

# Enhanced Hydrogen Evolution Catalysis from Chemical MoS<sub>2</sub> Nanosheets

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Citation Report

#	ARTICLE	IF	CITATIONS
40	First-row transition metal dichalcogenide catalysts for hydrogen evolution reaction. <i>Energy and Environmental Science</i> , 2013, 6, 3553.	15.6	946
41	Two-Dimensional Hybrid Nanosheets of Tungsten Disulfide and Reduced Graphene Oxide as Catalysts for Enhanced Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13751-13754.	7.2	474
42	Electrochemical Control of Photoluminescence in Two-Dimensional MoS <sub>2</sub> Nanoflakes. <i>ACS Nano</i> , 2013, 7, 10083-10093.	7.3	282
43	Conducting MoS <sub>2</sub> Nanosheets as Catalysts for Hydrogen Evolution Reaction. <i>Nano Letters</i> , 2013, 13, 6222-6227.	4.5	1,948
44	Site-Dependent Free Energy Barrier for Proton Reduction on MoS <sub>2</sub> Edges. <i>Journal of Physical Chemistry C</i> , 2013, 117, 21772-21777.	1.5	26
45	Controllable Disorder Engineering in Oxygen-Incorporated MoS <sub>2</sub> Ultrathin Nanosheets for Efficient Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2013, 135, 17881-17888.	6.6	2,107
46	Electrodeposited Cobalt-Sulfide Catalyst for Electrochemical and Photoelectrochemical Hydrogen Generation from Water. <i>Journal of the American Chemical Society</i> , 2013, 135, 17699-17702.	6.6	540
47	Highly Effective Visible-Light-Induced H <sub>2</sub> Generation by Single-Layer 1T-MoS <sub>2</sub> and a Nanocomposite of Few-Layer 2H-MoS <sub>2</sub> with Heavily Nitrogenated Graphene. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13057-13061.	7.2	438
48	Electrochemical tuning of vertically aligned MoS <sub>2</sub> nanofilms and its application in improving hydrogen evolution reaction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 19701-19706.	3.3	894
49	Mixed Close-Packed Cobalt Molybdenum Nitrides as Non-noble Metal Electrocatalysts for the Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2013, 135, 19186-19192.	6.6	897
50	Highly efficient electrocatalytic hydrogen production by nickel promoted molybdenum sulfide microspheres catalysts. <i>RSC Advances</i> , 2013, 3, 21231.	1.7	91
51	Outstanding mechanical properties of monolayer MoS <sub>2</sub> and its application in elastic energy storage. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 19427.	1.3	235
52	Synthesis of tantalum carbide and nitride nanoparticles using a reactive mesoporous template for electrochemical hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2013, 1, 12606.	5.2	72
54	Two-dimensional ferromagnet/semiconductor transition metal dichalcogenide contacts: $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle \text{p} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -type Schottky barrier and spin-injection control. <i>Physical Review B</i> , 2013, 88, .	1.1	58
55	Effects of edge hydrogenation on structural stability, electronic, and magnetic properties of WS <sub>2</sub> nanoribbons. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	24
58	Preparation, Applications of Two-Dimensional Graphene-like Molybdenum Disulfide. <i>Integrated Ferroelectrics</i> , 2014, 158, 26-42.	0.3	20
59	Nitrogen-doped carbon nanotube supported iron phosphide nanocomposites for highly active electrocatalysis of the hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2014, 149, 324-329.	2.6	79
60	Tungsten Phosphide Nanorod Arrays Directly Grown on Carbon Cloth: A Highly Efficient and Stable Hydrogen Evolution Cathode at All pH Values. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 21874-21879.	4.0	279

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61	Zirconium trisulfide ultrathin nanosheets as efficient catalysts for water oxidation in both alkaline and neutral solutions. <i>Inorganic Chemistry Frontiers</i> , 2014, 1, 751-756.	3.0	64
62	Electrochemistry of Transition Metal Dichalcogenides: Strong Dependence on the Metal-to-Chalcogen Composition and Exfoliation Method. <i>ACS Nano</i> , 2014, 8, 12185-12198.	7.3	288
63	Facile Synthesis of MoS <sub>2</sub> @CNT as an Effective Catalyst for Hydrogen Production in Microbial Electrolysis Cells. <i>ChemElectroChem</i> , 2014, 1, 1828-1833.	1.7	107
65	Enhanced Lithium-Ion Storage Performance from Three-Dimensional MoS <sub>2</sub> Nanosheets/Carbon Nanotube Paper. <i>ChemElectroChem</i> , 2014, 1, 1118-1125.	1.7	43
66	Design of Two-Dimensional, Ultrathin MoS <sub>2</sub> Nanoplates Fabricated Within One-Dimensional Carbon Nanofibers With Thermosensitive Morphology: High-Performance Electrocatalysts For The Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 22126-22137.	4.0	102
67	Chemically Exfoliated MoS <sub>2</sub> Nanosheets as an Efficient Catalyst for Reduction Reactions in the Aqueous Phase. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 21702-21710.	4.0	126
68	Characterization of few-layer 1T-MoSe <sub>2</sub> and its superior performance in the visible-light induced hydrogen evolution reaction. <i>APL Materials</i> , 2014, 2, .	2.2	222
69	Will Solar-Driven Water-Splitting Devices See the Light of Day?. <i>Chemistry of Materials</i> , 2014, 26, 407-414.	3.2	654
70	Cobalt-Embedded Nitrogen-Rich Carbon Nanotubes Efficiently Catalyze Hydrogen Evolution Reaction at All pH Values. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 4372-4376.	7.2	857
71	Graphene and Graphene-Like Layered Transition Metal Dichalcogenides in Energy Conversion and Storage. <i>Small</i> , 2014, 10, 2165-2181.	5.2	535
72	Centered Honeycomb NiSe <sub>2</sub> Nanoribbons: Structure and Electronic Properties. <i>Journal of Physical Chemistry C</i> , 2014, 118, 3295-3304.	1.5	27
73	Supercapacitor Electrodes Obtained by Directly Bonding 2D MoS <sub>2</sub> on Reduced Graphene Oxide. <i>Advanced Energy Materials</i> , 2014, 4, 1301380.	10.2	426
74	Layered transition metal dichalcogenides for electrochemical energy generation and storage. <i>Journal of Materials Chemistry A</i> , 2014, 2, 8981-8987.	5.2	552
77	Carbon Nanotubes Decorated with CoP Nanocrystals: A Highly Active Non-Noble-Metal Nanohybrid Electrocatalyst for Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6710-6714.	7.2	939
78	Ultrathin WS <sub>2</sub> Nanoflakes as a High-Performance Electrocatalyst for the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7860-7863.	7.2	622
79	Electrochemical Tuning of MoS <sub>2</sub> Nanoparticles on Three-Dimensional Substrate for Efficient Hydrogen Evolution. <i>ACS Nano</i> , 2014, 8, 4940-4947.	7.3	566
80	Recent Development of Molybdenum Sulfides as Advanced Electrocatalysts for Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2014, 4, 1693-1705.	5.5	769
81	Multiple Phases of Molybdenum Carbide as Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6407-6410.	7.2	685

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82	Synthesis and hydrogen-evolution activity of tungsten selenide thin films deposited on tungsten foils. <i>Journal of Electroanalytical Chemistry</i> , 2014, 716, 45-48.	1.9	51
83	Efficient Photoelectrochemical Hydrogen Generation Using Heterostructures of Si and Chemically Exfoliated Metallic MoS <sub>2</sub> . <i>Journal of the American Chemical Society</i> , 2014, 136, 8504-8507.	6.6	379
84	General synthesis of noble metal (Au, Ag, Pd, Pt) nanocrystal modified MoS <sub>2</sub> nanosheets and the enhanced catalytic activity of Pd@MoS <sub>2</sub> for methanol oxidation. <i>Nanoscale</i> , 2014, 6, 5762-5769.	2.8	311
85	Morphology dependence of molybdenum disulfide transparent counter electrode in dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2014, 2, 3919.	5.2	151
86	Synthesis of high-edge exposure MoS <sub>2</sub> nano flakes. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	8
87	Layer-Dependent Electrocatalysis of MoS <sub>2</sub> for Hydrogen Evolution. <i>Nano Letters</i> , 2014, 14, 553-558.	4.5	667
88	Recent advances in layered transition metal dichalcogenides for hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2014, 2, 5979-5985.	5.2	258
89	Surface functionalization of MoS <sub>2</sub> with POSS for enhancing thermal, flame-retardant and mechanical properties in PVA composites. <i>RSC Advances</i> , 2014, 4, 3253-3262.	1.7	98
90	Graphitic Carbon Nitride Nanoribbons: Graphene-Assisted Formation and Synergic Function for Highly Efficient Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 13934-13939.	7.2	470
91	Unconventional Pore and Defect Generation in Molybdenum Disulfide: Application in High-Rate Lithium-Ion Batteries and the Hydrogen Evolution Reaction. <i>ChemSusChem</i> , 2014, 7, 2489-2495.	3.6	82
92	High Electrochemical Selectivity of Edge versus Terrace Sites in Two-Dimensional Layered MoS <sub>2</sub> Materials. <i>Nano Letters</i> , 2014, 14, 7138-7144.	4.5	269
93	Catalytic Strategy for Efficient Degradation of Nitroaromatic Pesticides by Using Gold Nanoflower. <i>Journal of Agricultural and Food Chemistry</i> , 2014, 62, 10638-10645.	2.4	27
94	Self-Supported Cu <sub>3</sub> P Nanowire Arrays as an Integrated High-Performance Three-Dimensional Cathode for Generating Hydrogen from Water. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 9577-9581.	7.2	784
95	Synthesis and Stability of Two-Dimensional Ge/Sn Graphane Alloys. <i>Chemistry of Materials</i> , 2014, 26, 6941-6946.	3.2	42
96	One-step synthesis of cubic pyrite-type CoSe <sub>2</sub> at low temperature for efficient hydrogen evolution reaction. <i>RSC Advances</i> , 2014, 4, 54344-54348.	1.7	51
97	Self-Supported FeP Nanorod Arrays: A Cost-Effective 3D Hydrogen Evolution Cathode with High Catalytic Activity. <i>ACS Catalysis</i> , 2014, 4, 4065-4069.	5.5	419
98	Closely Interconnected Network of Molybdenum Phosphide Nanoparticles: A Highly Efficient Electrocatalyst for Generating Hydrogen from Water. <i>Advanced Materials</i> , 2014, 26, 5702-5707.	11.1	783
99	Monolayer MoS <sub>2</sub> Films Supported by 3D Nanoporous Metals for High-Efficiency Electrocatalytic Hydrogen Production. <i>Advanced Materials</i> , 2014, 26, 8023-8028.	11.1	299

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100	Easy incorporation of single-walled carbon nanotubes into two-dimensional MoS <sub>2</sub> for high-performance hydrogen evolution. <i>Nanotechnology</i> , 2014, 25, 465401.	1.3	57
101	Precise Tuning of the Charge Transfer Kinetics and Catalytic Properties of MoS <sub>2</sub> Materials via Electrochemical Methods. <i>Chemistry - A European Journal</i> , 2014, 20, 17426-17432.	1.7	73
102	Spontaneous exfoliation and tailoring of MoS <sub>2</sub> in mixed solvents. <i>Chemical Communications</i> , 2014, 50, 15936-15939.	2.2	113
103	Layer-controlled synthesis of graphene-like MoS <sub>2</sub> from single source organometallic precursor for Li-ion batteries. <i>RSC Advances</i> , 2014, 4, 16716.	1.7	28
104	Magnetic metal phosphide nanorods as effective hydrogen-evolution electrocatalysts. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 18919-18928.	3.8	62
105	Site-specific catalytic activity in exfoliated MoS <sub>2</sub> single-layer polytypes for hydrogen evolution: basal plane and edges. <i>Journal of Materials Chemistry A</i> , 2014, 2, 20545-20551.	5.2	150
106	NiP <sub>2</sub> nanosheet arrays supported on carbon cloth: an efficient 3D hydrogen evolution cathode in both acidic and alkaline solutions. <i>Nanoscale</i> , 2014, 6, 13440-13445.	2.8	400
107	Enhanced Electrocatalytic Activity of MoS <sub>2</sub> on TCNQ-Treated Electrode for Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 17679-17685.	4.0	78
108	Catalyzing the Hydrogen Evolution Reaction (HER) with Molybdenum Sulfide Nanomaterials. <i>ACS Catalysis</i> , 2014, 4, 3957-3971.	5.5	1,355
109	Engineering crystalline structures of two-dimensional MoS <sub>2</sub> sheets for high-performance organic solar cells. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7727-7733.	5.2	142
110	Controlled synthesis of FeP nanorod arrays as highly efficient hydrogen evolution cathode. <i>Journal of Materials Chemistry A</i> , 2014, 2, 17263-17267.	5.2	99
111	MoS <sub>2</sub> nanoparticles and h-BN nanosheets from direct exfoliation of bulk powder: one-step synthesis method. <i>Materials Research Express</i> , 2014, 1, 035038.	0.8	17
112	A 3D hybrid of layered MoS <sub>2</sub> /nitrogen-doped graphene nanosheet aerogels: an effective catalyst for hydrogen evolution in microbial electrolysis cells. <i>Journal of Materials Chemistry A</i> , 2014, 2, 13795-13800.	5.2	198
113	Chemically exfoliated ReS <sub>2</sub> nanosheets. <i>Nanoscale</i> , 2014, 6, 12458-12462.	2.8	160
114	Enhanced Electrocatalysis for Hydrogen Evolution Reactions from WS <sub>2</sub> Nanoribbons. <i>Advanced Energy Materials</i> , 2014, 4, 1301875.	10.2	128
115	Cobalt Sulfide Nanosheet/Graphene/Carbon Nanotube Nanocomposites as Flexible Electrodes for Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12594-12599.	7.2	252
116	MoS <sub>2</sub> nanosheet/Mo <sub>2</sub> C-embedded N-doped carbon nanotubes: synthesis and electrocatalytic hydrogen evolution performance. <i>Journal of Materials Chemistry A</i> , 2014, 2, 18715-18719.	5.2	109
117	Component-Controllable WS <sub>2</sub> /Se <sub>2</sub> Nanotubes for Efficient Hydrogen Evolution Reaction. <i>ACS Nano</i> , 2014, 8, 8468-8476.	7.3	317

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118	Electrochemically induced Fenton reaction of few-layer MoS <sub>2</sub> nanosheets: preparation of luminescent quantum dots via a transition of nanoporous morphology. <i>Nanoscale</i> , 2014, 6, 9831-9838.	2.8	141
119	CoP nanostructures with different morphologies: synthesis, characterization and a study of their electrocatalytic performance toward the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2014, 2, 14634.	5.2	227
120	NixSy-MoS <sub>2</sub> hybrid microspheres: One-pot hydrothermal synthesis and their application as a novel hydrogen evolution reaction electrocatalyst with enhanced activity. <i>Electrochimica Acta</i> , 2014, 137, 504-510.	2.6	46
121	<i>Operando</i> Synthesis of Macroporous Molybdenum Diselenide Films for Electrocatalysis of the Hydrogen-Evolution Reaction. <i>ACS Catalysis</i> , 2014, 4, 2866-2873.	5.5	122
122	CoP Nanosheet Arrays Supported on a Ti Plate: An Efficient Cathode for Electrochemical Hydrogen Evolution. <i>Chemistry of Materials</i> , 2014, 26, 4326-4329.	3.2	285
123	A Cost-Effective 3D Hydrogen Evolution Cathode with High Catalytic Activity: FeP Nanowire Array as the Active Phase. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12855-12859.	7.2	816
124	Strain engineering of WS <sub>2</sub> , WSe <sub>2</sub> , and WTe <sub>2</sub> . <i>RSC Advances</i> , 2014, 4, 34561.	1.7	279
125	Molecular Chalcogenides (ChalcoPolyoxometalates): A Family of Functional Materials with Emergent Properties. <i>Chemistry - A European Journal</i> , 2014, 20, 10554-10560.	1.7	8
126	Photoanode Current of Large-Area MoS <sub>2</sub> Ultrathin Nanosheets with Vertically Mesh-Shaped Structure on Indium Tin Oxide. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 5983-5987.	4.0	79
127	Nanometer-Sized MoS <sub>2</sub> Clusters on Graphene Flakes for Catalytic Formic Acid Decomposition. <i>ACS Catalysis</i> , 2014, 4, 3950-3956.	5.5	49
128	Nanostructured hydrotreating catalysts for electrochemical hydrogen evolution. <i>Chemical Society Reviews</i> , 2014, 43, 6555.	18.7	2,037
129	The design and construction of 3D rose-petal-shaped MoS <sub>2</sub> hierarchical nanostructures with structure-sensitive properties. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7680.	5.2	70
130	Enabling Silicon for Solar-Fuel Production. <i>Chemical Reviews</i> , 2014, 114, 8662-8719.	23.0	329
131	A novel three dimensional semimetallic MoS <sub>2</sub> . <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	6
132	Construction of Two-Dimensional MoS <sub>2</sub> /CdS Nanohybrids for Highly Efficient Photocatalytic Hydrogen Evolution. <i>Chemistry - A European Journal</i> , 2014, 20, 10632-10635.	1.7	156
133	Atomically-thin molybdenum nitride nanosheets with exposed active surface sites for efficient hydrogen evolution. <i>Chemical Science</i> , 2014, 5, 4615-4620.	3.7	455
134	Earth-abundant inorganic electrocatalysts and their nanostructures for energy conversion applications. <i>Energy and Environmental Science</i> , 2014, 7, 3519-3542.	15.6	1,151
135	Synthesis and Characterization of Molybdenum(0) and Tungsten(0) Complexes of Tetramethylthiourea: Single-Source Precursors for MoS <sub>2</sub> and WS <sub>2</sub> . <i>Organometallics</i> , 2014, 33, 5238-5245.	1.1	20

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136	Chemical Synthetic Strategy for Single-Layer Transition-Metal Chalcogenides. <i>Journal of the American Chemical Society</i> , 2014, 136, 14670-14673.	6.6	151
137	Colloidal Synthesis of 1T-WS <sub>2</sub> and 2H-WS <sub>2</sub> Nanosheets: Applications for Photocatalytic Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2014, 136, 14121-14127.	6.6	673
138	Three-Dimensional Structures of MoS <sub>2</sub> Nanosheets with Ultrahigh Hydrogen Evolution Reaction in Water Reduction. <i>Advanced Functional Materials</i> , 2014, 24, 6123-6129.	7.8	173
139	Highly active hydrogen evolution catalysis from metallic WS <sub>2</sub> nanosheets. <i>Energy and Environmental Science</i> , 2014, 7, 2608-2613.	15.6	660
140	Mo <sub>2</sub> C Nanoparticles Decorated Graphitic Carbon Sheets: Biopolymer-Derived Solid-State Synthesis and Application as an Efficient Electrocatalyst for Hydrogen Generation. <i>ACS Catalysis</i> , 2014, 4, 2658-2661.	5.5	343
141	Use of amine electride chemistry to prepare molybdenum disulfide intercalation compounds. <i>RSC Advances</i> , 2014, 4, 47121-47128.	1.7	15
143	Earth-Abundant Metal Pyrites (FeS <sub>2</sub> , CoS <sub>2</sub> , NiS <sub>2</sub> , and Their Alloys) for Highly Efficient Hydrogen Evolution and Polysulfide Reduction Electrocatalysis. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21347-21356.	1.5	548
144	Active guests in the MoS <sub>2</sub> /MoSe <sub>2</sub> host lattice: efficient hydrogen evolution using few-layer alloys of MoS <sub>2</sub> (1-x)Se <sub>2x</sub> . <i>Nanoscale</i> , 2014, 6, 12856-12863.	2.8	199
145	Facile approach to surface functionalized MoS <sub>2</sub> nanosheets. <i>RSC Advances</i> , 2014, 4, 32570.	1.7	137
146	Highly active and durable non-precious-metal catalysts encapsulated in carbon nanotubes for hydrogen evolution reaction. <i>Energy and Environmental Science</i> , 2014, 7, 1919-1923.	15.6	845
147	Synthesis of few-layered MoS <sub>2</sub> nanosheet-coated electrospun SnO <sub>2</sub> nanotube heterostructures for enhanced hydrogen evolution reaction. <i>Nanoscale</i> , 2014, 6, 10673.	2.8	139
148	Efficient Hydrogen Evolution by Mechanically Strained MoS <sub>2</sub> Nanosheets. <i>Langmuir</i> , 2014, 30, 9866-9873.	1.6	108
149	Electrocatalysis of the hydrogen-evolution reaction by electrodeposited amorphous cobalt selenide films. <i>Journal of Materials Chemistry A</i> , 2014, 2, 13835-13839.	5.2	133
150	Exfoliation of layered double hydroxides for enhanced oxygen evolution catalysis. <i>Nature Communications</i> , 2014, 5, 4477.	5.8	1,900
151	Dendritic, Transferable, Strictly Monolayer MoS <sub>2</sub> Flakes Synthesized on SrTiO <sub>3</sub> Single Crystals for Efficient Electrocatalytic Applications. <i>ACS Nano</i> , 2014, 8, 8617-8624.	7.3	158
152	Mechanisms in the solution growth of free-standing two-dimensional inorganic nanomaterials. <i>Nanoscale</i> , 2014, 6, 6398.	2.8	57
153	Molybdenum carbide-carbon nanocomposites synthesized from a reactive template for electrochemical hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10548-10556.	5.2	135
154	Molybdenum phosphide as an efficient electrocatalyst for the hydrogen evolution reaction. <i>Energy and Environmental Science</i> , 2014, 7, 2624-2629.	15.6	1,164

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155	Three-dimensional interconnected network of nanoporous CoP nanowires as an efficient hydrogen evolution cathode. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 16909.	1.3	90
156	Structural phase transitions in two-dimensional Mo- and W-dichalcogenide monolayers. <i>Nature Communications</i> , 2014, 5, 4214.	5.8	832
157	Toward Design of Synergistically Active Carbon-Based Catalysts for Electrocatalytic Hydrogen Evolution. <i>ACS Nano</i> , 2014, 8, 5290-5296.	7.3	947
158	Template-assisted synthesis of CoP nanotubes to efficiently catalyze hydrogen-evolving reaction. <i>Journal of Materials Chemistry A</i> , 2014, 2, 14812-14816.	5.2	147
160	Controllable Growth and Transfer of Monolayer MoS <sub>2</sub> on Au Foils and Its Potential Application in Hydrogen Evolution Reaction. <i>ACS Nano</i> , 2014, 8, 10196-10204.	7.3	404
161	Graphene, inorganic graphene analogs and their composites for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 12104.	5.2	251
162	Selective and efficient electrochemical biosensing of ultrathin molybdenum disulfide sheets. <i>Nanotechnology</i> , 2014, 25, 335702.	1.3	40
163	Semimetallic molybdenum disulfide ultrathin nanosheets as an efficient electrocatalyst for hydrogen evolution. <i>Nanoscale</i> , 2014, 6, 8359-8367.	2.8	248
164	High Efficiency Photocatalysis for Pollutant Degradation with MoS <sub>2</sub> /C <sub>3</sub> N <sub>4</sub> Heterostructures. <i>Langmuir</i> , 2014, 30, 8965-8972.	1.6	363
165	Molybdenum disulfide/pyrolytic carbon hybrid electrodes for scalable hydrogen evolution. <i>Nanoscale</i> , 2014, 6, 8185.	2.8	48
166	Chemical transformations of nanomaterials for energy applications. <i>Journal of Materials Chemistry A</i> , 2014, 2, 5965-5978.	5.2	49
167	Ni <sub>2</sub> P nanoparticle films supported on a Ti plate as an efficient hydrogen evolution cathode. <i>Nanoscale</i> , 2014, 6, 11031-11034.	2.8	277
169	Hydrothermal synthesis of MoS <sub>2</sub> nanoflowers as highly efficient hydrogen evolution reaction catalysts. <i>Journal of Power Sources</i> , 2014, 264, 229-234.	4.0	271
170	Equiatomic ternary chalcogenide: PdPS and its reduced graphene oxide composite for efficient electrocatalytic hydrogen evolution. <i>Chemical Communications</i> , 2014, 50, 7359-7362.	2.2	74
171	Vertical Heterostructures of Layered Metal Chalcogenides by van der Waals Epitaxy. <i>Nano Letters</i> , 2014, 14, 3047-3054.	4.5	135
172	MoS <sub>2</sub> /Graphene Cocatalyst for Efficient Photocatalytic H <sub>2</sub> Evolution under Visible Light Irradiation. <i>ACS Nano</i> , 2014, 8, 7078-7087.	7.3	885
173	Construction of a Mo <sub>x</sub> C/Ni Network Electrode with Low Overpotential for Hydrogen Generation. <i>ChemCatChem</i> , 2014, 6, 2059-2064.	1.8	20
174	Electrochemically Fabricated Polypyrrole and MoS <sub>x</sub> Copolymer Films as a Highly Active Hydrogen Evolution Electrocatalyst. <i>Advanced Materials</i> , 2014, 26, 3761-3766.	11.1	186



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175	CoSe <sub>2</sub> Nanoparticles Grown on Carbon Fiber Paper: An Efficient and Stable Electrocatalyst for Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2014, 136, 4897-4900.	6.6	1,317
176	Molybdenum Sulfide/N-Doped CNT Forest Hybrid Catalysts for High-Performance Hydrogen Evolution Reaction. Nano Letters, 2014, 14, 1228-1233.	4.5	634
177	High-Performance Electrocatalysis Using Metallic Cobalt Pyrite (CoS <sub>2</sub> ) Micro- and Nanostructures. Journal of the American Chemical Society, 2014, 136, 10053-10061.	6.6	1,211
178	Hydrothermal fabrication of porous MoS <sub>2</sub> and its visible light photocatalytic properties. Materials Letters, 2014, 131, 122-124.	1.3	90
179	A Cost-Effective 3D Hydrogen Evolution Cathode with High Catalytic Activity: FeP Nanowire Array as the Active Phase. Angewandte Chemie, 2014, 126, 13069-13073.	1.6	168
180	Phase-engineered transition-metal dichalcogenides for energy and electronics. MRS Bulletin, 2015, 40, 585-591.	1.7	71
181	Face the Edges: Catalytic Active Sites of Nanomaterials. Advanced Science, 2015, 2, 1500085.	5.6	145
182	Three-dimensional Nitrogen-Doped Graphene Supported Molybdenum Disulfide Nanoparticles as an Advanced Catalyst for Hydrogen Evolution Reaction. Scientific Reports, 2015, 5, 17542.	1.6	156
183	Heterostructures of transition metal dichalcogenides. Physical Review B, 2015, 92, .	1.1	190
184	Ternary SnS <sub>2</sub> -xSex Alloys Nanosheets and Nanosheet Assemblies with Tunable Chemical Compositions and Band Gaps for Photodetector Applications. Scientific Reports, 2015, 5, 17109.	1.6	54
185	Insight on Tafel slopes from a microkinetic analysis of aqueous electrocatalysis for energy conversion. Scientific Reports, 2015, 5, 13801.	1.6	2,017
186	Phase engineering of monolayer transition-metal dichalcogenide through coupled electron doping and lattice deformation. Applied Physics Letters, 2015, 107, .	1.5	33
188	Effect of Doping on Hydrogen Evolution Reaction of Vanadium Disulfide Monolayer. Nanoscale Research Letters, 2015, 10, 480.	3.1	31
189	Chemical Vapor Deposition of Monolayer Rhenium Disulfide (ReS <sub>2</sub> ). Advanced Materials, 2015, 27, 4640-4648.	11.1	203
190	Designing Efficient Solar-Driven Hydrogen Evolution Photocathodes Using Semitransparent MoQ <sub>x</sub> Cl <sub>y</sub> (Q = S, Se) Catalysts on Si Micropyramids. Advanced Materials, 2015, 27, 6511-6518.	11.1	93
191	Co(OH) <sub>2</sub> @PANI Hybrid Nanosheets with 3D Networks as High-Performance Electrocatalysts for Hydrogen Evolution Reaction. Advanced Materials, 2015, 27, 7051-7057.	11.1	294
193	Poros Molybdenum-Based Hybrid Catalysts for Highly Efficient Hydrogen Evolution. Angewandte Chemie - International Edition, 2015, 54, 12928-12932.	7.2	368
194	Chemical Weathering-Exfoliation of Atom-Thick Transition Metal Dichalcogenides and Their Ultrafast Saturable Absorption Properties. Advanced Functional Materials, 2015, 25, 5292-5299.	7.8	69

#	ARTICLE	IF	CITATIONS
196	Large Area, Free Standing, Two Dimensional Supramolecular Polymer Single Layer Sheets for Highly Efficient Electrocatalytic Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 12058-12063.	7.2	514
197	Ultrafine Molybdenum Carbide Nanoparticles Compositing with Carbon as a Highly Active Hydrogen Evolution Electrocatalyst. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14723-14727.	7.2	396
198	MoS <sub>2</sub> Nanosheets Supported on 3D Graphene Aerogel as a Highly Efficient Catalyst for Hydrogen Evolution. <i>Chemistry - A European Journal</i> , 2015, 21, 15908-15913.	1.7	99
199	Single Step Exfoliation and Covalent Functionalization of MoS <sub>2</sub> Nanosheets by an Organosulfur Reaction. <i>Chemistry - A European Journal</i> , 2015, 21, 15583-15588.	1.7	31
200	Size Dependent Optical Absorption of Layered MoS <sub>2</sub> and DNA Oligonucleotides Induced Dispersion Behavior for Label Free Detection of Single Nucleotide Polymorphism. <i>Advanced Functional Materials</i> , 2015, 25, 3541-3550.	7.8	123
201	Synthesis and Enhanced Electrochemical Catalytic Performance of Monolayer WS <sub>2</sub> (1x1)Se <sub>2</sub> (1x1) with a Tunable Band Gap. <i>Advanced Materials</i> , 2015, 27, 4732-4738.	11.1	214
202	Facile Synthesis of Single Crystal Vanadium Disulfide Nanosheets by Chemical Vapor Deposition for Efficient Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2015, 27, 5605-5609.	11.1	241
203	Hierarchical Transition Metal Dichalcogenide Nanosheets for Enhanced Electrocatalytic Hydrogen Evolution. <i>Advanced Materials</i> , 2015, 27, 7426-7431.	11.1	123
204	Enhanced Electrochemical H <sub>2</sub> Evolution by Few Layered Metallic WS <sub>2</sub> (1x1)Se <sub>2</sub> (1x1) Nanoribbons. <i>Advanced Functional Materials</i> , 2015, 25, 6077-6083.	7.8	111
205	A Review of Phosphide Based Materials for Electrocatalytic Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2015, 5, 1500985.	10.2	707
206	Synthesis and double hierarchical structure of MoS <sub>2</sub> /C nanospheres. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 2309-2314.	0.8	9
207	Gram-Scale Aqueous Synthesis of Stable Few-Layered 1T-MoS <sub>2</sub> : Applications for Visible-Light-Driven Photocatalytic Hydrogen Evolution. <i>Small</i> , 2015, 11, 5556-5564.	5.2	508
208	Vertically Aligned WS <sub>2</sub> Nanosheets for Water Splitting. <i>Advanced Functional Materials</i> , 2015, 25, 6199-6204.	7.8	108
209	The Hydric Effect in Inorganic Nanomaterials for Nanoelectronics and Energy Applications. <i>Advanced Materials</i> , 2015, 27, 3850-3867.	11.1	55
210	Structural Engineering of Electrocatalysts for the Hydrogen Evolution Reaction: Order or Disorder?. <i>ChemCatChem</i> , 2015, 7, 2568-2580.	1.8	144
211	Pristine Basal and Edge Plane Oriented Molybdenite MoS <sub>2</sub> Exhibiting Highly Anisotropic Properties. <i>Chemistry - A European Journal</i> , 2015, 21, 7170-7178.	1.7	133
212	High Performance Platinum Free Dye Sensitized Solar Cells with Molybdenum Disulfide Films as Counter Electrodes. <i>ChemPhysChem</i> , 2015, 16, 3959-3965.	1.0	27
213	Polymer Electrolyte Membrane Electrolyzers Utilizing Non Precious Mo based Hydrogen Evolution Catalysts. <i>ChemSusChem</i> , 2015, 8, 3512-3519.	3.6	51

#	ARTICLE	IF	CITATIONS
214	Nitrogen- and Phosphorus- Doped Nanoporous Graphene/Graphitic Carbon Nitride Hybrids as Efficient Electrocatalysts for Hydrogen Evolution. <i>ChemCatChem</i> , 2015, 7, 3873-3880.	1.8	99
215	A Self-Standing High-Performance Hydrogen Evolution Electrode with Nanostructured NiCo <sub>2</sub> O <sub>4</sub> /CuS Heterostructures. <i>Advanced Functional Materials</i> , 2015, 25, 6814-6822.	7.8	215
216	When Cubic Cobalt Sulfide Meets Layered Molybdenum Disulfide: A Core-Shell System Toward Synergetic Electrocatalytic Water Splitting. <i>Advanced Materials</i> , 2015, 27, 4752-4759.	11.1	705
219	Dimeric [Mo <sub>2</sub> S <sub>12</sub> ] <sup>2+</sup> Cluster: A Molecular Analogue of MoS <sub>2</sub> Edges for Superior Hydrogen Evolution Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15181-15185.	7.2	160
220	Two-Dimensional Materials for Sensing: Graphene and Beyond. <i>Electronics (Switzerland)</i> , 2015, 4, 651-687.	1.8	310
221	Effect of Polymer Addition on the Structure and Hydrogen Evolution Reaction Property of Nanoflower-Like Molybdenum Disulfide. <i>Metals</i> , 2015, 5, 1829-1844.	1.0	39
222	Tungsten-based porous thin-films for electrocatalytic hydrogen generation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 5798-5804.	5.2	43
223	Toxicity of exfoliated-MoS <sub>2</sub> and annealed exfoliated-MoS <sub>2</sub> towards planktonic cells, biofilms, and mammalian cells in the presence of electron donor. <i>Environmental Science: Nano</i> , 2015, 2, 370-379.	2.2	70
224	Aptamer loaded MoS <sub>2</sub> nanoplates as nanoprobe for detection of intracellular ATP and controllable photodynamic therapy. <i>Nanoscale</i> , 2015, 7, 15953-15961.	2.8	83
225	High-Performance Poly(ethylene oxide)/Molybdenum Disulfide Nanocomposite Films: Reinforcement of Properties Based on the Gradient Interface Effect. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 13164-13173.	4.0	58
226	Single-Crystal Atomic-Layered Molybdenum Disulfide Nanobelts with High Surface Activity. <i>ACS Nano</i> , 2015, 9, 6478-6483.	7.3	72
227	Charge Mediated Semiconducting-to-Metallic Phase Transition in Molybdenum Disulfide Monolayer and Hydrogen Evolution Reaction in New 1T <sup>±</sup> Phase. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13124-13128.	1.5	295
228	Cobalt diselenide nanobelts grafted on carbon fiber felt: an efficient and robust 3D cathode for hydrogen production. <i>Chemical Science</i> , 2015, 6, 4594-4598.	3.7	114
229	Metallic WO <sub>2</sub> Carbon Mesoporous Nanowires as Highly Efficient Electrocatalysts for Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2015, 137, 6983-6986.	6.6	470
230	MoS <sub>2</sub> ultrathin nanosheets obtained under a high magnetic field for lithium storage with stable and high capacity. <i>Nanoscale</i> , 2015, 7, 10925-10930.	2.8	21
231	Rugae-like FeP nanocrystal assembly on a carbon cloth: an exceptionally efficient and stable cathode for hydrogen evolution. <i>Nanoscale</i> , 2015, 7, 10974-10981.	2.8	133
232	Oxygen-incorporated MoS <sub>2</sub> ultrathin nanosheets grown on graphene for efficient electrochemical hydrogen evolution. <i>Journal of Power Sources</i> , 2015, 291, 195-200.	4.0	133
233	Silicon nanowire arrays coupled with cobalt phosphide spheres as low-cost photocathodes for efficient solar hydrogen evolution. <i>Chemical Communications</i> , 2015, 51, 10742-10745.	2.2	54

#	ARTICLE	IF	CITATIONS
234	Two-dimensional transition metal dichalcogenide nanomaterials for solar water splitting. <i>Electronic Materials Letters</i> , 2015, 11, 323-335.	1.0	93
235	Enhancement of electrochemical and catalytic properties of MoS <sub>2</sub> through ball-milling. <i>Electrochemistry Communications</i> , 2015, 54, 36-40.	2.3	51
236	Recent advances in heterogeneous electrocatalysts for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14942-14962.	5.2	1,061
237	Fe <sub>3</sub> O <sub>4</sub> @MoS <sub>2</sub> Core-Shell Composites: Preparation, Characterization, and Catalytic Application. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13658-13664.	1.5	137
238	Optimizing the Volmer Step by Single-Layer Nickel Hydroxide Nanosheets in Hydrogen Evolution Reaction of Platinum. <i>ACS Catalysis</i> , 2015, 5, 3801-3806.	5.5	142
239	Hot Electron of Au Nanorods Activates the Electrocatalysis of Hydrogen Evolution on MoS <sub>2</sub> Nanosheets. <i>Journal of the American Chemical Society</i> , 2015, 137, 7365-7370.	6.6	556
240	Ultrafine Metal Phosphide Nanocrystals <i>in Situ</i> Decorated on Highly Porous Heteroatom-Doped Carbons for Active Electrocatalytic Hydrogen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 28369-28376.	4.0	72
241	Ultrathin CoOOH Oxides Nanosheets Realizing Efficient Photocatalytic Hydrogen Evolution. <i>Journal of Physical Chemistry C</i> , 2015, 119, 26362-26366.	1.5	43
242	Constructing Highly Oriented Configuration by Few-Layer MoS <sub>2</sub> : Toward High-Performance Lithium-Ion Batteries and Hydrogen Evolution Reactions. <i>ACS Nano</i> , 2015, 9, 12464-12472.	7.3	259
243	Realizing semiconductor to metal transition in graphitic ZnO and MoS <sub>2</sub> nanocomposite with external electric field. <i>RSC Advances</i> , 2015, 5, 99153-99163.	1.7	20
244	Ultrafine CoP Nanoparticles Supported on Carbon Nanotubes as Highly Active Electrocatalyst for Both Oxygen and Hydrogen Evolution in Basic Media. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 28412-28419.	4.0	187
245	High Turnover Frequency of Hydrogen Evolution Reaction on Amorphous MoS <sub>2</sub> Thin Film Directly Grown by Atomic Layer Deposition. <i>Langmuir</i> , 2015, 31, 1196-1202.	1.6	183
246	Amorphous MoS <sub>x</sub> Cl <sub>y</sub> electrocatalyst supported by vertical graphene for efficient electrochemical and photoelectrochemical hydrogen generation. <i>Energy and Environmental Science</i> , 2015, 8, 862-868.	15.6	183
247	Porous C <sub>3</sub> N <sub>4</sub> Nanolayers@N-Graphene Films as Catalyst Electrodes for Highly Efficient Hydrogen Evolution. <i>ACS Nano</i> , 2015, 9, 931-940.	7.3	655
248	Tungsten diphosphide nanorods as an efficient catalyst for electrochemical hydrogen evolution. <i>Journal of Power Sources</i> , 2015, 278, 540-545.	4.0	82
250	Enabling practical electrocatalyst-assisted photoelectron-chemical water splitting with earth abundant materials. <i>Nano Research</i> , 2015, 8, 56-81.	5.8	92
251	Porous metallic MoO <sub>2</sub> -supported MoS <sub>2</sub> nanosheets for enhanced electrocatalytic activity in the hydrogen evolution reaction. <i>Nanoscale</i> , 2015, 7, 5203-5208.	2.8	267
252	Structural and electronic modification of MoS <sub>2</sub> nanosheets using S-doped carbon for efficient electrocatalysis of the hydrogen evolution reaction. <i>Chemical Communications</i> , 2015, 51, 5052-5055.	2.2	63

#	ARTICLE	IF	CITATIONS
253	Nanoarray based "superhydrophobic" surfaces for gas evolution reaction electrodes. <i>Materials Horizons</i> , 2015, 2, 294-298.	6.4	146
254	First-Principles Investigation of Transition Metal Dichalcogenide Nanotubes for Li and Mg Ion Battery Applications. <i>Journal of Physical Chemistry C</i> , 2015, 119, 4302-4311.	1.5	47
255	High Performance Pseudocapacitor Based on 2D Layered Metal Chalcogenide Nanocrystals. <i>Nano Letters</i> , 2015, 15, 1911-1917.	4.5	495
256	Cobalt-Boride: An efficient and robust electrocatalyst for Hydrogen Evolution Reaction. <i>Journal of Power Sources</i> , 2015, 279, 620-625.	4.0	255
257	Hydrothermal Continuous Flow Synthesis and Exfoliation of NiCo Layered Double Hydroxide Nanosheets for Enhanced Oxygen Evolution Catalysis. <i>Nano Letters</i> , 2015, 15, 1421-1427.	4.5	933
258	Modifying candle soot with FeP nanoparticles into high-performance and cost-effective catalysts for the electrocatalytic hydrogen evolution reaction. <i>Nanoscale</i> , 2015, 7, 4400-4405.	2.8	83
259	Plasmonic hot electron enhanced MoS <sub>2</sub> photocatalysis in hydrogen evolution. <i>Nanoscale</i> , 2015, 7, 4482-4488.	2.8	169
260	Vacancy-Induced Ferromagnetism of MoS <sub>2</sub> Nanosheets. <i>Journal of the American Chemical Society</i> , 2015, 137, 2622-2627.	6.6	659
261	Polymorphic CoSe <sub>2</sub> with Mixed Orthorhombic and Cubic Phases for Highly Efficient Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 1772-1779.	4.0	249
262	Synthesis and properties of molybdenum disulphide: from bulk to atomic layers. <i>RSC Advances</i> , 2015, 5, 7495-7514.	1.7	288
263	An efficient molybdenum disulfide/cobalt diselenide hybrid catalyst for electrochemical hydrogen generation. <i>Nature Communications</i> , 2015, 6, 5982.	5.8	897
264	Exfoliated MoS <sub>2</sub> supported Au@Pd bimetallic nanoparticles with core-shell structures and superior peroxidase-like activities. <i>RSC Advances</i> , 2015, 5, 10352-10357.	1.7	53
265	Electrochemical synthesis of luminescent MoS <sub>2</sub> quantum dots. <i>Chemical Communications</i> , 2015, 51, 6293-6296.	2.2	204
266	Two-Dimensional Layered Chalcogenides: From Rational Synthesis to Property Control via Orbital Occupation and Electron Filling. <i>Accounts of Chemical Research</i> , 2015, 48, 81-90.	7.6	74
267	Tandem intercalation strategy for single-layer nanosheets as an effective alternative to conventional exfoliation processes. <i>Nature Communications</i> , 2015, 6, 5763.	5.8	137
268	Seed Growth of Tungsten Diselenide Nanotubes from Tungsten Oxides. <i>Small</i> , 2015, 11, 2192-2199.	5.2	20
269	Nanocrystalline Ni <sub>5</sub> P <sub>4</sub> : a hydrogen evolution electrocatalyst of exceptional efficiency in both alkaline and acidic media. <i>Energy and Environmental Science</i> , 2015, 8, 1027-1034.	15.6	435
270	Flawed MoO <sub>2</sub> belts transformed from MoO <sub>3</sub> on a graphene template for the hydrogen evolution reaction. <i>Nanoscale</i> , 2015, 7, 7040-7044.	2.8	73

#	ARTICLE	IF	CITATIONS
271	Growth of three dimensional flower-like molybdenum disulfide hierarchical structures on graphene/carbon nanotube network: An advanced heterostructure for energy storage devices. Journal of Power Sources, 2015, 280, 39-46.	4.0	51
272	A strategy to synergistically increase the number of active edge sites and the conductivity of MoS <sub>2</sub> nanosheets for hydrogen evolution. Nanoscale, 2015, 7, 8731-8738.	2.8	116
273	Efficient hydrogen/oxygen evolution and photocatalytic dye degradation and reduction of aqueous Cr( <i>scp</i> ) by surfactant free hydrophilic Cu <sub>2</sub> ZnSnS <sub>4</sub> nanoparticles. Journal of Materials Chemistry A, 2015, 3, 8098-8106.	5.2	134
274	Computational Screening of 2D Materials for Photocatalysis. Journal of Physical Chemistry Letters, 2015, 6, 1087-1098.	2.1	641
275	A high-performance metal-free hydrogen-evolution reaction electrocatalyst from bacterium derived carbon. Journal of Materials Chemistry A, 2015, 3, 7210-7214.	5.2	75
276	From Water Oxidation to Reduction: Homologous Ni <sup>Co</sup> Based Nanowires as Complementary Water Splitting Electrocatalysts. Advanced Energy Materials, 2015, 5, 1402031.	10.2	448
277	Efficient charge separation on 3D architectures of TiO <sub>2</sub> mesocrystals packed with a chemically exfoliated MoS <sub>2</sub> shell in synergetic hydrogen evolution. Chemical Communications, 2015, 51, 7187-7190.	2.2	76
278	Order-disorder phase transitions in the two-dimensional semiconducting transition metal dichalcogenide alloys Mo <sub>1-x</sub> W <sub>x</sub> (X = S, Se and Te). Scientific Reports, 2014, 4, 6691.	1.6	54
279	Drastic Layer-Number-Dependent Activity Enhancement in Photocatalytic H <sub>2</sub> Evolution over MoS <sub>2</sub> /CdS (x = 1) Under Visible Light. Advanced Energy Materials, 2015, 5, 1402279.	10.2	239
280	Cu <sub>4</sub> Cluster Doped Monolayer MoS <sub>2</sub> for CO Oxidation. Scientific Reports, 2015, 5, 11230.	1.6	30
281	Susceptibility of FeS <sub>2</sub> hydrogen evolution performance to sulfide poisoning. Electrochemistry Communications, 2015, 58, 29-32.	2.3	13
282	Sequential structural and optical evolution of MoS <sub>2</sub> by chemical synthesis and exfoliation. Journal of the Korean Physical Society, 2015, 66, 1852-1855.	0.3	3
283	A vertical-oriented WS <sub>2</sub> nanosheet sensitized by graphene: an advanced electrocatalyst for hydrogen evolution reaction. Nanoscale, 2015, 7, 14760-14765.	2.8	88
284	A first-principles examination of conducting monolayer 1T <sup>2</sup> -MX <sub>2</sub> (M = Mo, W; X = S, Se, Te): promising catalysts for hydrogen evolution reaction and its enhancement by strain. Physical Chemistry Chemical Physics, 2015, 17, 21702-21708.	1.3	117
285	Controlled morphology evolution of electrospun carbon nanofiber templated tungsten disulfide nanostructures. Electrochimica Acta, 2015, 176, 255-264.	2.6	19
286	Heteroatom-Doped Graphene-Based Materials for Energy-Relevant Electrocatalytic Processes. ACS Catalysis, 2015, 5, 5207-5234.	5.5	800
287	The role of MoS <sub>2</sub> as an interfacial layer in graphene/silicon solar cells. Physical Chemistry Chemical Physics, 2015, 17, 8182-8186.	1.3	59
288	Porous Two-Dimensional Nanosheets Converted from Layered Double Hydroxides and Their Applications in Electrocatalytic Water Splitting. Chemistry of Materials, 2015, 27, 5702-5711.	3.2	291

#	ARTICLE	IF	CITATIONS
289	Origin of hydrogen evolution activity on $MS_2$ (M = Mo or Nb) monolayers. <i>Journal of Materials Chemistry A</i> , 2015, 3, 18898-18905.	5.2	30
290	Probing the Dynamics of the Metallic-to-Semiconducting Structural Phase Transformation in $MoS_2$ Crystals. <i>Nano Letters</i> , 2015, 15, 5081-5088.	4.5	174
291	Perpendicularly oriented few-layer $MoSe_2$ on $SnO_2$ nanotubes for efficient hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 16263-16271.	5.2	105
292	Synthesis of Few-Layer $MoS_2$ Nanosheets-Wrapped Polyaniline Hierarchical Nanostructures for Enhanced Electrochemical Capacitance Performance. <i>Electrochimica Acta</i> , 2015, 176, 149-155.	2.6	72
293	Metal-Free Polypyridyl Catalysts for Electro- and Photochemical Reduction of Water to Hydrogen. <i>Accounts of Chemical Research</i> , 2015, 48, 2027-2036.	7.6	201
294	Bifunctional non-noble metal oxide nanoparticle electrocatalysts through lithium-induced conversion for overall water splitting. <i>Nature Communications</i> , 2015, 6, 7261.	5.8	1,006
295	Defect- and S-rich ultrathin $MoS_2$ nanosheet embedded N-doped carbon nanofibers for efficient hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2015, 3, 15927-15934.	5.2	124
296	The remarkable activity and stability of a dye-sensitized single molecular layer $MoS_2$ ensemble for photocatalytic hydrogen production. <i>Chemical Communications</i> , 2015, 51, 13496-13499.	2.2	43
297	Effect of the Transition Metal on Metal-Free Nitrogen-Carbon Catalysts for the Hydrogen Evolution Reaction. <i>Journal of the Electrochemical Society</i> , 2015, 162, H719-H726.	1.3	90
298	Characterization of $MoS_2$ -Graphene Composites for High-Performance Coin Cell Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 17388-17398.	4.0	388
299	Poly(3,4-dinitrothiophene)/SWCNT composite as a low overpotential hydrogen evolution metal-free catalyst. <i>Journal of Materials Chemistry A</i> , 2015, 3, 78-82.	5.2	21
300	Enhanced hydrogen evolution reaction on few-layer $MoS_2$ nanosheets-coated functionalized carbon nanotubes. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 8877-8888.	3.8	118
301	Edge-terminated molybdenum disulfide with a 9.4-Å... interlayer spacing for electrochemical hydrogen production. <i>Nature Communications</i> , 2015, 6, 7493.	5.8	628
302	Synthesis, properties and applications of 2D non-graphene materials. <i>Nanotechnology</i> , 2015, 26, 292001.	1.3	101
303	Ultrathin $MoSe_2$ Nanosheets Decorated on Carbon Fiber Cloth as Binder-Free and High-Performance Electrocatalyst for Hydrogen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 14170-14175.	4.0	165
304	Flexible and porous catalyst electrodes constructed by Co nanoparticles@nitrogen-doped graphene films for highly efficient hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2015, 3, 15962-15968.	5.2	74
305	Optimizing Hybridization of 1T and 2H Phases in $MoS_2$ Monolayers to Improve Capacitances of Supercapacitors. <i>Materials Research Letters</i> , 2015, 3, 177-183.	4.1	149
306	Facile synthesis of boron- and nitride-doped $MoS_2$ nanosheets as fluorescent probes for the ultrafast, sensitive, and label-free detection of $Hg^{2+}$ . <i>Analyst</i> , 2015, 140, 4654-4661.	1.7	52

#	ARTICLE	IF	CITATIONS
307	SDSâ€“MoS <sub>2</sub> nanoparticles as highly-efficient peroxidase mimetics for colorimetric detection of H <sub>2</sub> O <sub>2</sub> and glucose. <i>Talanta</i> , 2015, 141, 47-52.	2.9	135
308	Hydrothermal synthesis and controlled growth of tungsten disulphide nanostructures from oneâ€“dimension to threeâ€“dimensions. <i>Micro and Nano Letters</i> , 2015, 10, 183-186.	0.6	6
309	MoS <sub>2</sub> /Nitrogen-doped graphene as efficient electrocatalyst for oxygen reduction reaction. <i>Electrochimica Acta</i> , 2015, 169, 142-149.	2.6	77
310	Molybdenum sulfide nanosheet arrays supported on Ti plate: an efficient hydrogen-evolving cathode over the whole pH range. <i>Electrochimica Acta</i> , 2015, 168, 256-260.	2.6	25
311	Highly active and inexpensive iron phosphide nanorods electrocatalyst towards hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 14272-14278.	3.8	63
312	Noble metal-free hydrogen evolution catalysts for water splitting. <i>Chemical Society Reviews</i> , 2015, 44, 5148-5180.	18.7	4,776
313	Controlled Synthesis of Layered Double Hydroxide Nanoplates Driven by Screw Dislocations. <i>Nano Letters</i> , 2015, 15, 3403-3409.	4.5	97
314	Ultrathin MoS <sub>2</sub> -coated carbon nanospheres as highly efficient electrocatalysts for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 6552-6558.	3.8	104
315	Enhanced hydrogen evolution catalysis from osmotically swollen ammoniated MoS <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , 2015, 3, 13050-13056.	5.2	140
316	Iron-Doped Molybdenum Carbide Catalyst with High Activity and Stability for the Hydrogen Evolution Reaction. <i>Chemistry of Materials</i> , 2015, 27, 4281-4288.	3.2	237
317	Some recent developments in surface and interface design for photocatalytic and electrocatalytic hybrid structures. <i>Chemical Communications</i> , 2015, 51, 10261-10271.	2.2	96
318	Growth Control of MoS <sub>2</sub> Nanosheets on Carbon Cloth for Maximum Active Edges Exposed: An Excellent Hydrogen Evolution 3D Cathode. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 12193-12202.	4.0	176
319	Highly dual-doped multilayer nanoporous graphene: efficient metal-free electrocatalysts for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 12642-12645.	5.2	83
320	Hydrogen evolution at nanoporous gold/tungsten sulfide composite film and its optimization. <i>Electrochimica Acta</i> , 2015, 173, 393-398.	2.6	32
321	Nanostructured two-dimensional materials. , 2015, , 477-524.		0
322	Monolayer-Precision Synthesis of Molybdenum Sulfide Nanoparticles and Their Nanoscale Size Effects in the Hydrogen Evolution Reaction. <i>ACS Nano</i> , 2015, 9, 3728-3739.	7.3	201
323	Recent Development in Hydrogen Evolution Reaction Catalysts and Their Practical Implementation. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 951-957.	2.1	626
324	Vertical ultrathin MoS <sub>2</sub> nanosheets on a flexible substrate as an efficient counter electrode for dye-sensitized solar cells. <i>Nanoscale</i> , 2015, 7, 10459-10464.	2.8	70



#	ARTICLE	IF	CITATIONS
325	The Influence of Water on the Optical Properties of Single-Layer Molybdenum Disulfide. <i>Advanced Materials</i> , 2015, 27, 2734-2740.	11.1	44
326	Stabilization and Band-Gap Tuning of the 1T-MoS <sub>2</sub> Monolayer by Covalent Functionalization. <i>Chemistry of Materials</i> , 2015, 27, 3743-3748.	3.2	297
327	Electrocatalytic hydrogen evolution using graphitic carbon nitride coupled with nanoporous graphene co-doped by S and Se. <i>Journal of Materials Chemistry A</i> , 2015, 3, 12810-12819.	5.2	124
328	Iridium- and Osmium-decorated Reduced Graphenes as Promising Catalysts for Hydrogen Evolution. <i>ChemPhysChem</i> , 2015, 16, 1898-1905.	1.0	29
329	Protein Induces Layer-by-Layer Exfoliation of Transition Metal Dichalcogenides. <i>Journal of the American Chemical Society</i> , 2015, 137, 6152-6155.	6.6	365
330	Layer-controllable WS <sub>2</sub> -reduced graphene oxide hybrid nanosheets with high electrocatalytic activity for hydrogen evolution. <i>Nanoscale</i> , 2015, 7, 10391-10397.	2.8	140
331	A 3D dendritic WSe <sub>2</sub> catalyst grown on carbon nanofiber mats for efficient hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2015, 3, 12149-12153.	5.2	88
332	From "waste to gold": a one-pot method to synthesize ultrafinely dispersed Fe <sub>2</sub> O <sub>3</sub> -based nanoparticles on N-doped carbon for synergistic and efficient water splitting. <i>Journal of Materials Chemistry A</i> , 2015, 3, 11756-11761.	5.2	59
333	CoSe <sub>2</sub> necklace-like nanowires supported by carbon fiber paper: a 3D integrated electrode for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9415-9420.	5.2	125
334	Preparation of 2D MoS <sub>2</sub> /Graphene Heterostructure through a Monolayer Intercalation Method and its Application as an Optical Modulator in Pulsed Laser Generation. <i>Advanced Optical Materials</i> , 2015, 3, 937-942.	3.6	62
335	Well-Constructed Single-Layer Molybdenum Disulfide Nanorose Cross-Linked by Three Dimensional-Reduced Graphene Oxide Network for Superior Water Splitting and Lithium Storage Property. <i>Scientific Reports</i> , 2015, 5, 8722.	1.6	79
336	Layer-Dependent Dopant Stability and Magnetic Exchange Coupling of Iron-Doped MoS <sub>2</sub> Nanosheets. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 7534-7541.	4.0	90
337	Ultrathin MoS <sub>2</sub> (1-x)Se <sub>2x</sub> Alloy Nanoflakes For Electrocatalytic Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2015, 5, 2213-2219.	5.5	473
338	2H → 1T phase transition and hydrogen evolution activity of MoS <sub>2</sub> , MoSe <sub>2</sub> , WS <sub>2</sub> and WSe <sub>2</sub> strongly depends on the MX <sub>2</sub> composition. <i>Chemical Communications</i> , 2015, 51, 8450-8453.	2.2	565
339	MoS <sub>2</sub> /Si Heterojunction with Vertically Standing Layered Structure for Ultrafast, High-Detectivity, Self-Driven Visible-Near Infrared Photodetectors. <i>Advanced Functional Materials</i> , 2015, 25, 2910-2919.	7.8	554
340	Bandstructure modulation of two-dimensional WSe <sub>2</sub> by electric field. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	29
341	Comparative Study of Potential Applications of Graphene, MoS <sub>2</sub> , and Other Two-Dimensional Materials in Energy Devices, Sensors, and Related Areas. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 7809-7832.	4.0	362
342	Amorphous nickel/cobalt tungsten sulfide electrocatalysts for high-efficiency hydrogen evolution reaction. <i>Applied Surface Science</i> , 2015, 341, 149-156.	3.1	76

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343	Ferric phosphide nanoparticles film supported on Titanium plate: A high-performance hydrogen evolution cathode in both acidic and neutral solutions. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 5092-5098.	3.8	16
344	Alternative synthesis of cobalt monophosphide@C core-shell nanocables for electrochemical hydrogen production. <i>Journal of Power Sources</i> , 2015, 286, 464-469.	4.0	54
345	3D macroporous MoS <sub>2</sub> thin film: in situ hydrothermal preparation and application as a highly active hydrogen evolution electrocatalyst at all pH values. <i>Electrochimica Acta</i> , 2015, 168, 133-138.	2.6	147
346	Synthesis of supported vertical NiS <sub>2</sub> nanosheets for hydrogen evolution reaction in acidic and alkaline solution. <i>RSC Advances</i> , 2015, 5, 32976-32982.	1.7	107
347	CO <sub>2</sub> -free electric power circulation via direct charge and discharge using the glycolic acid/oxalic acid redox couple. <i>Energy and Environmental Science</i> , 2015, 8, 1456-1462.	15.6	40
348	Two-Dimensional Metal Dichalcogenides and Oxides for Hydrogen Evolution: A Computational Screening Approach. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1577-1585.	2.1	75
349	Three-dimensional MoS <sub>2</sub> /rGO hydrogel with extremely high double-layer capacitance as active catalyst for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2015, 182, 652-658.	2.6	93
350	Electrochemistry of Nanostructured Layered Transition-Metal Dichalcogenides. <i>Chemical Reviews</i> , 2015, 115, 11941-11966.	23.0	719
351	A g-C <sub>3</sub> N <sub>4</sub> /nanocarbon/ZnIn <sub>2</sub> S <sub>4</sub> nanocomposite: an artificial Z-scheme visible-light photocatalytic system using nanocarbon as the electron mediator. <i>Chemical Communications</i> , 2015, 51, 17144-17147.	2.2	136
352	MoS <sub>2</sub> nanosheet-coated CoS <sub>2</sub> nanowire arrays on carbon cloth as three-dimensional electrodes for efficient electrocatalytic hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22886-22891.	5.2	185
353	Catalytic Activity in Lithium-Treated Core-Shell MoO <sub>3</sub> /MoS <sub>2</sub> Nanowires. <i>Journal of Physical Chemistry C</i> , 2015, 119, 22908-22914.	1.5	30
354	Ultrathin Two-Dimensional Nanomaterials. <i>ACS Nano</i> , 2015, 9, 9451-9469.	7.3	1,726
355	The CoTe <sub>2</sub> nanostructure: an efficient and robust catalyst for hydrogen evolution. <i>Chemical Communications</i> , 2015, 51, 17012-17015.	2.2	54
356	Single- and few-layer ZrS <sub>2</sub> as efficient photocatalysts for hydrogen production under visible light. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 15503-15509.	3.8	50
357	Femtosecond solid-state laser based on tungsten disulfide saturable absorber. <i>Optics Express</i> , 2015, 23, 27292.	1.7	46
358	In-Situ Growth of Few-Layered MoS <sub>2</sub> Nanosheets on Highly Porous Carbon Aerogel as Advanced Electrocatalysts for Hydrogen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 3140-3148.	3.2	105
359	Hierarchical composite structure of few-layers MoS <sub>2</sub> nanosheets supported by vertical graphene on carbon cloth for high-performance hydrogen evolution reaction. <i>Nano Energy</i> , 2015, 18, 196-204.	8.2	191
360	Enhanced hydrogen evolution catalysis in MoS <sub>2</sub> nanosheets by incorporation of a metal phase. <i>Journal of Materials Chemistry A</i> , 2015, 3, 24414-24421.	5.2	88

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361	Hydrothermal synthesis of 2D MoS <sub>2</sub> nanosheets for electrocatalytic hydrogen evolution reaction. RSC Advances, 2015, 5, 89389-89396.	1.7	110
362	Rising Again: Opportunities and Challenges for Platinum-Free Electrocatalysts. Chemistry of Materials, 2015, 27, 7218-7235.	3.2	131
363	High-Performance Overall Water Splitting Electrocatalysts Derived from Cobalt-Based Metal-Organic Frameworks. Chemistry of Materials, 2015, 27, 7636-7642.	3.2	579
364	Recent advances in transition-metal dichalcogenide based nanomaterials for water splitting. Nanoscale, 2015, 7, 19764-19788.	2.8	327
365	Metal diselenide nanoparticles as highly active and stable electrocatalysts for the hydrogen evolution reaction. Nanoscale, 2015, 7, 14813-14816.	2.8	103
366	High Power Supercapacitive Properties of Graphene Oxide Hybrid Films with Highly Conductive Molybdenum Disulfide Nanosheets. ChemElectroChem, 2015, 2, 1938-1946.	1.7	28
367	Crystalline/amorphous Ni/NiO core/shell nanosheets as highly active electrocatalysts for hydrogen evolution reaction. Journal of Power Sources, 2015, 300, 336-343.	4.0	251
368	Three-Dimensional Heterostructures of MoS <sub>2</sub> Nanosheets on Conducting MoO <sub>3</sub> as an Efficient Electrocatalyst To Enhance Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2015, 7, 23328-23335.	4.0	150
369	Bottom-Up Synthesis of Metal-Ion-Doped WS <sub>2</sub> Nanoflakes for Cancer Theranostics. ACS Nano, 2015, 9, 11090-11101.	7.3	263
370	Understanding catalysis in a multiphase two-dimensional transition metal dichalcogenide. Nature Communications, 2015, 6, 8311.	5.8	260
371	Microwave-Assisted Reactant-Protecting Strategy toward Efficient MoS <sub>2</sub> Electrocatalysts in Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2015, 7, 23741-23749.	4.0	107
372	Low-Dimensional Hyperthin FeS <sub>2</sub> Nanostructures for Efficient and Stable Hydrogen Evolution Electrocatalysis. ACS Catalysis, 2015, 5, 6653-6657.	5.5	145
373	Activating and tuning basal planes of MoO <sub>3</sub> , MoS <sub>2</sub> , and MoSe <sub>2</sub> for hydrogen evolution reaction. Physical Chemistry Chemical Physics, 2015, 17, 29305-29310.	1.3	60
374	2D nanosheet molybdenum disulphide (MoS <sub>2</sub> ) modified electrodes explored towards the hydrogen evolution reaction. Nanoscale, 2015, 7, 18152-18168.	2.8	104
375	A CNT@MoSe <sub>2</sub> hybrid catalyst for efficient and stable hydrogen evolution. Nanoscale, 2015, 7, 18595-18602.	2.8	162
376	Hierarchical Ni-Mo-S nanosheets on carbon fiber cloth: A flexible electrode for efficient hydrogen generation in neutral electrolyte. Science Advances, 2015, 1, e1500259.	4.7	427
377	Self-supported NiMo hollow nanorod array: an efficient 3D bifunctional catalytic electrode for overall water splitting. Journal of Materials Chemistry A, 2015, 3, 20056-20059.	5.2	218
378	Not your familiar two dimensional transition metal disulfide: structural and electronic properties of the PdS <sub>2</sub> monolayer. Journal of Materials Chemistry C, 2015, 3, 9603-9608.	2.7	135

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379	Beneficial effect of Re doping on the electrochemical HER activity of MoS <sub>2</sub> fullerenes. Dalton Transactions, 2015, 44, 16399-16404.	1.6	66
380	Colloidal synthesis of MoS <sub>2</sub> quantum dots: size-dependent tunable photoluminescence and bioimaging. New Journal of Chemistry, 2015, 39, 8492-8497.	1.4	170
381	Molecular metal–Nx centres in porous carbon for electrocatalytic hydrogen evolution. Nature Communications, 2015, 6, 7992.	5.8	575
382	Large-Area Synthesis of High-Quality Uniform Few-Layer MoTe <sub>2</sub> . Journal of the American Chemical Society, 2015, 137, 11892-11895.	6.6	302
383	Efficient hydrogen evolution catalysis using ternary pyrite-type cobalt phosphosulphide. Nature Materials, 2015, 14, 1245-1251.	13.3	1,162
384	Two-dimensional synthetic templates. National Science Review, 2015, 2, 19-21.	4.6	6
385	Nanoflower-like metallic conductive MoO <sub>2</sub> as a high-performance non-precious metal electrocatalyst for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2015, 3, 20080-20085.	5.2	139
386	Li Intercalation in MoS <sub>2</sub> : In Situ Observation of Its Dynamics and Tuning Optical and Electrical Properties. Nano Letters, 2015, 15, 6777-6784.	4.5	312
387	SiO <sub>2</sub> -directed surface control of hierarchical MoS <sub>2</sub> microspheres for stable lithium-ion batteries. RSC Advances, 2015, 5, 74012-74016.	1.7	6
388	Edge-rich MoS <sub>2</sub> Nanosheets Rooting into Polyaniline Nanofibers as Effective Catalyst for Electrochemical Hydrogen Evolution. Electrochimica Acta, 2015, 180, 155-163.	2.6	82
389	Metallic Iron–Nickel Sulfide Ultrathin Nanosheets As a Highly Active Electrocatalyst for Hydrogen Evolution Reaction in Acidic Media. Journal of the American Chemical Society, 2015, 137, 11900-11903.	6.6	609
390	The electronic and optical properties of MoS <sub>2</sub> (1–x)Se <sub>2x</sub> and MoS <sub>2</sub> (1–x)Te <sub>2x</sub> monolayers. Physical Chemistry Chemical Physics, 2015, 17, 26166-26174.	1.3	60
391	High-Performance Electrocatalysis for Hydrogen Evolution Reaction Using Se-Doped Pyrite-Phase Nickel Diphosphide Nanostructures. ACS Catalysis, 2015, 5, 6355-6361.	5.5	258
392	Co-Doped MoS <sub>2</sub> Nanosheets with the Dominant CoMoS Phase Coated on Carbon as an Excellent Electrocatalyst for Hydrogen Evolution. ACS Applied Materials & Interfaces, 2015, 7, 27242-27253.	4.0	422
393	Measurement of Ultrafast Excitonic Dynamics of Few-Layer MoS <sub>2</sub> Using State-Selective Coherent Multidimensional Spectroscopy. ACS Nano, 2015, 9, 12146-12157.	7.3	33
394	Nanostructured nickel sulfides: phase evolution, characterization and electrocatalytic properties for the hydrogen evolution reaction. RSC Advances, 2015, 5, 104740-104749.	1.7	61
395	Molybdenum-Carbide-Modified Nitrogen-Doped Carbon Vesicle Encapsulating Nickel Nanoparticles: A Highly Efficient, Low-Cost Catalyst for Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2015, 137, 15753-15759.	6.6	415
396	Synergetic effect of Cu–Pt bimetallic cocatalyst on SrTiO <sub>3</sub> for efficient photocatalytic hydrogen production from water. RSC Advances, 2015, 5, 102593-102598.	1.7	19

#	ARTICLE	IF	CITATIONS
397	Photocatalytic Stability of Single- and Few-Layer MoS <sub>2</sub> . ACS Nano, 2015, 9, 11302-11309.	7.3	197
398	In Situ CO <sub>2</sub> -Emission Assisted Synthesis of Molybdenum Carbonitride Nanomaterial as Hydrogen Evolution Electrocatalyst. Journal of the American Chemical Society, 2015, 137, 110-113.	6.6	278
399	MoSe <sub>2</sub> porous microspheres comprising monolayer flakes with high electrocatalytic activity. Nano Research, 2015, 8, 1108-1115.	5.8	70
400	High Catalytic Activity of Nitrogen and Sulfur Co-Doped Nanoporous Graphene in the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2015, 54, 2131-2136.	7.2	760
401	Synthesized ultrathin MoS <sub>2</sub> nanosheets perpendicular to graphene for catalysis of hydrogen evolution reaction. Chemical Communications, 2015, 51, 1893-1896.	2.2	144
402	NiS <sub>2</sub> nanosheets array grown on carbon cloth as an efficient 3D hydrogen evolution cathode. Electrochimica Acta, 2015, 153, 508-514.	2.6	185
403	Two-dimensional graphene analogues for biomedical applications. Chemical Society Reviews, 2015, 44, 2681-2701.	18.7	786
404	Facile one-pot synthesis of MoS <sub>2</sub> quantum dots/graphene/TiO <sub>2</sub> composites for highly enhanced photocatalytic properties. Chemical Communications, 2015, 51, 1709-1712.	2.2	144
405	A robust hydrogen evolution catalyst based on crystalline nickel phosphide nanoflakes on three-dimensional graphene/nickel foam: high performance for electrocatalytic hydrogen production from pH ≈ 14. Journal of Materials Chemistry A, 2015, 3, 1941-1946.	5.2	138
406	Engineering the Composition and Crystallinity of Molybdenum Sulfide for High-Performance Electrocatalytic Hydrogen Evolution. ACS Catalysis, 2015, 5, 448-455.	5.5	141
407	Ultrathin MoS <sub>2</sub> nanosheets growing within an in-situ-formed template as efficient electrocatalysts for hydrogen evolution. Journal of Power Sources, 2015, 275, 588-594.	4.0	113
408	Acidically oxidized carbon cloth: a novel metal-free oxygen evolution electrode with high catalytic activity. Chemical Communications, 2015, 51, 1616-1619.	2.2	153
410	High-Efficiency Electrochemical Hydrogen Evolution Catalyzed by Tungsten Phosphide Submicroparticles. ACS Catalysis, 2015, 5, 145-149.	5.5	231
411	Physical and chemical tuning of two-dimensional transition metal dichalcogenides. Chemical Society Reviews, 2015, 44, 2664-2680.	18.7	694
412	Synthesis of FeP <sub>2</sub> /C nanohybrids and their performance for hydrogen evolution reaction. Journal of Materials Chemistry A, 2015, 3, 499-503.	5.2	91
413	Embracing Structural Nonidealities and Asymmetries in Two-Dimensional Nanomechanical Resonators. Scientific Reports, 2015, 4, 3919.	1.6	38
414	A general one-step approach for in situ decoration of MoS <sub>2</sub> nanosheets with inorganic nanoparticles. Journal of Materials Chemistry A, 2015, 3, 1042-1048.	5.2	72
415	Pt-free solar driven photoelectrochemical hydrogen fuel generation using 1T MoS <sub>2</sub> co-catalyst assembled CdS QDs/TiO <sub>2</sub> photoelectrode. Chemical Communications, 2015, 51, 522-525.	2.2	60

