List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6505013/publications.pdf

Version: 2024-02-01

312 papers	21,431 citations	9756 73 h-index	12558 132 g-index
312 all docs	312 docs citations	312 times ranked	17965 citing authors

#	Article	IF	Citations
1	Ag@AgCl: A Highly Efficient and Stable Photocatalyst Active under Visible Light. Angewandte Chemie - International Edition, 2008, 47, 7931-7933.	7.2	1,304
2	Evidence of the Existence of Magnetism in Pristine VX₂ Monolayers (X = S, Se) and Their Strain-Induced Tunable Magnetic Properties. ACS Nano, 2012, 6, 1695-1701.	7.3	733
3	Plasmonic photocatalysts: harvesting visible light with noble metal nanoparticles. Physical Chemistry Chemical Physics, 2012, 14, 9813.	1.3	729
4	Facile in situ synthesis of visible-light plasmonic photocatalysts M@TiO2 (M = Au, Pt, Ag) and evaluation of their photocatalytic oxidation of benzene to phenol. Journal of Materials Chemistry, 2011, 21, 9079.	6.7	541
5	Highly Efficient Visibleâ€Light Plasmonic Photocatalyst Ag@AgBr. Chemistry - A European Journal, 2009, 15, 1821-1824.	1.7	535
6	Energy transfer in plasmonic photocatalytic composites. Light: Science and Applications, 2016, 5, e16017-e16017.	7.7	462
7	In situ ion exchange synthesis of the novel Ag/AgBr/BiOBr hybrid with highly efficient decontamination of pollutants. Chemical Communications, 2011, 47, 7054.	2.2	433
8	Electronic and magnetic properties of perfect, vacancy-doped, and nonmetal adsorbed MoSe2, MoTe2 and WS2 monolayers. Physical Chemistry Chemical Physics, 2011, 13, 15546.	1.3	428
9	Synthesis of Highly Efficient Ag@AgCl Plasmonic Photocatalysts with Various Structures. Chemistry - A European Journal, 2010, 16, 538-544.	1.7	394
10	Ab Initio Prediction and Characterization of Mo₂C Monolayer as Anodes for Lithium-Ion and Sodium-Ion Batteries. Journal of Physical Chemistry Letters, 2016, 7, 937-943.	2.1	334
11	Composite of CH₃NH₃PbI₃ with Reduced Graphene Oxide as a Highly Efficient and Stable Visibleâ€Light Photocatalyst for Hydrogen Evolution in Aqueous HI Solution. Advanced Materials, 2018, 30, 1704342.	11.1	302
12	Electronic and Optical Properties of Pristine and Vertical and Lateral Heterostructures of Janus MoSSe and WSSe. Journal of Physical Chemistry Letters, 2017, 8, 5959-5965.	2.1	293
13	An anion exchange approach to Bi2WO6 hollow microspheres with efficient visible light photocatalytic reduction of CO2 to methanol. Chemical Communications, 2012, 48, 9729.	2.2	273
14	Two-dimensional Janus PtSSe for photocatalytic water splitting under the visible or infrared light. Journal of Materials Chemistry A, 2019, 7, 603-610.	5.2	268
15	Metal-Free B@g-CN: Visible/Infrared Light-Driven Single Atom Photocatalyst Enables Spontaneous Dinitrogen Reduction to Ammonia. Nano Letters, 2019, 19, 6391-6399.	4.5	236
16	High-Throughput Screening of Synergistic Transition Metal Dual-Atom Catalysts for Efficient Nitrogen Fixation. Nano Letters, 2021, 21, 1871-1878.	4.5	223
17	Cu₂(OH)PO₄, a Nearâ€Infraredâ€Activated Photocatalyst. Angewandte Chemie - International Edition, 2013, 52, 4810-4813.	7.2	220
18	Two-dimensional III2-VI3 materials: Promising photocatalysts for overall water splitting under infrared light spectrum. Nano Energy, 2018, 51, 533-538.	8.2	213

#	Article	IF	Citations
19	Hydrogen Doped Metal Oxide Semiconductors with Exceptional and Tunable Localized Surface Plasmon Resonances. Journal of the American Chemical Society, 2016, 138, 9316-9324.	6.6	201
20	Two-dimensional germanium monochalcogenides for photocatalytic water splitting with high carrier mobility. Applied Catalysis B: Environmental, 2017, 217, 275-284.	10.8	197
21	Cu₂O Nanoparticles with Both {100} and {111} Facets for Enhancing the Selectivity and Activity of CO₂ Electroreduction to Ethylene. Advanced Science, 2020, 7, 1902820.	5.6	196
22	Valley Polarization in Janus Single-Layer MoSSe via Magnetic Doping. Journal of Physical Chemistry Letters, 2018, 9, 3612-3617.	2.1	194
23	A Janus MoSSe monolayer: a superior and strain-sensitive gas sensing material. Journal of Materials Chemistry A, 2019, 7, 1099-1106.	5.2	187
24	Progress on extending the light absorption spectra of photocatalysts. Physical Chemistry Chemical Physics, 2014, 16, 2758.	1.3	179
25	Ni^{II} Coordination to an Alâ€Based Metalâ€“Organic Framework Made from 2â€Aminoterephthalate for Photocatalytic Overall Water Splitting. Angewandte Chemie - International Edition, 2017, 56, 3036-3040.	7.2	175
26	Single-Layer Ag₂S: A Two-Dimensional Bidirectional Auxetic Semiconductor. Nano Letters, 2019, 19, 1227-1233.	4.5	165
27	Highly efficient and noble metal-free NiS modified MnxCd1-xS solid solutions with enhanced photocatalytic activity for hydrogen evolution under visible light irradiation. Applied Catalysis B: Environmental, 2017, 203, 282-288.	10.8	160
28	Enhancing the Photocatalytic Hydrogen Evolution Activity of Mixed-Halide Perovskite CH₃NH₃PbBr_{3â€“x}I_x Achieved by Bandgap Funneling of Charge Carriers. ACS Catalysis, 2018, 8, 10349-10357.	5.5	159
29	Efficient Separation of Photogenerated Electronâ€Hole Pairs by the Combination of a Heterolayered Structure and Internal Polar Field in Pyroelectric BiOIO₃ Nanoplates. Chemistry - A European Journal, 2013, 19, 14777-14780.	1.7	158
30	Doping strategy to promote the charge separation in BiVO4 photoanodes. Applied Catalysis B: Environmental, 2017, 211, 258-265.	10.8	156
31	Graphene/g-C3N4 bilayer: considerable band gap opening and effective band structure engineering. Physical Chemistry Chemical Physics, 2014, 16, 4230.	1.3	138
32	Holey graphitic carbon nitride (g-CN) supported bifunctional single atom electrocatalysts for highly efficient overall water splitting. Applied Catalysis B: Environmental, 2020, 264, 118521.	10.8	137
33	Preparation, characterization, and photocatalytic properties of silver carbonate. Applied Surface Science, 2011, 257, 8732-8736.	3.1	134
34	Adsorption of gaseous ethylene via induced polarization on plasmonic photocatalyst Ag/AgCl/TiO2 and subsequent photodegradation. Applied Catalysis B: Environmental, 2018, 220, 356-361.	10.8	134
35	Stable Si-based pentagonal monolayers: high carrier mobilities and applications in photocatalytic water splitting. Journal of Materials Chemistry A, 2015, 3, 24055-24063.	5.2	132
36	Ag₆Si₂O₇: a Silicate Photocatalyst for the Visible Region. Chemistry of Materials, 2014, 26, 3873-3875.	3.2	130

