8	31
1271	Emerging 2D Layered Materials for Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1902253.	19.5	79
1272	First-principles study on stability, structural and electronic properties of monolayers and nanotubes based on pure Mo(W)S(Se)2 and mixed (Janus) Mo(W)SSe dichalcogenides. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 115, 113681.	2.7	22
1273	An electrochemical sensor for determination of nitrite based on Au nanoparticles decorated MoS2 nanosheets. Chemical Papers, 2020, 74, 441-449.	2.2	26
1274	Multiple synergistic effects of graphene-based hybrid and hexagonal born nitride in enhancing thermal conductivity and flame retardancy of epoxy. Chemical Engineering Journal, 2020, 379, 122402.	12.7	120
1275	Recent advances in carbon-based electrocatalysts for oxygen reduction reaction. Chinese Chemical Letters, 2020, 31, 626-634.	9.0	104
1276	Freeâ€Standing 2D Nanoassemblies. Advanced Functional Materials, 2020, 30, 1902301.	14.9	45
1277	Efficient mercury chloride capture by ultrathin 2D metal-organic framework nanosheets. Chemical Engineering Journal, 2020, 379, 122337.	12.7	41
1278	Facilely transforming bulk materials to SnO/pristine graphene 2D-2D heterostructures for stable and fast lithium storage. Journal of Alloys and Compounds, 2020, 812, 152114.	5.5	21
1279	Synthesis of ultrathin Co2AlO4 nanosheets with oxygen vacancies for enhanced electrocatalytic oxygen evolution. Science China Materials, 2020, 63, 91-99.	6.3	16
1280	Printable Semiconductors for Backplane TFTs of Flexible OLED Displays. Advanced Functional Materials, 2020, 30, 1904588.	14.9	136
1281	Two-dimensional conjugated polymers synthesized via on-surface chemistry. Science China Materials, 2020, 63, 172-176.	6.3	9
1282	Electric field-modulated high sensitivity and selectivity for NH3 on α-C2N2 nanosheet: Insights from DFT calculations. Applied Surface Science, 2020, 505, 144619.	6.1	39

#	Article	IF	CITATIONS
1283	Recent advances in the recovery of metals from waste through biological processes. Bioresource Technology, 2020, 297, 122416.	9.6	85
1284	Defect-rich exfoliated MoSe2 nanosheets by supercritical fluid process as an attractive catalyst for hydrogen evolution in water. Applied Surface Science, 2020, 505, 144537.	6.1	19
1285	MOF-derived bimetallic Fe-Ni-P nanotubes with tunable compositions for dye-sensitized photocatalytic H2 and O2 production. Chemical Engineering Journal, 2020, 384, 123354.	12.7	57
1286	Microwave-assisted high-yield exfoliation of vanadium pentoxide nanoribbons for supercapacitor applications. Electrochimica Acta, 2020, 330, 135200.	5.2	18
1287	Confined active species and effective charge separation in Bi4O5I2 ultrathin hollow nanotube with increased photocatalytic activity. Applied Catalysis B: Environmental, 2020, 268, 118403.	20.2	75
1288	Electronic structure tailoring of BiOBr (0 1 0) nanosheets by cobalt doping for enhanced visible-light photocatalytic activity. Applied Surface Science, 2020, 502, 143895.	6.1	42
1289	Facile preparation of CoSe2 nano-vesicle derived from ZIF-67 and their application for efficient water oxidation. Applied Surface Science, 2020, 504, 144368.	6.1	56
1290	Ti <sub>3</sub> C <sub>2</sub> : An Ideal Coâ€catalyst?. Angewandte Chemie - International Edition, 2020, 59, 1914-1918.	13.8	104
1291	Oneâ€dimensional and twoâ€dimensional synergized nanostructures for highâ€performing energy storage and conversion. InformaÄnÄ-Materiály, 2020, 2, 3-32.	17.3	206
1292	Two-dimensional materials toward future photovoltaic devices. , 2020, , 117-158.		2
1293	Rapid production of few layer graphene for energy storage via dry exfoliation of expansible graphite. Composites Science and Technology, 2020, 185, 107895.	7.8	16
1294	Exploring Two-Dimensional Materials Thermodynamic Stability via Machine Learning. ACS Applied Materials & Samp; Interfaces, 2020, 12, 20149-20157.	8.0	80
1295	Facile preparation of a self-assembled Artemia cyst shell–TiO <sub>2</sub> –MoS <sub>2</sub> porous composite structure with highly efficient catalytic reduction of nitro compounds for wastewater treatment. Nanotechnology, 2020, 31, 085603.	2.6	56
1296	Water permeability in MXene membranes: Process matters. Chinese Chemical Letters, 2020, 31, 1665-1669.	9.0	39
1297	Tannic acid-assisted green exfoliation and functionalization of MoS2 nanosheets: Significantly improve the mechanical and flame-retardant properties of polyacrylonitrile composite fibers. Chemical Engineering Journal, 2020, 384, 123288.	12.7	98
1298	Facile synthesis of SiO2@MnO2 nanocomposites and their applications on platforms for sensitively sensing antibiotics and glutathione. Sensors and Actuators B: Chemical, 2020, 304, 127314.	7.8	19
1299	Vacancy in Ultrathin 2D Nanomaterials toward Sustainable Energy Application. Advanced Energy Materials, 2020, 10, 1902107.	19.5	76
1300	Ti <sub>3</sub> C <sub>2</sub> : An Ideal Coâ€catalyst?. Angewandte Chemie, 2020, 132, 1930-1934.	2.0	21

#	Article	IF	CITATIONS
1301	The energy band engineering for the high-performance infrared photodetectors constructed by CdTe/MoS <sub>2</sub> heterojunction. Journal of Physics Condensed Matter, 2020, 32, 065004.	1.8	20
1302	Inorganic 2D Luminescent Materials: Structure, Luminescence Modulation, and Applications. Advanced Optical Materials, 2020, 8, 1900978.	7.3	37
1303	2D Materials in Light: Excitedâ€State Dynamics and Applications. Chemical Record, 2020, 20, 413-428.	5.8	10
1304	Recent Advances in Two-dimensional Materials for Electrochemical Energy Storage and Conversion. Chemical Research in Chinese Universities, 2020, 36, 10-23.	2.6	41
1305	Quasi van der Waals epitaxy nitride materials and devices on two dimension materials. Nano Energy, 2020, 69, 104463.	16.0	48
1306	Self-Assembly of a Two-Dimensional Sheet with Ta@Si <sub>16</sub> Superatoms and Its Magnetic and Photocatalytic Properties. Journal of Physical Chemistry C, 2020, 124, 6861-6870.	3.1	18
1307	Lanthanide near-infrared emission and energy transfer in layered WS2/MoS2 heterostructure. Science China Materials, 2020, 63, 575-581.	6.3	17
1308	Molecular insights into the microstructure of ethanol/water binary mixtures confined within typical 2D nanoslits: The role of the adsorbed layers induced by different solid surfaces. Fluid Phase Equilibria, 2020, 509, 112452.	2.5	10
1309	Scalable and energy-efficient synthesis of Co <sub>x</sub> P for overall water splitting in alkaline media by high energy ball milling. Sustainable Energy and Fuels, 2020, 4, 1723-1729.	4.9	16
1310	A pro-gastrin-releasing peptide imprinted photoelectrochemical sensor based on the <i>in situ</i> growth of gold nanoparticles on a MoS <sub>2</sub> nanosheet surface. Analyst, The, 2020, 145, 1302-1309.	3.5	19
1311	Strain-engineered BlueP–MoS2 van der Waals heterostructure with improved lithiation/sodiation for LIBs and SIBs. Physical Chemistry Chemical Physics, 2020, 22, 1701-1714.	2.8	19
1312	Effects of a graphene substrate on the structure and properties of atomically thin metal sheets. Physical Chemistry Chemical Physics, 2020, 22, 667-673.	2.8	6
1313	Advances of 2D bismuth in energy sciences. Chemical Society Reviews, 2020, 49, 263-285.	38.1	138
1314	Mo <sub>2</sub> B, an MBene member with high electrical and thermal conductivities, and satisfactory performances in lithium ion batteries. Nanoscale Advances, 2020, 2, 347-355.	4.6	38
1315	SERS analysis of carcinoma-associated fibroblasts in a tumor microenvironment based on targeted 2D nanosheets. Nanoscale, 2020, 12, 2133-2141.	5.6	20
1316	Recent advances in two-dimensional-material-based sensing technology toward health and environmental monitoring applications. Nanoscale, 2020, 12, 3535-3559.	5.6	318
1317	Near infrared-light responsive WS <sub>2</sub> microengines with high-performance electro- and photo-catalytic activities. Chemical Science, 2020, 11, 132-140.	7.4	18
1318	Two-dimensional lanthanide coordination polymer nanosheets for detection of FOX-7. Chemical Science, 2020, 11, 1032-1042.	7.4	41

#	Article	IF	CITATIONS
1319	Water-stable 2-D Zr MOFs with exceptional UO $<$ sub $>$ 2 $<$ /sub $><$ sup $>$ 2+ $<$ /sup $>$ sorption capability. Journal of Materials Chemistry A, 2020, 8, 1849-1857.	10.3	29
1320	Cerium(III)-doped MoS2 nanosheets with expanded interlayer spacing and peroxidase-mimicking properties for colorimetric determination of hydrogen peroxide. Mikrochimica Acta, 2020, 187, 111.	5.0	25
1321	Functionalized layered double hydroxides for innovative applications. Materials Horizons, 2020, 7, 715-745.	12.2	171
1322	Natural antioxidant functionalization for fabricating ambient-stable black phosphorus nanosheets toward enhancing flame retardancy and toxic gases suppression of polyurethane. Journal of Hazardous Materials, 2020, 387, 121971.	12.4	106
1323	Facile fabrication of In2O3/S-doped g-C3N4 heterojunction hybrids for enhanced visible-light photocatalytic hydrogen evolution. Materials Letters, 2020, 261, 127159.	2.6	21
1324	Intrinsic carrier mobility of monolayer GeS and GeSe: First-principles calculation. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 118, 113877.	2.7	40
1325	Two-dimensional heterojunction SnS2/SnO2 photoanode with excellent photoresponse up to near infrared region. Solar Energy Materials and Solar Cells, 2020, 207, 110342.	6.2	13
1326	Atomic-Scale Intercalation of Graphene Layers into MoSe <sub>2</sub> Nanoflower Sheets as a Highly Efficient Catalyst for Hydrogen Evolution Reaction. ACS Applied Materials & Samp; Interfaces, 2020, 12, 2460-2468.	8.0	47
1327	Tellurene Photodetector with High Gain and Wide Bandwidth. ACS Nano, 2020, 14, 303-310.	14.6	101
1328	Ultrathin cobalt pyrophosphate nanosheets with different thicknesses for Zn-air batteries. Journal of Colloid and Interface Science, 2020, 563, 328-335.	9.4	36
1329	Solarâ€Inspired Water Purification Based on Emerging 2D Materials: Status and Challenges. Solar Rrl, 2020, 4, 1900400.	5.8	133
1330	Investigating hydrogen evolution reaction properties of a new honeycomb 2D AlC. International Journal of Hydrogen Energy, 2020, 45, 18602-18611.	7.1	11
1331	Ultrafast synthesis of uniform 4–5 atoms-thin layered tremella-like Pd nanostructure with extremely large electrochemically active surface area for formic acid oxidation. Journal of Power Sources, 2020, 447, 227248.	7.8	56
1332	Synaptic Plasticity and Filtering Emulated in Metal–Organic Frameworks Nanosheets Based Transistors. Advanced Electronic Materials, 2020, 6, 1900978.	5.1	49
1333	Chemistry of two-dimensional MXene nanosheets in theranostic nanomedicine. Chinese Chemical Letters, 2020, 31, 937-946.	9.0	52
1334	On engineering strategies for photoselective CO2 reduction $\hat{a} \in A$ thorough review. Applied Materials Today, 2020, 18, 100499.	4.3	15
1335	Recent Advances and Challenges of Twoâ€Dimensional Materials for Highâ€Energy and Highâ€Power Lithiumâ€Ion Capacitors. Batteries and Supercaps, 2020, 3, 10-29.	4.7	48
1336	One-pot ultrasonic synthesis of multifunctional Au nanoparticle-ferrocene-WS2 nanosheet composite for the construction of an electrochemical biosensing platform. Analytica Chimica Acta, 2020, 1099, 52-59.	5.4	18

#	Article	IF	CITATIONS
1337	Penta-graphene as a promising controllable CO2 capture and separation material in an electric field. Applied Surface Science, 2020, 502, 144067.	6.1	49
1338	Methods for Electrocatalysis. , 2020, , .		2
1339	Intrinsic ferromagnetism and valley polarization in hydrogenated group $V$ transition-metal dinitride (MN $<$ sub $>$ 2 $<$ /sub $>$ H $<$ sub $>$ 2 $<$ /sub $>$ , M = $V$ /Nb/Ta) nanosheets: insights from first-principles. Nanoscale, 2020, 12, 1002-1012.	5.6	17
1340	Recent developments in emerging two-dimensional materials and their applications. Journal of Materials Chemistry C, 2020, 8, 387-440.	<b>5.</b> 5	501
1341	Effects of interlayer interactions on the nanoindentation response of freely suspended multilayer gallium telluride. Nanotechnology, 2020, 31, 165706.	2.6	9
1342	The effects of native defects and carbon dopant on AIP nanosheet. Computational Materials Science, 2020, 173, 109458.	3.0	2
1343	Ultrastable PtCo/Co <sub>3</sub> O <sub>4</sub> –SiO <sub>2</sub> Nanocomposite with Active Lattice Oxygen for Superior Catalytic Activity toward CO Oxidation. Inorganic Chemistry, 2020, 59, 1218-1226.	4.0	30
1344	Low electronegativity Mn bulk doping intensifies charge storage of Ni <sub>2</sub> P redox shuttle for membrane-free water electrolysis. Journal of Materials Chemistry A, 2020, 8, 4073-4082.	10.3	26
1345	Nanoscale boron carbonitride semiconductors for photoredox catalysis. Nanoscale, 2020, 12, 3593-3604.	5.6	27
1346	Theoretical Investigation of Monolayer RhTeCl Semiconductors as Photocatalysts for Water Splitting. Journal of Physical Chemistry C, 2020, 124, 639-646.	3.1	18
1347	Black phosphorus @ molybdenum disulfide 2D nanocomposite with broad light absorption and high stability for methylene blue decomposition photocatalyst. Nanotechnology, 2020, 31, 155704.	2.6	15
1348	Recent advances of two-dimensional transition metal nitrides for energy storage and conversion applications. FlatChem, 2020, 19, 100149.	<b>5.</b> 6	54
1349	Synthesis of micro/nanoscaled metal–organic frameworks and their direct electrochemical applications. Chemical Society Reviews, 2020, 49, 301-331.	38.1	685
1350	Hybridization of CuO with Bi <sub>2</sub> MoO <sub>6</sub> Nanosheets as a Surface Multifunctional Photocatalyst for Toluene Oxidation under Solar Irradiation. ACS Applied Materials & Samp; Interfaces, 2020, 12, 2259-2268.	8.0	50
1351	Layered intercalation compounds: Mechanisms, new methodologies, and advanced applications. Progress in Materials Science, 2020, 109, 100631.	32.8	66
1352	Role of graphene and transition metal dichalcogenides as hole transport layer and counter electrode in solar cells. International Journal of Energy Research, 2020, 44, 1464-1487.	4.5	23
1353	In situ growth of novel nickel diselenide nanoarrays with high specific capacity as the electrode material of flexible hybrid supercapacitors. Applied Nanoscience (Switzerland), 2020, 10, 1591-1601.	3.1	17
1354	Structural, mechanical and electronic properties of two-dimensional chlorine-terminated transition metal carbides and nitrides. Journal of Physics Condensed Matter, 2020, 32, 135302.	1.8	18

#	Article	IF	Citations
1355	Heteroatoms-doped 3D carbon nanosphere cages embedded with MoS2 for lithium-ion battery. Electrochimica Acta, 2020, 332, 135490.	5.2	25
1356	The single-Mo-atom-embedded-graphdiyne monolayer with ultra-low onset potential as high efficient electrocatalyst for N2 reduction reaction. Applied Surface Science, 2020, 506, 144941.	6.1	48
1357	Controllable Synthesis of Porphyrinâ€Based 2D Lanthanide Metal–Organic Frameworks with Thickness― and Metalâ€Nodeâ€Dependent Photocatalytic Performance. Angewandte Chemie, 2020, 132, 3326-3332.	2.0	31
1358	Controllable Synthesis of Porphyrinâ€Based 2D Lanthanide Metal–Organic Frameworks with Thickness― and Metalâ€Nodeâ€Dependent Photocatalytic Performance. Angewandte Chemie - International Edition, 2020, 59, 3300-3306.	13.8	148
1359	Rose-like MoS2 nanostructures with a large interlayer spacing of $\hat{a}^{1}/49.9\hat{A}$ and exfoliated WS2 nanosheets supported on carbon nanotubes for hydrogen evolution reaction. Carbon, 2020, 158, 216-225.	10.3	41
1360	Magnetic properties of binary axb1â^'x hexagonal monolayers: a Monte Carlo study. Phase Transitions, 2020, 93, 74-82.	1.3	1
1361	Recent Advances in Chemical Functionalization of 2D Black Phosphorous Nanosheets. Advanced Science, 2020, 7, 1902359.	11.2	76
1362	Ionic Polyimide Derived Porous Carbon Nanosheets as Highâ€Efficiency Oxygen Reduction Catalysts for Zn–Air Batteries. Chemistry - A European Journal, 2020, 26, 6525-6534.	3.3	11
1363	Assembling Ni–Fe Layered Double Hydroxide 2D Thin Films for Oxygen Evolution Electrodes. ACS Applied Energy Materials, 2020, 3, 1017-1026.	5.1	19
1364	A fast composite-hydroxide-mediated approach for synthesis of 2D-LiCoO2 for high performance asymmetric supercapacitor. Electrochimica Acta, 2020, 331, 135426.	5.2	32
1365	Fabrication of ultra-sensitive photoelectrochemical aptamer biosensor: Based on semiconductor/DNA interfacial multifunctional reconciliation via 2D-C3N4. Biosensors and Bioelectronics, 2020, 150, 111903.	10.1	50
1366	Filling few-layer ReS2 in hollow mesoporous carbon spheres for boosted lithium/sodium storage properties. Energy Storage Materials, 2020, 26, 457-464.	18.0	28
1367	Effect of radiation on interfacial properties and phase behavior of ionic liquid-based microemulsions. Radiation Physics and Chemistry, 2020, 168, 108596.	2.8	8
1368	Unusual Mechanism Behind Enhanced Photocatalytic Activity and Surface Passivation of SiC(0001) via Forming Heterostructure with a MoS <sub>2</sub> Monolayer. Journal of Physical Chemistry C, 2020, 124, 1362-1368.	3.1	7
1369	2D Ti3C2 as electron harvester anchors on 2D g-C3N4 to create boundary edge active sites for boosting photocatalytic performance. Applied Catalysis A: General, 2020, 590, 117367.	4.3	75
1370	Synthesis and characterization of cadmium-bismuth microspheres for the catalytic and photocatalytic degradation of organic pollutants, with antibacterial, antioxidant and cytotoxicity assay. Journal of Photochemistry and Photobiology B: Biology, 2020, 202, 111723.	3.8	25
1371	The intrinsic magnetism, quantum anomalous Hall effect and Curie temperature in 2D transition metal trihalides. Physical Chemistry Chemical Physics, 2020, 22, 2429-2436.	2.8	42
1372	Thermally conducting polymer/nanocarbon and polymer/inorganic nanoparticle nanocomposite: a review. Polymer-Plastics Technology and Materials, 2020, 59, 895-909.	1.3	22

#	Article	IF	CITATIONS
1373	Lattice chain theories for dynamics of acoustic flexural phonons in nonpolar nanomaterials. Physical Review B, 2020, $102$ , .	3.2	10
1374	Organic Semiconductor Field-Effect Transistors Based on Organic-2D Heterostructures. Frontiers in Materials, 2020, 7, .	2.4	7
1375	Ultra-thin two-dimensional nanosheets for in-situ NIR light-triggered fluorescence enhancement. FlatChem, 2020, 24, 100193.	5.6	10
1376	Van der Waals Bound Organic Semiconductor/2D-Material Hybrid Heterosystems: Intrinsic Epitaxial Alignment of Perfluoropentacene Films on Transition Metal Dichalcogenides. Chemistry of Materials, 2020, 32, 9034-9043.	6.7	18
1377	Recent Advancements and Future Prospects in Ultrathin 2D Semiconductor-Based Photocatalysts for Water Splitting. Catalysts, 2020, 10, 1111.	3.5	35
1378	Memristors Based on 2D Materials as an Artificial Synapse for Neuromorphic Electronics. Advanced Materials, 2020, 32, e2002092.	21.0	241
1379	Electrocatalytic Hydrogen Evolution of Ultrathin Coâ€Mo <sub>5</sub> N <sub>6</sub> Heterojunction with Interfacial Electron Redistribution. Advanced Energy Materials, 2020, 10, 2002176.	19.5	138
1380	Application and prospect of antimonene: A new two-dimensional nanomaterial in cancer theranostics. Journal of Inorganic Biochemistry, 2020, 212, 111232.	3.5	20
1381	Realizing Few‣ayer Iodinene for Highâ€Rate Sodiumâ€lon Batteries. Advanced Materials, 2020, 32, e2004835.	21.0	41
1382	Tunable Contacts in Graphene/InSe van der Waals Heterostructures. Journal of Physical Chemistry C, 2020, 124, 23699-23706.	3.1	25
1383	Atomic Layer Deposition-Derived Nanomaterials: Oxides, Transition Metal Dichalcogenides, and Metal–Organic Frameworks. Chemistry of Materials, 2020, 32, 9056-9077.	6.7	25
1384	On the Capacities of Freestanding Vanadium Pentoxide–Carbon Nanotube–Nanocellulose Paper Electrodes for Charge Storage Applications. Energy Technology, 2020, 8, 2000731.	3.8	4
1385	Multidimensional (0D-3D) functional nanocarbon: Promising material to strengthen the photocatalytic activity of graphitic carbon nitride. Green Energy and Environment, 2021, 6, 823-845.	8.7	40
1386	Study of the structural and electronic properties of three- and two-dimensional transition-metal dioxides using first-principles calculations. Computational Condensed Matter, 2020, 25, e00498.	2.1	5
1387	CoO Quantum Dots Anchored on Reduced Graphene Oxide Aerogels for Lithium-Ion Storage. ACS Applied Nano Materials, 2020, 3, 10369-10379.	5.0	16
1388	Distinctive stability of a free-standing monolayer clay mineral nanosheet <i>via</i> transmission electron microscopy. Physical Chemistry Chemical Physics, 2020, 22, 25095-25102.	2.8	6
1389	Chemotaxisâ€Driven 2D Nanosheet for Directional Drug Delivery toward the Tumor Microenvironment. Small, 2020, 16, e2002732.	10.0	39
1390	Faradaic Electrodes Open a New Era for Capacitive Deionization. Advanced Science, 2020, 7, 2002213.	11.2	104

#	Article	IF	CITATIONS
1391	Graphene to Advanced MoS2: A Review of Structure, Synthesis, and Optoelectronic Device Application. Crystals, 2020, 10, 902.	2.2	38
1392	Two-Dimensional Supramolecular Nanoarchitectures of Polypseudorotaxanes Based on Cucurbit[8]uril for Highly Efficient Electrochemical Nitrogen Reduction. Chemistry of Materials, 2020, 32, 8724-8732.	6.7	19
1393	CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3–<i>x</i></sub> I <sub><i>x</i></sub> Quantum Dots Enhance Bulk Crystallization and Interface Charge Transfer for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Diterfaces, 2020, 12, 48861-48873.	8.0	17
1394	Molecular adsorption studies of diethyl sulfide and ethyl methyl sulfide vapors on ζ-phosphorene nanoribbon – A first-principles insight. Applied Surface Science, 2020, 534, 147597.	6.1	23
1395	Design of Ag/g-C3N4 on TiO2 nanotree arrays via ultrasonic-assisted spin coating as an efficient photoanode for solar water oxidation: Morphology modification and junction improvement. Catalysis Today, 2020, 358, 412-421.	4.4	17
1396	Achieving multiplexed functionality in a hierarchical MXene-based sulfur host for high-rate, high-loading lithium-sulfur batteries. Energy Storage Materials, 2020, 33, 147-157.	18.0	64
1397	Hierarchical nanostructured Au–SnO2 for enhanced energy storage performance. International Journal of Hydrogen Energy, 2020, 45, 29395-29406.	7.1	12
1398	Boron nitride and hyperbranched polyamide assembled recyclable polyisoprene vitrimer with robust mechanical properties, high thermal conductivity and remoldability. Polymer, 2020, 208, 122964.	3.8	15
1399	Breast cancer biomarker detection through the photoluminescence of epitaxial monolayer MoS2 flakes. Scientific Reports, 2020, 10, 16039.	3.3	33
1400	Accurate regulation of pore distribution and atomic arrangement enabling highly efficient dual-carbon lithium ion capacitors. Journal of Materials Chemistry A, 2020, 8, 22230-22239.	10.3	7
1401	Intercalation and flexibility chemistries of soft layered materials. Chemical Communications, 2020, 56, 13069-13081.	4.1	25
1402	Recent Progress on Two-dimensional Electrocatalysis. Chemical Research in Chinese Universities, 2020, 36, 611-621.	2.6	140
1403	Niobium Carbide MXenes with Broad-Band Nonlinear Optical Response and Ultrafast Carrier Dynamics. ACS Nano, 2020, 14, 10492-10502.	14.6	96
1404	Synthesizing 1D and 2D metal oxide nanostructures: using metal acetate complexes as building blocks. Nanoscale, 2020, 12, 17971-17981.	5.6	5
1405	Electro-Synthesis of Ultrafine V <sub>2</sub> AlC MAX-Phase and Its Conversion Process towards Two-Dimensional V <sub>2</sub> CT <sub>X</sub> . Journal of the Electrochemical Society, 2020, 167, 122501.	2.9	11
1406	Mediated Drug Release from Nanovehicles by Black Phosphorus Quantum Dots for Efficient Therapy of Chronic Obstructive Pulmonary Disease. Angewandte Chemie - International Edition, 2020, 59, 20568-20576.	13.8	56
1407	Novel NiCl <sub>2</sub> Nanosheets Synthesized via Chemical Vapor Deposition with High Specific Energy for Thermal Battery. ACS Applied Materials & Samp; Interfaces, 2020, 12, 34755-34762.	8.0	29
1408	Electronic structure engineering on two-dimensional (2D) electrocatalytic materials for oxygen reduction, oxygen evolution, and hydrogen evolution reactions. Nano Energy, 2020, 77, 105080.	16.0	157

#	Article	IF	CITATIONS
1409	Highâ€efficiency utilization of carbon materials for supercapacitors. Nano Select, 2020, 1, 244-262.	3.7	27
1410	Two-dimensional Metal-organic Frameworks and Derivatives for Electrocatalysis. Chemical Research in Chinese Universities, 2020, 36, 662-679.	2.6	27
1411	Graphene-supported organic-inorganic layered double hydroxides and their environmental applications: A review. Journal of Cleaner Production, 2020, 273, 122980.	9.3	47
1412	Highâ€Performance Phosphoreneâ€Based Transistors Using a Novel Exfoliationâ€Free Direct Crystallization on Silicon Substrates. Advanced Materials Interfaces, 2020, 7, 2000774.	3.7	12
1413	Current Trends in Nanomaterials for Metal Oxide-Based Conductometric Gas Sensors: Advantages and Limitations. Part 1: 1D and 2D Nanostructures. Nanomaterials, 2020, 10, 1392.	4.1	79
1414	Electronic and optoelectronic properties of the heterostructure devices composed of two-dimensional layered materials., 2020,, 151-193.		2
1415	Electrodeposited NiFe <sub>2</sub> Se <sub>4</sub> on Nickel Foam as a Binder-Free Electrode for High-Performance Asymmetric Supercapacitors. Industrial & Engineering Chemistry Research, 2020, 59, 14163-14171.	3.7	31
1416	Engineering the Phases and Heterostructures of Ultrathin Hybrid Perovskite Nanosheets. Advanced Materials, 2020, 32, e2002392.	21.0	25
1417	Photo-chemical property evolution of superior thin g-C3N4 nanosheets with their crystallinity and Pt deposition. International Journal of Hydrogen Energy, 2020, 45, 21523-21531.	7.1	35
1418	The effect of a two-dimensional structure on the dielectric constant and photovoltaic characteristics. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 401, 112756.	3.9	6
1419	2D materials: Excellent substrates for surface-enhanced Raman scattering (SERS) in chemical sensing and biosensing. TrAC - Trends in Analytical Chemistry, 2020, 130, 115983.	11.4	66
1420	Two-dimensional Noble Metal Nanomaterials for Electrocatalysis. Chemical Research in Chinese Universities, 2020, 36, 597-610.	2.6	11
1421	Simple and effective cleaning method for RuO2 nanosheet films for flexible transparent conducting electrodes. Applied Surface Science, 2020, 529, 147154.	6.1	5
1422	Recent developments in carbon-based two-dimensional materials: synthesis and modification aspects for electrochemical sensors. Mikrochimica Acta, 2020, 187, 441.	5.0	64
1423	Emerging bio-applications of two-dimensional nanoheterostructure materials., 2020,, 243-255.		5
1424	Controllable gas sensitive performance of 1T' WS2 monolayer instructed by strain: First-principles simulations. Chemical Physics Letters, 2020, 758, 137921.	2.6	8
1425	An Ab-initio competitive study of adsorption mechanism of lightest alkali and halide elements towards the AIC - Monolayer. AIP Conference Proceedings, 2020, , .	0.4	2
1426	Wafer-Scale Growth of Pristine and Doped Monolayer MoS <sub>2</sub> Films for Electronic Device Applications. Inorganic Chemistry, 2020, 59, 17356-17363.	4.0	14

#	Article	IF	CITATIONS
1428	An ultrathin polydiacetylene nanosheet as dual colorimetric and fluorescent indicator for lysophosphatidic acid, a cancer biomarker. Giant, 2020, 3, 100025.	5.1	11
1429	2D Nanomaterial, Ti3C2 MXene-Based Sensor to Guide Lung Cancer Therapy and Management. , 0, , .		3
1430	Effect of temperature and exfoliation time on the properties of chemically exfoliated MoS <sub>2</sub> nanosheets. Chemical Communications, 2020, 56, 15573-15576.	4.1	14
1431	NIR-II Fluorescence Imaging-Guided Photothermal Therapy with Amphiphilic Polypeptide Nanoparticles Encapsulating Organic NIR-II Dye. ACS Applied Bio Materials, 2020, 3, 8953-8961.	4.6	17
1432	Tuning the mechanical and electronic properties and carrier mobility of phosphorene <i>via</i> family atom doping: a first-principles study. Journal of Materials Chemistry C, 2020, 8, 14902-14909.	5 <b>.</b> 5	14
1433	Se Doping Regulates the Activity of NiTe <sub>2</sub> for Electrocatalytic Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2020, 124, 26793-26800.	3.1	12
1434	Structures and optoelectronic properties of two-dimensional MC6 (M = Ti and Hf) predicted by computational approaches. Materials Today Communications, 2020, 25, 101606.	1.9	0
1435	Uniform palladium nanosheets for fluorimetric detection of circulating tumor DNA. Analytica Chimica Acta, 2020, 1139, 164-168.	5.4	17
1436	Ultrabroadband Tuning and Fine Structure of Emission Spectra in Lanthanide Er-Doped ZnSe Nanosheets for Display and Temperature Sensing. ACS Nano, 2020, 14, 16003-16012.	14.6	61
1437	NH <sub>3</sub> Sensor Based on 2D Wormlike Polypyrrole/Graphene Heterostructures for a Self-Powered Integrated System. ACS Applied Materials & Self-Powered Integrated System. ACS Applied Materials & Self-Powered Integrated System.	8.0	38
1438	Accelerating the peroxidase-like activity of MoSe <sub>2</sub> nanosheets at physiological pH by dextran modification. Chemical Communications, 2020, 56, 10847-10850.	4.1	15
1439	In Situ Formation of Multiple Schottky Barriers in a Ti <sub>3</sub> C <sub>2</sub> MXene Film and its Application in Highly Sensitive Gas Sensors. Advanced Functional Materials, 2020, 30, 2003998.	14.9	187
1440	A Review of the Effects of Electrode Fabrication and Assembly Processes on the Structure and Electrochemical Performance of 2D MXenes. Advanced Functional Materials, 2020, 30, 2005305.	14.9	58
1441	Superhigh Uniform Magnetic Cr Substitution in a 2D Mo 2 C Superconductor for a Macroscopicâ€Scale Kondo Effect. Advanced Materials, 2020, 32, 2002825.	21.0	7
1442	Advancing Applications of Black Phosphorus and BPâ€Analog Materials in Photo/Electrocatalysis through Structure Engineering and Surface Modulation. Advanced Science, 2020, 7, 2001431.	11.2	51
1443	Synthesis of a Magnetic 2D Co@NC-600 Material by Designing a MOF Precursor for Efficient Catalytic Reduction of Water Pollutants. Inorganic Chemistry, 2020, 59, 12672-12680.	4.0	37
1444	Surface engineered 2D materials for photocatalysis. Chemical Communications, 2020, 56, 11000-11013.	4.1	61
1445	Ti <sub>2</sub> P monolayer as a high performance 2-D electrode material for ion batteries. Physical Chemistry Chemical Physics, 2020, 22, 18480-18487.	2.8	11

#	Article	IF	CITATIONS
1446	Two-dimensional metal (oxy)hydroxide and oxide ultrathin nanosheets via liquid phase epitaxy. Energy Storage Materials, 2020, 32, 272-280.	18.0	14
1447	Mediated Drug Release from Nanovehicles by Black Phosphorus Quantum Dots for Efficient Therapy of Chronic Obstructive Pulmonary Disease. Angewandte Chemie, 2020, 132, 20749-20757.	2.0	8
1448	Effects of the addition of boric acid on the physical properties of MXene/polyvinyl alcohol (PVA) nanocomposite. Composites Part B: Engineering, 2020, 199, 108205.	12.0	69
1449	Molybdenum carbide nano-sheet as a high capacity anode material for monovalent alkali metal-ion batteries—Theoretical investigation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126688.	2.1	8
1450	Growth and Grain Boundaries in 2D Materials. ACS Nano, 2020, 14, 9320-9346.	14.6	62
1451	Molecular Ligandâ€Mediated Assembly of Multicomponent Nanosheet Superlattices for Compact Capacitive Energy Storage. Angewandte Chemie - International Edition, 2020, 59, 20628-20635.	13.8	59
1452	Molecular Ligandâ€Mediated Assembly of Multicomponent Nanosheet Superlattices for Compact Capacitive Energy Storage. Angewandte Chemie, 2020, 132, 20809-20816.	2.0	13
1453	Unveiling the Occurrence of Co(III) in NiCo Layered Electroactive Hydroxides: The Role of Distorted Environments. Chemistry - A European Journal, 2020, 26, 17081-17090.	3.3	10
1454	Superlubricity achieved with two-dimensional nano-additives to liquid lubricants. Friction, 2020, 8, 1007-1024.	6.4	67
1455	Molten Salt-Directed Catalytic Synthesis of 2D Layered Transition-Metal Nitrides for Efficient Hydrogen Evolution. CheM, 2020, 6, 2382-2394.	11.7	163
1456	Recent development of two-dimensional metal–organic framework derived electrocatalysts for hydrogen and oxygen electrocatalysis. Nanoscale, 2020, 12, 18497-18522.	5.6	69
1457	Intercalation of Two-dimensional Layered Materials. Chemical Research in Chinese Universities, 2020, 36, 584-596.	2.6	21
1458	Two-Dimensional Nanomaterials for Anticorrosive Polymeric Coatings: A Review. Industrial & Samp; Engineering Chemistry Research, 2020, 59, 15424-15446.	3.7	94
1459	Van der Waals Bound Organic/2D Insulator Hybrid Structures: Epitaxial Growth of Acene Films on <i>h</i> h8N(001) and the Influence of Surface Defects. ACS Applied Materials & Defects. ACS	8.0	20
1460	Highly sensitive label-free biosensor based on graphene-oxide functionalized micro-tapered long period fiber grating. Optical Materials, 2020, 109, 110253.	3.6	28
1461	Synthesis of Nanosheets Containing Uniformly Dispersed PdII Ions at an Aqueous/Aqueous Interface: Development of a Highly Active Nanosheet Catalyst for Mizoroki–Heck Reaction. ACS Omega, 2020, 5, 18484-18489.	3.5	6
1462	Hierarchical nanosheets built from superatomic clusters: properties, exfoliation and single-crystal-to-single-crystal intercalation. Chemical Science, 2020, 11, 10744-10751.	7.4	14
1463	Optically tunable charge carrier injection in monolayer MoS2. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	6

#	Article	IF	CITATIONS
1464	Recent Progress on 2D Transition Metal Compounds-based Electrocatalysts for Efficient Nitrogen Reduction. Chemical Research in Chinese Universities, 2020, 36, 648-661.	2.6	7
1465	Flat-band splitting induced tunable magnetism in defective CrI3 monolayer. Solid State Communications, 2020, 321, 114037.	1.9	9
1466	Amorphous Metal Oxide Nanosheets Featuring Reversible Structure Transformations as Sodium-Ion Battery Anodes. Cell Reports Physical Science, 2020, 1, 100118.	5.6	29
1467	Two-dimensional Metal-Organic Frameworks as Electrocatalysts for Oxygen Evolution Reaction. Chemical Research in Chinese Universities, 2020, 36, 504-510.	2.6	22
1468	Improving Energy Storage Density and Efficiency of Polymer Dielectrics by Adding Trace Biomimetic Lysozyme-Modified Boron Nitride. ACS Applied Energy Materials, 2020, 3, 7952-7963.	5.1	16
1469	Holey Pt Nanosheets on NiFe-Hydroxide Laminates: Synergistically Enhanced Electrocatalytic 2D Interface toward Hydrogen Evolution Reaction. ACS Nano, 2020, 14, 10578-10588.	14.6	66
1470	State of the Art and Future Perspectives in Advanced CMOS Technology. Nanomaterials, 2020, 10, 1555.	4.1	115
1471	Facile and high-concentration exfoliation of montmorillonite into mono-layered nanosheets and application in multifunctional waterborne polyurethane coating. Applied Clay Science, 2020, 198, 105798.	5.2	14
1472	Voltage-gated multilayer graphene nanochannel for K+/Na+ separation: A molecular dynamics study. Journal of Molecular Liquids, 2020, 317, 114025.	4.9	10
1473	Theoretical exploration on the vibrational and mechanical properties of M <sub>3</sub> C <sub>2</sub> /M <sub>3</sub> T <sub>2</sub> MXenes. International Journal of Quantum Chemistry, 2020, 120, e26409.	2.0	10
1474	Promising functional two-dimensional lamellar metal thiophosphates: synthesis strategies, properties and applications. Materials Horizons, 2020, 7, 3131-3160.	12.2	26
1475	Rapid and ultrasensitive detection of Salmonella typhimurium using a novel impedance biosensor based on SiO2@MnO2 nanocomposites and interdigitated array microelectrodes. Sensors and Actuators B: Chemical, 2020, 324, 128654.	7.8	30
1476	Tunable phase transitions and high photovoltaic performance of two-dimensional In <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> semiconductors. Nanoscale Horizons, 2020, 5, 1566-1573.	8.0	17
1477	High-performance cement containing nanosized Fe3O4–decorated graphene oxide. Construction and Building Materials, 2020, 260, 120454.	7.2	11
1478	Doping Modulation of the Charge Injection Barrier between a Covalent Organic Framework Monolayer and Graphene. Chemistry of Materials, 2020, 32, 9228-9237.	6.7	18
1479	Construction of heterogeneous 2D layered MoS2/MXene nanohybrid anode material via interstratification process and its synergetic effect for asymmetric supercapacitors. Applied Surface Science, 2020, 534, 147644.	6.1	68
1480	Porous Plate-like MoP Assembly as an Efficient pH-Universal Hydrogen Evolution Electrocatalyst. ACS Applied Materials & Samp; Interfaces, 2020, 12, 49596-49606.	8.0	46
1481	Water-stable Mn-based MOF nanosheet as robust visible-light-responsive photocatalyst in aqueous solution. Science China Chemistry, 2020, 63, 1756-1760.	8.2	14

#	Article	IF	CITATIONS
1482	Two-Dimensional Platinum Diselenide: Synthesis, Emerging Applications, and Future Challenges. Nano-Micro Letters, 2020, 12, 174.	27.0	50
1483	Toward a Deformable Two-Dimensional Covalent Organic Network with a Noncovalently Connected Skeleton. Chemistry of Materials, 2020, 32, 8139-8145.	6.7	4
1484	Charge Transfer in the Heterostructure of CsPbBr <sub>3</sub> Nanocrystals with Nitrogen-Doped Carbon Dots. Journal of Physical Chemistry Letters, 2020, 11, 8002-8007.	4.6	24
1485	Titania Nanofilms from Titanium Complex-Containing Polymer Langmuir–Blodgett Films. Langmuir, 2020, 36, 10371-10378.	3.5	3
1486	2D materials towards ultrafast photonic applications. Physical Chemistry Chemical Physics, 2020, 22, 22140-22156.	2.8	38
1487	Three-omega thermal-conductivity measurements with curved heater geometries. Applied Physics Letters, 2020, 117, 073102.	3.3	3
1488	Covalent doping of Ni and P on 1T-enriched MoS <sub>2</sub> bifunctional 2D-nanostructures with active basal planes and expanded interlayers boosts electrocatalytic water splitting. Journal of Materials Chemistry A, 2020, 8, 19654-19664.	10.3	41
1489	Theoretical Study of the Electronic and Optical Properties of a Heterostructure Based on PTCDA Organic Semiconductor and MoSe2. JETP Letters, 2020, 111, 627-632.	1.4	3
1490	The Role of Covalent Functionalization in the Thermal Stability and Decomposition of Hybrid Layered Hydroxides. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000380.	2.4	9
1491	Prediction of two-dimensional CP <sub>3</sub> as a promising electrode material with a record-high capacity for Na ions. Nanoscale Advances, 2020, 2, 5271-5279.	4.6	12
1492	Two-dimensional nonlayered materials for electrocatalysis. Energy and Environmental Science, 2020, 13, 3993-4016.	30.8	76
1493	Directly Exfoliated Ultrathin Silicon Nanosheets for Enhanced Photocatalytic Hydrogen Production. Journal of Physical Chemistry Letters, 2020, 11, 8668-8674.	4.6	14
1494	All-Dry Transferred ReS <sub>2</sub> Nanosheets for Ultrasensitive Room-Temperature NO <sub>2</sub> Sensing under Visible Light Illumination. ACS Sensors, 2020, 5, 3172-3181.	7.8	34
1495	Design, characterization, and application of elemental 2D materials for electrochemical energy storage, sensing, and catalysis. Materials Advances, 2020, 1, 2562-2591.	5.4	21
1496	Structural characterization and property modification for two-dimensional (001) SrTiO3 nanosheets. Applied Nanoscience (Switzerland), 2020, 10, 4273-4279.	3.1	8
1497	In-plane anisotropic third-harmonic generation from germanium arsenide thin flakes. Scientific Reports, 2020, 10, 14282.	3.3	17
1498	Highly tunable anisotropic co-deformation of black phosphorene superlattices. Nanoscale, 2020, 12, 19787-19796.	5.6	1
1499	Tailoring Iron Oxide Nanoparticles for Efficient Cellular Internalization and Endosomal Escape. Nanomaterials, 2020, 10, 1816.	4.1	38

#	Article	IF	CITATIONS
1500	Visible-light-driven photocatalytic selective organic oxidation reactions. Journal of Materials Chemistry A, 2020, 8, 20897-20924.	10.3	60
1501	Sequence Decoding of 1D to 2D Selfâ€Assembling Cyclic Peptides. Chemistry - A European Journal, 2020, 26, 14765-14770.	3.3	12
1502	Ambient Temperature Graphitization Based on Mechanochemical Synthesis. Angewandte Chemie, 2020, 132, 22119-22123.	2.0	3
1503	Ambient Temperature Graphitization Based on Mechanochemical Synthesis. Angewandte Chemie - International Edition, 2020, 59, 21935-21939.	13.8	32
1504	Metal–organic framework <scp>â€based mixedâ€matrix</scp> membranes for gas separation: An overview. Journal of Polymer Science, 2020, 58, 2518-2546.	3.8	41
1505	MXene-Carbon Nanotube Hybrid Membrane for Robust Recovery of Au from Trace-Level Solution. ACS Applied Materials & Samp; Interfaces, 2020, 12, 43032-43041.	8.0	53
1506	Nitrite sensor based on room temperature ionic liquid functionalized α-zirconium phosphate modified glassy carbon electrode. Journal of Materials Research, 2020, 35, 3058-3066.	2.6	3
1507	Phase Engineering of Nanomaterials for Clean Energy and Catalytic Applications. Advanced Energy Materials, 2020, 10, 2002019.	19.5	85
1508	Recent Progress, Challenges, and Prospects in Two-Dimensional Photo-Catalyst Materials and Environmental Remediation. Nano-Micro Letters, 2020, 12, 167.	27.0	57
1509	The Scattering of Phonons by Infinitely Long Quantum Dislocations Segments and the Generation of Thermal Transport Anisotropy in a Solid Threaded by Many Parallel Dislocations. Nanomaterials, 2020, 10, 1711.	4.1	5
1510	Dopamine Sensing Based on Ultrathin Fluorescent Metal–Organic Nanosheets. ACS Applied Materials & M	8.0	35
1511	Quasi-metal Microwave Route to MoN and Mo <sub>2</sub> C Ultrafine Nanocrystalline Hollow Spheres as Surface-Enhanced Raman Scattering Substrates. ACS Nano, 2020, 14, 13718-13726.	14.6	18
1512	Point defects in two-dimensional hexagonal boron nitride: A perspective. Journal of Applied Physics, 2020, 128, .	2.5	42
1513	Recent Advances in Spatial Selfâ€Phase Modulation with 2D Materials and its Applications. Annalen Der Physik, 2020, 532, 2000322.	2.4	32
1514	Synthesis of Twoâ€dimensional Metallic Nanosheets: From Elemental Metals to Chemically Complex Alloys. ChemNanoMat, 2020, 6, 1683-1711.	2.8	18
1515	Soft-template assisted synthesis of hexagonal antimonene and bismuthene in colloidal solutions. Nanoscale, 2020, 12, 20945-20951.	5.6	22
1516	Facile synthesis of aqueous-dispersed luminescent nanosheets from non-layered lanthanum hexaboride. RSC Advances, 2020, 10, 31788-31793.	3.6	7
1517	Photoactivated Nanosheets Accelerate Nucleus Access of Cisplatin for Drugâ€Resistant Cancer Therapy. Advanced Functional Materials, 2020, 30, 2001546.	14.9	36

#	Article	IF	CITATIONS
1518	Edge-Functionalized Polyphthalocyanine Networks with High Oxygen Reduction Reaction Activity. Journal of the American Chemical Society, 2020, 142, 17524-17530.	13.7	75
1519	Layered and Heterostructured Pd/PdWCr Sheetâ€Assembled Nanoflowers as Highly Active and Stable Electrocatalysts for Formic Acid Oxidation. Advanced Functional Materials, 2020, 30, 2003933.	14.9	81
1520	Vanadium sulfide based materials: synthesis, energy storage and conversion. Journal of Materials Chemistry A, 2020, 8, 20781-20802.	10.3	73
1521	Recent Advances in 2D Metal Monochalcogenides. Advanced Science, 2020, 7, 2001655.	11.2	58
1522	Dimensional Nanofillers in Mixed Matrix Membranes for Pervaporation Separations: A Review. Membranes, 2020, 10, 193.	3.0	21
1523	Density Functional Theory Study on the Hydrogen Evolution Reaction in the S-rich SnS2 Nanosheets. Electrocatalysis, 2020, 11, 604-611.	3.0	17
1524	In Situ Wet Etching of MoS2@dWO3 Heterostructure as Ultra-Stable Highly Active Electrocatalyst for Hydrogen Evolution Reaction. Catalysts, 2020, 10, 977.	3.5	8
1525	Bioelectronicsâ€Related 2D Materials Beyond Graphene: Fundamentals, Properties, and Applications. Advanced Functional Materials, 2020, 30, 2003732.	14.9	39
1526	Progress Report on Property, Preparation, and Application of Bi <sub>2</sub> O <sub>2</sub> Se. Advanced Functional Materials, 2020, 30, 2004480.	14.9	72
1527	Sinter-Resistant Nanoparticle Catalysts Achieved by 2D Boron Nitride-Based Strong Metal–Support Interactions: A New Twist on an Old Story. ACS Central Science, 2020, 6, 1617-1627.	11.3	42
1528	BCN monolayer for high capacity Al-based dual-ion batteries. Materials Advances, 2020, 1, 2418-2425.	5.4	10
1529	Zâ€Scheme 2D/2D Heterojunction of CsPbBr <sub>3</sub> /Bi <sub>2</sub> WO <sub>6</sub> for Improved Photocatalytic CO <sub>2</sub> Reduction. Advanced Functional Materials, 2020, 30, 2004293.	14.9	234
1530	Quantum Transport in Two-Dimensional WS <sub>2</sub> with High-Efficiency Carrier Injection through Indium Alloy Contacts. ACS Nano, 2020, 14, 13700-13708.	14.6	26
1531	Growth of large-area two-dimensional non-layered $\hat{l}^2$ -In2S3 continuous thin films and application for photodetector device. Journal of Materials Science: Materials in Electronics, 2020, 31, 18175-18185.	2.2	7
1532	Catalytic Performance of Two-Dimensional Bismuth Tuned by Defect Engineering for Nitrogen Reduction Reaction. Journal of Physical Chemistry C, 2020, 124, 19563-19570.	3.1	8
1533	The Applications of 2D Nanomaterials in Energy-Related Process. ACS Symposium Series, 2020, , 219-251.	0.5	1
1534	State-of-the-Art Applications of 2D Nanomaterials in Energy Storage. ACS Symposium Series, 2020, , 253-293.	0.5	5
1535	Instrumental Techniques for Characterization of Molybdenum Disulphide Nanostructures. Journal of Analytical Methods in Chemistry, 2020, 2020, 1-29.	1.6	13

#	ARTICLE	IF	CITATIONS
1536	Shape-controlled template-driven growth of large CuS hexagonal nanoplates. Bulletin of Materials Science, 2020, 43, 1.	1.7	1
1537	Na-functionalized <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Ir</mml:mi><mml:mi><mml:mi> monolayer: Suppressed charge ordering and electric field tuned topological phase transition. Physical Review B. 2020. 102</mml:mi></mml:mi></mml:mrow></mml:math>	·Tes/mml:	mj} <mml:m< td=""></mml:m<>
1538	Intercalated phases of transition metal dichalcogenides. SmartMat, 2020, 1, e1013.	10.7	66
1539	Facile and environmental-friendly preparation of alkynyl-functionalized graphene oxide by epoxy ring-opening. Fullerenes Nanotubes and Carbon Nanostructures, 2021, 29, 407-413.	2.1	3
1540	The influence of an interfacial hBN layer on the fluorescence of an organic molecule. Beilstein Journal of Nanotechnology, 2020, 11, 1663-1684.	2.8	7
1541	Preparation and <i>in Vitro</i> Antitumor Study of Two-Dimensional Muscovite Nanosheets. Langmuir, 2020, 36, 14268-14275.	3.5	10
1542	Methods to Scale Down Graphene Oxide Size and Size Implication in Anti-cancer Applications. Frontiers in Bioengineering and Biotechnology, 2020, 8, 613280.	4.1	14
1543	A universal method for rapid and largeâ€scale growth of layered crystals. SmartMat, 2020, 1, e1011.	10.7	33
1544	A perspective on electrode engineering in ultrathin ferroelectric heterostructures for enhanced tunneling electroresistance. Applied Physics Reviews, 2020, 7, .	11.3	12
1545	Atomic Structure and Dynamics of Defects and Grain Boundaries in 2D Pd2Se3 Monolayers. Microscopy and Microanalysis, 2020, 26, 1636-1640.	0.4	0
1546	Two-Dimensional Nanomaterials With Enzyme-Like Properties for Biomedical Applications. Frontiers in Chemistry, 2020, 8, 565940.	3.6	33
1547	A universal strategy to continuously tune the properties of materials through internal strain. RSC Advances, 2020, 10, 39967-39972.	3.6	0
1548	Acidity characterization of solid acid catalysts by solid-state 31P NMR of adsorbed phosphorus-containing probe molecules: An update. Annual Reports on NMR Spectroscopy, 2020, , 65-149.	1.5	2
1549	Machine Learning Analysis of Raman Spectra of MoS2. Nanomaterials, 2020, 10, 2223.	4.1	13
1550	High-Yield Production of Water-Soluble MoS2 Quantum Dots for Fe3+ Detection and Cell Imaging. Nanomaterials, 2020, 10, 2155.	4.1	1
1551	First-principle calculations of lithium adsorption and diffusion on titanium-based monolayers. Chemical Physics, 2020, 539, 110956.	1.9	3
1552	Towards future physics and applications <i>via</i> two-dimensional material NEMS resonators. Nanoscale, 2020, 12, 22366-22385.	5.6	15
1553	BiVO4, Bi2WO6 and Bi2MoO6 photocatalysis: A brief review. Journal of Materials Science and Technology, 2020, 56, 45-68.	10.7	219

#	Article	IF	CITATIONS
1554	Ultrathin sulfate-intercalated NiFe-layered double hydroxide nanosheets for efficient electrocatalytic oxygen evolution. RSC Advances, 2020, 10, 12145-12150.	3.6	23
1555	First-principle study on monolayer and bilayer SnP <sub>3</sub> sheets as the potential sensors for NO <sub>2</sub> , NO, and NH <sub>3</sub> detection. Nanotechnology, 2020, 31, 325504.	2.6	23
1556	Ultrathin Ni-MOF Nanobelts-Derived Composite for High Sensitive Detection of Nitrite. Frontiers in Chemistry, 2020, 8, 330.	3.6	18
1557	Semiconducting two-dimensional group VA–VA haeckelite compounds with superior carrier mobility. Physical Chemistry Chemical Physics, 2020, 22, 12260-12266.	2.8	7
1558	Bulk COFs and COF nanosheets for electrochemical energy storage and conversion. Chemical Society Reviews, 2020, 49, 3565-3604.	38.1	617
1559	Metallic Phases on a Pristine Si(111) Surface. Journal of the Korean Physical Society, 2020, 76, 710-714.	0.7	0
1560	Construction of MoS2 field effect transistor sensor array for the detection of bladder cancer biomarkers. Science China Chemistry, 2020, 63, 997-1003.	8.2	39
1561	Bifunctional nanoporous Ni-Zn electrocatalysts with super-aerophobic surface for high-performance hydrazine-assisted hydrogen production. Nanotechnology, 2020, 31, 365701.	2.6	8
1562	2D materials beyond graphene toward Si integrated infrared optoelectronic devices. Nanoscale, 2020, 12, 11784-11807.	5.6	59
1563	Preâ€Polymerization Enables Controllable Synthesis of Nanosheetâ€Based Porphyrin Polymers towards Highâ€Performance Liâ€lon Batteries. Chemistry - A European Journal, 2020, 26, 10433-10438.	3.3	13
1564	Efficient Sensing Properties of Aluminum Nitride Nanosheets toward Toxic Pollutants under Gated Electric Field. ACS Applied Electronic Materials, 2020, 2, 1645-1652.	4.3	15
1565	Two-dimensional material membranes for critical separations. Inorganic Chemistry Frontiers, 2020, 7, 2560-2581.	6.0	65
1566	Bismuth Oxychalcogenide Nanosheet: Facile Synthesis, Characterization, and Photodetector Application. Advanced Materials Technologies, 2020, 5, 2000180.	5.8	37
1567	Field Emission in Ultrathin PdSe <sub>2</sub> Backâ€Gated Transistors. Advanced Electronic Materials, 2020, 6, 2000094.	5.1	66
1568	Recent advances in photodynamic therapy based on emerging two-dimensional layered nanomaterials. Nano Research, 2020, 13, 1485-1508.	10.4	36
1569	Anisotropic High Carrier Mobilities of One-Third-Hydrogenated Group-V Elemental Monolayers. Journal of Physical Chemistry C, 2020, 124, 12628-12635.	3.1	1
1570	Solution-gated transistors of two-dimensional materials for chemical and biological sensors: status and challenges. Nanoscale, 2020, 12, 11364-11394.	5.6	41
1571	Methylation Detection and DNA Sequencing Based on Adsorption of Nucleobases on Silicene Nanoribbon. Journal of Physical Chemistry C, 2020, 124, 10823-10831.	3.1	12

#	Article	IF	CITATIONS
1572	Influence of order degree of coaly graphite on its structure change during preparation of graphene oxide. Journal of Materiomics, 2020, 6, 628-641.	5.7	23
1573	A Polymeric Composite Material (rGO/PANI) for Acid Blue 129 Adsorption. Polymers, 2020, 12, 1051.	4.5	10
1574	Interfacial structure design of <scp>MXeneâ€based</scp> nanomaterials for electrochemical energy storage and conversion. InformaÄnÃ-Materiály, 2020, 2, 1057-1076.	17.3	143
1575	Wafer-Scale Two-Dimensional MoS <sub>2</sub> Layers Integrated on Cellulose Substrates Toward Environmentally Friendly Transient Electronic Devices. ACS Applied Materials & Samp; Interfaces, 2020, 12, 25200-25210.	8.0	31
1576	Anchoring of black phosphorus quantum dots onto WO <sub>3</sub> nanowires to boost photocatalytic CO <sub>2</sub> conversion into solar fuels. Chemical Communications, 2020, 56, 7777-7780.	4.1	57
1577	Performance enhancement of an ultra-scaled double-gate graphene nanoribbon tunnel field-effect transistor using channel doping engineering: Quantum simulation study. AEU - International Journal of Electronics and Communications, 2020, 122, 153287.	2.9	28
1578	First-principles study of superior hydrogen storage performance of Li-decorated Be2N6 monolayer. International Journal of Hydrogen Energy, 2020, 45, 19465-19478.	7.1	24
1579	Experimental Study on Thermal Conductivity and Rectification in Suspended Monolayer MoS <sub>2</sub> . ACS Applied Materials & Interfaces, 2020, 12, 28306-28312.	8.0	20
1580	Coking-resistant dry reforming of methane over BN–nanoceria interface-confined Ni catalysts. Catalysis Science and Technology, 2020, 10, 4237-4244.	4.1	37
1581	2D magnetic MOFs with micron-lateral size by liquid exfoliation. Chemical Communications, 2020, 56, 7657-7660.	4.1	21
1582	The synthesis and investigation of the reversible conversion of layered ZrS <sub>2</sub> and ZrS <sub>3</sub> . New Journal of Chemistry, 2020, 44, 7583-7590.	2.8	12
1583	Two-Dimensional Nanomaterials with Unconventional Phases. CheM, 2020, 6, 1237-1253.	11.7	93
1584	Regulating the charge diffusion of two-dimensional cobalt–iron hydroxide/graphene composites for high-rate water oxidation. Journal of Materials Chemistry A, 2020, 8, 11573-11581.	10.3	18
1585	Beneficial restacking of 2D nanomaterials for electrocatalysis: a case of MoS <sub>2</sub> membranes. Chemical Communications, 2020, 56, 7005-7008.	4.1	20
1586	MXene: An emerging two-dimensional layered material for removal of radioactive pollutants. Chemical Engineering Journal, 2020, 397, 125428.	12.7	112
1587	CdS nanosheets decorated with Ni@graphene core-shell cocatalyst for superior photocatalytic H2 production. Journal of Materials Science and Technology, 2020, 56, 170-178.	10.7	92
1588	Electrochemistry of Solvent-Exfoliated Red Phosphorus Nanosheets. Sensors and Actuators B: Chemical, 2020, 320, 128359.	7.8	4
1589	Rational Catalyst Design for N <sub>2</sub> Reduction under Ambient Conditions: Strategies toward Enhanced Conversion Efficiency. ACS Catalysis, 2020, 10, 6870-6899.	11.2	273