#	ARTICLE	IF	CITATIONS
416	Advancing the Electrochemistry of the Hydrogen Evolution Reaction through Combining Experiment and Theory. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 52-65.	7.2	1,616
417	Covalent functionalization of monolayered transition metal dichalcogenides by phase engineering. <i>Nature Chemistry</i> , 2015, 7, 45-49.	6.6	637
418	Chemically exfoliated metallic MoS <sub>2</sub> nanosheets: A promising supporting co-catalyst for enhancing the photocatalytic performance of TiO <sub>2</sub> nanocrystals. <i>Nano Research</i> , 2015, 8, 175-183.	5.8	331
419	The stability and electronic properties of novel three-dimensional graphene-MoS <sub>2</sub> hybrid structure. <i>Scientific Reports</i> , 2014, 4, 7007.	1.6	45
420	Electrocatalytic H <sub>2</sub> production from seawater over Co, N-codoped nanocarbons. <i>Nanoscale</i> , 2015, 7, 2306-2316.	2.8	158
421	Regulating the Electrical Behaviors of 2D Inorganic Nanomaterials for Energy Applications. <i>Small</i> , 2015, 11, 654-666.	5.2	50
422	A label-free ultrasensitive electrochemical DNA sensor based on thin-layer MoS <sub>2</sub> nanosheets with high electrochemical activity. <i>Biosensors and Bioelectronics</i> , 2015, 64, 386-391.	5.3	150
423	A Novel MoSe <sub>2</sub> "Reduced Graphene Oxide/Polyimide Composite Film for Applications in Electrocatalysis and Photoelectrocatalysis Hydrogen Evolution. <i>Advanced Functional Materials</i> , 2015, 25, 1814-1820.	7.8	165
424	Metal Dichalcogenides Monolayers: Novel Catalysts for Electrochemical Hydrogen Production. <i>Scientific Reports</i> , 2014, 4, 5348.	1.6	151
425	Few-Layer MoSe <sub>2</sub> Possessing High Catalytic Activity towards Iodide/Tri-iodide Redox Shuttles. <i>Scientific Reports</i> , 2014, 4, 4063.	1.6	70
426	Perpendicularly Oriented MoSe <sub>2</sub> /Graphene Nanosheets as Advanced Electrocatalysts for Hydrogen Evolution. <i>Small</i> , 2015, 11, 414-419.	5.2	276
427	Two-dimensional transition metal dichalcogenide nanosheet-based composites. <i>Chemical Society Reviews</i> , 2015, 44, 2713-2731.	18.7	1,405
428	Hydrogen Evolution Reaction of $\beta$ -Mo <sub>0.5</sub> W <sub>0.5</sub> C Achieved by High Pressure High Temperature Synthesis. <i>Catalysts</i> , 2016, 6, 208.	1.6	3
429	Two-Dimensional Transition Metal Dichalcogenides for Electrocatalytic Energy Conversion Applications. , 0, .		2
430	Synthesis of MoP decorated carbon cloth as a binder-free electrode for hydrogen evolution. <i>RSC Advances</i> , 2016, 6, 68568-68573.	1.7	29
431	Synthesis of Two-Dimensional Materials for Capacitive Energy Storage. <i>Advanced Materials</i> , 2016, 28, 6104-6135.	11.1	548
432	Phase Transformation Engineering in Cobalt Diselenide Realizing Enhanced Catalytic Activity for Hydrogen Evolution in an Alkaline Medium. <i>Advanced Materials</i> , 2016, 28, 7527-7532.	11.1	307
433	Lösungsprozessierte MoS <sub>2</sub> Nanoplättchen: Herstellung, Hybridisierung und Anwendungen. <i>Angewandte Chemie</i> , 2016, 128, 8960-8984.	1.6	52

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434	Preparation of Single-Layer MoS <sub>2</sub> and Mo <sub>1-x</sub> W <sub>x</sub> S <sub>2</sub> Nanosheets with High Concentration Metallic 1T Phase. <i>Small</i> , 2016, 12, 1866-1874.	5.2	126
435	Controlled Formation of TiO <sub>2</sub> /MoS <sub>2</sub> Core-Shell Heterostructures with Enhanced Visible-Light Photocatalytic Activities. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 221-227.	1.2	45
436	Layer-Controlled Chemical Vapor Deposition Growth of MoS <sub>2</sub> Vertical Heterostructures via van der Waals Epitaxy. <i>ACS Nano</i> , 2016, 10, 7039-7046.	7.3	122
437	Probing the Crystal Structure, Composition-Dependent Absolute Energy Levels, and Electrocatalytic Properties of Silver Indium Sulfide Nanostructures. <i>ChemPhysChem</i> , 2016, 17, 1195-1203.	1.0	15
438	Superior Electrical Conductivity in Hydrogenated Layered Ternary Chalcogenide Nanosheets for Flexible All-Solid-State Supercapacitors. <i>Angewandte Chemie</i> , 2016, 128, 5827-5832.	1.6	18
439	Recent Strategies for Improving the Catalytic Activity of 2D TMD Nanosheets Toward the Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2016, 28, 6197-6206.	11.1	769
440	Transition Metal Disulfides as Noble-Metal Alternative Co-Catalysts for Solar Hydrogen Production. <i>Advanced Energy Materials</i> , 2016, 6, 1502555.	10.2	279
441	Molybdenum Disulfide/Nitrogen-Doped Reduced Graphene Oxide Nanocomposite with Enlarged Interlayer Spacing for Electrocatalytic Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2016, 6, 1600116.	10.2	433
442	Two-Dimensional, Few-Layer Phosphochalcogenide, FePS <sub>3</sub> : A New Catalyst for Electrochemical Hydrogen Evolution over Wide pH Range. <i>ACS Energy Letters</i> , 2016, 1, 367-372.	8.8	178
443	Electrochemical Surface Interrogation of a MoS <sub>2</sub> Hydrogen-Evolving Catalyst: In Situ Determination of the Surface Hydride Coverage and the Hydrogen Evolution Kinetics. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2748-2752.	2.1	39
444	Solution-Processed Two-Dimensional MoS <sub>2</sub> Nanosheets: Preparation, Hybridization, and Applications. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8816-8838.	7.2	557
445	Engineering the Electronic Structure of 2D WS <sub>2</sub> Nanosheets Using Co Incorporation as Co <sub>1-x</sub> W <sub>x</sub> (1-x)S <sub>2</sub> for Conspicuously Enhanced Hydrogen Generation. <i>Small</i> , 2016, 12, 3802-3809.	5.2	60
446	Mechanically-induced reverse phase transformation of MoS <sub>2</sub> from stable 2H to metastable 1T and its memristive behavior. <i>RSC Advances</i> , 2016, 6, 65691-65697.	1.7	63
447	Superior Electrical Conductivity in Hydrogenated Layered Ternary Chalcogenide Nanosheets for Flexible All-Solid-State Supercapacitors. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5733-5738.	7.2	76
448	Chalcogenide and Phosphide Solid-State Electrocatalysts for Hydrogen Generation. <i>ChemPlusChem</i> , 2016, 81, 1045-1055.	1.3	74
449	Recent Advances in Controlling Syntheses and Energy Related Applications of MX <sub>2</sub> and MX <sub>2</sub> /Graphene Heterostructures. <i>Advanced Energy Materials</i> , 2016, 6, 1600459.	10.2	43
450	Ultrasmall Cu <sub>7</sub> S <sub>4</sub> @MoS <sub>2</sub> Hetero-Nanoframes with Abundant Active Edge Sites for Ultrahigh-Performance Hydrogen Evolution. <i>Angewandte Chemie</i> , 2016, 128, 6612-6615.	1.6	14
451	Selenium-Enriched Nickel Selenide Nanosheets as a Robust Electrocatalyst for Hydrogen Generation. <i>Angewandte Chemie</i> , 2016, 128, 7033-7038.	1.6	65

#	ARTICLE	IF	CITATIONS
452	Searching for Highly Active Catalysts for Hydrogen Evolution Reaction Based on O-Terminated MXenes through a Simple Descriptor. <i>Chemistry of Materials</i> , 2016, 28, 9026-9032.	3.2	247
453	Electrocatalytic Hydrogen Evolution Reaction of 2H MoSe <sub>2</sub> Nanoflowers and 2H-MoSe <sub>2</sub> /±-MoO <sub>3</sub> Heterostucture. <i>Electrochimica Acta</i> , 2016, 222, 499-504.	2.6	20
454	Electrocatalytic activity and electrochemical stability of Niâ€S/CeO <sub>2</sub> composite electrode for hydrogen evolution in alkaline water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 22643-22651.	3.8	21
455	All The Catalytic Active Sites of MoS <sub>2</sub> for Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2016, 138, 16632-16638.	6.6	664
456	Edge structures and properties of triangular antidots in single-layer MoS <sub>2</sub> . <i>Applied Physics Letters</i> , 2016, 109, 091603.	1.5	15
457	CuO photocathode-embedded semitransparent photoelectrochemical cell. <i>Journal of Materials Research</i> , 2016, 31, 3205-3213.	1.2	21
458	<i>In situ</i> Electrochemical Transformation of Ni <sub>3</sub> S <sub>2</sub> and Ni <sub>3</sub> S <sub>2</sub> â€Ni from Sheets to Nanodisks: Towards Efficient Electrocatalysis for Hydrogen Evolution Reaction (HER). <i>ChemistrySelect</i> , 2016, 1, 6708-6712.	0.7	11
459	First-principle study of hydrogenation on monolayer MoS <sub>2</sub> . <i>AIP Advances</i> , 2016, 6, .	0.6	34
460	Phase engineering of MoS <sub>2</sub> through GaN/AlN substrate coupling and electron doping. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 33351-33356.	1.3	14
461	Low-temperature growth of layered molybdenum disulphide with controlled clusters. <i>Scientific Reports</i> , 2016, 6, 21854.	1.6	59
463	Semimetallic MoP <sub>2</sub> : an active and stable hydrogen evolution electrocatalyst over the whole pH range. <i>Nanoscale</i> , 2016, 8, 8500-8504.	2.8	155
464	Selenideâ€Based Electrocatalysts and Scaffolds for Water Oxidation Applications. <i>Advanced Materials</i> , 2016, 28, 77-85.	11.1	544
465	Constructing ultrathin film with â€memoryâ€ photocatalytic activity from monolayered tungstate nanodots. <i>Chemical Communications</i> , 2016, 52, 6985-6988.	2.2	15
466	Controlled growth of MoS <sub>2</sub> nanopetals and their hydrogen evolution performance. <i>RSC Advances</i> , 2016, 6, 18483-18489.	1.7	32
467	High-performance flexible hydrogen sensor made of WS <sub>2</sub> nanosheetâ€Pd nanoparticle composite film. <i>Nanotechnology</i> , 2016, 27, 195501.	1.3	78
468	Ni <sub>0.85</sub> Se as an efficient non-noble bifunctional electrocatalyst for full water splitting. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 10688-10694.	3.8	92
469	Mussel inspired preparation of MoS <sub>2</sub> based polymer nanocomposites: The case of polyPEGMA. <i>Applied Surface Science</i> , 2016, 387, 399-405.	3.1	24
470	Novel Fe <sub>2</sub> P/graphitized carbon yolk/shell octahedra for high-efficiency hydrogen production and lithium storage. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9923-9930.	5.2	45



#	ARTICLE	IF	CITATIONS
471	T-ZrS nanoribbons: structure and electronic properties. Philosophical Magazine, 2016, 96, 2074-2087.	0.7	8
472	Tuning the activity of nanoplatelet MoS <sub>2</sub> -based catalyst for efficient hydrogen evolution via electrochemical decoration with Pt nanoparticles. Applied Surface Science, 2016, 385, 56-62.	3.1	23
473	Highly stable hollow bifunctional cobalt sulfides for flexible supercapacitors and hydrogen evolution. Journal of Materials Chemistry A, 2016, 4, 9014-9018.	5.2	85
474	Thickness-induced structural phase transformation of layered gallium telluride. Physical Chemistry Chemical Physics, 2016, 18, 18719-18726.	1.3	71
475	A wafer-scale antireflective protection layer of solution-processed TiO <sub>2</sub> nanorods for high performance silicon-based water splitting photocathodes. Journal of Materials Chemistry A, 2016, 4, 9477-9485.	5.2	47
476	Metal Doping Effect of the MoS <sub>2</sub> /P/Nitrogen-Doped Carbon Nanotubes (M = Fe, Ni, Cu) Hydrogen Evolution Hybrid Catalysts. ACS Applied Materials & Interfaces, 2016, 8, 13890-13901.	4.0	172
477	Synergetic effect of MoS <sub>2</sub> /RGO doping to enhance the photocatalytic performance of ZnO nanoparticles. New Journal of Chemistry, 2016, 40, 5185-5197.	1.4	123
478	A facile one-step method to produce MoS <sub>2</sub> quantum dots as promising bio-imaging materials. RSC Advances, 2016, 6, 25605-25610.	1.7	54
479	MoS <sub>2</sub> /NbSe <sub>2</sub> Hybrid Nanobelts for Enhanced Hydrogen Evolution. Journal of the Electrochemical Society, 2016, 163, H384-H387.	1.3	26
480	Bandgap Transition of 2H Transition Metal Dichalcogenides: Predictive Tuning via Inherent Interface Coupling and Strain. Journal of Physical Chemistry C, 2016, 120, 8927-8935.	1.5	31
481	Template-directed approach to two-dimensional molybdenum phosphide-carbon nanocomposites with high catalytic activities in the hydrogen evolution reaction. New Journal of Chemistry, 2016, 40, 6015-6021.	1.4	25
482	General Formation of MoS <sub>3</sub> (M = Co, Ni) Hollow Structures with Enhanced Electrocatalytic Activity for Hydrogen Evolution. Advanced Materials, 2016, 28, 92-97.	11.1	364
483	Novel hydrothermal synthesis of MoS <sub>2</sub> nanocluster structure for sensitive electrochemical detection of human and environmental hazardous pollutant 4-aminophenol. RSC Advances, 2016, 6, 40399-40407.	1.7	32
484	Co nanoparticles embedded in a 3D CoO matrix for electrocatalytic hydrogen evolution. RSC Advances, 2016, 6, 38515-38520.	1.7	26
485	Molybdenum disulfide nanosheets as barrier enhancing nanofillers in thermal decomposition of polypropylene composites. Chemical Engineering Journal, 2016, 295, 278-287.	6.6	47
486	Ni <sub>3</sub> Se <sub>2</sub> nanoforest/Ni foam as a hydrophilic, metallic, and self-supported bifunctional electrocatalyst for both H <sub>2</sub> and O <sub>2</sub> generations. Nano Energy, 2016, 24, 103-110.	8.2	377
487	Efficient exfoliation of bulk MoS <sub>2</sub> to nanosheets by mixed-solvent refluxing method. International Journal of Hydrogen Energy, 2016, 41, 10737-10743.	3.8	25
488	A self-standing nanoporous MoP <sub>2</sub> nanosheet array: an advanced pH-universal catalytic electrode for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2016, 4, 7169-7173.	5.2	204

#	ARTICLE	IF	CITATIONS
489	MoSSe@reduced graphene oxide nanocomposite heterostructures as efficient and stable electrocatalysts for the hydrogen evolution reaction. Nano Energy, 2016, 29, 46-53.	8.2	94
490	Hydrogen and CO <sub>2</sub> Reduction Reactions: Mechanisms and Catalysts. , 2016, , 105-160.		11
491	Salt-template-assisted synthesis of robust 3D honeycomb-like structured MoS <sub>2</sub> and its application as a lithium-ion battery anode. Journal of Materials Chemistry A, 2016, 4, 8734-8741.	5.2	96
492	Cobalt phosphate nanoparticles decorated with nitrogen-doped carbon layers as highly active and stable electrocatalysts for the oxygen evolution reaction. Journal of Materials Chemistry A, 2016, 4, 8155-8160.	5.2	222
493	Large-scale synthesis of LiNi <sub>0.75</sub> Fe <sub>0.25</sub> PO <sub>4</sub> covalently anchored on graphene nanosheets for remarkable electrochemical water oxidation. Journal of Materials Chemistry A, 2016, 4, 8149-8154.	5.2	10
494	Ditungsten carbide nanoparticles encapsulated by ultrathin graphitic layers with excellent hydrogen-evolution electrocatalytic properties. Journal of Materials Chemistry A, 2016, 4, 8204-8210.	5.2	57
495	Synthesis of Molybdenum Disulfide Nanowire Arrays Using a Block Copolymer Template. Chemistry of Materials, 2016, 28, 4017-4023.	3.2	28
496	Co-, N-, and S-Tridoped Carbon Derived from Nitrogen- and Sulfur-Enriched Polymer and Cobalt Salt for Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2016, 8, 13341-13347.	4.0	44
497	Stabilizing metastable tetragonal HfO <sub>2</sub> using a non-hydrolytic solution-phase route: ligand exchange as a means of controlling particle size. Chemical Science, 2016, 7, 4930-4939.	3.7	29
498	Large-area high quality MoS <sub>2</sub> monolayers grown by sulfur vapor counter flow diffusion. RSC Advances, 2016, 6, 50306-50314.	1.7	26
499	Unsaturated-sulfur-rich MoS <sub>2</sub> nanosheets decorated on free-standing SWNT film: Synthesis, characterization and electrocatalytic application. Nano Research, 2016, 9, 2079-2087.	5.8	69
500	Electrocatalysts for hydrogen oxidation and evolution reactions. Science China Materials, 2016, 59, 217-238.	3.5	142
501	Facile one-pot synthesis of CoS <sub>2</sub> -MoS <sub>2</sub> /CNTs as efficient electrocatalyst for hydrogen evolution reaction. Applied Surface Science, 2016, 384, 51-57.	3.1	121
502	Growth of MoSe <sub>2</sub> nanosheets with small size and expanded spaces of (002) plane on the surfaces of porous N-doped carbon nanotubes for hydrogen production. Nanoscale, 2016, 8, 16886-16893.	2.8	72
503	In-Plane Heterojunctions Enable Multiphase Two-Dimensional (2D) MoS <sub>2</sub> Nanosheets As Efficient Photocatalysts for Hydrogen Evolution from Water Reduction. ACS Catalysis, 2016, 6, 6723-6729.	5.5	116
504	In situ growth of metallic 1T-WS <sub>2</sub> nanoislands on single-walled carbon nanotube films for improved electrochemical performance. RSC Advances, 2016, 6, 87919-87925.	1.7	29
505	Ultrafine Co <sub>2</sub> P nanoparticles encapsulated in nitrogen and phosphorus dual-doped porous carbon nanosheet/carbon nanotube hybrids: high-performance bifunctional electrocatalysts for overall water splitting. Journal of Materials Chemistry A, 2016, 4, 15501-15510.	5.2	90
506	A p-Si/NiCoSe <sub>x</sub> core/shell nanopillar array photocathode for enhanced photoelectrochemical hydrogen production. Energy and Environmental Science, 2016, 9, 3113-3119.	15.6	162

#	ARTICLE	IF	CITATIONS
507	A novel and highly efficient earth-abundant Cu <sub>3</sub> P with TiO <sub>2</sub> heterojunction nanophotocatalyst for hydrogen evolution from water. <i>Nanoscale</i> , 2016, 8, 17516-17523.	2.8	110
508	FeNi <sub>3</sub> /NiFeO <sub>x</sub> Nanohybrids as Highly Efficient Bifunctional Electrocatalysts for Overall Water Splitting. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600368.	1.9	84
509	Electrocatalysis of layered Group 5 metallic transition metal dichalcogenides (MX <sub>2</sub> , M =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	5.2	218
510	Sn-doped few-layer MoS <sub>2</sub> /graphene hybrids with rich active sites and their enhanced catalytic performance for hydrogen generation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 509, 140-148.	2.3	9
511	Solvent-Assisted Oxygen Incorporation of Vertically Aligned MoS <sub>2</sub> Ultrathin Nanosheets Decorated on Reduced Graphene Oxide for Improved Electrocatalytic Hydrogen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 25210-25218.	4.0	103
512	Versatile Titanium Silicide Monolayers with Prominent Ferromagnetic, Catalytic, and Superconducting Properties: Theoretical Prediction. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3723-3729.	2.1	28
513	Lamellar structured CoSe <sub>2</sub> nanosheets directly arrayed on Ti plate as an efficient electrochemical catalyst for hydrogen evolution. <i>Electrochimica Acta</i> , 2016, 217, 156-162.	2.6	45
514	MoS <sub>2</sub> nanosheet decorated with trace loads of Pt as highly active electrocatalyst for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2016, 219, 187-193.	2.6	69
515	Wafer Scale Phase-Engineered 1T- and 2H-MoS <sub>2</sub> /Mo Core-Shell 3D Hierarchical Nanostructures toward Efficient Electrocatalytic Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2016, 28, 9831-9838.	11.1	208
516	Targeted Synthesis of 2H- and 1T-Phase MoS <sub>2</sub> Monolayers for Catalytic Hydrogen Evolution. <i>Advanced Materials</i> , 2016, 28, 10033-10041.	11.1	534
517	High-Yield Preparation and Electrochemical Properties of Few-Layer MoS <sub>2</sub> Nanosheets by Exfoliating Natural Molybdenite Powders Directly via a Coupled Ultrasonication-Milling Process. <i>Nanoscale Research Letters</i> , 2016, 11, 409.	3.1	32
518	Mo <sub>2</sub> C quantum dot embedded chitosan-derived nitrogen-doped carbon for efficient hydrogen evolution in a broad pH range. <i>Chemical Communications</i> , 2016, 52, 12753-12756.	2.2	138
519	Vertical 2D MoO <sub>2</sub> /MoSe <sub>2</sub> Core-Shell Nanosheet Arrays as High-Performance Electrocatalysts for Hydrogen Evolution Reaction. <i>Advanced Functional Materials</i> , 2016, 26, 8537-8544.	7.8	167
520	Carbon-Coated Nickel Phosphide Nanosheets as Efficient Dual-Electrocatalyst for Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 27850-27858.	4.0	113
521	Fabrication of zero to three dimensional nanostructured molybdenum sulfides and their electrochemical and photocatalytic applications. <i>Nanoscale</i> , 2016, 8, 18250-18269.	2.8	79
522	Ni <sub>2</sub> -CoP hybrid nanosheet arrays supported on carbon cloth as an efficient flexible cathode for hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16992-16999.	5.2	148
523	NaSn <sub>2</sub> As <sub>2</sub> : An Exfoliatable Layered van der Waals Zintl Phase. <i>ACS Nano</i> , 2016, 10, 9500-9508.	7.3	39
524	Tuning two-dimensional nanomaterials by intercalation: materials, properties and applications. <i>Chemical Society Reviews</i> , 2016, 45, 6742-6765.	18.7	363

#	ARTICLE	IF	CITATIONS
525	Scalable synthesis of high-quality transition metal dichalcogenide nanosheets and their application as sodium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17370-17380.	5.2	72
526	Hydrogen evolution reaction performance of the molybdenum disulfide/nickel-phosphorus composites in alkaline solution. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 18942-18952.	3.8	30
527	Impact of Covalent Functionalization on the Aqueous Processability, Catalytic Activity, and Biocompatibility of Chemically Exfoliated MoS <sub>2</sub> Nanosheets. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 27974-27986.	4.0	73
528	Facile Synthesis of Single Crystal PtSe <sub>2</sub> Nanosheets for Nanoscale Electronics. <i>Advanced Materials</i> , 2016, 28, 10224-10229.	11.1	286
529	Self-sacrificial template method of Mo <sub>3</sub> O <sub>10</sub> (C <sub>6</sub> H <sub>8</sub> N) <sub>2</sub> ·2H <sub>2</sub> O to fabricate MoS <sub>2</sub> /carbon-doped MoO <sub>2</sub> nanobelts as efficient electrocatalysts for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2016, 216, 397-404.	2.6	26
530	Self-supported porous Ni-Fe-P composite as an efficient electrocatalyst for hydrogen evolution reaction in both acidic and alkaline medium. <i>Electrochimica Acta</i> , 2016, 219, 194-203.	2.6	97
531	Vertically oriented few-layered HfS <sub>2</sub> nanosheets: growth mechanism and optical properties. <i>2D Materials</i> , 2016, 3, 035024.	2.0	88
532	Driving electrocatalytic activity by interface electronic structure control in a metalloprotein hybrid catalyst for efficient hydrogen evolution. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 23220-23230.	1.3	6
533	Emerging Applications of 2D TMDCs. <i>Springer Series in Materials Science</i> , 2016, , 473-512.	0.4	3
534	Recent progress in chemical vapor deposition growth of two-dimensional transition metal dichalcogenides. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2016, 62, 9-28.	1.8	66
535	Negative Electrocatalytic Effects of p-Doping Niobium and Tantalum on MoS <sub>2</sub> and WS <sub>2</sub> for the Hydrogen Evolution Reaction and Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2016, 6, 5724-5734.	5.5	174
536	Facile synthesis of hollow carbon microspheres embedded with molybdenum carbide nanoparticles as an efficient electrocatalyst for hydrogen generation. <i>RSC Advances</i> , 2016, 6, 75870-75874.	1.7	26
537	Diatom Frustules as a Biomineralized Scaffold for the Growth of Molybdenum Disulfide Nanosheets. <i>Chemistry of Materials</i> , 2016, 28, 5582-5586.	3.2	13
538	Enhancement of the Hydrogen Evolution Reaction from Ni-MoS <sub>2</sub> Hybrid Nanoclusters. <i>ACS Catalysis</i> , 2016, 6, 6008-6017.	5.5	122
539	WS <sub>2</sub> as a saturable absorber for Q-switched 2-µm lasers. <i>Optics Letters</i> , 2016, 41, 3783.	1.7	76
540	Metallic 1T phase MoS <sub>2</sub> nanosheets as a highly efficient co-catalyst for the photocatalytic hydrogen evolution of CdS nanorods. <i>RSC Advances</i> , 2016, 6, 74394-74399.	1.7	48
541	Dual-Mode Luminescent Nanopaper Based on Ultrathin g-C <sub>3</sub> N <sub>4</sub> Nanosheets Grafted with Rare-Earth Upconversion Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 21555-21562.	4.0	49
542	Two-Dimensional Molybdenum Carbide (MXene) as an Efficient Electrocatalyst for Hydrogen Evolution. <i>ACS Energy Letters</i> , 2016, 1, 589-594.	8.8	1,100

#	ARTICLE	IF	CITATIONS
543	Growth and Tunable Surface Wettability of Vertical MoS <sub>2</sub> Layers for Improved Hydrogen Evolution Reactions. ACS Applied Materials & Interfaces, 2016, 8, 22190-22195.	4.0	94
544	Factors controlling the CO intercalation of h-BN overlayers on Ru(0001). Physical Chemistry Chemical Physics, 2016, 18, 24278-24284.	1.3	13
545	Hierarchically nanostructured MoS <sub>2</sub> with rich in-plane edges as a high-performance electrocatalyst for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2016, 4, 14577-14585.	5.2	58
546	Solution Growth of Vertical VS <sub>2</sub> Nanoplate Arrays for Electrocatalytic Hydrogen Evolution. Chemistry of Materials, 2016, 28, 5587-5591.	3.2	173
547	Ultra-small nickel phosphide nanoparticles as a high-performance electrocatalyst for the hydrogen evolution reaction. RSC Advances, 2016, 6, 74895-74902.	1.7	12
548	Narrowâ€‘Gap Quantum Wires Arising from the Edges of Monolayer MoS <sub>2</sub> Synthesized on Graphene. Advanced Materials Interfaces, 2016, 3, 1600332.	1.9	30
549	Anchoring CoO Domains on CoSe <sub>2</sub> Nanobelts as Bifunctional Electrocatalysts for Overall Water Splitting in Neutral Media. Advanced Science, 2016, 3, 1500426.	5.6	236
550	MoS <sub>2</sub> /WS <sub>2</sub> â€‘Graphene Composites through Thermal Decomposition of Tetrathiomolybdate/Tetrathiotungstate for Proton/Oxygen Electroreduction. ChemPhysChem, 2016, 17, 2890-2896.	1.0	12
551	Facile synthesis and optical properties of zincblende and wurtzite Cu <sub>3</sub> ZnInSnSe <sub>6</sub> nanocrystals. Journal of Alloys and Compounds, 2016, 689, 425-431.	2.8	4
552	Biomolecule-assisted exfoliation and dispersion of graphene and other two-dimensional materials: a review of recent progress and applications. Nanoscale, 2016, 8, 15389-15413.	2.8	122
553	A Flexible Platform Containing Graphene Mesoporous Structure and Carbon Nanotube for Hydrogen Evolution. Advanced Science, 2016, 3, 1600208.	5.6	19
554	Controllable synthesis of molybdenum carbide nanoparticles embedded in porous graphitized carbon matrixes as efficient electrocatalyst for hydrogen evolution reaction. Electrochimica Acta, 2016, 215, 357-365.	2.6	48
555	Computational Insight into the Covalent Organicâ€‘Inorganic Interface. Chemistry of Materials, 2016, 28, 5976-5988.	3.2	22
556	MOF-derived Co-doped nickel selenide/C electrocatalysts supported on Ni foam for overall water splitting. Journal of Materials Chemistry A, 2016, 4, 15148-15155.	5.2	291
557	Hydrothermal synthesis of layer-controlled MoS <sub>2</sub> /graphene composite aerogels for lithium-ion battery anode materials. Applied Surface Science, 2016, 390, 209-215.	3.1	72
558	MoS <sub>2</sub> yolkâ€‘shell microspheres with a hierarchical porous structure for efficient hydrogen evolution. Nano Research, 2016, 9, 3038-3047.	5.8	41
559	Sulfur-Depleted Monolayered Molybdenum Disulfide Nanocrystals for Superelectrochemical Hydrogen Evolution Reaction. ACS Nano, 2016, 10, 8929-8937.	7.3	140
560	PEG-mediated hydrothermal synthesis of hierarchical microspheres of MoS <sub>2</sub> nanosheets and their potential for lubrication application. Journal of Industrial and Engineering Chemistry, 2016, 42, 87-94.	2.9	55

#	ARTICLE	IF	CITATIONS
561	Atomic-Sized Pores Enhanced Electrocatalysis of TaS <sub>2</sub> Nanosheets for Hydrogen Evolution. <i>Advanced Materials</i> , 2016, 28, 8945-8949.	11.1	167
562	An in Situ Sulfidation Approach for the Integration of MoS <sub>2</sub> Nanosheets on Carbon Fiber Paper and the Modulation of Its Electrocatalytic Activity by Interfacing with <i>n</i> -C <sub>60</sub> . <i>ACS Catalysis</i> , 2016, 6, 6246-6254.	5.5	60
563	Top-Down and Bottom-Up Approaches in Engineering 1T Phase Molybdenum Disulfide (MoS <sub>2</sub> ): Towards Highly Catalytically Active Materials. <i>Chemistry - A European Journal</i> , 2016, 22, 14336-14341.	1.7	45
564	CoSe <sub>2</sub> nanoparticles embedded defective carbon nanotubes derived from MOFs as efficient electrocatalyst for hydrogen evolution reaction. <i>Nano Energy</i> , 2016, 28, 143-150.	8.2	278
565	Effects of p- and n-type Doping in Inorganic Fullerene MoS <sub>2</sub> on the Hydrogen Evolution Reaction. <i>ChemElectroChem</i> , 2016, 3, 1937-1943.	1.7	24
566	Dopamine-Induced Formation of Ultrasmall Few-Layer MoS <sub>2</sub> Homogeneously Embedded in N-Doped Carbon Framework for Enhanced Lithium-Ion Storage. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 33741-33748.	4.0	49
567	Oxygen-Incorporated MoS <sub>2</sub> Nanosheets with Expanded Interlayers for Hydrogen Evolution Reaction and Pseudocapacitor Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 33681-33689.	4.0	94
568	Facile synthesis of CoNi <sub>2</sub> S <sub>4</sub> and CuCo <sub>2</sub> S <sub>4</sub> with different morphologies as prominent catalysts for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 19847-19854.	3.8	73
569	Monolayer MoS <sub>2</sub> with S vacancies from interlayer spacing expanded counterparts for highly efficient electrochemical hydrogen production. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16524-16530.	5.2	148
570	Ternary Metal Phosphide with Triple-Layered Structure as a Low-Cost and Efficient Electrocatalyst for Bifunctional Water Splitting. <i>Advanced Functional Materials</i> , 2016, 26, 7644-7651.	7.8	389
571	Vertically aligned oxygen-doped molybdenum disulfide nanosheets grown on carbon cloth realizing robust hydrogen evolution reaction. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 1160-1166.	3.0	55
572	Electrochemical Dealloying of PdCu <sub>3</sub> Nanoparticles to Achieve Pt-like Activity for the Hydrogen Evolution Reaction. <i>ChemSusChem</i> , 2016, 9, 2922-2927.	3.6	79
573	Phase Restructuring in Transition Metal Dichalcogenides for Highly Stable Energy Storage. <i>ACS Nano</i> , 2016, 10, 9208-9215.	7.3	216
574	Structural Evolution of Electrochemically Lithiated MoS <sub>2</sub> Nanosheets and the Role of Carbon Additive in Li-Ion Batteries. <i>Chemistry of Materials</i> , 2016, 28, 7304-7310.	3.2	89
575	Ultrastable nitrogen-doped carbon encapsulating molybdenum phosphide nanoparticles as highly efficient electrocatalyst for hydrogen generation. <i>Nanoscale</i> , 2016, 8, 17256-17261.	2.8	83
576	Synthesis of 1T-MoSe <sub>2</sub> ultrathin nanosheets with an expanded interlayer spacing of 1.17 nm for efficient hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14949-14953.	5.2	190
577	Hybrid catalyst of MoS <sub>2</sub> -CoMo <sub>2</sub> S <sub>4</sub> on graphene for robust electrochemical hydrogen evolution. <i>Fuel</i> , 2016, 184, 559-564.	3.4	40
578	Relating the optical absorption coefficient of nanosheet dispersions to the intrinsic monolayer absorption. <i>Carbon</i> , 2016, 107, 733-738.	5.4	35

#	ARTICLE	IF	CITATIONS
579	Porous nickel disulfide/reduced graphene oxide nanohybrids with improved electrocatalytic performance for hydrogen evolution. <i>Catalysis Communications</i> , 2016, 85, 26-29.	1.6	36
580	Stabilizing Active Edge Sites in Semicrystalline Molybdenum Sulfide by Anchorage on Nitrogen-Doped Carbon Nanotubes for Hydrogen Evolution Reaction. <i>Advanced Functional Materials</i> , 2016, 26, 6766-6776.	7.8	110
581	Three-dimensional carbon foam/N-doped graphene@MoS <sub>2</sub> hybrid nanostructures as effective electrocatalysts for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2016, 4, 12720-12725.	5.2	93
582	Colloidal preparation and electrocatalytic hydrogen production of MoS <sub>2</sub> and WS <sub>2</sub> nanosheets with controllable lateral sizes and layer numbers. <i>Nanoscale</i> , 2016, 8, 15262-15272.	2.8	64
583	Solution-processed MoS <sub>2</sub> nanotubes/reduced graphene oxide nanocomposite as an active electrocatalyst toward the hydrogen evolution reaction. <i>RSC Advances</i> , 2016, 6, 70740-70746.	1.7	15
584	Electrochemical Activity of Iron Phosphide Nanoparticles in Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2016, 6, 5441-5448.	5.5	197
585	In-situ Fabrication of Tungsten Diphosphide Nanoparticles on Tungsten foil: A Hydrogen Evolution Cathode for a Wide pH Range. <i>Energy Technology</i> , 2016, 4, 1030-1034.	1.8	11
586	Cd Nanoparticles-Decorated Perpendicular Hybrid of MoS <sub>2</sub> and N-Doped Graphene Nanosheets for Omnidirectional Enhancement of Photocatalytic Hydrogen Evolution. <i>ChemCatChem</i> , 2016, 8, 2557-2564.	1.8	25
587	Alternate to Molybdenum Disulfide: A 2D, Few-Layer Transition-Metal Thiophosphate and Its Hydrogen Evolution Reaction Activity over a Wide pH Range. <i>ChemElectroChem</i> , 2016, 3, 1392-1399.	1.7	44
588	Mo Doping Induced More Active Sites in Urchin-Like W <sub>18</sub> O <sub>49</sub> Nanostructure with Remarkably Enhanced Performance for Hydrogen Evolution Reaction. <i>Advanced Functional Materials</i> , 2016, 26, 5778-5786.	7.8	177
589	Composition and Interface Engineering of Alloyed MoS <sub>2</sub> /xSe <sub>2</sub> (1-x) Nanotubes for Enhanced Hydrogen Evolution Reaction Activity. <i>Small</i> , 2016, 12, 4379-4385.	5.2	72
590	Two-Dimensional Colloidal Nanocrystals. <i>Chemical Reviews</i> , 2016, 116, 10934-10982.	23.0	412
591	Engineering water dissociation sites in MoS <sub>2</sub> nanosheets for accelerated electrocatalytic hydrogen production. <i>Energy and Environmental Science</i> , 2016, 9, 2789-2793.	15.6	503
592	Enhanced Catalytic Activities of Metal-Phase-Assisted 1T@2H-MoSe <sub>2</sub> Nanosheets for Hydrogen Evolution. <i>Electrochimica Acta</i> , 2016, 217, 181-186.	2.6	83
593	A New Potassium Intercalation Compound of 3R-Nb <sub>1.15</sub> S <sub>2</sub> and its Superconducting Hydrated Derivative Synthesized via Soft Chemistry Strategy. <i>ChemistrySelect</i> , 2016, 1, 2610-2616.	0.7	3
594	Layered Post-Transition-Metal Dichalcogenides (X <sub>2</sub> M <sub>2</sub> X) and Their Properties. <i>Chemistry - A European Journal</i> , 2016, 22, 18810-18816.	1.7	29
595	Functionalized Nano-MoS <sub>2</sub> with Peroxidase Catalytic and Near-Infrared Photothermal Activities for Safe and Synergetic Wound Antibacterial Applications. <i>ACS Nano</i> , 2016, 10, 11000-11011.	7.3	812
596	Efficient Electrocatalytic and Photoelectrochemical Hydrogen Generation Using MoS <sub>2</sub> and Related Compounds. <i>Chem</i> , 2016, 1, 699-726.	5.8	462

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597	Graphene oxide co-doped with nitrogen and sulfur and decorated with cobalt phosphide nanorods: An efficient hybrid catalyst for electrochemical hydrogen evolution. <i>Electrochimica Acta</i> , 2016, 222, 246-256.	2.6	57
598	Plasma-Assisted Synthesis of NiCoP for Efficient Overall Water Splitting. <i>Nano Letters</i> , 2016, 16, 7718-7725.	4.5	1,079
599	Reinforcement of organo-modified molybdenum disulfide nanosheets on the mechanical and thermal properties of polyurethane acrylate films. <i>Composites Science and Technology</i> , 2016, 137, 188-195.	3.8	11
600	Ni <sup>2+</sup> Nanosheets as Catalyst for Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2016, 138, 14546-14549.	6.6	424
601	Controlled growth of vertical 3D MoS <sub>2</sub> (1 <sup>x</sup> )Se <sub>2x</sub> nanosheets for an efficient and stable hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18060-18066.	5.2	76
602	Hydrogenation-controlled phase transition on two-dimensional transition metal dichalcogenides and their unique physical and catalytic properties. <i>Scientific Reports</i> , 2016, 6, 34186.	1.6	61
603	Highly Active and Stable Catalysts of Phytic Acid-Derivative Transition Metal Phosphides for Full Water Splitting. <i>Journal of the American Chemical Society</i> , 2016, 138, 14686-14693.	6.6	647
604	Efficient hydrogen evolution in transition metal dichalcogenides via a simple one-step hydrazine reaction. <i>Nature Communications</i> , 2016, 7, 11857.	5.8	179
605	Efficient hydrogen evolution by ternary molybdenum sulfoselenide particles on self-standing porous nickel diselenide foam. <i>Nature Communications</i> , 2016, 7, 12765.	5.8	312
606	Elastic Carbon Aerogels Reconstructed from Electrospun Nanofibers and Graphene as Three-Dimensional Networked Matrix for Efficient Energy Storage/Conversion. <i>Scientific Reports</i> , 2016, 6, 31541.	1.6	45
607	Ammonia intercalated flower-like MoS <sub>2</sub> nanosheet film as electrocatalyst for high efficient and stable hydrogen evolution. <i>Scientific Reports</i> , 2016, 6, 31092.	1.6	76
608	Synthesis of Co-doped MoS <sub>2</sub> /graphene hybrids as enhanced electrocatalysts for the hydrogen evolution reaction. <i>RSC Advances</i> , 2016, 6, 104925-104932.	1.7	42
609	Tailoring the Electronic Structure of Covalently Functionalized Germanane via the Interplay of Ligand Strain and Electronegativity. <i>Chemistry of Materials</i> , 2016, 28, 8071-8077.	3.2	71
610	Tuning thermal conductivity in molybdenum disulfide by electrochemical intercalation. <i>Nature Communications</i> , 2016, 7, 13211.	5.8	136
611	Tribological Properties of Water-lubricated Rubber Materials after Modification by MoS <sub>2</sub> Nanoparticles. <i>Scientific Reports</i> , 2016, 6, 35023.	1.6	66
612	Noble metal-free ultrathin MoS <sub>2</sub> nanosheet-decorated CdS nanorods as an efficient photocatalyst for spectacular hydrogen evolution under solar light irradiation. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18551-18558.	5.2	118
613	Lithium Exfoliated Vanadium Dichalcogenides (VS <sub>2</sub> , VSe <sub>2</sub> , VTe <sub>2</sub> ) Exhibit Dramatically Different Properties from Their Bulk Counterparts. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600433.	1.9	89
614	Hollow Chevrelâ€Phase NiMo <sub>3</sub> S <sub>4</sub> for Hydrogen Evolution in Alkaline Electrolytes. <i>Angewandte Chemie</i> , 2016, 128, 15466-15471.	1.6	59



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615	Hollow Chevrelâ€Phase NiMo <sub>3</sub> S <sub>4</sub> for Hydrogen Evolution in Alkaline Electrolytes. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15240-15245.	7.2	133
616	Self-Templated Growth of Vertically Aligned 2H-1T MoS <sub>2</sub> for Efficient Electrocatalytic Hydrogen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 31702-31708.	4.0	133
617	Solutionâ€Processed Twoâ€Dimensional Metal Dichalcogenideâ€Based Nanomaterials for Energy Storage and Conversion. <i>Advanced Materials</i> , 2016, 28, 6167-6196.	11.1	438
618	Ultrasmall Cu <sub>7</sub> S <sub>4</sub> @MoS <sub>2</sub> Heteroâ€Nanoframes with Abundant Active Edge Sites for Ultrahighâ€Performance Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6502-6505.	7.2	128
619	Bipolar Electrochemical Synthesis of WS <sub>2</sub> Nanoparticles and Their Application in Magnetoâ€Immuno sandwich Assay. <i>Advanced Functional Materials</i> , 2016, 26, 4094-4098.	7.8	43
620	Highâ€Performance Hydrogen Evolution from MoS <sub>2</sub> (1â€x)/P<sub>x</sub> Solid Solution. <i>Advanced Materials</i> , 2016, 28, 1427-1432.	11.1	309
621	Seleniumâ€Enriched Nickel Selenide Nanosheets as a Robust Electrocatalyst for Hydrogen Generation. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6919-6924.	7.2	307
622	Defect engineering of two-dimensional transition metal dichalcogenides. <i>2D Materials</i> , 2016, 3, 022002.	2.0	736
623	Thermoelectric performance of restacked MoS <sub>2</sub> nanosheets thin-film. <i>Nanotechnology</i> , 2016, 27, 285703.	1.3	33
624	Contributions of Phase, Sulfur Vacancies, and Edges to the Hydrogen Evolution Reaction Catalytic Activity of Porous Molybdenum Disulfide Nanosheets. <i>Journal of the American Chemical Society</i> , 2016, 138, 7965-7972.	6.6	1,055
625	A highly flexible and conductive graphene-wrapped carbon nanofiber membrane for high-performance electrocatalytic applications. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 969-976.	3.0	16
626	Doping MoS <sub>2</sub> with Graphene Quantum Dots: Structural and Electrical Engineering towards Enhanced Electrochemical Hydrogen Evolution. <i>Electrochimica Acta</i> , 2016, 211, 603-610.	2.6	72
627	Ionic-liquid mediated synthesis of molybdenum disulfide/graphene composites: An enhanced electrochemical hydrogen evolution catalyst. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 12049-12061.	3.8	35
628	Spectrophotometric determination of mercury(II) ions based on their stimulation effect on the peroxidase-like activity of molybdenum disulfide nanosheets. <i>Mikrochimica Acta</i> , 2016, 183, 2481-2489.	2.5	54
629	General Thermal Texturization Process of MoS <sub>2</sub> for Efficient Electrocatalytic Hydrogen Evolution Reaction. <i>Nano Letters</i> , 2016, 16, 4047-4053.	4.5	106
630	Hydrothermal assisted morphology designed MoS <sub>2</sub> material as alternative cathode catalyst for PEM electrolyser application. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 13331-13340.	3.8	45
631	Mechanism of Hydrogen Evolution Reaction on 1T-MoS <sub>2</sub> from First Principles. <i>ACS Catalysis</i> , 2016, 6, 4953-4961.	5.5	678
632	Nanostructured catalysts for electrochemical water splitting: current state and prospects. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11973-12000.	5.2	823

#	ARTICLE	IF	CITATIONS
633	Ultrathin Co(Ni)-doped MoS <sub>2</sub> nanosheets as catalytic promoters enabling efficient solar hydrogen production. Nano Research, 2016, 9, 2284-2293.	5.8	80
634	Universal Strategy to Fabricate a Two-Dimensional Layered Mesoporous Mo <sub>2</sub> C Electrolyte Hybridized on Graphene Sheets with High Activity and Durability for Hydrogen Generation. ACS Applied Materials & Interfaces, 2016, 8, 18107-18118.	4.0	71
635	Molybdenum Polysulfide Anchored on Porous Zr-Metal Organic Framework To Enhance the Performance of Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2016, 120, 12539-12548.	1.5	80
636	Design, synthesis, and energy-related applications of metal sulfides. Materials Horizons, 2016, 3, 402-421.	6.4	243
637	Layer-by-Layer Assembly of Two-Dimensional Colloidal Cu <sub>2</sub> Se Nanoplates and Their Layer-Dependent Conductivity. Chemistry of Materials, 2016, 28, 4307-4314.	3.2	28
638	Tension-Enhanced Hydrogen Evolution Reaction on Vanadium Disulfide Monolayer. Nanoscale Research Letters, 2016, 11, 113.	3.1	37
639	Aromatic-Exfoliated Transition Metal Dichalcogenides: Implications for Inherent Electrochemistry and Hydrogen Evolution. ACS Catalysis, 2016, 6, 4594-4607.	5.5	80
640	Rationalization of electrocatalysis of nickel phosphide nanowires for efficient hydrogen production. Nano Energy, 2016, 26, 496-503.	8.2	61
641	The role of electronic coupling between substrate and 2D MoS <sub>2</sub> nanosheets in electrocatalytic production of hydrogen. Nature Materials, 2016, 15, 1003-1009.	13.3	687
642	Epitaxial growth of Pd nanoparticles on molybdenum disulfide by sonochemistry and its effects on electrocatalysis. RSC Advances, 2016, 6, 47468-47473.	1.7	17
643	Colloidal synthesis of VSe <sub>2</sub> single-layer nanosheets as novel electrocatalysts for the hydrogen evolution reaction. Chemical Communications, 2016, 52, 9228-9231.	2.2	131
644	The enhancement of polysulfide absorption in Li S batteries by hierarchically porous CoS <sub>2</sub> /carbon paper interlayer. Journal of Power Sources, 2016, 325, 71-78.	4.0	140
645	MoS <sub>2</sub> -coated vertical graphene nanosheet for high-performance rechargeable lithium-ion batteries and hydrogen production. NPG Asia Materials, 2016, 8, e268-e268.	3.8	113
646	Mo <sub>x</sub> W <sub>1-x</sub> (S <sub>y</sub> Se <sub>1-y</sub> ) <sub>2</sub> Alloy Nanoflakes for High-Performance Electrocatalytic Hydrogen Evolution. Particle and Particle Systems Characterization, 2016, 33, 576-582.	1.2	24
647	Facile synthesis of molybdenum disulfide/nitrogen-doped graphene composites for enhanced electrocatalytic hydrogen evolution and electrochemical lithium storage. Carbon, 2016, 107, 711-722.	5.4	56
648	N-doped WS <sub>2</sub> nanosheets: a high-performance electrocatalyst for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2016, 4, 11234-11238.	5.2	147
649	Maneuvering charge polarization and transport in 2H-MoS <sub>2</sub> for enhanced electrocatalytic hydrogen evolution reaction. Nano Research, 2016, 9, 2662-2671.	5.8	26
650	WO <sub>3</sub> Nanoplates Grown on Carbon Nanofibers for an Efficient Electrocatalytic Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2016, 8, 18132-18139.	4.0	129

#	ARTICLE	IF	CITATIONS
651	Carbon-Based Composite as an Efficient and Stable Metal-Free Electrocatalyst. <i>Advanced Functional Materials</i> , 2016, 26, 3621-3629.	7.8	21
652	2D Transition-Metal-Dichalcogenide-Nanosheet-Based Composites for Photocatalytic and Electrocatalytic Hydrogen Evolution Reactions. <i>Advanced Materials</i> , 2016, 28, 1917-1933.	11.1	1,214
653	Morphological Engineering of CVD-Grown Transition Metal Dichalcogenides for Efficient Electrochemical Hydrogen Evolution. <i>Advanced Materials</i> , 2016, 28, 6207-6212.	11.1	58
654	Recent Advances in Inorganic Heterogeneous Electrocatalysts for Reduction of Carbon Dioxide. <i>Advanced Materials</i> , 2016, 28, 3423-3452.	11.1	1,256
655	Intercalation in two-dimensional transition metal chalcogenides. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 452-463.	3.0	181
656	Preparation of MoS <sub>2</sub> /RGO nano heterojunction and photoelectric property. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 4665-4671.	1.1	7
657	Size-dependent magnetic and electrocatalytic properties of nickel phosphide nanoparticles. <i>Applied Surface Science</i> , 2016, 366, 439-447.	3.1	19
658	Catalytic Activity of MS <sub>2</sub> Monolayer for Electrochemical Hydrogen Evolution. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1623-1632.	1.5	75
659	Subnanometer Molybdenum Sulfide on Carbon Nanotubes as a Highly Active and Stable Electrocatalyst for Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 3543-3550.	4.0	72
660	Monolayer MoS <sub>2</sub> Graphene Hybrid Aerogels with Controllable Porosity for Lithium-Ion Batteries with High Reversible Capacity. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 2680-2687.	4.0	191
661	Enhanced Catalytic Activities of Surfactant-Assisted Exfoliated WS <sub>2</sub> Nanodots for Hydrogen Evolution. <i>ACS Nano</i> , 2016, 10, 2159-2166.	7.3	269
662	Decoration of the inert basal plane of defect-rich MoS <sub>2</sub> with Pd atoms for achieving Pt-similar HER activity. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4025-4031.	5.2	122
663	Electrical Properties of Synthesized Large-Area MoS <sub>2</sub> Field-Effect Transistors Fabricated with Inkjet-Printed Contacts. <i>ACS Nano</i> , 2016, 10, 2819-2826.	7.3	64
664	Intercalated 2D MoS <sub>2</sub> Utilizing a Simulated Sun Assisted Process: Reducing the HER Overpotential. <i>Journal of Physical Chemistry C</i> , 2016, 120, 2447-2455.	1.5	61
665	Tungsten disulphide nanorattle: A new type of high performance electrocatalyst for hydrogen evolution reaction. <i>Journal of Power Sources</i> , 2016, 307, 593-598.	4.0	28
666	Facet-controlled hollow Rh <sub>2</sub> S <sub>3</sub> hexagonal nanoprisms as highly active and structurally robust catalysts toward hydrogen evolution reaction. <i>Energy and Environmental Science</i> , 2016, 9, 850-856.	15.6	118
667	Nanometre-thick single-crystalline nanosheets grown at the water-air interface. <i>Nature Communications</i> , 2016, 7, 10444.	5.8	133
668	Stable Monolayer Transition Metal Dichalcogenide Ordered Alloys with Tunable Electronic Properties. <i>Journal of Physical Chemistry C</i> , 2016, 120, 2501-2508.	1.5	51

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669	Enhanced proton and electron reservoir abilities of polyoxometalate grafted on graphene for high-performance hydrogen evolution. <i>Energy and Environmental Science</i> , 2016, 9, 1012-1023.	15.6	138
670	Morphology-activity correlation in hydrogen evolution catalyzed by cobalt sulfides. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 279-285.	3.0	33
671	MoO <sub>2</sub> nanoparticles on reduced graphene oxide/polyimide-carbon nanotube film as efficient hydrogen evolution electrocatalyst. <i>Journal of Power Sources</i> , 2016, 304, 146-154.	4.0	45
672	Constructing Anatase TiO <sub>2</sub> Nanosheets with Exposed (001) Facets/Layered MoS <sub>2</sub> Two-Dimensional Nanojunctions for Enhanced Solar Hydrogen Generation. <i>ACS Catalysis</i> , 2016, 6, 532-541.	5.5	390
673	Thickness Dependence and Percolation Scaling of Hydrogen Production Rate in MoS <sub>2</sub> Nanosheet and Nanosheet-Carbon Nanotube Composite Catalytic Electrodes. <i>ACS Nano</i> , 2016, 10, 672-683.	7.3	116
674	Preparation and applications of novel composites composed of metal-organic frameworks and two-dimensional materials. <i>Chemical Communications</i> , 2016, 52, 1555-1562.	2.2	56
675	Heterostructures based on two-dimensional layered materials and their potential applications. <i>Materials Today</i> , 2016, 19, 322-335.	8.3	469
676	Improved photocatalytic activity of RGO/MoS <sub>2</sub> nanosheets decorated on TiO <sub>2</sub> nanoparticles. <i>RSC Advances</i> , 2016, 6, 31661-31667.	1.7	43
677	Amorphous flower-like molybdenum-sulfide-@-nitrogen-doped-carbon-nanofiber film for use in the hydrogen-evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2016, 472, 69-75.	5.0	31
678	Heterogeneous Spin States in Ultrathin Nanosheets Induce Subtle Lattice Distortion To Trigger Efficient Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2016, 138, 5087-5092.	6.6	351
679	Electrocatalytic regeneration of atmospherically aged MoS <sub>2</sub> nanostructures via solution-phase sulfidation. <i>RSC Advances</i> , 2016, 6, 26689-26695.	1.7	5
680	Microwave-assisted synthesis of multiply-twinned Au-Ag nanocrystals on reduced graphene oxide for high catalytic performance towards hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3865-3871.	5.2	32
681	Hydrogen evolution reaction in acidic media on single-crystalline titanium nitride nanowires as an efficient non-noble metal electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3673-3677.	5.2	109
682	Bioinspired synthesis of CVD graphene flakes and graphene-supported molybdenum sulfide catalysts for hydrogen evolution reaction. <i>Nano Research</i> , 2016, 9, 249-259.	5.8	24
683	Pure and stable metallic phase molybdenum disulfide nanosheets for hydrogen evolution reaction. <i>Nature Communications</i> , 2016, 7, 10672.	5.8	721
684	Laser induced MoS <sub>2</sub> /carbon hybrids for hydrogen evolution reaction catalysts. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6824-6830.	5.2	134
685	Metallic 1T-LiMoS <sub>2</sub> Cocatalyst Significantly Enhanced the Photocatalytic H <sub>2</sub> Evolution over Cd <sub>0.5</sub> Zn <sub>0.5</sub> S Nanocrystals under Visible Light Irradiation. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 4023-4030.	4.0	59
686	Molybdenum disulfide nanomaterials: Structures, properties, synthesis and recent progress on hydrogen evolution reaction. <i>Applied Materials Today</i> , 2016, 3, 23-56.	2.3	335

#	ARTICLE	IF	CITATIONS
687	Well-dispersed CoS <sub>2</sub> nano-octahedra grown on a carbon fibre network as efficient electrocatalysts for hydrogen evolution reaction. <i>Catalysis Science and Technology</i> , 2016, 6, 4545-4553.	2.1	62
688	Two-dimensional layered MoS <sub>2</sub> : rational design, properties and electrochemical applications. <i>Energy and Environmental Science</i> , 2016, 9, 1190-1209.	15.6	532
689	Large-quantity and continuous preparation of two-dimensional nanosheets. <i>Nanoscale</i> , 2016, 8, 5407-5411.	2.8	52
690	Comparison of liquid exfoliated transition metal dichalcogenides reveals MoSe <sub>2</sub> to be the most effective hydrogen evolution catalyst. <i>Nanoscale</i> , 2016, 8, 5737-5749.	2.8	127
691	Hollow Structured Micro/Nano MoS <sub>2</sub> Spheres for High Electrocatalytic Activity Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 5517-5525.	4.0	190
692	CO <sub>2</sub> -Induced Phase Engineering: Protocol for Enhanced Photoelectrocatalytic Performance of 2D MoS <sub>2</sub> Nanosheets. <i>ACS Nano</i> , 2016, 10, 2903-2909.	7.3	243
693	Tuning the hydrogen evolution activity of MS <sub>2</sub> (M = Mo or Nb) monolayers by strain engineering. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 9388-9395.	1.3	60
694	Bottom-up Electrosynthesis of Highly Active Tungsten Sulfide (WS <sub>3</sub> ) Films for Hydrogen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 3948-3957.	4.0	67
695	Electrochemical and bio-sensing platform based on a novel 3D Cu nano-flowers/layered MoS <sub>2</sub> composite. <i>Biosensors and Bioelectronics</i> , 2016, 79, 685-692.	5.3	79
696	Coordination polymer structure and revisited hydrogen evolution catalytic mechanism for amorphous molybdenum sulfide. <i>Nature Materials</i> , 2016, 15, 640-646.	13.3	490
697	Non-hydrolytic sol-gel synthesis of molybdenum sulfides. <i>Journal of Solid State Chemistry</i> , 2016, 242, 175-181.	1.4	8
698	Design and Epitaxial Growth of MoSe <sub>2</sub> /NiSe Vertical Heteronanostructures with Electronic Modulation for Enhanced Hydrogen Evolution Reaction. <i>Chemistry of Materials</i> , 2016, 28, 1838-1846.	3.2	310
699	Beaded stream-like CoSe <sub>2</sub> nanoneedle array for efficient hydrogen evolution electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4553-4561.	5.2	89
700	Boosting the lithium storage performance of MoS <sub>2</sub> with graphene quantum dots. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4783-4789.	5.2	100
701	The effect of lithium adsorption on the formation of 1T-MoS <sub>2</sub> phase based on first-principles calculation. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2016, 380, 1767-1771.	0.9	16
702	3D Tungsten-Doped MoS <sub>2</sub> Nanostructure: A Low-Cost, Facile Prepared Catalyst for Hydrogen Evolution Reaction. <i>Journal of the Electrochemical Society</i> , 2016, 163, H299-H304.	1.3	28
703	Controlled electrodeposition of CoMoS <sub>x</sub> on carbon cloth: A 3D cathode for highly-efficient electrocatalytic hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 3811-3819.	3.8	41
704	Hierarchical spheres constructed by defect-rich MoS <sub>2</sub> /carbon nanosheets for efficient electrocatalytic hydrogen evolution. <i>Nano Energy</i> , 2016, 22, 490-498.	8.2	267

#	ARTICLE	IF	CITATIONS
705	Nanostructured molybdenum phosphide/N,P dual-doped carbon nanotube composite as electrocatalysts for hydrogen evolution. <i>RSC Advances</i> , 2016, 6, 7370-7377.	1.7	30
706	Assembled 3D electrocatalysts for efficient hydrogen evolution: $WS_2$ layers anchored on graphene sheets. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 313-319.	3.0	61
707	Carbon quantum dots modified $MoS_2$ with visible-light-induced high hydrogen evolution catalytic ability. <i>Carbon</i> , 2016, 99, 599-606.	5.4	108
708	Photoluminescence Enhancement and Structure Repairing of Monolayer $MoSe_2$ by Hydrohalic Acid Treatment. <i>ACS Nano</i> , 2016, 10, 1454-1461.	7.3	179
709	Novel molybdenum disulfide nanosheets decorated polyaniline: Preparation, characterization and enhanced electrocatalytic activity for hydrogen evolution reaction. <i>Journal of Physics and Chemistry of Solids</i> , 2016, 91, 41-47.	1.9	53
710	Reduced Graphene Oxide/O-MWCNT Hybrids Functionalized with p-Phenylenediamine as High-Performance $MoS_2$ Electrocatalyst Support for Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1478-1487.	1.5	49
711	Core-Shell Nanocomposites Based on Gold Nanoparticle@Zinc-Iron-Embedded Porous Carbons Derived from Metal-Organic Frameworks as Efficient Dual Catalysts for Oxygen Reduction and Hydrogen Evolution Reactions. <i>ACS Catalysis</i> , 2016, 6, 1045-1053.	5.5	151
712	Catalytic Activities of Sulfur Atoms in Amorphous Molybdenum Sulfide for the Electrochemical Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2016, 6, 861-867.	5.5	280
713	Carbon-coated $MoS_2$ nanosheets as highly efficient electrocatalysts for the hydrogen evolution reaction. <i>Nanotechnology</i> , 2016, 27, 045402.	1.3	32
714	Advanced N-doped mesoporous molybdenum disulfide nanosheets and the enhanced lithium-ion storage performance. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1440-1445.	5.2	55
715	$MoS_2$ -graphene hybrid nanosheets constructed 3D architectures with improved electrochemical performance for lithium-ion batteries and hydrogen evolution. <i>Electrochimica Acta</i> , 2016, 189, 224-230.	2.6	89
716	A reductively treated thin layer $MoS_2$ nanosheet-poly(xanthurenic acid) composite with dramatically enhanced electrochemical performance and extended sensing applications. <i>Electrochimica Acta</i> , 2016, 190, 1025-1031.	2.6	15
717	Activating and optimizing $MoS_2$ basal planes for hydrogen evolution through the formation of strained sulphur vacancies. <i>Nature Materials</i> , 2016, 15, 48-53.	13.3	2,021
718	Two-Dimensional Rectangular and Honeycomb Lattices of NbN: Emergence of Piezoelectric and Photocatalytic Properties at Nanoscale. <i>Nano Letters</i> , 2016, 16, 126-131.	4.5	56
719	Design of active and stable $CoMo_x$ chalcogels as pH-universal catalysts for the hydrogen evolution reaction. <i>Nature Materials</i> , 2016, 15, 197-203.	13.3	825
720	Rational composition and structural design of in situ grown nickel-based electrocatalysts for efficient water electrolysis. <i>Journal of Materials Chemistry A</i> , 2016, 4, 167-172.	5.2	153
721	Bubble-template-assisted synthesis of hollow fullerene-like $MoS_2$ nanocages as a lithium ion battery anode material. <i>Journal of Materials Chemistry A</i> , 2016, 4, 51-58.	5.2	344
722	Layering $MoS_2$ on soft hollow g-C <sub>3</sub> N <sub>4</sub> nanostructures for photocatalytic hydrogen evolution. <i>Applied Catalysis A: General</i> , 2016, 521, 2-8.	2.2	125

#	ARTICLE	IF	CITATIONS
723	MoS <sub>2</sub> nanosheets array on carbon cloth as a 3D electrode for highly efficient electrochemical hydrogen evolution. Carbon, 2016, 98, 84-89.	5.4	89
724	Nano Devices and Circuit Techniques for Low-Energy Applications and Energy Harvesting. KAIST Research Series, 2016, , .	1.5	7
725	Graphene and Two-Dimensional Transition Metal Dichalcogenide Materials for Energy-Related Applications. KAIST Research Series, 2016, , 253-291.	1.5	0
726	Preparing molybdenum disulphide by vapour deposition. Surface Engineering, 2016, 32, 245-251.	1.1	7
727	NiSe <sub>2</sub> pyramids deposited on N-doped graphene encapsulated Ni foam for high-performance water oxidation. Journal of Materials Chemistry A, 2017, 5, 3981-3986.	5.2	67
728	Hierarchically Porous Electrocatalyst with Vertically Aligned Defect-Rich CoMoS Nanosheets for the Hydrogen Evolution Reaction in an Alkaline Medium. ACS Applied Materials & Interfaces, 2017, 9, 5288-5294.	4.0	93
729	Spraying Coagulation-Assisted Hydrothermal Synthesis of MoS <sub>2</sub> /Carbon/Graphene Composite Microspheres for Lithium-Ion Battery Applications. ChemElectroChem, 2017, 4, 2027-2036.	1.7	24
730	Unimer-Assisted Exfoliation for Highly Concentrated Aqueous Dispersion Solutions of Single- and Few-Layered van der Waals Materials. Langmuir, 2017, 33, 1217-1226.	1.6	9
731	Bi-axial grown amorphous MoS <sub>x</sub> bridged with oxygen on r-GO as a superior stable and efficient nonprecious catalyst for hydrogen evolution. Scientific Reports, 2017, 7, 41190.	1.6	31
732	Synthesis and application of transition metal phosphides as electrocatalyst for water splitting. Science Bulletin, 2017, 62, 633-644.	4.3	179
733	Thermal Properties of Two Dimensional Layered Materials. Advanced Functional Materials, 2017, 27, 1604134.	7.8	130
734	Integrated Ni-P-S nanosheets array as superior electrocatalysts for hydrogen generation. Green Energy and Environment, 2017, 2, 112-118.	4.7	33
735	Coral-Shaped MoS <sub>2</sub> Decorated with Graphene Quantum Dots Performing as a Highly Active Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 3653-3660.	4.0	98
736	MoS <sub>2</sub> nanosheet-Au nanorod hybrids for highly sensitive amperometric detection of H <sub>2</sub> O <sub>2</sub> in living cells. Journal of Materials Chemistry B, 2017, 5, 1446-1453.	2.9	64
737	Epitaxial Stitching and Stacking Growth of Atomically Thin Transition-Metal Dichalcogenides (TMDCs) Heterojunctions. Advanced Functional Materials, 2017, 27, 1603884.	7.8	73
738	Efficient hydrogen evolution electrocatalysts from Li <sub>x</sub> MoS <sub>2</sub> nanoparticles on three-dimensional substrate. International Journal of Hydrogen Energy, 2017, 42, 6482-6489.	3.8	11
739	A comparative study of hydrogen evolution reaction on pseudo-monolayer WS <sub>2</sub> and PtS <sub>2</sub> : insights based on the density functional theory. Catalysis Science and Technology, 2017, 7, 687-692.	2.1	51
740	Homologous NiO//Ni <sub>2</sub> P nanoarrays grown on nickel foams: a well matched electrode pair with high stability in overall water splitting. Nanoscale, 2017, 9, 4409-4418.	2.8	127

#	ARTICLE	IF	CITATIONS
741	Facile preparation of carbon sphere supported molybdenum compounds (P, C and S) as hydrogen evolution electrocatalysts in acid and alkaline electrolytes. <i>Nano Energy</i> , 2017, 32, 511-519.	8.2	143
742	In Situ Coupling of CoP Polyhedrons and Carbon Nanotubes as Highly Efficient Hydrogen Evolution Reaction Electrocatalyst. <i>Small</i> , 2017, 13, 1602873.	5.2	212
743	Band gap tuning of 1T-MoS <sub>2</sub> /SiC bilayers with normal strain: A density functional study. <i>Optik</i> , 2017, 135, 79-84.	1.4	2
744	Cobalt Phosphide Modified Titanium Oxide Nanophotocatalysts with Significantly Enhanced Photocatalytic Hydrogen Evolution from Water Splitting. <i>Small</i> , 2017, 13, 1603301.	5.2	132
745	Molybdenum disulfide and Au ultrasmall nanohybrids as highly active electrocatalysts for hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4122-4128.	5.2	41
746	Hydrogen functionalisation of transition metal dichalcogenide monolayers from first principles. <i>Molecular Simulation</i> , 2017, 43, 379-383.	0.9	6
747	Cracked monolayer 1T MoS <sub>2</sub> with abundant active sites for enhanced electrocatalytic hydrogen evolution. <i>Catalysis Science and Technology</i> , 2017, 7, 718-724.	2.1	83
748	Combining theory and experiment in electrocatalysis: Insights into materials design. <i>Science</i> , 2017, 355, .	6.0	7,837
749	Excellent photocatalytic performance of few-layer MoS <sub>2</sub> /graphene hybrids. <i>Journal of Alloys and Compounds</i> , 2017, 700, 12-17.	2.8	44
750	Comparative investigation of the vibrational properties of bulk 2H-MoS <sub>2</sub> and its exfoliated nanosheets under high pressure. <i>Journal of Raman Spectroscopy</i> , 2017, 48, 596-600.	1.2	10
751	Exfoliation of MoS <sub>2</sub> and h-BN nanosheets by hydrolysis of LiBH <sub>4</sub> . <i>Nanotechnology</i> , 2017, 28, 115604.	1.3	30
752	High performance electrocatalysis for hydrogen evolution reaction using nickel-doped CoS <sub>2</sub> nanostructures: experimental and DFT insights. <i>Electrochimica Acta</i> , 2017, 228, 428-435.	2.6	111
753	Controlled synthesis of 2D transition metal dichalcogenides: from vertical to planar MoS <sub>2</sub> . <i>2D Materials</i> , 2017, 4, 025029.	2.0	63
754	Two-Dimensional Water-Coupled Metallic MoS <sub>2</sub> with Nanochannels for Ultrafast Supercapacitors. <i>Nano Letters</i> , 2017, 17, 1825-1832.	4.5	337
755	Nano-netlike carbon fibers decorated with highly dispersed CoSe <sub>2</sub> nanoparticles as efficient hydrogen evolution electrocatalysts. <i>Journal of Alloys and Compounds</i> , 2017, 702, 611-618.	2.8	20
756	Supercritical CO <sub>2</sub> -Assisted Reverse-Micelle-Induced Solution-Phase Fabrication of Two-Dimensional Metallic 1T-MoS <sub>2</sub> and 1T-WS <sub>2</sub> . <i>ChemNanoMat</i> , 2017, 3, 466-471. <sup>1.5</sup>		43
757	In situ growth of MoS <sub>2</sub> on carbon nanofibers with enhanced electrochemical catalytic activity for the hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 9419-9427.	3.8	20
758	Quantum Effects and Phase Tuning in Epitaxial Hexagonal and Monoclinic MoTe <sub>2</sub> Monolayers. <i>ACS Nano</i> , 2017, 11, 3282-3288.	7.3	46



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759	Highly conductive carbon black supported amorphous molybdenum disulfide for efficient hydrogen evolution reaction. <i>Journal of Power Sources</i> , 2017, 347, 210-219.	4.0	76
760	Hydrogen evolution electrocatalysis with binary-nonmetal transition metal compounds. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5995-6012.	5.2	142
761	Regulated Synthesis of Mo Sheets and Their Derivative MoX Sheets (X: P, S, or C) as Efficient Electrocatalysts for Hydrogen Evolution Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 8041-8046.	4.0	43
762	One-Step Hydrothermal Fabrication of Three-dimensional MoS <sub>2</sub> Nanoflower using Polypyrrole as Template for Efficient Hydrogen Evolution Reaction. <i>Scientific Reports</i> , 2017, 7, 42309.	1.6	87
763	Three-dimensional hierarchical MoS <sub>2</sub> /CoS <sub>2</sub> heterostructure arrays for highly efficient electrocatalytic hydrogen evolution. <i>Green Energy and Environment</i> , 2017, 2, 134-141.	4.7	64
764	Confinement effect of monolayer MoS <sub>2</sub> quantum dots on conjugated polyimide and promotion of solar-driven photocatalytic hydrogen generation. <i>Dalton Transactions</i> , 2017, 46, 3877-3886.	1.6	72
765	Theoretical designing and experimental fabricating unique quadruple multimetallic phosphides with remarkable hydrogen evolution performance. <i>Nano Energy</i> , 2017, 34, 421-427.	8.2	31
766	Atomic Defects in Two-Dimensional Materials: From Single-Atom Spectroscopy to Functionalities in Optoelectronics, Nanomagnetism, and Catalysis. <i>Advanced Materials</i> , 2017, 29, 1606434.	11.1	211
767	One-Step In Situ Growth of Iron-Nickel Sulfide Nanosheets on FeNi Alloy Foils: High-Performance and Self-Supported Electrodes for Water Oxidation. <i>Small</i> , 2017, 13, 1604161.	5.2	177
768	An effective liquid-phase exfoliation approach to fabricate tungsten disulfide into ultrathin two-dimensional semiconducting nanosheets. <i>Journal of Materials Science</i> , 2017, 52, 7256-7268.	1.7	53
769	Pt/Fe-NF electrode with high double-layer capacitance for efficient hydrogen evolution reaction in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 9458-9466.	3.8	43
770	Controllable Synthesis of Caterpillar-like Molybdenum Sulfide @carbon Nanotube Hybrids with Core Shell Structure for Hydrogen Evolution. <i>Electrochimica Acta</i> , 2017, 235, 422-428.	2.6	20
771	Two-Dimensional (2D) Nanomaterials towards Electrochemical Nanoarchitectonics in Energy-Related Applications. <i>Bulletin of the Chemical Society of Japan</i> , 2017, 90, 627-648.	2.0	369
772	Shape-Controllable Gold Nanoparticle-MoS <sub>2</sub> Hybrids Prepared by Tuning Edge-Active Sites and Surface Structures of MoS <sub>2</sub> via Temporally Shaped Femtosecond Pulses. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 7447-7455.	4.0	50
773	Hierarchical, Dual-Scale Structures of Atomically Thin MoS <sub>2</sub> for Tunable Wetting. <i>Nano Letters</i> , 2017, 17, 1756-1761.	4.5	66
774	Ultrathin 1T-phase MoS <sub>2</sub> nanosheets decorated hollow carbon microspheres as highly efficient catalysts for solar energy harvesting and storage. <i>Journal of Power Sources</i> , 2017, 345, 156-164.	4.0	62
775	Hydrogen weakens interlayer bonding in layered transition metal sulfide Fe <sub>1+x</sub> S. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5030-5035.	5.2	11
776	Ionic Liquid-Assisted Synthesis of Nanoscale (MoS <sub>2</sub> ) <sub>x</sub> (SnO <sub>2</sub> ) <sub>1-x</sub> on Reduced Graphene Oxide for the Electrocatalytic Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 8065-8074.	4.0	55