#	Article	IF	Citations
37	SnO₂/Reduced Graphene Oxide Interlayer Mitigating the Shuttle Effect of Liâ€"S Batteries. ACS Applied Materials & Interfaces, 2018, 10, 18665-18674.	4.0	129
38	Fabrication of carbon bridged g-C3N4 through supramolecular self-assembly for enhanced photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2018, 229, 114-120.	10.8	128
39	DFT investigation on two-dimensional GeS/WS2 van der Waals heterostructure for direct Z-scheme photocatalytic overall water splitting. Applied Surface Science, 2018, 434, 365-374.	3.1	128
40	Many-body effects in silicene, silicane, germanene and germanane. Physical Chemistry Chemical Physics, 2013, 15, 8789.	1.3	127
41	Perovskite photocatalyst CsPbBr3-xIx with a bandgap funnel structure for H2 evolution under visible light. Applied Catalysis B: Environmental, 2019, 245, 522-527.	10.8	127
42	Strain-induced magnetic transitions in half-fluorinated single layers of BN, GaN and graphene. Nanoscale, 2011, 3, 2301.	2.8	124
43	Achieving high energy density for lithium-ion battery anodes by Si/C nanostructure design. Journal of Materials Chemistry A, 2019, 7, 2165-2171.	5.2	113
44	Constructing Surface Plasmon Resonance on Bi₂WO₆ to Boost High-Selective CO₂ Reduction for Methane. ACS Nano, 2021, 15, 3529-3539.	7.3	113
45	Ferromagnetism of undoped GaN mediated by through-bond spin polarization between nitrogen dangling bonds. Applied Physics Letters, 2009, 94, 162505.	1.5	112
46	High-efficient electrocatalytic overall water splitting over vanadium doped hexagonal Ni0.2Mo0.8N. Applied Catalysis B: Environmental, 2020, 263, 118330.	10.8	111
47	TiO2/Ti3C2 as an efficient photocatalyst for selective oxidation of benzyl alcohol to benzaldehyde. Applied Catalysis B: Environmental, 2021, 286, 119885.	10.8	111
48	Design and synthesis of porous M-ZnO/CeO2 microspheres as efficient plasmonic photocatalysts for nonpolar gaseous molecules oxidation: Insight into the role of oxygen vacancy defects and M=Ag, Au nanoparticles. Applied Catalysis B: Environmental, 2020, 260, 118151.	10.8	110
49	Intrinsic anomalous valley Hall effect in single-layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">N</mml:mi><mml:msub><mml:mi mathvariant="normal">b</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 102, .	1.1	108
50	Leadâ€Free Halide Perovskite Cs₃Bi₂<i>_x</i>Sb_{2â€"2}<i>_x</i>I₉ (<i>x</i>â‰ˆ 0.3) Possessing the Photocatalytic Activity for Hydrogen Evolution Comparable to that of (CH₃NH₃)PbI₃. Advanced Materials, 2020, 32, e2001344.	11.1	107
51	Efficient photocatalytic H2 production via rational design of synergistic spatially-separated dual cocatalysts modified Mn0.5Cd0.5S photocatalyst under visible light irradiation. Chemical Engineering Journal, 2018, 337, 480-487.	6.6	102
52	Polymorph selection towards photocatalytic gaseous CO2 hydrogenation. Nature Communications, 2019, 10, 2521.	5.8	102
53	Single-layer LaBr2: Two-dimensional valleytronic semiconductor with spontaneous spin and valley polarizations. Applied Physics Letters, 2019, 115, .	1.5	100
54	The Role of Effective Mass of Carrier in the Photocatalytic Behavior of Silver Halideâ€Based Ag@AgX (X=Cl, Br, I): A Theoretical Study. ChemPhysChem, 2012, 13, 2304-2309.	1.0	99

#	Article	IF	Citations
55	Effects of single metal atom (Pt, Pd, Rh and Ru) adsorption on the photocatalytic properties of anatase TiO 2. Applied Surface Science, 2017, 426, 639-646.	3.1	99
56	A theoretical study on the electronic properties of in-plane CdS/ZnSe heterostructures: type-II band alignment for water splitting. Journal of Materials Chemistry A, 2018, 6, 4161-4166.	5.2	99
57	Intrinsic Electric Field-Induced Properties in Janus MoSSe van der Waals Structures. Journal of Physical Chemistry Letters, 2019, 10, 559-565.	2.1	98
58	An organometal halide perovskite supported Pt single-atom photocatalyst for H₂ evolution. Energy and Environmental Science, 2022, 15, 1271-1281.	15.6	97
59	Graphene-diamond interface: Gap opening and electronic spin injection. Physical Review B, 2012, 85, .	1.1	95
60	Prediction of an extremely long exciton lifetime in a Janus-MoSTe monolayer. Nanoscale, 2018, 10, 19310-19315.	2.8	93
61	W supported on g-CN manifests high activity and selectivity for N₂electroreduction to NH₃. Journal of Materials Chemistry A, 2020, 8, 1378-1385.	5.2	93
62	Synthesis and Activity of Plasmonic Photocatalysts. ChemCatChem, 2014, 6, 2456-2476.	1.8	92
63	Photoexcitation Dynamics in Janus-MoSSe/WSe₂ Heterobilayers: Ab Initio Time-Domain Study. Journal of Physical Chemistry Letters, 2018, 9, 2797-2802.	2.1	89
64	Sulfuration of NiV-layered double hydroxide towards novel supercapacitor electrode with enhanced performance. Chemical Engineering Journal, 2018, 351, 119-126.	6.6	89
65	Sc₂C as a Promising Anode Material with High Mobility and Capacity: A Firstâ€Principles Study. ChemPhysChem, 2017, 18, 1627-1634.	1.0	88
66	Synthesis of a WO₃ photocatalyst with high photocatalytic activity and stability using synergetic internal Fe³⁺ doping and superficial Pt loading for ethylene degradation under visible-light irradiation. Catalysis Science and Technology, 2019, 9, 652-658.	2.1	86
67	PdSe₂: Flexible Two-Dimensional Transition Metal Dichalcogenides Monolayer for Water Splitting Photocatalyst with Extremely Low Recombination Rate. ACS Applied Energy Materials, 2019, 2, 513-520.	2.5	84
68	Boosting the electrocatalytic HER performance of Ni3N-V2O3 via the interface coupling effect. Applied Catalysis B: Environmental, 2021, 283, 119590.	10.8	84
69	Two-dimensional GeSe for high performance thin-film solar cells. Journal of Materials Chemistry A, 2018, 6, 5032-5039.	5.2	83
70	Selective photocatalytic conversion of alcohol to aldehydes by singlet oxygen over Bi-based metal-organic frameworks under UVâ€“vis light irradiation. Applied Catalysis B: Environmental, 2019, 254, 463-470.	10.8	83
71	Photocatalytic Selective Oxidation of HMF Coupled with H₂ Evolution on Flexible Ultrathin g-C₃N₄ Nanosheets with Enhanced Nâ€“H Interaction. ACS Catalysis, 2022, 12, 1919-1929.	5.5	82
72	Anisotropic Photoelectrochemical (PEC) Performances of ZnO Single-Crystalline Photoanode: Effect of Internal Electrostatic Fields on the Separation of Photogenerated Charge Carriers during PEC Water Splitting. Chemistry of Materials, 2016, 28, 6613-6620.	3.2	81

