

# Engineering the Edges of MoS<sub>2</sub> (WS<sub>2</sub>) Exfoliation into Monolayers in Polar Micromolecular So

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Citation Report

#	ARTICLE	IF	CITATIONS
2	Heterostructured WS <sub>2</sub> /MoS <sub>2</sub> Ultrathin Nanosheets Integrated on CdS Nanorods to Promote Charge Separation and Migration and Improve Solar-Driven Photocatalytic Hydrogen Evolution. ChemSusChem, 2017, 10, 1563-1570.	3.6	150
3	Surface Tension Components Ratio: An Efficient Parameter for Direct Liquid Phase Exfoliation. ACS Applied Materials & Interfaces, 2017, 9, 9168-9175.	4.0	45
4	Photocatalytic Properties of MoS <sub>2</sub> /CdS Composites Prepared Via One-Pot Hydrothermal Synthesis in Hydrogen Evolution Reactions from Aqueous Solutions of Organic Acids. Theoretical and Experimental Chemistry, 2017, 53, 25-30.	0.2	1
5	Layered Double Hydroxide Nanosheets with Multiple Vacancies Obtained by Dry Exfoliation as Highly Efficient Oxygen Evolution Electrocatalysts. Angewandte Chemie, 2017, 129, 5961-5965.	1.6	84
6	Layered Double Hydroxide Nanosheets with Multiple Vacancies Obtained by Dry Exfoliation as Highly Efficient Oxygen Evolution Electrocatalysts. Angewandte Chemie - International Edition, 2017, 56, 5867-5871.	7.2	808
7	Very Large-Sized Transition Metal Dichalcogenides Monolayers from Fast Exfoliation by Manual Shaking. Journal of the American Chemical Society, 2017, 139, 9019-9025.	6.6	109
8	Light-Switchable Oxygen Vacancies in Ultrafine Bi <sub>5</sub> O <sub>7</sub> Br Nanotubes for Boosting Solar-Driven Nitrogen Fixation in Pure Water. Advanced Materials, 2017, 29, 1701774.	11.1	533
9	Engineering the crystallinity of MoS <sub>2</sub> monolayers for highly efficient solar hydrogen production. Journal of Materials Chemistry A, 2017, 5, 8591-8598.	5.2	69
10	Surfactant-Free Polar-to-Nonpolar Phase Transfer of Exfoliated MoS <sub>2</sub> Two-Dimensional Colloids. ChemPlusChem, 2017, 82, 732-741.	1.3	10
11	Rapid and highly efficient chemical exfoliation of layered MoS <sub>2</sub> and WS <sub>2</sub> . Journal of Alloys and Compounds, 2017, 699, 222-229.	2.8	79
12	Preparation, Structure and Functional Properties of MoS <sub>2</sub> and WS <sub>2</sub> Nanocomposites with Inorganic Chalcogenide Semiconductors: a Review. Theoretical and Experimental Chemistry, 2017, 53, 211-234.	0.2	3
13	Fluorine-free preparation of titanium carbide MXene quantum dots with high near-infrared photothermal performances for cancer therapy. Nanoscale, 2017, 9, 17859-17864.	2.8	299
14	Amorphous WS <sub>x</sub> as an efficient cocatalyst grown on CdS nanoparticles via photochemical deposition for enhanced visible-light-driven hydrogen evolution. Molecular Catalysis, 2017, 440, 190-198.	1.0	26
15	A novel Ni-S-W-C electrode for hydrogen evolution reaction in alkaline electrolyte. Materials Letters, 2017, 209, 532-534.	1.3	20
16	Large-scale production of defect-free MoS <sub>2</sub> nanosheets via pyrene-assisted liquid exfoliation. Journal of Alloys and Compounds, 2017, 728, 1030-1036.	2.8	28
17	A transparent CdS@TiO <sub>2</sub> nanotextile photoanode with boosted photoelectrocatalytic efficiency and stability. Nanoscale, 2017, 9, 15650-15657.	2.8	40
18	Lateral-Size-Mediated Efficient Oxygen Evolution Reaction: Insights into the Atomically Thin Quantum Dot Structure of NiFe <sub>2</sub> O <sub>4</sub> . ACS Catalysis, 2017, 7, 5557-5567.	5.5	156
