

Recent developments of molybdenum and tungsten sul catalysts

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Sites for High Efficient Photocatalytic Hydrogen Evolution on a Limited-Layered MoS ₂ Cocatalyst Confined on Graphene Sheets—The Role of Graphene. <i>Journal of Physical Chemistry C</i> , 2012, 116, 25415-25424.	1.5	323
2	Photosystem II: The Water-Splitting Enzyme of Photosynthesis. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 2012, 77, 295-307.	2.0	39
3	Implementing molecular catalysts for hydrogen production in proton exchange membrane water electrolyzers. <i>Coordination Chemistry Reviews</i> , 2012, 256, 2435-2444.	9.5	51
4	Fe, Co, and Ni ions promote the catalytic activity of amorphous molybdenum sulfide films for hydrogen evolution. <i>Chemical Science</i> , 2012, 3, 2515.	3.7	861
6	Molybdenum Boride and Carbide Catalyze Hydrogen Evolution in both Acidic and Basic Solutions. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 12703-12706.	7.2	1,094
7	Na _{1.515} EuGeS ₄ , A Three-Dimensional Crystalline Assembly of Empty Nanotubules Constructed with Europium(II/III) Mixed Valence Ions. <i>Inorganic Chemistry</i> , 2012, 51, 11779-11786.	1.9	17
8	Molybdenum sulfides—efficient and viable materials for electro- and photoelectrocatalytic hydrogen evolution. <i>Energy and Environmental Science</i> , 2012, 5, 5577.	15.6	1,225
9	A Janus cobalt-based catalytic material for electro-splitting of water. <i>Nature Materials</i> , 2012, 11, 802-807.	13.3	784
10	Molecular systems for light driven hydrogen production. <i>Dalton Transactions</i> , 2012, 41, 13004.	1.6	346
11	Amorphous Molybdenum Sulfide Catalysts for Electrochemical Hydrogen Production: Insights into the Origin of their Catalytic Activity. <i>ACS Catalysis</i> , 2012, 2, 1916-1923.	5.5	1,007
12	WS ₂ nanosheets as a highly efficient electrocatalyst for hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2012, 125, 59-66.	10.8	295
14	Hydrogen Production Using a Molybdenum Sulfide Catalyst on a Titanium-Protected n ⁺ -Silicon Photocathode. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9128-9131.	7.2	289
15	Novel Assembly of an MoS ₂ Electrocatalyst onto a Silicon Nanowire Array Electrode to Construct a Photocathode Composed of Elements Abundant on the Earth for Hydrogen Generation. <i>Chemistry - A European Journal</i> , 2012, 18, 13994-13999.	1.7	109
16	Hybrid photocatalytic H ₂ evolution systems containing xanthene dyes and inorganic nickel based catalysts. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 17899-17909.	3.8	47
17	Comparative study of IVB—VIB transition metal compound electrocatalysts for the hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2012, 126, 225-230.	10.8	138
18	Copper molybdenum sulfide: a new efficient electrocatalyst for hydrogen production from water. <i>Energy and Environmental Science</i> , 2012, 5, 8912.	15.6	314
19	Hydrogen evolution catalyzed by MoS ₃ and MoS ₂ particles. <i>Energy and Environmental Science</i> , 2012, 5, 6136.	15.6	675
20	Syntheses, characterizations and properties of [Mo ₂ O ₂ S ₂]-based oxothiomolybdenum wheels incorporating bisphosphonate ligands. <i>Dalton Transactions</i> , 2012, 41, 9955.	1.6	23

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21	Electrodeposited Ni dendrites with high activity and durability for hydrogen evolution reaction in alkaline water electrolysis. <i>Journal of Materials Chemistry</i> , 2012, 22, 15153.	6.7	159
22	Recent advances in hybrid photocatalysts for solar fuel production. <i>Energy and Environmental Science</i> , 2012, 5, 5902.	15.6	563
23	Novel cobalt/nickel-tungsten-sulfide catalysts for electrocatalytic hydrogen generation from water. <i>Energy and Environmental Science</i> , 2013, 6, 2452.	15.6	182
24	Distorted MoS ₂ nanostructures: An efficient catalyst for the electrochemical hydrogen evolution reaction. <i>Electrochemistry Communications</i> , 2013, 34, 219-222.	2.3	109
25	Facile synthesis of low crystalline MoS ₂ nanosheet-coated CNTs for enhanced hydrogen evolution reaction. <i>Nanoscale</i> , 2013, 5, 7768.	2.8	426
26	Growth and Activation of an Amorphous Molybdenum Sulfide Hydrogen Evolving Catalyst. <i>ACS Catalysis</i> , 2013, 3, 2002-2011.	5.5	248