#	Article	IF	Citations
73	Co3(hexaiminotriphenylene)2: A conductive two-dimensional Ï€â€“d conjugated metalâ€“organic framework for highly efficient oxygen evolution reaction. Applied Catalysis B: Environmental, 2020, 278, 119295.	10.8	80
74	Novel titanium nitride halide TiNX (X = F, Cl, Br) monolayers: potential materials for highly efficient excitonic solar cells. Journal of Materials Chemistry A, 2018, 6, 2073-2080.	5.2	75
75	Effect of the structure distortion on the high photocatalytic performance of C 60 /g-C 3 N 4 composite. Applied Surface Science, 2017, 414, 124-130.	3.1	74
76	Porous Ag-ZnO microspheres as efficient photocatalyst for methane and ethylene oxidation: Insight into the role of Ag particles. Applied Surface Science, 2018, 456, 493-500.	3.1	74
77	Efficient nitric oxide reduction to ammonia on a metal-free electrocatalyst. Journal of Materials Chemistry A, 2021, 9, 5434-5441.	5.2	74
78	Highly efficient electrocatalytic hydrogen evolution coupled with upcycling of microplastics in seawater enabled via Ni3N/W5N4 janus nanostructures. Applied Catalysis B: Environmental, 2022, 307, 121198.	10.8	72
79	Engineering the electronic and optoelectronic properties of InX (X = S, Se, Te) monolayers via strain. Physical Chemistry Chemical Physics, 2017, 19, 4855-4860.	1.3	71
80	A first-principles study of NbSe₂monolayer as anode materials for rechargeable lithium-ion and sodium-ion batteries. Journal Physics D: Applied Physics, 2017, 50, 235501.	1.3	69
81	Broken-Gap Type-III Band Alignment in WTe₂/HfS₂ van der Waals Heterostructure. Journal of Physical Chemistry C, 2019, 123, 23089-23095.	1.5	69
82	Electronic Structure and Photocatalytic Water-Splitting Properties of Ag₂ZnSn(S_{1â€“x}Se_x)₄. Journal of Physical Chemistry C, 2015, 119, 27900-27908.	1.5	68
83	Two-dimensional ferroelastic topological insulators in single-layer Janus transition metal dichalcogenides <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>M</mml:mi><mml:mi>SSe</mml:mi></mml:mrow></mml:math> Physical Review B, 2018, 98, .	1.1	68
84	Electronic properties of two-dimensional van der Waals GaS/GaSe heterostructures. Journal of Materials Chemistry C, 2015, 3, 11548-11554.	2.7	66
85	Design of lateral heterostructure from arsenene and antimonene. 2D Materials, 2016, 3, 035017.	2.0	66
86	Multifunctional electrocatalyst PtM with low Pt loading and high activity towards hydrogen and oxygen electrode reactions: A computational study. Applied Catalysis B: Environmental, 2019, 255, 117743.	10.8	66
87	GeSe@SnS: stacked Janus structures for overall water splitting. Journal of Materials Chemistry A, 2019, 7, 12060-12067.	5.2	66
88	Accelerated electrocatalytic hydrogen evolution on non-noble metal containing trinickel nitride by introduction of vanadium nitride. Journal of Materials Chemistry A, 2019, 7, 5513-5521.	5.2	65
89	Design of new photovoltaic systems based on two-dimensional group-IV monochalcogenides for high performance solar cells. Journal of Materials Chemistry A, 2017, 5, 24145-24152.	5.2	64
90	Robust type-II band alignment in Janus-MoSSe bilayer with extremely long carrier lifetime induced by the intrinsic electric field. Physical Review B, 2019, 99, .	1.1	63

#	Article	IF	Citations
91	Photoelectrical, photophysical and photocatalytic properties of Al based MOFs: MIL-53(Al) and MIL-53-NH2(Al). Journal of Solid State Chemistry, 2016, 233, 194-198.	1.4	62
92	Layered photocatalyst Bi₂O₂[BO₂(OH)] nanosheets with internal polar field enhanced photocatalytic activity. CrystEngComm, 2014, 16, 4931-4934.	1.3	61
93	Ultrahigh Hole Mobility of Sn-Catalyzed GaSb Nanowires for High Speed Infrared Photodetectors. Nano Letters, 2019, 19, 5920-5929.	4.5	61
94	Janus TiXY Monolayers with Tunable Berry Curvature. Journal of Physical Chemistry Letters, 2019, 10, 7426-7432.	2.1	61
95	Cu@g-C₃N₄: An Efficient Single-Atom Electrocatalyst for NO Electrochemical Reduction with Suppressed Hydrogen Evolution. Journal of Physical Chemistry C, 2019, 123, 31043-31049.	1.5	61
96	Valley-related multiple Hall effect in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">V</mml:mi><mml:msub><mml:mi>Si</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">P</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2021, 104, .	3.1	61
97	Ohmic contact in monolayer InSe-metal interface. 2D Materials, 2017, 4, 025116.	2.0	60
98	Synthesis of MoS2/Ni3S2 heterostructure for efficient electrocatalytic hydrogen evolution reaction through optimizing the sulfur sources selection. Applied Surface Science, 2018, 459, 422-429.	3.1	60
99	Two-Dimensional Penta-BN₂ with High Specific Capacity for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 6104-6110.	4.0	58
100	Enhancing the Photoelectrochemical Water Oxidation Reaction of BiVO₄ Photoanode by Employing Carbon Spheres as Electron Reservoirs. ACS Catalysis, 2020, 10, 13031-13039.	5.5	57
101	Antiferromagnetic Topological Insulator with Nonsymmorphic Protection in Two Dimensions. Physical Review Letters, 2020, 124, 066401.	2.9	57
102	Straintronics in two-dimensional in-plane heterostructures of transition-metal dichalcogenides. Physical Chemistry Chemical Physics, 2017, 19, 663-672.	1.3	56
103	Photoreforming of plastic waste poly (ethylene terephthalate) via in-situ derived CN-CNTs-NiMo hybrids. Applied Catalysis B: Environmental, 2022, 307, 121143.	10.8	55
104	Nonmetal-Atom-Doping-Induced Valley Polarization in Single-Layer Tl₂O. Journal of Physical Chemistry Letters, 2019, 10, 4535-4541.	2.1	54
105	Janus Chromium Dichalcogenide Monolayers with Low Carrier Recombination for Photocatalytic Overall Water-Splitting under Infrared Light. Journal of Physical Chemistry C, 2019, 123, 4186-4192.	1.5	54
106	MoSSe nanotube: a promising photocatalyst with an extremely long carrier lifetime. Journal of Materials Chemistry A, 2019, 7, 7885-7890.	5.2	52
107	How to make an efficient gas-phase heterogeneous CO₂ hydrogenation photocatalyst. Energy and Environmental Science, 2020, 13, 3054-3063.	15.6	52
108	Oxygenâ€Vacancyâ€Enhanced Singlet Oxygen Production for Selective Photocatalytic Oxidation. ChemSusChem, 2020, 13, 3488-3494.	3.6	51