19	Rational design of freestanding MoS <sub>2</sub> monolayers for hydrogen evolution reaction. Nano Energy, 2017, 39, 409-417.	8.2	107

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20	Crystal lattice distortion in ultrathin Co(OH) <sub>2</sub> nanosheets inducing elongated Co–O–OH bonds for highly efficient oxygen evolution reaction. <i>Green Chemistry</i> , 2017, 19, 5809-5817.	4.6	43
21	Environmental Applications of 2D Molybdenum Disulfide (MoS <sub>2</sub> ) Nanosheets. <i>Environmental Science &amp; Technology</i> , 2017, 51, 8229-8244.	4.6	647
22	Photocatalytic hydrogen evolution activity over MoS <sub>2</sub> /ZnIn <sub>2</sub> S <sub>4</sub> microspheres. <i>Chinese Journal of Catalysis</i> , 2017, 38, 2067-2075.	6.9	63
23	Covalent functionalization of MoS <sub>2</sub> nanosheets synthesized by liquid phase exfoliation to construct electrochemical sensors for Cd (II) detection. <i>Talanta</i> , 2018, 182, 38-48.	2.9	58
24	Liquid Phase Exfoliation of MoS <sub>2</sub> Assisted by Formamide Solvothermal Treatment and Enhanced Electrocatalytic Activity Based on (H <sub>3</sub> Mo <sub>12</sub> O <sub>40</sub> /P/MoS <sub>2</sub> ) <sub>n</sub> Multilayer Structure. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 5227-5237.	3.2	39
25	One-step hydrothermal preparation of MoS <sub>2</sub> loaded on CdMoO <sub>4</sub> /CdS hybrids for efficient photocatalytic hydrogen evolution. <i>Catalysis Communications</i> , 2018, 110, 10-13.	1.6	9
26	Flower-like SnO <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> heterojunctions: The face-to-face contact interface and improved photocatalytic properties. <i>Advanced Powder Technology</i> , 2018, 29, 1153-1157.	2.0	25
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29	Natural Sugar: A Green Assistance To Efficiently Exfoliate Inorganic Layered Nanomaterials. <i>Inorganic Chemistry</i> , 2018, 57, 5560-5566.	1.9	14
30	Preparation of Few-Layer MoS <sub>2</sub> Nanosheets via an Efficient Shearing Exfoliation Method. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 2838-2846.	1.8	45
31	Layered Aggregation with Steric Effect: Morphology-Homogeneous Semiconductor MoS <sub>2</sub> as an Alternative 2D Probe for Visual Immunoassay. <i>Small</i> , 2018, 14, 1703560.	5.2	26
32	Synergistically enhanced photocatalytic hydrogen evolution performance of ZnCdS by co-loading graphene quantum dots and PdS dual cocatalysts under visible light. <i>Journal of Solid State Chemistry</i> , 2018, 260, 23-30.	1.4	27
33	NiS <sub>x</sub> 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. <i>ACS Catalysis</i> , 2018, 8, 1532-1545.	5.5	137
34	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. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 2810-2818.	4.0	112
35	Production of mono- to few-layer MoS <sub>2</sub> nanosheets in isopropanol by a salt-assisted direct liquid-phase exfoliation method. <i>Journal of Colloid and Interface Science</i> , 2018, 515, 27-31.	5.0	57
36	Solvothermal fabrication of MoS <sub>2</sub> anchored on ZnIn <sub>2</sub> S <sub>4</sub> microspheres with boosted photocatalytic hydrogen evolution activity. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 6977-6986.	3.8	65
37	Ultra-small freestanding amorphous molybdenum sulfide colloidal nanodots for highly efficient photocatalytic hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2018, 232, 446-453.	10.8	63