#	Article	IF	Citations
1590	Application of Raman spectroscopy to probe fundamental properties of two-dimensional materials. Npj 2D Materials and Applications, 2020, 4, .	7.9	74
1591	Electric-potential-induced uniformity in graphene oxide deposition on porous alumina substrates. Ceramics International, 2020, 46, 14828-14839.	4.8	14
1592	Graphene oxide functionalized micro-tapered long-period fiber grating for sensitive heavy metal sensing. Applied Physics Express, 2020, 13, 067001.	2.4	14
1593	Coordination tailoring of water-labile 3D MOFs to fabricate ultrathin 2D MOF nanosheets. Nanoscale, 2020, 12, 12767-12772.	5.6	40
1594	Strain effect on the catalytic activities of B- and B/N-doped black phosphorene for electrochemical conversion of CO to valuable chemicals. Journal of Materials Chemistry A, 2020, 8, 11986-11995.	10.3	31
1595	Performance enhancement of oxygen evolution reaction through incorporating bimetallic electrocatalysts in two-dimensional metal–organic frameworks. Catalysis Science and Technology, 2020, 10, 3897-3903.	4.1	34
1596	Structural-Defect-Mediated Grafting of Alkylamine on Few-Layer MoS <sub>2</sub> and Its Potential for Enhancement of Tribological Properties. ACS Applied Materials & Samp; Interfaces, 2020, 12, 30720-30730.	8.0	30
1597	High-Throughput Identification of Exfoliable Two-Dimensional Materials with Active Basal Planes for Hydrogen Evolution. ACS Energy Letters, 2020, 5, 2313-2321.	17.4	54
1599	Quasi-BIC Resonant Enhancement of Second-Harmonic Generation in WS <sub>2</sub> Monolayers. Nano Letters, 2020, 20, 5309-5314.	9.1	156
1600	Nitrogen defects-rich porous graphitic carbon nitride for efficient photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2020, 578, 788-795.	9.4	22
1601	Transformation of multilayer WS2 nanosheets to 1D luminescent WS2 nanostructures by one-pot supercritical fluid processing for hydrogen evolution reaction. Materials Science in Semiconductor Processing, 2020, 119, 105167.	4.0	10
1602	Chalcogenides-based Tubular Micromotors in Fluorescent Assays. Analytical Chemistry, 2020, 92, 9188-9193.	6.5	26
1603	Fabrication of Few-Layer Graphene-Supported Copper Catalysts Using a Lithium-Promoted Thermal Exfoliation Method for Methanol Oxidative Carbonylation. ACS Applied Materials & Samp; Interfaces, 2020, 12, 30483-30493.	8.0	8
1604	2-D Materials for Ultrascaled Field-Effect Transistors: One Hundred Candidates under the <i>Ab Initio</i> Microscope. ACS Nano, 2020, 14, 8605-8615.	14.6	56
1605	Twofold Interpenetrated 2D MOF Nanosheets Generated by an Instant In Situ Exfoliation Method: Morphology Control and Fluorescent Sensing. Advanced Materials Interfaces, 2020, 7, 2000813.	3.7	33
1606	3D Rosa centifolia-like CeO2 encapsulated with N-doped carbon as an enhanced electrocatalyst for Zn-air batteries. Journal of Colloid and Interface Science, 2020, 578, 796-804.	9.4	37
1607	Recent breakthroughs in two-dimensional van der Waals magnetic materials and emerging applications. Nano Today, 2020, 34, 100902.	11.9	49
1608	Photocatalytic H2 evolution and CO2 reduction over phosphorus-doped g-C3N4 nanostructures: Electronic, Optical, and Surface properties. Renewable and Sustainable Energy Reviews, 2020, 130, 109957.	16.4	59

#	Article	IF	CITATIONS
1609	Synthesis and Applications of Wide Bandgap 2D Layered Semiconductors Reaching the Green and Blue Wavelengths. ACS Applied Electronic Materials, 2020, 2, 1777-1814.	4.3	50
1610	Dual-Branched Dense Hexagonal Fe(II)-Based Coordination Nanosheets with Red-to-Colorless Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromism and Durable Device Fabrication. ACS Applied Materials & Electrochromi	8.0	36
1611	Gold nanoparticle–modified black phosphorus nanosheets with improved stability for detection of circulating tumor cells. Mikrochimica Acta, 2020, 187, 397.	5.0	31
1612	Toward the application of electromagnetic wave absorption by two-dimension materials. Journal of Materials Science: Materials in Electronics, 2021, 32, 25562-25576.	2.2	20
1613	Facile fabrication of laser-scribed-graphene humidity sensors by a commercial DVD drive. Sensors and Actuators B: Chemical, 2020, 321, 128483.	7.8	24
1614	Rational structure designs of 2D materials and their applications toward advanced lithium-sulfur battery and lithium-selenium battery. Chemical Engineering Journal, 2020, 401, 125976.	12.7	42
1615	Sub-nanometer-scale fine regulation of interlayer distance in Ni–Co layered double hydroxides leading to high-rate supercapacitors. Nano Energy, 2020, 76, 105026.	16.0	77
1616	A record-high ion storage capacity of T-graphene as two-dimensional anode material for Li-ion and Na-ion batteries. Applied Surface Science, 2020, 527, 146849.	6.1	59
1617	g-C3N4 nanosheets with tunable affinity and sieving effect endowing polymeric membranes with enhanced CO2 capture property. Separation and Purification Technology, 2020, 250, 117200.	7.9	41
1618	Artificial Metaphotonics Born Naturally in Two Dimensions. Chemical Reviews, 2020, 120, 6197-6246.	47.7	78
1619	In-situ conversion of Ni2P/rGO from heterogeneous self-assembled NiO/rGO precursor with boosted pseudocapacitive performance. Chinese Chemical Letters, 2020, 31, 1392-1397.	9.0	19
1620	Realization of ultrathin red 2D carbon nitride sheets to significantly boost the photoelectrochemical water splitting performance of TiO2 photoanodes. Chemical Engineering Journal, 2020, 396, 125267.	12.7	16
1621	A critical review on the applications and potential risks of emerging MoS2 nanomaterials. Journal of Hazardous Materials, 2020, 399, 123057.	12.4	76
1622	Atomic Thickness Catalysts: Synthesis and Applications. Small Methods, 2020, 4, 2000248.	8.6	32
1623	Halogen modified two-dimensional covalent triazine frameworks as visible-light driven photocatalysts for overall water splitting. Science China Chemistry, 2020, 63, 1134-1141.	8.2	31
1624	Exfoliated vermiculite nanosheets supporting tetraethylenepentamine for CO2 capture. Results in Materials, 2020, 7, 100102.	1.8	9
1625	Coverage-dependent differential reflectance spectra of MoS2 atomic films synthesized by CVD using a large-diameter quartz tube. Solid State Communications, 2020, 318, 113976.	1.9	3
1626	Stable halogen 2D materials: the case of iodine and astatine. Journal of Physics Condensed Matter, 2020, 32, 335301.	1.8	1

#	Article	IF	CITATIONS
1627	Deepâ€Learningâ€Enabled Fast Optical Identification and Characterization of 2D Materials. Advanced Materials, 2020, 32, e2000953.	21.0	54
1628	Efficient Syntheses of 2D Materials from Soft Layered Composites Guided by Yield Prediction Model: Potential of Experimentâ€Oriented Materials Informatics. Advanced Theory and Simulations, 2020, 3, 2000084.	2.8	15
1629	Direct laser patterning of two-dimensional lateral transition metal disulfide-oxide-disulfide heterostructures for ultrasensitive sensors. Nano Research, 2020, 13, 2035-2043.	10.4	21
1630	Enhanced electrochemical performance of MoS2 anode material with novel composite binder. Journal of Solid State Electrochemistry, 2020, 24, 1607-1614.	2.5	6
1631	Surface-diffusion mechanism for synthesis of substrate-free and catalyst-free boron nitride nanosheets. Journal of the European Ceramic Society, 2020, 40, 5324-5331.	5.7	10
1632	External-strain induced transition from Schottky to ohmic contact in Graphene/InS and Graphene/Janus In2SSe heterostructures. Journal of Solid State Chemistry, 2020, 289, 121511.	2.9	24
1633	Photocatalysis under shell: Co@BN core–shell composites for efficient EY-sensitized photocatalytic hydrogen evolution. Applied Surface Science, 2020, 514, 146096.	6.1	42
1634	Ultrathin Plasmonic Tungsten Oxide Quantum Wells with Controllable Free Carrier Densities. Journal of the American Chemical Society, 2020, 142, 5938-5942.	13.7	50
1635	Strain-Engineered Metal-Free h-B <sub>2</sub> O Monolayer as a Mechanocatalyst for Photocatalysis and Improved Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2020, 124, 7884-7892.	3.1	27
1636	Surface Functionalization of 2D Transition Metal Oxides and Dichalcogenides via Covalent and Non-covalent Bonding for Sustainable Energy and Biomedical Applications. ACS Applied Nano Materials, 2020, 3, 3116-3143.	5.0	67
1637	Atomic-scale engineering of chemical-vapor-deposition-grown 2D transition metal dichalcogenides for electrocatalysis. Energy and Environmental Science, 2020, 13, 1593-1616.	30.8	166
1638	Stochastic many-body perturbation theory for Moiré states in twisted bilayer phosphorene. Journal of Physics Condensed Matter, 2020, 32, 234001.	1.8	20
1639	Formation processes, size changes, and properties of nanosheets derived from exfoliation of soft layered inorganic–organic composites. Nanoscale Advances, 2020, 2, 1168-1176.	4.6	11
1640	Chemical Functionalisation of 2D Materials by Batch and Continuous Hydrothermal Flow Synthesis. Chemistry - A European Journal, 2020, 26, 6447-6460.	3.3	16
1641	Salivary Cortisol Determination on Smartphone-Based Differential Pulse Voltammetry System. Sensors, 2020, 20, 1422.	3.8	32
1642	Employing Conductive Metal–Organic Frameworks for Voltammetric Detection of Neurochemicals. Journal of the American Chemical Society, 2020, 142, 11717-11733.	13.7	159
1643	Hydrogen Generation by Solar Water Splitting Using 2D Nanomaterials. Solar Rrl, 2020, 4, 2000050.	5.8	29
1644	Two-dimensional metal oxide nanomaterials for sustainable energy applications. , 2020, , 39-72.		3

#	Article	IF	CITATIONS
1645	Vacuum-assisted assembly of iron cage intercalated layered double hydroxide composite membrane for water purification. Journal of Membrane Science, 2020, 603, 118032.	8.2	14
1646	A two-step gas/liquid strategy for the production of N-doped defect-rich transition metal dichalcogenide nanosheets and their antibacterial applications. Nanoscale, 2020, 12, 8415-8424.	5.6	43
1647	Thin‣ayered Photocatalysts. Advanced Functional Materials, 2020, 30, 1910005.	14.9	117
1648	Control over the Aspect Ratio of Supramolecular Nanosheets by Molecular Design. Chemistry - A European Journal, 2020, 26, 7840-7846.	3.3	28
1649	Facile Synthesis of FePS3 Nanosheets@MXene Composite as a High-Performance Anode Material for Sodium Storage. Nano-Micro Letters, 2020, 12, 54.	27.0	62
1650	A nano-photosensitizer based on covalent organic framework nanosheets with high loading and therapeutic efficacy. Nanoscale, 2020, 12, 7376-7382.	5.6	26
1651	Recent advances of two–dimensional molybdenum disulfide based materials: Synthesis, modification and applications in energy conversion and storage. Sustainable Materials and Technologies, 2020, 24, e00161.	3.3	12
1652	A nano-based thermotherapy for cancer stem cell-targeted therapy. Journal of Materials Chemistry B, 2020, 8, 3985-4001.	5.8	19
1653	Promoting Formation of Oxygen Vacancies in Two-Dimensional Cobalt-Doped Ceria Nanosheets for Efficient Hydrogen Evolution. Journal of the American Chemical Society, 2020, 142, 6461-6466.	13.7	168
1654	An aqueous miscible organic (AMO) process for layered double hydroxides (LDHs) for the enhanced properties of polypropylene/LDH composites. New Journal of Chemistry, 2020, 44, 10119-10126.	2.8	8
1655	Structure of two-dimensional Fe3O4. Journal of Chemical Physics, 2020, 152, 114705.	3.0	10
1656	Partial Atomic Tin Nanocomplex Pillared Few-Layered Ti3C2Tx MXenes for Superior Lithium-Ion Storage. Nano-Micro Letters, 2020, 12, 78.	27.0	68
1657	Recent Development of Photothermal Agents (PTAs) Based on Small Organic Molecular Dyes. ChemBioChem, 2020, 21, 2098-2110.	2.6	45
1658	Transformation Strategy for Highly Crystalline Covalent Triazine Frameworks: From Staggered AB to Eclipsed AA Stacking. Journal of the American Chemical Society, 2020, 142, 6856-6860.	13.7	136
1659	Ag@MoS <sub>2</sub> Core–Shell Heterostructure as SERS Platform to Reveal the Hydrogen Evolution Active Sites of Single-Layer MoS <sub>2</sub> . Journal of the American Chemical Society, 2020, 142, 7161-7167.	13.7	185
1660	Scalable Exfoliation and Highâ€Efficiency Separation Membrane of Boron Nitride Nanosheets. ChemistrySelect, 2020, 5, 3567-3573.	1.5	8
1661	INFLUENCE OF EMBEDDED TUNGSTEN PARTICLES ON MECHANICAL BEHAVIORS OF CVD DIAMOND COATING. Surface Review and Letters, 2020, 27, 1950097.	1.1	2
1662	A Double Cation–πâ€Driven Strategy Enabling Twoâ€Dimensional Supramolecular Polymers as Efficient Catalyst Carriers. Angewandte Chemie - International Edition, 2020, 59, 9534-9541.	13.8	27

#	Article	IF	CITATIONS
1663	Functionalization of a Few-Layer Antimonene with Oligonucleotides for DNA Sensing. ACS Applied Nano Materials, 2020, 3, 3625-3633.	5.0	26
1664	Stimuliâ€Responsive MXeneâ€Based Actuators. Advanced Functional Materials, 2020, 30, 1909504.	14.9	126
1665	Nanoscale Assembly of 2D Materials for Energy and Environmental Applications. Advanced Materials, 2020, 32, e1907006.	21.0	106
1666	MXene Printing and Patterned Coating for Device Applications. Advanced Materials, 2020, 32, e1908486.	21.0	239
1667	Covalent–Organic Frameworks: Advanced Organic Electrode Materials for Rechargeable Batteries. Advanced Energy Materials, 2020, 10, 1904199.	19.5	425
1668	Chemical Synthesis of Single Atomic Site Catalysts. Chemical Reviews, 2020, 120, 11900-11955.	47.7	806
1669	Prediction of Novel 2D Intrinsic Ferromagnetic Materials with High Curie Temperature and Large Perpendicular Magnetic Anisotropy. Journal of Physical Chemistry C, 2020, 124, 7956-7964.	3.1	42
1670	Heterostructured Monolayer MoS <sub>2</sub> Nanoparticles toward Water-Dispersible Catalysts. ACS Applied Materials & Dispersible Catalysts.	8.0	21
1671	Surface Adsorption and Vacancy in Tuning the Properties of Tellurene. ACS Applied Materials & Interfaces, 2020, 12, 19110-19115.	8.0	20
1672	Phase engineering of nanomaterials. Nature Reviews Chemistry, 2020, 4, 243-256.	30.2	438
1673	Engineering pristine 2D metal–organic framework nanosheets for electrocatalysis. Journal of Materials Chemistry A, 2020, 8, 8143-8170.	10.3	180
1674	Optimized Metal Chalcogenides for Boosting Water Splitting. Advanced Science, 2020, 7, 1903070.	11.2	190
1675	Diketopyrrolopyrrole-Based Donor–Acceptor Conjugated Microporous Polymers for Visible-Light-Driven Photocatalytic Hydrogen Production from Water. Macromolecules, 2020, 53, 2454-2463.	4.8	59
1676	Complementary doping of van der Waals materials through controlled intercalation for monolithically integrated electronics. Nano Research, 2020, 13, 1369-1375.	10.4	10
1677	2D materials for solar fuels production. , 2020, , 271-288.		0
1678	High-efficiency photocatalytic water splitting by a N-doped porous g-C <sub>3</sub> N <sub>4</sub> nanosheet polymer photocatalyst derived from urea and <i>N</i> Nli>, <i>N</i> li>-dimethylformamide. Inorganic Chemistry Frontiers, 2020, 7, 1770-1779.	6.0	120
1679	Recent Advances in Atomicâ€Level Engineering of Nanostructured Catalysts for Electrochemical CO <sub>2</sub> Reduction. Advanced Functional Materials, 2020, 30, 1910534.	14.9	100
1680	Design Strategies for Development of TMD-Based Heterostructures in Electrochemical Energy Systems. Matter, 2020, 2, 526-553.	10.0	312

#	ARTICLE	IF	Citations
1681	The controlled large-area synthesis of two dimensional metals. Materials Today, 2020, 36, 30-39.	14.2	23
1682	Revealing the defect-dominated oxygen evolution activity of hematene. Journal of Materials Chemistry A, 2020, 8, 6709-6716.	10.3	54
1683	Influence of morphology and interfacial interaction of TiO2-Graphene nanocomposites on the visible light photocatalytic performance. Journal of Solid State Chemistry, 2020, 286, 121301.	2.9	25
1684	Saltâ€Assisted Synthesis of 2D Materials. Advanced Functional Materials, 2020, 30, 1908486.	14.9	115
1685	Twoâ€Dimensional MOF and COF Nanosheets: Synthesis and Applications in Electrochemistry. Chemistry - A European Journal, 2020, 26, 6402-6422.	3.3	168
1686	Influence of the Substrate on the Optical and Photo-electrochemical Properties of Monolayer MoS <sub>2</sub> . ACS Applied Materials & Interfaces, 2020, 12, 15034-15042.	8.0	24
1687	Bovine serum albumin fibrous biofilm template synthesis of metallic nanomeshes for surface-enhanced Raman scattering and electrocatalytic detection. Materials and Design, 2020, 192, 108777.	7.0	8
1688	Co@N-doped carbon nanomaterial derived by simple pyrolysis of mixed-ligand MOF as an active and stable oxygen evolution electrocatalyst. Applied Surface Science, 2020, 529, 147081.	6.1	36
1689	Ion-Induced Delamination of Layered Bulk Metal–Organic Frameworks into Ultrathin Nanosheets for Boosting the Oxygen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2020, 8, 10554-10563.	6.7	17
1690	Ternary molybdenum sulfoselenide based hybrid nanotubes boost potassium-ion diffusion kinetics for high energy/power hybrid capacitors. Journal of Materials Chemistry A, 2020, 8, 13946-13954.	10.3	46
1691	Nanospaceâ€Confinement Synthesis: Designing Highâ€Energy Anode Materials toward Ultrastable Lithiumâ€Ion Batteries. Small, 2020, 16, e2002351.	10.0	13
1692	Two-dimensional materials for photocatalytic water splitting and CO2 reduction. , 2020, , 173-227.		7
1693	Fishnet-like superstructures constructed from ultrafine and ultralong Ni-MOF nanowire arrays directionally grown on highly rough and conductive scaffolds: synergistic activating effect for efficient and robust alkaline water oxidation activity. Applied Surface Science, 2020, 529, 147030.	6.1	8
1694	Ultrathin two-dimensional metal–organic framework nanosheets—an emerging class of catalytic nanomaterials. Dalton Transactions, 2020, 49, 11073-11084.	3.3	19
1695	Photoinduced charge transfer in transition metal dichalcogenide heterojunctions – towards next generation energy technologies. Energy and Environmental Science, 2020, 13, 2684-2740.	30.8	67
1696	Electrical conductivity and magnetic bistability in metal–organic frameworks and coordination polymers: charge transport and spin crossover at the nanoscale. Chemical Society Reviews, 2020, 49, 5601-5638.	38.1	122
1697	Defect and Interface Engineering on Twoâ€Dimensional Nanosheets for the Photocatalytic Nitrogen Reduction Reaction. ChemPhotoChem, 2020, 4, 5322-5336.	3.0	12
1698	Third order nonlinear optical property of WSe2 nanofilm at 800Ânm. Optical Materials, 2020, 107, 110040.	3.6	4

#	Article	IF	Citations
1699	Metal-Assisted and Solvent-Mediated Synthesis of Two-Dimensional Triazine Structures on Gram Scale. Journal of the American Chemical Society, 2020, 142, 12976-12986.	13.7	21
1700	A fish scale-like magnetic nanomaterial as a highly efficient sorbent for monitoring the changes in auxin levels under cadmium stress. Analyst, The, 2020, 145, 5925-5932.	3.5	7
1701	Recent advances in MXenes and their composites in lithium/sodium batteries from the viewpoints of components and interlayer engineering. Physical Chemistry Chemical Physics, 2020, 22, 16482-16526.	2.8	47
1702	Moltenâ€Saltâ€Assisted Chemical Vapor Deposition Process for Substitutional Doping of Monolayer MoS 2 and Effectively Altering the Electronic Structure and Phononic Properties. Advanced Science, 2020, 7, 2001080.	11.2	32
1703	Metal-oxide powder technology in biomedicine. , 2020, , 121-168.		2
1704	Advances in ultrathin borophene materials. Chemical Engineering Journal, 2020, 401, 126109.	12.7	42
1705	Stability and synthesis of 2D metals and alloys: a review. Materials Today Advances, 2020, 8, 100092.	5.2	43
1706	Large interlayer spacing Nb <sub>4</sub> C <sub>3</sub> T <sub>x</sub> (MXene) promotes the ultrasensitive electrochemical detection of Pb <sup>2+</sup> on glassy carbon electrodes. RSC Advances, 2020, 10, 24697-24704.	3.6	34
1707	Single-unit-cell-thick layered electrocatalysts: from synthesis to application. Nanoscale Advances, 2020, 2, 2678-2687.	4.6	1
1708	Hydrothermal Fabrication of Ag-Decorated MoSeâ,,/Reduced Graphene Oxide Ternary Hybrid for Hâ,,S Gas Sensing. IEEE Sensors Journal, 2020, 20, 13262-13268.	4.7	21
1709	Intrinsic ferromagnetism with high temperature, strong anisotropy and controllable magnetization in the CrX $(X = P, As)$ monolayer. Nanoscale, 2020, 12, 5464-5470.	5.6	48
1710	Magnetic topological insulators: growth, structure, and properties. , 2020, , 191-226.		1
1711	Manufacturing strategies for wafer-scale two-dimensional transition metal dichalcogenide heterolayers. Journal of Materials Research, 2020, 35, 1350-1368.	2.6	12
1712	Metal Oxide Nanosheets as 2D Building Blocks for the Design of Novel Materials. Chemistry - A European Journal, 2020, 26, 9084-9098.	3.3	37
1713	Surface functionalization modulates the structural and optoelectronic properties of two-dimensional Ga2O3. Materials Today Physics, 2020, 12, 100192.	6.0	24
1714	Adsorption of gas molecules on penta-graphene nanoribbon and its implication for nanoscale gas sensor. Physics Open, 2020, 2, 100014.	1.5	23
1715	Technical viewpoint on polystyrene/graphene nanocomposite. Journal of Thermoplastic Composite Materials, 2020, , 089270572090765.	4.2	8
1716	Phosphorene-assisted silicon photonic modulator with fast response time. Nanophotonics, 2020, 9, 1973-1979.	6.0	24

#	Article	IF	CITATIONS
1717	Magnetic twoâ€dimensional layered crystals meet with ferromagnetic semiconductors. InformaÄnÃ-MateriÃįly, 2020, 2, 639-655.	17.3	76
1718	Recent advances in two-dimensional inorganic nanosheet-based supercapacitor electrodes. Journal of the Korean Ceramic Society, 2020, 57, 119-134.	2.3	16
1719	Bismuthene for highly efficient carbon dioxide electroreduction reaction. Nature Communications, 2020, 11, 1088.	12.8	278
1720	Facile synthesis of large-area ultrathin two-dimensional supramolecular nanosheets in water. Nano Research, 2020, 13, 868-874.	10.4	20
1721	Nanotechnology approaches in the current therapy of skin cancer. Advanced Drug Delivery Reviews, 2020, 153, 109-136.	13.7	65
1722	Deriving 2D M $<$ sub $>$ 2 $<$ /sub $>$ X $<$ sub $>$ 3 $<$ /sub $>$ (M = Mo, W, X = S, Se) by periodic assembly of chalcogen vacancy lines in their MX $<$ sub $>$ 2 $<$ /sub $>$ counterparts. Nanoscale, 2020, 12, 8285-8293.	5 <b>.</b> 6	16
1723	Multifunctional Edge-Activated Carbon Nitride Nanosheet-Wrapped Polydimethylsiloxane Sponge Skeleton for Selective Oil Absorption and Photocatalysis. ACS Omega, 2020, 5, 4181-4190.	3.5	30
1724	Printed gas sensors. Chemical Society Reviews, 2020, 49, 1756-1789.	38.1	216
1725	Two-Dimensional 111-Type In -Based Halide Perovskite Cs3In2X9(X=Cl,Br,I) with Optimal Band Gap for Photovoltaics and Defect-Insensitive Blue Emission. Physical Review Applied, 2020, 13, .	3.8	14
1726	General Approach to Metal-Organic Framework Nanosheets With Controllable Thickness by Using Metal Hydroxides as Precursors. Frontiers in Materials, 2020, 7, .	2.4	21
1727	Advanced Exfoliation Strategies for Layered Double Hydroxides and Applications in Energy Conversion and Storage. Advanced Functional Materials, 2020, 30, 1909832.	14.9	94
1728	Recent Progress in Synaptic Devices Based on 2D Materials. Advanced Intelligent Systems, 2020, 2, 1900167.	6.1	55
1729	Theoretical Exploration and Electronic Applications of Conductive Two-Dimensional Metal–Organic Frameworks. Topics in Current Chemistry, 2020, 378, 25.	5.8	10
1730	Hierarchical Core–Shell Structure of 2D VS <sub>2</sub> @VC@N-Doped Carbon Sheets Decorated by Ultrafine Pd Nanoparticles: Assembled in a 3D Rosette-like Array on Carbon Fiber Microelectrode for Electrochemical Sensing. ACS Applied Materials & Samp; Interfaces, 2020, 12, 15507-15516.	8.0	34
1731	A self-powered photodetector based on two-dimensional boron nanosheets. Nanoscale, 2020, 12, 5313-5323.	<b>5.</b> 6	60
1732	Hierarchical and scalable integration of nanostructures for energy and environmental applications: a review of processing, devices, and economic analyses. Nano Futures, 2020, 4, 012002.	2.2	12
1733	Colloidal Behaviors of Two-Dimensional Titanium Carbide in Natural Surface Waters: The Role of Solution Chemistry. Environmental Science & Environment	10.0	17
1734	Evolutional carrier mobility and power factor of two-dimensional tin telluride due to quantum size effects. Journal of Materials Chemistry C, 2020, 8, 4181-4191.	5.5	11

#	ARTICLE Ion Exchange of Layered Alkali Titanates (Na <sub>2</sub> Ti <sub>3</sub> O <sub>7</sub> ,) Tj ETQq0 0 0 rgBT /0	IF	CITATIONS
1735	with Alkali Halides by the Solid-State Reactions at Room Temperature. Inorganic Chemistry, 2020, 59, 4024-4029.	4.0	19
1736	Noble-metal-free Ni2P modified step-scheme SnNb2O6/CdS-diethylenetriamine for photocatalytic hydrogen production under broadband light irradiation. Applied Catalysis B: Environmental, 2020, 269, 118844.	20.2	312
1737	Flexible electrochromic thin films with ultrafast responsion based on exfoliated V2O5 nanosheets/graphene oxide via layer-by-layer assembly. Applied Surface Science, 2020, 514, 145950.	6.1	23
1738	Identifying the Molecular Edge Termination of Exfoliated Hexagonal Boron Nitride Nanosheets with Solid-State NMR Spectroscopy and Plane-Wave DFT Calculations. Chemistry of Materials, 2020, 32, 3109-3121.	6.7	41
1739	Layered structure-based materials: challenges and opportunities for radionuclide sequestration. Environmental Science: Nano, 2020, 7, 724-752.	4.3	44
1740	Ni2P/rGO/NF Nanosheets As a Bifunctional High-Performance Electrocatalyst for Water Splitting. Materials, 2020, 13, 744.	2.9	11
1741	Surface and interface engineering in transition metal–based catalysts for electrochemical water oxidation. Materials Today Chemistry, 2020, 16, 100239.	3.5	23
1742	Unusual mechanical and electronic behaviors of bulk layered hydrogen substituted graphdiyne under biaxial strain. Applied Surface Science, 2020, 513, 145694.	6.1	13
1743	P, S Co-doped g-C3N4 isotype heterojunction composites for high-efficiency photocatalytic H2 evolution. Journal of Alloys and Compounds, 2020, 827, 154259.	5.5	51
1744	Construction of Agl/Bi2MoO6/AgBi(MoO4)2 multi-heterostructure composite nanosheets for visible-light photocatalysis. Materials Today Communications, 2020, 23, 100903.	1.9	7
1745	Shear Exfoliated Metal–Organic Framework Nanosheet-Enabled Flexible Sensor for Real-Time Monitoring of Superoxide Anion. ACS Applied Materials & Samp; Interfaces, 2020, 12, 5429-5436.	8.0	49
1746	Metal–Organic Layers for Synergistic Lewis Acid and Photoredox Catalysis. Journal of the American Chemical Society, 2020, 142, 1746-1751.	13.7	57
1747	Directional extraction and penetration of phosphorene nanosheets to cell membranes. Nanoscale, 2020, 12, 2810-2819.	5.6	27
1748	Emerging black phosphorus analogue nanomaterials for high-performance device applications. Journal of Materials Chemistry C, 2020, 8, 1172-1197.	5.5	54
1749	Controlling Pt co-catalyst loading in a WO <sub>3</sub> quantum dot and MoS <sub>2</sub> nanosheet composite Z-scheme system for enhanced photocatalytic H <sub>2</sub> evolution. Nanotechnology, 2020, 31, 185701.	2.6	8
1750	Overcoming Chemical Inertness under Ambient Conditions: A Critical View on Recent Developments in Ammonia Synthesis via Electrochemical N <sub>2</sub> Reduction by Asking Five Questions. ChemElectroChem, 2020, 7, 878-889.	3.4	32
1751	Efficient Selective Removal of Pb(II) by Using 6-Aminothiouracil-Modified Zr-Based Organic Frameworks: From Experiments to Mechanisms. ACS Applied Materials & Samp; Interfaces, 2020, 12, 7162-7178.	8.0	99
1752	Ultrathin BiOX (X = Cl, Br, I) Nanosheets with Exposed {001} Facets for Photocatalysis. ACS Applied Nano Materials, 2020, 3, 1981-1991.	5.0	100

#	Article	IF	CITATIONS
1753	Two-dimensional nanochannel membranes for molecular and ionic separations. Chemical Society Reviews, 2020, 49, 1071-1089.	38.1	242
1754	Theoretical study of strain induced magnetic transition of single-layer CrTe3. Journal of Applied Physics, 2020, 127, .	2.5	11
1755	Synthesis of two-dimensional nanomaterials. , 2020, , 35-71.		10
1756	Edge-Rich Black Phosphorus for Photocatalytic Nitrogen Fixation. Journal of Physical Chemistry Letters, 2020, 11, 1052-1058.	4.6	57
1757	The Rise of 2D Photothermal Materials beyond Graphene for Clean Water Production. Advanced Science, 2020, 7, 1902236.	11.2	206
1758	Highly enhanced performance for sensing by monolayer 1T' WS2 with atomic vacancy. Microelectronic Engineering, 2020, 223, 111215.	2.4	11
1759	Ultrathin Amorphous Nickel Doped Cobalt Phosphates with Highly Ordered Mesoporous Structures as Efficient Electrocatalyst for Oxygen Evolution Reaction. Small, 2020, 16, e1906766.	10.0	50
1760	State of the Art in Alcohol Sensing with 2D Materials. Nano-Micro Letters, 2020, 12, 33.	27.0	41
1761	CO2-assisted fabrication of two-dimensional amorphous transition metal oxides. Dalton Transactions, 2020, 49, 2048-2052.	3.3	4
1762	Theoretical investigations of a new two-dimensional semiconducting boron–carbon–nitrogen structure. RSC Advances, 2020, 10, 3424-3428.	3.6	6
1763	Current Trends in the Optical Characterization of Two-Dimensional Carbon Nanomaterials. Frontiers in Chemistry, 2019, 7, 927.	3.6	10
1764	Radiationâ€Induced Selfâ€Assembly of Ti <sub>3</sub> C <sub>2</sub> T <i><sub>x</sub></i> with Improved Electrochemical Performance for Supercapacitor. Advanced Materials Interfaces, 2020, 7, 1901839.	3.7	16
1765	Bipolar Electrochemistry Exfoliation of Layered Metal Chalcogenides Sb <sub>2</sub> S <sub>3</sub> and Bi <sub>2</sub> S <sub>3</sub> and their Hydrogen Evolution Applications. Chemistry - A European Journal, 2020, 26, 6479-6483.	3.3	15
1766	Electrochemically induced crystallization of amorphous materials in molten MgCl <sub>2</sub> : boron nitride and hard carbon. Chemical Communications, 2020, 56, 2783-2786.	4.1	10
1767	Fast and Universal Solution-Phase Flocculation Strategy for Scalable Synthesis of Various Few-Layered MXene Powders. Journal of Physical Chemistry Letters, 2020, 11, 1247-1254.	4.6	76
1768	van der Waals PtO2/MoS2 heterostructure verified from first principles. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126286.	2.1	9
1769	A 3D Hierarchical Pancake-Like Porous Carbon Nitride for Highly Enhanced Visible-Light Photocatalytic H2 Evolution. Catalysts, 2020, 10, 77.	3.5	2
1770	Advanced Interface Engineering of CH <sub>3</sub> NH <sub>3</sub> Pbl <sub>3</sub> Perovskite Solar Cells: The Unique Role of Layered Double Hydroxide Precursor. ACS Applied Energy Materials, 2020, 3, 1476-1483.	5.1	5

#	Article	IF	CITATIONS
1771	2D Inorganic Materials: from Atomic Crystals to Molecular Crystals. Chemical Research in Chinese Universities, 2020, 36, 147-148.	2.6	3
1772	Exfoliation of metal–organic frameworks into efficient single-layer metal–organic nanosheet electrocatalysts by the synergistic action of host–guest interactions and sonication. Nanoscale, 2020, 12, 3623-3629.	5.6	62
1773	Selective hydrogenation of 2-pentenal using highly dispersed Pt catalysts supported on ZnSnAl mixed metal oxides derived from layered double hydroxides. Catalysis Science and Technology, 2020, 10, 1106-1116.	4.1	3
1774	Manganese oxides transformed from orthorhombic phase to birnessite with enhanced electrochemical performance as supercapacitor electrodes. Journal of Materials Chemistry A, 2020, 8, 3746-3753.	10.3	22
1775	Electronic properties and spintronic applications of carbon phosphide nanoribbons. Physical Review B, 2020, 101, .	3.2	12
1776	Lanthanide Nd ion-doped two-dimensional In <sub>2</sub> Se <sub>3</sub> nanosheets with near-infrared luminescence property. Nanophotonics, 2020, 9, 2407-2414.	6.0	10
1777	Noble Metal Nanostructured Materials for Chemical and Biosensing Systems. Nanomaterials, 2020, 10, 209.	4.1	54
1778	Nanoarchitectonics from Atom to Life. Chemistry - an Asian Journal, 2020, 15, 718-728.	3.3	66
1779	Design, synthesis, characterization, and catalytic properties of g-C3N4-SO3H as an efficient nanosheet ionic liquid for one-pot synthesis of pyrazolo[3,4-b]pyridines and bis(indolyl)methanes. Journal of Molecular Liquids, 2020, 303, 112625.	4.9	31
1780	Creation of a two-dimensional polymer and graphene heterostructure. Nanoscale, 2020, 12, 5170-5174.	5.6	16
1781	Be3BN3 monolayer with ultrawide band gap and promising stability for deep ultraviolet applications. Computational Materials Science, 2020, 177, 109552.	3.0	1
1782	B–O Bonds in Ultrathin Boron Nitride Nanosheets to Promote Photocatalytic Carbon Dioxide Conversion. ACS Applied Materials & Interfaces, 2020, 12, 9935-9943.	8.0	76
1783	Anisotropic Electronic Structure and Interfacial Chemical Reaction of Stanene/Bi <sub>2</sub> Te <sub>3</sub> . Journal of Physical Chemistry C, 2020, 124, 4917-4924.	3.1	12
1784	Photocatalytic properties and energy band offset of a tungsten disulfide/graphitic carbon nitride van der Waals heterojunction. RSC Advances, 2020, 10, 5260-5267.	3.6	13
1785	Mixed-dimensional PdSe <sub>2</sub> /SiNWA heterostructure based photovoltaic detectors for self-driven, broadband photodetection, infrared imaging and humidity sensing. Journal of Materials Chemistry A, 2020, 8, 3632-3642.	10.3	158
1786	Printing 2D Conjugated Polymer Monolayers and Their Distinct Electronic Properties. Advanced Functional Materials, 2020, 30, 1909787.	14.9	20
1787	Metastable Zirconium Phosphate under Nanoconfinement with Superior Adsorption Capability for Water Treatment. Advanced Functional Materials, 2020, 30, 1909014.	14.9	48
1788	Sodiumâ€Mediated Epitaxial Growth of 2D Ultrathin Sb <sub>2</sub> Se <sub>3</sub> Flakes for Broadband Photodetection. Advanced Functional Materials, 2020, 30, 1909849.	14.9	88

#	Article	IF	CITATIONS
1789	Ultrathin two-dimensional metal-organic framework nanosheets decorated with tetra-pyridyl calix[4]arene: Design, synthesis and application in pesticide detection. Sensors and Actuators B: Chemical, 2020, 310, 127819.	7.8	97
1790	2D Covalent Organic Frameworks for Biomedical Applications. Advanced Functional Materials, 2020, 30, 2002046.	14.9	172
1791	Anisotropic polaritons in van der Waals materials. InformaÄnÃ-Materiály, 2020, 2, 777-790.	17.3	36
1792	Cobalt oxyhydroxide nanoflakes with oxidase-mimicking activity induced chemiluminescence of luminol for glutathione detection. Talanta, 2020, 215, 120928.	5.5	34
1793	The electronic properties tuned by the synergy of polaron and d-orbital in a Co–Sn co-intercalated α-MoO <sub>3</sub> system. Journal of Materials Chemistry C, 2020, 8, 6536-6541.	5.5	9
1794	Surface functionalization via synergistic grafting of surface-modified silica nanoparticles and layered double hydroxide nanosheets for fabrication of superhydrophilic but relatively oleophobic antifouling membranes. Separation and Purification Technology, 2020, 247, 116955.	7.9	19
1795	A DFT study of healing the N vacancy in h-BN monolayer by NO molecules. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	7
1796	Femtosecond Laser Micro/Nano-manufacturing: Theories, Measurements, Methods, and Applications. Nanomanufacturing and Metrology, 2020, 3, 26-67.	3.0	48
1797	Unique advantages of 2D inorganic nanosheets in exploring high-performance electrocatalysts: Synthesis, application, and perspective. Coordination Chemistry Reviews, 2020, 415, 213280.	18.8	70
1798	Hierarchically nanostructured Ni(OH)2–MnO2@C ternary composites derived from Ni-MOFs grown on nickel foam as high-performance integrated electrodes for hybrid supercapacitors. Electrochimica Acta, 2020, 343, 136139.	5.2	46
1799	Controlled synthesis of two-dimensional (2-D) ultra-thin bismuth selenide (Bi2Se3) nanosheets by bottom-up solution-phase chemistry and its electrical transport properties for thermoelectric application. FlatChem, 2020, 21, 100165.	5.6	10
1800	Modulation of the electronic structure and magnetism performance of V-doped monolayer MoS2 by strain engineering. Journal of Physics and Chemistry of Solids, 2020, 142, 109459.	4.0	9
1801	Aqueous solutions of carbohydrates are new choices of green solvents for highly efficient exfoliation of two-dimensional nanomaterials. Journal of Molecular Liquids, 2020, 309, 113087.	4.9	12
1802	Atomically Thin 1T-FeCl <sub>2</sub> Grown by Molecular-Beam Epitaxy. Journal of Physical Chemistry C, 2020, 124, 9416-9423.	3.1	50
1803	Boosting Photocatalytic CO <sub>2</sub> Reduction Efficiency by Heterostructures of NH <sub>2</sub> -MIL-101(Fe)/g-C <sub>3</sub> N <sub>4</sub> . ACS Applied Energy Materials, 2020, 3, 3946-3954.	5.1	125
1804	Plasma-Assisted Controllable Doping of Nitrogen into MoS <sub>2</sub> Nanosheets as Efficient Nanozymes with Enhanced Peroxidase-Like Catalysis Activity. ACS Applied Materials & Diterfaces, 2020, 12, 17547-17556.	8.0	97
1805	Epitaxial Growth of Centimeter-Scale Single-Crystal MoS <sub>2</sub> Monolayer on Au(111). ACS Nano, 2020, 14, 5036-5045.	14.6	211
1806	Electrical transport properties in group-V elemental ultrathin 2D layers. Npj 2D Materials and Applications, 2020, 4, .	7.9	35

#	ARTICLE	IF	CITATIONS
1807	Atomically thin PdSeO <sub>3</sub> nanosheets: a promising 2D photocatalyst produced by quaternary ammonium intercalation and exfoliation. Chemical Communications, 2020, 56, 5504-5507.	4.1	23
1808	Phosphorus-based metal-free Z-scheme 2D van der Waals heterostructures for visible-light photocatalytic water splitting: a first-principles study. Physical Chemistry Chemical Physics, 2020, 22, 9250-9256.	2.8	19
1809	High electron mobility, controllable magnetism and anomalous light absorption in a monolayered tin mononitride semiconductor. Journal of Materials Chemistry C, 2020, 8, 6396-6402.	5.5	6
1810	Functional gas sensing nanomaterials: A panoramic view. Applied Physics Reviews, 2020, 7, .	11.3	295
1811	Van der Waals heterostructures of MoS <sub>2</sub> and Janus MoSSe monolayers on graphitic boron-carbon-nitride ( <i>BC</i> <sub>3</sub> , <i>C</i> <sub>3</sub> , <ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>4</sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<i>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<ii>C<sub>,<i>C<sub>,<i>C<sub>,<i>C<sub>,<i>C<sub>,<i>C<sub>,<i>C<sub>,<i>C<sub>,<i>C<sub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,<isub>,&lt;</isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></sub></i></sub></i></sub></i></sub></i></sub></i></sub></i></sub></i></sub></i></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></i></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></sub></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii></ii>	:/sub>N <s< td=""><td>sub&gt;3</td></s<>	sub>3
1812	Strain, electric-field and functionalization induced widely tunable electronic properties in MoS <sub>2</sub> (i>BC <sub>3</sub> ,/ <i>C</i> <sub>3</sub> <i>N</i> and /\$C_{3}N_{4}\$ van der Waals heterostructures. Nanotechnology, 2020, 31, 295202.	2.6	48
1813	Partially hydroxylated ultrathin iridium nanosheets as efficient electrocatalysts for water splitting. National Science Review, 2020, 7, 1340-1348.	9.5	56
1814	Spin splitting with persistent spin textures induced by the line defect in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mn>1</mml:mn><mml:mi>T</mml:mi></mml:math> phase of monolayer transition metal dichalcogenides. Physical Review B, 2020, 101, .	3.2	17
1815	Laser-Assisted Fabrication for Metal Halide Perovskite-2D Nanoconjugates: Control on the Nanocrystal Density and Morphology. Nanomaterials, 2020, 10, 747.	4.1	6
1816	A Honeycombâ€Like Bulk Superstructure of Carbon Nanosheets for Electrocatalysis and Energy Storage. Angewandte Chemie - International Edition, 2020, 59, 19627-19632.	13.8	100
1817	Molecular Tuning Nanoarchitectonics for Molecular Recognition and Molecular Manipulation. ChemNanoMat, 2020, 6, 870-880.	2.8	25
1818	Controlling the electronic and optical properties of HfS <sub>2</sub> mono-layers <i>via</i> lanthanide substitutional doping: a DFT+ <i>U</i> study. RSC Advances, 2020, 10, 15670-15676.	3.6	30
1819	2D transition metal dichalcogenides, carbides, nitrides, and their applications in supercapacitors and electrocatalytic hydrogen evolution reaction. Applied Physics Reviews, 2020, 7, 021304.	11.3	126
1820	A Honeycombâ€Like Bulk Superstructure of Carbon Nanosheets for Electrocatalysis and Energy Storage. Angewandte Chemie, 2020, 132, 19795-19800.	2.0	7
1821	Charge-transfer materials for electrochemical water desalination, ion separation and the recovery of elements. Nature Reviews Materials, 2020, 5, 517-538.	48.7	360
1822	Interstratified heterostructures of metal hydroxide nanoclusters and MoS2 monolayers with improved electrode performance. Nanoscale, 2020, 12, 11759-11766.	5.6	7
1823	Recent advances on metal alkoxide-based electrocatalysts for water splitting. Journal of Materials Chemistry A, 2020, 8, 10130-10149.	10.3	43
1824	Noncovalent Functionalization of Few‣ayered Antimonene with Fullerene Clusters and Photoinduced Charge Separation in the Composite. Chemistry - A European Journal, 2020, 26, 6726-6735.	3.3	7

#	Article	IF	CITATIONS
1825	A Double Cation–πâ€Driven Strategy Enabling Twoâ€Dimensional Supramolecular Polymers as Efficient Catalyst Carriers. Angewandte Chemie, 2020, 132, 9621-9628.	2.0	4
1826	Automated Assembly of Wafer-Scale 2D TMD Heterostructures of Arbitrary Layer Orientation and Stacking Sequence Using Water Dissoluble Salt Substrates. Nano Letters, 2020, 20, 3925-3934.	9.1	25
1827	Anisotropic Transport Property of Antimonene MOSFETs. ACS Applied Materials & Distribution (12, 22378-22386.	8.0	30
1828	Dehydrationâ€Triggered Ionic Channel Engineering in Potassium Niobate for Li/Kâ€Ion Storage. Advanced Materials, 2020, 32, e2000380.	21.0	85
1829	Nanostructures for Electrocatalytic CO <sub>2</sub> Reduction. Chemistry - A European Journal, 2020, 26, 14024-14035.	3.3	26
1830	Spintronics in Two-Dimensional Materials. Nano-Micro Letters, 2020, 12, 93.	27.0	78
1831	Engineering two-dimensional nanomaterials to enable structure-activity relationship studies in nanosafety research. NanoImpact, 2020, 18, 100226.	4.5	11
1832	Construction and Photocatalytic Properties of TiO2@HNb3O8-NS. Journal of Molecular Structure, 2020, 1212, 128126.	3.6	6
1833	Atomic-Scale Imaging of a Free-Standing Monolayer Clay Mineral Nanosheet Using Scanning Transmission Electron Microscopy. Journal of Physical Chemistry Letters, 2020, 11, 3357-3361.	4.6	12
1834	The synthesis of interface-modulated ultrathin Ni( <scp>ii</scp> ) MOF/g-C <sub>3</sub> N <sub>4</sub> heterojunctions as efficient photocatalysts for CO <sub>2</sub> reduction. Nanoscale, 2020, 12, 10010-10018.	5.6	64
1835	Magneto-electronic properties, carrier mobility and strain effects of InSe nanoribbon. Journal of Physics Condensed Matter, 2020, 32, 015303.	1.8	3
1836	Low-dimensional materials as saturable absorbers for pulsed waveguide lasers. JPhys Photonics, 2020, 2, 031001.	4.6	6
1837	Conductive metalâ€organic frameworks: Recent advances in electrochemical energyâ€related applications and perspectives. , 2020, 2, 203-222.		75
1838	Controllable structure reconstruction of nickel–iron compounds toward highly efficient oxygen evolution. Nanoscale, 2020, 12, 10751-10759.	5.6	19
1839	Ultralow loading of nanostructured Mn species onto two-dimensional Co <sub>3</sub> O <sub>4</sub> nanosheets for selective catalytic reduction of NO <sub>x</sub> with NH <sub>3</sub> . Catalysis Science and Technology, 2020, 10, 3450-3457.	4.1	16
1840	Diyne-linked and fully π-conjugated polymetalloporphyrin nanosheets for outstanding heterogeneous catalysis. Science Bulletin, 2021, 66, 354-361.	9.0	7
1841	2D Transition Metal Dichalcogenides: Design, Modulation, and Challenges in Electrocatalysis. Advanced Materials, 2021, 33, e1907818.	21.0	284
1842	Two-dimensional (2D) materials beyond graphene in cancer drug delivery, photothermal and photodynamic therapy, recent advances and challenges ahead: A review. Journal of Drug Delivery Science and Technology, 2021, 61, 101830.	3.0	39

#	Article	IF	Citations
1843	Controllable preparation of ultrathin 2D BiOBr crystals for high-performance ultraviolet photodetector. Science China Materials, 2021, 64, 189-197.	6.3	20
1844	Surface charge transfer doping for two-dimensional semiconductor-based electronic and optoelectronic devices. Nano Research, 2021, 14, 1682-1697.	10.4	72
1845	Transition metal carbides in electrocatalytic oxygen evolution reaction. Chinese Chemical Letters, 2021, 32, 291-298.	9.0	91
1846	Bandgap-tuned ultra-small SnO2-nanoparticle-decorated 2D-Bi2WO6 nanoplates for visible-light-driven photocatalytic applications. Chemosphere, 2021, 263, 128185.	8.2	18
1847	Understanding all solid-state lithium batteries through in situ transmission electron microscopy. Materials Today, 2021, 42, 137-161.	14.2	64
1848	Layered materials for supercapacitors and batteries: Applications and challenges. Progress in Materials Science, 2021, 118, 100763.	32.8	48
1849	Wettability of MXene and its interfacial adhesion with epoxy resin. Materials Chemistry and Physics, 2021, 257, 123820.	4.0	27
1850	Liâ€decorated <scp>Al<sub>2</sub>C</scp> monolayer as a potential template for hydrogen storage: A firstâ€principles perspective. International Journal of Quantum Chemistry, 2021, 121, e26528.	2.0	22
1851	2D Materials as Electron Transport Layer for Lowâ€Temperature Solutionâ€Processed Perovskite Solar Cells. Solar Rrl, 2021, 5, 2000566.	5.8	12
1852	Liquid superlubricity with 2D material additives. , 2021, , 167-187.		1
1853	Two-dimensional materials for light emitting applications: Achievement, challenge and future perspectives. Nano Research, 2021, 14, 1912-1936.	10.4	34
1854	Full recycling of spent lithium ion batteries with production of core-shell nanowires//exfoliated graphite asymmetric supercapacitor. Journal of Energy Chemistry, 2021, 58, 336-344.	12.9	46
1855	Geometric, Electronic and Optical Properties of Pt-Doped C <sub>3</sub> N Monolayer Upon NO <sub>x</sub> Adsorption: A DFT Study. IEEE Sensors Journal, 2021, 21, 3602-3608.	4.7	43
1856	Toxic volatile organic compounds sensing by Al2C monolayer: A first-principles outlook. Journal of Hazardous Materials, 2021, 403, 123600.	12.4	22
1857	The Missing Link in the Magnetism of Hybrid Cobalt Layered Hydroxides: The Odd–Even Effect of the Organic Spacer. Chemistry - A European Journal, 2021, 27, 921-927.	3.3	10
1858	Two-dimensional black phosphorus nanoflakes: A coreactant-free electrochemiluminescence luminophors for selective Pb2+ detection based on resonance energy transfer. Journal of Hazardous Materials, 2021, 403, 123601.	12.4	34
1859	Nickel sulfide-based energy storage materials for high-performance electrochemical capacitors. Rare Metals, 2021, 40, 353-373.	7.1	81
1860	Photocatalytic Water Splitting Utilizing Electrospun Semiconductors for Solar Hydrogen Generation: Fabrication, Modification and Performance. Bulletin of the Chemical Society of Japan, 2021, 94, 8-20.	3.2	42

#	ARTICLE	IF	CITATIONS
1861	Polymer "Tapeâ€ê€Assisted Ballâ€Milling Method Fabrication Fewâ€Atomic‣ayered Bismuth for Improving K <sup>+</sup> /Na <sup>+</sup> Storage. Energy and Environmental Materials, 2021, 4, 421-427.	12.8	11
1862	Two-dimensional polymer nanosheets for efficient energy storage and conversion. Nano Research, 2021, 14, 2023-2036.	10.4	28
1863	Recent developments on anode materials for magnesium-ion batteries: a review. Rare Metals, 2021, 40, 290-308.	7.1	75
1864	3D printing of graphene oxide composites with well controlled alignment. Carbon, 2021, 171, 777-784.	10.3	35
1865	2D-titanium carbide (MXene) based selective electrochemical sensor for simultaneous detection of ascorbic acid, dopamine and uric acid. Journal of Materials Science and Technology, 2021, 72, 122-131.	10.7	103
1866	Rationally designed conjugated microporous polymers for contaminants adsorption. Science of the Total Environment, 2021, 750, 141683.	8.0	45
1867	Hydrogen storage on pristine and Li-decorated BC <sub>6</sub> N monolayer from first-principles insights. Molecular Physics, 2021, 119, e1827177.	1.7	24
1868	Controllable fabrication of two-dimensional layered transition metal oxides through electrochemical exfoliation of non-van der Waals metals for rechargeable zinc-ion batteries. Chemical Engineering Journal, 2021, 408, 127247.	12.7	19
1869	Rethinking the reaction pathways of chemical reduction of graphene oxide. Carbon, 2021, 171, 963-967.	10.3	15
1870	Mesoporous silica supported phosphotungstic acid catalyst for glycerol dehydration to acrolein. Catalysis Today, 2021, 376, 55-64.	4.4	22
1871	Future roadmap on nonmetal-based 2D ultrathin nanomaterials for photocatalysis. Chemical Engineering Journal, 2021, 406, 126780.	12.7	39
1872	Recent advances in photodegradation of antibiotic residues in water. Chemical Engineering Journal, 2021, 405, 126806.	12.7	234
1873	Recent advances in MXene-based nanocomposites for electrochemical energy storage applications. Progress in Materials Science, 2021, 117, 100733.	32.8	97
1874	Confinement in two-dimensional materials: Major advances and challenges in the emerging renewable energy conversion and other applications. Progress in Solid State Chemistry, 2021, 61, 100294.	7.2	24
1875	Subâ€3 nm Ultrafine Cu <sub>2</sub> O for Visible Light Driven Nitrogen Fixation. Angewandte Chemie - International Edition, 2021, 60, 2554-2560.	13.8	134
1876	Excellent sustained-release efficacy of herbicide quinclorac with cationic covalent organic frameworks. Chemical Engineering Journal, 2021, 405, 126979.	12.7	50
1877	Bottom-up fabrication of ultrathin CoFe layered double hydroxide nanosheets on oxidized carbon nanotube as a water oxidation electrocatalyst. Journal of Alloys and Compounds, 2021, 857, 157570.	5.5	8
1878	2D Sn/C freestanding frameworks as a robust nucleation layer for highly stable sodium metal anodes with a high utilization. Nano Energy, 2021, 79, 105457.	16.0	46

#	Article	IF	CITATIONS
1879	Stacking of 2D Materials. Advanced Functional Materials, 2021, 31, 2007810.	14.9	123
1880	Emerging porous nanosheets: From fundamental synthesis to promising applications. Nano Research, 2021, 14, 1-28.	10.4	69
1881	Novel 2D SnNb2O6/Ag3VO4 S-scheme heterojunction with enhanced visible-light photocatalytic activity. Ceramics International, 2021, 47, 7169-7176.	4.8	24
1882	"More is Different:―Synergistic Effect and Structural Engineering in Doubleâ€Atom Catalysts. Advanced Functional Materials, 2021, 31, 2007423.	14.9	179
1883	Nanomaterials in the environment, human exposure pathway, and health effects: A review. Science of the Total Environment, 2021, 759, 143470.	8.0	133
1884	Ultrathin sulfur-doped holey carbon nitride nanosheets with superior photocatalytic hydrogen production from water. Applied Catalysis B: Environmental, 2021, 284, 119742.	20.2	88
1885	Adsorption and sensing performance of CO, NO and O2 gas on Janus structure WSTe monolayer. Computational and Theoretical Chemistry, 2021, 1195, 113089.	2.5	11
1886	The Art of Constructing Black Phosphorus Nanosheet Based Heterostructures: From 2D to 3D. Advanced Materials, 2021, 33, e2005254.	21.0	33
1887	Hexagonal boron nitride composite photocatalysts for hydrogen production. Journal of Alloys and Compounds, 2021, 864, 158153.	5 <b>.</b> 5	26
1888	Electronic and optical studies on two-dimensional hydrogenated stirrup triels nitride nanosheets: A first-principle investigation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 264, 114978.	3 <b>.</b> 5	8
1889	FeOx clusters decorated hcp Ni nanosheets as inverse electrocatalyst to stimulate excellent oxygen evolution performance. Applied Catalysis B: Environmental, 2021, 284, 119687.	20.2	33
1890	Two-dimensional poly(3,4-ethylenedioxythiophene) nanosheets for highly electrochemical detection of iodide ions. Analytica Chimica Acta, 2021, 1144, 122-129.	5.4	6
1891	Ultrahigh carrier mobility and light-harvesting performance of 2D penta-PdX2 monolayer. Journal of Materials Science, 2021, 56, 3846-3860.	3.7	24
1892	Engineered two-dimensional nanomaterials: an emerging paradigm for water purification and monitoring. Materials Horizons, 2021, 8, 758-802.	12.2	92
1893	Structure, Preparation, and Applications of 2D Materialâ€Based Metalâ€"Semiconductor Heterostructures. Small Structures, 2021, 2, 2000093.	12.0	71
1894	A hybrid of ultrathin metal-organic framework sheet and ultrasmall copper nanoparticles for detection of hydrogen peroxide with enhanced activity. Analytical and Bioanalytical Chemistry, 2021, 413, 839-851.	3.7	19
1895	Fe-doped C3N monolayer as a promising SAC for CO oxidation with low temperature and high reactivity. Computational and Theoretical Chemistry, 2021, 1194, 113080.	2.5	8
1896	Tuning the hybrid boropheneâ^'/graphene-ionic liquid interface: Effect of metal cations on the electronic and photonic properties. Journal of Molecular Liquids, 2021, 321, 114759.	4.9	7

#	Article	IF	CITATIONS
1897	Tunable Optical Properties of 2D Materials and Their Applications. Advanced Optical Materials, 2021, 9, 2001313.	7.3	100
1898	The unique carrier mobility of Janus MoSSe/GaN heterostructures. Frontiers of Physics, 2021, 16, 1.	5.0	18
1899	In situ construction of N-doped amorphous CoFe selenites toward efficient electrocatalytic water oxidation. Journal of Power Sources, 2021, 483, 229196.	7.8	15
1900	Synergistic two- and three-dimensional morphology engineering of pyrite-type CoPS to boost hydrogen evolution over wide pH range. Journal of Power Sources, 2021, 484, 229144.	7.8	7
1901	Total-conversion, high-concentration exfoliation of two-dimensional boron nitride by paste-based sand milling strategy for massively producing high-performance nanocomposites. Composites Science and Technology, 2021, 201, 108545.	7.8	11
1902	Carbon-coated ultrathin metallic V5Se8 nanosheet for high-energy-density and robust potassium storage. Energy Storage Materials, 2021, 35, 1-11.	18.0	35
1903	Elemental 2D Materials: Progress and Perspectives Toward Unconventional Structures. Small Structures, 2021, 2, 2000101.	12.0	30
1904	Visible-light driven Znln2S4/TiO2-x heterostructure for boosting photocatalytic H2 evolution. International Journal of Hydrogen Energy, 2021, 46, 6262-6271.	7.1	53
1905	Laminated GO membranes for water transport and ions selectivity: Mechanism, synthesis, stabilization, and applications. Separation and Purification Technology, 2021, 259, 118192.	7.9	23
1906	Direct synthesis of defective ultrathin brookite-phase TiO <sub>2</sub> nanosheets showing flexible electronic band states. Chemical Communications, 2021, 57, 500-503.	4.1	3
1907	Emerging Monoâ€Elemental Bismuth Nanostructures: Controlled Synthesis and Their Versatile Applications. Advanced Functional Materials, 2021, 31, 2007584.	14.9	102
1908	Few-layered CuInP <sub>2</sub> S <sub>6</sub> nanosheet with sulfur vacancy boosting photocatalytic hydrogen evolution. CrystEngComm, 2021, 23, 591-598.	2.6	25
1909	Insights on the dual role of two-dimensional materials as catalysts and supports for energy and environmental catalysis. Journal of Materials Chemistry A, 2021, 9, 2018-2042.	10.3	34
1910	Unveiling surface charge on chalcogen atoms toward the high aspect-ratio colloidal growth of two-dimensional transition metal chalcogenides. Nanoscale, 2021, 13, 1291-1302.	5.6	2
1911	Integrated transition metal and compounds with carbon nanomaterials for electrochemical water splitting. Journal of Materials Chemistry A, 2021, 9, 3786-3827.	10.3	140
1912	Three-dimensional N-doped super-hydrophilic carbon electrodes with porosity tailored by Cu <sub>2</sub> 0 template-assisted electrochemical oxidation to improve the performance of electrical double-layer capacitors. Journal of Materials Chemistry A, 2021, 9, 2928-2936.	10.3	21
1913	Fabrication of ultrathin single-layer 2D metal–organic framework nanosheets with excellent adsorption performance <i>via</i> a facile exfoliation approach. Journal of Materials Chemistry A, 2021, 9, 546-555.	10.3	55
1914	Amino-rich carbon quantum dots ultrathin nanofiltration membranes by double "one-step―methods: Breaking through trade-off among separation, permeation and stability. Chemical Engineering Journal, 2021, 404, 127144.	12.7	51

