Benchmarking Hydrogen Evolving Reaction and Oxyge for Solar Water Splitting Devices

Journal of the American Chemical Society 137, 4347-4357 DOI: 10.1021/ja510442p

Citation Report

#	Article	IF	CITATIONS
44	Porous Nickel–Iron Oxide as a Highly Efficient Electrocatalyst for Oxygen Evolution Reaction. Advanced Science, 2015, 2, 1500199.	11.2	241
45	Insight on Tafel slopes from a microkinetic analysis of aqueous electrocatalysis for energy conversion. Scientific Reports, 2015, 5, 13801.	3.3	2,017
46	Roughened Znâ€Đoped Ru–Ti Oxide Water Oxidation Electrocatalysts by Blending Active and Activated Passive Components. ChemElectroChem, 2015, 2, 1839-1846.	3.4	22
47	Molecular Mixedâ€Metal Manganese Oxido Cubanes as Precursors to Heterogeneous Oxygen Evolution Catalysts. Chemistry - A European Journal, 2015, 21, 13420-13430.	3.3	20
48	Solar Water Splitting by TiO ₂ /CdS/Co–Pi Nanowire Array Photoanode Enhanced with Co–Pi as Hole Transfer Relay and CdS as Light Absorber. Advanced Functional Materials, 2015, 25, 5706-5713.	14.9	240
49	Triggering the electrocatalytic hydrogen evolution activity of the inert two-dimensional MoS ₂ surface via single-atom metal doping. Energy and Environmental Science, 2015, 8, 1594-1601.	30.8	1,109
50	Oxygen-tolerant proton reduction catalysis: much O ₂ about nothing?. Energy and Environmental Science, 2015, 8, 2283-2295.	30.8	72
51	Catalytically Active Nanomaterials for Electrochemical Energy Generation and Storage. ACS Symposium Series, 2015, , 137-172.	0.5	1
52	Water oxidation catalysis upon evolution of molecular Co(<scp>iii</scp>) cubanes in aqueous media. Faraday Discussions, 2015, 185, 121-141.	3.2	29
53	Biomass-derived high-performance tungsten-based electrocatalysts on graphene for hydrogen evolution. Journal of Materials Chemistry A, 2015, 3, 18572-18577.	10.3	43
54	Intramolecular Proton Transfer Boosts Water Oxidation Catalyzed by a Ru Complex. Journal of the American Chemical Society, 2015, 137, 10786-10795.	13.7	246
55	Particle suspension reactors and materials for solar-driven water splitting. Energy and Environmental Science, 2015, 8, 2825-2850.	30.8	344
56	Photochemical charge transfer observed in nanoscale hydrogen evolving photocatalysts using surface photovoltage spectroscopy. Energy and Environmental Science, 2015, 8, 2970-2976.	30.8	74
57	Nickel-rich layered LiNi _{1â^²x} M _x O ₂ (M = Mn, Fe, and Co) electrocatalysts with high oxygen evolution reaction activity. Journal of Materials Chemistry A, 2015, 3, 16604-16612.	10.3	44
58	Effects of electrolyte, catalyst, and membrane composition and operating conditions on the performance of solar-driven electrochemical reduction of carbon dioxide. Physical Chemistry Chemical Physics, 2015, 17, 18924-18936.	2.8	312
59	Noble metal-free hydrogen evolution catalysts for water splitting. Chemical Society Reviews, 2015, 44, 5148-5180.	38.1	4,776
60	Nanostructured Co ₂ P Electrocatalyst for the Hydrogen Evolution Reaction and Direct Comparison with Morphologically Equivalent CoP. Chemistry of Materials, 2015, 27, 3769-3774.	6.7	450
61	Edge overgrowth of spiral bimetallic hydroxides ultrathin-nanosheets for water oxidation. Chemical Science, 2015, 6, 3572-3576.	7.4	49

#	Article	IF	CITATIONS
62	Easily prepared, high activity Ir–Ni oxide catalysts for water oxidation. Electrochemistry Communications, 2015, 60, 109-112.	4.7	27
63	Pulse-Electrodeposited Ni–Fe (Oxy)hydroxide Oxygen Evolution Electrocatalysts with High Geometric and Intrinsic Activities at Large Mass Loadings. ACS Catalysis, 2015, 5, 6680-6689.	11.2	265
64	Efficient Electrocatalytic Water Oxidation at Neutral and High pH by Adventitious Nickel at Nanomolar Concentrations. Journal of the American Chemical Society, 2015, 137, 13980-13988.	13.7	84
65	Three dimensional nickel oxides/nickel structure by in situ electro-oxidation of nickel foam as robust electrocatalyst for oxygen evolution reaction. Applied Surface Science, 2015, 359, 172-176.	6.1	106
66	High-Performance Overall Water Splitting Electrocatalysts Derived from Cobalt-Based Metal–Organic Frameworks. Chemistry of Materials, 2015, 27, 7636-7642.	6.7	579
67	Recent advances in transition-metal dichalcogenide based nanomaterials for water splitting. Nanoscale, 2015, 7, 19764-19788.	5.6	327
68	Self-terminated electrodeposition of iridium electrocatalysts. Energy and Environmental Science, 2015, 8, 3557-3562.	30.8	52
69	Interfacial band-edge energetics for solar fuels production. Energy and Environmental Science, 2015, 8, 2851-2862.	30.8	163
70	Enhancement Effect of Noble Metals on Manganese Oxide for the Oxygen Evolution Reaction. Journal of Physical Chemistry Letters, 2015, 6, 4178-4183.	4.6	89
71	Photo-assisted water splitting with bipolar membrane induced pH gradients for practical solar fuel devices. Journal of Materials Chemistry A, 2015, 3, 19556-19562.	10.3	104
72	What Makes the Photocatalytic CO ₂ Reduction on N-Doped Ta ₂ O ₅ Efficient: Insights from Nonadiabatic Molecular Dynamics. Journal of the American Chemical Society, 2015, 137, 11517-11525.	13.7	105
73	Piezotronic-Enhanced Photoelectrochemical Reactions in Ni(OH) ₂ -Decorated ZnO Photoanodes. Journal of Physical Chemistry Letters, 2015, 6, 3410-3416.	4.6	67
74	3d–4f {Co ^{II} ₃ Ln(OR) ₄ } Cubanes as Bio-Inspired Water Oxidation Catalysts. Journal of the American Chemical Society, 2015, 137, 11076-11084.	13.7	134
75	Oxygen Evolution Catalyzed by Nickel–Iron Oxide Nanocrystals with a Nonequilibrium Phase. ACS Applied Materials & Interfaces, 2015, 7, 19755-19763.	8.0	49
76	High-Index Faceted Ni ₃ S ₂ Nanosheet Arrays as Highly Active and Ultrastable Electrocatalysts for Water Splitting. Journal of the American Chemical Society, 2015, 137, 14023-14026.	13.7	1,622
77	Nonstoichiometric Oxides as Low-Cost and Highly-Efficient Oxygen Reduction/Evolution Catalysts for Low-Temperature Electrochemical Devices. Chemical Reviews, 2015, 115, 9869-9921.	47.7	770
78	Surfactant-mediated electrodeposition of a water-oxidizing manganese oxide. Dalton Transactions, 2015, 44, 16873-16881.	3.3	5
79	Designing an improved transition metal phosphide catalyst for hydrogen evolution using experimental and theoretical trends. Energy and Environmental Science, 2015, 8, 3022-3029.	30.8	851

#	Article	IF	CITATIONS
80	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.	13.7	415
81	Electrooxidation of Alcohols with Electrode-Supported Transfer Hydrogenation Catalysts. ACS Catalysis, 2015, 5, 7343-7349.	11.2	10
82	Tuning oxide activity through modification of the crystal and electronic structure: from strain to potential polymorphs. Physical Chemistry Chemical Physics, 2015, 17, 28943-28949.	2.8	31
83	The Artificial Leaf: Recent Progress and Remaining Challenges. Makara Journal of Science, 2016, 20, .	0.3	2
84	Nanostructured p-Type Semiconductor Electrodes and Photoelectrochemistry of Their Reduction Processes. Energies, 2016, 9, 373.	3.1	46
85	Advanced Evaluation of the Long-Term Stability of Oxygen Evolution Electrocatalysts. Analytical Chemistry, 2016, 88, 7597-7602.	6.5	38
86	Highly Efficient and Stable Solar Water Splitting at (Na)WO ₃ Photoanodes in Acidic Electrolyte Assisted by Nonâ€Noble Metal Oxygen Evolution Catalyst. Advanced Energy Materials, 2016, 6, 1600526.	19.5	58
87	Modeling and practical realization of thin film siliconâ€based integrated solar water splitting devices. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1738-1746.	1.8	24
88	Direct Growth of MoS ₂ Microspheres on Ni Foam as a Hybrid Nanocomposite Efficient for Oxygen Evolution Reaction. Small, 2016, 12, 2975-2981.	10.0	114
89	Hierarchical NiCo ₂ S ₄ Nanowire Arrays Supported on Ni Foam: An Efficient and Durable Bifunctional Electrocatalyst for Oxygen and Hydrogen Evolution Reactions. Advanced Functional Materials, 2016, 26, 4661-4672.	14.9	1,204
90	ZnCo ₂ O ₄ Quantum Dots Anchored on Nitrogenâ€Đoped Carbon Nanotubes as Reversible Oxygen Reduction/Evolution Electrocatalysts. Advanced Materials, 2016, 28, 3777-3784.	21.0	692
91	Engineering Cobalt Phosphide (CoP) Thin Film Catalysts for Enhanced Hydrogen Evolution Activity on Silicon Photocathodes. Advanced Energy Materials, 2016, 6, 1501758.	19.5	134
92	Bipolar Membraneâ€Assisted Solar Water Splitting in Optimal pH. Advanced Energy Materials, 2016, 6, 1600100.	19.5	156
93	Fabrication of mesoporous NiFe2O4 nanorods as efficient oxygen evolution catalyst for water splitting. Electrochimica Acta, 2016, 211, 871-878.	5.2	117
94	Hierarchical NiMo-based 3D electrocatalysts for highly-efficient hydrogen evolution in alkaline conditions. Nano Energy, 2016, 27, 247-254.	16.0	196
95	Overall Water Splitting Catalyzed Efficiently by an Ultrathin Nanosheetâ€Built, Hollow Ni ₃ S ₂ â€Based Electrocatalyst. Advanced Functional Materials, 2016, 26, 4839-4847.	14.9	438
96	Promoting the Water Oxidation Catalysis by Synergistic Interactions between Ni(OH) ₂ and Carbon Nanotubes. Advanced Energy Materials, 2016, 6, 1600516.	19.5	68
97	Effect of the Synthesis Route and Fe Presence on the Redox Activity of Ni in Layered Double Hydroxides. ChemElectroChem, 2016, 3, 1320-1328.	3.4	14

#	Article	IF	CITATIONS
98	Promoting Active Species Generation by Plasmon-Induced Hot-Electron Excitation for Efficient Electrocatalytic Oxygen Evolution. Journal of the American Chemical Society, 2016, 138, 9128-9136.	13.7	341
99	A Mononuclear Co ^{II} Coordination Complex Locked in a Confined Space and Acting as an Electrochemical Waterâ€Oxidation Catalyst: A "Shipâ€inâ€aâ€Bottle―Approach. Angewandte Chemie - International Edition, 2016, 55, 2425-2430.	13.8	107
100	Chalcogenide and Phosphide Solid‣tate Electrocatalysts for Hydrogen Generation. ChemPlusChem, 2016, 81, 1045-1055.	2.8	74
101	A Mononuclear Co ^{II} Coordination Complex Locked in a Confined Space and Acting as an Electrochemical Waterâ€Oxidation Catalyst: A "Shipâ€inâ€aâ€Bottle―Approach. Angewandte Chemie, 2016 2471-2476.	, 22 8,	28
102	Mercury Underpotential Deposition to Determine Iridium and Iridium Oxide Electrochemical Surface Areas. Journal of the Electrochemical Society, 2016, 163, F3051-F3056.	2.9	63
103	MOF-Derived Noble Metal Free Catalysts for Electrochemical Water Splitting. ACS Applied Materials & Interfaces, 2016, 8, 35390-35397.	8.0	151
104	Efficiency limits for photoelectrochemical water-splitting. Nature Communications, 2016, 7, 13706.	12.8	218
105	Defect-Rich Ultrathin Cobalt–Iron Layered Double Hydroxide for Electrochemical Overall Water Splitting. ACS Applied Materials & Interfaces, 2016, 8, 34474-34481.	8.0	345
106	Developing a scalable artificial photosynthesis technology through nanomaterials by design. Nature Nanotechnology, 2016, 11, 1010-1019.	31.5	162
107	The Effect of the Illumination Intensity on the Performance of Si Multijunction based Integrated Photoelectrochemical water Splitting Devices. Energy Procedia, 2016, 102, 36-42.	1.8	7
108	Low-Overpotential High-Activity Mixed Manganese and Ruthenium Oxide Electrocatalysts for Oxygen Evolution Reaction in Alkaline Media. ACS Catalysis, 2016, 6, 2408-2415.	11.2	139
109	A monolithic all-silicon multi-junction solar device for direct water splitting. Renewable Energy, 2016, 94, 90-95.	8.9	6
110	Self-Terminated Electrodeposition of Ni, Co, and Fe Ultrathin Films. Journal of Physical Chemistry C, 2016, 120, 16228-16237.	3.1	30
111	Comparison of heterogenized molecular and heterogeneous oxide catalysts for photoelectrochemical water oxidation. Energy and Environmental Science, 2016, 9, 1794-1802.	30.8	136
112	A comparative technoeconomic analysis of renewable hydrogen production using solar energy. Energy and Environmental Science, 2016, 9, 2354-2371.	30.8	688
113	Electrochemical etching of α-cobalt hydroxide for improvement of oxygen evolution reaction. Journal of Materials Chemistry A, 2016, 4, 9578-9584.	10.3	125
114	Electrochemical Quantifying, Counting, and Sizing Supported Pt Nanoparticles in Real Time. Analytical Chemistry, 2016, 88, 6403-6409.	6.5	7
115	Transparent Nanoparticulate FeOOH Improves the Performance of a WO ₃ Photoanode in a Tandem Water-Splitting Device. Journal of Physical Chemistry C, 2016, 120, 10941-1 <u>0950.</u>	3.1	52

#	Article	IF	CITATIONS
116	Tailoring ruthenium exposure to enhance the performance of fcc platinum@ruthenium core–shell electrocatalysts in the oxygen evolution reaction. Physical Chemistry Chemical Physics, 2016, 18, 16169-16178.	2.8	47
117	In situ morphological transformation and investigation of electrocatalytic properties of cobalt oxide nanostructures toward oxygen evolution. CrystEngComm, 2016, 18, 6008-6012.	2.6	21
118	Liquid sunlight. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4545-4548.	7.1	13
119	A Place in the Sun for Artificial Photosynthesis?. ACS Energy Letters, 2016, 1, 121-135.	17.4	163
120	Self-assembly of noble metal monolayers on transition metal carbide nanoparticle catalysts. Science, 2016, 352, 974-978.	12.6	495
121	Mass transport aspects of electrochemical solar-hydrogen generation. Energy and Environmental Science, 2016, 9, 1533-1551.	30.8	81
122	Biâ€Functional Ironâ€Only Electrodes for Efficient Water Splitting with Enhanced Stability through In Situ Electrochemical Regeneration. Advanced Energy Materials, 2016, 6, 1502095.	19.5	136
123	CdSe-sensitized branched CdS hierarchical nanostructures for efficient photoelectrochemical solar hydrogen generation. Physical Chemistry Chemical Physics, 2016, 18, 11460-11466.	2.8	16
124	Ni3Se2 nanoforest/Ni foam as a hydrophilic, metallic, and self-supported bifunctional electrocatalyst for both H2 and O2 generations. Nano Energy, 2016, 24, 103-110.	16.0	377
125	Neutral Water Splitting Catalysis with a High FF Triple Junction Polymer Cell. ACS Catalysis, 2016, 6, 3310-3316.	11.2	24
126	Cobalt phosphide-based nanoparticles as bifunctional electrocatalysts for alkaline water splitting. Journal of Materials Chemistry A, 2016, 4, 7549-7554.	10.3	53
127	A transition metal oxofluoride offering advantages in electrocatalysis and potential use in applications. Faraday Discussions, 2016, 188, 481-498.	3.2	5
128	General Strategy for the Synthesis of Transition Metal Phosphide Films for Electrocatalytic Hydrogen and Oxygen Evolution. ACS Applied Materials & amp; Interfaces, 2016, 8, 12798-12803.	8.0	256
129	Design principles for hydrogen evolution reaction catalyst materials. Nano Energy, 2016, 29, 29-36.	16.0	629
130	Hierarchical MoS ₂ @MoP core–shell heterojunction electrocatalysts for efficient hydrogen evolution reaction over a broad pH range. Nanoscale, 2016, 8, 11052-11059.	5.6	160
131	The Dark Side of Molecular Catalysis: Diimine–Dioxime Cobalt Complexes Are Not the Actual Hydrogen Evolution Electrocatalyst in Acidic Aqueous Solutions. ACS Catalysis, 2016, 6, 3727-3737.	11.2	129
132	Hydrogen and CO2 Reduction Reactions: Mechanisms and Catalysts. , 2016, , 105-160.		11
133	Photoelectrochemical Cell Design, Efficiency, Definitions, Standards, and Protocols. , 2016. , 163-197.		10

#	Article	IF	Citations
134	Active and Durable Hydrogen Evolution Reaction Catalyst Derived from Pd-Doped Metal–Organic Frameworks. ACS Applied Materials & Interfaces, 2016, 8, 13378-13383.	8.0	103
135	An efficient bifunctional two-component catalyst for oxygen reduction and oxygen evolution in reversible fuel cells, electrolyzers and rechargeable air electrodes. Energy and Environmental Science, 2016, 9, 2020-2024.	30.8	221
136	Hydrogen Production with a Simple and Scalable Membraneless Electrolyzer. Journal of the Electrochemical Society, 2016, 163, F3012-F3019.	2.9	65
137	Enhancing Activity and Stability of Cobalt Oxide Electrocatalysts for the Oxygen Evolution Reaction via Transition Metal Doping. Journal of the Electrochemical Society, 2016, 163, F3020-F3028.	2.9	55
138	Electrocatalysts for hydrogen oxidation and evolution reactions. Science China Materials, 2016, 59, 217-238.	6.3	142
139	Solar-Driven Water Oxidation and Decoupled Hydrogen Production Mediated by an Electron-Coupled-Proton Buffer. Journal of the American Chemical Society, 2016, 138, 6707-6710.	13.7	95
140	Conductive Mesoporous Catalytic Films. Current Distortion and Performance Degradation by Dual-Phase Ohmic Drop Effects. Analysis and Remedies. Journal of Physical Chemistry C, 2016, 120, 21263-21271.	3.1	19
141	Electrochemical Preparation of Ru/Co Biâ€layered Catalysts on Ti Substrates for the Oxygen Evolution Reaction. Bulletin of the Korean Chemical Society, 2016, 37, 1270-1277.	1.9	5
142	Activating earth-abundant electrocatalysts for efficient, low-cost hydrogen evolution/oxidation: sub-monolayer platinum coatings on titanium tungsten carbide nanoparticles. Energy and Environmental Science, 2016, 9, 3290-3301.	30.8	138
143	Acidic or Alkaline? Towards a New Perspective on the Efficiency of Water Electrolysis. Journal of the Electrochemical Society, 2016, 163, F3197-F3208.	2.9	232
144	Translational Science for Energy and Beyond. Inorganic Chemistry, 2016, 55, 9131-9143.	4.0	11
145	Artificial Photosynthesis – An Inorganic Approach. Advances in Botanical Research, 2016, , 99-128.	1.1	4
146	Nanostructured Bifunctional Redox Electrocatalysts. Small, 2016, 12, 5656-5675.	10.0	174
147	Molecular engineered nanomaterials for catalytic hydrogen evolution and oxidation. Chemical Communications, 2016, 52, 13728-13748.	4.1	98
148	Engineering active sites of two-dimensional MoS ₂ nanosheets for improving hydrogen evolution. Inorganic Chemistry Frontiers, 2016, 3, 1376-1380.	6.0	22
149	Rapid prototyping of electrolyzer flow field plates. Energy and Environmental Science, 2016, 9, 3417-3423.	30.8	49
150	Fabrication of zero to three dimensional nanostructured molybdenum sulfides and their electrochemical and photocatalytic applications. Nanoscale, 2016, 8, 18250-18269.	5.6	79
151	Growth of One-Dimensional RuO ₂ Nanowires on g-Carbon Nitride: An Active and Stable Bifunctional Electrocatalyst for Hydrogen and Oxygen Evolution Reactions at All pH Values. ACS Applied Materials & Interfaces, 2016, 8, 28678-28688.	8.0	170

#	Article	IF	CITATIONS
152	Legitimate intermediates of oxygen evolution on iridium oxide revealed by in situ electrochemical evanescent wave spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 15199-15204.	2.8	40
153	Hollow Nano- and Microstructures as Catalysts. Chemical Reviews, 2016, 116, 14056-14119.	47.7	634
154	Undoped and Ni-Doped CoO _{<i>x</i>} Surface Modification of Porous BiVO ₄ Photoelectrodes for Water Oxidation. Journal of Physical Chemistry C, 2016, 120, 23449-23457.	3.1	52
155	Recent progress on earth abundant hydrogen evolution reaction and oxygen evolution reaction bifunctional electrocatalyst for overall water splitting in alkaline media. Journal of Power Sources, 2016, 333, 213-236.	7.8	390
156	Electrodeposited ternary iron-cobalt-nickel catalyst on nickel foam for efficient water electrolysis at high current density. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 506, 694-702.	4.7	34
157	Synthesis, Characterization, and Properties of Metal Phosphide Catalysts for the Hydrogen-Evolution Reaction. Chemistry of Materials, 2016, 28, 6017-6044.	6.7	519
158	Enhanced Water Oxidation Activity of the Cobalt(II,III) Oxide Electrocatalyst on an Earthâ€Abundantâ€Metalâ€Interlayered Hybrid Porous Carbon Support. ChemElectroChem, 2016, 3, 1899-1907.	3.4	23
159	Two-Dimensional Molybdenum Carbide (MXene) as an Efficient Electrocatalyst for Hydrogen Evolution. ACS Energy Letters, 2016, 1, 589-594.	17.4	1,100
160	RhCu 3D Nanoframe as a Highly Active Electrocatalyst for Oxygen Evolution Reaction under Alkaline Condition. Advanced Science, 2016, 3, 1500252.	11.2	48
161	Perovskite Solar Cells for the Generation of Fuels from Sunlight. , 2016, , 285-305.		4
162	Critical role of interfacial effects on the reactivity of semiconductor-cocatalyst junctions for photocatalytic oxygen evolution from water. Catalysis Science and Technology, 2016, 6, 6836-6844.	4.1	11
163	Competent overall water-splitting electrocatalysts derived from ZIF-67 grown on carbon cloth. RSC Advances, 2016, 6, 73336-73342.	3.6	55
164	Two-step synthesis of binary Ni–Fe sulfides supported on nickel foam as highly efficient electrocatalysts for the oxygen evolution reaction. Journal of Materials Chemistry A, 2016, 4, 13499-13508.	10.3	250
165	Modellierung, Simulation und Implementierung von Zellen für die solargetriebene Wasserspaltung. Angewandte Chemie, 2016, 128, 13168-13183.	2.0	10
166	Transitionâ€Metal (Co, Ni, and Fe)â€Based Electrocatalysts for the Water Oxidation Reaction. Advanced Materials, 2016, 28, 9266-9291.	21.0	1,392
167	Two-Dimensional Materials as Catalysts for Energy Conversion. Catalysis Letters, 2016, 146, 1917-1921.	2.6	58
168	One-Step Hydrothermal Deposition of Ni:FeOOH onto Photoanodes for Enhanced Water Oxidation. ACS Energy Letters, 2016, 1, 624-632.	17.4	122
169	A Smorgasbord of Carbon: Electrochemical Analysis of Cobalt–Bis(benzenedithiolate) Complex Adsorption and Electrocatalytic Activity on Diverse Graphitic Supports. ACS Applied Materials & amp;	8.0	20

# 170	ARTICLE Iridium Oxide for the Oxygen Evolution Reaction: Correlation between Particle Size, Morphology, and the Surface Hydroxo Layer from Operando XAS. Chemistry of Materials, 2016, 28, 6591-6604.	IF 6.7	CITATIONS 347
171	Method for the Solution Deposition of Phase-Pure CoSe ₂ as an Efficient Hydrogen Evolution Reaction Electrocatalyst. ACS Energy Letters, 2016, 1, 607-611.	17.4	62
172	A highly active and stable IrO <i> _x </i> /SrIrO ₃ catalyst for the oxygen evolution reaction. Science, 2016, 353, 1011-1014.	12.6	1,606
173	Noncovalent Immobilization of a Pyrene-Modified Cobalt Corrole on Carbon Supports for Enhanced Electrocatalytic Oxygen Reduction and Oxygen Evolution in Aqueous Solutions. ACS Catalysis, 2016, 6, 6429-6437.	11.2	170
174	On the Origin of the Improved Ruthenium Stability in RuO ₂ –IrO ₂ Mixed Oxides. Journal of the Electrochemical Society, 2016, 163, F3099-F3104.	2.9	82
175	Ultrasmall tungsten phosphide nanoparticles embedded in nitrogen-doped carbon as a highly active and stable hydrogen-evolution electrocatalyst. Journal of Materials Chemistry A, 2016, 4, 15327-15332.	10.3	116
176	Solar-Driven Reduction of 1 atm of CO ₂ to Formate at 10% Energy-Conversion Efficiency by Use of a TiO ₂ -Protected III–V Tandem Photoanode in Conjunction with a Bipolar Membrane and a Pd/C Cathode. ACS Energy Letters, 2016, 1, 764-770.	17.4	173
177	From water reduction to oxidation: Janus Co-Ni-P nanowires as high-efficiency and ultrastable electrocatalysts for over 3000Âh water splitting. Journal of Power Sources, 2016, 330, 156-166.	7.8	190
178	NiMnO ₃ /NiMn ₂ O ₄ Oxides Synthesized via the Aid of Pollen: Ilmenite/Spinel Hybrid Nanoparticles for Highly Efficient Bifunctional Oxygen Electrocatalysis. ACS Applied Materials & Interfaces, 2016, 8, 26740-26757.	8.0	88
179	A General Strategy for Decoupled Hydrogen Production from Water Splitting by Integrating Oxidative Biomass Valorization. Journal of the American Chemical Society, 2016, 138, 13639-13646.	13.7	689
180	Manganese oxides supported on nano-sized metal oxides as water-oxidizing catalysts for water splitting systems: 2-Water-oxidizing activities. International Journal of Hydrogen Energy, 2016, 41, 18472-18477.	7.1	13
181	Enhanced Performance of Si MIS Photocathodes Containing Oxide-Coated Nanoparticle Electrocatalysts. Nano Letters, 2016, 16, 6452-6459.	9.1	55
182	Discovery of Fe–Ce Oxide/BiVO ₄ Photoanodes through Combinatorial Exploration of Ni–Fe–Co–Ce Oxide Coatings. ACS Applied Materials & Interfaces, 2016, 8, 23696-23705.	8.0	35
183	A Gibeon meteorite yields a high-performance water oxidation electrocatalyst. Energy and Environmental Science, 2016, 9, 3448-3455.	30.8	35
184	A Molecular Ni omplex Containing Tetrahedral Nickel Selenide Core as Highly Efficient Electrocatalyst for Water Oxidation. ChemSusChem, 2016, 9, 3128-3132.	6.8	80
185	Modeling, Simulation, and Implementation of Solarâ€Driven Waterâ€Splitting Devices. Angewandte Chemie - International Edition, 2016, 55, 12974-12988.	13.8	119
186	Aerogel Architectures Boost Oxygenâ€Evolution Performance of NiFe ₂ O <i>x</i> > Spinels to Activity Levels Commensurate with Nickelâ€Rich Oxides. ChemElectroChem, 2016, 3, 1369-1375.	3.4	20
187	Organic-Inorganic Halide Perovskite Photovoltaics. , 2016, , .		115

#	Article	IF	CITATIONS
188	Simultaneous H ₂ Generation and Biomass Upgrading in Water by an Efficient Nobleâ€Metalâ€Free Bifunctional Electrocatalyst. Angewandte Chemie - International Edition, 2016, 55, 9913-9917.	13.8	435
189	Simultaneous H ₂ Generation and Biomass Upgrading in Water by an Efficient Nobleâ€Metalâ€Free Bifunctional Electrocatalyst. Angewandte Chemie, 2016, 128, 10067-10071.	2.0	94
190	Semiconducting materials for photoelectrochemical energy conversion. Nature Reviews Materials, 2016, 1, .	48.7	1,212
191	Activity origin and catalyst design principles forÂelectrocatalytic hydrogen evolution on heteroatom-dopedÂgraphene. Nature Energy, 2016, 1, .	39.5	927
192	Gold-supported cerium-doped NiOx catalysts for water oxidation. Nature Energy, 2016, 1, .	39.5	458
193	A review on noble-metal-free bifunctional heterogeneous catalysts for overall electrochemical water splitting. Journal of Materials Chemistry A, 2016, 4, 17587-17603.	10.3	1,037
194	Foot of the Wave Analysis for Mechanistic Elucidation and Benchmarking Applications in Molecular Water Oxidation Catalysis. ChemSusChem, 2016, 9, 3361-3369.	6.8	73
195	Parameterization of Water Electrooxidation Catalyzed by Metal Oxides Using Fourier Transformed Alternating Current Voltammetry. Journal of the American Chemical Society, 2016, 138, 16095-16104.	13.7	48
196	Spent Tea Leaf Templating of Cobalt-Based Mixed Oxide Nanocrystals for Water Oxidation. ACS Applied Materials & Interfaces, 2016, 8, 32488-32495.	8.0	43
197	Enhanced Activity and Acid pH Stability of Prussian Blue-type Oxygen Evolution Electrocatalysts Processed by Chemical Etching. Journal of the American Chemical Society, 2016, 138, 16037-16045.	13.7	194
198	Performance Limits of Photoelectrochemical CO ₂ Reduction Based on Known Electrocatalysts and the Case for Two-Electron Reduction Products. Chemistry of Materials, 2016, 28, 8844-8850.	6.7	30
199	A Million Turnover Molecular Anode for Catalytic Water Oxidation. Angewandte Chemie, 2016, 128, 15608-15612.	2.0	21
200	Low Overpotential Water Splitting Using Cobalt–Cobalt Phosphide Nanoparticles Supported on Nickel Foam. ACS Energy Letters, 2016, 1, 1192-1198.	17.4	143
201	A miniature solar device for overall water splitting consisting of series-connected spherical silicon solar cells. Scientific Reports, 2016, 6, 24633.	3.3	25
202	Electrolysis of CO ₂ to Syngas in Bipolar Membrane-Based Electrochemical Cells. ACS Energy Letters, 2016, 1, 1149-1153.	17.4	235
203	A hybrid of NiMo-Mo2C/C as non-noble metal electrocatalyst for hydrogen evolution reaction in an acidic solution. Electrochimica Acta, 2016, 222, 747-754.	5.2	51
204	One dimensional metal dithiolene (M = Ni, Fe, Zn) coordination polymers for the hydrogen evolution reaction. Dalton Transactions, 2016, 45, 19311-19321.	3.3	59
205	Electrochemically activated NiSe-Ni x S y hybrid nanorods as efficient electrocatalysts for oxygen evolution reaction. Electrochimica Acta, 2016, 220, 536-544.	5.2	60

ARTICLE IF CITATIONS # A nitrogen-doped ordered mesoporous carbon/graphene framework as bifunctional electrocatalyst 206 16.0 140 for oxygen reduction and evolution reactions. Nano Energy, 2016, 30, 503-510. A Million Turnover Molecular Anode for Catalytic Water Oxidation. Angewandte Chemie -13.8 90 International Edition, 2016, 55, 15382-15386. Effect of Sulfur Evaporation Rate on Screw Dislocation Driven Growth of MoS₂ with 208 3.0 38 High Atomic Step Density. Crystal Growth and Design, 2016, 16, 7145-7154. Generation of Transparent Oxygen Evolution Electrode Consisting of Regularly Ordered Nanoparticles from Self-Assembly Cobalt Phthalocyanine as a Template. ACS Applied Materials & amp; 209 8.0 Interfaces, 2016, 8, 32376-32384. Synergistic Electrochemical CO₂ Reduction and Water Oxidation with a Bipolar 210 17.4 134 Membrane. ACS Energy Letters, 2016, 1, 1143-1148. Self-supported porous Cobalt Oxide Nanowires with enhanced Electrocatalytic performance toward Oxygen evolution reaction. Journal of Chemical Sciences, 2016, 128, 1879-1885. 1.5 Structural and Spectroscopic Characterization of Reaction Intermediates Involved in a Dinuclear 212 13.7 49 Coâ€"Hbpp Water Oxidation Catalyst. Journal of the American Chemical Society, 2016, 138, 15291-15294. Ni–Mo Nanocatalysts on N-Doped Graphite Nanotubes for Highly Efficient Electrochemical Hydrogen 213 14.6 Evolution in Acid. AĆS Nano, 2016, 10, 10397-10403. Upscaling of integrated photoelectrochemical water-splitting devices to large areas. Nature 214 12.8 101 Communications, 2016, 7, 12681. Highly active Co–Mo–C/NRGO composite as an efficient oxygen electrode for water–oxygen redox 10.3 cycle. Journal of Materials Chemistry A, 2016, 4, 18100-18106. Shape effects of nickel phosphide nanocrystals on hydrogen evolution reaction. CrystEngComm, 2016, 216 2.6 96 18, 6083-6089. Nanoporous Graphene Enriched with Fe/Coâ€N Active Sites as a Promising Oxygen Reduction Electrocatalyst for Anion Exchange Membrane Fuel Cells. Advanced Functional Materials, 2016, 26, 14.9 305 2150-2162. Hierarchically Porous Nickel Sulfide Multifunctional Superstructures. Advanced Energy Materials, 218 19.5 268 2016, 6, 1502333. Amorphous Cobalt Boride (Co₂B) as a Highly Efficient Nonprecious Catalyst for Electrochemical Water Splitting: Oxygen and Hydrogen Evolution. Advanced Energy Materials, 2016, 6, 19.5 686 1502313. Interface Engineering of MoS₂/Ni₃S₂ Heterostructures for Highly Enhanced Electrochemical Overallâ€Waterâ€Splitting Activity. Angewandte Chemie - International 220 13.8 1,159 Edition, 2016, 55, 6702-6707. Metalâ€Derived Mesoporous Structure of a Carbon Nanofiber Electrocatalyst for Improved Oxygen Evolution Reaction in Alkaline Water Electrolysis. ChemElectroChem, 2016, 3, 1720-1724. Uncovering the prominent role of metal ions in octahedral versus tetrahedral sites of cobaltâ€"zinc 222 10.3 171 oxide catalysts for efficient oxidation of water. Journal of Materials Chemistry A, 2016, 4, 10014-10022. Ni-based heterogeneous catalyst from a designed molecular precursor for the efficient 4.1 electrochemical water oxidation. Chemical Communications, 2016, 52, 9255-9258.

#	Article	IF	CITATIONS
224	Cu-based Polyoxometalate Catalyst for Efficient Catalytic Hydrogen Evolution. Inorganic Chemistry, 2016, 55, 6750-6758.	4.0	50
225	Efficient and Stable Evolution of Oxygen Using Pulse-Electrodeposited Ir/Ni Oxide Catalyst in Fe-Spiked KOH Electrolyte. ACS Applied Materials & Interfaces, 2016, 8, 15985-15990.	8.0	46
226	Nanostructured catalysts for electrochemical water splitting: current state and prospects. Journal of Materials Chemistry A, 2016, 4, 11973-12000.	10.3	823
227	Wireless rotating disk electrode (wRDE) for assessing heterogeneous water oxidation catalysts (WOCs). Chemical Communications, 2016, 52, 7727-7730.	4.1	3
228	Solar water splitting: Efficiency discussion. International Journal of Hydrogen Energy, 2016, 41, 11941-11948.	7.1	37
229	How theory and simulation can drive fuel cell electrocatalysis. Nano Energy, 2016, 29, 334-361.	16.0	71
230	Dualâ€Templated Cobalt Oxide for Photochemical Water Oxidation. ChemSusChem, 2016, 9, 409-415.	6.8	12
231	Composition-Dependent Catalytic Activities of Noble-Metal-Free NiS/Ni ₃ S ₄ for Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2016, 120, 14581-14589.	3.1	94
232	Facile Fabrication of Sandwich Structured WO ₃ Nanoplate Arrays for Efficient Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2016, 8, 18089-18096.	8.0	142
233	An Alkaline-Stable, Metal Hydroxide Mimicking Metal–Organic Framework for Efficient Electrocatalytic Oxygen Evolution. Journal of the American Chemical Society, 2016, 138, 8336-8339.	13.7	453
234	Bifunctional Porous NiFe/NiCo ₂ O ₄ /Ni Foam Electrodes with Triple Hierarchy and Double Synergies for Efficient Whole Cell Water Splitting. Advanced Functional Materials, 2016, 26, 3515-3523.	14.9	545
235	Trimetallic TriStar Nanostructures: Tuning Electronic and Surface Structures for Enhanced Electrocatalytic Hydrogen Evolution. Advanced Materials, 2016, 28, 2077-2084.	21.0	181
236	Graphitic Nanoshell/Mesoporous Carbon Nanohybrids as Highly Efficient and Stable Bifunctional Oxygen Electrocatalysts for Rechargeable Aqueous Na–Air Batteries. Advanced Energy Materials, 2016, 6, 1501794.	19.5	120
237	A Stabilized, Intrinsically Safe, 10% Efficient, Solarâ€Driven Waterâ€Splitting Cell Incorporating Earthâ€Abundant Electrocatalysts with Steadyâ€State pH Gradients and Product Separation Enabled by a Bipolar Membrane. Advanced Energy Materials, 2016, 6, 1600379.	19.5	114
238	Interface Engineering of MoS ₂ /Ni ₃ S ₂ Heterostructures for Highly Enhanced Electrochemical Overallâ€Waterâ€Splitting Activity. Angewandte Chemie, 2016, 128, 6814-6819.	2.0	403
239	Computationally Probing the Performance of Hybrid, Heterogeneous, and Homogeneous Iridiumâ€Based Catalysts for Water Oxidation. ChemCatChem, 2016, 8, 1792-1798.	3.7	26
240	Vapor-Phase Atomic Layer Deposition of Nickel Sulfide and Its Application for Efficient Oxygen-Evolution Electrocatalysis. Chemistry of Materials, 2016, 28, 1155-1164.	6.7	144
241	First row transition metal catalysts for solar-driven water oxidation produced by electrodeposition. Journal of Materials Chemistry A, 2016, 4, 6724-6741.	10.3	80

ARTICLE IF CITATIONS Unprotected and interconnected Ru^O nano-chain networks: advantages of unprotected 242 7.4 102 surfaces in catalysis and electrocatalysis. Chemical Science, 2016, 7, 3188-3205. Fine-tuning the activity of oxygen evolution catalysts: The effect of oxidation pre-treatment on 243 4.4 size-selected Ru nanoparticles. Catalysis Today, 2016, 262, 57-64. Nickel supported on nitrogen-doped carbon nanotubes as hydrogen oxidation reaction catalyst in 244 12.8 368 alkaline electrolyte. Nature Communications, 2016, 7, 10141. Research opportunities to advance solar energy utilization. Science, 2016, 351, aad1920. 1,480 Electrocatalytic Oxygen Evolution with an Atomically Precise Nickel Catalyst. ACS Catalysis, 2016, 6, 246 11.2 104 1225-1234. Morphology–activity correlation in hydrogen evolution catalyzed by cobalt sulfides. Inorganic 6.0 Chemistry Frontiers, 2016, 3, 279-285. Nanostructured materials for water splitting - state of the art and future needs: A mini-review. 248 4.7 126 Electrochemistry Communications, 2016, 63, 10-17. Facile Synthesis of Nickel–Iron/Nanocarbon Hybrids as Advanced Electrocatalysts for Efficient Water 11.2 354 Splitting. ACS Catalysis, 2016, 6, 580-588. Development of solar fuels photoanodes through combinatorial integration of Ni–La–Co–Ce oxide 250 30.8 61 catalysts on BiVO₄. Energy and Environmental Science, 2016, 9, 565-580. Benchmarking nanoparticulate metal oxide electrocatalysts for the alkaline water oxidation 10.3 477 reaction. Journal of Materials Chemistry A, 2016, 4, 3068-3076. Achieving stable and efficient water oxidation by incorporating NiFe layered double hydroxide 252 8.0 99 nanoparticles into aligned carbon nanotubes. Nanoscale Horizons, 2016, 1, 156-160. Benchmarking the Performance of Thin-Film Oxide Electrocatalysts for Gas Evolution Reactions at 11.2 26 High Current Densities. ACS Catalysis, 2016, 6, 3017-3024. Amorphous flower-like molybdenum-sulfide-@-nitrogen-doped-carbon-nanofiber film for use in the 254 9.4 31 hydrogen-evolution reaction. Journal of Colloid and Interface Science, 2016, 472, 69-75. Low-Cost Nanostructured Iron Sulfide Electrocatalysts for PEM Water Electrolysis. ACS Catalysis, 11.2 2016, 6, 2626-2631. Homogeneously dispersed multimetal oxygen-evolving catalysts. Science, 2016, 352, 333-337. 256 12.6 1,948 A highly efficient and stable biphasic nanocrystalline Ni–Mo–N catalyst for hydrogen evolution in 166 both acidic and alkaline electrolytes. Nano Energy, 2016, 22, 111-119. Coordination Geometry and Oxidation State Requirements of Corner-Sharing MnO₆ 258 Octahedra for Water Oxidation Catalysis: An Investigation of Manganite (13-MnOOH). ACS Catalysis, 11.2 1562016, 6, 2089-2099. Opportunities to improve the net energy performance of photoelectrochemical water-splitting technology. Energy and Environmental Science, 2016, 9, 803-819. 30.8

#	Article	IF	CITATIONS
260	Cu ₂ 0 Nanowire Photocathodes for Efficient and Durable Solar Water Splitting. Nano Letters, 2016, 16, 1848-1857.	9.1	542
261	Interfacial effects on the catalysis of the hydrogen evolution, oxygen evolution and CO2-reduction reactions for (co-)electrolyzer development. Nano Energy, 2016, 29, 4-28.	16.0	104
262	Synthesis of Nanostructured BaTaO ₂ N Thin Films as Photoanodes for Solar Water Splitting. Journal of Physical Chemistry C, 2016, 120, 15758-15764.	3.1	68
263	CoSe ₂ and NiSe ₂ Nanocrystals as Superior Bifunctional Catalysts for Electrochemical and Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2016, 8, 5327-5334.	8.0	425
264	Effects of Intentionally Incorporated Metal Cations on the Oxygen Evolution Electrocatalytic Activity of Nickel (Oxy)hydroxide in Alkaline Media. ACS Catalysis, 2016, 6, 2416-2423.	11.2	199
265	A New Family of Perovskite Catalysts for Oxygen-Evolution Reaction in Alkaline Media: BaNiO ₃ and BaNi _{0.83} O _{2.5} . Journal of the American Chemical Society, 2016, 138, 3541-3547.	13.7	204
266	Rapid Characterization of Multi-Metallic Electrocatalysts for the Water Splitting Reactions Utilizing Printed Microelectrodes on a Chip. Journal of the Electrochemical Society, 2016, 163, H359-H366.	2.9	10
267	Engineering the kinetics and interfacial energetics of Ni/Ni–Mo catalyzed amorphous silicon carbide photocathodes in alkaline media. Journal of Materials Chemistry A, 2016, 4, 6842-6852.	10.3	34
268	Toward Benchmarking in Catalysis Science: Best Practices, Challenges, and Opportunities. ACS Catalysis, 2016, 6, 2590-2602.	11.2	190
269	Descriptors of Oxygen-Evolution Activity for Oxides: A Statistical Evaluation. Journal of Physical Chemistry C, 2016, 120, 78-86.	3.1	207
270	Hierarchically Porous Urchin-Like Ni ₂ P Superstructures Supported on Nickel Foam as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. ACS Catalysis, 2016, 6, 714-721.	11.2	737
271	Solution Synthesis of Thiospinel CuCo ₂ S ₄ Nanoparticles. Inorganic Chemistry, 2016, 55, 221-226.	4.0	69
272	Kinetic Analysis of Competitive Electrocatalytic Pathways: New Insights into Hydrogen Production with Nickel Electrocatalysts. Journal of the American Chemical Society, 2016, 138, 604-616.	13.7	51
273	Bio-inspired noble metal-free nanomaterials approaching platinum performances for H ₂ evolution and uptake. Energy and Environmental Science, 2016, 9, 940-947.	30.8	60
274	Colloidally-synthesized cobalt molybdenum nanoparticles as active and stable electrocatalysts for the hydrogen evolution reaction under alkaline conditions. Journal of Materials Chemistry A, 2016, 4, 3077-3081.	10.3	40
275	pH dependence of OER activity of oxides: Current and future perspectives. Catalysis Today, 2016, 262, 2-10.	4.4	288
276	Influence of Redox-Inactive Cations on the Structure and Electrochemical Reactivity of Synthetic Birnessite, a Heterogeneous Analog for the Oxygen-Evolving Complex. Journal of Physical Chemistry C, 2016, 120, 15618-15631.	3.1	3
277	Charge-Transfer Effects in Ni–Fe and Ni–Fe–Co Mixed-Metal Oxides for the Alkaline Oxygen Evolution Reaction. ACS Catalysis, 2016, 6, 155-161.	11.2	413

#	Article	IF	CITATIONS
278	Crystallographic Structure and Morphology Transformation of MnO ₂ Nanorods as Efficient Electrocatalysts for Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2016, 163, H67-H73.	2.9	72
279	Nickel sulfides for electrocatalytic hydrogen evolution under alkaline conditions: a case study of crystalline NiS, NiS ₂ , and Ni ₃ S ₂ nanoparticles. Catalysis Science and Technology, 2016, 6, 1077-1084.	4.1	408
280	Repercussion of the carbon matrix for the activity and stability of Fe/N/C electrocatalysts for the oxygen reduction reaction. Applied Catalysis B: Environmental, 2016, 183, 185-196.	20.2	63
281	Highly Active Threeâ€Dimensional NiFe/Cu ₂ O Nanowires/Cu Foam Electrode for Water Oxidation. ChemSusChem, 2017, 10, 1475-1481.	6.8	53
282	Enhanced Activity for Hydrogen Evolution Reaction over CoFe Catalysts by Alloying with Small Amount of Pt. ACS Applied Materials & Interfaces, 2017, 9, 3596-3601.	8.0	126
283	Facile synthesis of pyrite-type binary nickel iron diselenides as efficient electrocatalyst for oxygen evolution reaction. Applied Surface Science, 2017, 401, 17-24.	6.1	63
284	Cold Nanoclusters Promote Electrocatalytic Water Oxidation at the Nanocluster/CoSe ₂ Interface. Journal of the American Chemical Society, 2017, 139, 1077-1080.	13.7	294
285	Modelling heterogeneous interfaces for solar water splitting. Nature Materials, 2017, 16, 401-408.	27.5	252
286	Homologous NiO//Ni ₂ P nanoarrays grown on nickel foams: a well matched electrode pair with high stability in overall water splitting. Nanoscale, 2017, 9, 4409-4418.	5.6	127
287	Hemin-mediated construction of iridium oxide with superior stability for the oxygen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 2959-2971.	10.3	15
288	Atomic-layer-deposited ultrafine MoS ₂ nanocrystals on cobalt foam for efficient and stable electrochemical oxygen evolution. Nanoscale, 2017, 9, 2711-2717.	5.6	88
289	Template synthesis of CoSe ₂ /Co ₃ Se ₄ nanotubes: tuning of their crystal structures for photovoltaics and hydrogen evolution in alkaline medium. Journal of Materials Chemistry A, 2017, 5, 4513-4526.	10.3	165
290	MOF Templateâ€Directed Fabrication of Hierarchically Structured Electrocatalysts for Efficient Oxygen Evolution Reaction. Advanced Energy Materials, 2017, 7, 1602643.	19.5	281
291	An efficient nickel oxides/nickel structure for water oxidation: a new strategy. New Journal of Chemistry, 2017, 41, 1909-1913.	2.8	14
292	Highâ€₽erformance Supported Iridium Oxohydroxide Water Oxidation Electrocatalysts. ChemSusChem, 2017, 10, 1943-1957.	6.8	65
293	Microwaveâ€Assisted Synthesis of Stable and Highly Active Ir Oxohydroxides for Electrochemical Oxidation of Water. ChemSusChem, 2017, 10, 1958-1968.	6.8	40
294	Earth-abundant catalysts for electrochemical and photoelectrochemical water splitting. Nature Reviews Chemistry, 2017, 1, .	30.2	2,578
295	Hierarchical Ni 3.5 Co 5.5 S 8 nanosheet-assembled hollow nanocages: Superior electrocatalyst towards oxygen evolution reaction. International Journal of Hydrogen Energy, 2017, 42, 5985-5992.	7.1	36

#	Article	IF	CITATIONS
296	Tracking Catalyst Redox States and Reaction Dynamics in Ni–Fe Oxyhydroxide Oxygen Evolution Reaction Electrocatalysts: The Role of Catalyst Support and Electrolyte pH. Journal of the American Chemical Society, 2017, 139, 2070-2082.	13.7	518
297	Combining theory and experiment in electrocatalysis: Insights into materials design. Science, 2017, 355,	12.6	7,837
298	Rock Salt Ni/Co Oxides with Unusual Nanoscale‣tabilized Composition as Water Splitting Electrocatalysts. Advanced Functional Materials, 2017, 27, 1605121.	14.9	72
299	Effect of Interlayer Spacing on the Activity of Layered Manganese Oxide Bilayer Catalysts for the Oxygen Evolution Reaction. Journal of the American Chemical Society, 2017, 139, 1863-1870.	13.7	144
300	MOF-derived RuO ₂ /Co ₃ O ₄ heterojunctions as highly efficient bifunctional electrocatalysts for HER and OER in alkaline solutions. RSC Advances, 2017, 7, 3686-3694.	3.6	116
301	Electrocatalysis for the oxygen evolution reaction: recent development and future perspectives. Chemical Society Reviews, 2017, 46, 337-365.	38.1	4,505
302	NixWO2.72 nanorods as an efficient electrocatalyst for oxygen evolution reaction. Green Energy and Environment, 2017, 2, 119-123.	8.7	15
304	Colloidal nanocrystals for photoelectrochemical and photocatalytic water splitting. Journal Physics D: Applied Physics, 2017, 50, 074006.	2.8	25
305	A modular device for large area integrated photoelectrochemical water-splitting as a versatile tool to evaluate photoabsorbers and catalysts. Journal of Materials Chemistry A, 2017, 5, 4818-4826.	10.3	41
306	A Simplified Successive Ionic Layer Adsorption and Reaction (s-SILAR) Method for Growth of Porous BiVO ₄ Thin Films for Photoelectrochemical Water Oxidation. Journal of the Electrochemical Society, 2017, 164, H119-H125.	2.9	17
307	Synthesis of new photosensitive H ₂ BBQ ²⁺ [ZnCl ₄] ^{2â^'} /[(ZnCl) ₂ (μ-BBH)] complexes, through selective oxidation of H ₂ O to H ₂ O ₂ . Dalton Transactions, 2017, 46, 3688-3699.	3.3	6
308	Cobalt-Doped Iron Sulfide as an Electrocatalyst for Hydrogen Evolution. Journal of the Electrochemical Society, 2017, 164, F276-F282.	2.9	46
309	MoS ₂ –Ni ₃ S ₂ Heteronanorods as Efficient and Stable Bifunctional Electrocatalysts for Overall Water Splitting. ACS Catalysis, 2017, 7, 2357-2366.	11.2	963
310	Facile electrochemical preparation of self-supported porous Ni–Mo alloy microsphere films as efficient bifunctional electrocatalysts for water splitting. Journal of Materials Chemistry A, 2017, 5, 5797-5805.	10.3	119
311	Hollow Iron–Vanadium Composite Spheres: A Highly Efficient Ironâ€Based Water Oxidation Electrocatalyst without the Need for Nickel or Cobalt. Angewandte Chemie, 2017, 129, 3337-3341.	2.0	26
312	Graphene and Their Hybrid Electrocatalysts for Water Splitting. ChemCatChem, 2017, 9, 1554-1568.	3.7	88
313	Sulfur-Modified Graphitic Carbon Nitride Nanostructures as an Efficient Electrocatalyst for Water Oxidation. Small, 2017, 13, 1603893.	10.0	52
314	A comparison of the chemical, optical and electrocatalytic properties of water-oxidation catalysts for use in integrated solar-fuel generators. Energy and Environmental Science, 2017, 10, 987-1002.	30.8	50

#	Article	IF	CITATIONS
315	Degradation in photoelectrochemical devices: review with an illustrative case study. Journal Physics D: Applied Physics, 2017, 50, 124002.	2.8	63
316	Periodic Potential Oscillation during Oxygen Evolution Catalyzed by Manganese Oxide at Constant Current. Journal of the Electrochemical Society, 2017, 164, E78-E83.	2.9	14
317	Limiting photocurrent analysis of a wide channel photoelectrochemical flow reactor. Journal Physics D: Applied Physics, 2017, 50, 084002.	2.8	11
318	Translation of Ligand-Centered Hydrogen Evolution Reaction Activity and Mechanism of a Rhenium-Thiolate from Solution to Modified Electrodes: A Combined Experimental and Density Functional Theory Study. Inorganic Chemistry, 2017, 56, 2177-2187.	4.0	16
319	On the benchmarking of multi-junction photoelectrochemical fuel generating devices. Sustainable Energy and Fuels, 2017, 1, 492-503.	4.9	31
320	Non-precious metal electrocatalysts for hydrogen production in proton exchange membrane water electrolyzer. Applied Catalysis B: Environmental, 2017, 206, 608-616.	20.2	54
321	Deconvoluting the influences of 3D structure on the performance of photoelectrodes for solar-driven water splitting. Sustainable Energy and Fuels, 2017, 1, 154-173.	4.9	19
322	Highly efficient heterogeneous catalytic materials derived from metal-organic framework supports/precursors. Coordination Chemistry Reviews, 2017, 337, 80-96.	18.8	282
323	Hollow Iron–Vanadium Composite Spheres: A Highly Efficient Ironâ€Based Water Oxidation Electrocatalyst without the Need for Nickel or Cobalt. Angewandte Chemie - International Edition, 2017, 56, 3289-3293.	13.8	216
324	Regulating the active species of Ni(OH) ₂ using CeO ₂ : 3D CeO ₂ /Ni(OH) ₂ /carbon foam as an efficient electrode for the oxygen evolution reaction. Chemical Science, 2017, 8, 3211-3217.	7.4	141
325	Janus Co/CoP Nanoparticles as Efficient Mott–Schottky Electrocatalysts for Overall Water Splitting in Wide pH Range. Advanced Energy Materials, 2017, 7, 1602355.	19.5	482
326	Valence- and element-dependent water oxidation behaviors: in situ X-ray diffraction, absorption and electrochemical impedance spectroscopies. Physical Chemistry Chemical Physics, 2017, 19, 8681-8693.	2.8	80
327	Recent developments in complex metal oxide photoelectrodes. Journal Physics D: Applied Physics, 2017, 50, 193002.	2.8	127
328	Heteroatomâ€Doped Carbon Materials for Electrocatalysis. Chemistry - A European Journal, 2017, 23, 10703-10713.	3.3	64
329	Electrochemical Hydrogen Evolution at Ordered Mo ₇ Ni ₇ . ACS Catalysis, 2017, 7, 3375-3383.	11.2	62
330	Morphology controlled synthesis of 2-D Ni–Ni3S2 and Ni3S2 nanostructures on Ni foam towards oxygen evolution reaction. Nano Convergence, 2017, 4, .	12.1	28
331	Amorphous NiFe-OH/NiFeP Electrocatalyst Fabricated at Low Temperature for Water Oxidation Applications. ACS Energy Letters, 2017, 2, 1035-1042.	17.4	505
332	Evaluation of flow schemes for near-neutral pH electrolytes in solar-fuel generators. Sustainable Energy and Fuels, 2017, 1, 458-466.	4.9	36