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39	Direct Exfoliation of High-Quality, Atomically Thin MoSe <sub>2</sub> Layers in Water. <i>Advanced Sustainable Systems</i> , 2018, 2, 1700107.	2.7	11
40	Defect Mitigation of Solution-Processed 2D WSe <sub>2</sub> Nanoflakes for Solar-to-Hydrogen Conversion. <i>Nano Letters</i> , 2018, 18, 215-222.	4.5	70
41	Group 6 transition metal dichalcogenide nanomaterials: synthesis, applications and future perspectives. <i>Nanoscale Horizons</i> , 2018, 3, 90-204.	4.1	309
42	Understanding the exfoliation and dispersion of MoS <sub>2</sub> nanosheets in pure water. <i>Journal of Colloid and Interface Science</i> , 2018, 517, 204-212.	5.0	103
43	Remarkably enhanced photocatalytic hydrogen evolution over MoS <sub>2</sub> nanosheets loaded on uniform CdS nanospheres. <i>Applied Surface Science</i> , 2018, 430, 523-530.	3.1	104
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50	Synthesis of MoS <sub>2</sub> nanosheets for mercury speciation analysis by HPLC-UV-HG-AFS. <i>RSC Advances</i> , 2018, 8, 18364-18371.	1.7	20
51	A general strategy for the functionalization of two-dimensional metal chalcogenides. <i>Nanoscale</i> , 2018, 10, 10657-10663.	2.8	9
52	Engineering MoS <sub>2</sub> nanomesh with holes and lattice defects for highly active hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2018, 239, 537-544.	10.8	219
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54	Atomic-Scale Core/Shell Structure Engineering Induces Precise Tensile Strain to Boost Hydrogen Evolution Catalysis. <i>Advanced Materials</i> , 2018, 30, e1707301.	11.1	148
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69	Amorphous MoS <sub>2</sub> decorated on uniform Cd <sub>0.8</sub> Zn <sub>0.2</sub> S microspheres with dramatically improved photocatalytic hydrogen evolution performance. New Journal of Chemistry, 2019, 43, 7846-7854.	1.4	9
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75	Electrochemical Hydrogen Evolution over Hydrothermally Synthesized Re-Doped MoS <sub>2</sub> Flower-Like Microspheres. Molecules, 2019, 24, 4631.	1.7	24
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88	Coupling of Solar Energy and Thermal Energy for Carbon Dioxide Reduction: Status and Prospects. Angewandte Chemie - International Edition, 2020, 59, 8016-8035.	7.2	323
89	Tannic acid modified MoS <sub>2</sub> nanosheet membranes with superior water flux and ion/dye rejection. Journal of Colloid and Interface Science, 2020, 560, 177-185.	5.0	45
90	Wafer-Scale and Low-Temperature Growth of 1T-WS <sub>2</sub> Film for Efficient and Stable Hydrogen Evolution Reaction. Small, 2020, 16, e1905000.	5.2	53
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94	Robust water splitting on staggered gap heterojunctions based on WO <sub>3</sub> -WS <sub>2</sub> /MoS <sub>2</sub> nanostructures. Renewable Energy, 2020, 162, 504-512.	4.3	13
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97	Enhanced Charge Transfer in Atomically Thick 2H-WS <sub>2</sub> Nanosheets™ Electron Transport Layers of Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000260.	3.1	26
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105	Visible-Light-Driven Nitrogen Fixation Catalyzed by Bi <sub>5</sub> O <sub>7</sub> Br Nanostructures: Enhanced Performance by Oxygen Vacancies. Journal of the American Chemical Society, 2020, 142, 12430-12439.	6.6	260