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777	Few-layer MoS <sub>2</sub> flakes as a hole-selective layer for solution-processed hybrid organic hydrogen-evolving photocathodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4384-4396.	5.2	55
778	A Heterostructure Coupling of Exfoliated Ni-Fe Hydroxide Nanosheet and Defective Graphene as a Bifunctional Electrocatalyst for Overall Water Splitting. <i>Advanced Materials</i> , 2017, 29, 1700017.	11.1	845
779	P Dopants Triggered New Basal Plane Active Sites and Enlarged Interlayer Spacing in MoS <sub>2</sub> Nanosheets toward Electrocatalytic Hydrogen Evolution. <i>ACS Energy Letters</i> , 2017, 2, 745-752.	8.8	304
780	One-pot synthesis of nickel sulfide with sulfur powder as sulfur source in solution and their electrochemical properties for hydrogen evolution reaction. <i>Inorganic Chemistry Communication</i> , 2017, 79, 1-4.	1.8	12
781	Defect-rich MoS <sub>2</sub> nanowall catalyst for efficient hydrogen evolution reaction. <i>Nano Research</i> , 2017, 10, 1178-1188.	5.8	177
782	Enabling Colloidal Synthesis of Edge-Oriented MoS <sub>2</sub> with Expanded Interlayer Spacing for Enhanced HER Catalysis. <i>Nano Letters</i> , 2017, 17, 1963-1969.	4.5	225
783	Dominating Role of Ni <sup>0</sup> on the Interface of Ni/NiO for Enhanced Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 7139-7147.	4.0	206
784	Controllable nanoscale engineering of vertically aligned MoS <sub>2</sub> ultrathin nanosheets by nitrogen doping of 3D graphene hydrogel for improved electrocatalytic hydrogen evolution. <i>Carbon</i> , 2017, 116, 223-231.	5.4	92
785	Complex and Noncentrosymmetric Stacking of Layered Metal Dichalcogenide Materials Created by Screw Dislocations. <i>Journal of the American Chemical Society</i> , 2017, 139, 3496-3504.	6.6	81
786	Mapping the electrocatalytic activity of MoS <sub>2</sub> across its amorphous to crystalline transition. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5129-5141.	5.2	41
787	Boron-Dependency of Molybdenum Boride Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , 2017, 129, 5667-5670.	1.6	50
788	Boron-Dependency of Molybdenum Boride Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5575-5578.	7.2	259
789	Graphene Decorated with Uniform Ultrathin (CoP) <sub>x</sub> (FeP) <sub>1-x</sub> Nanorods: A Robust Non-Noble-Metal Catalyst for Hydrogen Evolution. <i>Small</i> , 2017, 13, 1700092.	5.2	39
790	Group 6 Layered Transition-Metal Dichalcogenides in Lab-on-a-Chip Devices: 1T-Phase WS <sub>2</sub> for Microfluidics Non-Enzymatic Detection of Hydrogen Peroxide. <i>Analytical Chemistry</i> , 2017, 89, 4978-4985.	3.2	34
791	Low-Temperature Atomic Layer Deposition of MoS <sub>2</sub> Films. <i>Angewandte Chemie</i> , 2017, 129, 5073-5077.	1.6	15
792	Amorphous Molybdenum Sulfide/Carbon Nanotubes Hybrid Nanospheres Prepared by Ultrasonic Spray Pyrolysis for Electrocatalytic Hydrogen Evolution. <i>Small</i> , 2017, 13, 1700111.	5.2	70
793	Exfoliated MoS <sub>2</sub> nanosheets promoted PtCu/graphene nanocomposites with superior electrocatalytic activity toward methanol oxidation. <i>Materials Letters</i> , 2017, 198, 148-151.	1.3	3
794	Interface Band Engineering Charge Transfer for 3D MoS <sub>2</sub> Photoanode to Boost Photoelectrochemical Water Splitting. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 3829-3836.	3.2	51

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795	Recent Advances in Atomic Metal Doping of Carbon-based Nanomaterials for Energy Conversion. <i>Small</i> , 2017, 13, 1700191.	5.2	290
796	Multiscale structural and electronic control of molybdenum disulfide foam for highly efficient hydrogen production. <i>Nature Communications</i> , 2017, 8, 14430.	5.8	488
797	Fe <sub>2</sub> P/reduced graphene oxide/Fe <sub>2</sub> P sandwich-structured nanowall arrays: a high-performance non-noble-metal electrocatalyst for hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 8608-8615.	5.2	118
798	Wafer-scale synthesis of ultrathin CoO nanosheets with enhanced electrochemical catalytic properties. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9060-9066.	5.2	31
799	Assembling metallic 1T-MoS <sub>2</sub> nanosheets with inorganic-ligand stabilized quantum dots for exceptional solar hydrogen evolution. <i>Chemical Communications</i> , 2017, 53, 5606-5609.	2.2	39
801	Active hydrogen evolution through lattice distortion in metallic MoTe <sub>2</sub> . <i>2D Materials</i> , 2017, 4, 025061.	2.0	103
802	Electrochemical generation of sulfur vacancies in the basal plane of MoS <sub>2</sub> for hydrogen evolution. <i>Nature Communications</i> , 2017, 8, 15113.	5.8	555
803	1T-Phase MoS <sub>2</sub> Nanosheets on TiO <sub>2</sub> Nanorod Arrays: 3D Photoanode with Extraordinary Catalytic Performance. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 5175-5182.	3.2	98
804	Ionic strength induced electrodeposition of two-dimensional layered MoS <sub>2</sub> nanosheets. <i>Applied Materials Today</i> , 2017, 8, 44-53.	2.3	29
805	Ultrathin Nitrogen-Doped Carbon Coated with CoP for Efficient Hydrogen Evolution. <i>ACS Catalysis</i> , 2017, 7, 3824-3831.	5.5	404
806	Large-Scale Synthesis of Carbon-Shell-Coated FeP Nanoparticles for Robust Hydrogen Evolution Reaction Electrocatalyst. <i>Journal of the American Chemical Society</i> , 2017, 139, 6669-6674.	6.6	451
807	In-situ photochemical fabrication of transition metal-promoted amorphous molybdenum sulfide catalysts for enhanced photosensitized hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 11118-11129.	3.8	40
808	N-doped graphene wrapped hexagonal metallic cobalt hierarchical nanosheet as a highly efficient water oxidation electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2017, 5, 8897-8902.	5.2	50
809	Hollow-ZIF-templated formation of a ZnO@Co <sub>2</sub> (S <sub>2</sub> ) <sub>3</sub> core-shell nanostructure for highly efficient pollutant photodegradation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9937-9945.	5.2	143
810	Sustainability and Nanomaterials in Concert. <i>ChemCatChem</i> , 2017, 9, 3274-3284.	1.8	9
811	Enhanced Catalytic Reduction of <i>p</i> -Nitrophenol on Ultrathin MoS <sub>2</sub> Nanosheets Decorated with Noble Metal Nanoparticles. <i>Crystal Growth and Design</i> , 2017, 17, 3538-3547.	1.4	138
812	Synthesis of Ni <sub>9</sub> S <sub>8</sub> /MoS <sub>2</sub> heterocatalyst for Enhanced Hydrogen Evolution Reaction. <i>Langmuir</i> , 2017, 33, 5148-5153.	1.6	39
813	Tuning Unique Peapod-like Co(S <sub>x</sub> ) <sub>2</sub> Se <sub>1-x</sub> Nanoparticles for Efficient Overall Water Splitting. <i>Advanced Functional Materials</i> , 2017, 27, 1701008.	7.8	192

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814	Hydrogen evolution activity of individual mono-, bi-, and few-layer MoS <sub>2</sub> towards photocatalysis. <i>Applied Materials Today</i> , 2017, 8, 132-140.	2.3	32
815	Self-template synthesis of hierarchical CoMoS <sub>3</sub> nanotubes constructed of ultrathin nanosheets for robust water electrolysis. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11309-11315.	5.2	86
816	Benzyl viologen-assisted simultaneous exfoliation and n-doping of MoS <sub>2</sub> nanosheets via a solution process. <i>Journal of Materials Chemistry C</i> , 2017, 5, 5395-5401.	2.7	12
817	Photocatalytic wastewater purification with simultaneous hydrogen production using MoS <sub>2</sub> QD-decorated hierarchical assembly of ZnIn <sub>2</sub> S <sub>4</sub> on reduced graphene oxide photocatalyst. <i>Water Research</i> , 2017, 121, 11-19.	5.3	176
818	Self-Optimization of the Active Site of Molybdenum Disulfide by an Irreversible Phase Transition during Photocatalytic Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7610-7614.	7.2	221
819	Electronic and transport properties of 2H 1T x MoS <sub>2</sub> hybrid structure: A first-principle study. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 91, 178-184.	1.3	7
820	Facile colorimetric assay for trinitrotoluene based on the intrinsic peroxidase-like activity of MoS <sub>2</sub> nanosheets. <i>Analytical Methods</i> , 2017, 9, 2939-2946.	1.3	14
821	Structural stability and intriguing electronic properties of two-dimensional transition metal dichalcogenide alloys. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 13846-13854.	1.3	46
822	Self-Optimization of the Active Site of Molybdenum Disulfide by an Irreversible Phase Transition during Photocatalytic Hydrogen Evolution. <i>Angewandte Chemie</i> , 2017, 129, 7718-7722.	1.6	61
823	Low-temperature Synthesis of Heterostructures of Transition Metal Dichalcogenide Alloys (W <sub>x</sub> Mo <sub>1-x</sub> S <sub>2</sub> ) and Graphene with Superior Catalytic Performance for Hydrogen Evolution. <i>ACS Nano</i> , 2017, 11, 5103-5112.	7.3	157
824	Design of ultralong single-crystal nanowire-based bifunctional electrodes for efficient oxygen and hydrogen evolution in a mild alkaline electrolyte. <i>Journal of Materials Chemistry A</i> , 2017, 5, 10895-10901.	5.2	23
825	3D-hierarchical MoSe <sub>2</sub> nanoarchitecture as a highly efficient electrocatalyst for hydrogen evolution. <i>2D Materials</i> , 2017, 4, 025092.	2.0	78
826	Ultrathin MoS <sub>2</sub> layers anchored exfoliated reduced graphene oxide nanosheet hybrid as a highly efficient cocatalyst for CdS nanorods towards enhanced photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2017, 212, 7-14.	10.8	167
827	Interlayer expanded lamellar CoSe <sub>2</sub> on carbon paper as highly efficient and stable overall water splitting electrodes. <i>Electrochimica Acta</i> , 2017, 241, 106-115.	2.6	48
828	A nitrogen-doped nano carbon dodecahedron with Co@Co <sub>3</sub> O <sub>4</sub> implants as a bi-functional electrocatalyst for efficient overall water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9533-9536.	5.2	87
829	Flower-like CoS <sub>2</sub> /MoS <sub>2</sub> nanocomposite with enhanced electrocatalytic activity for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 12246-12253.	3.8	81
830	Multifunctional Cu/Ag quantum dots on TiO <sub>2</sub> nanotubes as highly efficient photocatalysts for enhanced solar hydrogen evolution. <i>Journal of Catalysis</i> , 2017, 350, 226-239.	3.1	103
831	Colloidal 2D nanosheets of MoS <sub>2</sub> and other transition metal dichalcogenides through liquid-phase exfoliation. <i>Advances in Colloid and Interface Science</i> , 2017, 245, 40-61.	7.0	143

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832	Ultrathin CoS <sub>2</sub> shells anchored on Co <sub>3</sub> O <sub>4</sub> nanoneedles for efficient hydrogen evolution electrocatalysis. <i>Journal of Power Sources</i> , 2017, 356, 89-96.	4.0	56
833	CoO <sub>x</sub> carbon nanotubes hybrids integrated on carbon cloth as a new generation of 3D porous hydrogen evolution promoters. <i>Journal of Materials Chemistry A</i> , 2017, 5, 10510-10516.	5.2	45
834	Efficient Overall Water-Splitting Electrocatalysis Using Lepidocrocite VOOH Hollow Nanospheres. <i>Angewandte Chemie</i> , 2017, 129, 588-592.	1.6	63
835	2D MXenes: A New Family of Promising Catalysts for the Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2017, 7, 494-500.	5.5	825
836	Synthesis of few-layer 1T-MoTe <sub>2</sub> ultrathin nanosheets for high-performance pseudocapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1035-1042.	5.2	134
837	Strongly coupled MoS <sub>2</sub> nanoflake carbon nanotube nanocomposite as an excellent electrocatalyst for hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1558-1566.	5.2	117
838	Efficient Overall Water-Splitting Electrocatalysis Using Lepidocrocite VOOH Hollow Nanospheres. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 573-577.	7.2	209
839	One-Pot Synthesis of Zeolitic Imidazolate Framework 67-Derived Hollow Co <sub>3</sub> S <sub>4</sub> @MoS <sub>2</sub> Heterostructures as Efficient Bifunctional Catalysts. <i>Chemistry of Materials</i> , 2017, 29, 5566-5573.	3.2	510
840	Carbon Dioxide Electroreduction into Syngas Boosted by a Partially Delocalized Charge in Molybdenum Sulfide Selenide Alloy Monolayers. <i>Angewandte Chemie</i> , 2017, 129, 9249-9253.	1.6	154
841	2D materials-based photoelectrochemical cells: Combination of transition metal dichalcogenides and reduced graphene oxide for efficient charge transfer. <i>FlatChem</i> , 2017, 4, 54-60.	2.8	18
842	Single-Step Electrodeposited Molybdenum Incorporated Nickel Sulfide Thin Films from Low-Cost Precursors as Highly Efficient Hydrogen Evolution Electrocatalysts in Acid Medium. <i>Journal of Physical Chemistry C</i> , 2017, 121, 11108-11116.	1.5	42
843	Integrating metallic nanoparticles of Au and Pt with MoS <sub>2</sub> CdS hybrids for high-efficient photocatalytic hydrogen generation via plasmon-induced electron and energy transfer. <i>RSC Advances</i> , 2017, 7, 26097-26103.	1.7	27
844	Synergistic Phase and Disorder Engineering in 1T-MoSe <sub>2</sub> Nanosheets for Enhanced Hydrogen-Evolution Reaction. <i>Advanced Materials</i> , 2017, 29, 1700311.	11.1	411
845	In situ preparation of few-layered WS <sub>2</sub> nanosheets and exfoliation into bilayers on CdS nanorods for ultrafast charge carrier migrations toward enhanced photocatalytic hydrogen production. <i>Journal of Catalysis</i> , 2017, 351, 153-160.	3.1	98
846	Preparation of Nanowire like WSe <sub>2</sub> -Graphene Nanocomposite for Photocatalytic Reduction of CO <sub>2</sub> into CH <sub>3</sub> OH with the Presence of Sacrificial Agents. <i>Scientific Reports</i> , 2017, 7, 1867.	1.6	51
847	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. <i>Journal of Materials Chemistry C</i> , 2017, 5, 5977-5983.	2.7	35
848	Ultra-high electrocatalytic activity of VS <sub>2</sub> nanoflowers for efficient hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 15080-15086.	5.2	189
849	Ternary Ni <sub>x</sub> Co <sub>3-x</sub> S <sub>4</sub> with a Fine Hollow Nanostructure as a Robust Electrocatalyst for Hydrogen Evolution. <i>ChemCatChem</i> , 2017, 9, 4169-4174.	1.8	18

#	ARTICLE	IF	CITATIONS
850	New insight of the photocatalytic behaviors of graphitic carbon nitrides for hydrogen evolution and their associations with grain size, porosity, and photophysical properties. Applied Catalysis B: Environmental, 2017, 218, 349-358.	10.8	77
851	Remarkable enhancement in solar hydrogen generation from MoS <sub>2</sub> -RGO/ZnO composite photocatalyst by constructing a robust electron transport pathway. Chemical Engineering Journal, 2017, 327, 397-405.	6.6	71
852	Composite of Few-Layered MoS <sub>2</sub> Grown on Carbon Black: Tuning the Ratio of Terminal to Total Sulfur in MoS <sub>2</sub> for Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2017, 121, 14413-14425.	1.5	58
853	Fe <sup>3+</sup> -Clinoptilolite/graphene oxide and layered MoS <sub>2</sub> @Nitrogen doped graphene as novel graphene based nanocomposites for DMFC. International Journal of Hydrogen Energy, 2017, 42, 16741-16751.	3.8	19
854	Facile Construction of Flame-Retardant-Wrapped Molybdenum Disulfide Nanosheets for Properties Enhancement of Thermoplastic Polyurethane. Industrial & Engineering Chemistry Research, 2017, 56, 7229-7238.	1.8	61
855	Field-Effect Tuned Adsorption Dynamics of VSe <sub>2</sub> Nanosheets for Enhanced Hydrogen Evolution Reaction. Nano Letters, 2017, 17, 4109-4115.	4.5	134
856	Two-Dimensional 1T-Phase Transition Metal Dichalcogenides as Nanocarriers To Enhance and Stabilize Enzyme Activity for Electrochemical Pesticide Detection. ACS Nano, 2017, 11, 5774-5784.	7.3	109
857	Hydrogen adsorption on MoS <sub>2</sub> -surfaces: a DFT study on preferential sites and the effect of sulfur and hydrogen coverage. Physical Chemistry Chemical Physics, 2017, 19, 16231-16241.	1.3	64
858	PEGylated molybdenum dichalcogenide (PEG-MoS <sub>2</sub> ) nanosheets with enhanced peroxidase-like activity for the colorimetric detection of H <sub>2</sub> O <sub>2</sub> . New Journal of Chemistry, 2017, 41, 6700-6708.	1.4	42
859	Synthetic approaches to two-dimensional transition metal dichalcogenide nanosheets. Progress in Materials Science, 2017, 89, 411-478.	16.0	176
860	A simple electrochemical route to metallic phase trilayer MoS <sub>2</sub> : evaluation as electrocatalysts and supercapacitors. Journal of Materials Chemistry A, 2017, 5, 11316-11330.	5.2	119
861	Co-catalytic Effects of CoS <sub>2</sub> on the Activity of the MoS <sub>2</sub> Catalyst for Electrochemical Hydrogen Evolution. Langmuir, 2017, 33, 5628-5635.	1.6	59
862	Tellurite@Sulfate Driven Assembly of a New Family of Nanoscale Clusters Based on (Mo <sub>2</sub> O <sub>2</sub> S <sub>2</sub> ) <sup>2+</sup> . Chemistry - A European Journal, 2017, 23, 9683-9689.	1.7	6
863	Boosting the catalytic performance of MoS <sub>2</sub> cocatalysts over CdS nanoparticles for photocatalytic H <sub>2</sub> evolution by Co doping via a facile photochemical route. Applied Surface Science, 2017, 420, 456-464.	3.1	78
864	MoS <sub>2</sub> heterostructure with tunable phase stability: strain induced interlayer covalent bond formation. Nanoscale, 2017, 9, 8126-8132.	2.8	29
865	Textured NiSe <sub>2</sub> Film: Bifunctional Electrocatalyst for Full Water Splitting at Remarkably Low Overpotential with High Energy Efficiency. Scientific Reports, 2017, 7, 2401.	1.6	104
866	Tuning the catalytic functionality of transition metal dichalcogenides grown by chemical vapour deposition. Journal of Materials Chemistry A, 2017, 5, 14950-14968.	5.2	38
867	From two-dimensional materials to their heterostructures: An electrochemist's perspective. Applied Materials Today, 2017, 8, 68-103.	2.3	212

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868	Stabilization of the Metastable Lead Iodide Perovskite Phase via Surface Functionalization. <i>Nano Letters</i> , 2017, 17, 4405-4414.	4.5	204
869	Very Large-Sized Transition Metal Dichalcogenides Monolayers from Fast Exfoliation by Manual Shaking. <i>Journal of the American Chemical Society</i> , 2017, 139, 9019-9025.	6.6	109
870	Manifestation of Concealed Defects in MoS <sub>2</sub> Nanospheres for Efficient and Durable Electrocatalytic Hydrogen Evolution Reaction. <i>ChemistrySelect</i> , 2017, 2, 4667-4672.	0.7	2
871	Graphene/Group 5 Transition Metal Dichalcogenide Composites for Electrochemical Applications. <i>Chemistry - A European Journal</i> , 2017, 23, 10430-10437.	1.7	10
872	Interlayer Nanoarchitectonics of Two-Dimensional Transition-Metal Dichalcogenides Nanosheets for Energy Storage and Conversion Applications. <i>Advanced Energy Materials</i> , 2017, 7, 1700571.	10.2	303
873	Carbon Dioxide Electroreduction into Syngas Boosted by a Partially Delocalized Charge in Molybdenum Sulfide Selenide Alloy Monolayers. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9121-9125.	7.2	205
874	Oxygen-Containing Amorphous Cobalt Sulfide Porous Nanocubes as High-Activity Electrocatalysts for the Oxygen Evolution Reaction in an Alkaline/Neutral Medium. <i>Angewandte Chemie</i> , 2017, 129, 4936-4939.	1.6	110
875	One-step liquid phase chemical method to prepare carbon-based amorphous molybdenum sulfides: As the effective hydrogen evolution reaction catalysts. <i>Electrochimica Acta</i> , 2017, 236, 280-287.	2.6	10
876	Directional Construction of Vertical Nitrogen-Doped 1T-MoSe <sub>2</sub> /Graphene Shell/Core Nanoflake Arrays for Efficient Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2017, 29, 1700748.	11.1	404
877	Low-Temperature Atomic Layer Deposition of MoS <sub>2</sub> Films. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 4991-4995.	7.2	127
878	Engineering the crystallinity of MoS <sub>2</sub> monolayers for highly efficient solar hydrogen production. <i>Journal of Materials Chemistry A</i> , 2017, 5, 8591-8598.	5.2	69
879	Ternary CoS <sub>2</sub> /MoS <sub>2</sub> /RGO electrocatalyst with CoMoS phase for efficient hydrogen evolution. <i>Applied Surface Science</i> , 2017, 412, 138-145.	3.1	84
880	Role of Composition and Size of Cobalt Ferrite Nanocrystals in the Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2017, 9, 2988-2995.	1.8	74
881	Efficient Electrocatalyst for the Hydrogen Evolution Reaction Derived from Polyoxotungstate/Polypyrrole/Graphene. <i>ChemSusChem</i> , 2017, 10, 2402-2407.	3.6	41
882	Microwave-Electrochemical Deposition of a Fe-Co Alloy with Catalytic Ability in Hydrogen Evolution. <i>Electrochimica Acta</i> , 2017, 235, 480-487.	2.6	19
883	Direct synthesis of thickness-tunable MoS <sub>2</sub> quantum dot thin layers: Optical, structural and electrical properties and their application to hydrogen evolution. <i>Nano Energy</i> , 2017, 35, 101-114.	8.2	99
884	Emerging two-dimensional nanomaterials for electrochemical hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 8187-8208.	5.2	229
885	A straight forward approach to electrodeposit tungsten disulfide/poly(3,4-ethylenedioxythiophene) composites onto nanoporous gold for the hydrogen evolution reaction. <i>Applied Surface Science</i> , 2017, 410, 308-314.	3.1	23

#	ARTICLE	IF	CITATIONS
886	Basal-Plane Ligand Functionalization on Semiconducting 2H-MoS <sub>2</sub> Monolayers. ACS Applied Materials & Interfaces, 2017, 9, 12734-12742.	4.0	112
887	Intercalation-Induced Exfoliation and Thickness-Modulated Electronic Structure of a Layered Ternary Vanadium Oxide. Chemistry of Materials, 2017, 29, 3285-3294.	3.2	19
888	Oxygen-Containing Amorphous Cobalt Sulfide Porous Nanocubes as High-Activity Electrocatalysts for the Oxygen Evolution Reaction in an Alkaline/Neutral Medium. Angewandte Chemie - International Edition, 2017, 56, 4858-4861.	7.2	460
889	The Prospect of Two-Dimensional Heterostructures: A Review of Recent Breakthroughs. IEEE Nanotechnology Magazine, 2017, 11, 6-17.	0.9	27
890	New insights into high-valence state Mo in molybdenum carbide nanobelts for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2017, 42, 10880-10890.	3.8	29
891	In Situ Growth of Metal-Organic Framework on BiOBr 2D Material with Excellent Photocatalytic Activity for Dye Degradation. Crystal Growth and Design, 2017, 17, 2309-2313.	1.4	97
892	Functionalized Molybdenum Disulfide Nanosheets for OD-2D Hybrid Nanostructures: Photoinduced Charge Transfer and Enhanced Photoresponse. Journal of Physical Chemistry Letters, 2017, 8, 1729-1738.	2.1	67
893	Successful synthesis of 3D CoSe <sub>2</sub> hollow microspheres with high surface roughness and its excellent performance in catalytic hydrogen evolution reaction. Chemical Engineering Journal, 2017, 321, 105-112.	6.6	63
894	Composition- and phase-controlled synthesis and applications of alloyed phase heterostructures of transition metal disulphides. Nanoscale, 2017, 9, 5102-5109.	2.8	63
895	Dendritic growth of monolayer ternary WS <sub>2</sub> (1-x)Se <sub>2x</sub> flakes for enhanced hydrogen evolution reaction. Nanoscale, 2017, 9, 5641-5647.	2.8	31
896	Glucose-assisted synthesis 1D/2D nearly vertical CdS/MoS <sub>2</sub> heterostructures for efficient photocatalytic hydrogen evolution. Chemical Engineering Journal, 2017, 321, 366-374.	6.6	135
897	Enhanced electrocatalytic hydrogen evolution performance of MoS <sub>2</sub> ultrathin nanosheets via Sn doping. Applied Catalysis A: General, 2017, 538, 1-8.	2.2	45
898	The mechanism of hydrogen adsorption on transition metal dichalcogenides as hydrogen evolution reaction catalyst. Physical Chemistry Chemical Physics, 2017, 19, 10125-10132.	1.3	126
899	Two-dimensional nanosheets for electrocatalysis in energy generation and conversion. Journal of Materials Chemistry A, 2017, 5, 7257-7284.	5.2	220
900	Bifunctional Oxygen Electrocatalysis through Chemical Bonding of Transition Metal Chalcogenides on Conductive Carbons. Advanced Energy Materials, 2017, 7, 1602217.	10.2	105
901	Recent Advances in Ultrathin Two-Dimensional Nanomaterials. Chemical Reviews, 2017, 117, 6225-6331.	23.0	3,940
902	Significantly Increased Raman Enhancement on MoX <sub>2</sub> (X = S, Se) Monolayers upon Phase Transition. Advanced Functional Materials, 2017, 27, 1606694.	7.8	158
903	Engineering the surface charge states of nanostructures for enhanced catalytic performance. Materials Chemistry Frontiers, 2017, 1, 1951-1964.	3.2	63



#	ARTICLE	IF	CITATIONS
904	Fast solid-phase synthesis of large-area few-layer 1T <sup>TM</sup> -MoTe <sub>2</sub> films. <i>Journal of Crystal Growth</i> , 2017, 467, 29-33.	0.7	7
905	Highly active MoS <sub>2</sub> /carbon electrocatalysts for the hydrogen evolution reaction – insight into the effect of the internal resistance and roughness factor on the Tafel slope. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 1988-1998.	1.3	108
906	A Novel Mild Phase Transition to Prepare Black Phosphorus Nanosheets with Excellent Energy Applications. <i>Small</i> , 2017, 13, 1602243.	5.2	97
907	Self-assembled chrysanthemum-like microspheres constructed by few-layer ReSe <sub>2</sub> nanosheets as a highly efficient and stable electrocatalyst for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2017, 224, 593-599.	2.6	102
908	Hot electron-driven hydrogen evolution using anisotropic gold nanostructure assembled monolayer MoS <sub>2</sub> . <i>Nanoscale</i> , 2017, 9, 1520-1526.	2.8	55
909	A Cake-style CoS <sub>2</sub> @MoS <sub>2</sub> /RGO Hybrid Catalyst for Efficient Hydrogen Evolution. <i>Advanced Functional Materials</i> , 2017, 27, 1602699.	7.8	231
910	One-pot synthesis of holey MoS <sub>2</sub> nanostructures as efficient electrocatalysts for hydrogen evolution. <i>Applied Surface Science</i> , 2017, 396, 1719-1725.	3.1	17
911	Graphene Quantum Dots Decorated Titania Nanosheets Heterojunction: Efficient Charge Separation and Enhanced Visible-Light Photocatalytic Performance. <i>ChemCatChem</i> , 2017, 9, 3349-3357.	1.8	40
912	One-Dimensional Earth-Abundant Nanomaterials for Water-Splitting Electrocatalysts. <i>Advanced Science</i> , 2017, 4, 1600380.	5.6	253
913	Porous NiCo Diselenide Nanosheets Arrayed on Carbon Cloth as Promising Advanced Catalysts Used in Water Splitting. <i>Electrochimica Acta</i> , 2017, 225, 503-513.	2.6	46
914	Edge-Enriched 2D MoS <sub>2</sub> Thin Films Grown by Chemical Vapor Deposition for Enhanced Catalytic Performance. <i>ACS Catalysis</i> , 2017, 7, 877-886.	5.5	123
915	Phase engineering of a multiphasic 1T/2H MoS <sub>2</sub> catalyst for highly efficient hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2681-2688.	5.2	391
916	In-situ grown of Ni <sub>2</sub> P nanoparticles on 2D black phosphorus as a novel hybrid catalyst for hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 7951-7956.	3.8	88
917	Large-Scale Synthesis of Graphene-Like MoSe <sub>2</sub> Nanosheets for Efficient Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1974-1981.	1.5	62
918	Nanopolygons of Monolayer MS <sub>2</sub> : Best Morphology and Size for HER Catalysis. <i>Nano Letters</i> , 2017, 17, 368-376.	4.5	91
919	Dual-Functional N Dopants in Edges and Basal Plane of MoS <sub>2</sub> Nanosheets Toward Efficient and Durable Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2017, 7, 1602086.	10.2	286
920	Silicon microwire arrays decorated with amorphous heterometal-doped molybdenum sulfide for water photoelectrolysis. <i>Nano Energy</i> , 2017, 32, 422-432.	8.2	58
921	The Role of Intrinsic Defects in Electrocatalytic Activity of Monolayer VS <sub>2</sub> Basal Planes for the Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1530-1536.	1.5	93

#	ARTICLE	IF	CITATIONS
922	Improving the activity of Co <sub>x</sub> P nanoparticles for the electrochemical hydrogen evolution by hydrogenation. <i>Sustainable Energy and Fuels</i> , 2017, 1, 62-68.	2.5	41
923	In Situ Growth of Sn-Doped Ni <sub>3</sub> S <sub>2</sub> Nanosheets on Ni Foam as High-Performance Electrocatalyst for Hydrogen Evolution Reaction. <i>ChemElectroChem</i> , 2017, 4, 594-600.	1.7	64
924	Interlayer-expanded MoS <sub>2</sub> . <i>Materials Today</i> , 2017, 20, 83-91.	8.3	276
925	N-doped ZnO/MoS <sub>2</sub> binary heterojunctions: the dual role of 2D MoS <sub>2</sub> in the enhancement of photostability and photocatalytic activity under visible light irradiation for tetracycline degradation. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1093-1106.	3.2	125
926	Field Effect Enhanced Hydrogen Evolution Reaction of MoS <sub>2</sub> Nanosheets. <i>Advanced Materials</i> , 2017, 29, 1604464.	11.1	148
927	The direct hydrothermal deposition of cobalt-doped MoS <sub>2</sub> onto fluorine-doped SnO <sub>2</sub> substrates for catalysis of the electrochemical hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1472-1480.	5.2	42
928	Ultrafast Interfacial Self-Assembly of 2D Transition Metal Dichalcogenides Monolayer Films and Their Vertical and In-Plane Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 1021-1028.	4.0	43
929	Improving Hydrogen Evolution Activity of Earth-Abundant Cobalt-Doped Iron Pyrite Catalysts by Surface Modification with Phosphide. <i>Small</i> , 2017, 13, 1603356.	5.2	68
930	Surface functionalization of molybdenum dinitride nanosheets by halogen and alkali atoms: a first-principles study. <i>Journal of Materials Chemistry C</i> , 2017, 5, 683-689.	2.7	10
931	Strain-Dependent Edge Structures in MoS <sub>2</sub> Layers. <i>Nano Letters</i> , 2017, 17, 7021-7026.	4.5	40
932	Activating MoS <sub>2</sub> for pH-Universal Hydrogen Evolution Catalysis. <i>Journal of the American Chemical Society</i> , 2017, 139, 16194-16200.	6.6	164
933	Highly active two dimensional $\delta$ -MoO <sub>3-x</sub> for the electrocatalytic hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24223-24231.	5.2	166
934	Intermediate bands of MoS <sub>2</sub> enabled by Co doping for enhanced hydrogen evolution. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 1895-1899.	3.0	35
935	Hydrogen Evolution Reaction Catalyzed by Transition-Metal Nitrides. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24036-24045.	1.5	108
936	Observation of superconductivity in 1T $\delta$ -MoS <sub>2</sub> nanosheets. <i>Journal of Materials Chemistry C</i> , 2017, 5, 10855-10860.	2.7	77
937	Electrochemical and SECM Investigation of MoS <sub>2</sub> /GO and MoS <sub>2</sub> /rGO Nanocomposite Materials for HER Electrocatalysis. <i>ACS Omega</i> , 2017, 2, 7532-7545.	1.6	43
938	Three electron channels toward two types of active sites in MoS <sub>2</sub> @Pt nanosheets for hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22654-22661.	5.2	42
939	Structurally Deformed MoS <sub>2</sub> for Electrochemically Stable, Thermally Resistant, and Highly Efficient Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2017, 29, 1703863.	11.1	107

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940	Engineering a nanotubular mesoporous cobalt phosphide electrocatalyst by the Kirkendall effect towards highly efficient hydrogen evolution reactions. <i>Nanoscale</i> , 2017, 9, 16313-16320.	2.8	43
941	Active Role of Phosphorus in the Hydrogen Evolving Activity of Nickel Phosphide (0001) Surfaces. <i>ACS Catalysis</i> , 2017, 7, 7718-7725.	5.5	104
942	NaCl Crystal Tuning Nitrogen Self-Doped Porous Graphitic Carbon Nanosheets for Efficient Oxygen Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 10275-10282.	3.2	49
943	First-Row Transition Metal Based Catalysts for the Oxygen Evolution Reaction under Alkaline Conditions: Basic Principles and Recent Advances. <i>Small</i> , 2017, 13, 1701931.	5.2	352
944	Multifunctional Mo-N/C@MoS <sub>2</sub> Electrocatalysts for HER, OER, ORR, and Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1702300.	7.8	658
945	Sulfur vacancy induced high performance for photocatalytic H <sub>2</sub> production over 1T@2H phase MoS <sub>2</sub> nanolayers. <i>Catalysis Science and Technology</i> , 2017, 7, 5635-5643.	2.1	47
946	Doping-controlled phase transitions in single-layer MoS <sub>2</sub> . <i>Physical Review B</i> , 2017, 96, .	1.1	102
947	Arrays of ZnSe/MoSe <sub>2</sub> Nanotubes with Electronic Modulation as Efficient Electrocatalysts for Hydrogen Evolution Reaction. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700948.	1.9	39
948	Energy Level Engineering of MoS <sub>2</sub> by Transition-Metal Doping for Accelerating Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2017, 139, 15479-15485.	6.6	713
949	Temperature-dependent properties of monolayer MoS <sub>2</sub> annealed in an Ar diluted S atmosphere: an experimental and first-principles study. <i>Journal of Materials Chemistry C</i> , 2017, 5, 11138-11143.	2.7	12
950	Synthesis of MoS <sub>2</sub> (1-x)Se <sub>2x</sub> and WS <sub>2</sub> (1-x)Se <sub>2x</sub> alloys for enhanced hydrogen evolution reaction performance. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 2068-2074.	3.0	27
951	Unique hybrid Ni <sub>2</sub> P/MoO <sub>2</sub> @MoS <sub>2</sub> nanomaterials as bifunctional non-noble-metal electro-catalysts for water splitting. <i>Nanoscale</i> , 2017, 9, 17349-17356.	2.8	49
952	Precious metal-free approach to hydrogen electrocatalysis for energy conversion: From mechanism understanding to catalyst design. <i>Nano Energy</i> , 2017, 42, 69-89.	8.2	157
953	Highly Active Tungsten Oxide Nanoplate Electrocatalysts for the Hydrogen Evolution Reaction in Acidic and Near Neutral Electrolytes. <i>ACS Omega</i> , 2017, 2, 7039-7047.	1.6	68
954	A nanohybrid consisting of NiPS <sub>3</sub> nanoparticles coupled with defective graphene as a pH-universal electrocatalyst for efficient hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23536-23542.	5.2	118
955	Porous CoP nanosheet arrays grown on nickel foam as an excellent and stable catalyst for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 26995-27003.	3.8	23
956	Ultradispersed and Single-Layered MoS <sub>2</sub> Nanoflakes Strongly Coupled with Graphene: An Optimized Structure with High Kinetics for the Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 39380-39390.	4.0	46
957	One-pot synthesis of MoS <sub>2</sub> /WS <sub>2</sub> ultrathin nanoflakes with vertically aligned structure on indium tin oxide as a photocathode for enhanced photo-assistant electrochemical hydrogen evolution reaction. <i>RSC Advances</i> , 2017, 7, 49309-49319.	1.7	29

#	ARTICLE	IF	CITATIONS
958	Freestanding Metallic 1T MoS <sub>2</sub> with Dual Ion Diffusion Paths as High Rate Anode for Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1702998.	7.8	265
959	Metal-Organic Frameworks Derived Nanotube of Nickel-Cobalt Bimetal Phosphides as Highly Efficient Electrocatalysts for Overall Water Splitting. <i>Advanced Functional Materials</i> , 2017, 27, 1703455.	7.8	597
960	Temperature-dependent Crystallization of MoS <sub>2</sub> Nanoflakes on Graphene Nanosheets for Electrocatalysis. <i>Nanoscale Research Letters</i> , 2017, 12, 479.	3.1	30
961	Amorphous WS <sub>x</sub> as an efficient cocatalyst grown on CdS nanoparticles via photochemical deposition for enhanced visible-light-driven hydrogen evolution. <i>Molecular Catalysis</i> , 2017, 440, 190-198.	1.0	26
962	Edge-On MoS <sub>2</sub> Thin Films by Atomic Layer Deposition for Understanding the Interplay between the Active Area and Hydrogen Evolution Reaction. <i>Chemistry of Materials</i> , 2017, 29, 7604-7614.	3.2	82
963	Enhancing the colloidal stability and surface functionality of molybdenum disulfide (MoS <sub>2</sub> ) nanosheets with hyperbranched polyglycerol for photothermal therapy. <i>Journal of Colloid and Interface Science</i> , 2017, 508, 214-221.	5.0	42
964	One-Step Growth of Iron-Nickel Bimetallic Nanoparticles on FeNi Alloy Foils: Highly Efficient Advanced Electrodes for the Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 28627-28634.	4.0	116
965	Long-Term Stable 2H-MoS <sub>2</sub> Dispersion: Critical Role of Solvent for Simultaneous Phase Restoration and Surface Functionalization of Liquid-Exfoliated MoS <sub>2</sub> . <i>ACS Omega</i> , 2017, 2, 4678-4687.	1.6	55
966	MoS <sub>2</sub> Nanosheets Supported on Hollow Carbon Spheres as Efficient Catalysts for Electrochemical Hydrogen Evolution Reaction. <i>ACS Omega</i> , 2017, 2, 5087-5094.	1.6	38
967	Vertically Aligned MoS <sub>2</sub> /Mo <sub>2</sub> C hybrid Nanosheets Grown on Carbon Paper for Efficient Electrocatalytic Hydrogen Evolution. <i>ACS Catalysis</i> , 2017, 7, 7312-7318.	5.5	181
968	Engineering and modifying two-dimensional materials by electron beams. <i>MRS Bulletin</i> , 2017, 42, 667-676.	1.7	62
969	Hydrogen generation by water splitting using MoS <sub>2</sub> and other transition metal dichalcogenides. <i>Nano Energy</i> , 2017, 41, 49-65.	8.2	248
970	Hybridized 1T/2H MoS <sub>2</sub> Having Controlled 1T Concentrations and its use in Supercapacitors. <i>Chemistry - A European Journal</i> , 2017, 23, 17348-17355.	1.7	88
971	Magnetic Co-Doped MoS <sub>2</sub> Nanosheets for Efficient Catalysis of Nitroarene Reduction. <i>ACS Omega</i> , 2017, 2, 5891-5897.	1.6	66
972	Atomic-Level Coupled Interfaces and Lattice Distortion on CuS/NiS <sub>2</sub> Nanocrystals Boost Oxygen Catalysis for Flexible Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1703779.	7.8	200
973	Porous nickel telluride nanostructures as bifunctional electrocatalyst towards hydrogen and oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 24645-24655.	3.8	89
974	Electrochemical hydrogen storage: Opportunities for fuel storage, batteries, fuel cells, and supercapacitors. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 25143-25165.	3.8	237
975	Molybdenum diboride nanoparticles as a highly efficient electrocatalyst for the hydrogen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1928-1934.	2.5	96

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976	Morphology-Dependent Catalytic Performance of $\text{MoS}_2/\text{MoO}_x$ Heterojunction Nanostructures for Hydrogen Evolution Reaction. <i>Bulletin of the Korean Chemical Society</i> , 2017, 38, 1226-1230.	1.0	0
977	Flexible $\text{MoS}_2$ nanosheets/polypyrrole nanofibers for highly efficient electrochemical hydrogen evolution. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 3584-3588.	0.9	16
978	Acid promoted Ni/NiO monolithic electrode for overall water splitting in alkaline medium. <i>Science China Materials</i> , 2017, 60, 918-928.	3.5	32
979	Preparation of Monolayer $\text{MoS}_2$ Quantum Dots using Temporally Shaped Femtosecond Laser Ablation of Bulk $\text{MoS}_2$ Targets in Water. <i>Scientific Reports</i> , 2017, 7, 11182.	1.6	167
980	Defective $\text{MoS}_2$ electrocatalyst for highly efficient hydrogen evolution through a simple ball-milling method. <i>Science China Materials</i> , 2017, 60, 849-856.	3.5	23
981	Scalable Synthesis of Highly Crystalline $\text{MoSe}_2$ and Its Ambipolar Behavior. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 36009-36016.	4.0	52
982	Unveiling Active Sites for the Hydrogen Evolution Reaction on Monolayer $\text{MoS}_2$ . <i>Advanced Materials</i> , 2017, 29, 1701955.	11.1	249
983	Atomically Thin Transition-Metal Dichalcogenides for Electrocatalysis and Energy Storage. <i>Small Methods</i> , 2017, 1, 1700156.	4.6	98
984	An efficient $\text{Co}_3\text{S}_4/\text{CoP}$ hybrid catalyst for electrocatalytic hydrogen evolution. <i>Scientific Reports</i> , 2017, 7, 11891.	1.6	45
985	Graphene- and Phosphorene-like Boron Layers with Contrasting Activities in Highly Active $\text{MoS}_2/\text{B}_4$ for Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2017, 139, 12915-12918.	6.6	104
986	Comparative Study in Acidic and Alkaline Media of the Effects of pH and Crystallinity on the Hydrogen-Evolution Reaction on $\text{MoS}_2$ and $\text{MoSe}_2$ . <i>ACS Energy Letters</i> , 2017, 2, 2234-2238.	8.8	78
987	Highly Active 2D Layered $\text{MoS}_2$ -rGO Hybrids for Energy Conversion and Storage Applications. <i>Scientific Reports</i> , 2017, 7, 8378.	1.6	143
988	Iron-Doped Nickel Phosphide Nanosheet Arrays: An Efficient Bifunctional Electrocatalyst for Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 26001-26007.	4.0	200
989	Development of a Transferable Reactive Force Field of P/H Systems: Application to the Chemical and Mechanical Properties of Phosphorene. <i>Journal of Physical Chemistry A</i> , 2017, 121, 6135-6149.	1.1	38
990	Layered Noble Metal Dichalcogenides: Tailoring Electrochemical and Catalytic Properties. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 25587-25599.	4.0	51
991	Highly efficient hydrogen evolution reaction by strain and phase engineering in composites of Pt and $\text{MoS}_2$ nano-scrolls. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 18356-18365.	1.3	48
992	Polytype 1T/2H $\text{MoS}_2$ heterostructures for efficient photoelectrocatalytic hydrogen evolution. <i>Chemical Engineering Journal</i> , 2017, 330, 102-108.	6.6	116
993	Bifunctional metal phosphide FeMnP films from single source metal organic chemical vapor deposition for efficient overall water splitting. <i>Nano Energy</i> , 2017, 39, 444-453.	8.2	117

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994	Langmuir films and uniform, large area, transparent coatings of chemically exfoliated MoS <sub>2</sub> single layers. <i>Journal of Materials Chemistry C</i> , 2017, 5, 11275-11287.	2.7	35
995	Nitrogen-Doped Graphene with a Three-Dimensional Architecture Assisted by Carbon Nitride Tetrapods as an Efficient Metal-Free Electrocatalyst for Hydrogen Evolution. <i>ChemElectroChem</i> , 2017, 4, 2643-2652.	1.7	29
996	Atomically Precise Gold Nanoclusters Accelerate Hydrogen Evolution over MoS <sub>2</sub> Nanosheets: The Dual Interfacial Effect. <i>Small</i> , 2017, 13, 1701519.	5.2	92
997	Supercritical-Fluid-Assisted Decoration of MoS <sub>2</sub> @ MWCNTs and Their Superior Performance in the Electrochemical Hydrogen Evolution Reaction. <i>ChemistrySelect</i> , 2017, 2, 5978-5983.	0.7	5
998	Rational design of freestanding MoS <sub>2</sub> monolayers for hydrogen evolution reaction. <i>Nano Energy</i> , 2017, 39, 409-417.	8.2	107
999	Facile and one-step synthesis of a free-standing 3D MoS <sub>2</sub> /rGO/Mo binder-free electrode for efficient hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18081-18087.	5.2	39
1000	Electrocatalytic hydrogen gas generation by cobalt molybdenum disulfide (CoMoS <sub>2</sub> ) synthesized using alkyl-containing thiomolybdate precursors. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 20669-20676.	3.8	19
1001	Efficient hydrogen evolution activity of 1T-MoS <sub>2</sub> /Si-doped TiO <sub>2</sub> nanotube hybrids. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 20739-20748.	3.8	23
1002	Synthesis of few-layer MoS <sub>2</sub> nanosheets-coated TiO <sub>2</sub> nanosheets on graphite fibers for enhanced photocatalytic properties. <i>Solar Energy Materials and Solar Cells</i> , 2017, 172, 108-116.	3.0	89
1003	Electrochemical maps and movies of the hydrogen evolution reaction on natural crystals of molybdenite (MoS <sub>2</sub> ): basal vs. edge plane activity. <i>Chemical Science</i> , 2017, 8, 6583-6593.	3.7	159
1004	Self-optimizing, highly surface-active layered metal dichalcogenide catalysts for hydrogen evolution. <i>Nature Energy</i> , 2017, 2, .	19.8	336
1005	Plasmon-Enhanced Photoelectrochemical Current and Hydrogen Production of (MoS <sub>2</sub> -TiO <sub>2</sub> )/Au Hybrids. <i>Scientific Reports</i> , 2017, 7, 7178.	1.6	35
1006	Graphite oxide and molybdenum disulfide composite for hydrogen evolution reaction. <i>Chemical Physics Letters</i> , 2017, 685, 451-456.	1.2	26
1007	Facile exfoliation of molybdenum disulfide nanosheets as highly efficient electrocatalyst for detection of m-nitrophenol. <i>Journal of Electroanalytical Chemistry</i> , 2017, 801, 300-305.	1.9	11
1008	Ternary composites RGO/MoS <sub>2</sub> @Fe <sub>3</sub> O <sub>4</sub> : synthesis and enhanced electromagnetic wave absorbing performance. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 16802-16812.	1.1	28
1009	Hydrogenation of monolayer molybdenum diselenide via hydrogen plasma treatment. <i>Journal of Materials Chemistry C</i> , 2017, 5, 11294-11300.	2.7	20
1010	One-step selective formation of silver nanoparticles on atomic layered MoS <sub>2</sub> by laser-induced defect engineering and photoreduction. <i>Journal of Materials Chemistry C</i> , 2017, 5, 8883-8892.	2.7	23
1011	Ti@MoS <sub>x</sub> core-shell nanowire arrays as self-supported electrodes for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 30646-30652.	3.8	10

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1012	Effects of Tungsten Carbide on the Electrocatalytic Activity of PbO <sub>2</sub> -WC Composite Inert Anodes during Zinc Electrowinning. <i>Journal of the Electrochemical Society</i> , 2017, 164, H1064-H1071.	1.3	22
1013	Chemically exfoliated $\text{MoS}_2$ layers: Spectroscopic evidence for the semiconducting nature of the dominant trigonal metastable phase. <i>Physical Review B</i> , 2017, 96, .	1.1	39
1014	Electronic Modulation of Electrocatalytically Active Center of Cu <sub>7</sub> S <sub>4</sub> Nanodisks by Cobalt-Doping for Highly Efficient Oxygen Evolution Reaction. <i>ACS Nano</i> , 2017, 11, 12230-12239.	7.3	139
1015	Catalytic Properties of Vanadium Diselenide: A Comprehensive Study on Its Electrocatalytic Performance in Alkaline, Neutral, and Acidic Media. <i>ACS Omega</i> , 2017, 2, 8319-8329.	1.6	40
1016	A look into atomic carbon and oxygen adsorption on 1Tâ€²-MoS <sub>2</sub> monolayer: density functional theory calculations. <i>Materials Research Express</i> , 2017, 4, 125026.	0.8	3
1017	Novel Ni(S <sub>0.49</sub> Se <sub>0.51</sub> ) <sub>2</sub> porous flakes array on carbon fiber cloth for efficient hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 30119-30125.	3.8	22
1018	Controlling the H to Tâ€² structural phase transition via chalcogen substitution in MoTe <sub>2</sub> monolayers. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 31874-31882.	1.3	19
1019	Defect Engineering in MoSe <sub>2</sub> for the Hydrogen Evolution Reaction: From Point Defects to Edges. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 42688-42698.	4.0	171
1020	Two-Dimensional CoS <sub>2</sub> monolayer with robust ferromagnetism. <i>Scientific Reports</i> , 2017, 7, 15993.	1.6	23
1021	General Strategy for Two-Dimensional Transition Metal Dichalcogenides by Ion Exchange. <i>Chemistry of Materials</i> , 2017, 29, 10019-10026.	3.2	18
1022	1T-Phase Transition Metal Dichalcogenides (MoS <sub>2</sub> , MoSe <sub>2</sub> , WS <sub>2</sub> ,) Tj ETQq0 0 0 rgBT /Overlock 1 Enzyme-Based Biosensor. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 40697-40706.	4.0	138
1023	Aligned and stable metallic MoS <sub>2</sub> on plasma-treated mass transfer channels for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25359-25367.	5.2	31
1024	Understanding the high-electrocatalytic performance of two-dimensional MoS <sub>2</sub> nanosheets and their composite materials. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24540-24563.	5.2	183
1025	Heterostructured Arrays of Ni <sub>x</sub> P/S/Se Nanosheets on Co <sub>x</sub> P/S/Se Nanowires for Efficient Hydrogen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 41347-41353.	4.0	53
1026	MXene: an emerging two-dimensional material for future energy conversion and storage applications. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24564-24579.	5.2	450
1027	N,B-codoped defect-rich graphitic carbon nanocages as high performance multifunctional electrocatalysts. <i>Nano Energy</i> , 2017, 42, 334-340.	8.2	238
1028	Conductive Copper Benzenehexathiol Coordination Polymer as a Hydrogen Evolution Catalyst. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 40752-40759.	4.0	129
1029	Exfoliated WS <sub>2</sub> -Nafion Composite based Electromechanical Actuators. <i>Scientific Reports</i> , 2017, 7, 14599.	1.6	18

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1030	Electrochemical exfoliation of graphene and graphene-analogous 2D nanosheets. <i>Journal of Materials Science</i> , 2017, 52, 10649-10660.	1.7	51
1031	Enhanced photocatalytic activity and photoelectrochemical performance of InOOH nanosheets prepared via a facile solvothermal route. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 1869-1876.	1.1	3
1032	Heterogeneous Nanostructure Based on 1T-Phase MoS <sub>2</sub> for Enhanced Electrocatalytic Hydrogen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 25291-25297.	4.0	202
1033	Faradaic deionization of brackish and sea water via pseudocapacitive cation and anion intercalation into few-layered molybdenum disulfide. <i>Journal of Materials Chemistry A</i> , 2017, 5, 15640-15649.	5.2	167
1034	Evolution of dealloyed PdBi <sub>2</sub> nanoparticles as electrocatalysts with enhanced activity and remarkable durability in hydrogen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2017, 5, 15950-15960.	5.2	52
1035	Arrays of ZnO/MoS <sub>2</sub> nanocables and MoS <sub>2</sub> nanotubes with phase engineering for bifunctional photoelectrochemical and electrochemical water splitting. <i>Chemical Engineering Journal</i> , 2017, 328, 474-483.	6.6	103
1036	Layered Transition-Metal Ditungstenides in Electrocatalytic Applications—Contrasting Properties. <i>ACS Catalysis</i> , 2017, 7, 5706-5716.	5.5	50
1037	Tailoring catalytic activities of transition metal disulfides for water splitting. <i>FlatChem</i> , 2017, 4, 68-80.	2.8	24
1038	A review on the research progress of tailoring photoluminescence of monolayer transition metal dichalcogenides. <i>FlatChem</i> , 2017, 4, 48-53.	2.8	18
1039	Exfoliation of Stable 2D Black Phosphorus for Device Fabrication. <i>Chemistry of Materials</i> , 2017, 29, 6445-6456.	3.2	66
1040	Highly Active, Nonprecious Electrocatalyst Comprising Borophene Subunits for the Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2017, 139, 12370-12373.	6.6	335
1041	Molybdenum disulfide grafted titania nanotube arrays as high capacity retention anode material for lithium ion batteries. <i>Applied Nanoscience (Switzerland)</i> , 2017, 7, 67-73.	1.6	4
1042	In situ photodeposition of MoS <sub>x</sub> on CdS nanorods as a highly efficient cocatalyst for photocatalytic hydrogen production. <i>Journal of Materials Chemistry A</i> , 2017, 5, 15287-15293.	5.2	93
1043	One-pot mass preparation of MoS <sub>2</sub> /C aerogels for high-performance supercapacitors and lithium-ion batteries. <i>Nanoscale</i> , 2017, 9, 10059-10066.	2.8	60
1044	Environmental Applications of 2D Molybdenum Disulfide (MoS <sub>2</sub> ) Nanosheets. <i>Environmental Science &amp; Technology</i> , 2017, 51, 8229-8244.	4.6	647
1045	Closed Bipolar Electrodes for Spatial Separation of H <sub>2</sub> and O <sub>2</sub> Evolution during Water Electrolysis and the Development of High-Voltage Fuel Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 23654-23661.	4.0	53
1046	CO <sub>2</sub> -assisted fabrication of novel heterostructures of h-MoO <sub>3</sub> /1T-MoS <sub>2</sub> for enhanced photoelectrocatalytic performance. <i>Applied Surface Science</i> , 2017, 425, 56-62.	3.1	33
1047	Ternary Transitional Metal Chalcogenide Nanosheet with Significantly Enhanced Electrocatalytic Hydrogen-Evolution Activity. <i>Catalysis Letters</i> , 2017, 147, 215-220.	1.4	12



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1048	Fullerene-Like Nickel Oxysulfide Hollow Nanospheres as Bifunctional Electrocatalysts for Water Splitting. <i>Small</i> , 2017, 13, 1602637.	5.2	39
1049	Chemical vapor deposition growth and characterization of drop-like MoS <sub>2</sub> /MoO <sub>2</sub> granular films. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600245.	0.7	16
1050	Green synthesis of layered 1T-MoS <sub>2</sub> /reduced graphene oxide nanocomposite with excellent catalytic performances for 4-nitrophenol reduction. <i>Applied Surface Science</i> , 2017, 396, 310-318.	3.1	43
1051	Pseudocapacitive Charge Storage in Thick Composite MoS <sub>2</sub> Nanocrystal-Based Electrodes. <i>Advanced Energy Materials</i> , 2017, 7, 1601283.	10.2	230
1052	One-dimensional hierarchical structured MoS <sub>2</sub> with an ordered stacking of nanosheets: a facile template-free hydrothermal synthesis strategy and application as an efficient hydrogen evolution electrocatalyst. <i>CrystEngComm</i> , 2017, 19, 218-223.	1.3	5
1053	Room temperature 2D memristive transistor with optical short-term plasticity. , 2017, , .		4
1054	Synthesis and Characterization Carbon Nanotubes Doped Carbon Aerogels. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 275, 012006.	0.3	1
1055	In-situ wet tearing based subnanometer MoSeS for efficient hydrogen evolution. <i>Science China Materials</i> , 2017, 60, 929-936.	3.5	7
1056	Growth, structure and stability of sputter-deposited MoS <sub>2</sub> thin films. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 1115-1126.	1.5	44
1057	Hydrogen Evolution Reaction Property in Alkaline Solution of Molybdenum Disulfide Modified by Surface Anchor of Nickel-Phosphorus Coating. <i>Metals</i> , 2017, 7, 211.	1.0	9
1058	Two-Dimensional Material Molybdenum Disulfides as Electrocatalysts for Hydrogen Evolution. <i>Catalysts</i> , 2017, 7, 285.	1.6	72
1059	Enhanced Electrocatalytic Activity for Water Splitting on NiO/Ni/Carbon Fiber Paper. <i>Materials</i> , 2017, 10, 15.	1.3	23
1060	Synergically Improving Light Harvesting and Charge Transportation of TiO <sub>2</sub> Nanobelts by Deposition of MoS <sub>2</sub> for Enhanced Photocatalytic Removal of Cr(VI). <i>Catalysts</i> , 2017, 7, 30.	1.6	34
1061	Recent advances in unveiling active sites in molybdenum sulfide-based electrocatalysts for the hydrogen evolution reaction. <i>Nano Convergence</i> , 2017, 4, 19.	6.3	49
1062	Morphologies controllable synthesis of MoS <sub>2</sub> by hot-injection method: from quantum dots to nanosheets. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 13633-13637.	1.1	6
1063	Molybdenum Disulfide-Based Photocatalysis: Bulk-to-Single Layer Structure and Related Photomechanism for Environmental Applications. , 2017, , .		3
1064	Interface engineering: The Ni(OH) <sub>2</sub> /MoS <sub>2</sub> heterostructure for highly efficient alkaline hydrogen evolution. <i>Nano Energy</i> , 2017, 37, 74-80.	8.2	436
1065	Dual-Native Vacancy Activated Basal Plane and Conductivity of MoSe <sub>2</sub> with High Efficiency Hydrogen Evolution Reaction. <i>Small</i> , 2018, 14, e1704150.	5.2	114

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1066	Enlarged interlayer spaced molybdenum disulfide supported on nanocarbon hybrid network for efficient hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2018, 264, 329-340.	2.6	32
1067	Ultrathin two-dimensional materials for photo- and electrocatalytic hydrogen evolution. <i>Materials Today</i> , 2018, 21, 749-770.	8.3	228
1068	Carbon nanotube-induced phase and stability engineering: a strained cobalt-doped $WSe_2$ /MWNT heterostructure for enhanced hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4793-4800.	5.2	56
1069	A $MoS_2$ nanocatalyst with surface-enriched active sites for the heterogeneous transfer hydrogenation of nitroarenes. <i>Chinese Journal of Catalysis</i> , 2018, 39, 79-87.	6.9	24
1070	Vertical $1T\bar{a}TaS_2$ Synthesis on Nanoporous Gold for High-Performance Electrocatalytic Applications. <i>Advanced Materials</i> , 2018, 30, e1705916.	11.1	75
1071	Two-dimensional transition metal dichalcogenide hybrid materials for energy applications. <i>Nano Today</i> , 2018, 19, 16-40.	6.2	142
1072	Stable methylammonium-intercalated $1T\bar{a}^2-MoS_2$ for efficient electrocatalytic hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2018, 6, 5613-5617.	5.2	38
1073	Controlled Synthesis of Eutectic $NiSe/Ni_3Se_2$ Self-Supported on Ni Foam: An Excellent Bifunctional Electrocatalyst for Overall Water Splitting. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701507.	1.9	67
1074	Versatile two-dimensional silicon diphosphide ( $SiP_2$ ) for photocatalytic water splitting. <i>Nanoscale</i> , 2018, 10, 6369-6374.	2.8	51
1075	Bimetallic $Co_2Mo_3O_8$ suboxides coupled with conductive cobalt nanowires for efficient and durable hydrogen evolution in alkaline electrolyte. <i>Journal of Materials Chemistry A</i> , 2018, 6, 5217-5228.	5.2	63
1076	Improved HER Catalysis through Facile, Aqueous Electrochemical Activation of Nanoscale $WSe_2$ . <i>Nano Letters</i> , 2018, 18, 2329-2335.	4.5	66
1077	Controllable Edge Exposure of $MoS_2$ for Efficient Hydrogen Evolution with High Current Density. <i>ACS Applied Energy Materials</i> , 2018, 1, 1268-1275.	2.5	44
1078	Two-dimensional hybrid materials: $MoS_2$ -RGO nanocomposites enhanced the barrier properties of epoxy coating. <i>Applied Surface Science</i> , 2018, 444, 511-521.	3.1	74
1079	Large-scale controlled synthesis of porous two-dimensional nanosheets for the hydrogen evolution reaction through a chemical pathway. <i>Nanoscale</i> , 2018, 10, 6168-6176.	2.8	23
1080	Relaxing volume stress and promoting active sites in vertically grown 2D layered mesoporous $MoS_2(1-x)Se_2x/rGO$ composites with enhanced capability and stability for lithium ion batteries. <i>Electrochimica Acta</i> , 2018, 268, 424-434.	2.6	22
1081	Controlled Growth of $MoS_2$ Flakes from in-Plane to Edge-Enriched 3D Network and Their Surface-Energy Studies. <i>ACS Applied Nano Materials</i> , 2018, 1, 2356-2367.	2.4	44
1082	Light-assisted synthesis $MoS_x$ as a noble metal free cocatalyst formed heterojunction $CdS/Co_3O_4$ photocatalyst for visible light harvesting and spatial charge separation. <i>Dalton Transactions</i> , 2018, 47, 6973-6985.	1.6	61
1083	Engineering Molybdenum Diselenide and Its Reduced Graphene Oxide Hybrids for Efficient Electrocatalytic Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2018, 1, 2143-2152.	2.4	22

#	ARTICLE	IF	CITATIONS
1084	Metastable MoS <sub>2</sub> : Crystal Structure, Electronic Band Structure, Synthetic Approach and Intriguing Physical Properties. <i>Chemistry - A European Journal</i> , 2018, 24, 15942-15954.	1.7	133
1085	Metal (Ag, Pt)@MoS <sub>2</sub> Hybrids Greenly Prepared Through Photochemical Reduction of Femtosecond Laser Pulses for SERS and HER. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 7704-7714.	3.2	55
1086	Precious Versus Non-precious Electrocatalyst Centers. <i>Nanostructure Science and Technology</i> , 2018, , 101-168.	0.1	0
1087	Metallic Twin Boundaries Boost the Hydrogen Evolution Reaction on the Basal Plane of Molybdenum Selenotellurides. <i>Advanced Energy Materials</i> , 2018, 8, 1800031.	10.2	80
1088	Hierarchical MoS <sub>2</sub> @TiO <sub>2</sub> Heterojunctions for Enhanced Photocatalytic Performance and Electrocatalytic Hydrogen Evolution. <i>Chemistry - an Asian Journal</i> , 2018, 13, 1609-1615.	1.7	47
1089	Photoactivated Mixed In-Plane and Edge-Enriched p-Type MoS <sub>2</sub> Flake-Based NO <sub>2</sub> Sensor Working at Room Temperature. <i>ACS Sensors</i> , 2018, 3, 998-1004.	4.0	149
1090	Climbing the Volcano of Electrocatalytic Activity while Avoiding Catalyst Corrosion: Ni <sub>3</sub> P, a Hydrogen Evolution Electrocatalyst Stable in Both Acid and Alkali. <i>ACS Catalysis</i> , 2018, 8, 4408-4419.	5.5	178
1091	Mapping Catalytically Relevant Edge Electronic States of MoS <sub>2</sub> . <i>ACS Central Science</i> , 2018, 4, 493-503.	5.3	39
1092	Revealing the Contribution of Individual Factors to Hydrogen Evolution Reaction Catalytic Activity. <i>Advanced Materials</i> , 2018, 30, e1706076.	11.1	86
1093	Efficient Hydrogen Evolution Reaction Catalysis in Alkaline Media by All-in-One MoS <sub>2</sub> with Multifunctional Active Sites. <i>Advanced Materials</i> , 2018, 30, e1707105.	11.1	321
1094	MoS <sub>2</sub> Quantum Dots@TiO <sub>2</sub> Nanotube Arrays: An Extended-Spectrum-Driven Photocatalyst for Solar Hydrogen Evolution. <i>ChemSusChem</i> , 2018, 11, 1708-1721.	3.6	77
1095	1Tâ€²MoS <sub>2</sub> /W <sub>1-x</sub> S <sub>2</sub> /CdS Heterostructure Enabling Robust Photocatalytic Water Splitting: Unveiling the Interfacial Charge Polarization. <i>Solar Rrl</i> , 2018, 2, 1800032.	3.1	27
1096	Hydrogen Evolution Reaction at Anion Vacancy of Two-Dimensional Transition-Metal Dichalcogenides: Ab Initio Computational Screening. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2049-2055.	2.1	98
1097	Self-supported Ni <sub>3</sub> S <sub>2</sub> @MoS <sub>2</sub> core/shell nanorod arrays via decoration with CoS as a highly active and efficient electrocatalyst for hydrogen evolution and oxygen evolution reactions. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 8794-8804.	3.8	53
1098	Janus effect of O <sub>2</sub> plasma modification on the electrocatalytic hydrogen evolution reaction of MoS <sub>2</sub> . <i>Journal of Catalysis</i> , 2018, 361, 384-392.	3.1	40
1099	Transition-Metal-Based Electrocatalysts as Cocatalysts for Photoelectrochemical Water Splitting: A Mini Review. <i>Small</i> , 2018, 14, e1704179.	5.2	182
1100	Hydrogen evolution reaction: The role of arsenene nanosheet and dopant. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 21634-21641.	3.8	39
1101	Molybdenum Sulfide Induce Growth Enhancement Effect of Rice ( <i>Oryza sativa</i> L.) through Regulating the Synthesis of Chlorophyll and the Expression of Aquaporin Gene. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 4013-4021.	2.4	68

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1102	Die lokale Oberflächenstruktur und -zusammensetzung bestimmt die Wasserstoffentwicklung an Eisen-Nickelsulfiden. <i>Angewandte Chemie</i> , 2018, 130, 4157-4161.	1.6	10
1103	Oxygen-incorporation in Co <sub>2</sub> P as a non-noble metal cocatalyst to enhance photocatalysis for reducing water to H <sub>2</sub> under visible light. <i>Chemical Engineering Journal</i> , 2018, 346, 281-288.	6.6	66
1104	Ultrafast fabrication of nanostructure WO <sub>3</sub> photoanodes by hybrid microwave annealing with enhanced photoelectrochemical and photoelectrocatalytic activities. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 8770-8778.	3.8	16
1105	In situ promoting water dissociation kinetic of Co based electrocatalyst for unprecedentedly enhanced hydrogen evolution reaction in alkaline media. <i>Nano Energy</i> , 2018, 49, 14-22.	8.2	53
1106	Role of Hyper-Reduced States in Hydrogen Evolution Reaction at Sulfur Vacancy in MoS <sub>2</sub> . <i>ACS Catalysis</i> , 2018, 8, 4508-4515.	5.5	45
1107	W-Doped MoO <sub>2</sub> /MoC Hybrids Encapsulated by P-Doped Carbon Shells for Enhanced Electrocatalytic Hydrogen Evolution. <i>Energy Technology</i> , 2018, 6, 1707-1714.	1.8	21
1108	Synthesis of metal-phase-assisted 1T@2H-MoS <sub>2</sub> nanosheet-coated black TiO <sub>2</sub> spheres with visible light photocatalytic activities. <i>Journal of Materials Science</i> , 2018, 53, 10302-10312.	1.7	57
1109	3D CoFe <sub>2</sub> O <sub>4</sub> nanorod/flower-like MoS <sub>2</sub> nanosheet heterojunctions as recyclable visible light-driven photocatalysts for the degradation of organic dyes. <i>Applied Surface Science</i> , 2018, 447, 711-723.	3.1	92
1110	Scalable production of few-layer molybdenum disulfide nanosheets by supercritical carbon dioxide. <i>Journal of Materials Science</i> , 2018, 53, 7258-7265.	1.7	15
1111	A comprehensive review on nano-molybdenum disulfide/DNA interfaces as emerging biosensing platforms. <i>Biosensors and Bioelectronics</i> , 2018, 107, 244-258.	5.3	40
1112	Electrochemical growth of MoS <sub>x</sub> on Cu foam: A highly active and robust three-dimensional cathode for hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 4978-4986.	3.8	20
1113	Highly uniform Ru nanoparticles over N-doped carbon: pH and temperature-universal hydrogen release from water reduction. <i>Energy and Environmental Science</i> , 2018, 11, 800-806.	15.6	407
1114	Surfactant assisted self assembly of novel ultrathin Cu[Fe(CN) <sub>5</sub> NO] nanosheets for enhanced electrocatalytic oxygen evolution: Effect of nanosheet thickness. <i>Electrochimica Acta</i> , 2018, 265, 202-208.	2.6	8
1115	Highly efficient hydrogen evolution by self-standing nickel phosphide-based hybrid nanosheet arrays electrocatalyst. <i>Materials Today Physics</i> , 2018, 4, 1-6.	2.9	72
1116	Urchin-Like Nanorods of Binary NiCoS Supported on Nickel Foam for Electrocatalytic Overall Water Splitting. <i>Journal of the Electrochemical Society</i> , 2018, 165, H102-H108.	1.3	41
1117	Mixed-solvent liquid exfoliated MoS <sub>2</sub> NPs as peroxidase mimetics for colorimetric detection of H <sub>2</sub> O <sub>2</sub> and glucose. <i>RSC Advances</i> , 2018, 8, 7252-7259.	1.7	34
1118	OD (MoS <sub>2</sub> )/2D (g-C <sub>3</sub> N <sub>4</sub> ) heterojunctions in Z-scheme for enhanced photocatalytic and electrochemical hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2018, 228, 64-74.	10.8	298
1119	Controlled preparation of MoS <sub>2</sub> /PbBiO <sub>2</sub> I hybrid microspheres with enhanced visible-light photocatalytic behaviour. <i>Journal of Colloid and Interface Science</i> , 2018, 517, 278-287.	5.0	38