#	Article	IF	Citations
109	One-step synthesis of Co-doped 1T-MoS2 nanosheets with efficient and stable HER activity in alkaline solutions. Materials Chemistry and Physics, 2020, 244, 122642.	2.0	51
110	Surface Fluorination Engineering of NiFe Prussian Blue Analogue Derivatives for Highly Efficient Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2021, 13, 5142-5152.	4.0	51
111	Enhancing visible light photocatalytic activity of TiO2 using a colorless molecule (2-methoxyethanol) due to hydrogen bond effect. Applied Catalysis B: Environmental, 2017, 200, 230-236.	10.8	50
112	Electronics and optoelectronics of lateral heterostructures within monolayer indium monochalcogenides. Journal of Materials Chemistry C, 2016, 4, 11253-11260.	2.7	49
113	Large valley-polarized state in single-layer NbX2 (X = S, Se): Theoretical prediction. Nano Research, 2021, 14, 834-839.	5.8	49
114	Insights into the adsorption and energy transfer of Ag clusters on the AgCl(100) surface. Physical Chemistry Chemical Physics, 2013, 15, 8722.	1.3	48
115	Electronâ€“Hole Pair Generation of the Visible-Light Plasmonic Photocatalyst Ag@AgCl: Enhanced Optical Transitions Involving Midgap Defect States of AgCl. Journal of Physical Chemistry C, 2014, 118, 12133-12140.	1.5	48
116	Noble-metal-free plasmonic photocatalyst: hydrogen doped semiconductors. Scientific Reports, 2015, 4, 3986.	1.6	48
117	Synthesis of novel visible light response Ag 10 Si 4 O 13 photocatalyst. Applied Catalysis B: Environmental, 2016, 199, 315-322.	10.8	48
118	Ni3B as a highly efficient and selective catalyst for the electrosynthesis of hydrogen peroxide. Applied Catalysis B: Environmental, 2020, 279, 119371.	10.8	48
119	Probing the Mechanism of Plasmon-Enhanced Ammonia Borane Methanolysis on a CuAg Alloy at a Single-Particle Level. ACS Catalysis, 2021, 11, 10814-10823.	5.5	48
120	Fabrication of BiVO4 photoanode consisted of mesoporous nanoparticles with improved bulk charge separation efficiency. Applied Catalysis B: Environmental, 2018, 238, 586-591.	10.8	47
121	Prediction of two-dimensional PC₆ as a promising anode material for potassium-ion batteries. Physical Chemistry Chemical Physics, 2019, 21, 26212-26218.	1.3	47
122	Prediction of large-gap quantum spin hall insulator and Rashba-Dresselhaus effect in two-dimensional g-TlA (A = N, P, As, and Sb) monolayer films. Nano Research, 2015, 8, 2954-2962.	5.8	46
123	In-plane interfacing effects of two-dimensional transition-metal dichalcogenide heterostructures. Physical Chemistry Chemical Physics, 2016, 18, 15632-15638.	1.3	46
124	Proposed two-dimensional topological insulator in SiTe. Physical Review B, 2016, 94, .	1.1	45
125	Interface Schottky barrier engineering via strain in metalâ€“semiconductor composites. Nanoscale, 2016, 8, 1352-1359.	2.8	45
126	Nitrogen-free TMS₄-centers in metalâ€“organic frameworks for ammonia synthesis. Journal of Materials Chemistry A, 2020, 8, 20047-20053.	5.2	45

#	Article	IF	Citations
127	Prediction of two-dimensional antiferromagnetic ferroelasticity in an AgF₂ monolayer. Nanoscale Horizons, 2020, 5, 1386-1393.	4.1	45
128	Biasâ€Free Solar Water Splitting by Tetragonal Zircon BiVO₄ Nanocrystal Photocathode and Monoclinic Scheelite BiVO₄ Nanoporous Photoanode. Advanced Functional Materials, 2021, 31, 2008656.	7.8	45
129	In-situ growth of Ti3C2@MIL-NH2 composite for highly enhanced photocatalytic H2 evolution. Chemical Engineering Journal, 2021, 411, 128446.	6.6	45
130	Modified MXene: promising electrode materials for constructing Ohmic contacts with MoS₂for electronic device applications. Physical Chemistry Chemical Physics, 2018, 20, 16551-16557.	1.3	44
131	Two-dimensional materials with intrinsic auxeticity: progress and perspectives. Nanoscale, 2019, 11, 11413-11428.	2.8	44
132	The photocatalytic properties of ultrathin bismuth oxychloride nanosheets: a first principles study. Physical Chemistry Chemical Physics, 2016, 18, 7261-7268.	1.3	43
133	Self-doped pâ€“n junctions in two-dimensional In₂X₃ van der Waals materials. Materials Horizons, 2020, 7, 504-510.	6.4	42
134	Conduction-band valley spin splitting in single-layer H- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">T</mml:mi><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">O</mml:mi></mml:mrow></mml:math>. Physical Review B, 2018, 97, .	1.1	41
135	Plasmon-Mediated Nitrobenzene Hydrogenation with Formate as the Hydrogen Donor Studied at a Single-Particle Level. ACS Catalysis, 2021, 11, 3801-3809.	5.5	41
136	Plasmon-induced dehydrogenation of formic acid on Pd-dotted Ag@Au hexagonal nanoplates and single-particle study. Applied Catalysis B: Environmental, 2020, 277, 119226.	10.8	40
137	Photocatalytic Overall Water Splitting over MILâ€125(Ti) upon CoPi and Pt Coâ€catalyst Deposition. ChemistryOpen, 2017, 6, 701-705.	0.9	39
138	Direction-control of anisotropic electronic behaviors via ferroelasticity in two-dimensional Î±-MPI (M = Zr, Hf). Materials Horizons, 2019, 6, 1930-1937.	6.4	39
139	Prediction of single-layer TiVI₆ as a promising two-dimensional valleytronic semiconductor with spontaneous valley polarization. Journal of Materials Chemistry C, 2020, 8, 13220-13225.	2.7	39
140	Synthesis of Synergistic Nitrogen-Doped NiMoO₄/Ni₃N Heterostructure for Implementation of an Efficient Alkaline Electrocatalytic Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 2440-2449.	2.5	39
141	Lateral heterojunctions within monolayer h-BN/graphene: a first-principles study. RSC Advances, 2015, 5, 33037-33043.	1.7	37
142	Ni^{II} Coordination to an Alâ€Based Metalâ€“Organic Framework Made from 2â€Aminoterephthalate for Photocatalytic Overall Water Splitting. Angewandte Chemie, 2017, 129, 3082-3086.	1.6	37
143	Potential of one-dimensional blue phosphorene nanotubes as a water splitting photocatalyst. Journal of Materials Chemistry A, 2018, 6, 21087-21097.	5.2	37
144	Oxygen-terminated BiXenes and derived single atom catalysts for the hydrogen evolution reaction. Journal of Catalysis, 2019, 378, 97-103.	3.1	37