106	Improved charge carrier dynamics of WS <sub>2</sub> nanostructures by the way of CdS@WS <sub>2</sub> heterostructures for use in water splitting and water purification. Sustainable Energy and Fuels, 2020, 4, 4096-4107.	2.5	13
107	Fabrication of Ultrathin MoS <sub>2</sub> Nanosheets and Application on Adsorption of Organic Pollutants and Heavy Metals. Processes, 2020, 8, 504.	1.3	29
108	Facile Preparation of WO <sub>3</sub> Dots with Remarkably Low Toxicity and Uncompromised Activity as Co-reactants for Clinical Diagnosis by Electrochemiluminescence. Angewandte Chemie - International Edition, 2020, 59, 16747-16754.	7.2	77
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110	Facile Preparation of WO <sub>3</sub> x Dots with Remarkably Low Toxicity and Uncompromised Activity as Co-reactants for Clinical Diagnosis by Electrochemiluminescence. <i>Angewandte Chemie</i> , 2020, 132, 16890.	1.6	1
111	Few-layer WS <sub>2</sub> decorating ZnIn <sub>2</sub> S <sub>4</sub> with markedly promoted charge separation and photocatalytic H <sub>2</sub> evolution activity. <i>Applied Surface Science</i> , 2020, 514, 145965.	3.1	63
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115	Simultaneous exfoliation and colloidal formation of few-layer semiconducting MoS <sub>2</sub> sheets in water. <i>Chemical Communications</i> , 2020, 56, 2035-2038.	2.2	7
116	Recent Progress on Exploring Stable Metal-Organic Frameworks for Photocatalytic Solar Fuel Production. <i>Solar Rrl</i> , 2020, 4, 1900547.	3.1	47
117	Efficient Visible Light Driven Ammonia Synthesis on Sandwich Structured C <sub>3</sub> N <sub>4</sub> /MoS <sub>2</sub> /Mn <sub>3</sub> O <sub>4</sub> catalyst. <i>Applied Catalysis B: Environmental</i> , 2021, 281, 119476.	10.8	37
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120	Direct synthesis of 1T-phase MoS <sub>2</sub> nanosheets with abundant sulfur-vacancies through (CH <sub>3</sub> ) <sub>4</sub> N <sup>+</sup> cation-intercalation for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13996-14003.	5.2	17
121	Realization of Wafer-scale 1Tâ€MoS <sub>2</sub> Film for Efficient Hydrogen Evolution Reaction. <i>ChemSusChem</i> , 2021, 14, 1344-1350.	3.6	21
122	Graphdiyne@NiO <sub>x</sub> (OH) <sub>y</sub> heterostructure for efficient overall water splitting. <i>Materials Chemistry Frontiers</i> , 2021, 5, 5305-5311.	3.2	13
123	Exfoliation of large-flake, few-layer MoS <sub>2</sub> nanosheets mediated by carbon nanotubes. <i>Chemical Communications</i> , 2021, 57, 4400-4403.	2.2	10
124	Amorphous CoS <sub>x</sub> Growth on CaTiO <sub>3</sub> Nanocubes Formed S-Scheme Heterojunction for Photocatalytic Hydrogen Production. <i>Energy &amp; Fuels</i> , 2021, 35, 6231-6239.	2.5	17
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126	Ru-Doped CuO/MoS <sub>2</sub> Nanostructures as Bifunctional Water-Splitting Electrocatalysts in Alkaline Media. <i>ACS Applied Nano Materials</i> , 2021, 4, 7675-7685.	2.4	29
127	Aqueous Adsorption of Heavy Metals on Metal Sulfide Nanomaterials: Synthesis and Application. <i>Water (Switzerland)</i> , 2021, 13, 1843.	1.2	28



#	ARTICLE	IF	CITATIONS
128	Carbon dots mediated charge sinking effect for boosting hydrogen evolution in Cu-In-Zn-S QDs/MoS <sub>2</sub> photocatalysts. <i>Applied Catalysis B: Environmental</i> , 2022, 301, 120755.	10.8	63