27	Efficient solar water oxidation using photovoltaic devices functionalized with earth-abundant oxygen evolving catalysts. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 13083.	1.3	30
28	Room Temperature Electrodeposition of Molybdenum Sulfide for Catalytic and Photoluminescence Applications. <i>ACS Nano</i> , 2013, 7, 8199-8205.	7.3	92
29	Revealing and accelerating slow electron transport in amorphous molybdenum sulphide particles for hydrogen evolution reaction. <i>Chemical Communications</i> , 2013, 49, 8985.	2.2	279
30	Recent developments in transition metal carbides and nitrides as hydrogen evolution electrocatalysts. <i>Chemical Communications</i> , 2013, 49, 8896.	2.2	1,035
31	A H ₂ -evolving photocathode based on direct sensitization of MoS ₃ with an organic photovoltaic cell. <i>Energy and Environmental Science</i> , 2013, 6, 2706.	15.6	83
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34	High performance catalyst for electrochemical hydrogen evolution reaction based on SiO ₂ /WO ₃ nanofacets. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 9732-9740.	3.8	40
35	First-row transition metal dichalcogenide catalysts for hydrogen evolution reaction. <i>Energy and Environmental Science</i> , 2013, 6, 3553.	15.6	946
36	MoS ₂ Nanosheets: A Designed Structure with High Active Site Density for the Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2013, 3, 2101-2107.	5.5	340
37	Graphene Analogues of Inorganic Layered Materials. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13162-13185.	7.2	441
38	Ammonium Tetrathiomolybdate: A Versatile Catalyst for Hydrogen Evolution Reaction from Water under Ambient and Hostile Conditions. <i>Inorganic Chemistry</i> , 2013, 52, 14168-14177.	1.9	26
39	Influence of the Ligand Alkyl Chain Length on the Solubility, Aqueous Speciation, and Kinetics of Substitution Reactions of Water-Soluble M ₃ S ₄ (M = Mo, W) Clusters Bearing Hydroxyalkyl Diphosphines. <i>Inorganic Chemistry</i> , 2013, 52, 8713-8722.	1.9	18

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41	Controllable Disorder Engineering in Oxygen-Incorporated MoS ₂ Ultrathin Nanosheets for Efficient Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2013, 135, 17881-17888.	6.6	2,107
42	Selective Growth of MoS ₂ for Proton Exchange Membranes with Extremely High Selectivity. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 13042-13049.	4.0	65
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47	Defect-Rich MoS ₂ Ultrathin Nanosheets with Additional Active Edge Sites for Enhanced Electrocatalytic Hydrogen Evolution. <i>Advanced Materials</i> , 2013, 25, 5807-5813.	11.1	2,705
48	Fabrication of Luminescent Monolayered Tungsten Dichalcogenides Quantum Dots with Giant Spin-Valley Coupling. <i>ACS Nano</i> , 2013, 7, 8214-8223.	7.3	181
49	Size-Dependent Enhancement of Electrocatalytic Oxygen-Reduction and Hydrogen-Evolution Performance of MoS ₂ Particles. <i>Chemistry - A European Journal</i> , 2013, 19, 11939-11948.	1.7	226
50	Photoinduced Charge Transfer in Porphyrin-Cobaloxime and Corrole-Cobaloxime Hybrids. <i>Journal of Physical Chemistry C</i> , 2013, 117, 1647-1655.	1.5	62
51	Graphene-Like Two-Dimensional Materials. <i>Chemical Reviews</i> , 2013, 113, 3766-3798.	23.0	3,761
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59	Enhanced Electrocatalytic Properties of Transition-Metal Dichalcogenides Sheets by Spontaneous Gold Nanoparticle Decoration. Journal of Physical Chemistry Letters, 2013, 4, 1227-1232.	2.1	315
60	Biomass-derived electrocatalytic composites for hydrogen evolution. Energy and Environmental Science, 2013, 6, 1818.	15.6	343
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82	Highly Active Electrocatalysis of the Hydrogen Evolution Reaction by Cobalt Phosphide Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5427-5430.	7.2	1,033
83	Edge-exposed MoS ₂ nano-assembled structures as efficient electrocatalysts for hydrogen evolution reaction. <i>Nanoscale</i> , 2014, 6, 2131-2136.	2.8	260
84	Au Nanoparticle-Modified MoS ₂ Nanosheet-Based Photoelectrochemical Cells for Water Splitting. <i>Small</i> , 2014, 10, 3537-3543.	5.2	265
85	MoS ₂ nanoflower-decorated reduced graphene oxide paper for high-performance hydrogen evolution reaction. <i>Nanoscale</i> , 2014, 6, 5624.	2.8	320