#	Article	IF	CITATIONS
333	From pseudocapacitive redox to intermediary adsorption in oxygen evolution reaction. Materials Today Chemistry, 2017, 4, 117-132.	3.5	49
334	One‣tep Fabrication of Monolithic Electrodes Comprising Co ₉ S ₈ Particles Supported on Cobalt Foam for Efficient and Durable Oxygen Evolution Reaction. Chemistry - A European Journal, 2017, 23, 8749-8755.	3.3	64
335	Standardized Benchmarking of Water Splitting Catalysts in a Combined Electrochemical Flow Cell/Inductively Coupled Plasma–Optical Emission Spectrometry (ICP-OES) Setup. ACS Catalysis, 2017, 7, 3768-3778.	11.2	73
336	In Situ Growth of Ceria on Cerium–Nitrogen–Carbon as Promoter for Oxygen Evolution Reaction. Advanced Materials Interfaces, 2017, 4, 1700272.	3.7	17
337	Ultrathin Nitrogen-Doped Carbon Coated with CoP for Efficient Hydrogen Evolution. ACS Catalysis, 2017, 7, 3824-3831.	11.2	404
338	Facile Surface Modification of Ubiquitous Stainless Steel Led to Competent Electrocatalysts for Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2017, 5, 4778-4784.	6.7	78
339	Template-free synthesis of mesoporous manganese oxides with catalytic activity in the oxygen evolution reaction. Sustainable Energy and Fuels, 2017, 1, 780-788.	4.9	31
340	Ironâ€Doped Cobalt Monophosphide Nanosheet/Carbon Nanotube Hybrids as Active and Stable Electrocatalysts for Water Splitting. Advanced Functional Materials, 2017, 27, 1606635.	14.9	206
341	Kinetic Analysis of the Oxygen Evolution Reaction (OER) Performed with a Cobaltâ€Phosphate Electrocatalyst. ChemistrySelect, 2017, 2, 3323-3328.	1.5	15
342	In-situ activation of self-supported 3D hierarchically porous Ni3S2 films grown on nanoporous copper as excellent pH-universal electrocatalysts for hydrogen evolution reaction. Nano Energy, 2017, 36, 85-94.	16.0	211
343	Electrocatalytic properties of N-doped graphite felt in electro-Fenton process and degradation mechanism of levofloxacin. Chemosphere, 2017, 182, 306-315.	8.2	176
344	H 2 O 2 Treated La 0.8 Sr 0.2 CoO 3-Î′ as an Efficient Catalyst for Oxygen Evolution Reaction. Electrochimica Acta, 2017, 244, 139-145.	5.2	33
345	General Formation of Monodisperse IrM (M = Ni, Co, Fe) Bimetallic Nanoclusters as Bifunctional Electrocatalysts for Acidic Overall Water Splitting. Advanced Functional Materials, 2017, 27, 1700886.	14.9	321
346	Large-Scale Tunable 3D Self-Supporting WO ₃ Micro-Nano Architectures as Direct Photoanodes for Efficient Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2017, 9, 17856-17864.	8.0	57
347	Theoretical Insights to Bulk Activity Towards Oxygen Evolution in Oxyhydroxides. Catalysis Letters, 2017, 147, 1533-1539.	2.6	43
348	Evaluation of electrodeposited α-Mn 2 O 3 as a catalyst for the oxygen evolution reaction. Catalysis Today, 2017, 290, 2-9.	4.4	65
349	Ultrathin High Surface Area Nickel Boride (Ni <i>_x</i> B) Nanosheets as Highly Efficient Electrocatalyst for Oxygen Evolution. Advanced Energy Materials, 2017, 7, 1700381.	19.5	348
350	Nest-like NiCoP for Highly Efficient Overall Water Splitting. ACS Catalysis, 2017, 7, 4131-4137.	11.2	480

#	Article	IF	CITATIONS
351	Unbiased photocatalytic hydrogen generation from pure water on stable Ir-treated In 0.33 Ga 0.67 N nanorods. Nano Energy, 2017, 37, 158-167.	16.0	49
352	General Strategy for the Synthesis of Transition-Metal Phosphide/N-Doped Carbon Frameworks for Hydrogen and Oxygen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 16187-16193.	8.0	175
353	Interacting ZnCo 2 O 4 and Au nanodots on carbon nanotubes as highly efficient water oxidation electrocatalyst. Journal of Power Sources, 2017, 357, 1-10.	7.8	76
354	Syngas production from electrochemical reduction of CO ₂ : current status and prospective implementation. Green Chemistry, 2017, 19, 2326-2346.	9.0	281
356	Crystallinityâ€Modulated Electrocatalytic Activity of a Nickel(II) Borate Thin Layer on Ni ₃ B for Efficient Water Oxidation. Angewandte Chemie, 2017, 129, 6672-6677.	2.0	34
357	Crystallinityâ€Modulated Electrocatalytic Activity of a Nickel(II) Borate Thin Layer on Ni ₃ B for Efficient Water Oxidation. Angewandte Chemie - International Edition, 2017, 56, 6572-6577.	13.8	271
358	Molybdenum Carbideâ€Based Electrocatalysts for Hydrogen Evolution Reaction. Chemistry - A European Journal, 2017, 23, 10947-10961.	3.3	267
359	Bimetallic Carbides-Based Nanocomposite as Superior Electrocatalyst for Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 16977-16985.	8.0	135
360	Phase-controllable synthesis of cobalt hydroxide for electrocatalytic oxygen evolution. Dalton Transactions, 2017, 46, 10545-10548.	3.3	70
361	Design of template-stabilized active and earth-abundant oxygen evolution catalysts in acid. Chemical Science, 2017, 8, 4779-4794.	7.4	172
362	Interlayer expanded lamellar CoSe 2 on carbon paper as highly efficient and stable overall water splitting electrodes. Electrochimica Acta, 2017, 241, 106-115.	5.2	48
363	One-step electroreductively deposited iron-cobalt composite films as efficient bifunctional electrocatalysts for overall water splitting. Nano Energy, 2017, 38, 576-584.	16.0	65
364	Pitfalls and best practices in measurements of the electrochemical surface area of platinum-based nanostructured electro-catalysts. Journal of Catalysis, 2017, 345, 1-10.	6.2	53
365	Multi-Component Fe–Ni Hydroxide Nanocatalyst for Oxygen Evolution and Methanol Oxidation Reactions under Alkaline Conditions. ACS Catalysis, 2017, 7, 365-379.	11.2	154
366	Controlled synthesis of Mo-doped Ni ₃ S ₂ nano-rods: an efficient and stable electro-catalyst for water splitting. Journal of Materials Chemistry A, 2017, 5, 1595-1602.	10.3	148
367	Water oxidation mediated by ruthenium oxide nanoparticles supported on siliceous mesocellular foam. Catalysis Science and Technology, 2017, 7, 293-299.	4.1	13
368	Uncovering the Nature of Active Species of Nickel Phosphide Catalysts in High-Performance Electrochemical Overall Water Splitting. ACS Catalysis, 2017, 7, 103-109.	11.2	350
369	Electrochemical behavior of reduced graphene oxide and multi-walled carbon nanotubes composites for catechol and dopamine oxidation. Electrochimica Acta, 2017, 246, 415-423.	5.2	28

#	Article	IF	CITATIONS
370	Interconnected Molybdenum Carbide-Based Nanoribbons for Highly Efficient and Ultrastable Hydrogen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 24608-24615.	8.0	44
371	Self-Supported Biocarbon-Fiber Electrode Decorated with Molybdenum Carbide Nanoparticles for Highly Active Hydrogen-Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 22604-22611.	8.0	34
372	Continuous-flow electroreduction of carbon dioxide. Progress in Energy and Combustion Science, 2017, 62, 133-154.	31.2	279
373	Regulating Waterâ€Reduction Kinetics in Cobalt Phosphide for Enhancing HER Catalytic Activity in Alkaline Solution. Advanced Materials, 2017, 29, 1606980.	21.0	220
374	Solvation Effects for Oxygen Evolution Reaction Catalysis on IrO ₂ (110). Journal of Physical Chemistry C, 2017, 121, 11455-11463.	3.1	174
375	Electrodeposited Nickel–Cobalt–Sulfide Catalyst for the Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 19746-19755.	8.0	119
376	Efficient hydrogen production on MoNi4 electrocatalysts with fast water dissociation kinetics. Nature Communications, 2017, 8, 15437.	12.8	813
377	Design and Development of Efficient Bifunctional Catalysts by Tuning the Electronic Properties of Cobalt–Manganese Tungstate for Oxygen Reduction and Evolution Reactions. ChemCatChem, 2017, 9, 3681-3690.	3.7	43
378	Monolithic Photoassisted Water Splitting Device Using Anodized Niâ€Fe Oxygen Evolution Catalytic Substrate. Advanced Energy Materials, 2017, 7, 1700659.	19.5	35
379	Electroanalytical Assessment of the Effect of Ni:Fe Stoichiometry and Architectural Expression on the Bifunctional Activity of Nanoscale Ni _{<i>y</i>} Fe _{1–<i>y</i>} O <i>x</i> . Langmuir, 2017, 33, 9390-9397.	3.5	11
380	Hierarchical NiCoP nanocone arrays supported on Ni foam as an efficient and stable bifunctional electrocatalyst for overall water splitting. Journal of Materials Chemistry A, 2017, 5, 14828-14837.	10.3	255
381	Amorphous Metallic NiFeP: A Conductive Bulk Material Achieving High Activity for Oxygen Evolution Reaction in Both Alkaline and Acidic Media. Advanced Materials, 2017, 29, 1606570.	21.0	441
382	Photoelectrochemical devices for solar water splitting – materials and challenges. Chemical Society Reviews, 2017, 46, 4645-4660.	38.1	1,140
383	Gold(Core)–Lead(Shell) Nanoparticle‣oaded Titanium(IV) Oxide Prepared by Underpotential Photodeposition: Plasmonic Water Oxidation. Angewandte Chemie, 2017, 129, 10483-10487.	2.0	6
384	From the Precursor to the Active State: Monitoring Metamorphosis of Electrocatalysts During Water Oxidation by <i>In Situ</i> Spectroscopy. ChemElectroChem, 2017, 4, 2117-2122.	3.4	11
385	Cactusâ€Like Hollow Cu _{2â€} <i>_x</i> S@Ru Nanoplates as Excellent and Robust Electrocatalysts for the Alkaline Hydrogen Evolution Reaction. Small, 2017, 13, 1700052.	10.0	86
386	Development of non-oxide semiconductors as light harvesting materials in photocatalytic and photoelectrochemical water splitting. Dalton Transactions, 2017, 46, 10529-10544.	3.3	62
387	Gold(Core)–Lead(Shell) Nanoparticleâ€Loaded Titanium(IV) Oxide Prepared by Underpotential Photodeposition: Plasmonic Water Oxidation. Angewandte Chemie - International Edition, 2017, 56, 10347-10351.	13.8	31

#	Article	IF	CITATIONS
388	A Flexible Electrode Based on Al-Doped Nickel Hydroxide Wrapped around a Carbon Nanotube Forest for Efficient Oxygen Evolution. ACS Catalysis, 2017, 7, 4786-4795.	11.2	31
389	Electronic and Morphological Dual Modulation of Cobalt Carbonate Hydroxides by Mn Doping toward Highly Efficient and Stable Bifunctional Electrocatalysts for Overall Water Splitting. Journal of the American Chemical Society, 2017, 139, 8320-8328.	13.7	745
390	In Situ Coupling FeM (M = Ni, Co) with Nitrogenâ€Doped Porous Carbon toward Highly Efficient Trifunctional Electrocatalyst for Overall Water Splitting and Rechargeable Zn–Air Battery. Advanced Sustainable Systems, 2017, 1, 1700020.	5.3	122
391	Efficient H ₂ Evolution Coupled with Oxidative Refining of Alcohols via A Hierarchically Porous Nickel Bifunctional Electrocatalyst. ACS Catalysis, 2017, 7, 4564-4570.	11.2	295
392	Hematite-based photoelectrode for solar water splitting with very high photovoltage. Nano Energy, 2017, 38, 218-231.	16.0	83
393	Subvalent Iridium Precursors for Atom-Efficient Chemical Vapor Deposition of Ir and IrO ₂ Thin Films. Organometallics, 2017, 36, 2331-2337.	2.3	18
394	Hierarchical Co9S8 hollow microspheres as multifunctional electrocatalysts for oxygen reduction, oxygen evolution and hydrogen evolution reactions. Electrochimica Acta, 2017, 246, 380-390.	5.2	77
395	Nanoporous IrO ₂ catalyst with enhanced activity and durability for water oxidation owing to its micro/mesoporous structure. Nanoscale, 2017, 9, 9291-9298.	5.6	66
396	Oxygen Vacancy Engineering of Co ₃ O ₄ Nanocrystals through Coupling with Metal Support for Water Oxidation. ChemSusChem, 2017, 10, 2875-2879.	6.8	88
397	Oxygenâ€Containing Amorphous Cobalt Sulfide Porous Nanocubes as Highâ€Activity Electrocatalysts for the Oxygen Evolution Reaction in an Alkaline/Neutral Medium. Angewandte Chemie, 2017, 129, 4936-4939.	2.0	110
398	The Influence of Operation Temperature and Variations of the Illumination on the Performance of Integrated Photoelectrochemical Waterâ€Splitting Devices. ChemElectroChem, 2017, 4, 2099-2108.	3.4	15
399	Renewable energy production by photoelectrochemical oxidation of organic wastes using WO3 photoanodes. Journal of Hazardous Materials, 2017, 333, 259-264.	12.4	39
400	Hierarchical NiCo ₂ S ₄ @NiFe LDH Heterostructures Supported on Nickel Foam for Enhanced Overall-Water-Splitting Activity. ACS Applied Materials & Interfaces, 2017, 9, 15364-15372.	8.0	468
401	Boosting the Performance of the Nickel Anode in the Oxygen Evolution Reaction by Simple Electrochemical Activation. Angewandte Chemie - International Edition, 2017, 56, 5061-5065.	13.8	63
402	Boosting the Performance of the Nickel Anode in the Oxygen Evolution Reaction by Simple Electrochemical Activation. Angewandte Chemie, 2017, 129, 5143-5147.	2.0	19
403	Oxygenâ€Containing Amorphous Cobalt Sulfide Porous Nanocubes as Highâ€Activity Electrocatalysts for the Oxygen Evolution Reaction in an Alkaline/Neutral Medium. Angewandte Chemie - International Edition, 2017, 56, 4858-4861.	13.8	460
404	Photoelectrochemistry by Design: Tailoring the Nanoscale Structure of Pt/NiO Composites Leads to Enhanced Photoelectrochemical Hydrogen Evolution Performance. Journal of Physical Chemistry C, 2017, 121, 12148-12158.	3.1	20
405	Au nanoparticle incorporated Co(OH) 2 hybrid thin film with high electrocatalytic activity and stability for overall water splitting. Journal of Electroanalytical Chemistry, 2017, 794, 28-35.	3.8	36

ARTICLE IF CITATIONS # Review of recent trends in photoelectrocatalytic conversion of solar energy to electricity and 406 20.2 359 hydrogen. Applied Catalysis B: Environmental, 2017, 210, 235-254. Bulk layered heterojunction as an efficient electrocatalyst for hydrogen evolution. Science Advanćes, 2017, 3, e1602215. Photoelectrochemical deposition of CoP on cuprous oxide photocathodes for solar hydrogen 408 5.224 production. Electrochimica Acta, 2017, 235, 311-316. Microwave-assisted synthesis of a nanoamorphous (Ni_{0.8},Fe_{0.2}) oxide oxygen-evolving electrocatalyst containing only "fast―sites. Journal of Materials Chemistry A, 2017, 5, 409 11661-11670. Ag₂S/Ag Heterostructure: A Promising Electrocatalyst for the Hydrogen Evolution 410 3.5 91 Reaction. Langmuir, 2017, 33, 3178-3186. Design Principle and Loss Engineering for Photovoltaic–Electrolysis Cell System. ACS Omega, 2017, 2, 1009-1018. 3.5 A layered Na_{1â^x}Ni_yFe_{1â^y}O₂double oxide oxygen 412 evolution reaction electrocatalyst for highly efficient water splitting. Energy and Environmental 201 30.8 Science, 2017, 10, 121-128. Photodeposited ruthenium dioxide films for oxygen evolution reaction electrocatalysis. Journal of 10.3 24 Materials Chemistry A, 2017, 5, 1575-1580. Competitive Oxygen Evolution in Acid Electrolyte Catalyzed at Technologically Relevant Electrodes 414 8.0 48 Painted with Nanoscale RuO₂. ACS Applied Materials & amp; Interfaces, 2017, 9, 2387-2395. Recent developments in electrochemical water oxidation. Current Opinion in Electrochemistry, 2017, 4.8 1, 40-45. Crystalline Cobalt Oxide Films for Sustained Electrocatalytic Oxygen Evolution under Strongly 416 173 6.7 Acidic Conditions. Chemistry of Materials, 2017, 29, 950-957. Beating the Efficiency of Photovoltaics-Powered Electrolysis with Tandem Cell Photoelectrolysis. 17.4 ACS Energy Letters, 2017, 2, 45-51. Silver Leakage from Ag/AgCl Reference Electrodes as a Potential Cause of Interference in the 418 8.0 30 Electrocatalytic Hydrogen Evolution Reaction. ACS Applied Materials & amp; Interfaces, 2017, 9, 472-478. The Reaction Mechanism with Free Energy Barriers at Constant Potentials for the Oxygen Evolution Reaction at the IrO₂ (110) Surface. Journal of the American Chemical Society, 2017, 139, 13.7 243 149-155. Improving the performance of porous nickel foam for water oxidation using hydrothermally prepared 420 4.9 38 Ni and Fe metal oxides. Sustainable Energy and Fuels, 2017, 1, 207-216. One-step Nanoporous Structure Formation Using NiO Nanoparticles: Pore Size Control and Pore Size 421 Dependence of Hydrogen Evolution Reaction. Chemistry Letters, 2017, 46, 267-270. Engineering stepped edge surface structures of MoS₂sheet stacks to accelerate the 422 30.8 284 hydrogen evolution reaction. Energy and Environmental Science, 2017, 10, 593-603. Synthesis of single-crystal-like nanoporous carbon membranes and their application in overall water 12.8 142 splitting. Nature Communications, 2017, 8, 13592.

ARTICLE IF CITATIONS Energy and fuels from electrochemical interfaces. Nature Materials, 2017, 16, 57-69. 27.5 1,484 424 Materials for solar fuels and chemicals. Nature Materials, 2017, 16, 70-81. 425 1,163 Amorphous Ni_{0.75}Fe_{0.25}(OH)₂â€Decorated Layered Double 426 Perovskite Pr_{0.5}Ba_{0.5}CoO_{3â€<i>δ</i>} for Highly Efficient and Stable 10 3.4 Water Oxidation. ChemElectroChem, 2017, 4, 550-556. Gastight Hydrodynamic Electrochemistry: Design for a Hermetically Sealed Rotating Disk Electrode Cell. Analytical Chemistry, 2017, 89, 581-585. 427 Bioinspired Metal Selenolate Polymers with Tunable Mechanistic Pathways for Efficient 428 11.2 42 H₂ Evolution. ACS Catalysis, 2017, 7, 848-854. Highly crystallized \hat{l} ±-FeOOH for a stable and efficient oxygen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 2021-2028. 429 10.3 The direct hydrothermal deposition of cobalt-doped MoS₂ onto fluorine-doped SnO₂ substrates for catalysis of the electrochemical hydrogen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 1472-1480. 430 10.3 42 Efficient electricity storage with a battolyser, an integrated Ni–Fe battery and electrolyser. Energy 30.8 and Environmental Science, 2017, 10, 756-764. Electrocatalytic Activity and Stability Enhancement through Preferential Deposition of Phosphide on 432 3.7 11 Carbide. ChemCatChem, 2017, 9, 1054-1061. An Electrodeposited NiSe for Electrocatalytic Hydrogen and Oxygen Evolution Reactions in Alkaline 5.2 Solution. Electrochimica Acta, 2017, 224, 412-418. Reduced Graphene Oxide Supported Nickel–Manganese–Cobalt Spinel Ternary Oxide Nanocomposites and Their Chemically Converted Sulfide Nanocomposites as Efficient Electrocatalysts for Alkaline 434 101 11.2 Water Splitting. ACS Catalysis, 2017, 7, 819-832. Towards Versatile and Sustainable Hydrogen Production through Electrocatalytic Water Splitting: 6.8 154 Electrolyte Engineering. ChemSusChem, 2017, 10, 1318-1336. Vertically Aligned FeOOH/NiFe Layered Double Hydroxides Electrode for Highly Efficient Oxygen 436 8.0 174 Evolution Reaction. ACS Applied Materials & amp; Interfaces, 2017, 9, 464-471. Electro-oxidation of a cobalt based steel in LiOH: a non-noble metal based electro-catalyst suitable 5.6 for durable water-splitting in an acidic milieu. Nanoscale, 2017, 9, 17829-17838. Iridiumâ€Based Multimetallic Porous Hollow Nanocrystals for Efficient Overallâ€Waterâ€Splitting 438 21.0 460 Catalysis. Advanced Materials, 2017, 29, 1703798. Advances in efficient electrocatalysts based on layered double hydroxides and their derivatives. 93 Journal of Energy Chemistry, 2017, 26, 1094-1106. Electrocatalytic Metal–Organic Frameworks for Energy Applications. ChemSusChem, 2017, 10, 440 6.8 182 4374-4392. Fabrication of Nanoporous Nickel–Iron Hydroxylphosphate Composite as Bifunctional and Reversible 441 Catalyst for Highly Efficient Intermittent Water Splitting. ACS Applied Materials & amp; Interfaces, 2017, 9, 35837-35846.

<i>т</i> г		IF	CITATIONS
#	A porous Ru nanomaterial as an efficient electrocatalyst for the hydrogen evolution reaction under	IF	CHATIONS
442	acidic and neutral conditions. Chemical Communications, 2017, 53, 11713-11716.	4.1	83
443	Two-dimensional ultrathin arrays of CoP: Electronic modulation toward high performance overall water splitting. Nano Energy, 2017, 41, 583-590.	16.0	207
444	A low-noble-metal W _{1â^'x} Ir _x O _{3â^'Î} water oxidation electrocatalyst for acidic media via rapid plasma synthesis. Energy and Environmental Science, 2017, 10, 2432-2440.	30.8	116
445	Engineering Co ₉ S ₈ /WS ₂ array films as bifunctional electrocatalysts for efficient water splitting. Journal of Materials Chemistry A, 2017, 5, 23361-23368.	10.3	117
446	Niâ€Assisted Low Temperature Synthesis of MoC _x with Enhanced HER Activity. Chemistry - A European Journal, 2017, 23, 17029-17036.	3.3	13
447	Oxygen Vacancies Dominated NiS ₂ /CoS ₂ Interface Porous Nanowires for Portable Zn–Air Batteries Driven Water Splitting Devices. Advanced Materials, 2017, 29, 1704681.	21.0	533
448	Electrochemical and SECM Investigation of MoS ₂ /GO and MoS ₂ /rGO Nanocomposite Materials for HER Electrocatalysis. ACS Omega, 2017, 2, 7532-7545.	3.5	43
449	Highly defective porous CoP nanowire as electrocatalyst for full water splitting. International Journal of Hydrogen Energy, 2017, 42, 29080-29090.	7.1	68
450	Ionic Processes in Water Electrolysis: The Role of Ion-Selective Membranes. ACS Energy Letters, 2017, 2, 2625-2634.	17.4	68
451	Active Sites Intercalated Ultrathin Carbon Sheath on Nanowire Arrays as Integrated Core–Shell Architecture: Highly Efficient and Durable Electrocatalysts for Overall Water Splitting. Small, 2017, 13, 1702018.	10.0	91
452	Highly active, stable oxidized platinum clusters as electrocatalysts for the hydrogen evolution reaction. Energy and Environmental Science, 2017, 10, 2450-2458.	30.8	246
453	Core–Shell Au@Metal-Oxide Nanoparticle Electrocatalysts for Enhanced Oxygen Evolution. Nano Letters, 2017, 17, 6040-6046.	9.1	135
454	Reverse Electrodialysis-Assisted Solar Water Splitting. Scientific Reports, 2017, 7, 12281.	3.3	7
455	Ternary NiCoFe Layered Double Hydroxide Nanosheets Synthesized by Cation Exchange Reaction for Oxygen Evolution Reaction. Electrochimica Acta, 2017, 257, 118-127.	5.2	114
456	Two Are Better than One: Heterostructures Improve Hydrogen Evolution Catalysis. Joule, 2017, 1, 220-221.	24.0	32
457	Mixed-Metal–Organic Framework Self-Template Synthesis of Porous Hybrid Oxyphosphides for Efficient Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 38621-38628.	8.0	40
458	Highly Efficient Photocatalytic Water Splitting over Edge-Modified Phosphorene Nanoribbons. Journal of the American Chemical Society, 2017, 139, 15429-15436.	13.7	244
459	Ternary Ni-Fe-V sulfides bundles on nickel foam as free-standing hydrogen evolution electrodes in alkaline medium. Electrochimica Acta, 2017, 256, 241-251.	5.2	20

#	Article	IF	CITATIONS
460	ZnCo2O4 nanoparticles derived from dual-metal-organic-frameworks embedded in Multiwalled Carbon Nanotubes: a favorable electrocatalyst for the water splitting. Electrochimica Acta, 2017, 257, 233-242.	5.2	59
461	Perovskite Precursors Get a pH Tune-Up. Joule, 2017, 1, 221-223.	24.0	5
462	Lanthanide metal-assisted synthesis of rhombic dodecahedral MNi (M = Ir and Pt) nanoframes toward efficient oxygen evolution catalysis. Nano Energy, 2017, 42, 17-25.	16.0	94
463	Bifunctional NiFe inverse opal electrocatalysts with heterojunction Si solar cells for 9.54%-efficient unassisted solar water splitting. Nano Energy, 2017, 42, 1-7.	16.0	43
464	Facile synthesis of CoNi _x nanoparticles embedded in nitrogen–carbon frameworks for highly efficient electrocatalytic oxygen evolution. Chemical Communications, 2017, 53, 12177-12180.	4.1	20
465	A mechanical, high surface area and solvent-free â€~powder-to-electrode' fabrication method for screening OER catalysts. Electrochemistry Communications, 2017, 85, 1-5.	4.7	15
466	Lattice Matched Carbide–Phosphide Composites with Superior Electrocatalytic Activity and Stability. Chemistry of Materials, 2017, 29, 9369-9377.	6.7	22
467	Recent advances in cobalt phosphide based materials for energy-related applications. Journal of Materials Chemistry A, 2017, 5, 22913-22932.	10.3	121
468	Hexagonal Sphericon Hematite with High Performance for Water Oxidation. Advanced Materials, 2017, 29, 1703792.	21.0	46
469	Enhancing Multifunctionality through Secondary Phase Inclusion by Self-Assembly of Mn ₃ O ₄ Nanostructures with Superior Exchange Anisotropy and Oxygen Evolution Activity. Journal of Physical Chemistry C, 2017, 121, 25594-25602.	3.1	19
470	Highly Efficient and Stable Waterâ€Oxidation Electrocatalysis with a Very Low Overpotential using FeNiP Substitutionalâ€Solidâ€Solution Nanoplate Arrays. Advanced Materials, 2017, 29, 1704075.	21.0	163
471	Amorphous Co ₂ B Grown on CoSe ₂ Nanosheets as a Hybrid Catalyst for Efficient Overall Water Splitting in Alkaline Medium. ACS Applied Materials & Interfaces, 2017, 9, 39312-39317.	8.0	96
472	From 3D to 2D Co and Ni Oxyhydroxide Catalysts: Elucidation of the Active Site and Influence of Doping on the Oxygen Evolution Activity. ACS Catalysis, 2017, 7, 8558-8571.	11.2	50
473	Metalâ€Organic Frameworks Derived Nanotube of Nickel–Cobalt Bimetal Phosphides as Highly Efficient Electrocatalysts for Overall Water Splitting. Advanced Functional Materials, 2017, 27, 1703455.	14.9	597
474	A general polymer-assisted strategy enables unexpected efficient metal-free oxygen-evolution catalysis on pure carbon nanotubes. Energy and Environmental Science, 2017, 10, 2312-2317.	30.8	113
475	Molecularly dispersed nickel-containing species on the carbon nitride network as electrocatalysts for the oxygen evolution reaction. Carbon, 2017, 124, 180-187.	10.3	55
476	O–O bond formation in ruthenium-catalyzed water oxidation: single-site nucleophilic attack vs. O–O radical coupling. Chemical Society Reviews, 2017, 46, 6170-6193.	38.1	202
477	Enhanced Oxygen Evolution during Water Electrolysis at De-Alloyed Nickel Thin Film Electrodes. Journal of the Electrochemical Society, 2017, 164, F1196-F1203.	2.9	7

#	Article	IF	CITATIONS
478	Nanohybridization of MoS2 with Layered Double Hydroxides Efficiently Synergizes the Hydrogen Evolution in Alkaline Media. Joule, 2017, 1, 383-393.	24.0	386
479	Vertically Aligned MoS ₂ /Mo ₂ C hybrid Nanosheets Grown on Carbon Paper for Efficient Electrocatalytic Hydrogen Evolution. ACS Catalysis, 2017, 7, 7312-7318.	11.2	181
480	Catalyst Stability Benchmarking for the Oxygen Evolution Reaction: The Importance of Backing Electrode Material and Dissolution in Accelerated Aging Studies. ChemSusChem, 2017, 10, 4140-4143.	6.8	111
481	Earth-abundant elements doping for robust and stable solar-driven water splitting by FeOOH. Journal of Materials Chemistry A, 2017, 5, 21478-21485.	10.3	54
482	Exposing high-energy surfaces by rapid-anneal solid phase epitaxy. APL Materials, 2017, 5, 086103.	5.1	1
483	Metallic Transition Metal Selenide Holey Nanosheets for Efficient Oxygen Evolution Electrocatalysis. ACS Nano, 2017, 11, 9550-9557.	14.6	273
484	Heterogeneous Bimetallic Phosphide/Sulfide Nanocomposite for Efficient Solar-Energy-Driven Overall Water Splitting. ACS Nano, 2017, 11, 10303-10312.	14.6	187
485	Atomic-layer-deposited ultrathin Co ₉ S ₈ on carbon nanotubes: an efficient bifunctional electrocatalyst for oxygen evolution/reduction reactions and rechargeable Zn–air batteries. Journal of Materials Chemistry A, 2017, 5, 21353-21361.	10.3	97
486	Reactive Electrophilic O ^{lâ^'} Species Evidenced in Highâ€Performance Iridium Oxohydroxide Water Oxidation Electrocatalysts. ChemSusChem, 2017, 10, 4786-4798.	6.8	49
487	Investigating Catalyst–Support Interactions To Improve the Hydrogen Evolution Reaction Activity of Thiomolybdate [Mo ₃ S ₁₃] ^{2–} Nanoclusters. ACS Catalysis, 2017, 7, 7126-7130.	11.2	76
488	Exploitation of the Largeâ€Area Basal Plane of MoS ₂ and Preparation of Bifunctional Catalysts through On‧urface Selfâ€Assembly. Advanced Science, 2017, 4, 1700356.	11.2	9
489	Lability and Basicity of Bipyridine-Carboxylate-Phosphonate Ligand Accelerate Single-Site Water Oxidation by Ruthenium-Based Molecular Catalysts. Journal of the American Chemical Society, 2017, 139, 15347-15355.	13.7	76
490	In Situ Solid–Gas Reactivity of Nanoscaled Metal Borides from Molten Salt Synthesis. Inorganic Chemistry, 2017, 56, 9225-9234.	4.0	42
491	Hydrogen evolution reaction activity of nickel phosphide is highly sensitive to electrolyte pH. Journal of Materials Chemistry A, 2017, 5, 20390-20397.	10.3	98
492	Mesoporous Iron Sulfide for Highly Efficient Electrocatalytic Hydrogen Evolution. Journal of the American Chemical Society, 2017, 139, 13604-13607.	13.7	288
493	MoS2 quantum dots interspersed WO3 nanoplatelet arrays with enhanced photoelectrochemical activity. Electrochimica Acta, 2017, 252, 416-423.	5.2	32
494	Nickel-Based Electrocatalysts for Energy-Related Applications: Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution Reactions. ACS Catalysis, 2017, 7, 7196-7225.	11.2	857
495	Anomalous in situ Activation of Carbon-Supported Ni2P Nanoparticles for Oxygen Evolving Electrocatalysis in Alkaline Media. Scientific Reports, 2017, 7, 8236.	3.3	21

#	Apticie	IE	CITATIONS
#	Autologous growth of nickel oxyhydroxides with in situ electrochemical iron doping for efficient	IF 5 0	CHATIONS
490	oxygen evolution reactions. Materials Chemistry Frontiers, 2017, 1, 2541-2546.	5.9	24
497	New and Efficient Electrocatalyst for Hydrogen Production from Water Splitting: Inexpensive, Robust Metallic Glassy Ribbons Based on Iron and Cobalt. ACS Applied Materials & Interfaces, 2017, 9, 31340-31344.	8.0	61
498	Ordering and Phase Control in Epitaxial Double-Perovskite Catalysts for the Oxygen Evolution Reaction. ACS Catalysis, 2017, 7, 7029-7037.	11.2	35
499	Selfâ€Templated Fabrication of CoO–MoO ₂ Nanocages for Enhanced Oxygen Evolution. Advanced Functional Materials, 2017, 27, 1702324.	14.9	224
500	Hierarchical Nanostructures: Design for Sustainable Water Splitting. Advanced Energy Materials, 2017, 7, 1700559.	19.5	247
501	Straightforward synthesis of nitrogen-doped carbon nanotubes as highly active bifunctional electrocatalysts for full water splitting. Journal of Catalysis, 2017, 353, 19-27.	6.2	105
502	Supercritical fluid processing for the synthesis of NiS ₂ nanostructures as efficient electrocatalysts for electrochemical oxygen evolution reactions. Catalysis Science and Technology, 2017, 7, 3591-3597.	4.1	44
503	Mesoporous Ruthenium/Ruthenium Oxide Thin Films: Active Electrocatalysts for the Oxygen Evolution Reaction. ChemElectroChem, 2017, 4, 2480-2485.	3.4	39
504	Costâ€Effective Alkaline Water Electrolysis Based on Nitrogen―and Phosphorusâ€Doped Selfâ€Supportive Electrocatalysts. Advanced Materials, 2017, 29, 1702095.	21.0	175
505	Hollow and Porous Nickel Cobalt Perselenide Nanostructured Microparticles for Enhanced Electrocatalytic Oxygen Evolution. Chemistry of Materials, 2017, 29, 7032-7041.	6.7	93
506	A facile synthetic strategy for iron, aniline-based non-precious metal catalysts for polymer electrolyte membrane fuel cells. Scientific Reports, 2017, 7, 5396.	3.3	30
507	Elucidating Performance Limitations in Alkaline-Exchange- Membrane Fuel Cells. Journal of the Electrochemical Society, 2017, 164, E3583-E3591.	2.9	40
508	Allâ€Inâ€One Perovskite Catalyst: Smart Controls of Architecture and Composition toward Enhanced Oxygen/Hydrogen Evolution Reactions. Advanced Energy Materials, 2017, 7, 1700666.	19.5	124
509	High-Performance Pyrochlore-Type Yttrium Ruthenate Electrocatalyst for Oxygen Evolution Reaction in Acidic Media. Journal of the American Chemical Society, 2017, 139, 12076-12083.	13.7	331
510	Cobaltâ€Tungstenâ€Boron as an Active Electrocatalyst for Water Electrolysis. ChemistrySelect, 2017, 2, 6187-6193.	1.5	33
511	Microbial-Phosphorus-Enabled Synthesis of Phosphide Nanocomposites for Efficient Electrocatalysts. Journal of the American Chemical Society, 2017, 139, 11248-11253.	13.7	70
512	NiZn double hydroxide nanosheet-anchored nitrogen-doped graphene enriched with the γ-NiOOH phase as an activity modulated water oxidation electrocatalyst. Nanoscale, 2017, 9, 12590-12600.	5.6	64
513	Self-optimizing, highly surface-active layeredÂmetal dichalcogenide catalysts for hydrogen evolution. Nature Energy, 2017, 2, .	39.5	336

#	Article	IF	Citations
514	In Situ Fabrication of Ni–Mo Bimetal Sulfide Hybrid as an Efficient Electrocatalyst for Hydrogen Evolution over a Wide pH Range. ACS Catalysis, 2017, 7, 6179-6187.	11.2	287
515	A Theoretical Investigation into the Role of Surface Defects for Oxygen Evolution on RuO ₂ . Journal of Physical Chemistry C, 2017, 121, 18516-18524.	3.1	95
516	Hydrogen evolution reaction catalyzed by ruthenium ion-complexed graphitic carbon nitride nanosheets. Journal of Materials Chemistry A, 2017, 5, 18261-18269.	10.3	136
517	FeS 2 -doped MoS 2 nanoflower with the dominant 1T-MoS 2 phase as an excellent electrocatalyst for high-performance hydrogen evolution. Electrochimica Acta, 2017, 249, 72-78.	5.2	54
518	Facile synthesis of bicontinuous Ni3Fe alloy for efficient electrocatalytic oxygen evolution reaction. Journal of Alloys and Compounds, 2017, 726, 875-884.	5.5	49
519	Facile synthesis of sponge-like Ni ₃ N/NC for electrocatalytic water oxidation. Chemical Communications, 2017, 53, 9566-9569.	4.1	62
520	Two-dimensional boron-doped graphyne nanosheet: A new metal-free catalyst for oxygen evolution reaction. Carbon, 2017, 123, 558-564.	10.3	64
521	Interfaceâ€Engineered Ni(OH) ₂ ∫î²â€like FeOOH Electrocatalysts for Highly Efficient and Stable Oxygen Evolution Reaction. Chemistry - an Asian Journal, 2017, 12, 2720-2726.	3.3	43
522	Spinels: Controlled Preparation, Oxygen Reduction/Evolution Reaction Application, and Beyond. Chemical Reviews, 2017, 117, 10121-10211.	47.7	1,157
523	Crystalline nickel manganese antimonate as a stable water-oxidation catalyst in aqueous 1.0 M H ₂ SO ₄ . Energy and Environmental Science, 2017, 10, 2103-2108.	30.8	158
524	Hydrogen Bonding Rescues Overpotential in Seven-Coordinated Ru Water Oxidation Catalysts. ACS Catalysis, 2017, 7, 6525-6532.	11.2	50
525	Room Temperature Dissolution of Bulk Elemental Ni and Se for Solution Deposition of a NiSe2 HER Electrocatalyst. Inorganic Chemistry, 2017, 56, 10143-10146.	4.0	21
526	Two-Dimensional TiO ₂ Nanosheets for Photo and Electro-Chemical Oxidation of Water: Predictions of Optimal Dopant Species from First-Principles. Journal of Physical Chemistry C, 2017, 121, 19201-19208.	3.1	14
527	Photoelectrochemical Behavior of a Molecular Ru-Based Water-Oxidation Catalyst Bound to TiO ₂ -Protected Si Photoanodes. Journal of the American Chemical Society, 2017, 139, 11345-11348.	13.7	56
528	Are Metal Chalcogenides, Nitrides, and Phosphides Oxygen Evolution Catalysts or Bifunctional Catalysts?. ACS Energy Letters, 2017, 2, 1937-1938.	17.4	894
529	Investigating the origin of Co(IV)'s high electrocatalytic activity in the oxygen evolution reaction at a Na CoO2 interface. Materials Research Bulletin, 2017, 95, 285-291.	5.2	13
530	A wide visible light driven complex perovskite Ba(Mg _{1/3} Ta _{2/3})O _{3â^'x} N _y photocatalyst for water oxidation and reduction. Journal of Materials Chemistry A, 2017, 5, 18870-18877.	10.3	20
531	Perspectives on the photoelectrochemical storage of solar energy. MRS Energy & Sustainability, 2017, 4, 1.	3.0	49

#	Article	IF	CITATIONS
532	Photodecomposition of Metal Nitrate and Chloride Compounds Yields Amorphous Metal Oxide Films. Journal of the American Chemical Society, 2017, 139, 18174-18177.	13.7	17
533	Tungsten-coated nano-boron carbide as a non-noble metal bifunctional electrocatalyst for oxygen evolution and hydrogen evolution reactions in alkaline media. Nanoscale, 2017, 9, 19176-19182.	5.6	27
534	Understanding Variability in the Hydrogen Evolution Activity of a Cobalt Anthracenetetrathiolate Coordination Polymer. ACS Catalysis, 2017, 7, 8605-8612.	11.2	30
535	Rational Bottom-Up Engineering of Electrocatalysts by Atomic Layer Deposition: A Case Study of Fe _{<i>x</i>} Co _{1–<i>x</i>} S _{<i>y</i>} -Based Catalysts for Electrochemical Hydrogen Evolution. ACS Energy Letters, 2017, 2, 2778-2785.	17.4	61
536	Interface Engineering of Ni ₃ N@Fe ₃ N Heterostructure Supported on Carbon Fiber for Enhanced Water Oxidation. Industrial & Engineering Chemistry Research, 2017, 56, 14245-14251.	3.7	35
537	Synergistic Activity of Co and Fe in Amorphous Co <i>x</i> –Fe–B Catalyst for Efficient Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 40333-40343.	8.0	145
538	Boosting electrochemical water oxidation through replacement of O _h Co sites in cobalt oxide spinel with manganese. Chemical Communications, 2017, 53, 8018-8021.	4.1	151
539	Stability limits of tin-based electrocatalyst supports. Scientific Reports, 2017, 7, 4595.	3.3	127
540	Ternary nickel–iron sulfide microflowers as a robust electrocatalyst for bifunctional water splitting. Journal of Materials Chemistry A, 2017, 5, 15838-15844.	10.3	179
541	Highly Efficient Ni-Fe Based Oxygen Evolution Catalyst Prepared by A Novel Pulse Electrochemical Approach. Electrochimica Acta, 2017, 247, 722-729.	5.2	12
542	Nitrogen–doped graphitized carbon shell encapsulated NiFe nanoparticles: A highly durable oxygen evolution catalyst. Nano Energy, 2017, 39, 245-252.	16.0	143
543	Facile synthesis of Ni-doped WO3 nanoplate arrays for effective photoelectrochemical water splitting. Journal of Solid State Electrochemistry, 2017, 21, 3355-3364.	2.5	27
544	Facile synthesis of binary NiCoS nanorods supported on nickel foam as efficient electrocatalysts for oxygen evolution reaction. International Journal of Hydrogen Energy, 2017, 42, 17129-17135.	7.1	50
545	A facile conversion of a Ni/Fe coordination polymer to a robust electrocatalyst for the oxygen evolution reaction. RSC Advances, 2017, 7, 32819-32825.	3.6	21
546	Enhanced charge transfer kinetics of Fe2O3/CdS composite nanorod arrays using cobalt-phosphate as cocatalyst. Applied Catalysis B: Environmental, 2017, 218, 570-580.	20.2	171
547	Iron-Induced Activation of Ordered Mesoporous Nickel Cobalt Oxide Electrocatalyst for the Oxygen Evolution Reaction. ACS Applied Materials & amp; Interfaces, 2017, 9, 21225-21233.	8.0	96
548	Interfacial engineering of metal-insulator-semiconductor junctions for efficient and stable photoelectrochemical water oxidation. Nature Communications, 2017, 8, 15968.	12.8	177
549	Energy-Related Small Molecule Activation Reactions: Oxygen Reduction and Hydrogen and Oxygen Evolution Reactions Catalyzed by Porphyrin- and Corrole-Based Systems. Chemical Reviews, 2017, 117, 3717-3797.	47.7	1,042

#	Article	IF	CITATIONS
550	Bimetalâ€Organic Framework Derived CoFe ₂ O ₄ /C Porous Hybrid Nanorod Arrays as Highâ€Performance Electrocatalysts for Oxygen Evolution Reaction. Advanced Materials, 2017, 29, 1604437.	21.0	677
551	Enhancing Electrocatalytic Performance of Bifunctional Cobalt–Manganeseâ€Oxynitride Nanocatalysts on Graphene. ChemSusChem, 2017, 10, 68-73.	6.8	28
552	Bimetallic Cobaltâ€Based Phosphide Zeolitic Imidazolate Framework: CoP <i>_x</i> Phaseâ€Dependent Electrical Conductivity and Hydrogen Atom Adsorption Energy for Efficient Overall Water Splitting. Advanced Energy Materials, 2017, 7, 1601555.	19.5	340
553	Simple Aqueous Preparation of High Activity and Stability NiFe Hydrous Oxide Catalysts for Water Oxidation. ACS Sustainable Chemistry and Engineering, 2017, 5, 1106-1112.	6.7	24
554	A multifunctional biphasic water splitting catalyst tailored for integration with high-performance semiconductor photoanodes. Nature Materials, 2017, 16, 335-341.	27.5	217
555	Active and Stable Nickelâ€Based Electrocatalysts Based on the ZnO:Ni System for Water Oxidation in Alkaline Media. ChemCatChem, 2017, 9, 672-676.	3.7	17
556	Measurement Techniques for the Study of Thin Film Heterogeneous Water Oxidation Electrocatalysts. Chemistry of Materials, 2017, 29, 120-140.	6.7	473
557	Molecular hydrogen production from wastewater electrolysis cell with multi-junction BiOx/TiO2 anode and stainless steel cathode: Current and energy efficiency. Applied Catalysis B: Environmental, 2017, 202, 671-682.	20.2	36
558	Ni/NiO _x -decorated carbon nanofibers with enhanced oxygen evolution activity for rechargeable zinc–air batteries. Materials Chemistry Frontiers, 2017, 1, 677-682.	5.9	29
559	Multifunctional 0D–2D Ni ₂ P Nanocrystals–Black Phosphorus Heterostructure. Advanced Energy Materials, 2017, 7, 1601285.	19.5	149
560	Wire-on-flake heterostructured ternary Co _{0.5} Ni _{0.5} P/CC: an efficient hydrogen evolution electrocatalyst. Journal of Materials Chemistry A, 2017, 5, 982-987.	10.3	48
561	Effect of Chromium Doping on Electrochemical Water Oxidation Activity by Co _{3–<i>x</i>} Cr _{<i>x</i>} O ₄ Spinel Catalysts. ACS Catalysis, 2017, 7, 443-451.	11.2	92
562	Simultaneous modulation of surface composition, oxygen vacancies and assembly in hierarchical Co ₃ O ₄ mesoporous nanostructures for lithium storage and electrocatalytic oxygen evolution. Nanoscale, 2017, 9, 14431-14441.	5.6	77
563	Recent Advances in the BiVO4 Photocatalyst for Sun-Driven Water Oxidation: Top-Performing Photoanodes and Scale-Up Challenges. Catalysts, 2017, 7, 13.	3.5	202
564	Transition Metal-Modified Zirconium Phosphate Electrocatalysts for the Oxygen Evolution Reaction. Catalysts, 2017, 7, 132.	3.5	27
565	Electrochemical Exfoliation of Pillared‣ayer Metal–Organic Framework to Boost the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2018, 57, 4632-4636.	13.8	275
566	Molybdenum Phosphide/Carbon Nanotube Hybrids as pHâ€Universal Electrocatalysts for Hydrogen Evolution Reaction. Advanced Functional Materials, 2018, 28, 1706523.	14.9	185
567	Iron Hydroxide-Modified Nickel Hydroxylphosphate Single-Wall Nanotubes as Efficient Electrocatalysts for Oxygen Evolution Reactions. ACS Applied Materials & Interfaces, 2018, 10, 9407-9414.	8.0	38

#	Article	IF	CITATIONS
568	Mesoporous manganese phthalocyanine-based materials for electrochemical water oxidation <i>via</i> tailored templating. Catalysis Science and Technology, 2018, 8, 1517-1521.	4.1	11
569	In Situ Synthesis of Core–Shell-Ni ₃ Fe(OH) ₉ /Ni ₃ Fe Hybrid Nanostructures as Highly Active and Stable Bifunctional Catalysts for Water Electrolysis. ACS Applied Energy Materials, 2018, 1, 986-992.	5.1	15
570	Tailoring the electrocatalytic activity of bimetallic nickel-iron diselenide hollow nanochains for water oxidation. Nano Energy, 2018, 47, 275-284.	16.0	116
571	Reversing the Tradeoff between Rate and Overpotential in Molecular Electrocatalysts for H ₂ Production. ACS Catalysis, 2018, 8, 3286-3296.	11.2	79
572	Ultrathin NiCo ₂ P _x nanosheets strongly coupled with CNTs as efficient and robust electrocatalysts for overall water splitting. Journal of Materials Chemistry A, 2018, 6, 7420-7427.	10.3	302
573	A structurally versatile nickel phosphite acting as a robust bifunctional electrocatalyst for overall water splitting. Energy and Environmental Science, 2018, 11, 1287-1298.	30.8	205
574	Controlled Synthesis of Eutectic NiSe/Ni ₃ Se ₂ Self‣upported on Ni Foam: An Excellent Bifunctional Electrocatalyst for Overall Water Splitting. Advanced Materials Interfaces, 2018, 5, 1701507.	3.7	67
575	Selfâ€īemplated Synthesis of Co _{1â€<i>x</i>} S Porous Hexagonal Microplates for Efficient Electrocatalytic Oxygen Evolution. ChemElectroChem, 2018, 5, 1167-1172.	3.4	13
576	Possible influence of the Kuramoto length in a photo-catalytic water splitting reaction revealed by Poisson–Nernst–Planck equations involving ionization in a weak electrolyte. Chemical Physics, 2018, 502, 39-49.	1.9	2
577	Loading Amorphous NiMoO _{4–<i>x</i>} S _{<i>x</i>} Nanosheet Cocatalyst to Improve Performance of <i>p</i> -Silicon Wafer Photocathode. ACS Applied Energy Materials, 2018, 1, 1286-1293.	5.1	9
578	Porous superstructures constructed from ultrafine FeP nanoparticles for highly active and exceptionally stable hydrogen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 6387-6392.	10.3	79
579	Ir-Pd nanoalloys with enhanced surface-microstructure-sensitive catalytic activity for oxygen evolution reaction in acidic and alkaline media. Science China Materials, 2018, 61, 926-938.	6.3	45
580	DFT/TD-DFT study on the electronic and spectroscopic properties of hollow cubic and hollow spherical (ZnO) m quantum dots interacting with CO, NO2 and SO3 molecules. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	5
581	Total Water Splitting Catalyzed by Co@Ir Core–Shell Nanoparticles Encapsulated in Nitrogen-Doped Porous Carbon Derived from Metal–Organic Frameworks. ACS Sustainable Chemistry and Engineering, 2018, 6, 5105-5114.	6.7	113
582	Trends in activity for the oxygen evolution reaction on transition metal (M = Fe, Co, Ni) phosphide pre-catalysts. Chemical Science, 2018, 9, 3470-3476.	7.4	443
583	Electrochemical Exfoliation of Pillared‣ayer Metal–Organic Framework to Boost the Oxygen Evolution Reaction. Angewandte Chemie, 2018, 130, 4722-4726.	2.0	86
584	Promotion of electrochemical oxygen evolution reaction by chemical coupling of cobalt to molybdenum carbide. Applied Catalysis B: Environmental, 2018, 227, 340-348.	20.2	110
585	Ultrasmall Ir nanoparticles for efficient acidic electrochemical water splitting. Inorganic Chemistry Frontiers, 2018, 5, 1121-1125.	6.0	49

#	Article	IF	CITATIONS
586	A facile surface chemistry approach to bifunctional excellence for perovskite electrocatalysis. Nano Energy, 2018, 49, 117-125.	16.0	55
587	Multifunctional Singleâ€Crystallized Carbonate Hydroxides as Highly Efficient Electrocatalyst for Full Water splitting. Advanced Energy Materials, 2018, 8, 1800175.	19.5	101
588	Highly dispersed and disordered nickel–iron layered hydroxides and sulphides: robust and high-activity water oxidation catalysts. Sustainable Energy and Fuels, 2018, 2, 1561-1573.	4.9	29
589	Chapter 6. Emerging Semiconductor Oxides for Direct Solar Water Splitting. RSC Energy and Environment Series, 2018, , 163-182.	0.5	3
590	Facile synthesis of Ni based metal-organic frameworks wrapped MnO2 nanowires with high performance toward electrochemical oxygen evolution reaction. Talanta, 2018, 186, 154-161.	5.5	24
591	A highly efficient Ni–Mo bimetallic hydrogen evolution catalyst derived from a molybdate incorporated Ni-MOF. Journal of Materials Chemistry A, 2018, 6, 9228-9235.	10.3	83
592	Stable Water Oxidation in Acid Using Manganese-Modified TiO ₂ Protective Coatings. ACS Applied Materials & Interfaces, 2018, 10, 18805-18815.	8.0	24
593	General Synthetic Strategy for Libraries of Supported Multicomponent Metal Nanoparticles. ACS Nano, 2018, 12, 4594-4604.	14.6	66
594	Enhanced electrocatalytic performance for the hydrogen evolution reaction through surface enrichment of platinum nanoclusters alloying with ruthenium <i>in situ</i> embedded in carbon. Energy and Environmental Science, 2018, 11, 1232-1239.	30.8	230
595	Defect electrocatalytic mechanism: concept, topological structure and perspective. Materials Chemistry Frontiers, 2018, 2, 1250-1268.	5.9	119
596	The Impact of Different Si Surface Terminations in the (001) n-Si/NiOx Heterojunction on the Oxygen Evolution Reaction (OER) by XPS and Electrochemical Methods. Journal of the Electrochemical Society, 2018, 165, H3122-H3130.	2.9	13
597	Tuning the Electronic Spin State of Catalysts by Strain Control for Highly Efficient Water Electrolysis. Small Methods, 2018, 2, 1800001.	8.6	70
598	Tuning the morphology and Fe/Ni ratio of a bimetallic Fe-Ni-S film supported on nickel foam for optimized electrolytic water splitting. Journal of Colloid and Interface Science, 2018, 523, 121-132.	9.4	48
599	Metal phosphide catalysts anchored on metal-caged graphitic carbon towards efficient and durable hydrogen evolution electrocatalysis. Nano Energy, 2018, 48, 500-509.	16.0	66
600	Elucidating ultrafast electron dynamics at surfaces using extreme ultraviolet (XUV) reflection–absorption spectroscopy. Chemical Communications, 2018, 54, 4216-4230.	4.1	26
601	Solid-phase hot-pressing synthesis of POMOFs on carbon cloth and derived phosphides for all pH value hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 21969-21977.	10.3	43
602	Janus effect of O2 plasma modification on the electrocatalytic hydrogen evolution reaction of MoS2. Journal of Catalysis, 2018, 361, 384-392.	6.2	40
603	Transitionâ€Metalâ€Based Electrocatalysts as Cocatalysts for Photoelectrochemical Water Splitting: A Mini Review. Small, 2018, 14, e1704179.	10.0	182