129	Bioinspired Precious-Metal-Free N <sub>4</sub> Macrocycle as an Electrocatalyst for the Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 10826-10834.	2.5	15
130	Effect of composition of few-layered transition metal dichalcogenide nanosheets on separation mechanism of hydrogen selective membranes. <i>Journal of Membrane Science</i> , 2021, 634, 119419.	4.1	6
131	Molecular Dynamics Simulations of Water Anchored in Multilayered Nanoporous MoS <sub>2</sub> Membranes: Implications for Desalination. <i>ACS Applied Nano Materials</i> , 2021, 4, 10467-10476.	2.4	12
132	Raspberry Plant-like CNT@MoS <sub>2</sub> /Cd <sub>0.5</sub> Zn <sub>0.5</sub> S ternary photocatalytic systems for High-efficient hydrogen evolution. <i>Applied Surface Science</i> , 2021, 565, 150507.	3.1	21
133	Efficient mineralization of TBBPA via an integrated photocatalytic reduction/oxidation process mediated by MoS <sub>2</sub> /SnIn <sub>4</sub> S <sub>8</sub> photocatalyst. <i>Chemosphere</i> , 2021, 285, 131542.	4.2	30
134	Local electrochemical activity of transition metal dichalcogenides and their heterojunctions on 3D-printed nanocarbon surfaces. <i>Nanoscale</i> , 2021, 13, 5324-5332.	2.8	15
135	2D MXene-Based Materials for Electrocatalysis. <i>Transactions of Tianjin University</i> , 2020, 26, 149-171.	3.3	65
136	Effective promotion of spacial charge separation in direct Z-scheme WO <sub>3</sub> /CdS/WS <sub>2</sub> tandem heterojunction with enhanced visible-light-driven photocatalytic H <sub>2</sub> evolution. <i>Chemical Engineering Journal</i> , 2020, 398, 125602.	6.6	73
137	Highly efficient solution exfoliation of few-layer molybdenum disulfide nanosheets for photocatalytic hydrogen evolution. <i>Journal of Colloid and Interface Science</i> , 2020, 577, 38-47.	5.0	11
138	Atomically Thin Materials for Next-Generation Rechargeable Batteries. <i>Chemical Reviews</i> , 2022, 122, 957-999.	23.0	87
139	A biodegradable polymer-assisted efficient and universal exfoliation route to a stable few layer dispersion of transition metal dichalcogenides. <i>Materials Chemistry and Physics</i> , 2022, 276, 125347.	2.0	6
140	Ultrafast synchrotron X-ray imaging and multiphysics modelling of liquid phase fatigue exfoliation of graphite under ultrasound. <i>Carbon</i> , 2022, 186, 227-237.	5.4	14
141	Controlling 1T/2H heterophase junctions in the MoS <sub>2</sub> microsphere for the highly efficient photocatalytic hydrogen evolution. <i>Catalysis Science and Technology</i> , 2021, 11, 7914-7921.	2.1	4
142	Electrochemically Exfoliated WS <sub>2</sub> Nanosheets for the Electrochemical Impedimetric Detection of NADH. <i>ChemElectroChem</i> , 2021, 8, 4597-4604.	1.7	3
143	High-yield exfoliation of MoS <sub>2</sub> (WS <sub>2</sub> ) monolayers towards efficient photocatalytic hydrogen evolution. <i>Chemical Engineering Journal</i> , 2022, 431, 133286.	6.6	14
144	Insight into the Role of H <sub>2</sub> in WS <sub>2</sub> Growth by Chemical Vapor Deposition. <i>ACS Applied Electronic Materials</i> , 2021, 3, 5138-5146.	2.0	5
145	Surface Brønsted-Lewis dual acid sites for high-efficiency dinitrogen photofixation in pure water. <i>Journal of Energy Chemistry</i> , 2021, , .	7.1	5

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146	The 10th anniversary of MXenes: Challenges and prospects for their surface modification toward future biotechnological applications. <i>Advanced Drug Delivery Reviews</i> , 2022, 182, 114099.	6.6	28