#	Article	IF	CITATIONS
1915	Liquid Exfoliated SnP <sub>3</sub> Nanosheets for Very High Areal Capacity Lithiumâ€lon Batteries. Advanced Energy Materials, 2021, 11, 2002364.	19.5	40
1916	Solvothermal synthesis of carbonate-type layered double hydroxide monolayer nanosheets: Solvent selection based on characteristic parameter matching criterion. Journal of Colloid and Interface Science, 2021, 587, 324-333.	9.4	4
1917	Efficient charge separation and visible-light response of two-dimensional Janus group-III monochalcogenide multilayers. Catalysis Science and Technology, 2021, 11, 542-555.	4.1	20
1918	Twoâ€Dimensional Metal–Organic Frameworksâ€Based Electrocatalysts for Oxygen Evolution and Oxygen Reduction Reactions. Advanced Energy and Sustainability Research, 2021, 2, 2000067.	5.8	29
1919	Discrete composition control of two-dimensional morphologic all-inorganic metal halide perovskite nanocrystals. Journal of Energy Chemistry, 2021, 59, 257-275.	12.9	15
1920	Microwave-mechanochemistry-assisted synthesis of Z-scheme HSr2Nb3O10/WO3 heterojunctions for improved simulated sunlight driven photocatalytic activity. Journal of Environmental Chemical Engineering, 2021, 9, 104624.	6.7	8
1921	Pollens derived magnetic porous particles for adsorption of low-density lipoprotein from plasma. Bioactive Materials, 2021, 6, 1555-1562.	15.6	19
1922	Fabrication of Fe nanocomplex pillared few-layered Ti3C2Tx MXene with enhanced rate performance for lithium-ion batteries. Nano Research, 2021, 14, 1218-1227.	10.4	45
1923	Magnetically controlled 2D nano-DNA fluorescent biosensor for selective and sensitive detection of alkaline phosphatase activity. Sensors and Actuators B: Chemical, 2021, 327, 128914.	7.8	17
1924	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
1925	Recent Advances in Electrochemical Water Splitting and Reduction of CO <sub>2</sub> into Green Fuels on 2D Phosphoreneâ€Based Catalyst. Energy Technology, 2021, 9, .	3.8	14
1926	Theoretical investigation of electronic and optical properties of 2D transition metal dichalcogenides MoX2 (XÂ=ÂS, Se, Te) from first-principles. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 126, 114416.	2.7	14
1927	Recent Advances in Graphitic Carbon Nitride Supported Singleâ€Atom Catalysts for Energy Conversion. ChemCatChem, 2021, 13, 1250-1270.	3.7	46
1928	Ultrahigh carrier mobility of penta-graphene: A first-principle study. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 127, 114507.	2.7	50
1929	Epitaxial growth, electronic hybridization and stability under oxidation of monolayer MoS2 on Ag(1 $1$ ) Tj ETQq0 $0$	)	)verlock 10 Tf
1930	Facile preparation and highly efficient photodegradation performances of self-assembled Artemia eggshell-ZnO nanocomposites for wastewater treatment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 610, 125752.	4.7	62
1931	A sustainable and nondestructive method to high-throughput decolor Lycium barbarum L. polysaccharides by graphene-based nano-decoloration. Food Chemistry, 2021, 338, 127749.	8.2	7
1932	Subâ€3 nm Ultrafine Cu 2 O for Visible Light Driven Nitrogen Fixation. Angewandte Chemie, 2021, 133, 2584-2590.	2.0	13

#	Article	IF	CITATIONS
1933	Recent advances of monoelemental 2D materials for photocatalytic applications. Journal of Hazardous Materials, 2021, 405, 124179.	12.4	78
1934	One-step hydrothermal synthesis of S-defect-controlled ZnIn2S4 microflowers with improved kinetics process of charge-carriers for photocatalytic H2 evolution. Journal of Energy Chemistry, 2021, 58, 397-407.	12.9	100
1935	Liquid exfoliated biocompatible WS <sub>2</sub> @BSA nanosheets with enhanced theranostic capacity. Biomaterials Science, 2021, 9, 148-156.	5 <b>.</b> 4	18
1936	Advances in 2D/2D Zâ€Scheme Heterojunctions for Photocatalytic Applications. Solar Rrl, 2021, 5, 2000397.	5.8	82
1937	Atomic-scale insights into the formation of 2D crystals from in situ transmission electron microscopy. Nano Research, 2021, 14, 1650-1658.	10.4	12
1938	Sensing Applications of Atomically Thin Group IV Carbon Siblings Xenes: Progress, Challenges, and Prospects. Advanced Functional Materials, 2021, 31, 2005957.	14.9	37
1939	Recent advances and perspective on heterogeneous catalysis using metals and oxide nanocrystals. Materials Chemistry Frontiers, 2021, 5, 151-222.	5.9	18
1940	Synergetic enhancement of surface reactions and charge separation over holey C3N4/TiO2 2D heterojunctions. Science Bulletin, 2021, 66, 275-283.	9.0	61
1941	Sol–gel synthesis of 2-dimensional TiO2: self-assembly of Ti–oxoalkoxy–acetate complexes by carboxylate ligand directed condensation. Faraday Discussions, 2021, 227, 125-140.	3.2	7
1942	Single transition metal atom embedded antimonene monolayers as efficient trifunctional electrocatalysts for the HER, OER and ORR: a density functional theory study. Nanoscale, 2021, 13, 12885-12895.	5.6	56
1943	Direct bottom-up synthesis of size-controlled monodispersed single-layer magnesium hydroxide nanosheets modified with tripodal ligands. Dalton Transactions, 2021, 50, 3121-3126.	3.3	5
1944	Synthesis of MoS2 materials for photocatalysis applications and pollution abatement., 2021,, 283-300.		0
1945	Harnessing selectivity in chemical sensing <i>via</i> supramolecular interactions: from functionalization of nanomaterials to device applications. Materials Horizons, 2021, 8, 2685-2708.	12.2	18
1946	Recent Advances in 2D Layered Phosphorous Compounds. Small Methods, 2021, 5, e2001068.	8.6	15
1947	Covalent functionalization of two-dimensional black phosphorus nanosheets with porphyrins and their photophysical characterization. Materials Chemistry Frontiers, 2021, 5, 2824-2831.	5.9	21
1948	Pentagonal B <sub>2</sub> C monolayer with extremely high theoretical capacity for Li-/Na-ion batteries. Physical Chemistry Chemical Physics, 2021, 23, 6278-6285.	2.8	30
1949	Two-dimensional aluminium, gallium, and indium metallic crystals by first-principles design. Journal of Physics Condensed Matter, 2021, 33, 125901.	1.8	12
1950	A novel graphene-based micro/nano architecture with high strength and conductivity inspired by multiple creatures. Scientific Reports, 2021, 11, 1387.	3.3	6

#	Article	IF	CITATIONS
1951	Synthetic ferripyrophyllite: preparation, characterization and catalytic application. Dalton Transactions, 2021, 50, 850-857.	3.3	3
1952	Mass spectrometry for multi-dimensional characterization of natural and synthetic materials at the nanoscale. Chemical Society Reviews, 2021, 50, 5243-5280.	38.1	23
1953	Throwing light on the current developments of two-dimensional metal–organic framework nanosheets (2D MONs). Materials Advances, 2021, 2, 4914-4944.	5 <b>.</b> 4	15
1954	Molecular mechanisms underlying the role of the puckered surface in the biocompatibility of black phosphorus. Nanoscale, 2021, 13, 3790-3799.	5.6	9
1955	High-valence-state Ni–Fe bimetallic phosphonate nanoribbons catalyst for enhanced photocatalytic and electrocatalytic oxygen production. Journal of Materials Science, 2021, 56, 8091-8101.	3.7	3
1956	Preparation and applications of freestanding Janus nanosheets. Nanoscale, 2021, 13, 15151-15176.	5.6	21
1957	Overcoming barriers in photodynamic therapy harnessing nano-formulation strategies. Chemical Society Reviews, 2021, 50, 9152-9201.	38.1	254
1958	A new type of noncovalent surface–π stacking interaction occurring on peroxide-modified titania nanosheets driven by vertical π-state polarization. Chemical Science, 2021, 12, 4411-4417.	7.4	13
1959	Ohmic Contact Engineering for Two-Dimensional Materials. Cell Reports Physical Science, 2021, 2, 100298.	5.6	81
1960	Controlled growth of 2D ultrathin Ga <sub>2</sub> O <sub>3</sub> crystals on liquid metal. Nanoscale Advances, 2021, 3, 4411-4415.	4.6	5
1961	A review on two-dimensional materials for chemiresistive- and FET-type gas sensors. Physical Chemistry Chemical Physics, 2021, 23, 15420-15439.	2.8	49
1962	Ultrasensitive broadband photodetectors based on two-dimensional Bi <sub>2</sub> O <sub>2</sub> Te films. Journal of Materials Chemistry C, 2021, 9, 13713-13721.	<b>5.</b> 5	12
1963	Fabrication of Mo <sub>1.33</sub> CT <sub>z</sub> (MXene)â€"cellulose freestanding electrodes for supercapacitor applications. Materials Advances, 2021, 2, 743-753.	5.4	15
1964	Bioactive engineered photothermal nanomaterials: from theoretical understanding to cutting-edge application strategies in anti-cancer therapy. Materials Chemistry Frontiers, 2021, 5, 5257-5297.	5 <b>.</b> 9	18
1965	Two-dimensional biomaterials: material science, biological effect and biomedical engineering applications. Chemical Society Reviews, 2021, 50, 11381-11485.	38.1	129
1966	Defect engineering of oxide perovskites for catalysis and energy storage: synthesis of chemistry and materials science. Chemical Society Reviews, 2021, 50, 10116-10211.	38.1	140
1967	Magnetron sputtering enabled sustainable synthesis of nanomaterials for energy electrocatalysis. Green Chemistry, 2021, 23, 2834-2867.	9.0	96
1968	Metallenes as functional materials in electrocatalysis. Chemical Society Reviews, 2021, 50, 6700-6719.	38.1	253

#	Article	IF	CITATIONS
1969	Nonvolatile magnetoelectric coupling in two-dimensional ferromagnetic-bilayer/ferroelectric van der Waals heterostructures. Nanoscale, 2021, 13, 14214-14220.	5.6	7
1970	Hydrophobic Two-Dimensional MoS <sub>2</sub> Nanosheets Embedded in a Polyether Copolymer Block Amide (PEBA) Membrane for Recovering Pyridine from a Dilute Solution. ACS Omega, 2021, 6, 2675-2685.	3.5	21
1971	Hybrid dual-function thermal energy harvesting and storage technologies: towards self-chargeable flexible/wearable devices. Dalton Transactions, 2021, 50, 9983-10013.	3.3	13
1972	Two-dimensional metallic carbon allotrope with multiple rings for ion batteries. Physical Chemistry Chemical Physics, 2021, 23, 18770-18776.	2.8	17
1973	The interaction between vacancy defects in gallium sulfide monolayer and a new vacancy defect model. Physical Chemistry Chemical Physics, 2021, 23, 13623-13632.	2.8	6
1974	Two-dimensional oxide quasicrystal approximants with tunable electronic and magnetic properties. Nanoscale, 2021, 13, 10771-10779.	5.6	7
1975	Two-dimensional materials-based nanoplatforms for lung cancer management: Synthesis, properties, and targeted therapy., 2021,, 415-429.		1
1976	Moir $\tilde{A}$ © superlattices and related moir $\tilde{A}$ © excitons in twisted van der Waals heterostructures. Chemical Society Reviews, 2021, 50, 6401-6422.	38.1	38
1977	Recent progress of two-dimensional nanosheet membranes and composite membranes for separation applications. Frontiers of Chemical Science and Engineering, 2021, 15, 793-819.	4.4	36
1978	Metal–organic frameworks and their derivatives as electrocatalysts for the oxygen evolution reaction. Chemical Society Reviews, 2021, 50, 2663-2695.	38.1	333
1979	Current Advances in Black Phosphorusâ€Based Drug Delivery Systems for Cancer Therapy. Advanced Science, 2021, 8, 2003033.	11.2	70
1980	Freestanding perovskite oxide monolayers as two-dimensional semiconductors. Nanotechnology, 2021, 32, 145705.	2.6	11
1981	Nuclearity expansion in Pd clusters triggered by the migration of a phenyl group in cyclooligosilanes. Chemical Communications, 2021, 57, 7649-7652.	4.1	7
1982	Nonlinear plate theory of single-layered MoS <sub>2</sub> with thermal effect. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 136201.	0.5	0
1983	Electrochemiluminescent chiral discrimination with chiral Ag <sub>2</sub> S quantum dots/few-layer carbon nitride nanosheets. Analyst, The, 2021, 146, 6245-6251.	3.5	8
1984	Emerging beyond-graphene elemental 2D materials for energy and catalysis applications. Chemical Society Reviews, 2021, 50, 10983-11031.	38.1	170
1985	Penta-MS <sub>2</sub> (M = Mn, Ni, Cu/Ag and Zn/Cd) monolayers with negative Poisson's ratios and tunable bandgaps as water-splitting photocatalysts. Journal of Materials Chemistry A, 2021, 9, 6993-7004.	10.3	42
1986	A review on g-C <sub>3</sub> N <sub>4</sub> /graphene nanocomposites: multifunctional roles of graphene in the nanohybrid photocatalyst toward photocatalytic applications. Catalysis Science and Technology, 2021, 11, 6018-6040.	4.1	23

#	Article	IF	CITATIONS
1987	Thickness control of 2D nanosheets assembled from precise side-chain giant molecules. Chemical Science, 2021, 12, 5216-5223.	7.4	13
1988	Two-dimensional multimetallic alloy nanocrystals: recent progress and challenges. CrystEngComm, 2021, 23, 6454-6469.	2.6	8
1989	Defects of monolayer Pbl <sub>2</sub> : a computational study. Physical Chemistry Chemical Physics, 2021, 23, 20553-20559.	2.8	4
1990	Tunable metal–organic framework nanoarrays on carbon cloth constructed by a rational self-sacrificing template for efficient and robust oxygen evolution reactions. CrystEngComm, 2021, 23, 7090-7096.	2.6	6
1991	Molecular engineering of diketopyrrolopyrrole-conjugated polymer nanoparticles by chalcogenide variation for photoacoustic imaging guided photothermal therapy. Journal of Materials Chemistry B, 2021, 9, 3153-3160.	5.8	14
1992	The ultrahigh discharge efficiency and energy density of P(VDF-HFP) <i>via</i> electrospinning-hot press with St-MMA copolymer. Materials Chemistry Frontiers, 2021, 5, 3646-3656.	5.9	8
1993	Gate-bias instability of few-layer WSe <sub>2</sub> field effect transistors. RSC Advances, 2021, 11, 6818-6824.	3.6	6
1994	2D Materials for electrochemical carbon dioxide reduction. , 2021, , 183-196.		1
1995	A MoSe <sub>2</sub> quantum dot modified hole extraction layer enables binary organic solar cells with improved efficiency and stability. Journal of Materials Chemistry A, 2021, 9, 16500-16509.	10.3	16
1996	A versatile sea anemone-inspired strategy toward 2D hybrid porous carbons from functional molecular brushes. Chemical Communications, 2021, 57, 1446-1449.	4.1	2
1997	Thermoelectric effect and devices on <scp>IVA</scp> and <scp>VA</scp> Xenes. InformaÄnÃ-Materiály, 2021, 3, 271-292.	17.3	17
1998	Plasmonic photo-assisted electrochemical sensor for detection of trace lead ions based on Au anchored on two-dimensional g-C3N4/graphene nanosheets. Rare Metals, 2021, 40, 1727-1737.	7.1	38
1999	Layered double hydroxides as advanced tracks to promote ionic conductivity in metal borohydride. Materials Chemistry Frontiers, 2021, 5, 4989-4996.	5.9	6
2000	Interlayer Structural Engineering of 2D MXene for Electrochemical Energy Storage. , 2021, , 451-478.		0
2001	Broadening the scope of high structural dimensionality nanomaterials using pyridine-based curcuminoids. Dalton Transactions, 2021, 50, 7056-7064.	3.3	2
2002	Mechanically rollable photodetectors enabled by centimetre-scale 2D MoS2 layer/TOCN composites. Nanoscale Advances, 2021, 3, 3028-3034.	4.6	5
2003	Low-Cost Transformation of Biomass-Derived Carbon to High-Performing Nano-graphite via Low-Temperature Electrochemical Graphitization. ACS Applied Materials & Samp; Interfaces, 2021, 13, 4393-4401.	8.0	26
2004	Recent innovations in properties of nanostructured glasses and composites. Journal of Experimental Nanoscience, 2021, 16, 180-211.	2.4	5

#	Article	IF	CITATIONS
2005	Microwave absorption performance of hexagonal nano boron nitride doped basalt fabric-reinforced epoxy composites. Aircraft Engineering and Aerospace Technology, 2021, 93, 205-211.	1.2	4
2006	Core@shell and lateral heterostructures composed of SnS and NbS <sub>2</sub> . Nanoscale, 2021, 13, 5489-5496.	5.6	7
2007	Alkaline salt-promoted construction of hydrophilic and nitrogen deficient graphitic carbon nitride with highly improved photocatalytic efficiency. Journal of Materials Chemistry A, 2021, 9, 4700-4706.	10.3	23
2008	Two-dimensional Ti <sub>3</sub> C <sub>2</sub> MXene-based nanostructures for emerging optoelectronic applications. Materials Horizons, 2021, 8, 2929-2963.	12.2	37
2009	A review of confined-structure catalysts in the catalytic oxidation of VOCs: synthesis, characterization, and applications. Catalysis Science and Technology, 2021, 11, 5374-5387.	4.1	38
2010	Multiple C–Hâ∢anion and N–Hâ∢anion hydrogen bond directed two-dimensional crystalline nanosheets with precise distance control of surface charges for enhanced DNA capture. Soft Matter, 2021, 17, 9125-9130.	2.7	1
2011	Transition metal dichalcogenide-decorated MXenes: promising hybrid electrodes for energy storage and conversion applications. Materials Chemistry Frontiers, 2021, 5, 3298-3321.	5.9	66
2012	Dual modulation of lattice strain and charge polarization induced by Co(OH) <sub>2</sub> /Ni(OH) <sub>2</sub> interfaces for efficient oxygen evolution catalysis. Journal of Materials Chemistry A, 2021, 9, 13279-13287.	10.3	32
2013	Tunable photocatalytic water splitting and solar-to-hydrogen efficiency in β-PdSe <sub>2</sub> monolayer. Catalysis Science and Technology, 2021, 11, 6445-6454.	4.1	22
2014	Strategies and applications of covalent organic frameworks as promising nanoplatforms in cancer therapy. Journal of Materials Chemistry B, 2021, 9, 3450-3483.	5.8	36
2015	<i>Operando</i> Leaching of Pre-Incorporated Al and Mechanism in Transition Metal Hybrids for Elaborately Enhanced Charge Storage. SSRN Electronic Journal, 0, , .	0.4	0
2016	Chalcogenides as well as chalcogenides-based nanomaterials and its importance in photocatalysis. , 2021, , 33-76.		3
2017	Ultrasonic assisted exfoliation for efficient production of RuO2 monolayer nanosheets. Inorganic Chemistry Frontiers, 0, , .	6.0	5
2018	Recent advances in the photothermal applications of two-dimensional nanomaterials: photothermal therapy and beyond. Journal of Materials Chemistry A, 2021, 9, 17569-17591.	10.3	84
2019	Improving hydrogen evolution activity of two-dimensional nanosheets MoNi4/MoO2.5-NF self-supporting electrocatalyst by electrochemical-cycling activation. Journal of Materials Science, 2021, 56, 6945-6954.	3.7	6
2020	Supramolecular nanomedicine derived from cucurbit[7]uril-conjugated nano-graphene oxide for multi-modality cancer therapy. Biomaterials Science, 2021, 9, 3804-3813.	5.4	27
2021	Wafer-scale single crystals: crystal growth mechanisms, fabrication methods, and functional applications. Journal of Materials Chemistry C, 2021, 9, 7829-7851.	5 <b>.</b> 5	11
2022	Tuning the electrochemical performance of Ti <sub>3</sub> C <sub>2</sub> and Hf <sub>3</sub> C <sub>2</sub> monolayer by functional groups for metal-ion battery applications. Nanoscale, 2021, 13, 11534-11543.	5.6	25

#	ARTICLE	IF	CITATIONS
2023	Emerging elemental two-dimensional materials for energy applications. Journal of Materials Chemistry A, 2021, 9, 18793-18817.	10.3	30
2024	Recent advances in 2D MXene-based heterostructured photocatalytic materials., 2021,, 329-362.		4
2025	A 2D MOF-based artificial light-harvesting system with chloroplast bionic structure for photochemical catalysis. Journal of Materials Chemistry A, 2021, 9, 9301-9306.	10.3	29
2026	Modular metal-free catalytic radical annulation of cyclic diaryliodoniums to access π-extended arenes. Green Chemistry, 2021, 23, 1972-1977.	9.0	12
2027	Recent advances and perspectives of two-dimensional Ti-based electrodes for electrochemical energy storage. Sustainable Energy and Fuels, 2021, 5, 5061-5113.	4.9	11
2028	State-of-the-art surface oxide semiconductors of liquid metals: an emerging platform for development of multifunctional two-dimensional materials. Journal of Materials Chemistry A, 2021, 9, 34-73.	10.3	26
2029	2D metal–organic framework-based materials for electrocatalytic, photocatalytic and thermocatalytic applications. Nanoscale, 2021, 13, 3911-3936.	5.6	176
2030	A C <sub>2</sub> N/ZnSe heterostructure with type-II band alignment and excellent photocatalytic water splitting performance. New Journal of Chemistry, 2021, 45, 13571-13578.	2.8	10
2031	Large-scale visualization of the dispersion of liquid-exfoliated two-dimensional nanosheets. Chemical Communications, 2021, 57, 4303-4306.	4.1	2
2032	MXene-based photocatalysts. , 2021, , 333-357.		O
2033	Gas-sensing performance of BC <sub>3</sub> nanotubes for detecting poisonous cyanogen gas: a periodic DFT approach. New Journal of Chemistry, 2021, 45, 11574-11584.	2.8	14
2034	Waterborne Polyurea Coatings Filled with Sulfonated Graphene Improved Anti-Corrosion Performance. Coatings, 2021, 11, 251.	2.6	23
2035	Direct Imaging of Individual Organic Molecules in Supramolecular Assembly Strongly Fixed via Multivalent Electrostatic Interactions. Journal of Physical Chemistry C, 2021, 125, 4917-4923.	3.1	4
2036	Tunable Interlayer Distance via Adsorption of Cyclic Hydrocarbons in SCSC Mode. Crystal Growth and Design, 2021, 21, 2255-2262.	3.0	6
2037	Recent Progress in 2Dâ€Nanomaterialâ€Based Triboelectric Nanogenerators. Advanced Functional Materials, 2021, 31, 2009994.	14.9	60
2038	Two-Dimensional Metal-Organic Framework Materials: Synthesis, Structures, Properties and Applications. Chemical Reviews, 2021, 121, 3751-3891.	47.7	442
2039	Designing Highâ€Valence Metal Sites for Electrochemical Water Splitting. Advanced Functional Materials, 2021, 31, 2009779.	14.9	195
2040	MXenes: Synthesis, Optical Properties, and Applications in Ultrafast Photonics. Small, 2021, 17, e2006054.	10.0	119

#	Article	IF	CITATIONS
2041	Unravelling the intertwined atomic and bulk nature of localised excitons by attosecond spectroscopy. Nature Communications, 2021, 12, 1021.	12.8	32
2042	INTRODUCTION TO TWO-DIMENSIONAL MATERIALS. Surface Review and Letters, 2021, 28, 2140005.	1.1	14
2043	Low-temperature synthesis of Fe2(MoO4)3nanosheets: A cathode for sodium ion batteries with kinetics enhancement. Nano Research, 2021, 14, 3977.	10.4	7
2044	Electronic Properties of Triangle Molybdenum Disulfide (MoS2) Clusters with Different Sizes and Edges. Molecules, 2021, 26, 1157.	3.8	8
2045	Rationally Programming Nanomaterials with DNA for Biomedical Applications. Advanced Science, 2021, 8, 2003775.	11.2	51
2046	Recent Advances on Conductive 2D Covalent Organic Frameworks. Small, 2021, 17, e2006043.	10.0	77
2047	Two-Dimensional Hexagonal Boron Nitride for Building Next-Generation Energy-Efficient Devices. ACS Energy Letters, 2021, 6, 985-996.	17.4	37
2048	Atomic Zn Sites on N and S Codoped Biomass-Derived Graphene for a High-Efficiency Oxygen Reduction Reaction in both Acidic and Alkaline Electrolytes. ACS Applied Energy Materials, 2021, 4, 2481-2488.	5.1	21
2049	Design and in situ synthesis of ZnInS@ZIF-8-nanofilms multifunctional nanocomposite: A case application for simultaneous fluorescent sensing and enhanced photocatalytic performance toward antibiotic. Microporous and Mesoporous Materials, 2021, 315, 110916.	4.4	18
2050	Graphene-Based Coronal Hybrids for Enhanced Energy Storage. Energy Material Advances, 2021, 2021, .	11.0	12
2051	2D Nanomaterial, Ti3C2 MXene-Based Sensor to Guide Lung Cancer Therapy and Management. Biosensors, 2021, 11, 40.	4.7	17
2052	Non-noble Metal Electrocatalysts for the Hydrogen Evolution Reaction in Water Electrolysis. Electrochemical Energy Reviews, 2021, 4, 473-507.	25.5	224
2053	Effect of side chain modifications in imidazolium ionic liquids on the properties of the electrical double layer at a molybdenum disulfide electrode. Journal of Chemical Physics, 2021, 154, 084504.	3.0	13
2054	Tunable dielectric constant of water confined in graphene oxide nanochannels. Journal of Molecular Liquids, 2021, 324, 115139.	4.9	6
2055	Anisotropic 2D SiAs for Highâ€Performance UV–Visible Photodetectors. Small, 2021, 17, e2006310.	10.0	35
2056	Exfoliation Chemistry of Soft Layered Materials toward Tailored 2D Materials. Chemistry Letters, 2021, 50, 305-315.	1.3	19
2057	Perpendicularly anchored ReSe2 nanoflakes on reduced graphene oxide support for highly efficient hydrogen evolution reactions. Chemical Engineering Journal, 2021, 405, 126728.	12.7	29
2058	Anion Intercalation of VS <sub>4</sub> Triggers Atomic Sulfur Transfer to Organic Disulfide in Rechargeable Lithium Battery. Advanced Functional Materials, 2021, 31, 2009875.	14.9	28

#	ARTICLE	IF	CITATIONS
2059	Room Temperature Methanol Sensors Based on Rod-Shaped Nanostructures of MoS2 Functionalized With Ag Nanoparticles. IEEE Sensors Journal, 2021, 21, 4233-4240.	4.7	11
2060	Vacancy Engineering of Ultrathin 2D Materials for Photocatalytic CO <sub>2</sub> Reduction. ChemNanoMat, 2021, 7, 368-379.	2.8	35
2061	2D Materials Bridging Experiments and Computations for Electro/Photocatalysis. Advanced Energy Materials, 2022, 12, 2003841.	19.5	116
2062	A flower-cluster heterogenous structure assembled by ultrathin NiCo/NiCoOx-SiO2 nanobelts with stable catalytic performance. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 610, 125590.	4.7	1
2063	Surfactant-Assisted Synthesis of Palladium Nanosheets and Nanochains for the Electrooxidation of Ethanol. ACS Applied Materials & Samp; Interfaces, 2021, 13, 9830-9837.	8.0	40
2064	Exploring the N <sub>2</sub> Adsorption and Activation Mechanisms over the 2H/1T Mixed-Phase Ultrathin Mo <sub>1â€"<i>x</i></sub> W <sub><i>x</i></sub> S <sub>2</sub> Nanosheets for Boosting N <sub>2</sub> Photosynthesis. ACS Applied Materials & Description of the control of the co	8.0	24
2065	P-Doped MoSe <sub>2</sub> /MoS <sub>2</sub> Heterojunctions Anchored on N-CNTs/Carbon Cloth with Abundant Interfaces and Defects for Effective Electrocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2021, 4, 2408-2418.	5.1	18
2066	Two-Dimensional Group-10 Noble-Transition-Metal Dichalcogenides Photodetector., 0, , .		0
2067	Study of Thermal Expansion Coefficient of Graphene via Raman Microâ€Spectroscopy: Revisited. Small, 2021, 17, e2006146.	10.0	7
2068	Preparation of CdS <i><sub>y</sub></i> Se <sub>1â^'</sub> <i><sub>y</sub></i> â€MoS <sub>2</sub> Heterostructures via Cation Exchange of Preâ€Epitaxially Synthesized Cu <sub>2â^'</sub> <i><sub>i </sub></i> Se <sub> ā^'</sub> <i><sub>y</sub></i> for Photocatalytic Hydrogen Evolution, Small, 2021, 17, e2006135.	sub>2 <td>ıb<sup>11</sup></td>	ıb <sup>11</sup>
2069	Recent Advance of Transitionâ€Metalâ€Based Layered Double Hydroxide Nanosheets: Synthesis, Properties, Modification, and Electrocatalytic Applications. Advanced Energy Materials, 2021, 11, 2002863.	19.5	137
2070	Oriented Assembly of Anisotropic Nanosheets into Ultrathin Flowerlike Superstructures for Energy Storage. ACS Nano, 2021, 15, 2707-2718.	14.6	28
2071	Anisotropic Mechanical Properties of 2-D Materials. , 0, , .		0
2072	Harnessing the Unique Features of 2D Materials toward Dendriteâ€free Metal Anodes. Energy and Environmental Materials, 2022, 5, 45-67.	12.8	33
2073	Development of Two-Dimensional Nanomaterials Based Electrochemical Biosensors on Enhancing the Analysis of Food Toxicants. International Journal of Molecular Sciences, 2021, 22, 3277.	4.1	16
2074	"Plains–Hills― A New Model to Design Biomass-Derived Carbon Electrode Materials for High-Performance Potassium Ion Hybrid Supercapacitors. ACS Sustainable Chemistry and Engineering, 2021, 9, 3931-3941.	6.7	8
2075	Multiscale-structured polyvinylidene fluoride/polyacrylonitrile/ vermiculite nanosheets fibrous membrane with uniform Li+ flux distribution for lithium metal battery. Journal of Membrane Science, 2021, 621, 118996.	8.2	29
2076	A new strategy to improve the performance of MoS2-based 2D photodetector by synergism of colloidal CulnS2 quantum dots and surface plasma resonance of noble metal nanoparticles. Journal of Alloys and Compounds, 2021, 856, 158179.	5.5	23

#	Article	IF	CITATIONS
2077	Defectâ€Rich Porous Palladium Metallene for Enhanced Alkaline Oxygen Reduction Electrocatalysis. Angewandte Chemie - International Edition, 2021, 60, 12027-12031.	13.8	173
2078	Defectâ€Rich Porous Palladium Metallene for Enhanced Alkaline Oxygen Reduction Electrocatalysis. Angewandte Chemie, 2021, 133, 12134-12138.	2.0	32
2079	Semiconductor-to-metal transition in bilayer MoSi2N4 and WSi2N4 with strain and electric field. Applied Physics Letters, 2021, $118$ , .	3.3	65
2080	Integrating Co3O4 nanoparticles with MnO2 nanosheets as bifunctional electrocatalysts for water splitting. International Journal of Hydrogen Energy, 2021, 46, 10356-10365.	7.1	26
2081	Band Gap as a Novel Descriptor for the Reactivity of 2D Titanium Dioxide and its Supported Pt Single Atom for Methane Activation. Journal of Physical Chemistry Letters, 2021, 12, 2484-2488.	4.6	8
2082	In Situ and Operando Characterizations of 2D Materials in Electrochemical Energy Storage Devices. Small Science, 2021, 1, 2000076.	9.9	50
2083	Interaction studies of nitrotoluene and toluidine molecules on novel square-octagon arsenene nanotubes based on DFT method. Journal of Molecular Liquids, 2021, 325, 115260.	4.9	18
2084	Engineering Crystallinity and Oxygen Vacancies of Co(II) Oxide Nanosheets for High Performance and Robust Rechargeable Zn–Air Batteries. Advanced Functional Materials, 2021, 31, 2101239.	14.9	202
2085	Realization of AlSb in the Double-Layer Honeycomb Structure: A Robust Class of Two-Dimensional Material. ACS Nano, 2021, 15, 8184-8191.	14.6	20
2086	Twoâ€Dimensional Metal Telluride Atomic Crystals: Preparation, Physical Properties, and Applications. Advanced Functional Materials, 2021, 31, 2010901.	14.9	22
2087	The role of three-dimensional bulk clusters in determining surface morphologies of intermetallic compounds: Quasicrystals to clathrates. Journal of Chemical Physics, 2021, 154, 124706.	3.0	2
2088	Covalent Triazine Frameworks as Emerging Heterogeneous Photocatalysts. Chemistry of Materials, 2021, 33, 1909-1926.	6.7	116
2089	Enhanced optical absorption of Fe-, Co- and Ni- decorated Ti3C2 MXene: A first-principles investigation. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 127, 114565.	2.7	12
2090	The rising zinc anodes for high-energy aqueous batteries. EnergyChem, 2021, 3, 100052.	19.1	74
2091	Recent Development of Oxygen Evolution Electrocatalysts in Acidic Environment. Advanced Materials, 2021, 33, e2006328.	21.0	392
2092	Two-Dimensional Tetrahex-GeC <sub>2</sub> : A Material with Tunable Electronic and Optical Properties Combined with Ultrahigh Carrier Mobility. ACS Applied Materials & Samp; Interfaces, 2021, 13, 14489-14496.	8.0	15
2093	Excited State Energy Transfer in Metalâ€Organic Frameworks. Advanced Materials, 2021, 33, e2005819.	21.0	34
2094	Nanostructure strengthened nanofilms self-regulating synthesize along with the oil-water interface to fabricate macroscopic nanomaterials. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 613, 126114.	4.7	2

#	Article	IF	CITATIONS
2095	Functionalized MoS <sub>2</sub> -Based Nanomaterials for Cancer Phototherapy and Other Biomedical Applications., 2021, 3, 462-496.		68
2096	A novel zirconium phosphonate adsorbent for highly efficient radioactive cesium removal. Journal of Molecular Liquids, 2021, 326, 115307.	4.9	16
2097	Polymer nanocomposites with aligned two-dimensional materials. Progress in Polymer Science, 2021, 114, 101360.	24.7	39
2098	Colloidal Nanostructures of Transition-Metal Dichalcogenides. Accounts of Chemical Research, 2021, 54, 1517-1527.	15.6	29
2099	Confined Synthesis: From Layered Titanate to Highly Efficient and Durable Mesoporous Cu/TiO <sub>2</sub> Hydrogen Evolution Photocatalysts. ACS Applied Energy Materials, 2021, 4, 4050-4058.	5.1	8
2100	Li″on Intercalated Exfoliated WS <sub>2</sub> Nanosheets with Enhanced Electrocatalytic Hydrogen Evolution Performance. Crystal Research and Technology, 2021, 56, 2000165.	1.3	9
2101	Lamellar porous mo-modified carbon nitride polymers photocatalytic epoxidation of olefins. Molecular Catalysis, 2021, 504, 111441.	2.0	3
2102	Cooling scheme of black phosphorus-based structures via near-field radiative heat transfer. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 263, 107543.	2.3	6
2103	Recent progress in the role of twoâ€dimensional materials as an efficient charge transport layer in perovskite solar cells. International Journal of Energy Research, 2021, 45, 12598-12613.	4.5	12
2104	Piezoelectricity of Janus Sb2Se2Te monolayers: A first-principles study. Journal of Applied Physics, 2021, 129, .	2.5	26
2105	Recent Progress in Grapheneâ€Based Microsupercapacitors. Energy Technology, 2021, 9, 2000844.	3.8	23
2106	Morphology-Controlled Vapor Phase Growth and Characterization of One-Dimensional GaTe Nanowires and Two-Dimensional Nanosheets for Potential Visible-Light Active Photocatalysts. Nanomaterials, 2021, 11, 778.	4.1	6
2107	Intercalation as a versatile tool for fabrication, property tuning, and phase transitions in 2D materials. Npj 2D Materials and Applications, 2021, 5, .	7.9	113
2108	Polyethylene oxide assisted separation of molybdenite from quartz by flotation. Minerals Engineering, 2021, 162, 106765.	4.3	14
2109	Graphene/MoS2/FeCoNi(OH)x and Graphene/MoS2/FeCoNiPx multilayer-stacked vertical nanosheets on carbon fibers for highly efficient overall water splitting. Nature Communications, 2021, 12, 1380.	12.8	194
2110	MXenes for memristive and tactile sensory systems. Applied Physics Reviews, 2021, 8, .	11.3	25
2111	Strain-dependent optical properties of the novel monolayer group-IV dichalcogenides SiS <sub>2</sub> semiconductor: a first-principles study. Nanotechnology, 2021, 32, 235201.	2.6	6
2112	Ionic Liquids Achieve the Exfoliation of Ultrathin Two-Dimensional VOPO <sub>4</sub> ·2H <sub>2</sub> O Crystalline Nanosheets: Implications on Energy Storage and Catalysis. ACS Applied Nano Materials, 2021, 4, 2503-2514.	5.0	5

#	Article	IF	CITATIONS
2113	Theoretical Study on Tuning Band Gap and Electronic Properties of Atomically Thin Nanostructured MoS <sub>2</sub> /Metal Cluster Heterostructures. ACS Omega, 2021, 6, 6623-6628.	3.5	11
2114	Recent Advances in 2D Group VB Transition Metal Chalcogenides. Small, 2021, 17, e2005411.	10.0	20
2115	Recent Advances in Siliconâ€Based Electrodes: From Fundamental Research toward Practical Applications. Advanced Materials, 2021, 33, e2004577.	21.0	168
2116	Visible-light degradation of azo dyes by imine-linked covalent organic frameworks. Green Energy and Environment, 2023, 8, 194-199.	8.7	14
2117	Highâ€Yield Exfoliation of Ultrathin 2D Ni <sub>3</sub> Cr <sub>2</sub> P <sub>2</sub> S <sub>9</sub> and Ni <sub>3</sub> Cr <sub>2</sub> P <sub>2</sub> Se <sub>9</sub> Nanosheets. Small, 2021, 17, e2006866.	10.0	8
2118	The Green Synthesis of 2D Copper Nanosheets and Their Light Absorption. Materials, 2021, 14, 1926.	2.9	6
2119	Generalized assembly of sandwich-like OD/2D/OD heterostructures with highly exposed surfaces toward superior electrochemical performances. Nano Research, 2022, 15, 255-263.	10.4	14
2120	Interface Confinement in Metal Nanosheet for High-Efficiency Semi-Hydrogenation of Alkynes. ACS Catalysis, 2021, 11, 5231-5239.	11.2	22
2121	Synthesis of two-dimensional porous carbon nanosheets for high performance supercapacitors. Journal of Electroanalytical Chemistry, 2021, 886, 115119.	3.8	20
2122	Noble-metal-free Mo2C co-catalsyt modified perovskite oxide nanosheet photocatalysts with enhanced hydrogen evolution performance. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 615, 126252.	4.7	8
2123	Salt-resistant nanosensor for fast sulfadimethoxine tracing based on oxygen-doped g-C3N4 nanoplates. Mikrochimica Acta, 2021, 188, 153.	5.0	0
2124	Cation Exchange Enabled Cu Dopants Location Tailoring and Photoelectric Properties Regulation in CdS Nanosheets. Journal of Physical Chemistry Letters, 2021, 12, 3976-3982.	4.6	5
2125	SCREENING EFFECTS AT ORGANIC–2D MATERIAL HETEROINTERFACES. Surface Review and Letters, 2021, 28, 2140008.	1.1	0
2126	Exfoliated FePS3 nanosheets for T1-weighted magnetic resonance imaging-guided near-infrared photothermal therapy in vivo. Science China Materials, 2021, 64, 2613-2623.	6.3	15
2127	Mechanism of MoS <sub>2</sub> Growth on a Au(111) Surface: An Ab Initio Molecular Dynamics Study. Chemistry of Materials, 2021, 33, 3241-3248.	6.7	11
2128	Large-Area Assembly of Metal–Organic Layered Ultrathin Films at the Liquid/Liquid Interface. Langmuir, 2021, 37, 4515-4522.	3.5	7
2129	Progress, Challenges, and Opportunities in the Synthesis, Characterization, and Application of Metal-Boride-Derived Two-Dimensional Nanostructures., 2021, 3, 535-556.		49
2130	MXeneâ€GaN van der Waals Heterostructures for Highâ€Speed Selfâ€Driven Photodetectors and Lightâ€Emitting Diodes. Advanced Electronic Materials, 2021, 7, 2000955.	5.1	35

#	Article	IF	CITATIONS
2131	Montmorillonite-Based Two-Dimensional Nanocomposites: Preparation and Applications. Molecules, 2021, 26, 2521.	3.8	22
2132	Advancing Graphitic Carbon Nitride-Based Photocatalysts toward Broadband Solar Energy Harvesting. , 2021, 3, 663-697.		63
2133	Applications of two-dimensional materials in food packaging. Trends in Food Science and Technology, 2021, 110, 443-457.	15.1	27
2134	Metallated Graphynes as a New Class of Photofunctional 2D Organometallic Nanosheets. Angewandte Chemie, 2021, 133, 11427-11435.	2.0	3
2135	Biomedical applications of 2D monoelemental materials formed by group VA and VIA: a concise review. Journal of Nanobiotechnology, 2021, 19, 96.	9.1	30
2136	Ni-Co@carbon nanosheet derived from nickelocene doped Co-BDC for efficient oxygen evolution reaction. Applied Surface Science, 2021, 545, 148975.	6.1	17
2137	MXene in the lens of biomedical engineering: synthesis, applications and future outlook. BioMedical Engineering OnLine, 2021, 20, 33.	2.7	108
2138	Synergetic Advantages of Atomically Coupled 2D Inorganic and Graphene Nanosheets as Versatile Building Blocks for Diverse Functional Nanohybrids. Advanced Materials, 2021, 33, e2005922.	21.0	49
2139	Molybdenum disulfide-based materials with enzyme-like characteristics for biological applications. Colloids and Surfaces B: Biointerfaces, 2021, 200, 111575.	5.0	36
2140	A universal strategy for the synthesis of porous two-dimensional transition metal oxide nanosheets based on chemical topology transformation. Science China Materials, 2021, 64, 2477-2485.	6.3	5
2141	Microfluidics for flexible electronics. Materials Today, 2021, 44, 105-135.	14.2	65
2142	From Macro- to Nanoscale: Finite Size Effects on Metal–Organic Framework Switchability. Trends in Chemistry, 2021, 3, 291-304.	8.5	41
2143	Metastable 1T′-phase group VIB transition metal dichalcogenide crystals. Nature Materials, 2021, 20, 1113-1120.	27.5	119
2146	In Situ and Operando Characterizations of 2D Materials in Electrochemical Energy Storage Devices. Small Science, 2021, 1, 2170010.	9.9	13
2147	Influence of defect density on the gas sensing properties of multi-layered graphene grown by chemical vapor deposition. Carbon Trends, 2021, 3, 100024.	3.0	7
2148	Magnet Creation by Guest Insertion into a Paramagnetic Charge-Flexible Layered Metal–Organic Framework. Journal of the American Chemical Society, 2021, 143, 7021-7031.	13.7	20
2149	Interlamellar Lithiumâ€lon Conductor Reformed Interface for High Performance Lithium Metal Anode. Advanced Functional Materials, 2021, 31, 2102336.	14.9	23
2150	Two-dimensional nanomaterials with engineered bandgap: Synthesis, properties, applications. Nano Today, 2021, 37, 101059.	11.9	82

#	Article	IF	CITATIONS
2151	Metallated Graphynes as a New Class of Photofunctional 2D Organometallic Nanosheets. Angewandte Chemie - International Edition, 2021, 60, 11326-11334.	13.8	34
2152	2D/2D Heterostructures: Rational Design for Advanced Batteries and Electrocatalysis. Energy and Environmental Materials, 2022, 5, 115-132.	12.8	70
2153	High sensitive and selective toxic gas sensor based on monolayer Tetra-MoN2 for sensing NO: A first-principles study. Chemical Physics Letters, 2021, 769, 138359.	2.6	4
2154	Grapheneâ€Like Hydrogenâ€Bonded Melamine–Cyanuric Acid Supramolecular Nanosheets as Pseudoâ€Porous Catalyst Support. Advanced Materials, 2021, 33, e2007368.	21.0	31
2155	Adsorption of [ <scp>BF<sub>4</sub></scp> ] <sup>â^'</sup> anionâ€based ionic liquids on phosphorene, arsenene, and antimonene: A density functional theory study. International Journal of Quantum Chemistry, 2021, 121, e26668.	2.0	3
2156	Two-dimensional Nanomaterials in Thermocatalytic Reactions: Transition Metal Dichalcogenides, Metal Phosphorus Trichalcogenides and MXenes. Catalysis Reviews - Science and Engineering, 2023, 65, 1-51.	12.9	10
2157	Application of 2D Materials to Potassiumâ€lon Hybrid Capacitors. ChemSusChem, 2021, 14, 1974-1986.	6.8	26
2158	Recent Development of Gas Sensing Platforms Based on 2D Atomic Crystals. Research, 2021, 2021, 9863038.	5.7	29
2159	2D organic single crystals: Synthesis, novel physics, high-performance optoelectronic devices and integration. Materials Today, 2021, 50, 442-475.	14.2	32
2160	Molten Salt Assisted Low-Temperature Electro-Catalytic Graphitization of Coal Chars. Journal of the Electrochemical Society, 2021, 168, 046504.	2.9	8
2161	Recent Progress of 2D Nanomaterials for Application on Microwave Absorption: A Comprehensive Study. Frontiers in Materials, 2021, 8, .	2.4	32
2162	Interfacing perovskite strontium molybdate to molybdenum disulfide nanoplatelts for boosting HER from water. International Journal of Hydrogen Energy, 2021, 46, 14359-14368.	7.1	6
2163	Strain engineering on the electrical properties and photocatalytic activity in gold sulfide monolayer. Applied Surface Science, 2021, 546, 149066.	6.1	23
2164	Dithiocarbamate Complexes as Single Source Precursors to Nanoscale Binary, Ternary and Quaternary Metal Sulfides. Chemical Reviews, 2021, 121, 6057-6123.	47.7	91
2165	Metal-organic framework nanosheets and their composites for heterogeneous thermal catalysis: Recent progresses and challenges. Chinese Chemical Letters, 2021, 32, 3307-3321.	9.0	23
2166	Dualâ€Responsive Soft Actuators with Integrated Sensing Function Based on 1Tâ€MoS <sub>2</sub> Composite. Advanced Intelligent Systems, 2021, 3, 2000240.	6.1	15
2167	Defect-Enabled Phase Programming of Transition Metal Dichalcogenide Monolayers. Nano Letters, 2021, 21, 4676-4683.	9.1	6
2168	2D and Layered Ti-based Materials for Supercapacitors and Rechargeable Batteries: Synthesis, Properties, and Applications. Current Applied Materials, 2022, 1, .	0.5	4

#	Article	IF	CITATIONS
2169	Recent progress on antimonene: from theoretical calculation to epitaxial growth. Japanese Journal of Applied Physics, 2021, 60, SE0805.	1.5	13
2170	Thermal camouflaging metamaterials. Materials Today, 2021, 45, 120-141.	14.2	165
2171	Nanocomposites of 2D-MoS <sub>2</sub> Exfoliated in Thermotropic Liquid Crystals., 2021, 3, 704-712.		9
2172	Two-dimensional selenium and its composites for device applications. Nano Research, 2022, 15, 104-122.	10.4	26
2173	Improving Ammonia Detecting Performance of Polyaniline Decorated rGO Composite Membrane with GO Doping. Materials, 2021, 14, 2829.	2.9	16
2174	Van der Waals Integration Based on Twoâ€Dimensional Materials for Highâ€Performance Infrared Photodetectors. Advanced Functional Materials, 2021, 31, 2103106.	14.9	112
2175	Insight into the synergy of amine-modified S-scheme Cd0.5Zn0.5Se/porous g-C3N4 and noble-metal-free Ni2P for boosting photocatalytic hydrogen generation. Ceramics International, 2021, 47, 13488-13499.	4.8	18
2176	Bambooâ€Membrane Inspired Multilevel Ultrafast Interlayer Ion Transport for Superior Volumetric Energy Storage. Advanced Functional Materials, 2021, 31, 2100299.	14.9	27
2177	2D Niobium-Doped MoS <sub>2</sub> : Tuning the Exciton Transitions and Potential Applications. ACS Applied Electronic Materials, 2021, 3, 2564-2572.	4.3	12
2178	MoX <sub>2</sub> (X = O, S) Hierarchical Nanosheets Confined in Carbon Frameworks for Enhanced Lithium-lon Storage. ACS Applied Nano Materials, 2021, 4, 4615-4622.	5.0	2
2179	Electronic and structural properties of Janus MoSSe/MoX2 (XÂ=ÂS,Se) in-plane heterojunctions: A DFT study. Chemical Physics Letters, 2021, 771, 138495.	2.6	4
2180	In Situ Fabrication of Activated Carbon from a Bio-Waste Desmostachya bipinnata for the Improved Supercapacitor Performance. Nanoscale Research Letters, 2021, 16, 85.	5.7	45
2181	Optical Constants and Structural Properties of Epitaxial MoS2 Monolayers. Nanomaterials, 2021, 11, 1411.	4.1	17
2182	Experimental study on thermal conductivity and rectification of monolayer and multilayer MoS2. International Journal of Heat and Mass Transfer, 2021, 170, 121013.	4.8	20
2183	Exfoliation of carboxymethylcellulose-intercalated layered double hydroxide in water. Applied Clay Science, 2021, 205, 106005.	5.2	4
2184	Ferromagnetism in two-dimensional black phosphorus induced by phthalocyanine cobalt. Journal of Materials Science, 2021, 56, 13568-13578.	3.7	5
2185	Nanostructured covalent organic frameworks with elevated crystallization for (electro)photocatalysis and energy storage devices. Journal of Materials Science, 2021, 56, 13875-13924.	3.7	8
2186	Radiation Effects in a Post-Moore World. IEEE Transactions on Nuclear Science, 2021, 68, 509-545.	2.0	50

#	Article	IF	CITATIONS
2187	Rapid synthesis of amorphous CoO nanosheets: Highly efficient catalyst for parachlorophenol degradation by peroxymonosulfate activation. Separation and Purification Technology, 2021, 263, 118369.	7.9	36
2188	The Exfoliation of Crystalline Covalent Triazine Frameworks by Glycerol Intercalation. Advanced Materials Interfaces, 2021, 8, 2100374.	3.7	6
2189	Enhanced Valley Splitting in Monolayer WSe <sub>2</sub> by Phase Engineering. ACS Nano, 2021, 15, 8244-8251.	14.6	12
2190	Molecular Disorder Induces an Unusual Phase Transition in a Potential 2D Chiral Ferroelectric Perovskite. Chemistry - A European Journal, 2021, 27, 9054-9059.	3.3	15
2191	Hydrolysis of Methoxylated Nickel Hydroxide Leading to Single-Layer Ni(OH) < sub>2 < /sub> Nanosheets. Inorganic Chemistry, 2021, 60, 7094-7100.	4.0	3
2192	Combination of heterostructure with oxygen vacancies in Co@CoO1-x nanosheets array for high-performance lithium sulfur batteries. Chemical Engineering Journal, 2021, 411, 128546.	12.7	48
2193	Hydrogelâ€based composites: Unlimited platforms for biosensors and diagnostics. View, 2021, 2, 20200165.	5.3	31
2194	Application of Supra Molecular Immaterialness Adsorbent in Indoor Volatile Organic Compounds Control in Hot and Humid Areas. Integrated Ferroelectrics, 2021, 216, 231-246.	0.7	1
2195	Two-dimensional materials beyond graphene for the detection and removal of antibiotics: A critical review. Critical Reviews in Environmental Science and Technology, 2022, 52, 3493-3524.	12.8	14
2196	A Review on the Current Progress and Challenges of 2D Layered Transition Metal Dichalcogenides as Li/Naâ€ion Battery Anodes. ChemElectroChem, 2021, 8, 2358-2396.	3.4	25
2197	Dynamic molecular weaving in a two-dimensional hydrogen-bonded organic framework. CheM, 2021, 7, 1321-1332.	11.7	70
2198	Graphene-Based Two-Dimensional Mesoporous Materials: Synthesis and Electrochemical Energy Storage Applications. Materials, 2021, 14, 2597.	2.9	11
2199	A theoretical prediction of NP monolayer as a promising electrode material for Li-/Na-ion batteries. Applied Surface Science, 2021, 547, 149209.	6.1	9
2200	Morphology-Tunable Synthesis of Intrinsic Room-Temperature Ferromagnetic γ-Fe <sub>2</sub> O <sub>3</sub> Nanoflakes. ACS Applied Materials & Tringle 1, 13, 24051-24061.	8.0	15
2201	Metal–Organic Frameworks for Photo/Electrocatalysis. Advanced Energy and Sustainability Research, 2021, 2, 2100033.	5.8	123
2202	Exceptional Cocatalystâ€Free Photoâ€Enhanced Piezocatalytic Hydrogen Evolution of Carbon Nitride Nanosheets from Strong Inâ€Plane Polarization. Advanced Materials, 2021, 33, e2101751.	21.0	272
2203	On the Technologies of Artificial Intelligence and Machine Learning for 2D Materials. Journal of Surface Investigation, 2021, 15, 485-494.	0.5	4
2204	Atomic Scale Tracking of Single Layer Oxide Formation: Selfâ€Peeling and Phase Transition in Solution. Small Methods, 2021, 5, e2001234.	8.6	8

#	Article	IF	CITATIONS
2205	Structural, electronic, and optical properties of two-dimensional hafnium monoxide nanosheets. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 130, 114690.	2.7	3
2206	Structure of Coal-Derived Metal-Supported Few-Layer Graphene Composite Materials Synthesized Using a Microwave-Assisted Catalytic Graphitization Process. Nanomaterials, 2021, 11, 1672.	4.1	8
2207	Advances in Lithium–Sulfur Batteries: From Academic Research to Commercial Viability. Advanced Materials, 2021, 33, e2003666.	21.0	357
2208	A novel NIR-responsive CO gas-releasing and hyperthermia-generating nanomedicine provides a curative approach for cancer therapy. Nano Today, 2021, 38, 101197.	11.9	14
2209	Preparation of black phosphorus quantum dots and the surface decoration effect on the monolayer MoS2 photodetectors. Chemical Physics Letters, 2021, 772, 138571.	2.6	5
2210	Synthesis and functionalization of 2D nanomaterials for application in lithium-based energy storage systems. Energy Storage Materials, 2021, 38, 200-230.	18.0	29
2211	Noncovalent semiconducting polymer monolayers for high-performance field-effect transistors. Progress in Polymer Science, 2021, 117, 101394.	24.7	23
2212	DFT study of therapeutic potential of graphitic carbon nitride (g-C3N4) as a new drug delivery system for carboplatin to treat cancer. Journal of Molecular Liquids, 2021, 331, 115607.	4.9	51
2213	Opportunities and Challenges in Precise Synthesis of Transition Metal Singleâ€Atom Supported by 2D Materials as Catalysts toward Oxygen Reduction Reaction. Advanced Functional Materials, 2021, 31, 2103558.	14.9	51
2214	Engineering two-dimensional metal oxides and chalcogenides for enhanced electro- and photocatalysis. Science Bulletin, 2021, 66, 1228-1252.	9.0	103
2215	Recent progress in synthesis, growth mechanisms, properties, and applications of silicon nitride nanowires. Ceramics International, 2021, 47, 14944-14965.	4.8	26
2216	Metastable Two-Dimensional Materials for Electrocatalytic Energy Conversions. Accounts of Materials Research, 2021, 2, 559-573.	11.7	97
2217	Recent advancements of two-dimensional transition metal dichalcogenides and their applications in electrocatalysis and energy storage. Emergent Materials, 2021, 4, 951-970.	5 <b>.</b> 7	24
2218	Preparation of two-dimensional [Bi2O2]-based layered materials: Progress and prospects. APL Materials, 2021, 9, .	5.1	16
2219	Progress and perspectives of 2D materials as anodes for potassium-ion batteries. Energy Storage Materials, 2021, 38, 354-378.	18.0	41
2220	Emerging twoâ€dimensional bismuth oxychalcogenides for electronics and optoelectronics. InformaÄnÃ- Materiály, 2021, 3, 1251-1271.	17.3	51
2221	Two-dimensional alloyed transition metal dichalcogenide nanosheets: Synthesis and applications. Chinese Chemical Letters, 2022, 33, 163-176.	9.0	63
2222	In Situ Direct Laser Writing of 3D Graphene‣aden Microstructures. Advanced Materials Technologies, 2021, 6, 2100222.	5.8	4

#	Article	IF	CITATIONS
2223	Interlayer Engineering of Preintercalated Layered Oxides as Cathode for Emerging Multivalent Metal-ion Batteries: Zinc and Beyond. Energy Storage Materials, 2021, 38, 397-437.	18.0	90
2224	Emerging 2D nanomaterials for biomedical applications. Materials Today, 2021, 50, 276-302.	14.2	148
2225	Rhenium chemistry – Then and Now. Coordination Chemistry Reviews, 2021, 436, 213822.	18.8	30
2226	Structural advantages and enhancement strategies of heterostructure water-splitting electrocatalysts. Cell Reports Physical Science, 2021, 2, 100443.	5.6	66
2227	Recent Advances in Transition Metal Dichalcogenide Cathode Materials for Aqueous Rechargeable Multivalent Metal-Ion Batteries. Nanomaterials, 2021, 11, 1517.	4.1	27
2228	Review of gut nanotoxicology in mammals: Exposure, transformation, distribution and toxicity. Science of the Total Environment, 2021, 773, 145078.	8.0	25
2229	MoS2Ânanosheets uniformly grown on polyphosphazene-derived carbon nanospheres for lithium-ion batteries. Surfaces and Interfaces, 2021, 24, 101034.	3.0	5
2230	Biosensors Coupled with Signal Amplification Technology for the Detection of Pathogenic Bacteria: A Review. Biosensors, 2021, 11, 190.	4.7	33
2231	Ultrathin 2D-oxides: A perspective on fabrication, structure, defect, transport, electron, and phonon properties. Journal of Applied Physics, 2021, 129, .	2.5	17
2232	A monolayer nanostructure based on polyhedral oligomeric silsesquioxane and graphene oxide for highly efficient separation of hemoglobin. Composites Communications, 2021, 25, 100702.	6.3	5
2233	Constructing Layered Nanostructures from Nonâ€Layered Sulfide Crystals via Surface Charge Manipulation Strategy. Advanced Functional Materials, 2021, 31, 2101676.	14.9	20
2234	Carbon shell coated hollow NiCoSex composite as high-performance anode for lithium storage. Rare Metals, 2021, 40, 3185.	7.1	24
2235	Mass transport induced structural evolution and healing of sulfur vacancy lines and Mo chain in monolayer MoS2. Rare Metals, 2022, 41, 333-341.	7.1	8
2236	Synthesis of Large-Area MoSe2 Monolayer Film for Surface-Enhanced Raman Scattering Analysis. Nano, 2021, 16, 2150076.	1.0	0
2237	Highly enhanced NH3-sensing performance of BC6N monolayer with single vacancy and Stone-Wales defects: A DFT study. Applied Surface Science, 2021, 551, 149383.	6.1	45
2238	Investigation of the inhibited biotoxicity of heavy metals towards 5-formylcytosine in rice by hydrochar based on photoelectrochemical biosensor. Journal of Hazardous Materials, 2021, 414, 125293.	12.4	20
2239	InSe/Te van der Waals Heterostructure as a High-Efficiency Solar Cell from Computational Screening. Materials, 2021, 14, 3768.	2.9	7
2240	Intrinsic ferroelectricity and large bulk photovoltaic effect in novel two-dimensional buckled honeycomb-like lattice of NbP: first-principles study. Journal of Physics Condensed Matter, 2021, 33, 385302.	1.8	4