#	Article	IF	CITATIONS
604	A Hierarchical MoP Nanoflake Array Supported on Ni Foam: A Bifunctional Electrocatalyst for Overall Water Splitting. Small Methods, 2018, 2, 1700369.	8.6	106
605	Electrolysis of Natural Waters Contaminated with Transitionâ€Metal Ions: Identification of A Metastable FePbâ€Based Oxygenâ€Evolution Catalyst Operating in Weakly Acidic Solutions. ChemPlusChem, 2018, 83, 704-710.	2.8	9
606	Efficient and Stable Silicon Microwire Photocathodes with a Nickel Silicide Interlayer for Operation in Strongly Alkaline Solutions. ACS Energy Letters, 2018, 3, 1086-1092.	17.4	33
607	CoFeW ternary oxides nanoparticles for oxygen evolution reaction. Materials Letters, 2018, 223, 246-249.	2.6	17
608	Toward High-Performance and Low-Cost Hydrogen Evolution Reaction Electrocatalysts: Nanostructuring Cobalt Phosphide (CoP) Particles on Carbon Fiber Paper. ACS Applied Materials & Interfaces, 2018, 10, 14777-14785.	8.0	98
609	Polyoxometalate precursors for precisely controlled synthesis of bimetallic sulfide heterostructure through nucleation-doping competition. Nanoscale, 2018, 10, 8404-8412.	5.6	65
610	In situ promoting water dissociation kinetic of Co based electrocatalyst for unprecedentedly enhanced hydrogen evolution reaction in alkaline media. Nano Energy, 2018, 49, 14-22.	16.0	53
611	Boosting the hydrogen evolution performance of ruthenium clusters through synergistic coupling with cobalt phosphide. Energy and Environmental Science, 2018, 11, 1819-1827.	30.8	350
612	2D Nanostructures of CoFe2O4 and NiFe2O4: Efficient Oxygen Evolution Catalyst. Electrochimica Acta, 2018, 273, 462-473.	5.2	119
613	Anchoring zero valence single atoms of nickel and iron on graphdiyne for hydrogen evolution. Nature Communications, 2018, 9, 1460.	12.8	781
614	Composite structures for enhanced photoelectrochemical activity: WS2 quantum dots with oriented WO3 arrays. Journal of Materials Science, 2018, 53, 10338-10350.	3.7	7
615	A highly stable bifunctional catalyst based on 3D Co(OH)2@NCNTs@NF towards overall water-splitting. Nano Energy, 2018, 47, 96-104.	16.0	121
616	Ternary interfacial superstructure enabling extraordinary hydrogen evolution electrocatalysis. Materials Today, 2018, 21, 602-610.	14.2	48
617	Ultrathin CoNiP@Layered Double Hydroxides Core–Shell Nanosheets Arrays for Largely Enhanced Overall Water Splitting. ACS Applied Energy Materials, 2018, 1, 623-631.	5.1	79
618	Anion-Containing Noble-Metal-Free Bifunctional Electrocatalysts for Overall Water Splitting. ACS Catalysis, 2018, 8, 3688-3707.	11.2	245
619	Trimetallic NiFeMo for Overall Electrochemical Water Splitting with a Low Cell Voltage. ACS Energy Letters, 2018, 3, 546-554.	17.4	205
620	Recent progress and perspectives of bifunctional oxygen reduction/evolution catalyst development for regenerative anion exchange membrane fuel cells. Nano Energy, 2018, 47, 172-198.	16.0	134
621	Ruthenium-nickel sandwiched nanoplates for efficient water splitting electrocatalysis. Nano Energy, 2018, 47, 1-7.	16.0	137

#	Article	IF	CITATIONS
622	A wafer-scale 1 nm Ni(OH) ₂ nanosheet with superior electrocatalytic activity for the oxygen evolution reaction. Nanoscale, 2018, 10, 5054-5059.	5.6	31
623	One-pot synthesis of iron–nickel–selenide nanorods for efficient and durable electrochemical oxygen evolution. Inorganic Chemistry Frontiers, 2018, 5, 814-818.	6.0	32
624	Template-Free Synthesis of Hollow Iron Phosphide–Phosphate Composite Nanotubes for Use as Active and Stable Oxygen Evolution Electrocatalysts. ACS Applied Nano Materials, 2018, 1, 617-624.	5.0	66
625	Dynamic Hydrogen Bubble Templated NiCu Phosphide Electrodes for pH-Insensitive Hydrogen Evolution Reactions. ACS Sustainable Chemistry and Engineering, 2018, 6, 2866-2871.	6.7	66
626	Highly Active Trimetallic NiFeCr Layered Double Hydroxide Electrocatalysts for Oxygen Evolution Reaction. Advanced Energy Materials, 2018, 8, 1703189.	19.5	509
627	Ce-Doped NiFe-Layered Double Hydroxide Ultrathin Nanosheets/Nanocarbon Hierarchical Nanocomposite as an Efficient Oxygen Evolution Catalyst. ACS Applied Materials & Interfaces, 2018, 10, 6336-6345.	8.0	276
628	Steel: The Resurrection of a Forgotten Water-Splitting Catalyst. ACS Energy Letters, 2018, 3, 574-591.	17.4	122
629	Template-directed synthesis of sulphur doped NiCoFe layered double hydroxide porous nanosheets with enhanced electrocatalytic activity for the oxygen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 3224-3230.	10.3	170
630	A general potentiodynamic approach for red phosphorus and sulfur nanodot incorporation on reduced graphene oxide sheets: metal-free and binder-free electrodes for supercapacitor and hydrogen evolution activities. Journal of Materials Chemistry A, 2018, 6, 3141-3150.	10.3	32
631	Cobalt Sulfide Nanotubes (Co ₉ S ₈) Decorated with Amorphous MoS _{<i>x</i>} as Highly Efficient Hydrogen Evolution Electrocatalyst. ACS Applied Nano Materials, 2018, 1, 1083-1093.	5.0	31
632	Concentrated solar light for rapid crystallization of nanomaterials and extreme enhancement of photoelectrochemical performance. Chemical Communications, 2018, 54, 2373-2376.	4.1	4
633	Tunable 3D hierarchical Ni ₃ S ₂ superstructures as efficient and stable bifunctional electrocatalysts for both H ₂ and O ₂ generation. Journal of Materials Chemistry A, 2018, 6, 4485-4493.	10.3	88
634	Hydrogen Evolution with Minimal Parasitic Light Absorption by Dense Co–P Catalyst Films on Structured p-Si Photocathodes. ACS Energy Letters, 2018, 3, 612-617.	17.4	41
635	Catalytic H2 Evolution with CoO, Co(OH)2 and CoO(OH) Nanoparticles Generated from a Molecular Polynuclear Co Complex. European Journal of Inorganic Chemistry, 2018, 2018, 1499-1505.	2.0	2
637	General Techno-Economic Analysis of CO ₂ Electrolysis Systems. Industrial & Engineering Chemistry Research, 2018, 57, 2165-2177.	3.7	928
638	The Role of Seven-Coordination in Ru-Catalyzed Water Oxidation. ACS Catalysis, 2018, 8, 2039-2048.	11.2	41
639	Trends in adsorption of electrocatalytic water splitting intermediates on cubic ABO ₃ oxides. Physical Chemistry Chemical Physics, 2018, 20, 3813-3818.	2.8	94
640	Strongly electrophilic heteroatoms confined in atomic CoOOH nanosheets realizing efficient electrocatalytic water oxidation. Journal of Materials Chemistry A, 2018, 6, 3202-3210.	10.3	63

#	Article	IF	CITATIONS
641	Highly Localized Charge Transfer Excitons in Metal Oxide Semiconductors. Nano Letters, 2018, 18, 1228-1233.	9.1	57
642	Scalable one-step electrochemical deposition of nanoporous amorphous S-doped NiFe ₂ O ₄ /Ni ₃ Fe composite films as highly efficient electrocatalysts for oxygen evolution with ultrahigh stability. Journal of Materials Chemistry A, 2018. 6. 1551-1560.	10.3	96
643	Ultrathin Ir nanowires as high-performance electrocatalysts for efficient water splitting in acidic media. Nanoscale, 2018, 10, 1892-1897.	5.6	122
644	Mutually beneficial Co ₃ O ₄ @MoS ₂ heterostructures as a highly efficient bifunctional catalyst for electrochemical overall water splitting. Journal of Materials Chemistry A, 2018, 6, 2067-2072.	10.3	178
645	Preparation and characterization of porous Ni-Mo alloy and its electrocatalytic performance for hydrogen evolution in filter-press type electrolyzer. Ionics, 2018, 24, 2399-2409.	2.4	1
646	Fabrication of nanoporous Si electrocathode by high-energy argon ion irradiation for improved electrocatalytic hydrogen production. International Journal of Hydrogen Energy, 2018, 43, 64-71.	7.1	9
647	Mesoporous Ag-doped Co3O4 nanowire arrays supported on FTO as efficient electrocatalysts for oxygen evolution reaction in acidic media. Renewable Energy, 2018, 119, 54-61.	8.9	136
648	Insights into the Electrocatalytic Behavior of Defect-Centered Reduced Titania (TiO _{1.23}). Journal of Physical Chemistry C, 2018, 122, 1670-1680.	3.1	13
649	Enhanced Catalysis of the Electrochemical Oxygen Evolution Reaction by Iron(III) Ions Adsorbed on Amorphous Cobalt Oxide. ACS Catalysis, 2018, 8, 807-814.	11.2	163
650	Mimic the Photosystem II for Water Oxidation in Neutral Solution: A Case of Co ₃ O ₄ . Advanced Energy Materials, 2018, 8, 1702313.	19.5	18
651	Nickel Hydr(oxy)oxide Nanoparticles on Metallic MoS ₂ Nanosheets: A Synergistic Electrocatalyst for Hydrogen Evolution Reaction. Advanced Science, 2018, 5, 1700644.	11.2	104
652	Simple routes for the improvement of hydrogen evolution activity of Ni-Mo catalysts: From sol-gel derived powder catalysts to graphene supported co-electrodeposits. International Journal of Hydrogen Energy, 2018, 43, 16846-16858.	7.1	22
653	Iron oxide embedded titania nanowires – An active and stable electrocatalyst for oxygen evolution in acidic media. Nano Energy, 2018, 45, 118-126.	16.0	95
654	Electrolysis of Gaseous CO ₂ to CO in a Flow Cell with a Bipolar Membrane. ACS Energy Letters, 2018, 3, 149-154.	17.4	265
655	Passing the acid test. Nature Chemistry, 2018, 10, 6-7.	13.6	27
656	Strategies for Plasmonic Hotâ€Electronâ€Driven Photoelectrochemical Water Splitting. ChemPhotoChem, 2018, 2, 161-182.	3.0	51
657	Tunable Electrodeposition of Ni Electrocatalysts onto Si Microwires Array for Photoelectrochemical Water Oxidation. Particle and Particle Systems Characterization, 2018, 35, 1700321.	2.3	10
658	Tuning the Basal Plane Functionalization of Two-Dimensional Metal Carbides (MXenes) To Control Hydrogen Evolution Activity. ACS Applied Energy Materials, 2018, 1, 173-180.	5.1	304

#	Article	IF	Citations
659	Suppressing Ion Transfer Enables Versatile Measurements of Electrochemical Surface Area for Intrinsic Activity Comparisons. Journal of the American Chemical Society, 2018, 140, 2397-2400.	13.7	138
660	Cobalt-molybdenum nanosheet arrays as highly efficient and stable earth-abundant electrocatalysts for overall water splitting. Nano Energy, 2018, 45, 448-455.	16.0	257
661	Maximal Predictability Approach for Identifying the Right Descriptors for Electrocatalytic Reactions. Journal of Physical Chemistry Letters, 2018, 9, 588-595.	4.6	47
662	Adams Method Prepared Metal Oxide Catalysts for Solarâ€Driven Water Splitting. ChemPhotoChem, 2018, 2, 293-299.	3.0	10
663	Effect of lattice strain on the electro-catalytic activity of IrO ₂ for water splitting. Chemical Communications, 2018, 54, 996-999.	4.1	68
664	CoFe -CoFe2O4/N-doped carbon nanocomposite derived from in situ pyrolysis of a single source precursor as a superior bifunctional electrocatalyst for water splitting. Electrochimica Acta, 2018, 262, 18-26.	5.2	28
665	Chemical induced fragmentation of MOFs for highly efficient Ni-based hydrogen evolution catalysts. Nanoscale Horizons, 2018, 3, 218-225.	8.0	30
666	Unlocking the potential of graphene for water oxidation using an orbital hybridization strategy. Energy and Environmental Science, 2018, 11, 407-416.	30.8	52
667	An electrochemically neutralized energy-assisted low-cost acid-alkaline electrolyzer for energy-saving electrolysis hydrogen generation. Journal of Materials Chemistry A, 2018, 6, 4948-4954.	10.3	184
668	Cu ₃ P/CuO Coreâ€6hell Nanorod Arrays as Highâ€Performance Electrocatalysts for Water Oxidation. ChemElectroChem, 2018, 5, 2064-2068.	3.4	20
669	Phase-segregated NiP _x @FeP _y O _z core@shell nanoparticles: ready-to-use nanocatalysts for electro- and photo-catalytic water oxidation through <i>in situ</i> activation by structural transformation and spontaneous ligand removal. Chemical Science, 2018, 9, 4830-4836.	7.4	21
670	Cost effective Mo rich Mo ₂ C electrocatalysts for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 10028-10035.	10.3	121
671	Accelerating Neutral Hydrogen Evolution with Tungsten Modulated Amorphous Metal Hydroxides. ACS Catalysis, 2018, 8, 5200-5205.	11.2	73
672	Facile Synthesis of FeOOH Quantum Dots Modified ZnO Nanorods Films via a Metal-Solating Process. ACS Sustainable Chemistry and Engineering, 2018, 6, 7789-7798.	6.7	31
673	Intensification of anodic charge transfer by contaminant degradation for efficient H ₂ production. Journal of Materials Chemistry A, 2018, 6, 10297-10303.	10.3	28
674	Intermetallic Ni ₂ Ta Electrocatalyst for the Oxygen Evolution Reaction in Highly Acidic Electrolytes. Inorganic Chemistry, 2018, 57, 6010-6015.	4.0	61
675	In Situ Generation of Bifunctional, Efficient Fe-Based Catalysts from Mackinawite Iron Sulfide for Water Splitting. CheM, 2018, 4, 1139-1152.	11.7	271
676	Study of cobalt boride-derived electrocatalysts for overall water splitting. International Journal of Hydrogen Energy, 2018, 43, 6076-6087.	7.1	86
#	Article	IF	CITATIONS
-----	--	------	-----------
677	NiO as a Bifunctional Promoter for RuO ₂ toward Superior Overall Water Splitting. Small, 2018, 14, e1704073.	10.0	214
678	Toward Practical Solar Hydrogen Production. CheM, 2018, 4, 405-408.	11.7	34
679	Preparation of electrocatalysts using a thiol–amine solution processing method. Dalton Transactions, 2018, 47, 5137-5143.	3.3	5
680	Metallic Ni ₃ S ₂ Films Grown by Atomic Layer Deposition as an Efficient and Stable Electrocatalyst for Overall Water Splitting. ACS Applied Materials & Interfaces, 2018, 10, 12807-12815.	8.0	78
681	Atomic-scale insights into surface species of electrocatalysts in three dimensions. Nature Catalysis, 2018, 1, 300-305.	34.4	161
682	Ni ₂ P hollow microspheres for electrocatalytic oxygen evolution and reduction reactions. Catalysis Science and Technology, 2018, 8, 2289-2293.	4.1	42
683	Graphene quantum dot engineered nickel-cobalt phosphide as highly efficient bifunctional catalyst for overall water splitting. Nano Energy, 2018, 48, 284-291.	16.0	143
684	N-doped graphitic carbon materials hybridized with transition metals (compounds) for hydrogen evolution reaction: Understanding the synergistic effect from atomistic level. Carbon, 2018, 133, 260-266.	10.3	100
685	Insights into the Active Electrocatalytic Areas of Layered Double Hydroxide and Amorphous Nickel–Iron Oxide Oxygen Evolution Electrocatalysts. ACS Applied Energy Materials, 2018, 1, 1415-1423.	5.1	23
686	Facile fabrication of a 3D network composed of N-doped carbon-coated core–shell metal oxides/phosphides for highly efficient water splitting. Sustainable Energy and Fuels, 2018, 2, 1085-1092.	4.9	40
687	Deposition of Pd nanoparticles on the walls of cathodically hydrogenated TiO2 nanotube arrays via galvanic displacement: A novel route to produce exceptionally active and durable composite electrocatalysts for cost-effective hydrogen evolution. Nano Energy, 2018, 47, 527-538.	16.0	32
688	Nickelo-Sulfurization of DNA Leads to an Efficient Alkaline Water Oxidation Electrocatalyst with Low Ni Quantity. ACS Sustainable Chemistry and Engineering, 2018, 6, 6802-6810.	6.7	16
689	Catalyst design by scanning probe block copolymer lithography. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3764-3769.	7.1	40
690	Activation of a Ni electrocatalyst through spontaneous transformation of nickel sulfide to nickel hydroxide in an oxygen evolution reaction. Applied Catalysis B: Environmental, 2018, 233, 130-135.	20.2	103
691	Cooperation between holey graphene and NiMo alloy for hydrogen evolution in an acidic electrolyte. ACS Catalysis, 2018, 8, 3579-3586.	11.2	98
692	Cathodic Electrodeposition of Niâ^'Mo on Semiconducting NiFe ₂ O ₄ for Photoelectrochemical Hydrogen Evolution in Alkaline Media. ChemSusChem, 2018, 11, 1374-1381.	6.8	3
693	Scalable synthesis of heterostructure molybdenum and nickel sulfides nanosheets for efficient hydrogen generation in alkaline electrolyte. Catalysis Today, 2018, 316, 171-176.	4.4	28
694	High-Rate Electrochemical Reduction of Carbon Monoxide to Ethylene Using Cu-Nanoparticle-Based Gas Diffusion Electrodes. ACS Energy Letters, 2018, 3, 855-860.	17.4	77

#	Article	IF	CITATIONS
695	Steel-based electrocatalysts for efficient and durable oxygen evolution in acidic media. Catalysis Science and Technology, 2018, 8, 2104-2116.	4.1	35
696	Boosting photocatalytic overall water splitting by Co doping into Mn ₃ O ₄ nanoparticles as oxygen evolution cocatalysts. Nanoscale, 2018, 10, 10420-10427.	5.6	56
697	Molybdenum Ditelluride Rendered into an Efficient and Stable Electrocatalyst for the Hydrogen Evolution Reaction by Polymorphic Control. Energy Technology, 2018, 6, 345-350.	3.8	45
698	Importance of Surface IrO _{<i>x</i>} in Stabilizing RuO ₂ for Oxygen Evolution. Journal of Physical Chemistry B, 2018, 122, 947-955.	2.6	95
699	Water Splitting Catalysis Studied by using Realâ€īme Faradaic Efficiency Obtained through Coupled Electrolysis and Mass Spectrometry. ChemElectroChem, 2018, 5, 44-50.	3.4	11
700	Solarâ€ŧoâ€Hydrogen Energy Conversion Based on Water Splitting. Advanced Energy Materials, 2018, 8, 1701620.	19.5	429
701	Porous Niâ^'Moâ^'S Nanowire Network Film Electrode as a Highâ€Efficiency Bifunctional Electrocatalyst for Overall Water Splitting. ChemElectroChem, 2018, 5, 335-342.	3.4	60
702	Synthesis, Structure, and Redox Properties of a <i>trans</i> -Diaqua Ru Complex That Reaches Seven-Coordination at High Oxidation States. Inorganic Chemistry, 2018, 57, 1757-1765.	4.0	9
703	Tuning the Electronic Properties of Prussian Blue Analogues for Efficient Water Oxidation Electrocatalysis: Experimental and Computational Studies. Chemistry - A European Journal, 2018, 24, 4856-4863.	3.3	87
704	Polyoxometalate electrocatalysts based on earth-abundant metals for efficient water oxidation in acidic media. Nature Chemistry, 2018, 10, 24-30.	13.6	375
705	New insights into evaluating catalyst activity and stability for oxygen evolution reactions in alkaline media. Sustainable Energy and Fuels, 2018, 2, 237-251.	4.9	183
706	Sproutâ€like Growth of Mesoporous Mo ₂ C/NC Nanonetworks as Efficient Electrocatalysts for Hydrogen Evolution. ChemCatChem, 2018, 10, 625-631.	3.7	15
707	Highly efficient hydrogen evolution based on Ni3S4@MoS2 hybrids supported on N-doped reduced graphene oxide. Applied Surface Science, 2018, 428, 1046-1055.	6.1	18
708	Computational modelling of water oxidation catalysts. Current Opinion in Electrochemistry, 2018, 7, 22-30.	4.8	35
709	Advanced catalysts for sustainable hydrogen generation and storage via hydrogen evolution and carbon dioxide/nitrogen reduction reactions. Progress in Materials Science, 2018, 92, 64-111.	32.8	195
710	Recent developments in electrochemical hydrogen evolution reaction. Current Opinion in Electrochemistry, 2018, 7, 7-14.	4.8	95
711	Organic-inorganic hybrids-directed ternary NiFeMoS anemone-like nanorods with scaly surface supported on nickel foam for efficient overall water splitting. Chemical Engineering Journal, 2018, 334, 922-931.	12.7	216
712	Electrochemical water oxidation: The next five years. Current Opinion in Electrochemistry, 2018, 7, 31-35.	4.8	41

#	Article	IF	Citations
713	Ripple-like NiFeCo sulfides on nickel foam derived from in-situ sulfurization of precursor oxides as efficient anodes for water oxidation. Applied Surface Science, 2018, 428, 370-376.	6.1	24
714	Evaluating particle-suspension reactor designs for Z-scheme solar water splitting <i>via</i> transport and kinetic modeling. Energy and Environmental Science, 2018, 11, 115-135.	30.8	76
715	Investigation of Water Dissociation and Surface Hydroxyl Stability on Pure and Ni-Modified CoOOH by Ambient Pressure Photoelectron Spectroscopy. Journal of Physical Chemistry B, 2018, 122, 810-817.	2.6	18
716	Metal–organic frameworks for electrocatalysis. Coordination Chemistry Reviews, 2018, 373, 22-48.	18.8	360
717	Ni@Ru and NiCo@Ru Core–Shell Hexagonal Nanosandwiches with a Compositionally Tunable Core and a Regioselectively Grown Shell. Small, 2018, 14, 1702353.	10.0	50
718	Probing the Surface of Platinum during the Hydrogen Evolution Reaction in Alkaline Electrolyte. Journal of Physical Chemistry B, 2018, 122, 864-870.	2.6	50
719	Unraveling Geometrical Site Confinement in Highly Efficient Ironâ€Doped Electrocatalysts toward Oxygen Evolution Reaction. Advanced Energy Materials, 2018, 8, 1701686.	19.5	125
720	Computational Screening of Doped αâ€MnO ₂ Catalysts for the Oxygen Evolution Reaction. ChemSusChem, 2018, 11, 629-637.	6.8	40
721	Coffeeâ€Waste Templating of Metal Ionâ€Substituted Cobalt Oxides for the Oxygen Evolution Reaction. ChemSusChem, 2018, 11, 605-611.	6.8	40
722	Synthesis of Co–B in porous carbon using a metal–organic framework (MOF) precursor: A highly efficient catalyst for the oxygen evolution reaction. Electrochemistry Communications, 2018, 86, 140-144.	4.7	86
723	First-principles study on the atomistic corrosion processes of iron. Physical Chemistry Chemical Physics, 2018, 20, 1653-1663.	2.8	21
724	Electrocatalytic Alloys for CO ₂ Reduction. ChemSusChem, 2018, 11, 48-57.	6.8	249
725	Electropolymerization of Aniline on Nickel-Based Electrocatalysts Substantially Enhances Their Performance for Hydrogen Evolution. ACS Applied Energy Materials, 2018, 1, 3-8.	5.1	50
726	Reversible Structural Evolution of NiCoO _{<i>x</i>} H _{<i>y</i>} during the Oxygen Evolution Reaction and Identification of the Catalytically Active Phase. ACS Catalysis, 2018, 8, 1238-1247.	11.2	153
727	Co/CoP embedded in a hairy nitrogen-doped carbon polyhedron as an advanced tri-functional electrocatalyst. Materials Horizons, 2018, 5, 108-115.	12.2	184
728	Ruthenium Ion omplexed Graphitic Carbon Nitride Nanosheets Supported on Reduced Graphene Oxide as Highâ€Performance Catalysts for Electrochemical Hydrogen Evolution. ChemSusChem, 2018, 11, 130-136.	6.8	76
729	Remarkably enhanced water splitting activity of nickel foam due to simple immersion in a ferric nitrate solution. Nano Research, 2018, 11, 3959-3971.	10.4	88
730	Effect of Intercalated Metals on the Electrocatalytic Activity of 1T-MoS ₂ for the Hydrogen Evolution Reaction. ACS Energy Letters, 2018, 3, 7-13.	17.4	211

#	Article	IF	CITATIONS
731	Nickel-molybdenum alloy catalysts for the hydrogen evolution reaction: Activity and stability revised. Electrochimica Acta, 2018, 259, 1154-1161.	5.2	116
732	Nanoscale Trimetallic Metal–Organic Frameworks Enable Efficient Oxygen Evolution Electrocatalysis. Angewandte Chemie, 2018, 130, 1906-1910.	2.0	134
733	Nanoscale Trimetallic Metal–Organic Frameworks Enable Efficient Oxygen Evolution Electrocatalysis. Angewandte Chemie - International Edition, 2018, 57, 1888-1892.	13.8	536
734	Significant Enhancement of the Photoelectrochemical Activity of CuWO ₄ by using a Cobalt Phosphate Nanoscale Thin Film. ChemElectroChem, 2018, 5, 523-530.	3.4	25
735	Cation deficiency design: A simple and efficient strategy for promoting oxygen evolution reaction activity of perovskite electrocatalyst. Electrochimica Acta, 2018, 259, 1004-1010.	5.2	44
736	Kinetically Controlled Coprecipitation for General Fast Synthesis of Sandwiched Metal Hydroxide Nanosheets/Graphene Composites toward Efficient Water Splitting. Advanced Functional Materials, 2018, 28, 1704594.	14.9	91
737	Effects of redox-active interlayer anions on the oxygen evolution reactivity of NiFe-layered double hydroxide nanosheets. Nano Research, 2018, 11, 1358-1368.	10.4	134
738	Recent Progress on Layered Double Hydroxides and Their Derivatives for Electrocatalytic Water Splitting. Advanced Science, 2018, 5, 1800064.	11.2	515
739	Metal Oxide Cluster and Polyoxometallate Supports for Noble Metal Nanoparticles in Efficient Electrocatalysis. , 2018, , 207-216.		3
740	Synthesis, stabilization and applications of 2-dimensional 1T metallic MoS ₂ . Journal of Materials Chemistry A, 2018, 6, 23932-23977.	10.3	250
741	Colloidal Ni–Co–Sn nanoparticles as efficient electrocatalysts for the methanol oxidation reaction. Journal of Materials Chemistry A, 2018, 6, 22915-22924.	10.3	85
742	Ni(<scp>ii</scp>)-based coordination polymers for efficient electrocatalytic oxygen evolution reaction. RSC Advances, 2018, 8, 38562-38565.	3.6	18
743	Hollow cobalt phosphide octahedral pre-catalysts with exceptionally high intrinsic catalytic activity for electro-oxidation of water and methanol. Journal of Materials Chemistry A, 2018, 6, 20646-20652.	10.3	95
744	Chapter 3. Understanding the Effects of Composition and Structure on the Oxygen Evolution Reaction (OER) Occurring on NiFeOx Catalysts. RSC Energy and Environment Series, 2018, , 79-116.	0.5	3
745	Identification of Stabilizing High-Valent Active Sites by Operando High-Energy Resolution Fluorescence-Detected X-ray Absorption Spectroscopy for High-Efficiency Water Oxidation. Journal of the American Chemical Society, 2018, 140, 17263-17270.	13.7	92
746	Electrocatalytic Water Reduction Beginning with a {Fe(NO) ₂ } ¹⁰ -Reduced Dinitrosyliron Complex: Identification of Nitrogen-Doped FeO _{<i>x</i>} (OH) _{<i>y</i>} as a Real Heterogeneous Catalyst. Inorganic Chemistry. 2018, 57, 14715-14726.	4.0	11
747	Facile Preparation of Amorphous Fe–Co–Ni Hydroxide Arrays: A Highly Efficient Integrated Electrode for Water Oxidation. Inorganic Chemistry, 2018, 57, 15610-15617.	4.0	21
748	Pyrite-Type CoS2 Nanoparticles Supported on Nitrogen-Doped Graphene for Enhanced Water Splitting. Frontiers in Chemistry, 2018, 6, 569.	3.6	32

#	Article	IF	CITATIONS
749	Recent advances in energy chemistry of precious-metal-free catalysts for oxygen electrocatalysis. Chinese Chemical Letters, 2018, 29, 1757-1767.	9.0	63
750	Theoretical Design of an InSe/GaTe vdW Heterobilayer: A Potential Visible-Light Photocatalyst for Water Splitting. Journal of Physical Chemistry C, 2018, 122, 27803-27810.	3.1	55
751	Porous CoO-CeO2 heterostructures as highly active and stable electrocatalysts for water oxidation. International Journal of Hydrogen Energy, 2018, 43, 22529-22537.	7.1	35
752	Understanding Synergism of Cobalt Metal and Copper Oxide toward Highly Efficient Electrocatalytic Oxygen Evolution. ACS Catalysis, 2018, 8, 12030-12040.	11.2	60
753	Cobalt-molybdenum carbide@graphitic carbon nanocomposites: Metallic cobalt promotes the electrochemical hydrogen evolution reaction. International Journal of Hydrogen Energy, 2018, 43, 22243-22252.	7.1	27
754	General Approach of in Situ Etching and Doping To Synthesize a Nickel-Doped M _{<i>x</i>} O _{<i>y</i>} (M = Co, Mn, Fe) Nanosheets Array on Nickel Foam as Large-Sized Electrodes for Overall Water Splitting. ACS Applied Energy Materials, 2018, 1, 6279-6287.	5.1	38
755	Earth-Abundant Electrocatalysts in Proton Exchange Membrane Electrolyzers. Catalysts, 2018, 8, 657.	3.5	51
756	Benchmarking Vulnerability Assessment Tools for Enhanced Cyber-Physical System (CPS) Resiliency. , 2018, , .		5
757	Recent developments in earth-abundant and non-noble electrocatalysts for water electrolysis. Materials Today Physics, 2018, 7, 121-138.	6.0	203
758	Simple Doping, Great Deal: Regulation of Lattice Oxygen for Water Splitting. CheM, 2018, 4, 2739-2741.	11.7	12
759	Heterointerface engineering of trilayer-shelled ultrathin MoS ₂ /MoP/N-doped carbon hollow nanobubbles for efficient hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 24783-24792.	10.3	79
760	Electron Correlations Engineer Catalytic Activity of Pyrochlore Iridates for Acidic Water Oxidation. Advanced Materials, 2019, 31, e1805104.	21.0	63
761	Efficient oxygen evolution electrocatalysis in acid by a perovskite with face-sharing IrO6 octahedral dimers. Nature Communications, 2018, 9, 5236.	12.8	325
762	Synthesis, Thermal Stability and Electrocatalytic Activities of meso-tetrakis (5-bromothiophen-2-yl) Porphyrin and Its Cobalt and Copper Complexes. International Journal of Electrochemical Science, 2018, 13, 10233-10246.	1.3	7
763	Effects of Metal-Doping on Hydrogen Evolution Reaction Catalyzed by MAu ₂₄ and M ₂ Au ₃₆ Nanoclusters (M = Pt, Pd). ACS Applied Materials & Interfaces, 2018, 10, 44645-44653.	8.0	81
764	Direct storage of holes in ultrathin Ni(OH) ₂ on Fe ₂ O ₃ photoelectrodes for integrated solar charging battery-type supercapacitors. Journal of Materials Chemistry A, 2018, 6, 21360-21367.	10.3	44
765	Non-noble metals applied to solar water splitting. Energy and Environmental Science, 2018, 11, 3128-3156.	30.8	134
766	One-pot synthesis of graphene- cobalt hydroxide composite nanosheets (Co/G NSs) for electrocatalytic water oxidation. Scientific Reports, 2018, 8, 13772.	3.3	9

#	Article	IF	CITATIONS
767	Selective Electrochemical H ₂ O ₂ Production through Twoâ€Electron Oxygen Electrochemistry. Advanced Energy Materials, 2018, 8, 1801909.	19.5	498
768	Structurally Ordered Intermetallic Cobalt Stannide Nanocrystals for Highâ€Performance Electrocatalytic Overall Waterâ€Splitting. Angewandte Chemie - International Edition, 2018, 57, 15237-15242.	13.8	103
769	Organic Semiconductor Based Devices for Solar Water Splitting. Advanced Energy Materials, 2018, 8, 1802585.	19.5	88
770	Structurally Ordered Intermetallic Cobalt Stannide Nanocrystals for Highâ€Performance Electrocatalytic Overall Waterâ€Splitting. Angewandte Chemie, 2018, 130, 15457-15462.	2.0	46
771	Amorphous Boron Oxide Coated NiCo Layered Double Hydroxide Nanoarrays for Highly Efficient Oxygen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2018, 6, 14257-14263.	6.7	40
772	In Situ Raman Study of Amorphous and Crystalline Ni-Co Alloys for the Alkaline Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2018, 165, J3122-J3129.	2.9	40
773	Facile synthesis of sheet-shaped Co2P grown on carbon cloth as a high-performance electrocatalyst for the hydrogen evolution reaction. Journal of Solid State Electrochemistry, 2018, 22, 3977-3983.	2.5	6
774	Selfâ€Assembly of Largeâ€Area 2D Polycrystalline Transition Metal Carbides for Hydrogen Electrocatalysis. Advanced Materials, 2018, 30, e1805188.	21.0	84
775	Copper and Copperâ€Based Bimetallic Catalysts for Carbon Dioxide Electroreduction. Advanced Materials Interfaces, 2018, 5, 1800919.	3.7	72
776	A Perspective on Low-Temperature Water Electrolysis – Challenges in Alkaline and Acidic Technology. International Journal of Electrochemical Science, 2018, 13, 1173-1226.	1.3	197
777	Closely Arranged 3D–0D Graphene–Nickel Sulfide Superstructures for Bifunctional Hydrogen Electrocatalysis. ACS Applied Energy Materials, 2018, 1, 6368-6373.	5.1	5
778	First-Principles Determination of Active Sites of Ni Metal-Based Electrocatalysts for Hydrogen Evolution Reaction. ACS Applied Materials & amp; Interfaces, 2018, 10, 39624-39630.	8.0	41
779	Defining Nafion Ionomer Roles for Enhancing Alkaline Oxygen Evolution Electrocatalysis. ACS Catalysis, 2018, 8, 11688-11698.	11.2	75
780	An Ultrasonication-Assisted Cobalt Hydroxide Composite with Enhanced Electrocatalytic Activity toward Oxygen Evolution Reaction. Materials, 2018, 11, 1912.	2.9	14
781	g ₃ N ₄ /CeO ₂ /Fe ₃ O ₄ Ternary Composite as an Efficient Bifunctional Catalyst for Overall Water Splitting. ChemCatChem, 2018, 10, 5587-5592.	3.7	37
782	Highly Efficient Acidic Oxygen Evolution Electrocatalysis Enabled by Porous Ir–Cu Nanocrystals with Three-Dimensional Electrocatalytic Surfaces. Chemistry of Materials, 2018, 30, 8571-8578.	6.7	75
783	Catalyst or Precatalyst? The Effect of Oxidation on Transition Metal Carbide, Pnictide, and Chalcogenide Oxygen Evolution Catalysts. ACS Energy Letters, 2018, 3, 2956-2966.	17.4	309
784	Polyoxothiometalate-Derivatized Silicon Photocathodes for Sunlight-Driven Hydrogen Evolution Reaction. ACS Omega, 2018, 3, 13837-13849.	3.5	13

#	Article	IF	CITATIONS
785	What Matters in Fuel Cell Electrocatalysis?—A Theory Perspective. , 2018, , 908-919.		0
786	Activating p-Blocking Centers in Perovskite for Efficient Water Splitting. CheM, 2018, 4, 2902-2916.	11.7	99
787	Defect Engineering of Cobalt-Based Materials for Electrocatalytic Water Splitting. ACS Sustainable Chemistry and Engineering, 2018, 6, 15954-15969.	6.7	151
788	Rutile Alloys in the Mn–Sb–O System Stabilize Mn ³⁺ To Enable Oxygen Evolution in Strong Acid. ACS Catalysis, 2018, 8, 10938-10948.	11.2	97
789	Determining the Viability of Hydroxide-Mediated Bifunctional HER/HOR Mechanisms through Single-Crystal Voltammetry and Microkinetic Modeling. Journal of the Electrochemical Society, 2018, 165, J3209-J3221.	2.9	55
790	Hierarchical Porous Prism Arrays Composed of Hybrid Ni–NiO–Carbon as Highly Efficient Electrocatalysts for Overall Water Splitting. ACS Applied Materials & Interfaces, 2018, 10, 38906-38914.	8.0	56
791	Ligand-Capped Ru Nanoparticles as Efficient Electrocatalyst for the Hydrogen Evolution Reaction. ACS Catalysis, 2018, 8, 11094-11102.	11.2	70
792	Robust Electrodes with Maximized Spatial Catalysis for Vanadium Redox Flow Batteries. ACS Applied Materials & Interfaces, 2018, 10, 38922-38927.	8.0	19
793	Interfacing nickel nitride and nickel boosts both electrocatalytic hydrogen evolution and oxidation reactions. Nature Communications, 2018, 9, 4531.	12.8	410
794	Sn–Ni ₃ S ₂ Ultrathin Nanosheets as Efficient Bifunctional Water-Splitting Catalysts with a Large Current Density and Low Overpotential. ACS Applied Materials & Interfaces, 2018, 10, 40568-40576.	8.0	113
795	Harvesting Electronic Waste for the Development of Highly Efficient Ecoâ€Design Electrodes for Electrocatalytic Water Splitting. Advanced Energy Materials, 2018, 8, 1802615.	19.5	80
796	Recent progress in efficiency of hydrogen evolution process based photoelectrochemical cell. International Journal of Hydrogen Energy, 2018, 43, 21502-21523.	7.1	47
797	Bimetallic MnCo selenide yolk shell structures for efficient overall water splitting. Electrochimica Acta, 2018, 290, 82-89.	5.2	49
798	Disordering the Atomic Structure of Co(II) Oxide via Bâ€Đoping: An Efficient Oxygen Vacancy Introduction Approach for High Oxygen Evolution Reaction Electrocatalysts. Small, 2018, 14, e1802760.	10.0	88
799	Oxidative Deposition of Manganese Oxide Nanosheets on Nitrogen-Functionalized Carbon Nanotubes Applied in the Alkaline Oxygen Evolution Reaction. ACS Omega, 2018, 3, 11216-11226.	3.5	31
800	Electrocatalytic performance of different cobalt molybdate structures for water oxidation in alkaline media. CrystEngComm, 2018, 20, 5592-5601.	2.6	27
801	MOF-derived porous Ni ₂ P nanosheets as novel bifunctional electrocatalysts for the hydrogen and oxygen evolution reactions. Journal of Materials Chemistry A, 2018, 6, 18720-18727.	10.3	149
802	Mechanistic Study of the Synergy between Iron and Transition Metals for the Catalysis of the Oxygen Evolution Reaction. ChemSusChem, 2018, 11, 3790-3795.	6.8	32

ARTICLE IF CITATIONS A Highly Conductive and Mechanically Robust OH^{â€"} Conducting Membrane for Alkaline 803 6.7 43 Water Électrolysis. Chemistry of Materials, 2018, 30, 6420-6430. Flow Battery Electroanalysis: Hydrodynamic Voltammetry of Aqueous Fe(III/II) Redox Couples at 804 5.1 Polycrystalline Pt and Au. ACS Applied Energy Materials, 2018, 1, 4743-4753. Hierarchical coral-like FeNi(OH) /Ni via mild corrosion of nickel as an integrated electrode for 805 14.0 34 efficient overall water splitting. Chinese Journal of Catalysis, 2018, 39, 1736-1745. Constructing a hexagonal copper-coin-shaped NiCoSe₂@NiO@CoNi₂S₄@CoS₂ hybrid nanoarray on 806 nickel foam as a robust oxygen evolution reaction electrocatalyst. Journal of Materials Chemistry A, 2018, 6, 18641-18648. General Construction of Molybdenumâ€Based Nanowire Arrays for pHâ€Universal Hydrogen Evolution 807 14.9 134 Electrocatalysis. Advanced Functional Materials, 2018, 28, 1804600. Alkaline Water Electrolysis by NiZn-Double Hydroxide-Derived Porous Nickel Selenide-Nitrogen-Doped Graphene Composite. ACS Applied Energy Materials, 0, , . 808 5.1 Template Electro-Etching-Mediated FeOOH Nanotubes as Highly Efficient Photoactive Electrocatalysts 809 5.1 5 for Oxygen Evolution Reaction. ACS Applied Energy Materials, O, , . Redox-Mediator-Assisted Electrocatalytic Hydrogen Evolution from Water by a Molybdenum 11.2 Sulfide-Functionalized Metal–Organic Framework. ACS Catalysis, 2018, 8, 9848-9858. Nanotubes of NiCo₂S₄/Co₉S₈ Heterostructure: 811 Efficient Hydrogen Evolution Catalyst in Alkaline Medium. Chemistry - an Asian Journal, 2018, 13, 3.3 13 3204-3211. Sulfur-Rich MoS₆ as an Electrocatalyst for the Hydrogen Evolution Reaction. ACS Applied 5.1 Energy Materials, 2018, 1, 4453-4458. Self-Supported Hydrous Iridium–Nickel Oxide Two-Dimensional Nanoframes for High Activity Oxygen 813 11.2 103 Evolution Electrocatalysts. ACS Catalysis, 2018, 8, 10498-10520. Earthâ€Abundant Transitionâ€Metalâ€Based Electrocatalysts for Water Electrolysis to Produce Renewable 814 203 Hydrogen. Chemistry - A European Journal, 2018, 24, 18334-18355. In Situ Vertical Growth of Fe–Ni Layered Double-Hydroxide Arrays on Fe–Ni Alloy Foil: Interfacial Layer Enhanced Electrocatalyst with Small Overpotential for Oxygen Evolution Reaction. ACS Energy 815 17.4 150 Letters, 2018, 3, 2357-2365. A Porous Pyrochlore Y₂[Ru_{1.6}Y_{0.4}]O_{7â€"<i>Î</i>} Electrocatalyst for Enhanced Performance towards the Oxygen Evolution Reaction in Acidic Media. Angewandte Chemie, 2018, 130, 14073-14077. A Porous Pyrochlore Y₂[Ru_{1.6}Y_{0.4}]O_{7â€"<i>î</i>} 817 Electrocatalyst for Enhanced Performance towards the Oxygen Evolution Reaction in Acidic Media. 13.8 116 Angewandte Chemie - International Edition, 2018, 57, 13877-13881. Synthesis and electrochemical analysis of novel IrO2 nanoparticle catalysts supported on carbon nanotube for oxygen evolution reaction. International Journal of Hydrogen Energy, 2018, 43, 48 18095-18104. Carbon-encapsulated NiFe nanoparticles as a bifunctional electrocatalyst for high-efficiency overall 819 6.2 54 water splitting. Journal of Catalysis, 2018, 366, 266-274. Transition Metal Oxides as Electrocatalysts for the Oxygen Evolution Reaction in Alkaline Solutions: 1,157 An Application-Inspired Renaissance. Journal of the American Chemical Society, 2018, 140, 7748-7759.

#	Article	IF	Citations
821	Value added transformation of ubiquitous substrates into highly efficient and flexible electrodes for water splitting. Nature Communications, 2018, 9, 2014.	12.8	126
822	Amorphous Cu2-δO as Passivation Layer for Ultra Long Stability of Copper Oxide Nanowires in Photoelectrochemical Environments. Journal of the Electrochemical Society, 2018, 165, H417-H424.	2.9	3
823	Metal phosphonate coordination networks and frameworks as precursors of electrocatalysts for the hydrogen and oxygen evolution reactions. Journal of Nanoparticle Research, 2018, 20, 1.	1.9	17
824	Facile synthesis of Pd@Ru nanoplates with controlled thickness as efficient catalysts for hydrogen evolution reaction. CrystEngComm, 2018, 20, 4230-4236.	2.6	21
825	Transition metal anchored C ₂ N monolayers as efficient bifunctional electrocatalysts for hydrogen and oxygen evolution reactions. Journal of Materials Chemistry A, 2018, 6, 11446-11452.	10.3	223
826	A hybrid molecular photoanode for efficient light-induced water oxidation. Sustainable Energy and Fuels, 2018, 2, 1979-1985.	4.9	20
827	An alkaline water electrolyzer with nickel electrodes enables efficient high current densityÂoperation. International Journal of Hydrogen Energy, 2018, 43, 11932-11938.	7.1	66
828	Selective Synthesis of a Series of Isostructural M II Cu I Heterobimetallic Complexes Spontaneously Assembled by an Unsymmetrical Naphthyridineâ€Based Ligand. Chemistry - A European Journal, 2018, 24, 10329-10333.	3.3	13
829	Standards and Protocols for Data Acquisition and Reporting for Studies of the Electrochemical Reduction of Carbon Dioxide. ACS Catalysis, 2018, 8, 6560-6570.	11.2	250
830	The balance of electric field and interfacial catalysis in promoting water dissociation in bipolar membranes. Energy and Environmental Science, 2018, 11, 2235-2245.	30.8	100
831	A 3D well-matched electrode pair of Ni–Co–S//Ni–Co–P nanoarrays grown on nickel foam as a high-performance electrocatalyst for water splitting. Journal of Materials Chemistry A, 2018, 6, 12506-12514.	10.3	102
832	Tuning Spin State of Rockâ€Saltâ€Based Oxides by Manipulation of Crystallinity for Efficient Oxygen Electrocatalysis. Advanced Energy Materials, 2018, 8, 1703469.	19.5	48
833	Ni2P@carbon core-shell nanorod array derived from ZIF-67-Ni: Effect of phosphorization temperature on morphology, structure and hydrogen evolution reaction performance. Applied Surface Science, 2018, 457, 933-941.	6.1	48
834	Multiscale porous molybdenum phosphide of honeycomb structure for highly efficient hydrogen evolution. Nanoscale, 2018, 10, 14594-14599.	5.6	42
835	Self-supported transition metal phosphide based electrodes as high-efficient water splitting cathodes. Frontiers of Chemical Science and Engineering, 2018, 12, 494-508.	4.4	42
836	High-performance iron (III) oxide electrocatalyst for water oxidation in strongly acidic media. Journal of Catalysis, 2018, 365, 29-35.	6.2	44
837	Depth-Profiling Microanalysis of CoNCN Water-Oxidation Catalyst Using a λ = 46.9 nm Plasma Laser for Nano-Ionization Mass Spectrometry. Analytical Chemistry, 2018, 90, 9234-9240.	6.5	15
838	Determining the importance of the electrode support and fabrication method during the initial screening process of an active catalyst for the oxygen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 14162-14169.	10.3	46

#	Article	IF	CITATIONS
839	Powerful amorphous mixed metal catalyst for efficient water-oxidation. Materials Today Energy, 2018, 9, 247-253.	4.7	8
840	Composite Metal Oxideâ€Carbon Nanotube Electrocatalysts for the Oxygen Evolution and Oxygen Reduction Reactions. ChemElectroChem, 2018, 5, 2850-2856.	3.4	18
841	Synergistic effect: Hierarchical Ni3S2@Co(OH)2 heterostructure as efficient bifunctional electrocatalyst for overall water splitting. Applied Surface Science, 2018, 457, 156-163.	6.1	62
842	Current perspectives in engineering of viable hybrid photocathodes for solar hydrogen generation. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2018, 9, 023001.	1.5	5
843	A Highly Effective, Stable Oxygen Evolution Catalyst Derived from Transition Metal Selenides and Phosphides. Particle and Particle Systems Characterization, 2018, 35, 1800135.	2.3	28
844	Highly Efficient Oxygen Reduction Reaction Activity of Graphitic Tube Encapsulating Nitrided Co <i>_x</i> Fe <i>_y</i> Alloy. Advanced Energy Materials, 2018, 8, 1801002.	19.5	117
845	In-situ developed carbon spheres function as promising support for enhanced activity of cobalt oxide in oxygen evolution reaction. Journal of Colloid and Interface Science, 2018, 530, 264-273.	9.4	18
846	Rapid inkjet printing of high catalytic activity Co3O4/N-rGO layers for oxygen reduction reaction. Applied Catalysis A: General, 2018, 563, 9-17.	4.3	17
847	Extracting Knowledge from Data through Catalysis Informatics. ACS Catalysis, 2018, 8, 7403-7429.	11.2	179
848	Improving Electrocatalysts for Oxygen Evolution Using Ni _{<i>x</i>} Fe _{3–<i>x</i>} O ₄ /Ni Hybrid Nanostructures Formed by Solvothermal Synthesis. ACS Energy Letters, 2018, 3, 1698-1707.	17.4	132
849	Blend membranes of polybenzimidazole and an anion exchange ionomer (FAA3) for alkaline water electrolysis: Improved alkaline stability and conductivity. Journal of Membrane Science, 2018, 564, 653-662.	8.2	60
850	Preparation and Characterization of Nicke-iron Alloy Film as Freestanding Electrode for Oxygen Evolution Reaction. MATEC Web of Conferences, 2018, 160, 03001.	0.2	0
851	Single-Phase Pyrochlore Y ₂ Ir ₂ O ₇ Electrocatalyst on the Activity of Oxygen Evolution Reaction. ACS Applied Energy Materials, 2018, 1, 3992-3998.	5.1	48
852	Surface Sulfurization of NiCo-Layered Double Hydroxide Nanosheets Enable Superior and Durable Oxygen Evolution Electrocatalysis. ACS Applied Energy Materials, 2018, 1, 4040-4049.	5.1	71
853	Catalysts from earth abundant materials in a scalable, stand-alone photovoltaic-electrochemical module for solar water splitting. Journal of Materials Chemistry A, 2018, 6, 15968-15976.	10.3	19
854	Hydrogen Evolution on Catalytically Active Electrodeposited Ni–Re Alloy: Electrochemical Impedance Study. Russian Journal of Electrochemistry, 2018, 54, 598-603.	0.9	8
855	Tuning Bifunctional Oxygen Electrocatalysts by Changing the A‣ite Rareâ€Earth Element in Perovskite Nickelates. Advanced Functional Materials, 2018, 28, 1803712.	14.9	122
856	Electronic Structure Evolution in Tricomponent Metal Phosphides with Reduced Activation Energy for Efficient Electrocatalytic Oxygen Evolution. Small, 2018, 14, e1801756.	10.0	69

#	Article	IF	CITATIONS
857	Converting sunlight to clean fuels: The challenges of artificial photosynthesis and progress at the Conn Center. AIP Conference Proceedings, 2018, , .	0.4	0
858	Carbonâ€Rich Nanomaterials: Fascinating Hydrogen and Oxygen Electrocatalysts. Advanced Materials, 2018, 30, e1800528.	21.0	135
859	Self-Interconnected Porous Networks of NiCo Disulfide as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. ACS Applied Materials & Interfaces, 2018, 10, 27723-27733.	8.0	71
860	Flexible, self-supported hexagonal β-Co(OH)2 nanosheet arrays as integrated electrode catalyzing oxygen evolution reaction. Electrochimica Acta, 2018, 284, 495-503.	5.2	27
861	Cobalt Sulfide/Nickel Sulfide Heterostructure Directly Grown on Nickel Foam: An Efficient and Durable Electrocatalyst for Overall Water Splitting Application. ACS Applied Materials & Interfaces, 2018, 10, 27712-27722.	8.0	269
862	Synthesis of a Highly Efficient Oxygenâ€Evolution Electrocatalyst by Incorporation of Iron into Nanoscale Cobalt Borides. ChemSusChem, 2018, 11, 3150-3156.	6.8	41
863	Aggregation-Resistant 3D MXene-Based Architecture as Efficient Bifunctional Electrocatalyst for Overall Water Splitting. ACS Nano, 2018, 12, 8017-8028.	14.6	425
864	The Subâ€Nanometer Scale as a New Focus in Nanoscience. Advanced Materials, 2018, 30, e1802031.	21.0	99
865	Direct Chemical Synthesis of Lithium Sub-Stochiometric Olivine Li _{0.7} Co _{0.75} Fe _{0.25} PO ₄ Coated with Reduced Graphene Oxide as Oxygen Evolution Reaction Electrocatalyst. ACS Catalysis, 2018, 8, 8715-8725.	11.2	19
866	Efficient and Stable NiCo ₂ O ₄ /VN Nanoparticle Catalyst for Electrochemical Water Oxidation. ACS Sustainable Chemistry and Engineering, 2018, 6, 11473-11479.	6.7	41
867	The Structure of the Cobalt Oxide/Au Catalyst Interface in Electrochemical Water Splitting. Angewandte Chemie - International Edition, 2018, 57, 11893-11897.	13.8	90
868	Self-supported MoS2@NHCF fiber-in-tube composites with tunable voids for efficient hydrogen evolution reaction. Composites Communications, 2018, 9, 86-91.	6.3	34
869	The Structure of the Cobalt Oxide/Au Catalyst Interface in Electrochemical Water Splitting. Angewandte Chemie, 2018, 130, 12069-12073.	2.0	16
870	Intrinsic Activity of Some Oxygen and Hydrogen Evolution Reaction Electrocatalysts under Industrially Relevant Conditions. ACS Applied Energy Materials, 2018, 1, 4196-4202.	5.1	14
871	Bottom-up Synthesis of Porous NiMo Alloy for Hydrogen Evolution Reaction. Metals, 2018, 8, 83.	2.3	29
872	Piezotronics in Photoâ€Electrochemistry. Advanced Materials, 2018, 30, e1800154.	21.0	44
873	FeCo ₂ S ₄ Nanosheet Arrays Supported on Ni Foam: An Efficient and Durable Bifunctional Electrocatalyst for Overall Water-Splitting. ACS Sustainable Chemistry and Engineering, 2018, 6, 11724-11733.	6.7	83
874	Nickel oxide–polypyrrole nanocomposite electrode materials for electrocatalytic water oxidation. Catalysis Science and Technology, 2018, 8, 4030-4043.	4.1	20