#	Article	IF	Citations
145	The synergistic effect of light irradiation and interface engineering of the Co(OH)2/MoS2 heterostructure to realize the efficient alkaline hydrogen evolution reaction. Electrochimica Acta, 2019, 299, 618-625.	2.6	37
146	Two-Dimensional Ferroelastic Semiconductors in Nb₂SiTe₄ and Nb₂GeTe₄ with Promising Electronic Properties. Journal of Physical Chemistry Letters, 2020, 11, 497-503.	2.1	37
147	Improving the HER activity of Ni3FeN to convert the superior OER electrocatalyst to an efficient bifunctional electrocatalyst for overall water splitting by doping with molybdenum. Electrochimica Acta, 2020, 333, 135488.	2.6	37
148	Trifunctional Electrocatalysts with High Efficiency for the Oxygen Reduction Reaction, Oxygen Evolution Reaction, and Naâ€“O₂ Battery in Heteroatom-Doped Janus Monolayer MoSSe. ACS Applied Materials & Interfaces, 2020, 12, 24066-24073.	4.0	37
149	Design of Advanced Photocatalysis System by Adatom Decoration in 2D Nanosheets of Group-IV and IIIâ€“V Binary Compounds. Scientific Reports, 2016, 6, 23104.	1.6	37
150	Fullerene Interfaced with a TiO₂(110) Surface May Not Form an Efficient Photovoltaic Heterojunction: First-Principles Investigation of Electronic Structures. Journal of Physical Chemistry Letters, 2013, 4, 2223-2229.	2.1	36
151	New Basic Insights into the Low Hot Electron Injection Efficiency of Gold-Nanoparticle-Photosensitized Titanium Dioxide. ACS Applied Materials & Interfaces, 2014, 6, 12388-12394.	4.0	36
152	Effective bandgap engineering in wrinkled germanane via tiny electric field. Journal of Materials Chemistry C, 2014, 2, 1125-1130.	2.7	35
153	Vertical and Bidirectional Heterostructures from Graphyne and MSe₂ (M = Mo, W). Journal of Physical Chemistry Letters, 2015, 6, 2694-2701.	2.1	35
154	Functionalized MXenes as ideal electrodes for Janus MoSSe. Physical Chemistry Chemical Physics, 2019, 21, 70-76.	1.3	35
155	Electrodeposition of NiFe layered double hydroxide on Ni3S2 nanosheets for efficient electrocatalytic water oxidation. International Journal of Hydrogen Energy, 2020, 45, 8659-8666.	3.8	35
156	High-Throughput Screening of Efficient Biatom Catalysts Based on Monolayer Carbon Nitride for the Nitric Oxide Reduction Reaction. Journal of Physical Chemistry Letters, 2022, 13, 527-535.	2.1	35
157	Electronic structures of in-plane two-dimensional transition-metal dichalcogenide heterostructures. Physical Chemistry Chemical Physics, 2015, 17, 29380-29386.	1.3	34
158	Robust dual topological character with spin-valley polarization in a monolayer of the Dirac semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Na</mml:mi><mml:mn>3</mml:mn></mml: Physical Review B, 2017, 95, .	1.1	34
159	Monolayer HfTeSe₄: A Promising Two-Dimensional Photovoltaic Material for Solar Cells with High Efficiency. ACS Applied Materials & Interfaces, 2019, 11, 37901-37907.	4.0	34
160	Single-Layer Cu₂WS₄ with Promising Electrocatalytic Activity toward Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 45818-45824.	4.0	34
161	A water-stable triazine-based metal-organic framework as an efficient adsorbent of Pb(II) ions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 560, 315-322.	2.3	34
162	Substrate-dependent ALD of Cux on TiO2 and its performance in photocatalytic CO2 reduction. Chemical Engineering Journal, 2021, 405, 126654.	6.6	34

#	Article	IF	Citations
163	Molten-salt assisted synthesis of Cu clusters modified TiO2 with oxygen vacancies for efficient photocatalytic reduction of CO2 to CO. Chemical Engineering Journal, 2022, 445, 136718.	6.6	34
164	Giant anisotropic photogalvanic effect in a flexible AsSb monolayer with ultrahigh carrier mobility. Physical Chemistry Chemical Physics, 2017, 19, 27233-27239.	1.3	33
165	Intense Single Red Emission Induced by Nearâ€Infrared Irradiation Using a Narrow Bandgap Oxide BiVO₄ as the Host for Yb³⁺ and Tm³⁺ Ions. Advanced Optical Materials, 2018, 6, 1701331.	3.6	33
166	Insights into the Role of Surface Distortion in Promoting the Separation and Transfer of Photogenerated Carriers in Anatase TiO₂. Journal of Physical Chemistry C, 2013, 117, 24496-24502.	1.5	32
167	Promising Photocatalysts for Water Splitting in BeN₂ and MgN₂ Monolayers. Journal of Physical Chemistry C, 2018, 122, 8102-8108.	1.5	32
168	Quantum anomalous Hall effect and gate-controllable topological phase transition in layered <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>EuCd</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2019, 99, .	1.1	32
169	Two-dimensional valleytronic semiconductor with spontaneous spin and valley polarization in single-layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cr</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2021, 104, .	1.1	32
170	Tuning of the Surface-Exposing and Photocatalytic Activity for AgX (X = Cl and Br): A Theoretical Study. Journal of Physical Chemistry C, 2012, 116, 19372-19378.	1.5	31
171	Valley polarization in monolayer CrX₂ (XÂ=ÂS, Se) with magnetically doping and proximity coupling. New Journal of Physics, 2020, 22, 033002.	1.2	31
172	Boron containing metalâ€“organic framework for highly selective photocatalytic production of H₂O₂by promoting two-electron O₂reduction. Materials Horizons, 2021, 8, 2842-2850.	6.4	31
173	Ferroelastic-ferroelectric multiferroics in a bilayer lattice. Physical Review B, 2021, 103, .	1.1	31
174	Valley-Contrasting Physics in Single-Layer CrSi₂N₄ and CrSi₂P₄. Journal of Physical Chemistry Letters, 2021, 12, 8341-8346.	2.1	31
175	Plasmon-Enhanced Water Activation for Hydrogen Evolution from Ammonia-Borane Studied at a Single-Particle Level. ACS Catalysis, 2022, 12, 3558-3565.	5.5	31
176	2D spontaneous valley polarization from inversion symmetric single-layer lattices. Npj Computational Materials, 2022, 8, .	3.5	31
177	Methyl-terminated germanane GeCH3 synthesized by solvothermal method with improved photocatalytic properties. Applied Surface Science, 2019, 467-468, 881-888.	3.1	30
178	Activating electrocatalytic hydrogen evolution performance of two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>M</mml:mi><mml:msub><mml:mi>Si</mml:mi><mml:mn mathvariant="normal">N</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mi>M</mml:mi><mml:mi><m theoretical pred. Physical Review Materials, 2021, 5, .	3.1	30
179	Intrinsic valley polarization and anomalous valley hall effect in single-layer 2H-FeCl2. ChemPhysMater, 2022, 1, 56-61.	1.4	30
180	A comprehensive study of electronic and photocatalytic properties in monolayer, double-layer and bulk Bi2WO6. Physical Chemistry Chemical Physics, 2018, 20, 9221-9227.	1.3	29