#	Article	IF	CITATIONS
2241	Controllable synthesis of ultrathin monolayer titanate nanosheet via osmotic swelling to exfoliation of layered titanate. Ceramics International, 2021, 47, 19169-19179.	4.8	3
2242	A Liquid Metal Reaction System for Advanced Material Manufacturing. Accounts of Materials Research, 2021, 2, 669-680.	11.7	23
2243	Thermal-Driven Dynamic Shape Change of Bimetallic Nanoparticles Extends Hot Electron Lifetime of Pt/MoS <sub>2</sub> Catalysts. Journal of Physical Chemistry Letters, 2021, 12, 7173-7179.	4.6	8
2244	Shaping and structuring 2D materials via kirigami and origami. Materials Science and Engineering Reports, 2021, 145, 100621.	31.8	36
2245	Selfâ€Supporting Electrodes for Gasâ€Involved Key Energy Reactions. Advanced Functional Materials, 2021, 31, 2104620.	14.9	39
2246	Comparative trends and molecular analysis on the surfactant-assisted dispersibility of 1D and 2D carbon materials: Multiwalled nanotubes vs graphene nanoplatelets. Journal of Molecular Liquids, 2021, 333, 116002.	4.9	9
2247	Modulating the Energy Band to Inhibit the Over-oxidation for Highly Selective Anisaldehyde Production Coupled with Robust H <sub>2</sub> Evolution from Water Splitting. ACS Catalysis, 2021, 11, 8727-8735.	11.2	22
2248	van der Waals Epitaxy Growth of Bi2Se3 on a Freestanding Monolayer Graphene Membrane: Implications for Layered Materials and Heterostructures. ACS Applied Nano Materials, 2021, 4, 7607-7613.	5.0	0
2249	Facile fabrication of silk fibroin/graphene oxide composite films and realâ€time morphological observation in stretching. Journal of Applied Polymer Science, 2021, 138, 51403.	2.6	0
2250	Strain-tunable electronic structure of two-dimensional monolayer SiP. Modern Physics Letters B, 2021, 35, 2150404.	1.9	0
2251	VOOH nanosheets with enhanced capacitance as supercapacitor electrode. Journal of Alloys and Compounds, 2021, 869, 159367.	5.5	9
2252	Differences and Similarities of Photocatalysis and Electrocatalysis in Two-Dimensional Nanomaterials: Strategies, Traps, Applications and Challenges. Nano-Micro Letters, 2021, 13, 156.	27.0	71
2253	Non-covalent interaction-based molecular electronics with graphene electrodes. Nano Research, 2023, 16, 5436-5446.	10.4	8
2254	Lamellar MXene: A novel 2D nanomaterial for electrochemical sensors. Journal of Applied Electrochemistry, 2021, 51, 1509-1522.	2.9	27
2255	Selfâ€Assembly of 2D Nanosheets into 1D Nanostructures for Sensing NO 2. Small Structures, 2021, 2, 2100067.	12.0	8
2256	Selective photocatalytic reduction CO2 to CH4 on ultrathin TiO2 nanosheet via coordination activation. Applied Catalysis B: Environmental, 2021, 288, 120000.	20.2	87
2257	Nickel foam as conductive substrate enhanced low-crystallinity two-dimensional iron hydrogen phosphate for oxygen evolution reaction. Journal of Alloys and Compounds, 2021, 870, 159472.	5.5	15
2258	Metal chalcogenides-based materials for high-performance metal ion capacitors. Journal of Alloys and Compounds, 2021, 869, 159352.	5.5	25

#	Article	IF	CITATIONS
2259	Fast Polymeric Functionalization Approach for the Covalent Coating of MoS <sub>2</sub> Layers. ACS Applied Materials & Layers.	8.0	11
2260	Facile synthesis of ultrathin two-dimensional graphene-like CeO2–TiO2 mesoporous nanosheet loaded with Ag nanoparticles for non-enzymatic electrochemical detection of superoxide anions in HepG2 cells. Biosensors and Bioelectronics, 2021, 184, 113236.	10.1	24
2261	Hydrophilic and hydrophobic calcium-phosphonate monoester metal-organic layers. Inorganic Chemistry Communication, 2021, 129, 108614.	3.9	0
2262	Nonradiative Energy Transfer and Selective Charge Transfer in a WS <sub>2</sub> /(PEA) <sub>Pbl<sub>4</sub> Heterostructure. ACS Applied Materials &amp; lnterfaces, 2021, 13, 33677-33684.</sub>	8.0	10
2263	Co9S8 nanoparticles embedded in nitrogen, sulfur codoped porous carbon nanosheets for efficient oxygen/hydrogen electrocatalysis. Electrochimica Acta, 2021, 384, 138299.	5.2	11
2264	Intercalation of N-doped graphene into graphene oxide-based membranes to improve their overall nanofiltration performance. Chemical Physics Letters, 2021, 775, 138657.	2.6	5
2265	MoTe2 on ferroelectric single-crystal substrate in the dual-gate field-effect transistor operation. Current Applied Physics, 2021, 27, 38-42.	2.4	3
2266	Fabrication of Three-Dimensional Porous Materials with NiO Nanowalls for Electrocatalytic Oxygen Evolution. ACS Applied Nano Materials, 2021, 4, 8059-8065.	5.0	5
2267	MoS2-based nanocomposites: synthesis, structure, and applications in water remediation and energy storage: a review. Environmental Chemistry Letters, 2021, 19, 3645-3681.	16.2	48
2268	Enhancing Thermoelectric Power Factor of 2D Organometal Halide Perovskites by Suppressing 2D/3D Phase Separation. Advanced Materials, 2021, 33, e2102797.	21.0	19
2269	Metal–Organic Framework Nanosheets: Programmable 2D Materials for Catalysis, Sensing, Electronics, and Separation Applications. Advanced Functional Materials, 2021, 31, 2103723.	14.9	77
2270	Ultrathin hexagonal boron nitride as a van der Waals' force initiator activated graphene for engineering efficient non-metal electrocatalysts of Li-CO2 battery. Nano Research, 2022, 15, 1171-1177.	10.4	18
2271	Graphene-based nanomaterials for breast cancer treatment: promising therapeutic strategies. Journal of Nanobiotechnology, 2021, 19, 211.	9.1	36
2272	FeNi3/NiFe-Mixed Metal Oxide Heterostructured Nanosheets for Catalytic Nitro-Amination. ACS Applied Nano Materials, 2021, 4, 7739-7745.	5.0	5
2273	Two-dimensional coordination polymer-based nanosensor for sensitive and reliable nucleic acids detection in living cells. Chinese Chemical Letters, 2022, 33, 968-972.	9.0	9
2274	Chemical Vapor Deposition Growth of 2D Transition Metal Dichalcogenides on 3D Substrates toward Electrocatalyticâ€Related Applications. Advanced Energy and Sustainability Research, 2021, 2, 2100089.	5.8	7
2275	Borophene and Boronâ€Based Nanosheets: Recent Advances in Synthesis Strategies and Applications in the Field of Environment and Energy. Advanced Materials Interfaces, 2021, 8, 2100045.	3.7	35
2276	Piezoâ€Phototronic Effect in 2D αâ€In <sub>2</sub> Se <sub>3</sub> /WSe <sub>2</sub> van der Waals Heterostructure for Photodetector with Enhanced Photoresponse. Advanced Optical Materials, 2021, 9, 2100864.	7.3	37

#	Article	IF	CITATIONS
2277	Engineering of aerogelâ€based electrocatalysts for oxygen evolution reaction. Electrochemical Science Advances, 2022, 2, e2100113.	2.8	1
2278	Molecular Functionalization of 2H-Phase MoS <sub>2</sub> Nanosheets via an Electrolytic Route for Enhanced Catalytic Performance. ACS Applied Materials & Samp; Interfaces, 2021, 13, 33157-33171.	8.0	11
2279	Essential oil-loaded chitosan/zinc (II) montmorillonite synergistic sustained-release system as antibacterial material. Journal of Dispersion Science and Technology, 2023, 44, 288-298.	2.4	2
2280	Intersection of Organic Molecules and Carbon Materials for Sustainable Society. IEEJ Transactions on Electronics, Information and Systems, 2021, 141, 761-766.	0.2	0
2281	Strain of 2D materials via substrate engineering. Chinese Chemical Letters, 2022, 33, 153-162.	9.0	13
2282	Ultrathin Ti3C2 nanowires derived from multi-layered bulks for high-performance hydrogen evolution reaction. Chinese Chemical Letters, 2022, 33, 557-561.	9.0	18
2283	Nanodots Derived from Layered Materials: Synthesis and Applications. Advanced Materials, 2021, 33, e2006661.	21.0	29
2284	Photoelectrochemical biosensor for 5-formylcytosine deoxyribonucleoside detection based on BilO4-WS2/CuO ternary heterojunction. Sensors and Actuators B: Chemical, 2021, 341, 130019.	7.8	11
2285	Novel bioengineered MBenes for the treatment of Alzheimer's disease: An in-Sillico study. Journal of Biomolecular Structure and Dynamics, 2022, 40, 12268-12276.	3.5	4
2286	Elastic properties of two-dimensional Pt with adsorbed oxygen. Physical Review B, 2021, 104, .	3.2	1
2287	Two-dimensional MoS <sub>2</sub> 2H, 1T, and 1T <sup>â€2</sup> crystalline phases with incorporated adatoms: theoretical investigation of electronic and optical properties. Applied Optics, 2021, 60, G232.	1.8	8
2288	Ultrahigh Charge Separation Achieved by Selective Growth of Bi <sub>4</sub> O <sub>5</sub> I <sub>2</sub> Nanoplates on Electron-Accumulating Facets of Bi <sub>5</sub> O <sub>7</sub> I Nanobelts. ACS Applied Materials & Diterfaces, 2021, 13, 39985-40001.	8.0	20
2289	Mechanochemical Construction 2D/2D Covalent Organic Nanosheets Heterojunctions Based on Substoichiometric Covalent Organic Frameworks. ACS Applied Materials & Samp; Interfaces, 2021, 13, 42035-42043.	8.0	28
2290	Transition metals decorated g-C3N4/N-doped carbon nanotube catalysts for water splitting: A review. Journal of Electroanalytical Chemistry, 2021, 895, 115510.	3.8	59
2291	Lanthanide-Doped Topological Nanosheets with Enhanced Near-Infrared Photothermal Performance for Energy Conversion. ACS Applied Materials & Samp; Interfaces, 2021, 13, 43094-43103.	8.0	16
2292	Graphene oxide synthesis using a top–down approach and discrete characterization techniques: a holistic review. Carbon Letters, 2022, 32, 1-38.	5.9	14
2293	Arsenene-mediated multiple independently targeted reactive oxygen species burst for cancer therapy. Nature Communications, 2021, 12, 4777.	12.8	144
2294	Constructing van der Waals Heterogeneous Photocatalysts Based on Atomically Thin Carbon Nitride Sheets and Graphdiyne for Highly Efficient Photocatalytic Conversion of CO <sub>2</sub> into CO. ACS Applied Materials & District Conversion of CO <sub>2</sub> into CO.	8.0	51

#	ARTICLE	IF	CITATIONS
2295	Ultrathin PdAuBiTe Nanosheets as Highâ€Performance Oxygen Reduction Catalysts for a Direct Methanol Fuel Cell Device. Advanced Materials, 2021, 33, e2103383.	21.0	61
2296	One-dimensional ferromagnetic semiconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>CrSb</mml:mi><mml:msub><mml: .<="" 104,="" 2021,="" and="" anisotropy.="" b,="" curie="" high="" large="" magnetic="" physical="" review="" td="" temperature="" with=""><td>m<b>i.</b>2Se<td>.n<b>9</b>l:mi&gt;<mn< td=""></mn<></td></td></mml:></mml:msub></mml:mrow></mml:math>	m <b>i.</b> 2Se <td>.n<b>9</b>l:mi&gt;<mn< td=""></mn<></td>	.n <b>9</b> l:mi> <mn< td=""></mn<>
2297	A phosphorus integrated strategy for supercapacitor: 2D black phosphorus–doped and phosphorus-doped materials. Materials Today Chemistry, 2021, 21, 100480.	3.5	18
2298	Electronic structure of 2D quaternary materials and of their van der Waals heterostructures. Journal of Applied Physics, 2021, 130, 064304.	2.5	0
2299	MoS <sub>2</sub> â€"Nanosheets-Based Catalysts for Photocatalytic CO <sub>2</sub> Reduction: A Review. ACS Applied Nano Materials, 2021, 4, 8644-8667.	5.0	63
2300	Wafer-scale quasi-layered tungstate-doped polypyrrole film with high volumetric capacitance. Nano Research, 2023, 16, 4895-4900.	10.4	3
2301	Catalytic Functionalization of Hexagonal Boron Nitride for Oxidation and Epoxidation Reactions by Molecular Oxygen. Journal of Physical Chemistry C, 2021, 125, 19219-19228.	3.1	2
2302	Ultrathin Two-Dimensional Bi-Based photocatalysts: Synthetic strategies, surface defects, and reaction mechanisms. Chemical Engineering Journal, 2021, 417, 129305.	12.7	52
2303	A DFT study on carbon dioxide reduction of low-valent diuranium complex supported by a polypyrrolic macrocycle. Chemical Physics Letters, 2021, 776, 138652.	2.6	3
2304	Thermally responsive reduced graphene oxide with electroactive functionality for controllable electroanalysis. Talanta, 2021, 231, 122368.	5 <b>.</b> 5	1
2305	Fabrication of the amphiphilic hyperbranched poly(ether amine)@graphene (hPEAâ€AN@G) hybrid assemblies by ball milling. Polymer International, 0, , .	3.1	1
2306	Materials Informatics for 2D Materials Combined with Sparse Modeling and Chemical Perspective: Toward Small-Data-Driven Chemistry and Materials Science. Bulletin of the Chemical Society of Japan, 2021, 94, 2410-2422.	3.2	35
2307	Voltammetric determination of linagliptin in bulk and plasma sample using an electrochemical sensor based on L-cysteine modified 1T-MoS2 nanosheets. Microchemical Journal, 2021, 167, 106308.	4.5	7
2308	Enhanced light absorption in monolayer tungsten disulfide with dielectric Bragg reflector and metallic thin film. Optik, 2021, 239, 166781.	2.9	2
2309	The role of graphene in anti-corrosion coatings: A review. Construction and Building Materials, 2021, 294, 123613.	7.2	47
2310	User-friendly methodology for chemical vapor deposition –grown graphene-layersÂtransfer: Design and implementation. Materials Today Chemistry, 2021, 21, 100546.	3.5	2
2311	Solventâ∈Assisted Anisotropic Cleavage of Transition Metal Carbide into 2D Nanoflakes. Small Structures, 2021, 2, 2100039.	12.0	6
2312	Two-dimensional heterostructures and their device applications: progress, challenges and opportunitiesâ€"review. Journal Physics D: Applied Physics, 2021, 54, 433001.	2.8	30

#	Article	IF	CITATIONS
2313	Black Phosphorusâ€"Diketopyrrolopyrrole Polymer Semiconductor Hybrid for Enhanced Charge Transfer and Photodetection. Advanced Photonics Research, 2021, 2, 2100150.	3.6	3
2314	Nanoscale Pd Supported on Layered Co(OH) < sub > 2 < / sub > as Efficient Catalysts for Solventâ € Free Oxidation of Benzyl Alcohol. Chemistry Select, 2021, 6, 7384-7390.	1.5	4
2315	Performance analysis of photo-electrochemical photodetector based on liquid-phase exfoliation few-layered graphdiyne nanosheets. Nanophotonics, 2021, 10, 2833-2845.	6.0	8
2316	Recent Advances on Transition Metal Dichalcogenides for Electrochemical Energy Conversion. Advanced Materials, 2021, 33, e2008376.	21.0	114
2317	Selfâ€Assembly of a Bilayer 2D Supramolecular Organic Framework in Water. Angewandte Chemie, 0, , .	2.0	2
2318	Nanoscale Metal–Organic Layers for Biomedical Applications. Accounts of Materials Research, 2021, 2, 944-953.	11.7	14
2319	Mapping the Progress in Flexible Electrodes for Wearable Electronic Textiles: Materials, Durability, and Applications. Advanced Electronic Materials, 2022, 8, 2100578.	5.1	40
2320	Layered graphitic carbon nitride: nano-heterostructures, photo/electro-chemical performance and trends. Journal of Nanostructure in Chemistry, 2022, 12, 669-691.	9.1	34
2321	A promising polarization-sensitive ultraviolet photodetector based on the two-dimensional ZrNBr-ZrNCl lateral heterojunction with enhanced photoresponse: A theoretical prediction. Applied Surface Science, 2021, 560, 149907.	6.1	16
2322	Oxidic 2D Materials. Materials, 2021, 14, 5213.	2.9	1
2323	Operando leaching of pre-incorporated Al and mechanism in transition-metal hybrids on carbon substrates for enhanced charge storage. Matter, 2021, 4, 2902-2918.	10.0	22
2324	Closed‣oop Defect States in 2D Materials with Honeycomb Lattice Structure: Molybdenum Disulfide. Physica Status Solidi (B): Basic Research, 2021, 258, 2100214.	1.5	0
2325	Ultrathin Crystalline Covalentâ€Triazineâ€Framework Nanosheets with Electron Donor Groups for Synergistically Enhanced Photocatalytic Water Splitting. Angewandte Chemie, 2021, 133, 25585-25594.	2.0	8
2326	Quantum metasurfaces of arrays of $\hat{\mathfrak{b}}$ -emitters for photonic nano-devices. Journal of Optics (United) Tj ETQq1 1 (	0.7 <u>84</u> 314	rgBT /Overlo
2327	Review on engineering two-dimensional nanomaterials for promoting efficiency and stability of perovskite solar cells. Journal of Energy Chemistry, 2022, 68, 154-175.	12.9	11
2328	2D Highâ€Entropy Hydrotalcites. Small, 2021, 17, e2103412.	10.0	27
2329	Research progress of MXene-based catalysts for electrochemical water-splitting and metal-air batteries. Energy Storage Materials, 2021, 43, 509-530.	18.0	60
2330	Construction of NiCo <sub>2</sub> O <sub>4</sub> /O-g-C <sub>3</sub> N <sub>4</sub> Nanocomposites: A Battery-Type Electrode Material for High-Performance Supercapacitor Application. ACS Applied Nano Materials, 2021, 4, 10173-10184.	5.0	22

#	Article	IF	CITATIONS
2331	Metalâ€facilitated Photocatalytic Nanohybrids: Rational Design and Promising Environmental Applications. Chemistry - an Asian Journal, 2021, 16, 3038-3054.	3.3	1
2332	Performance Improvement of MoSâ,, Gas Sensor at Room Temperature. IEEE Transactions on Electron Devices, 2021, 68, 4644-4650.	3.0	5
2333	Emerging two-dimensional nanocatalysts for electrocatalytic hydrogen production. Chinese Chemical Letters, 2022, 33, 1831-1840.	9.0	67
2334	In situ reduced MXene/AuNPs composite toward enhanced charging/discharging and specific capacitance. Journal of Advanced Ceramics, 2021, 10, 1061-1071.	17.4	78
2335	Centimeter-Scale Few-Layer PdS <sub>2</sub> : Fabrication and Physical Properties. ACS Applied Materials & Samp; Interfaces, 2021, 13, 43063-43074.	8.0	28
2336	Fe@B6H6 aggregates: from simple building blocks to graphene analogue. Journal of Molecular Modeling, 2021, 27, 273.	1.8	0
2337	Surface Engineering of Graphene through Heterobifunctional Supramolecular-Covalent Scaffolds for Rapid COVID-19 Biomarker Detection. ACS Applied Materials & Samp; Interfaces, 2021, 13, 43696-43707.	8.0	13
2338	Two-Dimensional Materials for Advanced Solar Cells., 0, , .		0
2339	Dissolved gas analysis in transformer oil using Ni-Doped GaN monolayer: A DFT study. Superlattices and Microstructures, 2021, 159, 107055.	3.1	27
2340	Enhancing the activity of metal-organic nanosheets for oxygen evolution reaction by substituent effects. Journal of Colloid and Interface Science, 2022, 608, 306-312.	9.4	8
2341	Ultrathin Crystalline Covalentâ€Triazineâ€Framework Nanosheets with Electron Donor Groups for Synergistically Enhanced Photocatalytic Water Splitting. Angewandte Chemie - International Edition, 2021, 60, 25381-25390.	13.8	104
2342	Z-scheme systems of ASi2N4 (A = Mo or W) for photocatalytic water splitting and nanogenerators. Tungsten, 2022, 4, 52-59.	4.8	41
2343	Surface step edge-assisted monolayer epitaxy of $\hat{l}_{\pm}$ -antimonene on SnSe2 substrate. AIP Advances, 2021, 11, 095014.	1.3	0
2344	Highlighting the structure – directing capability of the functional groups of angular dicarboxylic ligands: New 2-dimensional Cu2+ MOFs from analogous synthetic routes. Polyhedron, 2021, 205, 115299.	2.2	4
2345	Recent progress of flexible electronics by 2D transition metal dichalcogenides. Nano Research, 2022, 15, 2413-2432.	10.4	58
2346	Active facet determination of layered double hydroxide for oxygen evolution reaction. Journal of Energy Chemistry, 2021, 60, 127-134.	12.9	32
2347	The Role of Additives in Suppressing the Degradation of Liquidâ€Exfoliated WS 2 Monolayers. Advanced Materials, 2021, 33, 2102883.	21.0	6
2348	Growth of Graphene Nanoflakes/ <i>h</i> à€BN Heterostructures. Advanced Materials Interfaces, 2021, 8, 2100766.	3.7	5

#	Article	IF	CITATIONS
2349	Enhanced energy storage performance of polymer nanocomposites using hybrid 2D ZnO@MoS2 semiconductive nano-fillers. Chemical Engineering Journal, 2022, 430, 132676.	12.7	40
2350	Iron oxychloride/bovine serum albumin nanosheets for catalytic H2O2 activation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 624, 126793.	4.7	9
2351	Effect of synthesis method parameters on the photocatalytic activity of tungsten oxide nanoplates. AIP Advances, 2021, 11, 095220.	1.3	3
2352	Selective biomass photoreforming for valuable chemicals and fuels: A critical review. Renewable and Sustainable Energy Reviews, 2021, 148, 111266.	16.4	70
2353	Atomic Layer Deposition of Nanolayered Carbon Films. Journal of Carbon Research, 2021, 7, 67.	2.7	2
2354	Harnessing the Volume Expansion of MoS <sub>3</sub> Anode by Structure Engineering to Achieve High Performance Beyond Lithiumâ€Based Rechargeable Batteries. Advanced Materials, 2021, 33, e2106232.	21.0	83
2355	Glaser Coupling of Substituted Anthracene Diynes on a Non-metallic Surface at the Vapor-Solid Interface. Chemical Research in Chinese Universities, 2021, 37, 1143.	2.6	0
2356	Identifying the Intermediate Free-Carrier Dynamics Across the Charge Separation in Monolayer MoS <sub>2</sub> /ReSe <sub>2</sub> Heterostructures. ACS Nano, 2021, 15, 16760-16768.	14.6	17
2357	Selfâ€Assembly of a Bilayer 2D Supramolecular Organic Framework in Water. Angewandte Chemie - International Edition, 2021, 60, 26268-26275.	13.8	37
2358	MXene-Derived Quantum Dots for Energy Conversion and Storage Applications. Energy &	5.1	41
2359	Emerging Photocatalysts for Hydrogen Production. Green Chemistry and Sustainable Technology, 2022, , 647-671.	0.7	1
2360	Design of transition metal oxides nanosheets for the direct electrocatalytic oxidation of glucose. Materials Chemistry and Physics, 2021, 269, 124770.	4.0	11
2361	Magnetic and electronic properties of two-dimensional metal-organic frameworks TM <sub>3</sub> (C <sub>2</sub> NH) <sub>12</sub> *. Chinese Physics B, 2021, 30, 097102.	1.4	5
2362	Electronic and optical properties of pristine and Li/Na/K/Mg/Ca decorated net-Y: First-principles calculations. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 271, 115269.	3.5	2
2363	Two-dimensional metallic MoS2-amorphous CoNi(OH)2 nanocomposite for enhanced electrochemical water splitting in alkaline solutions. Applied Surface Science, 2021, 561, 150079.	6.1	18
2364	Influence of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> (MXene) on the generation of dielectric barrier discharge in air. Plasma Science and Technology, 2021, 23, 115403.	1.5	4
2365	Nitrogen-Doped Titanium Monoxide Flexible Membrane for a Low-Cost, Biocompatible, and Durable Raman Scattering Substrate. Analytical Chemistry, 2021, 93, 12776-12785.	6.5	6
2366	Phase-Transition Mo <sub>1â€"<i>x</i></sub> V <sub><i>x</i></sub> Se <sub>2</sub> Alloy Nanosheets with Rich Vâ€"Se Vacancies and Their Enhanced Catalytic Performance of Hydrogen Evolution Reaction. ACS Nano, 2021, 15, 14672-14682.	14.6	31

#	Article	IF	CITATIONS
2367	Exploring the growth and oxidation of 2D-TaS $<$ sub $>$ 2 $<$ /sub $>$ 0 on Cu(111). Nanotechnology, 2021, 32, 505605.	2.6	3
2368	Hexagonal Boron Nitride Meeting Metal: A New Opportunity and Territory in Heterogeneous Catalysis. Journal of Physical Chemistry Letters, 2021, 12, 9608-9619.	4.6	26
2369	The adsorption performance of harmful gas on Cu doped WS2: A first-principle study. Materials Today Communications, 2021, 28, 102488.	1.9	36
2370	A <scp>waterâ€soluble</scp> micropatterned <scp>MoS<sub>2</sub></scp> quantum dots/polyvinyl alcohol film as a transient contact (pressure) and <scp>nonâ€contact</scp> (humidity) as touch and proximity sensor. Journal of Applied Polymer Science, 2022, 139, 51711.	2.6	1
2371	Dual 2D CuSe/g-C3N4 heterostructure for boosting electrocatalytic reduction of CO2. Electrochimica Acta, 2021, 390, 138766.	5.2	30
2372	Fabrication of fanlike L-shaped graphene nanostructures with enhanced thermal/electrochemical properties via laser irradiation. Carbon, 2021, 182, 691-699.	10.3	16
2373	Defects-induced oxidation of two-dimensional $\hat{l}^2$ -In2S3 and its optoelectronic properties. Optical Materials, 2021, 119, 111372.	3.6	13
2374	Van der Waals organic/inorganic heterostructures in the two-dimensional limit. CheM, 2021, 7, 2989-3026.	11.7	19
2375	Advances and perspectives of ZIFs-based materials for electrochemical energy storage: Design of synthesis and crystal structure, evolution of mechanisms and electrochemical performance. Energy Storage Materials, 2021, 43, 531-578.	18.0	56
2376	Hydrogen storage capacity of Li-decorated borophene and pristine graphene slit pores: A combined ab initio and quantum-thermodynamic study. Applied Surface Science, 2021, 562, 150019.	6.1	15
2377	Enhanced visible-light-driven photocatalytic activity of bismuth oxide via the decoration of titanium carbide quantum dots. Journal of Colloid and Interface Science, 2021, 600, 161-173.	9.4	51
2378	Van der Waals heterostructures with one-dimensional atomic crystals. Progress in Materials Science, 2021, 122, 100856.	32.8	29
2379	Improving thermal energy storage and transfer performance in solar energy storage: Nanocomposite synthesized by dispersing nano boron nitride in solar salt. Solar Energy Materials and Solar Cells, 2021, 232, 111378.	6.2	16
2380	Functionalized gold nanomaterials as biomimetic nanozymes and biosensing actuators. TrAC - Trends in Analytical Chemistry, 2021, 143, 116376.	11.4	31
2381	Spark plasma sintering and improved fracture toughness of silicoboron carbonitride ceramics with the integration of 2D MXene. Ceramics International, 2021, 47, 27730-27735.	4.8	4
2382	Novel electronic structures and magnetic properties in twisted two-dimensional graphene/Janus 2H–VSeTe heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114854.	2.7	8
2383	Ab-initio and experimental investigations on Pt:MoS2 for electronic and optical applications. Chemical Physics Letters, 2021, 780, 138938.	2.6	8
2384	Two-dimensional phosphorus polymorph possessing both wide band gap and strong anisotropy. Solid State Communications, 2021, , 114540.	1.9	1

#	Article	IF	CITATIONS
2385	Fe-incorporated cobalt-based metal-organic framework ultrathin nanosheets for electrocatalytic oxygen evolution. Chemical Engineering Journal, 2021, 422, 130055.	12.7	19
2386	Ab-initio and experimental investigations on Au incorporated MoS2 for electronic and optical response. Journal of Alloys and Compounds, 2021, 877, 160244.	5.5	10
2387	Exploring the structural and electronic properties of GeC/BP van der Waals heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114804.	2.7	6
2388	Large area layered ultrathin films of metal-diacid via liquid/liquid interfacial self-assembly. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 626, 127028.	4.7	5
2389	Effect on electrochemical reduction of nitrogen to ammonia under ambient conditions: Challenges and opportunities for chemical fuels. Journal of Energy Chemistry, 2021, 61, 304-318.	12.9	50
2390	Graphene quantum dots assisted exfoliation of atomically-thin 2D materials and as-formed 0D/2D van der Waals heterojunction for HER. Carbon, 2021, 184, 554-561.	10.3	43
2391	An ultrathin 2D Yb(III) metal-organic frameworks with strong electrochemiluminescence as a "on-off-on―platform for detection of picric acid and berberine chloride form. Talanta, 2021, 234, 122625.	5 <b>.</b> 5	10
2392	Adsorption characteristics of H2S, SO2, SO2F2, SOF2, and N2 on NiO–MoSe2 monolayer for gas-sensing applications. Vacuum, 2021, 193, 110506.	3.5	22
2393	Two-dimensional pyrite supported transition metal for highly-efficient electrochemical CO2 reduction: A theoretical screening study. Chemical Engineering Journal, 2021, 424, 130541.	12.7	31
2394	Two-dimensional materials and their derivatives for high performance phase change materials: emerging trends and challenges. Energy Storage Materials, 2021, 42, 845-870.	18.0	47
2395	Sensing ability of 2D Al2C monolayer toward toxic pnictogen hydrides: A first-principles perspective. Sensors and Actuators A: Physical, 2021, 331, 113000.	4.1	10
2396	Noble metal-molybdenum disulfide nanohybrids as dual fluorometric and colorimetric sensor for hepatitis B virus DNA detection. Talanta, 2021, 234, 122675.	5.5	20
2397	Theoretical investigation on the adsorption orientation of DNA on two-dimensional MoSe2. Chemical Physics, 2021, 551, 111329.	1.9	2
2398	Suppressing photocarrier recombination in anatase TiO2 nanoplates via thickness optimization for enhanced photocatalytical H2 generation. Applied Surface Science, 2021, 566, 150698.	6.1	6
2399	Vanadium selenide decorated reduced graphene oxide nanocomposite: A co-active catalyst for the detection of 2,4,6 – Trichlorophenol. Chemosphere, 2021, 282, 130874.	8.2	34
2400	Recent progress in solution assembly of 2D materials for wearable energy storage applications. Journal of Energy Chemistry, 2021, 62, 27-42.	12.9	29
2401	Applications of two-dimensional layered nanomaterials in photoelectrochemical sensors: A comprehensive review. Coordination Chemistry Reviews, 2021, 447, 214156.	18.8	136
2402	Emerging two-dimensional silicene nanosheets for biomedical applications. Materials Today Nano, 2021, 16, 100132.	4.6	19

#	Article	IF	CITATIONS
2403	Coat multi-layered graphene on Cu with radiofrequency plasmas for anti-oxidization in hot air. Materials Chemistry and Physics, 2021, 274, 125155.	4.0	3
2404	Unveiling the activity origin of ultrathin BiOCl nanosheets for photocatalytic CO2 reduction. Applied Catalysis B: Environmental, 2021, 299, 120679.	20.2	77
2405	Electrochemical catalytic mechanism of single transition metal atom embedded BC3 monolayer for oxygen reduction and evolution reactions. Chemical Engineering Journal, 2021, 425, 130631.	12.7	18
2406	Two-dimensional nanosheets of metal–organic frameworks with tailorable morphologies. Materials Today Chemistry, 2021, 22, 100517.	3.5	10
2407	2D bimetallic RuNi alloy Co-catalysts remarkably enhanced the photocatalytic H2 evolution performance of g-C3N4 nanosheets. Chemical Engineering Journal, 2021, 426, 130824.	12.7	49
2408	Construction of S-scheme 0D/2D heterostructures for enhanced visible-light-driven CO2 reduction. Applied Catalysis B: Environmental, 2021, 298, 120521.	20.2	86
2409	Sustainable remediation of hazardous environmental pollutants using biochar-based nanohybrid materials. Journal of Environmental Management, 2021, 300, 113762.	7.8	45
2410	Highly flexible and stable memristive devices based on hexagonal boron-nitride nanosheets: Polymethyl methacrylate nanocomposites. Organic Electronics, 2021, 99, 106322.	2.6	4
2411	Ti3C2 MXene/Ag2ZnGeO4 Schottky heterojunctions with enhanced photocatalytic performances: Efficient charge separation and mechanism studies. Separation and Purification Technology, 2021, 278, 119560.	7.9	20
2412	Fast and efficient shear-force assisted production of covalently functionalized oxide nanosheets. Journal of Colloid and Interface Science, 2022, 607, 621-632.	9.4	3
2413	Functionalizing Ti3C2Tx for enhancing fire resistance and reducing toxic gases of flexible polyurethane foam composites with reinforced mechanical properties. Journal of Colloid and Interface Science, 2022, 607, 1300-1312.	9.4	97
2414	Construction of double-functionalized g-C3N4 heterojunction structure via optimized charge transfer for the synergistically enhanced photocatalytic degradation of sulfonamides and H2O2 production. Journal of Hazardous Materials, 2022, 422, 126868.	12.4	49
2415	CuPd alloy decorated SnNb2O6 nanosheets as a multifunctional photocatalyst for semihydrogenation of phenylacetylene under visible light. Chemical Engineering Journal, 2022, 429, 132018.	12.7	12
2416	Signal enhancing strategies in aptasensors for the detection of small molecular contaminants by nanomaterials and nucleic acid amplification. Talanta, 2022, 236, 122866.	5.5	36
2417	Polymer-graphene composite in hydrogen production. , 2022, , 639-682.		1
2418	DNA nanosensing systems for tunable detection of metal ions and molecular crypto-steganography. Biosensors and Bioelectronics, 2022, 195, 113645.	10.1	11
2419	Design of copper salt@graphene nanohybrids to accomplish excellent resilience and superior fire safety for flexible polyurethane foam. Journal of Colloid and Interface Science, 2022, 606, 1205-1218.	9.4	20
2420	Application of MXenes for water treatment and energy-efficient desalination: A review. Journal of Hazardous Materials, 2022, 423, 127050.	12.4	111

#	Article	IF	CITATIONS
2421	Electronic and optical properties of two-dimensional GaN/ZnO heterojunction tuned by different stacking configurations. Journal of Colloid and Interface Science, 2022, 607, 913-921.	9.4	31
2422	High-quality graphene from the surface of CrFeCoNiC high-entropy alloy. Journal of Alloys and Compounds, 2022, 889, 161712.	5.5	1
2423	Surface functionalized Pt/SnNb2O6 nanosheets for visible-light-driven the precise hydrogenation of furfural to furfuryl alcohol. Journal of Energy Chemistry, 2022, 66, 566-575.	12.9	16
2424	Phosphorus-induced reconstruction of Subâ€2Ânm ultrafine spinel type CoO nanosheets for efficient water oxidation. Journal of Alloys and Compounds, 2021, 889, 161704.	5.5	4
2425	Electronic properties of the Poly(3-hexylthiophene) / MoS2interfaces: The influence of the substrate. Applied Surface Science, 2022, 572, 151372.	6.1	2
2426	Reduced graphene oxide-coated electrospun fibre: effect of orientation, coverage and electrical stimulation on Schwann cells behavior. Journal of Materials Chemistry B, 2021, 9, 2656-2665.	5.8	19
2427	Role of Co in the Electrocatalytic Activity of Monolayer Ternary NiFeCo-Double Hydroxide Nanosheets for Oxygen Evolution Reaction. Materials, 2021, 14, 207.	2.9	7
2428	A facile preparation method for MoS2 nanosheets and their well-controllable interfacial assembly with PEDOT: PSS for effective electrochemical hydrogen evolution reactions. Journal of Materials Science, 2021, 56, 7008-7021.	3.7	7
2429	Prediction of allotropes of tellurium with molecular, one- and two-dimensional covalent nets for photofunctional applications. RSC Advances, 2021, 11, 29965-29975.	3.6	4
2430	Selfâ€Antiâ€Stacking 2D Metal Phosphide Loopâ€Sheet Heterostructures by Edgeâ€Topological Regulation for Highly Efficient Water Oxidation. Small, 2021, 17, e2006860.	10.0	16
2431	Low-dimensional nanomaterials for antibacterial applications. Journal of Materials Chemistry B, 2021, 9, 3640-3661.	5.8	36
2432	Constructing Atomic Heterometallic Sites in Ultrathin Nickel-Incorporated Cobalt Phosphide Nanosheets via a Boron-Assisted Strategy for Highly Efficient Water Splitting. Nano Letters, 2021, 21, 823-832.	9.1	91
2433	Highlights of the development and application of luminescent lanthanide based coordination polymers, MOFs and functional nanomaterials. Dalton Transactions, 2021, 50, 770-784.	3.3	92
2434	Nanomaterials: a review of synthesis methods, properties, recent progress, and challenges. Materials Advances, 2021, 2, 1821-1871.	5.4	1,049
2435	Black phosphorus: device and application. , 2021, , 139-163.		1
2436	Effects of atomic substitutional doping on electronic structure of monolayer Janus WSeTe. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 096301.	0.5	O
2437	Ultrathin 2D/2D Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> /semiconductor dual-functional photocatalysts for simultaneous imine production and H <sub>2</sub> evolution. Journal of Materials Chemistry A, 2021, 9, 19984-19993.	10.3	40
2438	Research Progress of Photocatalytic CO2 Reduction Based on Two-dimensional Materials. Acta Chimica Sinica, 2021, 79, 10.	1.4	16

#	Article	IF	CITATIONS
2439	Application of two-dimensional materials in perovskite solar cells: recent progress, challenges, and prospective solutions. Journal of Materials Chemistry C, 2021, 9, 14065-14092.	5 <b>.</b> 5	24
2440	Up-scalable emerging energy conversion technologies enabled by 2D materials: from miniature power harvesters towards grid-connected energy systems. Energy and Environmental Science, 2021, 14, 3352-3392.	30.8	26
2441	Switching photodiodes based on (2D/3D) PdSe $<$ sub $>$ 2 $<$ /sub $>$ /Si heterojunctions with a broadband spectral response. Journal of Materials Chemistry C, 2021, 9, 3998-4007.	5 <b>.</b> 5	24
2442	Spin-constrained optoelectronic functionality in two-dimensional ferromagnetic semiconductor heterojunctions. Materials Horizons, 2021, 8, 1323-1333.	12.2	11
2443	Two-dimensional materials in biomedical, biosensing and sensing applications. Chemical Society Reviews, 2021, 50, 619-657.	38.1	265
2444	Recent progress of dimensionally designed electrode nanomaterials in aqueous electrochemical energy storage. Journal of Materials Chemistry A, 2021, 9, 9535-9572.	10.3	54
2445	Metal–organic framework structure–property relationships for high-performance multifunctional polymer nanocomposite applications. Journal of Materials Chemistry A, 2021, 9, 4348-4378.	10.3	34
2446	Inversion symmetry broken in 2H phase vanadium-doped molybdenum disulfide. Nanoscale, 2021, 13, 18103-18111.	<b>5.</b> 6	11
2447	Tensile properties of two-dimensional poly(3-hexyl thiophene) thin films as a function of thickness. Journal of Materials Chemistry $C$ , $O$ , $,$ .	5.5	1
2448	Alloy Engineering in Fewâ€Layer Manganese Phosphorus Trichalcogenides for Surfaceâ€Enhanced Raman Scattering. Advanced Functional Materials, 2020, 30, 1910171.	14.9	48
2449	Ultrathin 2D Photocatalysts: Electronicâ€Structure Tailoring, Hybridization, and Applications. Advanced Materials, 2018, 30, 1704548.	21.0	409
2450	In Situ Observations of Freestanding Singleâ€Atomâ€Thick Gold Nanoribbons Suspended in Graphene. Advanced Materials Interfaces, 2020, 7, 2000436.	3.7	8
2451	Ultrasensitive and Broadband Allâ€Optically Controlled THz Modulator Based on MoTe <sub>2</sub> /Si van der Waals Heterostructure. Advanced Optical Materials, 2020, 8, 2000160.	7.3	33
2452	State-of-the-Art Advances and Perspectives for Electrocatalysis. , 2020, , 311-352.		1
2453	MoS2- and MoO3-Based Ultrathin Layered Materials for Optoelectronic Applications. Materials Horizons, 2020, , 211-244.	0.6	2
2454	Two-Dimensional Macromolecular Architectures Constructed at Interfaces by Soft Solution Processes., 2018,, 478-485.		1
2455	2D MOF with electrochemical exfoliated graphene for nonenzymatic glucose sensing: Central metal sites and oxidation potentials. Analytica Chimica Acta, 2020, 1122, 9-19.	5.4	60
2456	Fast scan voltammetry-derived ultrasensitive Faraday cage-type electrochemical immunoassay for large-size targets. Biosensors and Bioelectronics, 2020, 163, 112277.	10.1	19

#	Article	IF	CITATIONS
2457	Engineering high-defect densities across vertically-aligned graphene nanosheets to induce photocatalytic reactivity. Carbon, 2020, 168, 32-41.	10.3	22
2458	Scaled-up synthesis of defect-rich layered double hydroxide monolayers without organic species for efficient oxygen evolution reaction. Green Energy and Environment, 2022, 7, 975-982.	8.7	28
2459	One-pot synthesis of hierarchical porous covalent organic frameworks and two-dimensional nanomaterials for selective removal of anionic dyes. Journal of Environmental Chemical Engineering, 2020, 8, 104054.	6.7	73
2460	Scalable one-step template-free synthesis of ultralight edge-functionalized g-C3N4 nanosheets with enhanced visible light photocatalytic performance. Separation and Purification Technology, 2020, 250, 117085.	7.9	22
2461	Monodisperse Pd Nanotetrahedrons on Ultrathin MoO <sub>3â€"<i>x</i></sub> Nanosheets as Excellent Heterogeneous Catalyst for Chemoselective Hydrogenation Reactions. Journal of Physical Chemistry C, 2017, 121, 27528-27534.	3.1	25
2462	Chemical Surface Reactivity and Morphological Changes of Bismuth Triiodide (Bil3) under Different Environmental Conditions. Langmuir, 2020, 36, 6458-6464.	3.5	7
2463	Modification of Black Phosphorus Nanosheets with a Ni-Containing Carbon Layer as Efficient and Stable Hydrogen Production Electrocatalysts. ACS Applied Materials & Samp; Interfaces, 2020, 12, 54619-54626.	8.0	9
2464	Ultrathin, Polycrystalline, Two-Dimensional Co <sub>3</sub> O <sub>4</sub> for Low-Temperature CO Oxidation. ACS Catalysis, 2019, 9, 2558-2567.	11.2	116
2465	Synthetic Techniques and Functionalization Approaches of 2D Transition Metal Dichalcogenides. RSC Smart Materials, 2019, , 245-282.	0.1	2
2466	Current status and prospects of memristors based on novel 2D materials. Materials Horizons, 2020, 7, 1495-1518.	12.2	101
2467	Ultrathin cadmium sulfide nanosheets for visible-light photocatalytic hydrogen production. Journal of Materials Chemistry A, 2020, 8, 3586-3589.	10.3	13
2468	Nitrogen fixation on a single Mo atom embedded stanene monolayer: a computational study. Physical Chemistry Chemical Physics, 2020, 22, 13981-13988.	2.8	33
2469	Modulation of the transport properties of metal/MoS2 interfaces using BN-graphene lateral tunneling layers. Nanotechnology, 2020, 31, 485204.	2.6	2
2470	Self-supporting covalent organic framework membranes synthesized through two different processes: solvothermal annealing and solvent vapor annealing. Nanotechnology, 2021, 32, 075604.	2.6	3
2471	Construction of monolayer IrTe2 and the structural transition under low temperatures. Chinese Physics B, 2020, 29, 078102.	1.4	5
2472	Epitaxial synthesis and electronic properties of monolayer Pd <sub>2</sub> Se <sub>3</sub> *. Chinese Physics B, 2020, 29, 098102.	1.4	7
2473	Interfaces between MoO $<$ sub $>$ x $<$ /sub $>$ and MoX $<$ sub $>$ 2 $<$ /sub $>$ (X = S, Se, and Te) $*$ . Chinese Physics B, 2020, 29, 116802.	1.4	7
2474	Advances in mechanical characterization of 1D and 2D nanomaterials: progress and prospects. Nano Express, 2020, 1, 022001.	2.4	14

#	WalleyLeependent properties of monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">MoSi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi< th=""><th>IF</th><th>CITATIONS</th></mml:mi<></mml:msub></mml:math>	IF	CITATIONS
2475	mathvariant="normal">N <mml:mn>4</mml:mn> <mml:mo>,</mml:mo> <mml:mo>AWSi<mml:mn>2</mml:mn><mml:msub><mml:mi< td=""><td>l<b>3</b>n20&gt;&lt;1</td><td>mm<b>l24</b>sub&gt;&lt;</td></mml:mi<></mml:msub></mml:mo>	l <b>3</b> n20><1	mm <b>l24</b> sub><
2476	mathvariant="normal">N <mml:mn>4</mml:mn> , and <mml:math <mml:math="" anisotropic="" in="" klighly="" metal="" monolayer="" two-dimensional="" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoOCl</mml:mi><mml:mn>2<td>l<b>312</b>1) &gt; &lt; /</td><td>mml/zmsub&gt;</td></mml:mn></mml:msub></mml:math>	l <b>312</b> 1) > < /	mml/zmsub>
2477	van der Waals heterostructure for photocatalysis: Graphitic carbon nitride and Janus transition-metal dichalcogenides. Physical Review Materials, 2019, 3, .	2.4	14
2478	Prediction of Janus <mml:math '="" 'xxml:msub=""><mml:msub><mml:mi>Al</mml:mi><mml:mnd:math< td=""><td>&gt;2<td>nl:mn&gt;</td></td></mml:mnd:math<></mml:msub></mml:math>	>2 <td>nl:mn&gt;</td>	nl:mn>

#	ARTICLE	IF	CITATIONS
2494	2D-Layered Nanomaterials for Energy Harvesting and Sensing Applications. , 0, , .		1
2495	Coordination-induced exfoliation to monolayer Bi-anchored MnB <sub>2</sub> nanosheets for multimodal imaging-guided photothermal therapy of cancer. Theranostics, 2020, 10, 1861-1872.	10.0	43
2496	Hydrangea-like architectures composed of Zr-based metal–organic framework nanosheets with enhanced iodine capture. Dalton Transactions, 2021, 50, 16468-16472.	3.3	4
2497	Achieving an Ohmic contact in graphene-based van der Waals heterostructures by intrinsic defects and the inner polarized electric field of Janus AlGaSSe. New Journal of Chemistry, 2021, 45, 21178-21187.	2.8	4
2498	Interface engineering and integration of two-dimensional polymeric and inorganic materials for advanced hybrid structures. New Journal of Chemistry, 2021, 45, 20972-20986.	2.8	0
2499	Photocatalytic reduction of CO <sub>2</sub> by halide perovskites: recent advances and future perspectives. Materials Advances, 2021, 2, 7187-7209.	5.4	27
2500	Recent advances in the exonuclease III-assisted target signal amplification strategy for nucleic acid detection. Analytical Methods, 2021, 13, 5103-5119.	2.7	13
2501	Photoluminescence of monolayer MoS <sub>2</sub> modulated by water/O <sub>2</sub> /laser irradiation. Physical Chemistry Chemical Physics, 2021, 23, 24579-24588.	2.8	11
2502	2D material hybrid heterostructures: achievements and challenges towards high throughput fabrication. Journal of Materials Chemistry C, 2021, 9, 15721-15734.	5 <b>.</b> 5	13
2503	Crystalline boron monosulfide nanosheets with tunable bandgaps. Journal of Materials Chemistry A, 2021, 9, 24631-24640.	10.3	21
2504	Liquidâ€Phase exfoliation method to access cobalt oxide nanosheets in pHâ€neutral solutions. Journal of the American Ceramic Society, 2022, 105, 1904.	3.8	5
2505	2D Magnetic Heterostructures and Their Interface Modulated Magnetism. ACS Applied Materials & Samp; Interfaces, 2021, 13, 50591-50601.	8.0	19
2506	Recent progress on the smart membranes based on two-dimensional materials. Chinese Chemical Letters, 2022, 33, 2832-2844.	9.0	16
2507	Adsorption of SF <sub>6</sub> Decomposition Products by the S Vacancy Structure and Edge Structure of SnS <sub>2</sub> : A Density Functional Theory Study. ACS Omega, 2021, 6, 28131-28139.	3.5	11
2508	Special topic on 2D materials chemistry. APL Materials, 2021, 9, 100401.	5.1	0
2509	Nonlinear Optical Properties and Ultrafast Carrier Dynamics of 2D Indium Selenide Nanosheets. Advanced Optical Materials, 2021, 9, 2101432.	7.3	14
2510	Electronic properties and quasiparticle model of monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>MoSi</mml:mi>N</mml:mrow><mml:mn>4</mml:mn></mml:msub></mml:math> . Physical Review B, 2021, 104, .	l:mrow> < n 3.2	nml:mn>2 </td
2511	An Amphiphilic Corona-Forming Block Promotes Formation of a Variety of 2D Platelets via Crystallization-Driven Block Copolymer Self-Assembly. Macromolecules, 2021, 54, 9761-9772.	4.8	12

#	Article	IF	CITATIONS
2512	Oil–Water–Oil Triphase Synthesis of Ionic Covalent Organic Framework Nanosheets. Angewandte Chemie - International Edition, 2021, 60, 27078-27085.	13.8	51
2513	PFP@PLGA/Cu12Sb4S13-mediated PTT ablates hepatocellular carcinoma by inhibiting the RAS/MAPK/MT-CO1 signaling pathway. Nano Convergence, 2021, 8, 29.	12.1	5
2514	Mg-induced g-C3N4 synthesis of nitrogen-doped graphitic carbon for effective activation of peroxymonosulfate to degrade organic contaminants. Chinese Chemical Letters, 2022, 33, 3113-3118.	9.0	20
2515	2D Ti-based metal–organic framework photocatalysis for red light-driven selective aerobic oxidation of sulfides. Chemical Engineering Journal, 2022, 430, 133071.	12.7	28
2516	Facile manufacture of COF-based mixed matrix membranes for efficient CO2 separation. Chemical Engineering Journal, 2022, 430, 133001.	12.7	54
2518	Plasmonic <scp>Coreâ€Shell</scp> Nanostructures Enhanced Spectroscopies. Chinese Journal of Chemistry, 2022, 40, 392-406.	4.9	1
2519	Atomic Structure of Dislocations and Grain Boundaries in Two-Dimensional PtSe <sub>2</sub> . ACS Nano, 2021, 15, 16748-16759.	14.6	12
2520	Competitive screening and band gap renormalization in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math> -type monolayer transition metal dichalcogenides. Physical Review B, 2021, 104, .	3.2	6
2521	Mechanistic insight into the chemical treatments of monolayer transition metal disulfides for photoluminescence enhancement. Nature Communications, 2021, 12, 6044.	12.8	17
2522	Stoichiometric two-dimensional non-van der Waals AgCrS2 with superionic behaviour at room temperature. Nature Chemistry, 2021, 13, 1235-1240.	13.6	50
2523	Elemental 2D Materials: Solutionâ€Processed Synthesis and Applications in Electrochemical Ammonia Production. Advanced Functional Materials, 2022, 32, 2107280.	14.9	20
2524	Oil–Water–Oil Triphase Synthesis of Ionic Covalent Organic Framework Nanosheets. Angewandte Chemie, 2021, 133, 27284-27291.	2.0	7
2525	Theoretical Study of Anisotropic Carrier Mobility for Two-Dimensional Nb <sub>2</sub> Se <sub>9</sub> Material. ACS Omega, 2021, 6, 26782-26790.	3.5	8
2526	Artificial Metal–Peptide Assemblies: Bioinspired Assembly of Peptides and Metals through Space and across Length Scales. Journal of the American Chemical Society, 2021, 143, 17316-17336.	13.7	38
2527	Progress in Fabrication of Nanosheet Membranes with Two-Dimensional Materials. Material Sciences, 2018, 08, 736-741.	0.0	0
2528	ZrS <sub>2</sub> quantum dots: Preparation, structure, and optical properties. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 148501.	0.5	2
2529	Dynamics of A-exciton and spin relaxation in WS <sub>2</sub> and WSe <sub>2</sub> monolayer. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 017201.	0.5	3
2530	Graphene Based Immunosensors. RSC Detection Science, 2019, , 156-185.	0.0	0

#	Article	IF	CITATIONS
2531	Novel UV line beam system for large area processing with 248 nm (Withdrawal Notice). , 2019, , .		0
2532	Wonders of Multifield Lattice Oscillation. , 2020, , 369-392.		0
2533	Zero-valent Au, Cu, and Sn intercalation into GeS nanoribbons: tailoring ultrafast photoconductive response. , $2020$ , , .		0
2534	Thickness-dependent Young's modulus of polycrystalline α-PbO nanosheets. Nanotechnology, 2020, 31, 395712.	2.6	3
2535	Direct femtosecond laser ablation of large-area TaSe <sub>2</sub> , SnS <sub>2</sub> , and TiS <sub>2</sub> thick films by a back ablation procedure. Applied Optics, 2020, 59, 7606.	1.8	3
2537	Emerging 2D-Nanostructured materials for electrochemical and sensing Application-A review. International Journal of Hydrogen Energy, 2022, 47, 1371-1389.	7.1	34
2538	Atomically Thin Materials for Next-Generation Rechargeable Batteries. Chemical Reviews, 2022, 122, 957-999.	47.7	87
2539	Structure, Stability, Properties, and Application of Atomically Thin Coinage Metal Flatland in Graphene Pore: A Density Functional Theory Calculation. Physica Status Solidi (B): Basic Research, 2022, 259, 2100489.	1.5	10
2540	Concealing Messages at the Atomic‶hin Level by Reaching the Limit of Writing. Advanced Materials Technologies, 2022, 7, 2101089.	5.8	0
2541	Interfacial Interactions within Amyloid Protein Corona Based on 2D MoS <sub>2</sub> Nanosheets. ChemBioChem, 2022, 23, .	2.6	4
2542	Increased solar absorption and promoted photocarrier separation in atomically thin 2D carbon nitride sheets for enhanced visible-light photocatalysis. Chemical Engineering Journal, 2022, 431, 133219.	12.7	7
2543	Highly wrinkled palladium nanosheets as advanced electrocatalysts for the oxygen reduction reaction in acidic medium. Chemical Engineering Journal, 2022, 431, 133237.	12.7	33
2544	The Adsorption behaviors of pristine MoS2 and N-MoS2 Monolayer: A First-Principles Calculation. Surfaces and Interfaces, 2021, , 101580.	3.0	3
2546	Exploring Structure-function Relationship of Two-dimensional Electrocatalysts with Synchrotron Radiation X-ray Absorption Spectrum. Current Chinese Science, 2021, 1, 22-42.	0.5	2
2547	Two-dimensional CoSe structures: Intrinsic magnetism, strain-tunable anisotropic valleys, magnetic Weyl point, and antiferromagnetic metal state. Physical Review B, 2020, 102, .	3.2	8
2548	Design and Characterization of Ag@Cu2O-rGO Nanocomposite for the p-Nitrophenol Reduction. Catalysts, 2021, 11, 43.	3.5	3
2549	Room temperature synthesis of two-dimensional multilayer magnets based on α-CoII layered hydroxides. Nano Materials Science, 2022, 4, 36-43.	8.8	14
2550	Earth-abundant electrocatalysts for sustainable energy conversion. , 2022, , 131-168.		0

#	Article	IF	Citations
2551	Novel CuTe monolayer as promising anode material for Na-ion batteries: A theoretical study. Applied Surface Science, 2022, 573, 151550.	6.1	12
2552	Potassium reduced graphite functionalization: Architectural aesthetics and electrical excellence. Carbon, 2022, 186, 75-82.	10.3	0
2553	Robust and flexible polymer/MXene-derived two dimensional TiO2 hybrid gel electrolyte for dendrite-free solid-state zinc-ion batteries. Chemical Engineering Journal, 2022, 430, 132748.	12.7	31
2554	Solid additives in organic solar cells: progress and perspectives. Journal of Materials Chemistry C, 2022, 10, 2364-2374.	5.5	40
2555	Two-dimensional materials towards separator functionalization in advanced Li–S batteries. Nanoscale, 2021, 13, 18883-18911.	5.6	10
2556	Dual-wavelength self-starting mode-locking Er-doped fiber laser with MnPS <sub>3</sub> saturable absorber. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 184208.	0.5	3
2558	Challenges, Possible Strategies and Conclusions. RSC Smart Materials, 2020, , 428-437.	0.1	0
2559	First-principles study of magnetism in some novel MXene materials. RSC Advances, 2020, 10, 44430-44436.	3.6	11
2560	Two-dimensional nanomaterials and their derivatives for laser protection. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 184201.	0.5	4
2561	Synthesis of Two-Dimensional (2D) Nanomaterials. , 2020, , 55-78.		0
2562	Research progress of low-dimensional semiconductor materials in field of nonlinear optics. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 184211.	0.5	7
2563	High-Temperature Scanning Probe Microscopy. , 2020, , 1-1-1-14.		0
2564	Two-dimensional PdMo curved nanosheets for tunable CO2 electrocatalytic reduction to syngas. Cell Reports Physical Science, 2021, 2, 100619.	5.6	7
2565	Integration of Magnetic Phase-Change Microcapsules with Black Phosphorus Nanosheets for Efficient Harvest of Solar Photothermal Energy. ACS Applied Energy Materials, 2021, 4, 13248-13262.	5.1	39
2566	Passively mode-locked in Er-doped fiber laser based on semi-metallic InBi saturable absorber. Journal Physics D: Applied Physics, 0, , .	2.8	0
2567	2D van der Waals materials for ultrafast pulsed fiber lasers: review and prospect. Nanotechnology, 2022, 33, 082003.	2.6	11
2568	Borophene: Two-dimensional Boron Monolayer: Synthesis, Properties, and Potential Applications. Chemical Reviews, 2022, 122, 1000-1051.	47.7	106
2569	MXene-based electrochemical and biosensing platforms to detect toxic elements and pesticides pollutants from environmental matrices. Chemosphere, 2022, 291, 132820.	8.2	89

#	Article	IF	CITATIONS
2570	Polymerâ€based microfluidic devices: A comprehensive review on preparation and applications. Polymer Engineering and Science, 2022, 62, 3-24.	3.1	26
2571	The Road for 2D Semiconductors in the Silicon Age. Advanced Materials, 2022, 34, e2106886.	21.0	57
2572	Ultrathin Anion Conductors Based Memristor. Advanced Electronic Materials, 2022, 8, 2100845.	5.1	10
2573	Graphitic Azaâ€Fused Ï€â€Conjugated Networks: Construction, Engineering, and Taskâ€Specific Applications. Advanced Materials, 2022, 34, e2107947.	21.0	17
2574	Rapid, Ordered Polymerization of Crystalline Semiconducting Covalent Triazine Frameworks. Angewandte Chemie, 2022, 134, e202113926.	2.0	5
2575	Insight into the Role of H <sub>2</sub> in WS <sub>2</sub> Growth by Chemical Vapor Deposition. ACS Applied Electronic Materials, 2021, 3, 5138-5146.	4.3	5
2576	Rapid, Ordered Polymerization of Crystalline Semiconducting Covalent Triazine Frameworks. Angewandte Chemie - International Edition, 2022, 61, e202113926.	13.8	54
2578	Reduction of CO2 by photoelectrochemical process using nonâ€oxide twoâ€dimensional nanomaterials ―a review. ChemElectroChem, 2021, 8, 4305.	3.4	8
2579	Self-Limiting Two-Dimensional Surface Oxides of Liquid Metals. , 2020, , 79-110.		0
2580	Ab initio investigation of topological phase transitions induced by pressure in trilayer van der Waals structures: the example of h-BN/SnTe/h-BN. Journal of Physics Condensed Matter, 2021, 33, 025003.	1.8	2
2581	Structural stability, magneto-electronic properties, and tuning effects for transition metal-doped net-Y nanoribbons. Journal Physics D: Applied Physics, 2020, 53, 485001.	2.8	1
2582	Few-layer GaSe nanosheet-based broadband saturable absorber for passively Q-switched solid-state bulk lasers. Applied Optics, 2020, 59, 8834.	1.8	3
2583	Anisotropic transport in tellurene FETs. Micro and Nano Letters, 2020, 15, 959-963.	1.3	1
2584	A review on 2D porous organic polymers for membrane-based separations: Processing and engineering of transport channels., 2021, 1, 100014.		19
2585	Graphene: Structure, properties, preparation, modification, and applications., 2022,, 1-24.		0
2586	Controllable dimensions and regular geometric architectures from self-assembly of lithium-containing polyhedral oligomeric silsesquioxane: Build for enhancing the fire safety of epoxy resin. Composites Part B: Engineering, 2022, 229, 109483.	12.0	12
2587	Organic building blocks at inorganic nanomaterial interfaces. Materials Horizons, 2022, 9, 61-87.	12.2	18
2588	Functional role of single-atom catalysts in electrocatalytic hydrogen evolution: Current developments and future challenges. Coordination Chemistry Reviews, 2022, 452, 214289.	18.8	54