#	Article	IF	CITATIONS
875	NiO hollow microspheres as efficient bifunctional electrocatalysts for Overall Water-Splitting. International Journal of Hydrogen Energy, 2018, 43, 21665-21674.	7.1	72
876	Porous magnetic iron- manganese oxide nanocubes derived from metal organic framework deposited on reduced graphene oxide nanoflake as a bi-functional electrocatalyst for hydrogen evolution and oxygen reduction reaction. Electrochimica Acta, 2018, 283, 1359-1365.	5.2	19
877	Comparative Analysis of Solar-to-Fuel Conversion Efficiency: A Direct, One-Step Electrochemical CO ₂ Reduction Reactor versus a Two-Step, Cascade Electrochemical CO ₂ Reduction Reactor. ACS Energy Letters, 2018, 3, 1892-1897.	17.4	18
878	One‣tep Controllable Synthesis of Mesoporous MgCo ₂ O ₄ Nanosheet Arrays with Ethanol on Nickel Foam as an Advanced Electrode Material for Highâ€Performance Supercapacitors. Chemistry - A European Journal, 2018, 24, 14982-14988.	3.3	37
879	Towards Highâ€Efficiency Hydrogen Production through in situ Formation of Wellâ€Dispersed Rhodium Nanoclusters. ChemSusChem, 2018, 11, 3253-3258.	6.8	57
880	Resolution of Electronic and Structural Factors Underlying Oxygen-Evolving Performance in Amorphous Cobalt Oxide Catalysts. Journal of the American Chemical Society, 2018, 140, 10710-10720.	13.7	54
881	Cobalt Oxide Materials for Oxygen Evolution Catalysis via Single‣ource Precursor Chemistry. Chemistry - A European Journal, 2018, 24, 13890-13896.	3.3	7
882	Hierarchical NiSe2 sheet-like nano-architectures as an efficient and stable bifunctional electrocatalyst for overall water splitting: Phase and morphology engineering. Electrochimica Acta, 2018, 279, 195-203.	5.2	49
883	Design Strategy of Multiâ€electron Transfer Catalysts Based on a Bioinformatic Analysis of Oxygen Evolution and Reduction Enzymes. Molecular Informatics, 2018, 37, e1700139.	2.5	2
884	Evaluating Hydrogen Evolution and Oxidation in Alkaline Media to Establish Baselines. Journal of the Electrochemical Society, 2018, 165, F441-F455.	2.9	42
885	Induced Phosphorization-Derived Well-Dispersed Molybdenum Phosphide Nanoparticles Encapsulated in Hollow N-Doped Carbon Nanospheres for Efficient Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2018, 6, 7676-7686.	6.7	37
886	Photocatalytic and photosensitized water splitting: A plea for well-defined and commonly accepted protocol. Comptes Rendus Chimie, 2018, 21, 909-915.	0.5	8
887	Electrochemical Water Oxidation Catalysed by CoO o ₂ O ₃ o(OH) ₂ Multiphaseâ€Nanoparticles Prepared by Femtosecond Laser Ablation in Water. ChemistrySelect, 2018, 3, 4979-4984.	1.5	14
888	Cross-linked trimetallic nanopetals for electrocatalytic water splitting. Journal of Power Sources, 2018, 390, 224-233.	7.8	47
889	Characterizing Electrocatalysts with Scanning Electrochemical Microscopy. Industrial & Engineering Chemistry Research, 2018, 57, 7431-7440.	3.7	21
890	Identifying the forefront of electrocatalytic oxygen evolution reaction: Electronic double layer. Applied Catalysis B: Environmental, 2018, 239, 425-432.	20.2	49
891	Hierarchical Design of NiOOH@Amorphous Ni–P Bilayer on a 3D Mesh Substrate for High-Efficiency Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2018, 10, 30273-30282.	8.0	27
892	The ensemble effect of nitrogen doping and ultrasmall SnO2 nanocrystals on graphene sheets for efficient electroreduction of carbon dioxide. Applied Catalysis B: Environmental, 2018, 239, 441-449.	20.2	85

#	Article	IF	CITATIONS
893	Effect of Intrinsic Properties of Anions on the Electrocatalytic Activity of NiCo ₂ O ₄ and NiCo ₂ O _{<i>x</i>} S _{4–<i>x</i>} Grown by Chemical Bath Deposition. ACS Omega, 2018, 3, 9066-9074.	3.5	17
894	Promoting the water reduction reaction of transition metal dichalcogenides in a basic electrolyte by interface engineering. Journal of Materials Chemistry A, 2018, 6, 17488-17494.	10.3	13
895	Nickel Molybdenum Nitride Nanorods Grown on Ni Foam as Efficient and Stable Bifunctional Electrocatalysts for Overall Water Splitting. ACS Applied Materials & Interfaces, 2018, 10, 30400-30408.	8.0	97
896	Hybrid cobalt-based electrocatalysts with adjustable compositions for electrochemical water splitting derived from Co2+-Loaded MIL-53(Fe) particles. Electrochimica Acta, 2018, 286, 397-405.	5.2	22
897	Facile synthesis of ZnCo-ZIFs-derived ZnxCo3â^²xO4 hollow polyhedron for efficient oxygen evolution reduction. Journal of Colloid and Interface Science, 2018, 532, 650-656.	9.4	33
898	Enhancing Durability and Photoelectrochemical Performance of the Earth Abundant Ni–Mo/TiO ₂ /CdS/CIGS Photocathode under Various pH Conditions. ChemSusChem, 2018, 11, 3679-3688.	6.8	17
899	Novel Cobalt Germanium Hydroxide for Electrochemical Water Oxidation. ACS Applied Materials & Interfaces, 2018, 10, 30357-30366.	8.0	22
900	Hydrogen evolution reaction (HER) on Au@Ag ultrananoclusters as electro-catalysts. Nanoscale, 2018, 10, 17730-17737.	5.6	21
901	Heterostructures for Electrochemical Hydrogen Evolution Reaction: A Review. Advanced Functional Materials, 2018, 28, 1803291.	14.9	906
902	B-site doping effects of NdBa _{0.75} Ca _{0.25} Co ₂ O _{5+δ} double perovskite catalysts for oxygen evolution and reduction reactions. Journal of Materials Chemistry A, 2018, 6, 17807-17818.	10.3	50
903	FeCo/FeCoP _{<i>x</i>} O _{<i>y</i>} (OH) _{<i>z</i>} as Bifunctional Electrodeposited-Film Electrodes for Overall Water Splitting. ACS Applied Energy Materials, 0, , .	5.1	3
904	Applications of Plasma in Energy Conversion and Storage Materials. Advanced Energy Materials, 2018, 8, 1801804.	19.5	77
905	Crystalline Ru _{0.33} Se Nanoparticlesâ€Decorated TiO ₂ Nanotube Arrays for Enhanced Hydrogen Evolution Reaction. Small, 2018, 14, e1802132.	10.0	59
906	Feâ€CoP Electrocatalyst Derived from a Bimetallic Prussian Blue Analogue for Largeâ€Currentâ€Density Oxygen Evolution and Overall Water Splitting. Advanced Science, 2018, 5, 1800949.	11.2	318
907	Ternary Ni2(1-x)Mo2xP nanowire arrays toward efficient and stable hydrogen evolution electrocatalysis under large-current-density. Nano Energy, 2018, 53, 492-500.	16.0	216
908	Folic Acid Derived Bimetallicâ€Doped Hollow Carbon Nanostructures for Efficient Electrocatalytic Oxygen Evolution. Chemistry - an Asian Journal, 2018, 13, 3274-3280.	3.3	16
909	Pick a Wick: A Simple, Ultrafast Combustion Synthesis of Co ₃ O ₄ Dispersed Carbon for Enhanced Oxygen Evolution Kinetics. ACS Applied Energy Materials, 2018, 1, 4448-4452.	5.1	11
910	Light-driven water oxidation using hybrid photosensitizer-decorated Co3O4 nanoparticles. Materials Today Energy, 2018, 9, 506-515.	4.7	11

#	Article	IF	CITATIONS
911	Recent progress on earth abundant electrocatalysts for oxygen evolution reaction (OER) in alkaline medium to achieve efficient water splitting – A review. Journal of Power Sources, 2018, 400, 31-68.	7.8	418
912	CoS2-incorporated WS2 nanosheets for efficient hydrogen production. Electrochimica Acta, 2018, 287, 1-9.	5.2	23
913	Ultrafast Electron Trapping and Defect-Mediated Recombination in NiO Probed by Femtosecond Extreme Ultraviolet Reflection–Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 5047-5054.	4.6	40
914	Anion-Induced Size Selection of β-Mo ₂ C Supported on Nitrogen-Doped Carbon Nanotubes for Electrocatalytic Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2018, 6, 11922-11929.	6.7	38
915	Ar ²⁺ Beam Irradiation-Induced Multivancancies in MoSe ₂ Nanosheet for Enhanced Electrochemical Hydrogen Evolution. ACS Energy Letters, 2018, 3, 2167-2172.	17.4	73
916	Phaseâ€Controlled Synthesis of Nickel Phosphide Nanocrystals and Their Electrocatalytic Performance for the Hydrogen Evolution Reaction. Chemistry - A European Journal, 2018, 24, 11748-11754.	3.3	55
917	Graphene Layer Encapsulation of Non-Noble Metal Nanoparticles as Acid-Stable Hydrogen Evolution Catalysts. ACS Energy Letters, 2018, 3, 1539-1544.	17.4	57
918	Aluminum-incorporated p-CuO/n-ZnO photocathode coated with nanocrystal-engineered TiO ₂ protective layer for photoelectrochemical water splitting and hydrogen generation. Journal of Materials Chemistry A, 2018, 6, 11951-11965.	10.3	58
919	Electrocatalytic valorisation of biomass derived chemicals. Catalysis Science and Technology, 2018, 8, 3216-3232.	4.1	105
920	Three-dimensional-networked Ni2P/Ni3S2 heteronanoflake arrays for highly enhanced electrochemical overall-water-splitting activity. Nano Energy, 2018, 51, 26-36.	16.0	378
921	NiPS ₃ Nanosheet–Graphene Composites as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. ACS Nano, 2018, 12, 5297-5305.	14.6	104
922	Self-Supported FeNi-P Nanosheets with Thin Amorphous Layers for Efficient Electrocatalytic Water Splitting. ACS Sustainable Chemistry and Engineering, 2018, 6, 9640-9648.	6.7	71
923	Surface engineering by a novel electrochemical activation method for the synthesis of Co3+ enriched Co(OH)2/CoOOH heterostructure for water oxidation. Journal of Power Sources, 2018, 396, 395-403.	7.8	54
924	Electrochemically Deposited Nickel Oxide from Molecular Complexes for Efficient Water Oxidation Catalysis. ChemSusChem, 2018, 11, 2752-2757.	6.8	14
925	Ultrafine Co Nanoparticles Encapsulated in Carbonâ€Nanotubesâ€Grafted Graphene Sheets as Advanced Electrocatalysts for the Hydrogen Evolution Reaction. Advanced Materials, 2018, 30, e1802011.	21.0	453
926	Facile Formation of Nanostructured Manganese Oxide Films as Highâ€Performance Catalysts for the Oxygen Evolution Reaction. ChemSusChem, 2018, 11, 2554-2561.	6.8	19
927	Nanostructured FeNi ₃ Incorporated with Carbon Doped with Multiple Nonmetal Elements for the Oxygen Evolution Reaction. ChemSusChem, 2018, 11, 2703-2709.	6.8	75
928	Large-scale printing synthesis of transition metal phosphides encapsulated in N, P co-doped carbon as highly efficient hydrogen evolution cathodes. Nano Energy, 2018, 51, 223-230.	16.0	79

#	Article	IF	CITATIONS
929	Anion Engineering on 3D Ni ₃ S ₂ Nanosheets Array toward Water Splitting. ACS Applied Energy Materials, 2018, 1, 3488-3496.	5.1	25
930	Layered Metal–Organic Framework-Derived Metal Oxide/Carbon Nanosheet Arrays for Catalyzing the Oxygen Evolution Reaction. ACS Energy Letters, 2018, 3, 1655-1661.	17.4	176
931	A hierarchical nickel–carbon structure templated by metal–organic frameworks for efficient overall water splitting. Energy and Environmental Science, 2018, 11, 2363-2371.	30.8	240
932	Anion insertion enhanced electrodeposition of robust metal hydroxide/oxide electrodes for oxygen evolution. Nature Communications, 2018, 9, 2373.	12.8	336
933	Visible light driven water splitting through an innovative Cu-treated-Î^MnO ₂ nanostructure: probing enhanced activity and mechanistic insights. Nanoscale, 2018, 10, 13250-13260.	5.6	29
934	2D graphdiyne materials: challenges and opportunities in energy field. Science China Chemistry, 2018, 61, 765-786.	8.2	123
935	In-situ electrochemical activation designed hybrid electrocatalysts for water electrolysis. Science Bulletin, 2018, 63, 853-876.	9.0	107
936	Selfâ€Supported Hierarchical Shell@Core Ni ₃ S ₂ @Ni Foam Composite Electrocatalyst with High Efficiency and Longâ€Term Stability for Methanol Oxidation. ChemElectroChem, 2018, 5, 2376-2382.	3.4	12
937	Organic chemistry at anodes and photoanodes. Sustainable Energy and Fuels, 2018, 2, 1905-1927.	4.9	76
938	Proton–Electron Conductivity in Thin Films of a Cobalt–Oxygen Evolving Catalyst. ACS Applied Energy Materials, 2019, 2, 3-12.	5.1	39
939	Silicaâ€Free Synthesis of Mesoporous Co ₃ O ₄ /CoO _x P _y as a Highly Active Oxygen Evolution Reaction Catalyst. ChemNanoMat, 2019, 5, 1390-1397.	2.8	10
940	Nitrogen-Doped Mesostructured Carbon-Supported Metallic Cobalt Nanoparticles for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 6672-6680.	5.1	28
941	Nanoporous Nickel Phosphide Cathode for a High-Performance Proton Exchange Membrane Water Electrolyzer. ACS Applied Materials & Interfaces, 2019, 11, 30774-30785.	8.0	29
942	Synthesis of low- and high-index faceted metal (Pt, Pd, Ru, Ir, Rh) nanoparticles for improved activity and stability in electrocatalysis. Nanoscale, 2019, 11, 18995-19011.	5.6	110
943	Rapid Performance Optimization Method for Photoelectrodes. Journal of Physical Chemistry C, 2019, 123, 21838-21851.	3.1	8
944	Copper-Substituted NiTiO ₃ Ilmenite-Type Materials for Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 31038-31048.	8.0	8
945	Electrocatalytic Hydrogen Evolution in Neutral pH Solutions: Dual-Phase Synergy. ACS Catalysis, 2019, 9, 8712-8718.	11.2	103
946	Environmental TEM Study of NiMoO4 Nanorods Undergoing Thermal Reduction: Observing the Formation of a Ni–Mo Alloy@oxide Core-shell Catalyst. Microscopy and Microanalysis, 2019, 25, 1472-1473.	0.4	0

#	Article	IF	CITATIONS
947	Vulcan Carbon as Support for Sputtered Oxygen Evolution Electrocatalysts. Electrocatalysis, 2019, 10, 604-612.	3.0	1
948	Iron tungsten mixed composite as a robust oxygen evolution electrocatalyst. Chemical Communications, 2019, 55, 10944-10947.	4.1	28
949	Upscaling high activity oxygen evolution catalysts based on CoFe2O4 nanoparticles supported on nickel foam for power-to-gas electrochemical conversion with energy efficiencies above 80%. Applied Catalysis B: Environmental, 2019, 259, 118055.	20.2	35
950	A novel Cs2O–Bi2O3–TiO2–ZnO heterostructure with direct Z-Scheme for efficient photocatalytic water splitting. Ceramics International, 2019, 45, 23756-23764.	4.8	17
951	Rational Integration of Photovoltaics for Solar Hydrogen Generation. ACS Applied Energy Materials, 2019, 2, 6395-6403.	5.1	13
952	Morphological and Electronic Tuning of Ni ₂ P through Iron Doping toward Highly Efficient Water Splitting. ACS Catalysis, 2019, 9, 8882-8892.	11.2	227
953	Hydrogen evolution activity tuning <i>via</i> two-dimensional electron accumulation at buried interfaces. Journal of Materials Chemistry A, 2019, 7, 20696-20705.	10.3	11
954	Boosting Electrocatalytic Hydrogen Evolution Activity with a NiPt ₃ @NiS Heteronanostructure Evolved from a Molecular Nickel–Platinum Precursor. Journal of the American Chemical Society, 2019, 141, 13306-13310.	13.7	119
955	In Situ Electrochemical Oxidation of Cu ₂ S into CuO Nanowires as a Durable and Efficient Electrocatalyst for Oxygen Evolution Reaction. Chemistry of Materials, 2019, 31, 7732-7743.	6.7	131
956	Electrodeposition of MoS _{<i>x</i>} Hydrogen Evolution Catalysts from Sulfur-Rich Precursors. ACS Applied Materials & Interfaces, 2019, 11, 32879-32886.	8.0	45
957	Hybrid Ni(OH) ₂ /FeOOH@NiFe Nanosheet Catalysts toward Highly Efficient Oxygen Evolution Reaction with Ultralong Stability over 1000 Hours. ACS Sustainable Chemistry and Engineering, 2019, 7, 14601-14610.	6.7	39
958	Facile Protocol for Alkaline Electrolyte Purification and Its Influence on a Ni–Co Oxide Catalyst for the Oxygen Evolution Reaction. ACS Catalysis, 2019, 9, 8165-8170.	11.2	59
959	Strain Regulation to Optimize the Acidic Water Oxidation Performance of Atomic‣ayer IrO <i>_x</i> . Advanced Materials, 2019, 31, e1903616.	21.0	121
960	A wood-derived hierarchically porous monolithic carbon matrix embedded with Co nanoparticles as an advanced electrocatalyst for water splitting. Sustainable Energy and Fuels, 2019, 3, 2753-2762.	4.9	25
961	Electrolyte-Dependent Oxygen Evolution Reactions in Alkaline Media: Electrical Double Layer and Interfacial Interactions. ACS Applied Materials & amp; Interfaces, 2019, 11, 33748-33758.	8.0	59
962	Quadruple perovskite ruthenate as a highly efficient catalyst for acidic water oxidation. Nature Communications, 2019, 10, 3809.	12.8	150
963	Amorphous multinary phyllosilicate catalysts for electrochemical water oxidation. Journal of Materials Chemistry A, 2019, 7, 18380-18387.	10.3	21
964	Construction of Hierarchical Co–Fe Oxyphosphide Microtubes for Electrocatalytic Overall Water Splitting. Advanced Science, 2019, 6, 1900576.	11.2	208

#	Article	IF	CITATIONS
965	Dual Doping Induced Interfacial Engineering of Fe ₂ N/Fe ₃ N Hybrids with Favorable dâ€Band towards Efficient Overall Water Splitting. ChemCatChem, 2019, 11, 6051-6060.	3.7	92
966	Remarkable improvements in the performance and stability of Si photoanodes adopting nanocrystalline NiOx electrocatalyst and stoichiometric SiO2 protection. Applied Surface Science, 2019, 493, 1150-1158.	6.1	7
967	Efficient and Highly Transparent Ultraâ€Thin Nickelâ€Iron Oxyâ€hydroxide Catalyst for Oxygen Evolution Prepared by Successive Ionic Layer Adsorption and Reaction. ChemPhotoChem, 2019, 3, 1050-1054.	3.0	6
968	Influence of the S:Ni ratio in raw materials on the NixSy electrocatalysts. Applied Surface Science, 2019, 491, 590-594.	6.1	18
969	Anionic Effects on Metal Pair of Se-Doped Nickel Diphosphide for Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 14247-14255.	6.7	30
970	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.	6.1	53
971	Insights into the Electrochemical Oxygen Evolution Reaction with ab Initio Calculations and Microkinetic Modeling: Beyond the Limiting Potential Volcano. Journal of Physical Chemistry C, 2019, 123, 18960-18977.	3.1	138
972	Photocatalytic hydrogen evolution on Si photocathodes modified with bis(thiosemicarbazonato)nickel(<scp>ii</scp>)/Nafion. Chemical Communications, 2019, 55, 9440-9443.	4.1	12
973	Stainless Steel as A Bi-Functional Electrocatalyst—A Top-Down Approach. Materials, 2019, 12, 2128.	2.9	21
974	Large-Area CVD MoS ₂ /WS ₂ Heterojunctions as a Photoelectrocatalyst for Salt-Water Oxidation. ACS Applied Energy Materials, 2019, 2, 5877-5882.	5.1	23
975	In Situ Hybridizing MoS ₂ Microflowers on VS ₂ Microflakes in a One-Pot CVD Process for Electrolytic Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 5799-5808.	5.1	53
976	Inlaying Ultrathin Bimetallic MOF Nanosheets into 3D Ordered Macroporous Hydroxide for Superior Electrocatalytic Oxygen Evolution. Small, 2019, 15, e1902218.	10.0	77
977	Single-crystalline ultrathin nanofilms of Ni aerogel with Ni(OH)2 hybrid nanoparticles towards enhanced catalytic performance for ethanol electro-oxidation. Applied Surface Science, 2019, 492, 756-764.	6.1	20
978	Shaping well-defined noble-metal-based nanostructures for fabricating high-performance electrocatalysts: advances and perspectives. Inorganic Chemistry Frontiers, 2019, 6, 2582-2618.	6.0	51
979	Crystalline Strontium Iridate Particle Catalysts for Enhanced Oxygen Evolution in Acid. ACS Applied Energy Materials, 2019, 2, 5490-5498.	5.1	61
980	High-Efficiency Electrocatalytic Water Oxidation on Trimetal-Based Fe–Co–Cr Oxide. ACS Applied Energy Materials, 2019, 2, 5584-5590.	5.1	7
981	Porous MoS ₂ Framework and Its Functionality for Electrochemical Hydrogen Evolution Reaction and Lithium Ion Batteries. ACS Applied Energy Materials, 2019, 2, 5900-5908.	5.1	30
982	An organic ligand promoting the electrocatalytic activity of cobalt oxide for the hydrogen evolution reaction. Sustainable Energy and Fuels, 2019, 3, 2205-2210.	4.9	7

#	Article	IF	CITATIONS
983	Attuning the Electronic Properties of Two-Dimensional Co-Fe-O for Accelerating Water Electrolysis and Photolysis. ACS Applied Materials & 2019, 11, 30682-30693.	8.0	16
984	Dual Alkaline Ion Route to Chemical De-insertion in Oxygen Evolution Olivine Electrocatalysts. ACS Catalysis, 2019, 9, 8355-8363.	11.2	6
985	One-step solid-phase boronation to fabricate self-supported porous FeNiB/FeNi foam for efficient electrocatalytic oxygen evolution and overall water splitting. Journal of Materials Chemistry A, 2019, 7, 19554-19564.	10.3	68
986	Electrodeposited Co-Mo-TiO2 Electrocatalysts for the Hydrogen Evolution Reaction. Journal of the Electrochemical Society, 2019, 166, F661-F669.	2.9	15
987	lsostructural Ni ^{II} Metal–Organic Frameworks (MOFs) for Efficient Electrocatalysis of Oxygen Evolution Reaction and for Gas Sorption Properties. Chemistry - A European Journal, 2019, 25, 11141-11146.	3.3	16
988	Tailoring the facets of Ni ₃ S ₂ as a bifunctional electrocatalyst for high-performance overall water-splitting. Journal of Materials Chemistry A, 2019, 7, 18003-18011.	10.3	83
989	Interfacing Epitaxial Dinickel Phosphide to 2D Nickel Thiophosphate Nanosheets for Boosting Electrocatalytic Water Splitting. ACS Nano, 2019, 13, 7975-7984.	14.6	171
990	A Trimodal Porous Cobaltâ€Based Electrocatalyst for Enhanced Oxygen Evolution. Advanced Materials Interfaces, 2019, 6, 1900381.	3.7	10
991	Harnessing Native Iron Ore as an Efficient Electrocatalyst for Overall Water Splitting. ChemElectroChem, 2019, 6, 3667-3673.	3.4	13
992	Ce-doped CoS ₂ pyrite with weakened O ₂ adsorption suppresses catalyst leaching and stabilizes electrocatalytic H ₂ evolution. Journal of Materials Chemistry A, 2019, 7, 17775-17781.	10.3	35
993	Design of Multiâ€Metallicâ€Based Electrocatalysts for Enhanced Water Oxidation. ChemPhysChem, 2019, 20, 2936-2945.	2.1	48
994	Three-dimensional open nano-netcage electrocatalysts for efficient pH-universal overall water splitting. Nature Communications, 2019, 10, 4875.	12.8	253
995	Dynamic oxygen adsorption on single-atomic Ruthenium catalyst with high performance for acidic oxygen evolution reaction. Nature Communications, 2019, 10, 4849.	12.8	416
996	Bifunctional Electrocatalyst of Low-Symmetry Mesoporous Titanium Dioxide Modified with Cobalt Oxide for Oxygen Evolution and Reduction Reactions. Catalysts, 2019, 9, 836.	3.5	21
997	Surface Engineering of 3D Gas Diffusion Electrodes for Highâ€Performance H ₂ Production with Nonprecious Metal Catalysts. Advanced Energy Materials, 2019, 9, 1901824.	19.5	11
998	Atomic Arrangement in Metalâ€Doped NiS ₂ Boosts the Hydrogen Evolution Reaction in Alkaline Media. Angewandte Chemie - International Edition, 2019, 58, 18676-18682.	13.8	174
999	Electrolyte Effects on the Electrocatalytic Performance of Iridiumâ€Based Nanoparticles for Oxygen Evolution in Rotating Disc Electrodes. ChemPhysChem, 2019, 20, 2956-2963.	2.1	44
1000	Enhancement of hydrogen evolution reaction by Pt nanopillar-array electrode in alkaline media and the effect of nanopillar length on the electrode efficiency. International Journal of Hydrogen Energy, 2019, 44, 30141-30150.	7.1	13

#	Article	IF	CITATIONS
1001	Adjustable Ternary FeCoNi Nanohybrids for Enhanced Oxygen Evolution Reaction. Chemistry - A European Journal, 2019, 25, 15361-15366.	3.3	7
1002	Construction of Ni@Pt/N-doped nanoporous carbon, derived from pyrolysis of nickel metal organic framework, and application for HER in alkaline and acidic solutions. Electrochimica Acta, 2019, 327, 134895.	5.2	19
1003	Reduced graphene oxide-supported CoP nanocrystals confined in porous nitrogen-doped carbon nanowire for highly enhanced lithium/sodium storage and hydrogen evolution reaction. Nano Research, 2019, 12, 2872-2880.	10.4	49
1004	Photo/electrocatalytic hydrogen exploitation for CO2 reduction toward solar fuels production. , 2019, , 365-418.		6
1005	Two-dimensional transition-metal dichalcogenides for electrochemical hydrogen evolution reaction. FlatChem, 2019, 18, 100140.	5.6	39
1006	Tuning quaternary hybride Co–Ni–S–Se composition as a bifunctional electrocatalyst for hydrogen and oxygen evolution reactions. International Journal of Hydrogen Energy, 2019, 44, 27685-27694.	7.1	24
1007	Vanadium-oxygen cell for positive electrolyte discharge in dual-circuit vanadium redox flow battery. Journal of Power Sources, 2019, 439, 227075.	7.8	17
1008	Tuning the Electrocatalytic Activity of Co ₃ O ₄ through Discrete Elemental Doping. ACS Applied Materials & Interfaces, 2019, 11, 39706-39714.	8.0	21
1009	Realization of controllable open system with NMR. New Journal of Physics, 2019, 21, 093008.	2.9	8
1010	Nesting Co ₃ Mo Binary Alloy Nanoparticles onto Molybdenum Oxide Nanosheet Arrays for Superior Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 9002-9010.	8.0	74
1011	Ultrathin nickel boride nanosheets anchored on functionalized carbon nanotubes as bifunctional electrocatalysts for overall water splitting. Journal of Materials Chemistry A, 2019, 7, 764-774.	10.3	123
1012	In-situ synthesis of Co-N supported on nickel foam for efficient hydrogen evolution reaction. AIP Conference Proceedings, 2019, , .	0.4	0
1013	Engineering Bimetal Synergistic Electrocatalysts Based on Metal–Organic Frameworks for Efficient Oxygen Evolution. Small, 2019, 15, e1903410.	10.0	126
1014	Mixed Phase (Galn)2O3 Films with a Single Absorption Edge Grown by Magnetron Sputtering. Journal of Electronic Materials, 2019, 48, 8061-8066.	2.2	3
1015	Mixed-Metal-Cluster Strategy for Boosting Electrocatalytic Oxygen Evolution Reaction of Robust Metal–Organic Frameworks. ACS Applied Materials & Interfaces, 2019, 11, 45080-45086.	8.0	35
1016	Universal scaling relations for the rational design of molecular water oxidation catalysts with near-zero overpotential. Nature Communications, 2019, 10, 4993.	12.8	151
1017	Ruthenium–Cobalt Nanoalloy Embedded within Hollow Carbon Spheres as a Bifunctionally Robust Catalyst for Hydrogen Generation from Water Splitting and Ammonia Borane Hydrolysis. ACS Sustainable Chemistry and Engineering, 2019, 7, 18744-18752.	6.7	60
1018	Solid‣tate Conversion Synthesis of Advanced Electrocatalysts for Water Splitting. Chemistry - A European Journal, 2020, 26, 3961-3972.	3.3	8

#	ARTICLE In Situ Spatially Coherent Identification of Phosphide-Based Catalysts: Crystallographic Latching for	IF	CITATIONS
1019	Highly Efficient Overall Water Electrolysis. ACS Energy Letters, 2019, 4, 2813-2820. Rational Design of Rhodium–Iridium Alloy Nanoparticles as Highly Active Catalysts for Acidic Oxygen Evolution. ACS Nano, 2019, 13, 13225-13234.	17.4	151
1021	NiMoFe and NiMoFeP as Complementary Electrocatalysts for Efficient Overall Water Splitting and Their Application in PVâ€Electrolysis with STH 12.3%. Small, 2019, 15, e1905501.	10.0	55
1022	Investigating the Integrity of Graphene towards the Electrochemical Oxygen Evolution Reaction. ChemElectroChem, 2019, 6, 5446-5453.	3.4	11
1023	Carbon Layer Coated Ni ₃ S ₂ /MoS ₂ Nanohybrids as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. ChemElectroChem, 2019, 6, 5603-5609.	3.4	22
1024	3D nanostructured NiMo catalyst electrodeposited on 316L stainless steel for hydrogen generation in industrial applications. Journal of Applied Electrochemistry, 2019, 49, 1227-1238.	2.9	18
1025	Theoretical Insight into the Performance of Mn ^{II/III} -Monosubstituted Heteropolytungstates as Water Oxidation Catalysts. Inorganic Chemistry, 2019, 58, 15751-15757.	4.0	11
1026	Atomic Arrangement in Metalâ€Đoped NiS ₂ Boosts the Hydrogen Evolution Reaction in Alkaline Media. Angewandte Chemie, 2019, 131, 18849-18855.	2.0	38
1027	Hierarchical Multiporous Nickel for Oxygen Evolution Reaction in Alkaline Media. ChemCatChem, 2019, 11, 5951-5960.	3.7	7
1028	Enhanced Iridium Mass Activity of 6H-Phase, Ir-Based Perovskite with Nonprecious Incorporation for Acidic Oxygen Evolution Electrocatalysis. ACS Applied Materials & Interfaces, 2019, 11, 42006-42013.	8.0	48
1029	Ni Nanoparticles on Ultrathin Mo2C Interconnected Nanonet: An Efficient 3D Hydrogen-Evolving Electrocatalyst with Superior Durability. Journal of the Electrochemical Society, 2019, 166, F1128-F1133.	2.9	3
1030	Trace anodic migration of iridium and titanium ions and subsequent cathodic selectivity degradation in acid electrolysis systems. Materials Today Energy, 2019, 14, 100352.	4.7	8
1031	Electrochemical Approach for the Production of Layered Double Hydroxides with a Wellâ€Defined Co/Me ^{III} Ratio. Chemistry - A European Journal, 2019, 25, 16301-16310.	3.3	7
1032	A Biocompatible Multilayer Film from an Asymmetric Picoliniumâ€Containing Polycation with Fast Visibleâ€Light/NIRâ€Degradability. Macromolecular Rapid Communications, 2019, 40, e1900441.	3.9	0
1033	Online monitoring and assessment of energy efficiency for copper smelting process. Journal of Central South University, 2019, 26, 2149-2159.	3.0	2
1034	Morphology enhancement of SiO2 aerogel films grown on Si substrate using dense SiO2 buffer layer. Rare Metals, 2019, , 1.	7.1	1
1035	MOFâ€Derived Niâ€Doped CoS ₂ Grown on Carbon Fiber Paper for Efficient Oxygen Evolution Reaction. ChemElectroChem, 2019, 6, 1206-1212.	3.4	42
1036	Ultrathin Nanosheet of Graphdiyne-Supported Palladium Atom Catalyst for Efficient Hydrogen Production. IScience, 2019, 11, 31-41.	4.1	149

#	Article	IF	CITATIONS
1037	Chromium-ruthenium oxide solid solution electrocatalyst for highly efficient oxygen evolution reaction in acidic media. Nature Communications, 2019, 10, 162.	12.8	396
1038	FeNi nanoparticles embedded porous nitrogen-doped nanocarbon as efficient electrocatalyst for oxygen evolution reaction. Electrochimica Acta, 2019, 321, 134720.	5.2	25
1039	Selective C–C Coupling in Carbon Dioxide Electroreduction via Efficient Spillover of Intermediates As Supported by Operando Raman Spectroscopy. Journal of the American Chemical Society, 2019, 141, 18704-18714.	13.7	270
1040	Coupled cobalt-doped molybdenum carbide@N-doped carbon nanosheets/nanotubes supported on nickel foam as a binder-free electrode for overall water splitting. Chinese Journal of Catalysis, 2019, 40, 1352-1359.	14.0	40
1041	Electrodeposition of Unary Oxide on a Bimetallic Hydroxide as a Highly Active and Stable Catalyst for Water Oxidation. ACS Sustainable Chemistry and Engineering, 2019, 7, 16392-16400.	6.7	35
1042	Enhancing hydrogen evolution activity by doping and tuning the curvature of manganese-embedded carbon nanotubes. Catalysis Science and Technology, 2019, 9, 5301-5314.	4.1	23
1043	Tandem Cuprous Oxide/Silicon Microwire Hydrogen-Evolving Photocathode with Photovoltage Exceeding 1.3 V. ACS Energy Letters, 2019, 4, 2287-2294.	17.4	25
1044	Iridium on vertical graphene as an all-round catalyst for robust water splitting reactions. Journal of Materials Chemistry A, 2019, 7, 20590-20596.	10.3	61
1045	Cu-Based Nanosheet Arrays for Water-Splitting. ACS Applied Nano Materials, 2019, 2, 6000-6009.	5.0	20
1046	Inception of molybdate as a "pore forming additive―to enhance the bifunctional electrocatalytic activity of nickel and cobalt based mixed hydroxides for overall water splitting. Nanoscale, 2019, 11, 16896-16906.	5.6	24
1047	Synergistic effect of MoS2 and Ni9S8 nanosheets as an efficient electrocatalyst for hydrogen evolution reaction. Journal of Colloid and Interface Science, 2019, 556, 24-32.	9.4	16
1048	Systematic Investigation of Iridium-Based Bimetallic Thin Film Catalysts for the Oxygen Evolution Reaction in Acidic Media. ACS Applied Materials & amp; Interfaces, 2019, 11, 34059-34066.	8.0	56
1049	Mesoporous CoP Nanowire Arrays for Hydrogen Evolution. ACS Applied Nano Materials, 2019, 2, 5922-5930.	5.0	32
1050	Modulation of oxygen vacancy in tungsten oxide nanosheets for Vis-NIR light-enhanced electrocatalytic hydrogen production and anticancer photothermal therapy. Nanoscale, 2019, 11, 18183-18190.	5.6	25
1051	A core@shell hollow heterostructure of Co ₃ O ₄ and Co ₃ S ₄ : an efficient oxygen evolution catalyst. New Journal of Chemistry, 2019, 43, 15768-15776.	2.8	18
1052	Raney Nickel 2.0: Development of a high-performance bifunctional electrocatalyst. Electrochimica Acta, 2019, 322, 134687.	5.2	26
1053	Characterization of Long Noncoding RNA and mRNA Profiles in Sepsis-Induced Myocardial Depression. Molecular Therapy - Nucleic Acids, 2019, 17, 852-866.	5.1	36
1054	Schottky junction effect enhanced plasmonic photocatalysis by TaON@Ni NP heterostructures. Chemical Communications, 2019, 55, 11754-11757.	4.1	52

#	ARTICLE Electrochemically Synthesized Ni@reduced Graphene Oxide Composite Catalysts for Hydrogen	IF	CITATIONS
1055	Evolution in Alkaline Media - the Effects of Graphene Oxide Support. International Journal of Electrochemical Science, 2019, 14, 8532-8543.	1.3	7
1056	Impedance Spectroscopy Modeling of Nickel–Molybdenum Alloys on Porous and Flat Substrates for Applications in Water Splitting. Journal of Physical Chemistry C, 2019, 123, 23890-23897.	3.1	31
1057	Flower-like Co3O4 microstrips embedded in Co foam as a binder-free electrocatalyst for oxygen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 24209-24217.	7.1	23
1058	Bimetallic MOF-templated synthesis of alloy nanoparticle-embedded porous carbons for oxygen evolution and reduction reactions. Dalton Transactions, 2019, 48, 13953-13959.	3.3	19
1059	Hetero-coupling of a carbonate hydroxide and sulfide for efficient and robust water oxidation. Journal of Materials Chemistry A, 2019, 7, 21959-21965.	10.3	28
1060	Self-Supported Porous Ni–Fe–W Hydroxide Nanosheets on Carbon Fiber: A Highly Efficient Electrode for Oxygen Evolution Reaction. Inorganic Chemistry, 2019, 58, 13037-13048.	4.0	28
1061	2H and 2H/1T-Transition Metal Dichalcogenide Films Prepared via Powderless Gas Deposition for the Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 16440-16449.	6.7	10
1062	Investigation of mixed-metal (oxy)fluorides as a new class of water oxidation electrocatalysts. Chemical Science, 2019, 10, 9209-9218.	7.4	47
1063	Characterization of Amorphous Ni-Nb-Y Nanoparticles for the Hydrogen Evolution Reaction Produced Through Surfactant-Assisted Ball Milling. Electrocatalysis, 2019, 10, 680-689.	3.0	9
1064	Single Site Cobalt Substitution in 2D Molybdenum Carbide (MXene) Enhances Catalytic Activity in the Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2019, 141, 17809-17816.	13.7	259
1065	A2B corrole with a meso-[PtII(bipy)Cl2]-substituent: Synthesis, electronic structure and highly efficient electrocatalyzed hydrogen evolutions. Inorganica Chimica Acta, 2019, 496, 119067.	2.4	8
1066	State-of-the-art progress in the use of ternary metal oxides as photoelectrode materials for water splitting and organic synthesis. Nano Today, 2019, 28, 100763.	11.9	67
1067	Effects of iron doping on the hydrogen evolution reaction performance of self-supported nickel selenides. Results in Physics, 2019, 14, 102522.	4.1	5
1068	Superior methanol electrooxidation performance of (110)-faceted nickel polyhedral nanocrystals. Journal of Materials Chemistry A, 2019, 7, 22036-22043.	10.3	38
1069	Role of Lattice Oxygen in the Oxygen Evolution Reaction on Co ₃ O ₄ : Isotope Exchange Determined Using a Small-Volume Differential Electrochemical Mass Spectrometry Cell Design. Analytical Chemistry, 2019, 91, 12653-12660.	6.5	26
1070	Crystal Structure and Composition-Dependent Electrocatalytic Activity of Ni–Mo Nanoalloys for Water Splitting To Produce Hydrogen. ACS Applied Energy Materials, 2019, 2, 7112-7120.	5.1	23
1071	Application of a deep eutectic solvent to prepare nanocrystalline Ni and Ni/TiO2 coatings as electrocatalysts for the hydrogen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 24604-24616.	7.1	53
1072	In-situ monitoring of hydrogen absorption into Ni thin film electrodes during alkaline water electrolysis. Electrochimica Acta, 2019, 322, 134752.	5.2	3

#	Article	IF	CITATIONS
1073	1T/2H MoSe2-on-MXene heterostructure as bifunctional electrocatalyst for efficient overall water splitting. Electrochimica Acta, 2019, 326, 134976.	5.2	125
1074	Two-Dimensional CuTe ₂ X (X = Cl, Br, and I): Potential Photocatalysts for Water Splitting under the Visible/Infrared Light. Journal of Physical Chemistry C, 2019, 123, 25543-25548.	3.1	6
1075	A simple strategy to construct cobalt oxide-based high-efficiency electrocatalysts with oxygen vacancies and heterojunctions. Electrochimica Acta, 2019, 326, 134979.	5.2	32
1076	Two-dimensional Cobalt Oxy-hydrate Sulfide Nanosheets with Modified t2g Orbital State of CoO6–x Octahedron for Efficient Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2019, 7, 17325-17334.	6.7	15
1077	Calculations of theoretical efficiencies for electrochemically-mediated tandem solar water splitting as a function of bandgap energies and redox shuttle potential. Energy and Environmental Science, 2019, 12, 261-272.	30.8	18
1078	Enhancing the activity of oxygen-evolution and chlorine-evolution electrocatalysts by atomic layer deposition of TiO ₂ . Energy and Environmental Science, 2019, 12, 358-365.	30.8	78
1079	Unassisted solar water splitting with 9.8% efficiency and over 100 h stability based on Si solar cells and photoelectrodes catalyzed by bifunctional Ni–Mo/Ni. Journal of Materials Chemistry A, 2019, 7, 2200-2209.	10.3	63
1080	Alternative Oxidation Reactions for Solar-Driven Fuel Production. ACS Catalysis, 2019, 9, 2007-2017.	11.2	115
1081	Sustainable synthesis of nitrogen-doped porous carbon with improved electrocatalytic performance for hydrogen evolution. New Journal of Chemistry, 2019, 43, 3078-3083.	2.8	10
1082	New aspects of improving the performance of WO ₃ thin films for photoelectrochemical water splitting by tuning the ultrathin depletion region. RSC Advances, 2019, 9, 899-905.	3.6	14
1083	Formation of unexpectedly active Ni–Fe oxygen evolution electrocatalysts by physically mixing Ni and Fe oxyhydroxides. Chemical Communications, 2019, 55, 818-821.	4.1	57
1084	Electromodified NiFe Alloys as Electrocatalysts for Water Oxidation: Mechanistic Implications of Timeâ€Resolved UV/Vis Tracking of Oxidation State Changes. ChemSusChem, 2019, 12, 1966-1976.	6.8	33
1085	Structural Transformation Identification of Sputtered Amorphous MoS _{<i>x</i>} as an Efficient Hydrogen-Evolving Catalyst during Electrochemical Activation. ACS Catalysis, 2019, 9, 2368-2380.	11.2	78
1086	Three-dimensionally patterned Ag–Pt alloy catalyst on planar Si photocathodes for photoelectrochemical H ₂ evolution. Physical Chemistry Chemical Physics, 2019, 21, 4184-4192.	2.8	11
1087	Ni Foam-Supported Fe-Doped β-Ni(OH) ₂ Nanosheets Show Ultralow Overpotential for Oxygen Evolution Reaction. ACS Energy Letters, 2019, 4, 622-628.	17.4	240
1088	Bimetallic metal-organic framework derived electrocatalyst for efficient overall water splitting. International Journal of Hydrogen Energy, 2019, 44, 5983-5989.	7.1	26
1089	NiFe-based nanostructures on nickel foam as highly efficiently electrocatalysts for oxygen and hydrogen evolution reactions. Journal of Energy Chemistry, 2019, 39, 39-53.	12.9	157
1090	Analysis of the interfacial characteristics of BiVO ₄ /metal oxide heterostructures and its implication on their junction properties. Physical Chemistry Chemical Physics, 2019, 21, 5086-5096.	2.8	56

#	Article	IF	CITATIONS
1091	Breaking Long-Range Order in Iridium Oxide by Alkali Ion for Efficient Water Oxidation. Journal of the American Chemical Society, 2019, 141, 3014-3023.	13.7	337
1092	Novel design of hollow g-C ₃ N ₄ nanofibers decorated with MoS ₂ and S, N-doped graphene for ternary heterostructures. Dalton Transactions, 2019, 48, 2170-2178.	3.3	16
1093	Constructing Earthâ€abundant 3D Nanoarrays for Efficient Overall Water Splitting – A Review. ChemCatChem, 2019, 11, 1550-1575.	3.7	108
1094	One-dimensional CoS ₂ –MoS ₂ nano-flakes decorated MoO ₂ sub-micro-wires for synergistically enhanced hydrogen evolution. Nanoscale, 2019, 11, 3500-3505.	5.6	31
1095	Fabrication of NiC/MoC/NiMoO ₄ Heterostructured Nanorod Arrays as Stable Bifunctional Electrocatalysts for Efficient Overall Water Splitting. Chemistry - an Asian Journal, 2019, 14, 1013-1020.	3.3	17
1096	Facile Synthesis and Characterization of MOFâ€Derived Porous Co ₃ O ₄ Composite for Oxygen Evolution Reaction. ChemistrySelect, 2019, 4, 1131-1137.	1.5	19
1097	Vertical nanosheet array of 1T phase MoS2 for efficient and stable hydrogen evolution. Applied Catalysis B: Environmental, 2019, 246, 296-302.	20.2	122
1098	Pulse-electrodeposited nickel phosphide for high-performance proton exchange membrane water electrolysis. Journal of Alloys and Compounds, 2019, 785, 296-304.	5.5	40
1099	Electrocatalytic water oxidation over AlFe ₂ B ₂ . Chemical Science, 2019, 10, 2796-2804.	7.4	52
1100	Optimizing Ni–Fe Oxide Electrocatalysts for Oxygen Evolution Reaction by Using Hard Templating as a Toolbox. ACS Applied Energy Materials, 2019, 2, 1199-1209.	5.1	71
1101	Self-standing FeCo Prussian blue analogue derived FeCo/C and FeCoP/C nanosheet arrays for cost-effective electrocatalytic water splitting. Electrochimica Acta, 2019, 302, 45-55.	5.2	80
1102	Porous Cobalt–Nickel Hydroxide Nanosheets with Active Cobalt Ions for Overall Water Splitting. Small, 2019, 15, e1804832.	10.0	46
1103	A multi-component Cu ₂ O@FePO ₄ core–cage structure to jointly promote fast electron transfer toward the highly sensitive <i>in situ</i> detection of nitric oxide. Nanoscale, 2019, 11, 4471-4477.	5.6	21
1104	A bio-inspired 3D quasi-fractal nanostructure for an improved oxygen evolution reaction. Chemical Communications, 2019, 55, 357-360.	4.1	5
1105	Ni-Doped CuS as an efficient electrocatalyst for the oxygen evolution reaction. Catalysis Science and Technology, 2019, 9, 406-417.	4.1	76
1106	Layered and two dimensional metal oxides for electrochemical energy conversion. Energy and Environmental Science, 2019, 12, 41-58.	30.8	310
1107	High-performance oxygen evolution electrocatalysis by boronized metal sheets with self-functionalized surfaces. Energy and Environmental Science, 2019, 12, 684-692.	30.8	169
1108	An all-nanosheet OER/ORR bifunctional electrocatalyst for both aprotic and aqueous Li–O ₂ batteries. Nanoscale, 2019, 11, 2855-2862.	5.6	26

#	Article	IF	Citations
1109	Artesunate enhances adriamycin cytotoxicity by inhibiting glycolysis in adriamycin-resistant chronic myeloid leukemia K562/ADR cells. RSC Advances, 2019, 9, 1004-1014.	3.6	3
1110	Boosting electrochemical water splitting <i>via</i> ternary NiMoCo hybrid nanowire arrays. Journal of Materials Chemistry A, 2019, 7, 2156-2164.	10.3	163
1111	Highly efficient hydrogen evolution of platinum <i>via</i> tuning the interfacial dissolved-gas concentration. Chemical Communications, 2019, 55, 1378-1381.	4.1	23
1112	Catalysis of hydrogen evolution reaction by Ni ₁₂ P ₅ single crystalline nanoplates and spherical nanoparticles. CrystEngComm, 2019, 21, 228-235.	2.6	14
1113	Engineering multiphase for activating electroactive sites for highly efficient hydrogen evolution: Experimental and theoretical investigation. International Journal of Hydrogen Energy, 2019, 44, 13323-13333.	7.1	2
1114	Hydrothermally Synthesized Cobalt Borophosphate as an Electrocatalyst for Water Oxidation in the pH Range from 7 to 14. ChemElectroChem, 2019, 6, 3132-3138.	3.4	5
1115	Negative Charging of Transitionâ€Metal Phosphides via Strong Electronic Coupling for Destabilization of Alkaline Water. Angewandte Chemie, 2019, 131, 11922-11926.	2.0	22
1116	Ni3S2-MoSx nanorods grown on Ni foam as high-efficient electrocatalysts for overall water splitting. International Journal of Hydrogen Energy, 2019, 44, 17900-17908.	7.1	24
1117	Strontium-doped lanthanum iron nickelate oxide as highly efficient electrocatalysts for oxygen evolution reaction. Journal of Colloid and Interface Science, 2019, 553, 813-819.	9.4	18
1118	CeO ₂ -Induced Interfacial Co ²⁺ Octahedral Sites and Oxygen Vacancies for Water Oxidation. ACS Catalysis, 2019, 9, 6484-6490.	11.2	278
1119	Neutral-pH overall water splitting catalyzed efficiently by a hollow and porous structured ternary nickel sulfoselenide electrocatalyst. Journal of Materials Chemistry A, 2019, 7, 16793-16802.	10.3	60
1120	Fe ₄₀ Co ₄₀ Se ₂₀ ÂGlassy Films Supported on Carbon Fiber Paper as Electrocatalysts in the Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2019, 166, F620-F626.	2.9	12
1121	Metal–Organic Frameworks Toward Electrocatalytic Applications. Applied Sciences (Switzerland), 2019, 9, 2427.	2.5	55
1122	Copper coordination polymer electrocatalyst for strong hydrogen evolution reaction activity in neutral medium: influence of coordination environment and network structure. Catalysis Science and Technology, 2019, 9, 4347-4354.	4.1	21
1123	A Fully Reversible Water Electrolyzer Cell Made Up from FeCoNi (Oxy)hydroxide Atomic Layers. Advanced Energy Materials, 2019, 9, 1901312.	19.5	106
1124	Facile Synthesis of Monodispersed α-Ni(OH)2 Microspheres Assembled by Ultrathin Nanosheets and Its Performance for Oxygen Evolution Reduction. Frontiers in Materials, 2019, 6, .	2.4	30
1125	Tremella-like Ni3S2/MnS with ultrathin nanosheets and abundant oxygen vacancies directly used for high speed overall water splitting. Applied Catalysis B: Environmental, 2019, 257, 117899.	20.2	157
1126	Artificial photosynthesis $\hat{a} \in $ concluding remarks. Faraday Discussions, 2019, 215, 439-451.	3.2	14

#	Article	IF	CITATIONS
1127	A class of metal diboride electrocatalysts synthesized by a molten salt-assisted reaction for the hydrogen evolution reaction. Chemical Communications, 2019, 55, 8627-8630.	4.1	57
1128	Phosphorous doped cobalt-iron sulfide/carbon nanotube as active and robust electrocatalysts for water splitting. Electrochimica Acta, 2019, 318, 892-900.	5.2	43
1129	Electrochemical characterization of manganese oxides as a water oxidation catalyst in proton exchange membrane electrolysers. Royal Society Open Science, 2019, 6, 190122.	2.4	23
1130	Unveiling the active sites of Ni–Fe phosphide/metaphosphate for efficient oxygen evolution under alkaline conditions. Chemical Communications, 2019, 55, 7687-7690.	4.1	96
1131	Perspectives on Low-Temperature Electrolysis and Potential for Renewable Hydrogen at Scale. Annual Review of Chemical and Biomolecular Engineering, 2019, 10, 219-239.	6.8	223
1132	Amorphous Ni/C nanocomposites from tandem plasma reaction for hydrogen evolution. International Journal of Hydrogen Energy, 2019, 44, 18115-18122.	7.1	4
1133	Direct magnetic enhancement of electrocatalytic water oxidation in alkaline media. Nature Energy, 2019, 4, 519-525.	39.5	413
1134	3D CVD graphene oxide-coated Ni foam as carbo- and electro-catalyst towards hydrogen evolution reaction in acidic solution: In situ electrochemical gas chromatography. Carbon, 2019, 151, 109-119.	10.3	28
1135	Topological Formation of a Mo–Ni-Based Hollow Structure as a Highly Efficient Electrocatalyst for the Hydrogen Evolution Reaction in Alkaline Solutions. ACS Applied Materials & Interfaces, 2019, 11, 21998-22004.	8.0	56
1136	Artificial photosynthesis systems for catalytic water oxidation. Advances in Inorganic Chemistry, 2019, 74, 3-59.	1.0	35
1137	Stabilization of reactive Co ₄ O ₄ cubane oxygen-evolution catalysts within porous frameworks. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11630-11639.	7.1	41
1138	Mechanistic Investigation with Kinetic Parameters on Water Oxidation Catalyzed by Manganese Oxide Nanoparticle Film. ACS Sustainable Chemistry and Engineering, 2019, 7, 10595-10604.	6.7	28
1139	Highly Efficient and Selective Generation of Ammonia and Hydrogen on a Graphdiyne-Based Catalyst. Journal of the American Chemical Society, 2019, 141, 10677-10683.	13.7	474
1140	Effect of the Solvent Ratio (Ethylene Glycol/Water) on the Preparation of an Iron Sulfide Electrocatalyst and Its Activity towards Overall Water Splitting. ChemElectroChem, 2019, 6, 3199-3208.	3.4	17
1141	Efficient platinum harvesting of MOF-derived N-doped carbon through cathodic cyclic voltammetry for hydrogen evolution. Electrochimica Acta, 2019, 317, 173-181.	5.2	13
1142	Enhanced Electrocatalytic Oxygen Evolution Activity by Tuning Both the Oxygen Vacancy and Orbital Occupancy of Bâ€5ite Metal Cation in NdNiO ₃ . Advanced Functional Materials, 2019, 29, 1902449.	14.9	72
1143	Surfaceâ€Wrinkleâ€Modified Graphite Felt with High Effectiveness for Vanadium Redox Flow Batteries. Advanced Electronic Materials, 2019, 5, 1900036.	5.1	10
1144	Re–Ni cathodes obtained by electrodeposition as a promising electrode material for hydrogen evolution reaction in alkaline solutions. Electrochimica Acta, 2019, 317, 358-366.	5.2	15