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1120	Confining SnS <sub>2</sub> Ultrathin Nanosheets in Hollow Carbon Nanostructures for Efficient Capacitive Sodium Storage. <i>Joule</i> , 2018, 2, 725-735.	11.7	324
1121	Toward Exploring the Structure of Monolayer to Few-layer TaS <sub>2</sub> by Efficient Ultrasound-free Exfoliation. <i>Nanoscale Research Letters</i> , 2018, 13, 20.	3.1	12
1122	Ultrathin Alumina Mask-Assisted Nanopore Patterning on Monolayer MoS <sub>2</sub> for Highly Catalytic Efficiency in Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 8026-8035.	4.0	55
1123	Superior electrocatalysis for hydrogen evolution with crumpled graphene/tungsten disulfide/tungsten trioxide ternary nanohybrids. <i>Nano Energy</i> , 2018, 47, 66-73.	8.2	71
1124	Self-Template Synthesis of Co@Se@O Hierarchical Nanotubes as Efficient Electrocatalysts for Oxygen Evolution under Alkaline and Neutral Conditions. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 8231-8237.	4.0	43
1125	In Situ Synthesis of Efficient Water Oxidation Catalysts in Laser-Induced Graphene. <i>ACS Energy Letters</i> , 2018, 3, 677-683.	8.8	91
1126	A wafer-scale 1 nm Ni(OH) <sub>2</sub> nanosheet with superior electrocatalytic activity for the oxygen evolution reaction. <i>Nanoscale</i> , 2018, 10, 5054-5059.	2.8	31
1127	Engineering active edge sites of fractal-shaped single-layer MoS <sub>2</sub> catalysts for high-efficiency hydrogen evolution. <i>Nano Energy</i> , 2018, 51, 786-792.	8.2	98
1128	Local Surface Structure and Composition Control the Hydrogen Evolution Reaction on Iron Nickel Sulfides. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4093-4097.	7.2	104
1129	Oxygen Evolution Activity of Co@Ni Nanochain Alloys: Promotion by Electron Injection. <i>Chemistry - A European Journal</i> , 2018, 24, 3707-3711.	1.7	12
1130	Metallic 1T-Li <sub>x</sub> MoS <sub>2</sub> co-catalyst enhanced photocatalytic hydrogen evolution over ZnIn <sub>2</sub> S <sub>4</sub> floriated microspheres under visible light irradiation. <i>Catalysis Science and Technology</i> , 2018, 8, 1375-1382.	2.1	31
1131	Intriguing electronic structures and optical properties of two-dimensional van der Waals heterostructures of Zr <sub>2</sub> CT <sub>2</sub> (T = O, F) with MoSe <sub>2</sub> and WSe <sub>2</sub> . <i>Journal of Materials Chemistry C</i> , 2018, 6, 2830-2839.	2.7	73
1132	High efficient degradation of dye molecules by PDMS embedded abundant single-layer tungsten disulfide and their antibacterial performance. <i>Nano Energy</i> , 2018, 46, 338-346.	8.2	131
1133	Engineered MoSe <sub>2</sub> -Based Heterostructures for Efficient Electrochemical Hydrogen Evolution Reaction. <i>Advanced Energy Materials</i> , 2018, 8, 1703212.	10.2	152
1134	Defect-rich O-incorporated 1T-MoS <sub>2</sub> nanosheets for remarkably enhanced visible-light photocatalytic H <sub>2</sub> evolution over CdS: The impact of enriched defects. <i>Applied Catalysis B: Environmental</i> , 2018, 229, 227-236.	10.8	176
1135	In-situ growth of AuNPs on WS <sub>2</sub> @U-bent optical fiber for evanescent wave absorption sensor. <i>Applied Surface Science</i> , 2018, 441, 1072-1078.	3.1	9
1136	MoS <sub>x</sub> -coated NbS <sub>2</sub> nanoflakes grown on glass carbon: an advanced electrocatalyst for the hydrogen evolution reaction. <i>Nanoscale</i> , 2018, 10, 3444-3450.	2.8	24
1137	Preferential horizontal growth of tungsten sulfide on carbon and insight into active sulfur sites for the hydrogen evolution reaction. <i>Nanoscale</i> , 2018, 10, 3838-3848.	2.8	31

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1138	Directly Assembled 3D Molybdenum Disulfide on Silicon Wafer for Efficient Photoelectrochemical Water Reduction. <i>Advanced Sustainable Systems</i> , 2018, 2, 1700142.	2.7	36
1139	Large Dendritic Monolayer MoS <sub>2</sub> Grown by Atmospheric Pressure Chemical Vapor Deposition for Electrocatalysis. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 4630-4639.	4.0	88
1140	In-plane Black Phosphorus/Dicobalt Phosphide Heterostructure for Efficient Electrocatalysis. <i>Angewandte Chemie</i> , 2018, 130, 2630-2634.	1.6	55
1141	Mutually beneficial Co <sub>3</sub> O <sub>4</sub> @MoS <sub>2</sub> heterostructures as a highly efficient bifunctional catalyst for electrochemical overall water splitting. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2067-2072.	5.2	178
1142	Nanostructured MoS <sub>2</sub> -Based Advanced Biosensors: A Review. <i>ACS Applied Nano Materials</i> , 2018, 1, 2-25.	2.4	238
1143	Recent development on MoS <sub>2</sub> -based photocatalysis: A review. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2018, 35, 39-55.	5.6	404
1144	The Role of Composition of Uniform and Highly Dispersed Cobalt Vanadium Iron Spinel Nanocrystals for Oxygen Electrocatalysis. <i>ACS Catalysis</i> , 2018, 8, 1259-1267.	5.5	101
1145	Superior Electro-Oxidation and Corrosion Resistance of Monolayer Transition Metal Disulfides. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 4285-4294.	4.0	23
1146	Balancing the Hydrogen Evolution Reaction, Surface Energetics, and Stability of Metallic MoS <sub>2</sub> Nanosheets via Covalent Functionalization. <i>Journal of the American Chemical Society</i> , 2018, 140, 441-450.	6.6	241
1147	Constructing hierarchical polymer@MoS <sub>2</sub> core-shell structures for regulating thermal and fire safety properties of polystyrene nanocomposites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 107, 144-154.	3.8	43
1148	Electrochemically tuned cobalt hydroxide carbonate with abundant grain boundaries for highly efficient electro-oxidation of hydrazine. <i>Materials Chemistry Frontiers</i> , 2018, 2, 369-375.	3.2	10
1149	Nitrogen-doped carbon active sites boost the ultra-stable hydrogen evolution reaction on defect-rich MoS <sub>2</sub> nanosheets. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 2026-2033.	3.8	35
1150	Fabrication of Z-scheme magnetic MoS <sub>2</sub> /CoFe <sub>2</sub> O <sub>4</sub> nanocomposites with highly efficient photocatalytic activity. <i>Journal of Colloid and Interface Science</i> , 2018, 514, 664-674.	5.0	82
1151	Surface-enhanced Raman scattering of alkyne-conjugated MoS <sub>2</sub> : a comparative study between metallic and semiconductor phases. <i>Journal of Materials Chemistry C</i> , 2018, 6, 1071-1082.	2.7	31
1152	Nickel Hydr(oxy)oxide Nanoparticles on Metallic MoS <sub>2</sub> Nanosheets: A Synergistic Electrocatalyst for Hydrogen Evolution Reaction. <i>Advanced Science</i> , 2018, 5, 1700644.	5.6	104
1153	Nanocomposite of MoO <sub>3</sub> and MoC loaded on porous carbon as an efficient electrocatalyst for hydrogen evolution reaction. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 446-453.	3.0	31
1154	In-plane Black Phosphorus/Dicobalt Phosphide Heterostructure for Efficient Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2600-2604.	7.2	209
1155	Morphological Effects and Stabilization of the Metallic 1T Phase in Layered V, Nb, and Ta-Doped WSe <sub>2</sub> for Electrocatalysis. <i>Chemistry - A European Journal</i> , 2018, 24, 3199-3208.	1.7	38

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1156	Tuning the Basal Plane Functionalization of Two-Dimensional Metal Carbides (MXenes) To Control Hydrogen Evolution Activity. <i>ACS Applied Energy Materials</i> , 2018, 1, 173-180.	2.5	304
1157	Ultrathin molybdenum disulfide/carbon nitride nanosheets with abundant active sites for enhanced hydrogen evolution. <i>Nanoscale</i> , 2018, 10, 1766-1773.	2.8	57
1158	Langmuir-Blodgett Nanoassemblies of the MoS <sub>2</sub> /Au Composite at the Air/Water Interface for Dengue Detection. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 3020-3028.	4.0	45
1159	Hybrid of Fe <sub>4</sub> [Fe(CN) <sub>6</sub> ] <sub>3</sub> nanocubes and MoS <sub>2</sub> nanosheets on nitrogen-doped graphene realizing improved electrochemical hydrogen production. <i>Electrochimica Acta</i> , 2018, 263, 140-146.	2.6	38
1160	Preparation of High-Percentage 1T-Phase Transition Metal Dichalcogenide Nanodots for Electrochemical Hydrogen Evolution. <i>Advanced Materials</i> , 2018, 30, 1705509.	11.1	341
1161	Rapid reaction of MoS <sub>2</sub> nanosheets with Pb <sup>2+</sup> and Pb <sup>4+</sup> ions in solution. <i>Nanoscale</i> , 2018, 10, 1807-1814.	2.8	14
1162	Oriented Growth of ZIF-67 to Derive 2D Porous CoPO Nanosheets for Electrochemical-Photovoltage-Driven Overall Water Splitting. <i>Advanced Functional Materials</i> , 2018, 28, 1706120.	7.8	171
1163	Molybdenum Sulphoselenophosphide Spheroids as an Effective Catalyst for Hydrogen Evolution Reaction. <i>Small</i> , 2018, 14, 1703862.	5.2	37
1164	A facile strategy for the synthesis of ferroferric oxide/titanium dioxide/molybdenum disulfide heterostructures as a magnetically separable photocatalyst under visible-light. <i>Journal of Colloid and Interface Science</i> , 2018, 516, 138-144.	5.0	12
1165	Low-dimensional catalysts for hydrogen evolution and CO <sub>2</sub> reduction. <i>Nature Reviews Chemistry</i> , 2018, 2, .	13.8	631
1166	Strain tunable magnetic properties of 3d transition-metal ion doped monolayer MoS <sub>2</sub> : A first-principles study. <i>AIP Advances</i> , 2018, 8, 055917.	0.6	12
1167	Ion Transport Nanotube Assembled with Vertically Aligned Metallic MoS <sub>2</sub> for High Rate Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702779.	10.2	181
1168	CoP nanoparticles anchored on N,P-dual-doped graphene-like carbon as a catalyst for water splitting in non-acidic media. <i>Nanoscale</i> , 2018, 10, 2603-2612.	2.8	96
1169	Self-Supported Ternary Ni-Se Nanorod Arrays as Highly Active Electrocatalyst for Hydrogen Generation in Both Acidic and Basic Media: Experimental Investigation and DFT Calculation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 2430-2441.	4.0	83
1170	3D hierarchical CMF/MoSe <sub>2</sub> composite foam as highly efficient electrocatalyst for hydrogen evolution. <i>Electrochimica Acta</i> , 2018, 263, 94-101.	2.6	30
1171	Controllable Phase Stabilities in Transition Metal Dichalcogenides through Curvature Engineering: First-Principles Calculations and Continuum Prediction. <i>Advanced Theory and Simulations</i> , 2018, 1, 1800003.	1.3	5
1172	One step hydrothermal synthesis of 3D CoS <sub>2</sub> @MoS <sub>2</sub> -NG for high performance supercapacitors. <i>Nanotechnology</i> , 2018, 29, 29LT01.	1.3	16
1173	Electrodeposited Co <sub>1-x</sub> MoxS thin films as highly efficient electrocatalysts for hydrogen evolution reaction in acid medium. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 2641-2647.	1.2	14

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1174	Molybdenum and tungsten disulfides-based nanocomposite films for energy storage and conversion: A review. <i>Chemical Engineering Journal</i> , 2018, 348, 908-928.	6.6	98
1175	3D hierarchical defect-rich NiMo <sub>3</sub> S <sub>4</sub> nanosheet arrays grown on carbon textiles for high-performance sodium-ion batteries and hydrogen evolution reaction. <i>Nano Energy</i> , 2018, 49, 460-470.	8.2	107
1176	MoS <sub>2</sub> Nanoparticles as Electrocatalytic Labels in Magneto-Immunoassays. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 16861-16866.	4.0	11
1177	TMD-based highly efficient electrocatalysts developed by combined computational and experimental approaches. <i>Chemical Society Reviews</i> , 2018, 47, 4332-4356.	18.7	232
1178	Electron transfer dynamics of quaternary sulfur semiconductor/mos <sub>2</sub> layer-on-layer for efficient visible-light h <sub>2</sub> evolution. <i>Applied Catalysis B: Environmental</i> , 2018, 235, 9-16.	10.8	9
1179	Auto-optimizing Hydrogen Evolution Catalytic Activity of ReS <sub>2</sub> through Intrinsic Charge Engineering. <i>ACS Nano</i> , 2018, 12, 4486-4493.	7.3	111
1180	Hydrogen evolution enhancement of ultra-low loading, size-selected molybdenum sulfide nanoclusters by sulfur enrichment. <i>Applied Catalysis B: Environmental</i> , 2018, 235, 84-91.	10.8	56
1181	Metallic Transition-Metal Dichalcogenide Nanocatalysts for Energy Conversion. <i>CheM</i> , 2018, 4, 1510-1537.	5.8	141
1182	A Green Design for Lubrication: Multifunctional System Containing Fe <sub>3</sub> O <sub>4</sub> @MoS <sub>2</sub> Nanohybrid. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 7372-7379.	3.2	27
1183	Cobalt incorporated MoS <sub>2</sub> hollow structure with rich out-of-plane edges for efficient hydrogen production. <i>Electrochimica Acta</i> , 2018, 276, 81-91.	2.6	31
1184	Alloying as a Route to Monolayer Transition Metal Dichalcogenides with Improved Optoelectronic Performance: Mo(S <sub>1-x</sub> Se <sub>x</sub> ) <sub>2</sub> and Mo <sub>1-x</sub> W <sub>x</sub> S <sub>2</sub> . <i>ACS Applied Energy Materials</i> , 2018, 1, 2208-2214.	2.5	17
1185	Low-temperature, plasma assisted, cyclic synthesis of MoS <sub>2</sub> . <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2018, 36, .	0.6	6
1186	Hierarchical whisker-on-sheet NiCoP with adjustable surface structure for efficient hydrogen evolution reaction. <i>Nanoscale</i> , 2018, 10, 7619-7629.	2.8	72
1187	High phase-purity 1T <sup>-</sup> -MoS <sub>2</sub> - and 1T <sup>-</sup> -MoSe <sub>2</sub> -layered crystals. <i>Nature Chemistry</i> , 2018, 10, 638-643.	6.6	757
1188	Structural change of molybdenum sulfide facilitates the electrocatalytic hydrogen evolution reaction at neutral pH as revealed by in situ Raman spectroscopy. <i>Chinese Journal of Catalysis</i> , 2018, 39, 401-406.	6.9	30
1189	TiO <sub>2</sub> : Si nanotube/1T-MoSe <sub>2</sub> nanosheet hybrids with highly efficient hydrogen evolution catalytic activity. <i>Journal of Colloid and Interface Science</i> , 2018, 522, 136-143.	5.0	25
1190	Theoretical insights into the effective hydrogen evolution on Cu <sub>3</sub> P and its evident improvement by surface-doped Ni atoms. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 10407-10417.	1.3	29
1191	Targeted bottom-up synthesis of 1T-phase MoS <sub>2</sub> arrays with high electrocatalytic hydrogen evolution activity by simultaneous structure and morphology engineering. <i>Nano Research</i> , 2018, 11, 4368-4379.	5.8	52



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1192	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
1193	Distinctive organized molecular assemble of MoS <sub>2</sub> , MOF and Co <sub>3</sub> O <sub>4</sub> , for efficient dye-sensitized photocatalytic H <sub>2</sub> evolution. <i>Catalysis Science and Technology</i> , 2018, 8, 2352-2363.	2.1	63
1194	Highly Water Dispersible Polymer Acid-Doped Polyanilines as Low-Cost, Nafion-Free Ionomers for Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2018, 1, 1512-1521.	2.5	18
1195	Controllable defects implantation in MoS <sub>2</sub> grown by chemical vapor deposition for photoluminescence enhancement. <i>Nano Research</i> , 2018, 11, 4123-4132.	5.8	55
1196	N-doped graphitic carbon materials hybridized with transition metals (compounds) for hydrogen evolution reaction: Understanding the synergistic effect from atomistic level. <i>Carbon</i> , 2018, 133, 260-266.	5.4	100
1197	Use of molybdenum disulfide nanosheets embellished nanoiron for effective capture of chromium (VI) ions from aqueous solution. <i>Journal of Molecular Liquids</i> , 2018, 259, 376-383.	2.3	14
1198	Insights into the Active Electrocatalytic Areas of Layered Double Hydroxide and Amorphous Nickel-Iron Oxide Oxygen Evolution Electrocatalysts. <i>ACS Applied Energy Materials</i> , 2018, 1, 1415-1423.	2.5	23
1199	Unilamellar Metallic MoS <sub>2</sub> /Graphene Superlattice for Efficient Sodium Storage and Hydrogen Evolution. <i>ACS Energy Letters</i> , 2018, 3, 997-1005.	8.8	184
1200	MoS <sub>2</sub> -filled coating on flexible polyurethane foam via layer-by-layer assembly technique: flame-retardant and smoke suppression properties. <i>Journal of Materials Science</i> , 2018, 53, 9340-9349.	1.7	30
1201	Fe <sub>2</sub> O <sub>3</sub> /SnSSe Hexagonal Nanoplates as Lithium-Ion Batteries Anode. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 12722-12730.	4.0	52
1202	Facile synthesis of MoS <sub>2</sub> /N-doped macro-mesoporous carbon hybrid as efficient electrocatalyst for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 7326-7337.	3.8	23
1203	Molybdenum Carbide-Decorated Metallic Cobalt@Nitrogen-Doped Carbon Polyhedrons for Enhanced Electrocatalytic Hydrogen Evolution. <i>Small</i> , 2018, 14, e1704227.	5.2	114
1204	Regulating the Charge and Spin Ordering of Two-Dimensional Ultrathin Solids for Electrocatalytic Water Splitting. <i>CheM</i> , 2018, 4, 1263-1283.	5.8	219
1205	Large-scale synthesis of nitrogen doped MoS <sub>2</sub> quantum dots for efficient hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2018, 270, 256-263.	2.6	42
1206	Ultrathin MXene nanosheets with rich fluorine termination groups realizing efficient electrocatalytic hydrogen evolution. <i>Nano Energy</i> , 2018, 47, 512-518.	8.2	243
1207	Emerging Two-Dimensional Nanomaterials for Electrocatalysis. <i>Chemical Reviews</i> , 2018, 118, 6337-6408.	23.0	1,552
1208	Exploring new two-dimensional monolayers: pentagonal transition metal borides/carbides (penta-TMB/Cs). <i>Journal of Materials Chemistry A</i> , 2018, 6, 10226-10232.	5.2	77
1209	Ab initio study of two-dimensional PdPS as an ideal light harvester and promising catalyst for hydrogen evolution reaction. <i>Materials Today Energy</i> , 2018, 7, 136-140.	2.5	24

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1210	Exfoliated MoS <sub>2</sub> with porous graphene nanosheets for enhanced electrochemical hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 13946-13952.	3.8	37
1211	Chemical synthesis of two-dimensional atomic crystals, heterostructures and superlattices. <i>Chemical Society Reviews</i> , 2018, 47, 3129-3151.	18.7	132
1212	Construction of hierarchical Ni-Co-P hollow nanobricks with oriented nanosheets for efficient overall water splitting. <i>Energy and Environmental Science</i> , 2018, 11, 872-880.	15.6	773
1213	Two-Dimensional Layered Materials as Catalyst Supports. <i>ChemNanoMat</i> , 2018, 4, 28-40.	1.5	61
1214	Amorphous MoS <sub>2</sub> nanosheets grown on copper@nickel-phosphorous dendritic structures for hydrogen evolution reaction. <i>Applied Surface Science</i> , 2018, 432, 183-189.	3.1	26
1215	Facile synthesis of Ni <sub>3</sub> S <sub>2</sub> /rGO nanosheets composite on nickel foam as efficient electrocatalyst for hydrogen evolution reaction in alkaline media. <i>Journal of Materials Research</i> , 2018, 33, 519-527.	1.2	18
1216	Molybdenum Ditetelluride Rendered into an Efficient and Stable Electrocatalyst for the Hydrogen Evolution Reaction by Polymorphic Control. <i>Energy Technology</i> , 2018, 6, 345-350.	1.8	45
1217	Solvothermal synthesis of metallic 1T-WS <sub>2</sub> : A supporting co-catalyst on carbon nitride nanosheets toward photocatalytic hydrogen evolution. <i>Chemical Engineering Journal</i> , 2018, 335, 282-289.	6.6	161
1218	Solar Hydrogen Energy Conversion Based on Water Splitting. <i>Advanced Energy Materials</i> , 2018, 8, 1701620.	10.2	429
1219	Insight into the structural and electronic nature of chemically exfoliated molybdenum disulfide nanosheets in aqueous dispersions. <i>Dalton Transactions</i> , 2018, 47, 3014-3021.	1.6	16
1220	Optimized expanding of interlayer distance for molybdenum disulfide towards enhanced hydrogen evolution reaction. <i>Applied Surface Science</i> , 2018, 428, 948-953.	3.1	10
1221	Tunable Rashba spin splitting in two-dimensional graphene/As-I heterostructures. <i>Applied Surface Science</i> , 2018, 427, 10-14.	3.1	7
1222	High-metallic-phase-concentration Mo <sub>1-x</sub> W <sub>x</sub> S <sub>2</sub> nanosheets with expanded interlayers as efficient electrocatalysts. <i>Nano Research</i> , 2018, 11, 1687-1698.	5.8	37
1223	Dreidimensionale Architekturen aus Übergangsmetall-Dichalkogenid-Nanomaterialien zur elektrochemischen Energiespeicherung und -umwandlung. <i>Angewandte Chemie</i> , 2018, 130, 634-655.	1.6	37
1224	Three-Dimensional Architectures Constructed from Transition-Metal Dichalcogenide Nanomaterials for Electrochemical Energy Storage and Conversion. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 626-646.	7.2	398
1225	Electric field and photoelectrical effect bi-enhanced hydrogen evolution reaction. <i>Nano Research</i> , 2018, 11, 3205-3212.	5.8	17
1226	Plasma-assisted synthesis of MoS <sub>2</sub> . <i>2D Materials</i> , 2018, 5, 015005.	2.0	19
1227	Surface modification and drug delivery applications of MoS <sub>2</sub> nanosheets with polymers through the combination of mussel inspired chemistry and SET-LRP. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018, 82, 205-213.	2.7	122

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1228	Polyoxometalate and Resin-Derived Pd-Doped Mo <sub>2</sub> C@N-Doped Carbon as a Highly Efficient Hydrogen-Evolution Reaction Catalyst at All pH Values. Chemistry - an Asian Journal, 2018, 13, 158-163.	1.7	41
1229	Etchant-free transfer of 2D nanostructures. Nanotechnology, 2018, 29, 025602.	1.3	40
1230	Bimetallic Carbide as a Stable Hydrogen Evolution Catalyst in Harsh Acidic Water. ACS Energy Letters, 2018, 3, 78-84.	8.8	42
1231	Quantum Dots of 1T Phase Transitional Metal Dichalcogenides Generated <i>via</i> Electrochemical Li Intercalation. ACS Nano, 2018, 12, 308-316.	7.3	110
1232	Applications of Phosphorene and Black Phosphorus in Energy Conversion and Storage Devices. Advanced Energy Materials, 2018, 8, 1702093.	10.2	385
1233	WS <sub>2</sub> grafted on silicon and nano-silicon particles etched: a high-performance electrocatalyst for hydrogen evolution reaction. Journal of the Iranian Chemical Society, 2018, 15, 613-620.	1.2	4
1234	Two-Dimensional Transition Metal Oxide and Chalcogenide-Based Photocatalysts. Nano-Micro Letters, 2018, 10, 23.	14.4	257
1235	Activation of the MoSe <sub>2</sub> basal plane and Se-edge by B doping for enhanced hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 510-515.	5.2	110
1236	Ultrathin layered double hydroxide nanosheets with Ni(III) active species obtained by exfoliation for highly efficient ethanol electrooxidation. Electrochimica Acta, 2018, 260, 898-904.	2.6	60
1237	ELECTROCATALYTIC PROCESSES IN ENERGY TECHNOLOGIES. , 2018, , 291-341.		0
1238	Integrating the active OER and HER components as the heterostructures for the efficient overall water splitting. Nano Energy, 2018, 44, 353-363.	8.2	516
1239	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.	4.0	64
1240	Tuning the activity of the inert MoS <sub>2</sub> surface <i>via</i> graphene oxide support doping towards chemical functionalization and hydrogen evolution: a density functional study. Physical Chemistry Chemical Physics, 2018, 20, 1861-1871.	1.3	22
1241	Crystal-plane engineering of NiCo <sub>2</sub> O <sub>4</sub> electrocatalysts towards efficient overall water splitting. Journal of Catalysis, 2018, 357, 238-246.	3.1	158
1242	Amorphous Ni(OH) <sub>2</sub> encounter with crystalline CuS in hollow spheres: A mesoporous nano-shelled heterostructure for hydrogen evolution electrocatalysis. Nano Energy, 2018, 44, 7-14.	8.2	201
1243	Electric field tuned MoS <sub>2</sub> /metal interface for hydrogen evolution catalyst from first-principles investigations. Nanotechnology, 2018, 29, 03LT01.	1.3	16
1244	Group 6 transition metal dichalcogenide nanomaterials: synthesis, applications and future perspectives. Nanoscale Horizons, 2018, 3, 90-204.	4.1	309
1245	Structure Re-determination and Superconductivity Observation of Bulk 1T MoS <sub>2</sub> . Angewandte Chemie, 2018, 130, 1246-1249.	1.6	46

#	ARTICLE	IF	CITATIONS
1246	Structure Reâ€determination and Superconductivity Observation of Bulk 1T MoS <sub>2</sub> . Angewandte Chemie - International Edition, 2018, 57, 1232-1235.	7.2	126
1247	Enhanced electrocatalytic hydrogen evolution activity of nickel foam by low-temperature-oxidation. Journal of Materials Research, 2018, 33, 213-224.	1.2	27
1248	Electronic structure of the PLD grown mixed phase MoS <sub>2</sub> /GaN interface and its thermal annealing effect. Current Applied Physics, 2018, 18, 170-177.	1.1	17
1249	Recent progress in 2D materials for flexible supercapacitors. Journal of Energy Chemistry, 2018, 27, 57-72.	7.1	179
1250	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.	1.6	71
1251	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.	7.2	308
1252	Effect of Intercalated Metals on the Electrocatalytic Activity of 1T-MoS <sub>2</sub> for the Hydrogen Evolution Reaction. ACS Energy Letters, 2018, 3, 7-13.	8.8	211
1253	Morphologyâ€Controlled Synthesis of Molybdenum Disulfide Wrapped Singleâ€Walled Carbon Nanotubes for the Hydrogen Evolution Reaction. ChemCatChem, 2018, 10, 1128-1133.	1.8	15
1254	Facile formation of 2D Co <sub>2</sub> P@Co <sub>3</sub> O <sub>4</sub> microsheets through in-situ toptactic conversion and surface corrosion: Bifunctional electrocatalysts towards overall water splitting. Journal of Power Sources, 2018, 374, 142-148.	4.0	102
1255	Three-dimensional well-mixed / highly-densed NiS-CoS nanorod arrays: An efficient and stable bifunctional electrocatalyst for hydrogen and oxygen evolution reactions. Electrochimica Acta, 2018, 260, 82-91.	2.6	109
1256	Two-dimensional materials and one-dimensional carbon nanotube composites for microwave absorption. Nanotechnology, 2018, 29, 025704.	1.3	71
1257	NO-sensing performance of vacancy defective monolayer MoS <sub>2</sub> predicted by density function theory. Applied Surface Science, 2018, 434, 294-306.	3.1	54
1258	Defective molybdenum sulfide quantum dots as highly active hydrogen evolution electrocatalysts. Nano Research, 2018, 11, 751-761.	5.8	83
1259	1Tâ€ <sup>2</sup> Transition Metal Telluride Atomic Layers for Plasmon-Free SERS at Femtomolar Levels. Journal of the American Chemical Society, 2018, 140, 8696-8704.	6.6	192
1260	Thermodynamic Simulation of Componentsâ€™ Content in MoS <sub>2</sub> Hydrothermal Reaction System and Oxygenâ€Doped MoS <sub>2</sub> One-Step Hydrothermal Preparation Method. IOP Conference Series: Materials Science and Engineering, 2018, 381, 012021.	0.3	1
1261	Synthesis, stabilization and applications of 2-dimensional 1T metallic MoS <sub>2</sub> . Journal of Materials Chemistry A, 2018, 6, 23932-23977.	5.2	250
1262	Cr <sub>2</sub> O <sub>3</sub> nanofiber: a high-performance electrocatalyst toward artificial N <sub>2</sub> fixation to NH <sub>3</sub> under ambient conditions. Chemical Communications, 2018, 54, 12848-12851.	2.2	100
1263	Interlayer-expanded and defect-rich metal dichalcogenide (MX <sub>2</sub> ) nanosheets for active and stable hydrogen evolution. Inorganic Chemistry Frontiers, 2018, 5, 3140-3147.	3.0	16

#	ARTICLE	IF	CITATIONS
1264	Electrochemical activity of 1T $\epsilon^2$ structured rhenium selenide nanosheets <i>via</i> electronic structural modulation from selenium-vacancy generation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22526-22533.	5.2	49
1265	One-step, room temperature generation of porous and amorphous cobalt hydroxysulfides from layered double hydroxides for superior oxygen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24311-24316.	5.2	88
1266	Urchin-like Mo <sub>2</sub> S <sub>3</sub> prepared <i>via</i> a molten salt assisted method for efficient hydrogen evolution. <i>Chemical Communications</i> , 2018, 54, 12714-12717.	2.2	27
1267	Design of atomically precise Au <sub>2</sub> Pd <sub>6</sub> nanoclusters for boosting electrocatalytic hydrogen evolution on MoS <sub>2</sub> . <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 2948-2954.	3.0	37
1268	Vertically Aligned Ultrathin 1T-WS <sub>2</sub> Nanosheets Enhanced the Electrocatalytic Hydrogen Evolution. <i>Nanoscale Research Letters</i> , 2018, 13, 167.	3.1	57
1269	Large surface and pore structure of mesoporous WS <sub>2</sub> and RGO nanosheets with small amount of Pt as a highly efficient electrocatalyst for hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 22905-22916.	3.8	12
1270	Layered Ternary and Quaternary Transition Metal Chalcogenide Based Catalysts for Water Splitting. <i>Catalysts</i> , 2018, 8, 551.	1.6	45
1271	Increased yield of MoS <sub>2</sub> monolayer exfoliation through the bimetallic corrosion of aluminum. <i>Applied Physics Letters</i> , 2018, 113, 213101.	1.5	1
1272	Recent advances in energy chemistry of precious-metal-free catalysts for oxygen electrocatalysis. <i>Chinese Chemical Letters</i> , 2018, 29, 1757-1767.	4.8	63
1273	Exposure of active edge structure for electrochemical H <sub>2</sub> evolution from VS <sub>2</sub> /MWCNTs hybrid catalysts. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 22949-22954.	3.8	34
1274	Influence of solvent in solvothermal synthesis of Cu <sub>3</sub> SnS <sub>4</sub> : Morphology and band gap dependant electrocatalytic hydrogen evolution reaction and photocatalytic dye degradation. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 22861-22873.	3.8	30
1275	Recent Advances of Cobalt-Based Electrocatalysts for Oxygen Electrode Reactions and Hydrogen Evolution Reaction. <i>Catalysts</i> , 2018, 8, 559.	1.6	107
1276	Low-temperature metalorganic chemical vapor deposition of molybdenum disulfide on multicomponent glass substrates. <i>FlatChem</i> , 2018, 11, 32-37.	2.8	11
1277	Synthesis of Air-Stable 1T Phase of Molybdenum Disulfide for Efficient Electrocatalytic Hydrogen Evolution. <i>ChemCatChem</i> , 2019, 11, 707-714.	1.8	10
1278	“Inverse Strain Effect in Atomic Scale” Enhanced Hydrogen Evolution Activity and Durability in Cu-Substituted Palladseite. <i>ACS Energy Letters</i> , 2018, 3, 3008-3014.	8.8	24
1279	Reaction Mechanism for the Hydrogen Evolution Reaction on the Basal Plane Sulfur Vacancy Site of MoS <sub>2</sub> Using Grand Canonical Potential Kinetics. <i>Journal of the American Chemical Society</i> , 2018, 140, 16773-16782.	6.6	116
1280	Earth-Abundant Electrocatalysts in Proton Exchange Membrane Electrolyzers. <i>Catalysts</i> , 2018, 8, 657.	1.6	51
1281	Mixed-Phase (2H and 1T) MoS <sub>2</sub> Catalyst for a Highly Efficient and Stable Si Photocathode. <i>Catalysts</i> , 2018, 8, 580.	1.6	20

#	ARTICLE	IF	CITATIONS
1282	Nickel-Doped Silver Sulfide: An Efficient Air-Stable Electrocatalyst for Hydrogen Evolution from Neutral Water. ACS Omega, 2018, 3, 17070-17076.	1.6	18
1283	Recent developments in earth-abundant and non-noble electrocatalysts for water electrolysis. Materials Today Physics, 2018, 7, 121-138.	2.9	203
1284	Reversible and selective ion intercalation through the top surface of few-layer MoS <sub>2</sub> . Nature Communications, 2018, 9, 5289.	5.8	119
1285	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.	2.5	15
1286	Defect Engineering of MoS <sub>2</sub> and Its Impacts on Electrocatalytic and Photocatalytic Behavior in Hydrogen Evolution Reactions. Chemistry - an Asian Journal, 2019, 14, 278-285.	1.7	39
1287	Characteristics and performance of two-dimensional materials for electrocatalysis. Nature Catalysis, 2018, 1, 909-921.	16.1	591
1288	Revealing Activity Trends of Metal Diborides Toward pH-Universal Hydrogen Evolution Electrocatalysts with Pt-Like Activity. Advanced Energy Materials, 2019, 9, 1803369.	10.2	111
1289	Metallic MoS <sub>2</sub> nanosheets: multifunctional electrocatalyst for the ORR, OER and Li-O <sub>2</sub> batteries. Nanoscale, 2018, 10, 22549-22559.	2.8	93
1290	Hierarchical MoS <sub>2</sub> /Ni <sub>3</sub> S <sub>2</sub> core-shell nanofibers for highly efficient and stable overall-water-splitting in alkaline media. Materials Today Energy, 2018, 10, 214-221.	2.5	16
1291	Sugar-Based Natural Deep Eutectic Mixtures as Green Intercalating Solvents for High-Yield Preparation of Stable MoS <sub>2</sub> Nanosheets: Application to Electrocatalysis of Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2018, 1, 5896-5906.	2.5	37
1292	In Situ Engineering MoS <sub>2</sub> NDs/V <sub>2</sub> S <sub>3</sub> Lamellar Heterostructure for Enhanced Electrocatalytic Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2018, 6, 15471-15479.	3.2	42
1293	Morphological Engineering of Winged Au@MoS <sub>2</sub> Heterostructures for Electrocatalytic Hydrogen Evolution. Nano Letters, 2018, 18, 7104-7110.	4.5	96
1294	Facile Synthesis of Superstructured MoS <sub>2</sub> and Graphitic Nanocarbon Hybrid for Efficient Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2018, 6, 14441-14449.	3.2	41
1295	Selenium phosphorus co-doped cobalt oxide nanosheets anchored on Co foil: A self-supported and stable bifunctional electrode for efficient electrochemical water splitting. Electrochimica Acta, 2018, 292, 247-255.	2.6	17
1296	Hydrogen evolution from water reactions with molybdenum sulfide cluster anions. International Journal of Mass Spectrometry, 2018, 434, 193-201.	0.7	14
1297	The Effect of Metal Components in the Quaternary Electrocatalysts on the Morphology and Catalytic Performance of Transition Metal Phosphides. Electroanalysis, 2018, 30, 2584-2588.	1.5	4
1298	2D layered transition metal dichalcogenides (MoS <sub>2</sub> ): Synthesis, applications and theoretical aspects. Applied Materials Today, 2018, 13, 242-270.	2.3	139
1299	Stable Sulfur-Intercalated 1T MoS <sub>2</sub> on Graphitic Nanoribbons as Hydrogen Evolution Electrocatalyst. Advanced Functional Materials, 2018, 28, 1802744.	7.8	79

#	ARTICLE	IF	CITATIONS
1300	Selective Formation of C <sub>2</sub> Products from Electrochemical CO <sub>2</sub> Reduction over Cu <sub>1.8</sub> Se Nanowires. ACS Applied Energy Materials, 0, , .	2.5	11
1301	New Properties of Two-Dimensional Materials: Highly Effective Thermal Catalytic Degradation Activity. ChemistrySelect, 2018, 3, 10133-10138.	0.7	1
1302	Epitaxial MoS <sub>2</sub> nanosheets on nitrogen doped graphite foam as a 3D electrode for highly efficient electrochemical hydrogen evolution. Electrochimica Acta, 2018, 292, 407-418.	2.6	31
1303	Conductive Molybdenum Sulfide for Efficient Electrocatalytic Hydrogen Evolution. Small, 2018, 14, e1803361.	5.2	73
1304	In Situ Fabrication of Heterostructure on Nickel Foam with Tuned Composition for Enhancing Water-Splitting Performance. Small, 2018, 14, e1803666.	5.2	100
1305	Strongly enhanced visible light photoelectrocatalytic hydrogen evolution reaction in an n-doped MoS <sub>2</sub> /TiO <sub>2</sub> (B) heterojunction by selective decoration of platinum nanoparticles at the MoS <sub>2</sub> edge sites. Journal of Materials Chemistry A, 2018, 6, 22681-22696.	5.2	49
1306	Efficient hydrogen evolution catalytic activity of graphene/metallic MoS <sub>2</sub> nanosheet heterostructures synthesized by a one-step hydrothermal process. International Journal of Hydrogen Energy, 2018, 43, 21835-21843.	3.8	51
1307	Molybdenum-Based Carbon Hybrid Materials to Enhance the Hydrogen Evolution Reaction. Chemistry - A European Journal, 2018, 24, 18158-18179.	1.7	46
1308	Two-Dimensional Sandwich-Structured Mesoporous Mo <sub>2</sub> C/Carbon/Graphene Nanohybrids for Efficient Hydrogen Production Electrocatalysts. ACS Applied Materials & Interfaces, 2018, 10, 40800-40807.	4.0	44
1309	Mechanochemical Coupling of MoS <sub>2</sub> and Perovskites for Hydrogen Generation. ACS Applied Energy Materials, 2018, 1, 6409-6416.	2.5	33
1310	Metallic 1T-MoS <sub>2</sub> nanosheets and their composite materials: Preparation, properties and emerging applications. Materials Today Energy, 2018, 10, 264-279.	2.5	75
1311	Surface Modulation of Hierarchical MoS <sub>2</sub> Nanosheets by Ni Single Atoms for Enhanced Electrocatalytic Hydrogen Evolution. Advanced Functional Materials, 2018, 28, 1807086.	7.8	314
1312	Triggering basal plane active sites of monolayer MoS <sub>2</sub> for the hydrogen evolution reaction by phosphorus doping. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	6
1313	Mirror twin grain boundaries in molybdenum dichalcogenides. Journal of Physics Condensed Matter, 2018, 30, 493001.	0.7	36
1314	Rhenium-Doped and Stabilized MoS <sub>2</sub> Atomic Layers with Basal-Plane Catalytic Activity. Advanced Materials, 2018, 30, e1803477.	11.1	164
1315	Insight into the catalytic activity of MXenes for hydrogen evolution reaction. Science Bulletin, 2018, 63, 1397-1403.	4.3	61
1316	Functionalized MoS <sub>2</sub> Nanovehicle with Near-Infrared Laser-Mediated Nitric Oxide Release and Photothermal Activities for Advanced Bacteria-Infected Wound Therapy. Small, 2018, 14, e1802290.	5.2	259
1317	Defect Engineering of Cobalt-Based Materials for Electrocatalytic Water Splitting. ACS Sustainable Chemistry and Engineering, 2018, 6, 15954-15969.	3.2	151

#	ARTICLE	IF	CITATIONS
1318	Phase-selective synthesis of 1T $\epsilon$ MoS <sub>2</sub> monolayers and heterophase bilayers. <i>Nature Materials</i> , 2018, 17, 1108-1114.	13.3	348
1319	Chemical Diversity of Metal Sulfide Minerals and Its Implications for the Origin of Life. <i>Life</i> , 2018, 8, 46.	1.1	35
1320	Activating the MoS <sub>2</sub> Basal Plane by Controllable Fabrication of Pores for an Enhanced Hydrogen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2018, 24, 19075-19080.	1.7	17
1321	Surface/Interfacial Engineering of Inorganic Low-Dimensional Electrode Materials for Electrocatalysis. <i>Accounts of Chemical Research</i> , 2018, 51, 2857-2866.	7.6	190
1322	Insights into the Electrocatalytic Hydrogen Evolution Reaction Mechanism on Two-Dimensional Transition-Metal Carbonitrides (MXene). <i>Chemistry - A European Journal</i> , 2018, 24, 18479-18486.	1.7	87
1323	Electrocatalytic Activity of Ti/Al/Ti/PbO <sub>2</sub> -WC Rod Composite Electrodes During Zinc Electrowinning. <i>International Journal of Electrochemical Science</i> , 2018, , 4367-4378.	0.5	4
1324	A Pseudolayered MoS <sub>2</sub> as Li <sup>+</sup> Intercalation Host with Enhanced Rate Capability and Durability. <i>Small</i> , 2018, 14, e1803344.	5.2	35
1325	Synergetic coupling of Pd nanoparticles and amorphous MoS toward highly efficient electrocatalytic hydrogen evolution reactions. <i>Applied Materials Today</i> , 2018, 13, 158-165.	2.3	33
1326	Optimizing MoS <sub>2</sub> Edges by Alloying Isovalent W for Robust Hydrogen Evolution Activity. <i>ACS Catalysis</i> , 2018, 8, 9529-9536.	5.5	83
1327	Metallic-Phase MoS <sub>2</sub> Nanopetals with Enhanced Electrocatalytic Activity for Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 13435-13442.	3.2	48
1328	Morphological Evolution of Vertically Standing Molybdenum Disulfide Nanosheets by Chemical Vapor Deposition. <i>Materials</i> , 2018, 11, 631.	1.3	10
1329	Crystal phase control in two-dimensional materials. <i>Science China Chemistry</i> , 2018, 61, 1227-1242.	4.2	42
1330	Simple synthesis of nitrogen-doped porous carbon from Chinese steamed bread flour and its catalytic application for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2018, 290, 30-37.	2.6	13
1331	Simultaneous Exfoliation and Functionalization of 2H-MoS <sub>2</sub> by Thiolated Surfactants: Applications in Enhanced Antibacterial Activity. <i>Journal of the American Chemical Society</i> , 2018, 140, 12634-12644.	6.6	176
1332	Si <sub>3</sub> N <sub>4</sub> /MoS <sub>2</sub> -PEDOT: PSS composite counter electrode for bifacial dye-sensitized solar cells. <i>Solar Energy</i> , 2018, 173, 1135-1143.	2.9	21
1333	Band Modulation of Black Phosphorus and Molybdenum Disulfide van der Waals Heterojunction: Twist and Electric Field Effects. <i>ACS Applied Energy Materials</i> , 2018, , .	2.5	10
1334	Holey MoS <sub>2</sub> Nanosheets with Photocatalytic Metal Rich Edges by Ambient Electrospray Deposition for Solar Water Disinfection. <i>Global Challenges</i> , 2018, 2, 1800052.	1.8	26
1335	Synergistic modulation in MX <sub>2</sub> (where M = Mo or W or V, and X = S or Se) for an enhanced hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21847-21858.	5.2	39



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1336	Sulfur-Doped CoO Nanoflakes with Loosely Packed Structure Realizing Enhanced Oxygen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2018, 24, 17288-17292.	1.7	39
1337	Lithium Electrochemical Tuning for Electrocatalysis. <i>Advanced Materials</i> , 2018, 30, e1800978.	11.1	51
1338	Earth-Abundant Transition-Metal-Based Electrocatalysts for Water Electrolysis to Produce Renewable Hydrogen. <i>Chemistry - A European Journal</i> , 2018, 24, 18334-18355.	1.7	203
1339	Fabrication of MoS <sub>2</sub> @g-C <sub>3</sub> N <sub>4</sub> core-shell nanospheres for visible light photocatalytic degradation of toluene. <i>Journal of Nanoparticle Research</i> , 2018, 20, 1.	0.8	17
1340	MoS <sub>2</sub> nanostructure electrodeposited on Ni-P coating: an efficient and durable hybrid cathode catalyst in alkaline water electrolyses. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 397, 012135.	0.3	1
1341	Ni-Doped MoS <sub>2</sub> as an Efficient Catalyst for Electrochemical Hydrogen Evolution in Alkine Media. <i>ChemistrySelect</i> , 2018, 3, 9493-9498.	0.7	25
1342	Amorphous Molybdenum Sulfide on Three-Dimensional Hierarchical Hollow Microspheres Comprising Bamboo-like N-Doped Carbon Nanotubes as a Highly Active Hydrogen Evolution Reaction Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12706-12715.	3.2	28
1343	An eco-friendly synthesized mesoporous-silica particle combined with WSe <sub>2</sub> -graphene-TiO <sub>2</sub> by self-assembled method for photocatalytic dye decomposition and hydrogen production. <i>Scientific Reports</i> , 2018, 8, 12759.	1.6	13
1344	Nitrogen Doped Holey Carbon with MoS <sub>2</sub> -MoP Nanosheets for Efficient Hydrogen Evolution Reaction in Alkaline Medium. <i>Journal of the Electrochemical Society</i> , 2018, 165, F976-F980.	1.3	13
1345	A facile strategy for ultrasmall Pt NPs being partially-embedded in N-doped carbon nanosheet structure for efficient electrocatalysis. <i>Science China Materials</i> , 2018, 61, 1557-1566.	3.5	12
1346	Few Layered N, P Dual-Doped Carbon-Encapsulated Ultrafine MoP Nanocrystal/MoP Cluster Hybrids on Carbon Cloth: An Ultrahigh Active and Durable 3D Self-Supported Integrated Electrode for Hydrogen Evolution Reaction in a Wide pH Range. <i>Advanced Functional Materials</i> , 2018, 28, 1801527.	7.8	142
1347	Hydrogen adsorption engineering by intramolecular proton transfer on 2D nanosheets. <i>NPG Asia Materials</i> , 2018, 10, 441-454.	3.8	16
1348	Chemically activating MoS <sub>2</sub> via spontaneous atomic palladium interfacial doping towards efficient hydrogen evolution. <i>Nature Communications</i> , 2018, 9, 2120.	5.8	461
1349	CoSe <sub>2</sub> /MoSe <sub>2</sub> Heterostructures with Enriched Water Adsorption/Dissociation Sites towards Enhanced Alkaline Hydrogen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2018, 24, 11158-11165.	1.7	82
1350	Lithiation-induced amorphization of Pd <sub>3</sub> P <sub>2</sub> S <sub>8</sub> for highly efficient hydrogen evolution. <i>Nature Catalysis</i> , 2018, 1, 460-468.	16.1	247
1351	Nano-designed semiconductors for electro- and photoelectro-catalytic conversion of carbon dioxide. <i>Chemical Society Reviews</i> , 2018, 47, 5423-5443.	18.7	181
1352	Multiscale organic-induced scalable synthesis of a mesoporous MoS <sub>2</sub> -monolayer/carbon composite for high-performance lithium and potassium storage. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11147-11153.	5.2	77
1353	Ultrathin Transition Metal Dichalcogenide/3d Metal Hydroxide Hybridized Nanosheets to Enhance Hydrogen Evolution Activity. <i>Advanced Materials</i> , 2018, 30, e1801171.	11.1	180

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1354	Exfoliated molybdenum di-sulfide (MoS <sub>2</sub> ) electrode for hydrogen production in microbial electrolysis cell. <i>Bioelectrochemistry</i> , 2018, 123, 201-210.	2.4	33
1355	Vanadium disulfide decorated graphitic carbon nitride for super-efficient solar-driven hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 295-301.	10.8	89
1356	Efficiently visible-light-induced photoactivity of MoS <sub>2</sub> nanoflowers/chromic oxide/protonated titanate nanoflakes edge-on ternary heterostructures for production of hydrogen. <i>Journal of Alloys and Compounds</i> , 2018, 761, 31-40.	2.8	10
1357	Dynamic tungsten diselenide nanomaterials: supramolecular assembly-induced structural transition over exfoliated two-dimensional nanosheets. <i>Chemical Science</i> , 2018, 9, 5452-5460.	3.7	22
1358	Metallic 1T phase MoS <sub>2</sub> nanosheets decorated hollow cobalt sulfide polyhedra for high-performance lithium storage. <i>Journal of Materials Chemistry A</i> , 2018, 6, 12613-12622.	5.2	46
1359	Amorphous MoS <sub>2</sub> -Coated TiO <sub>2</sub> Nanotube Arrays for Enhanced Electrocatalytic Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2018, 122, 12589-12597.	1.5	72
1360	1T phase as an efficient hole injection layer to TMDs transistors: a universal approach to achieve p-type contacts. <i>2D Materials</i> , 2018, 5, 031012.	2.0	27
1361	Prediction of Enhanced Catalytic Activity for Hydrogen Evolution Reaction in Janus Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2018, 18, 3943-3949.	4.5	267
1362	Effective size selection of MoS <sub>2</sub> nanosheets by a novel liquid cascade centrifugation: Influences of the flakes dimensions on electrochemical and photoelectrochemical applications. <i>Journal of Colloid and Interface Science</i> , 2018, 527, 159-171.	5.0	10
1363	Intercalation of aromatic amine for the 2H $\leftrightarrow$ 1T $\leftrightarrow$ 2 phase transition of MoS <sub>2</sub> by experiments and calculations. <i>Nanoscale</i> , 2018, 10, 11349-11356.	2.8	54
1364	Synergetic photocatalytic effect between 1T@2H-MoS <sub>2</sub> and plasmon resonance induced by Ag quantum dots. <i>Nanotechnology</i> , 2018, 29, 285402.	1.3	30
1365	Recent Advances on Black Phosphorus for Energy Storage, Catalysis, and Sensor Applications. <i>Advanced Materials</i> , 2018, 30, e1800295.	11.1	215
1366	The rise of two-dimensional MoS <sub>2</sub> for catalysis. <i>Frontiers of Physics</i> , 2018, 13, 1.	2.4	93
1367	Monolayer AsTe <sub>2</sub> : Stable Robust Metal in 2D, 1D and 0D. <i>ChemPhysChem</i> , 2018, 19, 2176-2182.	1.0	3
1368	An Electrocatalyst for a Hydrogen Evolution Reaction in an Alkaline Medium: Three-dimensional Graphene Supported CeO <sub>2</sub> Hollow Microspheres. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 3952-3959.	1.0	27
1369	A superior dye adsorbent towards the hydrogen evolution reaction combining active sites and phase-engineering of (1T/2H) MoS <sub>2</sub> /MoO <sub>3</sub> hybrid heterostructured nanoflowers. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15320-15329.	5.2	86
1370	Semiconductor Nanomembrane Materials for High-Performance Soft Electronic Devices. <i>Journal of the American Chemical Society</i> , 2018, 140, 9001-9019.	6.6	34
1371	3D MoS <sub>2</sub> -rGO@Mo nano hybrids for enhanced hydrogen evolution: The importance of the synergy on the Volmer reaction. <i>Electrochimica Acta</i> , 2018, 283, 357-365.	2.6	39

#	ARTICLE	IF	CITATIONS
1372	Engineering nanoporous Ag/Pd core/shell interfaces with ultrathin Pt doping for efficient hydrogen evolution reaction over a wide pH range. <i>Journal of Materials Chemistry A</i> , 2018, 6, 14281-14290.	5.2	41
1373	Synergistic effect of MoS <sub>2</sub> and diamond nanoparticles in electrochemical sensors: determination of the anticonvulsant drug valproic acid. <i>Mikrochimica Acta</i> , 2018, 185, 334.	2.5	25
1374	C/N-co-doped Pd coated Ag nanowires as a high-performance electrocatalyst for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2018, 283, 221-227.	2.6	22
1375	MoS <sub>2</sub> nanosheets via electrochemical lithium-ion intercalation under ambient conditions. <i>FlatChem</i> , 2018, 9, 33-39.	2.8	40
1376	Ni and N co-doped MoC <sub>x</sub> as efficient electrocatalysts for hydrogen evolution reaction at all pH values. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 14301-14309.	3.8	30
1377	Pt nanocrystals grown on three-dimensional architectures made from graphene and MoS <sub>2</sub> nanosheets: Highly efficient multifunctional electrocatalysts toward hydrogen evolution and methanol oxidation reactions. <i>Carbon</i> , 2018, 139, 369-377.	5.4	87
1378	Well-patterned Au nanodots on MoS <sub>2</sub> /TiO <sub>2</sub> hybrids for enhanced hydrogen evolution activity. <i>Electrochimica Acta</i> , 2018, 283, 419-427.	2.6	16
1379	Mixed-Phase 2D-MoS <sub>2</sub> as an Effective Photocatalyst for Selective Aerobic Oxidative Coupling of Amines under Visible-Light Irradiation. <i>Chemistry - A European Journal</i> , 2018, 24, 13871-13878.	1.7	45
1380	Synergetic Transformation of Solid Inorganic-Organic Hybrids into Advanced Nanomaterials for Catalytic Water Splitting. <i>Accounts of Chemical Research</i> , 2018, 51, 1711-1721.	7.6	196
1381	Assembling Ni-Co phosphides/carbon hollow nanocages and nanosheets with carbon nanotubes into a hierarchical necklace-like nanohybrid for electrocatalytic oxygen evolution reaction. <i>Nanoscale</i> , 2018, 10, 13555-13564.	2.8	81
1382	Optimizing edges and defects of supported MoS <sub>2</sub> catalysts for hydrogen evolution via an external electric field. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 26083-26090.	1.3	25
1383	Noble metal nanostructure-decorated molybdenum disulfide nanocomposites: synthesis and applications. <i>Journal of Materials Chemistry B</i> , 2018, 6, 5323-5334.	2.9	24
1384	A metallic MoS <sub>2</sub> nanosheet array on graphene-protected Ni foam as a highly efficient electrocatalytic hydrogen evolution cathode. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16458-16464.	5.2	33
1385	Acid-engineered defective MoS <sub>2</sub> as an efficient electrocatalyst for hydrogen evolution reaction. <i>Materials Letters</i> , 2018, 230, 232-235.	1.3	15
1386	Physical properties and potential applications of two-dimensional metallic transition metal dichalcogenides. <i>Coordination Chemistry Reviews</i> , 2018, 376, 1-19.	9.5	49
1387	CVD-Grown MoSe <sub>2</sub> Nanoflowers with Dual Active Sites for Efficient Electrochemical Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 27771-27779.	4.0	60
1388	Hydrophobic and Electronic Properties of the E-MoS <sub>2</sub> Nanosheets Induced by FAS for the CO <sub>2</sub> Electroreduction to Syngas with a Wide Range of CO/H <sub>2</sub> Ratios. <i>Advanced Functional Materials</i> , 2018, 28, 1802339.	7.8	99
1389	MOF-Derived Bifunctional Iron Oxide and Iron Phosphide Nanoarchitecture Photoelectrode for Neutral Water Splitting. <i>ChemElectroChem</i> , 2018, 5, 2842-2849.	1.7	33

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1390	Metallic MoS <sub>2</sub> for High Performance Energy Storage and Energy Conversion. <i>Small</i> , 2018, 14, e1800640.	5.2	218
1391	One step synthesis of Fe <sub>4.4</sub> Ni <sub>17.6</sub> Se <sub>16</sub> coupled NiSe foam as self-supported, highly efficient and durable oxygen evolution electrode. <i>Materials Today Chemistry</i> , 2018, 9, 133-139.	1.7	10
1392	One-Pot Rapid Synthesis of Mo(S,Se) <sub>2</sub> Nanosheets on Graphene for Highly Efficient Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11502-11510.	3.2	18
1393	A comparative study on the photocatalytic degradation of organic dyes using hybridized 1T/2H, 1T/3R and 2H MoS <sub>2</sub> nano-sheets. <i>RSC Advances</i> , 2018, 8, 26364-26370.	1.7	63
1394	MoS <sub>2</sub> nanosheets for improving analytical performance of lactate biosensors. <i>Sensors and Actuators B: Chemical</i> , 2018, 274, 310-317.	4.0	48
1395	CoSe <sub>2</sub> /WSe <sub>2</sub> /WO <sub>3</sub> hybrid nanowires on carbon cloth for efficient hydrogen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2018, 768, 889-895.	2.8	24
1396	Prickly Pear-Like Three-Dimensional Porous MoS <sub>2</sub> : Synthesis, Characterization and Advanced Hydrogen Evolution Reaction. <i>Catalysts</i> , 2018, 8, 235.	1.6	3
1397	Traversing Energy Landscapes Away from Equilibrium: Strategies for Accessing and Utilizing Metastable Phase Space. <i>Journal of Physical Chemistry C</i> , 2018, 122, 25709-25728.	1.5	75
1398	Reaction Mechanism with Thermodynamic Structural Screening for Electrochemical Hydrogen Evolution on Monolayer 1T <sup>±</sup> Phase MoS <sub>2</sub> . <i>Chemistry of Materials</i> , 2018, 30, 5404-5411.	3.2	33
1399	One-Step Preparation of Large Area Films of Oriented MoS <sub>2</sub> Nanoparticles on Multilayer Graphene and Its Electrocatalytic Activity for Hydrogen Evolution. <i>Materials</i> , 2018, 11, 168.	1.3	6
1400	Properties, Preparation and Applications of Low Dimensional Transition Metal Dichalcogenides. <i>Nanomaterials</i> , 2018, 8, 463.	1.9	38
1401	Hollow nanoparticles as emerging electrocatalysts for renewable energy conversion reactions. <i>Chemical Society Reviews</i> , 2018, 47, 8173-8202.	18.7	222
1402	A MoS <sub>2</sub> /sulfur-doped carbon sphere nanohybrid catalyst with high-efficiency electrocatalysis for flexible counter electrodes. <i>Journal of Alloys and Compounds</i> , 2018, 767, 848-855.	2.8	9
1403	Recent advances in hydrogen evolution reaction catalysts on carbon/carbon-based supports in acid media. <i>Journal of Power Sources</i> , 2018, 398, 9-26.	4.0	163
1404	Metallic and superhydrophilic nickel cobalt diselenide nanosheets electrodeposited on carbon cloth as a bifunctional electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2018, 6, 17353-17360.	5.2	100
1405	Synthesis, properties, and optoelectronic applications of two-dimensional MoS <sub>2</sub> and MoS <sub>2</sub> -based heterostructures. <i>Chemical Society Reviews</i> , 2018, 47, 6101-6127.	18.7	293
1406	Nitrogen-rich 1T <sup>±</sup> -MoS <sub>2</sub> layered nanostructures using alkyl amines for high catalytic performance toward hydrogen evolution. <i>Nanoscale</i> , 2018, 10, 14726-14735.	2.8	39
1407	Effect of substrate angle on the growth of MoS <sub>2</sub> vertical nanosheets using a one-step chemical vapor deposition. <i>Materials Research Express</i> , 2018, 5, 075026.	0.8	7

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1408	MoS <sub>2</sub> Nanosheet Arrays Rooted on Hollow rGO Spheres as Bifunctional Hydrogen Evolution Catalyst and Supercapacitor Electrode. <i>Nano-Micro Letters</i> , 2018, 10, 62.	14.4	91
1409	Mechanistic Role of Two-State Reactivity in a Molecular MoS <sub>2</sub> Edge-Site Analogue for Hydrogen Evolution Electrocatalysis. <i>Inorganic Chemistry</i> , 2018, 57, 9167-9174.	1.9	4
1410	Investigation on the electrocatalytic activity of hierarchical flower like architected Cu <sub>3</sub> SnS <sub>4</sub> for hydrogen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2018, 826, 38-45.	1.9	22
1411	The self-template synthesis of highly efficient hollow structure Fe/N/C electrocatalysts with Fe <sup>2+</sup> -N coordination for the oxygen reduction reaction. <i>RSC Advances</i> , 2018, 8, 24509-24516.	1.7	25
1412	Facile fabrication of POSS-Modified MoS <sub>2</sub> /PMMA nanocomposites with enhanced thermal, mechanical and optical limiting properties. <i>Composites Science and Technology</i> , 2018, 165, 388-396.	3.8	21
1413	One-step electrodeposition of a hierarchically structured S-doped NiCo film as a highly-efficient electrocatalyst for the hydrogen evolution reaction. <i>Nanoscale</i> , 2018, 10, 15238-15248.	2.8	52
1414	Rapid synthesis of MoS <sub>2</sub> -PDA-Ag nanocomposites as heterogeneous catalysts and antimicrobial agents via microwave irradiation. <i>Applied Surface Science</i> , 2018, 459, 588-595.	3.1	170
1415	Insights Into Highly Improved Solar-Driven Photocatalytic Oxygen Evolution Over Integrated Ag <sub>3</sub> PO <sub>4</sub> /MoS <sub>2</sub> Heterostructures. <i>Frontiers in Chemistry</i> , 2018, 6, 123.	1.8	19
1416	BSA-caged metal clusters to exfoliate MoS <sub>2</sub> nanosheets towards their hybridized functionalization. <i>Nanoscale</i> , 2018, 10, 10911-10917.	2.8	18
1417	Identifying the high activity of the basal plane in 1T <sup>+</sup> -phase MoS <sub>2</sub> towards electrochemical hydrogen evolution. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 1490-1492.	3.0	6
1418	Evaluating Hydrogen Evolution and Oxidation in Alkaline Media to Establish Baselines. <i>Journal of the Electrochemical Society</i> , 2018, 165, F441-F455.	1.3	42
1419	Electron density modulation of NiCo <sub>2</sub> S <sub>4</sub> nanowires by nitrogen incorporation for highly efficient hydrogen evolution catalysis. <i>Nature Communications</i> , 2018, 9, 1425.	5.8	356
1420	Engineering graphene and TMDs based van der Waals heterostructures for photovoltaic and photoelectrochemical solar energy conversion. <i>Chemical Society Reviews</i> , 2018, 47, 4981-5037.	18.7	344
1421	Atomically Thin 2D Multinary Nanosheets for Energy-Related Photo, Electrocatalysis. <i>Advanced Science</i> , 2018, 5, 1800244.	5.6	54
1422	Electrodeposited molybdenum sulfide as a cathode for proton exchange membrane water electrolyzer. <i>Journal of Power Sources</i> , 2018, 392, 69-78.	4.0	37
1423	Colloidal synthesis of 1T <sup>+</sup> phase dominated WS <sub>2</sub> towards durable electrocatalysis. <i>Nano Energy</i> , 2018, 50, 176-181.	8.2	123
1424	Defect- and Phase-Induced Acceleration of Electrocatalytic Hydrogen Production by Ultrathin and Small MoS <sub>2</sub> -Decorated rGO Sheets. <i>ACS Applied Nano Materials</i> , 2018, 1, 4622-4632.	2.4	33
1425	Tuning the phase stability of Mo-based TMD monolayers through coupled vacancy defects and lattice strain. <i>Journal of Materials Chemistry C</i> , 2018, 6, 9561-9568.	2.7	52

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1426	In situ growth of polyphosphazene particles on molybdenum disulfide nanosheets for flame retardant and friction application. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 114, 407-417.	3.8	39
1427	Tuning the activity/stability balance of anion doped CoS Se <sub>2</sub> dichalcogenides. <i>Journal of Catalysis</i> , 2018, 366, 50-60.	3.1	17
1428	Enhanced electrocatalysis for alkaline hydrogen evolution by Mn doping in a Ni <sub>3</sub> S <sub>2</sub> nanosheet array. <i>Chemical Communications</i> , 2018, 54, 10100-10103.	2.2	72
1429	Mesoporous Mo <sub>2</sub> C/Carbon Hybrid Nanotubes Synthesized by a Dual-Template Self-Assembly Approach for an Efficient Hydrogen Production Electrocatalyst. <i>Langmuir</i> , 2018, 34, 10924-10931.	1.6	27
1430	Metal-Organic-Framework-Derived Hollow CoS <sub>x</sub> @MoS <sub>2</sub> Microcubes as Superior Bifunctional Electrocatalysts for Hydrogen Evolution and Oxygen Evolution Reactions. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12961-12968.	3.2	89
1431	Effect of phosphorus on controlling and enhancing electrocatalytic performance of Ni <sub>2</sub> TiO <sub>2</sub> -MnO <sub>2</sub> coatings. <i>Journal of Electroanalytical Chemistry</i> , 2018, 826, 104-116.	1.9	19
1432	A DFT Study on the Adsorption of H <sub>2</sub> S and SO <sub>2</sub> on Ni Doped MoS <sub>2</sub> Monolayer. <i>Nanomaterials</i> , 2018, 8, 646.	1.9	120
1433	Flower-like MoS <sub>2</sub> on graphitic carbon nitride for enhanced photocatalytic and electrochemical hydrogen evolutions. <i>Applied Catalysis B: Environmental</i> , 2018, 239, 334-344.	10.8	154
1434	MOF-Derived NiO/NiCo <sub>2</sub> O <sub>4</sub> and NiO/NiCo <sub>2</sub> O <sub>4</sub> -rGO as Highly Efficient and Stable Electrocatalysts for Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12511-12521.	3.2	79
1435	Enhanced thermoelectric performance of two dimensional MS <sub>2</sub> (M=Mo, W) through phase engineering. <i>Journal of Materiomics</i> , 2018, 4, 329-337.	2.8	21
1436	Strategies on Phase Control in Transition Metal Dichalcogenides. <i>Advanced Functional Materials</i> , 2018, 28, 1802473.	7.8	90
1437	(NiFe) <sub>2</sub> S nanoparticles grown on graphene as an efficient electrocatalyst for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2018, 286, 195-204.	2.6	59
1438	Edge-Terminated MoS <sub>2</sub> Nanoassembled Electrocatalyst via In Situ Hybridization with 3D Carbon Network. <i>Small</i> , 2018, 14, e1802191.	5.2	15
1439	Solvothermal Synthesis of Monodisperse PtCu Dodecahedral Nanoframes with Enhanced Catalytic Activity and Durability for Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2018, 1, 5054-5061.	2.5	43
1440	Preparation of 1T <sup>2</sup> -Phase ReS <sub>2</sub> Se <sub>2</sub> (1-x) (x = 0-1) Nanodots for Highly Efficient Electrocatalytic Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2018, 140, 8563-8568.	6.6	104
1441	Two-Dimensional Manganese Nitride Monolayer with Room Temperature Rigid Ferromagnetism under Strain. <i>Journal of Physical Chemistry C</i> , 2018, 122, 14918-14927.	1.5	50
1442	The synergistic effect of Ni promoter on Mo-S/CNT catalyst towards hydrodesulfurization and hydrogen evolution reactions. <i>Fuel</i> , 2018, 232, 36-44.	3.4	30
1443	Electrochemical Formation of Amorphous Molybdenum Phosphosulfide for Enabling the Hydrogen Evolution Reaction in Alkaline and Acidic Media. <i>ACS Applied Energy Materials</i> , 2018, 1, 2849-2858.	2.5	18

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1444	Three-Dimensional Cathode Constructed through Confined Growth of FeP Nanocrystals in Ordered Mesoporous Carbon Film Coated on Carbon Cloth for Efficient Hydrogen Production. <i>ChemCatChem</i> , 2018, 10, 3441-3446.	1.8	7
1445	Stabilized monolayer 1T MoS <sub>2</sub> embedded in CoOOH for highly efficient overall water splitting. <i>Nanoscale</i> , 2018, 10, 12330-12336.	2.8	33
1446	Recent Development of Metallic (1T) Phase of Molybdenum Disulfide for Energy Conversion and Storage. <i>Advanced Energy Materials</i> , 2018, 8, 1703482.	10.2	317
1447	Building Close Ties Between CO <sub>2</sub> and Functional Two-Dimensional Nanomaterials with Green Chemistry Strategy. <i>Energy and Environmental Materials</i> , 2018, 1, 46-60.	7.3	26
1448	Composite electrocatalyst Mo <sub>1-x</sub> S <sub>2</sub> nanosheets on carbon fiber paper for highly efficient hydrogen evolution reaction. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 2969-2976.	1.2	19
1449	Controlling the dendritic structure and the photo-electrocatalytic properties of highly crystalline MoS <sub>2</sub> on sapphire substrate. <i>2D Materials</i> , 2018, 5, 031015.	2.0	13
1450	Porous Co <sub>9</sub> S <sub>8</sub> /Nitrogen, Sulfur-Doped Carbon@Mo <sub>2</sub> C Dual Catalyst for Efficient Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 22291-22302.	4.0	96
1451	Layered transition metal dichalcogenide electrochemistry: journey across the periodic table. <i>Chemical Society Reviews</i> , 2018, 47, 5602-5613.	18.7	117
1452	In Situ Hydrothermal Synthesis MoS <sub>2</sub> /Guar Gum Carbon Nanoflowers as Advanced Electrocatalysts for Electrocatalytic Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 8688-8696.	3.2	34
1453	Recent Advances in the Solution-Based Preparation of Two-Dimensional Layered Transition Metal Chalcogenide Nanostructures. <i>Chemical Reviews</i> , 2018, 118, 6151-6188.	23.0	162
1454	A hierarchical nickel-carbon structure templated by metal-organic frameworks for efficient overall water splitting. <i>Energy and Environmental Science</i> , 2018, 11, 2363-2371.	15.6	240
1455	Preparation of MoS <sub>2</sub> -based polydopamine-modified core-shell nanocomposites with elevated adsorption performances. <i>RSC Advances</i> , 2018, 8, 21644-21650.	1.7	19
1456	In-situ electrochemical activation designed hybrid electrocatalysts for water electrolysis. <i>Science Bulletin</i> , 2018, 63, 853-876.	4.3	107
1457	Functionalization of 2D materials by intercalation. <i>Progress in Surface Science</i> , 2019, 94, 1-20.	3.8	48
1458	Ultrafine molybdenum carbide nanoparticles supported on nitrogen doped carbon nanosheets for hydrogen evolution reaction. <i>Chinese Chemical Letters</i> , 2019, 30, 192-196.	4.8	32
1459	Metal Oxides/Chalcogenides and Composites. <i>SpringerBriefs in Materials</i> , 2019, , .	0.1	16
1460	Recent Progress in CVD Growth of 2D Transition Metal Dichalcogenides and Related Heterostructures. <i>Advanced Materials</i> , 2019, 31, e1901694.	11.1	250
1461	Mo Insertion into the H <sub>2</sub> Bond in Mo <sub>x</sub> S <sub>y</sub> + H <sub>2</sub> Reactions. <i>Journal of Physical Chemistry A</i> , 2019, 123, 7261-7269.	1.1	7