#	Article	IF	CITATIONS
2589	Cataluminescence on 2D WS2 nanosheets surface for H2S sensing. Sensors and Actuators B: Chemical, 2022, 353, 131111.	7.8	13
2590	Effective modulating the electronic and magnetic properties of VI3 monolayer: A first-principles calculation. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 137, 115079.	2.7	3
2591	2D material based field effect transistors and nanoelectromechanical systems for sensing applications. IScience, 2021, 24, 103513.	4.1	21
2592	Two-dimensional materials toward Terahertz optoelectronic device applications. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2022, 51, 100473.	11.6	36
2593	Large-Area Monolayer MoS <sub>2</sub> Nanosheets on GaN Substrates for Light-Emitting Diodes and Valley-Spin Electronic Devices. ACS Applied Nano Materials, 2021, 4, 12127-12136.	5.0	17
2594	Dependence of the photoelectric performance of the CVD-grown 2D WS2 on the oxygen-doping concentration. Journal of Alloys and Compounds, 2022, 895, 162705.	5.5	3
2595	Scaling of energy gaps in phosphorene nanoï¬,akes. Journal of Physics Condensed Matter, 2021, 34, .	1.8	0
2596	Theoretical Study on V Atom Supported on N and P-Doped Defective Graphene for Electrocatalytic Nitrogen Reduction. Journal of the Electrochemical Society, 2021, 168, 116516.	2.9	5
2597	Unraveling the Electrical and Magnetic Properties of Layered Conductive Metalâ€Organic Framework With Atomic Precision. Angewandte Chemie, 2022, 134, e202113569.	2.0	14
2598	Intrinsic half-metallic properties of MnHm (M: Fe, V, Co, and Cr) in various space groups: A first-principles study. Journal of Magnetism and Magnetic Materials, 2022, 547, 168758.	2.3	6
2599	Chemistry, Functionalization, and Applications of Recent Monoelemental Two-Dimensional Materials and Their Heterostructures. Chemical Reviews, 2022, 122, 1127-1207.	47.7	103
2600	Exploring the Synergistic Effect of Novel Niâ€Fe in 2D Bimetallic Metalâ€Organic Frameworks for Enhanced Electrochemical Reduction of CO <sub>2</sub> . Advanced Materials Interfaces, 2022, 9, 2101505.	3.7	32
2601	Controlled Preparation of Zn–Co–S Nanosheet Arrays for High-Performance All-Solid-State Supercapacitors. ACS Applied Energy Materials, 2021, 4, 13803-13810.	5.1	9
2602	30 Li <sup>+</sup> â€Accommodating Covalent Organic Frameworks as Ultralong Cyclable Highâ€Capacity Liâ€Ion Battery Electrodes. Advanced Functional Materials, 2022, 32, 2108798.	14.9	59
2603	Amorphous TiO <sub>2</sub> Bridges Stabilized WS <sub>2</sub> Membranes with Excellent Filtration Stability and Photocatalysis-Driving Self-Cleaning Ability. ACS Applied Materials & Samp; Interfaces, 2021, 13, 58076-58084.	8.0	9
2604	Modulating the Electronic Properties of MoS <sub>2</sub> Nanosheets for Electrochemical Hydrogen Production: A Review. ACS Applied Nano Materials, 2021, 4, 11413-11427.	5.0	24
2605	Metallization and Superconductivity in the van der Waals Compound CuP <sub>2</sub> Se through Pressure-Tuning of the Interlayer Coupling. Journal of the American Chemical Society, 2021, 143, 20343-20355.	13.7	10
2606	Colloidal Metalâ€Halide Perovskite Nanoplatelets: Thicknessâ€Controlled Synthesis, Properties, and Application in Lightâ€Emitting Diodes. Advanced Materials, 2022, 34, e2107105.	21.0	124

#	ARTICLE	IF	Citations
2607	Triangle nanowall arrays of ultrathin MoS2 nanosheets vertically grown on Co-Fe bimetallic disulfide as highly efficient electrocatalysts for hydrogen evolution reaction. Electrochimica Acta, 2022, 403, 139683.	5.2	10
2608	Experimental demonstration of high-gain CMOS inverter operation at low V <sub> dd </sub> down to 0.5 V consisting of WSe <sub>2</sub> n/p FETs. Japanese Journal of Applied Physics, 2022, 61, SC1004.	1.5	1
2609	Preparation of Polyvinyl alcohol Hydrogel Braided Wire Reinforced by Soluble starch Granules Based on Magnetoionic induction and Piezoelectric sensing. ChemistrySelect, 2021, 6, 11931-11938.	1.5	1
2610	Hollow MoS2 tetrapods for high-performance potassium-ion storage. Journal of Alloys and Compounds, 2021, 898, 162885.	5.5	4
2611	Lanthanum Oxide Nickel Hydroxide Composite Triangle Nanosheets for Energy Density Asymmetric Supercapacitors. Frontiers in Chemistry, 2021, 9, 783942.	3.6	5
2612	Manipulation on Two-Dimensional Amorphous Nanomaterials for Enhanced Electrochemical Energy Storage and Conversion. Nanomaterials, 2021, 11, 3246.	4.1	7
2613	Tunable Band Alignments in 2D Ferroelectric $\hat{l}$ ±-ln <sub>2</sub> Se <sub>3</sub> Based Van der Waals Heterostructures. ACS Applied Electronic Materials, 2021, 3, 5114-5123.	4.3	19
2614	Progress of Wearable and Flexible Electrochemical Biosensors With the Aid of Conductive Nanomaterials. Frontiers in Bioengineering and Biotechnology, 2021, 9, 761020.	4.1	9
2615	2D Arsenene and Arsenic Materials: Fundamental Properties, Preparation, and Applications. Small, 2022, 18, e2104556.	10.0	27
2616	In situ microscopy techniques for characterizing the mechanical properties and deformation behavior of two-dimensional (2D) materials. Materials Today, 2021, 51, 247-272.	14.2	22
2617	2D-2D MXene/ReS2 hybrid from Ti3C2Tx MXene conductive layers supporting ultrathin ReS2 nanosheets for superior sodium storage. Chemical Engineering Journal, 2022, 431, 133796.	12.7	36
2618	Defectâ€Assisted Anchoring of Pt Single Atoms on MoS <sub>2</sub> Nanosheets Produces Highâ€Performance Catalyst for Industrial Hydrogen Evolution Reaction. Small, 2022, 18, e2104824.	10.0	36
2619	Unraveling the Electrical and Magnetic Properties of Layered Conductive Metalâ€Organic Framework With Atomic Precision. Angewandte Chemie - International Edition, 2022, 61, .	13.8	27
2620	Rational design of 2D ultrathin BiO(HCOO)xl1-x composite nanosheets: The synergistic effect of ultrathin structure and hybridization in the effective elimination of BPA under visible light irradiation. Separation and Purification Technology, 2022, 282, 120153.	7.9	6
2621	A Comprehensive Review on Recent Advances in Two-Dimensional (2D) Hexagonal Boron Nitride. ACS Applied Electronic Materials, 2021, 3, 5165-5187.	4.3	42
2622	From structural ceramics to 2D materials with multi-applications: A review on the development from MAX phases to MXenes. Journal of Advanced Ceramics, 2021, 10, 1194-1242.	17.4	122
2623	Twoâ€dimensional Metalâ€organic Frameworks for Electrochemical CO <sub>2</sub> Reduction Reaction. ChemCatChem, 2022, 14, .	3.7	17
2624	Recent Advances in Manifold Exfoliated Synthesis of Twoâ€Dimensional Nonâ€precious Metalâ€Based Nanosheet Electrocatalysts for Water Splitting. Small Structures, 2022, 3, 2100153.	12.0	43

#	Article	IF	CITATIONS
2625	Ultrabroadband Absorption and High-Performance Photodetection in Europium-Doped 2D Topological Insulator Bi <sub>2</sub> Se <sub>3</sub> Nanosheets. ACS Applied Nano Materials, 2021, 4, 12527-12540.	5.0	6
2626	A review on sustainable production of graphene and related life cycle assessment. 2D Materials, 2022, 9, 012002.	4.4	21
2627	Electric field and strain induced gap modifications in multilayered GaN. Applied Surface Science, 2022, 578, 151970.	6.1	4
2628	Formation and diffusion of intrinsic point defects in bulk and monolayer MoS 2 : first principles study. Physica Status Solidi (B): Basic Research, 0, , .	1.5	1
2629	Current advances and challenges in nanosheet-based wearable power supply devices. IScience, 2021, 24, 103477.	4.1	16
2630	Preparation and Annealing of Two-Dimensional MoSe <sub>2</sub> Continuous Films by Chemical Vapor Deposition. Material Sciences, 2021, 11, 1234-1243.	0.0	0
2631	Injectable and self-healing nanocomposite hydrogel loading needle-like nano-hydroxyapatite and graphene oxide for synergistic tumour proliferation inhibition and photothermal therapy. Journal of Materials Chemistry B, 2021, 9, 9734-9743.	5.8	13
2632	Uranyl phosphonates: crystalline materials and nanosheets for temperature sensing. Dalton Transactions, 2021, 50, 17129-17139.	3.3	9
2633	Supercapacitors operated at extremely low environmental temperatures. Journal of Materials Chemistry A, 2021, 9, 26603-26627.	10.3	25
2635	Graphene oxide-catalyzed trifluoromethylation of alkynes with quinoxalinones and Langlois' reagent. RSC Advances, 2021, 11, 38667-38673.	3.6	7
2636	Carbon Nanotubes: General Introduction. , 2022, , 1-13.		0
2637	Monolayer Nanosheets Exfoliated from Cage-Based Cationic Metal–Organic Frameworks. Inorganic Chemistry, 2022, 61, 1521-1529.	4.0	6
2638	Two-dimensional material-based virus detection. Science China Chemistry, 2022, 65, 497-513.	8.2	13
2639	Binary pentagonal auxetic materials for photocatalysis and energy storage with outstanding performances. Nanoscale, 2022, 14, 2041-2051.	5.6	20
2640	All-Optical Modulation Technology Based on 2D Layered Materials. Micromachines, 2022, 13, 92.	2.9	20
2641	Emerging washable textronics for imminent e-waste mitigation: strategies, reliability, and perspectives. Journal of Materials Chemistry A, 2022, 10, 2697-2735.	10.3	14
2642	The interlayer coupling modulation of a g-C <sub>3</sub> N <sub>4</sub> /WTe <sub>2</sub> heterostructure for solar cell applications. RSC Advances, 2021, 12, 998-1004.	3.6	9
2643	Facile synthesis of an organic/inorganic hybrid 2D structure tincone film by molecular layer deposition. Dalton Transactions, 2022, 51, 1829-1837.	3.3	3

#	Article	IF	CITATIONS
2644	Two-dimensional transition metal chalcogenide nanomaterials for cancer diagnosis and treatment. Chinese Chemical Letters, 2022, 33, 4437-4448.	9.0	10
2645	Structural engineering and surface modification of nickel double hydroxide nanosheets for all-solid-state asymmetric supercapacitors. Journal of Energy Storage, 2022, 45, 103720.	8.1	8
2646	Silanized MXene/Carbon Nanotube Composites as a Shielding Layer of Polyurethane Coatings for Anticorrosion. ACS Applied Nano Materials, 2022, 5, 1408-1418.	5.0	15
2647	Dielectric engineering enable to lateral anti-ambipolar MoTe <sub> 2 </sub> heterojunction. Nanotechnology, 2022, 33, 175704.	2.6	8
2648	Recent advances in the fabrication of 2D metal oxides. IScience, 2022, 25, 103598.	4.1	45
2649	A novel gasification exfoliation method of the preparation of anhydrous montmorillonite nanosheets for inhibiting restack problem suffering from dehydration. Applied Clay Science, 2022, 217, 106394.	5.2	3
2650	Three-dimensional porous aerogel assembly from ultrathin rGO@SnO2 nanosheets for advanced lithium-ion batteries. Composites Part B: Engineering, 2022, 231, 109591.	12.0	15
2651	xmins:mmi="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e406" altimg="si20.svg"> <mml:msub> <mml:mrow /&gt; <mml:mrow> <mml:mn>4</mml:mn> </mml:mrow> </mml:mrow </mml:msub> N <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e414" Non-toxic.2D is mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"</mml:math 	3.0	2
2652	id="d1e347" altimg="si5.svg"> <mml:msub><mml:mrow></mml:mrow><mml:mrow></mml:mrow></mml:msub> C <mml:math altimg="si75.svg" display="inline" id="d1e355" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:msub></mml:msub></mml:msub></mml:math> C <mml:math< td=""><td>3.5</td><td>7</td></mml:math<>	3.5	7
2653	/> <mml:mrow><mml:mn>2</mml:mn></mml:mrow> MXene surface-modified Tuning the band gap of the InSe monolayer by substitutional doping. Applied Surface Science, 2022, 579, 152190.	6.1	7
2654	A pinning effect for the enhanced oxidation resistance at $1600 \hat{A} \hat{A}^{\circ} \text{C}$ of silicoboron carbonitride ceramics with the addition of MXene. Corrosion Science, 2022, 196, 110041.	6.6	1
2655	Crystal phase-driven copolymerization of CO2 and cyclohexene oxide in Prussian blue analogue nanosheets. Applied Materials Today, 2022, 26, 101352.	4.3	6
2656	Electrochromic coordination nanosheets: Achievements and future perspective. Coordination Chemistry Reviews, 2022, 454, 214353.	18.8	15
2657	Construction of model platforms to probe the confinement effect of nanocomposite-enabled water treatment. Chemical Engineering Journal Advances, 2022, 9, 100229.	5.2	8
2658	First-principles calculations of molecular adsorption on the surface of two-dimensional BCOH. Chemical Physics, 2022, 555, 111442.	1.9	1
2659	Self-assembly of nano/microstructured 2D Ti3CNTx MXene-based composites for electromagnetic pollution elimination and Joule energy conversion application. Carbon, 2022, 189, 305-318.	10.3	55
2660	Adsorption of toxic H2S, CO and NO molecules on pristine and transition metal doped α-AsP monolayer by first-principles calculations. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 138, 115109.	2.7	8
2661	Surface synergetic effects of Pt clusters/monolayer Bi2MoO6 nanosheet for promoting the photocatalytic selective reduction of 4-nitrostyrene to 4-vinylaniline. Applied Catalysis B: Environmental, 2022, 304, 121010.	20.2	27

#	Article	IF	Citations
2662	Construction of novel Ag@SrNbO/LDH ternary hybrid with high catalytic performance towards the reduction of 4-nitrophenol. Applied Surface Science, 2022, 581, 152425.	6.1	13
2663	Research Hotspots and Visual Analysis of Global 2D-MoS2-Based Biosensors., 2020,,.		O
2664	Magnetic Anisotropy in the Coll-AlIII-nitrate Layered Double Hydroxides with the Co/Al Ratios 2, 3, and 4. , 2020, , .		0
2665	Transport Behavior of Water and Ions Through Positively Charged Nanopores. SSRN Electronic Journal, 0, , .	0.4	1
2666	Enhanced Visible to Near-Infrared Photodetectors Made from MoS <sub>2</sub> -Based Mixed-Dimensional Structures. SSRN Electronic Journal, 0, , .	0.4	0
2667	Redox chemistry-enabled stepwise surface dual nanoparticle engineering of 2D MXenes for tumor-sensitive $\langle i \rangle T \langle i \rangle \langle sub \rangle 1 \langle sub \rangle$ and $\langle i \rangle T \langle i \rangle \langle sub \rangle MRI$ -guided photonic breast-cancer hyperthermia in the NIR-II biowindow. Biomaterials Science, 2022, 10, 1562-1574.	5.4	16
2668	Tungsten and Molybdenum Oxide nanostructures: Two-dimensional layers and nanoclusters. Journal of Physics Condensed Matter, 2022, , .	1.8	2
2669	Introduction to 2D MXenes: fundamental aspects, MAX phases and MXene derivatives, current challenges, and future prospects., 2022, , 1-47.		0
2670	Transition metal oxides (NiO, SnO2, In2O3) modified graphene: A promising candidate to detect and scavenge CO, C2H2, and CH4 gases. Diamond and Related Materials, 2022, 123, 108856.	3.9	15
2671	Porphyrinâ€Based COF 2D Materials: Variable Modification of Sensing Performances by Postâ€Metallization. Angewandte Chemie, 0, , .	2.0	13
2672	2D material-based optical sensors: a review. ISSS Journal of Micro and Smart Systems, 2022, 11, 169-177.	2.0	10
2673	<scp>Twoâ€Dimensional Metalâ€Organic</scp> Frameworks and Covalent Organic Frameworks. Chinese Journal of Chemistry, 2022, 40, 1359-1385.	4.9	31
2674	Superlattice in a Ru superstructure for enhancing hydrogen evolution. Angewandte Chemie, 0, , .	2.0	5
2675	Layered MAX phase electrocatalyst activity is driven by only a few hot spots. Journal of Materials Chemistry A, 2022, 10, 3206-3215.	10.3	8
2676	A metallic Cu <sub>2</sub> N monolayer with planar tetracoordinated nitrogen as a promising catalyst for CO <sub>2</sub> electroreduction. Journal of Materials Chemistry A, 2022, 10, 1560-1568.	10.3	13
2677	Phase engineering two-dimensional nanostructures for electrocatalytic hydrogen evolution reaction. Chinese Chemical Letters, 2023, 34, 107119.	9.0	15
2678	Self-Assembly of Ir-Based Nanosheets with Ordered Interlayer Space for Enhanced Electrocatalytic Water Oxidation. Journal of the American Chemical Society, 2022, 144, 2208-2217.	13.7	103
2679	A Cu(II) Metal Organic Framework with a Tetranuclear Core: Structure, Magnetism, and Supercapacitor Activity. Crystal Growth and Design, 2022, 22, 1172-1181.	3.0	5

#	Article	IF	CITATIONS
2680	Cobalt doped Mo $<$ sub $>5sub>N<sub>6sub> as a noble-metal-free novel cocatalyst for promoting photocatalytic hydrogen production of g-C<sub>3sub>N<sub>4sub> nanosheets. Materials Chemistry Frontiers, 2022, 6, 718-723.$	5.9	10
2681	Fabrication and application of copper metal–organic frameworks as nanocarriers for pH-responsive anticancer drug delivery. Journal of the Iranian Chemical Society, 2022, 19, 2727-2737.	2.2	11
2682	Direct Z-scheme OD/2D heterojunction of CuO quantum Dots/ultrathin CoAl-LDH for boosting charge separation and photocatalytic CO2 reduction. Solar Energy, 2022, 231, 705-715.	6.1	17
2683	Commensurate Assembly of C <sub>60</sub> on Black Phosphorus for Mixedâ€Dimensional van der Waals Transistors. Small, 2022, 18, e2105916.	10.0	6
2684	Influence of h-BN on electronic properties of GeS/InSe heterojunction. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	1
2685	Modified Metalâ^'Organic Frameworks for Electrochemical Applications. Small Structures, 2022, 3, .	12.0	20
2686	High-yield production of mono- or few-layer transition metal dichalcogenide nanosheets by an electrochemical lithium ion intercalation-based exfoliation method. Nature Protocols, 2022, 17, 358-377.	12.0	100
2687	Experimental and theoretical characterization of the interfacial adhesion of 2D heterogeneous materials: A review. Journal of Micromechanics and Molecular Physics, 2021, 06, 31-48.	1.2	4
2688	Fast and recoverable NO <sub>2</sub> detection achieved by assembling ZnO on Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i>b&gt;MXene nanosheets under UV illumination at room temperature. Nanoscale, 2022, 14, 3441-3451.</sub>	5.6	65
2689	Plasmon-Accelerated Generation of Singlet Oxygen on an Au/MoS <sub>2</sub> Nanohybrid for Enhanced Photodynamic Killing of Bacterial Pathogens/Cancerous Cells. ACS Applied Bio Materials, 2022, 5, 747-760.	4.6	6
2690	Bottom-up supramolecular assembly in two dimensions. Chemical Science, 2022, 13, 3057-3068.	7.4	30
2691	MXene-based materials for remediation of environmental pollutants., 2022,, 553-594.		1
2692	Fabricating nickel phyllosilicate-like nanosheets to prepare a defect-rich catalyst for the one-pot conversion of lignin into hydrocarbons under mild conditions. Green Chemistry, 2022, 24, 846-857.	9.0	15
2693	<i>In Situ</i> Crumpling of Gold Nanosheets into Spherical Three-Dimensional Architecture: Probing the Aggregation-Induced Enhancement in Photothermal Properties. Langmuir, 2022, 38, 1929-1936.	3.5	11
2694	Giant tunneling magnetoresistance in atomically thin VSi2N4/MoSi2N4/VSi2N4 magnetic tunnel junction. Applied Physics Letters, 2022, 120, .	3.3	17
2695	Synthesis and electrocatalytic performance of ultrathin noble metal nanosheets. CrystEngComm, 2022, 24, 1319-1333.	2.6	5
2696	Tunable Electronic Structure and Properties of h-BN Nanomaterials Under Elastic Strain. Journal of Electronic Materials, 2022, 51, 1663-1668.	2.2	3
2697	Organoplatinum(II) Cruciform: A Versatile Building Block to Fabricate 2D Microcrystals with Fullâ€Color and White Phosphorescence and Anisotropic Photon Transport. Angewandte Chemie, 0, , .	2.0	O

#	Article	IF	CITATIONS
2698	Superlattice in a Ru Superstructure for Enhancing Hydrogen Evolution. Angewandte Chemie - International Edition, 2022, 61, .	13.8	62
2699	Porphyrinâ€Based COF 2D Materials: Variable Modification of Sensing Performances by Postâ€Metallization. Angewandte Chemie - International Edition, 2022, 61, .	13.8	63
2701	Tuning the optical band gap of monolayer WSe2 in ferroelectric field-effect transistors. Ceramics International, 2022, 48, 14231-14236.	4.8	2
2702	Sensing and biosensing with 2D nanosheets beyond graphene. , 2022, , 119-141.		1
2703	Design of two-dimensional halide perovskite composites for optoelectronic applications and beyond. Materials Advances, 2022, 3, 756-778.	5.4	14
2704	Oxygen deficient α-MoO <sub>3</sub> with enhanced adsorption and state-quenching of H <sub>2</sub> O for gas sensing: a DFT study. Journal of Materials Chemistry C, 2022, 10, 1839-1849.	5 <b>.</b> 5	9
2705	Unique BiFeO $\langle$ sub $\rangle$ 3 $\langle$ sub $\rangle$ /g-C $\langle$ sub $\rangle$ 3 $\langle$ sub $\rangle$ N $\langle$ sub $\rangle$ 4 $\langle$ sub $\rangle$ mushroom heterojunction with photocatalytic antibacterial and wound therapeutic activity. Nanoscale, 2022, 14, 2686-2695.	5.6	15
2706	Janus 2D materials <i>via</i> asymmetric molecular functionalization. Chemical Science, 2022, 13, 315-328.	7.4	25
2707	A bright future for engineering piezoelectric 2D crystals. Chemical Society Reviews, 2022, 51, 650-671.	38.1	43
2708	Heterostructural MoS <sub>2</sub> /NiS nanoflowers <i>via</i> enhancing electrocatalytic hydrogen evolution. New Journal of Chemistry, 2022, 46, 5505-5514.	2.8	8
2709	A fast and high-efficiency electrochemical exfoliation strategy towards antimonene/carbon composites for selective lubrication and sodium–ion storage applications. Physical Chemistry Chemical Physics, 2022, 24, 4957-4965.	2.8	7
2710	Interfacial charge and energy transfer in van der Waals heterojunctions. InformaÄnÃ-Materiály, 2022, 4,	17.3	48
2711	Defect Engineering of Ultrathin WO <sub>3</sub> Nanosheets: Implications for Nonlinear Optoelectronic Devices. ACS Applied Nano Materials, 2022, 5, 1169-1177.	5.0	15
2712	Thermal Rectifier and Thermal Transistor of 1T/2H MoS <sub>2</sub> for Heat Flow Management. ACS Applied Materials & District Substitution (17) Applied Materials & District Substitution (17) August 100 August 1	8.0	7
2713	Promoted photocarriers separation by straining in 2D/2D van der Waals heterostructures for high-efficiency visible-light photocatalysis. Materials Today Physics, 2022, 22, 100600.	6.0	13
2714	Organoplatinum(II) Cruciform: A Versatile Building Block to Fabricate 2D Microcrystals with Fullâ€Color and White Phosphorescence and Anisotropic Photon Transport. Angewandte Chemie - International Edition, 2022, 61, .	13.8	16
2715	Methylcyclohexane and methyl methacrylate sensing studies using $\hat{I}^3$ -arsenene nanoribbon $\hat{a} \in \hat{I}^4$ A first-principles investigation. Computational and Theoretical Chemistry, 2022, 1209, 113595.	2.5	12
2717	Induced polymer crystallinity in mixed matrix membranes by metal-organic framework nanosheets for gas separation., 2022, 2, 100017.		5

#	Article	IF	CITATIONS
2718	Enhanced visible to near-infrared photodetectors made from MoS2-based mixed-dimensional structures. Applied Surface Science, 2022, 585, 152594.	6.1	9
2719	Recent progress on transition metal diselenides from formation and modification to applications. Nanoscale, 2022, 14, 1075-1095.	5.6	21
2720	Simultaneous visible and ultraviolet photoresponse improvement of MoS2/ZnO heterostructure photodetector via direct resonant coupling of Au nanoparticles localized surface plasmon resonance. Optical Materials, 2022, 124, 111997.	3.6	14
2721	Recent advances in niobium MXenes: Synthesis, properties, and emerging applications. Matter, 2022, 5, 546-572.	10.0	40
2722	Fabrication of Co, N-Doping Hierarchical Porous Graphene from Metal Organic Framework for Oxygen Reduction Reaction in Microbial Fuel Cell. Journal of the Electrochemical Society, 2022, 169, 024501.	2.9	3
2723	Yb <sup>3+</sup> -Doped Two-Dimensional Upconverting Tb-MOF Nanosheets with Luminescence Sensing Properties. ACS Applied Materials & Sensing Properties.	8.0	30
2724	New progress on MXenes-based nanocomposite photocatalysts. Materials Reports Energy, 2022, 2, 100081.	3.2	7
2725	2D Covalent Organic Framework Direct Osteogenic Differentiation of Stem Cells. Advanced Healthcare Materials, 2022, 11, e2101737.	7.6	8
2726	Preparation of high-quality few-layers bismuthene hexagons. Applied Materials Today, 2022, 26, 101360.	4.3	9
2727	Enhanced thermal energy storage performance of hydrous salt phase change material via defective graphene. Journal of Energy Storage, 2022, 48, 104064.	8.1	10
2728	Functionalized 3D H-SnS2-APTES-PTCA complexes with 3D hollow SnS2 as effective co-reaction accelerator for label-free electrochemiluminescence immunosensor. Sensors and Actuators B: Chemical, 2022, 357, 131439.	7.8	8
2729	Dual-ligand two-dimensional Europium-organic gels nanosheets for ratiometric fluorescence detecting anthrax spore biomarker. Chemical Engineering Journal, 2022, 435, 134912.	12.7	24
2730	Dual 2-dimensional CuSe/g-C3N4 nano-heterostructure for boosting immobilization of elemental mercury in flue gas. Chemical Engineering Journal, 2022, 435, 134696.	12.7	20
2731	Enhancing the heterojunction component-interaction by in-situ hydrothermal growth toward photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2022, 614, 367-377.	9.4	9
2732	Fe-Based metal–organic frameworks as functional materials for battery applications. Inorganic Chemistry Frontiers, 2022, 9, 827-844.	6.0	24
2733	Carbon and carbon paste electrodes. , 2022, , 79-114.		7
2734	Opportunities for Ultrathin 2D Catalysts in Promoting CO2 Photoreduction. Inorganic Materials Series, 2022, , 65-149.	0.7	1
2735	Chapter 1. Recent Developments and Perspectives on Solar-driven Fine Chemicals Synthesis: From the Reaction System to 2D Photocatalysts. Inorganic Materials Series, 2022, , 1-64.	0.7	1

#	Article	IF	CITATIONS
2736	Facile surface functionalization of MXene by pillar[5] arene for enhanced electrochemical performance. Chemical Communications, 2022, 58, 3170-3173.	4.1	3
2737	Photochemical Synthesis and Spectroscopy of Covalent PAH Dimers. Journal of Physical Chemistry A, 2022, , .	2.5	1
2738	Tuning valley splitting and magnetic anisotropy of multiferroic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Cu</mml:mi><mml:mi>M<td>i&gt;<mml:m< td=""><td>ısub&gt;<mml:n< td=""></mml:n<></td></mml:m<></td></mml:mi></mml:mrow></mml:math>	i> <mml:m< td=""><td>ısub&gt;<mml:n< td=""></mml:n<></td></mml:m<>	ısub> <mml:n< td=""></mml:n<>

#	Article	IF	Citations
2754	Valence oscillation and dynamic active sites in monolayer NiCo hydroxides for water oxidation. Nature Catalysis, 2021, 4, 1050-1058.	34.4	272
2755	Nanostructured Photothermal Materials for Environmental and Catalytic Applications. Molecules, 2021, 26, 7552.	3.8	12
2756	Synthesis of Sub-1 Nm 2d Transitional Metal Oxides Via Anion Exchange-Bonds Cleavage Cascade Reactions. SSRN Electronic Journal, 0, , .	0.4	0
2757	Transport Behavior of Water and Ions Through Positively Charged Nanopores. SSRN Electronic Journal, 0, , .	0.4	1
2759	Promising application of a SiC <sub>2</sub> /C <sub>3</sub> B heterostructure as a new platform for lithium-ion batteries. Physical Chemistry Chemical Physics, 2022, 24, 6926-6934.	2.8	5
2760	Super-resolution imaging of photogenerated charges on CdS/g-C <sub>3</sub> N <sub>4</sub> heterojunctions and its correlation with photoactivity. Nanoscale, 2022, 14, 5612-5624.	<b>5.</b> 6	10
2761	Controllable synthesis of few-layer ammoniated 1T′-phase WS <sub>2</sub> as an anode material for lithium-ion batteries. Nanoscale, 2022, 14, 5869-5875.	5.6	6
2762	A "Trojan horse―strategy towards robust Co–N <sub>4</sub> active sites accommodated in micropore defect-rich carbon nanosheets for boosting selective hydrogenation of nitroarenes. Journal of Materials Chemistry A, 2022, 10, 9435-9444.	10.3	12
2763	Defect-rich Fe-doped NiS/MoS <sub>2</sub> heterostructured ultrathin nanosheets for efficient overall water splitting. Physical Chemistry Chemical Physics, 2022, 24, 8344-8350.	2.8	18
2764	Europium functionalized black phosphorus quantum dots as a CRET platform for synergistically enhanced chemiluminescence. Chemical Communications, 2022, 58, 5168-5171.	4.1	5
2765	Defective 2D silicon phosphide monolayers for the nitrogen reduction reaction: a DFT study. Nanoscale, 2022, 14, 5782-5793.	5.6	10
2766	Dimensional optimization enables high-performance capacitive deionization. Journal of Materials Chemistry A, 2022, 10, 6414-6441.	10.3	43
2767	Charge transport through single-molecule bilayer-graphene junctions with atomic thickness. Chemical Science, 2022, 13, 5854-5859.	7.4	9
2768	Durable polymer solar cells produced by the encapsulation of a WSe <sub>2</sub> hole-transport layer and β-carotene as an active layer additive. Inorganic Chemistry Frontiers, 2022, 9, 1785-1793.	6.0	4
2770	Covalent organic framework-based materials as electrocatalysts for fuel cells. , 2022, , 229-250.		1
2771	Controllable Repairing the Single Vacancies of Bc3 Monolayer Using Co and Bf Molecules: A First-Principles Study. SSRN Electronic Journal, 0, , .	0.4	0
2772	Recent Developments of Thermosetting Polymers for Advanced Composites., 2022,, 1047-1056.		1
2773	Preparation of double-layered nanosheets containing pH-responsive polymer networks in the interlayers and their conversion into single-layered nanosheets through the cleavage of cross-linking points. Dalton Transactions, 2022, 51, 6264-6274.	3.3	1

#	Article	IF	CITATIONS
2774	New progress and prospects of mechanical exfoliation technology of two-dimensional materials. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 108201.	0.5	1
2775	Pomegranate seed polyphenol-based nanosheets as an efficient inhibitor of amyloid fibril assembly and cytotoxicity of HEWL. RSC Advances, 2022, 12, 8719-8730.	3.6	3
2776	Nonlinear optical properties of PtTe <sub>2</sub> based saturable absorbers for ultrafast photonics. Journal of Materials Chemistry C, 2022, 10, 5124-5133.	5.5	20
2777	Biomimetic synthesis of 2D ultra-small copper sulfide nanoflakes based on reconfiguration of the keratin secondary structure for cancer theranostics in the NIR-II region. Journal of Materials Chemistry B, 2022, 10, 3152-3161.	5.8	5
2778	Fluorescence sensing of nitrophenol explosives using a two-dimensional organic–metal chalcogenide fully covered with functional groups. Chemical Communications, 2022, 58, 4615-4618.	4.1	5
2779	2D material based heterostructures for solar light driven photocatalytic H <sub>2</sub> production. Materials Advances, 2022, 3, 3389-3417.	5.4	20
2780	Interface modulation and physical properties of heterostructure of metal nanoparticles and two-dimensional materials. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 066801.	0.5	3
2783	Tin sulfide-based nanocomposite: synthesis and study of structural, morphological and optical properties., 2022, 18, 67-74.		2
2784	Transition Metal Dichalcogenide-based Membranes for Water Desalination, Gas Separation, and Energy Storage. Separation and Purification Reviews, 2023, 52, 43-57.	5.5	27
2785	Filament Engineering of Twoâ€Dimensional <i>h</i> à€BN for a Selfâ€Power Mechanoâ€Nociceptor System. Small, 2022, 18, e2200185.	10.0	25
2786	Planar Heterojunction of Ultrathin CrTe <sub>3</sub> and CrTe <sub>2</sub> van der Waals Magnet. ACS Nano, 2022, 16, 4348-4356.	14.6	10
2787	Constructing Advanced Aqueous Zincâ€lon Batteries with 2D Carbonâ€Rich Materials. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	4
2788	Emerging Optical Microscopy Techniques for Electrochemistry. Annual Review of Analytical Chemistry, 2022, 15, 57-82.	5.4	24
2789	Structural, electronic, and transport properties of 1D Ta2Ni3Se8 semiconducting material. Applied Physics Letters, 2022, 120, .	3.3	6
2790	MXene-Based Electrodes for Supercapacitor Energy Storage. Energy & Storage. Energy &	5.1	67
2791	Free-standing homochiral 2D monolayers by exfoliation of molecular crystals. Nature, 2022, 602, 606-611.	27.8	60
2792	Roles of Metal Ions in MXene Synthesis, Processing and Applications: A Perspective. Advanced Science, 2022, 9, e2200296.	11.2	44
2793	Kinetics-Favorable Ultrathin NiCo-MOF Nanosheets with Boosted Pseudocapacitive Charge Storage for Quasi-Solid-State Hybrid Supercapacitors. Inorganic Chemistry, 2022, 61, 3866-3874.	4.0	26

#	Article	IF	CITATIONS
2794	Therapeutic potential of C2N as targeted drug delivery system for fluorouracil and nitrosourea to treat cancer: a theoretical study. Journal of Nanostructure in Chemistry, 2023, 13, 89-102.	9.1	16
2795	2D arsenenes. Journal of Semiconductors, 2022, 43, 030201.	3.7	2
2796	A Strong Two-Dimensional Semiconductor <i>I</i> -B <sub>4</sub> C with High Carrier Mobility. Journal of Physical Chemistry C, 2022, 126, 6036-6046.	3.1	2
2797	2D Heterostructures for Highly Efficient Photodetectors: From Advanced Synthesis to Characterizations, Mechanisms, and Device Applications. Advanced Photonics Research, 2022, 3, .	3.6	13
2798	Enhanced light–matter interaction in two-dimensional transition metal dichalcogenides. Reports on Progress in Physics, 2022, 85, 046401.	20.1	74
2799	Fabrication and electron transport characteristics of suspended Graphene/hBN heterostructure Devices. Journal of Physics: Conference Series, 2022, 2230, 012028.	0.4	0
2800	Ultrasonic-assisted rapid and highly efficient liquid-phase exfoliation of α-zirconium phosphate. Journal of Materials Science, 2022, 57, 6619-6628.	3.7	3
2801	Layered Double Hydroxide Engineering for the Photocatalytic Conversion of Inactive Carbon and Nitrogen Molecules. ACS ES&T Engineering, 2022, 2, 1088-1102.	7.6	12
2802	Lightâ€Controlled Ionic/Molecular Transport through Solidâ€State Nanopores and Nanochannels. Chemistry - an Asian Journal, 2022, 17, .	3.3	9
2805	Transition-metal hydroxide nanosheets with peculiar double-layer structures as efficient electrocatalysts. Chem Catalysis, 2022, 2, 867-882.	6.1	10
2806	Robust Lithium–Sulfur Batteries Enabled by Highly Conductive WSe <sub>2</sub> â€Based Superlattices with Tunable Interlayer Space. Advanced Functional Materials, 2022, 32, .	14.9	51
2807	Host–Guest Intercalation Chemistry for the Synthesis and Modification of Twoâ€Dimensional Transition Metal Dichalcogenides. Advanced Materials, 2022, 34, e2200425.	21.0	14
2808	Supramolecular Assembly of Multifunctional Collagen Nanocomposite Film via Polyphenol-Coordinated Clay Nanoplatelets. ACS Applied Bio Materials, 2022, 5, 1319-1329.	4.6	4
2809	Review of the use of nanodevices to detect single molecules. Analytical Biochemistry, 2022, 654, 114645.	2.4	7
2810	Synthesis of transition metal dichalcogenide van der Waals heterostructures through chemical vapor deposition. Journal of Physics Condensed Matter, 2022, 34, 254002.	1.8	4
2811	Two-Dimensional Nanomaterials beyond Graphene for Biomedical Applications. Journal of Functional Biomaterials, 2022, 13, 27.	4.4	55
2812	Exfoliation of MoS <sub>2</sub> Nanosheets Enabled by a Redox-Potential-Matched Chemical Lithiation Reaction. Nano Letters, 2022, 22, 2956-2963.	9.1	35
2813	Synthesis of Tunable-Acidity Vanadium Phosphorus Oxide Catalysts Modified by Layered Double Oxide for the Selective Oxidation of <i>n</i> -Butane. Industrial & Engineering Chemistry Research, 2022, 61, 3850-3859.	3.7	5

#	Article	IF	CITATIONS
2814	Scission of 2D Inorganic Nanosheets via Physical Adsorption on a Nonflat Surface. Advanced Materials Interfaces, 0, , 2102591.	3.7	2
2815	Thermal Properties of 2D Dirac Materials MN <sub>4</sub> (M = Be and Mg): A First-Principles Study. ACS Omega, 2022, 7, 10812-10819.	3.5	13
2816	Putting surface-enhanced Raman spectroscopy to work for nanozyme research: Methods, materials and applications. TrAC - Trends in Analytical Chemistry, 2022, 152, 116603.	11.4	18
2817	Detecting the Knowledge Domains of Compound Semiconductors. Micromachines, 2022, 13, 476.	2.9	1
2818	Theoretical design of two-dimensional visible light-driven photocatalysts for overall water splitting. Chemical Physics Reviews, 2022, 3, .	5.7	7
2819	Direct Electrodeposition of Bimetallic Nanostructures on Co-Based MOFs for Electrochemical Sensing of Hydrogen Peroxide. Frontiers in Chemistry, 2022, 10, 856003.	3.6	4
2820	Ultrathin Ce-doped La <sub>2</sub> O <sub>3</sub> nanofilm electrocatalysts for efficient oxygen evolution reactions. Nanotechnology, 2022, 33, 245405.	2.6	4
2821	Preparation of twoâ€dimensional boron nitrideâ€layered double hydroxide hybrid to reinforce the corrosion protection of the epoxy coating. Materials and Corrosion - Werkstoffe Und Korrosion, 2022, 73, 1444-1458.	1.5	5
2822	Bio-derived crystalline silk nanosheets for versatile macroscopic assemblies. Nano Research, 2022, 15, 5538-5544.	10.4	5
2823	Double-edged roles of intrinsic defects in two-dimensional MoS2. Trends in Chemistry, 2022, 4, 451-463.	8.5	5
2824	Elucidating the Ambient Stability and Gas Sensing Mechanism of Nickel-Decorated Phosphorene for NO <sub>2</sub> Detection: A First-Principles Study. ACS Omega, 2022, 7, 9808-9817.	3.5	8
2825	High-Performance Photodetectors Based on MoTe <sub>2</sub> –MoS <sub>2</sub> van der Waals Heterostructures. ACS Omega, 2022, 7, 10049-10055.	3.5	24
2826	Single-Cell Photothermal Analysis Induced by MoS2 Nanoparticles by Raman Spectroscopy. Frontiers in Bioengineering and Biotechnology, 2022, 10, 844011.	4.1	4
2827	2D π onjugated metal–organic frameworks for CO <sub>2</sub> electroreduction. SmartMat, 2022, 3, 54-67.	10.7	31
2828	Chemical environment dependent Stabilities, electronic properties and diffusions behaviors of intrinsic point defects in novel Two-Dimensional MoSi2N4 monolayer. Applied Surface Science, 2022, 592, 153214.	6.1	6
2829	Polytypic Phase Transition of Nb <sub>1â€"<i>x</i></sub> V <sub><i>x</i></sub> Se <sub>2</sub> via Colloidal Synthesis and Their Catalytic Activity toward Hydrogen Evolution Reaction. ACS Nano, 2022, 16, 4278-4288.	14.6	18
2830	Novel Binary Ni-Based Mixed Metal–Organic Framework Nanosheets Materials and Their High Optical Power Limiting. ACS Omega, 2022, 7, 10429-10437.	3.5	0
2831	Current Progress and Scalable Approach toward the Synthesis of 2D Metal–Organic Frameworks. Advanced Materials Interfaces, 2022, 9, .	3.7	9

#	Article	IF	CITATIONS
2832	Investigation of Ordered TiMC and TiMCT $<$ sub $>$ 2 $<$ /sub $>$ (M = Cr and Mo; T = O and S) MXenes as High-Performance Anode Materials for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2022, 126, 5283-5291.	3.1	9
2833	Self-assembly pre-occupancy for 2D super-ordered emptiness arrays in graphene. Science China Materials, 2022, 65, 1869-1875.	6.3	1
2834	Reductive Upgrading of Biomass-Based Levulinic Acid to $\hat{I}^3$ -Valerolactone Over Ru-Based Single-Atom Catalysts. Frontiers in Chemistry, 2022, 10, 895198.	3.6	2
2835	2D materials-based nanomedicine: From discovery to applications. Advanced Drug Delivery Reviews, 2022, 185, 114268.	13.7	53
2836	Surface Modification of 2D Photocatalysts for Solar Energy Conversion. Advanced Materials, 2022, 34, e2200180.	21.0	184
2837	Application of Metal Nanoparticles for Production of Self-Sterilizing Coatings. Coatings, 2022, 12, 480.	2.6	11
2838	Recent advances in biomedical applications of 2D nanomaterials with peroxidase-like properties. Advanced Drug Delivery Reviews, 2022, 185, 114269.	13.7	27
2839	Exfoliated 2D Antimoneneâ€Based Structures for Lightâ€Harvesting Photoactive Layer of Highly Stable Solar Cells. Small Structures, 0, , 2200038.	12.0	2
2840	Cobalt and nickel coordinated guanidinium-based two-dimensional covalent organic framework nanosheets for efficient photocatalytic CO2 reduction. Catalysis Today, 2022, 402, 202-209.	4.4	4
2841	Tuning the Electronic and Optical Properties of the Novel Monolayer Noble-Transition-Metal Dichalcogenides Semiconductor $\hat{l}^2$ -AuSe via Strain: A Computational Investigation. Nanomaterials, 2022, 12, 1272.	4.1	2
2842	Controllable repairing the single vacancies of BC3 monolayer using CO and BF molecules: A first-principles study. Results in Physics, 2022, 35, 105365.	4.1	5
2843	Electronic and optical properties of metallic nitride: A comparative study between the MN (M = Al, Ga,) Tj ETQq1 1	0.78431	4 rgBT /Ove
2844	A molecular paradigm: "Plug-and-play―chemical sensing and crypto-steganography based on molecular recognition and selective response. Biosensors and Bioelectronics, 2022, 209, 114260.	10.1	5
2846	Graphene oxide-doped stearate-intercalated layered double oxide nanocomposites as high-performance CO2 adsorbents. Separation and Purification Technology, 2022, 288, 120686.	7.9	12
2847	Trimetallic nanoparticle-decorated MXene nanosheets for catalytic electrochemical detection of carcinoembryonic antigen via Exo III-aided dual recycling amplifications. Sensors and Actuators B: Chemical, 2022, 359, 131617.	7.8	23
2848	Layer structured materials for ambient nitrogen fixation. Coordination Chemistry Reviews, 2022, 460, 214468.	18.8	28
2849	Activating and optimizing the MoS2@MoO3 S-scheme heterojunction catalyst through interface engineering to form a sulfur-rich surface for photocatalyst hydrogen evolution. Chemical Engineering Journal, 2022, 438, 135238.	12.7	49
2850	An overview of recent progress in nanostructured carbon-based supercapacitor electrodes: From zero to bi-dimensional materials. Carbon, 2022, 193, 298-338.	10.3	168

#	Article	IF	CITATIONS
2851	A Nb2CTx/sodium alginate-based composite film with neuron-like network for self-powered humidity sensing. Chemical Engineering Journal, 2022, 438, 135588.	12.7	86
2852	Ordered and disordered two-dimensional tellurium-selenium binary compounds from swarm intelligence and first principles. Materials Today Communications, 2022, 31, 103409.	1.9	0
2853	Layered bismuth-based photocatalysts. Coordination Chemistry Reviews, 2022, 463, 214515.	18.8	99
2854	runing the electronic transport properties in few-layers GeP <mml:math altimg="si9.svg" display="inline" id="d1e899" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:math> intercalated by Cr-atoms.	2.7	0
2855	Preparation of mechanically strong and active composite films based on fish myofibrillar proteins: The dual effects of oxidized polyphenol crosslinking and layered double hydroxide reinforcement. Food Hydrocolloids, 2022, 129, 107616.	10.7	14
2856	Transparent humidity sensor with high sensitivity via a facile and scalable way based on liquid-phase exfoliated MoO3- nanosheets. Sensors and Actuators Reports, 2022, 4, 100092.	4.4	2
2857	Comparison of the Stability of 2H Nanosurfaces by the Adsorption of Small Molecules: A DFT Study. International Journal of Scientific Research in Science and Technology, 2021, , 122-129.	0.1	0
2858	Role of the Spatial Distribution of Gas Flow for Tuning the Vertical/Planar Growth of Nonlayered Two-Dimensional Nanoplates. Crystal Growth and Design, 2022, 22, 763-771.	3.0	3
2859	General Synthesis of Two-Dimensional Porous Metal Oxides/Hydroxides for Microwave Absorbing Applications. Inorganic Chemistry, 2022, 61, 678-687.	4.0	8
2860	Thermionic electron emission in the 1D edge-to-edge limit. Chinese Physics B, 0, , .	1.4	0
2861	Electrically Conductive MoS <sub>2</sub> Reinforced Polyacrylonitrile Nanofibers for Biomedical Applications. Advanced NanoBiomed Research, 2022, 2, .	3.6	6
2862	Borophene Nanosheets as High-Efficiency Catalysts for the Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2021, 13, 60987-60994.	8.0	38
2863	Two Dimensional Perovskites/Transition Metal Dichalcogenides Heterostructures: Puzzles and Challenges. Israel Journal of Chemistry, 2022, 62, .	2.3	4
2866	Electrochemical DNA Biosensor Based on Platinum-gold Bimetal Decorated Graphene Modified Electrode for the Detection of <i>Vibrio parahaemolyticus</i> Specific <i>tlh</i> Gene Sequence. Current Analytical Chemistry, 2022, 18, 781-789.	1.2	1
2867	Tunable Multiâ€Bit Nonvolatile Memory Based on Ferroelectric Fieldâ€Effect Transistors. Advanced Electronic Materials, 2022, 8, .	5.1	7
2868	Chemical modification of ordered/disordered carbon nanostructures for metal hosts and electrocatalysts of <scp>lithiumâ€air</scp> batteries. InformaÄnÃ-Materiály, 2022, 4, .	17.3	25
2869	Wet-chemical synthesis and applications of amorphous metal-containing nanomaterials. Nano Research, 2023, 16, 4289-4309.	10.4	17
2870	Ultrathin Two-Dimensional Metal–Organic Framework Nanosheets with Activated Ligand-Cluster Units for Enhanced SERS. ACS Applied Materials & Interfaces, 2022, 14, 2326-2334.	8.0	14

#	Article	IF	CITATIONS
2871	Dynamic liquid crystal behavior of Bi $$$ _{{2}}\$\$Te\$\$_{{3}}\$\$ nanosheets. European Physical Journal: Special Topics, 0, , 1.	2.6	1
2872	Two-dimensional noble transition-metal dichalcogenides for nanophotonics and optoelectronics: Status and prospects. Nano Research, 2022, 15, 3675-3694.	10.4	22
2873	Silicon Nanosheets: An Emerging 2D Photonic Material with a Large Transient Nonlinear Optical Response beyond Graphene. Nanomaterials, 2022, 12, 90.	4.1	6
2874	Eggshell-like MoS <sub>2</sub> Nanostructures with Negative Curvature and Stepped Faces for Efficient Hydrogen Evolution Reactions. ACS Applied Nano Materials, 2021, 4, 14086-14093.	5.0	5
2875	Facile Synthesis of Pd and PdPtNi Trimetallic Nanosheets as Enhanced Oxygen Reduction Electrocatalysts. Small, 2022, 18, e2103665.	10.0	20
2876	Infrared Photodetectors Based on 2D Materials and Nanophotonics. Advanced Functional Materials, 2022, 32, .	14.9	86
2877	2D layered black arsenic-phosphorus materials: Synthesis, properties, and device applications. Nano Research, 2022, 15, 3737-3752.	10.4	36
2878	Boron-Functionalized Organic Framework as a High-Performance Metal-Free Catalyst for N <sub>2</sub> Fixation. Journal of Physical Chemistry Letters, 2021, 12, 12142-12149.	4.6	9
2879	Si doped T-graphene: a 2D lattice as an anode electrode in Na ion secondary batteries. New Journal of Chemistry, 2022, 46, 9718-9726.	2.8	10
2880	MXene Analogue: A 2D Nitridene Solid Solution for Highâ€Rate Hydrogen Production. Angewandte Chemie, 2022, 134, .	2.0	7
2881	Two-Dimensional Field-Effect Transistor Sensors: The Road toward Commercialization. Chemical Reviews, 2022, 122, 10319-10392.	47.7	89
2882	MXene Analogue: A 2D Nitridene Solid Solution for Highâ€Rate Hydrogen Production. Angewandte Chemie - International Edition, 2022, 61, .	13.8	56
2883	Hybridization of 2D Nanomaterials with 3D Graphene Architectures for Electrochemical Energy Storage and Conversion. Advanced Functional Materials, 2022, 32, .	14.9	26
2884	Controllable synthesis and adsorption mechanism of flower-like MoS2/g-C3N4 nanocomposites for the removal of methylene blue in water. Journal of Nanoparticle Research, 2022, 24, 1.	1.9	7
2885	Properties and applications of quantum dots derived from two-dimensional materials. Advances in Physics: X, 2022, 7, .	4.1	11
2886	Atomically Surficial Modulation in Two-Dimensional Semiconductor Nanocrystals for Selective Photocatalytic Reactions. Frontiers in Chemistry, 2022, 10, 890287.	3.6	1
2887	Metal organic framework (MOF)-based composite filler incorporated thin film nanocomposite of hollow fiber membrane for carbon dioxide permeance. Materials Today: Proceedings, 2022, 65, 3060-3065.	1.8	1
2888	The Influence of Ionic Liquids Adsorption on the Electronic and Optical Properties of Phosphorene and Arsenene with Different Phases: A Computational Study. Molecules, 2022, 27, 2518.	3.8	3

#	Article	IF	CITATIONS
2889	Performance Enhancement of SnS/ <i>h</i> -BN Heterostructure p-Type FET via the Thermodynamically Predicted Surface Oxide Conversion Method. ACS Applied Materials & Samp; Interfaces, 2022, 14, 19928-19937.	8.0	4
2890	Layered Organic Metal Chalcogenides (OMCs): From Bulk to Twoâ€Dimensional Materials. Angewandte Chemie - International Edition, 2022, 61, .	13.8	18
2891	Design of Vertically Aligned Two-Dimensional Heterostructures of Rigid Ti <sub>3</sub> C <sub>2</sub> T <sub>X</sub> MXene and Pliable Vanadium Pentoxide for Efficient Lithium Ion Storage. ACS Nano, 2022, 16, 5556-5565.	14.6	33
2892	Density Functional Theoryâ€Based Calculations for 2D Hexagonal Lanthanide Metals. Advanced Theory and Simulations, 0, , 2200057.	2.8	5
2893	Layered Organic Metal Chalcogenides (OMCs): From Bulk to Twoâ€Dimensional Materials. Angewandte Chemie, 2022, 134, .	2.0	3
2894	Growth of Tellurium Nanobelts on h-BN for p-type Transistors with Ultrahigh Hole Mobility. Nano-Micro Letters, 2022, 14, 109.	27.0	31
2895	Bandgap Engineering of Ternary εâ€InSe <sub>1â^'</sub> <i><sub>x</sub></i> S <i><sub>x</sub></i> and εâ€InSe <sub>1â^'</sub> <i><sub>y</sub></i> Bingle Crystals for Highâ€Performance Electronics and Optoelectronics. Advanced Optical Materials, 2022, 10, .	7.3	3
2896	Saltâ€Assisted 2Hâ€ŧoâ€1T′ Phase Transformation of Transition Metal Dichalcogenides. Advanced Materials, 2022, 34, e2201194.	21.0	19
2897	Hydrogen-bonded quasi-layered polypyrrole-tungstate complex with exceptional electrochemical capacitance over 25000 cycles. Composites Part B: Engineering, 2022, 238, 109910.	12.0	3
2898	Multifunctional TiO2/C nanosheets derived from 3D metal–organic frameworks for mild-temperature-photothermal-sonodynamic-chemodynamic therapy under photoacoustic image guidance. Journal of Colloid and Interface Science, 2022, 621, 360-373.	9.4	10
2904	Controlled local orientation of 2D nanomaterials in 3D devices: methods and prospects for multifunctional designs and enhanced performance. Journal of Materials Chemistry A, 2022, 10, 19129-19168.	10.3	9
2905	Carbon nanomaterial-based sensors in air pollution remediation. , 2022, , 105-123.		1
2906	The identified intrinsic active sites for efficient and stable bi-functional catalyst N-MoS <sub>2</sub> ·Ni <sub>3</sub> S <sub>2</sub> /NiS: the Mo–N structure and Ni–S structure on the heterogeneous interface synergistically enhance water splitting. Journal of Materials Chemistry A, 2022, 10, 11755-11765.	10.3	12
2907	Spin Canting and Weak Long-Range Ferromagnetic Order in a Rigid Supramolecular Framework. SSRN Electronic Journal, 0, , .	0.4	0
2908	Layered hydroxides as electrocatalysts for water splitting. , 2022, , 241-272.		0
2909	Bottom-up synthesis of 2D layered high-entropy transition metal hydroxides. Nanoscale Advances, 2022, 4, 2468-2478.	4.6	17
2910	A heterogeneous reaction strategy towards the general synthesis of 2D non-layered nanomaterials. Materials Advances, 0, , .	5.4	0
2911	N-Doped Two-Dimensional Carbon Nanosheets with Micropore-Dominant Porosity for High-Performance Supercapacitor. SSRN Electronic Journal, 0, , .	0.4	O

#	Article	IF	Citations
2912	Artificial Intelligence for Nanostructured Materials. Nanobiotechnology Reports, 2022, 17, 1-9.	0.6	0
2913	Multifunctional biomimetic hydrogel based on graphene nanoparticles and sodium alginate for peripheral nerve injury therapy., 2022, 135, 212727.		7
2914	Recent Advances in SnSe Nanostructures beyond Thermoelectricity. Advanced Functional Materials, 2022, 32, .	14.9	28
2915	Effect of vertical strain and in-plane biaxial strain on type-II MoSi2N4/Cs3Bi2I9 van der Waals heterostructure. Journal of Applied Physics, 2022, 131, .	2.5	11
2916	Solid-state mechanochemistry advancing two dimensional materials for lithium-ion storage applications: A mini review. Nano Materials Science, 2023, 5, 210-227.	8.8	17
2917	Covalent Organic Frameworks-based Nanocomposites for Oxygen reduction reaction. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2022, 102, 477-485.	1.6	2
2918	Synthesis and spectroscopic study of two-dimensional CsPbBr3 perovskite nanosheets. , 2022, , .		0
2919	Combined Experimental and DFT Study on 2D MoSe <sub>2</sub> toward Low Infrared Emissivity. Advanced Functional Materials, 2022, 32, .	14.9	5
2920	Hot-Pressed Two-Dimensional Amorphous Metals and Their Electronic Properties. Crystals, 2022, 12, 616.	2.2	0
2921	Hexagonal boron phosphide and boron arsenide van der Waals heterostructure as high-efficiency solar cell. Chinese Physics B, 2022, 31, 097301.	1.4	2
2922	General Synthesis of Large Inorganic Nanosheets via 2D Confined Assembly of Nanoparticles. ACS Central Science, 2022, 8, 627-635.	11.3	7
2923	Single-Atom Tailoring of Two-Dimensional Atomic Crystals Enables Highly Efficient Detection and Pattern Recognition of Chemical Vapors. ACS Sensors, 2022, 7, 1533-1543.	7.8	16
2924	Two-Dimensional Material-Based Electrochemical Sensors/Biosensors for Food Safety and Biomolecular Detection. Biosensors, 2022, 12, 314.	4.7	103
2925	Investigation of the Tetrakis(dimethylamino)hafnium and H2S ALD Process: Effects of Deposition Temperature and Annealing. Solids, 2022, 3, 258-270.	2.4	0
2926	Recent progress on layered double hydroxides: comprehensive regulation for enhanced oxygen evolution reaction. Materials Today Energy, 2022, , 101036.	4.7	6
2927	Detection of Trace Water Based on Electro-oxidation of Molybdenum Disulfide Nanomaterials to Form Molybdenum Oxysulfide. ACS Applied Materials & Interfaces, 2022, 14, 23850-23858.	8.0	6
2928	Elementâ€Doped Mxenes: Mechanism, Synthesis, and Applications. Small, 2022, 18, e2201740.	10.0	43
2929	2D Polymer Nanonets: Controllable Constructions and Functional Applications. Macromolecular Rapid Communications, 2022, 43, e2200250.	3.9	3