87	Hydrogen evolution by a metal-free electrocatalyst. <i>Nature Communications</i> , 2014, 5, 3783.	5.8	1,851
88	Photosystem II: Its function, structure, and implications for artificial photosynthesis. <i>Biochemistry (Moscow)</i> , 2014, 79, 185-196.	0.7	15
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97	Recent Development of Molybdenum Sulfides as Advanced Electrocatalysts for Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2014, 4, 1693-1705.	5.5	769
98	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
99	Synthesis of MoS ₂ -carbon composites with different morphologies and their application in hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 9638-9650.	3.8	53
100	Molybdenum Sulfide Supported on Crumpled Graphene Balls for Electrocatalytic Hydrogen Production. <i>Advanced Energy Materials</i> , 2014, 4, 1400398.	10.2	101
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103	MoSe ₂ nanosheets and their graphene hybrids: synthesis, characterization and hydrogen evolution reaction studies. <i>Journal of Materials Chemistry A</i> , 2014, 2, 360-364.	5.2	564
104	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
105	Earth-abundant hydrogen evolution electrocatalysts. <i>Chemical Science</i> , 2014, 5, 865-878.	3.7	636
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109	One-step synthesis of cubic pyrite-type CoSe ₂ at low temperature for efficient hydrogen evolution reaction. <i>RSC Advances</i> , 2014, 4, 54344-54348.	1.7	51
110	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
111	Cobalt nanoparticles encapsulated in nitrogen-doped carbon as a bifunctional catalyst for water electrolysis. <i>Journal of Materials Chemistry A</i> , 2014, 2, 20067-20074.	5.2	231
112	NiP ₂ 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
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114	Amorphous Molybdenum Sulfides as Hydrogen Evolution Catalysts. <i>Accounts of Chemical Research</i> , 2014, 47, 2671-2681.	7.6	529
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118	A one-step synthesis of Co@P@B/rGO at room temperature with synergistically enhanced electrocatalytic activity in neutral solution. <i>Journal of Materials Chemistry A</i> , 2014, 2, 18420-18427.	5.2	96
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124	Component-Controllable WS ₂ /Se Nanotubes for Efficient Hydrogen Evolution Reaction. <i>ACS Nano</i> , 2014, 8, 8468-8476.	7.3	317
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126	High-performance hydrogen evolution electrocatalysis by layer-controlled MoS ₂ nanosheets. <i>RSC Advances</i> , 2014, 4, 34733-34738.	1.7	58
127	<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
128	Porous inorganic nanostructures with colloidal dimensions: synthesis and applications in electrochemical energy devices. <i>Chemical Communications</i> , 2014, 50, 2077-2088.	2.2	24
129	Photo-electrocatalytic H ₂ evolution on poly(2,2'-bithiophene) at neutral pH. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 18230-18234.	3.8	14
130	Extraordinary attributes of 2-dimensional MoS ₂ nanosheets. <i>Chemical Physics Letters</i> , 2014, 609, 172-183.	1.2	141
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135	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
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146	Low pH Electrolytic Water Splitting Using Earth-Abundant Metastable Catalysts That Self-Assemble in Situ. Journal of the American Chemical Society, 2014, 136, 3304-3311.	6.6	147
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149	Catalytic Hydrogen Evolution by Tungsten Disulfide at Liquid-Liquid Interfaces. ChemCatChem, 2014, 6, 2832-2835.	1.8	28
150	Ni ₂ P nanoparticle films supported on a Ti plate as an efficient hydrogen evolution cathode. Nanoscale, 2014, 6, 11031-11034.	2.8	277
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154	Equiatomic ternary chalcogenide: PdPS and its reduced graphene oxide composite for efficient electrocatalytic hydrogen evolution. Chemical Communications, 2014, 50, 7359-7362.	2.2	74
155	Electrochemically Fabricated Polypyrrole and MoS ₂ Copolymer Films as a Highly Active Hydrogen Evolution Electrocatalyst. Advanced Materials, 2014, 26, 3761-3766.	11.1	186
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