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1462	Morphological and Electronic Tuning of Ni <sub>2</sub> P through Iron Doping toward Highly Efficient Water Splitting. ACS Catalysis, 2019, 9, 8882-8892.	5.5	227
1463	Boosting Electrocatalytic Hydrogen Evolution Activity with a NiPt <sub>3</sub> @NiS Heteronanostructure Evolved from a Molecular Nickel-Platinum Precursor. Journal of the American Chemical Society, 2019, 141, 13306-13310.	6.6	119
1464	Electroactive Materials. SpringerBriefs in Materials, 2019, , 31-67.	0.1	0
1465	Ionic liquid assisted exfoliation and dispersion of molybdenum disulphide: Synthesis and characterization. AIP Conference Proceedings, 2019, , .	0.3	3
1466	One-Pot Synthesis of Nanoporous Nickel Hydroxide Film as High-Performance Electrode for Asymmetric Supercapacitor. Journal of the Electrochemical Society, 2019, 166, D595-D602.	1.3	6
1467	Improved electrical properties of MoS <sub>2</sub> transistor with Hf <sub>1-x</sub> Ti <sub>x</sub> O as gate dielectric. , 2019, , .		0
1468	Phosphorus Doped MoS <sub>2</sub> Nanosheet Promoted with Nitrogen, Sulfur Dual Doped Reduced Graphene Oxide as an Effective Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 6184-6194.	2.5	78
1469	Photoemission spectroscopy study of structural defects in molybdenum disulfide (MoS <sub>2</sub> ) grown by chemical vapor deposition (CVD). Chemical Communications, 2019, 55, 10384-10387.	2.2	82
1470	A double-signal nanoprobe based on molybdenum disulfide quantum dots/manganese dioxide nanosheets for glutathione detection. Microchemical Journal, 2019, 150, 104149.	2.3	18
1471	Au-MoS <sub>2</sub> Hybrids as Hydrogen Evolution Electrocatalysts. ACS Applied Energy Materials, 2019, 2, 6043-6050.	2.5	43
1472	Multifunctional electrochemical application of a novel 3D AgInS <sub>2</sub> /rGO nanohybrid for electrochemical detection and HER. Journal of Chemical Technology and Biotechnology, 2019, 94, 3713-3724.	1.6	9
1473	(TiO <sub>2</sub> (B) Nanosheet)/(Metallic Phase MoS <sub>2</sub> ) Hybrid Nanostructures: An Efficient Catalyst for Photocatalytic Hydrogen Evolution. Solar Rrl, 2019, 3, 1900323.	3.1	18
1474	Field Effect Modulation of Electrocatalytic Hydrogen Evolution at Back-Gated Two-Dimensional MoS <sub>2</sub> Electrodes. Nano Letters, 2019, 19, 6118-6123.	4.5	40
1475	In-situ visualization of hydrogen evolution sites on helium ion treated molybdenum dichalcogenides under reaction conditions. Npj 2D Materials and Applications, 2019, 3, .	3.9	35
1476	High-Yield Preparation of Exfoliated 1T-MoS <sub>2</sub> with SERS Activity. Chemistry of Materials, 2019, 31, 5725-5734.	3.2	126
1477	Ni <sub>2</sub> P <sub>2</sub> O <sub>7</sub> microsheets as efficient Bi-functional electrocatalysts for water splitting application. Sustainable Energy and Fuels, 2019, 3, 2435-2446.	2.5	28
1478	Highly Effective and Noninvasive Near-Infrared Eradication of a <i>Staphylococcus aureus</i> Biofilm on Implants by a Photoresponsive Coating within 20 Min. Advanced Science, 2019, 6, 1900599.	5.6	212
1479	Ruthenium and cobalt bimetal encapsulated in nitrogen-doped carbon material derived of ZIF-67 as enhanced hydrogen evolution electrocatalyst. Applied Surface Science, 2019, 494, 101-110.	3.1	53



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1480	Engineering Monolayer 1T-MoS <sub>2</sub> into a Bifunctional Electrocatalyst via Sonochemical Doping of Isolated Transition Metal Atoms. <i>ACS Catalysis</i> , 2019, 9, 7527-7534.	5.5	92
1481	Single Pt atoms stabilized on Mo <sub>2</sub> TiC <sub>2</sub> O <sub>2</sub> for hydrogen evolution: A first-principles investigation. <i>Journal of Chemical Physics</i> , 2019, 151, 024702.	1.2	22
1482	Defect-rich one-dimensional MoS <sub>2</sub> hierarchical architecture for efficient hydrogen evolution: Coupling of multiple advantages into one catalyst. <i>Applied Catalysis B: Environmental</i> , 2019, 258, 117964.	10.8	77
1483	Defect-engineered MoS <sub>2</sub> with extended photoluminescence lifetime for high-performance hydrogen evolution. <i>Journal of Materials Chemistry C</i> , 2019, 7, 10173-10178.	2.7	34
1484	A review on synthesis of graphene, h-BN and MoS <sub>2</sub> for energy storage applications: Recent progress and perspectives. <i>Nano Research</i> , 2019, 12, 2655-2694.	5.8	283
1485	Formation of Mixed-Metal Ceria Nanopeapod Composites within Scrolled Hexaniobate Nanosheets. <i>ChemNanoMat</i> , 2019, 5, 1373-1380.	1.5	6
1486	One-pot synthesized visible-light-responsive MoS <sub>2</sub> @CdS nanosheets-on-nanospheres for hydrogen evolution from the antibiotic wastewater: Waste to energy insight. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 21577-21587.	3.8	26
1487	Three-dimensional electrode interface assembled from rGO nanosheets and carbon nanotubes for highly electrocatalytic oxygen reduction. <i>Chemical Engineering Journal</i> , 2019, 378, 122127.	6.6	32
1488	Ti <sub>3</sub> C <sub>2</sub> nanosheets modified Zr-MOFs with Schottky junction for boosting photocatalytic HER performance. <i>Solar Energy</i> , 2019, 188, 750-759.	2.9	39
1489	Electrochemical Flocculation Integrated Hydrogen Evolution Reaction of Fe-Doped Carbon Nanotubes on Iron Foam for Ultralow Voltage Electrolysis in Neutral Media. <i>Advanced Science</i> , 2019, 6, 1901458.	5.6	73
1490	Ultra-thin solid electrolyte interphase evolution and wrinkling processes in molybdenum disulfide-based lithium-ion batteries. <i>Nature Communications</i> , 2019, 10, 3265.	5.8	69
1491	Insight into the excellent catalytic activity of (CoMo)S <sub>2</sub> /graphene for hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2019, 258, 118012.	10.8	44
1492	Controlled synthesis of Ni <sub>3</sub> C/nitrogen-doped carbon nanoflakes for efficient oxygen evolution. <i>Electrochimica Acta</i> , 2019, 320, 134631.	2.6	25
1493	Comprehensive study on the nonlinear optical properties of few-layered MoSe <sub>2</sub> nanosheets at 1 $\mu$ m. <i>Journal of Alloys and Compounds</i> , 2019, 806, 52-57.	2.8	28
1494	A Critical Review on Energy Conversion and Environmental Remediation of Photocatalysts with Remodeling Crystal Lattice, Surface, and Interface. <i>ACS Nano</i> , 2019, 13, 9811-9840.	7.3	331
1495	Photoelectrochemical determination of trypsin by using an indium tin oxide electrode modified with a composite prepared from MoS <sub>2</sub> nanosheets and TiO <sub>2</sub> nanorods. <i>Mikrochimica Acta</i> , 2019, 186, 490.	2.5	17
1496	Compositional regulation and modification of the host CdS for efficient photocatalytic hydrogen production: Case study on MoS <sub>2</sub> decorated Co <sub>0.2</sub> Cd <sub>0.8</sub> S nanorods. <i>Chemical Engineering Journal</i> , 2019, 378, 122139.	6.6	33
1497	Effective Electrocatalytic Hydrogen Evolution in Neutral Medium Based on 2D MoP/MoS <sub>2</sub> Heterostructure Nanosheets. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 25986-25995.	4.0	86

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1498	Bipolar Electrochemistry as a Simple Synthetic Route toward Nanoscale Transition of Mo <sub>2</sub> B <sub>5</sub> and W <sub>2</sub> B <sub>5</sub> for Enhanced Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 0, , .	3.2	6
1499	Building MoS <sub>2</sub> /S-doped g-C <sub>3</sub> N <sub>4</sub> layered heterojunction electrocatalysts for efficient hydrogen evolution reaction. Journal of Catalysis, 2019, 375, 441-447.	3.1	60
1500	Two-dimensional MoS <sub>2</sub> /Fe-phthalocyanine hybrid nanostructures as excellent electrocatalysts for hydrogen evolution and oxygen reduction reactions. Nanoscale, 2019, 11, 14266-14275.	2.8	32
1501	BaAs <sub>3</sub> : a narrow gap 2D semiconductor with vacancy-induced semiconductor→metal transition from first principles. Journal of Materials Science, 2019, 54, 12676-12687.	1.7	3
1502	High yield and concentration exfoliation of defect-free 2D nanosheets via gentle water freezing-thawing approach and stabilization with PVP. Materials Research Express, 2019, 6, 1150c9.	0.8	8
1503	High Phase Purity 1T MoS <sub>2</sub> Ultrathin Nanosheets by a Spatially Confined Template. Angewandte Chemie - International Edition, 2019, 58, 17621-17624.	7.2	109
1504	Molybdenum Disulfide Nanosheet/Quantum Dot Dynamic Memristive Structure Driven by Photoinduced Phase Transition. Small, 2019, 15, e1903809.	5.2	17
1505	The Stability of Metallic MoS <sub>2</sub> Nanosheets and Their Property Change by Annealing. Nanomaterials, 2019, 9, 1366.	1.9	23
1506	Two-dimensional transition-metal dichalcogenides for electrochemical hydrogen evolution reaction. FlatChem, 2019, 18, 100140.	2.8	39
1507	Synthesis, crystal structures and physical properties of A(H <sub>2</sub> O) MoS <sub>2</sub> (A=K, Rb, Cs). Journal of Solid State Chemistry, 2019, 279, 120937.	1.4	5
1508	Activating the MoS <sub>2</sub> Basal Planes for Electrocatalytic Hydrogen Evolution by 2H/1T Structural Interfaces. ACS Applied Materials & Interfaces, 2019, 11, 42014-42020.	4.0	34
1509	Hierarchical ZnS@C@MoS <sub>2</sub> core-shell nanostructures as efficient hydrogen evolution electrocatalyst for alkaline water electrolysis. International Journal of Hydrogen Energy, 2019, 44, 25310-25318.	3.8	30
1510	Electric Strain in Dual Metal Janus Nanosheets Induces Structural Phase Transition for Efficient Hydrogen Evolution. Joule, 2019, 3, 2955-2967.	11.7	75
1511	Ultrathin molybdenum disulfide nanosheet-coated acetylene black: One-pot synthesis and electrocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2019, 44, 23547-23555.	3.8	10
1512	Semiconductor→Cocatalyst Interfacial Electron Transfer Dominates Photocatalytic Reaction. Journal of Physical Chemistry C, 2019, 123, 24404-24408.	1.5	26
1513	Metallic edge states in zig-zag vertically-oriented MoS <sub>2</sub> nanowalls. Scientific Reports, 2019, 9, 15602.	1.6	10
1514	Pseudocubic Phase Tungsten Oxide as a Photocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 8792-8800.	2.5	19
1515	Interfacial aspect of ZnTe/In <sub>2</sub> Te <sub>3</sub> heterostructures as an efficient catalyst for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 27441-27449.	5.2	41

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1516	Single-Atom Ru Doping Induced Phase Transition of MoS <sub>2</sub> and S Vacancy for Hydrogen Evolution Reaction. <i>Small Methods</i> , 2019, 3, 1900653.	4.6	206
1517	Advanced Co <sub>3</sub> O <sub>4</sub> @CuO nano-composite based electrocatalyst for efficient hydrogen evolution reaction in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 26148-26157.	3.8	63
1518	Highly purified dicobalt phosphide nanodendrites on exfoliated graphene: In situ synthesis and as robust bifunctional electrocatalysts for overall water splitting. <i>Materials Today Energy</i> , 2019, 14, 100336.	2.5	17
1519	MoS <sub>2</sub> Moiré Superlattice for Hydrogen Evolution Reaction. <i>ACS Energy Letters</i> , 2019, 4, 2830-2835.	8.8	98
1520	Strong edge-induced ferromagnetism in sputtered MoS <sub>2</sub> film treated by post-annealing. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	11
1521	Anion Extraction-Induced Polymorph Control of Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2019, 19, 8644-8652.	4.5	12
1522	Carbon-Free, High-Capacity and Long Cycle Life 1D@2D NiMoO <sub>4</sub> Nanowires/Metallic 1T MoS <sub>2</sub> Composite Lithium-Ion Battery Anodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 44593-44600.	4.0	14
1523	Structural and Electronic Optimization of MoS <sub>2</sub> Edges for Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2019, 141, 18578-18584.	6.6	292
1524	High Phase-Purity 1T-MoS <sub>2</sub> Ultrathin Nanosheets by a Spatially Confined Template. <i>Angewandte Chemie</i> , 2019, 131, 17785-17788.	1.6	67
1525	Surface Engineering of MoS <sub>2</sub> via Laser-Induced Exfoliation in Protic Solvents. <i>Small</i> , 2019, 15, e1903791.	5.2	28
1526	High air humidity is sufficient for successful egg incubation and early post-embryonic development in the marbled crayfish ( <i>Procambarus virginalis</i> ). <i>Freshwater Biology</i> , 2019, 64, 1603-1612.	1.2	16
1527	Surface Assembly Strategy for the Fabrication of MoS <sub>2</sub> Thin-Film Patterns. <i>International Journal of Precision Engineering and Manufacturing</i> , 2019, 20, 2215-2220.	1.1	1
1528	Morphology enhancement of SiO <sub>2</sub> aerogel films grown on Si substrate using dense SiO <sub>2</sub> buffer layer. <i>Rare Metals</i> , 2019, , 1.	3.6	1
1529	Tuning the hydrogen activation reactivity on topological insulator heterostructures. <i>Nano Energy</i> , 2019, 58, 40-46.	8.2	49
1530	River meander-inspired cross-section in 3D-printed helical microchannels for inertial focusing and enrichment. <i>Sensors and Actuators B: Chemical</i> , 2019, 301, 127125.	4.0	13
1531	Recent progress in two-dimensional nanomaterials: Synthesis, engineering, and applications. <i>FlatChem</i> , 2019, 18, 100133.	2.8	52
1532	Ultrahigh-current-density niobium disulfide catalysts for hydrogen evolution. <i>Nature Materials</i> , 2019, 18, 1309-1314.	13.3	280
1533	1T/2H MoS <sub>2</sub> /MoO <sub>3</sub> hybrid assembles with glycine as highly efficient and stable electrocatalyst for water splitting. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 24237-24245.	3.8	19

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1534	Soft Chemical Synthesis of H <sub>x</sub> CrS <sub>2</sub> : An Antiferromagnetic Material with Alternating Amorphous and Crystalline Layers. <i>Journal of the American Chemical Society</i> , 2019, 141, 15634-15640.	6.6	31
1535	Strong interactions in molybdenum disulfide heterostructures boosting the catalytic performance of water splitting: A short review. <i>Nano Materials Science</i> , 2019, 1, 231-245.	3.9	17
1536	Electrodeposition and Characterization of Cr-MoS <sub>2</sub> Composite Coatings. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 5674-5690.	1.2	5
1537	The 2D petaloid MoS <sub>2</sub> lamellas modified cubic CaTiO <sub>3</sub> nanocomposites towards photocatalytic hydrogen production enhancement. <i>Journal of Alloys and Compounds</i> , 2019, 811, 152067.	2.8	24
1538	MAX and MAB Phases: Two-Dimensional Layered Carbide and Boride Nanomaterials for Electrochemical Applications. <i>ACS Applied Nano Materials</i> , 2019, 2, 6010-6021.	2.4	47
1539	A fantastic two-dimensional MoS <sub>2</sub> material based on the inert basal planes activation: Electronic structure, synthesis strategies, catalytic active sites, catalytic and electronics properties. <i>Coordination Chemistry Reviews</i> , 2019, 399, 213020.	9.5	101
1540	Revealing the role of the 1T phase on the adsorption of organic dyes on MoS <sub>2</sub> nanosheets. <i>RSC Advances</i> , 2019, 9, 28345-28356.	1.7	19
1541	Two-dimensional MoS <sub>2</sub> "melamine hybrid nanostructures for enhanced catalytic hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 22571-22578.	5.2	14
1542	Engineering the In-Plane Structure of Metallic Phase Molybdenum Disulfide <i>via</i> Co and O Dopants toward Efficient Alkaline Hydrogen Evolution. <i>ACS Nano</i> , 2019, 13, 11733-11740.	7.3	75
1543	MoS <sub>x</sub> Quantum Dot-Modified Black Silicon for Highly Efficient Photoelectrochemical Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17598-17605.	3.2	17
1544	Defects-rich nickel nanoparticles grown on nickel foam as integrated electrodes for electrocatalytic oxidation of urea. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 27664-27670.	3.8	26
1545	Boosting the photocatalytic hydrogen evolution performance via an atomically thin 2D heterojunction visualized by scanning photoelectrochemical microscopy. <i>Nano Energy</i> , 2019, 65, 104053.	8.2	18
1546	Synthesis of MoWS <sub>2</sub> on Flexible Carbon-Based Electrodes for High-Performance Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 37550-37558.	4.0	31
1547	Defect-Rich Porous CoS <sub>1.097</sub> /MoS <sub>2</sub> Hybrid Microspheres as Electrocatalysts for pH-Universal Hydrogen Evolution. <i>ACS Applied Energy Materials</i> , 2019, 2, 7504-7511.	2.5	35
1548	Heterojunction Photoanode of Atomic-Layer-Deposited MoS <sub>2</sub> on Single-Crystalline CdS Nanorod Arrays. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 37586-37594.	4.0	47
1549	The Critical Role of Electrolyte Gating on the Hydrogen Evolution Performance of Monolayer MoS <sub>2</sub> . <i>Nano Letters</i> , 2019, 19, 8118-8124.	4.5	33
1550	Ex Situ and Operando XRD and XAS Analysis of MoS <sub>2</sub> : A Lithiation Study of Bulk and Nanosheet Materials. <i>ACS Applied Energy Materials</i> , 2019, 2, 7635-7646.	2.5	42
1551	Ethylene glycol solvent induced expansion of interplanar spacing and 2H-1T phase transformation of molybdenum disulfide nanocomposites for enhanced lithium storage capability. <i>Journal of Alloys and Compounds</i> , 2019, 810, 151959.	2.8	9

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1552	Enhanced Electrochemical Performance of Self-Assembled Nanoflowers of MoS <sub>2</sub> Nanosheets as Supercapacitor Electrode Materials. ACS Omega, 2019, 4, 15780-15788.	1.6	56
1553	Nanoscale mapping of hydrogen evolution on metallic and semiconducting MoS <sub>2</sub> nanosheets. Nanoscale Horizons, 2019, 4, 619-624.	4.1	46
1554	Insights into the intrinsic capacity of interlayer-expanded MoS <sub>2</sub> as a Li-ion intercalation host. Journal of Materials Chemistry A, 2019, 7, 1187-1195.	5.2	32
1555	Exfoliation of amorphous phthalocyanine conjugated polymers into ultrathin nanosheets for highly efficient oxygen reduction. Journal of Materials Chemistry A, 2019, 7, 3112-3119.	5.2	87
1556	New sustainable and environmental friendly process of synthesis of highly porous MoS <sub>2</sub> nanoflowers in cooking oil and their electrochemical properties. Electrochimica Acta, 2019, 300, 177-185.	2.6	11
1557	Morphology-tunable & template-free fabrication of MoS <sub>2</sub> nanostructures with enhanced photoreduction activities for Cr(VI). Journal of Photochemistry and Photobiology A: Chemistry, 2019, 373, 176-181.	2.0	13
1558	Contacting MoS <sub>2</sub> to MXene: Vanishing p-Type Schottky Barrier and Enhanced Hydrogen Evolution Catalysis. Journal of Physical Chemistry C, 2019, 123, 3719-3726.	1.5	47
1559	Graphene oxide supported cobalt phosphide nanorods designed from a molecular complex for efficient hydrogen evolution at low overpotential. Chemical Communications, 2019, 55, 2186-2189.	2.2	15
1560	Effect of Ho dopant on the ferromagnetic characteristics of MoS <sub>2</sub> nanocrystals. Physical Chemistry Chemical Physics, 2019, 21, 232-237.	1.3	14
1561	Controlled Vapor Growth and Nonlinear Optical Applications of Large Area 3R Phase WS <sub>2</sub> and WSe <sub>2</sub> Atomic Layers. Advanced Functional Materials, 2019, 29, 1806874.	7.8	92
1562	General Method for Synthesis Transition Metal Phosphide/Nitrogen and Phosphide Doped Carbon Materials with Yolk-Shell Structure for Oxygen Reduction Reaction. ChemCatChem, 2019, 11, 1722-1731.	1.8	27
1563	Facile microwave assisted synthesis of vastly edge exposed 1T/2H-MoS <sub>2</sub> with enhanced activity for hydrogen evolution catalysis. Journal of Materials Chemistry A, 2019, 7, 3563-3569.	5.2	24
1564	Aligned Heterointerface-Induced 1T-MoS <sub>2</sub> Monolayer with Near-Ideal Gibbs Free for Stable Hydrogen Evolution Reaction. Small, 2019, 15, e1804903.	5.2	63
1565	Strategic Design of Clay-Based Multifunctional Materials: From Natural Minerals to Nanostructured Membranes. Advanced Functional Materials, 2019, 29, 1807611.	7.8	65
1566	Pressure effect on the electronic, structural, and vibrational properties of layered $\text{MoS}_2$ . Physical Review B, 2019, 99, .		
1567	Remote Induction of Cell Autophagy by 2D MoS <sub>2</sub> Nanosheets via Perturbing Cell Surface Receptors and mTOR Pathway from Outside of Cells. ACS Applied Materials & Interfaces, 2019, 11, 6829-6839.	4.0	30
1568	Novel Binder-Free Three-Dimensional MoS <sub>2</sub> -Based Electrode for Efficient and Stable Electrocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2019, 2, 1102-1110.	2.5	42
1569	Template synthesis of defect-rich MoS <sub>2</sub> -based assemblies as electrocatalytic platforms for hydrogen evolution reaction. Chemical Communications, 2019, 55, 2078-2081.	2.2	41

#	ARTICLE	IF	CITATIONS
1570	Enhanced photocatalytic performance and stability of 1T MoS <sub>2</sub> transformed from 2H MoS <sub>2</sub> via Li intercalation. Results in Physics, 2019, 12, 2218-2224.	2.0	29
1571	Vertical nanosheet array of 1T phase MoS <sub>2</sub> for efficient and stable hydrogen evolution. Applied Catalysis B: Environmental, 2019, 246, 296-302.	10.8	122
1572	Vanadium self-intercalated C/V <sub>1.11</sub> S <sub>2</sub> nanosheets with abundant active sites for enhanced electro-catalytic hydrogen evolution. Electrochimica Acta, 2019, 300, 208-216.	2.6	19
1573	N-, O- and P-doped hollow carbons: Metal-free bifunctional electrocatalysts for hydrogen evolution and oxygen reduction reactions. Applied Catalysis B: Environmental, 2019, 248, 239-248.	10.8	131
1574	Interface engineering of (Ni, Fe)S <sub>2</sub> @MoS <sub>2</sub> heterostructures for synergetic electrochemical water splitting. Applied Catalysis B: Environmental, 2019, 247, 107-114.	10.8	378
1575	Advanced Electrocatalysts for Hydrogen Evolution Reaction Based on Core-Shell MoS <sub>2</sub> /TiO <sub>2</sub> Nanostructures in Acidic and Alkaline Media. ACS Applied Energy Materials, 2019, 2, 2053-2062.	2.5	67
1576	Extrinsic and Dynamic Edge States of Two-Dimensional Lead Halide Perovskites. ACS Nano, 2019, 13, 1635-1644.	7.3	79
1577	Two dimensional MoS <sub>2</sub> meets porphyrins via intercalation to enhance the electrocatalytic activity toward hydrogen evolution. Nanoscale, 2019, 11, 3780-3785.	2.8	21
1578	Direct observation of active catalyst surface phases and the effect of dynamic self-optimization in NiFe-layered double hydroxides for alkaline water splitting. Energy and Environmental Science, 2019, 12, 572-581.	15.6	453
1579	Ordered intracrystalline pores in planar molybdenum oxide for enhanced alkaline hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 257-268.	5.2	70
1580	Intercalated complexes of 1T-MoS <sub>2</sub> nanosheets with alkylated phenylenediamines as excellent catalysts for electrochemical hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 2334-2343.	5.2	41
1581	Enhancing the antibacterial efficacy of low-dose gentamicin with 5 minute assistance of phototherapy at 50 °C. Biomaterials Science, 2019, 7, 1437-1447.	2.6	56
1582	Catalysis of hydrogen evolution reaction by Ni <sub>12</sub> P <sub>5</sub> single crystalline nanoplates and spherical nanoparticles. CrystEngComm, 2019, 21, 228-235.	1.3	14
1583	Half-metal state of a Ti <sub>2</sub> C monolayer by asymmetric surface decoration. Physical Chemistry Chemical Physics, 2019, 21, 3318-3326.	1.3	22
1584	Active Pore-Edge Engineering of Single-Layer Niobium Diselenide Porous Nanosheets Electrode for Hydrogen Evolution. Nanomaterials, 2019, 9, 751.	1.9	11
1585	Electrocatalytic Performance of Titania Nanotube Arrays Coated with MoS <sub>2</sub> by ALD toward the Hydrogen Evolution Reaction. ACS Omega, 2019, 4, 8816-8823.	1.6	16
1586	Recent progress in the hybrids of transition metals/carbon for electrochemical water splitting. Journal of Materials Chemistry A, 2019, 7, 14380-14390.	5.2	111
1587	Engineering a 3D MoS <sub>2</sub> foam using keratin exfoliated nanosheets. Chemical Engineering Journal, 2019, 374, 254-262.	6.6	22

#	ARTICLE	IF	CITATIONS
1588	MoS <sub>2</sub> nanosheets supported gold nanoparticles for electrochemical nitrogen fixation at various pH value. <i>Electrochimica Acta</i> , 2019, 317, 34-41.	2.6	44
1589	Revisiting the Role of Active Sites for Hydrogen Evolution Reaction through Precise Defect Adjusting. <i>Advanced Functional Materials</i> , 2019, 29, 1901290.	7.8	61
1590	Fabrication of Ni <sup>2+</sup> incorporated ZnO photoanode for efficient overall water splitting. <i>Applied Surface Science</i> , 2019, 490, 302-308.	3.1	17
1591	Recent advances in metal sulfides: from controlled fabrication to electrocatalytic, photocatalytic and photoelectrochemical water splitting and beyond. <i>Chemical Society Reviews</i> , 2019, 48, 4178-4280.	18.7	810
1592	MoS <sub>2</sub> Coexisting in 1T and 2H Phases Synthesized by Common Hydrothermal Method for Hydrogen Evolution Reaction. <i>Nanomaterials</i> , 2019, 9, 844.	1.9	117
1593	Superior Hydrogen Evolution Reaction Performance in 2H-MoS <sub>2</sub> to that of 1T Phase. <i>Small</i> , 2019, 15, e1900964.	5.2	59
1594	Polypyrrole coated niobium disulfide nanowires as high performance electrocatalysts for hydrogen evolution reaction. <i>Nanotechnology</i> , 2019, 30, 405601.	1.3	7
1595	Electrochemically scalable production of bilayer fluorographene nanosheets for solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16876-16882.	5.2	14
1596	Mass Production of High-Quality Transition Metal Dichalcogenides Nanosheets via a Molten Salt Method. <i>Advanced Functional Materials</i> , 2019, 29, 1900649.	7.8	59
1597	Edge-Site Nanoengineering of WS <sub>2</sub> by Low-Temperature Plasma-Enhanced Atomic Layer Deposition for Electrocatalytic Hydrogen Evolution. <i>Chemistry of Materials</i> , 2019, 31, 5104-5115.	3.2	57
1598	Unraveling the Role of Lithium in Enhancing the Hydrogen Evolution Activity of MoS <sub>2</sub> : Intercalation versus Adsorption. <i>ACS Energy Letters</i> , 2019, 4, 1733-1740.	8.8	45
1599	Tailoring the physicochemical properties of solution-processed transition metal dichalcogenides via molecular approaches. <i>Chemical Communications</i> , 2019, 55, 8900-8914.	2.2	22
1600	Toward heterostructured transition metal hybrids with highly promoted electrochemical hydrogen evolution. <i>RSC Advances</i> , 2019, 9, 19924-19929.	1.7	4
1601	1T-phase MoS <sub>2</sub> quantum dots as a superior co-catalyst to Pt decorated on carbon nitride nanorods for photocatalytic hydrogen evolution from water. <i>Materials Chemistry Frontiers</i> , 2019, 3, 2032-2040.	3.2	45
1602	Synthesis and Processing of Emerging Two-Dimensional Nanomaterials. , 2019, , 1-25.		18
1603	Decorating MoS <sub>2</sub> and CoSe <sub>2</sub> nanostructures on 1D-CdS nanorods for boosting photocatalytic hydrogen evolution rate. <i>Journal of Molecular Liquids</i> , 2019, 289, 111164.	2.3	12
1604	High-performance carbon black/molybdenum disulfide nanohybrid sensor for cocoa catechins determination using an extraction-free approach. <i>Sensors and Actuators B: Chemical</i> , 2019, 296, 126651.	4.0	41
1605	Exploring the catalytic activity of MXenes Mn <sub>1</sub> CnO <sub>2</sub> for hydrogen evolution. <i>Journal of Materials Science</i> , 2019, 54, 11378-11389.	1.7	14

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1606	Bridging N-doped graphene and carbon rich C <sub>3</sub> N <sub>4</sub> layers for photo-promoted multi-functional electrocatalysts. <i>Electrochimica Acta</i> , 2019, 317, 25-33.	2.6	24
1607	Facile synthesis of Cu <sub>2</sub> MoS <sub>4</sub> nanosheet/multi-walled carbon nanotube composites as a high-efficiency electrocatalyst for hydrogen evolution. <i>New Journal of Chemistry</i> , 2019, 43, 9574-9582.	1.4	16
1608	1T/2H multi-phase MoS <sub>2</sub> heterostructures: synthesis, characterization and thermal catalysis decomposition of dihydroxylammonium 5,5'-bistetrazole-1,1'-diolate. <i>New Journal of Chemistry</i> , 2019, 43, 10434-10441.	1.4	18
1609	Water-Soluble Defect-Rich MoS <sub>2</sub> Ultrathin Nanosheets for Enhanced Hydrogen Evolution. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3282-3289.	2.1	50
1610	Facile preparation of novel and active 2D nanosheets from non-layered and traditionally non-exfoliable earth-abundant materials. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15411-15419.	5.2	28
1611	Fabrication of MoSe <sub>2</sub> decorated three-dimensional graphene composites structure as a highly stable electrocatalyst for improved hydrogen evolution reaction. <i>Renewable Energy</i> , 2019, 143, 1659-1669.	4.3	32
1612	Discovery of Superconductivity in 2M WS <sub>2</sub> with Possible Topological Surface States. <i>Advanced Materials</i> , 2019, 31, e1901942.	11.1	102
1613	Interface Modulation of Two-Dimensional Superlattices for Efficient Overall Water Splitting. <i>Nano Letters</i> , 2019, 19, 4518-4526.	4.5	191
1614	In-situ surface selective removal: An efficient way to prepare water oxidation catalyst. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 14955-14967.	3.8	13
1615	Using ligands to control reactivity, size and phase in the colloidal synthesis of WSe <sub>2</sub> nanocrystals. <i>Chemical Communications</i> , 2019, 55, 8856-8859.	2.2	27
1616	Engineering of transition metal dichalcogenide-based 2D nanomaterials through doping for environmental applications. <i>Molecular Systems Design and Engineering</i> , 2019, 4, 804-827.	1.7	71
1617	The Effect of Nickel on MoS <sub>2</sub> Growth Revealed with <i>in Situ</i> Transmission Electron Microscopy. <i>ACS Nano</i> , 2019, 13, 7117-7126.	7.3	48
1618	Induction of mTOR-dependent autophagy by WS <sub>2</sub> nanosheets from both inside and outside of human cells. <i>Nanoscale</i> , 2019, 11, 10684-10694.	2.8	14
1619	Direct In Situ Growth of Centimeter-Scale Multi-Heterojunction MoS <sub>2</sub> /WS <sub>2</sub> /WSe <sub>2</sub> Thin-Film Catalyst for Photo-Electrochemical Hydrogen Evolution. <i>Advanced Science</i> , 2019, 6, 1900301.	5.6	60
1620	All-in-one surface engineering strategy on nickel phosphide arrays towards a robust electrocatalyst for hydrogen evolution reaction. <i>Journal of Power Sources</i> , 2019, 429, 46-54.	4.0	33
1621	Atomic Pillar Effect in PdxNbS <sub>2</sub> To Boost Basal Plane Activity for Stable Hydrogen Evolution. <i>Chemistry of Materials</i> , 2019, 31, 4726-4731.	3.2	32
1622	Silicon quantum dot-assisted synthesis of MoS <sub>2</sub> /rGO sandwich structures with excellent supercapacitive performance. <i>New Journal of Chemistry</i> , 2019, 43, 8660-8668.	1.4	8
1623	Propelling Polysulfide Conversion by Defect-Rich MoS <sub>2</sub> Nanosheets for High-Performance Lithium-Sulfur Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 20788-20795.	4.0	89



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1624	Ultrathin MoS <sub>2</sub> alloy nanosheets anchored on carbon nanotubes as advanced catalysts for hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 16110-16119.	3.8	23
1625	Mesoporous spinel NiFe oxide cubes as advanced electrocatalysts for oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 16368-16377.	3.8	22
1626	Highly effective photocatalytic performance of {001}-TiO <sub>2</sub> /MoS <sub>2</sub> /RGO hybrid heterostructures for the reduction of Rh B. <i>RSC Advances</i> , 2019, 9, 15033-15041.	1.7	10
1627	Ultrathin 2D/2D ZnIn <sub>2</sub> S <sub>4</sub> /MoS <sub>2</sub> hybrids for boosted photocatalytic hydrogen evolution under visible light. <i>Journal of Alloys and Compounds</i> , 2019, 798, 553-559.	2.8	51
1628	Layered Crystalline and Amorphous Platinum Disulfide (PtS <sub>2</sub> ): Contrasting Electrochemistry. <i>Chemistry - A European Journal</i> , 2019, 25, 7330-7338.	1.7	20
1629	Metallic molybdenum sulfide nanodots as platinum-alternative co-catalysts for photocatalytic hydrogen evolution. <i>Journal of Catalysis</i> , 2019, 374, 237-245.	3.1	37
1630	Immobilized Single Molecular Molybdenum Disulfide on Carbonized Polyacrylonitrile for Hydrogen Evolution Reaction. <i>ACS Nano</i> , 2019, 13, 6720-6729.	7.3	40
1631	Beyond 1T phase? Synergistic Electronic Structure and Defects Engineering in 2H-MoS <sub>2</sub> /Se(1-x) Nanosheets for Enhanced Hydrogen Evolution Reaction and Sodium Storage. <i>ChemCatChem</i> , 2019, 11, 3200-3211.	1.8	21
1632	The Holy Grail in Platinum-Free Electrocatalytic Hydrogen Evolution: Molybdenum-Based Catalysts and Recent Advances. <i>ChemElectroChem</i> , 2019, 6, 3570-3589.	1.7	72
1633	Computational Discovery and Design of MXenes for Energy Applications: Status, Successes, and Opportunities. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 24885-24905.	4.0	105
1634	Ru-RuO <sub>2</sub> /CNT hybrids as high-activity pH-universal electrocatalysts for water splitting within 0.73 V in an asymmetric-electrolyte electrolyzer. <i>Nano Energy</i> , 2019, 61, 576-583.	8.2	151
1635	Chemical optimization towards superior electrocatalysis of Janus 1T-MoS <sub>2</sub> (X = S, Se, Te) for hydrogen evolution: Small composition tuning makes big difference. <i>Electrochimica Acta</i> , 2019, 310, 153-161.	2.6	9
1636	Facile chemical-vapour-deposition synthesis of vertically aligned co-doped MoS <sub>2</sub> nanosheets as an efficient catalyst for triiodide reduction and hydrogen evolution reaction. <i>Journal of Catalysis</i> , 2019, 373, 250-259.	3.1	32
1637	Generation of Monolayer MoS <sub>2</sub> with 1T Phase by Spatial-Confinement-Induced Ultrathin PPy Anchoring for High-Performance Supercapacitor. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900162.	1.9	33
1638	Optimization of active surface area of flower like MoS <sub>2</sub> using V-doping towards enhanced hydrogen evolution reaction in acidic and basic medium. <i>Applied Catalysis B: Environmental</i> , 2019, 254, 432-442.	10.8	185
1639	Molybdenum Selenide Electrocatalysts for Electrochemical Hydrogen Evolution Reaction. <i>ChemElectroChem</i> , 2019, 6, 3530-3548.	1.7	73
1640	Triiodide reduction activity of hydrangea molybdenum sulfide/reduced graphene oxide composite for dye-sensitized solar cells. <i>Materials Research Bulletin</i> , 2019, 117, 78-83.	2.7	11
1641	Layer-Dependent Hydrazine Adsorption Properties in Few-Layer WS <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2019, 123, 13167-13173.	1.5	8

#	ARTICLE	IF	CITATIONS
1642	Recent advances of phase engineering in group VI transition metal dichalcogenides. <i>Tungsten</i> , 2019, 1, 46-58.	2.0	15
1643	Interface-engineered atomically thin Ni <sub>3</sub> S <sub>2</sub> /MnO <sub>2</sub> heterogeneous nanoarrays for efficient overall water splitting in alkaline media. <i>Applied Catalysis B: Environmental</i> , 2019, 254, 329-338.	10.8	134
1644	Phase-Tunable Synthesis of Ultrathin Layered Tetragonal CoSe and Nonlayered Hexagonal CoSe Nanoplates. <i>Advanced Materials</i> , 2019, 31, e1900901.	11.1	52
1645	High efficient degradation of levofloxacin by edge-selectively Fe@3D-WS <sub>2</sub> : Self-renewing behavior and Degradation mechanism study. <i>Applied Catalysis B: Environmental</i> , 2019, 252, 187-197.	10.8	34
1646	Aqueous Zinc-Ion Storage in MoS <sub>2</sub> by Tuning the Intercalation Energy. <i>Nano Letters</i> , 2019, 19, 3199-3206.	4.5	362
1647	Transition Metal Dichalcogenide Anchored in 3D Nickel Framework with Graphene Support for Efficient Electrocatalytic Hydrogen Evolution. <i>Advanced Sustainable Systems</i> , 2019, 3, 1800168.	2.7	12
1648	Three-Dimensional Branched Crystal Carbon Nitride with Enhanced Intrinsic Peroxidase-Like Activity: A Hypersensitive Platform for Colorimetric Detection. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 17467-17474.	4.0	29
1649	Recent progress on in situ characterizations of electrochemically intercalated transition metal dichalcogenides. <i>Nano Research</i> , 2019, 12, 2126-2139.	5.8	29
1650	Hydrogen interaction with a sulfur-vacancy-induced occupied defect state in the electronic band structure of MoS <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 15302-15309.	1.3	17
1651	MoS <sub>2</sub> nanosheet/MoS <sub>2</sub> flake homostructures for efficient electrocatalytic hydrogen evolution. <i>Materials Research Express</i> , 2019, 6, 085005.	0.8	8
1652	Self-supported nanotubular MoP electrode for highly efficient hydrogen evolution via water splitting. <i>Catalysis Communications</i> , 2019, 127, 1-4.	1.6	14
1653	Enhancing the Performance of Ni-Mo Alkaline Hydrogen Evolution Electrocatalysts with Carbon Supports. <i>ACS Applied Energy Materials</i> , 2019, 2, 2524-2533.	2.5	43
1654	Transport properties and photoresponse of a series of 2D transition metal dichalcogenide intercalation compounds. <i>New Journal of Chemistry</i> , 2019, 43, 6523-6534.	1.4	4
1655	Boundary activated hydrogen evolution reaction on monolayer MoS <sub>2</sub> . <i>Nature Communications</i> , 2019, 10, 1348.	5.8	263
1656	New Simultaneous Exfoliation and Doping Process for Generating MX <sub>2</sub> Nanosheets for Electrocatalytic Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 14786-14795.	4.0	54
1657	Enhanced photoelectrochemical hydrogen production efficiency of MoS <sub>2</sub> -Si heterojunction. <i>Optics Express</i> , 2019, 27, A352.	1.7	91
1658	One-pot synthesis of porous 1T-phase MoS <sub>2</sub> integrated with single-atom Cu doping for enhancing electrocatalytic hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2019, 251, 87-93.	10.8	160
1659	Anderson polyoxometalate supported Cu(H <sub>2</sub> O)(phen) complex as an electrocatalyst for hydrogen evolution reaction in neutral medium. <i>Polyhedron</i> , 2019, 172, 80-86.	1.0	7

#	ARTICLE	IF	CITATIONS
1660	Graphene/graphene nanoribbon aerogels decorated with S-doped MoSe <sub>2</sub> nanosheets as an efficient electrocatalyst for hydrogen evolution. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1209-1216.	3.0	17
1661	Co doping induced photocurrent enhancement in photocatalyst MoS <sub>2</sub> . <i>Catalysis Communications</i> , 2019, 125, 56-60.	1.6	12
1662	Bi <sub>2</sub> Te <sub>3</sub> MoS <sub>2</sub> Layered Nanoscale Heterostructures for Electron Transfer Catalysis. <i>ACS Applied Nano Materials</i> , 2019, 2, 2005-2012.	2.4	19
1663	Molybdenum Disulfide Modified by Laser Irradiation for Catalyzing Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 6999-7003.	3.2	53
1664	Scalable Production of Few-Layer Niobium Disulfide Nanosheets via Electrochemical Exfoliation for Energy-Efficient Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 13205-13213.	4.0	53
1665	Ultrathin MoS <sub>2</sub> nanosheets for high-performance photoelectrochemical applications via plasmonic coupling with Au nanocrystals. <i>Nanoscale</i> , 2019, 11, 7813-7824.	2.8	57
1666	Facile synthesis of high-performance photocatalysts based on Ag/TiO <sub>2</sub> composites. <i>Ceramics International</i> , 2019, 45, 12586-12589.	2.3	35
1667	Engineering MoS <sub>2</sub> Basal Planes for Hydrogen Evolution via Synergistic Ruthenium Doping and Nanocarbon Hybridization. <i>Advanced Science</i> , 2019, 6, 1900090.	5.6	148
1668	Theoretical insight into the hydrogen adsorption on MoS <sub>2</sub> (MoSe <sub>2</sub> ) monolayer as a function of biaxial strain/external electric field. <i>Applied Surface Science</i> , 2019, 478, 857-865.	3.1	38
1669	Tunable 2D-gallium arsenide and graphene bandgaps in a graphene/GaAs heterostructure: an <i>ab initio</i> study. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 265502.	0.7	6
1670	Thermal annealing effects on the electrophysical characteristics of sputtered MoS <sub>2</sub> thin films by Hall effect measurements. <i>Semiconductor Science and Technology</i> , 2019, 34, 045017.	1.0	9
1671	The development of 2D materials for electrochemical energy applications: A mechanistic approach. <i>APL Materials</i> , 2019, 7, .	2.2	28
1673	Facile Preparation of 1T/2H-Mo(S <sub>1-x</sub> Se <sub>x</sub> ) <sub>2</sub> Nanoparticles for Boosting Hydrogen Evolution Reaction. <i>ChemCatChem</i> , 2019, 11, 2217-2222.	1.8	124
1674	Engineering 2D Metal-Organic Framework/MoS <sub>2</sub> Interface for Enhanced Alkaline Hydrogen Evolution. <i>Small</i> , 2019, 15, e1805511.	5.2	169
1675	Discovering superior basal plane active two-dimensional catalysts for hydrogen evolution. <i>Materials Today</i> , 2019, 25, 28-34.	8.3	58
1676	Metallic and plasmonic MoO <sub>2</sub> monocrystalline ultrathin mesoporous nanosheets for highly sensitive and stable surface-enhanced Raman spectroscopy. <i>Chemical Communications</i> , 2019, 55, 4679-4682.	2.2	16
1677	The shape-controlled synthesis of gallium-palladium (GaPd <sub>2</sub> ) nanomaterials as high-performance electrocatalysts for the hydrogen evolution reaction. <i>Nanoscale</i> , 2019, 11, 8518-8527.	2.8	10
1678	Microscopic insights into the catalytic mechanisms of monolayer MoS <sub>2</sub> and its heterostructures in hydrogen evolution reaction. <i>Nano Research</i> , 2019, 12, 2140-2149.	5.8	33

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1679	Charge Storage by Electrochemical Reaction of Water Bilayers Absorbed on MoS <sub>2</sub> Monolayers. <i>Scientific Reports</i> , 2019, 9, 3980.	1.6	16
1680	An enzyme-free electrochemiluminescence aptasensor for the rapid detection of <i>Staphylococcus aureus</i> by the quenching effect of MoS <sub>2</sub> -PtNPs-vancomycin to S <sub>2</sub> O <sub>8</sub> <sup>2-</sup> /O <sub>2</sub> system. <i>Sensors and Actuators B: Chemical</i> , 2019, 288, 586-593.	4.0	31
1681	Vertically Grown MoS <sub>2</sub> Nanoplates on VN with an Enlarged Surface Area as an Efficient and Stable Electrocatalyst for HER. <i>ACS Applied Energy Materials</i> , 2019, 2, 2854-2861.	2.5	37
1682	Facile Non-enzymatic Lactic Acid Sensor Based on Cobalt Oxide Nanostructures. <i>Electroanalysis</i> , 2019, 31, 1296-1303.	1.5	32
1683	Unveiling the Interfacial Effects for Enhanced Hydrogen Evolution Reaction on MoS <sub>2</sub> /WTe <sub>2</sub> Hybrid Structures. <i>Small</i> , 2019, 15, e1900078.	5.2	58
1684	Lattice Mismatch-Induced Ultrastable 1T-Phase MoS <sub>2</sub> @Pd/Au for Plasmon-Enhanced Hydrogen Evolution. <i>Nano Letters</i> , 2019, 19, 2758-2764.	4.5	98
1685	Transition metal dichalcogenide-based composites for hydrogen production. <i>Functional Composites and Structures</i> , 2019, 1, 012001.	1.6	12
1686	Activating MoS <sub>2</sub> with Super-High Nitrogen-Doping Concentration as Efficient Catalyst for Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10917-10925.	1.5	50
1687	Synthesis of Au-nanoparticle-loaded 1T@2H-MoS <sub>2</sub> nanosheets with high photocatalytic performance. <i>Journal of Materials Science</i> , 2019, 54, 9656-9665.	1.7	44
1688	Sisyphus effects in hydrogen electrochemistry on metal silicides enabled by silicene subunit edge. <i>Science Bulletin</i> , 2019, 64, 617-624.	4.3	65
1689	Photocorrosion Inhibition of Semiconductor-Based Photocatalysts: Basic Principle, Current Development, and Future Perspective. <i>ACS Catalysis</i> , 2019, 9, 4642-4687.	5.5	432
1690	Photoelectrochemical properties of a well-structured 1.3 nm-thick pn junction crystal. <i>Chemical Communications</i> , 2019, 55, 4586-4588.	2.2	6
1691	Ultrafast Carrier Dynamics in Few-Layer Colloidal Molybdenum Disulfide Probed by Broadband Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10571-10577.	1.5	35
1692	High-Mobility MoS <sub>2</sub> Directly Grown on Polymer Substrate with Kinetics-Controlled Metal-Organic Chemical Vapor Deposition. <i>ACS Applied Electronic Materials</i> , 2019, 1, 608-616.	2.0	47
1693	Nanostructured Rhenium-Carbon Composites as Hydrogen-Evolving Catalysts Effective over the Entire pH Range. <i>ACS Applied Nano Materials</i> , 2019, 2, 2725-2733.	2.4	24
1694	Principle of proximity: Plasmonic hot electrons motivate donor-adjacent semiconductor defects with enhanced electrocatalytic hydrogen evolution. <i>Nano Energy</i> , 2019, 60, 689-700.	8.2	30
1695	Lithium Intercalated Molybdenum Disulfide-Coated Cotton Thread as a Viable Nerve Tissue Scaffold Candidate. <i>ACS Applied Nano Materials</i> , 2019, 2, 2044-2053.	2.4	9
1696	A strong coupled 2D metal-organic framework and ternary layered double hydroxide hierarchical nanocomposite as an excellent electrocatalyst for the oxygen evolution reaction. <i>Electrochimica Acta</i> , 2019, 307, 275-284.	2.6	49

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1697	Anion engineering of exfoliated CoAl layered double hydroxides on hematite photoanode toward highly efficient photoelectrochemical water splitting. <i>Chemical Engineering Journal</i> , 2019, 366, 523-530.	6.6	43
1698	Ethylenediamine-Assisted High Yield Exfoliation of MoS <sub>2</sub> for Flexible Solid-State Supercapacitor Application. <i>ACS Applied Nano Materials</i> , 2019, 2, 1170-1177.	2.4	34
1699	Intrinsic hydrogen evolution capability and a theoretically supported reaction mechanism of a paddlewheel-type dirhodium complex. <i>Dalton Transactions</i> , 2019, 48, 7302-7312.	1.6	16
1700	Morphology-Controlled Metal Sulfides and Phosphides for Electrochemical Water Splitting. <i>Advanced Materials</i> , 2019, 31, e1806682.	11.1	500
1701	Enhancing Electrocatalytic Water Splitting by Strain Engineering. <i>Advanced Materials</i> , 2019, 31, e1807001.	11.1	470
1702	Nanoarchitectonics for Transition-Metal-Sulfide-Based Electrocatalysts for Water Splitting. <i>Advanced Materials</i> , 2019, 31, e1807134.	11.1	998
1703	Millisecond synthesis of CoS nanoparticles for highly efficient overall water splitting. <i>Nano Research</i> , 2019, 12, 2259-2267.	5.8	85
1704	Single Layer 2D Crystals for Electrochemical Applications of Ion Exchange Membranes and Hydrogen Evolution Catalysts. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801838.	1.9	25
1705	Covalent organic frameworks derived hollow structured N-doped noble carbon for asymmetric-electrolyte Zn-air battery. <i>Science China Chemistry</i> , 2019, 62, 385-392.	4.2	29
1706	Exfoliation of transition-metal dichalcogenides using ATP in aqueous solution. <i>Chemical Communications</i> , 2019, 55, 2972-2975.	2.2	15
1707	Sulfur-doped graphene/transition metal dichalcogenide heterostructured hybrids with electrocatalytic activity toward the hydrogen evolution reaction. <i>Nanoscale Advances</i> , 2019, 1, 1489-1496.	2.2	36
1708	One-step preparation of molybdenum disulfide/graphene nano-catalysts through a simple co-exfoliation method for high-performance electrocatalytic hydrogen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2019, 542, 355-362.	5.0	17
1709	1T-MoS <sub>2</sub> nanosheets confined among TiO <sub>2</sub> nanotube arrays for high performance supercapacitor. <i>Chemical Engineering Journal</i> , 2019, 366, 163-171.	6.6	105
1710	Nanomaterials With Different Dimensions for Electrocatalysis. , 2019, , 435-464.		10
1711	N- and S-doped porous carbon decorated with in-situ synthesized Co-Ni bimetallic sulfides particles: A cathode catalyst of rechargeable Zn-air batteries. <i>Carbon</i> , 2019, 146, 476-485.	5.4	67
1712	Hierarchical Ni <sub>2</sub> P@NiFeAlO <sub>x</sub> Nanosheet Arrays as Bifunctional Catalysts for Superior Overall Water Splitting. <i>Inorganic Chemistry</i> , 2019, 58, 3247-3255.	1.9	47
1713	1T/2H-MoS <sub>2</sub> with Tunable Phases and Residual S, N Co-Doped Carbon as a Highly Active and Durable Catalyst for Hydrogen Evolution. <i>ACS Applied Energy Materials</i> , 2019, 2, 2022-2033.	2.5	20
1714	In situ synthesis of edge-enriched MoS <sub>2</sub> hierarchical nanorods with 1T/2H hybrid phases for highly efficient electrocatalytic hydrogen evolution. <i>CrystEngComm</i> , 2019, 21, 1984-1991.	1.3	29

#	ARTICLE	IF	CITATIONS
1715	Layered MoS <sub>2</sub> @graphene functionalized with nitrogen-doped graphene quantum dots as an enhanced electrochemical hydrogen evolution catalyst. Chinese Chemical Letters, 2019, 30, 1253-1260.	4.8	46
1716	1T-2H Cr <sub>x</sub> -MoS <sub>2</sub> Ultrathin Nanosheets for Durable and Enhanced Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 7227-7232.	3.2	25
1717	Atomically engineering activation sites onto metallic 1T-MoS <sub>2</sub> catalysts for enhanced electrochemical hydrogen evolution. Nature Communications, 2019, 10, 982.	5.8	311
1718	Noble-Metal-Free Nanoelectrocatalysts for Hydrogen Evolution Reaction. Environmental Chemistry for A Sustainable World, 2019, , 73-120.	0.3	2
1719	Cocatalysts for Selective Photoreduction of CO <sub>2</sub> into Solar Fuels. Chemical Reviews, 2019, 119, 3962-4179.	23.0	1,591
1720	Facial Synthesis of 1T Phase MoS <sub>2</sub> Nanoflowers via Anion Exchange Method for Efficient Hydrogen Evolution. ChemistrySelect, 2019, 4, 2070-2074.	0.7	7
1721	Facile efficient earth abundant NiO/C composite electrocatalyst for the oxygen evolution reaction. RSC Advances, 2019, 9, 5701-5710.	1.7	21
1722	Prediction of Strain Effect on Hydrogen Evolution Reaction on VMO-SLMOS <sub>2</sub> *, 2019, , .		0
1723	Suppression Effect of MoS <sub>2</sub> Nanosheets for CO and CO <sub>2</sub> Production During Combustion of Flexible Polyurethane Foams. , 2019, , .		0
1724	Chemisorption Can Reverse Defect-Defect Interaction on Heterogeneous Catalyst Surfaces. Journal of Physical Chemistry Letters, 2019, 10, 7311-7317.	2.1	13
1725	1T-MoS <sub>2</sub> nanopatch/Ti <sub>3</sub> C <sub>2</sub> MXene/TiO <sub>2</sub> nanosheet hybrids for efficient photocatalytic hydrogen evolution. Materials Chemistry Frontiers, 2019, 3, 2673-2680.	3.2	81
1726	Rich diversity of crystallographic phase formation in 2D Re <sub>x</sub> Mo <sub>1-x</sub> S <sub>2</sub> (<i>x</i>=0.5) alloy. Journal of Applied Physics, 2019, 126, .	1.1	3
1727	Recent advances in two-dimensional materials and their nanocomposites in sustainable energy conversion applications. Nanoscale, 2019, 11, 21622-21678.	2.8	201
1728	Strain and defect engineered monolayer Ni-MoS <sub>2</sub> for pH-universal hydrogen evolution catalysis. Nanoscale, 2019, 11, 18329-18337.	2.8	56
1729	Multifunctional 2H-TaS <sub>2</sub> nanoflakes for efficient supercapacitors and electrocatalytic evolution of hydrogen and oxygen. Nanoscale, 2019, 11, 22255-22260.	2.8	41
1730	Interfacial engineering of Mo <sub>2</sub> C@Mo <sub>3</sub> C <sub>2</sub> heteronanowires for high performance hydrogen evolution reactions. Nanoscale, 2019, 11, 23318-23329.	2.8	54
1731	Metallic 1T-VS <sub>2</sub> nanosheets featuring V <sup>2+</sup> self-doping and mesopores towards an efficient hydrogen evolution reaction. Inorganic Chemistry Frontiers, 2019, 6, 3510-3517.	3.0	39
1732	Revealing the Intrinsic Peroxidase-Like Catalytic Mechanism of Heterogeneous Single-Atom Co@MoS <sub>2</sub> . Nano-Micro Letters, 2019, 11, 102.	14.4	114

#	ARTICLE	IF	CITATIONS
1733	Strain Controls Charge Carrier Lifetimes in Monolayer WSe <sub>2</sub> : Ab Initio Time Domain Analysis. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 7732-7739.	2.1	36
1734	Broadband Nonlinear Optical Response of InSe Nanosheets for the Pulse Generation From 1 to 2 $\mu$ m. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 48281-48289.	4.0	51
1735	Carbon-Based Photocathode Materials for Solar Hydrogen Production. <i>Advanced Materials</i> , 2019, 31, e1801446.	11.1	83
1736	Two-dimensional $\pi$ -conjugated metal-organic nanosheets as single-atom catalysts for the hydrogen evolution reaction. <i>Nanoscale</i> , 2019, 11, 454-458.	2.8	65
1737	Au nanoparticles enhanced Z-scheme Au-CoFe <sub>2</sub> O <sub>4</sub> /MoS <sub>2</sub> visible light photocatalyst with magnetic retrievability. <i>Applied Surface Science</i> , 2019, 463, 854-862.	3.1	61
1738	Enhanced ferromagnetism in WS <sub>2</sub> via defect engineering. <i>Journal of Alloys and Compounds</i> , 2019, 772, 740-744.	2.8	41
1739	Improved catalytic performance of monolayer nano-triangles WS <sub>2</sub> and MoS <sub>2</sub> on HER by 3d metals doping. <i>Computational Materials Science</i> , 2019, 159, 333-340.	1.4	31
1740	Enhanced 1T $\alpha$ -Phase Stabilization and Chemical Reactivity in a MoTe <sub>2</sub> Monolayer through Contact with a 2D Ca <sub>2</sub> N Electride. <i>ChemPhysChem</i> , 2019, 20, 595-601.	1.0	14
1741	MoS <sub>x</sub> @NiO Composite Nanostructures: An Advanced Nonprecious Catalyst for Hydrogen Evolution Reaction in Alkaline Media. <i>Advanced Functional Materials</i> , 2019, 29, 1807562.	7.8	83
1742	Electrochemical and optical studies of facile synthesized molybdenum disulphide (MoS <sub>2</sub> ) nano structures. <i>Journal of Alloys and Compounds</i> , 2019, 782, 119-131.	2.8	26
1743	Facile method to synthesis hybrid phase 1T@2H MoSe <sub>2</sub> nanostructures for rechargeable lithium ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2019, 833, 333-339.	1.9	39
1744	Chemically activated MoS <sub>2</sub> for efficient hydrogen production. <i>Nano Energy</i> , 2019, 57, 535-541.	8.2	95
1745	Rationally design of monometallic NiO-Ni <sub>3</sub> S <sub>2</sub> /NF heteronanosheets as bifunctional electrocatalysts for overall water splitting. <i>Journal of Catalysis</i> , 2019, 369, 345-351.	3.1	84
1746	Ultrahigh length-to-diameter ratio nickel phosphide nanowires as pH-wide electrocatalyst for efficient hydrogen evolution. <i>Electrochimica Acta</i> , 2019, 298, 943-949.	2.6	23
1747	Electrochemical Hydrogen Evolution at the Interface of Monolayer VS <sub>2</sub> and Water from First-Principles Calculations. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 2944-2949.	4.0	20
1748	PtNi bimetallic nanoparticles loaded MoS <sub>2</sub> nanosheets: Preparation and electrochemical sensing application for the detection of dopamine and uric acid. <i>Analytica Chimica Acta</i> , 2019, 1055, 17-25.	2.6	88
1749	Template-Driven Phase Selective Formation of Metallic 1T-MoS <sub>2</sub> Nanoflowers for Hydrogen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 2008-2017.	3.2	45
1750	Applications of 2D MXenes in energy conversion and storage systems. <i>Chemical Society Reviews</i> , 2019, 48, 72-133.	18.7	1,354

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1751	1T-MoS <sub>2</sub> monolayer doped with isolated Ni atoms as highly active hydrogen evolution catalysts: A density functional study. <i>Applied Surface Science</i> , 2019, 469, 292-297.	3.1	41
1752	Nickel cobalt phosphide with three-dimensional nanostructure as a highly efficient electrocatalyst for hydrogen evolution reaction in both acidic and alkaline electrolytes. <i>Nano Research</i> , 2019, 12, 375-380.	5.8	182
1753	Reduced graphene oxide/metallic MoSe <sub>2</sub> : Cu nanosheet nanostructures grown by a chemical process for highly efficient water splitting. <i>Materials Research Bulletin</i> , 2019, 111, 183-190.	2.7	22
1754	CTAB-assisted synthesis of dissilient hollow spherical MoS <sub>2</sub> for efficient hydrogen evolution. <i>Materials Research Express</i> , 2019, 6, 035001.	0.8	7
1755	Iridium-Triggered Phase Transition of MoS <sub>2</sub> Nanosheets Boosts Overall Water Splitting in Alkaline Media. <i>ACS Energy Letters</i> , 2019, 4, 368-374.	8.8	105
1756	High sensitivity label-free detection of Fe <sup>3+</sup> ion in aqueous solution using fluorescent MoS <sub>2</sub> quantum dots. <i>Sensors and Actuators B: Chemical</i> , 2019, 281, 989-997.	4.0	38
1757	Poor crystalline MoS <sub>2</sub> with highly exposed active sites for the improved hydrogen evolution reaction performance. <i>Journal of Alloys and Compounds</i> , 2019, 777, 514-523.	2.8	47
1758	Structural Quantification for Graphene and Related Two-Dimensional Materials by Raman Spectroscopy. <i>Analytical Chemistry</i> , 2019, 91, 468-481.	3.2	20
1759	Controllable Synthesis of Nanosized Amorphous MoS <sub>x</sub> Using Temporally Shaped Femtosecond Laser for Highly Efficient Electrochemical Hydrogen Production. <i>Advanced Functional Materials</i> , 2019, 29, 1806229.	7.8	54
1760	Tailoring Highly Thermal Conductive Properties of Te/MoS <sub>2</sub> /Ag Heterostructure Nanocomposites Using a Bottom-Up Approach. <i>Advanced Electronic Materials</i> , 2019, 5, 1800548.	2.6	25
1761	Construct 3D Pd@MoS <sub>2</sub> -conjugated polypyrrole frameworks Heterojunction with unprecedented photocatalytic activity for Tsuji-Trost reaction under visible light. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 356-366.	10.8	20
1762	Heterogeneous Co <sup>II</sup> /N/C Electrocatalysts with Controlled Cobalt Site Densities for the Hydrogen Evolution Reaction: Structure-Activity Correlations and Kinetic Insights. <i>ACS Catalysis</i> , 2019, 9, 83-97.	5.5	122
1763	Carbonized MoS <sub>2</sub> : Super-Active Co-Catalyst for Highly Efficient Water Splitting on CdS. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 4220-4229.	3.2	68
1764	Engineering an Earth-Abundant Element-Based Bifunctional Electrocatalyst for Highly Efficient and Durable Overall Water Splitting. <i>Advanced Functional Materials</i> , 2019, 29, 1807031.	7.8	146
1765	SnS <sub>2</sub> quantum dots growth on MoS <sub>2</sub> : Atomic-level heterostructure for electrocatalytic hydrogen evolution. <i>Electrochimica Acta</i> , 2019, 300, 45-52.	2.6	42
1766	Intense pulsed light, a promising technique to develop molybdenum sulfide catalysts for hydrogen evolution. <i>Nanotechnology</i> , 2019, 30, 175401.	1.3	6
1767	2D Metallic Transitional Metal Dichalcogenides for Electrochemical Hydrogen Evolution. <i>Energy Technology</i> , 2019, 7, 1801025.	1.8	10
1768	Unraveling the Factors Affecting the Electrochemical Performance of MoS <sub>2</sub> -Carbon Composite Catalysts for Hydrogen Evolution Reaction: Surface Defect and Electrical Resistance of Carbon Supports. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 5037-5045.	4.0	20



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1769	Effect of nickel-doped FeS <sub>2</sub> nanoparticles-reduced graphene oxide electrocatalysts for efficient hydrogen evolution. <i>Journal of Alloys and Compounds</i> , 2019, 775, 1293-1300.	2.8	29
1770	Modeling of Electrocatalytic Dinitrogen Reduction on Microstructured Electrodes. <i>Small Methods</i> , 2019, 3, 1800332.	4.6	23
1771	High-efficiency hydrogen evolution from seawater using hetero-structured T/Td phase ReS <sub>2</sub> nanosheets with cationic vacancies. <i>Nano Energy</i> , 2019, 55, 42-48.	8.2	102
1772	Facile solvothermal synthesis of Pt <sub>71</sub> Co <sub>29</sub> lamellar nanoflowers as an efficient catalyst for oxygen reduction and methanol oxidation reactions. <i>Journal of Colloid and Interface Science</i> , 2019, 536, 556-562.	5.0	114
1773	Decorating cobalt phosphide and rhodium on reduced graphene oxide for high-efficiency hydrogen evolution reaction. <i>Journal of Energy Chemistry</i> , 2019, 34, 72-79.	7.1	25
1774	Metallic 1T-MoS <sub>2</sub> nanosheets in-situ entrenched on N,P,S-codoped hierarchical carbon microflower as an efficient and robust electro-catalyst for hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 614-620.	10.8	77
1775	Low-temperature one-pot synthesis of WS <sub>2</sub> nanoflakes as electrocatalyst for hydrogen evolution reaction. <i>Nanotechnology</i> , 2019, 30, 045603.	1.3	10
1776	Unsaturated Sulfur Edge Engineering of Strongly Coupled MoS <sub>2</sub> Nanosheet@Carbon Macroporous Hybrid Catalyst for Enhanced Hydrogen Generation. <i>Advanced Energy Materials</i> , 2019, 9, 1802553.	10.2	159
1777	Structural phase transition barrier of N-doped MoS <sub>2</sub> with charge injection. <i>Materials Research Express</i> , 2019, 6, 016308.	0.8	3
1778	Ultrathin molybdenum phosphide films as high-efficiency electrocatalysts for hydrogen evolution reaction. <i>Materials Research Express</i> , 2019, 6, 016418.	0.8	8
1779	Phase-Controlled Synthesis of 1T-MoSe <sub>2</sub> /NiSe Heterostructure Nanowire Arrays via Electronic Injection for Synergistically Enhanced Hydrogen Evolution. <i>Small Methods</i> , 2019, 3, 1800317.	4.6	67
1780	One-step hydrothermal synthesis of high-percentage 1T-phase MoS <sub>2</sub> quantum dots for remarkably enhanced visible-light-driven photocatalytic H <sub>2</sub> evolution. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 76-85.	10.8	137
1781	The role of conductivity and phase structure in enhancing catalytic activity of CoSe for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2019, 294, 142-147.	2.6	57
1782	Scalable Silver Oxo-Sulfide Catalyst for Electrochemical Water Splitting. <i>ACS Applied Energy Materials</i> , 2019, 2, 788-796.	2.5	7
1783	Phase and Defect Engineering of MoS <sub>2</sub> Stabilized in Periodic TiO <sub>2</sub> Nanoporous Film for Enhanced Solar Water Splitting. <i>Advanced Optical Materials</i> , 2019, 7, 1801403.	3.6	25
1784	Partial Surface Selenization of Cobalt Sulfide Microspheres for Enhancing the Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2019, 9, 456-465.	5.5	71
1785	Ultrathin 1T-Mo <sub>2</sub> C dominated by (100) Surface/Cu Schottky junction as efficient catalyst for hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 853-859.	3.8	19
1786	Mechanically tuned molybdenum dichalcogenides (MoS <sub>2</sub> and MoSe <sub>2</sub> ) dispersed supramolecular hydrogel scaffolds. <i>Journal of Molecular Liquids</i> , 2019, 276, 184-193.	2.3	18

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1787	One-pot hydrothermal synthesis of Al-doped MoS <sub>2</sub> @graphene aerogel nanocomposite electrocatalysts for enhanced hydrogen evolution reaction. <i>Results in Physics</i> , 2019, 12, 250-258.	2.0	26
1788	Ultrafine monolayer Co-containing layered double hydroxide nanosheets for water oxidation. <i>Journal of Energy Chemistry</i> , 2019, 34, 57-63.	7.1	78
1789	In-situ growth of graphene decorated Ni <sub>3</sub> S <sub>2</sub> pyramids on Ni foam for high-performance overall water splitting. <i>Applied Surface Science</i> , 2019, 465, 772-779.	3.1	39
1790	Enhanced hydrogen evolution reaction over molybdenum carbide nanoparticles confined inside single-walled carbon nanotubes. <i>Journal of Energy Chemistry</i> , 2019, 28, 123-127.	7.1	55
1791	N, P dual-doped hollow carbon spheres supported MoS <sub>2</sub> hybrid electrocatalyst for enhanced hydrogen evolution reaction. <i>Catalysis Today</i> , 2019, 330, 259-267.	2.2	39
1792	First-principle study on the structural and electronic properties of H <sub>2</sub> S and SO <sub>2</sub> adsorption on Pd-doped MoS <sub>2</sub> monolayer. <i>Molecular Physics</i> , 2020, 118, e1606462.	0.8	3
1793	Engineering the HER catalytic behavior of heteroatom-doped molybdenum disulfide via versatile partial cation exchange. <i>Journal of Energy Chemistry</i> , 2020, 41, 15-19.	7.1	13
1794	PAF-1 as oxygen tank to in-situ synthesize edge-exposed O-MoS <sub>2</sub> for highly efficient hydrogen evolution. <i>Catalysis Today</i> , 2020, 347, 56-62.	2.2	7
1795	Electron density modulation of Fe <sub>1-x</sub> CoxP nanosheet arrays by iron incorporation for highly efficient water splitting. <i>Nano Energy</i> , 2020, 67, 104174.	8.2	87
1796	Layered Transition Metal Dichalcogenide-Based Nanomaterials for Electrochemical Energy Storage. <i>Advanced Materials</i> , 2020, 32, e1903826.	11.1	329
1797	Multifunctional Transition Metal-Based Phosphides in Energy-Related Electrocatalysis. <i>Advanced Energy Materials</i> , 2020, 10, 1902104.	10.2	322
1798	Nickel-manganese bimetallic phosphides porous nanosheet arrays as highly active bifunctional hydrogen and oxygen evolution electrocatalysts for overall water splitting. <i>Electrochimica Acta</i> , 2020, 329, 135121.	2.6	43
1799	Direct growth of high-content 1T phase MoS <sub>2</sub> film by pulsed laser deposition for hydrogen evolution reaction. <i>Applied Surface Science</i> , 2020, 504, 144320.	3.1	20
1800	Hierarchical microsphere assembled by nanoplates embedded with MoS <sub>2</sub> and (NiFe) <sub>x</sub> nanoparticles as low-cost electrocatalyst for hydrogen evolution reaction. <i>Nanotechnology</i> , 2020, 31, 035403.	1.3	8
1801	Thermoelectric performance of Cu-doped MoS <sub>2</sub> layered nanosheets for low grade waste heat recovery. <i>Applied Surface Science</i> , 2020, 505, 144066.	3.1	30
1802	Synergetic effect of defects rich MoS <sub>2</sub> and Ti <sub>3</sub> C <sub>2</sub> MXene as cocatalysts for enhanced photocatalytic H <sub>2</sub> production activity of TiO <sub>2</sub> . <i>Chemical Engineering Journal</i> , 2020, 383, 123178.	6.6	175
1803	Enhanced visible-light-driven hydrogen evolution of ultrathin narrow-band-gap g-C <sub>3</sub> N <sub>4</sub> nanosheets. <i>Journal of Materials Science</i> , 2020, 55, 2118-2128.	1.7	14
1804	Face or Edge? Control of Molybdenite Surface Interactions with Divalent Cations. <i>Journal of Physical Chemistry C</i> , 2020, 124, 372-381.	1.5	14

#	ARTICLE	IF	CITATIONS
1805	Microwave Hydrothermal Synthesis of 1T@2H $\alpha$ -MoS <sub>2</sub> as an Excellent Photocatalyst. ChemCatChem, 2020, 12, 893-902.	1.8	38
1806	The effect of 2D-MoS <sub>2</sub> doped polypyrrole coatings on brass corrosion. Journal of Molecular Structure, 2020, 1203, 127318.	1.8	22
1807	Charged excited state induced by ultrathin nanotip drives highly efficient hydrogen evolution. Applied Catalysis B: Environmental, 2020, 262, 118305.	10.8	20
1808	Assembling amorphous (Fe-Ni)Co-OH/Ni <sub>3</sub> S <sub>2</sub> nano hybrids with S-vacancy and interfacial effects as an ultra-highly efficient electrocatalyst: Inner investigation of mechanism for alkaline water-to-hydrogen/oxygen conversion. Applied Catalysis B: Environmental, 2020, 263, 118338.	10.8	73
1809	Experimental and Theoretical Insights of MoS <sub>2</sub> /Mo <sub>3</sub> N <sub>2</sub> Nanoribbon $\alpha$ -Electrocatalysts for Efficient Hydrogen Evolution Reaction. ChemCatChem, 2020, 12, 122-128.	1.8	10
1810	Highly dispersive bimetallic sulfides afforded by crystalline polyoxometalate-based coordination polymer precursors for efficient hydrogen evolution reaction. Journal of Power Sources, 2020, 446, 227319.	4.0	64
1811	Tuning the morphology and phase of MoSe <sub>2</sub> by using a mixed solvent of water and dimethyl formamide and its enhanced electrocatalytic activity for hydrogen evolution reaction. Journal of Materials Science, 2020, 55, 2129-2138.	1.7	11
1812	Synthesis and characterization of Ni <sub>2</sub> P and MoS <sub>2</sub> on MWCNT as an innovative catalytic material for hydrogen generation. Applied Surface Science, 2020, 503, 144163.	3.1	9
1813	Recent Advances in Electrocatalytic Hydrogen Evolution Using Nanoparticles. Chemical Reviews, 2020, 120, 851-918.	23.0	1,767
1814	Efficient Optimization of Electron/Oxygen Pathway by Constructing Ceria/Hydroxide Interface for Highly Active Oxygen Evolution Reaction. Advanced Functional Materials, 2020, 30, 1908367.	7.8	120
1815	Wafer $\alpha$ -Scale and Low $\alpha$ -Temperature Growth of 1T $\alpha$ -WS <sub>2</sub> Film for Efficient and Stable Hydrogen Evolution Reaction. Small, 2020, 16, e1905000.	5.2	53
1816	One-step fabrication of ultrathin layered 1T@2H phase MoS <sub>2</sub> with high catalytic activity based counter electrode for photovoltaic devices. Journal of Materials Science and Technology, 2020, 51, 94-101.	5.6	30
1817	Decipher of the structure and surface chemistry in molybdenum phosphosulfide on electrochemical catalytic hydrogen evolution reaction. Journal of Catalysis, 2020, 382, 228-236.	3.1	12
1818	Structure Engineering of MoS <sub>2</sub> via Simultaneous Oxygen and Phosphorus Incorporation for Improved Hydrogen Evolution. Small, 2020, 16, e1905738.	5.2	112
1819	Ligand-protected atomically precise gold nanoclusters as model catalysts for oxidation reactions. Chemical Communications, 2020, 56, 1163-1174.	2.2	52
1820	Water dissociation and hydrogen evolution on the surface of Fe-based bulk metallic glasses. Physical Chemistry Chemical Physics, 2020, 22, 700-708.	1.3	8
1821	MoS <sub>2</sub> impurities: Chemical identification and spatial resolution of bismuth impurities in geological material. Applied Surface Science, 2020, 508, 145256.	3.1	7
1822	Assembly of 1T-WS <sub>2</sub> : Sn nanosheets/graphene by a modified hydrothermal process for water splitting. Journal of Sol-Gel Science and Technology, 2020, 93, 554-562.	1.1	6