#	Article	IF	CITATIONS
1145	Interface and defect engineering of hybrid nanostructures toward an efficient HER catalyst. Nanoscale, 2019, 11, 12489-12496.	5.6	30
1146	Ultrafine Dualâ€Phased Carbide Nanocrystals Confined in Porous Nitrogenâ€Doped Carbon Dodecahedrons for Efficient Hydrogen Evolution Reaction. Advanced Materials, 2019, 31, e1900699.	21.0	311
1147	Electrodeposited mesh-type dimensionally stable anode for oxygen evolution reaction in acidic and alkaline media. Chemical Engineering Science, 2019, 206, 424-431.	3.8	12
1148	Free-standing S, N co-doped graphene/Ni foam as highly efficient and stable electrocatalyst for oxygen evolution reaction. Electrochimica Acta, 2019, 317, 408-415.	5.2	19
1149	One-step electrodeposition of cerium-doped nickel hydroxide nanosheets for effective oxygen generation. RSC Advances, 2019, 9, 17891-17896.	3.6	20
1150	Laserâ€Assisted Doping and Architecture Engineering of Fe ₃ O ₄ Nanoparticles for Highly Enhanced Oxygen Evolution Reaction. ChemSusChem, 2019, 12, 3562-3570.	6.8	19
1151	Controllable fabrication of uniform ruthenium phosphide nanocrystals for the hydrogen evolution reaction. Chemical Communications, 2019, 55, 7828-7831.	4.1	47
1152	Negative Charging of Transitionâ€Metal Phosphides via Strong Electronic Coupling for Destabilization of Alkaline Water. Angewandte Chemie - International Edition, 2019, 58, 11796-11800.	13.8	155
1153	Layerâ€byâ€Layer Coating of Cobaltâ€Based Ink for Largeâ€Scale Fabrication of OER Electrocatalyst. Energy Technology, 2019, 7, 1900603.	3.8	6
1154	Electrosynthesis of high-entropy metallic glass nanoparticles for designer, multi-functional electrocatalysis. Nature Communications, 2019, 10, 2650.	12.8	286
1155	Heterogenization of few-layer MoS2 with highly crystalline 3D Ni3S2 nanoframes effectively synergizes the electrocatalytic hydrogen generation in alkaline medium. Materials Today Energy, 2019, 13, 85-92.	4.7	26
1156	Spark-plasma-sintered porous electrodes for efficient oxygen evolution in alkaline water electrolysis. Electrochimica Acta, 2019, 317, 128-138.	5.2	9
1157	Rationally engineered active sites for efficient and durable hydrogen generation. Nature Communications, 2019, 10, 2281.	12.8	59
1158	A synthetic chemist's guide to electroanalytical tools for studying reaction mechanisms. Chemical Science, 2019, 10, 6404-6422.	7.4	255
1159	Electrodeposited Ni Co P hierarchical nanostructure as a cost-effective and durable electrocatalyst with superior activity for bifunctional water splitting. Journal of Power Sources, 2019, 429, 156-167.	7.8	120
1160	Prospects and Challenges for Solar Fertilizers. Joule, 2019, 3, 1578-1605.	24.0	153
1161	A Simple Synthetic Strategy toward Defectâ€Rich Porous Monolayer NiFe‣ayered Double Hydroxide Nanosheets for Efficient Electrocatalytic Water Oxidation. Advanced Energy Materials, 2019, 9, 1900881.	19.5	363
1162	MOFs derived metallic cobalt-zinc oxide@nitrogen-doped carbon/carbon nanotubes as a highly-efficient electrocatalyst for oxygen reduction reaction. Applied Surface Science, 2019, 487, 1049-1057.	6.1	27

#	άρτις ε	IF	CITATIONS
π	Ultrathin MoSSe alloy nanosheets anchored on carbon nanotubes as advanced catalysts for		CHAHONS
1163	hydrogen evolution. International Journal of Hydrogen Energy, 2019, 44, 16110-16119.	7.1	23
1164	Oneâ€Pot Synthesis of Co(OH) 2 ―and/or Co 3 O 4 â€Decorated Cobaltâ€Doped ZnO Nanorod Arrays and Their Potential as (Photoâ€)Anode Materials. ChemistrySelect, 2019, 4, 5033-5043.	1.5	0
1165	Fe ₃ C o Nanoparticles Encapsulated in a Hierarchical Structure of Nâ€Doped Carbon as a Multifunctional Electrocatalyst for ORR, OER, and HER. Advanced Functional Materials, 2019, 29, 1901949.	14.9	297
1166	Impact of morphology on the oxygen evolution reaction of 3D hollow Cobalt-Molybdenum Nitride. Applied Catalysis B: Environmental, 2019, 255, 117744.	20.2	107
1167	Electronic, mechanistic, and structural factors that influence the performance of molecular water oxidation catalysts anchored on electrode surfaces. Current Opinion in Electrochemistry, 2019, 15, 140-147.	4.8	15
1168	Metal-support interaction boosted electrocatalysis of ultrasmall iridium nanoparticles supported on nitrogen doped graphene for highly efficient water electrolysis in acidic and alkaline media. Nano Energy, 2019, 62, 117-126.	16.0	151
1169	Electrolyte Effects on the Stability of Niâ^'Mo Cathodes for the Hydrogen Evolution Reaction. ChemSusChem, 2019, 12, 3491-3500.	6.8	37
1170	The Holy Grail in Platinumâ€Free Electrocatalytic Hydrogen Evolution: Molybdenumâ€Based Catalysts and Recent Advances. ChemElectroChem, 2019, 6, 3570-3589.	3.4	72
1171	Recent Studies on Bifunctional Perovskite Electrocatalysts in Oxygen Evolution, Oxygen Reduction, and Hydrogen Evolution Reactions under Alkaline Electrolyte. Israel Journal of Chemistry, 2019, 59, 708-719.	2.3	12
1172	Intrinsically stable in situ generated electrocatalyst for long-term oxidation of acidic water at up to 80 °C. Nature Catalysis, 2019, 2, 457-465.	34.4	117
1173	Ru-RuO2/CNT hybrids as high-activity pH-universal electrocatalysts for water splitting within 0.73â€V in an asymmetric-electrolyte electrolyzer. Nano Energy, 2019, 61, 576-583.	16.0	151
1174	Chlorinated Graphene via the Photodecomposition of Metal Chlorides. ACS Sustainable Chemistry and Engineering, 2019, 7, 11024-11034.	6.7	6
1175	Metal–Organic Frameworks as Porous Templates for Enhanced Cobalt Oxide Electrocatalyst Performance. ACS Applied Energy Materials, 2019, 2, 3306-3313.	5.1	7
1176	Coupling a Low Loading of IrP ₂ , PtP ₂ , or Pd ₃ P with Heteroatom-Doped Nanocarbon for Overall Water-Splitting Cells and Zinc–Air Batteries. ACS Applied Materials & Interfaces, 2019, 11, 16461-16473.	8.0	38
1177	Transition Metal-Modified Exfoliated Zirconium Phosphate as an Electrocatalyst for the Oxygen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 3561-3567.	5.1	21
1178	>10% solar-to-hydrogen efficiency unassisted water splitting on ALD-protected silicon heterojunction solar cells. Sustainable Energy and Fuels, 2019, 3, 1490-1500.	4.9	25
1179	Optimization of active surface area of flower like MoS2 using V-doping towards enhanced hydrogen evolution reaction in acidic and basic medium. Applied Catalysis B: Environmental, 2019, 254, 432-442.	20.2	185
1180	Featherlike NiCoP Holey Nanoarrys for Efficient and Stable Seawater Splitting. ACS Applied Energy Materials, 2019, 2, 3910-3917.	5.1	102

#	Article	IF	CITATIONS
1181	Edge-Enhanced Oxygen Evolution Reactivity at Ultrathin, Au-Supported Fe ₂ O ₃ Electrocatalysts. ACS Catalysis, 2019, 9, 5375-5382.	11.2	46
1182	Three-Dimensional Dendritic Cu–Co–P Electrode by One-Step Electrodeposition on a Hydrogen Bubble Template for Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 10734-10741.	6.7	100
1183	The development of molecular water oxidation catalysts. Nature Reviews Chemistry, 2019, 3, 331-341.	30.2	230
1184	Heterogeneous molecular catalysts for electrocatalytic CO2 reduction. Nano Research, 2019, 12, 2093-2125.	10.4	172
1185	Single Atoms and Clusters Based Nanomaterials for Hydrogen Evolution, Oxygen Evolution Reactions, and Full Water Splitting. Advanced Energy Materials, 2019, 9, 1900624.	19.5	538
1186	Single phase of spinel Co ₂ RhO ₄ nanotubes with remarkably enhanced catalytic performance for the oxygen evolution reaction. Nanoscale, 2019, 11, 9287-9295.	5.6	23
1187	Ultrasmall MoP encapsulated in nitrogen-doped carbon hybrid frameworks for highly efficient hydrogen evolution reaction in both acid and alkaline solutions. Inorganic Chemistry Frontiers, 2019, 6, 1482-1489.	6.0	26
1188	A promising engineering strategy for water electro-oxidation iridate catalysts <i>via</i> coordination distortion. Chemical Communications, 2019, 55, 5801-5804.	4.1	24
1189	What would it take for renewably powered electrosynthesis to displace petrochemical processes?. Science, 2019, 364, .	12.6	1,505
1190	Coâ€Modified MoS ₂ Hybrids as Superior Bifunctional Electrocatalysts for Water Splitting Reactions: Integrating Multiple Active Components in One. Advanced Materials Interfaces, 2019, 6, 1900372.	3.7	22
1191	<i>In situ</i> growth of a POMOF-derived nitride based composite on Cu foam to produce hydrogen with enhanced water dissociation kinetics. Journal of Materials Chemistry A, 2019, 7, 13559-13566.	10.3	39
1192	Homogeneously Distributed NiFe Alloy Nanoparticles on 3D Carbon Fiber Network as a Bifunctional Electrocatalyst for Overall Water Splitting. ChemElectroChem, 2019, 6, 2497-2502.	3.4	31
1193	Coupling Co2P and CoP nanoparticles with copper ions incorporated Co9S8 nanowire arrays for synergistically boosting hydrogen evolution reaction electrocatalysis. Journal of Colloid and Interface Science, 2019, 550, 10-16.	9.4	47
1194	Enhancing the Performance of Ni-Mo Alkaline Hydrogen Evolution Electrocatalysts with Carbon Supports. ACS Applied Energy Materials, 2019, 2, 2524-2533.	5.1	43
1195	Operando Surface X-ray Diffraction Studies of Structurally Defined Co ₃ O ₄ and CoOOH Thin Films during Oxygen Evolution. ACS Catalysis, 2019, 9, 3811-3821.	11.2	93
1196	Stable Potential Windows for Longâ€Term Electrocatalysis by Manganese Oxides Under Acidic Conditions. Angewandte Chemie, 2019, 131, 5108-5112.	2.0	44
1197	Decoupling H ₂ (g) and O ₂ (g) Production in Water Splitting by a Solar-Driven V ^{3+/2+} (aq,H ₂ SO ₄) KOH(aq) Cell. ACS Energy Letters, 2019, 4, 968-976.	17.4	33
1198	Synthesis of ultrasmall and monodisperse sulfur nanoparticle intercalated CoAl layered double hydroxide and its electro-catalytic water oxidation reaction at neutral pH. Nanoscale, 2019, 11, 7560-7566.	5.6	16

#	Article	IF	Citations
1199	Identifying high-efficiency oxygen evolution electrocatalysts from Co–Ni–Cu based selenides through combinatorial electrodeposition. Journal of Materials Chemistry A, 2019, 7, 9877-9889.	10.3	80
1200	Heterogeneous electrocatalysts design for nitrogen reduction reaction under ambient conditions. Materials Today, 2019, 27, 69-90.	14.2	289
1201	2D Co-incorporated hydroxyapatite nanoarchitecture as a potential efficient oxygen evolution cocatalyst for boosting photoelectrochemical water splitting on Fe2O3 photoanode. Applied Catalysis B: Environmental, 2019, 250, 224-233.	20.2	58
1202	Ultrafine Metallic Nickel Domains and Reduced Molybdenum States Improve Oxygen Evolution Reaction of NiFeMo Electrocatalysts. Small, 2019, 15, e1804764.	10.0	35
1203	Mixed-Ligand-Architected 2D Co(II)-MOF Expressing a Novel Topology for an Efficient Photoanode for Water Oxidation Using Visible Light. ACS Applied Materials & Interfaces, 2019, 11, 13295-13303.	8.0	55
1204	Engineering MoS ₂ Basal Planes for Hydrogen Evolution via Synergistic Ruthenium Doping and Nanocarbon Hybridization. Advanced Science, 2019, 6, 1900090.	11.2	148
1205	Active Site Identification and Evaluation Criteria of In Situ Grown CoTe and NiTe Nanoarrays for Hydrogen Evolution and Oxygen Evolution Reactions. Small Methods, 2019, 3, 1900113.	8.6	78
1206	Three-dimensional graphene surface-mounted nickel-based metal organic framework for oxygen evolution reaction. Electrochimica Acta, 2019, 305, 338-348.	5.2	51
1207	Support and Interface Effects in Waterâ€Splitting Electrocatalysts. Advanced Materials, 2019, 31, e1808167.	21.0	531
1208	Polyoxometalate/Lead Composite Anode for Efficient Oxygen Evolution in Zinc Electrowinning. Journal of the Electrochemical Society, 2019, 166, E129-E136.	2.9	14
1209	Hybrid Films of Ni(OH) 2 Nanowall Networks on Reduced Graphene Oxide Prepared at a Liquid/Liquid Interface for Oxygen Evolution and Supercapacitor Applications. ChemistrySelect, 2019, 4, 2519-2528.	1.5	12
1210	Electrochemical Measurements as Screening Method for Water Oxidation Catalyst. PoliTO Springer Series, 2019, , 75-91.	0.5	0
1211	Effect of Surface Ligands on CoP for the Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 1642-1645.	5.1	32
1212	Highly Active Ir/TiO ₂ Electrodes for the Oxygen Evolution Reaction Using Atomic Layer Deposition on Ordered Porous Substrates. ACS Applied Energy Materials, 2019, 2, 2344-2349.	5.1	30
1213	Entropyâ€Maximized Synthesis of Multimetallic Nanoparticle Catalysts via a Ultrasonicationâ€Assisted Wet Chemistry Method under Ambient Conditions. Advanced Materials Interfaces, 2019, 6, 1900015.	3.7	130
1214	Electrospun cobalt-ZIF micro-fibers for efficient water oxidation under unique pH conditions. Catalysis Science and Technology, 2019, 9, 1847-1856.	4.1	43
1215	Rational construction of self-supported triangle-like MOF-derived hollow (Ni,Co)Se ₂ arrays for electrocatalysis and supercapacitors. Nanoscale, 2019, 11, 6401-6409.	5.6	122
1217	A Standâ€Alone Siâ€Based Porous Photoelectrochemical Cell. Advanced Energy Materials, 2019, 9, 1803548.	19.5	17

#	Article	IF	CITATIONS
1218	Nanopolyaniline Coupled with an Anticorrosive Graphene as a 3D Film Electrocatalyst for Efficient Oxidation of Toluene Methyl Câ''H Bonds and Hydrogen Production at Low Voltage. Chemistry - A European Journal, 2019, 25, 6963-6972.	3.3	4
1219	Formation of Branched Ruthenium Nanoparticles for Improved Electrocatalysis of Oxygen Evolution Reaction. Small, 2019, 15, e1804577.	10.0	54
1220	Increased nucleation sites in nickel foam for the synthesis of MoP@Ni3P/NF nanosheets for bifunctional water splitting. Applied Surface Science, 2019, 481, 1403-1411.	6.1	46
1221	Carbon sheet-decorated graphite felt electrode with high catalytic activity for vanadium redox flow batteries. Carbon, 2019, 148, 9-15.	10.3	40
1222	Co2Ni alloy/N-doped CNTs composite as efficient hydrogen evolution reaction catalyst in alkaline medium. Journal of Alloys and Compounds, 2019, 791, 779-785.	5.5	32
1223	Fluorineâ€Doped Tin Oxide/Alumina as Longâ€Term Robust Conducting Support for Earthâ€Abundant Water Oxidation Electrocatalysts. ChemElectroChem, 2019, 6, 2282-2289.	3.4	4
1224	Hydrogen evolution reaction catalyzed by platinum nanoislands decorated on three-dimensional nanocarbon hybrid. Ionics, 2019, 25, 3787-3797.	2.4	9
1225	Engineering the electronic structure of single atom Ru sites via compressive strain boosts acidic water oxidation electrocatalysis. Nature Catalysis, 2019, 2, 304-313.	34.4	757
1226	Recent progress in atomic layer deposition of molybdenum disulfide: a mini review. Science China Materials, 2019, 62, 913-924.	6.3	24
1227	A trinuclear cobalt-based coordination polymer as an efficient oxygen evolution electrocatalyst at neutral pH. Journal of Colloid and Interface Science, 2019, 545, 269-275.	9.4	22
1228	A robust ALD-protected silicon-based hybrid photoelectrode for hydrogen evolution under aqueous conditions. Chemical Science, 2019, 10, 4469-4475.	7.4	25
1229	Plasma enabled non-thermal phosphorization for nickel phosphide hydrogen evolution catalysts. Chemical Communications, 2019, 55, 4202-4205.	4.1	20
1230	Stable Potential Windows for Longâ€īerm Electrocatalysis by Manganese Oxides Under Acidic Conditions. Angewandte Chemie - International Edition, 2019, 58, 5054-5058.	13.8	182
1231	Toward practical solar hydrogen production – an artificial photosynthetic leaf-to-farm challenge. Chemical Society Reviews, 2019, 48, 1908-1971.	38.1	781
1232	High-performance electrolytic oxygen evolution with a seamless armor core–shell FeCoNi oxynitride. Nanoscale, 2019, 11, 7239-7246.	5.6	28
1233	Two-dimensional dual carbon-coupled defective nickel quantum dots towards highly efficient overall water splitting. Applied Catalysis B: Environmental, 2019, 250, 213-223.	20.2	101
1234	Amorphous Fe Co Ni oxide for oxygen evolution reaction. Materials Today Energy, 2019, 12, 311-317.	4.7	38
1235	Testing Novel Water Oxidation Catalysts for Solar Fuels Production. PoliTO Springer Series, 2019, , .	0.5	3

		CITATION REPORT		
#	Article		IF	Citations
1236	Ruthenium Nanoparticles for Catalytic Water Splitting. ChemSusChem, 2019, 12, 249	3-2514.	6.8	93
1237	The Role of Aluminum in Promoting Ni–Fe–OOH Electrocatalysts for the Oxygen E ACS Applied Energy Materials, 2019, 2, 3488-3499.	volution Reaction.	5.1	30
1238	A Roadmap to Low ost Hydrogen with Hydroxide Exchange Membrane Electrolyzers Materials, 2019, 31, e1805876.	s. Advanced	21.0	184
1239	Molecular Catalysts Immobilized on Semiconductor Photosensitizers for Proton Reduc Visible‣ightâ€Driven Overall Water Splitting. ChemSusChem, 2019, 12, 1807-1824.	tion toward	6.8	25
1240	IrW nanobranches as an advanced electrocatalyst for pH-universal overall water splittir Nanoscale, 2019, 11, 8898-8905.	ıg.	5.6	59
1241	Hierarchical hetero-Ni ₃ Se ₄ @NiFe LDH micro/nanosheets as bifunctional electrocatalysts with superior stability for overall water splitting. Nanoscal 2019, 4, 1132-1138.	efficient le Horizons,	8.0	100
1242	Nickel Foam Supported Co ₃ O ₄ @Ni ₃ Se _{4 Nanorod Arrays with Longâ€Term and Efficient Catalytic Performance for Water Splitti ChemNanoMat, 2019, 5, 814-819.}	Coreâ€ 5 hell ng.	2.8	8
1243	Ambient Fast Synthesis and Active Sites Deciphering of Hierarchical Foamâ€Like Trime Framework Nanostructures as a Platform for Highly Efficient Oxygen Evolution Electro Advanced Materials, 2019, 31, e1901139.	tal–Organic catalysis.	21.0	374
1244	Approaches for measuring the surface areas of metal oxide electrocatalysts for determ intrinsic electrocatalytic activity. Chemical Society Reviews, 2019, 48, 2518-2534.	ining their	38.1	483
1245	Tuning the coupling interface of ultrathin Ni ₃ S ₂ @NiV-LDH h nanosheet electrocatalysts for improved overall water splitting. Nanoscale, 2019, 11, 8	eterogeneous 8855-8863.	5.6	133
1246	Iridium-doped ZIFs-derived porous carbon-coated IrCo alloy as competent bifunctional overall water splitting in acid medium. Electrochimica Acta, 2019, 307, 206-213.	catalyst for	5.2	42
1247	Zn _{0.35} Co _{0.65} O – A Stable and Highly Active Oxygen Evol Formed by Zinc Leaching and Tetrahedral Coordinated Cobalt in Wurtzite Structure. A Materials, 2019, 9, 1900328.	ution Catalyst dvanced Energy	19.5	41
1248	Ternary mesoporous cobalt-iron-nickel oxide efficiently catalyzing oxygen/hydrogen ever reactions and overall water splitting. Nano Research, 2019, 12, 2281-2287.	olution	10.4	59
1249	Hierarchical heterostructure based on molybdenum dichalcogenide nanosheets asseml doped graphene layers for efficient hydrogen evolution reaction. Materials Research Bu 115, 201-210.	bled nitrogen Illetin, 2019,	5.2	12
1250	Cobalt-doped hematite thin films for electrocatalytic water oxidation in highly acidic m Communications, 2019, 55, 5017-5020.	edia. Chemical	4.1	24
1251	Nanostructured Rhenium–Carbon Composites as Hydrogen-Evolving Catalysts Effect Entire pH Range. ACS Applied Nano Materials, 2019, 2, 2725-2733.	tive over the	5.0	24
1252	Self-reconstruction in 2D nickel thiophosphate nanosheets to boost oxygen evolution Applied Surface Science, 2019, 484, 54-61.	reaction.	6.1	23
1253	Integrated Valorization of Desalination Brine through NaOH Recovery: Opportunities a Angewandte Chemie - International Edition, 2019, 58, 6502-6511.	nd Challenges.	13.8	30

#	Article	IF	CITATIONS
1254	Hierarchical microsphere of MoNi porous nanosheets as electrocatalyst and cocatalyst for hydrogen evolution reaction. Applied Catalysis B: Environmental, 2019, 249, 98-105.	20.2	98
1255	Rational Design of Nanoarray Architectures for Electrocatalytic Water Splitting. Advanced Functional Materials, 2019, 29, 1808367.	14.9	298
1256	Recommended Practices and Benchmark Activity for Hydrogen and Oxygen Electrocatalysis in Water Splitting and Fuel Cells. Advanced Materials, 2019, 31, e1806296.	21.0	841
1257	Integrated Valorization of Desalination Brine through NaOH Recovery: Opportunities and Challenges. Angewandte Chemie, 2019, 131, 6570-6579.	2.0	8
1258	Bifunctional cobalt phosphide nanoparticles with convertible surface structure for efficient electrocatalytic water splitting in alkaline solution. Journal of Catalysis, 2019, 371, 262-269.	6.2	45
1259	NiFeOx nanosheets tight-coupled with Bi2WO6 nanosheets to improve the electrocatalyst for oxygen evolution reaction. Applied Surface Science, 2019, 478, 969-980.	6.1	17
1260	Black Silicon Photoanodes Entirely Prepared with Abundant Materials by Low-Cost Wet Methods. ACS Applied Energy Materials, 2019, 2, 1006-1010.	5.1	19
1261	Modular Design of Nobleâ€Metalâ€Free Mixed Metal Oxide Electrocatalysts for Complete Water Splitting. Angewandte Chemie - International Edition, 2019, 58, 4644-4648.	13.8	182
1262	Decoupling structure-sensitive deactivation mechanisms of Ir/IrOx electrocatalysts toward oxygen evolution reaction. Journal of Catalysis, 2019, 371, 57-70.	6.2	70
1263	Remote ion-pair interactions in Fe-porphyrin-based molecular catalysts for the hydrogen evolution reaction. Catalysis Science and Technology, 2019, 9, 1301-1308.	4.1	24
1264	Modular Design of Nobleâ€Metalâ€Free Mixed Metal Oxide Electrocatalysts for Complete Water Splitting. Angewandte Chemie, 2019, 131, 4692-4696.	2.0	19
1265	Strong-coupled CoOx nanoparticles/Bi2WO6 nanosheets hybrid as electrocatalyst for water oxidation under alkaline conditions. Materials Research Bulletin, 2019, 113, 152-160.	5.2	18
1266	Metal-organic framework derived Co3O4/MoS2 heterostructure for efficient bifunctional electrocatalysts for oxygen evolution reaction and hydrogen evolution reaction. Applied Catalysis B: Environmental, 2019, 248, 202-210.	20.2	309
1267	Constituent-tunable ternary CoM _{2x} Se _{2(1â^'x)} (M = Te, S) sandwich-like graphitized carbon-based composites as highly efficient electrocatalysts for water splitting. Nanoscale, 2019, 11, 6108-6119.	5.6	10
1268	A new metal–organic open framework enabling facile synthesis of carbon encapsulated transition metal phosphide/sulfide nanoparticle electrocatalysts. Journal of Materials Chemistry A, 2019, 7, 7168-7178.	10.3	50
1269	Axial Ligand Effects of Ruâ€BDA Complexes in the O–O Bond Formation via the I2M Bimolecular Mechanism in Water Oxidation Catalysis. European Journal of Inorganic Chemistry, 2019, 2019, 2101-2108.	2.0	26
1270	Amorphous Ni-Nb-Y Alloys as Hydrogen Evolution Electrocatalysts. Electrocatalysis, 2019, 10, 243-252.	3.0	18
1271	Seven Coordinated Molecular Ruthenium–Water Oxidation Catalysts: A Coordination Chemistry Journey. Chemical Reviews, 2019, 119, 3453-3471.	47.7	148

#	Article	IF	CITATIONS
1272	Beyond Colloidal Synthesis: Nanofiber Reactor to Design Self-Supported Core–Shell Pd ₁₆ S ₇ /MoS ₂ /CNFs Electrode for Efficient and Durable Hydrogen Evolution Catalysis. ACS Applied Energy Materials, 2019, 2, 2013-2021.	5.1	15
1273	Trifunctional Electrocatalysis on Dualâ€Doped Graphene Nanorings–Integrated Boxes for Efficient Water Splitting and Zn–Air Batteries. Advanced Energy Materials, 2019, 9, 1803867.	19.5	173
1274	Nickel sulfide nanostructures prepared by laser irradiation for efficient electrocatalytic hydrogen evolution reaction and supercapacitors. Chemical Engineering Journal, 2019, 367, 115-122.	12.7	90
1275	Ruthenium Oxide Nanosheets for Enhanced Oxygen Evolution Catalysis in Acidic Medium. Advanced Energy Materials, 2019, 9, 1803795.	19.5	147
1276	Recent Advances in the Development of Molecular Catalystâ€Based Anodes for Water Oxidation toward Artificial Photosynthesis. ChemSusChem, 2019, 12, 1775-1793.	6.8	60
1277	Silicon Thin Films: Functional Materials for Energy, Healthcare, and IT Applications. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800847.	1.8	1
1278	Direct electrosynthesis of sodium hydroxide and hydrochloric acid from brine streams. Nature Catalysis, 2019, 2, 106-113.	34.4	65
1279	Electrochemical flow cell enabling <i>operando</i> probing of electrocatalyst surfaces by X-ray spectroscopy and diffraction. Physical Chemistry Chemical Physics, 2019, 21, 5402-5408.	2.8	38
1280	Fabrication of dispersive α-Co(OH)2 nanosheets on graphene nanoribbons for boosting their oxygen evolution performance. Journal of Materials Science, 2019, 54, 7692-7701.	3.7	18
1281	Tip-Welded Ternary FeCo ₂ S ₄ Nanotube Arrays on Carbon Cloth as Binder-Free Electrocatalysts for Highly Efficient Oxygen Evolution. ACS Sustainable Chemistry and Engineering, 2019, 7, 19426-19433.	6.7	32
1282	An efficient and stable photoelectrochemical system with 9% solar-to-hydrogen conversion efficiency via InGaP/GaAs double junction. Nature Communications, 2019, 10, 5282.	12.8	98
1283	Niobium-based semiconductor electrodes for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 31940-31948.	7.1	5
1284	Promoting Electrocatalytic Oxygen Evolution over Transition-Metal Phosphide-Based Nanocomposites via Architectural and Electronic Engineering. ACS Applied Materials & Interfaces, 2019, 11, 46825-46838.	8.0	34
1285	From a layered iridium(<scp>iii</scp>)–cobalt(<scp>ii</scp>) organophosphonate to an efficient oxygen-evolution-reaction electrocatalyst. Chemical Communications, 2019, 55, 13920-13923.	4.1	15
1286	Intermetallic compounds with high hydrogen evolution reaction performance: a case study of a MCo ₂ (M = Ti, Zr, Hf and Sc) series. Chemical Communications, 2019, 55, 14406-14409.	4.1	23
1287	Coupled nanocomposite Co _{5.47} N–Co ₃ Fe ₇ inlaid in a tremella-like carbon framework as a highly efficient multifunctional electrocatalyst for oxygen transformation and overall water splitting. Sustainable Energy and Fuels, 2019, 3, 3538-3549.	4.9	12
1288	FeP ₃ monolayer as a high-efficiency catalyst for hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 25665-25671.	10.3	43
1289	Carbon fibre paper coated by a layered manganese oxide: a nano-structured electrocatalyst for water-oxidation with high activity over a very wide pH range. Journal of Materials Chemistry A, 2019, 7, 25333-25346.	10.3	22

\sim			~	
	ΙΤΔΤΙ	ON	RED	UDL
\sim	$\Pi \cap \Pi$		IVEL 1	

#	Article	IF	CITATIONS
1290	Constructing Mono-/Di-/Tri-Types of Active Sites in MoS ₂ Film toward Understanding Their Electrocatalytic Activity for the Hydrogen Evolution. ACS Applied Energy Materials, 2019, 2, 8974-8984.	5.1	8
1291	Nitrogen-Plasma-Treated Continuous Monolayer MoS ₂ for Improving Hydrogen Evolution Reaction. ACS Omega, 2019, 4, 21509-21515.	3.5	34
1292	Hierarchical Multiporous Nickel for Oxygen Evolution Reaction in Alkaline Media. ChemCatChem, 2019, 11, 5834-5834.	3.7	2
1293	Charge-Transfer Effects in Fe–Co and Fe–Co–Y Oxides for Electrocatalytic Water Oxidation Reaction. ACS Applied Energy Materials, 2019, 2, 8903-8911.	5.1	21
1294	High-performance Fe–Co–Sn oxide electrocatalysts for oxygen evolution reaction. Materials Today Energy, 2019, 14, 100364.	4.7	7
1295	Photoelectrochemical water oxidation in α-Fe2O3 thin films enhanced by a controllable wet-chemical Ti-doping strategy and Co–Pi co-catalyst modification. Journal of Materials Science: Materials in Electronics, 2019, 30, 21444-21453.	2.2	19
1296	Dynamic Tuning of a Thin Film Electrocatalyst by Tensile Strain. Scientific Reports, 2019, 9, 15906.	3.3	21
1297	A general synthesis approach for amorphous noble metal nanosheets. Nature Communications, 2019, 10, 4855.	12.8	321
1298	A non-precious metal hydrogen catalyst in a commercial polymer electrolyte membrane electrolyser. Nature Nanotechnology, 2019, 14, 1071-1074.	31.5	209
1299	Ir nanoparticles with ultrahigh dispersion as oxygen evolution reaction (OER) catalysts: synthesis and activity benchmarking. Catalysis Science and Technology, 2019, 9, 6345-6356.	4.1	61
1300	An iron-doped cobalt phosphide nano-electrocatalyst derived from a metal–organic framework for efficient water splitting. Dalton Transactions, 2019, 48, 16555-16561.	3.3	51
1301	A methodological review on material growth and synthesis of solar-driven water splitting photoelectrochemical cells. RSC Advances, 2019, 9, 30112-30124.	3.6	24
1302	Nickel foam and stainless steel mesh as electrocatalysts for hydrogen evolution reaction, oxygen evolution reaction and overall water splitting in alkaline media. RSC Advances, 2019, 9, 31563-31571.	3.6	151
1303	Selective acid leaching: a simple way to engineer cobalt oxide nanostructures for the electrochemical oxygen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 23130-23139.	10.3	29
1304	Multiple modulations of pyrite nickel sulfides <i>via</i> metal heteroatom doping engineering for boosting alkaline and neutral hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 25628-25640.	10.3	69
1305	Single nickel atom supported on hybridized graphene–boron nitride nanosheet as a highly active bi-functional electrocatalyst for hydrogen and oxygen evolution reactions. Journal of Materials Chemistry A, 2019, 7, 26261-26265.	10.3	44
1306	Revisiting O–O Bond Formation through Outer‧phere Water Molecules versus Bimolecular Mechanisms in Waterâ€Oxidation Catalysis (WOC) by Cp*Ir Based Complexes. European Journal of Inorganic Chemistry, 2019, 2019, 2093-2100.	2.0	4
1307	Amorphous cerium phosphate on P-doped Fe2O3 nanosheets for efficient photoelectrochemical water oxidation. Chemical Engineering Journal, 2019, 355, 910-919.	12.7	87

#	Article	IF	CITATIONS
1308	Unique NiFe NiCoO2 hollow polyhedron as bifunctional electrocatalysts for water splitting. Journal of Energy Chemistry, 2019, 33, 74-80.	12.9	61
1309	Cu-Ni-CoSex quaternary porous nanocubes as enhanced Pt-free electrocatalysts for highly efficient dye-sensitized solar cells and hydrogen evolution in alkaline medium. Chemical Engineering Journal, 2019, 357, 11-20.	12.7	47
1310	Facile synthesis of jagged Au/Ir nanochains with superior electrocatalytic activity for oxygen evolution reaction. Applied Surface Science, 2019, 463, 58-65.	6.1	10
1311	Ultrathin Feâ€Nâ€C Nanosheets Coordinated Feâ€Doped CoNi Alloy Nanoparticles for Electrochemical Water Splitting. Particle and Particle Systems Characterization, 2019, 36, 1800252.	2.3	21
1312	3-D CdS@NiCo layered double hydroxide core-shell photoelectrocatalyst used for efficient overall water splitting. Applied Catalysis B: Environmental, 2019, 241, 28-40.	20.2	70
1313	Ruthenium Nanoparticles Supported on Carbon Microfibers for Hydrogen Evolution Electrocatalysis. European Journal of Inorganic Chemistry, 2019, 2019, 2071-2077.	2.0	16
1314	Imidazole for Pyridine Substitution Leads to Enhanced Activity Under Milder Conditions in Cobalt Water Oxidation Electrocatalysis. Inorganic Chemistry, 2019, 58, 1391-1397.	4.0	26
1315	Electrochemical Water Oxidation in Acidic Solution Using Titanium Diboride (TiB ₂) Catalyst. ChemCatChem, 2019, 11, 3877-3881.	3.7	24
1316	Epitaxial growth of oriented prussian blue analogue derived well-aligned CoFe2O4 thin film for efficient oxygen evolution reaction. Applied Catalysis B: Environmental, 2019, 245, 1-9.	20.2	128
1317	Novel cobalt-fumarate framework as a robust and efficient electrocatalyst for water oxidation at neutral pH. Electrochimica Acta, 2019, 298, 248-253.	5.2	17
1318	Record-high solar-to-hydrogen conversion efficiency based on a monolithic all-silicon triple-junction IBC solar cell. Solar Energy Materials and Solar Cells, 2019, 191, 422-426.	6.2	15
1319	Computational Electrochemistry of Water Oxidation on Metalâ€Doped and Metalâ€Supported Defective hâ€BN. ChemSusChem, 2019, 12, 1995-2007.	6.8	12
1320	Charge-Redistribution-Enhanced Nanocrystalline Ru@IrOx Electrocatalysts for Oxygen Evolution in Acidic Media. CheM, 2019, 5, 445-459.	11.7	354
1321	Molybdenum carbide in-situ embedded into carbon nanosheets as efficient bifunctional electrocatalysts for overall water splitting. Electrochimica Acta, 2019, 298, 305-312.	5.2	66
1322	Virus-templated Pt–Ni(OH)2 nanonetworks for enhanced electrocatalytic reduction of water. Nano Energy, 2019, 58, 167-174.	16.0	46
1323	Highly exposed ruthenium-based electrocatalysts from bimetallic metal-organic frameworks for overall water splitting. Nano Energy, 2019, 58, 1-10.	16.0	181
1324	Photoelectrochemical hydrogen production from water splitting using heterostructured nanowire arrays of Bi2O3/BiAl oxides as a photocathode. Solar Energy Materials and Solar Cells, 2019, 194, 276-284.	6.2	28
1325	Ni/Al Layered Double Hydroxide and Carbon Nanomaterial Composites for Glucose Sensing. ACS Applied Nano Materials, 2019, 2, 143-155.	5.0	29
#	Article	IF	CITATIONS
------	--	------	-----------
1326	Trimetallic Molybdate Nanobelts as Active and Stable Electrocatalysts for the Oxygen Evolution Reaction. ACS Catalysis, 2019, 9, 1013-1018.	11.2	59
1327	Applications of 2D MXenes in energy conversion and storage systems. Chemical Society Reviews, 2019, 48, 72-133.	38.1	1,354
1328	Recent advances in one-dimensional nanostructures for energy electrocatalysis. Chinese Journal of Catalysis, 2019, 40, 4-22.	14.0	48
1329	Rational Design and Construction of Cocatalysts for Semiconductorâ€Based Photoâ€Electrochemical Oxygen Evolution: A Comprehensive Review. Advanced Science, 2019, 6, 1801505.	11.2	120
1330	Modulated electrochemical oxygen evolution catalyzed by MoS ₂ nanoflakes from atomic layer deposition. Nanotechnology, 2019, 30, 095402.	2.6	22
1331	Direct synthesis of parallel doped N-MoP/N-CNT as highly active hydrogen evolution reaction catalyst. Science China Materials, 2019, 62, 690-698.	6.3	21
1332	Plasma Hydrogenated TiO ₂ /Nickel Foam as an Efficient Bifunctional Electrocatalyst for Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2019, 7, 885-894.	6.7	40
1333	Boosting the Single-Pass Conversion for Renewable Chemical Electrosynthesis. Joule, 2019, 3, 13-15.	24.0	51
1334	Iridiumâ€Based Catalysts for Solid Polymer Electrolyte Electrocatalytic Water Splitting. ChemSusChem, 2019, 12, 1576-1590.	6.8	111
1335	Monitoring oxygen-vacancy ratio in NiFe-based electrocatalysts during oxygen evolution reaction in alkaline electrolyte. Journal of Industrial and Engineering Chemistry, 2019, 72, 273-280.	5.8	17
1336	Engineering an Earthâ€Abundant Elementâ€Based Bifunctional Electrocatalyst for Highly Efficient and Durable Overall Water Splitting. Advanced Functional Materials, 2019, 29, 1807031.	14.9	146
1337	Three-Dimensional Nanoporous Co ₉ S ₄ P ₄ Pentlandite as a Bifunctional Electrocatalyst for Overall Neutral Water Splitting. ACS Applied Materials & Interfaces, 2019, 11, 3880-3888.	8.0	73
1338	Tailored Assembly of Molecular Water Oxidation Catalysts on Photoelectrodes for Artificial Photosynthesis. European Journal of Inorganic Chemistry, 2019, 2019, 2040-2057.	2.0	28
1339	Atomic Layer Deposition of NiOOH/Ni(OH) ₂ on PIMâ€1â€Based Nâ€Doped Carbon Nanofibers for Electrochemical Water Splitting in Alkaline Medium. ChemSusChem, 2019, 12, 1469-1477.	6.8	54
1340	AgPd Alloy Nanoparticles Decorated MoS ₂ 2D Nanosheets: Efficient Hydrogen Evolution Catalyst in Wide pH Condition. ChemistrySelect, 2019, 4, 378-386.	1.5	8
1341	Carbon nanotubes sheathed in lead for the oxygen evolution in zinc electrowinning. Journal of Applied Electrochemistry, 2019, 49, 67-77.	2.9	10
1342	Water oxidation with inhomogeneous metal-silicon interfaces. Current Opinion in Colloid and Interface Science, 2019, 39, 40-50.	7.4	34
1343	rGO supported NiWO4 nanocomposites for hydrogen evolution reactions. Materials Letters, 2019, 240, 51-54.	2.6	52

#	Article	IF	CITATIONS
1344	High Pressure Electrochemical Reduction of CO ₂ to Formic Acid/Formate: A Comparison between Bipolar Membranes and Cation Exchange Membranes. Industrial & Engineering Chemistry Research, 2019, 58, 1834-1847.	3.7	116
1345	Nanostructuring Strategies To Increase the Photoelectrochemical Water Splitting Activity of Silicon Photocathodes. ACS Applied Nano Materials, 2019, 2, 6-11.	5.0	19
1346	Helical cobalt borophosphates to master durable overall water-splitting. Energy and Environmental Science, 2019, 12, 988-999.	30.8	179
1347	Green synthesis of NiFe LDH/Ni foam at room temperature for highly efficient electrocatalytic oxygen evolution reaction. Science China Materials, 2019, 62, 681-689.	6.3	70
1348	RuO2 nanocluster as a 4-in-1 electrocatalyst for hydrogen and oxygen electrochemistry. Nano Energy, 2019, 55, 49-58.	16.0	66
1349	Topotactic Transformations in an Icosahedral Nanocrystal to Form Efficient Water‧plitting Catalysts. Advanced Materials, 2019, 31, e1805546.	21.0	76
1350	Rapid identification of homogeneous O2 evolution catalysts and comparative studies of Ru(II)-carboxamides vs. Ru(II)-carboxylates in water-oxidation. Journal of Catalysis, 2019, 369, 10-20.	6.2	11
1351	Stability and Catalytic Performance of Reconstructed Fe ₃ O ₄ (001) and Fe ₃ O ₄ (110) Surfaces during Oxygen Evolution Reaction. Journal of Physical Chemistry C, 2019, 123, 8304-8311.	3.1	30
1352	Design of Noble Metal Electrocatalysts on an Atomic Level. ChemElectroChem, 2019, 6, 289-303.	3.4	46
1353	Rapid low-temperature synthesis of hollow CuS0.55 nanoparticles for efficient electrocatalytic water oxidation. Chemical Engineering Science, 2019, 195, 665-670.	3.8	28
1354	Stability of vapor phase water electrolysis cell with anion exchange membrane. Catalysis Today, 2019, 334, 243-248.	4.4	5
1355	Hierarchical Cobalt Sulfide/Molybdenum Sulfide Heterostructure as Bifunctional Electrocatalyst towards Overall Water Splitting. ChemElectroChem, 2019, 6, 430-438.	3.4	49
1356	Nickel Foam‣upported CoCO 3 @CoSe Nanowires with a Heterostructure Interface for Overall Water Splitting with Low Overpotential and High Efficiency. Energy Technology, 2019, 7, 1800741.	3.8	13
1357	Ultrasmall Abundant Metal-Based Clusters as Oxygen-Evolving Catalysts. Journal of the American Chemical Society, 2019, 141, 232-239.	13.7	56
1358	One-step and scalable synthesis of Ni2P nanocrystals encapsulated in N,P-codoped hierarchically porous carbon matrix using a bipyridine and phosphonate linked nickel metal–organic framework as highly efficient electrocatalysts for overall water splitting. Electrochimica Acta, 2019, 297, 755-766.	5.2	44
1359	Hierarchical design and development of nanostructured trifunctional catalysts for electrochemical oxygen and hydrogen reactions. Nano Energy, 2019, 56, 724-732.	16.0	51
1360	A Tannic Acid–Derived Nâ€, Pâ€Codoped Carbonâ€Supported Ironâ€Based Nanocomposite as an Advanced Trifunctional Electrocatalyst for the Overall Water Splitting Cells and Zinc–Air Batteries. Advanced Energy Materials, 2019, 9, 1803312.	19.5	209
1361	Highly Efficient Hydrogen Production Using a Reformed Electrolysis System Driven by a Single Perovskite Solar Cell. ChemSusChem, 2019, 12, 434-440.	6.8	12

#	Article	IF	CITATIONS
1362	β-Mo2C/N, P-co-doped carbon as highly efficient catalyst for hydrogen evolution reaction. Journal of Materials Science, 2019, 54, 4589-4600.	3.7	18
1363	How does cobalt phosphate modify the structure of TiO2 nanotube array photoanodes for solar water splitting?. Catalysis Today, 2019, 335, 306-311.	4.4	3
1364	Multimetal Borides Nanochains as Efficient Electrocatalysts for Overall Water Splitting. Small, 2019, 15, e1804212.	10.0	135
1365	Influence of Cr doping on the oxygen evolution potential of SnO2/Ti and Sb-SnO2/Ti electrodes. Journal of Electroanalytical Chemistry, 2019, 832, 436-443.	3.8	37
1366	Datura-like Ni-HG-rGO as highly efficient electrocatalyst for hydrogen evolution reaction in alkaline conditions. Journal of Colloid and Interface Science, 2019, 535, 75-83.	9.4	23
1367	Ruthenium coordinated with triphenylphosphine-hyper-crosslinked polymer: An efficient catalyst for hydrogen evolution reaction and hydrolysis of ammonia borane. Applied Surface Science, 2019, 466, 193-201.	6.1	48
1368	MOF derived N-doped carbon coated CoP particle/carbon nanotube composite for efficient oxygen evolution reaction. Carbon, 2019, 141, 643-651.	10.3	192
1369	In-situ formation of hierarchical 1D-3D hybridized carbon nanostructure supported nonnoble transition metals for efficient electrocatalysis of oxygen reaction. Applied Catalysis B: Environmental, 2019, 243, 151-160.	20.2	66
1370	A New Defectâ€Rich CoGa Layered Double Hydroxide as Efficient and Stable Oxygen Evolution Electrocatalyst. Small Methods, 2019, 3, 1800286.	8.6	41
1371	Synthesis, characterization and photocatalytic performance of p-type carbon nitride. Applied Catalysis B: Environmental, 2019, 242, 121-131.	20.2	33
1372	Construction of surface lattice oxygen in metallic Nâ^'CuCoS1.97 porous nanowire for wearable Znâ^'air battery. Journal of Energy Chemistry, 2019, 34, 1-9.	12.9	15
1373	Electrocatalytic water splitting at nitrogen-doped carbon layers-encapsulated nickel cobalt selenide. Journal of Energy Chemistry, 2019, 34, 161-170.	12.9	31
1374	Recent progress on earth abundant electrocatalysts for hydrogen evolution reaction (HER) in alkaline medium to achieve efficient water splitting – A review. Journal of Energy Chemistry, 2019, 34, 111-160.	12.9	323
1375	Ultrathin Graphdiyne-Wrapped Iron Carbonate Hydroxide Nanosheets toward Efficient Water Splitting. ACS Applied Materials & Interfaces, 2019, 11, 2618-2625.	8.0	73
1376	N, P dual-doped hollow carbon spheres supported MoS2 hybrid electrocatalyst for enhanced hydrogen evolution reaction. Catalysis Today, 2019, 330, 259-267.	4.4	39
1377	Application of X-ray photoelectron spectroscopy to studies of electrodes in fuel cells and electrolyzers. Journal of Electron Spectroscopy and Related Phenomena, 2019, 231, 127-139.	1.7	21
1378	Recent advances in heterogeneous Mn-based electrocatalysts toward biological photosynthetic Mn4Ca cluster. Catalysis Today, 2020, 353, 232-241.	4.4	9
1379	Recent Development of Ni/Feâ€Based Micro/Nanostructures toward Photo/Electrochemical Water Oxidation. Advanced Energy Materials, 2020, 10, 1900954.	19.5	358

#	Article	IF	CITATIONS
1380	Mn promotion of rutile TiO2-RuO2 anodes for water oxidation in acidic media. Applied Catalysis B: Environmental, 2020, 261, 118225.	20.2	53
1381	Size-dependent catalytic activity of cobalt phosphides for hydrogen evolution reaction. Journal of Energy Chemistry, 2020, 43, 121-128.	12.9	51
1382	Serpentine CoxNi3-xGe2O5(OH)4 nanosheets with tuned electronic energy bands for highly efficient oxygen evolution reaction in alkaline and neutral electrolytes. Applied Catalysis B: Environmental, 2020, 260, 118184.	20.2	28
1383	Coupling efficient biomass upgrading with H ₂ production <i>via</i> bifunctional Cu _x S@NiCo-LDH core–shell nanoarray electrocatalysts. Journal of Materials Chemistry A, 2020, 8, 1138-1146.	10.3	132
1384	A ternary nanostructured α-Fe2O3/Au/TiO2 photoanode with reconstructed interfaces for efficient photoelectrocatalytic water splitting. Applied Catalysis B: Environmental, 2020, 260, 118206.	20.2	72
1385	Metal-organic framework derived carbon materials for electrocatalytic oxygen reactions: Recent progress and future perspectives. Carbon, 2020, 156, 77-92.	10.3	149
1386	MOF-derived Co9S8/MoS2 embedded in tri-doped carbon hybrids for efficient electrocatalytic hydrogen evolution. Journal of Energy Chemistry, 2020, 44, 90-96.	12.9	32
1387	A current perspective for photocatalysis towards the hydrogen production from biomass-derived organic substances and water. International Journal of Hydrogen Energy, 2020, 45, 18144-18159.	7.1	83
1388	First-row transition metal polypyridine complexes that catalyze proton to hydrogen reduction. Coordination Chemistry Reviews, 2020, 402, 213079.	18.8	66
1389	Borate crosslinking synthesis of structure tailored carbon-based bifunctional electrocatalysts directly from guar gum hydrogels for efficient overall water splitting. Carbon, 2020, 157, 153-163.	10.3	30
1390	An Engineered Superhydrophilic/Superaerophobic Electrocatalyst Composed of the Supported CoMoS _{<i>x</i>} Chalcogel for Overall Water Splitting. Angewandte Chemie, 2020, 132, 1676-1682.	2.0	12
1391	N, S-codoped graphene loaded Ni-Co bimetal sulfides for enhanced oxygen evolution activity. Applied Surface Science, 2020, 503, 144146.	6.1	41
1392	Ni-Fe-Cr-Oxides: An Efficient Catalyst Activated by Visible Light for the Oxygen Evolution Reaction. Zeitschrift Fur Physikalische Chemie, 2020, 234, 633-643.	2.8	5
1393	Self-supported Ni2P nanosheets on low-cost three-dimensional Fe foam as a novel electrocatalyst for efficient water oxidation. Journal of Energy Chemistry, 2020, 42, 71-76.	12.9	44
1394	Facile microwave approach towards high performance MoS2/graphene nanocomposite for hydrogen evolution reaction. Science China Materials, 2020, 63, 62-74.	6.3	38
1395	Highly efficient Ni nanotube arrays and Ni nanotube arrays coupled with NiFe layered-double-hydroxide electrocatalysts for overall water splitting. Journal of Power Sources, 2020, 448, 227434.	7.8	41
1396	Metal-organic framework-derived nanocomposites for electrocatalytic hydrogen evolution reaction. Progress in Materials Science, 2020, 108, 100618.	32.8	220
1397	Stannites – A New Promising Class of Durable Electrocatalysts for Efficient Water Oxidation. ChemCatChem, 2020, 12, 1161-1168.	3.7	18

#	Article	IF	CITATIONS
1398	Charge Transfer Engineering via Multiple Heteroatom Doping in Dual Carbon-Coupled Cobalt Phosphides for Highly Efficient Overall Water Splitting. Applied Catalysis B: Environmental, 2020, 268, 118404.	20.2	73
1399	Interface engineering in transition metal carbides for electrocatalytic hydrogen generation and nitrogen fixation. Materials Horizons, 2020, 7, 32-53.	12.2	61
1400	Self-supported iron-doping NiSe2 nanowrinkles as bifunctional electrocatalysts for electrochemical water splitting. Journal of Alloys and Compounds, 2020, 818, 152833.	5.5	25
1401	Chemical and structural engineering of transition metal boride towards excellent and sustainable hydrogen evolution reaction. Nano Energy, 2020, 67, 104245.	16.0	79
1402	Coral-like hierarchical architecture self-assembled by cobalt hexacyanoferrate nanocrystals and N-doped carbon nanoplatelets as efficient electrocatalyst for oxygen evolution reaction. Journal of Colloid and Interface Science, 2020, 558, 190-199.	9.4	21
1403	Walnut shell-derived hierarchical porous carbon with high performances for electrocatalytic hydrogen evolution and symmetry supercapacitors. International Journal of Hydrogen Energy, 2020, 45, 443-451.	7.1	55
1404	An Engineered Superhydrophilic/Superaerophobic Electrocatalyst Composed of the Supported CoMoS _{<i>x</i>} Chalcogel for Overall Water Splitting. Angewandte Chemie - International Edition, 2020, 59, 1659-1665.	13.8	268
1405	Three-dimensional mesoporous Ir–Ru binary oxides with improved activity and stability for water electrolysis. Catalysis Today, 2020, 352, 39-46.	4.4	30
1406	Photoelectrochemical Water Splitting using Adapted Silicon Based Multi-Junction Solar Cell Structures: Development of Solar Cells and Catalysts, Upscaling of Combined Photovoltaic-Electrochemical Devices and Performance Stability. Zeitschrift Fur Physikalische Chemie, 2020, 234, 1055-1095.	2.8	19
1408	Dealloying Generation of Oxygen Vacancies in the Amorphous Nanoporous Ni–Mo–O for Superior Electrocatalytic Hydrogen Generation. ACS Applied Energy Materials, 2020, 3, 1319-1327.	5.1	28
1409	CoP/Nâ€Ðoped Carbon Nanowire Derived from Coâ€Based Coordination Polymer as Efficient Electrocatalyst toward Oxygen Evolution Reaction. Energy Technology, 2020, 8, 1901419.	3.8	5
1410	Structure Engineering of MoS ₂ via Simultaneous Oxygen and Phosphorus Incorporation for Improved Hydrogen Evolution. Small, 2020, 16, e1905738.	10.0	112
1411	MoS2-supported on free-standing TiO2-nanotubes for efficient hydrogen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 4468-4480.	7.1	14
1412	Rational design of Cu–Co thiospinel ternary sheet arrays for highly efficient electrocatalytic water splitting. Journal of Materials Chemistry A, 2020, 8, 1799-1807.	10.3	48
1413	Nanoconfined Synthesis of Nitrogen-Rich Metal-Free Mesoporous Carbon Nitride Electrocatalyst for the Oxygen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 1439-1447.	5.1	29
1414	Water-Oxidation Electrocatalysis by Manganese Oxides: Syntheses, Electrode Preparations, Electrolytes and Two Fundamental Questions. Zeitschrift Fur Physikalische Chemie, 2020, 234, 925-978.	2.8	41
1415	Decoupled Photoelectrochemical Water Splitting System for Centralized Hydrogen Production. Joule, 2020, 4, 448-471.	24.0	91
1416	Polymorphs of a copper coordination compound: interlinking active sites enhance the electrocatalytic activity of the coordination polymer compared to the coordination complex.	2.6	16