#	Article	IF	Citations
181	Unraveling the Mechanism of Photoinduced Charge-Transfer Process in Bilayer Heterojunction. ACS Applied Materials & Interfaces, 2018, 10, 25401-25408.	4.0	29
182	Intercorrelated ferroelectrics in 2D van der Waals materials. Materials Horizons, 2021, 8, 1683-1689.	6.4	29
183	Controlling the Electronic Structures and Properties of in-Plane Transition-Metal Dichalcogenides Quantum Wells. Scientific Reports, 2015, 5, 17578.	1.6	28
184	Groupâ€…IV Monochalcogenides MX (M=Ge, Sn; X=S, Se) as Chemical Anchors of Polysulfides for Lithiumâ€“Sulfur Batteries. Chemistry - A European Journal, 2018, 24, 11193-11199.	1.7	28
185	Two transition metal phosphonate photocatalysts for H₂ evolution and CO₂ reduction. Chemical Communications, 2018, 54, 7195-7198.	2.2	28
186	Stacking-Independent Ferromagnetism in Bilayer VI₃ with Half-Metallic Characteristic. Journal of Physical Chemistry Letters, 2020, 11, 2158-2164.	2.1	28
187	H4,4,4-graphyne with double Dirac points as high-efficiency bifunctional electrocatalysts for water splitting. Journal of Materials Chemistry A, 2021, 9, 4082-4090.	5.2	28
188	Quantum anomalous Hall effect in doped ternary chalcogenide topological insulators TlBiTe2 and TlBiSe2. Applied Physics Letters, 2011, 99, .	1.5	27
189	Robust two-dimensional ferroelectricity in single-layer Î³-SbP and Î³-SbAs. Nanoscale, 2019, 11, 11864-11871.	2.8	27
190	Prediction of intrinsic electrocatalytic activity for hydrogen evolution reaction in Ti4X3 (Xâ€¯=â€¯C, N). Journal of Catalysis, 2020, 387, 12-16.	3.1	27
191	Janus single-layer group-III monochalcogenides: a promising visible-light photocatalyst. Journal Physics D: Applied Physics, 2019, 52, 455303.	1.3	26
192	Ag₂ZnSnS₄/Mo-mesh photoelectrode prepared by electroplating for efficient photoelectrochemical hydrogen generation. Journal of Materials Chemistry A, 2019, 7, 1647-1657.	5.2	26
193	Two-dimensional ferroelastic semiconductors in single-layer indium oxygen halide InOY (Y = Cl/Br). Physical Chemistry Chemical Physics, 2019, 21, 7440-7446.	1.3	26
194	Origin of the Increased Photocatalytic Performance of TiO2Nanocrystal Composed of Pure Core and Heavily Nitrogen-Doped Shell: A Theoretical Study. ACS Applied Materials & Interfaces, 2014, 6, 22815-22822.	4.0	25
195	Enhanced selectivity and activity for electrocatalytic reduction of CO₂ to CO on an anodized Zn/carbon/Ag electrode. Journal of Materials Chemistry A, 2019, 7, 16685-16689.	5.2	25
196	Construction of New Active Sites: Cu Substitution Enabled Surface Frustrated Lewis Pairs over Calcium Hydroxyapatite for CO₂ Hydrogenation. Advanced Science, 2021, 8, e2101382.	5.6	25
197	Magnetic properties of phthalocyanine-based organometallic nanowire. Applied Physics Letters, 2012, 101, 062405.	1.5	24
198	Computational Screening of Defective Group IVA Monochalcogenides as Efficient Catalysts for Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2019, 123, 11791-11797.	1.5	24

#	Article	IF	Citations
199	Tailoring the composition and structure of Ni3S2 by introduction of Co towards high efficiency energy storage device. Chemical Engineering Journal, 2021, 403, 126285.	6.6	23
200	Nitrogen vacancy enhanced photocatalytic selective oxidation of benzyl alcohol in g-C3N4. International Journal of Hydrogen Energy, 2021, 46, 37782-37791.	3.8	23
201	Landscape of DNA-like inorganic metal free double helical semiconductors and potential applications in photocatalytic water splitting. Journal of Materials Chemistry A, 2017, 5, 8484-8492.	5.2	22
202	TiN nanosheet arrays on Ti foils for high-performance supercapacitance. RSC Advances, 2018, 8, 12841-12847.	1.7	22
203	ZnO nanorods modified with noble metal-free Co₃O₄ nanoparticles as a photocatalyst for efficient ethylene degradation under light irradiation. Catalysis Science and Technology, 2019, 9, 6191-6198.	2.1	22
204	Intrinsic triferroicity in a two-dimensional lattice. Physical Review B, 2021, 103, .	1.1	22
205	Antiferromagnetic topological insulator in stable exfoliated two-dimensional materials. Physical Review B, 2020, 102, .	1.1	21
206	Borophosphene: A potential anchoring material for lithium-sulfur batteries. Applied Surface Science, 2021, 562, 150157.	3.1	21
207	Targeted Regulation of the Electronic States of Nickel Toward the Efficient Electrosynthesis of Benzonitrile and Hydrogen Production. ACS Applied Materials & Interfaces, 2021, 13, 56140-56150.	4.0	21
208	Nitric oxide reduction reaction for efficient ammonia synthesis on topological nodal-line semimetal Cu₂Si monolayer. Journal of Materials Chemistry A, 2022, 10, 8568-8577.	5.2	21
209	Two-dimensional magnetoelectric multiferroics in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>MnSTe</mml:mi><mml:mo>/</mml:mo><mml:msub><mml heterobilayer with ferroelectrically controllable skyrmions. Physical Review B, 2022, 105, .	3.7	21
210	Loss of Linear Band Dispersion and Trigonal Structure in Silicene on Ir(111). Journal of Physical Chemistry Letters, 2015, 6, 1065-1070.	2.1	20
211	Excited-State Properties of Janus Transition-Metal Dichalcogenides. Journal of Physical Chemistry C, 2020, 124, 1667-1673.	1.5	20
212	Nonvolatile Controlling Valleytronics by Ferroelectricity in 2H-VSe₂/Sc₂CO₂ van der Waals Heterostructure. Journal of Physical Chemistry C, 2021, 125, 2802-2809.	1.5	20
213	Atomically dispersed cobalt-based species anchored on polythiophene as an efficient electrocatalyst for oxygen evolution reaction. Applied Surface Science, 2021, 545, 148943.	3.1	19
214	Photo-induced photo-thermal synergy effect leading to efficient CO2 cycloaddition with epoxide over a Fe-based metal organic framework. Journal of Colloid and Interface Science, 2022, 625, 33-40.	5.0	19
215	Insights into the effect of inner polarization and multiple Ag-O units on high-efficient Ag-based photocatalyst. Applied Catalysis B: Environmental, 2017, 205, 211-218.	10.8	18
216	Hydrogenation of silicene on Ag(111) and formation of half-silicane. Journal of Materials Chemistry A, 2017, 5, 18128-18137.	5.2	18

#	Article	IF	Citations
217	Electronic properties of two-dimensional in-plane heterostructures of WS₂/WSe₂/MoS₂. Materials Research Express, 2018, 5, 046307.	0.8	18
218	Theoretical study on the photocatalytic properties of graphene oxide with single Au atom adsorption. Surface Science, 2018, 669, 71-78.	0.8	18
219	Enhanced electrocatalytic HER performance of non-noble metal nickel by introduction of divanadium trioxide. Electrochimica Acta, 2019, 320, 134535.	2.6	18
220	Single-Layer PtI2: A Multifunctional Material with Promising Photocatalysis toward the Oxygen Evolution Reaction and Negative Poissonâ€™s Ratio. ACS Applied Materials & Interfaces, 2019, 11, 31793-31798.	4.0	18
221	The mirror asymmetry induced nontrivial properties of polar WSSe/MoSSe heterostructures. Journal of Physics Condensed Matter, 2019, 31, 125003.	0.7	18
222	Monomolecular VB₂-doped MOFs for photocatalytic oxidation with enhanced stability, recyclability and selectivity. Journal of Materials Chemistry A, 2019, 7, 26934-26943.	5.2	18
223	Molybdenum Nitride Electrocatalysts for Hydrogen Evolution More Efficient than Platinum/Carbon: Mo₂N/CeO₂@Nickel Foam. ACS Applied Materials & Interfaces, 2020, 12, 29153-29161.	4.0	18
224	A magnetic topological insulator in two-dimensional EuCd₂Bi₂: giant gap with robust topology against magnetic transitions. Materials Horizons, 2021, 8, 956-961.	6.4	18
225	Two-dimensional transition metal borides as high activity and selectivity catalysts for ammonia synthesis. Nanoscale, 2021, 13, 17331-17339.	2.8	18
226	Anomalous valley Hall effect in antiferromagnetic monolayers. Npj 2D Materials and Applications, 2022, 6, .	3.9	18
227	Novel high-efficiency visible-light responsive Ag₄(GeO₄) photocatalyst. Catalysis Science and Technology, 2017, 7, 2318-2324.	2.1	17
228	Tunable Schottky contacts in MSe₂/NbSe₂ (M = Mo and W) heterostructures and promising application potential in field-effect transistors. Physical Chemistry Chemical Physics, 2018, 20, 1897-1903.	1.3	17
229	Stabilizing quantum anomalous Hall topological phase in bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>M</mml:mi><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">T</mml:mi><mml:msub><mml:mi		