#	ARTICLE	IF	CITATIONS
1823	On the origin of metallicity and stability of the metastable phase in chemically exfoliated MoS <sub>2</sub> . Applied Materials Today, 2020, 19, 100544.	2.3	8
1824	Different phases of few-layer MoS <sub>2</sub> and their silver/gold nanocomposites for efficient hydrogen evolution reaction. Catalysis Science and Technology, 2020, 10, 154-163.	2.1	36
1825	Recent progress of TMD nanomaterials: phase transitions and applications. Nanoscale, 2020, 12, 1247-1268.	2.8	132
1826	Room-temperature synthesis of Ni <sub>1-x</sub> Fe <sub>x</sub> (oxy)hydroxides: structure-activity relationship for the oxygen evolution reaction. Sustainable Energy and Fuels, 2020, 4, 932-939.	2.5	6
1827	Tuning the surface charge density of exfoliated thin molybdenum disulfide sheets <i>via</i> non-covalent functionalization for promoting hydrogen evolution reaction. Journal of Materials Chemistry C, 2020, 8, 510-517.	2.7	17
1828	Exfoliated Mo <sub>2</sub> C nanosheets hybridized on CdS with fast electron transfer for efficient photocatalytic H <sub>2</sub> production under visible light irradiation. Applied Catalysis B: Environmental, 2020, 264, 118541.	10.8	79
1829	Growth and characterization of MoS <sub>2</sub> /n-GaN and MoS <sub>2</sub> /p-GaN vertical heterostructure with wafer scale homogeneity. Solid-State Electronics, 2020, 165, 107751.	0.8	3
1830	MoS <sub>x</sub> -CdS/Cu <sub>2</sub> ZnSnS <sub>4</sub> -based thin film photocathode for solar hydrogen evolution from water. Applied Catalysis B: Environmental, 2020, 268, 118438.	10.8	41
1831	Morphology/phase-dependent MoS <sub>2</sub> nanostructures for high-efficiency electrochemical activity. Journal of Alloys and Compounds, 2020, 818, 152909.	2.8	20
1832	Direct Vapor Deposition Growth of 1T MoTe <sub>2</sub> on Carbon Cloth for Electrocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2020, 3, 3212-3219.	2.5	52
1833	Highly Sensitive 1T MoS <sub>2</sub> Pressure Sensor with Wide Linearity Based on Hierarchical Microstructures of Leaf Vein as Spacer. Advanced Electronic Materials, 2020, 6, 1900916.	2.6	27
1834	A feasible and environmentally friendly method to simultaneously synthesize MoS <sub>2</sub> quantum dots and pore-rich monolayer MoS <sub>2</sub> for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 433-442.	3.8	24
1835	Methods for Electrocatalysis. , 2020, , .		2
1836	Metallic WSe <sub>2</sub> : Sn nanosheets assembled on graphene by a modified hydrothermal process for hydrogen evolution reaction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 589, 124149.	2.3	9
1837	Theoretical investigation on the hydrogen evolution reaction mechanism at MoS <sub>2</sub> heterostructures: the essential role of the 1T/2H phase interface. Catalysis Science and Technology, 2020, 10, 458-465.	2.1	19
1838	Chemical Insights into the Rapid, Light-Induced Auto-Oxidation of Molybdenum Disulfide Aqueous Dispersions. Chemistry of Materials, 2020, 32, 148-156.	3.2	11
1839	Layered intercalation compounds: Mechanisms, new methodologies, and advanced applications. Progress in Materials Science, 2020, 109, 100631.	16.0	66
1840	Photocatalytic H <sub>2</sub> Evolution on TiO <sub>2</sub> Assembled with Ti <sub>3</sub> C <sub>2</sub> MXene and Metallic 1T-WS <sub>2</sub> as Co-catalysts. Nano-Micro Letters, 2020, 12, 6.	14.4	141

#	ARTICLE	IF	CITATIONS
1841	Porous coordination polymer-derived ultrasmall CoP encapsulated in nitrogen-doped carbon for efficient hydrogen evolution in both acidic and basic media. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 1729-1737.	3.8	12
1842	Gas Molecules on Defective and Nonmetal-Doped MoS <sub>2</sub> Monolayers. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1511-1522.	1.5	37
1843	Deep Phase Transition of MoS <sub>2</sub> for Excellent Hydrogen Evolution Reaction by a Facile C-Doping Strategy. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 877-885.	4.0	38
1844	One-dimensional CoMoS <sub>4</sub> nanorod arrays as an efficient electrocatalyst for hydrogen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2020, 821, 153245.	2.8	8
1845	In situ self-assembly of molybdenum disulfide/Mg-Al layered double hydroxide composite for enhanced photocatalytic activity. <i>Journal of Alloys and Compounds</i> , 2020, 817, 153308.	2.8	22
1846	Influence of a Tunable Band Gap on Photoredox Catalysis by Various Two-Dimensional Transition-Metal Dichalcogenides. <i>ACS Applied Nano Materials</i> , 2020, 3, 84-93.	2.4	17
1847	Review on bimetallic-deposited TiO <sub>2</sub> : preparation methods, charge carrier transfer pathways and photocatalytic applications. <i>Chemical Papers</i> , 2020, 74, 717-756.	1.0	41
1848	Novel Pt-Ni/NiO/Ni <sub>2</sub> O <sub>3</sub> based electrodes for electrocatalytic biodiesel production from waste palm oil. <i>Materials Today: Proceedings</i> , 2020, 20, 69-73.	0.9	4
1849	Photo/Electrochemical Applications of Metal Sulfide/TiO <sub>2</sub> Heterostructures. <i>Advanced Energy Materials</i> , 2020, 10, 1902355.	10.2	236
1850	3D Carbon Foam Supported Edge-Rich N-Doped MoS <sub>2</sub> Nanoflakes for Enhanced Electrocatalytic Hydrogen Evolution. <i>Chemistry - A European Journal</i> , 2020, 26, 4150-4156.	1.7	12
1851	Enhancing the specific capacity and rate performance of MoS <sub>2</sub> nanomaterials via introducing subgrains at a hydrothermal temperature 160°C. <i>Journal of Electroanalytical Chemistry</i> , 2020, 856, 113659.	1.9	4
1852	Excellent photoresponse performances of graphene/metallic WSe <sub>2</sub> nanosheet heterostructure films. <i>Materials Science in Semiconductor Processing</i> , 2020, 107, 104851.	1.9	14
1853	Facile synthesis of rGO-MoS <sub>2</sub> -Ag nanocomposites with long-term antimicrobial activities. <i>Nanotechnology</i> , 2020, 31, 125101.	1.3	25
1854	Ultrathin VS <sub>2</sub> nanodiscs for highly stable electro catalytic hydrogen evolution reaction. <i>International Journal of Energy Research</i> , 2020, 44, 811-820.	2.2	35
1855	Simultaneous visible-light-induced hydrogen production enhancement and antibiotic wastewater degradation using MoS <sub>2</sub> @Zn Cd <sub>1-5</sub> : Solid-solution-assisted photocatalysis. <i>Chinese Journal of Catalysis</i> , 2020, 41, 103-113.	6.9	83
1856	Engineering defects and adjusting electronic structure on S doped MoO <sub>2</sub> nanosheets toward highly active hydrogen evolution reaction. <i>Nano Research</i> , 2020, 13, 121-126.	5.8	57
1857	Nano-layer based 1T-rich MoS <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> co-catalyst system for enhanced photocatalytic and photoelectrochemical activity. <i>Applied Catalysis B: Environmental</i> , 2020, 268, 118466.	10.8	112
1858	Template-Assisted Synthesis of Metallic 1T-MoS <sub>2</sub> Nanosheets for Hydrogen Evolution Reaction. <i>Advanced Functional Materials</i> , 2020, 30, 1906069.	7.8	47

#	ARTICLE	IF	CITATIONS
1859	Controllable synthesis of hierarchical MoS <sub>2</sub> nanotubes with ultra-uniform and superior storage potassium properties. <i>Journal of Colloid and Interface Science</i> , 2020, 561, 593-600.	5.0	31
1860	Molybdenum and boron synergistically boosting efficient electrochemical nitrogen fixation. <i>Nano Energy</i> , 2020, 78, 105391.	8.2	21
1861	Functionalization of Molybdenum Disulfide via Plasma Treatment and 3-Mercaptopropionic Acid for Gas Sensors. <i>Nanomaterials</i> , 2020, 10, 1860.	1.9	8
1862	Tailoring the Interfacial Interactions of van der Waals 1T-MoS <sub>2</sub> /C <sub>60</sub> Heterostructures for High-Performance Hydrogen Evolution Reaction Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2020, 142, 17923-17927.	6.6	112
1863	Facile One-Step Preparation and Efficient Photocatalytic Hydrogen Production of Composite MoS <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> Sensitized by Erythrosin B. <i>Nano</i> , 2020, 15, 2050127.	0.5	4
1864	Two-dimensional materials as novel co-catalysts for efficient solar-driven hydrogen production. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23202-23230.	5.2	81
1865	MnS-Nanoparticles-Decorated Three-Dimensional Graphene Hybrid as Highly Efficient Bifunctional Electrocatalyst for Hydrogen Evolution Reaction and Oxygen Reduction Reaction. <i>Catalysts</i> , 2020, 10, 1141.	1.6	9
1866	General Synthesis of Nanoporous 2D Metal Compounds with 3D Bicontinuous Structure. <i>Advanced Materials</i> , 2020, 32, e2004055.	11.1	20
1867	One-pot synthesis of non-precious metal RGO/1T <sup>-</sup> MoTe <sub>2</sub> : Cu heterohybrids for excellent catalytic hydrogen evolution. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2020, 260, 114659.	1.7	6
1868	Engineering Electrocatalytic Microcells for Two-Dimensional Materials. <i>Cell Reports Physical Science</i> , 2020, 1, 100190.	2.8	10
1869	Band Edge Tailoring in Few-Layer Two-Dimensional Molybdenum Sulfide/Selenide Alloys. <i>Journal of Physical Chemistry C</i> , 2020, 124, 22893-22902.	1.5	9
1870	<i>cmme</i> -SnS: a two-dimensional tin sulfide nanosheet. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21219-21226.	5.2	4
1871	Low Crystalline MoS <sub>2</sub> Nanotubes from MoS <sub>2</sub> Nanomasks for Lithium Ion Battery Applications. <i>ACS Applied Nano Materials</i> , 2020, 3, 7580-7586.	2.4	27
1872	To achieve ultrasensitive electrochemical detection of mercury ions employing metallic 1T-MoS <sub>2</sub> nanosheets. <i>Electrochimica Acta</i> , 2020, 355, 136800.	2.6	17
1873	Nanoscale engineering and Mo-doping of 2D ultrathin ReS <sub>2</sub> nanosheets for remarkable electrocatalytic hydrogen generation. <i>Nanoscale</i> , 2020, 12, 17045-17052.	2.8	22
1874	Parameter optimisation for electrochemically activated MoTe <sub>2</sub> . <i>Sustainable Energy and Fuels</i> , 2020, 4, 4473-4477.	2.5	9
1875	Operando time-resolved X-ray absorption spectroscopy reveals the chemical nature enabling highly selective CO <sub>2</sub> reduction. <i>Nature Communications</i> , 2020, 11, 3525.	5.8	242
1876	Hydrogen evolution on non-metal oxide catalysts. <i>JPhys Energy</i> , 2020, 2, 042002.	2.3	16

#	ARTICLE	IF	CITATIONS
1877	Isomerization behavior of p-aminoazobenzene directly anchored on MoS <sub>2</sub> /graphene oxide nanocomposite. Applied Surface Science, 2020, 530, 147216.	3.1	4
1878	Nanocomposites formed by combination of urchin like NiS with Ni-nanoparticles/N-doped nanoporous carbon, derived from nickel organic framework, and decorated with RuO <sub>2</sub> nanoparticles: Construction and kinetics for hydrogen evolution reaction. Electrochimica Acta, 2020, 355, 136710.	2.6	2
1879	Self-Assembled SnO <sub>2</sub> /SnSe <sub>2</sub> Heterostructures: A Suitable Platform for Ultrasensitive NO <sub>2</sub> and H <sub>2</sub> Sensing. ACS Applied Materials & Interfaces, 2020, 12, 34362-34369.	4.0	44
1880	Embedding Ultrafine Metal Oxide Nanoparticles in Monolayered Metal-Organic Framework Nanosheets Enables Efficient Electrocatalytic Oxygen Evolution. ACS Nano, 2020, 14, 1971-1981.	7.3	109
1881	Design and synthesis of two-dimensional materials and their heterostructures. , 2020, , 13-54.		1
1882	Enhanced bifunctional electrocatalytic activity of Ni-Co bimetallic chalcogenides for efficient water-splitting application. Journal of Alloys and Compounds, 2020, 846, 156389.	2.8	42
1883	Ultrasonic treatment of Co <sub>7</sub> (PO <sub>4</sub> ) <sub>2</sub> (HPO <sub>4</sub> ) <sub>4</sub> using NMP for supercapacitors and oxygen evolution reaction. Electrochimica Acta, 2020, 337, 135827.	2.6	24
1884	In-situ Raman analysis of hydrogenation in well-defined ultrathin molybdenum diselenide deposits synthesized through vapor phase deposition. Scientific Reports, 2020, 10, 10190.	1.6	1
1885	Electrocatalytic properties of two-dimensional transition metal dichalcogenides and their heterostructures in energy applications. , 2020, , 215-241.		6
1886	Electron Density and Its Relation with Electronic and Optical Properties in 2D Mo/W Dichalcogenides. Nanomaterials, 2020, 10, 2221.	1.9	11
1887	Direct Evidence of Electronic Interaction at the Atomic-Layer-Deposited MoS <sub>2</sub> Monolayer/SiO <sub>2</sub> Interface. ACS Applied Materials & Interfaces, 2020, 12, 53852-53859.	4.0	11
1888	Increasing the active sites and intrinsic activity of transition metal chalcogenide electrocatalysts for enhanced water splitting. Journal of Materials Chemistry A, 2020, 8, 25465-25498.	5.2	112
1889	Zr-Based Metal-Organic Framework Films Grown on Bio-Template for Photoelectrocatalysis. ChemistrySelect, 2020, 5, 13855-13861.	0.7	6
1890	Self-assembled hybrid organic-MoS <sub>3</sub> -nanoparticle catalyst for light energy conversion. Nanoscale, 2020, 12, 22952-22957.	2.8	6
1891	Formation of Coherent 1H-1T Heterostructures in Single-Layer MoS <sub>2</sub> on Au(111). ACS Nano, 2020, 14, 16939-16950.	7.3	29
1892	Atomic-scale evidence for highly selective electrocatalytic N <sub>2</sub> coupling on metallic MoS <sub>2</sub> . Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31631-31638.	3.3	18
1893	A Highly Efficient Co <sub>3</sub> V <sub>2</sub> O <sub>8</sub> /MoS <sub>2</sub> /Carbon Cloth Nanocomposite Bifunctional Electrocatalyst for Overall Water Splitting. ChemistrySelect, 2020, 5, 14276-14281.	0.7	7
1894	1T/2H Mixed Phase MoS <sub>2</sub> Nanosheets Integrated by a 3D Nitrogen-Doped Graphene Derivative for Enhanced Electrocatalytic Hydrogen Evolution. ACS Applied Materials & Interfaces, 2020, 12, 55884-55893.	4.0	44

#	ARTICLE	IF	CITATIONS
1895	Engineering of Amorphous Structures and Sulfur Defects into Ultrathin FeS Nanosheets to Achieve Superior Electrocatalytic Alkaline Oxygen Evolution. ACS Applied Materials & Interfaces, 2020, 12, 51846-51853.	4.0	45
1896	Preparation of highly dispersed Ru-Ni alloy nanoparticles on an N-doped carbon layer (RuNi@CN) and its application as a catalyst for the hydrogen evolution reaction in alkaline solution. International Journal of Electrochemical Science, 2020, 15, 11769-11778.	0.5	7
1897	Hybrid Transition Metal Dichalcogenide/Graphene Microspheres for Hydrogen Evolution Reaction. Nanomaterials, 2020, 10, 2376.	1.9	10
1898	Transition Metal Chalcogenides for the Electrocatalysis of Water. , 2020, , .		2
1900	Tuning the spin polarization in monolayer MoS <sub>2</sub> through (Y,Yb) co-doping. New Journal of Chemistry, 2020, 44, 20316-20321.	1.4	3
1901	MoS <sub>2</sub> /graphene/carbonized melamine foam composite catalysts for the hydrogen evolution reaction. New Carbon Materials, 2020, 35, 540-546.	2.9	7
1902	2H-MoS <sub>2</sub> on Mo <sub>2</sub> CT <sub>x</sub> MXene Nanohybrid for Efficient and Durable Electrocatalytic Hydrogen Evolution. ACS Nano, 2020, 14, 16140-16155.	7.3	180
1903	MoS <sub>2</sub> /graphene composites: Fabrication and electrochemical energy storage. Energy Storage Materials, 2020, 33, 470-502.	9.5	85
1904	Electrodeposition-fabricated catalysts for polymer electrolyte water electrolysis. Korean Journal of Chemical Engineering, 2020, 37, 1275-1294.	1.2	6
1905	Rapid and Low-Temperature Molecular Precursor Approach toward Ternary Layered Metal Chalcogenides and Oxides: Mo <sub>1-x</sub> W <sub>x</sub> S <sub>2</sub> and Mo <sub>1-x</sub> W <sub>x</sub> O <sub>3</sub> Alloys (0 ≤ x ≤ 1). Chemistry of Materials, 2020, 32, 7895-7907.	3.2	13
1906	Multiphasic 1T@2H MoSe <sub>2</sub> as a highly efficient catalyst for the N <sub>2</sub> reduction to NH <sub>3</sub> . Applied Surface Science, 2020, 532, 147372.	3.1	22
1907	High-throughput production of cheap mineral-based two-dimensional electrocatalysts for high-current-density hydrogen evolution. Nature Communications, 2020, 11, 3724.	5.8	153
1908	Tuning of Trifunctional NiCu Bimetallic Nanoparticles Confined in a Porous Carbon Network with Surface Composition and Local Structural Distortions for the Electrocatalytic Oxygen Reduction, Oxygen and Hydrogen Evolution Reactions. Journal of the American Chemical Society, 2020, 142, 14688-14701.	6.6	231
1909	Development of highly active hydrogen evolution reaction (HER) catalysts composed of reduced graphene oxide and amorphous molybdenum sulfides derived from (NH <sub>4</sub> ) <sub>2</sub> MoO <sub>4</sub> -m (m = 0, 1, and 2). Journal of Photochemistry and Photobiology A: Chemistry, 2020, 401, 112793.	2.0	6
1910	Recent advance and prospectives of electrocatalysts based on transition metal selenides for efficient water splitting. Nano Energy, 2020, 78, 105234.	8.2	250
1911	2H-MoS <sub>2</sub> nanoflowers based high energy density solid state supercapacitor. Materials Chemistry and Physics, 2020, 255, 123551.	2.0	57
1912	Facile one-pot supercritical synthesis of MoS <sub>2</sub> /pristine graphene nanohybrid as a highly active advanced electrocatalyst for hydrogen evolution reaction. Applied Surface Science, 2020, 531, 147282.	3.1	12
1913	Tunable Optical Transition in 2H-MoS <sub>2</sub> via Direct Electrochemical Engineering of Vacancy Defects and Surface C Bonds. ACS Applied Materials & Interfaces, 2020, 12, 40870-40878.	4.0	19



#	ARTICLE	IF	CITATIONS
1914	Inserting Co and P into MoS <sub>2</sub> photocathodes: enhancing hydrogen evolution reaction catalytic performance by activating edges and basal planes with sulfur vacancies. <i>Catalysis Science and Technology</i> , 2020, 10, 6902-6909.	2.1	11
1915	2D photocatalysts with tuneable supports for enhanced photocatalytic water splitting. <i>Materials Today</i> , 2020, 41, 34-43.	8.3	36
1916	Interactions between Transition-Metal Surfaces and MoS <sub>2</sub> Monolayers: Implications for Hydrogen Evolution and CO <sub>2</sub> Reduction Reactions. <i>Journal of Physical Chemistry C</i> , 2020, 124, 20116-20124.	1.5	12
1917	Dynamic evolution and reversibility of single-atom Ni(II) active site in 1T-MoS <sub>2</sub> electrocatalysts for hydrogen evolution. <i>Nature Communications</i> , 2020, 11, 4114.	5.8	112
1918	Non-precious-metal catalysts for alkaline water electrolysis: <i>operando</i> characterizations, theoretical calculations, and recent advances. <i>Chemical Society Reviews</i> , 2020, 49, 9154-9196.	18.7	448
1919	Salmonella typhimurium detector based on the intrinsic peroxidase-like activity and photothermal effect of MoS <sub>2</sub> . <i>Mikrochimica Acta</i> , 2020, 187, 627.	2.5	14
1920	Defect-Rich Adhesive Molybdenum Disulfide/rGO Vertical Heterostructures with Enhanced Nanozyme Activity for Smart Bacterial Killing Application. <i>Advanced Materials</i> , 2020, 32, e2005423.	11.1	207
1921	CdS@MoS <sub>2</sub> Hetero-structured Nanocomposites Are Highly Effective Photo-Catalysts for Organic Dye Degradation. <i>ACS Omega</i> , 2020, 5, 27463-27469.	1.6	25
1922	Near Degeneracy of Magnetic Phases in Two-Dimensional Chromium Telluride with Enhanced Perpendicular Magnetic Anisotropy. <i>ACS Nano</i> , 2020, 14, 15256-15266.	7.3	35
1923	Promoting Electrocatalytic Hydrogen Evolution Reaction and Oxygen Evolution Reaction by Fields: Effects of Electric Field, Magnetic Field, Strain, and Light. <i>Small Methods</i> , 2020, 4, 2000494.	4.6	146
1924	Significantly increased Raman enhancement on defect-rich O-incorporated 1T-MoS <sub>2</sub> nanosheets. <i>Journal of Materials Science</i> , 2020, 55, 16374-16384.	1.7	14
1925	Defect Engineering in Metastable Phases of Transition-Metal Dichalcogenides for Electrochemical Applications. <i>Chemistry - an Asian Journal</i> , 2020, 15, 3961-3972.	1.7	8
1926	Recent Progress in Non-Precious Metal Single Atomic Catalysts for Solar and Non-Solar Driven Hydrogen Evolution Reaction. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000151.	2.7	14
1927	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. <i>Journal of Materials Chemistry A</i> , 2020, 8, 19654-19664.	5.2	41
1928	Single-Step Chemical Vapor Deposition Growth of Platinum Nanocrystal: Monolayer MoS <sub>2</sub> Dendrite Hybrid Materials for Efficient Electrocatalysis. <i>Chemistry of Materials</i> , 2020, 32, 8243-8256.	3.2	23
1929	Steer the Rheology of Solvent with Little Surfactant to Exfoliate MoS <sub>2</sub> Nanosheet by Liquid Phase Exfoliation Method. <i>Nano</i> , 2020, 15, 2050118.	0.5	3
1930	Progress and Prospects in Transition-Metal Dichalcogenide Research Beyond 2D. <i>Chemical Reviews</i> , 2020, 120, 12563-12591.	23.0	163
1931	Construction of a C@MoS <sub>2</sub> @C sandwiched heterostructure for accelerating the pH-universal hydrogen evolution reaction. <i>Chemical Communications</i> , 2020, 56, 13393-13396.	2.2	37

#	ARTICLE	IF	CITATIONS
1932	Nickel doped MoS <sub>2</sub> nanoparticles as precious-metal free bifunctional electrocatalysts for glucose assisted electrolytic H <sub>2</sub> generation. International Journal of Hydrogen Energy, 2020, 45, 32940-32948.	3.8	21
1933	Additive manufacturing assisted van der Waals integration of 3D/3D hierarchically functional nanostructures. Communications Materials, 2020, 1, .	2.9	5
1934	Boosting Solar Hydrogen Production of Molybdenum Tungsten Sulfide-Modified Si Micropyramids by Introducing Phosphate. ACS Applied Materials & Interfaces, 2020, 12, 41515-41526.	4.0	10
1935	Integrated graphene quantum dot decorated functionalized nanosheet biosensor for mycotoxin detection. Analytical and Bioanalytical Chemistry, 2020, 412, 7029-7041.	1.9	28
1936	Synthesis of Semiconducting 2H-Phase WTe <sub>2</sub> Nanosheets with Large Positive Magnetoresistance. Inorganic Chemistry, 2020, 59, 11935-11939.	1.9	17
1937	Iron-Tuned 3D Cobalt-Phosphate Catalysts for Efficient Hydrogen and Oxygen Evolution Reactions Over a Wide pH Range. ACS Sustainable Chemistry and Engineering, 2020, 8, 13793-13804.	3.2	38
1938	A new metalorganic chemical vapor deposition process for MoS <sub>2</sub> with a 1,4-diazabutadienyl stabilized molybdenum precursor and elemental sulfur. Dalton Transactions, 2020, 49, 13462-13474.	1.6	12
1939	Heterostructural Ni <sub>3</sub> S <sub>2</sub> @Fe <sub>5</sub> Ni <sub>4</sub> S <sub>8</sub> hybrids for efficient electrocatalytic oxygen evolution. Journal of Materials Science, 2020, 55, 15963-15974.	1.7	11
1940	Phase Engineering of Nanomaterials for Clean Energy and Catalytic Applications. Advanced Energy Materials, 2020, 10, 2002019.	10.2	85
1941	Recent Advances in Spatial Self-Phase Modulation with 2D Materials and its Applications. Annalen Der Physik, 2020, 532, 2000322.	0.9	32
1942	Surface Characterization of MoS <sub>2</sub> Atomic Layers Mechanically Exfoliated on a Si Substrate. Materials, 2020, 13, 3595.	1.3	5
1943	Bifunctional catalytic activity of Ni-Co layered double hydroxide for the electro-oxidation of water and methanol. Sustainable Energy and Fuels, 2020, 4, 5254-5263.	2.5	48
1944	Design of Core-Shell Quantum Dots-3D WS <sub>2</sub> Nanowall Hybrid Nanostructures with High-Performance Bifunctional Sensing Applications. ACS Nano, 2020, 14, 12668-12678.	7.3	49
1945	Boosting Electrocatalytic Hydrogen Evolution of Nickel foam Supported Nickel Hydroxide by Ruthenium Doping. ChemistrySelect, 2020, 5, 9626-9634.	0.7	4
1946	Basal plane activation in monolayer MoTe <sub>2</sub> for the hydrogen evolution reaction via phase boundaries. Journal of Materials Chemistry A, 2020, 8, 19522-19532.	5.2	19
1947	Modulation of electronic structures in two-dimensional electrocatalysts for the hydrogen evolution reaction. Chemical Communications, 2020, 56, 11910-11930.	2.2	56
1948	Modeling for Structural Engineering and Synthesis of Two-Dimensional WSe <sub>2</sub> Using a Newly Developed ReaxFF Reactive Force Field. Journal of Physical Chemistry C, 2020, 124, 28285-28297.	1.5	20
1949	Nitrogen-Doped Hierarchical Heterostructured Aerophobic MoS <sub>x</sub> /Ni <sub>3</sub> S <sub>2</sub> Nanowires by One-pot Synthesis: System Engineering and Synergistic Effect in Electrocatalysis of Hydrogen Evolution Reaction. Energy and Environmental Materials, 2021, 4, 658-663.	7.3	24

#	ARTICLE	IF	CITATIONS
1950	Coreâ€‘Shell Structured MXene@Carbon Nanodots as Bifunctional Catalysts for Solar-Assisted Water Splitting. ACS Nano, 2020, 14, 17615-17625.	7.3	66
1951	Mesoporous Thin-Film NiS <sub>2</sub> as an Idealized Pre-Electrocatalyst for a Hydrogen Evolution Reaction. ACS Catalysis, 2020, 10, 15114-15122.	5.5	58
1952	Solid-state synthesis of few-layer cobalt-doped MoS <sub>2</sub> with CoMoS phase on nitrogen-doped graphene driven by microwave irradiation for hydrogen electrocatalysis. RSC Advances, 2020, 10, 34323-34332.	1.7	14
1953	Controllable fabrication and structure evolution of hierarchical 1T-MoS <sub>2</sub> nanospheres for efficient hydrogen evolution. Green Energy and Environment, 2022, 7, 314-323.	4.7	28
1954	Highly Enhanced Gas Sensing Performance Using a 1T/2H Heterophase MoS <sub>2</sub> Field-Effect Transistor at Room Temperature. ACS Applied Materials & Interfaces, 2020, 12, 50610-50618.	4.0	64
1955	Tailoring two-dimensional nanomaterials by structural engineering for chemical and biological sensing. Sensors and Actuators Reports, 2020, 2, 100024.	2.3	8
1956	High-Performance Rechargeable Aluminumâ€‘Selenium Battery with a New Deep Eutectic Solvent Electrolyte: Thiourea-AlCl <sub>3</sub> . ACS Applied Materials & Interfaces, 2020, 12, 27064-27073.	4.0	46
1957	Bulk COFs and COF nanosheets for electrochemical energy storage and conversion. Chemical Society Reviews, 2020, 49, 3565-3604.	18.7	617
1958	One-step method to achieve multiple decorations on lamellar MoS <sub>2</sub> to synergistically enhance the electrocatalytic HER performance. Journal of Alloys and Compounds, 2020, 834, 155217.	2.8	39
1959	Largeâ€‘scale Twoâ€‘dimensional MoS <sub>2</sub> Catalyst Prepared under Mild Conditions for Enhancing Electrocatalytic Hydrogen Evolution Reaction. Chemistry - an Asian Journal, 2020, 15, 1990-1995.	1.7	0
1960	Recent advances in photodynamic therapy based on emerging two-dimensional layered nanomaterials. Nano Research, 2020, 13, 1485-1508.	5.8	36
1961	Advancement of Platinum (Pt)-Free (Non-Pt Precious Metals) and/or Metal-Free (Non-Precious-Metals) Electrocatalysts in Energy Applications: A Review and Perspectives. Energy & Fuels, 2020, 34, 6634-6695.	2.5	100
1962	Vanadium-doping in interlayer-expanded MoS <sub>2</sub> nanosheets for the efficient electrocatalytic hydrogen evolution reaction. Inorganic Chemistry Frontiers, 2020, 7, 2497-2505.	3.0	23
1963	Recent Advancement of pâ€‘and dâ€‘Block Elements, Single Atoms, and Grapheneâ€‘Based Photoelectrochemical Electrodes for Water Splitting. Advanced Energy Materials, 2020, 10, 2000280.	10.2	88
1964	Ultrathin 1T-MoS <sub>2</sub> Nanoplates Induced by Quaternary Ammonium-Type Ionic Liquids on Polypyrrole/Graphene Oxide Nanosheets and Its Irreversible Crystal Phase Transition During Electrocatalytic Nitrogen Reduction. ACS Applied Materials & Interfaces, 2020, 12, 25189-25199.	4.0	35
1965	Composition Engineeringâ€‘Triggered Bifunctionality of Freeâ€‘Standing Coralâ€‘Like 1Tâ€‘MoS <sub>2</sub> for Highly Efficient Overall Water Splitting. Energy Technology, 2020, 8, 2000268.	1.8	7
1966	Crystalline Cobalt/Amorphous LaCoO <sub>x</sub> Hybrid Nanoparticles Embedded in Porous Nitrogen-Doped Carbon as Efficient Electrocatalysts for Hydrazine-Assisted Hydrogen Production. ACS Applied Materials & Interfaces, 2020, 12, 24701-24709.	4.0	56
1967	Enhanced performance of in-plane transition metal dichalcogenides monolayers by configuring local atomic structures. Nature Communications, 2020, 11, 2253.	5.8	112

#	ARTICLE	IF	CITATIONS
1968	Design of MoS <sub>2</sub> /Graphene van der Waals Heterostructure as Highly Efficient and Stable Electrocatalyst for Hydrogen Evolution in Acidic and Alkaline Media. ACS Applied Materials & Interfaces, 2020, 12, 24777-24785.	4.0	62
1969	Fluorescence quenching of molybdenum disulfide quantum dots for metal ion sensing. Monatshefte für Chemie, 2020, 151, 729-741.	0.9	5
1970	Charge doping induced reversible multistep structural phase transitions and electromechanical actuation in two-dimensional 1Tâ€²-MoS <sub>2</sub> . Nanoscale, 2020, 12, 12541-12550.	2.8	19
1971	Activation strategies of water-splitting electrocatalysts. Journal of Materials Chemistry A, 2020, 8, 10096-10129.	5.2	67
1972	Preparation and characterization of ZnO/PEG-Co(II)-PbO <sub>2</sub> nanocomposite electrode and an investigation of the electrocatalytic degradation of phenol. Journal of Hazardous Materials, 2020, 399, 123018.	6.5	61
1973	Incorporation of pyridinic and graphitic N to Ni@ <scp>CNTs</scp> : As a competent electrocatalyst for hydrogen evolution reaction. International Journal of Energy Research, 2020, 44, 9157-9165.	2.2	18
1974	Tailoring the nanostructures of electrochemical actuators for fast response and large deformation. Nanoscale, 2020, 12, 15643-15651.	2.8	9
1975	Canonicâ€Like HER Activity of Cr<sub>1â€x</sub><sub>x</sub></i>Mo<sub>x</sub></i>B<sub>2</sub> Solid Solution: Overpowering Pt/C at High Current Density. Advanced Materials, 2020, 32, e2000855.	11.1	61
1976	2H-MoS <sub>2</sub> nanoflowers with exposed edges for hydrogen producing electrochemical cell. Materials Today Communications, 2020, 25, 101270.	0.9	6
1977	3D freestanding flower-like nickel-cobalt layered double hydroxides enriched with oxygen vacancies as efficient electrocatalysts for water oxidation. Sustainable Materials and Technologies, 2020, 25, e00170.	1.7	8
1978	Hybrid phase 1T/2H-MoS <sub>2</sub> with controllable 1T concentration and its promoted hydrogen evolution reaction. Nanoscale, 2020, 12, 11908-11915.	2.8	62
1979	Directing the Morphology of Chemical Vapor Depositionâ€Grown MoS<sub>2</sub> on Sapphire by Crystal Plane Selection. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000073.	0.8	9
1981	Direct synthesis of metastable phases of 2D transition metal dichalcogenides. Chemical Society Reviews, 2020, 49, 3952-3980.	18.7	142
1982	2D materialsâ€based flexible supercapacitors for high energy storage devices. , 2020, , 417-436.		0
1983	Wettability transition of Ni <sub>3</sub> B <sub>4</sub> -doped MoS <sub>2</sub> for hydrogen evolution reaction by magnetron sputtering. Applied Surface Science, 2020, 510, 145368.	3.1	15
1984	Ultrasensitive electrochemiluminescent immunosensing based on trimetallic Auâ€Pdâ€Pt/MoS <sub>2</sub> nanosheet as coreaction accelerator and self-enhanced ABEL-centric complex. Analytica Chimica Acta, 2020, 1125, 86-93.	2.6	17
1985	Self-supported mesoporous bitungsten carbide nanoplates electrode for efficient hydrogen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 14821-14830.	3.8	5
1986	Reticulation of 2D Semiconductors by Metalâ€Organic Approach for Efficient Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2020, 8, 8102-8110.	3.2	7

#	ARTICLE	IF	CITATIONS
1987	Oxidation of metallic two-dimensional transition metal dichalcogenides: 1T-MoS <sub>2</sub> and 1T-TaS <sub>2</sub> . 2D Materials, 2020, 7, 045005.	2.0	15
1988	Magnetic and topological properties in hydrogenated transition metal dichalcogenide monolayers. Chinese Journal of Physics, 2020, 66, 15-23.	2.0	25
1989	Why are MoS <sub>2</sub> monolayers not a good catalyst for the oxygen evolution reaction?. Applied Surface Science, 2020, 528, 146591.	3.1	40
1990	Cobalt doping of FePS <sub>3</sub> promotes intrinsic active sites for the efficient hydrogen evolution reaction. Nanoscale, 2020, 12, 14459-14464.	2.8	34
1991	Electronic coupling between molybdenum disulfide and gold nanoparticles to enhance the peroxidase activity for the colorimetric immunoassays of hydrogen peroxide and cancer cells. Journal of Colloid and Interface Science, 2020, 578, 366-378.	5.0	20
1992	Mechanism of hydrogen generation on stable Mo-edge of 2H-MoS <sub>2</sub> in water from density functional theory. Theoretical Chemistry Accounts, 2020, 139, 1.	0.5	6
1993	Electrochemical investigation of the interactions of organic and inorganic depressants on basal and edge planes of molybdenite. Journal of Colloid and Interface Science, 2020, 570, 350-361.	5.0	22
1994	Revisiting the Active Sites at the MoS <sub>2</sub> /H <sub>2</sub> O Interface via Grand-Canonical DFT: The Role of Water Dissociation. ACS Applied Materials & Interfaces, 2020, 12, 31401-31410.	4.0	36
1995	STEM imaging artifacts with three-fold astigmatism in monolayer transition metal dichalcogenides. Applied Physics Letters, 2020, 116, .	1.5	5
1997	Intercalation-Induced Disintegrated Layer-By-Layer Growth of Ultrathin Ternary Mo(Te <sub>1-x</sub> S <sub>x</sub> ) <sub>2</sub> Plates. ACS Applied Materials & Interfaces, 2020, 12, 30980-30989.	4.0	5
1998	Ni and Co-Substituted Metallic MoS <sub>2</sub> for the Alkaline Hydrogen Evolution Reaction. ChemElectroChem, 2020, 7, 3606-3615.	1.7	24
1999	FeNiMo trimetallic nanoparticles encapsulated in carbon cages as efficient hydrogen evolution reaction electrocatalysts. Materials Advances, 2020, 1, 54-60.	2.6	16
2000	Dual-Enhanced Doping in ReSe <sub>2</sub> for Efficiently Photoenhanced Hydrogen Evolution Reaction. Advanced Science, 2020, 7, 2000216.	5.6	26
2001	Engineering Phase Transformation of MoS <sub>2</sub> /RGO by N-doping as an Excellent Microwave Absorber. ACS Applied Materials & Interfaces, 2020, 12, 16831-16840.	4.0	57
2002	Scalable Synthesis of a MoS <sub>2</sub> /Black Phosphorus Heterostructure for pH-Universal Hydrogen Evolution Catalysis. ChemCatChem, 2020, 12, 2840-2848.	1.8	42
2003	Post-graphene 2D materials-based antimicrobial agents: focus on fabrication strategies and biosafety assessments. Journal of Materials Science, 2020, 55, 7226-7246.	1.7	31
2004	2D Thin Sheet Heterostructures of MoS <sub>2</sub> on MoSe <sub>2</sub> as Efficient Electrocatalyst for Hydrogen Evolution Reaction in Wide pH Range. Inorganic Chemistry, 2020, 59, 4377-4388.	1.9	41
2005	Facile Route to Achieve Co@Mo <sub>2</sub> C Encapsulated by N-Doped Carbon as Efficient Electrocatalyst for Overall Water Splitting in Alkaline Media. Journal of the Electrochemical Society, 2020, 167, 044520.	1.3	10

#	ARTICLE	IF	CITATIONS
2006	Preparation, Photophysical and Electrochemical Evaluation of an Azaborondipyrromethene/Zinc Porphyrin/Graphene Supramolecular Nanoensemble. <i>Chemistry - A European Journal</i> , 2020, 26, 6652-6661.	1.7	12
2007	Hydrogen Generation by Solar Water Splitting Using 2D Nanomaterials. <i>Solar Rrl</i> , 2020, 4, 2000050.	3.1	29
2008	Effect of reaction temperature and reaction time on the structure and properties of MoS <sub>2</sub> synthesized by hydrothermal method. <i>Vietnam Journal of Chemistry</i> , 2020, 58, 92-100.	0.7	34
2009	2D nanomaterials for electrokinetic power generation. , 2020, , 245-270.		0
2010	Facile synthesis of Fe-Ni bimetallic N-doped carbon framework for efficient electrochemical hydrogen evolution reaction. <i>Materials Today Energy</i> , 2020, 16, 100387.	2.5	26
2011	Pressure-Induced Multidimensional Assembly and Sintering of CuInS <sub>2</sub> Nanoparticles into Lamellar Nanosheets with Band Gap Narrowing. <i>ACS Applied Nano Materials</i> , 2020, 3, 2438-2446.	2.4	10
2012	Ruthenium Nanoparticles on Cobalt-Doped 1Tâ€² Phase MoS <sub>2</sub> Nanosheets for Overall Water Splitting. <i>Small</i> , 2020, 16, e2000081.	5.2	82
2013	Strain Effect on the Hydrogen Evolution Reaction of V <sub>2</sub> Mo <sub>2</sub> -SLMoS <sub>2</sub> . <i>IEEE Nanotechnology Magazine</i> , 2020, 19, 192-196.	1.1	3
2014	Synthesis of Ultrathin Metal Nanowires with Chemically Exfoliated Tungsten Disulfide Nanosheets. <i>Nano Letters</i> , 2020, 20, 3740-3746.	4.5	15
2015	Morphologically tailored nano-structured MoS <sub>2</sub> catalysts via introduction of Ni and Co ions for enhanced HER activity. <i>Applied Surface Science</i> , 2020, 516, 146094.	3.1	32
2016	Vertical kinetically oriented MoS <sub>2</sub> -Mo <sub>2</sub> N heterostructures on carbon cloth: a highly efficient hydrogen evolution electrocatalyst. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2201-2207.	2.5	28
2017	Magnetic Enhancement for Hydrogen Evolution Reaction on Ferromagnetic MoS <sub>2</sub> Catalyst. <i>Nano Letters</i> , 2020, 20, 2923-2930.	4.5	130
2018	Unravelling the Role of Metallic Cu in Cu-CuFe <sub>2</sub> O <sub>4</sub> /C Nanohybrid for Enhanced Oxygen Reduction Electrocatalysis. <i>ACS Applied Energy Materials</i> , 2020, 3, 3488-3496.	2.5	19
2019	Mechanistic and Experimental Study of the Formation of MoS <sub>2</sub> /HKUST-1 Core-Shell Composites on MoS <sub>2</sub> Quantum Dots with an Enhanced CO <sub>2</sub> Adsorption Capacity. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 5808-5817.	1.8	12
2020	An earth-abundant bimetallic catalyst coated metallic nanowire grown electrode with platinum-like pH-universal hydrogen evolution activity at high current density. <i>Chemical Science</i> , 2020, 11, 3893-3902.	3.7	42
2021	A Scalable Interfacial Engineering Strategy for a Finely Tunable, Homogeneous MoS <sub>2</sub> /rGO-Based HER Catalytic Structure. <i>Advanced Materials Interfaces</i> , 2020, 7, 1902022.	1.9	18
2022	Optimized Metal Chalcogenides for Boosting Water Splitting. <i>Advanced Science</i> , 2020, 7, 1903070.	5.6	190
2023	Construction of Active Orbital via Single-Atom Cobalt Anchoring on the Surface of 1T-MoS <sub>2</sub> Basal Plane toward Efficient Hydrogen Evolution. <i>ACS Applied Energy Materials</i> , 2020, 3, 2315-2322.	2.5	50

#	ARTICLE	IF	CITATIONS
2024	Squeezed metallic droplet with tunable Kubo gap and charge injection in transition metal dichalcogenides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 6362-6369.	3.3	33
2025	Recent Advances in Atomic-Level Engineering of Nanostructured Catalysts for Electrochemical CO <sub>2</sub> Reduction. <i>Advanced Functional Materials</i> , 2020, 30, 1910534.	7.8	100
2026	Engineered 2D Transition Metal Dichalcogenides—A Vision of Viable Hydrogen Evolution Reaction Catalysis. <i>Advanced Energy Materials</i> , 2020, 10, 1903870.	10.2	169
2027	Design Strategies for Development of TMD-Based Heterostructures in Electrochemical Energy Systems. <i>Matter</i> , 2020, 2, 526-553.	5.0	312
2028	Salt-Assisted Synthesis of 2D Materials. <i>Advanced Functional Materials</i> , 2020, 30, 1908486.	7.8	115
2029	Transition metal based battery-type electrodes in hybrid supercapacitors: A review. <i>Energy Storage Materials</i> , 2020, 28, 122-145.	9.5	413
2030	Self-assembly of 0D/2D homostructure for enhanced hydrogen evolution. <i>Materials Today</i> , 2020, 36, 83-90.	8.3	24
2031	Co@N-doped carbon nanomaterial derived by simple pyrolysis of mixed-ligand MOF as an active and stable oxygen evolution electrocatalyst. <i>Applied Surface Science</i> , 2020, 529, 147081.	3.1	36
2032	Extraordinary lithium storage capacity and lithiation mechanism of partially amorphous molybdenum sulfide on chemically exfoliated graphene. <i>Electrochimica Acta</i> , 2020, 354, 136636.	2.6	10
2033	Two-Dimensional Layered Materials: High-Efficient Electrocatalysts for Hydrogen Evolution Reaction. <i>ACS Applied Nano Materials</i> , 2020, 3, 6270-6296.	2.4	70
2034	Engineering Mo-O-C interface in MoS <sub>2</sub> @rGO via charge transfer boosts hydrogen evolution. <i>Chemical Engineering Journal</i> , 2020, 399, 126018.	6.6	49
2035	Photoinduced charge transfer in transition metal dichalcogenide heterojunctions—towards next generation energy technologies. <i>Energy and Environmental Science</i> , 2020, 13, 2684-2740.	15.6	67
2036	Synthesis of an iron-doped 3D-ordered mesoporous cobalt phosphide material toward efficient electrocatalytic overall water splitting. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 3002-3010.	3.0	22
2037	MoS <sub>2</sub> /NiS core-shell structures for improved electrocatalytic process of hydrogen evolution. <i>Journal of Power Sources</i> , 2020, 472, 228497.	4.0	33
2038	Boosting hydrogen evolution on MoS <sub>2</sub> via co-confining selenium in surface and cobalt in inner layer. <i>Nature Communications</i> , 2020, 11, 3315.	5.8	229
2039	Electrospun fibrous active bimetallic electrocatalyst for hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 21502-21511.	3.8	20
2040	Nickel-cobalt bimetallic sulfide NiCo <sub>2</sub> S <sub>4</sub> nanostructures for a robust hydrogen evolution reaction in acidic media. <i>RSC Advances</i> , 2020, 10, 22196-22203.	1.7	14
2041	Influence of Surface Chemistry on Water Absorption in Functionalized Germanane. <i>Chemistry of Materials</i> , 2020, 32, 1537-1544.	3.2	8

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2042	Environmental friendly synthesis of hierarchical mesoporous platinum nanoparticles templated by fucoidan biopolymer for enhanced hydrogen evolution reaction. <i>Journal of Materials Science and Technology</i> , 2020, 46, 185-190.	5.6	8
2043	Graphene and molybdenum disulphide hybrids for energy applications: an update. <i>Materials Today Advances</i> , 2020, 6, 100053.	2.5	24
2044	Contacts for Molybdenum Disulfide: Interface Chemistry and Thermal Stability. <i>Materials</i> , 2020, 13, 693.	1.3	8
2045	Distinctive Improved Synthesis and Application Extensions Graphdiyne for Efficient Photocatalytic Hydrogen Evolution. <i>ChemCatChem</i> , 2020, 12, 1985-1995.	1.8	60
2046	Copper halide diselenium: predicted two-dimensional materials with ultrahigh anisotropic carrier mobilities. <i>RSC Advances</i> , 2020, 10, 8016-8026.	1.7	10
2047	Visible-light driven photocatalytic hydrogen generation by water-soluble all-inorganic core-shell silicon quantum dots. <i>Journal of Materials Chemistry A</i> , 2020, 8, 15789-15794.	5.2	15
2048	Bottom-Up Synthesized MoS <sub>2</sub> Interfacing Polymer Carbon Nanodots with Electrocatalytic Activity for Hydrogen Evolution. <i>Chemistry - A European Journal</i> , 2020, 26, 6635-6642.	1.7	12
2049	Molybdenum disulfide with enlarged interlayer spacing decorated on reduced graphene oxide for efficient electrocatalytic hydrogen evolution. <i>Journal of Materials Science</i> , 2020, 55, 6637-6647.	1.7	59
2050	A first-principles study of nitrogene with monovacancy and light-atom substituted doping. <i>Nanotechnology</i> , 2020, 31, 205202.	1.3	3
2051	Structure and Dynamics of the Electronic Heterointerfaces in MoS <sub>2</sub> by First-Principles Simulations. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1644-1649.	2.1	9
2052	Current Trends in Pickering Emulsions: Particle Morphology and Applications. <i>Engineering</i> , 2020, 6, 468-482.	3.2	266
2053	3D Graphene-Based H <sub>2</sub> Production Photocatalyst and Electrocatalyst. <i>Advanced Energy Materials</i> , 2020, 10, 1903802.	10.2	199
2054	Co-doped 1T $\epsilon$ /T phase dominated MoS <sub>1</sub> +XSe <sub>1</sub> +Y alloy nanosheets as bifunctional electrocatalyst for overall water splitting. <i>Applied Surface Science</i> , 2020, 513, 145828.	3.1	10
2055	Accelerated Dinitrogen Electroreduction to Ammonia via Interfacial Polarization Triggered by Single-Atom Protrusions. <i>CheM</i> , 2020, 6, 885-901.	5.8	223
2056	Electrocatalyst engineering and structure-activity relationship in hydrogen evolution reaction: From nanostructures to single atoms. <i>Science China Materials</i> , 2020, 63, 921-948.	3.5	76
2057	Coupling of bowl-like VS <sub>2</sub> nanosheet arrays and carbon nanofiber enables ultrafast Na <sup>+</sup> -Storage and robust flexibility for sodium-ion hybrid capacitors. <i>Energy Storage Materials</i> , 2020, 28, 91-100.	9.5	82
2058	The effect of ionic liquid compounds on the exfoliation of the two-dimensional layer of molybdenum disulfide. <i>Microporous and Mesoporous Materials</i> , 2020, 299, 110127.	2.2	1
2059	Highly disordered cobalt oxide nanostructure induced by sulfur incorporation for efficient overall water splitting. <i>Nano Energy</i> , 2020, 71, 104652.	8.2	105



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2060	1T- and 2H-mixed phase MoS <sub>2</sub> nanosheets coated on hollow mesoporous TiO <sub>2</sub> nanospheres with enhanced photocatalytic activity. <i>Journal of Colloid and Interface Science</i> , 2020, 567, 10-17.	5.0	29
2061	Novel MoS <sub>2</sub> –DOPO Hybrid for Effective Enhancements on Flame Retardancy and Smoke Suppression of Flexible Polyurethane Foams. <i>ACS Omega</i> , 2020, 5, 2734-2746.	1.6	34
2062	ZIF-derived porous carbon composites coated on NiCo <sub>2</sub> S <sub>4</sub> nanotubes array toward efficient water splitting. <i>Nanotechnology</i> , 2020, 31, 195402.	1.3	8
2063	<i>In situ</i> surface-derivation of AgPdMo/MoS <sub>2</sub> nanowires for synergistic hydrogen evolution catalysis in alkaline solution. <i>Nanoscale</i> , 2020, 12, 6472-6479.	2.8	9
2064	A nanostructured MoO <sub>2</sub> /MoS <sub>2</sub> /MoP heterojunction electrocatalyst for the hydrogen evolution reaction. <i>Nanotechnology</i> , 2020, 31, 225403.	1.3	24
2065	First-principles calculations of the electronic properties of two-dimensional pentagonal structure XS <sub>2</sub> (X=Ni, Pd, Pt). <i>Vacuum</i> , 2020, 174, 109176.	1.6	35
2066	Construction of Hybrid MoS <sub>2</sub> Phase Coupled with SiC Heterojunctions with Promoted Photocatalytic Activity for 4-Nitrophenol Degradation. <i>Langmuir</i> , 2020, 36, 1174-1182.	1.6	41
2067	Synthesis of two-dimensional nanomaterials. , 2020, , 35-71.		10
2068	Theoretical Analysis of Surface Active Sites in Defective 2H and 1T MoS <sub>2</sub> Polymorphs for Hydrogen Evolution Reaction: Quantifying the Total Activity of Point Defects. <i>Advanced Theory and Simulations</i> , 2020, 3, 1900213.	1.3	17
2069	The Rise of 2D Photothermal Materials beyond Graphene for Clean Water Production. <i>Advanced Science</i> , 2020, 7, 1902236.	5.6	206
2070	Iron-doped nickel cobalt ternary phosphide hyperbranched hierarchical arrays for efficient overall water splitting. <i>Electrochimica Acta</i> , 2020, 334, 135633.	2.6	38
2071	Rational design of stable sulfur vacancies in molybdenum disulfide for hydrogen evolution. <i>Journal of Catalysis</i> , 2020, 382, 320-328.	3.1	26
2072	Developing Indium-based Ternary Spinel Selenides for Efficient Solid Flexible Zn-Air Batteries and Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 8115-8123.	4.0	38
2073	Engineering Substrate Interaction To Improve Hydrogen Evolution Catalysis of Monolayer MoS <sub>2</sub> Films beyond Pt. <i>ACS Nano</i> , 2020, 14, 1707-1714.	7.3	97
2074	Surface electron state engineering enhanced hydrogen evolution of hierarchical molybdenum disulfide in acidic and alkaline media. <i>Applied Catalysis B: Environmental</i> , 2020, 266, 118649.	10.8	55
2075	Tuning the electronic, mechanical, thermal, and optical properties of tetrahexcarbon via hydrogenation. <i>Carbon</i> , 2020, 161, 71-82.	5.4	31
2076	Incorporation of active phase in porous MoS <sub>2</sub> for enhanced hydrogen evolution reaction. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 4121-4128.	1.1	3
2077	Two-dimensional materials for energy conversion and storage. <i>Progress in Materials Science</i> , 2020, 111, 100637.	16.0	134

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2078	Near-Infrared Light-Switched MoS <sub>2</sub> Nanoflakes@Gelatin BioplatforM for Capture, Detection, and Nondestructive Release of Circulating Tumor Cells. <i>Analytical Chemistry</i> , 2020, 92, 3111-3117.	3.2	28
2079	Metallicity of 2H-MoS <sub>2</sub> induced by Au hybridization. <i>2D Materials</i> , 2020, 7, 025021.	2.0	17
2080	Silicon diphosphide (SiP <sub>2</sub> ) and silicon diarsenide (SiAs <sub>2</sub> ): Novel stable 2D semiconductors with high carrier mobilities, promising for water splitting photocatalysts. <i>Materials Today Energy</i> , 2020, 16, 100377.	2.5	33
2081	Transition metal dichalcogenides-based flexible gas sensors. <i>Sensors and Actuators A: Physical</i> , 2020, 303, 111875.	2.0	125
2082	AgO-decorated multi-dimensional chrysanthemum-like NiCo <sub>2</sub> O <sub>4</sub> mounted on nickel foam as a highly efficient and stable electrocatalyst for the oxygen evolution reaction. <i>Nanoscale</i> , 2020, 12, 7180-7187.	2.8	21
2083	Structural Phase Catalytic Redox Reactions in Energy and Environmental Applications. <i>Advanced Materials</i> , 2020, 32, e1905739.	11.1	56
2084	Molecular Semiconductors for Logic Operations: Dead End or Bright Future?. <i>Advanced Materials</i> , 2020, 32, e1905909.	11.1	135
2085	1T phase boosted MoSe <sub>2</sub> /pg-C <sub>3</sub> N <sub>4</sub> with Z-scheme heterojunction for enhanced photocatalytic degradation of contaminants. <i>Applied Surface Science</i> , 2020, 510, 145341.	3.1	35
2086	2D Hybrid Superlattice-Based On-Chip Electrocatalytic Microdevice for <i>in Situ</i> Revealing Enhanced Catalytic Activity. <i>ACS Nano</i> , 2020, 14, 1635-1644.	7.3	36
2087	The main factor to improve the performance of CoSe <sub>2</sub> for photocatalytic CO <sub>2</sub> reduction: element doping or phase transformation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 4457-4463.	5.2	23
2088	Ultrasensitive Plasmon-Free Surface-Enhanced Raman Spectroscopy with Femtomolar Detection Limit from 2D van der Waals Heterostructure. <i>Nano Letters</i> , 2020, 20, 1620-1630.	4.5	60
2089	Highly efficient removal of Cr(VI) from water based on graphene oxide incorporated flower-like MoS <sub>2</sub> nanocomposite prepared in situ hydrothermal synthesis. <i>Environmental Science and Pollution Research</i> , 2020, 27, 13882-13894.	2.7	23
2090	Achieving Rich and Active Alkaline Hydrogen Evolution Heterostructures via Interface Engineering on 2D 1T-MoS <sub>2</sub> Quantum Sheets. <i>Advanced Functional Materials</i> , 2020, 30, 2000551.	7.8	83
2091	Electron Density Modulation of Metallic MoO <sub>2</sub> by Ni Doping to Produce Excellent Hydrogen Evolution and Oxidation Activities in Acid. <i>ACS Energy Letters</i> , 2020, 5, 1908-1915.	8.8	110
2092	Stability of 2H- and 1T-MoS <sub>2</sub> in the presence of aqueous oxidants and its protection by a carbon shell. <i>RSC Advances</i> , 2020, 10, 9324-9334.	1.7	10
2093	Programmable Synapse-Like MoS <sub>2</sub> Field-Effect Transistors Phase-Engineered by Dynamic Lithium Ion Modulation. <i>Advanced Electronic Materials</i> , 2020, 6, 1901410.	2.6	13
2094	Recent Advances in Layered Tungsten Disulfide as Electrocatalyst for Water Splitting. <i>ChemCatChem</i> , 2020, 12, 4962-4999.	1.8	39
2095	Feasibility of N <sub>2</sub> Reduction on the V Anchored 1T-MoS <sub>2</sub> Monolayer: A Density Functional Theory Study. <i>ChemPhysChem</i> , 2020, 21, 1235-1242.	1.0	14

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2096	A review and perspective on molybdenum-based electrocatalysts for hydrogen evolution reaction. <i>Rare Metals</i> , 2020, 39, 335-351.	3.6	196
2097	Computational screening for enhanced hydrogen sensing by doped-2H and pristine-1T MoS <sub>2</sub> . <i>Chemical Physics Letters</i> , 2020, 749, 137450.	1.2	11
2098	First-Principles Study of Fluorinated Tetrahexacarbon: Stable Configurations, Thermal, Mechanical, and Electronic Properties. <i>Journal of Physical Chemistry C</i> , 2020, 124, 8225-8235.	1.5	16
2099	Combinatorial Design and Computational Screening of Two-Dimensional Transition Metal Trichalcogenide Monolayers: Toward Efficient Catalysts for Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3192-3197.	2.1	26
2100	Plasma-Assisted Controllable Doping of Nitrogen into MoS <sub>2</sub> Nanosheets as Efficient Nanozymes with Enhanced Peroxidase-Like Catalysis Activity. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 17547-17556.	4.0	97
2101	Electrokinetic Analysis of Poorly Conductive Electrocatalytic Materials. <i>ACS Catalysis</i> , 2020, 10, 4990-4996.	5.5	43
2102	Printable Highly Stable and Superfast Humidity Sensor Based on Two Dimensional Molybdenum Diselenide. <i>Scientific Reports</i> , 2020, 10, 5509.	1.6	36
2103	Partially hydroxylated ultrathin iridium nanosheets as efficient electrocatalysts for water splitting. <i>National Science Review</i> , 2020, 7, 1340-1348.	4.6	56
2104	Two-Dimensional Transition Metal Dichalcogenides: Synthesis, Biomedical Applications and Biosafety Evaluation. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 236.	2.0	76
2105	Single-crystalline CoFe nanoparticles encapsulated in N-doped carbon nanotubes as a bifunctional catalyst for water splitting. <i>Materials Chemistry Frontiers</i> , 2020, 4, 2307-2313.	3.2	32
2106	2D transition metal dichalcogenides, carbides, nitrides, and their applications in supercapacitors and electrocatalytic hydrogen evolution reaction. <i>Applied Physics Reviews</i> , 2020, 7, 021304.	5.5	126
2107	Synergistic effect of cobalt boride nanoparticles on MoS <sub>2</sub> nanoflowers for a highly efficient hydrogen evolution reaction in alkaline media. <i>Nanoscale</i> , 2020, 12, 10158-10165.	2.8	24
2108	Investigation of potassium-intercalated bulk MoS <sub>2</sub> transmission electron energy-loss spectroscopy. <i>Physical Review B</i> , 2020, 101, .	1.5	15
2109	Atomically thin defect-rich Ni-Se-S hybrid nanosheets as hydrogen evolution reaction electrocatalysts. <i>Nano Research</i> , 2020, 13, 2056-2062.	5.8	39
2110	Ultrastable molybdenum disulfide-based electrocatalyst for hydrogen evolution in acidic media. <i>Journal of Power Sources</i> , 2020, 456, 227998.	4.0	23
2111	Tuning the electronic structure of NiSe <sub>2</sub> nanosheets by Mn dopant for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 12237-12243.	3.8	26
2112	Effect of Mo content on hydrogen evolution reaction activity of Mo <sub>2</sub> C/C electrocatalysts. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 12691-12701.	3.8	30
2113	One-pot synthesis of ruthenium nanoparticles embedded nitrogen-doped carbon framework for electrocatalytic hydrogen evolution reaction. <i>Inorganic Chemistry Communication</i> , 2020, 116, 107914.	1.8	13

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2114	Facile synthesis of few-layer and ordered K-promoted MoS <sub>2</sub> nanosheets supported on SBA-15 and their potential application for heterogeneous catalysis. <i>Journal of Catalysis</i> , 2020, 385, 107-119.	3.1	16
2115	Solvothermal Synthesis of Defect-Rich Mixed 1T-2H MoS <sub>2</sub> Nanoflowers for Enhanced Hydrodesulfurization. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 7343-7352.	3.2	76
2116	Highly sensitive endotoxin detection using a gold nanoparticle loaded layered molybdenum disulfide-polyacrylic acid nanocomposite. <i>Analyst</i> , The, 2020, 145, 3939-3947.	1.7	14
2117	2D molybdenum disulphide nanosheets incorporated with single heteroatoms for the electrochemical hydrogen evolution reaction. <i>Nanoscale</i> , 2020, 12, 10447-10455.	2.8	14
2118	Nature and origin of unusual properties in chemically exfoliated 2D MoS <sub>2</sub> . <i>APL Materials</i> , 2020, 8, 040909.	2.2	9
2119	Liquid phase exfoliation of GeS nanosheets in ambient conditions for lithium ion battery applications. <i>2D Materials</i> , 2020, 7, 035015.	2.0	25
2120	The coupling of experiments with density functional theory in the studies of the electrochemical hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8783-8812.	5.2	33
2121	2D Transition Metal Dichalcogenides: Design, Modulation, and Challenges in Electrocatalysis. <i>Advanced Materials</i> , 2021, 33, e1907818.	11.1	284
2122	Synthesis of metallic mixed 3R and 2H Nb <sub>1+x</sub> S <sub>2</sub> nanoflakes by chemical vapor deposition. <i>Faraday Discussions</i> , 2021, 227, 332-340.	1.6	2
2123	High-precision regulation synthesis of Fe-doped Co <sub>2</sub> P nanorod bundles as efficient electrocatalysts for hydrogen evolution in all-pH range and seawater. <i>Journal of Energy Chemistry</i> , 2021, 55, 92-101.	7.1	89
2124	MoS <sub>2</sub> induced hollow Cu <sub>2</sub> O spheres: Synthesis and efficient catalytic performance in the reduction of 4-nitrophenol by NaBH <sub>4</sub> . <i>Applied Surface Science</i> , 2021, 539, 148285.	3.1	26
2125	Active Edge Site Exposed Ni(OH) <sub>2</sub> Nanosheets on Stainless Steel Mesh as a Versatile Electrocatalyst for the Oxidation of Urea, Hydrazine, and Water. <i>ChemCatChem</i> , 2021, 13, 1165-1174.	1.8	13
2126	An account of the strategies to enhance the water splitting efficiency of noble-metal-free electrocatalysts. <i>Journal of Energy Chemistry</i> , 2021, 59, 160-190.	7.1	48
2127	Interplay between transition-metal dopants and sulfur vacancies in MoS <sub>2</sub> electrocatalyst. <i>Surface Science</i> , 2021, 704, 121759.	0.8	20
2128	Inducing two-dimensional single crystal TiN arrays with exposed {1 1 1} facets by a novel chemical vapor deposition with excellent electrocatalytic activity for hydrogen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 404, 126451.	6.6	5
2129	Electrocatalytic reduction of Cr(VI) over heterophase MoS <sub>2</sub> film electrode. <i>Chemical Engineering Journal</i> , 2021, 404, 126556.	6.6	25
2130	Improved hydrogen evolution activity by unique NiS <sub>2</sub> -MoS <sub>2</sub> heterostructures with misfit lattices supported on poly(ionic liquid)s functionalized polypyrrole/graphene oxide nanosheets. <i>Chemical Engineering Journal</i> , 2021, 404, 126253.	6.6	23
2131	Enhanced activity and stability of MoS <sub>2</sub> through enriching 1T-phase by covalent functionalization for energy conversion applications. <i>Chemical Engineering Journal</i> , 2021, 403, 126318.	6.6	63

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2132	Freestanding nanosheets of 1T-2H hybrid MoS <sub>2</sub> as electrodes for efficient sodium storage. <i>Journal of Materials Science and Technology</i> , 2021, 67, 237-242.	5.6	26
2133	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
2134	The mechanism and surface engineering of carbon encapsulate defects-rich molybdenum phosphide for the hydrogen evolution reaction in alkaline media. <i>Journal of Alloys and Compounds</i> , 2021, 850, 156737.	2.8	16
2135	Hierarchical molybdenum disulfide nanosheet arrays stemmed from nickel-cobalt layered double hydroxide/carbon cloth for highly-efficient hydrogen evolution reaction. <i>Journal of Energy Chemistry</i> , 2021, 57, 587-592.	7.1	31
2136	Chelation-mediated in-situ formation of ultrathin cobalt (oxy)hydroxides on hematite photoanode towards enhanced photoelectrochemical water oxidation. <i>Journal of Energy Chemistry</i> , 2021, 56, 152-161.	7.1	34
2137	Recent advances in structural engineering of molybdenum disulfide for electrocatalytic hydrogen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 405, 127013.	6.6	91
2138	Electricity generation from phase-engineered flexible MoS <sub>2</sub> nanosheets under moisture. <i>Nano Energy</i> , 2021, 81, 105630.	8.2	41
2139	Enhancement of 1T-MoS <sub>2</sub> Superambient Temperature Stability and Hydrogen Evolution Performance by Intercalating a Phenanthroline Monolayer. <i>ChemNanoMat</i> , 2021, 7, 447-456.	1.5	11
2140	Two-dimensional MoS <sub>2</sub> for hydrogen evolution reaction catalysis: The electronic structure regulation. <i>Nano Research</i> , 2021, 14, 1985-2002.	5.8	98
2141	Electrochemical hydrogen-storage performance of copper sulfide micro-hexagons. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 5530-5536.	3.8	16
2142	Adopting sulfur-atom sharing strategy to construct CoS <sub>2</sub> /MoS <sub>2</sub> heterostructure on three-dimensional nitrogen-doped graphene aerogels: A novel photocatalyst for wastewater treatment. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104771.	3.3	11
2143	Hydrogen Evolution Reaction for Vacancy-Ordered MXenes and the Impact of Proton Absorption into the Vacancies. <i>Advanced Sustainable Systems</i> , 2021, 5, 2000158.	2.7	27
2144	Nb <sub>4</sub> C <sub>3</sub> T <sub>x</sub> (MXene) as a new stable catalyst for the hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 1955-1966.	3.8	62
2145	Self-supported MoO <sub>2</sub> /MoS <sub>2</sub> nano-sheets embedded in a carbon cloth as a binder-free substrate for high-energy lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2021, 367, 137482.	2.6	24
2146	Design of metal-organic frameworks (MOFs)-based photocatalyst for solar fuel production and photo-degradation of pollutants. <i>Chinese Journal of Catalysis</i> , 2021, 42, 872-903.	6.9	73
2147	Nanosized Co <sub>3</sub> O <sub>4</sub> -MoS <sub>2</sub> heterostructure electrodes for improving the oxygen evolution reaction in an alkaline medium. <i>Journal of Alloys and Compounds</i> , 2021, 853, 156946.	2.8	33
2148	Solvothermal decoration of Cu <sub>3</sub> Sn <sub>4</sub> on reduced graphene oxide for enhanced electrocatalytic hydrogen evolution reaction. <i>Environmental Progress and Sustainable Energy</i> , 2021, 40, e13558.	1.3	12
2149	3D flexible W <sub>x</sub> V <sub>1-x</sub> Se <sub>2</sub> nanoplates arrays on carbon cloth as an novel efficient hydrogen evolution electrocatalysts. <i>Applied Surface Science</i> , 2021, 540, 148297.	3.1	7