147	High-efficiency 2D nanosheet exfoliation by a solid suspension-improving method. <i>Nanotechnology</i> , 2022, 33, 185602.	1.3	5
148	MoS <sub>2</sub> /CdS rod-like nanocomposites as high-performance visible light photocatalyst for water splitting photocatalytic hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 8247-8260.	3.8	59
150	MoS <sub>2</sub> nanosheets for the detoxification of Hg <sup>2+</sup> in living cells. <i>Materials Advances</i> , 0, , .	2.6	0
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152	Recent advances in <scp>MXene</scp> as electrocatalysts for sustainable energy generation: A review on surface engineering and compositing of <scp>MXene</scp>. <i>International Journal of Energy Research</i> , 2022, 46, 8625-8656.	2.2	26
153	Rational Design of Better Hydrogen Evolution Electrocatalysts for Water Splitting: A Review. <i>Advanced Science</i> , 2022, 9, e2200307.	5.6	121
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155	Can the Production of 2D Crystals be Driven by Differential Temperature? Research with MoS <sub>2</sub> as An Example. <i>Crystal Research and Technology</i> , 2022, 57, .	0.6	2
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160	Photoelectrochemical Enhancement of Graphene@WS <sub>2</sub> Nanosheets for Water Splitting Reaction. <i>Nanomaterials</i> , 2022, 12, 1914.	1.9	4
161	Strategies for Controlled Growth of Transition Metal Dichalcogenides by Chemical Vapor Deposition for Integrated Electronics. <i>ACS Materials Au</i> , 2022, 2, 665-685.	2.6	16
162	Spontaneous heteroassembly of 2D semiconducting van der Waals materials in random solution phase. <i>Materials Today</i> , 2022, 58, 18-29.	8.3	5
163	Facile and scalable preparation of 2D-MoS <sub>2</sub> /graphene oxide composite for supercapacitor. <i>Ionics</i> , 2022, 28, 5223-5232.	1.2	1
164	MoS <sub>2</sub> and MoSe <sub>2</sub> Nanosheets as Triggers for Glutathione Dimerization in Solution and Glutathione Oxidation in Live Cells. <i>ACS Applied Nano Materials</i> , 2022, 5, 10583-10595.	2.4	5
165	2022 Pioneers in Energy Research: Jinhua Ye. <i>Energy &amp; Fuels</i> , 2022, 36, 11269-11274.	2.5	2

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166	Fabrication of TaON/CdS Heterostructures for Enhanced Photocatalytic Hydrogen Evolution under Visible Light Irradiation. <i>Catalysts</i> , 2022, 12, 1110.	1.6	3
167	Few-layered MoS2 anchored on 2D porous C3N4 nanosheets for Pt-free photocatalytic hydrogen evolution. <i>Nano Research</i> , 2023, 16, 3524-3535.	5.8	19
168	Systematic study: From worldwide-renowned drink to low-cost solvent for non-organic synthesis of two-dimensional tungsten disulfide. <i>Surfaces and Interfaces</i> , 2022, , 102387.	1.5	0
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170	Regulating Charge Carrier's Transportation rate via Bridging Ternary Heterojunctions Enabling CdS nanorods Solar Driven Hydrogen Evolution Rate. <i>Dalton Transactions</i> , 0, , .	1.6	4
171	Recent advances in understanding and design of efficient hydrogen evolution electrocatalysts for water splitting: A comprehensive review. <i>Advances in Colloid and Interface Science</i> , 2023, 311, 102811.	7.0	17
172	Assessing recent progress in MXene-based nanomaterials for oxygen evolution reactions. <i>International Journal of Hydrogen Energy</i> , 2024, 52, 293-301.	3.8	3