#	Article	IF	CITATIONS
1417	Different phases of few-layer MoS ₂ and their silver/gold nanocomposites for efficient hydrogen evolution reaction. Catalysis Science and Technology, 2020, 10, 154-163.	4.1	36
1418	Morphology control of metal-modified zirconium phosphate support structures for the oxygen evolution reaction. Dalton Transactions, 2020, 49, 3892-3900.	3.3	20
1419	Exceptional performance of hierarchical Ni–Fe oxyhydroxide@NiFe alloy nanowire array electrocatalysts for large current density water splitting. Energy and Environmental Science, 2020, 13, 86-95.	30.8	698
1420	Transforming the carbon economy: challenges and opportunities in the convergence of low-cost electricity and reductive CO ₂ utilization. Energy and Environmental Science, 2020, 13, 472-494.	30.8	290
1421	3D-Printed electrodes for membraneless water electrolysis. Sustainable Energy and Fuels, 2020, 4, 213-225.	4.9	52
1422	Accelerative oxygen evolution by Cu-doping into Fe-Co oxides. Sustainable Energy and Fuels, 2020, 4, 143-148.	4.9	7
1423	Self-supported nanostructured iridium-based networks as highly active electrocatalysts for oxygen evolution in acidic media. Journal of Materials Chemistry A, 2020, 8, 1066-1071.	10.3	43
1424	Electronic modulation of cobalt phosphide nanosheet arrays via copper doping for highly efficient neutral-pH overall water splitting. Applied Catalysis B: Environmental, 2020, 265, 118555.	20.2	172
1425	Nanocluster materials in photosynthetic machines. Chemical Engineering Journal, 2020, 385, 123951.	12.7	18
1426	Improving the HER activity of Ni3FeN to convert the superior OER electrocatalyst to an efficient bifunctional electrocatalyst for overall water splitting by doping with molybdenum. Electrochimica Acta, 2020, 333, 135488.	5.2	37
1427	Rational strain engineering in delafossite oxides for highly efficient hydrogen evolution catalysis in acidic media. Nature Catalysis, 2020, 3, 55-63.	34.4	124
1428	Dopingâ€Assisted Phase Changing Effect on MoS ₂ Towards Hydrogen Evolution Reaction in Acidic and Alkaline pH. ChemElectroChem, 2020, 7, 336-346.	3.4	34
1429	MOFâ€Derived Copper Nitride/Phosphide Heterostructure Coated by Multiâ€Doped Carbon as Electrocatalyst for Efficient Water Splitting and Neutralâ€pH Hydrogen Evolution Reaction. ChemElectroChem, 2020, 7, 289-298.	3.4	30
1430	Effect of Graphene Encapsulation of NiMo Alloys on Oxygen Evolution Reaction. ACS Catalysis, 2020, 10, 792-799.	11.2	60
1431	Dye-Sensitized Photocathodes: Boosting Photoelectrochemical Performances with Polyoxometalate Electron Transfer Mediators. ACS Applied Energy Materials, 2020, 3, 163-169.	5.1	14
1432	Combined Experimental and Theoretical Assessment of WX _{<i>y</i>} (X = C, N, S, P) for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 1082-1088.	5.1	32
1433	Controlled Synthesis of Hollow Bimetallic Prussian Blue Analog for Conversion into Efficient Oxygen Evolution Electrocatalyst. ACS Sustainable Chemistry and Engineering, 2020, 8, 1319-1328.	6.7	39
1434	Three-dimensional bimetal TMO supported carbon based electrocatalyst developed via dry synthesis for hydrogen and oxygen evolution. Applied Surface Science, 2020, 505, 144642.	6.1	47

щ		IF	CITATIONS
#	AKTICLE	IF	CHATIONS
1435	overall water splitting. Journal of Catalysis, 2020, 381, 44-52.	6.2	83
1436	A review on NiFe-based electrocatalysts for efficient alkaline oxygen evolution reaction. Journal of Power Sources, 2020, 448, 227375.	7.8	217
1437	CoFe-based electrocatalysts for oxygen evolution and reduction reaction. , 2020, , 265-293.		0
1438	Modulating ternary Mo–Ni–P by electronic reconfiguration and morphology engineering for boosting all-pH electrocatalytic overall water splitting. Electrochimica Acta, 2020, 330, 135294.	5.2	30
1439	Active copper(II) and copper(I) reviving repeatedly in situ on copper wire electrode for full water splitting at ultra-low potential. Applied Surface Science, 2020, 505, 144653.	6.1	5
1440	Nitrogen-doped graphene nanosheets supported assembled Pd nanoflowers for efficient ethanol electrooxidation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 587, 124257.	4.7	9
1441	Improved photocatalytic HER activity of α-Sb monolayer with doping and strain engineering. Applied Surface Science, 2020, 507, 145194.	6.1	17
1442	Direct synthesis of bifunctional nanorods from a Co–adenine–MoO ₃ hybrid for overall water splitting. Materials Chemistry Frontiers, 2020, 4, 546-554.	5.9	17
1443	Selfâ€Recovery of Photochemical H 2 Evolution with a Molecular Diiron Catalyst Incorporated in a UiOâ€66 Metal–Organic Framework. ChemPhotoChem, 2020, 4, 287-290.	3.0	7
1444	Amorphous WO ₃ induced lattice distortion for a low-cost and high-efficient electrocatalyst for overall water splitting in acid. Sustainable Energy and Fuels, 2020, 4, 1712-1722.	4.9	14
1445	The Reactivity and Stability of Polyoxometalate Water Oxidation Electrocatalysts. Molecules, 2020, 25, 157.	3.8	47
1446	Partial phosphorization of porous Co–Ni–B for efficient hydrogen evolution electrocatalysis. International Journal of Hydrogen Energy, 2020, 45, 4545-4555.	7.1	19
1447	A Challenge to the <i>G</i> â^¼ 0 Interpretation of Hydrogen Evolution. ACS Catalysis, 2020, 10, 121-128.	11.2	166
1448	Laserâ€Ablationâ€Produced Cobalt Nickel Phosphate with Highâ€Valence Nickel Ions as an Active Catalyst for the Oxygen Evolution Reaction. Chemistry - A European Journal, 2020, 26, 2793-2797.	3.3	18
1449	Dissociating Water at nâ \in Si Photoanodes Partially Covered with Fe Catalysts. Advanced Energy Materials, 2020, 10, 1902963.	19.5	23
1450	Importance of Interfacial Band Structure between the Substrate and Mn ₃ O ₄ Nanocatalysts during Electrochemical Water Oxidation. ACS Catalysis, 2020, 10, 1237-1245.	11.2	23
1451	Copper nickel alloy nanorods textured nanoparticles for oxygen evolution reaction. Electrochimica Acta, 2020, 333, 135545.	5.2	17
1452	Tweaking Nickel with Minimal Silver in a Heterogeneous Alloy of Decahedral Geometry to Deliver Platinumâ€like Hydrogen Evolution Activity. Angewandte Chemie, 2020, 132, 2903-2911.	2.0	6

#	Article	IF	CITATIONS
1453	Atomically Embedded Ag via Electrodiffusion Boosts Oxygen Evolution of CoOOH Nanosheet Arrays. ACS Catalysis, 2020, 10, 562-569.	11.2	93
1454	Kineticâ€Oriented Construction of MoS ₂ Synergistic Interface to Boost pHâ€Universal Hydrogen Evolution. Advanced Functional Materials, 2020, 30, 1908520.	14.9	59
1455	Advanced catalysts for hydrogen evolution reaction based on MoS2/NiCo2S4 heterostructures in Alkaline Media. International Journal of Hydrogen Energy, 2020, 45, 1759-1768.	7.1	20
1456	Tweaking Nickel with Minimal Silver in a Heterogeneous Alloy of Decahedral Geometry to Deliver Platinumâ€like Hydrogen Evolution Activity. Angewandte Chemie - International Edition, 2020, 59, 2881-2889.	13.8	50
1457	Spontaneous Formation of >90% Optically Transmissive, Electrochemically Active CoP Films for Photoelectrochemical Hydrogen Evolution. Journal of Physical Chemistry Letters, 2020, 11, 14-20.	4.6	8
1458	Ni-based layered metal-organic frameworks with palladium for electrochemical dechlorination. Applied Catalysis B: Environmental, 2020, 264, 118505.	20.2	56
1459	Ordered mesoporous ruthenium oxide with balanced catalytic activity and stability toward oxygen evolution reaction. Catalysis Today, 2020, 358, 203-209.	4.4	11
1460	Laser Fragmentationâ€Induced Defectâ€Rich Cobalt Oxide Nanoparticles for Electrochemical Oxygen Evolution Reaction. ChemSusChem, 2020, 13, 520-528.	6.8	55
1461	Enhanced Water Oxidation Activity by Introducing Gallium into Cobaltâ€ i ron Oxide System. ChemElectroChem, 2020, 7, 118-123.	3.4	6
1462	Rapid growth of amorphous cobalt-iron oxyhydroxide nanosheet arrays onto iron foam: Highly efficient and low-cost catalysts for oxygen evolution. Journal of Electroanalytical Chemistry, 2020, 856, 113621.	3.8	13
1463	Tuning single atom-nanoparticle ratios of Ni-based catalysts for synthesis gas production from CO2. Applied Catalysis B: Environmental, 2020, 264, 118502.	20.2	47
1464	Liquefied Sunshine: Transforming Renewables into Fertilizers and Energy Carriers with Electromaterials. Advanced Materials, 2020, 32, e1904804.	21.0	49
1465	Transition Metal Selenides for Electrocatalytic Hydrogen Evolution Reaction. ChemElectroChem, 2020, 7, 31-54.	3.4	103
1466	Room-temperature sputtered electrocatalyst WSe2 nanomaterials for hydrogen evolution reaction. Journal of Energy Chemistry, 2020, 47, 107-111.	12.9	41
1467	Toward Efficient Carbon and Water Cycles: Emerging Opportunities with Single‧ite Catalysts Made of 3d Transition Metals. Advanced Materials, 2020, 32, e1905548.	21.0	23
1468	Phosphomolybdic Acid as a Catalyst for Oxidative Valorization of Biomass and Its Application as an Alternative Electron Source. ACS Catalysis, 2020, 10, 2060-2068.	11.2	33
1469	Synthesis of the rod-like NiS2@C for hydrogen evolution reaction in acidic solution. Functional Materials Letters, 2020, 13, 2050009.	1.2	2
1470	Amorphous Ni-Based Nanoparticles for Alkaline Oxygen Evolution. ACS Applied Nano Materials, 2020, 3, 10522-10530.	5.0	10

#	Article	IF	CITATIONS
1471	Planar and Nanostructured n‣i/Metalâ€Oxide/WO ₃ /BiVO ₄ Monolithic Tandem Devices for Unassisted Solar Water Splitting. Advanced Energy and Sustainability Research, 2020, 1, 2000037.	5.8	9
1472	Fabrication of NiSx/C with a tuned S/Ni molar ratio using Ni2+ ions and Amberlyst for hydrogen evolution reaction (HER). International Journal of Hydrogen Energy, 2020, 45, 24567-24572.	7.1	3
1473	Hybrid Co@Ni12P5/PPy microspheres with dual synergies for high performance oxygen evolution. Journal of Catalysis, 2020, 391, 357-365.	6.2	19
1474	Microkinetic assessment of electrocatalytic oxygen evolution reaction over iridium oxide in unbuffered conditions. Journal of Catalysis, 2020, 391, 435-445.	6.2	52
1475	Sponge Assembled by Graphene Nanocages with Double Active Sites to Accelerate Alkaline HER Kinetics. Nano Letters, 2020, 20, 8375-8383.	9.1	40
1476	Performance Correlation of Self-Supported Electrodes in Half-Cell and Single-Cell Tests for Water Electrolysis. ACS Sustainable Chemistry and Engineering, 2020, 8, 15815-15821.	6.7	6
1477	Coreduction methodology for immiscible alloys of CuRu solid-solution nanoparticles with high thermal stability and versatile exhaust purification ability. Chemical Science, 2020, 11, 11413-11418.	7.4	13
1478	Recent Advances in Transition Metal Carbide Electrocatalysts for Oxygen Evolution Reaction. Catalysts, 2020, 10, 1164.	3.5	43
1479	Increasing the Efficiency of Water Splitting through Spin Polarization Using Cobalt Oxide Thin Film Catalysts. Journal of Physical Chemistry C, 2020, 124, 22610-22618.	3.1	67
1480	Electrodeposition of iron phosphide film for hydrogen evolution reaction. Electrochimica Acta, 2020, 363, 137167.	5.2	25
1481	Best Practices in Using Foam-Type Electrodes for Electrocatalytic Performance Benchmark. ACS Energy Letters, 2020, 5, 3260-3264.	17.4	112
1482	Water oxidation electrocatalysis using ruthenium coordination oligomers adsorbed on multiwalled carbon nanotubes. Nature Chemistry, 2020, 12, 1060-1066.	13.6	54
1483	Ni/NiO nanosheets for alkaline hydrogen evolution reaction: In situ electrochemical-Raman study. Electrochimica Acta, 2020, 361, 137040.	5.2	148
1484	Role of Oxidized Mo Species on the Active Surface of Ni–Mo Electrocatalysts for Hydrogen Evolution under Alkaline Conditions. ACS Catalysis, 2020, 10, 12858-12866.	11.2	75
1485	Bifunctional Behavior of Pd/Ni Nanocatalysts on MOFâ€Derived Carbons for Alkaline Waterâ€splitting. Electroanalysis, 2020, 32, 3060-3074.	2.9	23
1486	Recent advances on hydrogen production through seawater electrolysis. Materials Science for Energy Technologies, 2020, 3, 780-807.	1.8	45
1487	Binder-Free Heterostructured NiFe ₂ O ₄ /NiFe LDH Nanosheet Composite Electrocatalysts for Oxygen Evolution Reactions. ACS Applied Energy Materials, 2020, 3, 10831-10840.	5.1	51
1488	Nanosheets Decorated MoS 2 Micro Balls: Effect of 1T/2H Composition. ChemistrySelect, 2020, 5, 11764-11768.	1.5	2

		CITATION REPORT		
#	Article		IF	CITATIONS
1489	Low-iridium electrocatalysts for acidic oxygen evolution. Dalton Transactions, 2020, 49,	15568-15573.	3.3	19
1490	A highly efficient electrochemical oxygen evolution reaction catalyst constructed from a two-dimensional Prussian blue analogue. Dalton Transactions, 2020, 49, 14290-14296.	S-treated	3.3	19
1491	Facile synthesis of three-dimensional spherical Ni(OH)2/NiCo2O4 heterojunctions as effice bifunctional electrocatalysts for water splitting. International Journal of Hydrogen Energy 30601-30610.	cient 7, 2020, 45,	7.1	32
1492	Decoupled Electrochemical Water Splitting: From Fundamentals to Applications. Advanc Materials, 2020, 10, 2002453.	ed Energy	19.5	167
1493	Fused Porphyrin Thin Films as Heterogeneous Visible-Light Active Photocatalysts with We Active Metal Sites for Hydrogen Generation. ACS Applied Energy Materials, 2020, 3, 984	ell-Defined 8-9855.	5.1	26
1494	Recent Progress in Engineering the Atomic and Electronic Structure of Electrocatalysts v Exchange Reactions. Advanced Materials, 2020, 32, e2001866.	ia Cation	21.0	101
1495	Degradation study of a proton exchange membrane water electrolyzer under dynamic op conditions. Applied Energy, 2020, 280, 115911.	peration	10.1	56
1496	Research progress and surface/interfacial regulation methods for electrophotocatalytic h production from water splitting. Materials Today Energy, 2020, 18, 100524.	ydrogen	4.7	28
1497	Small Polarons and Surface Defects in Metal Oxide Photocatalysts Studied Using XUV Reflection–Absorption Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 2285	53-22870.	3.1	24
1498	All Boron Atoms in a ScB ₁₂ Monolayer Contribute to the Hydrogen Evolutio Journal of Physical Chemistry C, 2020, 124, 23221-23229.	on Reaction.	3.1	14
1499	Ultrathin Nanosheet-Assembled Co–Fe Hydroxide Nanotubes: Sacrificial Template Synt Topotactic Transformation, and Their Application as Electrocatalysts for Efficient Oxygen Reaction. ACS Applied Materials & Interfaces, 2020, 12, 46578-46587.	thesis, 1 Evolution	8.0	12
1500	Acidic Oxygen Evolution Reaction Activity–Stability Relationships in Ru-Based Pyrochlc Catalysis, 2020, 10, 12182-12196.	ores. ACS	11.2	111
1501	Influence of Composition on Performance in Metallic Iron–Nickel–Cobalt Ternary An Alkaline Water Electrolysis. ACS Catalysis, 2020, 10, 12139-12147.	odes for	11.2	20
1502	Ligand directed synthesis of a unprecedented tetragonalbipyramidal copper (II) complex antibacterial activity and catalytic role in oxidative dimerisation of $2\hat{a} \in a$ minophenol. App Organometallic Chemistry, 2020, 34, e5935.	and its lied	3.5	21
1503	IrCo nanocacti on Co _x S _y nanocages as a highly efficient and ro electrocatalyst for the oxygen evolution reaction in acidic media. Nanoscale, 2020, 12, 1	obust 7074-17082.	5.6	11
1504	Active Site Engineering in Porous Electrocatalysts. Advanced Materials, 2020, 32, e2002	435.	21.0	304
1505	Stoichiometry-Dependent Oxygen Evolution Electrocatalysis on Open-Tubular Nitrogen-E Column Supported Transition Metal Oxides. ACS Applied Energy Materials, 2020, 3, 2010)oped Carbon 0-2019.	5.1	6
1506	Efficient Conversion of CO ₂ to Formate Using Inexpensive and Easily Prepar Post-Transition Metal Alloy Catalysts. Energy & Fuels, 2020, 34, 3467-3476.	ed	5.1	23

#	Article	IF	CITATIONS
1507	Stabilizing Hydrogen Adsorption through Theory-Guided Chalcogen Substitution in Chevrel-Phase Mo ₆ X ₈ (X=S, Se, Te) Electrocatalysts. ACS Applied Materials & Interfaces, 2020, 12, 35995-36003.	8.0	26
1508	Hierarchical heterostructure CoCO3@NiFe LDH nanowires array as outstanding bifunctional electrocatalysts for overall water splitting. Materials Letters, 2020, 277, 128285.	2.6	19
1509	Constructing multifunctional â€~Nanoplatelet-on-Nanoarray' electrocatalyst with unprecedented activity towards novel selective organic oxidation reactions to boost hydrogen production. Applied Catalysis B: Environmental, 2020, 278, 119339.	20.2	93
1510	FeNiS _{<i>x</i>} @MoS ₂ Heterostructure: A Bioinspired Nonprecious Electrocatalyst for the Hydrogen Evolution Reaction in Acidic and Basic Media. ChemElectroChem, 2020, 7, 3324-3335.	3.4	9
1511	Two-dimensional Noble Metal Nanomaterials for Electrocatalysis. Chemical Research in Chinese Universities, 2020, 36, 597-610.	2.6	11
1512	Hierarchical Fe 3 Câ^'Mo 2 Câ^'Carbon Hybrid Electrocatalysts Promoted through a Strong Chargeâ€Transfer Effect. ChemSusChem, 2020, 13, 5280-5287.	6.8	6
1513	Ferrites for electrocatalytic water splitting applications. , 2020, , 123-145.		2
1514	Faster hydrogen production in alkaline media. Nature Catalysis, 2020, 3, 967-968.	34.4	10
1515	Inception of Co ₃ O ₄ as Microstructural Support to Promote Alkaline Oxygen Evolution Reaction for Co _{0.85} Se/Co ₉ Se ₈ Network. Inorganic Chemistry, 2020, 59, 17326-17339.	4.0	22
1516	Nb-incorporated Fe (oxy)hydroxide derived from structural transformation for efficient oxygen evolution electrocatalysis. Journal of Materials Chemistry A, 2020, 8, 24598-24607.	10.3	18
1517	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.	10.3	112
1518	Nonprecious Bimetallic Iron–Molybdenum Sulfide Electrocatalysts for the Hydrogen Evolution Reaction in Proton Exchange Membrane Electrolyzers. ACS Catalysis, 2020, 10, 14336-14348.	11.2	50
1519	Structural Evolution in Photodeposited Nickel (oxy)hydroxide Oxygen Evolution Electrocatalysts. ACS Applied Energy Materials, 2020, 3, 12407-12416.	5.1	5
1520	A Highly Efficient Co ₃ V ₂ O ₈ /MoS ₂ /Carbon Cloth Nanocomposite Bifunctional Electrocatalyst for Overall Water Splitting. ChemistrySelect, 2020, 5, 14276-14281.	1.5	7
1521	Se Doping Regulates the Activity of NiTe ₂ for Electrocatalytic Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2020, 124, 26793-26800.	3.1	12
1522	Cobaltâ€Molybdenum Bimetal Phosphides Encapsulated in Carbon as Efficient and Durable Electrocatalyst for Hydrogen Evolution. ChemistrySelect, 2020, 5, 14312-14319.	1.5	12
1523	Bifunctional <i>α</i> â€MnO ₂ and Co ₃ O ₄ Catalyst for Oxygen Electrocatalysis in Alkaline Solution. ChemElectroChem, 2020, 7, 4822-4836.	3.4	21
1524	Pt-Co3O4 Superstructures by One-Pot Reduction/Precipitation in Bicontinuous Microemulsion for Electrocatalytic Oxygen Evolution Reaction. Catalysts, 2020, 10, 1311.	3.5	14

#	Article	IF	Citations
1525	High Solar-to-Hydrogen Conversion Efficiency at pH 7 Based on a PV-EC Cell with an Oligomeric Molecular Anode. ACS Applied Materials & Interfaces, 2020, 12, 55856-55864.	8.0	16
1526	2H-MoS ₂ on Mo ₂ CT _{<i>x</i>} MXene Nanohybrid for Efficient and Durable Electrocatalytic Hydrogen Evolution. ACS Nano, 2020, 14, 16140-16155.	14.6	180
1527	A general doping rule: rational design of Ir-doped catalysts for the oxygen evolution reaction. Chemical Communications, 2020, 56, 15201-15204.	4.1	9
1528	Ultrafine IrNi Bimetals Encapsulated in Zeolitic Imidazolate Frameworksâ€Đerived Porous Nâ€Đoped Carbon for Boosting Oxygen Evolution in Both Alkaline and Acidic Electrolytes. Advanced Materials Interfaces, 2020, 7, 2001145.	3.7	18
1529	Rational Design of Niâ€Based Electrocatalysts by Modulation of Iron Ions and Carbon Nanotubes for Enhanced Oxygen Evolution Reaction. Advanced Sustainable Systems, 2020, 4, 2000227.	5.3	4
1530	Selective Methanolâ€ŧoâ€Formate Electrocatalytic Conversion on Branched Nickel Carbide. Angewandte Chemie - International Edition, 2020, 59, 20826-20830.	13.8	83
1531	Amorphous NiFe phosphides supported on nanoarray-structured nitrogen-doped carbon paper for high-performance overall water splitting. Electrochimica Acta, 2020, 357, 136873.	5.2	23
1532	Catalyst–electrolyte interface chemistry for electrochemical CO ₂ reduction. Chemical Society Reviews, 2020, 49, 6632-6665.	38.1	234
1533	Electrocatalytic CO2 Reduction to Fuels: Progress and Opportunities. Trends in Chemistry, 2020, 2, 825-836.	8.5	104
1534	Pyrite-type electrocatalysts for hydrogen evolution. MRS Bulletin, 2020, 45, 555-561.	3.5	2
1535	Pt nanocluster size effects in the hydrogen evolution reaction: approaching the theoretical maximum activity. Physical Chemistry Chemical Physics, 2020, 22, 19059-19068.	2.8	10
1536	Addressing the Stability Gap in Photoelectrochemistry: Molybdenum Disulfide Protective Catalysts for Tandem III–V Unassisted Solar Water Splitting. ACS Energy Letters, 2020, 5, 2631-2640.	17.4	48
1537	Analysis of the Active Species Responsible for Water Oxidation Using a Pentanuclear Fe Complex. IScience, 2020, 23, 101378.	4.1	19
1538	Apparent disagreement between cyclic voltammetry and electrochemical impedance spectroscopy explained by time-domain simulation of constant phase elements. International Journal of Hydrogen Energy, 2020, 45, 22383-22393.	7.1	10
1539	An interconnected porous Au ₃ Pt film on Ni foam: an efficient electrocatalyst for alkaline hydrogen evolution reaction. Sustainable Energy and Fuels, 2020, 4, 4878-4883.	4.9	2
1540	Opportunities for intermediate temperature renewable ammonia electrosynthesis. Journal of Materials Chemistry A, 2020, 8, 15591-15606.	10.3	22
1541	Maximizing pore and heteroatom utilization within N,P-co-doped polypyrrole-derived carbon nanotubes for high-performance supercapacitors. Journal of Materials Chemistry A, 2020, 8, 17558-17567.	10.3	64
1542	Selective Methanolâ€ŧoâ€Formate Electrocatalytic Conversion on Branched Nickel Carbide. Angewandte Chemie, 2020, 132, 21012-21016.	2.0	24

		CITATION REPORT		
# 1543	ARTICLE Transition metal chalcogenides based nanocomposites as efficient electrocatalyst for l evolution reaction over the entire pH range. International Journal of Hydrogen Energy, 24219-24231.	1ydrogen 2020, 45,	IF 7.1	Citations
1544	Suppressed Jahn–Teller Distortion in MnCo ₂ O ₄ @Ni _{ Heterostructures to Promote the Overall Water Splitting. Small, 2020, 16, e2001856.}	2P	10.0	59
1545	Enabling efficient hydrogen-evolution reaction over perovskite oxide electrocatalysts t phosphorus promotion. International Journal of Hydrogen Energy, 2020, 45, 24859-24	hrough ·869.	7.1	22
1546	<i>In situ</i> growth of Fe and Nb co-doped β-Ni(OH) ₂ nanosheet arrays an efficient oxygen evolution reaction. Inorganic Chemistry Frontiers, 2020, 7, 3465-3	on nickel foam for 474.	6.0	16
1547	Iridium-based nanomaterials for electrochemical water splitting. Nano Energy, 2020, 7	8, 105270.	16.0	192
1548	A multi-interfacial FeOOH@NiCo ₂ O ₄ heterojunction as a high bifunctional electrocatalyst for overall water splitting. Nanoscale, 2020, 12, 19404-19	ghly efficient 412.	5.6	38
1549	NiCoPt/graphene-dot nanosponge as a highly stable electrocatalyst for efficient hydrogreation in acidic electrolyte. Journal of Alloys and Compounds, 2020, 849, 156651.	gen evolution	5.5	15
1550	Non-precious-metal catalysts for alkaline water electrolysis: <i>operando</i> character theoretical calculations, and recent advances. Chemical Society Reviews, 2020, 49, 91	izations, 54-9196.	38.1	448
1551	Waterâ€Splitting Based and Related Therapeutic Effects: Evolving Concepts, Progress, Small, 2020, 16, e2004551.	and Perspectives.	10.0	26
1552	Cobalt Metal–Organic Framework Based on Layered Double Nanosheets for Enhance Water Oxidation in Neutral Media. Journal of the American Chemical Society, 2020, 14	ed Electrocatalytic -2, 19198-19208.	13.7	64
1553	LaTiO ₂ N crystallographic orientation control significantly increases visible induced charge extraction. Journal of Materials Chemistry A, 2020, 8, 22867-22873.	2-light	10.3	5
1554	Hydrogen Evolution Reaction Electrocatalysts Based on Electrolytic and Chemical-Cata Rhenium and Nickel. Russian Journal of Electrochemistry, 2020, 56, 821-831.	lytic Alloys of	0.9	5
1555	Realâ€īime Carbon Monoxide Detection using a Rotating Gold Ring Electrode: A Feasi ChemElectroChem, 2020, 7, 4417-4422.	bility Study.	3.4	4
1556	Water Electrolysis in Saturated Phosphate Buffer at Neutral pH. ChemSusChem, 2020	, 13, 5921-5933.	6.8	29
1557	Promoting Electrocatalytic Hydrogen Evolution Reaction and Oxygen Evolution Reaction Effects of Electric Field, Magnetic Field, Strain, and Light. Small Methods, 2020, 4, 200	on by Fields: 10494.	8.6	146
1558	Photo-electrochemical degradation of wastewaters containing organics catalysed by p materials: a review. Reviews in Environmental Science and Biotechnology, 2020, 19, 84	hosphate-based 43-872.	8.1	31
1559	Superactive NiFe-LDH/graphene nanocomposites as competent catalysts for water spli Inorganic Chemistry Frontiers, 2020, 7, 3805-3836.	tting reactions.	6.0	85
1560	Low Temperature Hydrothermal Method for Synthesis of Crystalline Fe ₂ C and their Oxygen Evolution Performance. Electroanalysis, 2020, 32, 2528-2534.) ₃	2.9	12

#	Article	IF	CITATIONS
1561	Strong Electronic Interaction Enhanced Electrocatalysis of Metal Sulfide Clusters Embedded Metal–Organic Framework Ultrathin Nanosheets toward Highly Efficient Overall Water Splitting. Advanced Science, 2020, 7, 2001965.	11.2	129
1562	Active faceted nanoporous ruthenium for electrocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2020, 8, 19788-19792.	10.3	19
1563	Efficient electrocatalyst of α-Fe ₂ O ₃ nanorings for oxygen evolution reaction in acidic conditions. RSC Advances, 2020, 10, 29077-29081.	3.6	6
1564	Synthetic Approaches to Metallo-Supramolecular Co ^{II} Polygons and Potential Use for H ₂ O Oxidation. Inorganic Chemistry, 2020, 59, 14432-14438.	4.0	2
1565	Nickel doped MoS2 nanoparticles as precious-metal free bifunctional electrocatalysts for glucose assisted electrolytic H2 generation. International Journal of Hydrogen Energy, 2020, 45, 32940-32948.	7.1	21
1566	Recent advances in phase, size, and morphology-oriented nanostructured nickel phosphide for overall water splitting. Journal of Materials Chemistry A, 2020, 8, 19196-19245.	10.3	194
1567	Uncovering the role of Ag in layer-alternating Ni ₃ S ₂ /Ag/Ni ₃ S ₂ as an electrocatalyst with enhanced OER performance. Inorganic Chemistry Frontiers, 2020, 7, 3627-3635.	6.0	26
1568	Sr ₂ CoTaO ₆ Double Perovskite Oxide as a Novel Visible-Light-Absorbing Bifunctional Photocatalyst for Photocatalytic Oxygen and Hydrogen Evolution Reactions. ACS Sustainable Chemistry and Engineering, 2020, 8, 14190-14197.	6.7	37
1569	Oxygen Vacancies Induced NiFe-Hydroxide as a Scalable, Efficient, and Stable Electrode for Alkaline Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2020, 8, 14071-14081.	6.7	32
1570	Promoting photocatalytic hydrogen evolution over the perovskite oxide Pr _{0.5} (Ba _{0.5} Sr _{0.5}) _{0.5} Co _{0.8} Fe _{0.2} O by plasmon-induced hot electron injection. Nanoscale, 2020, 12, 18710-18720.	_{3<td>step ></td>}	step >
1571	Controlling the Number of Branches and Surface Facets of Pd ore Ruâ€Branched Nanoparticles to Make Highly Active Oxygen Evolution Reaction Electrocatalysts. Chemistry - A European Journal, 2020, 26, 15501-15504.	3.3	5
1572	NiFe-Layered Double Hydroxide Synchronously Activated by Heterojunctions and Vacancies for the Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2020, 12, 42850-42858.	8.0	105
1573	Strong Catalyst–Support Interactions in Electrochemical Oxygen Evolution on Ni–Fe Layered Double Hydroxide. ACS Energy Letters, 2020, 5, 3185-3194.	17.4	44
1574	Isolated Single Atoms Anchored on N-Doped Carbon Materials as a Highly Efficient Catalyst for Electrochemical and Organic Reactions. ACS Sustainable Chemistry and Engineering, 2020, 8, 14630-14656.	6.7	88
1575	Metal oxide-based materials as an emerging family of hydrogen evolution electrocatalysts. Energy and Environmental Science, 2020, 13, 3361-3392.	30.8	370
1576	Redox Metal–Ligand Cooperativity Enables Robust and Efficient Water Oxidation Catalysis at Neutral pH with Macrocyclic Copper Complexes. Journal of the American Chemical Society, 2020, 142, 17434-17446.	13.7	59
1577	Selective Surface Reconstruction of a Defective Iridiumâ€Based Catalyst for Highâ€Efficiency Water Splitting. Advanced Functional Materials, 2020, 30, 2004375.	14.9	85
1578	Transitionâ€Metal Phosphides: Activity Origin, Energyâ€Related Electrocatalysis Applications, and Synthetic Strategies. Advanced Functional Materials, 2020, 30, 2004009.	14.9	309

#	Article	IF	CITATIONS
1579	Capturing the active sites of multimetallic (oxy)hydroxides for the oxygen evolution reaction. Energy and Environmental Science, 2020, 13, 4225-4237.	30.8	186
1580	Singleâ€Atom Inâ€Doped Subnanometer Pt Nanowires for Simultaneous Hydrogen Generation and Biomass Upgrading. Advanced Functional Materials, 2020, 30, 2004310.	14.9	77
1581	Tailoring Morphology and Electronic Structure of Cobalt Iron Oxide Nanowires for Electrochemical Oxygen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 8583-8594.	5.1	51
1582	Charge reactions on crystalline/amorphous lanthanum nickel oxide cocatalyst modified hematite photoanode. Journal of Chemical Physics, 2020, 153, 024701.	3.0	3
1583	Emerging Metal Single Atoms in Electrocatalysts and Batteries. Advanced Functional Materials, 2020, 30, 2003870.	14.9	38
1584	Nickel foam supported Cr-doped NiCo2O4/FeOOH nanoneedle arrays as a high-performance bifunctional electrocatalyst for overall water splitting. Nano Research, 2020, 13, 3299-3309.	10.4	88
1585	MoO ₂ as a Propitious "Pore-Forming Additive―for Boosting the Water Oxidation Activity of Cobalt Oxalate Microrods. Journal of Physical Chemistry C, 2020, 124, 20010-20020.	3.1	19
1586	Insights into the Mo-Doping Effect on the Electrocatalytic Performance of Hierarchical Co _{<i>x</i>} Mo _{<i>y</i>} S Nanosheet Arrays for Hydrogen Generation and Urea Oxidation. ACS Applied Materials & Interfaces, 2020, 12, 40194-40203.	8.0	85
1587	Direct Observation of Photoinduced Higher Oxidation States at a Semiconductor/Electrocatalyst Junction. ACS Catalysis, 2020, 10, 10476-10487.	11.2	10
1588	Bioinspired Water Oxidation Using a Mn-Oxo Cluster Stabilized by Non-Innocent Organic Tyrosine Y161 and Plastoquinone Mimics. ACS Sustainable Chemistry and Engineering, 2020, 8, 13648-13659.	6.7	7
1589	<i>Operando</i> characterization techniques for electrocatalysis. Energy and Environmental Science, 2020, 13, 3748-3779.	30.8	159
1590	Recent Electrochemical Applications of Metal–Organic Framework-Based Materials. Crystal Growth and Design, 2020, 20, 7034-7064.	3.0	112
1591	Two-Dimensional Metal Organic Framework Nanosheets as Bifunctional Catalyst for Electrochemical and Photoelectrochemical Water Oxidation. Frontiers in Chemistry, 2020, 8, 604239.	3.6	12
1592	Green and facile synthesis of cerium doped Ni3Fe electrocatalyst for efficient oxygen evolution reaction. Bulletin of the Chemical Society of Ethiopia, 2020, 34, 353-363.	1.1	2
1593	Three-dimensional porous CoNiO2@reduced graphene oxide nanosheet arrays/nickel foam as a highly efficient bifunctional electrocatalyst for overall water splitting. Tungsten, 2020, 2, 390-402.	4.8	58
1594	Prussian Blue Analogue-Derived Metal Oxides as Electrocatalysts for Oxygen Evolution Reaction: Tailoring the Molar Ratio of Cobalt to Iron. ACS Applied Energy Materials, 2020, 3, 11752-11762.	5.1	26
1595	Hollow IrCo Nanoparticles for High-Performance Overall Water Splitting in an Acidic Medium. ACS Applied Nano Materials, 2020, 3, 11916-11922.	5.0	16
1596	Efficient Machine-Learning-Aided Screening of Hydrogen Adsorption on Bimetallic Nanoclusters. ACS Combinatorial Science, 2020, 22, 768-781.	3.8	15

#	Article	IF	CITATIONS
1597	Understanding Multi-Ion Transport Mechanisms in Bipolar Membranes. ACS Applied Materials & Interfaces, 2020, 12, 52509-52526.	8.0	54
1598	Polymer Entrapment Flash Pyrolysis for the Preparation of Nanoscale Iridiumâ€Free Oxygen Evolution Electrocatalysts. ChemNanoMat, 2020, 6, 930-936.	2.8	3
1599	Cerium Surface-Engineered Iridium Oxides for Enhanced Oxygen Evolution Reaction Activity and Stability. ACS Applied Energy Materials, 2020, 3, 4432-4440.	5.1	17
1600	Defect-Engineered MoO ₂ Nanostructures as an Efficient Electrocatalyst for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 5208-5218.	5.1	54
1601	A facile synthesis of Ru/N–C as an efficient and cost-effective electrocatalyst for hydrogen evolution. New Journal of Chemistry, 2020, 44, 7962-7967.	2.8	4
1602	Oxygen evolution electrocatalysis using mixed metal oxides under acidic conditions: Challenges and opportunities. Journal of Catalysis, 2020, 388, 130-140.	6.2	59
1603	Cobalt Colloid-derived Efficient and Durable Nanoscale Electrocatalytic Films for High-Activity Water Oxidation. ACS Omega, 2020, 5, 10651-10662.	3.5	6
1604	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.	5.1	100
1605	Rational Design of an Iridium–Tungsten Composite with an Iridium-Rich Surface for Acidic Water Oxidation. ACS Applied Materials & Interfaces, 2020, 12, 25991-26001.	8.0	36
1606	In-situ structure and catalytic mechanism of NiFe and CoFe layered double hydroxides during oxygen evolution. Nature Communications, 2020, 11, 2522.	12.8	594
1607	Aggregationâ€Induced Improvement of Catalytic Activity by Innerâ€Aggregate Electronic Communication of Metalâ€Fullereneâ€Based Surfactants. ChemCatChem, 2020, 12, 2726-2731.	3.7	5
1608	Composition Engineering–Triggered Bifunctionality of Freeâ€Standing Coralâ€Like 1Tâ€MoS ₂ for Highly Efficient Overall Water Splitting. Energy Technology, 2020, 8, 2000268.	3.8	7
1609	Syngas Evolution from CO ₂ Electroreduction by Porous Au Nanostructures. ACS Applied Energy Materials, 2020, 3, 4658-4668.	5.1	29
1610	Photoelectrochemical water splitting: a road from stable metal oxides to protected thin film solar cells. Journal of Materials Chemistry A, 2020, 8, 10625-10669.	10.3	162
1611	Spray-Coated Thin-Film Ni-Oxide Nanoflakes as Single Electrocatalysts for Oxygen Evolution and Hydrogen Generation from Water Splitting. ACS Omega, 2020, 5, 10641-10650.	3.5	32
1612	Engineering the electronic structure of 1T′-ReS ₂ through nitrogen implantation for enhanced alkaline hydrogen evolution. Journal of Materials Chemistry A, 2020, 8, 11607-11616.	10.3	39
1613	Hierarchical Polyelemental Nanoparticles as Bifunctional Catalysts for Oxygen Evolution and Reduction Reactions. Advanced Energy Materials, 2020, 10, 2001119.	19.5	39
1614	Electronic structure inspired a highly robust electrocatalyst for the oxygen-evolution reaction. Chemical Communications, 2020, 56, 8071-8074.	4.1	15

#	Article	IF	CITATIONS
1615	Implanting Ni-O-VOx sites into Cu-doped Ni for low-overpotential alkaline hydrogen evolution. Nature Communications, 2020, 11, 2720.	12.8	113
1616	Fundamental understanding of the acidic oxygen evolution reaction: mechanism study and state-of-the-art catalysts. Nanoscale, 2020, 12, 13249-13275.	5.6	183
1617	Highly efficient mixed-metal spinel cobaltite electrocatalysts for the oxygen evolution reaction. Chinese Journal of Catalysis, 2020, 41, 1855-1863.	14.0	39
1618	IrO2 nanoparticle-decorated single-layer NiFe LDHs nanosheets with oxygen vacancies for the oxygen evolution reaction. Chemical Engineering Journal, 2020, 399, 125738.	12.7	60
1619	Nanocast Mixed Ni–Co–Mn Oxides with Controlled Surface and Pore Structure for Electrochemical Oxygen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 5597-5609.	5.1	20
1620	Heteroatom-Doped Carbon Electrocatalysts Derived from Nanoporous Two-Dimensional Covalent Organic Frameworks for Oxygen Reduction and Hydrogen Evolution. ACS Applied Nano Materials, 2020, 3, 5481-5488.	5.0	46
1621	Regulating the charge diffusion of two-dimensional cobalt–iron hydroxide/graphene composites for high-rate water oxidation. Journal of Materials Chemistry A, 2020, 8, 11573-11581.	10.3	18
1622	Core/shell -structured NiMoO4 @ MoSe2/NixSey Nanorod on Ni Foam as a Bifunctional Electrocatalyst for Efficient Overall Water Splitting. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 599, 124888.	4.7	35
1623	Improving catalysis for electrochemical water splitting using a phosphosulphide surface. Inorganic Chemistry Frontiers, 2020, 7, 2388-2395.	6.0	28
1624	Controllable Synthesis of Feâ€Doped NiCo ₂ O ₄ Nanobelts as Superior Catalysts for Oxygen Evolution Reaction. Chemistry - A European Journal, 2020, 26, 13725-13729.	3.3	13
1625	Ag2â^'O with highly exposed {111} crystal facets for efficient electrochemical oxygen evolution: Activity and mechanism. Chinese Journal of Catalysis, 2020, 41, 1706-1714.	14.0	4
1626	Coupling interface structure in NixS/Cu5FeS4 hybrid with enhanced electrocatalytic activity for alkaline hydrogen evolution reaction. Journal of Colloid and Interface Science, 2020, 578, 668-676.	9.4	18
1627	Performance enhancement of oxygen evolution reaction through incorporating bimetallic electrocatalysts in two-dimensional metal–organic frameworks. Catalysis Science and Technology, 2020, 10, 3897-3903.	4.1	34
1628	TiO2-mediated visible-light-driven hydrogen evolution by ligand-capped Ru nanoparticles. Sustainable Energy and Fuels, 2020, 4, 4170-4178.	4.9	7
1629	Metal–organic-frameworks on 3D-printed electrodes: <i>in situ</i> electrochemical transformation towards the oxygen evolution reaction. Sustainable Energy and Fuels, 2020, 4, 3732-3738.	4.9	15
1630	Accelerating hydrogen evolution at neutral pH by destabilization of water with a conducting oxophilic metal oxide. Journal of Materials Chemistry A, 2020, 8, 12169-12176.	10.3	21
1631	Visible-Light-Driven Nitrogen Fixation Catalyzed by Bi ₅ O ₇ Br Nanostructures: Enhanced Performance by Oxygen Vacancies. Journal of the American Chemical Society, 2020, 142, 12430-12439.	13.7	260
1632	Dual Role of Silver Moieties Coupled with Ordered Mesoporous Cobalt Oxide towards Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2020, 59, 16544-16552.	13.8	64

# 1633	ARTICLE NiCo-LDHs derived NiCo2S4 nanostructure coated by MoS2 nanosheets as high-efficiency bifunctional electrocatalysts for overall water splitting. Surface and Coatings Technology, 2020, 397, 126065.	IF 4.8	CITATIONS 23
1634	Water Electrolysis Using Thin Pt and RuO _{<i>x</i>} Catalysts Deposited by a Flame-Annealing Method on Pencil-Lead Graphite-Rod Electrodes. ACS Omega, 2020, 5, 6090-6099.	3.5	8
1635	Dual Role of Silver Moieties Coupled with Ordered Mesoporous Cobalt Oxide towards Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie, 2020, 132, 16687.	2.0	23
1636	Functionalization of metal oxides with thiocyanate groups: A general strategy for boosting oxygen evolution reaction in neutral media. Nano Energy, 2020, 76, 105079.	16.0	16
1637	High performance multicomponent bifunctional catalysts for overall water splitting. Journal of Materials Chemistry A, 2020, 8, 13795-13805.	10.3	51
1638	Enabling Ironâ€Based Highly Effective Electrochemical Waterâ€5plitting and Selective Oxygenation of Organic Substrates through In Situ Surface Modification of Intermetallic Iron Stannide Precatalyst. Advanced Energy Materials, 2020, 10, 2001377.	19.5	96
1639	Cobalt-stabilized oxygen vacancy of V2O5 nanosheet arrays with delocalized valence electron for alkaline water splitting. Chemical Engineering Science, 2020, 227, 115915.	3.8	26
1640	HER activity of MNi1- (MÂ=ÂCr, Mo and W; xÂâ‰^Â0.2) alloy in acid and alkaline media. International Journal of Hydrogen Energy, 2020, 45, 17533-17539.	7.1	22
1641	Surfaceâ€Guided Formation of Amorphous Mixedâ€Metal Oxyhydroxides on Ultrathin MnO ₂ Nanosheet Arrays for Efficient Electrocatalytic Oxygen Evolution. Advanced Energy Materials, 2020, 10, 2001059.	19.5	87
1642	Boosting the Oxygen Evolution Electrocatalysis Performance of Iron Phosphide via Architectural Design and Electronic Modulation. ACS Sustainable Chemistry and Engineering, 2020, 8, 9206-9216.	6.7	15
1643	A Biasâ€Free, Standâ€Alone, and Scalable Photovoltaic–Electrochemical Device for Solar Hydrogen Production. Advanced Sustainable Systems, 2020, 4, 2000070.	5.3	16
1644	Remarkably improved oxygen evolution reaction activity of cobalt oxides by an Fe ion solution immersion process. Inorganic Chemistry Frontiers, 2020, 7, 3327-3339.	6.0	29
1645	Cobaltâ^'Iron Oxide Nanosheets for Highâ€Efficiency Solarâ€Driven CO ₂ â^'H ₂ O Coupling Electrocatalytic Reactions. Advanced Functional Materials, 2020, 30, 2003438.	14.9	65
1646	Active Learning Accelerated Discovery of Stable Iridium Oxide Polymorphs for the Oxygen Evolution Reaction. Chemistry of Materials, 2020, 32, 5854-5863.	6.7	73
1647	Highly enhanced bifunctional electrocatalytic activity of mixed copper–copper oxides on nickel foam <i>via</i> composition control. New Journal of Chemistry, 2020, 44, 11993-12001.	2.8	14
1648	Atomically dispersed catalysts for hydrogen/oxygen evolution reactions and overall water splitting. Journal of Power Sources, 2020, 471, 228446.	7.8	74
1649	Porous nickel electrodes with controlled texture for the hydrogen evolution reaction and sodium borohydride electrooxidation. CrystEngComm, 2020, 22, 4228-4237.	2.6	22
1650	Singleâ€Atom Catalysts for Electrocatalytic Applications. Advanced Functional Materials, 2020, 30, 2000768.	14.9	390

#	Article	IF	CITATIONS
1651	Transport Phenomena: Challenges and Opportunities for Molecular Catalysis in Metal–Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 11941-11956.	13.7	74
1652	Ni-based aligned plate intermetallic nanostructures as effective catalysts for hydrogen evolution reaction. Materials Letters, 2020, 272, 127831.	2.6	7
1653	Ni―and Co‧ubstituted Metallic MoS ₂ for the Alkaline Hydrogen Evolution Reaction. ChemElectroChem, 2020, 7, 3606-3615.	3.4	24
1654	Water oxidation electrocatalysis in acidic media with Co-containing polyoxometalates. Journal of Catalysis, 2020, 389, 345-351.	6.2	30
1655	Synthesis and Electrocatalytic HER Studies of Carbene-Ligated Cu _{3–<i>x</i>} P Nanocrystals. ACS Applied Materials & Interfaces, 2020, 12, 16394-16401.	8.0	19
1656	Bipolar Energetics and Bifunctional Catalytic Activity of a Nanocrystalline Ru Thin-Film Enable High-Performance Photoelectrochemical Water Reduction and Oxidation. ACS Applied Materials & Interfaces, 2020, 12, 16402-16410.	8.0	2
1657	First-Principles Mechanistic Insights into the Hydrogen Evolution Reaction on Ni2P Electrocatalyst in Alkaline Medium. Catalysts, 2020, 10, 307.	3.5	8
1658	Strategies for Engineering Highâ€Performance PGMâ€Free Catalysts toward Oxygen Reduction and Evolution Reactions. Small Methods, 2020, 4, 2000016.	8.6	70
1659	Self-Standing 3D Core–Shell Nanohybrids Based on Amorphous Co–Fe–B _i Nanosheets Grafted on NiCo ₂ O ₄ Nanowires for Efficient and Durable Water Oxidation. ACS Applied Energy Materials, 2020, 3, 4338-4347.	5.1	11
1660	2D Thin Sheet Heterostructures of MoS ₂ on MoSe ₂ as Efficient Electrocatalyst for Hydrogen Evolution Reaction in Wide pH Range. Inorganic Chemistry, 2020, 59, 4377-4388.	4.0	41
1661	Cobalt Metal–Cobalt Carbide Composite Microspheres for Water Reduction Electrocatalysis. ACS Applied Energy Materials, 2020, 3, 3909-3918.	5.1	32
1662	Graphdiyne: A Rising Star of Electrocatalyst Support for Energy Conversion. Advanced Energy Materials, 2020, 10, 2000177.	19.5	100
1663	Mesoporous cobalt–cobalt phosphide electrocatalyst for water splitting. Materials Today Energy, 2020, 16, 100398.	4.7	3
1664	Tactical Surface Modification of a 3D Graphite Felt as an Electrode of Vanadium Redox Flow Batteries with Enhanced Electrolyte Utilization and Fast Reaction Kinetics. Energy & Fuels, 2020, 34, 5060-5071.	5.1	25
1665	Mechanistic Study of IrO ₂ Dissolution during the Electrocatalytic Oxygen Evolution Reaction. Journal of Physical Chemistry Letters, 2020, 11, 2695-2700.	4.6	70
1666	Ultrathin rGO-wrapped free-standing bimetallic CoNi ₂ S ₄ -carbon nanofibers: an efficient and robust bifunctional electrocatalyst for water splitting. Nanotechnology, 2020, 31, 275402.	2.6	9
1667	Micro-nanoporous MoO2@CoMo heterostructure catalyst for hydrogen evolution reaction. Applied Catalysis B: Environmental, 2020, 270, 118895.	20.2	63
1668	Interfacial synergy between dispersed Ru sub-nanoclusters and porous NiFe layered double hydroxide on accelerated overall water splitting by intermediate modulation. Nanoscale, 2020, 12, 9669-9679.	5.6	62

#	Article	IF	CITATIONS
1669	Green preparation of Fe3O4 coral-like nanomaterials with outstanding magnetic and OER properties. Journal of Alloys and Compounds, 2020, 831, 154702.	5.5	28
1670	Undoped SnO ₂ as a Support for Ni Species to Boost Oxygen Generation through Alkaline Water Electrolysis. ACS Applied Materials & Interfaces, 2020, 12, 18407-18420.	8.0	17
1671	Tailoring Lattice Oxygen Binding in Ruthenium Pyrochlores to Enhance Oxygen Evolution Activity. Journal of the American Chemical Society, 2020, 142, 7883-7888.	13.7	210
1672	Metal–Organic Frameworks in Heterogeneous Catalysis: Recent Progress, New Trends, and Future Perspectives. Chemical Reviews, 2020, 120, 8468-8535.	47.7	1,001
1673	Hierarchical Mo-doped CoP ₃ interconnected nanosheet arrays on carbon cloth as an efficient bifunctional electrocatalyst for water splitting in an alkaline electrolyte. Dalton Transactions, 2020, 49, 5563-5572.	3.3	30
1674	Chalcogenides by Design: Functionality through Metavalent Bonding and Confinement. Advanced Materials, 2020, 32, e1908302.	21.0	179
1675	Nature-inspired electrocatalysts and devices for energy conversion. Chemical Society Reviews, 2020, 49, 3107-3141.	38.1	84
1676	A Preciousâ€Metalâ€Free Hybrid Electrolyzer for Alcohol Oxidation Coupled to CO ₂ â€ŧoâ€Syngas Conversion. Angewandte Chemie - International Edition, 2020, 59, 15633-15641.	13.8	62
1677	Trifunctional catalytic activities of trimetallic FeCoNi alloy nanoparticles embedded in a carbon shell for efficient overall water splitting. Journal of Materials Chemistry A, 2020, 8, 9021-9031.	10.3	72
1678	Plasma-Deposited Ru-Based Thin Films for Photoelectrochemical Water Splitting. Catalysts, 2020, 10, 278.	3.5	12
1679	Water Splitting Electrocatalysis within Layered Inorganic Nanomaterials. , 2020, , .		3
1680	Design Strategies for Development of TMD-Based Heterostructures in Electrochemical Energy Systems. Matter, 2020, 2, 526-553.	10.0	312
1681	Tuning Surface Electronic Structure of Twoâ€Đimensional Cobaltâ€Based Hydroxide Nanosheets for Highly Efficient Water Oxidation. ChemCatChem, 2020, 12, 2823-2832.	3.7	24
1682	Vertically aligned one-dimensional ZnO/V2O5 core–shell hetero-nanostructure for photoelectrochemical water splitting. Journal of Energy Chemistry, 2020, 49, 262-274.	12.9	43
1683	Efficient Electronic Transport in Partially Disordered Co ₃ O ₄ Nanosheets for Electrocatalytic Oxygen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 3071-3081.	5.1	27
1684	2D Fe-doped NiO nanosheets with grain boundary defects for the advanced oxygen evolution reaction. Dalton Transactions, 2020, 49, 6355-6362.	3.3	32
1685	Employing DNA scaffold with rhenium electrocatalyst for enhanced HER activities. Applied Surface Science, 2020, 528, 147049.	6.1	11
1686	Ni–Fe nanocubes embedded with Pt nanoparticles for hydrogen and oxygen evolution reactions. International Journal of Hydrogen Energy, 2020, 45, 20832-20842.	7.1	40

#	Article	IF	CITATIONS
1687	Electrocatalysis as the Nexus for Sustainable Renewable Energy: The Gordian Knot of Activity, Stability, and Selectivity. Angewandte Chemie - International Edition, 2020, 59, 15298-15312.	13.8	140
1688	Two-Dimensional Layered Materials: High-Efficient Electrocatalysts for Hydrogen Evolution Reaction. ACS Applied Nano Materials, 2020, 3, 6270-6296.	5.0	70
1689	3D Macroporous Catalysts: Impact of Additives on the Morphology and Performance of Cu/Cu2O Foam Prepared by Dynamic Hydrogen Bubble Template Towards Glycerol Electro-Oxidation. Journal of the Electrochemical Society, 2020, 167, 114505.	2.9	14
1690	Surface-Induced 2D/1D Heterostructured Growth of ReS ₂ /CoS ₂ for High-Performance Electrocatalysts. ACS Applied Materials & Interfaces, 2020, 12, 33586-33594.	8.0	30
1691	In situ grown Cu-Based metal-organic framework on copper foam as high-performance electrocatalysts for oxygen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 21540-21546.	7.1	24
1692	A Universal Process: Self-Templated and Orientated Fabrication of XMoO ₄ (X: Ni, Co, or Fe) Nanosheets on MoO ₂ Nanoplates as Electrocatalysts for Efficient Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 33785-33794.	8.0	23
1693	Carbon Dots Integrated NiCo ₂ O ₄ Hierarchical Nanoneedle Arrays Supported on Ni Foam as Efficient and Stable Electrode for Hydrogen and Oxygen Evolution Reactions. Electroanalysis, 2020, 32, 2090-2100.	2.9	10
1694	NiCo/NiCo–OH and NiFe/NiFe–OH core shell nanostructures for water splitting electrocatalysis at large currents. Applied Catalysis B: Environmental, 2020, 278, 119326.	20.2	141
1695	Cathodic activated stainless steel mesh as a highly active electrocatalyst for the oxygen evolution reaction with self-healing possibility. Journal of Energy Chemistry, 2020, 49, 153-160.	12.9	57
1696	Boron enhances oxygen evolution reaction activity over Ni foam-supported iron boride nanowires. Journal of Materials Chemistry A, 2020, 8, 13638-13645.	10.3	61
1697	Crystallized RuTe2 as unexpected bifunctional catalyst for overall water splitting. Applied Catalysis B: Environmental, 2020, 278, 119281.	20.2	161
1698	Elektrokatalyse als Nexus für nachhaltige erneuerbare Energien – der gordische Knoten aus Aktivitä Stabilitäund Selektivitä Angewandte Chemie, 2020, 132, 15410-15426.	2.0	14
1699	Sodium–cobalt pyrophosphate electrocatalyst for water splitting. Journal of Solid State Chemistry, 2020, 290, 121510.	2.9	6
1700	Removal of Gas Bubbles on an Electrode Using a Magnet. ACS Applied Energy Materials, 2020, 3, 6752-6757.	5.1	28
1701	Metal Oxide-Based Tandem Cells for Self-Biased Photoelectrochemical Water Splitting. ACS Energy Letters, 2020, 5, 844-866.	17.4	149
1702	Nickel Phosphide Electrocatalysts for Hydrogen Evolution Reaction. Catalysts, 2020, 10, 188.	3.5	53
1703	Electrospun CNF Supported Ceramics as Electrochemical Catalysts for Water Splitting and Fuel Cell: A Review. Polymers, 2020, 12, 238.	4.5	35
1704	Mo2C Decorated High-Defective Graphene Nanospheres for Improved Hydrogen Evolution Reaction Catalytic Performance. Catalysis Letters, 2020, 150, 2141-2149.	2.6	9