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2150	Hydrogen electrocatalysis revisited: Weak bonding of adsorbed hydrogen as the design principle for active electrode materials. <i>Current Opinion in Electrochemistry</i> , 2021, 26, 100673.	2.5	18
2151	MoS <sub>2</sub> /Co <sub>9</sub> S <sub>8</sub> /MoC heterostructure connected by carbon nanotubes as electrocatalyst for efficient hydrogen evolution reaction. <i>Journal of Materials Science and Technology</i> , 2021, 79, 29-34.	5.6	28
2152	Band-gap-energy-adjustable and noble-metal-free modified NiS-Zn Cd <sub>1</sub> -S for highly efficient visible-light-driven Cr <sup>6+</sup> photoreduction in alkaline wastewater. <i>Journal of Physics and Chemistry of Solids</i> , 2021, 150, 109893.	1.9	11
2153	Enhanced N <sub>2</sub> affinity of 1T-MoS <sub>2</sub> with a unique pseudo-six-membered ring consisting of N-Li-Mo-Mo for high ambient ammonia electrosynthesis performance. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1230-1239.	5.2	44
2154	Nanoconical active structures prepared by anodization and deoxidation of molybdenum foil and their activity origin. <i>Journal of Alloys and Compounds</i> , 2021, 851, 156896.	2.8	6
2155	Exfoliated Molybdenum Disulfide-Wrapped CdS Nanoparticles as a Nano-Heterojunction for Photo-Electrochemical Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 438-448.	4.0	22
2156	Hierarchical few-layer fluorine-free Ti <sub>3</sub> C <sub>2</sub> T <sub>X</sub> (T = O, F) ETQq0 0 0 rgBT /Overlock 10 Tf 50 507 Td Chemistry A, 2021, 9, 922-927.	5.2	29
2157	Recent advances in electrochemical techniques for characterizing surface properties of minerals. <i>Advances in Colloid and Interface Science</i> , 2021, 288, 102346.	7.0	28
2158	Tunable optical properties of SiO <sub>2</sub> /Ag double-layer and SiO <sub>2</sub> /Ag/SiO <sub>2</sub> triple-layer hybrid structures. <i>Physica B: Condensed Matter</i> , 2021, 605, 412772.	1.3	2
2159	Molecular Understanding of Charge Storage in MoS <sub>2</sub> Supercapacitors with Ionic Liquids. <i>Energy and Environmental Materials</i> , 2021, 4, 631-637.	7.3	20
2160	A highly active selenized nickel-iron electrode with layered double hydroxide for electrocatalytic water splitting in saline electrolyte. <i>Materials Today Energy</i> , 2021, 19, 100575.	2.5	25
2161	Relativistic structural characterization of molybdenum and tungsten disulfide materials. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26492.	1.0	4
2162	Amorphous CoMoS <sub>x</sub> /N-Doped Carbon Hybrid with 3D Networks as Electrocatalysts for Hydrogen Evolution. <i>Catalysis Letters</i> , 2021, 151, 1720-1727.	1.4	4
2163	Boosting $\text{pH}$ -Universal Hydrogen Evolution of Molybdenum Disulfide Particles by Interfacial Engineering. <i>Chinese Journal of Chemistry</i> , 2021, 39, 288-294.	2.6	18
2164	In situ growth of NiSe@Co <sub>0.85</sub> Se heterointerface structure with electronic modulation on nickel foam for overall water splitting. <i>Rare Metals</i> , 2021, 40, 1373-1382.	3.6	87
2165	Non-noble metal single-atom catalyst of Co <sub>1</sub> /MXene (Mo <sub>2</sub> CS <sub>2</sub> ) for CO oxidation. <i>Science China Materials</i> , 2021, 64, 651-663.	3.5	44
2166	Toward Active-Site Tailoring in Heterogeneous Catalysis by Atomically Precise Metal Nanoclusters with Crystallographic Structures. <i>Chemical Reviews</i> , 2021, 121, 567-648.	23.0	361
2167	Strategies to improve electrocatalytic and photocatalytic performance of two-dimensional materials for hydrogen evolution reaction. <i>Chinese Journal of Catalysis</i> , 2021, 42, 511-556.	6.9	131

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2168	Atomistic modeling of electrocatalysis: Are we there yet?. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2021, 11, e1499.	6.2	79
2169	Engineering metallic MoS <sub>2</sub> monolayers with responsive hydrogen evolution electrocatalytic activities for enzymatic reaction monitoring. Journal of Materials Chemistry A, 2021, 9, 11056-11063.	5.2	13
2170	Synthesis of MoS <sub>2</sub> materials for photocatalysis applications and pollution abatement. , 2021, , 283-300.		0
2171	Profuse Surface Activation of Ir-Dispersed Titanium Nitride Bifunctional Electrocatalysts. Advanced Energy and Sustainability Research, 2021, 2, 2000054.	2.8	5
2172	Synthesis of MoS <sub>2</sub> /Ni-metal-organic framework composites as efficient electrocatalysts for hydrogen evolution reactions. International Journal of Energy Research, 2021, 45, 9638-9647.	2.2	32
2173	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. Journal of Materials Chemistry A, 2021, 9, 13996-14003.	5.2	17
2174	Realization of Wafer-Scale 1T-MoS <sub>2</sub> Film for Efficient Hydrogen Evolution Reaction. ChemSusChem, 2021, 14, 1344-1350.	3.6	21
2175	MoS <sub>2</sub> Nanoribbons with a Prolonged Photoresponse Lifetime for Enhanced Visible Light Photoelectrocatalytic Hydrogen Evolution. Inorganic Chemistry, 2021, 60, 1991-1997.	1.9	14
2176	Hierarchical MnCo <sub>2</sub> O <sub>4</sub> nanowire@NiFe layered double hydroxide nanosheet heterostructures on Ni foam for overall water splitting. CrystEngComm, 2021, 23, 7141-7150.	1.3	8
2177	Co <sub>9</sub> S <sub>8</sub> Nanoparticles for Hydrogen Evolution. ACS Applied Nano Materials, 2021, 4, 1776-1785.	2.4	33
2178	Two-dimensional biomaterials: material science, biological effect and biomedical engineering applications. Chemical Society Reviews, 2021, 50, 11381-11485.	18.7	129
2179	1T Phase Transition Metal Dichalcogenides for Hydrogen Evolution Reaction. Electrochemical Energy Reviews, 2021, 4, 194-218.	13.1	65
2180	Synthesis and characterization of 2D materials. , 2021, , 77-104.		2
2181	Biomimetic 2D-Ni(Co,Fe)P/1D-WO <sub>x</sub> nanocoral reef electrocatalysts for efficient water splitting. Journal of Materials Chemistry A, 2021, 9, 10909-10920.	5.2	28
2182	Metal, Metal Oxides, and Metal Sulfide Roles in Fuel Cell. Environmental Chemistry for A Sustainable World, 2021, , 115-145.	0.3	0
2183	Two-dimensional materials-based nanoplatfoms for lung cancer management: Synthesis, properties, and targeted therapy. , 2021, , 415-429.		1
2184	Facilitating electrocatalytic hydrogen evolution via multifunctional tungsten@tungsten disulfide core-shell nanospheres. Journal of Materials Chemistry A, 2021, 9, 9272-9280.	5.2	13
2185	Synergistic effect of cocatalytic NiSe <sub>2</sub> on stable 1T-MoS <sub>2</sub> for hydrogen evolution. RSC Advances, 2021, 11, 6842-6849.	1.7	7

#	ARTICLE	IF	CITATIONS
2186	One-step synthesis of single-site vanadium substitution in 1T-WS <sub>2</sub> monolayers for enhanced hydrogen evolution catalysis. <i>Nature Communications</i> , 2021, 12, 709.	5.8	137
2187	Computational design of a switchable heterostructure electrocatalyst based on a two-dimensional ferroelectric In <sub>2</sub> Se <sub>3</sub> material for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11553-11562.	5.2	15
2188	Facile synthesis of bimetallic-based CoMoO <sub>4</sub> /MoO <sub>2</sub> /CoP oxidized/phosphide nanorod arrays electroplated with FeOOH for efficient overall seawater splitting. <i>CrystEngComm</i> , 2021, 23, 6778-6791.	1.3	4
2189	Tailoring the d-band center of N-doped carbon nanotube arrays with Co <sub>4</sub> N nanoparticles and single-atom Co for a superior hydrogen evolution reaction. <i>NPG Asia Materials</i> , 2021, 13, .	3.8	95
2190	A palladium doped 1T-phase molybdenum disulfide/black phosphorene two-dimensional van der Waals heterostructure for visible-light enhanced electrocatalytic hydrogen evolution. <i>Nanoscale</i> , 2021, 13, 5892-5900.	2.8	16
2191	Thermally stable fishnet-like 1T-MoS <sub>2</sub> /CNT heterostructures with improved electrode performance. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4707-4715.	5.2	21
2192	Hybrid structure of PbS QDs and vertically-few-layer MoS <sub>2</sub> nanosheets array for broadband photodetector. <i>Nanotechnology</i> , 2021, 32, 145602.	1.3	8
2193	Electrocatalytic hydrogenation of furfural using non-noble-metal electrocatalysts in alkaline medium. <i>Green Chemistry</i> , 2021, 23, 4201-4212.	4.6	34
2194	An Electrochemical Nanosensor Using a Screen-Printed Electrode Modified with 1T-MoS <sub>2</sub> /Nafion for Determination of Renin Inhibitor Aliskiren. <i>Journal of the Electrochemical Society</i> , 2021, 168, 017509.	1.3	1
2195	Tuning of structural and optical properties with enhanced catalytic activity in chemically synthesized Co-doped MoS <sub>2</sub> nanosheets. <i>RSC Advances</i> , 2021, 11, 1303-1319.	1.7	29
2196	Influence of the choice of precursors on the synthesis of two-dimensional transition metal dichalcogenides. <i>Dalton Transactions</i> , 2021, 50, 12365-12385.	1.6	20
2197	Millisecond Conversion of Metastable 2D Materials by Flash Joule Heating. <i>ACS Nano</i> , 2021, 15, 1282-1290.	7.3	48
2198	Transition metal dichalcogenide-decorated MXenes: promising hybrid electrodes for energy storage and conversion applications. <i>Materials Chemistry Frontiers</i> , 2021, 5, 3298-3321.	3.2	66
2199	Strategy and Future Prospects to Develop Room-Temperature-Recoverable NO <sub>2</sub> Gas Sensor Based on Two-Dimensional Molybdenum Disulfide. <i>Nano-Micro Letters</i> , 2021, 13, 38.	14.4	103
2200	Designing Zn-doped nickel sulfide catalysts with an optimized electronic structure for enhanced hydrogen evolution reaction. <i>Nanoscale</i> , 2021, 13, 10127-10132.	2.8	26
2201	Defect engineering and characterization of active sites for efficient electrocatalysis. <i>Nanoscale</i> , 2021, 13, 3327-3345.	2.8	60
2202	A highly stable CoMo <sub>2</sub> S <sub>4</sub> /Ni <sub>3</sub> S <sub>2</sub> heterojunction electrocatalyst for efficient hydrogen evolution. <i>Chemical Communications</i> , 2021, 57, 785-788.	2.2	20
2203	Two-Dimensional Transition Metal Chalcogenides for Hydrogen Evolution Catalysis. , 2021, , 3075-3101.		0



#	ARTICLE	IF	CITATIONS
2204	Hollow Sandwiched Structure of Ni-Modified MoS <sub>2</sub> Wrapped into Symmetrical N-Doped Carbon toward a Superior Hydrogen Evolution Electrocatalyst. ACS Sustainable Chemistry and Engineering, 2021, 9, 732-742.	3.2	14
2205	The Electrochemical Tuning of Transition Metal-Based Materials for Electrocatalysis. Electrochemical Energy Reviews, 2021, 4, 146-168.	13.1	30
2206	Recent advances in transition-metal-sulfide-based bifunctional electrocatalysts for overall water splitting. Journal of Materials Chemistry A, 2021, 9, 5320-5363.	5.2	322
2207	Supercapacitors based on two-dimensional transition metal dichalcogenides and their hybrids. , 2021, , 159-191.		3
2208	Carbon Nanotube Supported Amorphous MoS <sub>2</sub> via Microwave Heating Synthesis for Enhanced Performance of Hydrogen Evolution Reaction. Energy Material Advances, 2021, 2021, .	4.7	20
2209	Heterointerface Effects on Lithium-Induced Phase Transitions in Intercalated MoS <sub>2</sub> . ACS Applied Materials & Interfaces, 2021, 13, 10603-10611.	4.0	17
2210	Molybdenum-based materials for sodium-ion batteries. Informa-Ãn-Ã-Materi-Ãly, 2021, 3, 339-352.	8.5	65
2211	Application of Scanning Tunneling Microscopy in Electrocatalysis and Electrochemistry. Electrochemical Energy Reviews, 2021, 4, 249-268.	13.1	26
2212	New Insights into Cd <sup>2+</sup> /Fe <sup>3+</sup> Co-Doped BiOBr for Enhancing the Photocatalysis Efficiency of Dye Decomposition under Visible-Light. Nanomaterials, 2021, 11, 423.	1.9	13
2213	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.	2.5	21
2214	Hexagonal RuSe <sub>2</sub> Nanosheets for Highly Efficient Hydrogen Evolution Electrocatalysis. Angewandte Chemie, 2021, 133, 7089-7093.	1.6	20
2215	Polyvinylalcohol (PVA)-Assisted Exfoliation of ReS <sub>2</sub> Nanosheets and the Use of ReS <sub>2</sub> -PVA Composites for Transparent Memristive Photosynapse Devices. ACS Applied Materials & Interfaces, 2021, 13, 8919-8928.	4.0	12
2216	Hexagonal RuSe <sub>2</sub> Nanosheets for Highly Efficient Hydrogen Evolution Electrocatalysis. Angewandte Chemie - International Edition, 2021, 60, 7013-7017.	7.2	88
2217	Borophene-supported single transition metal atoms as potential oxygen evolution/reduction electrocatalysts: a density functional theory study. Journal of Molecular Modeling, 2021, 27, 67.	0.8	17
2218	Nanocrystalline NiSe <sub>2</sub> /MoS <sub>2</sub> heterostructures for electrochemical hydrogen evolution reaction. Nanotechnology, 2021, 32, 175602.	1.3	11
2219	Mechanisms of Hydrogen Evolution Reaction in Two-Dimensional Nitride MXenes Using In Situ X-Ray Absorption Spectroelectrochemistry. ACS Catalysis, 2021, 11, 3128-3136.	5.5	28
2220	The Combined Role of Faceting and Heteroatom Doping for Hydrogen Evolution on a WC Electrocatalyst in Aqueous Solution: A Density Functional Theory Study. Journal of Physical Chemistry C, 2021, 125, 4602-4613.	1.5	13
2221	2D Materials Bridging Experiments and Computations for Electro/Photocatalysis. Advanced Energy Materials, 2022, 12, 2003841.	10.2	116

#	ARTICLE	IF	CITATIONS
2222	Determining Equilibrium Shapes of MoS <sub>2</sub> : Modified Algorithm, Edge Reconstructions with S and O, and Temperature Effects. <i>Journal of Physical Chemistry C</i> , 2021, 125, 4828-4835.	1.5	3
2223	One-Pot Hydrothermal Synthesis of Solution-Processable MoS <sub>2</sub> /PEDOT:PSS Composites for High-Performance Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 7285-7296.	4.0	41
2224	Transition metal-based electrocatalysts for overall water splitting. <i>Chinese Chemical Letters</i> , 2021, 32, 2597-2616.	4.8	94
2225	Morphological engineering of carbon-based materials: in the quest of efficient catalysts for overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 7284-7296.	3.8	12
2226	A Facile Reaction Strategy for the Synthesis of MOF-Based Pine-Needle-Like Nanocluster Hierarchical Structure for Efficient Overall Water Splitting. <i>Inorganic Chemistry</i> , 2021, 60, 4047-4057.	1.9	23
2227	Facile Ion-Exchange Method for Zn Intercalated MoS <sub>2</sub> As an Efficient and Stable Catalyst toward Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 2398-2407.	2.5	9
2228	Photodriven Transient Picosecond Topâ€Layer Semiconductor to Metal Phaseâ€Transition in pâ€Doped Molybdenum Disulfide. <i>Advanced Materials</i> , 2021, 33, e2006957.	11.1	11
2229	High-throughput screening of transition metal single-atom catalyst anchored on Janus MoSSe basal plane for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 10337-10345.	3.8	30
2230	Ethylenediamine-assisted phase engineering of 1T/2Hâ€MoS <sub>2</sub> /graphene for efficient and stable electrocatalytic hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 11688-11700.	3.8	21
2231	Phase Transitions and Water Splitting Applications of 2D Transition Metal Dichalcogenides and Metal Phosphorous Trichalcogenides. <i>Advanced Science</i> , 2021, 8, 2002284.	5.6	47
2232	Unveiling the Excellent Electrocatalytic Activity of Grain-Boundary Enriched Anisotropic Pure Gold Nanostructures toward Hydrogen Evolution Reaction: A Combined Approach of Experiment and Theory. <i>ACS Applied Energy Materials</i> , 2021, 4, 3017-3032.	2.5	9
2233	Elimination of Interlayer Potential Barriers of Chromium Sulfide by Self-Intercalation for Enhanced Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 13055-13062.	4.0	17
2234	Manipulating Electrocatalysis using Mosaic Catalysts. <i>Small Science</i> , 2021, 1, 2000059.	5.8	15
2235	The properties and prospects of chemically exfoliated nanosheets for quantum materials in two dimensions. <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	17
2236	Time-Domain Ab Initio Insights into the Reduced Nonradiative Electronâ€Hole Recombination in ReSe <sub>2</sub> /MoS <sub>2</sub> van der Waals Heterostructure. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2682-2690.	2.1	20
2237	From Monolayers to Nanotubes: Toward Catalytic Transition-Metal Dichalcogenides for Hydrogen Evolution Reaction. <i>Energy &amp; Fuels</i> , 2021, 35, 6282-6288.	2.5	10
2238	Liquidâ€Exfoliated 2D Materials for Optoelectronic Applications. <i>Advanced Science</i> , 2021, 8, e2003864.	5.6	77
2239	Morphology-Controlled Vapor Phase Growth and Characterization of One-Dimensional GaTe Nanowires and Two-Dimensional Nanosheets for Potential Visible-Light Active Photocatalysts. <i>Nanomaterials</i> , 2021, 11, 778.	1.9	6

#	ARTICLE	IF	CITATIONS
2240	Intercalation as a versatile tool for fabrication, property tuning, and phase transitions in 2D materials. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	113
2241	Enhancement of basal plane electrocatalytic hydrogen evolution activity via joint utilization of trivial and non-trivial surface states. <i>Applied Materials Today</i> , 2021, 22, 100921.	2.3	12
2242	Noble metal-free electrocatalytic materials for water splitting in alkaline electrolyte. <i>EnergyChem</i> , 2021, 3, 100053.	10.1	68
2243	Cysteine-Induced Hybridization of 2D Molybdenum Disulfide Films for Efficient and Stable Hydrogen Evolution Reaction. <i>Materials</i> , 2021, 14, 1165.	1.3	4
2244	Advances in transition metal dichalcogenide-based two-dimensional nanomaterials. <i>Materials Today Chemistry</i> , 2021, 19, 100399.	1.7	50
2245	Enhanced Triboelectric Nanogenerator Based on Tungsten Disulfide via Thiolated Ligand Conjugation. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 21299-21309.	4.0	25
2246	Controllable synthesis of flower-like Mn-Co-P nanosheets as bifunctional electrocatalysts for overall water splitting. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 615, 126265.	2.3	24
2247	Electrochemical synthesis of zinc ricinoleate and its application in ammonia adsorption. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105083.	3.3	0
2248	Hybrid nanocomposites of a molybdenum disulfide (MoS <sub>2</sub> ) based hydrophobic filler for a robust self-cleaning effect. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 96, 294-306.	2.9	5
2249	Insights into the principles, design methodology and applications of electrocatalysts towards hydrogen evolution reaction. <i>Energy Reports</i> , 2021, 7, 8577-8596.	2.5	4
2250	NiFeP-MoO <sub>2</sub> hybrid nanorods on nickel foam as high-activity and high-stability electrode for overall water splitting. <i>Chemical Engineering Journal</i> , 2021, 409, 128161.	6.6	86
2251	All-pH Stable Sandwich-Structured MoO <sub>2</sub> /MoS <sub>2</sub> /C Hollow Nanoreactors for Enhanced Electrochemical Hydrogen Evolution. <i>Advanced Functional Materials</i> , 2021, 31, 2101715.	7.8	87
2252	Activating a Two-Dimensional PtSe <sub>2</sub> Basal Plane for the Hydrogen Evolution Reaction through the Simultaneous Generation of Atomic Vacancies and Pt Clusters. <i>Nano Letters</i> , 2021, 21, 3857-3863.	4.5	40
2253	Development of hybrid hydrophobic molybdenum disulfide (MoS <sub>2</sub> ) nanoparticles for super water repellent self-cleaning. <i>Progress in Organic Coatings</i> , 2021, 153, 106161.	1.9	13
2254	Vanadium doped 1T MoS <sub>2</sub> nanosheets for highly efficient electrocatalytic hydrogen evolution in both acidic and alkaline solutions. <i>Chemical Engineering Journal</i> , 2021, 409, 128158.	6.6	98
2255	CO oxidation over defective and nonmetal doped MoS <sub>2</sub> monolayers. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 165002.	0.7	5
2256	MoS <sub>2</sub> /ZIF-8 derived nitrogen doped carbon (NC)-PEDOT: PSS as optically transparent counter electrode for dye-sensitized solar cells. <i>Solar Energy</i> , 2021, 218, 117-128.	2.9	13
2257	Modulation of Volmer step for efficient alkaline water splitting implemented by titanium oxide promoting surface reconstruction of cobalt carbonate hydroxide. <i>Nano Energy</i> , 2021, 82, 105732.	8.2	53

#	ARTICLE	IF	CITATIONS
2258	Synthesis of Few Layer Amorphous 1T/2H MoS <sub>2</sub> by a One-Step Ethanol/Water Solvothermal Method and Its Hydrodesulfurization Performance. <i>Catalysis Letters</i> , 0, , 1.	1.4	4
2259	Metal substrates-induced phase transformation of monolayer transition metal dichalcogenides for hydrogen evolution catalysis*. <i>Chinese Physics B</i> , 2021, 30, 116401.	0.7	3
2260	Elucidating the structural redox behaviors of nanostructured expanded graphite anodes toward fast-charging and high-performance lithium-ion batteries. <i>Carbon</i> , 2021, 175, 187-201.	5.4	37
2261	Interfacing perovskite strontium molybdate to molybdenum disulfide nanoplatelets for boosting HER from water. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 14359-14368.	3.8	6
2262	Enhancing the Surface Reactivity of Black Phosphorus on Hydrogen Evolution by Covalent Chemistry. <i>Journal of Physical Chemistry C</i> , 2021, 125, 7581-7589.	1.5	14
2263	Rationally Designed Ni <sub>3</sub> S <sub>2</sub> Interfaces for Efficient Overall Water Electrolysis. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100078.	2.8	40
2264	Recent progress in doping-induced structural and electronic modification in Cu-SnCo interconnected network enhanced efficient performance evidence for the hydrogen evolution reaction: current state and prospects. <i>Journal of Porous Materials</i> , 2021, 28, 1335-1344.	1.3	2
2265	Nanotoxicity of 2D Molybdenum Disulfide, MoS <sub>2</sub> , Nanosheets on Beneficial Soil Bacteria, <i>Bacillus cereus</i> and <i>Pseudomonas aeruginosa</i> . <i>Nanomaterials</i> , 2021, 11, 1453.	1.9	10
2266	ZIF-Derived Co-N-S Tridoped Carbon Frameworks for Electrocatalytic Oxygen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2021, 125, 9839-9846.	1.5	9
2267	The Versatile Electronic, Magnetic and Photo-Electro Catalytic Activity of a New 2D MA <sub>2</sub> Z <sub>4</sub> Family**. <i>Chemistry - A European Journal</i> , 2021, 27, 9925-9933.	1.7	44
2268	Effects of functional supports on efficiency and stability of atomically dispersed noble-metal electrocatalysts. <i>EnergyChem</i> , 2021, 3, 100054.	10.1	20
2269	In Situ Growth of Metallic 1T-MoS <sub>2</sub> on TiO <sub>2</sub> Nanotubes with Improved Photocatalytic Performance. <i>ACS Omega</i> , 2021, 6, 12787-12793.	1.6	8
2270	Simple Construction of Amorphous Monometallic Cobalt-Based Selenite Nanoparticles using Ball Milling for Highly Efficient Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2021, 13, 2719-2725.	1.8	5
2271	Bimetallic NiCo-NiCoO <sub>2</sub> nano-heterostructures embedded on copper foam as a self-supported bifunctional electrode for water oxidation and hydrogen production in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 18936-18948.	3.8	35
2272	Density Functional Theory Study of Edge-Induced Atomic-Scale Structural Phase Transitions of MoS <sub>2</sub> Nanocrystals: Implications for a High-Performance Catalyst. <i>ACS Applied Nano Materials</i> , 2021, 4, 5496-5502.	2.4	2
2273	Kinetic 2D Crystals via Topochemical Approach. <i>Advanced Materials</i> , 2021, 33, e2006043.	11.1	11
2274	Modulation of the Electronic Structure of IrSe <sub>2</sub> by Filling the Bi Atom as a Bifunctional Electrocatalyst for pH Universal Water Splitting. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2000074.	2.8	10
2275	Hierarchical Ni <sub>3</sub> S <sub>4</sub> @MoS <sub>2</sub> nanocomposites as efficient electrocatalysts for hydrogen evolution reaction. <i>Journal of Materials Science and Technology</i> , 2021, 95, 70-77.	5.6	32

#	ARTICLE	IF	CITATIONS
2276	Construction of 2D layered TiO <sub>2</sub> @MoS <sub>2</sub> heterostructure for efficient adsorption and photodegradation of organic dyes. <i>Nanotechnology</i> , 2021, 32, 335605.	1.3	12
2277	Electrocatalysts for the hydrogen evolution reaction in alkaline and neutral media. A comparative review. <i>Journal of Power Sources</i> , 2021, 493, 229708.	4.0	151
2278	Ferromagnetism and intrinsic half-metallicity of two-dimensional MnN monolayer with square-octagonal structure. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 225804.	0.7	1
2279	Large-scale preparation of 2D VSe <sub>2</sub> through a defect-engineering approach for efficient hydrogen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 411, 128494.	6.6	30
2280	Molybdenum Disulfide Quantum Dots: Properties, Synthesis, and Applications. <i>Journal of Carbon Research</i> , 2021, 7, 45.	1.4	15
2281	Electron injection induced phase transition of 2H to 1T MoS <sub>2</sub> by cobalt and nickel substitutional doping. <i>Chemical Engineering Journal</i> , 2021, 411, 128567.	6.6	42
2282	One-step preparation of cobalt-doped NiS@MoS <sub>2</sub> core-shell nanorods as bifunctional electrocatalyst for overall water splitting. <i>Electrochimica Acta</i> , 2021, 377, 138051.	2.6	55
2283	Design of earth-abundant ternary Fe <sub>1-x</sub> Co <sub>x</sub> S <sub>2</sub> on RGO as efficient electrocatalysts for hydrogen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2021, 862, 158610.	2.8	16
2284	Modifying redox properties and local bonding of Co <sub>3</sub> O <sub>4</sub> by CeO <sub>2</sub> enhances oxygen evolution catalysis in acid. <i>Nature Communications</i> , 2021, 12, 3036.	5.8	262
2285	Coupling of Ru and Vacancy on 2D Mo-Based Electrocatalyst Via a Solid-Phase Interface Reaction Strategy for Hydrogen Evolution Reaction. <i>Advanced Energy Materials</i> , 2021, 11, 2100141.	10.2	71
2286	Interlayer engineering of molybdenum disulfide toward efficient electrocatalytic hydrogenation. <i>Science Bulletin</i> , 2021, 66, 1003-1012.	4.3	39
2287	Electrochemical ion insertion from the atomic to the device scale. <i>Nature Reviews Materials</i> , 2021, 6, 847-867.	23.3	84
2288	Tuning structure, electronic, and catalytic properties of non-metal atom doped Janus transition metal dichalcogenides for hydrogen evolution. <i>Applied Surface Science</i> , 2021, 552, 149146.	3.1	33
2289	Effect of cobalt doping on H <sub>2</sub> generation mechanism of Mo-edge from density functional theory. <i>Theoretical Chemistry Accounts</i> , 2021, 140, 1.	0.5	2
2290	Two-dimensional Bi nanosheets as an enhanced electrocatalyst for hydrogen evolution reaction. <i>Journal of Sol-Gel Science and Technology</i> , 2021, 99, 132-139.	1.1	5
2291	First-principles study on the electronic structures and magnetic properties of TM-doped (TM=V, Cr, Tj) ETQq1 1 Q.784314 ggBT /Over	1.0	1
2292	Roles of sulfur-edge sites, metal-edge sites, terrace sites, and defects in metal sulfides for photocatalysis. <i>Chem Catalysis</i> , 2021, 1, 44-68.	2.9	83
2293	Engineering two-dimensional metal oxides and chalcogenides for enhanced electro- and photocatalysis. <i>Science Bulletin</i> , 2021, 66, 1228-1252.	4.3	103

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2294	Interfacial engineering of MoS <sub>2</sub> /MoN heterostructures as efficient electrocatalyst for pH-universal hydrogen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2021, 867, 159066.	2.8	38
2295	Meritorious spatially on hierarchically Co <sub>3</sub> O <sub>4</sub> /MoS <sub>2</sub> phase nanocomposite synergistically a high-efficient electrocatalyst for hydrogen evolution reaction performance: Recent advances & future perspectives. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 22707-22718.	3.8	24
2296	A Polarization Boosted Strategy for the Modification of Transition Metal Dichalcogenides as Electrocatalysts for Water Splitting. <i>Small</i> , 2021, 17, e2100510.	5.2	9
2297	Cr-Doped CoP Nanorod Arrays as High-Performance Hydrogen Evolution Reaction Catalysts at High Current Density. <i>Small</i> , 2021, 17, e2100832.	5.2	48
2298	One-pot solvothermal synthesis of Co <sub>2</sub> P nanoparticles: An efficient HER and OER electrocatalysts. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 21924-21938.	3.8	60
2299	Intrinsic effects of thickness, surface chemistry and electroactive area on nanostructured MoS <sub>2</sub> electrodes with superior stability for hydrogen evolution. <i>Electrochimica Acta</i> , 2021, 382, 138257.	2.6	9
2300	First-principles study on the electronic structures and ferromagnetism of tetragonal AlN monolayer doped with Be and C. <i>Computational Materials Science</i> , 2021, 193, 110413.	1.4	1
2301	Surface electron accumulation and enhanced hydrogen evolution reaction in MoSe <sub>2</sub> basal planes. <i>Nano Energy</i> , 2021, 84, 105922.	8.2	36
2302	Sustained Solar-Powered Electrocatalytic H <sub>2</sub> Production by Seawater Splitting Using Two-Dimensional Vanadium Disulfide. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 8572-8580.	3.2	10
2303	Recent advances in nanostructured electrocatalysts for hydrogen evolution reaction. <i>Rare Metals</i> , 2021, 40, 3375-3405.	3.6	112
2304	Gas-Phase Prehistory and Molecular Precursors in Monolayer Metal Dichalcogenides Synthesis: The Case of MoS <sub>2</sub> . <i>ACS Nano</i> , 2021, 15, 10525-10531.	7.3	9
2305	Tailoring of cobalt phosphide anchored nitrogen and sulfur co-doped three dimensional graphene hybrid: Boosted electrocatalytic performance towards hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2021, 380, 138262.	2.6	89
2306	Versatile noble-metal-free electrocatalyst synergistically accelerating for the highly comprehensive understanding evidence for Electrochemical Water Splitting: Future Achievements & Perspectives. <i>Surfaces and Interfaces</i> , 2021, 24, 101104.	1.5	10
2307	Regulating the electronic structure of ReS <sub>2</sub> by Mo doping for electrocatalysis and lithium storage. <i>Chemical Engineering Journal</i> , 2021, 414, 128811.	6.6	21
2308	Surface Sulfur Vacancy Engineering of Metal Sulfides Promoted Desorption of Hydrogen Atoms for Enhanced Electrocatalytic Hydrogen Evolution. <i>Journal of Physical Chemistry C</i> , 2021, 125, 12707-12712.	1.5	21
2309	Effect of copper concentration and sulfur vacancies on electronic properties of MoS <sub>2</sub> monolayer: a computational study. <i>Journal of Molecular Modeling</i> , 2021, 27, 213.	0.8	10
2310	Roadmap and Direction toward High-Performance MoS <sub>2</sub> Hydrogen Evolution Catalysts. <i>ACS Nano</i> , 2021, 15, 11014-11039.	7.3	179
2311	Thermal-Driven Dynamic Shape Change of Bimetallic Nanoparticles Extends Hot Electron Lifetime of Pt/MoS <sub>2</sub> Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 7173-7179.	2.1	8

#	ARTICLE	IF	CITATIONS
2312	All-pH-Tolerant In-Plane Heterostructures for Efficient Hydrogen Evolution Reaction. ACS Nano, 2021, 15, 11417-11427.	7.3	77
2313	Self-assembled mesostructured Co <sub>0.5</sub> Fe <sub>2.5</sub> O <sub>4</sub> nanoparticle superstructures for highly efficient oxygen evolution. Journal of Colloid and Interface Science, 2021, 593, 125-132.	5.0	2
2314	1T-MoS <sub>2</sub> Coordinated Bimetal Atoms as Active Centers to Facilitate Hydrogen Generation. Materials, 2021, 14, 4073.	1.3	7
2315	Transition metal sulfides for electrochemical hydrogen evolution. International Journal of Hydrogen Energy, 2021, 46, 24060-24077.	3.8	73
2316	Theoretical evaluation and experimental investigation of layered 2H/1T-phase MoS <sub>2</sub> and its reduced graphene-oxide hybrids for hydrogen evolution reactions. Journal of Alloys and Compounds, 2021, 868, 159272.	2.8	22
2317	Structure and Interface Modification of Carbon Dots for Electrochemical Energy Application. Small, 2021, 17, e2102091.	5.2	36
2318	MoS <sub>2</sub> -based nanocomposites: synthesis, structure, and applications in water remediation and energy storage: a review. Environmental Chemistry Letters, 2021, 19, 3645-3681.	8.3	48
2319	Interface effect of C <sub>3</sub> N <sub>4</sub> -Ti <sub>4</sub> O <sub>7</sub> -MoS <sub>2</sub> composite toward enhanced electrocatalytic hydrogen evolution reaction. Journal of Fuel Chemistry and Technology, 2021, 49, 986-996.	0.9	10
2320	Role of graphene in improving catalytic behaviors of AuNPs/MoS <sub>2</sub> /Gr/Ni-F structure in hydrogen evolution reaction*. Chinese Physics B, 2021, 30, 088801.	0.7	2
2321	Electronic and optical properties of two-dimensional As <sub>2</sub> GeTe and P <sub>2</sub> SiS monolayers: Density functional study. Chemical Physics, 2021, 547, 111215.	0.9	6
2322	Chemical Vapor Deposition Growth of 2D Transition Metal Dichalcogenides on 3D Substrates toward Electrocatalytic-Related Applications. Advanced Energy and Sustainability Research, 2021, 2, 2100089.	2.8	7
2323	In-situ Surface-selective Removal of Al Element from NiFeAl Ternary Nanowires for Large-current Oxygen Evolution Reaction. ChemNanoMat, 2021, 7, 1138.	1.5	0
2324	Adapting Early Transition Metal and Nonmetallic Dopants on CoFe Oxyhydroxides for Enhanced Alkaline and Neutral pH Saline Water Oxidation. ACS Applied Energy Materials, 2021, 4, 6942-6956.	2.5	28
2325	High Electrocatalytic Activity of Defected MX <sub>2</sub> /Graphene Heterostructures (M = Mo, W; X = S, Se, Te). Journal of Materials Chemistry A, 2021, 9, 11078-11084.	1.5	11
2326	Micro-patterned deposition of MoS <sub>2</sub> ultrathin-films by a controlled droplet dragging approach. Scientific Reports, 2021, 11, 13993.	1.6	5
2327	Aqueous Adsorption of Heavy Metals on Metal Sulfide Nanomaterials: Synthesis and Application. Water (Switzerland), 2021, 13, 1843.	1.2	28
2328	Controlled Chemical Functionalization toward 3D-2D Carbon Nanohorn-MoS <sub>2</sub> Heterostructures with Enhanced Electrocatalytic Activity for Protons Reduction. Advanced Functional Materials, 2021, 31, 2105287.	7.8	21
2329	Revisiting lithium-storage mechanisms of molybdenum disulfide. Chinese Chemical Letters, 2022, 33, 1779-1797.	4.8	21

#	ARTICLE	IF	CITATIONS
2330	Electrocatalytic deep dehalogenation of florfenicol using Fe-doped CoP nanotubes array for blocking resistance gene expression and microbial inhibition during biochemical treatment. <i>Water Research</i> , 2021, 201, 117361.	5.3	19
2331	Construction of defect-rich 1T-MoS <sub>2</sub> towards efficient electrocatalytic hydrogen evolution: Recent advances and future perspectives. <i>Surfaces and Interfaces</i> , 2021, 25, 101305.	1.5	11
2332	Synthesis of Nitrogen-Doped Hierarchical Porous Carbon Materials and its Catalytic Ability in Hydrogen Evolution Reaction. <i>Solid State Phenomena</i> , 0, 323, 56-65.	0.3	0
2333	Density Functional Theory for Electrocatalysis. <i>Energy and Environmental Materials</i> , 2022, 5, 157-185.	7.3	95
2334	Nano-pom-pom multiphasic MoS <sub>2</sub> grown on carbonized wood as electrode for efficient hydrogen evolution in acidic and alkaline media. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 28087-28097.	3.8	22
2335	Transition metals decorated g-C <sub>3</sub> N <sub>4</sub> /N-doped carbon nanotube catalysts for water splitting: A review. <i>Journal of Electroanalytical Chemistry</i> , 2021, 895, 115510.	1.9	59
2336	Heterojunction of Vertically Arrayed MoS <sub>2</sub> Nanosheet/N-Doped Reduced Graphene Oxide Enabling a Nanozyme for Sensitive Biomolecule Monitoring. <i>Analytical Chemistry</i> , 2021, 93, 11123-11132.	3.2	52
2337	Effect of the normal compressive strain and electric field on the electronic and optical properties of ZrCO <sub>2</sub> MXene and MoSe <sub>2</sub> van der Waals Heterojunction: A first principles calculation. <i>Vacuum</i> , 2021, 190, 110290.	1.6	4
2338	Monolayer 1T and 1Tâ€² MoSO as Promising Electrocatalyst for Hydrogen Evolution based on First Principle Calculations. <i>ChemPhysChem</i> , 2021, 22, 2034-2041.	1.0	5
2339	Intrinsic ORR Activity Enhancement of Pt Atomic Sites by Engineering the d â€¦Band Center via Local Coordination Tuning. <i>Angewandte Chemie</i> , 2021, 133, 22082-22088.	1.6	4
2340	Metal-semiconductor 1T/2H-MoS <sub>2</sub> by a heteroatom-doping strategy for enhanced electrocatalytic hydrogen evolution. <i>Catalysis Communications</i> , 2021, 156, 106325.	1.6	21
2341	A spontaneously formed plasmonic-MoTe <sub>2</sub> hybrid platform for ultrasensitive Raman enhancement. <i>Cell Reports Physical Science</i> , 2021, 2, 100526.	2.8	10
2342	Gamma-ray initiated polymerization from polydopamine-modified MoS <sub>2</sub> nanosheets with poly (ionic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Engineering Journal Advances, 2021, 7, 100134.	2.4	6
2343	Lanthanum-doped 1±-Ni(OH) <sub>2</sub> 1D-2D-3D hierarchical nanostructures for robust bifunctional electro-oxidation. <i>Particuology</i> , 2021, 57, 104-111.	2.0	32
2344	Intrinsic ORR Activity Enhancement of Pt Atomic Sites by Engineering the d â€¦Band Center via Local Coordination Tuning. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 21911-21917.	7.2	132
2345	Synergistic Effect of Metal Cations and Visible Light on 2D MoS <sub>2</sub> Nanosheet Aggregation. <i>Environmental Science &amp; Technology</i> , 2021, 55, 16379-16389.	4.6	16
2346	A hierarchical and branch-like NiCoS/NF material prepared by gradient electrodeposition method for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 36629-36639.	3.8	14
2347	Hierarchical Nanostructured Coâ€¦Moâ€¦B/CoMoO <sub>4</sub> Amorphous Composite for the Alkaline Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 42605-42612.	4.0	18



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2348	Mn-Co bimetallic phosphate on electrodeposited PANI nanowires with composition modulated structural morphology for efficient electrocatalytic water splitting. <i>Applied Catalysis B: Environmental</i> , 2021, 292, 120202.	10.8	73
2350	A stable and active three-dimensional carbon based trimetallic electrocatalyst for efficient overall wastewater splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 30762-30779.	3.8	9
2351	Simple Heterolayered MoS <sub>2</sub> /Graphene Nanosheets for Zn-Air Batteries. <i>ACS Applied Nano Materials</i> , 2021, 4, 10389-10398.	2.4	17
2352	2D MoS <sub>2</sub> : structure, mechanisms, and photocatalytic applications. <i>Materials Today Sustainability</i> , 2021, 13, 100073.	1.9	54
2353	Ni-nanoclusters hybridized 1T-Mn-VTe <sub>2</sub> mesoporous nanosheets for ultra-low potential water splitting. <i>Applied Catalysis B: Environmental</i> , 2022, 301, 120780.	10.8	32
2354	Metal-Organic Framework Modified MoS <sub>2</sub> Nanozyme for Synergetic Combating Drug-Resistant Bacterial Infections via Photothermal Effect and Photodynamic Modulated Peroxidase-Mimic Activity. <i>Advanced Healthcare Materials</i> , 2022, 11, e2101698.	3.9	42
2355	Calcination effects of 2D molybdenum disulfides. <i>Materials Characterization</i> , 2021, 179, 111351.	1.9	5
2356	Anchoring Sites Engineering in Single-Atom Catalysts for Highly Efficient Electrochemical Energy Conversion Reactions. <i>Advanced Materials</i> , 2021, 33, e2102801.	11.1	64
2357	Hybrid Phase MoS <sub>2</sub> as a Noble Metal-Free Photocatalyst for Conversion of Nitroaromatics to Aminoaromatics. <i>Journal of Physical Chemistry C</i> , 2021, 125, 20887-20895.	1.5	7
2358	Atmosphere plasma treatment and Co heteroatoms doping on basal plane of colloidal 2D VSe <sub>2</sub> nanosheets for enhanced hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 32425-32434.	3.8	10
2359	Recent advances in the electrochemistry of layered post-transition metal chalcogenide nanomaterials for hydrogen evolution reaction. <i>Journal of Energy Chemistry</i> , 2021, 60, 451-479.	7.1	57
2360	Promotion for Full Water Splitting toward Vanadium-Incorporated MoO <sub>2</sub> -MoNi <sub>4</sub> Hybrid Nanoarrays. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 13225-13232.	3.2	12
2361	Two-dimensional metallic MoS <sub>2</sub> -amorphous CoNi(OH) <sub>2</sub> nanocomposite for enhanced electrochemical water splitting in alkaline solutions. <i>Applied Surface Science</i> , 2021, 561, 150079.	3.1	18
2362	Synthesis and photocatalytic hydrogen activity of Mo <sub>1-x</sub> S <sub>2</sub> nanosheets with controllable Mo vacancies. <i>Journal of Alloys and Compounds</i> , 2021, 876, 160165.	2.8	16
2363	New insights of the interaction of H <sub>2</sub> S with mackinawite FeS in a wet environment: An ab initio molecular dynamics study. <i>International Journal of Hydrogen Energy</i> , 2021, , .	3.8	2
2364	Mo-modified cobalt phosphide as highly active and stable electrocatalysts for hydrogen oxidation reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 31300-31304.	3.8	7
2365	Hierarchical MoS <sub>2</sub> /polyaniline binary hybrids with high performance for improving fire safety of epoxy resin. <i>Polymers for Advanced Technologies</i> , 2022, 33, 163-172.	1.6	6
2367	Tunable nitrogen-doped delaminated 2D MXene obtained by NH <sub>3</sub> /Ar plasma treatment as highly efficient hydrogen and oxygen evolution reaction electrocatalyst. <i>Chemical Engineering Journal</i> , 2021, 420, 129832.	6.6	30

#	ARTICLE	IF	CITATIONS
2368	Interlayer Interaction Induced Layer-Dependent Catalytic Activity toward a Hydrogen Evolution Reaction on Two-Dimensional PtSe <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2021, 125, 19716-19723.	1.5	1
2369	High-Performance Nanostructured MoS <sub>2</sub> Electrodes with Spontaneous Ultralow Gold Loading for Hydrogen Evolution. <i>Journal of Physical Chemistry C</i> , 2021, 125, 20940-20951.	1.5	9
2370	Unraveling the morphology effect of kandite supporting MoS <sub>2</sub> nanosheets for enhancing electrocatalytic hydrogen evolution. <i>Applied Clay Science</i> , 2021, 212, 106211.	2.6	14
2371	Ruthenium single atoms implanted continuous MoS <sub>2</sub> -Mo <sub>2</sub> C heterostructure for high-performance and stable water splitting. <i>Nano Energy</i> , 2021, 88, 106277.	8.2	68
2372	A ternary hybrid of Zn-doped MoS <sub>2</sub> -RGO for highly effective electrocatalytic hydrogen evolution. <i>Journal of Colloid and Interface Science</i> , 2021, 599, 100-108.	5.0	15
2373	High proportion of 1T phase MoS <sub>2</sub> prepared by a simple solvothermal method for high-efficiency electrocatalytic hydrogen evolution. <i>Chemical Engineering Journal</i> , 2021, 422, 130100.	6.6	28
2374	Novel assembly of Janus RGO/1T-SeMoS nanosheets structures showing high-efficient electrocatalytic activity for hydrogen evolution. <i>Colloids and Interface Science Communications</i> , 2021, 45, 100509.	2.0	4
2375	Fe atom clusters embedded N-doped graphene decorated with ultrathin mesoporous carbon nitride nanosheets for high efficient photocatalytic performance. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 629, 127360.	2.3	6
2376	Noble metal-molybdenum disulfide nanohybrids as dual fluorometric and colorimetric sensor for hepatitis B virus DNA detection. <i>Talanta</i> , 2021, 234, 122675.	2.9	20
2377	Triggering in-plane defect cluster on MoS <sub>2</sub> for accelerated dinitrogen electroreduction to ammonia. <i>Journal of Energy Chemistry</i> , 2021, 62, 359-366.	7.1	40
2378	Nanostructured NiCo <sub>2</sub> S <sub>4</sub> @NiCo <sub>2</sub> O <sub>4</sub> -reduced graphene oxide as an efficient hydrogen evolution electrocatalyst in alkaline electrolyte. <i>Journal of Colloid and Interface Science</i> , 2021, 601, 570-580.	5.0	22
2379	Facile synthesis of three-dimensional Ni <sub>3</sub> Sn <sub>2</sub> S <sub>2</sub> as a novel battery-type electrode material for high-performance supercapacitors. <i>Electrochimica Acta</i> , 2021, 396, 139216.	2.6	8
2380	Nickel-cobalt phosphate nanoparticles wrapped in nitrogen-doped carbon loading on partially phosphatized foamed nickel as efficient electrocatalyst for water splitting. <i>Chemical Engineering Journal</i> , 2021, 426, 130854.	6.6	24
2381	MoS <sub>2</sub> @CoS <sub>2</sub> heteronanoshet arrays coated on porous carbon microtube textile for overall water splitting. <i>Journal of Power Sources</i> , 2021, 514, 230580.	4.0	32
2382	Photocatalytic H <sub>2</sub> production with simultaneous wastewater purification over flower-like 1T/2H-MoS <sub>2</sub> -decorated CNT/CNU isotype heterojunction photocatalyst. <i>Applied Surface Science</i> , 2021, 569, 151072.	3.1	10
2383	S defect-rich ultrathin 2D MoS <sub>2</sub> : The role of S point-defects and S stripping-defects in the removal of Cr(VI) via synergistic adsorption and photocatalysis. <i>Applied Catalysis B: Environmental</i> , 2021, 299, 120664.	10.8	88
2384	Vacancy-induced 2H@1T MoS <sub>2</sub> phase-incorporation on ZnIn <sub>2</sub> S <sub>4</sub> for boosting photocatalytic hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120570.	10.8	75
2385	Probing on crystallographic structural and surface morphology of hydrothermally synthesized MoS <sub>2</sub> nanoflowers consisting of nanosheets. <i>Applied Surface Science Advances</i> , 2021, 6, 100167.	2.9	11

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2386	Optional construction of Cu <sub>2</sub> O@Fe <sub>2</sub> O <sub>3</sub> @CC architecture as a robust multifunctional photoelectronic catalyst for overall water splitting and CO <sub>2</sub> reduction. Chemical Engineering Journal, 2021, 426, 131192.	6.6	21
2387	Single atom Ru doping 2H-MoS <sub>2</sub> as highly efficient hydrogen evolution reaction electrocatalyst in a wide pH range. Applied Catalysis B: Environmental, 2021, 298, 120490.	10.8	125
2388	Hydrazine hydrate-assisted adjustment of sulfur-rich MoS <sub>2</sub> as hydrogen evolution electrocatalyst. Journal of Alloys and Compounds, 2021, 885, 160990.	2.8	16
2389	Se and O co-insertion induce the transition of MoS <sub>2</sub> from 2H to 1T phase for designing high-active electrocatalyst of hydrogen evolution reaction. Chemical Engineering Journal, 2021, 425, 130611.	6.6	25
2390	Van der Waal heterostructure based on BY(Y As, P) and MX $\langle \text{M Mo, W; X S, Se} \rangle$ monolayers. Applied Surface Science, 2021, 568, 150846.	3.1	24
2391	Directly anchoring non-noble metal single atoms on 1T-TMDs with tip structure for efficient hydrogen evolution. Chemical Engineering Journal, 2022, 428, 131210.	6.6	22
2392	Highly efficient electrochemical dechlorination of florfenicol by an ultrathin molybdenum disulfide cathode. Chemical Engineering Journal, 2022, 427, 131600.	6.6	15
2393	MoS <sub>2</sub> /CoS <sub>2</sub> heterostructures embedded in N-doped carbon nanosheets towards enhanced hydrogen evolution reaction. Journal of Alloys and Compounds, 2022, 891, 161962.	2.8	32
2394	Interface engineering heterostructured MoS <sub>2</sub> /WS <sub>2</sub> -reduced graphene Oxide for enhanced hydrogen Evolution electrocatalysts. Separation and Purification Technology, 2021, 278, 119569.	3.9	10
2395	Size-dependent trends in the hydrogen evolution activity and electronic structure of MoS <sub>2</sub> nanotubes. Nanoscale Advances, 0, , .	2.2	1
2396	HERs in an acidic medium over MoS <sub>2</sub> nanosheets: from fundamentals to synthesis and the recent progress. Sustainable Energy and Fuels, 2021, 5, 1952-1987.	2.5	30
2397	High-conductivity 1T-MoS <sub>2</sub> catalysts anchored on a carbon fiber cloth for high-performance lithium-sulfur batteries. Materials Chemistry Frontiers, 2021, 5, 6941-6950.	3.2	22
2398	Non-carbon-supported single-atom site catalysts for electrocatalysis. Energy and Environmental Science, 2021, 14, 2809-2858.	15.6	198
2399	2D coordination polymer-derived CoSe <sub>2</sub> -NiSe <sub>2</sub> /CN nanosheets: the dual-phase synergistic effect and ultrathin structure to enhance the hydrogen evolution reaction. Dalton Transactions, 2021, 50, 9934-9941.	1.6	13
2400	Atomic Layer Deposition of 2D Metal Dichalcogenides for Electronics, Catalysis, Energy Storage, and Beyond. Advanced Materials Interfaces, 2021, 8, 2001677.	1.9	39
2401	Controlled assembly of cobalt embedded N-doped graphene nanosheets (Co@NGr) by pyrolysis of a mixed ligand Co( <i>scp</i> ) MOF as a sacrificial template for high-performance electrocatalysts. RSC Advances, 2021, 11, 21179-21188.	1.7	9
2402	Metastable marcasite NiSe <sub>2</sub> nanodendrites on carbon fiber clothes to suppress polysulfide shuttling for high-performance lithium-sulfur batteries. Nanoscale, 2021, 13, 16487-16498.	2.8	13
2403	Periodic nanostructures: preparation, properties and applications. Chemical Society Reviews, 2021, 50, 6423-6482.	18.7	34

#	ARTICLE	IF	CITATIONS
2404	Active Basal Plane Catalytic Activity via Interfacial Engineering for a Finely Tunable Conducting Polymer/MoS <sub>2</sub> Hydrogen Evolution Reaction Multilayer Structure. ACS Applied Materials & Interfaces, 2021, 13, 734-744.	4.0	17
2405	P-Doped CdS integrated with multiphasic MoSe <sub>2</sub> nanosheets accomplish prominent photocatalytic activity for hydrogen evolution. Catalysis Science and Technology, 2021, 11, 5849-5858.	2.1	6
2406	Activating transition metal dichalcogenide monolayers as efficient electrocatalysts for the oxygen reduction reaction via single atom doping. Journal of Materials Chemistry C, 2021, 9, 6040-6050.	2.7	35
2407	Atomic-level engineering of two-dimensional electrocatalysts for CO <sub>2</sub> reduction. Nanoscale, 2021, 13, 7081-7095.	2.8	24
2408	Promoted Interfacial Charge Transport and Separation of Size-Uniform Zn, Ni-Doped CdS-1T/2H O-MoS <sub>2</sub> Nanoassemblies for Efficient Visible-Light Photocatalytic Water Splitting. Crystal Growth and Design, 2021, 21, 1278-1289.	1.4	9
2409	Two-dimensional materials in biomedical, biosensing and sensing applications. Chemical Society Reviews, 2021, 50, 619-657.	18.7	265
2411	WS <sub>2</sub> /MoS <sub>2</sub> Heterostructures through Thermal Treatment of MoS <sub>2</sub> Layers Electrostatically Functionalized with W <sub>3</sub> S <sub>4</sub> Molecular Clusters. Chemistry - A European Journal, 2020, 26, 6670-6678.	1.7	6
2412	Light Auxiliary Hydrogen-Evolution Catalyst Based on Uniformly Pt Nanoparticles Decorated Molybdenum Sulfide Hybrids. Particle and Particle Systems Characterization, 2017, 34, 1600200.	1.2	9
2413	Defects Engineering Induced Ultrahigh Magnetization in Rare Earth Element Nd-doped MoS <sub>2</sub> . Advanced Quantum Technologies, 2021, 4, 2000093.	1.8	19
2414	In Situ Synthesis of Few-layered g-C <sub>3</sub> N <sub>4</sub> with Vertically Aligned MoS <sub>2</sub> Loading for Boosting Solar-driven Hydrogen Generation. Small, 2018, 14, 1703003.	5.2	90
2415	State-of-the-Art Advances and Perspectives for Electrocatalysis. , 2020, , 311-352.		1
2416	History, Progress, and Development of Electrocatalysis. , 2020, , 401-424.		2
2417	Catalyst Engineering for Electrochemical Energy Conversion from Water to Water: Water Electrolysis and the Hydrogen Fuel Cell. Engineering, 2020, 6, 653-679.	3.2	75
2418	The Co <sub>3</sub> O <sub>4</sub> nanosheet array as support for MoS <sub>2</sub> as highly efficient electrocatalysts for hydrogen evolution reaction. Journal of Energy Chemistry, 2017, 26, 1136-1139.	7.1	56
2419	Vastly improved solar-light induced water splitting catalyzed by few-layer MoS <sub>2</sub> on Au nanoparticles utilizing localized surface plasmon resonance. Nano Energy, 2020, 77, 105267.	8.2	23
2420	Stable Mixed-Organic-Cation Perovskite MA <sub>1-x</sub> FA <sub>x</sub> Pb <sub>3</sub> Integrated with MoS <sub>2</sub> for Enhanced Visible-Light Photocatalytic H <sub>2</sub> Evolution. Industrial & Engineering Chemistry Research, 2020, 59, 20667-20675.	1.8	12
2421	TiO <sub>2</sub> Nanorod Array Conformally Coated with a Monolayer MoS <sub>2</sub> Film: An Efficient Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 10854-10862.	2.5	11
2422	Doping-induced structural phase transition in cobalt diselenide enables enhanced hydrogen evolution catalysis. Nature Communications, 2018, 9, 2533.	5.8	356

#	ARTICLE	IF	CITATIONS
2423	Surface/interface nanoengineering for rechargeable Zn-air batteries. Energy and Environmental Science, 2020, 13, 1132-1153.	15.6	344
2424	Current status and prospects of memristors based on novel 2D materials. Materials Horizons, 2020, 7, 1495-1518.	6.4	101
2425	Vertically conductive MoS <sub>2</sub> pyramids with a high density of active edge sites for efficient hydrogen evolution. Journal of Materials Chemistry C, 2020, 8, 3017-3022.	2.7	16
2426	Tuning the phase stability and surface HER activity of 1Tâ€²-MoS <sub>2</sub> by covalent chemical functionalization. Journal of Materials Chemistry C, 2020, 8, 15852-15859.	2.7	8
2427	Insight the process of hydrazine gas adsorption on layered WS <sub>2</sub> : a first principle study. Nanotechnology, 2020, 31, 495703.	1.3	6
2428	Recyclable free-polymer transfer of nano-grain MoS <sub>2</sub> film onto arbitrary substrates. Nanotechnology, 2021, 32, 045702.	1.3	5
2429	2D 1Tâ€²-MoS <sub>2</sub> -WS <sub>2</sub> van der Waals heterostructure for hydrogen evolution reaction: dispersion-corrected density functional theory calculations. Materials Research Express, 2020, 7, 075506.	0.8	13
2430	Key role of antibonding electron transfer in bonding on solid surfaces. Physical Review Materials, 2019, 3, .	0.9	22
2431	Large thermoelectric power factor of high-mobility transition-metal dichalcogenides with $\frac{1}{3}$ phase. Physical Review Research, 2020, 2, .	1.8	18
2432	Editorsâ€™ Choiceâ€™ Reviewâ€™ Conductive Forms of MoS <sub>2</sub> and Their Applications in Energy Storage and Conversion. Journal of the Electrochemical Society, 2020, 167, 126517.	1.3	46
2433	MoSe <sub>2</sub> -Ni <sub>3</sub> Se <sub>4</sub> Hybrid Nanoelectrocatalysts and Their Enhanced Electrocatalytic Activity for Hydrogen Evolution Reaction. Nanoscale Research Letters, 2020, 15, 132.	3.1	19
2434	STRATEGIES OF FABRICATING GRAPHENE AND GRAPHENE-ANALOGOUS 2D NANOSHEETS. Ceramics - Silikaty, 2018, , 211-220.	0.2	2
2435	Nonlinear optical absorption features in few-layered hybrid Ti <sub>3</sub> C <sub>2</sub> (OH)/Ti <sub>3</sub> C <sub>2</sub> F <sub>2</sub> MXene for optical pulse generation in the NIR region. Optics Express, 2020, 28, 31499.	1.7	22
2436	Catalytic Behavior of Molybdenum Sulfide for the Hydrogen Evolution Reaction as a Function of Crystallinity and Particle Size Using Carbon Multiwall Nanotubes as Substrates. Zeitschrift Fur Physikalische Chemie, 2020, 234, 1021-1043.	1.4	9
2437	Synthesis of PdS <sub>x</sub> -Mediated Polydimite Heteronanorods and Their Long-Range Activation for Enhanced Water Electroreduction. Research, 2019, 2019, 8078549.	2.8	9
2438	Co&lt;sub&gt;9&lt;/sub&gt;S&lt;sub&gt;8&lt;/sub&gt; Nanotubes as an Efficient Catalyst for Hydrogen Evolution Reaction in Alkaline Electrolyte. American Journal of Analytical Chemistry, 2016, 07, 210-218.	0.3	9
2439	Hydrogen adsorption mechanism on single-layer MoSe <sub>2</sub> for hydrogen evolution reaction: First-principles study. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 217102.	0.2	2
2440	Construction of 1T@2H MoS <sub>2</sub> heterostructures <i>in situ</i> from natural molybdenite with enhanced electrochemical performance for lithium-ion batteries. RSC Advances, 2021, 11, 33481-33489.	1.7	8

#	ARTICLE	IF	CITATIONS
2441	Correlation of grain orientations and the thickness of gradient MoS <sub>2</sub> films. RSC Advances, 2021, 11, 34269-34274.	1.7	2
2442	Finding the catalytically active sites on the layered tri-chalcogenide compounds CoPS <sub>3</sub> and NiPS <sub>3</sub> for hydrogen evolution reaction. Physical Chemistry Chemical Physics, 2021, 23, 23967-23977.	1.3	12
2443	Chemical Vapor Deposition Mediated Phase Engineering for 2D Transition Metal Dichalcogenides: Strategies and Applications. Small Science, 2022, 2, 2100047.	5.8	35
2444	High-performance and long-cycle life of triboelectric nanogenerator using PVC/MoS <sub>2</sub> composite membranes for wind energy scavenging application. Nano Energy, 2022, 91, 106649.	8.2	35
2445	Efficient MnNiCo nanocomposite-based electrocatalyst for oxygen evolution reaction in alkaline media. Journal of the Chinese Chemical Society, 2021, 68, 2254-2263.	0.8	3
2446	Synthesis of emerging two-dimensional (2D) materials – Advances, challenges and prospects. FlatChem, 2021, 30, 100305.	2.8	65
2447	Aiding Time-Dependent Laser Ablation to Direct 1T-MoS <sub>2</sub> for an Improved Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2021, 9, 14744-14755.	3.2	12
2448	Phase engineering of transition metal compounds for boosting lithium/sodium storage. APL Materials, 2021, 9, .	2.2	3
2449	MoS <sub>2</sub> -Based Catalysts for N <sub>2</sub> Electroreduction to NH <sub>3</sub> – An Overview of MoS <sub>2</sub> Optimization Strategies. ChemistryOpen, 2021, 10, 1041-1054.	0.9	10
2451	Kinetics and Evolution of Magnetism in Soft-Chemical Synthesis of CrSe <sub>2</sub> from KCrSe <sub>2</sub> . Chemistry of Materials, 2021, 33, 8070-8078.	3.2	11
2452	Predicting New MXene-like Two-Dimensional Materials Pb <sub>2</sub> CO <sub>2</sub> and Sn <sub>2</sub> CO <sub>2</sub> as Potential Hydrogen Evolution Reaction Catalysts. Journal of Physical Chemistry C, 2021, 125, 22562-22569.	1.5	5
2453	Nanoscale Chevrel-Phase Mo <sub>6</sub> S <sub>8</sub> Prepared by a Molecular Precursor Approach for Highly Efficient Electrocatalysis of the Hydrogen Evolution Reaction in Acidic Media. ACS Applied Energy Materials, 2021, 4, 13015-13026.	2.5	12
2454	Constructing a new 2D Janus black phosphorus/SMoSe heterostructure for spontaneous wide-spectral-responsive photocatalytic overall water splitting. International Journal of Hydrogen Energy, 2021, 46, 39183-39194.	3.8	17
2455	Probing active sites on MnPSe <sub>3</sub> and FePSe <sub>3</sub> tri-chalcogenides as a design strategy for better hydrogen evolution reaction catalysts. International Journal of Hydrogen Energy, 2021, 46, 37928-37938.	3.8	9
2456	Single-atom dispersed Cu or Co on 2H-MoS <sub>2</sub> monolayer for improving electrocatalytic activity of overall water splitting. Surfaces and Interfaces, 2021, 27, 101538.	1.5	9
2457	Synthesis, Characterization, and Catalytic Application of 2D Mo(W) Dichalcogenides Nanosheets. Advances in Chemical and Materials Engineering Book Series, 2017, , 1-30.	0.2	0
2458	Chapter 9. High Electrocatalytic Performance of Two-dimensional Layered MoS <sub>2</sub> -based Materials for the Hydrogen Evolution Reaction. RSC Smart Materials, 2019, , 283-310.	0.1	1
2459	MoS <sub>2</sub> /HCSs/ZnIn <sub>2</sub> S <sub>4</sub> nanocomposites with enhanced charge transport and photocatalytic hydrogen evolution performance. Journal of Alloys and Compounds, 2022, 895, 162504.	2.8	21

#	ARTICLE	IF	CITATIONS
2460	The Modified Liquid-Liquid Interface: The Effect of an Interfacial Layer of MoS <sub>2</sub> on Ion Transfer. <i>ChemElectroChem</i> , 2021, 8, 4445-4455.	1.7	11
2464	Morphology and Phase Engineering of MoS <sub>2</sub> Cocatalyst for High-Efficiency Hydrogen Evolution: One-Step Clean Synthesis and Comparative Studies. <i>Journal of Physical Chemistry C</i> , 0, , .	1.5	10
2465	Co-Mo-Se ternary chalcogenide thin film coated p-Si photocathode for efficient solar hydrogen production. <i>Functional Materials Letters</i> , 2021, 14, 2151002.	0.7	1
2466	Assembly of Janus RGO/1T <sup>+</sup> -TeMoSe nanostructures possessing enhanced electrocatalytic activity for hydrogen evolution. <i>Materials Science in Semiconductor Processing</i> , 2022, 138, 106253.	1.9	3
2467	Carbon dioxide and nitrogen reduction reactions using 2D transition metal dichalcogenide (TMDC) and carbide/nitride (MXene) catalysts. <i>Energy and Environmental Science</i> , 2021, 14, 6242-6286.	15.6	69
2468	Role of Earth-Abundant/Carbonaceous Electrocatalysts as Cocatalyst for Solar Water Splitting. , 2020, , 201-220.		0
2469	Two-Dimensional Transition Metal Chalcogenides for Hydrogen Evolution Catalysis. , 2020, , 1-28.		0
2470	Controlled vanadium doping of mos <sub>2</sub> thin films through co-sputtering and thermal sulfurization. <i>Cumhuriyet Science Journal</i> , 2020, 41, 305-310.	0.1	5
2471	High-Efficiency Photocatalytic Degradation of Tannic Acid Using TiO <sub>2</sub> Heterojunction Catalysts. <i>ACS Omega</i> , 2021, 6, 28538-28547.	1.6	5
2472	Preparation of CoSOH/Co(OH) <sub>2</sub> composite nanosheets and its catalytic performance for oxygen evolution. <i>Journal of Fuel Chemistry and Technology</i> , 2021, 49, 1549-1557.	0.9	3
2473	Interface Engineering and Anion Engineering of Mo-Based Heterogeneous Electrocatalysts for Hydrogen Evolution Reaction. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	30
2474	The electrical conductivity of solution-processed nanosheet networks. <i>Nature Reviews Materials</i> , 2022, 7, 217-234.	23.3	75
2475	Effect of Silver-Nanocrystalline Impregnated on Graphite Electrode in Catalyzing Thiamethoxam Reduction. <i>Journal of the Electrochemical Society</i> , 2020, 167, 136507.	1.3	1
2476	Nanostructured Composite Catalyst for Electrochemical Water Splitting: Significantly Improved for Hydrogen Evolution Reaction. <i>Sensor Letters</i> , 2020, 18, 842-852.	0.4	0
2477	Modern applications of scanning electrochemical microscopy in the analysis of electrocatalytic surface reactions. <i>Chinese Journal of Catalysis</i> , 2022, 43, 59-70.	6.9	8
2478	Low-temperature synthesis of molybdenum sulfides, tungsten sulfides, and composites thereof as efficient electrocatalysts for hydrogen evolution reaction. <i>Applied Surface Science</i> , 2022, 576, 151828.	3.1	12
2479	Hierarchical sulphide - phosphide NiSP /NF catalyst prepared by gradient electrodeposition for oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2022, 895, 162675.	2.8	12
2480	A new hyperbranched water-splitting technique based on Co <sub>3</sub> O <sub>4</sub> /MoS <sub>2</sub> nano composite catalyst for High-Performance of hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 2124-2133.	3.8	5

#	ARTICLE	IF	CITATIONS
2481	P-Type AsP Nanosheet as an Electron Donor for Stable Solar Broad-Spectrum Hydrogen Evolution. ACS Applied Materials & Interfaces, 2021, 13, 55102-55111.	4.0	2
2482	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.	1.0	6
2483	Modulating the Electronic Properties of MoS <sub>2</sub> Nanosheets for Electrochemical Hydrogen Production: A Review. ACS Applied Nano Materials, 2021, 4, 11413-11427.	2.4	24
2484	Triangle nanowall arrays of ultrathin MoS <sub>2</sub> nanosheets vertically grown on Co-Fe bimetallic disulfide as highly efficient electrocatalysts for hydrogen evolution reaction. Electrochimica Acta, 2022, 403, 139683.	2.6	10
2485	Self-water-absorption-type two-dimensional composite photocatalyst with high-efficiency water absorption and overall water-splitting performance. , 2022, 1, 100008.		55
2486	Intercalation in two-dimensional transition metal chalcogenides: interlayer engineering and applications. Progress in Energy, 2022, 4, 022001.	4.6	2
2487	Single-Atom Engineering to Ignite 2D Transition Metal Dichalcogenide Based Catalysis: Fundamentals, Progress, and Beyond. Chemical Reviews, 2022, 122, 1273-1348.	23.0	104
2488	Reaction Mechanism and Strategy for Optimizing the Hydrogen Evolution Reaction on Single-Layer 1Tâ€² WSe <sub>2</sub> and WTe <sub>2</sub> Based on Grand Canonical Potential Kinetics. ACS Applied Materials & Interfaces, 2021, 13, 55611-55620.	4.0	14
2489	Environmental implications of MoS <sub>2</sub> nanosheets on rice and associated soil microbial communities. Chemosphere, 2022, 291, 133004.	4.2	21
2490	Mechanism of sulfur vacancies and doping in 1Â¹-MoS <sub>2</sub> toward the evolution of hydrogen. Chemical Physics Letters, 2022, 787, 139231.	1.2	8
2491	Heterointerface Control over Lithium-Induced Phase Transitions in MoS <sub>2</sub> Nanosheets: Implications for Nanoscaled Energy Materials. ACS Applied Nano Materials, 2021, 4, 14105-14114.	2.4	7
2492	Template-assisted hydrothermal synthesized hydrophilic spherical 1T-MoS <sub>2</sub> with excellent zinc storage performance. Journal of Alloys and Compounds, 2022, 898, 162854.	2.8	20
2493	Effective enhancement of electron migration and photocatalytic performance of nitrogen-rich carbon nitride by constructing fungal carbon dot/molybdenum disulfide cocatalytic system. Journal of Colloid and Interface Science, 2022, 609, 592-605.	5.0	19
2494	Two-Dimensional Materials for Heavy Metal Removal. Environmental Chemistry for A Sustainable World, 2021, , 105-134.	0.3	0
2495	MoO <sub>x</sub> S <sub>y</sub> /Ni <sub>3</sub> S <sub>2</sub> Microspheres on Ni Foam as Highly Efficient, Durable Electrocatalysts for Hydrogen Evolution Reaction. Chemistry of Materials, 2022, 34, 798-808.	3.2	26
2496	Tailoring S-vacancy concentration changes the type of the defect and photocatalytic activity in ZFS. Journal of Hazardous Materials, 2022, 428, 128215.	6.5	9
2497	Recent advances in MoS <sub>2</sub> -based materials for electrocatalysis. Chemical Communications, 2022, 58, 2259-2278.	2.2	30
2498	Large-scale production of low-cost molybdenum dioxide-phosphide seamless electrode for high-current-density hydrogen evolution. Journal of Materials Chemistry A, 0, , .	5.2	8



#	ARTICLE	IF	CITATIONS
2499	Electrocatalysis enabled transformation of earth-abundant water, nitrogen and carbon dioxide for a sustainable future. <i>Materials Advances</i> , 2022, 3, 1359-1400.	2.6	17
2500	Modulation of bovine serum albumin aggregation by glutathione functionalized MoS <sub>2</sub> quantum dots. <i>International Journal of Biological Macromolecules</i> , 2022, 195, 237-245.	3.6	9
2501	Rapid, one-step fabrication of MoS <sub>2</sub> electrocatalysts by hydrothermal electrodeposition. <i>Electrochemistry Communications</i> , 2022, 134, 107180.	2.3	6
2502	Electronic structure transformation induced by dual-metal orbital hybridization in Re <sub>x</sub> Mn <sub>1-x</sub> S <sub>2</sub> monolayer for hydrogen evolution reaction. <i>Surfaces and Interfaces</i> , 2022, 28, 101671.	1.5	1
2503	In-situ phase conversion of composited 1T@2H MoSe <sub>2</sub> nanosheets with enhanced HER performance. <i>Materials Chemistry and Physics</i> , 2022, 278, 125657.	2.0	7
2504	Restructuring electronic structure via W doped 1T MoS <sub>2</sub> for enhancing hydrogen evolution reaction. <i>Applied Surface Science</i> , 2022, 579, 152216.	3.1	20
2505	Synthesis and nano-engineering of MXenes for energy conversion and storage applications: Recent advances and perspectives. <i>Coordination Chemistry Reviews</i> , 2022, 454, 214339.	9.5	71
2506	P and Se-codopants triggered basal plane active sites in NbS <sub>2</sub> 3D nanosheets toward electrocatalytic hydrogen evolution. <i>Applied Surface Science</i> , 2022, 581, 152419.	3.1	7
2507	Influence of Single and Double-Atom Metal Doping on the Electrocatalytic Hydrogen Evolution Activity of 2D-MoS <sub>2</sub> Surface. , 2020, , .		0
2508	Surfactant-Free Synthesis of Ultrafine Pt Nanoparticles on MoS <sub>2</sub> Nanosheets as Bifunctional Catalysts for the Hydrodeoxygenation of Bio-Oil. <i>Langmuir</i> , 2020, 36, 14710-14716.	1.6	7
2509	Application of Transition Metal Phosphides to Electrocatalysis: An Overview. <i>Jom</i> , 2022, 74, 381-395.	0.9	9
2510	ÅzÅzÅ¼cÅ¼ ve IsÅ±l Å°Å¼lem SÅ¼recinin MoS <sub>2</sub> Å°nce Filmlerinin YapÅ±sal Å–zelliklerine Etkisinin Å°ncelenmesi. <i>Deu Muhendislik Fakultesi Fen Ve Muhendislik</i> , 2022, 24, 81-90.	0.1	0
2511	Efficient and long-term photocatalytic H <sub>2</sub> evolution stability enabled by Cs <sub>2</sub> AgBiBr <sub>6</sub> /MoS <sub>2</sub> in aqueous HBr solution. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 8829-8840.	3.8	25
2512	Phase engineering two-dimensional nanostructures for electrocatalytic hydrogen evolution reaction. <i>Chinese Chemical Letters</i> , 2023, 34, 107119.	4.8	15
2513	Plasma-induced large-area N,Pt-doping and phase engineering of MoS <sub>2</sub> nanosheets for alkaline hydrogen evolution. <i>Energy and Environmental Science</i> , 2022, 15, 1201-1210.	15.6	75
2514	Stabilization of Metastable Halide Perovskite Lattices in the 2D Limit. <i>Advanced Materials</i> , 2022, 34, e2108556.	11.1	31
2515	Magnetic Nanostructures: Rational Design and Fabrication Strategies toward Diverse Applications. <i>Chemical Reviews</i> , 2022, 122, 5411-5475.	23.0	49
2516	Photo-assisted Fe <sup>2+</sup> modified molybdenum disulfide activated potassium persulfate to degrade sulfadiazine: Insights into the degradation pathway and mechanism from density functional theory. <i>Chemical Engineering Journal</i> , 2022, 435, 134904.	6.6	29