#	Article	IF	CITATIONS
2930	Structural Evolution and Bandgap Modulation of Layered <i><math>\hat{l}^2</math></i> -GeSe <sub>2</sub> Single Crystal under High Pressure. Chinese Physics B, O, , .	1.4	1
2931	Phosphoreneâ€"an emerging two-dimensional material: recent advances in synthesis, functionalization, and applications. 2D Materials, 2022, 9, 032001.	4.4	25
2932	A self-cleaning membrane based on NG/g-C3N4 and graphene oxide with enhanced nanofiltration performance. Journal of Materials Science, 2022, 57, 9118-9133.	3.7	5
2933	First-principles study of the adsorption behavior and sensing properties of C2H4 and C2H6 molecules on (CuO/TiO2)n (n=1–3) cluster modified MoTe2 monolayer. Surfaces and Interfaces, 2022, 31, 102003.	3.0	8
2934	2D MoS2-MoSe2 and MoS2-NbS2 lateral heterostructures as anode materials for LIBs/SIBs. Applied Surface Science, 2022, 596, 153529.	6.1	9
2936	Unraveling the electronegativity-dominated intermediate adsorption on high-entropy alloy electrocatalysts. Nature Communications, 2022, 13, 2662.	12.8	196
2937	A DFT study of adsorption properties of SO2, SOF2, and SO2F2 on ZnO/CuO doped graphene. Diamond and Related Materials, 2022, 126, 109103.	3.9	15
2938	Assembly of Bimetallic (Au-Ag)FON Composite Film at Liquid/Solid Interfaces and Their Tunable Optical Properties. Dalton Transactions, 0, , .	3.3	1
2939	Atomically Thin Bi <sub>2</sub> O <sub>2</sub> (OH) <sub>1+<i>x</i></sub> (NO <sub>3</sub> ) <sub>1–<i>x</i></sub> Nanosheets with Regulated Surface Composition for Enhanced Photocatalytic CO <sub>2</sub> Reduction. ACS Applied Nano Materials, 2022, 5, 7019-7028.	5.0	9
2940	Gadolinium Halide Monolayers: A Fertile Family of Two-Dimensional 4f Magnets. ACS Applied Electronic Materials, 2022, 4, 3168-3176.	4.3	9
2941	Multilayer MXene Heterostructures and Nanohybrids for Multifunctional Applications: A Review., 2022, 4, 1174-1206.		25
2942	Layered Uranyl Phosphonates Encapsulating Co(II)/Mn(II)/Zn(II) Ions: Exfoliation into Nanosheets and Its Impact on Magnetic and Luminescent Properties. Chemistry - A European Journal, 2022, , .	3.3	2
2943	Tuning gap in corrugated graphene with spin dependence. Physica E: Low-Dimensional Systems and Nanostructures, 2022, , 115227.	2.7	2
2944	Defect-Regulated Frustrated-Lewis-Pair Behavior of Boron Nitride in Ambient Pressure Hydrogen Activation. Journal of the American Chemical Society, 2022, 144, 10688-10693.	13.7	17
2945	2D single- and few-layered MXenes: synthesis, applications and perspectives. Journal of Materials Chemistry A, 2022, 10, 13651-13672.	10.3	56
2946	Organic ultrathin nanostructure arrays: materials, methods and applications. Nanoscale Advances, 0,	4.6	1
2947	Viscous Solvent-Assisted Planetary Ball Milling for the Scalable Production of Large Ultrathin Two-Dimensional Materials. ACS Nano, 2022, 16, 10179-10187.	14.6	26
2948	Low-Temperature Synthesis of Boron Nitride as a Large-Scale Passivation and Protection Layer for Two-Dimensional Materials and High-Performance Devices. ACS Applied Materials & Samp; Interfaces, 0, , .	8.0	3

#	Article	IF	CITATIONS
2949	Molecular engineering regulation redoxâ€dualâ€activeâ€center covalent organic frameworksâ€based anode for highâ€performance Li storage. EcoMat, 2022, 4, .	11.9	24
2950	3D-to-2D Evolution triggered paramagnetic-to-antiferromagnetic transformation. Materials Today Chemistry, 2022, 25, 100923.	3.5	4
2951	Synergistic effect of photo-thermal catalytic glycerol reforming hydrogen production over 2D Au/TiO2 nanoflakes. Chemical Engineering Journal, 2022, 446, 137063.	12.7	21
2952	Antimicrobial mechanisms of biomaterials: from macro to nano. Biomaterials Science, 2022, 10, 4392-4423.	5.4	22
2953	Ultrathin Znti-Ldh Nanosheet: A Bifunctional Lewis and Bronsted Acid Photocatalyst for Synthesis of N-Benzylideneanilline Via a Tandem Reaction. SSRN Electronic Journal, 0, , .	0.4	0
2954	First-principles study of gas adsorption and sensing based on noble metal (Ag, Au and Pt) - Decorated α-AsP monolayer. Journal of Molecular Graphics and Modelling, 2022, 116, 108236.	2.4	2
2955	Potassium gluconate-cooperative pore generation based on g-C3N4 nanosheets for highly efficient photocatalytic hydrogen production and antibiotic degradation. Journal of Environmental Chemical Engineering, 2022, 10, 107986.	6.7	6
2956	Photocatalytic and photothermal bismuthene nanosheets as drug carrier capable of generating CO to improve drug sensitivity and reduce inflammation for enhanced cancer therapy. Chemical Engineering Journal, 2022, 446, 137321.	12.7	11
2957	Magnetic Order, Electrical Doping, and Charge-State Coupling at Amphoteric Defect Sites in Mn-Doped 2D Semiconductors. ACS Nano, 2022, 16, 9452-9460.	14.6	7
2958	Laser-Triggered Bottom-Up Transcription of Chemical Information: Toward Patterned Graphene/MoS <sub>2</sub> Heterostructures. Journal of the American Chemical Society, 2022, 144, 9645-9650.	13.7	12
2959	Highly Curved, Quasiâ€Singleâ€Crystalline Mesoporous Metal Nanoplates Promote CC Bond Cleavage in Ethanol Oxidation Electrocatalysis. Advanced Materials, 2022, 34, .	21.0	39
2960	Inâ€Situ Growth of Highâ€Quality Customized Monolayer Graphene Structures for Optoelectronics. Advanced Functional Materials, 2022, 32, .	14.9	3
2961	Two-dimensional material inks. Nature Reviews Materials, 2022, 7, 717-735.	48.7	71
2962	Intermediate-state imaging of electrical switching and quantum coupling of molybdenum disulfide monolayer. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	1
2963	Puffing ultrathin oxides with nonlayered structures. Science Advances, 2022, 8, .	10.3	24
2964	Recent advances in transition metal selenides-based electrocatalysts: Rational design and applications in water splitting. Journal of Alloys and Compounds, 2022, 918, 165719.	5.5	45
2965	Advances in Biologically Applicable Graphene-Based 2D Nanomaterials. International Journal of Molecular Sciences, 2022, 23, 6253.	4.1	11
2966	Intercalation of Nanoscale Multiferroic Spacers between the Two-Dimensional Interlayers of MXene. ACS Omega, 2022, 7, 20369-20375.	3.5	5

#	ARTICLE	IF	CITATIONS
2967	Janus transition-metal dichalcogenides heterostructures for highly efficient excitonic solar cells. Applied Surface Science, 2022, 598, 153835.	6.1	11
2968	Towards n-type conductivity in hexagonal boron nitride. Nature Communications, 2022, 13, .	12.8	24
2969	Two-dimensional (2D) nanomaterials for enhanced oil recovery (EOR): A review. FlatChem, 2022, 34, 100383.	5.6	12
2970	Emerging Dual-Functional 2D transition metal oxides for carbon capture and Utilization: A review. Fuel, 2022, 324, 124706.	6.4	15
2972	Two-Dimensional Nanomaterials as Smart Flame Retardants for Polyurethane. ACS Symposium Series, 0, , 189-219.	0.5	13
2973	Recent strategies for activating the basal planes of transition metal dichalcogenides towards hydrogen production. Journal of Materials Chemistry A, 2022, 10, 19067-19089.	10.3	27
2974	Liquid exfoliation of five-coordinate layered titanate K <sub>2</sub> Ti <sub>2</sub> O <sub>5</sub> single crystals in water. CrystEngComm, 2022, 24, 5112-5119.	2.6	1
2975	The floating body effect of a WSe <sub>2</sub> transistor with volatile memory performance. Materials Horizons, 0, , .	12.2	4
2976	Effective High-throughput Screening of Two-Dimensional Layered Materials for Potential Lithium-ion battery Anodes. Dalton Transactions, 0, , .	3.3	O
2977	Interfacial structure design of MXene-based nanomaterials for supercapacitors and batteries., 2022,,.		O
2978	Vacancy engineering of two-dimensional W <sub>2</sub> N <sub>3</sub> nanosheets for efficient CO <sub>2</sub> hydrogenation. Nanoscale, 2022, 14, 9736-9742.	5.6	4
2979	Properties of MXenes. Engineering Materials, 2022, , 37-52.	0.6	2
2980	Chapter 2. Green Nanotechnology for High-performance Impurity Detection and Water Treatment. RSC Nanoscience and Nanotechnology, 2022, , 33-64.	0.2	0
2981	Mechanical, electronic and photocatalytic properties of binary Ge-based materials GeX <sub>2</sub> (X) Tj ETQq1	1.0.7843	14 rgBT /0\
2982	2-Dimensional rare earth metal–organic frameworks based on a hexanuclear secondary building unit as efficient detectors for vapours of nitroaromatics and volatile organic compounds. Inorganic Chemistry Frontiers, 2022, 9, 4850-4863.	6.0	7
2983	Single-atom site catalysts based on high specific surface area supports. Physical Chemistry Chemical Physics, 2022, 24, 17417-17438.	2.8	11
2984	Delamination of MoS <sub>2</sub> /SiO <sub>2</sub> interfaces under nanoindentation. Physical Chemistry Chemical Physics, 2022, 24, 15991-16002.	2.8	7
2985	The role of permanent and induced electrostatic dipole moments for Schottky barriers in Janus MXY/graphene heterostructures: a first-principles study. Dalton Transactions, 0, , .	3.3	11

#	Article	IF	CITATIONS
2986	Discrete palladium clusters that consist of two mutually bisecting perpendicular planes. Chemical Science, 2022, 13, 7610-7615.	7.4	2
2987	Fluorescence/Electrochemiluminescence Approach for Instant Detection of Glycated Hemoglobin Index. SSRN Electronic Journal, 0, , .	0.4	0
2988	Prediction of the Be <sub>2</sub> B <sub>2</sub> monolayer: an ultrahigh capacity anode material for Li-ion and Na-ion batteries. Physical Chemistry Chemical Physics, 2022, 24, 14953-14963.	2.8	4
2989	Synthetic 2D tellurium nanosheets with intense TE wave polarization absorption by employing the PVD method. Journal of Nanoparticle Research, 2022, 24, .	1.9	O
2990	The Electronic Properties of gâ^2NO Modulated by Organic Molecules Adsorption. Crystals, 2022, 12, 882.	2.2	8
2992	Monolayered Carbides of Main Group Elements (Si, Ge, Sn and Pb) for NO2 Gas Sensing: Insights from First-Principle Studies. Silicon, 2022, 14, 12683-12692.	3.3	7
2993	Insight into the Heterogeneity of Longitudinal Plasmonic Field in a Nanocavity Using an Intercalated Two-Dimensional Atomic Crystal Probe with a $\hat{a}^{-1}/47$ $\hat{A}$ Resolution. Journal of the American Chemical Society, 2022, 144, 13174-13183.	13.7	4
2994	Oxygen Vacancy-Induced Construction of CoO/h-TiO <sub>2</sub> Z-Scheme Heterostructures for Enhanced Photocatalytic Hydrogen Evolution. ACS Applied Materials & Samp; Interfaces, 2022, 14, 28945-28955.	8.0	34
2995	Assembling covalent organic framework membranes via phase switching for ultrafast molecular transport. Nature Communications, 2022, 13, .	12.8	42
2996	Enhanced electronic and optical properties of multi-layer Arsenic via strain engineering. Nanotechnology, 0, , .	2.6	0
2997	Two-dimensional molecular crystalline semiconductors towards advanced organic optoelectronics. Nano Research, 2022, 15, 9554-9572.	10.4	2
2998	Synthesis of WS2 by Chemical Vapor Deposition: Role of the Alumina Crucible. Crystals, 2022, 12, 835.	2.2	6
2999	Transport and performance study of double-walled black phosphorus nanotube transistors. Semiconductor Science and Technology, 2022, 37, 085003.	2.0	1
3000	MXene-based nanocomposites for solar energy harvesting. Sustainable Materials and Technologies, 2022, 33, e00462.	3.3	7
3001	Solvent-assisted exfoliation for high-quality molybdenum disulfide nanoflakes and relevant field-effect transistors. Journal of Materials Science, 2022, 57, 11215-11225.	3.7	2
3002	Surface-Functionalized NdVO4:Gd3+ Nanoplates as Active Agents for Near-Infrared-Light-Triggered and Multimodal-Imaging-Guided Photothermal Therapy. Pharmaceutics, 2022, 14, 1217.	4.5	7
3003	Two-Dimensional Photocatalysts for Energy and Environmental Applications. Solar, 2022, 2, 305-320.	1.8	1
3004	Functionalization of Nanomaterials: Synthesis and Characterization. ACS Symposium Series, 0, , 1-26.	0.5	4

#	ARTICLE	IF	Citations
3005	A critical assessment of the role of ionic surfactants in the exfoliation and stabilization of 2D nanosheets: The case of the transition metal dichalcogenides MoS2, WS2 and MoSe2. Journal of Colloid and Interface Science, 2022, 626, 167-177.	9.4	11
3006	Biomedical Applications of MXeneâ€Integrated Composites: Regenerative Medicine, Infection Therapy, Cancer Treatment, and Biosensing. Advanced Functional Materials, 2022, 32, .	14.9	62
3007	2D Oxides for Electronics and Optoelectronics. Small Science, 2022, 2, .	9.9	22
3008	Transport behavior of water and ions through positively charged nanopores. Journal of Molecular Liquids, 2022, 360, 119546.	4.9	3
3009	Band alignments tuned by spontaneous polarization in two-dimensional MoS2/GaN van der Waals heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 143, 115360.	2.7	10
3010	Size-dependent design of ultrathin g-C3N4 nanomesh with N defects towards superior visible-light photocatalytic efficiency. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 649, 129534.	4.7	5
3011	lonic liquid as morphology-directing agent of two-dimensional Bi2WO6: New insight into photocatalytic and antibacterial activity. Applied Surface Science, 2022, 599, 153971.	6.1	12
3012	A novel two-dimensional main group metal organic framework Ga3C6N6 as a promising anode material for Li/Na-lon batteries. Applied Surface Science, 2022, 599, 153958.	6.1	6
3013	Unidirectional charge transport originated from defect boundary on two-dimensional heterostructure. Applied Surface Science, 2022, 599, 153940.	6.1	0
3014	Solvent-exfoliated Cu-TCPP nanosheets: Electrochemistry and sensing application in simultaneous determination of 4-aminophenol and acetaminophen. Microchemical Journal, 2022, 181, 107688.	4.5	7
3015	Morphological dependent behaviour of CoMoO4 anode: Lithium vs. sodium ion batteries. Journal of Alloys and Compounds, 2022, 920, 165925.	5.5	11
3016	Efficient and reusable catalysis of benzylic C–H oxidation over layered [Co <sub>5</sub> (OH) <sub>6</sub> ] <sup>4+</sup> derivatives. Chemical Communications, 2022, 58, 8444-8447.	4.1	1
3017	The effect of morphology on electrochemical hydrogen evolution reaction of ReSe <sub>2</sub> nano-structures. New Journal of Chemistry, 2022, 46, 14894-14902.	2.8	3
3018	Facile synthesis of rare earth-doped CeF <sub>3</sub> two-dimensional nanosheets and their application in ratiometric luminescence temperature sensing. CrystEngComm, 0, , .	2.6	4
3019	Photonic spin Hall effect: fundamentals and emergent applications., 2022, 1, 220007-220007.		56
3020	High performance transition metal-based electrocatalysts for green hydrogen production. Chemical Communications, 2022, 58, 7874-7889.	4.1	14
3021	Porous Vermiculite Membrane with High Permeance for Carbon Capture. SSRN Electronic Journal, 0, , .	0.4	0
3022	Antimicrobial properties of metal nanoclusters. , 2022, , 537-568.		0

#	Article	IF	CITATIONS
3023	Enhanced Selectivity of the Propylene Epoxidation Reaction on a Cu Monolayer Surface via Eleyâ€Rideal Mechanism. ChemPhysChem, 2022, 23, .	2.1	4
3024	Recent Advances in Metal-Based Nanoparticle-Mediated Biological Effects in Arabidopsis thaliana: A Mini Review. Materials, 2022, 15, 4539.	2.9	4
3025	Emergent Phenomena in Magnetic Two-Dimensional Materials and van der Waals Heterostructures. ACS Applied Electronic Materials, 2022, 4, 3278-3302.	4.3	26
3026	Elemental Twoâ€Dimensional Materials for Li/Naâ€lon Battery Anode Applications. Chemical Record, 2022, 22, .	5.8	10
3027	2D/2D CsPbBr <sub>3</sub> /BiOCl Heterojunction with an S-Scheme Charge Transfer for Boosting the Photocatalytic Conversion of CO <sub>2</sub> . Inorganic Chemistry, 2022, 61, 10557-10566.	4.0	46
3028	On-surface synthesis and characterization of nitrogen-doped covalent-organic frameworks on $Ag(111)$ substrate. Journal of Chemical Physics, 2022, 157, .	3.0	4
3029	Electronic, Magnetic, and Optical Properties of Metal Adsorbed g-ZnO Systems. Frontiers in Chemistry, 0, 10, .	3.6	6
3030	Cocrystallization Enabled Spatial Selfâ€Confinement Gives Crystalline Porous Metal Oxide Nanosheets for Gas Sensing. Angewandte Chemie, 0, , .	2.0	4
3031	Atomicâ€Level Design of Active Site on Twoâ€Dimensional MoS <sub>2</sub> toward Efficient Hydrogen Evolution: Experiment, Theory, and Artificial Intelligence Modelling. Advanced Functional Materials, 2022, 32, .	14.9	53
3032	Interlayer coupling and external electric field controllable electronic structures and Schottky contact of HfSeX (XÂ=ÂS, Se)/graphene van der Waals heterostructures. Diamond and Related Materials, 2022, 128, 109223.	3.9	9
3033	A Hexagonal Nut‣ike Metal–Organic Framework and Its Conformal Transformation. Small, 2022, 18, .	10.0	7
3034	Cocrystallization Enabled Spatial Selfâ€Confinement Approach to Synthesize Crystalline Porous Metal Oxide Nanosheets for Gas Sensing. Angewandte Chemie - International Edition, 2022, 61, .	13.8	10
3035	High-Throughput Prediction of the Band Gaps of van der Waals Heterostructures via Machine Learning. Nanomaterials, 2022, 12, 2301.	4.1	3
3036	Solid Lubrication Performance of Few―and Multilayer Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> Coatings. Advanced Engineering Materials, 2022, 24, .	3.5	7
3037	Cr3-doped GaSe monolayer as an innovative sensor and scavenger for Cl2, NO, and SO2: A DFT study. Journal of Materials Research and Technology, 2022, 19, 4463-4472.	5.8	15
3038	A review on bismuth-based nanocomposites for energy and environmental applications. Chemosphere, 2022, 307, 135652.	8.2	20
3039	Recent Advances in the Construction of 2D Heterostructures for Electrocatalytic Water Splitting. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	15
3040	Carbonateâ€Hydroxide Induced Metalâ€Organic Framework Transformation Strategy for Honeycombâ€Like NiCoP Nanoplates to Drive Enhanced pHâ€Universal Hydrogen Evolution. Small Methods, 2022, 6, .	8.6	8

#	Article	IF	CITATIONS
3041	Estimating Li-ion storage in semiconducting nanocomposite of 2D-MoS2 decorated aluminum nitride nanoflowers for flexible electrodes of supercapacitors. Applied Physics Letters, 2022, 121, .	3.3	11
3042	Universal Principle for Large-Scale Production of a High-Quality Two-Dimensional Monolayer via Positive Charge-Driven Exfoliation. Journal of Physical Chemistry Letters, 2022, 13, 6597-6603.	4.6	6
3043	Understanding the Linear and Nonlinear Optical Responses of Few-Layer Exfoliated MoS2 and WS2 Nanoflakes: Experimental and Simulation Studies. Nanotechnology, 0, , .	2.6	4
3044	Significant variation of structural, electronic, magnetic, and polarized properties induced by strain in armchair MoSTe nanoribbon. Journal of Applied Physics, 2022, 132, 015101.	2.5	0
3045	Preparation of Various Nanomaterials via Controlled Gelation of a Hydrophilic Polymer Bearing Metal-Coordination Units with Metal Ions. Gels, 2022, 8, 435.	4.5	3
3046	Preparation of Complex Ratioâ€Dependent Nanomaterials from Polymerizable Hydrogenâ€Bonded Liquid Crystal. Macromolecular Chemistry and Physics, 0, , 2200132.	2.2	0
3047	Interface-Coupling of NiFe-LDH on Exfoliated Black Phosphorus for the High-Performance Electrocatalytic Oxygen Evolution Reaction. Frontiers in Chemistry, 0, 10, .	3.6	2
3048	Adsorption of small gas molecules of transition metal (Pt and Au) modified HfSe2 monolayer.  Materials Today Communications, 2022, 32, 103885.	1.9	0
3049	Spin canting and weak long-range ferromagnetic order in a rigid supramolecular framework. Physica B: Condensed Matter, 2022, 643, 414157.	2.7	0
3050	An organic-based amphiphilic Janus polymer nanosheet: Synthesis, properties, and microscopic dispersion interpretations. Journal of Molecular Liquids, 2022, 363, 119822.	4.9	5
3051	Nanodiamond plates as macroscale solid lubricant: A "non-layered―two-dimension material. Carbon, 2022, 198, 119-131.	10.3	13
3052	In situ synthesis of ultrafine Cu2O on layered double hydroxide for electrochemical detection of S-nitrosothiols. Talanta, 2022, 250, 123736.	5.5	6
3053	Recent progresses on radiotherapeutics-based treatment of cancer with two-dimensional nanomaterials. Applied Materials Today, 2022, 29, 101584.	4.3	1
3054	An invisible hand: Hydrogen bonding guided synthesis of ultrathin two-dimensional amorphous TiO2 nanosheets. Science China Materials, 2022, 65, 3017-3024.	6.3	6
3055	Photocatalytic Carbon Dioxide Conversion by Structurally and Materially Modified Titanium Dioxide Nanostructures. International Journal of Molecular Sciences, 2022, 23, 8143.	4.1	5
3056	2D Single-Atom Fe–N–C Catalyst Derived from a Layered Complex as an Oxygen Reduction Catalyst for PEMFCs. ACS Applied Energy Materials, 2022, 5, 8791-8799.	5.1	8
3057	Determining the interlayer shearing in twisted bilayer MoS2 by nanoindentation. Nature Communications, 2022, 13, .	12.8	12
3058	Rapid Layer-Number Identification of MoS <sub>2</sub> Nanosheet in MoS <sub>2</sub> /MoO <sub>2</sub> Conformal Heterostructures by Color: Implications for the Fabrication of 2D/3D Heterostructures. ACS Applied Nano Materials, 2022, 5, 11280-11288.	5.0	3

#	ARTICLE	IF	CITATIONS
3059	Unraveling the Atomic-Level Vacancy Modulation in Cu9s5 for Nir-Driven Efficient Inhibition of Drug-Resistant Bacteria: Key Role of Cu Vacancy Position. SSRN Electronic Journal, 0, , .	0.4	0
3060	CHAPTER 2. Synthesis and Characterization of Two Dimensional Materials. , 2022, , 36-63.		0
3061	CHAPTER 7. Two-dimensional Nanomaterials Design and Reactor Engineering of Different Methods for CO2 Electrochemical Conversion Process., 2022,, 211-229.		0
3062	Construction of heterogeneous 1T/2H MoSe2 homojunction nanosheets with excellent broad-spectrum photocatalytic activity. Journal of Materials Science, 2022, 57, 14386-14397.	3.7	9
3063	Functional Customization of Two-Dimensional Materials for Photocatalytic Activation and Conversion of Inert Small Molecules in Air., 2022,,.		1
3064	Electronic and spintronic properties of Janus <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>M</mml:mi><mml:mrow><mml:msub><mml:m mathvariant="normal">P<mml:mi>x</mml:mi></mml:m></mml:msub><mml:mi>M</mml:mi>MM</mml:mrow></mml:math> ="http://www.w3.org/1998/Math/MathML"> <mml:mi>M</mml:mi> =) Tj ET	l:n <b>3i2</b> y <td>m<b>lı</b>mi&gt;</td>	m <b>lı</b> mi>
3065	Preparation of 2D Molybdenum Phosphide via Surfaceâ€Confined Atomic Substitution. Advanced Materials, 2022, 34, .	21.0	14
3066	First-Principles Study of the Optical Dipole Trap for Two-Dimensional Excitons in Graphane. Physical Review Letters, 2022, 129, .	7.8	2
3067	A prospectus for thickness dependent electronic properties of twoâ€dimensional metals using density functional theory calculation. International Journal of Quantum Chemistry, 2022, 122, .	2.0	3
3068	On the choice of shape and size for truncated cluster-based x-ray spectral simulations of 2D materials. Journal of Chemical Physics, 2022, 157, .	3.0	3
3069	Ultrahigh Lithium Storage Capacity of Al <sub>2</sub> C Monolayer in a Restricted Multilayered Growth Mechanism. ACS Applied Materials & Samp; Interfaces, 2022, 14, 35663-35672.	8.0	4
3070	Research Progress of Conjugated Nanomedicine for Cancer Treatment. Pharmaceutics, 2022, 14, 1522.	4.5	11
3071	Fabrication and Applications of 2D Few-Layer Antimonene: An Overview. Journal of the Institution of Engineers (India): Series D, 0, , .	1.0	0
3072	Selective syntheses of thick and thin nanosheets based on correlation between thickness and lateral-size distribution. IScience, 2022, 25, 104933.	4.1	0
3073	Insight into the Nanotribological Mechanism of Two-Dimensional Covalent Organic Frameworks. ACS Applied Materials & Samp; Interfaces, 2022, 14, 40173-40181.	8.0	7
3074	Structure and electronic properties of stable facets in the 2D material hexagonal boron nitride (hBN) on curved platinum., 2022, 4, 100071.		O
3075	2D materials and van der Waals heterojunctions for neuromorphic computing. Neuromorphic Computing and Engineering, 2022, 2, 032004.	5.9	14
3076	Facile synthesis of zinc hydroxyfluoride nanobelt and effect of hexamethylenetetramine for growth direction. Journal of Asian Ceramic Societies, 2022, 10, 697-702.	2.3	3

#	Article	IF	CITATIONS
3077	Infusion of variable chemical structure to tune stacking among metalâ€organic layers in 2D Nano MOF. Chemistry - A European Journal, 0, , .	3.3	3
3078	Bottlebrush Polymer-Functionalized Graphene Oxide-Based Multifunctional Poly(vinyl alcohol) Nanocomposite Films with Exceptional Performance. Macromolecules, 2022, 55, 10703-10712.	4.8	2
3079	Chemical Energyâ€Driven Lithiation Preparation of Defectâ€Rich Transition Metal Nanostructures for Electrocatalytic Hydrogen Evolution. Small, 2022, 18, .	10.0	7
3080	Ultrathin g-C3N4 nanosheet–CoOOH nanocomposite for fluorescence imaging of ascorbic acid in living cells. Analytical Sciences, 2022, 38, 1433-1440.	1.6	1
3081	2D Metalâ€Organic Framework Based on the Functionalized Anthracene Derivative as A Dualâ€Functional Luminescent Probe for Fe <sup>3+</sup> and Ascorbic Acid. ChemistrySelect, 2022, 7, .	1.5	0
3082	DFT calculations of 2D graphene like ZnS:Mn sheet for RESOLFT microscopic applications. Journal of Computational Electronics, 2022, 21, 1191-1201.	2.5	1
3083	Improving the device performances of two-dimensional semiconducting transition metal dichalcogenides: Three strategies. Frontiers of Physics, 2022, 17, .	5.0	10
3085	MXenes Thin Films: From Fabrication to Their Applications. Molecules, 2022, 27, 4925.	3.8	16
3087	Constructing Heterogeneous Photocatalysts Based on Carbon Nitride Nanosheets and Graphene Quantum Dots for Highly Efficient Photocatalytic Hydrogen Generation. Materials, 2022, 15, 5390.	2.9	1
3088	Mixed-Metal-Atom Markers Enable Simultaneous Imaging of Spatial Distribution in Two-Dimensional Heterogeneous Molecular Assembly by Scanning Transmission Electron Microscopy. ACS Measurement Science Au, 2022, 2, 542-546.	4.4	2
3089	High-Entropy Metal–Organic Framework Arrays Boost Oxygen Evolution Electrocatalysis. Journal of Physical Chemistry C, 2022, 126, 14094-14102.	3.1	15
3090	<b>Unprecedented Small Molecule-Based Uniform Two-Dimensional Platelets with Tailorable Shapes and Sizes /b&gt;. Journal of the American Chemical Society, 2022, 144, 15403-15410.</b>	13.7	16
3091	One-Step Synthesis of 1T MoS <sub>2</sub> Hierarchical Nanospheres for Electrocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2022, 5, 11705-11712.	5.1	8
3092	Strain modulated electronic and optical properties of laterally stitched MoSi2N4/XSi2N4 (X=W, Ti) 2D heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 144, 115471.	2.7	12
3093	TiB2 derived nanosheets co-immobilized with triangular gold nanoparticles elicit fast and stable photocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2024, 52, 20-32.	7.1	9
3094	Visualizing fast interlayer anisotropic lithium diffusion via single crystal microbattery. Matter, 2022, 5, 4015-4028.	10.0	5
3095	2D hybrid photocatalysts for solar energy harvesting. Sustainable Materials and Technologies, 2022, 33, e00469.	3.3	7
3096	High sensitivity of 2D covalent triazine framework for recognition of NO, NO2, and HO2 radicals: A periodic DFT study. Chemical Physics Letters, 2022, 805, 139940.	2.6	3

#	Article	IF	CITATIONS
3097	Regulating of MnO2 photocatalytic activity in degradation of organic dyes by polymorphic engineering. Solid State Sciences, 2022, 132, 106997.	3.2	16
3098	Research progress of bone-targeted drug delivery system on metastatic bone tumors. Journal of Controlled Release, 2022, 350, 377-388.	9.9	10
3099	Coordinating single-atom catalysts on two-dimensional nanomaterials: A paradigm towards bolstered photocatalytic energy conversion. Coordination Chemistry Reviews, 2022, 471, 214743.	18.8	25
3100	Effect of flexoelectricity on a bilayer molybdenum disulfide Schottky contact. Nano Energy, 2022, 102, 107701.	16.0	7
3101	Enhancement in the hydrogen storage capability of borophene through yttrium doping: A theoretical study. Journal of Energy Storage, 2022, 55, 105500.	8.1	9
3102	Two novel easily exfoliated quaternary chalcogenides with high performance of photocatalytic hydrogen production. Applied Surface Science, 2022, 604, 154555.	6.1	13
3103	Antifungal CoAl layered double hydroxide ultrathin nanosheets loaded with oregano essential oil for cereal preservation. Food Chemistry, 2022, 397, 133809.	8.2	1
3104	BSA-assisted hydrothermal conversion of MoS2 nanosheets into quantum dots with high yield and bright fluorescence for constructing a sensing platform via dual quenching effects. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 282, 121701.	3.9	0
3105	Construction and application in solid-state asymmetric supercapacitors of gladiolus-like NiSe/CoSe/Ni3Se2 hierarchical nanocomposite with synergistic structural advantages. Journal of Alloys and Compounds, 2022, 925, 166696.	5 <b>.</b> 5	7
3106	Metal–Organic Frameworkâ€Based Nanomaterials for Electrocatalytic Oxygen Evolution. Small Methods, 2022, 6, .	8.6	53
3107	Largeâ€Scale Production of Rectorite Nanosheets and Their Coâ€Assembly with Aramid Nanofibers for Highâ€Performance Electrical Insulating Nanopapers. Advanced Materials, 2022, 34, .	21.0	14
3108	Hexagonal boron nitride nanosheets based magnetic solid phase extraction for the extraction of phenoxy carboxylic acid herbicides from water samples followed by high-performance liquid chromatography-tandem mass spectrometry. Journal of Chromatography A, 2022, 1682, 463519.	3.7	3
3109	Recent advances in graphdiyne materials for biomedical applications. Nano Today, 2022, 46, 101616.	11.9	6
3110	Nanotubes-nanosheets (1D/2D) heterostructured bifunctional electrocatalysts for overall water splitting. Electrochimica Acta, 2022, 430, 141095.	<b>5.2</b>	9
3111	Hazardous gas adsorption of Janus HfSeTe monolayer adjusted by surface vacancy defect: A DFT study. Surfaces and Interfaces, 2022, 34, 102316.	3.0	5
3112	Facile synthesis of black phosphorus-zinc oxide nanohybrids for antibacterial coating of titanium surface. Colloids and Surfaces B: Biointerfaces, 2022, 219, 112807.	5.0	8
3113	Two-dimensional materials in enhancement of membrane-based lithium recovery from metallic-ions-rich wastewaters: A review. Desalination, 2022, 543, 116096.	8.2	26
3114	Electrocatalytic activity enhancement of palladium-manganese nanosheet assembled nanobuds by tuning electronic structure. Applied Surface Science, 2022, 605, 154634.	6.1	2

#	Article	IF	CITATIONS
3115	A in-plane biaxial strain tunable electronic structures and magnetic properties of Fe2C monolayer. Journal of Magnetism and Magnetic Materials, 2022, 563, 169959.	2.3	5
3116	Electronic structure and magnetism of pristine, defected, and strained Ti2N MXene. Journal of Magnetism and Magnetic Materials, 2022, 563, 169895.	2.3	1
3117	Nanoarchitectured assembly and surface of two-dimensional (2D) transition metal dichalcogenides (TMDCs) for cancer therapy. Coordination Chemistry Reviews, 2022, 472, 214765.	18.8	15
3118	Facile construction of BiOBr/CoAl-LDH heterojunctions with suppressed Z-axis growth for efficient photoreduction of CO2. Separation and Purification Technology, 2022, 302, 122090.	7.9	45
3119	FeSe2/CoSe nanosheets for efficient overall water splitting under low cell voltages. Materials Today Chemistry, 2022, 26, 101110.	3.5	4
3120	Two-dimensional HfTe2 monolayer treated by dispersed single Pt atom for hazardous gas Detection: A First-principles study. Applied Surface Science, 2022, 605, 154572.	6.1	7
3121	Ultrathin two-dimensional nanosheet metal-organic frameworks with high-density ligand active sites for advanced lithium-ion capacitors. Nano Energy, 2022, 103, 107797.	16.0	30
3122	Recent progress of hollow structure platform in assisting oxygen evolution reaction. Chemical Engineering Journal, 2023, 452, 139232.	12.7	5
3123	A Study of the Electrical and Optical Properties of Cr2+:Znse Nano-Sheets by First-Principle Calculations. SSRN Electronic Journal, 0, , .	0.4	0
3124	MOF-derived nanoarrays as advanced electrocatalysts for water splitting. Nanoscale, 2022, 14, 12196-12218.	5 <b>.</b> 6	23
3125	General synthesis strategy of ZrO <sub>2</sub> nanofilms with few-atom layered thickness for boosting triethylamine detection. Chemical Communications, 2022, 58, 10174-10177.	4.1	2
3126	Metal–organic framework-derived 2D layered double hydroxide ultrathin nanosheets for efficient electrocatalytic hydrogen evolution reaction. Chemical Communications, 2022, 58, 10655-10658.	4.1	8
3128	Facet engineering of ultrathin two-dimensional materials. Chemical Society Reviews, 2022, 51, 7327-7343.	38.1	23
3129	Mechanical, electronic and catalytic properties of 2H-1T' MoS2 heterointerfaces. Physical Chemistry Chemical Physics, 0, , .	2.8	0
3130	Perovskite-transition metal dichalcogenides heterostructures: recent advances and future perspectives., 2022, 1, 220006-220006.		17
3131	Ultrathin MOF nanosheet-based resistive sensors for highly sensitive detection of methanol. Chemical Communications, 2022, 58, 11543-11546.	4.1	7
3132	Photochemically engineered ultra-stable 1T MoS <sub>2</sub> by flow synthesis. Chemical Communications, 2022, 58, 11929-11932.	4.1	1
3133	Recent advances in solution assisted synthesis of transition metal chalcogenides for photo-electrocatalytic hydrogen evolution. Physical Chemistry Chemical Physics, 2022, 24, 20638-20673.	2.8	27

#	Article	IF	CITATIONS
3134	Pore engineering in covalent organic framework membrane for gas separation., 2022, 2, 100037.		5
3135	Hexagonal Boron Nitride Nanosheets Based Magnetic Solid Phase Extraction for the Extraction of Phenoxy Carboxylic Acid Herbicides from Water Samples Followed by HPLC-MS/MS Determination. SSRN Electronic Journal, 0, , .	0.4	O
3136	Synthesis of manganese molybdate/MWCNT nanostructure composite with a simple approach for supercapacitor applications. RSC Advances, 2022, 12, 27868-27876.	3.6	11
3137	CHAPTER 12. Oxidative Dehydrogenation of Ethane to Ethylene Over Two-dimensional Nanomaterial Catalysts Using CO2., 2022,, 320-340.		0
3138	lonic Liquid Functionalized Perovskite/MoS2 Nanosheets Based Photoelectrochemical Platform for Determining CA19-9 Assisted with Silver-Nanoparticle-Labeled Sandwich-Type Immunocomplex. SSRN Electronic Journal, 0, , .	0.4	O
3139	MXene-Based Nanocomposite Photocatalysts for Wastewater Treatment. , 2022, , 53-81.		1
3140	Preferential grain growth, tunable bandgap and topological insulating to bulk state modification induced via Ag ion irradiation in antimony telluride nanostructured thin film. Radiation Physics and Chemistry, 2023, 202, 110546.	2.8	O
3141	Generating Self-Shaped 2D Aluminum Oxide Nanopowders. Nanomaterials, 2022, 12, 2955.	4.1	1
3142	Regioselective Friedel–Crafts Acylation Reaction Using Single Crystalline and Ultrathin Nanosheet Assembly of Scrutinyite-SnO <sub>2</sub> . ACS Omega, 2022, 7, 32225-32237.	3.5	1
3143	Quaternary PdCuNiP Porous Nanosheets with Enhanced Electrochemical Performance in the Ethanol Oxidation Reaction. Inorganic Chemistry, 2022, 61, 14470-14476.	4.0	5
3144	Intrinsic Ferromagnetism in 2D Fe <sub>2</sub> H with a High Curie Temperature. ACS Applied Materials & Lamp; Interfaces, 2022, 14, 44745-44752.	8.0	4
3145	Synthesis of twoâ€dimensional materials: How computational studies can help?. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2023, 13, .	14.6	1
3146	Ultrathin Niobate Nanosheet Assembly with Au NPs and CdS QDs as a Highly Efficient Photocatalyst. Chemistry - A European Journal, 0, , .	3.3	0
3147	Two-Dimensional Nanomaterials: An Overview of Their Properties, Synthesis and Applications. Issn 2458-9411, 0, , .	0.4	O
3148	Atomically Thin Holey Two-Dimensional Ru <sub>2</sub> P Nanosheets for Enhanced Hydrogen Evolution Electrocatalysis. ACS Nano, 2022, 16, 16452-16461.	14.6	21
3149	Current Progress in 2D Metal–Organic Frameworks for Electrocatalysis. Small Structures, 2023, 4, .	12.0	100
3150	Superlow Power Consumption Artificial Synapses Based on WSe <sub>2</sub> Quantum Dots Memristor for Neuromorphic Computing. Research, 2022, 2022, .	5.7	9
3151	Full Composition Tuning of W <sub>1â€"<i>x</i></sub> Nb <sub><i>x</i></sub> Se <sub>2</sub> Alloy Nanosheets to Promote the Electrocatalytic Hydrogen Evolution Reaction. ACS Nano, 2022, 16, 13949-13958.	14.6	9

#	Article	IF	CITATIONS
3152	Recent Advances of Transition Metal Chalcogenides as Cathode Materials for Aqueous Zinc-Ion Batteries. Nanomaterials, 2022, 12, 3298.	4.1	5
3153	Facile hydrothermal synthesis of layered $1T\hat{a}\in^2$ MoTe2 nanotubes as robust hydrogen evolution electrocatalysts. Frontiers in Chemistry, 0, 10, .	3.6	1
3154	Facile Synthesis of Black Phosphorus Nanosheet@NaReF4 Nanocomposites for Potential Bioimaging. Nanomaterials, 2022, 12, 3383.	4.1	4
3155	Integration and Applications of Nanomaterials for Ultrafast Photonics. Laser and Photonics Reviews, 2022, 16, .	8.7	24
3156	Solution Processed Photodetectors with PVK-WS <sub>2</sub> Nanotube/Nanofullerene Organic–Inorganic Hybrid Films. ACS Applied Materials & Interfaces, 2022, 14, 43612-43620.	8.0	2
3157	A Brief Assessment on Recent Developments in Efficient Electrocatalytic Nitrogen Reduction with 2D Non-Metallic Nanomaterials. Nanomaterials, 2022, 12, 3413.	4.1	81
3158	A review on graphitic carbon nitride (g-C3N4) – metal organic framework (MOF) heterostructured photocatalyst materials for photo(electro)chemical hydrogen evolution. International Journal of Hydrogen Energy, 2022, 47, 36784-36813.	7.1	23
3159	Spatially Confined Faceâ€Selective Growth of Largeâ€Area 2D Organic Molecular Crystals in a Supramolecular Gel for Highly Efficient Flexible Photodetection. Advanced Science, 2022, 9, .	11.2	3
3160	Surface-Modified Ultrathin Metal–Organic Framework Nanosheets as a Single-Site Iron Electrocatalyst for Oxygen Evolution Reaction. ACS Applied Nano Materials, 2022, 5, 15021-15029.	5.0	3
3161	High-Temperature Ferromagnetism in a Two-Dimensional Semiconductor with a Rectangular Spin Lattice. Journal of Physical Chemistry C, 2022, 126, 16034-16041.	3.1	6
3162	Guidelines for Arranging 2D Nanosheets into Neatly Tiled Monolayer Films by a Spin-Coating Process. Langmuir, 2022, 38, 12399-12407.	3.5	3
3163	Silicon-doped Boron Nitride Nanosheets for Enhanced Toxic Gas Sensing: An ab initio Approach. Silicon, 0, , .	3.3	1
3164	A Critical Review on New and Efficient 2D Materials for Catalysis. Advanced Materials Interfaces, 2022, 9, .	3.7	7
3165	Review on recent advances in twoâ€dimensional nanomaterialsâ€based cathodes for lithiumâ€sulfur batteries. EcoMat, 2023, 5, .	11.9	15
3166	Edge modification facilitated heterogenization and exfoliation of two-dimensional nanomaterials for cancer catalytic therapy. Science Advances, 2022, 8, .	10.3	35
3167	Photon-Induced Electron Transfer in Ligand-Stabilized Monoclinic CsPbBr <sub>3</sub> and Alanine-Functionalized Graphene Heterostructures. Journal of Physical Chemistry C, 2022, 126, 15298-15308.	3.1	3
3168	2D/2D Inorganic/Organic Hybrid of Lead-Free Cs <sub>2</sub> AgBiBr <sub>6</sub> Double Perovskite/Covalent Triazine Frameworks with Boosted Charge Separation and Efficient CO <sub>2</sub> Photoreduction. Inorganic Chemistry, 2022, 61, 16028-16037.	4.0	15
3169	Role of Competitive Crystallization Kinetics in the Formation of 2D Platelets with Distinct Coronal Surface Patterns via Seeded Growth. Journal of the American Chemical Society, 2022, 144, 19051-19059.	13.7	14

#	Article	IF	CITATIONS
3170	Magnetic Properties of Layered Hybrid Organicâ€Inorganic Metalâ€Halide Perovskites: Transition Metal, Organic Cation and Perovskite Phase Effects. Advanced Functional Materials, 2022, 32, .	14.9	11
3171	Charge Sampling Photodetector Based on van der Waals Heterostructures. Advanced Optical Materials, 0, , 2201442.	7.3	0
3172	Probing the interlayer mechanical coupling of 2D layered materials - A review. Progress in Natural Science: Materials International, 2022, 32, 528-537.	4.4	5
3173	Carbon dioxide adsorption and conversion to methane and ethane on hydrogen boride sheets. Communications Chemistry, 2022, 5, .	4.5	8
3174	Coupling of nanocrystal hexagonal array and two-dimensional metastable substrate boosts H2-production. Nature Communications, 2022, 13, .	12.8	22
3175	Vacancy Defects in 2D Transition Metal Dichalcogenide Electrocatalysts: From Aggregated to Atomic Configuration. Advanced Materials, 2023, 35, .	21.0	27
3176	Ultrathin Cageâ€based Covalent Organic Framework Nanosheets as Precursor for Pyrolysisâ€Free Oxygen Evolution Reaction Electrocatalyst. ChemNanoMat, 2022, 8, .	2.8	4
3177	Piezoelectric-enhanced photocatalytic performance of porous carbon nitride nanosheets. Journal of Colloid and Interface Science, 2023, 630, 191-203.	9.4	15
3178	Recent advances on the utilization of nanosheets as electrode material for supercapacitor application. Journal of Energy Storage, 2022, 55, 105697.	8.1	9
3179	Advances in two-dimensional materials for energy-efficient and molecular precise membranes for biohydrogen production. Bioresource Technology, 2022, 364, 128065.	9.6	3
3180	Emerging Devices for Sensing-Memory-Computing Applications. , 2022, , 143-197.		0
3181	Few-layer graphitic carbon nitride for enhanced visible-light photocatalytic efficiency: the role of narrow bandgap and nitrogen-vacancies. Environmental Science: Nano, 2022, 9, 4445-4458.	4.3	1
3182	The electronic properties of non-conventional $\langle b \rangle \hat{l} \pm \langle b \rangle$ -graphyne nanoribbons. Physical Chemistry Chemical Physics, 2022, 24, 26813-26827.	2.8	3
3183	New two-dimensional Ge–Sb–Te semiconductors with high photovoltaic performance for solar energy conversion. Journal of Materials Chemistry C, 2022, 10, 16813-16821.	5 <b>.</b> 5	2
3184	Collision Avoidance Systems and Emerging Bio-inspired Sensors for Autonomous Vehicles. , 2022, , 121-141.		0
3185	2D-Double transition metal MXenes for spintronics applications: surface functionalization induced ferromagnetic half-metallic complexes. Journal of Materials Chemistry C, 2022, 10, 17886-17898.	5.5	5
3186	Wrinkle-mediated CVD synthesis of wafer scale Graphene/h-BN heterostructures. Nanotechnology, 2023, 34, 025601.	2.6	3
3187	Alpha-Germanium Nanolayers for High-Performance Li-ion Batteries. Nanomaterials, 2022, 12, 3760.	4.1	7

#	Article	IF	CITATIONS
3188	Exploring 2D Energy Storage Materials: Advances in Structure, Synthesis, Optimization Strategies, and Applications for Monovalent and Multivalent Metalâ€lon Hybrid Capacitors. Small, 2022, 18, .	10.0	29
3189	Covalent Organic Framework (C6N6) as a Drug Delivery Platform for Fluorouracil to Treat Cancerous Cells: A DFT Study. Materials, 2022, 15, 7425.	2.9	15
3190	Tuning the Nonradiative Electron–Hole Recombination with Defects in Monolayer Black Phosphorus. Journal of Physical Chemistry Letters, 2022, 13, 10162-10168.	4.6	7
3191	Tunable long-lived exciton lifetime in single-layer two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LiAlTe</mml:mi><mml:mn>2<td>n<b>ān</b></td><td>nl<b>ı</b>msub&gt;</td></mml:mn></mml:msub></mml:math>	n <b>ān</b>	nl <b>ı</b> msub>
3193	The shapes of synthesized twoâ€dimensional materials. SmartMat, 2023, 4, .	10.7	5
3194	Recent Progress of Electrode Architecture for MXene/MoS2 Supercapacitor: Preparation Methods and Characterizations. Micromachines, 2022, 13, 1837.	2.9	12
3195	Chemically coupling SnO <sub>2</sub> quantum dots and MXene for efficient CO <sub>2</sub> electroreduction to formate and Zn–CO <sub>2</sub> battery. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	27
3196	2D-Materials-Based Wearable Biosensor Systems. Biosensors, 2022, 12, 936.	4.7	10
3197	Recent Advances in Semiconductor Heterojunctions and Z-Schemes for Photocatalytic Hydrogen Generation. Topics in Current Chemistry, 2022, 380, .	5.8	18
3198	MoS2 and MoS2 Nanocomposites for Adsorption and Photodegradation of Water Pollutants: A Review. Molecules, 2022, 27, 6782.	3.8	18
3199	A study of the electrical and optical properties of Cr2K: ZnSe nano-sheets by first-principle calculations. Materials Today Communications, 2022, 33, 104790.	1.9	1
3200	N-Doped Two-Dimensional Carbon Nanosheets with Micropore-Dominant Porosity for High-Performance Supercapacitors. Energy & Samp; Fuels, 2022, 36, 13246-13255.	5.1	5
3201	Additional electron transfer channels of thermostable OD Cs(Pb: Pt)Br3 perovskite quantum dots /2D accordion-like Ni-MOF nanojunction for photocatalytic H2 evolution. International Journal of Hydrogen Energy, 2022, 47, 40860-40871.	7.1	7
3202	xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:mrow><mml:mi>C</mml:mi><mml:mn>2</mml:mn> (<mml:math) (xmlns:mml="http://www.w3.org/1998/Math/&lt;/td&gt;&lt;td&gt;&lt;mml:mo&lt;br&gt;MathML" 0.784314="" 1="" 10="" 222="" 50="" etqq1="" overlock="" rgbt="" td="" tf="" tj=""> 2.4</mml:math)></mml:mrow>	>/ <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	
3203	Ideal IR-VIS light tran. Physical Review Materials, 2022, 6.  Metal single atom doped 2D materials for photocatalysis: current status and future perspectives. Progress in Energy, 2023, 5, 012001.	10.9	9
3204	Dicarbon nitride and Janus transition metal chalcogenides van der Waals heterojunctions for photocatalytic water splitting. Journal of Physics Condensed Matter, 2023, 35, 014003.	1.8	2
3205	An overview on room-temperature chemiresistor gas sensors based on 2D materials: Research status and challenge. Composites Part B: Engineering, 2023, 248, 110378.	12.0	21
3206	Molybdenumâ€Based Nanomaterials for Photothermal Cancer Therapy. Advanced NanoBiomed Research, 2022, 2, .	3.6	26

#	Article	IF	CITATIONS
3207	Recent Advances in Organic and Inorganic Hole and Electron Transport Layers for Organic Solar Cells: Basic Concept and Device Performance. ACS Applied Electronic Materials, 2022, 4, 5119-5143.	4.3	12
3208	Edgeâ€Nitrogen Enriched Porous Carbon Nanosheets Anodes with Enlarged Interlayer Distance for Fast Charging Sodiumâ€lon Batteries. Small, 2022, 18, .	10.0	19
3209	Molecular interaction with defected h-BN. Computational and Theoretical Chemistry, 2022, 1217, 113911.	2.5	1
3210	Effective corrosion protection by PDA-BN@CeO2 nanocomposite epoxy coatings. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 657, 130448.	4.7	13
3211	2D Materials towards sensing technology: From fundamentals to applications. Sensing and Bio-Sensing Research, 2022, 38, 100540.	4.2	27
3212	Fluorescence/electrochemiluminescence approach for instant detection of glycated hemoglobin index. Analytical Biochemistry, 2022, 659, 114958.	2.4	1
3213	Electronic and optical properties of lateral heterostructures within monolayer black phosphorene and group-IV monochalcogenides. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, 454, 128495.	2.1	3
3214	Red blood cell membrane nanoparticles for tumor phototherapy. Colloids and Surfaces B: Biointerfaces, 2022, 220, 112895.	5.0	10
3215	Porous vermiculite membrane with high permeance for carbon capture. Journal of Membrane Science, 2022, 664, 121102.	8.2	4
3216	Water splitting performance of metal and non-metal-doped transition metal oxide electrocatalysts. Coordination Chemistry Reviews, 2023, 474, 214864.	18.8	90
3217	High-velocity transverse impact of monolayer graphene oxide by a molecular dynamics study. Computational Materials Science, 2023, 216, 111881.	3.0	2
3218	Fabrication strategies for metal-organic framework electrochemical biosensors and their applications. Coordination Chemistry Reviews, 2023, 475, 214814.	18.8	46
3219	Construction of NiCo-LDH/g-C <sub>3</sub> N <sub>4</sub> heterojunctions as efficient photocatalysts for enhanced degradation of tetracycline hydrochloride and hydrogen evolution. New Journal of Chemistry, 2022, 46, 22830-22840.	2.8	4
3220	Synthesis and phase-engineering of ultrathin two-dimensional nanomaterials. , 2022, , .		0
3221	Recent Advances in the MXenes for Photocatalytic and Hydrogen Production Applications. , 2022, , 2219-2260.		0
3222	Bio-inspired self-healing MXene/polyurethane coating with superior active/passive anticorrosion performance for Mg alloy. Chemical Engineering Journal, 2023, 454, 140187.	12.7	14
3223	Topological defects and their induced metallicity in monolayer semiconducting $\hat{I}^3$ -phase group IV monochalcogenides. Science China Materials, $0$ , , .	6.3	0
3224	Repulsive Osmotic Delamination: 1D Dissolution of 2D Materials. Advanced Materials Technologies, 2023, 8, .	5.8	10

#	Article	IF	Citations
3225	Two-Dimensional Triblock Peptide Assemblies for the Stabilization of Pickering Emulsions with pH Responsiveness. ACS Applied Materials & Interfaces, 2022, 14, 53228-53240.	8.0	4
3226	Review of Interface Modification Based on 2D Nanomaterials for Surface Plasmon Resonance Riosepsors, ACS Photonics, 2022, 9, 3807-3823. Tunable electronic properties and negative differential resistance effect of the intrinsic type-III ZrS <mml:math <="" altimg="si13.svg" display="inline" td="" xmlns:mml="http://www.w3.org/1998/Math/MathML"><td>6.6</td><td>16</td></mml:math>	6.6	16
3227	id="d1e711"> <mml:msub><mml:mrow></mml:mrow><mml:mrow></mml:mrow></mml:msub> /WTe <mml:math altimg="si13.svg" display="inline" id="d1e719" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:msub><mml:math altimg="si13.svg" display="inline" id="d1e719" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:msub><mml:mrow< td=""><td>6.1</td><td>6</td></mml:mrow<></mml:msub></mml:msub></mml:math></mml:msub></mml:msub></mml:math>	6.1	6
3228	Mechanical cleavage of non-van der Waals structures towards two-dimensional crystals., 2023, 2, 58-66.		14
3229	Thickness-Tunable Growth of Composition-Controllable Two-Dimensional Fe <sub><i>x</i></sub> GeTe <sub>2</sub> . Nano Letters, 2022, 22, 9477-9484.	9.1	5
3230	Recent advances in 2D organicâ-'inorganic heterostructures for electronics and optoelectronics. SmartMat, 2023, 4, .	10.7	15
3231	Solar and Thermal Radiationâ€Modulation Materials for Building Applications. Advanced Energy Materials, 2023, 13, .	19.5	13
3232	Biomimetic ultrathin pepsomes for photo-controllable catalysis. Science China Chemistry, 2022, 65, 2444-2449.	8.2	4
3233	Research on the Thickness and Microstructure of Plate-like TiO2 by the Nanosheet-Seeding Growth Technique. Coatings, 2022, 12, 1673.	2.6	0
3234	Development and Analysis of Electrochemical Reactor with Vibrating Functional Element for AAO Nanoporous Membranes Fabrication. Sensors, 2022, 22, 8856.	3.8	1
3235	Advances in Graphene-Supported Single-Atom Catalysts for Clean Energy Conversion. Electrochemical Energy Reviews, 2022, 5, .	25.5	17
3236	Recent trends in Bi-based nanomaterials: challenges, fabrication, enhancement techniques, and environmental applications. Beilstein Journal of Nanotechnology, 0, 13, 1316-1336.	2.8	5
3237	Phase Transitions and Magnetic Properties of Zigzag Triangular Nanographenes: Monte Carlo Simulation. Journal of Superconductivity and Novel Magnetism, 2023, 36, 111-118.	1.8	1
3238	Nitrogen-doped carbon-encapsulated SmFeOx bimetallic nanoparticles as high-performance electrocatalysts for oxygen reduction reaction. Journal of the Taiwan Institute of Chemical Engineers, 2022, 141, 104579.	<b>5.</b> 3	3
3239	Recent Advances in Two-dimensional p-type Metal Chalcogenides: synthesis, doping strategies and applications. Journal Physics D: Applied Physics, O, , .	2.8	0
3240	Dual-defect enhanced piezocatalytic performance of C3N5 for multifunctional applications. Applied Catalysis B: Environmental, 2023, 323, 122196.	20.2	26
3241	Interfacial engineering of halide perovskites and two-dimensional materials. Chemical Society Reviews, 2023, 52, 212-247.	38.1	13
3242	Carbon Nanotubes: General Introduction. , 2022, , 1321-1333.		0

#	Article	IF	CITATIONS
3243	Label-free plasmonic-based biosensing using a gold nanohole array chip coated with a wafer-scale deposited WS <sub>2</sub> monolayer. RSC Advances, 2022, 12, 33284-33292.	3.6	0
3244	Analytical Scaling of Trap-Limited Current in 2-D Ultrathin Dielectrics. IEEE Transactions on Electron Devices, 2023, 70, 1527-1532.	3.0	3
3245	Current progresses in two-dimensional MXene-based framework: prospects from superficial synthesis to energy conversion and storage applications. Materials Today Chemistry, 2023, 27, 101238.	3.5	8
3246	Spotting the driving forces for SERS of two-dimensional nanomaterials. Materials Horizons, 2023, 10, 1087-1104.	12.2	7
3247	2D spin glass MnIn <sub>2</sub> Se <sub>4</sub> : application of liquid-phase exfoliation to a layered structure with seven-atom-thick layers. Journal of Materials Chemistry C, 0, , .	<b>5.</b> 5	0
3248	Growth modulation of nonlayered 2D-MnTe and MnTe/WS <sub>2</sub> heterojunctions for high-performance photodetectors. Journal of Materials Chemistry C, 2023, 11, 1464-1469.	5.5	2
3249	Metallene-related materials for electrocatalysis and energy conversion. Materials Horizons, 2023, 10, 407-431.	12.2	13
3250	Aluminum functionalized few-layer silicene as anode material for alkali metal ion batteries. Molecular Systems Design and Engineering, 2023, 8, 379-387.	3.4	5
3251	PdMo supported by graphene for synergistic boosting electrochemical catalysis of methanol oxidation. Journal of Electroanalytical Chemistry, 2023, 928, 117038.	3.8	5
3252	Linear maltodextrin polymer–folic acid modified graphene oxide nanoparticles for targeted delivery and pH/photothermal sensitive release of hydrophobic anticancer drugs in tumor cells. New Journal of Chemistry, 0, , .	2.8	0
3253	Effect of bacterial growth stage on the response to two-dimensional nanomaterials. Environmental Science: Nano, 0, , .	4.3	0
3254	Ni-based ultrathin nanostructures for overall electrochemical water splitting. Materials Chemistry Frontiers, 2023, 7, 194-215.	5.9	10
3255	Adsorption and sensing of formaldehyde on pristine and noble metal doped tellurene: A first-principles investigation. Chemical Physics Letters, 2023, 811, 140244.	2.6	4
3256	Advanced theragnostics for the central nervous system (CNS) and neurological disorders using functional inorganic nanomaterials. Advanced Drug Delivery Reviews, 2023, 192, 114636.	13.7	7
3257	Computational designing of Au-decorated buckled bismuthene and its application as a humidity gas sensor. Materials Chemistry and Physics, 2023, 295, 127174.	4.0	4
3258	First-principles study on optoelectronic properties of nonmetal-doped PtS2. Solid State Communications, 2023, 360, 115045.	1.9	0
3259	Janus nanographene oxide with aerophilic/hydrophilic characteristics for enhancing foam stability in high-temperature reservoirs. Journal of Molecular Liquids, 2023, 371, 121087.	4.9	5
3260	Epitaxial growth and E-beam induced structural changes of single crystalline 2D antimonene. Scripta Materialia, 2023, 226, 115262.	5.2	O