#	Article	IF	Citations
235	Ferromagnetic dual topological insulator in a two-dimensional honeycomb lattice. Materials Horizons, 2020, 7, 2431-2438.	6.4	16
236	Synergistic effect between boron containing metal-organic frameworks and light leading to enhanced CO2 cycloaddition with epoxides. Chemical Engineering Journal, 2022, 437, 135363.	6.6	16
237	Two-dimensional ferroelastic topological insulator with tunable topological edge states in single-layer ZrAsX (X = Br and Cl). Journal of Materials Chemistry C, 2019, 7, 9743-9747.	2.7	15
238	Interlayer coupling effect in van der Waals heterostructures of transition metal dichalcogenides. Frontiers of Physics, 2021, 16, 1.	2.4	15
239	Out-of-plane ferroelectricity and multiferroicity in elemental bilayer phosphorene, arsenene, and antimonene. Applied Physics Letters, 2021, 118, .	1.5	15
240	Quantum spin Hall effect in antiferromagnetic topological heterobilayers. Physical Review B, 2021, 103, .	1.1	15
241	Magnetism-mediated transition between crystalline and higher-order topological phases in NpSb. Physical Review B, 2021, 103, .	1.1	15
242	Enhanced singlet oxygen production over a photocatalytic stable metal organic framework composed of porphyrin and Ag. Journal of Colloid and Interface Science, 2021, 602, 300-306.	5.0	15
243	Promoting Electrocatalytic Reduction of CO₂ to C₂H₄ Production by Inhibiting C₂H₅OH Desorption from Cu₂O/C Composite. Small, 2022, 18, e2105212.	5.2	15
244	BiVO₄ quadrangular nanoprisms with highly exposed {101} facets for selective photocatalytic oxidation of benzylamine. Journal of Materials Chemistry A, 2022, 10, 19699-19709.	5.2	15
245	In-plane heterostructures of Sb/Bi with high carrier mobility. Nanotechnology, 2017, 28, 255201.	1.3	14
246	Effects of Ag Incorporation on the Band Structures and Conductivity Types of (Cu_{1â€x}Ag_x)₂ZnSnS₄ Solid Solutions. ChemPhotoChem, 2018, 2, 811-817.	1.5	14
247	Observation of intrinsic dark exciton in Janus-MoSSe heterosturcture induced by intrinsic electric field. Journal of Physics Condensed Matter, 2018, 30, 395001.	0.7	14
248	Enhanced photocatalytic activity towards H2 evolution over NiO via phosphonic acid surface modification with different functional groups. International Journal of Hydrogen Energy, 2019, 44, 16575-16581.	3.8	14
249	Post-synthetic platinum complex modification of a triazine based metal organic frameworks for enhanced photocatalytic H2 evolution. Journal of Solid State Chemistry, 2019, 271, 260-265.	1.4	14
250	Effect of point defects on electronic and excitonic properties in Janus-MoSSe monolayer. Physical Review B, 2021, 104, .	1.1	14
251	In situ integration of Fe3N@Co4N@CoFe alloy nanoparticles as efficient and stable electrocatalyst for overall water splitting. Electrochimica Acta, 2021, 395, 139218.	2.6	14
252	Antiferromagnetic ferroelastic multiferroics in single-layer VOX (X = Cl, Br) predicted from first-principles. Applied Physics Letters, 2021, 119, 173103.	1.5	14

#	Article	IF	Citations
253	Valley-dependent properties in two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cr</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> MXene predicted from first principles. Physical Review Materials, 2022, 6, .	2.4	14
254	Evolution of the linear band dispersion of monolayer and bilayer germanene on Cu(111). Physical Chemistry Chemical Physics, 2017, 19, 22844-22851.	1.3	13
255	Step-like band alignment and stacking-dependent band splitting in trilayer TMD heterostructures. Physical Chemistry Chemical Physics, 2018, 20, 25000-25008.	1.3	13
256	Two-Dimensional Valleytronics in Single-Layer t-ZrNY (Y = Cl, Br) Predicted from First Principles. Journal of Physical Chemistry C, 2020, 124, 20598-20604.	1.5	13
257	Coronene-Based 2D Metalâ€“Organic Frameworks: A New Family of Promising Single-Atom Catalysts for Nitrogen Reduction Reaction. Journal of Physical Chemistry C, 2021, 125, 20870-20876.	1.5	13
258	Single-valley state in a two-dimensional antiferromagnetic lattice. Physical Review B, 2021, 104, .	1.1	13
259	Excited-State Properties of CuInP₂S₆ Monolayer as Photocatalyst for Water Splitting. Journal of Physical Chemistry Letters, 2022, 13, 1972-1978.	2.1	13
260	Intertwined ferroelectricity and topological state in two-dimensional multilayer. Npj Computational Materials, 2021, 7, .	3.5	12
261	Tl₂S: a metal-shrouded two-dimensional semiconductor. Physical Chemistry Chemical Physics, 2018, 20, 14778-14784.	1.3	11
262	Highly effective and selective molecular nanowire catalysts for hydrogen and ammonia synthesis. Journal of Materials Chemistry A, 2020, 8, 26075-26084.	5.2	11
263	Synthesis of novel cubic Ni2Mo3N and its electronic structure regulation by vanadium doping towards high-efficient HER electrocatalyst. Electrochimica Acta, 2020, 337, 135689.	2.6	11
264	Spontaneous valley polarization in two-dimensional organometallic lattices. Physical Review B, 2021, 104, .	1.1	11
265	Enhanced many-body effects in 2- and 1-dimensional ZnO structures: A Green's function perturbation theory study. Journal of Chemical Physics, 2013, 139, 144703.	1.2	10
266	Hybridization Effects between Silicene/Silicene Oxides and Ag(111). Journal of Physical Chemistry C, 2016, 120, 20192-20198.	1.5	10
267	Modulation of silicene properties by AsSb with van der Waals interaction. RSC Advances, 2017, 7, 5827-5835.	1.7	10
268	Defect-engineered three-dimensional vanadium diselenide microflowers/nanosheets on carbon cloth by chemical vapor deposition for high-performance hydrogen evolution reaction. Nanotechnology, 2021, 32, 265402.	1.3	10
269	Host dependent electrocatalytic hydrogen evolution of Ni/TiO2 composites. Journal of Materials Chemistry A, 2021, 9, 6325-6334.	5.2	10
270	Borate-modulated amorphous NiFeB nanocatalysts as highly active and stable electrocatalysts for oxygen evolution reaction. Journal of Alloys and Compounds, 2022, 903, 163741.	2.8	10