#	ARTICLE	IF	CITATIONS
2517	Applications of MXenes and their composites in catalysis and photoelectrocatalysis. , 2022, , 449-498.		0
2518	One-pot synthesis of ultrathin 1T-MoS <sub>2</sub> nanosheets as efficient catalyst for reduction of 4-nitrophenol. <i>Materials Letters</i> , 2022, 314, 131794.	1.3	11
2519	Boosting the electronic and catalytic properties of 2D semiconductors with supramolecular 2D hydrogen-bonded superlattices. <i>Nature Communications</i> , 2022, 13, 510.	5.8	19
2520	Two-Dimensional Confined Synthesis of Metastable 1T-Phase MoS <sub>2</sub> Nanosheets for the Hydrogen Evolution Reaction. <i>ACS Applied Nano Materials</i> , 2022, 5, 1377-1384.	2.4	15
2521	Emerging 2D Materials for Electrocatalytic Applications: Synthesis, Multifaceted Nanostructures, and Catalytic Center Design. <i>Small</i> , 2022, 18, e2105831.	5.2	31
2522	Sandwich-type microRNA biosensor based on graphene oxide incorporated 3D-flower-like MoS <sub>2</sub> and AuNPs coupling with HRP enzyme signal amplification. <i>Mikrochimica Acta</i> , 2022, 189, 49.	2.5	18
2523	First-Principles Calculation of Optoelectronic Properties in 2D Materials: The Polytypic WS <sub>2</sub> Case. <i>ACS Physical Chemistry Au</i> , 2022, 2, 191-198.	1.9	7
2524	Electronic, optical, and catalytic properties of finite antimonene nanoribbons: first principles study. <i>Physica Scripta</i> , 2022, 97, 035802.	1.2	6
2525	Electrochemical Water Splitting: H <sub>2</sub> Evolution Reaction. <i>Materials Horizons</i> , 2022, , 59-89.	0.3	2
2526	Phase transformations in the nickel phosphide system induced by transition-metal doping and their electro-catalytic study. <i>Sustainable Energy and Fuels</i> , 2022, 6, 1319-1331.	2.5	7
2527	An insight to catalytic synergic effect of Pd-MoS <sub>2</sub> nanorods for highly efficient hydrogen evolution reaction. <i>Arabian Journal of Chemistry</i> , 2022, 15, 103735.	2.3	13
2528	Electronegativity-Induced Charge Balancing to Boost Stability and Activity of Amorphous Electrocatalysts. <i>Advanced Materials</i> , 2022, 34, e2100537.	11.1	39
2529	Electrocatalysis under a magnetic lens: A combined electrochemistry and electron paramagnetic resonance review. <i>Electrochimica Acta</i> , 2022, 407, 139704.	2.6	11
2530	One-pot green method for fabrication of MoS <sub>2</sub> decorated graphite rod and their application in H <sub>2</sub> evolution. <i>Materials Letters</i> , 2022, 313, 131784.	1.3	4
2531	Direct growth of cobalt-doped molybdenum disulfide on graphene nanohybrids through microwave irradiation with enhanced electrocatalytic properties for hydrogen evolution reaction. <i>Advanced Composites and Hybrid Materials</i> , 2022, 5, 2339-2352.	9.9	25
2532	Enhancing Tumor Catalytic Therapy by Co-Catalysis. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	11
2533	All-Solution-Processed Van der Waals Heterostructures for Wafer-Scale Electronics. <i>Advanced Materials</i> , 2022, 34, e2106110.	11.1	43
2534	Constructing Z-scheme structure by loading BiOBr with (010) exposure on the surface of MoS <sub>2</sub> and its enhanced photocatalytic property for degrading RhB. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 6722-6733.	1.1	6

#	ARTICLE	IF	CITATIONS
2535	Mesoporous Gamma-Alumina-Supported Mo Catalysts: Effect of Calcination Temperature. ChemistrySelect, 2022, 7, .	0.7	0
2536	Enhancing Tumor Catalytic Therapy by Co-Catalysis. Angewandte Chemie - International Edition, 2022, 61, .	7.2	51
2537	Ni <sub>2</sub> P@MoS <sub>2</sub> /CC catalysts with heterogeneous structure are used for highly efficient electrolysis of water for hydrogen evolution. Journal of Alloys and Compounds, 2022, 905, 164157.	2.8	9
2538	Plasmonic hot-electron assisted phase transformation in 2D-MoS <sub>2</sub> for the hydrogen evolution reaction: current status and future prospects. Journal of Materials Chemistry A, 2022, 10, 8626-8655.	5.2	24
2539	Designed synthesis of a hierarchical MoSe <sub>2</sub> @WSe <sub>2</sub> hybrid nanostructure as a bifunctional electrocatalyst for total water-splitting. Sustainable Energy and Fuels, 2022, 6, 1708-1718.	2.5	7
2540	Dynamic coordination transformation of active sites in single-atom MoS <sub>2</sub> catalysts for boosted oxygen evolution catalysis. Energy and Environmental Science, 2022, 15, 2071-2083.	15.6	33
2541	Emerging investigator series: correlating phase composition and geometric structure to the colloidal stability of 2D MoS <sub>2</sub> nanomaterials. Environmental Science: Nano, 2022, 9, 1605-1616.	2.2	3
2542	Nanoscale metal oxides—2D materials heterostructures for photoelectrochemical water splitting—a review. Journal of Materials Chemistry A, 2022, 10, 8656-8686.	5.2	48
2543	Sustainable Desalination Device Capable of Producing Fresh Water and Electricity. SSRN Electronic Journal, 0, , .	0.4	0
2544	Tailoring defects in 2D materials for electrocatalysis. , 2022, , 303-337.		0
2545	Defects in transition metal dichalcogenides. , 2022, , 89-117.		1
2546	Mo/Co doped 1T-VS <sub>2</sub> nanostructures as a superior bifunctional electrocatalyst for overall water splitting in alkaline media. Journal of Materials Chemistry A, 2022, 10, 9067-9079.	5.2	38
2547	Facile and Scalable Preparation of 2d-MoS <sub>2</sub> /Graphene Oxide Composite for Supercapacitor. SSRN Electronic Journal, 0, , .	0.4	0
2548	Layer by Layer Deposition of 1T-MoS <sub>2</sub> for the Hydrogen Evolution Reaction. ChemistrySelect, 2022, 7, .	0.7	1
2549	Direct Thermal Enhancement of Hydrogen Evolution Reaction of On-Chip Monolayer MoS <sub>2</sub> . ACS Nano, 2022, 16, 2921-2927.	7.3	44
2550	Construction of Confined Bifunctional 2D Material for Efficient Sulfur Resource Recovery and Hg <sup>2+</sup> Adsorption in Desulfurization. Environmental Science & Technology, 2022, 56, 4531-4541.	4.6	13
2551	Bifunctional P-Intercalated and Doped Metallic (1T)-Copper Molybdenum Sulfide Ultrathin 2D-Nanosheets with Enlarged Interlayers for Efficient Overall Water Splitting. ACS Applied Materials & Interfaces, 2022, 14, 14492-14503.	4.0	39
2552	Black Si Photocathode with a Conformal and Amorphous MoS <sub>x</sub> Catalytic Layer Grown Using Atomic Layer Deposition for Photoelectrochemical Hydrogen Evolution. ACS Applied Materials & Interfaces, 2022, 14, 14137-14145.	4.0	4

#	ARTICLE	IF	CITATIONS
2553	Highly Sensitive and Selective Triethylamine Sensing through High-Entropy Alloy (Tiâ€“Zrâ€“Crâ€“Vâ€“Ni) Nanoparticle-Induced Fermi Energy Control of MoS <sub>2</sub> Nanosheets. ACS Applied Materials & Interfaces, 2022, 14, 13653-13664.	4.0	13
2554	Non-noble metal-based bifunctional electrocatalysts for hydrogen production. Rare Metals, 2022, 41, 2169-2183.	3.6	62
2555	Electrochemical hydrogen generation technology: Challenges in electrodes materials for a sustainable energy. Electrochemical Science Advances, 2023, 3, .	1.2	8
2556	Mapping 1D Confined Electromagnetic Edge States in 2D Monolayer Semiconducting MoS <sub>2</sub> Using 4D-STEM. ACS Nano, 2022, 16, 6657-6665.	7.3	9
2557	A simple two-step strategy to synthesize defect-rich MoS <sub>2</sub> nanocrystals for enhanced electrochemical hydrogen evolution. AIP Advances, 2022, 12, .	0.6	4
2558	Two-Dimensional Palladium Phosphoronitride for Oxygen Reduction. ACS Applied Materials & Interfaces, 2022, 14, 12156-12167.	4.0	10
2559	Direct Synthesis of Stable 1Tâ€“MoS <sub>2</sub> Doped with Ni Single Atoms for Water Splitting in Alkaline Media. Small, 2022, 18, e2107238.	5.2	58
2560	Electrospinning derivative fabrication of sandwich-structured CNF/Co <sub>3</sub> S <sub>4</sub> /MoS <sub>2</sub> as self-supported electrodes to accelerate electron transport in HER. International Journal of Hydrogen Energy, 2022, 47, 14930-14941.	3.8	14
2561	Recent advancements in the cathodic catalyst for the hydrogen evolution reaction in microbial electrolytic cells. International Journal of Hydrogen Energy, 2022, 47, 15333-15356.	3.8	20
2562	Tunable electronic properties of the GeC/MoS <sub>2</sub> heterostructures: A first-principles study. Solid State Communications, 2022, 345, 114703.	0.9	4
2563	Phase engineering-defective 1Tâ€“MoS <sub>2</sub> nanoflowers as excellent full spectrum photocatalyst. Journal of Alloys and Compounds, 2022, 910, 164898.	2.8	9
2564	Provoking Metallic 1T Phase Conversion of 2H-MoS <sub>2</sub> via an Effectual Solvothermal Route for Electrocatalytic Water Reduction in Acid. ACS Sustainable Chemistry and Engineering, 2022, 10, 5258-5267.	3.2	14
2565	Towards the application of 2D metal dichalcogenides as hydrogen evolution electrocatalysts in proton exchange membrane electrolyzers. Current Opinion in Electrochemistry, 2022, 34, 101001.	2.5	5
2566	Transition metal dichalcogenides as catalysts for the hydrogen evolution reaction: The emblematic case of â€“ZrSe <sub>2</sub> as catalyst for electrolyzers. Nano Select, 2022, 3, 1069-1081.	1.9	6
2567	Multiple 2D Phase Transformations in Monolayer Transition Metal Chalcogenides. Advanced Materials, 2022, 34, e2200643.	11.1	6
2568	Origin of the Enhanced Hydrogen Evolution Reaction Activity of Grain Boundaries in MoS <sub>2</sub> Monolayers. Journal of Physical Chemistry C, 2022, 126, 6215-6222.	1.5	5
2569	Hydrazine Hydrate Intercalated 1T-Dominant MoS <sub>2</sub> with Superior Ambient Stability for Highly Efficient Electrocatalytic Applications. ACS Applied Materials & Interfaces, 2022, 14, 16338-16347.	4.0	17
2570	WS <sub>2</sub> /p-Si-based photocathodes with high activity originated from the unique vertical geometry of the 2D WS <sub>2</sub> nanoplatelets. FlatChem, 2022, 33, 100361.	2.8	4

#	ARTICLE	IF	CITATIONS
2571	Electrochemical interfaces on chalcogenides: Some structural perspectives and synergistic effects of single-surface active sites. <i>Current Opinion in Electrochemistry</i> , 2022, 33, 100955.	2.5	3
2572	Facile synthesis of Fe-MoS <sub>2</sub> /NRGO composite material as effective electrocatalyst for high-efficiency hydrogen evolution reaction. <i>Applied Surface Science</i> , 2022, 587, 152842.	3.1	15
2573	Dual roles of MoS <sub>2</sub> nanosheets in advanced oxidation Processes: Activating permonosulfate and quenching radicals. <i>Chemical Engineering Journal</i> , 2022, 440, 135866.	6.6	24
2574	Enabling efficient electrocatalytic conversion of N <sub>2</sub> to NH <sub>3</sub> by Ti <sub>3</sub> C <sub>2</sub> MXene loaded with semi-metallic 1Tâ€²-MoS <sub>2</sub> nanosheets. <i>Applied Catalysis B: Environmental</i> , 2022, 310, 121277.	10.8	54
2575	Progressions in cathodic catalysts for oxygen reduction and hydrogen evolution in bioelectrochemical systems: Molybdenum as the next-generation catalyst. <i>Catalysis Reviews - Science and Engineering</i> , 2023, 65, 986-1078.	5.7	3
2576	Recent Progress and Approaches on Transition Metal Chalcogenides for Hydrogen Production. <i>Energies</i> , 2021, 14, 8265.	1.6	4
2577	Machine-Learning Assisted Exploration: Toward the Next-Generation Catalyst for Hydrogen Evolution Reaction. <i>Journal of the Electrochemical Society</i> , 2021, 168, 126523.	1.3	4
2578	A Strategy for Waferâ€šscale Crystalline MoS <sub>2</sub> Thin Films with Controlled Morphology Using Pulsed Metalâ€šOrganic Chemical Vapor Deposition at Low Temperature. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	8
2579	SiCP <sub>4</sub> Monolayer with a Direct Band Gap and High Carrier Mobility for Photocatalytic Water Splitting. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 190-197.	2.1	16
2580	Artificial synapses based on electric stress induced conductance variation in vertical MoReS <sub>3</sub> nanosheets. <i>Applied Physics Letters</i> , 2021, 119, 263101.	1.5	0
2581	Covalent Functionalization of Nickel Phosphide Nanocrystals with Aryl-Diazonium Salts. <i>Chemistry of Materials</i> , 2021, 33, 9652-9665.	3.2	9
2582	Stabilizing the heavily-doped and metallic phase of MoS <sub>2</sub> monolayers with surface functionalization. <i>2D Materials</i> , 2022, 9, 015033.	2.0	5
2583	Molybdenum Sulfide Quantum Dots Decorated on TiO <sub>2</sub> for Photocatalytic Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2022, 5, 702-709.	2.4	8
2584	Designing Self-Supported Electrocatalysts for Electrochemical Water Splitting: Surface/Interface Engineering toward Enhanced Electrocatalytic Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 59593-59617.	4.0	58
2585	Carbonate materials synthesis using molten salt templates. <i>Journal of Materials Science</i> , 2022, 57, 7778-7790.	1.7	2
2586	CO oxidation on MXene (Mo <sub>2</sub> CS <sub>2</sub> ) supported single-atom catalyst: A termolecular Eley-Rideal mechanism. <i>Chinese Chemical Letters</i> , 2023, 34, 107412.	4.8	13
2587	Enhanced electrocatalysis of WSe <sub>2</sub> nanosheets by partial oxidation for hydrogen generation. <i>International Journal of Energy Research</i> , 2022, 46, 12073-12081.	2.2	29
2588	Surface and Interface Engineering Strategies for MoS <sub>2</sub> Towards Electrochemical Hydrogen Evolution. <i>Chemistry - an Asian Journal</i> , 2022, 17, .	1.7	6

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2589	NiX <sub>2</sub> (X = S, Se, and Te) Monolayers: Promising Anodes in Li/Na-Ion Batteries and Superconductors. <i>Journal of Physical Chemistry C</i> , 2022, 126, 6925-6933.	1.5	13
2590	Structure engineering of 1T/2H multiphase MoS <sub>2</sub> via oxygen incorporation over 2D layered porous g-C <sub>3</sub> N <sub>4</sub> for remarkably enhanced photocatalytic hydrogen evolution. <i>Materials Today Nano</i> , 2022, 18, 100204.	2.3	19
2591	Salt-Assisted MoS <sub>2</sub> Growth: Molecular Mechanisms from the First Principles. <i>Journal of the American Chemical Society</i> , 2022, 144, 7497-7503.	6.6	30
2592	Ni(OH) <sub>2</sub> nanoparticles decorated on 1T phase MoS <sub>2</sub> basal plane for efficient water splitting. <i>Applied Surface Science</i> , 2022, 593, 153408.	3.1	10
2593	Symbiosis of 1T and 2H phases in the basal plane of defective MoS <sub>2</sub> nanoflowers for efficient hydrodesulfurization. <i>Fuel</i> , 2022, 322, 124252.	3.4	4
2594	A single-atom vanadium-doped 2D semiconductor platform for attomolar-level molecular sensing. <i>Journal of Materials Chemistry A</i> , 2022, 10, 13298-13304.	5.2	12
2595	Tuning phase compositions of MoS <sub>2</sub> nanomaterials for enhanced heavy metal removal: performance and mechanism. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 13305-13316.	1.3	6
2596	Incorporating Au <sub>11</sub> nanoclusters on MoS <sub>2</sub> nanosheet edges for promoting the hydrogen evolution reaction at the interface. <i>Nanoscale</i> , 2022, 14, 7919-7926.	2.8	9
2597	The effects of the fluence of electron irradiation on the structure and hydrogen evolution reaction performance of molybdenum disulfide. <i>Journal of Materials Chemistry C</i> , 2022, 10, 7839-7848.	2.7	3
2598	A solution-processed MoS <sub>2</sub> /graphene heterostructure mediated by a bifunctional block copolymer as a non-noble metal platform for hydrogen evolution. <i>Sustainable Energy and Fuels</i> , 2022, 6, 2858-2867.	2.5	1
2599	Intercalation-Driven Defect Engineering of MoS <sub>2</sub> for Catalytic Transfer Hydrogenation. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	7
2600	Electrocatalytic hydrogen evolution performance of modified Ti <sub>3</sub> C <sub>2</sub> O <sub>2</sub> doped with non-metal elements: A DFT study. <i>ChemPhysMater</i> , 2022, 1, 321-329.	1.4	3
2601	Silver Nanocluster/MoS <sub>2</sub> Heterostructures for Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2022, 5, 7132-7141.	2.4	15
2602	Rationalizing hydrogen evolution mechanism on the slab of Zn-reduced 2H-MoS <sub>2</sub> monolayer by density functional theory calculations. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 19005-19015.	3.8	6
2603	Intercalation of coordination polymer to regulate interlayer of 2D layered MoS <sub>2</sub> for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, , .	3.8	9
2604	The coupled electrocatalyst synergy fabrication for the electrochemical oxygen evolution reaction: From electrode to green energy system. <i>Journal of the Chinese Chemical Society</i> , 0, , .	0.8	0
2605	Three-Dimensional Printed MoS <sub>2</sub> /Graphene Aerogel Electrodes for Hydrogen Evolution Reactions. <i>ACS Materials Au</i> , 2022, 2, 596-601.	2.6	16
2606	Activating the Electrocatalysis of MoS <sub>2</sub> Basal Plane for Hydrogen Evolution via Atomic Defect Configurations. <i>Small</i> , 2022, 18, .	5.2	26

#	ARTICLE	IF	CITATIONS
2607	Pentagon-based 2D materials: Classification, properties and applications. <i>Physics Reports</i> , 2022, 964, 1-42.	10.3	43
2608	Room-temperature ferromagnetism in two-dimensional transition metal chalcogenides: Strategies and origin. <i>Journal of Alloys and Compounds</i> , 2022, 913, 165289.	2.8	7
2609	FeS <sub>2</sub> /MoS <sub>2</sub> @RGO hybrid materials derived from polyoxomolybdate-based metal-organic frameworks as high-performance electrocatalyst for ammonia synthesis under ambient conditions. <i>Chemical Engineering Journal</i> , 2022, 445, 136797.	6.6	70
2610	A well-designed fence-like Co <sub>3</sub> O <sub>4</sub> @MoO <sub>3</sub> derived from Co foam for enhanced electrocatalytic HER. <i>Applied Surface Science</i> , 2022, 595, 153532.	3.1	13
2611	One-step ultrafast laser induced synthesis of strongly coupled 1T-2H MoS <sub>2</sub> /N-rGO quantum-dot heterostructures for enhanced hydrogen evolution. <i>Chemical Engineering Journal</i> , 2022, 445, 136618.	6.6	10
2612	Taking Advantage of Teamwork: Unsupported Cobalt Molybdenum Sulfide as an Active HER Electrocatalyst in Alkaline Media. <i>Journal of the Electrochemical Society</i> , 2022, 169, 054524.	1.3	6
2613	Mitigation Effects and Associated Mechanisms of Environmentally Relevant Thiols on the Phytotoxicity of Molybdenum Disulfide Nanosheets. <i>Environmental Science &amp; Technology</i> , 2022, 56, 9556-9568.	4.6	9
2614	Unveiling the Electrocatalytic Activity of 1Tâ€²-MoSe <sub>2</sub> on Lithium-Polysulfide Conversion Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 24486-24496.	4.0	11
2615	Conversion of layered materials to ultrathin amorphous nanosheets induced by ball-milling insertion and pure-water exfoliation. <i>Journal of Materials Chemistry A</i> , 2022, 10, 11766-11773.	5.2	5
2616	Atomic and structural modifications of two-dimensional transition metal dichalcogenides for various advanced applications. <i>Chemical Science</i> , 2022, 13, 7707-7738.	3.7	28
2617	Tuning strategies and structure effects of electrocatalysts for carbon dioxide reduction reaction. <i>Chinese Journal of Catalysis</i> , 2022, 43, 1618-1633.	6.9	6
2618	Molybdenum chalcogenides based anode materials for alkali metal ions batteries: Beyond lithium ion batteries. <i>Energy Storage Materials</i> , 2022, 50, 308-333.	9.5	46
2619	Nanostructured molybdenum dichalcogenides: a review. <i>Materials Advances</i> , 2022, 3, 5672-5697.	2.6	16
2620	The Potential Application of Exfoliated MoS <sub>2</sub> to Aqueous Lithium-Ion Batteries. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2621	Monoclinic bismuth vanadate nanoparticles as saturable absorber for Q-switching operations at 1.3 and 2 Åµm. <i>Applied Physics Express</i> , 0, , .	1.1	3
2622	Reviewâ€”Recent Developments in the Applications of 2D Transition Metal Dichalcogenides as Electrocatalysts in the Generation of Hydrogen for Renewable Energy Conversion. <i>Journal of the Electrochemical Society</i> , 2022, 169, 064504.	1.3	19
2623	Co-Based Nanosheets with Transitional Metal Doping for Oxygen Evolution Reaction. <i>Nanomaterials</i> , 2022, 12, 1788.	1.9	0
2624	Large-Area MoS <sub>2</sub> Nanosheets with Triangular Nanopore Arrays as Active and Robust Electrocatalysts for Hydrogen Evolution. <i>Journal of Physical Chemistry C</i> , 2022, 126, 9696-9703.	1.5	16

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2625	Single-Atom Catalysts for Hydrogen Generation: Rational Design, Recent Advances, and Perspectives. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	42
2626	Sepaktakraw-like catalyst Mn-doped CoP enabling ultrastable electrocatalytic oxygen evolution at 100 $\text{mA cm}^{-2}$ in alkali media. <i>Rare Metals</i> , 2022, 41, 3069-3077.	3.6	28
2627	Two-Dimensional Nanomaterials as Smart Flame Retardants for Polyurethane. <i>ACS Symposium Series</i> , 0, , 189-219.	0.5	13
2628	Recent strategies for activating the basal planes of transition metal dichalcogenides towards hydrogen production. <i>Journal of Materials Chemistry A</i> , 2022, 10, 19067-19089.	5.2	27
2630	Sulfide and selenide-based electrocatalysts for hydrogen evolution reaction (HER). , 2022, , 427-463.		0
2631	Synthesis of a novel ZnO/TiO <sub>2</sub> -nanorod MXene heterostructured nanophotocatalyst for the removal pharmaceutical ceftriaxone sodium from aqueous solution under simulated sunlight. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108111.	3.3	15
2632	Tuning the hydrogen and hydroxyl adsorption on Ru nanoparticles for hydrogen electrode reactions via size controlling. <i>Chinese Chemical Letters</i> , 2023, 34, 107622.	4.8	7
2633	Interlayer Incorporation of MoS <sub>2</sub> (TM-MoS <sub>2</sub> ) to Achieve Unique Magnetic and Electronic Properties for Spintronics. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	4
2634	Direct Growth of Carbon Nitride (C <sub>3</sub> N <sub>3</sub> ) Nanosheets on Copper Foam as an Efficient Catalytic Electrode for Electrochemical Hydrogen Evolution. <i>ChemElectroChem</i> , 2022, 9, .	1.7	1
2635	A Brief Review of the Chemical Structure and Raman Spectrum of Mono- and Multilayer Molybdenum- and Tungsten-Based Transition Metal Dichalcogenides. <i>Journal of Electronic Materials</i> , 2022, 51, 4808-4815.	1.0	1
2636	CdS/VS <sub>2</sub> Heterostructured Nanoparticles as Efficient Visible-Light-Driven Photocatalysts for Boosting Hydrogen Evolution. <i>ChemNanoMat</i> , 0, , .	1.5	1
2637	Molybdenum disulfide (MoS <sub>2</sub> )-based electrocatalysts for hydrogen evolution reaction: From mechanism to manipulation. <i>Journal of Energy Chemistry</i> , 2022, 74, 45-71.	7.1	35
2638	Transition Metal Non-Oxides as Electrocatalysts: Advantages and Challenges. <i>Small</i> , 2022, 18, .	5.2	47
2639	Surface Design Strategy of Catalysts for Water Electrolysis. <i>Small</i> , 2022, 18, .	5.2	138
2641	Structure tailorable and flexible electrospun Poly(vinylidene fluoride)@WS <sub>2</sub> membrane with enhanced hydrogen evolution reaction activity and mechanical properties. <i>Polymer Testing</i> , 2022, 113, 107668.	2.3	1
2642	Unravelling the phase transition of 2H-MoS <sub>2</sub> to 1T-MoS <sub>2</sub> induced by the chemical interaction of Pd with molybdenum disulfide-graphene hybrids. <i>Applied Surface Science</i> , 2022, 599, 153896.	3.1	9
2643	MoS <sub>2</sub> with high 1T phase content enables fast reversible zinc-ion storage via pseudocapacitance. <i>Chemical Engineering Journal</i> , 2022, 448, 137688.	6.6	24
2644	The effect of morphology on electrochemical hydrogen evolution reaction of ReSe <sub>2</sub> nano-structures. <i>New Journal of Chemistry</i> , 2022, 46, 14894-14902.	1.4	3



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2645	Experimental correlation of Mn <sup>3+</sup> cation defects and electrocatalytic activity of $\delta\text{-MnO}_2$ an X-ray photoelectron spectroscopy study. <i>Journal of Materials Chemistry A</i> , 2022, 10, 15811-15838.	5.2	5
2646	Twin Boundaries Boost the Hydrogen Evolution Reaction on the Solid Solution of Nickel Tungsten. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2647	Amorphous Fe Hydroxide Nanoparticles Embedded in Ni <sub>3</sub> S <sub>2</sub> as High-Efficiency and Low-Cost Electrocatalysts for Oxygen Evolution Reaction. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2648	Enhanced hydrogen evolution reaction performance of MoS <sub>2</sub> by dual metal atoms doping. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 23191-23200.	3.8	12
2649	Ultraefficient Electrocatalytic Hydrogen Evolution from Strain-Engineered, Multilayer MoS <sub>2</sub> . <i>Nano Letters</i> , 2022, 22, 5742-5750.	4.5	27
2650	The potential application of exfoliated MoS <sub>2</sub> to aqueous lithium-ion batteries. <i>Electrochemistry Communications</i> , 2022, 139, 107307.	2.3	0
2651	In situ growth of petal-like MoS <sub>2</sub> @MoO <sub>2</sub> heterostructure on carbon cloth for superior Zn-ion storage. <i>Ceramics International</i> , 2022, 48, 30582-30588.	2.3	5
2652	Unveiling the structural, dynamical, elastic, and electronic properties of cuboid silver tetrathiotungstate by means of ab initio calculations. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 385701.	0.7	1
2653	Atomic-Level Design of Active Site on Two-Dimensional MoS <sub>2</sub> toward Efficient Hydrogen Evolution: Experiment, Theory, and Artificial Intelligence Modelling. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	53
2654	Strain engineering of electronic properties and anomalous valley hall conductivity of transition metal dichalcogenide nanoribbons. <i>Scientific Reports</i> , 2022, 12, .	1.6	6
2655	Nitrogen-Doped Cobalt-Molybdenum Sulfide Hybrid Heterojunctions as Active Electrocatalysts for Producing Hydrogen in Alkaline Media. <i>Energy &amp; Fuels</i> , 2022, 36, 11591-11600.	2.5	3
2656	Construction of amorphous CoFeOx(OH)y/MoS <sub>2</sub> /CP electrode for superior OER performance. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 28859-28868.	3.8	16
2657	RuO <sub>2</sub> electronic structure and lattice strain dual engineering for enhanced acidic oxygen evolution reaction performance. <i>Nature Communications</i> , 2022, 13, .	5.8	145
2658	Revealing the Role of d-Orbital Occupation in Edge Reconstruction of 1T-Transition-Metal Dichalcogenides. <i>Journal of Physical Chemistry C</i> , 2022, 126, 11389-11399.	1.5	3
2659	Construction of Pd nanoparticles/two-dimensional Co-MOF nanosheets heterojunction for enhanced electrocatalytic hydrodechlorination. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121730.	10.8	26
2660	Synthetic Method and Oil Displacement Capacity of Nano-MoS <sub>2</sub> . <i>Geofluids</i> , 2022, 2022, 1-10.	0.3	0
2661	Noble Metal-Free 2D 1T-MoS <sub>2</sub> Edge Sites Boosting Selective Hydrogenation of Maleic Anhydride. <i>ACS Catalysis</i> , 2022, 12, 8986-8994.	5.5	18
2662	Modulation of morphology and electronic structure on MoS <sub>2</sub> -based electrocatalysts for water splitting. <i>Nano Research</i> , 2022, 15, 6862-6887.	5.8	42

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2663	Crystal phase engineering of electrocatalysts for energy conversions. <i>Nano Research</i> , 2022, 15, 10194-10217.	5.8	13
2664	Advances and challenges in two-dimensional materials for oxygen evolution. <i>Nano Research</i> , 2022, 15, 8714-8750.	5.8	53
2665	Double-phase 1T/2H MoS <sub>2</sub> heterostructure loaded in N-doped carbon/CNT complex carbon for efficient and rapid lithium storage. <i>Materials Today Energy</i> , 2022, 29, 101103.	2.5	9
2666	Molecularly imprinted sensor based on 1T/2H MoS <sub>2</sub> and MWCNTs for voltammetric detection of acetaminophen. <i>Sensors and Actuators A: Physical</i> , 2022, 345, 113772.	2.0	7
2667	MoS <sub>2</sub> and WS <sub>2</sub> Nanosheets Decorated on Metal-Organic Framework-Derived Cobalt/Carbon Nanostructures as Electrocatalysts for Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2022, 5, 10696-10703.	2.4	10
2668	Amorphous Fe hydroxide nanoparticles embedded in Ni <sub>3</sub> S <sub>2</sub> as high-efficiency and low-cost electrocatalysts for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2022, 427, 140889.	2.6	10
2669	Enhanced electrocatalytic performance of Ni-based phosphides via dual regulation of Co-introducing and graphene-support for hydrogen evolution. <i>Journal of Alloys and Compounds</i> , 2022, 923, 166450.	2.8	1
2670	Recent Progress in Phase Regulation, Functionalization, and Biosensing Applications of Polyphase MoS <sub>2</sub> . <i>Small</i> , 2022, 18, .	5.2	17
2671	Cobalt and Aluminum Co-Optimized 1T Phase MoS <sub>2</sub> with Rich Edges for Robust Hydrogen Evolution Activity. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 10203-10210.	3.2	5
2672	Vacancy-Assisted Fast Electron Transport Non-noble Metal Electrocatalyst Mn <sub>0.09</sub> -MoS <sub>2</sub> for Hydrogen Evolution Reaction. <i>Electrocatalysis</i> , 2022, 13, 807-817.	1.5	4
2673	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
2674	Two Birds with One Stone: Prelithiated Two-Dimensional Nanohybrids as High-Performance Anode Materials for Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 35673-35681.	4.0	6
2675	Molybdenum-based electrocatalysts with nanostructured supports for hydrogen evolution reaction. <i>International Journal of Applied Ceramic Technology</i> , 2023, 20, 1129-1146.	1.1	3
2676	A novel 0D/2D/2D hetero-layered nitrogen-doped graphene/MoS <sub>2</sub> architecture for catalytic hydrogen evolution reaction. <i>Fuel</i> , 2022, 328, 125538.	3.4	7
2677	Dual MOF-Derived MoS <sub>2</sub> /CdS Photocatalysts with Rich Sulfur Vacancies for Efficient Hydrogen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	9
2678	Electron-Injection and Atomic-Interface Engineering toward Stabilized Defected 1T-Rich MoS <sub>2</sub> as High Rate Anode for Sodium Storage. <i>ACS Nano</i> , 2022, 16, 12425-12436.	7.3	34
2679	A review of heteroatomic doped two-dimensional materials as electrocatalysts for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 29698-29729.	3.8	14
2680	Interface Engineering-Induced 1T-MoS <sub>2</sub> /NiS Heterostructure for Efficient Hydrogen Evolution Reaction. <i>Catalysts</i> , 2022, 12, 947.	1.6	10

#	ARTICLE	IF	CITATIONS
2681	Fabrication of novel p-n-p heterojunctions ternary WSe <sub>2</sub> /In <sub>2</sub> S <sub>3</sub> /ZnIn <sub>2</sub> S <sub>4</sub> to enhance visible-light photocatalytic activity. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108354.	3.3	7
2682	Size-dependent and support-enhanced electrocatalysis of 2H-MoS <sub>2</sub> for hydrogen evolution. <i>Nano Today</i> , 2022, 46, 101592.	6.2	16
2683	Twin boundaries boost the hydrogen evolution reaction on the solid solution of nickel and tungsten. <i>Fuel</i> , 2022, 330, 125510.	3.4	4
2684	Recent advances in metallic transition metal dichalcogenides as electrocatalysts for hydrogen evolution reaction. <i>IScience</i> , 2022, 25, 105098.	1.9	14
2685	Transition metal dichalcogenides: Synthesis and use in the development of electrochemical sensors and biosensors. <i>Biosensors and Bioelectronics</i> , 2022, 216, 114674.	5.3	47
2686	Core-shell structured NiSe@MoS nanosheets anchored on multi-walled carbon nanotubes-based counter electrode for dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2022, 432, 141179.	2.6	9
2687	Unraveling the mechanism to form MoS <sub>2</sub> lubricant layers from MoDTC by ab initio simulations. <i>Applied Surface Science</i> , 2022, 606, 154880.	3.1	1
2688	Synergy of hyperbranched polysiloxane and MoS <sub>2</sub> /rGO heterostructured particles for enhancing polyimide bonded solid lubricating coatings. <i>Progress in Organic Coatings</i> , 2022, 173, 107183.	1.9	2
2689	(1T/2H)-MoS <sub>2</sub> /CoFe <sub>2</sub> O <sub>4</sub> heterojunctions with a unique grape bunch structure for photocatalysis of organic dyes driven by visible light. <i>Applied Surface Science</i> , 2022, 605, 154751.	3.1	12
2690	PBA-MoS <sub>2</sub> nanoboxes with enhanced peroxidase activity for constructing a colorimetric sensor array for reducing substances containing the catechol structure. <i>Analyst</i> , 2022, 147, 4761-4767.	1.7	1
2691	A Novel Mof-Derived Strategy to Construct Cu-Doped CeO <sub>2</sub> Supported PdCu Alloy Electrocatalysts for Hydrogen Evolution Reaction. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2692	A Density Functional Theory Study of the Co Oxidation on Pt <sub>1</sub> Supported on Pt <sub>x</sub> 2 (X = S, Se, Te). <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2693	Phase-engineering of nickel hydroxide in the Ni/Ni(OH) <sub>2</sub> interface for efficient hydrogen evolution and hydrazine-assisted water splitting in seawater. <i>Journal of Materials Chemistry A</i> , 2022, 10, 21848-21855.	5.2	28
2694	Crystal facet and phase engineering for advanced water splitting. <i>CrystEngComm</i> , 2022, 24, 5838-5864.	1.3	23
2695	MoS <sub>2</sub> -catalyzed selective electrocatalytic hydrogenation of aromatic aldehydes in an aqueous environment. <i>Green Chemistry</i> , 2022, 24, 7974-7987.	4.6	11
2696	The application of plasma technology in activating the hydrogen evolution performance of nanostructured electrocatalysts. , 2022, , 63-104.		0
2697	Highly stable 1T-MoS <sub>2</sub> by magneto-hydrothermal synthesis with Ru modification for efficient hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 21013-21020.	5.2	17
2698	Atomic mechanism of lithium intercalation induced phase transition in layered MoS <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 18777-18782.	1.3	3

#	ARTICLE	IF	CITATIONS
2699	Microflower-like Co <sub>9</sub> S <sub>8</sub> @MoS <sub>2</sub> heterostructure as an efficient bifunctional catalyst for overall water splitting. RSC Advances, 2022, 12, 22931-22938.	1.7	7
2700	Status and perspectives of key materials for PEM electrolyzer. , 2022, 1, e9120032.		182
2701	Cobalt porphyrin/molybdenum disulfide nanoensembles for light-assisted electrocatalytic water oxidation and selective hydrogen peroxide production. 2D Materials, 2023, 10, 014007.	2.0	3
2702	Black Phosphorous Mediates Surface Charge Redistribution of CoSe <sub>2</sub> for Electrochemical H <sub>2</sub> O Production in Acidic Electrolytes. Advanced Materials, 2022, 34, .	11.1	25
2703	Improving the catalytic activity of two-dimensional Mo <sub>2</sub> C for hydrogen evolution reaction by doping and vacancy defects. International Journal of Hydrogen Energy, 2022, 47, 38517-38523.	3.8	4
2704	Mo-Doped Cu <sub>2</sub> S Multilayer Nanosheets Grown In Situ on Copper Foam for Efficient Hydrogen Evolution Reaction. Molecules, 2022, 27, 5961.	1.7	4
2705	Sulfur vacancy engineering of metal sulfide photocatalysts for solar energy conversion. Chem Catalysis, 2023, 3, 100375.	2.9	6
2706	Improving Catalytic Activity of Janus-MoSSe Based on Surface Interface Regulation. Molecules, 2022, 27, 6038.	1.7	2
2707	The Structural Phase Effect of MoS <sub>2</sub> in Controlling the Reaction Selectivity between Electrocatalytic Hydrogenation and Dimerization of Furfural. ACS Catalysis, 2022, 12, 11340-11354.	5.5	20
2708	Controllable substitutional vanadium doping in wafer-scale molybdenum disulfide films. Nano Research, 2023, 16, 3415-3421.	5.8	7
2709	Morphologically Controlled Synthesis of Reduced-Dimensional ZnO/Zn(OH) <sub>2</sub> Nanosheets. ACS Omega, 2022, 7, 35834-35839.	1.6	4
2710	A Critical Review on New and Efficient 2D Materials for Catalysis. Advanced Materials Interfaces, 2022, 9, .	1.9	7
2711	Molecular intercalation of transition metal dichalcogenide nanosheets to enhance electrocatalytic activity toward hydrogen evolution reaction. Bulletin of the Korean Chemical Society, 2022, 43, 1352-1363.	1.0	4
2712	Establishing a water-to-energy platform via dual-functional photocatalytic and photoelectrocatalytic systems: A comparative and perspective review. Advances in Colloid and Interface Science, 2022, 309, 102793.	7.0	8
2713	Cu/Cu <sub>3</sub> P@CNT Flexible Film Electrode for Highly Efficient Electrocatalytic Hydrogen Evolution in Alkaline Solution. ChemElectroChem, 2022, 9, .	1.7	1
2714	Activation of hydrogen peroxide by molybdenum disulfide as Fenton-like catalyst and cocatalyst: Phase-dependent catalytic performance and degradation mechanism. Chinese Chemical Letters, 2023, 34, 107874.	4.8	5
2715	Surface-Plasma-Induced One-Pot Synthesis of N,S-Carbon Dot Intercalated MoS <sub>2</sub> /Graphene Nanosheets for Highly Efficient Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2022, 5, 12817-12827.	2.5	18
2716	Phase-Field Modeling of Chemical Vapor-Deposited 2D MoSe <sub>2</sub> Domains with Varying Morphology for Electronic Devices and Catalytic Applications. ACS Applied Nano Materials, 2022, 5, 15488-15497.	2.4	3

#	ARTICLE	IF	CITATIONS
2717	Bifunctional electrocatalysts of CoFeP/rGO heterostructure for water splitting. International Journal of Hydrogen Energy, 2022, 47, 39499-39508.	3.8	7
2718	Recent progress of electrochemical hydrogen evolution over 1T-MoS <sub>2</sub> catalysts. Frontiers in Chemistry, 0, 10, .	1.8	5
2719	Systematic Mapping of Electrocatalytic Descriptors for Hybrid and Non-Hybrid Molybdenum Dichalcogenides with Graphene Support for Cathodic Hydrogen Generation. Journal of Physical Chemistry C, 2022, 126, 17011-17024.	1.5	6
2720	Energy level modulation of MoS <sub>2</sub> monolayers by halide doping for an enhanced hydrogen evolution reaction. Journal of Materials Chemistry A, 2022, 10, 23274-23281.	5.2	7
2721	Zinc doping induced WS <sub>2</sub> accelerating the HER and ORR kinetics: A theoretical and experimental validation. Catalysis Today, 2023, 423, 113921.	2.2	2
2722	Charge self-regulation in 1T'-MoS <sub>2</sub> structure with rich S vacancies for enhanced hydrogen evolution activity. Nature Communications, 2022, 13, .	5.8	56
2723	Impact Electrochemistry of MoS <sub>2</sub> : Electrocatalysis and Hydrogen Generation at Low Overpotentials. Journal of Physical Chemistry C, 2022, 126, 17942-17951.	1.5	3
2724	Co/CoS <sub>2</sub> heterojunction embedded in nitrogen-doped carbon framework as bifunctional electrocatalysts for hydrogen and oxygen evolution. International Journal of Hydrogen Energy, 2023, 48, 1831-1841.	3.8	6
2725	Enhanced Hydrogen Evolution Reactivity of Tâ€™-Phase Tungsten Dichalcogenides (WS <sub>2</sub> , WSe <sub>2</sub> , and WTe <sub>2</sub> ) Materials: A DFT Study. International Journal of Molecular Sciences, 2022, 23, 11727.	1.8	4
2726	Directly growth of highly uniform MnSâ€MoS <sub>2</sub> on carbon cloth for advanced H <sub>2</sub> evolution electrocatalyst in different pH electrolytes. International Journal of Hydrogen Energy, 2022, 47, 40872-40880.	3.8	5
2727	2D Transition Metal Dichalcogenidesâ€Based Electrocatalysts for Hydrogen Evolution Reaction. Advanced Functional Materials, 2022, 32, .	7.8	54
2728	Energetic and Kinetic Coupling between the Intercalated Atom and Intrinsic S Vacancy in the MoS <sub>2</sub> Bilayer. Journal of Physical Chemistry C, 2022, 126, 18560-18570.	1.5	1
2729	Constructing 1â€2â€ TaS <sub>2</sub> nanosheets with architecture and defect engineering for enhance hydrogen evolution reaction. Journal of Alloys and Compounds, 2023, 935, 167877.	2.8	3
2730	Single-phase Mn-Fe interfacial oxides nanocomposites encored on carbon nitride sheets exhibited enhanced performance for electrocatalytic oxygen reduction reactions. Journal of Electroanalytical Chemistry, 2022, 926, 116942.	1.9	1
2731	HER activity of nickel molybdenum sulfide electrocatalyst as function of the ionomer in the ink formulation. International Journal of Hydrogen Energy, 2023, 48, 26446-26460.	3.8	2
2732	Eliminating Thiamphenicol with abundant H* and â€OH generated on a morphologically transformed Co <sub>3</sub> O <sub>4</sub> cathode in electric field. Separation and Purification Technology, 2023, 305, 122411.	3.9	1
2733	Rational design and fabrication of MoS <sub>x</sub> nanoclusters decorated Mn <sub>0.3</sub> Cd <sub>0.7</sub> S nanorods with promoted interfacial charge transfer toward robust photocatalytic H <sub>2</sub> generation. Journal of Colloid and Interface Science, 2023, 630, 37-46.	5.0	11
2734	A density functional theory study of the CO oxidation on Pt <sub>1</sub> supported on PtX <sub>2</sub> (X=As, Se, Te). Applied Surface Science, 2023, 609, 155341.	3.1	0

#	ARTICLE	IF	CITATIONS
2735	Synthesis and phase-engineering of ultrathin two-dimensional nanomaterials. , 2022, , .		0
2736	CRYSTAL STRUCTURE AND ELECTRONIC PROPERTIES OF THE RHENIUM DISULFIDE. , 2022, 89, 651-656.		0
2737	Crystal Structure and Electronic Properties of Rhenium Disulfide**. Journal of Applied Spectroscopy, 2022, 89, 860-864.	0.3	0
2738	Tunable optoelectronic and photocatalytic properties of BAs-BSe van der Waals heterostructures by strain engineering. Chemical Physics, 2022, , 111769.	0.9	0
2739	Fabrication of 3D ordered mesoporous nickel phosphide for efficient hydrogen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 3013-3025.	3.8	3
2740	Biomolecule capturing and sensing on 2D transition metal dichalcogenide canvas. , 2023, 2, e9120043.		14
2741	Metal-nonmetal atom co-doping engineered transition metal disulfide for highly efficient hydrogen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 2990-2997.	3.8	4
2742	Rational Design of NiSe/ReSe <sub>2</sub> Nanocomposite For Efficient Electrochemical Hydrogen Evolution Reaction. Journal of the Electrochemical Society, 2022, 169, 116512.	1.3	2
2743	Vacancy-Regulated Charge Carrier Dynamics and Suppressed Nonradiative Recombination in Two-Dimensional ReX <sub>2</sub> (X = S, Se). Journal of Physical Chemistry Letters, 2022, 13, 10656-10665.	2.1	5
2744	Electron Extraction Engineering Induced 1T <sup>+</sup> Phase Transition of Re <sub>0.75</sub> V <sub>0.25</sub> Se <sub>2</sub> for Ultrafast Sodium Ion Storage. Advanced Science, 2022, 9, .	5.6	11
2745	Tunable electronic, magnetic, and optical properties of carbon-nanomaterial/±-Fe2O3 interface: A first-principles study. Materials Today Communications, 2022, 33, 104890.	0.9	0
2746	Zeolitic imidazolate framework-67 derived cobalt-based catalysts for water splitting. Materials Today Chemistry, 2022, 26, 101210.	1.7	2
2747	Aerogels-Inspired based Photo and Electrocatalyst for Water Splitting to Produce Hydrogen. Applied Materials Today, 2022, 29, 101670.	2.3	4
2748	Theory-guided electrocatalyst engineering: From mechanism analysis to structural design. Chinese Journal of Catalysis, 2022, 43, 2987-3018.	6.9	45
2749	Molten-salt-induced phosphorus vacancy defect engineering of heterostructured cobalt phosphides for efficient overall water splitting. Inorganic Chemistry Frontiers, 2022, 10, 325-334.	3.0	11
2750	Interlayer-expanded MoSe <sub>2</sub> nanotubes as multifunctional separator coating for high-performance lithium-sulfur battery. Materials Letters, 2023, 331, 133481.	1.3	2
2751	A nanoelectrode-based study of water splitting electrocatalysts. Materials Horizons, 2023, 10, 52-64.	6.4	4
2752	Recent progress on design and applications of transition metal chalcogenide-associated electrocatalysts for the overall water splitting. Chinese Journal of Catalysis, 2023, 44, 7-49.	6.9	47

#	ARTICLE	IF	CITATIONS
2753	How to dope the basal plane of 2H-MoS <sub>2</sub> to boost the hydrogen evolution reaction?. <i>Electrochimica Acta</i> , 2023, 439, 141653.	2.6	3
2754	Tunable electronic properties and related functional devices for ferroelectric In <sub>2</sub> Se <sub>3</sub> /MoSSe van der Waals heterostructures. <i>RSC Advances</i> , 2022, 13, 228-238.	1.7	1
2755	Controlled synthesis of NiCoP@NiM LDH (M=Cu, Fe, Co) as efficient hydrogen evolution reaction electrocatalyst. <i>Journal of Alloys and Compounds</i> , 2023, 937, 168412.	2.8	9
2756	Band alignment of 2H-phase two-dimensional MoS <sub>2</sub> /graphene oxide van der Waals heterojunction. <i>Journal of Alloys and Compounds</i> , 2023, 936, 168244.	2.8	6
2757	A comparative analysis of different van der Waals treatments for molecular adsorption on the basal plane of 2H-MoS <sub>2</sub> . <i>Surface Science</i> , 2023, 729, 122226.	0.8	5
2758	Complementary effects of functionalization, vacancy defects and strain engineering in activating the basal plane of monolayer FePS <sub>3</sub> for HER. <i>Sustainable Energy and Fuels</i> , 2022, 6, 5621-5630.	2.5	1
2759	Surface/Interface Engineering of Si-Based Photocathodes for Efficient Hydrogen Evolution. <i>ACS Photonics</i> , 2022, 9, 3786-3806.	3.2	2
2760	Co-Doped Fe <sub>3</sub> S <sub>4</sub> Nanoflowers for Boosting Electrocatalytic Nitrogen Fixation to Ammonia under Mild Conditions. <i>Inorganic Chemistry</i> , 2022, 61, 20123-20132.	1.9	6
2761	2D Molybdenum Compounds for Electrocatalytic Energy Conversion. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	12
2762	Porous Cobalt-nickel phosphides prepared from Al-doped NiCo-LDH precursors for supercapacitor and electrocatalysis applications. <i>Chemical Engineering Journal</i> , 2023, 455, 140545.	6.6	17
2763	Hydrothermally modified ZnO-NiSe heterostructure as promising photoelectrocatalyst in hydrogen evolution reaction. <i>Materials Today: Proceedings</i> , 2023, 76, 316-324.	0.9	0
2764	Advances in Interfacial Engineering and Their Role in Heterostructure Formation for HER Applications in Wider pH. <i>ACS Applied Energy Materials</i> , 2022, 5, 14571-14592.	2.5	4
2765	Redispersion Behavior of 2D MoS <sub>2</sub> Nanosheets: Unique Dependence on the Intervention Timing of Natural Organic Matter. <i>Environmental Science &amp; Technology</i> , 2023, 57, 939-950.	4.6	3
2766	Chemical vapor deposition of two-dimensional transition metal sulfides on carbon paper for electrocatalytic hydrogen evolution. <i>New Carbon Materials</i> , 2022, 37, 1183-1191.	2.9	6
2767	3D nanosheet networks like mesoporous structure of NiO/CoSe <sub>2</sub> nanohybrid directly grown on nickel foam for oxygen evolution process. <i>Journal of Taibah University for Science</i> , 2022, 16, 1171-1180.	1.1	3
2768	Strain Induces Ferromagnetism in a Janus Transition Metal Dichalcogenides: CrTe <sub>1</sub> H Monolayer. <i>Journal of Electronic Materials</i> , 2023, 52, 1036-1049.	1.0	3
2769	Development of Anion Exchange Membrane Water Electrolysis and the Associated Challenges: A Review. <i>ChemElectroChem</i> , 2023, 10, .	1.7	15
2770	A novel MOF-derived strategy to construct Cu-doped CeO <sub>2</sub> supported PdCu alloy electrocatalysts for hydrogen evolution reaction. <i>Journal of Industrial and Engineering Chemistry</i> , 2023, 120, 96-102.	2.9	5

#	ARTICLE	IF	CITATIONS
2771	1T-phase MoS <sub>2</sub> /holey ultrathin g-C <sub>3</sub> N <sub>4</sub> nanosheets based 2D/2D heterostructure for enhanced photocatalytic hydrogen production. International Journal of Hydrogen Energy, 2023, 48, 7284-7293.	3.8	6
2772	Advancing the Understanding of the Structure-Activity-Durability Relation of 2D MoS <sub>2</sub> for the Hydrogen Evolution Reaction. ACS Catalysis, 2023, 13, 342-354.	5.5	11
2773	Colossal Vacancy Effect of 2D CuInP <sub>2</sub> S <sub>6</sub> Quantum Dots for Enhanced Broadband Photodetection. Crystal Growth and Design, 2023, 23, 1259-1268.	1.4	5
2774	Tailoring of 1T Phase-Domain MoS <sub>2</sub> Active Sites with Bridging S <sub>2</sub> <sup>2-</sup> /Apical S <sup>2-</sup> Phase-Selective Precursor Modulation for Enriched HER Kinetics. Inorganic Chemistry, 2023, 62, 841-852.	1.9	5
2775	Preparation of TiO <sub>2</sub> photocatalyst with Ti <sub>3</sub> C <sub>2</sub> MXene as precursor by molten salt method and its hydrogen production performance. Journal of Materials Science, 2023, 58, 302-316.	1.7	1
2776	A review of the synthesis, properties, and applications of 2D transition metal dichalcogenides and their heterostructures. Materials Chemistry and Physics, 2023, 297, 127332.	2.0	29
2777	Two-dimensional metal-phase layered molybdenum disulfide for electrocatalytic hydrogen evolution reaction. Nanoscale, 2023, 15, 4429-4437.	2.8	4
2778	Sulphur vacancy induced Co <sub>3</sub> S <sub>4</sub> @CoMo <sub>2</sub> S <sub>4</sub> nanocomposites as a functional electrode for high performance supercapacitors. Journal of Materials Chemistry A, 2023, 11, 3640-3652.	5.2	12
2779	Pd-based Metallic Glasses as Promising Materials for Hydrogen Energy Applications. Journal of the Electrochemical Society, 2023, 170, 014503.	1.3	5
2780	2D Transition Metal Dichalcogenides for Photocatalysis. Angewandte Chemie - International Edition, 2023, 62, .	7.2	65
2781	Electrical Contacts With 2D Materials: Current Developments and Future Prospects. Small, 2023, 19, .	5.2	9
2782	Filling the Gap between Heteroatom Doping and Edge Enrichment of 2D Electrocatalysts for Enhanced Hydrogen Evolution. ACS Nano, 2023, 17, 1287-1297.	7.3	9
2783	2D Transition Metal Dichalcogenides for Photocatalysis. Angewandte Chemie, 2023, 135, .	1.6	3
2784	A Review of Chemically Induced Intercalation and Deintercalation in Battery Materials. Energy Technology, 2023, 11, .	1.8	1
2785	Tailoring Polymorphic Heterostructures of MoS <sub>2</sub> -WS <sub>2</sub> (1T/1T, 2H/2H) for Efficient Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2023, 11, 568-577.	3.2	11
2786	Redispersion mechanisms of 2D nanosheets: combined role of intersheet contact and surface chemistry. Nanoscale, 2023, 15, 3159-3168.	2.8	1
2787	Recent Advances in Defect-Engineered Transition Metal Dichalcogenides for Enhanced Electrocatalytic Hydrogen Evolution: Perfecting Imperfections. ACS Omega, 2023, 8, 1851-1863.	1.6	6
2788	Zinc Single Atom Confinement Effects on Catalysis in 1T-Phase Molybdenum Disulfide. ACS Nano, 2023, 17, 1414-1426.	7.3	13



#	ARTICLE	IF	CITATIONS
2789	Organic interlayers boost the activity of MoS <sub>2</sub> toward hydrogen evolution by maintaining high 1T/2H phase ratio. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 10555-10565.	3.8	1
2790	Superaerophilic/superaerophobic cooperative electrode for efficient hydrogen evolution reaction via enhanced mass transfer. <i>Science Advances</i> , 2023, 9, .	4.7	36
2791	Surface Defects Regulate the <i>in Vivo</i> Bioenergetic Response of Earthworm <i>Eisenia fetida</i> Coelomocytes to Molybdenum Disulfide Nanosheets. <i>ACS Nano</i> , 2023, 17, 2639-2652.	7.3	9
2792	The synthesis, properties, and potential applications of CoS <sub>2</sub> as a transition metal dichalcogenide (TMD). <i>International Journal of Hydrogen Energy</i> , 2023, 48, 15831-15878.	3.8	15
2793	Monitoring Amine Intercalation in H <sub>3</sub> Sb <sub>3</sub> P <sub>2</sub> O <sub>14</sub> Thin Films Based on Real-Time X-ray Diffraction Data Analysis. <i>Chemistry of Materials</i> , 2023, 35, 837-845.	3.2	4
2794	Electrostatic restacking of two-dimensional materials to generate novel hetero-superlattices and their energy applications. <i>APL Materials</i> , 2023, 11, .	2.2	2
2795	Dual-pathway optimization on microwave absorption characteristics of core-shell Fe <sub>3</sub> O <sub>4</sub> @C microcapsules: Composition regulation on magnetic core and MoS <sub>2</sub> nanosheets growth on carbon shell. <i>Chemical Engineering Journal</i> , 2023, 461, 141867.	6.6	36
2796	Active States During the Reduction of CO <sub>2</sub> by a MoS <sub>2</sub> Electrocatalyst. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 3222-3229.	2.1	2
2797	Advanced in-situ electrochemical scanning probe microscopies in electrocatalysis. <i>Chinese Journal of Catalysis</i> , 2023, 47, 93-120.	6.9	7
2798	Double-sided growth of MoSe <sub>2</sub> nanosheets onto hollow zinc stannate (ZnO, ZnSnO <sub>3</sub> , and SnO <sub>2</sub> ) nanofibers (h-ZTO) for efficient CO <sub>2</sub> photoreduction. <i>Journal of Environmental Chemical Engineering</i> , 2023, 11, 109917.	3.3	11
2799	Dynamic phase evolution of MoS <sub>3</sub> accompanied by organodiselenide mediation enables enhanced performance rechargeable lithium battery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	3.3	6
2800	The structure analysis and chemical properties probing during recycling processes of transition metal dichalcogenides exfoliation. <i>Electrochimica Acta</i> , 2023, 449, 142171.	2.6	3
2801	Multi-Interface polarization engineering constructed 1T-2H MoS <sub>2</sub> QDs/Y-NaBi(MoO <sub>4</sub> ) <sub>2</sub> multiple heterostructure for high-efficient piezoelectric-photoelectrocatalysis PDE-5i degradation. <i>Applied Catalysis B: Environmental</i> , 2023, 327, 122460.	10.8	6
2802	Insights into the enhanced performance of NiCo-LDH modified Pd/NF cathode for electrocatalytic hydrodechlorination. <i>Fuel</i> , 2023, 341, 127689.	3.4	9
2803	Rational design of 2D heterostructured photo- & electro-catalysts for hydrogen evolution reaction: A review. <i>Applied Surface Science Advances</i> , 2023, 15, 100402.	2.9	5
2804	Design of an electrochemical sensing platform based on MoS <sub>2</sub> -PEDOT:PSS nanocomposite for the detection of epirubicin in biological samples. <i>Microchemical Journal</i> , 2023, 189, 108534.	2.3	4
2805	New Janus structure photocatalyst having widely tunable electronic and optical properties with strain engineering. <i>Journal of Materials Science and Technology</i> , 2023, 155, 142-147.	5.6	4
2806	Graphene dispersant-assisted in situ growth of Re-doped MoS <sub>2</sub> nanosheets on carbon cloth and their performance for hydrogen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2023, 641, 166-175.	5.0	8

#	ARTICLE	IF	CITATIONS
2807	Fabrication and characterization of PEG-In <sub>2</sub> O <sub>3</sub> modified PbO <sub>2</sub> anode for electrochemical degradation of metronidazole. <i>Electrochimica Acta</i> , 2023, 442, 141919.	2.6	1
2808	Recent advances in various processes for clean and sustainable hydrogen production. <i>Nano Structures Nano Objects</i> , 2023, 33, 100948.	1.9	12
2809	Nanoarchitectonics of Layered Metal Chalcogenides-Based Ternary Electrocatalyst for Water Splitting. <i>Energies</i> , 2023, 16, 1669.	1.6	3
2810	Exciton Manipulation for Enhancing Photoelectrochemical Hydrogen Evolution Reaction in Wrinkled 2D Heterostructures. <i>Advanced Materials</i> , 2023, 35, .	11.1	12
2811	Polyoxometalate-based metal-organic frameworks directed fabrication of defective-1T/2H-MoS <sub>2</sub> /ZnS heterostructured nanozyme for colorimetric determination of hydroquinone. <i>Applied Surface Science</i> , 2023, 619, 156713.	3.1	5
2812	Synergizing lattice strain and electron transfer in TMSs@1T-MoS <sub>2</sub> in-plane heterostructures for efficient hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2023, 328, 122445.	10.8	10
2813	Sandwiched cathodes kinetically boosted by few-layered catalytic $1T-MoSe_2$ nanosheets for high-rate and long-cycling lithium-sulfur batteries. <i>EcoMat</i> , 2023, 5, .	6.8	8
2814	In-situ atomic level observation of the strain response of graphene lattice. <i>Scientific Reports</i> , 2023, 13, .	1.6	4
2815	Synthesis of atomically thin sheets by the intercalation-based exfoliation of layered materials. , 2023, 2, 101-118.		42
2816	Electron induced construction of heterogeneous MoS <sub>2</sub> for highly efficient hydrogen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2023, 932, 117267.	1.9	5
2817	WSe <sub>2</sub> Monolayer: A Stable Two-Dimensional Heterostructure Material from First-Principles of Simulation Calculations. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2022, 17, 1379-1383.	0.1	1
2818	Flexible electronics based on one-dimensional inorganic semiconductor nanowires and two-dimensional transition metal dichalcogenides. <i>Chinese Chemical Letters</i> , 2023, 34, 108226.	4.8	7
2819	Towards the realisation of high perme-selective MoS <sub>2</sub> membrane for water desalination. <i>Npj Clean Water</i> , 2023, 6, .	3.1	10
2820	Solar-Triggered Engineered 2D-Materials for Environmental Remediation: Status and Future Insights. <i>Advanced Materials Interfaces</i> , 2023, 10, .	1.9	8
2821	TiO <sub>2</sub> nanorods based self-supported electrode of 1T/2H MoS <sub>2</sub> nanosheets decorated by Ag nano-particles for efficient hydrogen evolution reaction. <i>Chinese Chemical Letters</i> , 2023, 34, 108265.	4.8	4
2822	Effect of terminations on the hydrogen evolution reaction mechanism on Ti <sub>3</sub> C <sub>2</sub> MXene. <i>Journal of Materials Chemistry A</i> , 2023, 11, 6886-6900.	5.2	15
2823	Hexagonal Co <sub>9</sub> S <sub>8</sub> : Experimental and Mechanistic Study of Enhanced Electrocatalytic Hydrogen Evolution of a New Crystallographic Phase. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	10
2824	Ruthenium doping in the MoS <sub>2</sub> /AB heterostructure for the hydrogen evolution reaction in acidic media. <i>Dalton Transactions</i> , 2023, 52, 4891-4899.	1.6	2

#	ARTICLE	IF	CITATIONS
2825	Grand Canonical Quantum Mechanics with Applications to Mechanisms and Rates for Electrocatalysis. Topics in Catalysis, 2023, 66, 1171-1177.	1.3	1
2826	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.	5.9	2
2827	<i>Ex Situ</i> Characterization of 1T/2H MoS <sub>2</sub> and Their Carbon Composites for Energy Applications, a Review. ACS Nano, 2023, 17, 5163-5186.	7.3	9
2828	Extending MoS <sub>2</sub> -based materials into the catalysis of non-acidic hydrogen evolution: challenges, progress, and perspectives. Materials Futures, 2023, 2, 022103.	3.1	12
2829	A study of highly activated hydrogen evolution reaction performance in acidic media by 2D heterostructure of N and S doped graphene on MoO <sub>x</sub> . , 2023, 5, .		3
2830	The Ability of CO <sub>2</sub> Capture on Transition Metal-Modified 1T- $\alpha$ -MoS <sub>2</sub> Monolayers Controlled by an Electric Field. ChemPhysChem, 0, , .	1.0	0
2831	A Low-Temperature Synthetic Route Toward a High-Entropy 2D Hexenary Transition Metal Dichalcogenide for Hydrogen Evolution Electrocatalysis. Advanced Science, 2023, 10, .	5.6	9
2832	Quasi-Two-Dimensional Intermetallic Electride CeRuSi for Efficient Alkaline Hydrogen Evolution. ACS Catalysis, 2023, 13, 4752-4759.	5.5	7
2833	Enhancing efficiency of the ternary tri-chalcogenide MnPSe <sub>3</sub> towards hydrogen evolution reaction by activating its basal plane. International Journal of Hydrogen Energy, 2023, 48, 21778-21787.	3.8	4
2834	Lattice-disordered high-entropy metal hydroxide nanosheets as efficient precatalysts for bifunctional electro-oxidation. Journal of Colloid and Interface Science, 2023, 642, 41-52.	5.0	19
2835	Enhanced hydrogen generation via overall water splitting using novel MoS <sub>2</sub> -BN nanoflowers assembled TiO <sub>2</sub> ternary heterostructures. International Journal of Hydrogen Energy, 2023, 48, 22044-22059.	3.8	31
2836	Emerging Novel Chalcogenide-Based Materials for Electro Water Splitting Applications. , 2023, , 245-269.		0
2837	Electrodeposited Heterostructures of Cobalt Sulfide/Molybdenum Sulfide Trigger both Acidic and Alkaline HER. Journal of the Electrochemical Society, 2023, 170, 042501.	1.3	1
2838	Engineering of Nanoscale Heterogeneous Transition Metal Dichalcogenide-Au Interfaces. Nano Letters, 2023, 23, 2792-2799.	4.5	1
2839	Consecutive Synthesis of MoO <sub>2</sub> , Mo <sub>2</sub> C and MoS <sub>2</sub> Nanodots as Efficient Electrochemical Hydrogen Evolution Electrocatalysts. Catalysis Letters, 2024, 154, 619-626.	1.4	0
2840	Co(OH) <sub>2</sub> Intercalated in MoO <sub>3</sub> by Molecular Electrodeposition Resulting in a Conductive Material: A Molybdenum Bronze for Efficient Electrocatalytic Hydrogen Evolution. Chemistry of Materials, 2023, 35, 3083-3094.	3.2	1
2841	Co-doped amorphous MoS <sub>x</sub> for efficient hydrogen evolution reaction in acid condition. Carbon Letters, 2023, 33, 1367-1380.	3.3	1
2842	Simultaneous detection of lead and cadmium based on N-doped MoS <sub>2</sub> /MWCNTs nanocomposites. Journal of Materials Science, 2023, 58, 6643-6655.	1.7	4

#	ARTICLE	IF	CITATIONS
2843	Designing electrocatalysts for seawater splitting: surface/interface engineering toward enhanced electrocatalytic performance. <i>Green Chemistry</i> , 2023, 25, 3767-3790.	4.6	20
2844	Heterostructure and phase engineering synergistically activated highly efficient alkaline hydrogen evolution in Mo <sub>2</sub> C/MoS <sub>2</sub> -rGO hybrids. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 27557-27567.	3.8	2
2845	Review of Heterogeneous Functionalized-Based Electrode Materials for Energy Conversion and Storage Processes. <i>Journal of the Electrochemical Society</i> , 0, , .	1.3	0
2846	Engineering polymorphs in colloidal metal dichalcogenides: precursor-mediated phase control, molecular insights into crystallisation kinetics and promising electrochemical activity. <i>Journal of Materials Chemistry A</i> , 2023, 11, 11341-11353.	5.2	5
2847	Interactions of molybdenum disulfide nanosheets with wheat plants under changing environments: More than meets the eye?. <i>Chemosphere</i> , 2023, 331, 138736.	4.2	1
2848	Preparation of a Hybrid TiO <sub>2</sub> and 1T/2H-MoS <sub>2</sub> Photocatalyst for the Degradation of Tetracycline Hydrochloride. <i>ACS Omega</i> , 2023, 8, 15458-15466.	1.6	2
2849	Single-atomic rhenium-assisted 2H-to-1T phase transformation of MoS <sub>2</sub> nanosheets boosting electrocatalytic hydrogen evolution. , 2023, 1, 571-579.		5
2850	Electronic, Optical, piezoelectric properties and photocatalytic water splitting performance of Two-dimensional group IV-V compounds. <i>Applied Surface Science</i> , 2023, 627, 157317.	3.1	4
2862	STEM High Angle Annular Dark-Field Imaging. <i>Springer Handbooks</i> , 2023, , 409-448.	0.3	0
2865	One-step synthesis of MoS <sub>2</sub> /NiS heterostructures with a stable 1T phase for an efficient hydrogen evolution reaction. <i>Dalton Transactions</i> , 2023, 52, 8530-8535.	1.6	1
2878	Moiré superlattice engineering of two-dimensional materials for electrocatalytic hydrogen evolution reaction. <i>Nano Research</i> , 2023, 16, 8712-8728.	5.8	13
2883	Photocatalytic applications and modification methods of two-dimensional nanomaterials: a review. <i>Tungsten</i> , 2024, 6, 77-113.	2.0	8
2884	Recent advances in defect-engineered molybdenum sulfides for catalytic applications. <i>Materials Horizons</i> , 2023, 10, 3948-3999.	6.4	4
2898	Recent advances on liquid intercalation and exfoliation of transition metal dichalcogenides: From fundamentals to applications. <i>Nano Research</i> , 2024, 17, 2088-2110.	5.8	2
2901	Advances in bio-inspired electrocatalysts for clean energy future. <i>Nano Research</i> , 2024, 17, 515-533.	5.8	7
2903	Emerging on-chip microcells in electrocatalysis: functions of window and circuit. , 2023, 1, 874-891.		1
2906	Recent advances in two-dimensional nanomaterials as bifunctional electrocatalysts for full water splitting. <i>Journal of Materials Chemistry A</i> , 2023, 11, 18502-18529.	5.2	7
2907	Uncovering the photoelectronic/catalytic property modulation and applications of 2D MoS <sub>2</sub> : from the perspective of constructing heterogeneous interfaces. <i>Journal of Materials Chemistry A</i> , 2023, 11, 19736-19763.	5.2	2

#	ARTICLE	IF	CITATIONS
2953	From VIB- to VB-Group Transition Metal Disulfides: Structure Engineering Modulation for Superior Electromagnetic Wave Absorption. Nano-Micro Letters, 2024, 16, .	14.4	8
2954	MEMS Pressure Sensor Based on Piezoresistive Effect of MoS <sub>2</sub> Film. , 2023, , .		0
2976	Tin as a co-catalyst for electrocatalytic oxidation and reduction reactions. Inorganic Chemistry Frontiers, 2024, 11, 1019-1047.	3.0	0
2978	Dual carbon engineering enabling 1T/2H MoS <sub>2</sub> with ultrastable potassium ion storage performance. Nanoscale Horizons, 2024, 9, 305-316.	4.1	3
2989	Improved electrochemical activity from Ru doped WS <sub>2</sub> nanosheet catalyst. AIP Conference Proceedings, 2024, , .	0.3	0
3000	Stacking engineering in layered homostructures: transitioning from 2D to 3D architectures. Physical Chemistry Chemical Physics, 2024, 26, 7988-8012.	1.3	0
3020	Efficient Photoelectrochemical Hydrogen Production Utilizing Advanced Integrated Heterostructures Silicon Solar Cells and 2D-Material. , 2024, , .		0