#	Article	IF	CITATIONS
3261	BeN4 monolayer as an excellent Dirac anode material for potassium-ion batteries. Journal of Alloys and Compounds, 2023, 936, 168351.	5.5	15
3262	An eco-friendly approach on green synthesis, bio-engineering applications, and future outlook of ZnO nanomaterial: A critical review. Environmental Research, 2023, 221, 114807.	7.5	19
3263	Ni-Based Janus Pentagonal Monolayers as Promising Water-Splitting Photocatalysts. Journal of Physical Chemistry C, 2022, 126, 20354-20363.	3.1	6
3264	Effect of Solvothermal Temperature on Morphology and Supercapacitor Performance of Ni-MOF. Molecules, 2022, 27, 8226.	3.8	8
3265	Review on Magnetism in Catalysis: From Theory to PEMFC Applications of 3d Metal Pt-Based Alloys. International Journal of Molecular Sciences, 2022, 23, 14768.	4.1	11
3266	A first-principles study: single-layer TiS2 modified by non-metal doping. Journal of Molecular Modeling, 2022, 28, .	1.8	0
3267	More than One Century of History for Photocatalysis, from Past, Present and Future Perspectives. Catalysts, 2022, 12, 1572.	3.5	3
3268	Interfacial stress transfer in monolayer and few-layer MoS2 nanosheets in model nanocomposites. Composites Science and Technology, 2023, 233, 109892.	7.8	4
3270	Understanding the Photoluminescence Quenching of Liquid Exfoliated WS <sub>2</sub> Monolayers.  Journal of Physical Chemistry C, 0, , .	3.1	2
3271	xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:mi>A</mml:mi> -type antiferromagnetic bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">LaBr</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> . Physical Review	3.2	15
3272	B, 2022, 106. 2D, Metalâ€Free Electrocatalysts for the Nitrogen Reduction Reaction. Advanced Functional Materials, 2023, 33, .	14.9	17
3273	Rheological Properties and Structural Build-Up of Cement Based Materials with Addition of Nanoparticles: A Review. Buildings, 2022, 12, 2219.	3.1	4
3274	Hybrid Lamellar Superlattices with Monoatomic Platinum Layers and Programmable Organic Ligands. Journal of the American Chemical Society, 2023, 145, 717-724.	13.7	6
3275	Recent advances in determination applications of emerging films based on nanomaterials. Advances in Colloid and Interface Science, 2023, 311, 102828.	14.7	3
3276	Nanomaterial-Based Electrically Conductive Hydrogels for Cardiac Tissue Repair. International Journal of Nanomedicine, 0, Volume 17, 6181-6200.	6.7	8
3277	Formation of Diamane Nanostructures in Bilayer Graphene on Langasite under Irradiation with a Focused Electron Beam. Nanomaterials, 2022, 12, 4408.	4.1	5
3278	Combined Photodynamic and Photothermal Therapy and Immunotherapy for Cancer Treatment: A Review. International Journal of Nanomedicine, 0, Volume 17, 6427-6446.	6.7	28
3279	Constructing metal-free heterophotocatalyst using two-dimensional carbon nitride sheets and violet phosphorene for highly efficient visible-light photocatalysis. Journal of Materials Science and Technology, 2023, 146, 113-120.	10.7	4

#	Article	IF	CITATIONS
3280	Room Temperature Ferromagnetism in Hydrogenated Janus CrSSe Monolayer Using Quantum Monte Carlo Simulation. Crystal Growth and Design, 2023, 23, 511-523.	3.0	2
3281	Strain Induces Ferromagnetism in a Janus Transition Metal Dichalcogenides: CrSTe-1H Monolayer. Journal of Electronic Materials, 2023, 52, 1036-1049.	2.2	3
3282	First-principles study on the electronic structures and topological properties of Bi(110)/IV-VI and Bi(110)/V-V van der Waals heterostructures. Applied Surface Science, 2023, 614, 156027.	6.1	2
3283	Metal oxide semiconductors for gas sensing. Engineering Reports, 2023, 5, .	1.7	33
3284	Development of conductive materials and conductive networks for flexible force sensors. Chemical Engineering Journal, 2023, 455, 140763.	12.7	8
3285	High-Gain MoS <sub>2</sub> /Ta <sub>2</sub> NiSe <sub>5</sub> Heterojunction Photodetectors with Charge Transfer and Suppressing Dark Current. ACS Applied Materials & Samp; Interfaces, 2022, 14, 56384-56394.	8.0	14
3286	A Rising 2D Star: Novel MBenes with Excellent Performance in Energy Conversion and Storage. Nano-Micro Letters, 2023, 15, .	27.0	29
3287	Two-Dimensional Nanomaterial-Templated Composites. Accounts of Chemical Research, 2022, 55, 3581-3593.	15.6	25
3288	Strongly Anisotropic Quasiâ€1D BaTiS <sub>3</sub> Chalcogenide Perovskite for Nearâ€Infrared Polarized Photodetection. Advanced Optical Materials, 2023, 11, .	7.3	9
3289	Emerging 2D Copperâ€Based Materials for Energy Storage and Conversion: A Review and Perspective. Small, 2023, 19, .	10.0	21
3290	Degradation of bisphenol A in an oxidation system constructed from Mo2C MXene and peroxymonosulfate. Npj Clean Water, 2022, 5, .	8.0	9
3291	Perspective Chapter: <i>Brassica</i> Species Mediated Green Synthesis of Nanoparticles and Its Potential Biological Applications., 0, , .		1
3292	Two-dimensional nanomaterials: synthesis and applications in photothermal catalysis. Nanoscale, 2023, 15, 2455-2469.	5.6	11
3293	Controllable Preparation of 2D V <sub>2</sub> O <sub>5</sub> Peroxidaseâ€Mimetic Nanozyme to Develop Portable Paperâ€Based Analytical Device for Intelligent Pesticide Assay. Small, 2023, 19, .	10.0	36
3294	Enhanced Polymeric Carbon Nitride Nanosheet-Based Fluorescence for Biosensing Applications. ACS Applied Nano Materials, 2023, 6, 1441-1447.	5.0	4
3295	2D Zinc Oxide – Synthesis, Methodologies, Reaction Mechanism, and Applications. Small, 2023, 19, .	10.0	22
3296	Printed Electronics Based on 2D Material Inks: Preparation, Properties, and Applications toward Memristors. Small Methods, 2023, 7, .	8.6	8
3297	The rise of two-dimensional tellurium for next-generation electronics and optoelectronics. Frontiers of Physics, 2023, 18, .	5.0	7

#	Article	IF	CITATIONS
3298	Two-dimensional Mo2C: An efficient promoter for hydrogen storage and release from a liquid organic hydrogen carrier. International Journal of Hydrogen Energy, 2023, 48, 12309-12320.	7.1	7
3299	Liquid phase exfoliation of talc: effect of the medium on flake size and shape. Beilstein Journal of Nanotechnology, 0, 14, 68-78.	2.8	1
3300	3D-strain-induced multiple semiconductor–metallic phase transition in monolayer SrTiO3. Applied Physics Letters, 2023, 122, .	3.3	3
3301	Recent Advances for the Synthesis and Applications of 2-Dimensional Ternary Layered Materials. Research, 2023, 6, .	5.7	8
3302	A highly sensitive MXene/AuPt/AChE-based electrochemical platform for the detection of chlorpyrifos. Microchemical Journal, 2023, 187, 108425.	4.5	8
3303	Surface modification for improving immunoassay sensitivity. Lab on A Chip, 0, , .	6.0	1
3304	Structures and properties of nano-XNH $<$ sub $>$ 2 $<$ /sub $>$ (X = C, Si, Ge, and Sn). AIP Advances, 2023, 13, 015113.	1.3	0
3305	The first 2D organic-inorganic hybrid relaxor-ferroelectric single crystal. Science China Chemistry, 2023, 66, 466-474.	8.2	4
3306	Threeâ€Terminal Artificial Olfactory Sensors based on Emerging Materials: Mechanism and Application. Advanced Functional Materials, 2023, 33, .	14.9	12
3307	Monolayer group-V binary compounds <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>i^</mml:mi></mml:math> -BiP and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>i^</mml:mi></mml:math> -SbP with ultrahigh piezoelectricity and stability. Physical Review Materials. 2023. 7	2.4	4
3308	Transparent conductivity in polycrystal bismuth thin films grown on glass by molecular beam epitaxy. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	0
3309	Monolayer and bilayer lanthanide compound Gd2C with large magnetic anisotropy energy and high Curie temperature. Journal of Materials Science, 2023, 58, 268-280.	3.7	1
3310	Preparation and characterization of Ce-MOF/g-C3N4 composites and evaluation of their photocatalytic performance. Ceramics International, 2023, 49, 24428-24441.	4.8	13
3311	Progress on 2D–2D heterostructured hybrid materials for efficient electrocatalysis. Energy Advances, 2023, 2, 280-292.	3.3	1
3312	Self-Assembled Sphere Covalent Organic Framework with Enhanced Herbicidal Activity by Loading Cyhalofop-butyl. Journal of Agricultural and Food Chemistry, 2023, 71, 1417-1425.	5.2	5
3313	Nonâ€Destructive Lowâ€Temperature Contacts to MoS <sub>2</sub> Nanoribbon and Nanotube Quantum Dots. Advanced Materials, 2023, 35, .	21.0	4
3314	Current Trends in Nanomaterials for Metal Oxide-Based Conductometric Gas Sensors: Advantages and Limitationsâ€"Part 2: Porous 2D Nanomaterials. Nanomaterials, 2023, 13, 237.	4.1	8
3315	Synthesis of Two-Dimensional Metal, Metal Oxide and Metal Hydroxide Nanomaterials for Biosensing. Environmental Chemistry for A Sustainable World, 2023, , 161-185.	0.5	O

#	Article	IF	CITATIONS
3316	Pd–PdO Nanodomains on Amorphous Ru Metallene Oxide for Highâ€Performance Multifunctional Electrocatalysis. Advanced Materials, 2023, 35, .	21.0	51
3317	The tunability of electronic and transport properties of InSe/MoSe2 van der Waals heterostructure: A first-principles study. Surfaces and Interfaces, 2023, 36, 102634.	3.0	5
3318	Review of photo- and electro-catalytic multi-metallic layered double hydroxides. Coordination Chemistry Reviews, 2023, 480, 215008.	18.8	21
3319	Sustainable and mild exfoliation of bulk crystalline carbon nitride into ultrathin nanosheets via ion-exchange in pure-water. Carbon, 2023, 205, 76-85.	10.3	6
3320	Design of novel type-I (type-II) band alignment in GeC-VXY (VÂ=ÂCI, Br; YÂ=ÂSe, Te) van der Waals heterostructure for optoelectronic and renewable energy application. Applied Surface Science, 2023, 615, 156260.	6.1	8
3321	Electrochemically Exfoliated Two-Dimensional Nanomaterials for Electronics. Ceramist, 2022, 25, 427-436.	0.1	O
3322	Phase Transfer of Inorganic Nanosheets in a Water/2-Butanone Biphasic System and Lateral Size Fractionation via Stepwise Extractions. Langmuir, 2023, 39, 820-828.	<b>3.</b> 5	0
3323	A Review on Low-Dimensional Nanomaterials: Nanofabrication, Characterization and Applications. Nanomaterials, 2023, 13, 160.	4.1	17
3324	Spectroscopy and carrier dynamics of one-dimensional nanostructures. Journal of Semiconductors, 2022, 43, 121201.	3.7	0
3325	Electric-Field-Tunable Spin Polarization and Carrier-Transport Anisotropy in an A-Type Antiferromagnetic van der Waals Bilayer. Physical Review Applied, 2022, 18, .	3.8	6
3326	Liquid Phase Isolation of SnS Monolayers with Enhanced Optoelectronic Properties. Advanced Science, 2023, 10, .	11.2	9
3327	2D heterostructures for advanced logic and memory devices. , 2023, , 141-167.		0
3328	2D quantum materials and sensors devices. , 2023, , 19-41.		0
3329	A Review on Advanced Nanomaterials for Antibacterial Applications. Current Nanoscience, 2023, 19, .	1.2	0
3330	Recent progress in metal–organic frameworks (MOFs) for electrocatalysis. , 2023, 1, 9-38.		49
3331	Anisotropy and Hybrid Heterosurface-Modulated Two-Dimensional Hydrogen Bond Network of Water. Journal of Physical Chemistry C, 2023, 127, 2544-2557.	3.1	0
3332	Selective Ion Transport in Twoâ€Dimensional Lamellar Nanochannel Membranes. Angewandte Chemie - International Edition, 2023, 62, .	13.8	22
3333	Investigation of adsorption behaviors, and electronic and magnetic properties for small gas molecules adsorbed on Pt-doped arsenene by density functional calculations. RSC Advances, 2023, 13, 3807-3817.	3.6	6

#	Article	IF	CITATIONS
3334	2D Organic Materials: Status and Challenges. Advanced Science, 2023, 10, .	11.2	13
3335	Expediting Oxygen Evolution by Optimizing Cation and Anion Complexity in Electrocatalysts Based on Metal Phosphorous Trichalcogenides. Angewandte Chemie, 2023, 135, .	2.0	2
3336	Antimonene: a tuneable post-graphene material for advanced applications in optoelectronics, catalysis, energy and biomedicine. Chemical Society Reviews, 2023, 52, 1288-1330.	38.1	18
3337	Transition metal phosphides: A wonder catalyst for electrocatalytic hydrogen production. Chinese Chemical Letters, 2023, 34, 108156.	9.0	22
3338	Graphene-Based Wearable Biosensors. , 2023, , 107-128.		0
3339	Curved Porous PdCu Metallene as a High-Efficiency Bifunctional Electrocatalyst for Oxygen Reduction and Formic Acid Oxidation. ACS Applied Materials & Samp; Interfaces, 2023, 15, 5198-5208.	8.0	14
3340	Interlayer Chemical Modulation of Phase Transitions in Two-Dimensional Metal Chalcogenides. Molecules, 2023, 28, 959.	3.8	1
3341	Metal-organic layers: Preparation and applications. Science China Materials, 2023, 66, 839-858.	6.3	3
3342	Selective Ion Transport in Twoâ€Dimensional Lamellar Nanochannel Membranes. Angewandte Chemie, 2023, 135, .	2.0	1
3343	Expediting Oxygen Evolution by Optimizing Cation and Anion Complexity in Electrocatalysts Based on Metal Phosphorous Trichalcogenides. Angewandte Chemie - International Edition, 2023, 62, .	13.8	7
3344	2D supramolecular organic framework with tunable luminescence <i>via</i> cucurbit[ <i>n</i> ]uril-based hydrogen bonds, outer-surface interactions and host–guest interactions. Materials Chemistry Frontiers, 2023, 7, 1354-1364.	5.9	6
3345	Recent Advances in the Synthesis of MXene Quantum Dots. Chemical Record, 2023, 23, .	5.8	7
3346	Organic semiconductor production for solar cells applications using spin coating technique and nano powder graphene. AIP Conference Proceedings, 2023, , .	0.4	0
3347	Silicon disulfide for high-performance Li-ion batteries and solid-state electrolytes. Journal of Materials Chemistry A, 2023, 11, 4987-5000.	10.3	1
3348	Layer-Structured Anisotropic Metal Chalcogenides: Recent Advances in Synthesis, Modulation, and Applications. Chemical Reviews, 2023, 123, 3329-3442.	47.7	23
3349	Super-elastic and mechanically durable MXene-based nanocomposite aerogels enabled by interfacial engineering with dual crosslinking strategy. Nano Research, 2023, 16, 8025-8035.	10.4	2
3350	Fluorescence off–on nanosensor based on MoS2 nanosheets and oligonucleotides for the alternative detection of mercury(II) ions or silver(I) ions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2023, 293, 122479.	3.9	3
3351	Recent trends in MXene-based material for biomedical applications. Environmental Research, 2023, 222, 115337.	7.5	30

#	Article	IF	CITATIONS
3352	Carbon dots as a new class of multifunctional nanomaterial in mesenchymal stem cells: opportunities and challenges. Journal of Materials Chemistry B, 2023, 11, 3511-3536.	5.8	6
3353	Solar cells based on 2D Janus group-III chalcogenide van der Waals heterostructures. Nanoscale, 2023, 15, 7126-7138.	5.6	8
3354	Recent advances of two-dimensional lubricating materials: from tunable tribological properties to applications. Journal of Materials Chemistry A, 2023, 11, 9239-9269.	10.3	6
3355	Defect engineering of two-dimensional materials for advanced energy conversion and storage. Chemical Society Reviews, 2023, 52, 1723-1772.	38.1	66
3356	First-principles study on electronic states of In <sub>2</sub> Se <sub>3</sub> /Au heterostructure controlled by strain engineering. RSC Advances, 2023, 13, 11385-11392.	3.6	1
3357	Advances in the understanding of the structure–performance relationships of 2D material catalysts based on electron microscopy. Materials Chemistry Frontiers, 2023, 7, 2764-2778.	5.9	6
3358	Tunable Schottky barrier in a graphene/AIP van der Waals heterostructure. Semiconductor Science and Technology, 2023, 38, 045009.	2.0	4
3359	Laser-enabled localized synthesis of Mo1-xWxS2 alloys with tunable composition. Materials Today Advances, 2023, 17, 100351.	<b>5.</b> 2	2
3360	Noble metal nanostructures for various applications. Materials Today: Proceedings, 2023, , .	1.8	1
3361	Intriguing optical and photocatalytic properties of pentagonal penta-PtPS, -PtPSe and -PtPTe monolayers: A first-principle study. Journal of Physics and Chemistry of Solids, 2023, 177, 111280.	4.0	2
3362	A theoretical exploration of different π-π stacking dimers of coronenes and its substituted analogues. Journal of Molecular Structure, 2023, 1282, 135198.	3.6	2
3363	Unraveling the atomic-level vacancy modulation in Cu9S5 for NIR-driven efficient inhibition of drug-resistant bacteria: Key role of Cu vacancy position. Journal of Hazardous Materials, 2023, 451, 131082.	12.4	3
3364	Revealing the confinement effects of graphitic carbon nitride nanochannels on the water desalination performance. Separation and Purification Technology, 2023, 314, 123553.	7.9	3
3365	Recent advances in two-dimensional nanomaterials: properties, antimicrobial, and drug delivery application of nanocomposites. Materials Today Chemistry, 2023, 30, 101492.	<b>3.</b> 5	14
3366	Rational design of 2D heterostructured photo-& amp; electro-catalysts for hydrogen evolution reaction: A review. Applied Surface Science Advances, 2023, 15, 100402.	6.8	5
3367	Unexpected Bi-functional Co-g-GaN monolayer for detecting and scavenging toxic gases. Materials Today Communications, 2023, 35, 105781.	1.9	2
3368	Recent advances in two-dimensional metal-organic frameworks as an exotic candidate for the evaluation of redox-active sites in energy storage devices. Journal of Energy Storage, 2023, 64, 107142.	8.1	25
3369	Boron Nitride quantum dots: A rising star in sensing applications. , 2023, 2, 100008.		4

#	Article	IF	CITATIONS
3370	Controlled synthesis of continuous MoS2 films via space-confined vapor deposition. Chemical Physics, 2023, 571, 111923.	1.9	2
3371	Investigation on the photocatalytic property of direct Z-type van der Waals g-C3N4/AlN heterojunction and its mechanism. Chemical Physics, 2023, 571, 111913.	1.9	5
3372	Liquid-phase exfoliation of titanium disulfide nanosheets in aqueous ionic liquid solutions for highly efficient CO2 electroreduction. Journal of Molecular Liquids, 2023, 381, 121814.	4.9	0
3374	Visible-light-driven benzyl alcohol oxidation over Pt/Mn-Bi4Ti3O12 nanosheets: Structure-function relationship of multicomponent photocatalysts. Journal of Catalysis, 2023, 418, 141-150.	6.2	11
3375	Polarization Controlled Assembly of Ultrathin Thiorphan Nanostructures on ZnO Surface Facets. Langmuir, 2023, 39, 1764-1774.	3.5	1
3376	A universal growth method for high-quality phase-engineered germanium chalcogenide nanosheets. Nanoscale, 2023, 15, 4438-4447.	5.6	0
3377	Disordered Au Nanoclusters for Efficient Ammonia Electrosynthesis. ChemSusChem, 2023, 16, .	6.8	8
3378	Nonrelativistic Spin-Momentum Coupling in Antiferromagnetic Twisted Bilayers. Physical Review Letters, 2023, 130, .	7.8	19
3379	Engineered Superhydrophilic/Superaerophobic Catalyst: Two-Dimensional Co(OH) <sub>2</sub> â€"CeO <sub>2</sub> Nanosheets Supported on Three-Dimensional Co Dendrites for Overall Water Splitting. Inorganic Chemistry, 2023, 62, 2784-2792.	4.0	1
3380	Synthesis of OD/2D CdSe/HSr2Nb3O10 n–n heterojunction with excellent visible-light-driven photocatalytic performance. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 290, 116304.	3.5	0
3381	Deep ultraviolet optical limiting materials: 2D Ti <sub>3</sub> C <sub>2</sub> and Ti <sub>3</sub> AlC <sub>2</sub> nanosheets. Journal of Materials Chemistry C, 2023, 11, 2355-2363.	5.5	6
3382	One-step preparation of ZnTi-LDH/graphene nanosheet hybrids in supercritical ethanol based on an exfoliation-reassembly strategy and their enhanced photocatalytic performance. Journal of Supercritical Fluids, 2023, 195, 105859.	3.2	3
3383	2D Transition Metal Carbides (MXenes) for Third Order Nonlinear Optics: Status and Prospects. Laser and Photonics Reviews, 2023, 17, .	8.7	10
3384	Graphene Oxide Nanosurface Reduces Apoptotic Death of HCT116 Colon Carcinoma Cells Induced by Zirconium Trisulfide Nanoribbons. International Journal of Molecular Sciences, 2023, 24, 2783.	4.1	2
3385	Thickness Determination of Ultrathin 2D Materials Empowered by Machine Learning Algorithms. Laser and Photonics Reviews, 2023, 17, .	8.7	3
3386	An Advanced Strategy to Enhance TENG Output: Reducing Triboelectric Charge Decay. Advanced Materials, 2023, 35, .	21.0	38
3387	Multifunctional waterborne polyurethane nanocoatings based on large-scale exfoliated mono-layered montmorillonite nanosheets. Progress in Organic Coatings, 2023, 177, 107410.	3.9	0
3388	Nanodesigns for Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> -based cathode in sodium-ion batteries: a topical review. Nanotechnology, 2023, 34, 202003.	2.6	6

#	ARTICLE	IF	CITATIONS
3389	Encyclopedia of emergent particles in 528 magnetic layer groups and 394 magnetic rod groups. Physical Review B, 2023, 107, .	3.2	6
3390	Photoswitchable Nanoporous Metal–Organic Framework Monolayer Film for Light-Gated Ion Nanochannel. ACS Applied Nano Materials, 2023, 6, 2813-2821.	5.0	2
3391	Potential and Progress of 2D Materials in Photomedicine for Cancer Treatment. ACS Applied Bio Materials, 2023, 6, 365-383.	4.6	5
3392	An ultrasensitive electrochemical immunosensor for CA72-4 based on a signal amplification strategy of MoS2 nanoflower-supported Au nanoparticles. Journal of Saudi Chemical Society, 2023, 27, 101612.	5.2	6
3393	Simulation of a Steep-Slope p- and n-Type HfS2/MoTe2 Field-Effect Transistor with the Hybrid Transport Mechanism. Nanomaterials, 2023, 13, 649.	4.1	1
3394	Layer-engineered interlayer charge transfer in WSe <sub>2</sub> /WS <sub>2</sub> heterostructures. Journal Physics D: Applied Physics, 2023, 56, 135102.	2.8	2
3395	Electronic and Spintronic Properties of Armchair MoSi2N4 Nanoribbons Doped by 3D Transition Metals. Nanomaterials, 2023, 13, 676.	4.1	4
3396	Nanoporous graphene in polymeric nanocomposite membranes for gas separation and water purification—standings and headways. Journal of Macromolecular Science - Pure and Applied Chemistry, 2023, 60, 81-91.	2.2	2
3397	Strong anisotropic optical response in two-dimensional Mo-VIA and Mo-VIIA monolayer binary materials. Photonics and Nanostructures - Fundamentals and Applications, 2023, 53, 101114.	2.0	2
3398	Cobalt Pyrophosphate Nanosheets Effectively Boost Photoelectrochemical Water Splitting Efficiency of BiVO4 Photoanodes. Catalysis Letters, 2024, 154, 23-33.	2.6	1
3399	Metal–organic framework-derived photoelectrochemical sensors: structural design and biosensing technology. Journal of Materials Chemistry C, 2023, 11, 3692-3709.	5.5	17
3400	Progressive Review of Functional Nanomaterials-Based Polymer Nanocomposites for Efficient EMI Shielding. Journal of Composites Science, 2023, 7, 77.	3.0	6
3401	Theoretical Analysis of Magnetic Coupling in the Ti <sub>2</sub> C Bare MXene. Journal of Physical Chemistry C, 2023, 127, 3706-3714.	3.1	6
3402	Synthesis and Engineering of High-Performance Transition Metal-Based Electrocatalysts for Green Hydrogen Production and Storage. ACS Symposium Series, 0, , 169-203.	0.5	0
3403	"Edge/Basal Plane Half-Reaction Separation―Mechanism of Two-Dimensional Materials for Photocatalytic Water Splitting. ACS Energy Letters, 2023, 8, 1416-1423.	17.4	18
3404	Layered Copper Hydroxide Salts as Catalyst for the "Click―Reaction and Their Application in Methyl Orange Photocatalytic Discoloration. Catalysts, 2023, 13, 426.	3.5	3
3405	The thermal stability of carbon materials in the air: Quantitative structural investigation of thermal stability of carbon materials in air. Carbon, 2023, 206, 211-225.	10.3	7
3406	Waferâ€scale singleâ€crystalline MoSe <sub>2</sub> and WSe <sub>2</sub> monolayers grown by molecularâ€beam epitaxy at lowâ€temperature—Âthe role of islandâ€substrate interaction and surface steps. Natural Sciences, 2023, 3, .	2.1	8

#	ARTICLE	IF	Citations
3407	The important role of surface charge on a new mechanism of nitrogen reduction. Physical Chemistry Chemical Physics, 2023, 25, 7986-7993.	2.8	1
3408	Photoinduced Ce–MoS2/WO3 nanocomposites with enhanced photodynamic and enzyme-like activity for rapid sterilization. Ceramics International, 2023, 49, 17424-17436.	4.8	5
3409	Advancement in two-dimensional carbonaceous nanomaterials for photocatalytic water detoxification and energy conversion. Journal of Environmental Chemical Engineering, 2023, 11, 109517.	6.7	8
3410	Rhombohedral Boron Monosulfide as a p-Type Semiconductor. Molecules, 2023, 28, 1896.	3.8	5
3411	Robust electronic properties of monolayer BeO against molecule adsorption. Physical Chemistry Chemical Physics, 2023, 25, 8853-8860.	2.8	O
3412	Bright and Efficient Lightâ€Emitting Devices Based on 2D Transition Metal Dichalcogenides. Advanced Materials, 2023, 35, .	21.0	10
3413	MXene Fiber-based Wearable Textiles in Sensing and Energy Storage Applications. Fibers and Polymers, 2023, 24, 1167-1182.	2.1	4
3414	Oneâ€Pot Synthesis of 2Dâ€2D WO <sub>3</sub> /gâ€C <sub>3</sub> N <sub>4</sub> Photocatalyst in Reverse Microemulsion System via Supercritical CO <sub>2</sub> for Enhanced Hydrogen Generation. ChemSusChem, 2023, 16, .	6.8	5
3415	Recent advances in nanoâ€scaffolds for tissue engineering applications: Toward natural therapeutics. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2023, 15, .	6.1	6
3416	Electrocapacitive Deionization: Mechanisms, Electrodes, and Cell Designs. Advanced Functional Materials, 2023, 33, .	14.9	31
3417	Two-Dimensional Fe–N–C Single-Atomic-Site Catalysts with Boosted Peroxidase-Like Activity for a Sensitive Immunoassay. Analytical Chemistry, 2023, 95, 4521-4528.	6.5	3
3418	Structural properties of Bi/Au(110). Nanotechnology, 2023, 34, 235601.	2.6	0
3419	The coupling of plasmon in metal with a dipolar mode in a monolayer of \$\$MoS_2\$\$ and \$\$WS_2\$\$. Indian Journal of Physics, 0, , .	1.8	0
3420	Molten-salt assisted synthesis of two-dimensional materials and energy storage application. Materials Today Chemistry, 2023, 29, 101419.	3.5	3
3421	Trends in the Preparation and Passivation Techniques of Black Phosphorus Nanostructures for Optoelectronics Applications: A Review. ACS Applied Nano Materials, 2023, 6, 3159-3183.	5.0	2
3422	Electronic/Optoelectronic Memory Device Enabled by Telluriumâ€based 2D van der Waals Heterostructure for inâ€6ensor Reservoir Computing at the Optical Communication Band. Advanced Materials, 2023, 35, .	21.0	31
3423	Impedance spectroscopy data for 2D biintercalate clathrate InSe< <nano2>+<fecl3>&gt;. Applied Nanoscience (Switzerland), 0, , .</fecl3></nano2>	3.1	0
3424	Flexible Large-Area Graphene Films of 50–600Ânm Thickness with High Carrier Mobility. Nano-Micro Letters, 2023, 15, .	27.0	11

#	Article	IF	CITATIONS
3425	Few-Layered Violet Phosphorene Nanostructures as Saturable Absorbers for Stable Soliton Mode-Locking Operations in an Ultrafast Fiber Laser. ACS Applied Nano Materials, 2023, 6, 4726-4733.	5.0	10
3426	Environmentally sustainable implementations of two-dimensional nanomaterials. Frontiers in Chemistry, 0, $11$ , .	3.6	4
3427	Two-dimensional transition metal MXene-based gas sensors: A review. Chinese Chemical Letters, 2024, 35, 108286.	9.0	9
3428	2D material-based sensing devices: an update. Journal of Materials Chemistry A, 2023, 11, 6016-6063.	10.3	16
3429	Study on the Half-Auxetic Behavior of Layered Nitrogen-Doped Graphdiyne. Advances in Condensed Matter Physics, 2023, 12, 1-8.	0.1	0
3430	Rational design of MoS <sub>2</sub> -supported Cu single-atom catalysts by machine learning potential for enhanced peroxidase-like activity. Nanoscale, 2023, 15, 6686-6695.	5.6	2
3431	Environmentally Stable and Reconfigurable Ultralow-Power Two-Dimensional Tellurene Synaptic Transistor for Neuromorphic Edge Computing. ACS Applied Materials & (2023, 15, 18463-18472.	8.0	6
3432	Influence of embedded NiO-nanoparticles on the nonlinear absorption of tungsten disulfide nanolayers. Optical Materials, 2023, 138, 113657.	3.6	3
3433	A critical review on the properties and energy storage applications of graphene oxide/layered double hydroxides and graphene oxide/MXenes. Journal of Power Sources, 2023, 564, 232870.	7.8	16
3434	Lithium-ion battery performance improvement using two-dimensional materials. Materials Today: Proceedings, 2023, , .	1.8	2
3435	Large Ultrathin Polyoxomolybdate-Decorated Boron Nitride Nanosheets with Enhanced Antibacterial Activity for Infection Control. ACS Applied Nano Materials, 2023, 6, 4754-4769.	5.0	0
3436	2D Layered Nanomaterials as Fillers in Polymer Composite Electrolytes for Lithium Batteries. Advanced Energy Materials, 2023, 13, .	19.5	21
3437	Dynamic Morphological Evolution of Co-Based Layered Double Hydroxide Nanosheets Investigated by In Situ Electrochemical-Atomic Force Microscopy. Journal of Physical Chemistry C, 2023, 127, 5219-5229.	3.1	3
3438	Metal functionalization of two-dimensional nanomaterials for electrochemical carbon dioxide reduction. Nanoscale, 2023, 15, 6456-6475.	5.6	7
3439	Co2CrAl Heuslerene: Mechanical, Thermodynamic and Electronic Properties. Metals, 2023, 13, 582.	2.3	0
3440	Nanomaterials-Based Electrochemical Δ9-THC and CBD Sensors for Chronic Pain. Biosensors, 2023, 13, 384.	4.7	0
3441	Nanodendriteâ€"promising nanoreinforcement for emerging next-generation nanocomposite. Polymer-Plastics Technology and Materials, 2022, 61, 1503-1520.	1.3	0
3442	Assembling a Photoactive 2D Puzzle: From Bulk Powder to Large-Area Films of Semiconducting Transition-Metal Dichalcogenide Nanosheets. Accounts of Materials Research, 2023, 4, 348-358.	11.7	2

#	Article	IF	CITATIONS
3443	Recent Advances and Perspectives of Lewis Acidic Etching Route: An Emerging Preparation Strategy for MXenes. Nano-Micro Letters, 2023, $15$ , .	27.0	24
3444	Silver-ion-passivated black phosphorus photodetectors to improve the response time. New Journal of Chemistry, 2023, 47, 7432-7437.	2.8	O
3445	Recent Advances in Confining Polyoxometalates and the Applications. Small, 2023, 19, .	10.0	22
3446	Ultrathin 2D Ceriumâ€Based Metal–Organic Framework Nanosheet That Boosts Selective Oxidation of Inert C(sp <sup>3</sup> )H Bond through Multiphoton Excitation. Small, 2023, 19, .	10.0	9
3447	Molecular assembly of carbon nitride-based composite membranes for photocatalytic sterilization and wound healing. Chemical Science, 2023, 14, 4319-4327.	7.4	2
3448	Transition-Metal Dichalcogenides in Electrochemical Batteries and Solar Cells. Micromachines, 2023, 14, 691.	2.9	8
3449	Fine Structure Splitting of Phonon-Assisted Excitonic Transition in (PEA)2PbI4 Two-Dimensional Perovskites. Nanomaterials, 2023, 13, 1119.	4.1	5
3450	Structural Bistability in RbI Monolayers on Ag(111). Journal of Physical Chemistry Letters, 2023, 14, 3023-3030.	4.6	2
3451	Plate-Like Colloidal Metal Nanoparticles. Chemical Reviews, 2023, 123, 3493-3542.	47.7	24
3452	Fewer Dimensions for Higher Thermal Performance: A Review on 2D Nanofluids. Applied Sciences (Switzerland), 2023, 13, 4070.	2.5	3
3453	Two-Dimensional Mesoporous Materials for Energy Storage and Conversion: Current Status, Chemical Synthesis and Challenging Perspectives. Electrochemical Energy Reviews, 2023, 6, .	25.5	15
3454	Dielectric-free electrowetting on graphene. Faraday Discussions, 0, 246, 307-321.	3.2	3
3455	Recent developments in 2D materials for energy harvesting applications. JPhys Energy, 2023, 5, 032001.	5.3	4
3456	Functional Carbon from Nature: Biomassâ€Derived Carbon Materials and the Recent Progress of Their Applications. Advanced Science, 2023, 10, . First-principles investigation on the structural, vibrational, mechanical, electronic, and optical	11.2	30
3457	properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>M</mml:mi><mml:mrow><mml:msub><mml:m athvariant="normal">Si<mml:mn>2</mml:mn></mml:m></mml:msub><mml:mi>Z</mml:mi><mml:msub><mml:msub><mml:mi>Z</mml:mi></mml:msub><mml:msub><mml:msub><mml:mi>Z</mml:mi></mml:msub><mml:msub><mml:msub><mml:msub><mml:mi>Z</mml:mi></mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><mml:msub><m< td=""><td>ni ml:mn&gt;4&lt;</td><td>/mml:mn&gt;</td></m<></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:msub></mml:mrow></mml:math>	ni ml:mn>4<	/mml:mn>

#	Article	IF	CITATIONS
3461	Atomic-thick metastable phase RhMo nanosheets for hydrogen oxidation catalysis. Nature Communications, 2023, $14$ , .	12.8	18
3462	埪ªŽæ°§åŒ–石墨烯功能化锥形光çºçš"è¡€çº¢è›‹ç™½ä¼æ"Ÿç"ç©¶. Laser and Optoelectronics	∂r <b>o</b> gress,	<b>2</b> 023, 60, 0
3463	Recent advances in two-dimensional nanomaterials for bone tissue engineering. Journal of Materiomics, 2023, 9, 930-958.	5.7	3
3464	Boosting flame retardancy of thermoplastic polyurethane: Synergistic effect of nickel phosphide nanoparticles and molybdenum disulfide nanosheets. Journal of Vinyl and Additive Technology, 2023, 29, 522-533.	3.4	4
3465	Recent advances in synthesis and properties of zirconiumâ€based <scp>MXenes</scp> for application in rechargeable batteries. Energy Storage, 2023, 5, .	4.3	10
3466	Emerging Graphitic Carbon Nitride-based Nanobiomaterials for Biological Applications. ACS Applied Bio Materials, 2023, 6, 1339-1367.	4.6	6
3467	FeOCl in Advanced Oxidization Processes for Water Purification: A Critical Review. Current Pollution Reports, 2023, 9, 143-164.	6.6	5
3468	Introducing anthracene and amino groups into Ln-OFs for the photoreduction of Cr( <scp>vi</scp> ) without additional photosensitizers or cocatalysts. Inorganic Chemistry Frontiers, 2023, 10, 2626-2635.	6.0	2
3469	Stateâ€ofâ€theâ€art electrochemical sensors for quantitative detection of pesticides. Applied Organometallic Chemistry, 2023, 37, .	3.5	2
3470	Wrapping–Trapping versus Extraction Mechanism of Bactericidal Activity of MoS <sub>2</sub> Nanosheets against <i>Staphylococcus aureus</i> Nanosheets against <i <i="" against="" n<="" nanosheets="" td=""><td><b>3.</b>5</td><td>4</td></i>	<b>3.</b> 5	4
3471	铋烯ææ−™ç"Ÿé•¿æŽ§å^¶åŠå…‰ç"µå器件应用ç"究进展. Hongwai Yu Jiguang Gongcheng/Infrared and La	a <b>se</b> r Engin	æring, 2023
3472	Diversiform gas sensors based on two-dimensional nanomaterials. Nano Research, 2023, 16, 11959-11991.	10.4	9
3473	Growth strategy for solution-phase growth of two-dimensional nanomaterials via a unified model., 2023, 2, 670-677.		5
3474	Pseudo-topotactic Transformation from Oxide Nanosheets to Amorphous Nanosheets. Chemistry Letters, 2023, 52, 322-324.	1.3	0
3475	Multiscale architected porous materials for renewable energy conversion and storage. Energy Storage Materials, 2023, 59, 102768.	18.0	6
3476	First-principles study on the electronic structure and photocatalytic property of a novel two-dimensional ZrS <sub>2</sub> /InSe heterojunction. RSC Advances, 2023, 13, 11150-11159.	3.6	4
3477	Insights into electronic properties of strained two-dimensional semiconductors by out-of-plane bending. Journal of Physics Condensed Matter, 2023, 35, 284001.	1.8	0
3478	Ni(OH) <sub>2</sub> -MoS <sub>2</sub> Nanocomposite Modified Glassy Carbon Electrode for the Detection of Dopamine and α-Lipoic Acid. Journal of the Electrochemical Society, 2023, 170, 047506.	2.9	1

#	Article	IF	Citations
3479	Mn-Incorporation-Induced Phase Transition in Bottom-Up Synthesized Colloidal Sub-1-nm Ni(OH) <sub>2</sub> Nanosheets for Enhanced Oxygen Evolution Catalysis. Nano Letters, 2023, 23, 3259-3266.	9.1	4
3480	Fabrication of Polyelectrolyte Sheets of Unimolecular Thickness via MOF-Templated Polymerization. Macromolecules, 2023, 56, 3141-3148.	4.8	2
3481	Recent advances, properties, fabrication and opportunities in two-dimensional materials for their potential sustainable applications. Energy Storage Materials, 2023, 59, 102780.	18.0	12
3482	AÂÏ€â€Conjugated Van der Waals Heterostructure Between Singleâ€Atom Niâ€Anchored Salphenâ€Based Covalent Organic Framework and Polymeric Carbon Nitride for Highâ€Efficiency Interfacial Charge Separation. Small, 2023, 19, .	10.0	7
3483	A Spaceâ€Confined Polymerization Templated by Ice Enables Largeâ€Scale Synthesis of Twoâ€Dimensional Polymer Sheets. Angewandte Chemie - International Edition, 2023, 62, .	13.8	8
3484	Metallene-based catalysts towards hydrogen evolution reaction. Current Opinion in Electrochemistry, 2023, 39, 101303.	4.8	1
3485	A Spaceâ€Confined Polymerization Templated by Ice Enables Largeâ€Scale Synthesis of Twoâ€Dimensional Polymer Sheets. Angewandte Chemie, 2023, 135, .	2.0	0
3486	ZIF-67 derived rGO/NiCo2S4 electrode materials prepared by hydrothermal method for asymmetric supercapacitors. Diamond and Related Materials, 2023, 136, 109946.	3.9	6
3487	A Mixed Protonic–Electronic Conductor Base on the Host–Guest Architecture of 2D Metal–Organic Layers and Inorganic Layers. Advanced Science, 2023, 10, .	11.2	3
3488	Engineering polymorphs in colloidal metal dichalcogenides: precursor-mediated phase control, molecular insights into crystallisation kinetics and promising electrochemical activity. Journal of Materials Chemistry A, 2023, 11, 11341-11353.	10.3	5
3489	Improving photocatalytic degradation of enrofloxacin over TiO2 nanosheets with Ti3+ sites by coordination activation. Applied Catalysis A: General, 2023, 660, 119217.	4.3	5
3490	Development of in situ characterization of two-dimensional materials grown on insulator substrates with spectroscopic photoemission and low energy electron microscopy. Journal of Electron Spectroscopy and Related Phenomena, 2023, 264, 147318.	1.7	0
3491	Stable p-Type Molybdenum and Copper Ion-Containing Coordination Polymer Photocathode in Protic Electrolytes. ACS Applied Energy Materials, 2023, 6, 4766-4777.	5.1	4
3492	Airâ€Stable Violet Phosphorus/MoS <sub>2</sub> van der Waals Heterostructure for Highâ€Responsivity and Gateâ€Tunable Photodetection. Small, 2023, 19, .	10.0	3
3493	Enhancing effect of black phosphorus quantum dots on electrochemiluminescence of Ir(dF(CF3)ppy)2(bpy) in ionic liquid medium and its sensing application. Journal of Electroanalytical Chemistry, 2023, 941, 117522.	3.8	4
3494	Micron-Scale Fabrication of Ultrathin Amorphous Copper Nanosheets Templated by DNA Scaffolds. Journal of the American Chemical Society, 2023, 145, 4553-4563.	13.7	7
3495	Charge transfer and quantum emitters in two-dimensional heterostructures: An Ab initio study. AIP Conference Proceedings, 2023, , .	0.4	0
3496	Corrosion resistant nanoscale polymer-based coatings. , 2023, , 547-584.		0

#	Article	IF	Citations
3497	Ultrathin Defective Nanosheet Subunit ZnIn <sub>2</sub> S <sub>4</sub> Hollow Nanoflowers for Efficient Photocatalytic Hydrogen Evolution. Small Structures, 2023, 4, .	12.0	3
3498	The electronic properties and application of sawtoothlike C <mml:math altimg="si16.svg" display="inline" id="d1e339" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow></mml:mrow><mml:mrow></mml:mrow></mml:msub></mml:math> N nanoribbon. Chemical	2.6	1
3499	Multidimensional modulation of light fields via a combination of two-dimensional materials and meta-structures. Science China Information Sciences, 2023, 66, .	4.3	2
3500	g <sub>3</sub> N <sub>4</sub> Nanosheet Nanoarchitectonics: H <sub>2</sub> Generation and CO <sub>2</sub> Reduction. ChemNanoMat, 2023, 9, .	2.8	22
3501	Simple Hydrothermal Synthesis of Molybdenum Disulfide and Its Application for a Largeâ€Area Photodetector. Crystal Research and Technology, 2020, 55, .	1.3	3
3502	Enantioselective Labeling of Zebrafish for D-Phenylalanine Based on Graphene-Based Nanoplatform. Molecules, 2023, 28, 3700.	3.8	0
3503	Microenvironment Restruction of Emerging 2D Materials and their Roles in Therapeutic and Diagnostic Nanoâ€Bioâ€Platforms. Advanced Science, 2023, 10, .	11.2	4
3504	A Oneâ€Step Selfâ€Flowering Method toward Programmable Ultrathin Porous Carbonâ€Based Materials for Microwave Absorption and Hydrogen Evolution. Small, 2023, 19, .	10.0	5
3505	Interfacial Interaction of Monolayer Black Phosphorus/g <sub>3</sub> N <sub>4</sub> Van Der Waals Heterojunction for Efficient Photocatalytic Hydrogen Evolution. Physica Status Solidi (B): Basic Research, 0, , .	1.5	0
3506	Microstructured All-Optical Switching Based on Two-Dimensional Material. Coatings, 2023, 13, 876.	2.6	2
3507	A Significant Twoâ€Dimensional Structural Transformation in a Coordination Polymer that Changes Its Electronic and Protonic Behavior. Angewandte Chemie - International Edition, 2023, 62, .	13.8	2
3508	Recent Progress and Regulation Strategies of Layered Materials as Cathode of Aqueous Zincâ€lon Batteries. Energy and Environmental Materials, 0, , .	12.8	13
3509	Triboelectric Nanogenerators Based on 2D Materials: From Materials and Devices to Applications. Micromachines, 2023, 14, 1043.	2.9	4
3510	Synthesis of two-dimensional polyoxoniobate-based clusterphenes with in-plane electron delocalization., 2023, 2, 989-997.		3
3511	Strain engineering tunable electronic conductivity in two- dimensional $\hat{I}^3$ -GeSe. Materials Chemistry and Physics, 2023, 305, 127964.	4.0	3
3512	The emergence of single-atom-layer catalysis. , 2023, 1, 100004.		2
3513	Mesoporous PtPb Nanosheets as Efficient Electrocatalysts for Hydrogen Evolution and Ethanol Oxidation. Angewandte Chemie - International Edition, 2023, 62, .	13.8	19
3514	Overview of Bandgap Control Methods for 2D Materials. Applied Physics, 2023, 13, 232-241.	0.0	0

#	Article	IF	Citations
3515	Graphitic carbon nitride (g-C3N4): Futuristic material for rechargeable batteries. Journal of Energy Storage, 2023, 68, 107673.	8.1	11
3516	Recent progress in nanozymes for the treatment of diabetic wounds. Journal of Materials Chemistry B, 2023, 11, 6746-6761.	5.8	8
3517	First-principles design of g-C <sub>3</sub> N <sub>4</sub> /HfSSe heterojunctions for optoelectronic applications. Journal of Physics Condensed Matter, 2023, 35, 365301.	1.8	0
3518	Synthetic approaches for perovskite thin films and single-crystals. Energy Advances, 2023, 2, 1075-1115.	3.3	3
3519	Engineer Nanoscale Defects into Selective Channels: MOF-Enhanced Li+ Separation by Porous Layered Double Hydroxide Membrane. Nano-Micro Letters, 2023, 15, .	27.0	12
3520	In-situ constructed ultrathin hydrotalcite derivative supported PtIn catalyst for isobutane direct dehydrogenation. Molecular Catalysis, 2023, 547, 113287.	2.0	0
3521	A Comparative Analysis of Standard and Nano-Structured Glass for Enhancing Heat Transfer and Reducing Energy Consumption Using Metal and Oxide Nanoparticles: A Review. Sustainability, 2023, 15, 9221.	3.2	1
3522	MXene-based Ti <sub>2</sub> C/Ta <sub>2</sub> C lateral heterostructure: an intrinsic room temperature ferromagnetic material with large magnetic anisotropy. RSC Advances, 2023, 13, 17222-17229.	3.6	0
3523	Tuning charge transfer efficiency by functionalizing ligands in FAPbBr <sub>3</sub> nanocrystals and graphene heterostructures. Physical Chemistry Chemical Physics, 2023, 25, 17410-17419.	2.8	3
3524	Lamellar Membranes. Engineering Materials, 2023, , 23-48.	0.6	0
3525	Tuneable work function of titanium carbide (Ti3C2Tx) by modification in surface termination groups. Materials Chemistry and Physics, 2023, 306, 128052.	4.0	1
3526	Sodium-alginate-laden MXene and MOF systems and their composite hydrogel beads for batch and fixed-bed adsorption of naproxen with electrochemical regeneration. Carbohydrate Polymers, 2023, 318, 121098.	10.2	3
3527	The 3D Controllable Fabrication of Nanomaterials with FIB-SEM Synchronization Technology. Nanomaterials, 2023, 13, 1839.	4.1	0
3528	Introduction to Nanomedicine. SpringerBriefs in Applied Sciences and Technology, 2023, , 1-15.	0.4	0
3529	Advancements in Freestanding Hydrogen Boride Sheets: Unraveling the Novel Properties of Borophane Polymorphs. Chemistry Letters, 2023, 52, 611-621.	1.3	2
3530	Exfoliating kaolin to ultrathin nanosheets with high aspect ratio and pore volume: A comparative study of three kaolin clays in China. Applied Surface Science, 2023, 635, 157778.	6.1	1
3531	<i>In Situ</i> and Emerging Transmission Electron Microscopy for Catalysis Research. Chemical Reviews, 2023, 123, 8347-8394.	47.7	11
3532	Electronic Interpretation of Interlayer Energy Landscape in Layered Materials. Advanced Functional Materials, 2023, 33, .	14.9	2

#	ARTICLE	IF	Citations
3533	Assembling Triphenylene-Based Metal–Organic Framework Nanosheets at the Air/Liquid Interface: Modification by Tuning the Spread Solution Concentration. Langmuir, 2023, 39, 8952-8962.	3.5	1
3534	Recent development of two-dimensional tantalum dichalcogenides and their applications., 2023, 181, 207627.		3
3535	Sensing properties of 2D conductive M3(HITP)2 MOFs toward SO2 gas: a theoretical study. Chemical Papers, 0, , .	2.2	1
3536	Polysaccharide decolorization: Methods, principles of action, structural and functional characterization, and limitations of current research. Trends in Food Science and Technology, 2023, 138, 284-296.	15.1	6
3537	Ambient plasma treated tungsten disulfide for electrochemical energy applications. Journal of Physics and Chemistry of Solids, 2023, 181, 111520.	4.0	6
3538	Advances in molten-salt-assisted synthesis of 2D MXenes and their applications in electrochemical energy storage and conversion. Chemical Engineering Journal, 2023, 470, 144185.	12.7	5
3539	First-Principle Study of Two-Dimensional SiP2 for Photocatalytic Water Splitting with Ultrahigh Carrier Mobility. Crystals, 2023, 13, 981.	2.2	1
3540	2D Nano Covalent Organic Frameworks – A Porous Polymeric Promising Material Exploring New Prospects of Drug Delivery in Cancer Therapeutics. ChemistrySelect, 2023, 8, .	1.5	1
3541	Ultrathin ZnTi-LDH nanosheet: A bifunctional Lewis and Br $\tilde{A}$ ¶nsted acid photocatalyst for synthesis of N-benzylideneanilline via a tandem reaction. Chinese Journal of Catalysis, 2023, 49, 102-112.	14.0	1
3542	Guest Entrapment in Metalâ€Organic Nanosheets for Quantifiably Tuneable Luminescence. Advanced Functional Materials, 2023, 33, .	14.9	2
3543	Computational design of promising 2D electrode materials for Li-ion and Li–S battery applications. Materials Reports Energy, 2023, 3, 100213.	3.2	4
3544	Functional Materials for Memristorâ€Based Reservoir Computing: Dynamics and Applications. Advanced Functional Materials, 2023, 33, .	14.9	7
3545	Regulating and predicting the polyhedral crystal morphology in spirofluorene molecular system. Chemistry - an Asian Journal, 0, , .	3.3	0
3546	Porous, Ultrathin PtAgBiTe Nanosheets for Direct Hydrazine Hydrate Fuel Cell Devices. Advanced Materials, 2023, 35, .	21.0	8
3547	Theoretical identifying the superior anchoring effect and electrochemical performance of Ti2CS2 by single atom Zn doping for lithium-sulfur batteries. Physical Chemistry Chemical Physics, 0, , .	2.8	0
3548	Dielectric layer doping for enhanced triboelectric nanogenerators. Nano Energy, 2023, 114, 108651.	16.0	9
3549	Boosting Lean Electrolyte Lithium–Sulfur Battery Performance with Transition Metals: A Comprehensive Review. Nano-Micro Letters, 2023, 15, .	27.0	15
3550	Practical applications of total internal reflection fluorescence microscopy for nanocatalysis., 2024, 2, 85-99.		O

#	ARTICLE	IF	CITATIONS
3551	Application of Conductive MOF in Zincâ€Based Batteries. Advanced Materials, 2023, 35, .	21.0	20
3552	Polypyridyl Ru( <scp>ii</scp> ) or cyclometalated Ir( <scp>iii</scp> ) functionalized architectures for photocatalysis. Chemical Society Reviews, 2023, 52, 4725-4754.	38.1	8
3553	Ultrathin Carbon Nitride Nanosheets Exfoliated and In Situ Modified with a Nickel Bis(Chelate) Complex for Boosting Photocatalytic Performances. Inorganic Chemistry, 2023, 62, 10973-10983.	4.0	2
3554	Auxiliary ball milling to prepare WS2/graphene nanosheetsÂcomposite for lithium-ion battery anode materials. Tungsten, 2024, 6, 124-133.	4.8	5
3555	Metal Doped Nanostructures Derived from Biomass for Supercapacitor Applications: Effect of Doping on Cyclability. Green Energy and Technology, 2023, , 245-269.	0.6	0
3556	Ultra-small carbon-supported FeRu alloy as a superior electrocatalyst for hydrogen evolution reaction. Science China Materials, 2023, 66, 2672-2679.	6.3	0
3557	Efficient solar energy conversion <i>via</i> bionic sunlight-driven ion transport boosted by synergistic photo-electric/thermal effects. Energy and Environmental Science, 2023, 16, 3146-3157.	30.8	7
3558	NbSe <sub>2</sub> @PPy nanosheets as anode materials for flexible all-solid-state asymmetric supercapacitors. Journal of Materials Chemistry A, 2023, 11, 11153-11160.	10.3	6
3559	Functional Nanomaterials Enhancing Electrochemical Biosensors as Smart Tools for Detecting Infectious Viral Diseases. Molecules, 2023, 28, 3777.	3.8	8
3560	Dependence of the dielectric response of PVDF-based nanocomposites on the size of MoS2. Polymer, 2023, 278, 125982.	3.8	0
3561	Existence of chloride ions in high salinity wastewater accelerates the removal of micropollutants over light-driven catalysts. Applied Catalysis B: Environmental, 2023, 334, 122823.	20.2	4
3562	Room-temperature half-metals induced <i>via</i> chemical surface modification: 2D Mn <sub>2</sub> Se <sub>2</sub> monolayer. Physical Chemistry Chemical Physics, 2023, 25, 14294-14302.	2.8	1
3563	Photothermal Nanomaterials: A Powerful Light-to-Heat Converter. Chemical Reviews, 2023, 123, 6891-6952.	47.7	137
3564	Building intercalation structure for high ionic conductivity via aliovalent substitution. Science Bulletin, 2023, 68, 1134-1142.	9.0	1
3565	Fe(II)-Modulated Microporous Electrocatalytic Membranes for Organic Microcontaminant Oxidation and Fouling Control: Mechanisms of Regulating Electron Transport toward Enhanced Reactive Oxygen Species Activation. Environmental Science & Eamp; Technology, 2023, 57, 19000-19011.	10.0	1
3566	A Significant Twoâ€Dimensional Structural Transformation in a Coordination Polymer that Changes Its Electronic and Protonic Behavior. Angewandte Chemie, 2023, 135, .	2.0	0
3567	Adsorption and electrochemical regeneration of 2D magnetic MXene nanosheets loaded with tetracycline. Chemical Engineering Journal, 2023, 467, 143473.	12.7	10
3568	Complex Refractive Index Extraction for Ultrathin Molybdenum Oxides Using Microâ€Photonic Integrated Circuit Chips. Advanced Optical Materials, 0, , .	7.3	1

#	Article	IF	Citations
3569	Inkjet-printed WS2 and MoSe2 transistors with edge-FET architecture and near-vertical electronic transport. , 2022, , .		0
3570	Defect engineering in Znln2X4 (X=S, Se, Te) semiconductors for improved photocatalysis. Surfaces and Interfaces, 2023, 39, 102960.	3.0	2
3571	Application Status and Prospect of Two-Dimensional Graphene for Hydrogen Isotope Separation. Springer Proceedings in Physics, 2023, , 654-667.	0.2	0
3572	Fundamentals of New-Generation Cement-Based Nanocomposites. , 2023, , 1-71.		O
3573	A review of boron nitride-based photocatalysts for carbon dioxide reduction. Journal of Materials Chemistry A, 2023, 11, 11925-11963.	10.3	10
3574	Abnormal Out-of-Plane Vibrational Raman Mode in Electrochemically Intercalated Multilayer MoS <sub>2</sub> . Nano Letters, 2023, 23, 5342-5349.	9.1	4
3575	Structural Quantification of the Surface-Confined Metal-Organic Precursors Simulated with the Lattice Monte Carlo Method. Molecules, 2023, 28, 4253.	3.8	0
3576	The ecotoxicity of single-layer molybdenum disulfide nanosheets on freshwater microalgae Selenastrum capricornutum. Chemical Engineering Research and Design, 2023, 175, 426-436.	5.6	0
3577	Mesoporous PtPb Nanosheets as Efficient Electrocatalysts for Hydrogen Evolution and Ethanol Oxidation. Angewandte Chemie, 2023, 135, .	2.0	0
3578	Conducting 2D Nanosheets: Photo Driven Crystallinity in Self-Assembled Cu (II) Metalated Porphyrin-Bispyridylquinoxaline. ACS Applied Electronic Materials, 2023, 5, 3603-3611.	4.3	1
3579	Construction of a micro–nano reactor assembled by TiO <sub>2</sub> /N–C ultrathin sheets for photocatalytic H <sub>2</sub> evolution. Chemical Communications, 2023, 59, 8131-8134.	4.1	0
3580	Black-phosphorus-based materials for application in solar cells. , 2023, 42, 100109.		1
3581	Polarizationâ€Sensitive Photodetector Based on High Crystallinity Quasiâ€1D BiSel Nanowires Synthesized via Chemical Vapor Deposition. Small, 2023, 19, .	10.0	3
3582	Electrospun nanofibers for photocatalytic water treatment and hydrogen generation application: A review. International Journal of Hydrogen Energy, 2023, 48, 37193-37208.	7.1	5
3583	Reinforced active learning for CVD-grown two-dimensional materials characterization. IISE Transactions, 0, , 1-13.	2.4	0
3584	Defect activation of atomically thin electrocatalysts for the oxygen evolution reaction. Cell Reports Physical Science, 2023, 4, 101471.	5 <b>.</b> 6	O
3585	Side-Chain-Dependent Functional Intercalations in Graphene Oxide Membranes for Selective Water and Ion Transport. Nano Letters, 2023, 23, 6095-6101.	9.1	2
3586	Efficient photosynthesis of hydrogen peroxide by triazole-modified covalent triazine framework nanosheets. Journal of Colloid and Interface Science, 2023, 650, 40-46.	9.4	6