#	Article	IF	Citations
271	Valley polarization caused by crystalline symmetry breaking. Materials Horizons, 2021, 8, 244-249.	6.4	9
272	Photothermal synergy for efficient dry reforming of CH₄ by an Ag/AgBr/CsPbBr₃ composite. Catalysis Science and Technology, 2022, 12, 1628-1636.	2.1	9
273	Interface effects between germanene and Au(1â€†1â€†1) from first principles. Journal Physics D: Applied Physics, 2017, 50, 115301.	1.3	8
274	InSe Monolayer: Promising Cocatalyst of g-C₃N₄ for Water Splitting under Visible Light. ACS Applied Energy Materials, 0, , .	2.5	8
275	Photostable Ag(I)-Based Metalâ€“Organic Framework: Synthesis, Structure, and Photocatalytic Selective Oxidation Properties. Inorganic Chemistry, 2020, 59, 16127-16131.	1.9	8
276	Dual topological insulator and insulator-semimetal transition in mirror-symmetric honeycomb materials. Physical Review B, 2019, 100, .	1.1	7
277	Room-Temperature Quantum Anomalous Hall Effect in Single-Layer CrP₂S₆. Journal of Physical Chemistry C, 2019, 123, 14707-14711.	1.5	7
278	Electronic and magnetic properties of the one-dimensional interfaces of two-dimensional lateral GeC/BP heterostructures. Physical Chemistry Chemical Physics, 2019, 21, 8856-8864.	1.3	7
279	Photoexcited charge carrier behaviors in solar energy conversion systems from theoretical simulations. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2020, 10, e1441.	6.2	7
280	Exciton manipulation in rippled transition metal dichalcogenides. Nanoscale, 2020, 12, 21124-21130.	2.8	7
281	Electronic Properties of Monolayer and van der Waals Bilayer of Janus TiClI. Journal of Physical Chemistry Letters, 2021, 12, 2245-2251.	2.1	7
282	Tl2O/WTe2 van der Waals heterostructure with tunable multiple band alignments. Journal of Chemical Physics, 2020, 152, 074703.	1.2	6
283	Single-atom catalysts of TMâ€“porphyrin for alkali oxygen batteries: reaction mechanism and universal design principle. Journal of Materials Chemistry A, 2021, 9, 16998-17005.	5.2	6
284	Engineering antiferromagnetic topological insulators in two-dimensional NaMnBi. Journal of Materials Chemistry C, 2021, 9, 16952-16958.	2.7	6
285	Engineering antiferromagnetic topological insulator by strain in two-dimensional rare-earth pnictide EuCd2Sb2. Applied Physics Letters, 2021, 119, .	1.5	6
286	p-orbital multiferroics in single-layer SiN. Applied Physics Letters, 2022, 120, .	1.5	6
287	Intrinsic ferromagnetic triferroicity in bilayer Tâ€²-VTe2. Applied Physics Letters, 2022, 120, .	1.5	6
288	Computational screening of MX (Mâ€‰â€‰=â€‰â€‰Ga, Ge, Sn, In; Xâ€‰â€‰=â€‰â€‰As, Se) van der Waa heterostructures as suitable candidates for solar cells. Journal Physics D: Applied Physics, 2019, 52, 335303.	1.3	5

#	Article	IF	Citations
289	Design and synthesis of BiVO4@CuOx as a photo assisted Fenton-like catalyst for efficient degradation of tetracycline. Surfaces and Interfaces, 2021, 26, 101380.	1.5	5
290	Antiferromagnetic topological crystalline insulator and mixed Weyl semimetal in two-dimensional NpAs monolayer. New Journal of Physics, 2021, 23, 123018.	1.2	5
291	Origin of the Enhanced Hydrogen Evolution Reaction Activity of Grain Boundaries in MoS₂ Monolayers. Journal of Physical Chemistry C, 2022, 126, 6215-6222.	1.5	5
292	Switchable quantum anomalous and spin Hall effects in honeycomb magnet EuCd₂As₂. New Journal of Physics, 2022, 24, 053038.	1.2	5
293	Janus Bi2XYZ monolayers for light harvesting and energy conversion from first-principles calculations. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 117, 113823.	1.3	4
294	High-temperature quantum anomalous Hall insulator in two-dimensional Bi2ON. Applied Physics Letters, 2020, 116, .	1.5	4
295	Robust Intrinsic Multiferroicity in a FeHfSe₃ Layer. Journal of Physical Chemistry Letters, 2021, 12, 8882-8888.	2.1	4
296	Steric effects in the hydrogen evolution reaction based on the TMX₄ active center: Feâ€“BHT as a case study. Physical Chemistry Chemical Physics, 2021, 23, 25239-25245.	1.3	4
297	Stoichiometric modulation on optical nonlinearity of 2D MoS x Se2â^'x alloys for photonic applications. Nanophotonics, 2021, .	2.9	4
298	Boosting hot electrons transfer via laser-induced atomic redistribution for plasmon-enhanced nitroreduction and single-particle study. Journal of Catalysis, 2022, 407, 115-125.	3.1	4
299	Hydrogen adsorption behavior on AXenes Na₂N and K₂N: a first-principles study. Materials Research Express, 2022, 9, 045501.	0.8	4
300	A new concept of atomically thin pâ€“n junction based on Ca₂N/Na₂N donorâ€“acceptor heterostructure: a first-principles study. Nanoscale, 0, , .	2.8	4
301	Single-Layer BI: A Multifunctional Semiconductor with Ferroelectricity, Ultrahigh Carrier Mobility, and Negative Poissonâ€™s Ratio. Physical Review Applied, 2021, 15, .	1.5	3
302	Valley-contrasting physics in a two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>p</mml:mi><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math> -orbital honeycomb lattice. Physical Review B, 2022, 105, .	1.1	3
303	Electronic Properties of Defective Janus MoSSe Monolayer. Journal of Physical Chemistry Letters, 2022, 13, 4807-4814.	2.1	3
304	Intrinsic valley-related multiple Hall effect in the two-dimensional organometallic lattice of NbTa-benzene. Physical Review B, 2022, 106, .	1.1	3
305	Ideal inert substrates for planar antimonene: h-BN and hydrogenated SiC(0001). Physical Chemistry Chemical Physics, 2018, 20, 23397-23402.	1.3	2
306	Propose two-dimensional Sb₂Te₂X (X = S, Se) with isotropic electron mobility and remarkable visible-light response. Physical Chemistry Chemical Physics, 2019, 21, 14904-14910.	1.3	2

#	Article	IF	Citations
307	Stable valley-layer coupling and design principle in 2D lattice. Applied Physics Letters, 2021, 119, 073101.	1.5	2
308	Vanadium Nitride/Porous Carbon Composites on Ni Foam for Highâ€Performance Supercapacitance. ChemistrySelect, 2019, 4, 11189-11195.	0.7	1
309	Diversity of structural and electronic properties ofPâ€“AuBr of different dimensions. Materials Research Express, 2019, 6, 065010.	0.8	1
310	Switchable quantum anomalous Hall effect in a ferromagnetic topological crystalline insulating NpSb monolayer. Journal Physics D: Applied Physics, 2022, 55, 305301.	1.3	1
311	Î³-Graphyne analogues based on As and Sb elements. Computational Materials Science, 2018, 150, 325-328.	1.4	0
312	In situ observation of photo-induced shortening of single Au nanorod for plasmon-enhanced formic acid dehydrogenation. , 2022, , 100014.		0