#	Article	IF	CITATIONS
1705	High Entropy Intermetallic–Oxide Core–Shell Nanostructure as Superb Oxygen Evolution Reaction Catalyst. Advanced Sustainable Systems, 2020, 4, 1900105.	5.3	129
1706	Preparation of ultrathin molybdenum disulfide dispersed on graphene via cobalt doping: A bifunctional catalyst for hydrogen and oxygen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 9583-9591.	7.1	25
1707	Co–NiFe layered double hydroxide nanosheets as an efficient electrocatalyst for the electrochemical evolution of oxygen. International Journal of Hydrogen Energy, 2020, 45, 9368-9379.	7.1	40
1708	Fe-Based Electrocatalysts for Oxygen Evolution Reaction: Progress and Perspectives. ACS Catalysis, 2020, 10, 4019-4047.	11.2	379
1709	Boosting the electrochemical water splitting on Co3O4 through surface decoration of epitaxial S-doped CoO layers. Chemical Engineering Journal, 2020, 390, 124591.	12.7	49
1710	Bismuth Substituted Strontium Cobalt Perovskites for Catalyzing Oxygen Evolution. Journal of Physical Chemistry C, 2020, 124, 6562-6570.	3.1	41
1711	Metalâ€Rich Chalcogenides for Electrocatalytic Hydrogen Evolution: Activity of Electrodes and Bulk Materials. ChemElectroChem, 2020, 7, 1514-1527.	3.4	55
1712	An effective hybrid electrocatalyst for the alkaline HER: Highly dispersed Pt sites immobilized by a functionalized NiRu-hydroxide. Applied Catalysis B: Environmental, 2020, 269, 118824.	20.2	86
1713	Dynamic evolution of a hydroxylated layer in ruthenium phosphide electrocatalysts for an alkaline hydrogen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 5655-5662.	10.3	25
1714	Interface engineering of copper-cobalt based heterostructure as bifunctional electrocatalysts for overall water splitting. Ceramics International, 2020, 46, 13125-13132.	4.8	20
1715	Electrolysis of low-grade and saline surface water. Nature Energy, 2020, 5, 367-377.	39.5	579
1716	Ionic liquid-assisted one-step preparation of ultrafine amorphous metallic hydroxide nanoparticles for the highly efficient oxygen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 15767-15773.	10.3	37
1717	Structural Evolution of Ni-Based Co-Catalysts on [Ca2Nb3O10]â^' Nanosheets during Heating and Their Photocatalytic Properties. Catalysts, 2020, 10, 13.	3.5	9
1718	Zwitterionic Conjugated Surfactant Functionalization of Graphene with pHâ€Independent Dispersibility: An Efficient Electron Mediator for the Oxygen Evolution Reaction in Acidic Media. Small, 2020, 16, 1906635.	10.0	8
1719	Fabrication of hierarchical SrTiO ₃ @MoS ₂ heterostructure nanofibers as efficient and low-cost electrocatalysts for hydrogen-evolution reactions. Nanotechnology, 2020, 31, 205604.	2.6	47
1720	A Lowâ€Temperature Molecular Precursor Approach to Copperâ€Based Nanoâ€Sized <i>Digenite</i> Mineral for Efficient Electrocatalytic Oxygen Evolution Reaction. Chemistry - an Asian Journal, 2020, 15, 852-859.	3.3	32
1721	Atomic layer deposition of Pd nanoparticles on self-supported carbon-Ni/NiO-Pd nanofiber electrodes for electrochemical hydrogen and oxygen evolution reactions. Journal of Colloid and Interface Science, 2020, 569, 286-297.	9.4	68
1722	Trimetallic Mo–Ni–Co selenides nanorod electrocatalysts for highly-efficient and ultra-stable hydrogen evolution. Nano Energy, 2020, 71, 104637.	16.0	100

#	Article	IF	CITATIONS
1723	Bimetallic Two-Dimensional Nanoframes: High Activity Acidic Bifunctional Oxygen Reduction and Evolution Electrocatalysts. ACS Applied Energy Materials, 2020, 3, 2404-2421.	5.1	16
1724	Novel, large area scalable polycrystalline Zn1-xCoxO films RF sputtered from a single mixed target for electrochemical water oxidation. International Journal of Hydrogen Energy, 2020, 45, 9380-9385.	7.1	1
1725	VS ₂ Microflowers with In Situ Embedded Few-Layer MoS ₂ Nanobelts for Enhanced Hydrogen Evolution Reaction at High Current Density. Journal of the Electrochemical Society, 2020, 167, 026508.	2.9	8
1726	Amorphous cobalt-cerium binary metal oxides as high performance electrocatalyst for oxygen evolution reaction. Journal of Catalysis, 2020, 384, 14-21.	6.2	35
1727	Rational Construction of a WS ₂ /CoS ₂ Heterostructure Electrocatalyst for Efficient Hydrogen Evolution at All pH Values. ACS Sustainable Chemistry and Engineering, 2020, 8, 4474-4480.	6.7	63
1728	Optimization of carbon-supported Ir–Ru alloys for polymer electrolyte fuel cell anodes under cell reversal. Journal of Industrial and Engineering Chemistry, 2020, 85, 87-93.	5.8	21
1729	Facile Synthesis of Nanoporous Transition Metalâ€Based Phosphates for Oxygen Evolution Reaction. ChemCatChem, 2020, 12, 2091-2096.	3.7	106
1730	In situ confinement growth of peasecod-like N-doped carbon nanotubes encapsulate bimetallic FeCu alloy as a bifunctional oxygen reaction cathode electrocatalyst for sustainable energy batteries. Journal of Alloys and Compounds, 2020, 826, 154152.	5.5	43
1731	Second Coordination Sphere Effects in an Evolved Ru Complex Based on Highly Adaptable Ligand Results in Rapid Water Oxidation Catalysis. Journal of the American Chemical Society, 2020, 142, 5068-5077.	13.7	69
1732	Structural and Morphological Conversion between Two Co-Based MOFs for Enhanced Water Oxidation. Inorganic Chemistry, 2020, 59, 2701-2710.	4.0	33
1733	Nonâ€Nobleâ€Metalâ€Based Electrocatalysts toward the Oxygen Evolution Reaction. Advanced Functional Materials, 2020, 30, 1910274.	14.9	760
1734	N, Ru Codoped Pellet Drum Bundle-Like Sb ₂ S ₃ : An Efficient Hydrogen Evolution Reaction and Hydrogen Oxidation Reaction Electrocatalyst in Alkaline Medium. ACS Applied Materials & Interfaces, 2020, 12, 7057-7070.	8.0	28
1735	Three-dimensional hierarchically porous iridium oxide-nitrogen doped carbon hybrid: An efficient bifunctional catalyst for oxygen evolution and hydrogen evolution reaction in acid. International Journal of Hydrogen Energy, 2020, 45, 6036-6046.	7.1	30
1736	Tailorâ€Designed Porous Catalysts: Nickelâ€Doped Cu/Cu ₂ O Foams for Efficient Glycerol Electroâ€Oxidation. ChemElectroChem, 2020, 7, 951-958.	3.4	19
1737	Basicity and Electrolyte Composition Dependent Stability of Niâ€Feâ€5 and Niâ€Mo Electrodes during Water Splitting. ChemPhysChem, 2020, 21, 518-524.	2.1	5
1738	Fe-substituted cobalt-phosphate polyoxometalates as enhanced oxygen evolution catalysts in acidic media. Chinese Journal of Catalysis, 2020, 41, 853-857.	14.0	29
1739	Simultaneous electrochemical ozone production and hydrogen evolution by using tantalum-based nanorods electrocatalysts. Applied Catalysis B: Environmental, 2020, 266, 118632.	20.2	42
1740	Improved performance and stability of photoelectrochemical water-splitting Si system using a bifacial design to decouple light harvesting and electrocatalysis. Nano Energy, 2020, 70, 104478.	16.0	37

#	Article	IF	CITATIONS
1741	Engineering Substrate Interaction To Improve Hydrogen Evolution Catalysis of Monolayer MoS ₂ Films beyond Pt. ACS Nano, 2020, 14, 1707-1714.	14.6	97
1742	Cu2O photocathodes with band-tail states assisted hole transport for standalone solar water splitting. Nature Communications, 2020, 11, 318.	12.8	139
1743	3D architecture double perovskite NdBa0.5Sr0.5Co1.5Fe0.5O5+δ embedded hollow-net Co3O4 bifunctional electrocatalysts coupled with N-doped CNT and reduced graphene oxide for oxygen electrode reactions. Journal of Alloys and Compounds, 2020, 823, 153782.	5.5	13
1744	Vitamin B12 functionalized N-Doped graphene: A promising electro-catalyst for hydrogen evolution and electro-oxidative sensing of H2O2. Electrochimica Acta, 2020, 337, 135730.	5.2	19
1745	A Spin Coating Method To Deposit Iridium-Based Catalysts onto Silicon for Water Oxidation Photoanodes. ACS Applied Materials & amp; Interfaces, 2020, 12, 5901-5908.	8.0	12
1746	Non-redox doping boosts oxygen evolution electrocatalysis on hematite. Chemical Science, 2020, 11, 2464-2471.	7.4	26
1747	One-step electrodeposition of Ni _x Fe _{3â^²x} O ₄ /Ni hybrid nanosheet arrays as highly active and robust electrocatalysts for the oxygen evolution reaction. Green Chemistry, 2020, 22, 1710-1719.	9.0	33
1748	Self-assembly of homointerface engineered IrCo0.14 bracelet-like nanorings as efficient and stable bifunctional catalysts for electrochemical water splitting in acidic media. Electrochimica Acta, 2020, 337, 135738.	5.2	16
1749	Nickelâ€Doping Effect on Mn ₃ O ₄ Nanoparticles for Electrochemical Water Oxidation under Neutral Condition. Small Methods, 2020, 4, 1900733.	8.6	36
1750	Pinning of the Fermi Level in CuFeO ₂ by Polaron Formation Limiting the Photovoltage for Photochemical Water Splitting. Advanced Functional Materials, 2020, 30, 1910432.	14.9	38
1751	Ir- and Ru-doped layered double hydroxides as affordable heterogeneous catalysts for electrochemical water oxidation. Dalton Transactions, 2020, 49, 2468-2476.	3.3	29
1752	Copper-based homogeneous and heterogeneous catalysts for electrochemical water oxidation. Nanoscale, 2020, 12, 4187-4218.	5.6	79
1753	Metal-organic frameworks derived carbon-incorporated cobalt/dicobalt phosphide microspheres as Mott–Schottky electrocatalyst for efficient and stable hydrogen evolution reaction in wide-pH environment. Journal of Colloid and Interface Science, 2020, 565, 513-522.	9.4	25
1754	The Determination of Electrochemical Active Surface Area and Specific Capacity Revisited for the System MnO _x as an Oxygen Evolution Catalyst. Zeitschrift Fur Physikalische Chemie, 2020, 234, 979-994.	2.8	167
1755	lr/TiON _x /C high-performance oxygen evolution reaction nanocomposite electrocatalysts in acidic media: synthesis, characterization and electrochemical benchmarking protocol. JPhys Energy, 2020, 2, 02LT01.	5.3	11
1756	A pulse modulatable self-oscillation kinetics for water oxidation at large current on manganese catalyst. Electrochimica Acta, 2020, 337, 135798.	5.2	3
1757	Luminescent Solar Concentrators for Photoelectrochemical Water Splitting. ACS Applied Energy Materials, 2020, 3, 1665-1671.	5.1	12
1758	Interfacial Engineering of Cobalt Nitrides and Mesoporous Nitrogen-Doped Carbon: Toward Efficient Overall Water-Splitting Activity with Enhanced Charge-Transfer Efficiency. ACS Energy Letters, 2020, 5, 692-700.	17.4	125

#	Article	IF	CITATIONS
1759	Strategies for Semiconductor/Electrocatalyst Coupling toward Solarâ€Driven Water Splitting. Advanced Science, 2020, 7, 1902102.	11.2	110
1760	Enhanced electrocatalytic hydrogen evolution on a plasmonic electrode: the importance of the Ti/TiO2 adhesion layer. Journal of Materials Chemistry A, 2020, 8, 13980-13986.	10.3	10
1761	Water splitting mediated by an electrocatalytically driven cyclic process involving iron oxide species. Journal of Materials Chemistry A, 2020, 8, 9896-9910.	10.3	19
1762	A robust and highly active hydrogen evolution catalyst based on Ru nanocrystals supported on vertically oriented Cu nanoplates. Journal of Materials Chemistry A, 2020, 8, 10787-10795.	10.3	13
1763	Electrochemical Reactors for CO2 Conversion. Catalysts, 2020, 10, 473.	3.5	72
1764	Preparation of Zirconium Phosphate Nanomaterials and Their Applications as Inorganic Supports for the Oxygen Evolution Reaction. Nanomaterials, 2020, 10, 822.	4.1	18
1765	Biomass-derived self-supported porous carbon membrane embedded with Co nanoparticles as an advanced electrocatalyst for efficient and robust hydrogen evolution reaction. Renewable Energy, 2020, 155, 447-455.	8.9	26
1766	Operando time-resolved diffuse reflection spectroscopy: The origins of photocatalytic water-oxidation activity of bismuth vanadate. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 395, 112493.	3.9	2
1767	A Preciousâ€Metalâ€Free Hybrid Electrolyzer for Alcohol Oxidation Coupled to CO 2 â€ŧoâ€Syngas Conversion. Angewandte Chemie, 2020, 132, 15763-15771.	2.0	17
1768	Nanoheterostructures of Partially Oxidized RuNi Alloy as Bifunctional Electrocatalysts for Overall Water Splitting. ChemSusChem, 2020, 13, 2739-2744.	6.8	23
1769	Pulsed Electrochemical Carbon Monoxide Reduction on Oxideâ€Derived Copper Catalyst. ChemSusChem, 2020, 13, 3028-3033.	6.8	20
1770	Inâ€Situ Study on Ni–Mo Stability in a Waterâ€Splitting Device: Effect of Catalyst Substrate and Electric Potential. ChemSusChem, 2020, 13, 3172-3179.	6.8	13
1771	Production of NiO/N-doped carbon hybrid and its electrocatalytic performance for oxygen evolution reactions. Carbon Letters, 2020, 30, 485-491.	5.9	13
1772	Phase-dependent hydrogen evolution activity of nickel phosphide nanosheet arrays in alkaline electrolytes. Electrochimica Acta, 2020, 344, 136116.	5.2	12
1773	Charge redistribution within platinum–nitrogen coordination structure to boost hydrogen evolution. Nano Energy, 2020, 73, 104739.	16.0	55
1774	Multi-heteroatom-doped carbon from waste-yeast biomass for sustained water splitting. Nature Sustainability, 2020, 3, 556-563.	23.7	186
1775	Fe-doped Co ₃ O ₄ polycrystalline nanosheets as a binder-free bifunctional cathode for robust and efficient zinc–air batteries. Chemical Communications, 2020, 56, 5374-5377.	4.1	36
1776	Mitigating voltage losses in photoelectrochemical cell scale-up. Sustainable Energy and Fuels, 2020, 4, 2734-2740.	4.9	20

#	Article	IF	CITATIONS
1777	α(β)-PbO2 doped with Co3O4 and CNT porous composite materials with enhanced electrocatalytic activity for zinc electrowinning. RSC Advances, 2020, 10, 1351-1360.	3.6	11
1778	Three-dimensional self-supporting NiFe-X (X = OH, O, P) nanosheet arrays for high-efficiency overall water splitting. 2D Materials, 2020, 7, 035016.	4.4	14
1779	Enhanced OER Performances of Au@NiCo2S4 Core-Shell Heterostructure. Nanomaterials, 2020, 10, 611.	4.1	18
1780	Role of Sulfur Incorporation in p-Type Nickel Oxide (p-NiO) on n-Type Silicon (n-Si) Photoelectrodes for Water Oxidation Reactions. ACS Applied Energy Materials, 2020, 3, 4255-4264.	5.1	9
1781	Self‣upported 3 D Ultrathin Cobalt–Nickel–Boron Nanoflakes as an Efficient Electrocatalyst for the Oxygen Evolution Reaction. ChemSusChem, 2020, 13, 3662-3670.	6.8	25
1782	Protein denaturation induced electrocatalytic hydrogen evolution. Carbon, 2020, 165, 378-385.	10.3	2
1783	A Single Molecular Stoichiometric Pâ€Source for Phaseâ€Selective Synthesis of Crystalline and Amorphous Iron Phosphide Nanocatalysts. ChemNanoMat, 2020, 6, 1208-1219.	2.8	6
1784	In-situ synthesis of free-standing FeNi-oxyhydroxide nanosheets as a highly efficient electrocatalyst for water oxidation. Chemical Engineering Journal, 2020, 395, 125180.	12.7	100
1785	Effect of microstructure and internal stress on hydrogen absorption into Ni thin film electrodes during alkaline water electrolysis. Electrochimica Acta, 2020, 340, 135970.	5.2	11
1786	Amorphous Ni–Fe–Se hollow nanospheres electrodeposited on nickel foam as a highly active and bifunctional catalyst for alkaline water splitting. Dalton Transactions, 2020, 49, 6764-6775.	3.3	38
1787	Lateral silicon oxide/gold interfaces enhance the rate of electrochemical hydrogen evolution reaction in alkaline media. Journal of Chemical Physics, 2020, 152, 154705.	3.0	7
1788	Bifunctional Au@Pt/Au core@shell Nanoparticles As Novel Electrocatalytic Tags in Immunosensing: Application for Alzheimer's Disease Biomarker Detection. Analytical Chemistry, 2020, 92, 7209-7217.	6.5	38
1789	Amorphous Iridium and Tantalum Oxide Layers Coated on Titanium Felt for Electrocatalytic Oxygen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 4531-4538.	5.1	16
1790	Acid-Doped Hydrogel Electrolytes for Electrocatalyst Interfaces. ACS Applied Polymer Materials, 2020, 2, 2046-2054.	4.4	7
1791	Hierarchical 3D Oxygenated Cobalt Molybdenum Selenide Nanosheets as Robust Trifunctional Catalyst for Water Splitting and Zinc–Air Batteries. Small, 2020, 16, e2000797.	10.0	52
1792	Influence of the phosphorus source on iron phosphide nanoparticle synthesis for hydrogen evolution reaction catalysis. International Journal of Hydrogen Energy, 2020, 45, 32780-32788.	7.1	23
1793	Recent progress of precious-metal-free electrocatalysts for efficient water oxidation in acidic media. Journal of Energy Chemistry, 2020, 51, 113-133.	12.9	66
1794	Best Practice for Evaluating Electrocatalysts for Hydrogen Economy. ACS Applied Materials & Interfaces, 2020, 12, 20500-20506.	8.0	25

#	Article	IF	CITATIONS
1795	Electrodeposition of (hydro)oxides for an oxygen evolution electrode. Chemical Science, 2020, 11, 10614-10625.	7.4	117
1796	Bimetallic oxide coupled with B-doped graphene as highly efficient electrocatalyst for oxygen evolution reaction. Science China Materials, 2020, 63, 1247-1256.	6.3	14
1797	Assembled 3D MOF on 2D Nanosheets for Self-boosting Catalytic Synthesis of N-doped Carbon Nanotube Encapsulated Metallic Co Electrocatalysts for Overall Water Splitting. Applied Catalysis B: Environmental, 2020, 271, 118939.	20.2	136
1798	Prussian Blue Analogues–Derived CoFe–B Nanocubes with Increased Specific Surface Area and Modulated Electronic Structure as Enhanced Oxygen Evolution Electrocatalysts. Energy Technology, 2021, 9, 2000178.	3.8	11
1799	Enhancement of oxygen evolution activity of perovskite (La0.8Sr0.2)0.95MnO3-l´ electrode by Co phase surface modification. Catalysis Today, 2021, 364, 148-156.	4.4	13
1800	Grain Boundaries Boost Oxygen Evolution Reaction in NiFe Electrocatalysts. Small Methods, 2021, 5, 2000755.	8.6	22
1801	Tuning the electronic structure of the earth-abundant electrocatalysts for oxygen evolution reaction (OER) to achieve efficient alkaline water splitting – A review. Journal of Energy Chemistry, 2021, 56, 299-342.	12.9	148
1802	Fluorination of ZIF-67 framework templated Prussian blue analogue nano-box for efficient electrochemical oxygen evolution reaction. Chemical Engineering Journal, 2021, 403, 126371.	12.7	91
1803	Recent Progress on NiFeâ€Based Electrocatalysts for Alkaline Oxygen Evolution. Advanced Sustainable Systems, 2021, 5, .	5.3	50
1804	A 3D multi-interface structure of coral-like Fe-Mo-S/Ni3S2@NF using for high-efficiency and stable overall water splitting. Chemical Engineering Journal, 2021, 404, 126483.	12.7	82
1805	<i>Operando</i> X-ray spectroscopy visualizing the chameleon-like structural reconstruction on an oxygen evolution electrocatalyst. Energy and Environmental Science, 2021, 14, 906-915.	30.8	93
1806	Proton-coupled redox properties and water oxidation catalysis of an aqua-coordinated (µ-oxo)diruthenium(III) complex. Inorganica Chimica Acta, 2021, 514, 120007.	2.4	2
1807	Templateâ€free synthesis of oneâ€dimensional cobalt sulfide nanorod array as an attractive architecture for overall water splitting. International Journal of Energy Research, 2021, 45, 2785-2796.	4.5	19
1808	Synthesis of CuTi-LDH supported on g-C3N4 for electrochemical and photoelectrochemical oxygen evolution reactions. International Journal of Hydrogen Energy, 2021, 46, 16414-16430.	7.1	32
1809	Identification of highly active surface iron sites on Ni(OOH) for the oxygen evolution reaction by atomic layer deposition. Journal of Catalysis, 2021, 394, 476-485.	6.2	8
1810	Atomically dispersed Ni–Ru–P interface sites for high-efficiency pH-universal electrocatalysis of hydrogen evolution. Nano Energy, 2021, 80, 105467.	16.0	114
1811	Bimetallic chalcogenide nanocrystallites as efficient electrocatalyst for overall water splitting. Journal of Alloys and Compounds, 2021, 852, 156736.	5.5	30
1812	Nanoporous metallic-glass electrocatalysts for highly efficient oxygen evolution reaction. Journal of Alloys and Compounds, 2021, 852, 156876.	5.5	29

#	Article	IF	CITATIONS
1813	Effect of iron on Ni–Mo–Fe composite as a low-cost bifunctional electrocatalyst for overall water splitting. International Journal of Hydrogen Energy, 2021, 46, 3821-3832.	7.1	30
1814	Surface-assembled Fe-Oxide colloidal nanoparticles for high performance electrocatalytic water oxidation. International Journal of Hydrogen Energy, 2021, 46, 5207-5222.	7.1	14
1815	Al, Fe-codoped CoP nanoparticles anchored on reduced graphene oxide as bifunctional catalysts to enhance overall water splitting. Chemical Engineering Journal, 2021, 421, 127856.	12.7	44
1816	Hierarchical NiMoP2-Ni2P with amorphous interface as superior bifunctional electrocatalysts for overall water splitting. Journal of Materials Science and Technology, 2021, 77, 108-116.	10.7	48
1817	Porous and wrinkle treatment of commercial Ni foam and its application for high-efficiency oxygen evolution reaction electrode. International Journal of Hydrogen Energy, 2021, 46, 4890-4902.	7.1	3
1818	Integrating hydrogen production with anodic selective oxidation of sulfides over a CoFe layered double hydroxide electrode. Chemical Science, 2021, 12, 938-945.	7.4	41
1819	Tunable e g Orbital Occupancy in Heusler Compounds for Oxygen Evolution Reaction**. Angewandte Chemie, 2021, 133, 5864-5869.	2.0	12
1820	Tunable <i>e</i> _g Orbital Occupancy in Heusler Compounds for Oxygen Evolution Reaction**. Angewandte Chemie - International Edition, 2021, 60, 5800-5805.	13.8	45
1821	Reduced titania nanorods and Ni–Mo–S catalysts for photoelectrocatalytic water treatment and hydrogen production coupled with desalination. Applied Catalysis B: Environmental, 2021, 284, 119745.	20.2	23
1822	Ultrafine cobalt-ruthenium alloy nanoparticles induced by confinement effect for upgrading hydrogen evolution reaction in all-pH range. Chemical Engineering Journal, 2021, 417, 128047.	12.7	26
1823	Electrosynthesis and characterization of Layered Double Hydroxides on different supports. Applied Clay Science, 2021, 202, 105949.	5.2	5
1824	Electronic modulation of oxygen evolution on metal doped NiFe layered double hydroxides. Journal of Colloid and Interface Science, 2021, 587, 385-392.	9.4	35
1825	Nanocatalyst Design for Longâ€Term Operation of Proton/Anion Exchange Membrane Water Electrolysis. Advanced Energy Materials, 2021, 11, 2003188.	19.5	89
1826	Co2(OH)3Cl and MOF mediated synthesis of porous Co3O4/NC nanosheets for efficient OER catalysis. Applied Surface Science, 2021, 542, 148739.	6.1	40
1827	Oxygen evolution reaction over catalytic single-site Co in a well-defined brookite TiO2 nanorod surface. Nature Catalysis, 2021, 4, 36-45.	34.4	189
1828	Nickel selenide from single-molecule electrodeposition for efficient electrocatalytic overall water splitting. New Journal of Chemistry, 2021, 45, 351-357.	2.8	20
1829	Ultrathin MoS ₂ wrapped N-doped carbon-coated cobalt nanospheres for OER applications. Sustainable Energy and Fuels, 2021, 5, 801-807.	4.9	16
1830	Rational Engineering Co _x O _y Nanosheets via Phosphorous and Sulfur Dual oupling for Enhancing Water Splitting and Zn–Air Battery. Advanced Functional Materials, 2021, 31, 2007822.	14.9	44

#	Article	IF	Citations
1831	The rational design of Cu _{2â^'x} Se@(Co,Cu)Se ₂ core–shell structures as bifunctional electrocatalysts for neutral-pH overall water splitting. Nanoscale, 2021, 13, 1134-1143.	5.6	12
1832	Substitutionally Dispersed Highâ€Oxidation CoO <i>_x</i> Clusters in the Lattice of Rutile TiO ₂ Triggering Efficient CoTi Cooperative Catalytic Centers for Oxygen Evolution Reactions. Advanced Functional Materials, 2021, 31, 2009610.	14.9	82
1833	Trace amounts of palladium-doped hollow TiO2 nanosphere as highly efficient electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2021, 46, 1923-1933.	7.1	21
1834	Ultra-small Sn-RuO2 nanoparticles supported on N‑doped carbon polyhedra for highly active and durable oxygen evolution reaction in acidic media. Chemical Engineering Journal, 2021, 409, 128155.	12.7	37
1835	Fundamental insights and rational design of low-cost polyoxometalates for the oxygen evolution reaction. Journal of Catalysis, 2021, 393, 202-206.	6.2	10
1836	Electrochemical carbon dioxide capture to close the carbon cycle. Energy and Environmental Science, 2021, 14, 781-814.	30.8	207
1837	Comparative life cycle assessment of electrochemical upgrading of CO ₂ to fuels and feedstocks. Green Chemistry, 2021, 23, 867-880.	9.0	65
1838	Decoupled amphoteric water electrolysis and its integration with Mn–Zn battery for flexible utilization of renewables. Energy and Environmental Science, 2021, 14, 883-889.	30.8	49
1839	Determining the Electrochemical Oxygen Evolution Reaction Kinetics of Fe ₃ S ₄ @Ni ₃ S ₂ Using Distribution Function of Relaxation Times. ChemElectroChem, 2021, 8, 517-523.	3.4	12
1840	Understanding the Hydrogen Evolution Reaction Kinetics of Electrodeposited Nickelâ€Molybdenum in Acidic, Nearâ€Neutral, and Alkaline Conditions. ChemElectroChem, 2021, 8, 195-208.	3.4	100
1841	Efficient and durable FeCoNi-(Oxy)hydroxide anode: Stoichiometric ration regulated morphology-, defect- and valence-dependent water oxidation performance. Chemical Engineering Journal, 2021, 417, 127934.	12.7	4
1842	MOFs derived NiFeP porous nanoflowers for boosted electrocatalytic water splitting. Microporous and Mesoporous Materials, 2021, 312, 110760.	4.4	16
1843	Performance of Integrated Thin-Film Silicon Solar Cell-Based Water-Splitting Devices under Varying Illumination Angles and an Estimation of Their Annual Hydrogen Production. Energy & Fuels, 2021, 35, 839-846.	5.1	5
1844	Palladium oxide decorated transition metal nitride as efficient electrocatalyst for hydrogen evolution reaction. Journal of Alloys and Compounds, 2021, 855, 157511.	5.5	31
1845	Reconstructed Water Oxidation Electrocatalysts: The Impact of Surface Dynamics on Intrinsic Activities. Advanced Functional Materials, 2021, 31, 2008190.	14.9	161
1846	Engineering nanointerface of molybdenum-based heterostructures to boost the electrocatalytic hydrogen evolution reaction. Journal of Energy Chemistry, 2021, 58, 370-376.	12.9	18
1847	Ni/MoC heteronanoparticles encapsulated within nitrogen-doped carbon nanotube arrays as highly efficient self-supported electrodes for overall water splitting. Chemical Engineering Journal, 2021, 406, 126815.	12.7	88
1848	Nitrogen-doped carbon quantum dots via a facile reflux assisted polymerization of N-Methyl-Pyrrolidone for hydrogen evolution reaction. Journal of Solid State Chemistry, 2021, 293, 121781.	2.9	12

#	Article	IF	CITATIONS
1849	Colloidal Nanocrystals as Electrocatalysts with Tunable Activity and Selectivity. ACS Catalysis, 2021, 11, 1248-1295.	11.2	51
1850	Graphene-induced growth of Co ₃ O ₄ nanoplates with modulable oxygen vacancies for improved OER properties. CrystEngComm, 2021, 23, 7928-7931.	2.6	7
1851	Superior catalytic activity of α-Ni(OH) ₂ for urea electrolysis. Catalysis Science and Technology, 2021, 11, 4294-4300.	4.1	18
1852	Multimetallic nanostructures for electrocatalytic oxygen evolution reaction in acidic media. Materials Chemistry Frontiers, 2021, 5, 4445-4473.	5.9	14
1853	Bimetallic oxyhydroxide <i>in situ</i> derived from an Fe ₂ Co-MOF for efficient electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2021, 9, 13271-13278.	10.3	27
1854	Constructing the CoO/Co ₄ N heterostructure with an optimized electronic structure to boost alkaline hydrogen evolution electrocatalysis. Journal of Materials Chemistry A, 2021, 9, 18208-18212.	10.3	35
1855	Hierarchical MnCo ₂ O ₄ nanowire@NiFe layered double hydroxide nanosheet heterostructures on Ni foam for overall water splitting. CrystEngComm, 2021, 23, 7141-7150.	2.6	8
1856	Self-Supported Phosphorus-Doped Vertically Aligned Graphene Arrays Integrated with FeCoNiP Nanoparticles as Bifunctional Electrocatalysts for Water-Splitting Over a Wide pH Range. Electronic Materials Letters, 2021, 17, 87-101.	2.2	17
1857	Bimetallic cyclic redox couple in dimanganese copper oxide supported by nickel borate for boosted alkaline electrocatalytic oxygen evolution reaction. Sustainable Energy and Fuels, 2021, 5, 2517-2527.	4.9	5
1858	Alkaline Anion Exchange Membrane (AEM) Water Electrolysers—Current/Future Perspectives in Electrolysers for Hydrogen. , 2022, , 473-504.		2
1859	Perspective on intermetallics towards efficient electrocatalytic water-splitting. Chemical Science, 2021, 12, 8603-8631.	7.4	74
1860	Efficient electrochemical water splitting using copper molybdenum sulfide anchored Ni foam as a high-performance bifunctional catalyst. Materials Advances, 2021, 2, 455-463.	5.4	11
1861	Harnessing Photoelectrochemistry for Wastewater Nitrate Treatment Coupled with Resource Recovery. ACS Sustainable Chemistry and Engineering, 2021, 9, 3688-3701.	6.7	15
1862	One-step synthesis of single-site vanadium substitution in 1T-WS2 monolayers for enhanced hydrogen evolution catalysis. Nature Communications, 2021, 12, 709.	12.8	137
1863	NaBH ₄ -reduction induced tunable oxygen vacancies in LaNiO _{2.7} to enhance the oxygen evolution reaction. Chemical Communications, 2021, 57, 7168-7171.	4.1	11
1864	Interfacing RuO ₂ with Pt to induce efficient charge transfer from Pt to RuO ₂ for highly efficient and stable oxygen evolution in acidic media. Journal of Materials Chemistry A, 2021, 9, 14352-14362.	10.3	25
1865	Pencil graphite rods decorated with nickel and nickel–iron as low-cost oxygen evolution reaction electrodes. Sustainable Energy and Fuels, 2021, 5, 3929-3938.	4.9	7
1866	Facile synthesis of bimetallic-based CoMoO ₄ /MoO ₂ /CoP oxidized/phosphide nanorod arrays electroplated with FeOOH for efficient overall seawater splitting. CrystEngComm, 2021, 23, 6778-6791.	2.6	4

#	Article	IF	CITATIONS
1867	Recent advances in understanding oxygen evolution reaction mechanisms over iridium oxide. Inorganic Chemistry Frontiers, 2021, 8, 2900-2917.	6.0	75
1868	Hierarchical superhydrophilic/superaerophobic CoMnP/Ni ₂ P nanosheet-based microplate arrays for enhanced overall water splitting. Journal of Materials Chemistry A, 2021, 9, 22129-22139.	10.3	45
1869	A morphology controlled surface sulfurized CoMn ₂ O ₄ microspike electrocatalyst for water splitting with excellent OER rate for binder-free electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2021, 9, 12255-12264.	10.3	58
1870	Concisely Synthesized FeNiWO _{<i>x</i>} Film as a Highly Efficient and Robust Catalyst for Electrochemical Water Oxidation. ACS Applied Energy Materials, 2021, 4, 1410-1420.	5.1	23
1871	Highly robust, novel aluminum counter cation-based monophosphate tungsten bronze electro-catalysts for oxygen evolution in acidic solution. RSC Advances, 2021, 11, 10681-10687.	3.6	4
1872	Critical review: hydrothermal synthesis of 1T-MoS ₂ – an important route to a promising material. Journal of Materials Chemistry A, 2021, 9, 9451-9461.	10.3	37
1873	Cerium oxide modified iridium nanorods for highly efficient electrochemical water splitting. Chemical Communications, 2021, 57, 8798-8801.	4.1	6
1874	Chemical and electrochemical water oxidation mediated by bis(pyrazol-1-ylmethyl)pyridine-ligated Cu(<scp>i</scp>) complexes. Sustainable Energy and Fuels, 2021, 5, 2771-2780.	4.9	8
1875	Nickel-iron layered double hydroxides for an improved Ni/Fe hybrid battery-electrolyser. Materials Advances, 2021, 2, 5076-5088.	5.4	6
1876	Pressure-promoted highly-ordered Fe-doped-Ni ₂ B for effective oxygen evolution reaction and overall water splitting. Journal of Materials Chemistry A, 2021, 9, 6469-6475.	10.3	37
1877	Custom plating of nanoscale semiconductor/catalyst junctions for photoelectrochemical water splitting. Nanoscale, 2021, 13, 1997-2004.	5.6	7
1878	Cobalt-Oxo Complexes. , 2021, , 825-845.		0
1879	A bifunctional hexa-filamentous microfibril multimetallic foam: an unconventional high-performance electrode for total water splitting under industrial operation conditions. Journal of Materials Chemistry A, 2021, 9, 4971-4983.	10.3	20
1881	Ultrathin Silicon Oxide Overlayers Enable Selective Oxygen Evolution from Acidic and Unbuffered pH-Neutral Seawater. ACS Catalysis, 2021, 11, 1316-1330.	11.2	54
1882	Engineering electrocatalyst nanosurfaces to enrich the activity by inducing lattice strain. Energy and Environmental Science, 2021, 14, 3717-3756.	30.8	98
1883	Tetragonal tungsten bronze type Sn(<scp>ii</scp>)-based quaternary oxides: a new class of visible-light-absorbing semiconductors for photoelectrochemical water oxidation. Journal of Materials Chemistry A, 2021, 9, 21085-21093.	10.3	5
1884	Activation Strategy of MoS ₂ as HER Electrocatalyst through Doping-Induced Lattice Strain, Band Gap Engineering, and Active Crystal Plane Design. ACS Applied Materials & Interfaces, 2021, 13, 765-780.	8.0	86
1885	Defective two-dimensional layered heterometallic phosphonates as highly efficient oxygen evolution electrocatalysts. Inorganic Chemistry Frontiers, 2021, 8, 4448-4457.	6.0	6

#	Article	IF	CITATIONS
1886	Solar-driven valorisation of glycerol on BiVO ₄ photoanodes: effect of co-catalyst and reaction media on reaction selectivity. Journal of Materials Chemistry A, 2021, 9, 6252-6260.	10.3	34
1887	Low-crystallinity mesoporous NiGaFe hydroxide nanosheets on macroporous Ni foam for high-efficiency oxygen evolution electrocatalysis. Journal of Materials Chemistry A, 2021, 9, 6223-6231.	10.3	24
1888	Controllable atomic defect engineering in layered Ni _x Fe _{1â^'x} (OH) ₂ nanosheets for electrochemical overall water splitting. Journal of Materials Chemistry A, 2021, 9, 14432-14443.	10.3	84
1889	Recent discoveries in the reaction mechanism of heterogeneous electrocatalytic nitrate reduction. Catalysis Science and Technology, 2021, 11, 705-725.	4.1	114
1890	Controllable synthesis of multidimensional carboxylic acid-based NiFe MOFs as efficient electrocatalysts for oxygen evolution. Materials Chemistry Frontiers, 2021, 5, 7191-7198.	5.9	30
1891	Prospects and challenges in designing photocatalytic particle suspension reactors for solar fuel processing. Chemical Science, 2021, 12, 9866-9884.	7.4	22
1892	Enhanced oxygen evolution catalytic activity of NiS ₂ by coupling with ferrous phosphite and phosphide. Sustainable Energy and Fuels, 2021, 5, 1801-1808.	4.9	7
1893	Firstâ€Principles Evaluation of Oneâ€Dimensional Metalâ€Organic Frameworks for Electrocatalytic Câ^'H Activation of Natural Gas. Chemistry - an Asian Journal, 2021, 16, 292-295.	3.3	5
1894	Fast and facile synthesis of carbonate-modified NiFe layered double hydroxide nanosheets by dielectric barrier discharge microplasma: mechanism and application in enhanced water oxidation. Journal of Materials Science, 2021, 56, 8115-8126.	3.7	10
1895	Two-Dimensional Transition Metal Chalcogenides for Hydrogen Evolution Catalysis. , 2021, , 3075-3101.		0
1896	Nickel–cobalt oxalate as an efficient non-precious electrocatalyst for an improved alkaline oxygen evolution reaction. Nanoscale Advances, 2021, 3, 3770-3779.	4.6	19
1897	<i>In situ</i> formation of grain boundaries on a supported hybrid to boost water oxidation activity of iridium oxide. Nanoscale, 2021, 13, 13845-13857.	5.6	6
1898	Understanding polyoxometalates as water oxidation catalysts through iron <i>vs.</i> cobalt reactivity. Chemical Science, 2021, 12, 8755-8766.	7.4	23
1899	Surface and bulk reconstruction of CoW sulfides during pH-universal electrocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2021, 9, 11359-11369.	10.3	21
1900	Decoupled electrochemical water-splitting systems: a review and perspective. Energy and Environmental Science, 2021, 14, 4740-4759.	30.8	172
1901	Engineering MoSe ₂ /WS ₂ Hybrids to Replace the Scarce Platinum Electrode for Hydrogen Evolution Reactions and Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 5061-5072.	8.0	69
1902	Layered double hydroxide derived bimetallic nickel–iron selenide as an active electrocatalyst for nitrogen fixation under ambient conditions. Inorganic Chemistry Frontiers, 2021, 8, 1762-1770.	6.0	41
1903	Electro-catalysts for oxygen electrodes in seawater electrolyzers (OER) and reversible electrolyzers (OER/ORR). , 2021, , 83-103.		2

#	Article	IF	CITATIONS
1904	Self-standing, hybrid three-dimensional-porous MoS2/Ni3S2 foam electrocatalyst for hydrogen evolution reaction in alkaline medium. International Journal of Hydrogen Energy, 2021, 46, 7759-7771.	7.1	31
1905	Reevesite with Ordered Intralayer Atomic Arrangement as an Optimized Nickelâ€ŀron Oxygen Evolution Electrocatalyst. ChemElectroChem, 2021, 8, 558-562.	3.4	4
1906	Chevrel Phase Nanoparticles as Electrocatalysts for Hydrogen Evolution. ACS Applied Nano Materials, 2021, 4, 2030-2036.	5.0	10
1907	Trimetallic NiFeCr-LDH/MoS2composites as novel electrocatalyst for OER. International Journal of Hydrogen Energy, 2021, 46, 7037-7046.	7.1	53
1908	Delivering the Full Potential of Oxygen Evolving Electrocatalyst by Conditioning Electrolytes at Nearâ€Neutral pH. ChemSusChem, 2021, 14, 1554-1564.	6.8	20
1909	Controlled Nucleation and Growth of Carbon Nitride Films on CNT Fiber Fabric for Photoelectrochemical Applications. Advanced Sustainable Systems, 0, , 2000265.	5.3	4
1912	Mo-doping induced edge-rich cobalt iron oxide ultrathin nanomeshes as efficient bifunctional electrocatalysts for overall water splitting. Electrochimica Acta, 2021, 368, 137651.	5.2	22
1913	Uncovering the Role of Countercations in Ligand Exchange of WSe ₂ : Tuning the d-Band Center toward Improved Hydrogen Desorption. ACS Applied Materials & Interfaces, 2021, 13, 11403-11413.	8.0	15
1914	3D urchin-like NiCo2O4 coated with carbon nanospheres prepared on flexible graphite felt for efficient bifunctional electrocatalytic water splitting. Journal of Materials Science, 2021, 56, 9961-9973.	3.7	12
1915	Engineered Nanoscale Singleâ€Metalâ€Oxides Catalytic Thin Films for Highâ€Performance Water Oxidation. Energy Technology, 2021, 9, 2000896.	3.8	5
1916	Ordered Macroporous Superstructure of Nitrogenâ€Doped Nanoporous Carbon Implanted with Ultrafine Ru Nanoclusters for Efficient pHâ€Universal Hydrogen Evolution Reaction. Advanced Materials, 2021, 33, e2006965.	21.0	213
1917	Abundant Active Sites on the Basal Plane and Edges of Layered van der Waals Fe ₃ GeTe ₂ for Highly Efficient Hydrogen Evolution. , 2021, 3, 313-319.		19
1918	Novel polyoxometalate-based composite as efficient electrocatalyst for alkaline water oxidation reaction. Journal of the Iranian Chemical Society, 2021, 18, 2079.	2.2	2
1919	Metalâ€Organicâ€Frameworkâ€Derived Bismuth Nanosheets for Electrochemical and Solarâ€Driven Electrochemical CO ₂ Reduction to Formate. ChemElectroChem, 2021, 8, 880-886.	3.4	15
1920	Electrochemically active surface area controls HER activity for FexNi100â^'x films in alkaline electrolyte. Journal of Catalysis, 2021, 394, 104-112.	6.2	59
1921	Nanostructural Co–MoS2/NiCoS supported on reduced Graphene oxide as a high activity electrocatalyst for hydrogen evolution in alkaline media. International Journal of Hydrogen Energy, 2021, 46, 8567-8577.	7.1	11
1922	X-ray Photoelectron Spectroscopy and Resonant X-ray Spectroscopy Investigations of Interactions between Thin Metal Catalyst Films and Amorphous Titanium Dioxide Photoelectrode Protection Layers. Chemistry of Materials, 2021, 33, 1265-1275.	6.7	15
1923	Thin-film iron-oxide nanobeads as bifunctional electrocatalyst for high activity overall water splitting. International Journal of Hydrogen Energy, 2021, 46, 7885-7902.	7.1	31

#	Article	IF	CITATIONS
1924	Regenerative fuel cells: Recent progress, challenges, perspectives and their applications for space energy system. Applied Energy, 2021, 283, 116376.	10.1	50
1925	<i>Operando</i> unraveling photothermal-promoted dynamic active-sites generation in NiFe ₂ O ₄ for markedly enhanced oxygen evolution. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	107
1926	Rare-earth-regulated Ru-O interaction within the pyrochlore ruthenate for electrocatalytic oxygen evolution in acidic media. Science China Materials, 2021, 64, 1653-1661.	6.3	27
1927	Electrodeposition of electrocatalytic coatings in systems based on deep eutectic solvents: a review. Voprosy Khimii I Khimicheskoi Tekhnologii, 2021, , 4-22.	0.4	3
1928	A Facile Reaction Strategy for the Synthesis of MOF-Based Pine-Needle-Like Nanocluster Hierarchical Structure for Efficient Overall Water Splitting. Inorganic Chemistry, 2021, 60, 4047-4057.	4.0	23
1929	Electrochemical Routes for the Valorization of Biomass-Derived Feedstocks: From Chemistry to Application. ACS Energy Letters, 0, , 1205-1270.	17.4	130
1930	Unveiling the Excellent Electrocatalytic Activity of Grain-Boundary Enriched Anisotropic Pure Gold Nanostructures toward Hydrogen Evolution Reaction: A Combined Approach of Experiment and Theory. ACS Applied Energy Materials, 2021, 4, 3017-3032.	5.1	9
1931	A Unified Research Data Infrastructure for Catalysis Research – Challenges and Concepts. ChemCatChem, 2021, 13, 3223-3236.	3.7	45
1932	Electrochemically Decorated Iridium Electrodes with WS _{3â^'} <i>_x</i> Toward Improved Oxygen Evolution Electrocatalyst Stability in Acidic Electrolytes. Advanced Sustainable Systems, 2021, 5, 2000284.	5.3	8
1933	Oxygen Evolution Reaction Activity and Stability Benchmarks for Supported and Unsupported IrO _{<i>x</i>} Electrocatalysts. ACS Catalysis, 2021, 11, 4107-4116.	11.2	69
1934	<i>Ab Initio</i> Thermodynamics and Kinetics of the Lattice Oxygen Evolution Reaction in Iridium Oxides. ACS Energy Letters, 2021, 6, 1124-1133.	17.4	56
1935	Recent Development of Oxygen Evolution Electrocatalysts in Acidic Environment. Advanced Materials, 2021, 33, e2006328.	21.0	392
1936	Evaluating the effect of membrane-ionomer combinations and supporting electrolytes on the performance of cobalt nanoparticle anodes in anion exchange membrane electrolyzers. Journal of Power Sources, 2021, 488, 229433.	7.8	20
1937	InGaN-based nanowires development for energy harvesting and conversion applications. Journal of Applied Physics, 2021, 129, .	2.5	9
1938	Nickel Structures as a Template Strategy to Create Shaped Iridium Electrocatalysts for Electrochemical Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 13576-13585.	8.0	7
1939	Theoretical Insights into the Limitation of Photocatalytic Overall Water Splitting Performance of VIA Group Elements Doped Polymeric Carbon Nitride: A Density Functional Theory Calculation Predicting Solarâ€toâ€Hydrogen Efficiency. Solar Rrl, 2021, 5, 2000630.	5.8	13
1940	Efficient Hydrogen Evolution on Nanoscale Graphdiyne. Small, 2021, 17, e2006136.	10.0	36
1941	Iridium Oxide Modified with Silver Single Atom for Boosting Oxygen Evolution Reaction in Acidic Media. ACS Energy Letters, 0, , 1588-1595.	17.4	69

#	Article	IF	CITATIONS
1942	Crystal Growth and Design of Disk/Filament ZnO-Decorated 1D TiO2 Composite Ceramics for Photoexcited Device Applications. Nanomaterials, 2021, 11, 667.	4.1	8
1943	Earth-Abundant Electrocatalysts for Water Splitting: Current and Future Directions. Catalysts, 2021, 11, 429.	3.5	25
1944	Design of a Multilayered Oxygenâ€Evolution Electrode with High Catalytic Activity and Corrosion Resistance for Saline Water Splitting. Advanced Functional Materials, 2021, 31, 2101820.	14.9	103
1945	Critical Review of Platinum Group Metal-Free Materials for Water Electrolysis: Transition from the Laboratory to the Market. Johnson Matthey Technology Review, 2021, 65, 207-226.	1.0	17
1946	Twoâ€Dimensional Metal–Organic Frameworks and Covalent–Organic Frameworks for Electrocatalysis: Distinct Merits by the Reduced Dimension. Advanced Energy Materials, 2022, 12, 2003990.	19.5	78
1947	Semi-conducting Ni/Zn nano-hybrids' driven efficient electro-catalytic performance: fabrication, characterization, and electrochemical features' elucidation. Green Chemistry Letters and Reviews, 2021, 14, 286-301.	4.7	18
1948	Influence of Fe and Ni Doping on the OER Performance at the Co ₃ O ₄ (001) Surface: Insights from DFT+ <i>U</i> Calculations. ACS Catalysis, 2021, 11, 5601-5613.	11.2	86
1949	Valenceâ€State Effect of Iridium Dopant in NiFe(OH) ₂ Catalyst for Hydrogen Evolution Reaction. Small, 2021, 17, e2100203.	10.0	31
1950	Accelerating H ₂ Evolution by Anodic Semiâ€dehydrogenation of Tetrahydroisoquinolines in Water over Co ₃ O ₄ Nanoribbon Arrays Decorated Nickel Foam. Chemistry - A European Journal, 2021, 27, 7502-7506.	3.3	11
1951	3D Printed Nickel–Molybdenum-Based Electrocatalysts for Hydrogen Evolution at Low Overpotentials in a Flow-Through Configuration. ACS Applied Materials & Interfaces, 2021, 13, 20260-20268.	8.0	22
1952	Importance of the oxyl character on the IrO2 surface dependent catalytic activity for the oxygen evolution reaction. Journal of Catalysis, 2021, 396, 192-201.	6.2	18
1953	Electrodeposited nanostructured flakes of cobalt, manganese and nickel-based sulfide (CoMnNiS) for electrocatalytic alkaline oxygen evolution reaction (OER). Journal of Materials Science: Materials in Electronics, 2021, 32, 12292-12307.	2.2	16
1954	Partially reduced <scp>NiO</scp> by cellulose as a highly active catalyst for oxygen evolution reaction: synergy between in situ generated Ni ³⁺ and lattice oxygen. International Journal of Energy Research, 2021, 45, 15544-15556.	4.5	6
1955	Superoxide Oxidation by a Thiolate-Ligated Iron Complex and Anion Inhibition. Inorganic Chemistry, 2021, 60, 7250-7261.	4.0	4
1956	One-Pot Synthesis of B/P-Codoped Co-Mo Dual-Nanowafer Electrocatalysts for Overall Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 20024-20033.	8.0	52
1957	3D Porous Ru-Doped NiCo-MOF Hollow Nanospheres for Boosting Oxygen Evolution Reaction Electrocatalysis. Inorganic Chemistry, 2021, 60, 5882-5889.	4.0	59
1958	Constructing Ultrathin W-Doped NiFe Nanosheets via Facile Electrosynthesis as Bifunctional Electrocatalysts for Efficient Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 20070-20080.	8.0	54
1959	Doping of MoS ₂ by "Cu―and "V― An Efficient Strategy for the Enhancement of Hydrogen Evolution Activity. Langmuir, 2021, 37, 4847-4858.	3.5	22