#	ARTICLE	IF	CITATIONS
3587	Recent Progresses on Transparent Electrodes and Active Layers Toward Neutral, Color Semitransparent Perovskite Solar Cells. Solar Rrl, 2023, 7, .	5.8	2
3588	An Emerging Family of Piezocatalysts: 2D Piezoelectric Materials. Small, 2023, 19, .	10.0	15
3589	Mn <sup>2+</sup> -Doped ZnSe/ZnS Core/Shell Nanoplatelets as Low-Toxic UV-to-Vis Light-Converters with Enhanced Optical Properties. ACS Applied Nano Materials, 2023, 6, 11124-11134.	5.0	0
3590	Structural Design and Synthesis of Elemental Doped MXenes and MXenes-Based Composites. , 2023, , 29-45.		1
3592	Controllable growth of 2D ReS2 flakes and their surface Raman enhancement effects. Journal of Alloys and Compounds, 2023, 963, 171207.	5.5	1
3593	Biosensing Applications of MXene-Based Composites. , 2023, , 325-343.		0
3594	Rapid synthesis of Palladium-Platinum-Nickel ultrathin porous nanosheets with high catalytic performance for alcohol electrooxidation. Journal of Colloid and Interface Science, 2023, 650, 350-357.	9.4	8
3595	Controlled Synthesis and Accurate Doping of Waferâ€Scale 2D Semiconducting Transition Metal Dichalcogenides. Advanced Materials, 0, , .	21.0	3
3596	Engineering Lattice Planes of NiCo-LDH Ultrathin Sheets for Boosting Methanol/Ethanol Oxidation Performance. Inorganic Chemistry, 2023, 62, 11256-11264.	4.0	3
3597	Cutting edge composite materials based on MXenes: Synthesis and electromagnetic interference shielding applications. Composites Part B: Engineering, 2023, 264, 110874.	12.0	17
3598	High specific surface area MXene/SWCNT/cellulose nanofiber aerogel film as an electrode for flexible supercapacitors. Composites Part B: Engineering, 2023, 264, 110888.	12.0	10
3599	3D Nanocellulose Matrix Enhancing the Lithiation Dynamics of FePS <sub>3</sub> Anode. Advanced Functional Materials, 2023, 33, .	14.9	3
3600	Electrochemical properties of two-dimensional hexagonal boron nitride nanosheets prepared by hydrothermal method. Electrochimica Acta, 2023, 463, 142848.	5.2	1
3601	Analyzing Fundamental Properties of Two-Dimensional Materials by Raman Spectroscopy from Microscale to Nanoscale. Analytical Chemistry, 2023, 95, 10821-10838.	6.5	3
3602	Balancing loading mass and gravimetric capacitance of NiCoâ^'layered double hydroxides to achieve ultrahigh areal performance for flexible supercapacitors., 2024, 3, 100151.		2
3603	Synthesis of three-dimensional (3D) hierarchically porous iron–nickel nanoparticles encapsulated in boron and nitrogen-codoped porous carbon nanosheets for accelerated water splitting. Journal of Colloid and Interface Science, 2023, 652, 758-769.	9.4	2
3604	Laser-Induced Fluorescence in Combustion Research. , 2023, , 223-243.		0
3605	Growth of two-dimensional single crystal materials controlled by atomic steps. Wuli Xuebao/Acta Physica Sinica, 2023, 72, 208101.	0.5	O

#	Article	IF	CITATIONS
3606	2D layered materials: structures, synthesis, and electrocatalytic applications. Green Chemistry, 2023, 25, 6149-6169.	9.0	2
3607	Development of MoS2 doping strategy for enhanced SO2 detection at room temperature. Applied Surface Science, 2023, 638, 158013.	6.1	3
3608	Sandwich-type electrochemical aptasensor based on HMCS@PDA@AuNPs and PtCu DNs/MUN-CuO-TiO2 for ultrasensitive detection of cardiac troponin I. Sensors and Actuators B: Chemical, 2023, 393, 134275.	7.8	2
3609	Twoâ€Dimensional Oxide Crystals for Device Applications: Challenges and Opportunities. Advanced Materials, 2024, 36, .	21.0	5
3610	Editorial: Semiconductor Photocatalysts. Crystals, 2023, 13, 1109.	2.2	0
3611	Tuning of Electronic and Optical Properties of PtS <sub>2</sub> Monolayer Using Stacking Engineering. Physica Status Solidi (B): Basic Research, 2023, 260, .	1.5	1
3612	<scp>CoNiFe</scp> â€layered double hydroxide decorated <scp>Coâ€N </scp> network as a robust biâ€functional oxygen electrocatalyst for zincâ€air batteries. EcoMat, 2023, 5, .	11.9	3
3613	Controlling Photoinduced H <sub>2</sub> Release from Freestanding Borophane Sheets Under UV Irradiation by Tuning B–H Bonds. Advanced Materials Interfaces, 2023, 10, .	3.7	2
3614	Nanobio Interface Between Proteins and 2D Nanomaterials. ACS Applied Materials & Description (2023, 15, 35753-35787).	8.0	5
3615	Plasma-optimized contact for high-performance PdSe2 nanoflake-based field-effect transistors. Applied Physics Letters, 2023, 123, .	3.3	2
3616	Rh- and Ru-Modified InSe Monolayers for Detection of NH <sub>3</sub> , NO <sub>2</sub> , and SO <sub>2</sub> in Agricultural Greenhouse: A DFT Study. ACS Applied Nano Materials, 2023, 6, 14447-14458.	5.0	13
3617	Real-Time <i>GW</i> -Ehrenfest-Fan-Migdal Method for Nonequilibrium 2D Materials. Nano Letters, 2023, 23, 7029-7036.	9.1	7
3618	MXene-based nanomaterials with enzyme-like properties for biomedical applications. Nanoscale Horizons, 2023, 8, 1333-1344.	8.0	3
3619	Synthesis of Nitrogen vacancy-riched ultrathin polymeric carbon nitride nanosheets via ethanol-ethylene glycol ultrasonic exfoliation and photocatalytic hydrogen evolution activity. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, , 132113.	4.7	1
3622	Pt clusters in carbon network to enhance photocatalytic CO2 and benzene conversion of WOx/g-C3N4 nanosheets. Carbon, 2023, 214, 118337.	10.3	23
3623	Emerging 2D pnictogens: a novel multifunctional photonic nanoplatform for cutting-edge precision treatment. Chemical Communications, 2023, 59, 10205-10225.	4.1	1
3624	Two-Dimensional B <sub>4</sub> S Monolayer: A Highly Anisotropic Nonclassical System with Planar Tetracoordinate Sulfur Atoms and Polyene Boron Chains. Journal of Physical Chemistry C, 2023, 127, 15533-15541.	3.1	1
3625	Ultrathin porous Pd metallene as highly efficient oxidase mimics for the colorimetric detection of chromium (VI). Analytical and Bioanalytical Chemistry, 2023, 415, 6063-6075.	3.7	3

#	Article	IF	CITATIONS
3626	Computational Prediction of Stacking Mode in Conductive Two-Dimensional Metal–Organic Frameworks: An Exploration of Chemical and Electrical Property Changes. ACS Sensors, 2023, 8, 3068-3075.	7.8	4
3627	Nanoconfinement Approaches to Two-Dimensional Polymeric Materials. Macromolecules, 2023, 56, 6177-6188.	4.8	0
3628	Graphene and related materials for the Internet of Bio-Nano Things. APL Materials, 2023, 11, .	5.1	1
3629	Emerging trends of carbon nitrides and their hybrids for photo-/electro-chemical energy applications. Carbon, 2023, 214, 118345.	10.3	5
3630	Clean Production of Hydrogen Peroxide: A Heterogeneous Solarâ€Driven Redox Process. Advanced Energy Materials, 2023, 13, .	19.5	11
3631	Advances in Structure Pharmaceutics from Discovery to Evaluation and Design. Molecular Pharmaceutics, 0, , .	4.6	0
3632	Synthesis and assembly of two-dimensional heterostructured architectures. MRS Communications, 0, , .	1.8	0
3633	Evolution of Ni coordination configuration during one-pot pyrolysis synthesis of Ni-g-C3N4 single atom catalyst. Carbon, 2023, 214, 118348.	10.3	0
3634	Modulating electronic structure of two-dimensional AsP via external strain and electric field. Physica B: Condensed Matter, 2023, 668, 415197.	2.7	0
3635	Heater Topology Influence on the Functional Characteristics of Thin-Film Gas Sensors Made by MEMS-Silicon Technology. Chemosensors, 2023, 11, 443.	<b>3.</b> 6	1
3636	Tuning the magnetic properties of nonmagnetic monolayer Mo2C by doping and adsorption. Physica B: Condensed Matter, 2023, 667, 415219.	2.7	0
3637	Phase-Dependent Dual Discrimination of MoSe <sub>2</sub> /MoO <sub>3</sub> Composites Toward <i>N</i> , <i>N</i> ,Ci>Dimethylformamide and Triethylamine at Room Temperature. ACS Sensors, 2023, 8, 3146-3157.	7.8	5
3638	Recent advances on liquid intercalation and exfoliation of transition metal dichalcogenides: From fundamentals to applications. Nano Research, 2024, 17, 2088-2110.	10.4	2
3639	Two dimensional borophene nanomaterials: Recent developments for novel renewable energy storage applications. Progress in Solid State Chemistry, 2023, 71, 100416.	7.2	4
3640	Phase Engineering and Synchrotron-Based Study on Two-Dimensional Energy Nanomaterials. Chemical Reviews, 2023, 123, 10750-10807.	47.7	3
3641	Recent advances in bioinspired vision sensor arrays based on advanced optoelectronic materials. APL Materials, 2023, 11, .	5.1	3
3642	Three-Dimensional Porous Tetrakis Methane and Silane as a High-Capacity Anode Material for Monovalent and Divalent Metal Ion Batteries. Journal of Physical Chemistry C, 2023, 127, 16802-16810.	3.1	1
3643	Two-dimensional superhard silicon nitrides with widely tunable bandgap, high carrier mobility and hole-doping-induced robust magnetism. Nanoscale, 0, , .	5.6	0

#	Article	IF	CITATIONS
3644	å^è¿›ææ–™çš"原åå^¶é€. Chinese Science Bulletin, 2023, , .	0.7	1
3645	Photoelectrochemical Engineering for Lightâ€Assisted Rechargeable Metal Batteries: Mechanism, Development, and Future. Small, 2023, 19, .	10.0	O
3646	Lattice modulation strategies for 2D material assisted epitaxial growth. Nano Convergence, 2023, 10, .	12.1	1
3647	Two-Dimensional Nanomaterials as Technology Marvels. , 2023, , 279-291.		0
3648	Continuous catalytic reduction of p-nitrophenol confined within two-dimensional nanochannels in laminar MoS2 membranes. Chemical Engineering Journal, 2023, 474, 145671.	12.7	0
3649	Graphene-Sandwiched Van der Waals Heterostructures for Photodetectors. , 2023, , .		0
3650	Transition Metal Dichalcogenides Nanoscrolls: Preparation and Applications. Nanomaterials, 2023, 13, 2433.	4.1	0
3651	Optimizing 2D-metal contact in layered Tin-selenide via native oxide modulation. Nano Research, 0, , .	10.4	0
3652	Recent Progress in 2D Metalâ€Organic Frameworkâ€Related Materials. Small, 2024, 20, .	10.0	4
3653	Customized Production of Holey Graphene Oxides via a Continuous Flow Process. Small, 0, , .	10.0	0
3654	Facile synthesis of hierarchical CdS nanoflowers for efficient piezocatalytic hydrogen evolution. Dalton Transactions, 2023, 52, 13426-13434.	3.3	3
3655	Micelles self-degraded template based 2D graphitic carbon nitride-polypyrrole nanotube composite electrode for high supercapacitor performance. Diamond and Related Materials, 2023, 139, 110257.	3.9	5
3656	High carrier mobility and broad spectrum GaSe/SnSe van der Waals heterostructure optoelectronic devices: First-principles study. Computational Materials Science, 2023, 230, 112507.	3.0	0
3657	Novel synthetic approach of 2D-metal–organic frameworks (MOF) for wastewater treatment. Nanotechnology, 2023, 34, 442001.	2.6	2
3658	Stacking polytypes of $1T\hat{a}\in^2$ phase Se-rich transition metal diselenide and their electrocatalytic activity in the hydrogen evolution reaction. Journal of Materials Chemistry A, 2023, 11, 19619-19628.	10.3	3
3659	Recent advances in two-dimensional nanomaterials as bifunctional electrocatalysts for full water splitting. Journal of Materials Chemistry A, 2023, 11, 18502-18529.	10.3	7
3660	Synthesis, characterization & Catalysis of ITQ 2D metalâ€"organic frameworks and spectroscopic & Composites with organic dyes. Journal of Materials Chemistry C, 0, , .	5.5	0
3661	Selective edge etching of Pd metallene for enhanced formic acid electrooxidation. Chemical Communications, 2023, 59, 11588-11591.	4.1	1

#	ARTICLE	IF	CITATIONS
3662	Predicting adsorption of organic compounds onto graphene and black phosphorus by molecular dynamics and machine learning. Environmental Science and Pollution Research, 2023, 30, 108846-108854.	<b>5.</b> 3	1
3663	Layerâ€controlled nonlinear terahertz valleytronics in twoâ€dimensional semimetal and semiconductor <scp>PtSe<sub>2</sub></scp> . InformaÄnÃ-Materiály, 2023, 5, .	17.3	3
3664	A review from material functionalization to process feasibility on advanced mixed matrix membranes for gas separations. Chemical Engineering Journal, 2023, 475, 146075.	12.7	4
3665	Reactive X (where X = O, N, S, C, Cl, Br, and I) species nanomedicine. Chemical Society Reviews, 2023, 52, 6957-7035.	38.1	3
3666	In the View of Electrons Transfer and Energy Conversion: The Antimicrobial Activity and Cytotoxicity of Metalâ€Based Nanomaterials and Their Applications. Small, 2024, 20, .	10.0	0
3667	Epitaxial growth of metal-organic framework nanosheets into single-crystalline orthogonal arrays. Nature Communications, 2023, 14, .	12.8	4
3668	Facet-dependent adsorption of heavy metal ions on Janus clay nanosheets. Journal of Hazardous Materials, 2024, 461, 132548.	12.4	3
3669	The reformation of catalyst: From a trial-and-error synthesis to rational design. Nano Research, 0, , .	10.4	16
3670	Planar BN-Doped Nanographenes on Reactive Metal Surfaces: A Promising Pathway for the Preparation of BN-Doped Graphene Layers. ACS Applied Electronic Materials, 2023, 5, 5193-5201.	4.3	0
3671	Recent Advances in the Preparation and Application of Two-Dimensional Nanomaterials. Materials, 2023, 16, 5798.	2.9	3
3672	Self-assembly method for two-dimensional mesoporous materials: a review for recent progress., 0, 3, .		0
3673	Investigating the adsorption, electronic properties, and gas-sensing responses of NH3 on the B3S monolayer. Inorganic Chemistry Communication, 2023, 158, 111524.	3.9	0
3674	Two-Dimensional Copper/Nickel Metal–Organic Framework Nanosheets for Non-Enzymatic Electrochemical Glucose Detection. Micromachines, 2023, 14, 1896.	2.9	1
3675	Two-dimensional nanomaterials as enhanced surface plasmon resonance sensing platforms: Design perspectives and illustrative applications. Biosensors and Bioelectronics, 2023, 241, 115672.	10.1	4
3676	Substitutional doping of MoTe <sub>2</sub> /ZrS <sub>2</sub> heterostructures for sustainable energy related applications. Physical Chemistry Chemical Physics, 2023, 25, 27017-27026.	2.8	0
3677	Efficient removal of aqueous organic pollutants by well-ordered layered manganese oxide nanocomposites: Impacts of interlayer spacing and nanoconfinement. Chemical Engineering Journal, 2023, 472, 144830.	12.7	0
3678	Exploring modern developments in diverse 2D photocatalysts for water oxidation. Journal of Porous Materials, 2024, 31, 1-32.	2.6	0
3679	Fe-based Composites-enabled electrochemical sensors for nitrite detection: A review. Materials Today Chemistry, 2023, 33, 101747.	3.5	0

#	Article	IF	CITATIONS
3680	2D Covalent Organic Frameworks. , 2023, , 155-212.		0
3681	Crystalline framework nanosheets as platforms for functional materials. International Journal of Minerals, Metallurgy and Materials, 2023, 30, 1986-2005.	4.9	3
3682	Graphene-Loaded Bimetallic Oxide Nanoparticle Oxygen Electrode Materials for Rechargeable Zinc–Air Batteries. Energy & Samp; Fuels, 2023, 37, 11445-11452.	5.1	1
3683	Electronic transport in hexagonal zinc chalcogenide monolayers: 2D anisotropic nanodevices. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 679, 132556.	4.7	1
3684	Nonlinear optics and photonics applications of two-dimensional materials., 2024,, 393-440.		0
3685	Nonvolatile multiferroic coupling in van der Waals heterostructure. Applied Physics Letters, 2023, 123, .	3.3	O
3686	Magnetic topological materials in two-dimensional: theory, material realization and application prospects. Science Bulletin, 2023, 68, 2639-2657.	9.0	4
3687	Amalgamation of MXenes and Polymers for Multifunctional Nanocomposites. ACS Symposium Series, 0, , 27-54.	0.5	0
3688	Interlayer, gallery-engineered graphene oxide using selective protection of mono-Boc-ethylenediamine as anode for sodium ion batteries. Journal of Energy Storage, 2023, 73, 109237.	8.1	0
3689	Emerging two-dimensional materials for analytical lab-on-chip platforms: A review of electrochemical and optical biosensor. Microchemical Journal, 2023, 194, 109247.	4.5	1
3690	Nanosheetâ€Assembled Zirconiumâ€Porphyrin Frameworks Enabling Surfaceâ€Confined, Initiatorâ€Free Photosynthesis of Ultrahigh Molecular Weight Polymers. Angewandte Chemie - International Edition, 2023, 62, .	13.8	0
3691	Emerging two-dimensional Mo-based materials for rechargeable metal-ion batteries: Advances and perspectives. Journal of Energy Chemistry, 2024, 89, 487-518.	12.9	3
3692	In situ lithiation modulation of LiNi0.8Co0.1Mn0.1O2 as bifunctional electrocatalysts for highly efficient overall water splitting. Journal of Colloid and Interface Science, 2024, 653, 246-257.	9.4	1
3693	Biosensing Frontiers: MXenes and Their Composites. ACS Symposium Series, 0, , 213-236.	0.5	0
3694	Large sliding regulation in van der waals layered nonlinear optical ternary chalcogenides. Npj Computational Materials, 2023, 9, .	8.7	0
3695	Theoretical Investigation of Quantum Capacitance of M $<$ sub $>$ 2 $<$ /sub $>$ C MXenes as Supercapacitor Electrode. Physica Status Solidi (B): Basic Research, 2023, 260, .	1.5	0
3696	Effect of perylene assembly shapes on photoelectrochemical properties and ultrasensitive biosensing behaviors toward dopamine. Analytical and Bioanalytical Chemistry, 2023, 415, 5845-5854.	3.7	0
3697	Prediction of nonlayered oxide monolayers as flexible high-l̂º dielectrics with negative Poisson's ratios. Nature Communications, 2023, 14, .	12.8	O

#	Article	IF	CITATIONS
3699	Efficient and stable CO2 to formate conversion enabled by edge-site-enriched SnS2 nanoplates. Applied Catalysis B: Environmental, 2024, 341, 123274.	20.2	0
3700	A novel two-dimensional whorled TiB4 as a high-performance anode material for Li-ion and Na-ion batteries. Applied Surface Science, 2023, 639, 158083.	6.1	4
3701	Carrier transport across PtSe2/n-type GaN heterojunction. Vacuum, 2023, 218, 112597.	3.5	0
3702	Bi <sub>2</sub> WO <sub>6</sub> /C <sub>3</sub> N <sub>4</sub> S-Scheme Heterojunction with a Built-In Electric Field for Photocatalytic CO <sub>2</sub> Reduction. ACS Applied Nano Materials, 2023, 6, 17130-17139.	5.0	4
3703	First-Principles Study of χ3-Borophene as a Candidate for Gas Sensing and the Removal of Harmful Gases. Nanomaterials, 2023, 13, 2117.	4.1	2
3704	Two-Dimensional Materials: From Discovery to Application in Membrane Distillation/Crystallization Processes. Chemistry, 2023, 5, 2205-2228.	2.2	0
3705	Enhanced Photocatalytic Activity of Hydrothermally Synthesized Nanostructured Monoclinic BiVO4 Nanosheets. Springer Proceedings in Materials, 2023, , 255-263.	0.3	0
3706	Nano-structured Materials in Additive Manufacturing: Synthesis, Properties, and Applications. Materials Horizons, 2024, , 41-61.	0.6	O
3707	Rational design of Ti3C2 MXene nanocomposite with bromophenol blue for efficient signal amplification: Sensitive electrochemical detection of cardiac troponin I in patient plasma. Sensors and Actuators B: Chemical, 2023, 397, 134668.	7.8	3
3709	Synergistic integration of self-supported 1T/2Hâ^'WS2 and nitrogen-doped rGO on carbon cloth for pH-universal electrocatalytic hydrogen evolution. Nano Research, 2024, 17, 1267-1280.	10.4	1
3710	Halide Ions Regulating the Morphologies of PbS and Au@PbS Core–Shell Nanocrystals: Synthesis, Self-Assembly, and Electrical Transport Properties. Journal of Physical Chemistry Letters, 2023, 14, 9521-9530.	4.6	1
3711	Bi <sub>2</sub> O <sub>2</sub> Se/Xene for Steep-Slope Transistors. ACS Applied Electronic Materials, 2023, 5, 4248-4253.	4.3	0
3712	Toward automated screening of band gap sensitivity in 2D materials. JPhys Materials, 2023, 6, 045004.	4.2	0
3713	Effects of doping and modulation on hydrogen evolution reaction of Pt@MoS2 single-atom catalysts: A first-principles study. Molecular Catalysis, 2023, 549, 113485.	2.0	0
3714	Optimization of photoactive components of photoelectrochemical biosensors. , 2023, , 225-243.		0
3715	Electrochemical Reversible Reforming between Ethylamine and Acetonitrile on Heterostructured Pdâ€Ni(OH) <sub>2</sub> Nanosheets. Angewandte Chemie - International Edition, 2023, 62, .	13.8	2
3716	Electrochemical Reversible Reforming between Ethylamine and Acetonitrile on Heterostructured Pdâ€Ni(OH) <sub>2</sub> Nanosheets. Angewandte Chemie, 2023, 135, .	2.0	0
3717	Emerging two-dimensional nanomaterial in cancer treatment - A review. AIP Conference Proceedings, 2023, , .	0.4	O

#	Article	IF	CITATIONS
3718	Intercalation of Metal into Transition Metal Dichalcogenides in Molten Salts. Small, 2024, 20, .	10.0	3
3719	Adsorption properties of nCu2O-graphene (nÂ=Â1, 2, 3) for SOF2 and SO2F2 gas molecules. Diamond and Related Materials, 2023, 139, 110378.	3.9	O
3720	Nanolayered double hydroxides. , 2024, , 483-495.		0
3721	Advancing sustainable phosphorus removal and recovery with Metal-Organic frameworks (MOFs). Chemical Engineering Journal, 2023, 475, 145949.	12.7	1
3722	Ti3C2Tx intercalation, modification and application in enzymatic CO2 conversion. Separation and Purification Technology, 2024, 329, 125144.	7.9	1
3723	Nanosheetâ€Assembled Zirconiumâ€Porphyrin Frameworks Enabling Surfaceâ€Confined, Initiatorâ€Free Photosynthesis of Ultrahigh Molecular Weight Polymers. Angewandte Chemie, 2023, 135, .	2.0	0
3724	Molecule-induced n-type behavior of phosphorene-based field-effect transistor for highly sensitive detection of sialic acid. Electrochimica Acta, 2023, 469, 143228.	5.2	0
3725	Technology and Integration Roadmap for Optoelectronic Memristor. Advanced Materials, 2024, 36, .	21.0	2
3726	Ultrafast dynamics in polymeric carbon nitride thin films probed by time-resolved EUV photoemission and UV-Vis transient absorption spectroscopy. Physical Chemistry Chemical Physics, 2023, 25, 27094-27113.	2.8	0
3727	Jahn–Teller Effects and Spintronic Behaviors in a Ti-Doped ScSI Monolayer. ACS Applied Electronic Materials, 2023, 5, 5564-5572.	4.3	0
3728	Rising of boron nitride: A review on boron nitride nanosheets enhanced anti-corrosion coatings. Progress in Organic Coatings, 2024, 186, 107990.	3.9	1
3729	Two-dimensional cluster-assembled materials with properties beyond their individualities and bulks. Matter, 2023, , .	10.0	0
3730	ZIF-8 labelled a new electrochemical aptasensor based on PEI-PrGO/AuNWs for DON detection. Talanta, 2024, 267, 125257.	5.5	1
3731	2D MoTe2 nanomesh with a large surface area and uniform pores for highly active hydrogen evolution catalysis. Applied Materials Today, 2023, 35, 101939.	4.3	0
3732	Effect of strain on the electronic structure and optical properties of Cr-doped monolayer MoS2. Journal of Molecular Modeling, 2023, 29, .	1.8	1
3733	Recent advances in 2D materials for smart textiles. FlatChem, 2023, 42, 100562.	5.6	3
3734	Covalent functionalization of activated MoS <sub>2</sub> via using alkyl sulfide and their utilization in polymeric composites with mechanical and thermal property enhancements. Polymer Composites, 2023, 44, 8903-8916.	4.6	0
3735	Engineering 2D heterostructured VS2-rGO-Ni nanointerface to stimulate electrocatalytic water splitting and supercapacitor applications. Journal of Energy Storage, 2023, 73, 109133.	8.1	2

#	Article	IF	CITATIONS
3736	Sublimation-based wafer-scale monolayer WS <sub>2</sub> formation <i>via</i> self-limited thinning of few-layer WS <sub>2</sub> . Nanoscale Horizons, 2023, 9, 132-142.	8.0	1
3737	An ultrathin Zn-based layered double hydroxides augment degradation of mutant p53 to improve tumor therapy. Chemical Engineering Journal, 2023, 475, 146449.	12.7	0
3738	Modulation of magnetism in transition-metal-doped monolayer MoS2 by strain engineering. Materials Chemistry and Physics, 2024, 311, 128523.	4.0	1
3739	B, P, and S heteroatom doped, bio- and hemo-compatible 2D graphitic-carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) with antioxidant, light-induced antibacterial, and bioimaging endeavors. Nanotechnology, 2024, 35, 025101.	2.6	O
3740	Classification and Simulation of Structural Phase Transformation-Induced Interfacial Defects in Group VI Transition-Metal Dichalcogenide Monolayers. Nano Letters, 2023, 23, 9445-9450.	9.1	0
3741	Biomedical Applications of 2D MXene Nanocomposites: A Review. ChemBioEng Reviews, 2023, 10, 1050-1072.	4.4	O
3742	Sheetâ€Isolated MoS <sub>2</sub> Used for Dispersing Pt Nanoparticles and its Application in Methanol Fuel Cells. Chemistry - A European Journal, 2024, 30, .	3.3	0
3743	Monatomic reactions with single vacancy monolayer h-BN: DFT studies. RSC Advances, 2023, 13, 30346-30357.	3.6	O
3744	Anisotropic infrared absorption in monolayer black phosphorus metasurface with/without local oxidative effect. Optical Materials, 2023, 145, 114457.	3.6	1
3745	Tunable Electronic Transport of New-Type 2D Iodine Materials Affected by the Doping of Metal Elements. Molecules, 2023, 28, 7159.	3.8	1
3746	A 2d Heterostructureâ€Based Multifunctional Floating Gate Memory Device for Multimodal Reservoir Computing. Advanced Materials, 0, , .	21.0	0
3747	Constructing carbon nanotube-optimized hollow Ti3C2 MXene hierarchical conductive networks for robust lithium-sulfur batteries. Journal of Materials Chemistry A, 0, , .	10.3	0
3748	Polarization-direction-controlled Z-scheme photocatalytic switch in <mml:math display="inline" overflow="scroll" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Sc</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:m athvariant="normal">SSsctudy Physical Pository Applied 2023 20</mml:m></mml:msub></mml:math>	niæ <b>C&amp;</b> O <td>m<b>k</b>mi&gt;<mml< td=""></mml<></td>	m <b>k</b> mi> <mml< td=""></mml<>
3749	heterostructures: A first-principles study. Physical Review Applied, 2023, 20, .  MXenes as conductive and mechanical additives in energy storage devices. EnergyChem, 2023, 5, 100110.	19.1	0
3750	Borophene: A concise overview of design, characteristics, and sensing applications. FlatChem, 2023, 42, 100579.	5.6	1
3751	Theoretical modelling of the structure, reactivity, and the application of Co (II), Cu (II), and Ni (II) Schiff base complexes as sensor materials for phosgene (COCl2) gas. Chemical Physics Impact, 2023, 7, 100352.	3.5	5
3752	Recent Progress in Two-Dimensional Material Exfoliation Technology and Enlightenment for Geological Sciences. Journal of Physical Chemistry Letters, 2023, 14, 10181-10193.	4.6	0
3753	Role of graphitic carbon in g-C3N4 nanoarchitectonics towards efficient photocatalytic reaction kinetics: A review. Carbon, 2024, 216, 118584.	10.3	14

#	Article	IF	CITATIONS
3754	Ferrite bismuth-based nanomaterials: From ferroelectric and piezoelectric properties to nanomedicine applications. Colloids and Surfaces B: Biointerfaces, 2024, 233, 113642.	5.0	0
3755	Progress on Two-Dimensional Transitional Metal Dichalcogenides Alloy Materials: Growth, Characterisation, and Optoelectronic Applications. Nanomaterials, 2023, 13, 2843.	4.1	1
3756	Dimensionality Engineering of Lead Organic Chalcogenide Semiconductors. Journal of the American Chemical Society, 2023, 145, 23963-23971.	13.7	2
3757	"Non-layered―two-dimensional nanodiamond plates as nanoadditives in water lubrication. Wear, 2024, 536-537, 205174.	3.1	0
3759	Intermetallic Nanocrystals for Fuel-Cells-Based Electrocatalysis. Chemical Reviews, 2023, 123, 12507-12593.	47.7	9
3761	Recent progress in group-III metal chalcogenide based Janus materials: from properties to potential applications. Journal of Materials Chemistry C, 2023, 11, 16439-16451.	5.5	1
3762	Green Synthesis and Biosafety Assessment of MXene. Small, 0, , .	10.0	1
3763	Improved Electrochemical Performance in an Exfoliated Tetracyanonickelate-Based Metal–Organic Framework. ACS Applied Materials & Interfaces, 2023, 15, 53568-53583.	8.0	0
3764	Amorphous Boride/Selenide Heterojunction Coupling Light-Response Effects for Large Current Water Splitting. ACS Sustainable Chemistry and Engineering, 2023, 11, 16469-16478.	6.7	0
3765	Modified Molten Salt Assisted Exfoliation of Large‧ize 2D Materials. Advanced Functional Materials, 2024, 34, .	14.9	0
3766	Pd <sub>8</sub> Nanocluster with Nonmetalâ€toâ€Metal―Ring Coordination and Promising Photothermal Conversion Efficiency. Angewandte Chemie - International Edition, 2024, 63, .	13.8	1
3767	Type-II GaSe/MoS2 van der Waals Heterojunction for High-Performance Flexible Photodetector. Crystals, 2023, 13, 1602.	2.2	0
3768	Gas-responsive two-dimensional metal–organic framework composites for trace visualization of volatile organic compounds. Biosensors and Bioelectronics, 2024, 245, 115826.	10.1	0
3769	Macroscopic assembly of 2D materials for energy storage and seawater desalination. IScience, 2023, 26, 108436.	4.1	1
3770	Pd <sub>8</sub> Nanocluster with Nonmetalâ€toâ€Metall―Ring Coordination and Promising Photothermal Conversion Efficiency. Angewandte Chemie, 0, , .	2.0	0
3771	Electronic properties by polarization-inducing of the F-GaN-H/SiC van der Waals hetero-structures. Vacuum, 2024, 221, 112846.	3.5	0
3772	Resistive Switching in Bigraphene/Diamane Nanostructures Formed on a La3Ga5SiO14 Substrate Using Electron Beam Irradiation. Nanomaterials, 2023, 13, 2978.	4.1	1
3773	Recent Progress on Phase Engineering of Nanomaterials. Chemical Reviews, 2023, 123, 13489-13692.	47.7	3

#	Article	IF	Citations
3774	Prediction of a new 2D topological insulator: Pmmn-PtO2. Materials Today Communications, 2023, 37, 107484.	1.9	0
3776	Recent Advances in Furfural Reduction via Electro- And Photocatalysis: From Mechanism to Catalyst Design. ACS Catalysis, 2023, 13, 15263-15289.	11.2	3
3777	Unlocking the power of MXenes – Crafting a 2D nanoplatform for tomorrow: Synthesis, functionalization, stability, and biomedical applications. Materials Today Communications, 2024, 38, 107711.	1.9	2
3778	Photocatalytic aqueous environmental remediation via two-dimensional carbon nitride nanosheets. Surfaces and Interfaces, 2024, 44, 103717.	3.0	0
3779	Facile Synthesis of CsPbBr <sub>3</sub> /K <sub>4–<i>x</i></sub> Nb <sub>6</sub> O <sub>17</sub> Nanocomposites with Sandwich-like and Scroll-like Heterostructures. Crystal Growth and Design, 2023, 23, 8800-8808.	3.0	0
3780	Low-dimensional nanomaterial-enabled efficient and stable perovskite light-emitting diodes: recent progress and challenges. Journal of Materials Chemistry C, 2024, 12, 388-403.	<b>5.</b> 5	0
3781	Preparation and structure optimization of 2D MXene nanocomposites for microwave absorbing application. Materials Today Physics, 2024, 40, 101291.	6.0	1
3782	Preparation of Fe, N co-doped oxygen reduction catalysts from sacrificial templates and their application to Zn-air batteries. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2024, 681, 132762.	4.7	O
3783	Advances and Challenges of Ultrafast Fiber Lasers in 2–4 µm Midâ€Infrared Spectral Regions. Laser and Photonics Reviews, 0, , .	8.7	0
3784	Carbon layer derived carrier transport in Co/g-C3N4 nanosheet junctions for efficient H2O2 production and NO removal. Chemical Engineering Journal, 2024, 479, 147609.	12.7	10
3785	Recent Research on Preparation and Application of Smart Joule Heating Fabrics. Small, 2024, 20, .	10.0	1
3786	Application of Ti3C2Tx MXene nanosheets and quantum-dots in halide perovskite solar cells. Materials Today Sustainability, 2024, 25, 100619.	4.1	0
3787	First-principles studies on the electronic and photocatalytic water splitting properties of surface functionalized Y <sub>2</sub> C-based MXenes. Physical Chemistry Chemical Physics, 0, , .	2.8	0
3788	Recent advances in two-dimensional intrinsic ferromagnetic materials $Fe < \text{sub} > 3 <  \text{sub} > 4 > \text{X} <  \text{i} > \text{Ge and Ga} > 2 <  \text{sub} > 2 < \text{sub} > \text{Herrostructures for spintronics. Nanoscale, 0, , .}}$	<b>5.</b> 6	0
3789	Wafer-scale synthesis of two-dimensional ultrathin films. Chemical Communications, 2024, 60, 265-279.	4.1	0
3791	Recent advancements in the plant and microbial assisted green synthesis of nanomaterials. Materials Today: Proceedings, 2023, , .	1.8	0
3793	Postâ€Graphene 2D Materials: Structures, Properties, and Cancer Therapy Applications. Advanced Healthcare Materials, 2024, 13, .	7.6	0
3794	Charge doping and electric field tunable ferromagnetism and Curie temperature of the MnS <sub>2</sub> monolayer. Physical Chemistry Chemical Physics, 0, , .	2.8	0

#	Article	IF	CITATIONS
3795	Temperatures- and Pressure-Dependent Thermostructural Properties of Ti2AlC MAX-Phase Using Quasi-Harmonic Debye Approximation. Glass Physics and Chemistry, 2023, 49, 493-502.	0.7	1
3796	Effect of vacancy defects on anisotropic electronic transport behaviors of CoN <sub>4</sub> C <sub>2</sub> based 2D devices: a first-principles study. Nanotechnology, 2024, 35, 085702.	2.6	0
3798	Two-dimensional MSi $<$ sub $>$ 2 $<$ /sub $>$ N $<$ sub $>$ 4 $<$ /sub $>$ (M = Ge, Sn, and Pb) monolayers: promising new materials for optoelectronic applications. 2D Materials, 2024, 11, 015016.	4.4	0
3799	Versatile MXenes as electrochemical sensors for heavy metal ions and phenolic moiety containing industrial chemicals: Recent development and prospects. Materials Advances, 0, , .	5.4	0
3801	Strategies to Develop Electrocatalytically Active Perovskite Oxide Nanosheets. ChemCatChem, 2024, 16,	3.7	0
3802	Robust Zeolitic Tetrazole Framework for Electrocatalytic Dopamine Detection with High Selectivity. Inorganic Chemistry, 2023, 62, 20236-20241.	4.0	0
3804	Interface Engineering with Dynamicsâ€Mechanics Coupling for Highly Reactive and Reversible Aqueous Zincâ€Ion Batteries. Advanced Science, 2023, 10, .	11.2	0
3805	Bioinspired Lightâ€Driven Proton Pump: Engineering Band Alignment of WS <sub>2</sub> with PEDOT:PSS and PDINN. Small, 0, , .	10.0	0
3806	Origin of Phase Engineering CoTe <sub>2</sub> Alloy Toward Kineticsâ€Reinforced and Dendriteâ€Free Lithiumâ^'Sulfur Batteries. Advanced Materials, 2024, 36, .	21.0	0
3807	Plasma Processing and Treatment of 2D Transition Metal Dichalcogenides: Tuning Properties and Defect Engineering. Chemical Reviews, 2023, 123, 13869-13951.	47.7	1
3808	MXenes-mining: a decade of discovery. , 0, , .		1
3809	Enwrapping ZnIn <sub>2</sub> S <sub>4</sub> on vacancy-rich Nb <sub>2</sub> O <sub>5</sub> nanoplates for enhanced photocatalytic hydrogen evolution. Inorganic Chemistry Frontiers, 0, , .	6.0	0
3810	Synthesis of Carbon thin films using Aerosol-Assisted Chemical Vapour Deposition (AACVD). Journal of Zankoy Sulaimani - Part A, 2022, 24, 1-6.	0.1	0
3811	Electronic Structure and Magnetic Properties of Penta-Graphene Nanoribbons: Configurations and Adsorption Effects. Journal of Electronic Materials, 0, , .	2.2	0
3812	Polydopamineâ€Modified 2D Iron (II) Immobilized MnPS <sub>3</sub> Nanosheets for Multimodal Imagingâ€Guided Cancer Synergistic Photothermalâ€Chemodynamic Therapy. Advanced Science, 2024, 11, .	11.2	0
3813	Atomicâ€6cale Insights into the 2D Materials from Aberrationâ€Corrected Scanning Transmission Electron Microscopy: Progress and Future. Small Science, 2024, 4, .	9.9	0
3814	Theoretical Investigation of 2D M3C2S2 (M $\hat{a}\in \infty=\hat{a}\in \infty$ Cr, Zr) as Potential Electrode Materials for Li-lon Batteries. Journal of Electronic Materials, 0, , .	2.2	0
3815	Controllable toughness enhancement in graphene hybrid materials via planar twist-angle of carbon nanotubes. Computational Materials Science, 2024, 233, 112676.	3.0	0

#	Article	IF	CITATIONS
3817	Synthesis of Cu <sub>2â€x</sub> Seâ€MoSe <sub>2</sub> Edgeâ€Epitaxial Heterostructure for Efficient Electrocatalytic Hydrogen Evolution. Small, 0, , .	10.0	0
3818	Entropy-directed metal–organic frameworks drive solar-electrolytic water splitting. Chemical Engineering Journal, 2024, 480, 148017.	12.7	1
3819	Reviewing black phosphorus for biomedical and optoelectronic applications. Inorganic Chemistry Communication, 2024, 160, 111912.	3.9	1
3820	Continuous Phase Regulation of a Pd–Te Hexagonal Nanoplate Library. Journal of the American Chemical Society, 0, , .	13.7	0
3821	Advance in reversible Zn anodes promoted by 2D materials. Rare Metals, 0, , .	7.1	0
3822	Electronic, mechanical and contact properties of Mo4/3B2T2 (T=F, O, OH) monolayer: A first principles study. Current Applied Physics, 2024, 59, 1-9.	2.4	0
3823	Supramolecular nanosheet formation induced photosensitisation mechanism change of Rose Bengal dye in aqueous media. Chemical Communications, 0, , .	4.1	0
3824	Divergent interfacial thermal transport in MoS2/Si heterostructure over optical phonon modes. Applied Physics Letters, 2023, 123, .	3.3	0
3825	Design and Performance of Rh Nanocatalysts for Boosted H <sub>2</sub> Generation in Alkaline Media. Accounts of Materials Research, 0, , .	11.7	0
3826	Recent advances of nanotechnology in ameliorating bioenergy production: A comprehensive review. Sustainable Chemistry and Pharmacy, 2024, 37, 101392.	3.3	0
3827	Borophene: A 2D Wonder Shaping the Future of Nanotechnology and Materials Science. SSRN Electronic Journal, 0, , .	0.4	0
3828	Synergetic Enhancement of Quantum Yield and Exciton Lifetime of Monolayer WS <sub>2</sub> by Proximal Metal Plate and Negative Electric Bias. ACS Nano, 0, , .	14.6	0
3829	3D Molybdenum Disulfide Nanospheres Loaded with Metformin to Enhance SCPP Scaffolds for Bone Regeneration. ACS Applied Materials & Interfaces, 0, , .	8.0	1
3830	Identification of triangular single crystals of transition metal dichalcogenides based on detection algorithm. Optics Letters, 0, , .	3.3	O
3831	Two-dimensional Ni/Co bimetal pyrophosphate nanosheets for sensitive electrochemical detection of phenol. International Journal of Electrochemical Science, 2023, , 100453.	1.3	0
3832	Enhancement of multilayer lithium storage in a $\hat{l}^2$ (sub>12-borophene/graphene heterostructure with built-in dipoles. Physical Chemistry Chemical Physics, 0, , .	2.8	1
3833	Controllable synthesis of sodium-calcium silicate nanoplates and the enhancement of cement-based materials. Case Studies in Construction Materials, 2024, 20, e02829.	1.7	0
3834		3.3	0

#	Article	IF	CITATIONS
3836	Distal iodine migration of arylalkynes $\langle i \rangle via \langle i \rangle$ cyclic monoaryliodonium salts. Organic Chemistry Frontiers, 2024, 11, 1350-1356.	4.5	0
3837	Ultrathin CuNi2Al-LDH nanosheets with enhanced electron transfer for visible-light-driven photo-fenton-like water decontamination. Chemical Engineering Journal, 2024, 481, 148313.	12.7	1
3838	Fabrication of BiOBr on carbon fiber cloth as easily recyclable visible-light-driven photocatalyst for purifying wastewater. Materials Letters, 2023, , 135831.	2.6	0
3839	Heteroepitaxy in Organic/TMD Hybrids and Challenge to Achieve it for TMD Monolayers: The Case of Pentacene on WS <sub>2</sub> and WSe <sub>2</sub> . ACS Applied Materials & Description of the Case of Pentacene on WS <sub>2</sub> . ACS Applied Materials & Description of the Case of Pentacene on WS <sub>2</sub> . ACS Applied Materials & Description of the Case of Pentacene on WS <sub>2</sub> . ACS Applied Materials & Description of the Case of Pentacene on WS <sub>2</sub> . ACS Applied Materials & Description of the Case of Pentacene on WS <sub>2</sub> . ACS Applied Materials & Description of the Case of Pentacene on WS <sub>2</sub> . ACS Applied Materials & Description of the Case of Pentacene on WS <sub>2</sub> . ACS Applied Materials & Description of the Case of Pentacene on WS <sub>2</sub> .	8.0	O
3840	Advances in the Study of Three-Dimensional Nanomaterials in Flexible Piezoresistive Sensors (FPS)., 0, 73, 215-224.		0
3841	Borophene Production and Characterization by Chemical Vapor Deposition Method. , 0, , .		O
3842	Progress in MXeneâ€based catalysts for oxygen evolution reaction. , 2024, 2, .		0
3843	The B3S monolayer as a two-dimensional material for seeing of HCHO molecules as environmental and water pollutants. Physica B: Condensed Matter, 2024, 676, 415656.	2.7	1
3844	Suspended Black Arsenic Nanoribbons with Anisotropic Elastic Properties for Nanomechanical Devices. ACS Applied Nano Materials, 2023, 6, 23542-23547.	5.0	0
3845	Ti3C2@UiOâ^'TCPP Schottky junction photoelectrochemical sensor for detecting alkaline phosphatase through the steric hindrance effect of phosphopeptide. Analytica Chimica Acta, 2024, , 342210.	5.4	O
3846	High-performance photocatalytic and piezoelectric properties of two-dimensional transition metal oxyhalide <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ZrO</mml:mi><mml:msub><mml:< td=""><td>m<b>i₃.≱</b><td>nl:<b>o</b>ni&gt;<mml:< td=""></mml:<></td></td></mml:<></mml:msub></mml:mrow></mml:math>	m <b>i₃.≱</b> <td>nl:<b>o</b>ni&gt;<mml:< td=""></mml:<></td>	nl: <b>o</b> ni> <mml:< td=""></mml:<>
3847	structures. Physical Review B, 2024, 109, . Mechanical properties and oxidation corrosion resistance of phosphate ceramic coating enhanced by SiO <sub>2</sub> â€BNNSs material. International Journal of Applied Ceramic Technology, 2024, 21, 1747-1767.	2.1	O
3848	Sustainable remediation of pesticide pollutants using covalent organic framework – A review on material properties, synthesis methods and application. Environmental Research, 2024, 246, 118018.	7.5	0
3849	Catalysis with Twoâ€Dimensional Metalâ€Organic Frameworks: Synthesis, Characterization, and Modulation. Small, 0, , .	10.0	0
3850	Nanoâ€bio interactions between 2D nanomaterials and mononuclear phagocyte system cells. , 0, , .		1
3851	Hexagonal boron nitride nanomaterials for biomedical applications. , 0, , .		O
3852	Co-immobilization of enzymes and chemocatalysts for one-pot chemoenzymatic cascades: Scaffold engineering toward more efficient catalysis. Chem Catalysis, 2024, 4, 100894.	6.1	0
3853	Recent progress in developing 2D MOFs/COFs/Zeolites nanosheets membranes for water purification. Separation and Purification Technology, 2024, 337, 126404.	7.9	1

#	Article	IF	CITATIONS
3854	Strategic review of gas sensing enhancement ways of 2D tungsten disulfide/selenide-based chemiresistive sensors: decoration and composite. Journal of Materials Chemistry A, 2024, 12, 3771-3806.	10.3	1
3855	Exfoliation of bulk 2H-MoS2 into bilayer 1T-phase nanosheets via ether-induced superlattices. Nano Research, 0, , .	10.4	0
3856	Piezoelectric performance regulation from 2D materials to devices. Matter, 2024, 7, 855-888.	10.0	0
3857	New-type 2D iodine materials with tunable electronic transport impacted by the doping of nonmetal elements. Ceramics International, 2024, 50, 11040-11048.	4.8	0
3858	Emerging two dimensional metastableâ€phase oxides: insights and prospects in synthesis and catalysis. Angewandte Chemie - International Edition, 2024, 63, .	13.8	0
3859	Exploring the adsorption characteristics of toxic CO gas on pristine, defective, and transition metal-doped I-AsP monolayer. Computational and Theoretical Chemistry, 2024, 1232, 114464.	2.5	0
3860	Emerging two dimensional metastableâ€phase oxides: insights and prospects in synthesis and catalysis. Angewandte Chemie, 2024, 136, .	2.0	0
3861	Overcoming the permeability-selectivity challenge in water purification using two-dimensional cobalt-functionalized vermiculite membrane. Nature Communications, 2024, 15, .	12.8	1
3863	Construction of built-in correction photoelectrochemical sensing platform for diagnosis of Alzheimer's disease. Biosensors and Bioelectronics, 2024, 249, 116020.	10.1	0
3864	Modulating the electronic structure and interface contact of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">W</mml:mi><mml:msub>Se<mml:mn>2</mml:mn> van der Waals heterostructures by strain engineering: Insights from first-principles calculations.</mml:msub></mml:mrow></mml:math>	n <b>ızıl</b> ımrow	> <b>o</b> mml:mo>
3865	Catalytic removal of malachite green from aqueous solution by a peroxidase-mimicking Cu-Al layered double hydroxide nanoparticle: Synthesis, characterization, and application. Applied Catalysis A: General, 2024, 670, 119563.	4.3	0
3866	Brownian Diffusion of Hexagonal Boron Nitride Nanosheets and Graphene in Two Dimensions. ACS Nano, 2024, 18, 2446-2454.	14.6	0
3867	Tunable electronic and optical properties of h-BP/MoS2 van der Waals heterostructures toward optoelectronic applications. Journal of Physics and Chemistry of Solids, 2024, 188, 111869.	4.0	0
3868	Robust photogalvanic effect in the armchair B2C4P2 photodetector by vacancy and substitution-doping. European Physical Journal B, 2024, 97, .	1.5	O
3869	Multifunctional photothermal hydrogels: Design principles, various functions, and promising biological applications. Chinese Chemical Letters, 2024, , 109527.	9.0	0
3870	Janus SMoZAZ′ (A = Si, Ge; Z, Z′ = N, P, As; Z ≠Z′) monolayers: potential water-splitting photocatalyst low carrier recombination rate. Catalysis Science and Technology, 2024, 14, 945-960.	with 4.1	O
3871	2D Metal Carbides and Nitrides (MXenes) in Water Treatment. Engineering Materials, 2024, , 141-168.	0.6	0
3873	Unraveling the role of varying composition on electronic and optical properties of bilayer $MoxW(1a^2x)S2$ for photovoltaic applications., 2024,,.		O

#	Article	IF	CITATIONS
3874	Cutting-edge shape memory nanocomposite sponges. , 2024, , 133-156.		0
3875	Two-dimensional metal-organic frameworks and their derivatives: synthesis, 3D printing fabrication, and applications., 2024, , 163-185.		0
3876	Recent Advances in the Growth Strategies, Multifunctional Properties, and Emerging Applications of Twoâ€Dimensional Nonâ€van der Waals Bismuth Oxychalcogenides and Prospective Heterostructures. Small Structures, 0, , .	12.0	0
3877	Experimental Characterization of Defect-Induced Phonon Lifetime Shortening. Physical Review Letters, 2024, 132, .	7.8	1
3878	Green in situ synthesis of sandwich-like W-bridged siligraphene (g-SiC@WC@g-SiC) heterostructure from Saccharum Ravennae gum for ultrahigh-rate photodegradation of acetaminophen. Chemosphere, 2024, 352, 141301.	8.2	0
3879	WS2(RE)/Si2(X)H co-doped heterojunctions for wide-spectrum and high-performance photodetections. Journal of Optics (India), 0, , .	1.7	O
3880	Ultrathin two-dimensional materials: New opportunities and challenges in ultra-sensitive gas sensing. Coordination Chemistry Reviews, 2024, 505, 215691.	18.8	0
3881	Porous materials as effective chemiresistive gas sensors. Chemical Society Reviews, 2024, 53, 2530-2577.	38.1	O
3882	Ultrathin two-dimensional medium-entropy oxide as a highly efficient and stable electrocatalyst for oxygen evolution reaction. Nano Research, 2024, 17, 2555-2562.	10.4	0
3883	WS <sub>2</sub> -Graphene van der Waals Heterostructure as Promising Anode Material for Lithium-lon Batteries: A First-Principles Approach. ACS Omega, 2024, 9, 6482-6491.	3 <b>.</b> 5	0
3884	Photocatalytic Z-scheme overall water splitting for hydrogen generation with Sc2CCl2/ML (ML =) Tj ETQq0 0 0 r	gBT_/Overl	ock 10 Tf 50
3885	A Review on Recent Trends and Future Developments in Electrochemical Sensing. ACS Omega, 0, , .	3.5	1
3886	Unveiling the Energy Storage Mechanism of MXenes under Acidic Conditions through Transitions of Surface Functionalizations. Journal of Physical Chemistry C, 2024, 128, 2352-2361.	3.1	0
3887	Electric Fieldâ€induced Orientation of Carbon Nanomaterials in Dispersions. ChemistrySelect, 2024, 9, .	1.5	O
3889	The electronic structures and hydrogen adsorption properties of a new graphene-like AINC2 monolayer: First-principles calculations. International Journal of Hydrogen Energy, 2024, 59, 1054-1062.	7.1	0
3890	2D Boron Nanosheets for Photo―and Electrocatalytic Applications. ChemCatChem, 0, , .	3.7	O
3891	Constructing a 3D Bi2WO6/ZnIn2S4 direct Z-scheme heterostructure for improved photocatalytic CO2 reduction performance. Journal of Colloid and Interface Science, 2024, 662, 695-706.	9.4	0
3892	Recent advances and perspectives of molybdenum disulfide and molybdenum disulfide based nanocomposites for adsorption and photocatalytic degradation of organic dyes: a review. Journal of Materials Science, 2024, 59, 3225-3252.	3.7	o

#	Article	IF	CITATIONS
3893	The fluctuated structural/electronic properties of SrTiO <sub>3</sub> two-dimensional materials caused by surface effects. Journal of Physics Condensed Matter, 2024, 36, 215001.	1.8	0
3894	Metal-organic frameworks: Recent advances in synthesis strategies and applications. Inorganic Chemistry Communication, 2024, 162, 112223.	3.9	0
3895	Oriented Exfoliating 3D Metal–Organic Frameworks into Ultrathin Metal–Organic Nanosheets with Different Crystal Faces. Advanced Functional Materials, 0, , .	14.9	0
3896	Metal-organic framework-derived heterostructured CoSe2-ZnSe nanorods coupled with carbon polyhedron supported carbon paper for oxygen evolution electrocatalysts. International Journal of Hydrogen Energy, 2024, 60, 425-433.	7.1	0
3897	Chemical-Vapor-Deposition-Synthesized Two-Dimensional Non-Stoichiometric Copper Selenide (β-Cu2â°xSe) for Ultra-Fast Tetracycline Hydrochloride Degradation under Solar Light. Molecules, 2024, 29, 887.	3.8	0
3898	An efficient sensor for SF6 decomposition products by TiO2 decorated α-AsP monolayer: Theoretically evaluating GIS device safety. Materials Science in Semiconductor Processing, 2024, 174, 108248.	4.0	0
3899	Ion and Water Transport in 2D Nanofluidic Channels. Advanced Functional Materials, 0, , .	14.9	0
3900	Potential application of ternary pentagonal p-SiXY $<$ sub $>$ 4 $<$ /sub $>$ (X = Si, C, Ge; Y = C, B, N) materials for optoelectronics and photocatalytic water splitting: a first-principles study. Sustainable Energy and Fuels, 2024, 8, 1346-1357.	4.9	0
3901	Versatile carbon-based materials from biomass for advanced electrochemical energy storage systems. EScience, 2024, , 100249.	41.6	0
3902	Optimizing the d-band center of sub-nanometer Pd–Pt alloy clusters for improved photocatalytic dehalogenation of polyhalogenated biphenyls. Separation and Purification Technology, 2024, 342, 126887.	7.9	0
3903	Two-dimensional interfacial enhanced CO2 adsorption performance of porous organic amine solids: Structure-activity relationships and DFT calculations. Chemical Engineering Journal, 2024, 485, 149938.	12.7	0
3904	Double transition-metal MXenes: Classification, properties, machine learning, artificial intelligence, and energy storage applications. Materials Today Physics, 2024, 42, 101382.	6.0	0
3905	Scalable Synthesis of Bilayer Graphene at Ambient Temperature. Journal of the American Chemical Society, 2024, 146, 6388-6396.	13.7	0
3906	Photoelectric and Magnetic Variation of Transition Metal-Doped Monolayer TiS2: A First-Principles Calculation. Journal of Superconductivity and Novel Magnetism, 2024, 37, 639-655.	1.8	0
3907	Tailoring bone microenvironment with 2D layered materials. Fundamental Research, 2024, , .	3.3	0
3908	Transition metal selenides as catalysts for electrochemical water splitting. International Journal of Hydrogen Energy, 2024, 60, 1414-1432.	7.1	0
3909	Superconductivity in a van der Waals layered quasicrystal. Nature Communications, 2024, 15, .	12.8	0
3910	A review of two-dimensional inorganic materials: Types, properties, and their optoelectronic applications. Progress in Solid State Chemistry, 2024, , 100443.	7.2	0

#	Article	IF	CITATIONS
3911	Insights into the efficient water treatment over N-doped carbon nanosheets with layered minerals as template: The role of interfacial electron tunneling and transfer. Journal of Hazardous Materials, 2024, 469, 133924.	12.4	0
3912	Engineered two-dimensional nanomaterials based diagnostics integrated with internet of medical things (IoMT) for COVID-19. Chemical Society Reviews, 2024, 53, 3774-3828.	38.1	0
3913	Bending deformation modulation of the optoelectronic properties of molybdenum ditelluride doped with nonmetallic atoms X ( $Xaems=2ems=2ems=2ems=2ems=2ems=2ems=2ems=2$	1.8	0
3914	Controlled Formation of Nanoribbons and Their Heterostructures via Assembly of Massâ€Selected Inorganic Ions. Advanced Materials, 0, , .	21.0	0
3915	The application of nanoparticles-based ferroptosis, pyroptosis and autophagy in cancer immunotherapy. Journal of Nanobiotechnology, 2024, 22, .	9.1	0
3916	Regulation of uniformity and electric field distribution achieved highly energy storage performance in PVDF-based nanocomposites via continuous gradient structure. Chinese Chemical Letters, 2024, , 109714.	9.0	O
3917	A new charge transfer pathway in the MoSe <sub>2</sub> â€"WSe <sub>2</sub> heterostructure under the conditions of B-excitons being resonantly pumped. Physical Chemistry Chemical Physics, 2024, 26, 9424-9431.	2.8	0
3918	Homoâ€ŧype α″n <sub>2</sub> Se <sub>3</sub> /PdSe <sub>2</sub> Ferroelectric van der Waals Heterojunction Photodetectors with Highâ€performance and Broadband. Advanced Functional Materials, 0, , .	14.9	O
3919	Two-Dimensional Semiconductors and Transistors for Future Integrated Circuits. ACS Nano, 2024, 18, 7739-7768.	14.6	0
3920	Twoâ€Dimensional Crystalline Electrocatalysts for Efficient Reduction of Carbon Dioxide. ChemElectroChem, 0, , .	3.4	O
3921	Research progresses of nanomaterials as lubricant additives. Friction, 0, , .	6.4	0
3922	Recent advancements in microenvironmental regulation of Single-Atom catalysts for electrochemical conversion of CO2 to CO. Fuel, 2024, 367, 131416.	6.4	O
3923	Graphene-based nanomaterials for the removal of emerging contaminants of concern from water and their potential adaptation for point-of-use applications. Chemosphere, 2024, 355, 141728.	8.2	0
3924	altimg="si181.svg" display="inline" id="d1e479"> <mml:msub><mml:mrow /&gt;<mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:mrow </mml:msub> gas sensors based on monolayer 2D metal oxide <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">altimg="si45.svg" display="inline" id="d1e487"&gt;<mml:mi>i±</mml:mi></mml:math> -MoO <mml:math< td=""><td>7.1</td><td>O</td></mml:math<>	7.1	O
3925	Recent progress in two-dimensional metallenes and their potential application as electrocatalyst.  Journal of Energy Chemistry, 2024, 94, 577-598.	12.9	0
3926	Progress in flexible supercapacitors for wearable electronics using graphene-based organic frameworks. Journal of Energy Storage, 2024, 86, 111260.	8.1	O
3927	Emerging two-dimensional materials: Synthesis, physical properties, and application for catalysis in energy conversion and storage., 2024, 2, 100060.		0
3928	Enhanced Electrocatalytic Oxygen Evolution by In Situ Growth of Tetrametallic Metal–Organic Framework Electrocatalyst FeCoNiMn-MOF on Nickel Foam. Inorganic Chemistry, 2024, 63, 6005-6015.	4.0	O

#	Article	IF	CITATIONS
3929	Metallic layered VSe2 saturable absorber based single- and dual-wavelength ultrafast fiber laser. Optical Fiber Technology, 2024, 84, 103764.	2.7	0
3930	High-Efficiency Self-Powered Broadband Photodetector Based on PtSe <sub>2</sub> /MoSe <sub>2</sub> Heterojunction. ACS Photonics, 2024, 11, 1693-1702.	6.6	0
3931	Illustrating the pertinacious interlayer charge compression effect in van der Waals heterointerfaces. Applied Surface Science, 2024, 660, 159969.	6.1	0
3932	Ion Transport Behavior in van der Waals Gaps of 2D Materials. Small, 0, , .	10.0	0
3933	Stability of 2D Crystals from Tessellation. Advanced Functional Materials, 0, , .	14.9	0
3934	Tuning the Surface Stability and Li/Na Storage of MXenes by Controlling the Surface Termination Coverage. Small, 0, , .	10.0	0
3935	Electrowetting of Carbonâ€based Materials for Advanced Electrochemical Technologies. ChemElectroChem, 0, , .	3.4	0
3936	MOF/MXene Composites: Synthesis, Application and Future Perspectives. Advanced Sustainable Systems, 0, , .	5.3	0
3937	Endosomal escape in magnetic nanostructures: Recent advances and future perspectives. Materials Today Advances, 2024, 22, 100484.	5.2	0
3938	Liquid Metal-Enabled Chemical Synthesis. , 2024, , 1-33.		0
3939	Assembled RhRuFe Trimetallene for Water Electrolysis. Small Methods, 0, , .	8.6	0
3940	Atomic-Scale Imaging of Clay Mineral Nanosheets and Their Supramolecular Complexes through Electron Microscopy: A Supramolecular Chemist's Perspective. Langmuir, 2024, 40, 6065-6076.	3.5	O