# 1961	ARTICLE Synthesis of 3D CoO nanowires supported NiFe layered double hydroxide using an atmospheric pressure microplasma for high-performance oxygen evolution reaction. Chemical Engineering Journal, 2021, 410, 128366.	IF 12.7	Citations 39
1962	Three-dimensional Nanoporous Cu-Doped Ni Coating as Bifunctional Electrocatalyst for Hydrazine Sensing and Hydrogen Evolution Reaction. Nanotechnology, 2021, 32, 305502.	2.6	2
1963	Challenging the Durability of Intermetallic Mo–Ni Compounds in the Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2021, 13, 23616-23626.	8.0	27
1964	Microporous Film of Ternary Ni/Co/Fe Alloy for Superior Electrolytic Hydrogen Production in Alkaline Medium. Journal of the Electrochemical Society, 2021, 168, 054509.	2.9	14
1965	Benchmarking of oxygen evolution catalysts on porous nickel supports. Joule, 2021, 5, 1281-1300.	24.0	74
1966	Strategic Design of a Bifunctional NiFeCoW@NC Hybrid to Replace the Noble Platinum for Dye-Sensitized Solar Cells and Hydrogen Evolution Reactions. ACS Applied Materials & Interfaces, 2021, 13, 25010-25023.	8.0	17
1967	Transition Metal Chalcogenides as a Versatile and Tunable Platform for Catalytic CO ₂ and N ₂ Electroreduction. ACS Materials Au, 2021, 1, 6-36.	6.0	55
1968	Electrocatalytic Oxidation of Water by OH â^ ―and H 2 Oâ€Capped IrO x Nanoparticles Electrophoretically Deposited on Graphite and Basal Plane HOPG: Effect of the Substrate Electrode**. ChemElectroChem, 2021, 8, 1632-1641.	3.4	1
1969	Photoelectrochemical water splitting by hybrid organic-inorganic systems: Setting the path from 2% to 20% solar-to-hydrogen conversion efficiency. IScience, 2021, 24, 102463.	4.1	12
1970	Fundamentals, On-Going Advances and Challenges of Electrochemical Carbon Dioxide Reduction. Electrochemical Energy Reviews, 2022, 5, 82-111.	25.5	17
1971	<i>In-Situ</i> Generated High-Valent Iron Single-Atom Catalyst for Efficient Oxygen Evolution. Nano Letters, 2021, 21, 4795-4801.	9.1	47
1973	Promoted electrocatalytic hydrogen evolution performance by constructing Ni12P5–Ni2P heterointerfaces. International Journal of Hydrogen Energy, 2021, 46, 17097-17105.	7.1	25
1974	Metalâ€Assisted Efficient Nanotubular Electrocatalyst of MoS ₂ for Hydrogen Production. ChemCatChem, 2021, 13, 3237-3246.	3.7	2
1975	Effect of Adding Polyethylene Glycol to the Precursor Solution of Amorphous IrO ₂ -Ta ₂ O ₅ Electrocatalysts for Oxygen Evolution Reaction. Electrochemistry, 2021, 89, 234-238.	1.4	6
1976	2D-Layered Non-Precious Electrocatalysts for Hydrogen Evolution Reaction: Fundamentals to Applications. Catalysts, 2021, 11, 689.	3.5	20
1977	Progress and Perspectives in Photo―and Electrochemicalâ€Oxidation of Biomass for Sustainable Chemicals and Hydrogen Production. Advanced Energy Materials, 2021, 11, 2101180.	19.5	200
1978	Thermally templated cobalt oxide nanobubbles on crumpled graphene sheets: A promising non-precious metal catalysts for acidic oxygen evolution. Electrochimica Acta, 2021, 382, 138277.	5.2	11
1979	In Situ Analytical Techniques for the Investigation of Material Stability and Interface Dynamics in Electrocatalytic and Photoelectrochemical Applications. Small Methods, 2021, 5, e2100322.	8.6	22
#	Article	IF	CITATIONS
------	--	------	-----------
1980	Decreasing the Energy Consumption of the CO ₂ Electrolysis Process Using a Magnetic Field. ACS Energy Letters, 2021, 6, 2427-2433.	17.4	24
1981	A fundamental viewpoint on the hydrogen spillover phenomenon of electrocatalytic hydrogen evolution. Nature Communications, 2021, 12, 3502.	12.8	183
1982	Degradation Mechanism of an IrO2 Anode Co-Catalyst for Cell Voltage Reversal Mitigation under Transient Operation Conditions of a PEM Fuel Cell. Journal of the Electrochemical Society, 2021, 168, 064521.	2.9	11
1983	Constant Change: Exploring Dynamic Oxygen Evolution Reaction Catalysis and Material Transformations in Strontium Zinc Iridate Perovskite in Acid. Journal of the American Chemical Society, 2021, 143, 9961-9971.	13.7	57
1984	Electrochemical Polymer Pen Lithography. Small, 2021, 17, e2100662.	10.0	6
1985	Recent progress on precious metal single atom materials for water splitting catalysis. SusMat, 2021, 1, 194-210.	14.9	86
1986	ZIF-12/Fe-Cu LDH Composite as a High Performance Electrocatalyst for Water Oxidation. Frontiers in Chemistry, 2021, 9, 686968.	3.6	12
1987	Mechanisms of water oxidation on heterogeneous catalyst surfaces. Nano Research, 2021, 14, 3446-3457.	10.4	34
1988	3D nickel molybdenum oxyselenide (Ni1-xMoxOSe) nanoarchitectures as advanced multifunctional catalyst for Zn-air batteries and water splitting. Applied Catalysis B: Environmental, 2021, 286, 119909.	20.2	72
1989	Amorphous Ni _{1–<i>x</i>} Fe _{<i>x</i>} Oxyhydroxide Nanosheets with Integrated Bulk and Surface Iron for a High and Stable Oxygen Evolution Reaction. ACS Applied Energy Materials, 2021, 4, 6833-6841.	5.1	10
1990	Recent advances in nanostructured electrocatalysts for hydrogen evolution reaction. Rare Metals, 2021, 40, 3375-3405.	7.1	112
1991	Progress of Nonpreciousâ€Metalâ€Based Electrocatalysts for Oxygen Evolution in Acidic Media. Advanced Materials, 2021, 33, e2003786.	21.0	166
1992	α-Fe2O3 nanorods decorated with NiMnO3 co-catalyst as photoanode for enhanced oxygen evolution reaction in photoelectrochemical water splitting. Materials Today Communications, 2021, 27, 102231.	1.9	12
1993	Accelerating water dissociation kinetics of Ni3N by tuning interfacial orbital coupling. Nano Research, 2021, 14, 3458-3465.	10.4	16
1994	Clean and Affordable Hydrogen Fuel from Alkaline Water Splitting: Past, Recent Progress, and Future Prospects. Advanced Materials, 2021, 33, e2007100.	21.0	781
1995	Understanding Degradation Mechanisms in SrIrO ₃ Oxygen Evolution Electrocatalysts: Chemical and Structural Microscopy at the Nanoscale. Advanced Functional Materials, 2021, 31, 2101542.	14.9	16
1996	Recent progress in high-entropy alloys for catalysts: synthesis, applications, and prospects. Materials Today Energy, 2021, 20, 100638.	4.7	73
1997	CVD growth of the nanostructured Ni3S2 thin films as efficient electrocatalyst for hydrogen evolution reaction. Vacuum, 2021, 188, 110209.	3.5	11

#	Article	IF	CITATIONS
1998	Hydrogen Environmental Benefits Depend on the Way of Production: An Overview of the Main Processes Production and Challenges by 2050. Advanced Energy and Sustainability Research, 2021, 2, 2100093.	5.8	22
1999	Impact of interfacial CoOOH on OER catalytic activities and electrochemical behaviors of bimetallic CoxNi-LDH nanosheet catalysts. Electrochimica Acta, 2021, 381, 138276.	5.2	53
2000	NiCo layered double hydroxides derived Ni0.67Co0.33(PO3)2 as stable and efficient electrocatalysts for overall water splitting. Journal of Alloys and Compounds, 2021, 869, 159311.	5.5	8
2001	Tuning the Catalytic Water Oxidation Activity through Structural Modifications of High-Nuclearity Mn-oxo Clusters [Mn18M] (M = Sr2+, Mn2+). Water (Switzerland), 2021, 13, 2042.	2.7	2
2002	Defect-engineered ultrathin NiMoO4 nanomeshes as efficient and stable electrocatalysts for overall water splitting. Ceramics International, 2021, 47, 19098-19105.	4.8	18
2003	Advancing the Anode Compartment for Energy Efficient CO ₂ Reduction at Neutral pH. ChemElectroChem, 2021, 8, 2726-2736.	3.4	13
2004	Impact of Single-Pulse, Low-Intensity Laser Post-Processing on Structure and Activity of Mesostructured Cobalt Oxide for the Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2021, 13, 51962-51973.	8.0	20
2005	Stability evaluation of earthâ€abundant metalâ€based polyoxometalate electrocatalysts for oxygen evolution reaction towards industrial PEM electrolysis at high current densities. Electrochemical Science Advances, 2022, 2, e202100073.	2.8	3
2006	Improved electrocatalytic water oxidation with cobalt hydroxide nano-flakes supported on copper-modified nickel foam. Electrochimica Acta, 2021, 383, 138368.	5.2	4
2007	Metal hydride mediated water splitting: Electrical energy saving and decoupled H2/O2 generation. Materials Today, 2021, 47, 16-24.	14.2	13
2008	Layered Oxides SrLaFe _{1â€x} Co _x O _{4â€Î´} (x=0–1) as Bifunctional Electrocatalysts for Waterâ€Splitting. ChemCatChem, 2021, 13, 3510-3516.	3.7	18
2009	Principles of Water Electrolysis and Recent Progress in Cobaltâ€, Nickelâ€, and Ironâ€Based Oxides for the Oxygen Evolution Reaction. Angewandte Chemie, 2022, 134, .	2.0	18
2010	Design Principles of NiFe-Layered Double Hydroxide Anode Catalysts for Anion Exchange Membrane Water Electrolyzers. ACS Applied Materials & Interfaces, 2021, 13, 37179-37186.	8.0	36
2011	Experimental Verification of Ir 5d Orbital States and Atomic Structures in Highly Active Amorphous Iridium Oxide Catalysts. ACS Catalysis, 2021, 11, 10084-10094.	11.2	4
2012	Surface-Promoted Evolution of Ru-bda Coordination Oligomers Boosts the Efficiency of Water Oxidation Molecular Anodes. Journal of the American Chemical Society, 2021, 143, 11651-11661.	13.7	28
2013	Flower-like CoO@Cu2S nanocomposite for enhanced oxygen evolution reaction. Applied Surface Science, 2021, 555, 149441.	6.1	15
2014	Engineering Charge Redistribution within Perovskite Oxides for Synergistically Enhanced Overall Water Splitting. , 2021, 3, 1258-1265.		30
2015	Boosting the activity of FeOOH via integration of ZIF-12 and graphene to efficiently catalyze the oxygen evolution reaction. International Journal of Hydrogen Energy, 2021, 46, 25050-25059.	7.1	7

#	Article	IF	CITATIONS
2016	Tellurium-Incorporated Nickel-Cobalt Layered Double Hydroxide and Its Oxygen Evolution Reaction. Journal of Korean Institute of Metals and Materials, 2021, 59, 491-498.	1.0	6
2017	MoS ₂ Decoration Followed by P Inclusion over Ni-Co Bimetallic Metal–Organic Framework-Derived Heterostructures for Water Splitting. Inorganic Chemistry, 2021, 60, 10772-10780.	4.0	22
2018	Electronic interaction boosted electrocatalysis of iridium nanoparticles on nitrogen-doped graphene for efficient overall water splitting in acidic and alkaline media. Chemical Engineering Journal, 2021, 415, 129034.	12.7	42
2019	Nickel Foam Supported NiO@Ru Heterostructure Towards Highâ€Efficiency Overall Water Splitting. ChemPhysChem, 2021, 22, 1785-1791.	2.1	14
2020	Principles of Water Electrolysis and Recent Progress in Cobaltâ€, Nickelâ€, and Ironâ€Based Oxides for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2022, 61, .	13.8	286
2021	Noble-Metal-Free Multicomponent Nanointegration for Sustainable Energy Conversion. Chemical Reviews, 2021, 121, 10271-10366.	47.7	156
2022	Metalâ€Organic Framework Derived Nanostructured Bifunctional Electrocatalysts for Water Splitting. ChemElectroChem, 2021, 8, 3782-3803.	3.4	14
2023	Complex Impedance Analysis on Charge Accumulation Step of Mn ₃ O ₄ Nanoparticles during Water Oxidation. ACS Omega, 2021, 6, 18404-18413.	3.5	5
2024	Bipolar Membrane and Interface Materials for Electrochemical Energy Systems. ACS Applied Energy Materials, 2021, 4, 7419-7439.	5.1	21
2025	Interfacing or Doping? Role of Ce in Highly Promoted Water Oxidation of NiFe‣ayered Double Hydroxide. Advanced Energy Materials, 2021, 11, 2101281.	19.5	120
2026	Phase- and Surface Composition-Dependent Electrochemical Stability of Ir-Ru Nanoparticles during Oxygen Evolution Reaction. ACS Catalysis, 2021, 11, 9300-9316.	11.2	79
2027	Microâ€Electrode with Fast Mass Transport for Enhancing Selectivity of Carbonaceous Products in Electrochemical CO ₂ Reduction. Advanced Functional Materials, 2021, 31, 2103966.	14.9	16
2028	High-Performance Ni _{<i>x</i>} Co _{3-x} O ₄ /Ti ₃ C ₂ T _{<i>x</i>} Interfacial Nanohybrid for Electrochemical Overall Water Splitting. ACS Applied Materials & amp; Interfaces, 2021, 13, 34308-34319.	-HT 8.0	24
2029	Defect-Driven Oxide Transformations and the Electrochemical Interphase. Accounts of Chemical Research, 2021, 54, 3039-3049.	15.6	3
2030	Electrochemical tuning of nickel molybdate nanorod arrays towards promoted electrocatalytic urea oxidization. Applied Catalysis A: General, 2021, 622, 118220.	4.3	11
2031	In-situ electrochemical tuning of (CoNiMnZnFe)3O3.2 high-entropy oxide for efficient oxygen evolution reactions. Journal of Alloys and Compounds, 2021, 868, 159064.	5.5	57
2032	Stability challenges of electrocatalytic oxygen evolution reaction: From mechanistic understanding to reactor design. Joule, 2021, 5, 1704-1731.	24.0	416
2033	Reutilizing Methane Reforming Spent Catalysts as Efficient Overall Water-Splitting Electrocatalysts. ACS Omega, 2021, 6, 21316-21326.	3.5	16

ARTICLE IF CITATIONS Improving the onset potential and Tafel slope determination of earth-abundant water oxidation 2034 5.2 30 electrocatalysts. Electrochimica Acta, 2021, 388, 138613. Deployment of MIL-88B(Fe)/TiO₂ Nanotube-Supported Ti Wires as Reusable Electrochemiluminescence Microelectrodes for Noninvasive Sensing of 6.5 H₂O₂ from Single Cancer Cells. Analytical Chemistry, 2021, 93, 11312-11320. Manipulating the Local Coordination and Electronic Structures for Efficient Electrocatalytic Oxygen 2036 21.0 142 Evolution. Advanced Materials, 2021, 33, e2103004. Engineering Selfâ€Reconstruction via Flexible Components in Layered Double Hydroxides for Superiorâ€Evolving Performance. Small, 2021, 17, e2101671. Boosting Unassisted Alkaline Solar Water Splitting Using Silicon Photocathode with TiO₂ Nanorods Decorated by Edgeâ€Rich MoS₂ Nanoplates. Small, 2021, 17, 2038 10.0 35 e2103457. Interface engineering of N-doped Ni3S2/CoS2 heterostructures as efficient bifunctional catalysts for overall water splitting. Journal of Electroanalytical Chemistry, 2021, 895, 115516. 2039 3.8 Integrating RuNi alloy in S-doped defective carbon for efficient hydrogen evolution in both acidic and 2040 12.7 42 alkaline media. Chemical Engineering Journal, 2021, 417, 129319. Bio-Inspired Molecular Catalysts for Water Oxidation. Catalysts, 2021, 11, 1068. 2041 3.5 Enhanced activity of Pd/α-MnO2 for electrocatalytic oxygen evolution reaction. International Journal 2042 7.1 11 of Hydrogen Energy, 2021, 46, 26976-26988. From NiMoO₄ to Î³-NiOOH: Detecting the Active Catalyst Phase by Time Resolved <i>in 2043 14.6 Situ</i> and <i>Operando</i> Raman Spectroscopy. ACS Nano, 2021, 15, 13504-13515. Engineered Modular Design of a Nanoscale CoNP/Au_{nano} Hybrid Assembly for 2044 5.116 High-Performance Overall Water Splitting. ACS Applied Energy Materials, 2021, 4, 8953-8968. Hydrogen from Sunlight and Water: A Side-by-Side Comparison between Photoelectrochemical and 2045 17.4 Sólar Thermochemical Water-Splitting. ACS Énergy Letters, 2021, 6, 3096-3113. Low-crystalline transition metal oxide/hydroxide on MWCNT by Fenton-reaction-inspired green 2046 5.2 19 synthesis for lithium ion battery and OER electrocatalysis. Electrochimica Acta, 2021, 387, 138559. Defect Engineering of Sb₂Te₃ through Different Doses of Ion Irradiation to Boost Hydrogen Evolution Reaction Performance. ACS Applied Energy Materials, 2021, 4, 8465-8474. 2047 5.1 Understanding spatial effects of tetrahedral and octahedral cobalt cations on peroxymonosulfate 2048 20.2 68 activation for efficient pollution degradation. Applied Catalysis B: Environmental, 2021, 291, 120072. WS2 moirel•superlattices derived from mechanical flexibility for hydrogen evolution reaction. Nature 2049 12.8 Communications, 2021, 12, 5070. Recent Progress in the Development of Advanced Functionalized Electrodes for Oxygen Evolution 2050 2.9 3 Reaction: An Overview. Materials, 2021, 14, 4420. A cobalt-based coordination polymer with a tripodal carboxylate ligand: synthese, structure and properties. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2021, 76, 447-452.

#	Article	IF	CITATIONS
2052	Quasi-Two-Dimensional Earth-Abundant Bimetallic Electrocatalysts for Oxygen Evolution Reactions. ACS Energy Letters, 2021, 6, 3367-3375.	17.4	29
2053	N and Mn dual-doped cactus-like cobalt oxide nanoarchitecture derived from cobalt carbonate hydroxide as efficient electrocatalysts for oxygen evolution reactions. Journal of Colloid and Interface Science, 2021, 597, 361-369.	9.4	25
2054	New Applications of Zirconium Phosphate Nanomaterials. Accounts of Materials Research, 2021, 2, 793-803.	11.7	8
2055	Bimetallic Mixed Clusters Highly Loaded on Porous 2D Graphdiyne for Hydrogen Energy Conversion. Advanced Science, 2021, 8, e2102777.	11.2	27
2056	Designing of low Pt electrocatalyst through immobilization on metal@C support for efficient hydrogen evolution reaction in acidic media. Journal of Electroanalytical Chemistry, 2021, 896, 115076.	3.8	16
2057	High Centrifugal Field Coupling with Electrolyte Circulation Internals: Process Intensification toward Efficient Water Electrolysis for Hydrogen Storage via Power-to-Gas. Journal of the Electrochemical Society, 2021, 168, 093504.	2.9	0
2058	Phosphorized CoNi ₂ S ₄ Yolkâ€Shell Spheres for Highly Efficient Hydrogen Production via Water and Urea Electrolysis. Angewandte Chemie, 2021, 133, 23067-23073.	2.0	14
2059	High-active nanoplates of nitrogen-doped carbon@Mo2C as efficient catalysts in water splitting. Synthetic Metals, 2021, 279, 116847.	3.9	13
2060	In-situ derived highly active NiS2 and MoS2 nanosheets on NiMoO4 microcuboids via controlled surface sulfidation for high-current-density hydrogen evolution reaction. Electrochimica Acta, 2021, 389, 138733.	5.2	9
2061	Triggering the Intrinsic Catalytic Activity of Ni-Doped Molybdenum Oxides via Phase Engineering for Hydrogen Evolution and Application in Mg/Seawater Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 13106-13113.	6.7	29
2062	Revealing the genuine stability of the reference Pt/C electrocatalyst toward the ORR. Electrochimica Acta, 2021, 391, 138963.	5.2	9
2063	Electronic modification in graphdiyne for future electrocatalytic applications. 2D Materials, 2021, 8, 044009.	4.4	6
2064	Surfactant-free colloidal strategies for highly dispersed and active supported IrO2 catalysts: Synthesis and performance evaluation for the oxygen evolution reaction. Journal of Catalysis, 2021, 401, 54-62.	6.2	14
2065	Design Principles for Multinary Metal Chalcogenides: Toward Programmable Reactivity in Energy Conversion. Chemistry of Materials, 2021, 33, 7133-7147.	6.7	13
2066	Sacrificial Cu Layer Mediated the Formation of an Active and Stable Supported Iridium Oxygen Evolution Reaction Electrocatalyst. ACS Catalysis, 2021, 11, 12510-12519.	11.2	18
2067	Active facet determination of layered double hydroxide for oxygen evolution reaction. Journal of Energy Chemistry, 2021, 60, 127-134.	12.9	32
2068	Design of tin polyphosphate for hydrogen evolution reaction and supercapacitor applications. Journal of the Korean Ceramic Society, 2021, 58, 688-699.	2.3	9
2069	Modulation of electronic structure and oxygen vacancies of perovskites SrCoO3-δ by sulfur doping enables highly active and stable oxygen evolution reaction. Electrochimica Acta, 2021, 390, 138872.	5.2	16

#	Article	IF	CITATIONS
2070	Self-supported NiFe-LDH@CoSx nanosheet arrays grown on nickel foam as efficient bifunctional electrocatalysts for overall water splitting. Chemical Engineering Journal, 2021, 419, 129512.	12.7	89
2071	Commercial anion exchange membrane water electrolyzer stack through non-precious metal electrocatalysts. Applied Catalysis B: Environmental, 2021, 292, 120170.	20.2	59
2072	Investigation on microstructural impacts to electrochemical performances of strontium tungstate as efficient bifunctional catalyst for hydrogen and oxygen evolution reactions. Journal of the Taiwan Institute of Chemical Engineers, 2021, 126, 145-153.	5.3	15
2073	Facile Co 3 O 4 nanoparticles deposited on polyvinylpyrrolidine for efficient water oxidation in alkaline media. Journal of the Chinese Chemical Society, 0, , .	1.4	0
2074	Iron and chromium co-doped cobalt phosphide porous nanosheets as robust bifunctional electrocatalyst for efficient water splitting. Nanotechnology, 2022, 33, 075204.	2.6	9
2075	Co3O4@carbon with high Co2+/Co3+ ratios derived from ZIF-67 supported on N-doped carbon nanospheres as stable bifunctional oxygen catalysts. Materials Today Energy, 2021, 21, 100737.	4.7	25
2076	Charge Separated One-Dimensional Hybrid Cobalt/Nickel Phosphonate Frameworks: A Facile Approach to Design Bifunctional Electrocatalyst for Oxygen Evolution and Hydrogen Evolution Reactions. Inorganic Chemistry, 2021, 60, 15106-15111.	4.0	21
2077	Graphdiyne in-situ thermal reduction enabled ultra-small quasi-core/shell Ru-RuO2 heterostructures for efficient acidic water oxidation. 2D Materials, 2021, 8, 044011.	4.4	8
2078	Cu-Co bimetal oxide hierarchical nanostructures as high-performance electrocatalyst for oxygen evolution reaction. Materials Today Energy, 2021, 21, 100703.	4.7	5
2079	Fascinating Tin Effects on the Enhanced and Large-Current-Density Water Splitting Performance of Sn–Ni(OH) ₂ . ACS Applied Materials & Interfaces, 2021, 13, 42861-42869.	8.0	30
2080	Towards Highly Efficient Chalcopyrite Photocathodes for Water Splitting: The Use of Cocatalysts beyond Pt. ChemSusChem, 2021, 14, 4671-4679.	6.8	7
2081	Metal-substituted zirconium diboride (Zr1-TMB2; TMÂ=ÂNi, Co, and Fe) as low-cost and high-performance bifunctional electrocatalyst for water splitting. Electrochimica Acta, 2021, 389, 138789.	5.2	22
2082	Ligand Functionalized Ironâ€Based Metalâ€Organic Frameworks for Efficient Electrocatalytic Oxygen Evolution. ChemCatChem, 2021, 13, 4976-4984.	3.7	10
2083	Zinc sulfide for photocatalysis: White angel or black sheep?. Progress in Materials Science, 2022, 124, 100865.	32.8	23
2084	Development of Various Photovoltaicâ€Ðriven Water Electrolysis Technologies for Green Solar Hydrogen Generation. Solar Rrl, 2022, 6, 2100479.	5.8	21
2085	C9N4 as excellent dual electrocatalyst: A first principles study*. Chinese Physics B, 2021, 30, 096802.	1.4	0
2086	Multicomponent nonprecious hydrogen evolution catalysts for high performance and durable proton exchange membrane water electrolyzer. Journal of Power Sources, 2021, 506, 230200.	7.8	17
2087	Doping modification, defects construction, and surface engineering: Design of cost-effective high-performance electrocatalysts and their application in alkaline seawater splitting. Nano Energy, 2021, 87, 106160.	16.0	57

#	Article	IF	CITATIONS
2088	Activating nickel iron layer double hydroxide for alkaline hydrogen evolution reaction and overall water splitting by electrodepositing nickel hydroxide. Chemical Engineering Journal, 2021, 419, 129608.	12.7	89
2089	Evaluation of Manganese Cubanoid Clusters for Water Oxidation Catalysis: From Wellâ€Defined Molecular Coordination Complexes to Catalytically Active Amorphous Films. ChemSusChem, 2021, 14, 4741-4751.	6.8	2
2090	Copper-doped ruthenium oxide as highly efficient electrocatalysts for the evolution of oxygen in acidic media. Journal of Alloys and Compounds, 2022, 892, 162113.	5.5	20
2091	Realization of interstitial boron ordering and optimal near-surface electronic structure in Pd-B alloy electrocatalysts. Chemical Engineering Journal, 2021, 419, 129568.	12.7	23
2092	Comprehensive and Highâ€ŧhroughput Electrolysis of Water and Urea by 3–5 nm Nickel and Copper Coordination Polymers. Chemistry - an Asian Journal, 2021, 16, 3444-3452.	3.3	7
2093	RuO2 clusters derived from bulk SrRuO3: Robust catalyst for oxygen evolution reaction in acid. Nano Research, 2022, 15, 1959-1965.	10.4	23
2094	The Role of Surface Curvature in Electrocatalysts. Chemistry - A European Journal, 2022, 28, .	3.3	9
2095	Phosphorized CoNi ₂ S ₄ Yolkâ€Shell Spheres for Highly Efficient Hydrogen Production via Water and Urea Electrolysis. Angewandte Chemie - International Edition, 2021, 60, 22885-22891.	13.8	191
2096	Selectively Se-doped Co3O4@CeO2 nanoparticle-dotted nanoneedle arrays for high-efficiency overall water splitting. Applied Surface Science, 2021, 562, 150227.	6.1	89
2097	Porous N, P co-doped carbon-coated ultrafine Co2P nanoparticles derived from DNA: An electrocatalyst for highly efficient hydrogen evolution reaction. Electrochimica Acta, 2021, 393, 139051.	5.2	17
2098	Ultrastable NiFeOOH/NiFe/Ni electrocatalysts prepared by in-situ electro-oxidation for oxygen evolution reaction at large current density. Applied Surface Science, 2021, 564, 150440.	6.1	30
2099	Self-supporting transition metal chalcogenides on metal substrates for catalytic water splitting. Chemical Engineering Journal, 2021, 421, 129645.	12.7	62
2100	Nano-engineering of Ru-based hierarchical porous nanoreactors for highly efficient pH-universal overall water splitting. Applied Catalysis B: Environmental, 2021, 294, 120230.	20.2	49
2101	Type-II vdW heterojunction SeGa2Te/SeIn2Se as a high-efficiency visible-light-driven water-splitting photocatalyst. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 413, 127594.	2.1	9
2102	Enhanced electrocatalysis of NiMnIn Heusler alloy films for hydrogen evolution reaction by magnetic field. Journal of Alloys and Compounds, 2021, 877, 160271.	5.5	23
2103	The Roles of Composition and Mesostructure of Cobaltâ€Based Spinel Catalysts in Oxygen Evolution Reactions. Chemistry - A European Journal, 2021, 27, 17038-17048.	3.3	13
2104	Electrooxidation-enabled electroactive high-valence ferritic species in NiFe layered double hydroxide arrays as efficient oxygen evolution catalysts. Journal of Colloid and Interface Science, 2021, 599, 168-177.	9.4	14
2105	Iron-doped metal-organic framework with enhanced oxygen evolution reaction activity for overall water splitting. International Journal of Hydrogen Energy, 2021, 46, 34565-34573.	7.1	9

ARTICLE IF CITATIONS High proportion of 1ÂT phase MoS2 prepared by a simple solvothermal method for high-efficiency 2106 12.7 28 electrocatalytic hydrogen evolution. Chemical Engineering Journal, 2021, 422, 130100. Hollow and substrate-supported Prussian blue, its analogs, and their derivatives for green water 14.0 19 splitting. Chinese Journal of Catalysis, 2021, 42, 1843-1864. Self-template synthesis of hollow Fe-doped CoP prisms with enhanced oxygen evolution reaction 2108 12.9 60 activity. Journal of Energy Chemistry, 2021, 62, 415-422. Cobalt nanorods decorated titanium oxide arrays as efficient and stable electrocatalyst for oxygen 2109 evolution reaction. Electrochimica Acta, 2021, 396, 139213. Porous MoWN/MoWC@N C Nano-octahedrons synthesized via confined carburization and vapor deposition in MOFs as efficient trifunctional electrocatalysts for oxygen reversible catalysis and 2110 10 9.4 hydrogen production in the same electrolyte. Journal of Colloid and Interface Science, 2021, 601, 626-639. Dual-defective Co3O4 nanoarrays enrich target intermediates and promise high-efficient overall water splitting. Chemical Engineering Journal, 2021, 424, 130328. 12.7 Coupled Sn/Mo2C nanoparticles wrapped in carbon nanofibers by electrospinning as high-performance electrocatalyst for hydrogen evolution reaction. Applied Surface Science, 2021, 566, 2112 6.1 22 150754. Severe plastic deformed Pd-based metallic glass for superior hydrogen evolution in both acidic and 5.2 14 alkaline media. Scripta Materialia, 2021, 204, 114145. Multifunctional N and O co-doped 3D carbon aerogel as a monolithic electrode for either enzyme 2114 immobilization, oxygen reduction and showing supercapacitance. Electrochimica Acta, 2021, 395, 5.2 4 139179. Large-scale synthesis of low-cost bimetallic polyphthalocyanine for highly stable water oxidation. 20.2 Applied Catalysis B: Environmental, 2021, 299, 120637. Three-dimensional petal-like graphene Co3.0Cu1.0 metal organic framework for oxygen evolution 2116 5.515 reaction. Journal of Alloys and Compounds, 2021, 884, 161144. Hybrid heterojunction of molybdenum disulfide/single cobalt atoms anchored nitrogen, sulfur-doped carbon nanotube /cobalt disulfide with multiple active sites for highly efficient hydrogen evolution. 20.2 Applied Catalysis B: Environmental, 2021, 298, 120630. Nanostructured NaFeS2 as a cost-effective and robust electrocatalyst for hydrogen and oxygen 2118 12.7 20 evolution with reduced overpotentials. Chemical Engineering Journal, 2021, 426, 131315. Self-optimizing iron phosphorus oxide for stable hydrogen evolution at high current. Applied Catalysis B: Environmental, 2021, 298, 120559. 20.2 Optional construction of Cu2O@Fe2O3@CC architecture as a robust multifunctional 2120 photoelectronic catalyst for overall water splitting and CO2 reduction. Chemical Engineering 12.7 21 Journal, 2021, 426, 131192. High-valence Ni and Fe sites on sulfated NiFe-LDH nanosheets to enhance O-O coupling for water oxidation. Chemical Engineering Journal, 2021, 426, 130873. Hydrazine hydrate-assisted adjustment of sulfur-rich MoS2 as hydrogen evolution electrocatalyst. 2122 5.516 Journal of Alloys and Compounds, 2021, 885, 160990. Efficient preparation of Ni-M (MÂ=ÂFe, Co, Mo) bimetallic oxides layer on Ni nanorod arrays for 4.3 electrocatalytic oxygen evolution. Applied Materials Today, 2021, 25, 101185.

#	Article	IF	CITATIONS
2124	Unexpected increasing Co valence state of an exsolved catalyst by Mo doping for enhanced oxygen evolution reaction. Chemical Engineering Journal, 2021, 425, 130681.	12.7	11
2125	High valence state of Ni and Mo synergism in NiS2-MoS2 hetero-nanorods catalyst with layered surface structure for urea electrocatalysis. Journal of Energy Chemistry, 2022, 66, 483-492.	12.9	158
2126	Understanding the activity and stability of flame-made Co3O4 spinels: A route towards the scalable production of highly performing OER electrocatalysts. Chemical Engineering Journal, 2022, 429, 132180.	12.7	56
2127	Recent advances in non-metal doped titania for solar-driven photocatalytic/photoelectrochemical water-splitting. Journal of Energy Chemistry, 2022, 66, 529-559.	12.9	70
2128	Advanced hydrogen evolution electrocatalysis enabled by ruthenium phosphide with tailored hydrogen binding strength via interfacial electronic interaction. Chemical Engineering Journal, 2022, 429, 132557.	12.7	26
2129	Mixed- ligand-devised anionic MOF with divergent open Co(II)-nodes as chemo-resistant, bi-functional material for electrochemical water oxidation and mild-condition tandem CO2 fixation. Chemical Engineering Journal, 2022, 429, 132301.	12.7	51
2130	Sustainable nitrogen fixation over Ru single atoms decorated Cu2O using electrons produced from photoelectrocatalytic organics degradation. Chemical Engineering Journal, 2022, 428, 130373.	12.7	9
2131	Electronic wastes: A near inexhaustible and an unimaginably wealthy resource for water splitting electrocatalysts. Journal of Hazardous Materials, 2022, 421, 126687.	12.4	18
2132	One-pot hydrothermal approach towards 2D/2D heterostructure based on 1ÂT MoS2 chemically bonding with GO for extremely high electrocatalytic performance. Chemical Engineering Journal, 2022, 428, 132072.	12.7	22
2133	Boron substitution enhanced activity of BxGa1â^'xAs/GaAs photocatalyst for water splitting. Applied Catalysis B: Environmental, 2022, 300, 120690.	20.2	4
2134	Investigations of the stability of etched or platinized p-InP(100) photocathodes for solar-driven hydrogen evolution in acidic or alkaline aqueous electrolytes. Energy and Environmental Science, 2021, 14, 6007-6020.	30.8	33
2135	Dealloyed RuNiO _x as a robust electrocatalyst for the oxygen evolution reaction in acidic media. Dalton Transactions, 2021, 50, 5124-5127.	3.3	6
2136	<i>In situ</i> formation of highly exposed NiPS ₃ nanosheets on nickel foam as an efficient 3D electrocatalyst for overall water splitting. Sustainable Energy and Fuels, 2021, 5, 2537-2544.	4.9	8
2137	Surface morphology controls water dissociation on hydrated IrO ₂ nanoparticles. Nanoscale, 2021, 13, 14480-14489.	5.6	8
2138	A self-supported FeNi layered double hydroxide anode with high activity and long-term stability for efficient oxygen evolution reaction. Sustainable Energy and Fuels, 2021, 5, 3205-3212.	4.9	3
2139	Tuning and understanding the electronic effect of Co–Mo–O sites in bifunctional electrocatalysts for ultralong-lasting rechargeable zinc–air batteries. Journal of Materials Chemistry A, 2021, 9, 21716-21722.	10.3	16
2140	Oxygen evolution catalysts under proton exchange membrane conditions in a conventional three electrode cell <i>vs.</i> electrolyser device: a comparison study and a 3D-printed electrolyser for academic labs. Journal of Materials Chemistry A, 2021, 9, 9113-9123.	10.3	24
2141	Boosting OER performance of IrO ₂ in acid <i>via</i> urchin-like hierarchical-structure design. Dalton Transactions, 2021, 50, 6083-6087.	3.3	18

# 2142	ARTICLE Transition metal-based bimetallic MOFs and MOF-derived catalysts for electrochemical oxygen evolution reaction. Energy and Environmental Science, 2021, 14, 1897-1927.	IF 30.8	Citations 415
2143	A binuclear Co-based metal–organic framework towards efficient oxygen evolution reaction. Chemical Communications, 2021, 57, 5016-5019.	4.1	23
2144	Nickel Iron Diselenide for Highly Efficient and Selective Electrocatalytic Conversion of Methanol to Formate. Small, 2021, 17, e2006623.	10.0	29
2145	Enhancing the electrocatalytic activity and stability of Prussian blue analogues by increasing their electroactive sites through the introduction of Au nanoparticles. Nanoscale, 2021, 13, 12676-12686.	5.6	6
2146	Enhanced electrocatalytic activity of carbon cloth by synergetic effect of plasma and acid treatment. Plasma Science and Technology, 2021, 23, 025504.	1.5	6
2147	Bifunctional Pt-IrO ₂ Catalysts for the Oxygen Evolution and Oxygen Reduction Reactions: Alloy Nanoparticles versus Nanocomposite Catalysts. ACS Catalysis, 2021, 11, 820-828.	11.2	50
2148	Electrochemically dealloyed nanoporous Fe ₄₀ Ni ₂₀ Co ₂₀ P ₁₅ C ₅ metallic glass for efficient and stable electrocatalytic hydrogen and oxygen generation. RSC Advances, 2021, 11, 7369-7380.	3.6	13
2149	pH-dependent hydrogen evolution using spatially confined ruthenium on hollow N-doped carbon nanocages as a Mott–Schottky catalyst. Journal of Materials Chemistry A, 2021, 9, 13958-13966.	10.3	40
2150	Understanding the efficient electrocatalytic activities of MoSe ₂ –Cu ₂ S nanoheterostructures. Journal of Materials Chemistry A, 2021, 9, 9837-9848.	10.3	31
2151	Highly efficient photocatalytic water splitting and enhanced piezoelectric properties of 2D Janus group-III chalcogenides. Journal of Materials Chemistry C, 2021, 9, 4989-4999.	5.5	38
2152	The role of metal–organic porous frameworks in dual catalysis. Inorganic Chemistry Frontiers, 2021, 8, 3618-3658.	6.0	30
2153	Enhanced urea oxidization electrocatalysis on spinel cobalt oxide nanowires <i>via</i> on-site electrochemical defect engineering. Materials Chemistry Frontiers, 2021, 5, 3717-3724.	5.9	16
2154	Ultrathin IrO ₂ Nanoneedles for Electrochemical Water Oxidation. Advanced Functional Materials, 2018, 28, 1704796.	14.9	226
2155	Interface Engineering for Highâ€Performance Photoelectrochemical Cells via Atomic Layer Deposition Technique. Energy Technology, 2021, 9, 2000819.	3.8	4
2156	Greatly boosting electrochemical hydrogen evolution reaction over Ni3S2 nanosheets rationally decorated by Ni3Sn2S2 quantum dots. Applied Catalysis B: Environmental, 2020, 267, 118675.	20.2	63
2157	Efficient catalysis of N doped NiS/NiS2 heterogeneous structure. Chemical Engineering Journal, 2020, 397, 125507.	12.7	160
2158	Temperature-driven, dynamic catalytic synthesis of three-dimensional hollow few-layer graphite framework. Chemical Engineering Journal, 2020, 398, 125545.	12.7	8
2159	Snowflake Co3O4-CuO heteroanode arrays supported on three-dimensional framework for enhanced oxygen evolution. Journal of Electroanalytical Chemistry, 2020, 871, 114235.	3.8	8

#	Article	IF	CITATIONS
2160	Comparison of electrochemical active surface area methods for various nickel nanostructures. Journal of Electroanalytical Chemistry, 2020, 870, 114246.	3.8	108
2161	Uniquely designed surface nanocracks for highly efficient and ultra-stable graphite felt electrode for vanadium redox flow battery. Materials Chemistry and Physics, 2020, 251, 123178.	4.0	21
2162	Lanthanide-regulated oxygen evolution activity of face-sharing IrO6 dimers in 6H-perovskite electrocatalysts. Chinese Journal of Catalysis, 2020, 41, 1692-1697.	14.0	18
2163	A Review on Advanced FeNi-Based Catalysts for Water Splitting Reaction. Energy & Fuels, 2020, 34, 13491-13522.	5.1	158
2164	TiO ₂ Nanorod Array Conformally Coated with a Monolayer MoS ₂ Film: An Efficient Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 10854-10862.	5.1	11
2165	Ru Nanoclusters Coupled on Co/N-Doped Carbon Nanotubes Efficiently Catalyzed the Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2020, 8, 9136-9144.	6.7	86
2166	In Situ Synthesis of MoS ₂ on C ₃ N ₄ To Form MoS ₂ /C ₃ N ₄ with Interfacial Mo–N Coordination for Electrocatalytic Reduction of N ₂ to NH ₃ . ACS Sustainable Chemistry and Engineering, 2020, 8, 8814-8822.	6.7	40
2167	Chapter 7. Artificial Photosynthesis with Inorganic Particles. RSC Energy and Environment Series, 2018, , 214-280.	0.5	4
2168	Chapter 11. Prototyping Development of Integrated Solar-driven Water-splitting Cells. RSC Energy and Environment Series, 2018, , 387-453.	0.5	2
2169	Chapter 12. High-efficiency Water Splitting Systems. RSC Energy and Environment Series, 2018, , 454-499.	0.5	5
2170	Iron-doped NiCo-MOF hollow nanospheres for enhanced electrocatalytic oxygen evolution. Nanoscale, 2020, 12, 14004-14010.	5.6	36
2171	Pseudo-atomic-scale metals well-dispersed on nano-carbons as ultra-low metal loading oxygen-evolving electrocatalysts. Chemical Science, 2020, 11, 6012-6019.	7.4	6
2172	N ₂ plasma-activated NiO nanosheet arrays with enhanced water splitting performance. Nanotechnology, 2020, 31, 455709.	2.6	18
2173	Nanotechnology for catalysis and solar energy conversion. Nanotechnology, 2021, 32, 042003.	2.6	44
2174	Inexpensive and Efficient Alkaline Water Electrolyzer with Robust Steel-Based Electrodes. Journal of the Electrochemical Society, 2020, 167, 114513.	2.9	20
2175	Communication—Electrodeposited Co–Mo–P–TiO ₂ Composites Electrocatalysts for the Hydrogen Evolution Reaction. Journal of the Electrochemical Society, 2020, 167, 132502.	2.9	8
2176	Transition-Metal Chalcogenides for Oxygen-Evolution Reaction. Materials Research Foundations, 2019, , 141-168.	0.3	1
2177	Hydrogen evolution reaction on Cr–C electrocatalysts electrodeposited from a choline chloride based trivalent chromium plating bath. Voprosy Khimii I Khimicheskoi Tekhnologii, 2019, , 61-66.	0.4	3

#	Article	IF	CITATIONS
2178	Synthesis and Characterization of the Cu _{0.72} Co _{2.28} O ₄ Catalyst for Oxygen Evolution Reaction in an Anion Exchange Membrane Water Electrolyzer. Journal of Korean Institute of Metals and Materials, 2020, 58, 49-58.	1.0	12
2179	Controlled Deposition of Iridium Oxide Nanoparticles on Graphene. Electrochemistry, 2020, 88, 392-396.	1.4	2
2180	Synthesis and Applications of Colloidal Nanomaterials of Main Group- and Transition- Metal Phosphides. Indian Institute of Metals Series, 2021, , 461-536.	0.3	1
2181	Intermetallic compounds M ₂ Pt (M = Al, Ga, In, Sn) in the oxygen evolution reaction. Sustainable Energy and Fuels, 2021, 5, 5762-5772.	4.9	7
2182	MOF-derived Zn–Co–Ni sulfides with hollow nanosword arrays for high-efficiency overall water and urea electrolysis. Green Energy and Environment, 2023, 8, 798-811.	8.7	11
2183	Encapsulating Fe ₂ O ₃ Nanotubes into Carbonâ€Coated Co ₉ S ₈ Nanocages Derived from a MOFsâ€Directed Strategy for Efficient Oxygen Evolution Reactions and Liâ€lons Storage. Small, 2021, 17, e2103178.	10.0	26
2184	lridium in Tungsten Trioxide Matrix as an Efficient Biâ€Functional Electrocatalyst for Overall Water Splitting in Acidic Media. Small, 2021, 17, e2102078.	10.0	28
2185	Chemically Activating Tungsten Disulfide <i>via</i> Structural and Electronic Engineering Strategy for Upgrading the Hydrogen Evolution Reaction. ACS Applied Materials & amp; Interfaces, 2021, 13, 49793-49801.	8.0	12
2186	Self‣upported Graphite/Graphene/NiFe‣DH Electrodes for High Performance Oxygen Evolution Reaction. Particle and Particle Systems Characterization, 2021, 38, 2100189.	2.3	2
2187	Facile Surfactant-Assisted Synthesis of BiVO4 Nanoparticulate Films for Solar Water Splitting. Catalysts, 2021, 11, 1244.	3.5	1
2188	Gel-like State of Nickel Hydroxide Created by Electrochemical Aging under Alkaline Conditions. ACS Applied Energy Materials, 2021, 4, 10668-10681.	5.1	1
2189	Boron doped cryptomelane as a highly efficient electrocatalyst for the oxygen evolution reaction. International Journal of Hydrogen Energy, 2021, 46, 39810-39821.	7.1	8
2190	Essentials of High Performance Water Electrolyzers – From Catalyst Layer Materials to Electrode Engineering. Advanced Energy Materials, 2021, 11, 2101998.	19.5	92
2191	Contribution of the Subâ€Surface to Electrocatalytic Activity in Atomically Precise La _{0.7} Sr _{0.3} MnO ₃ Heterostructures. Small, 2021, 17, e2103632.	10.0	4
2192	NiFe-layered double hydroxideÂarrays for oxygen evolution reaction in fresh water and seawater. Materials Today Energy, 2021, 22, 100883.	4.7	26
2193	Electrochemical Surface Restructuring of Phosphorus-Doped Carbon@MoP Electrocatalysts for Hydrogen Evolution. Nano-Micro Letters, 2021, 13, 215.	27.0	63
2194	Nickel Nitrate Hydroxide Holey Nanosheets for Efficient Oxygen Evolution Electrocatalysis in Alkaline Condition. Electrocatalysis, 2022, 13, 37-46.	3.0	4
2195	Investigation of n-GaAs Photoanode Corrosion in Acidic Media with Various Thin Ir Cocatalyst Layers. ACS Applied Energy Materials, 2021, 4, 10799-10809.	5.1	2

#	Article	IF	CITATIONS
2196	Applying Active Learning to the Screening of Molecular Oxygen Evolution Catalysts. Molecules, 2021, 26, 6362.	3.8	5
2197	Se-doped cobalt oxide nanoparticle as highly-efficient electrocatalyst for oxygen evolution reaction. International Journal of Hydrogen Energy, 2022, 47, 216-227.	7.1	21
2198	Designing of noble metal free high performance mesoporous electrocatalysts for water splitting. International Journal of Hydrogen Energy, 2021, 46, 39799-39809.	7.1	7
2199	Role of sputtered WO3 underlayer and NiFeCr-LDH co-catalyst in WO3–BiVO4 heterojunction for enhanced photoelectrochemical water oxidation. International Journal of Hydrogen Energy, 2021, 46, 39868-39881.	7.1	21
2200	Exploration of electrocatalytic water oxidation properties of NiFe catalysts doped with nonmetallic elements (P, S, Se). International Journal of Hydrogen Energy, 2021, 46, 38992-39002.	7.1	10
2201	Fast synthesis of Pt single-atom catalyst with high intrinsic activity for hydrogen evolution reaction by plasma sputtering. Materials Today Energy, 2021, 22, 100877.	4.7	16
2202	Revealing the Dynamics and Roles of Iron Incorporation in Nickel Hydroxide Water Oxidation Catalysts. Journal of the American Chemical Society, 2021, 143, 18519-18526.	13.7	96
2203	Solar-Driven Water Splitting at 13.8% Solar-to-Hydrogen Efficiency by an Earth-Abundant Electrolyzer. ACS Sustainable Chemistry and Engineering, 2021, 9, 14070-14078.	6.7	15
2204	Identification of the Active-Layer Structures for Acidic Oxygen Evolution from 9R-BalrO ₃ Electrocatalyst with Enhanced Iridium Mass Activity. Journal of the American Chemical Society, 2021, 143, 18001-18009.	13.7	73
2205	Compensating Electronic Effect Enables Fast Siteâ€ŧo‣ite Electron Transfer over Ultrathin RuMn Nanosheet Branches toward Highly Electroactive and Stable Water Splitting. Advanced Materials, 2021, 33, e2105308.	21.0	73
2207	Concurrent H ₂ Generation and Formate Production Assisted by CO ₂ Absorption in One Electrolyzer. Small Methods, 2021, 5, e2100871.	8.6	9
2208	A comprehensive review on the recent developments in transition metal-based electrocatalysts for oxygen evolution reaction. Applied Surface Science Advances, 2021, 6, 100184.	6.8	66
2209	NiMo Catalyst Electrodeposited on Si Photocathodes for Enhanced Solar Water Splitting. Applied Physics, 2016, 06, 296-306.	0.0	0
2210	3D Catalysts of Mo(W) Carbide, Nitride, Oxide, Phosphide, and Boride. Advances in Chemical and Materials Engineering Book Series, 2017, , 53-99.	0.3	0
2212	Chapter 4. Surface Science, X-ray and Electron Spectroscopy Studies of Electrocatalysis. RSC Energy and Environment Series, 2018, , 117-153.	0.5	0
2213	Chapter 6. Heterojunction Approaches for Stable and Efficient Photoelectrodes. RSC Energy and Environment Series, 2018, , 183-213.	0.5	0
2214	Chapter 5. Evaluating Electrocatalysts for Solar Water-splitting Reactions. RSC Energy and Environment Series, 2018, , 154-181.	0.5	0
2215	Synergistic Effects of Plasmonic Gold and Perovskite-Type SrTiO ₃ for Enhanced Photocatalytic Performance of TiO ₂ Nanotube Arrays. Journal of Physical Chemistry C, 2021, 125, 24340-24349.	3.1	10

#	Article	IF	CITATIONS
2216	Recent advances in structural engineering of 2D hexagonal boron nitride electrocatalysts. Nano Energy, 2022, 91, 106661.	16.0	49
2217	Pt–Rh alloy catalysts for hydrogen generation developed by direct current/pulse current method. Journal of the Iranian Chemical Society, 2022, 19, 1913-1922.	2.2	6
2218	Enhancement of Catalytic Activity and Stability of La0.6Ca0.4Fe0.7Ni0.3O2.9 Perovskite with ppm Concentration of Fe in the Electrolyte for the Oxygen Evolution Reaction. Materials, 2021, 14, 6403.	2.9	0
2219	Covalent Organic Frameworks as Tunable Supports for HER, OER, and ORR Catalysts: A New Addition to Heterogeneous Electrocatalysts. Nanostructure Science and Technology, 2022, , 389-444.	0.1	0
2220	Comparative Techno-Economic and Life Cycle Analysis of Water Oxidation and Hydrogen Oxidation at the Anode in a CO ₂ Electrolysis to Ethylene System. ACS Sustainable Chemistry and Engineering, 2021, 9, 14678-14689.	6.7	9
2221	A Waterâ€Splitting System with a Cobalt (II,III) Oxide Coâ€Catalystâ€Loaded Bismuth Vanadate Photoanode Along with an Organoâ€Photocathode. ChemElectroChem, 2020, 7, 5029-5035.	3.4	8
2222	Electrodeposition of Pt-Decorated Ni(OH) ₂ /CeO ₂ Hybrid as Superior Bifunctional Electrocatalyst for Water Splitting. Research, 2020, 2020, 9068270.	5.7	19
2223	Study of Activity and Super-Capacitance Exhibited by Bifunctional Raney 2.0 Catalyst for Alkaline Water-Splitting Electrolysis. Hydrogen, 2021, 2, 1-17.	3.4	2
2224	An in-situ spectroscopic study on the photochemical CO2 reduction on CsPbBr3 perovskite catalysts embedded in a porous copper scaffold. Chemical Engineering Journal, 2022, 430, 132807.	12.7	23
2225	Two-Dimensional Transition Metal Chalcogenides for Hydrogen Evolution Catalysis. , 2020, , 1-28.		0
2226	Bifunctional nanocatalysts for water splitting and its challenges. , 2020, , 59-95.		1
2227	Low-Pressure Ammonia Production. Green Energy and Technology, 2020, , 123-136.	0.6	0
2228	Self-driven dual hydrogen production system based on a bifunctional single-atomic Rh catalyst. Journal of Materials Chemistry A, 2022, 10, 6134-6145.	10.3	34
2229	The Synergetic Effect of MoSO ₂ /Graphite Nanosheets as Highly Efficient for Electrochemical Water Splitting in Acidic Media. Science of Advanced Materials, 2021, 13, 1574-1583.	0.7	0
2230	The Effect of Fe Dopant Location in Co(Fe)OOH _x Nanoparticles for the Oxygen Evolution Reaction. ACS Nano, 2021, 15, 18226-18236.	14.6	37
2231	A WOx mediated interface boosts the activity and stability of Pt-catalyst for alkaline water splitting. Chemical Engineering Journal, 2022, 431, 133287.	12.7	14
2232	Solutionâ€Processed Graphene Thinâ€Film Enables Binderâ€Free, Efficient Loading of Nanocatalysts for Electrochemical Water Splitting. Advanced Materials Interfaces, 2021, 8, 2101576.	3.7	7
2233	Hollow CoS <i>_x</i> Nanoparticles Grown on FeCo-LDH Microtubes for Enhanced Electrocatalytic Performances for the Oxygen Evolution Reaction. ACS Applied Energy Materials, 2021, 4, 12211-12223.	5.1	14

#	Article	IF	CITATIONS
2234	Role of Metal Ion Sites in Bivalent Cobalt Phosphorus Oxygen Systems toward Efficient Oxygen Evolution Reaction. Journal of Physical Chemistry C, 0, , .	3.1	8
2235	In Situ/Operando Insights into the Stability and Degradation Mechanisms of Heterogeneous Electrocatalysts. Small, 2022, 18, e2104205.	10.0	14
2236	Costâ€effective and Efficient Catalyst of Bimetallic Nickel Iron Selenide toward Oxygen Evolution Reaction. ChemCatChem, 2020, 12, 4416-4421.	3.7	3
2237	Hydrophobic, Carbon Free Gas Diffusion Electrode for Alkaline Applications. Journal of the Electrochemical Society, 2020, 167, 144502.	2.9	5
2238	Recent advances in carbon substrate supported nonprecious nanoarrays for electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2021, 9, 25773-25795.	10.3	71
2239	Insights into the light-driven hydrogen evolution reaction of mesoporous graphitic carbon nitride decorated with Pt or Ru nanoparticles. Dalton Transactions, 2022, 51, 731-740.	3.3	3
2240	Regulating the heteroatom doping in metallogel-derived Co@dual self-doped carbon onions to maximize electrocatalytic water splitting. Journal of Materials Chemistry A, 2021, 9, 26800-26809.	10.3	17
2241	Epitaxial oxide thin films for oxygen electrocatalysis: A tutorial review. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 010801.	2.1	12
2242	Highly active oxygen evolution reaction electrocatalyst based on defective-CeO2-x decorated MOF(Ni/Fe). Electrochimica Acta, 2022, 403, 139630.	5.2	13
2243	One-pot synthesis of pompon-like bimetallic organic framework for enhanced oxygen evolution electrocatalysis. Journal of Power Sources, 2022, 520, 230812.	7.8	9
2244	Construction of RuSe2/MoOx hybrid and used as bi-functional electrocatalyst for overall water splitting. Materials Chemistry and Physics, 2022, 277, 125461.	4.0	3
2245	Low-temperature synthesis of molybdenum sulfides, tungsten sulfides, and composites thereof as efficient electrocatalysts for hydrogen evolution reaction. Applied Surface Science, 2022, 576, 151828.	6.1	12
2246	Unveiling the Impact of Fe Incorporation on Intrinsic Performance of Reconstructed Water Oxidation Electrocatalyst. ACS Energy Letters, 2021, 6, 4345-4354.	17.4	67
2247	Graphene oxide wrapped Mix-valent cobalt phosphate hollow nanotubes as oxygen evolution catalyst with low overpotential. Journal of Colloid and Interface Science, 2022, 610, 592-600.	9.4	6
2248	Revealing the Regulation Mechanism of Ir–MoO ₂ Interfacial Chemical Bonding for Improving Hydrogen Oxidation Reaction. ACS Catalysis, 2021, 11, 14932-14940.	11.2	33
2249	Regulating Electron Redistribution of Intermetallic Iridium Oxide by Incorporating Ru for Efficient Acidic Water Oxidation. Advanced Energy Materials, 2021, 11, .	19.5	64
2250	Oxidizing Ethanol and 2-Propanol by Hypochlorous Acid Generated from Chloride Ions on HxWO3 Photoelectrodes. Journal of Physical Chemistry C, 0, , .	3.1	0
2251	Enhanced Photoelectrochemical Water Oxidation with Ferrihydrite Decorated WO3. Catalysis Letters, 2022, 152, 2575-2584.	2.6	2

#	Article	IF	CITATIONS
2252	Monoatomic Platinum-Embedded Hexagonal Close-Packed Nickel Anisotropic Superstructures as Highly Efficient Hydrogen Evolution Catalyst. Nano Letters, 2021, 21, 9381-9387.	9.1	30
2253	Carbonate-Derived Multi-Metal Catalysts for Electrochemical Water-Splitting at High Current Densities. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	9
2254	Construction of SbVO4@Co Foam Heterostructure as Efficient (Photo)electrocatalyst for Oxygen Evolution Reaction. Journal of Electronic Materials, 0, , 1.	2.2	1
2255	Optimization of Oxygen Evolution Reaction with Electroless Deposited Ni–P Catalytic Nanocoating. Nanomaterials, 2021, 11, 3010.	4.1	13
2256	Understanding the Stability of Etched or Platinized p-GaInP Photocathodes for Solar-Driven H ₂ Evolution. ACS Applied Materials & Interfaces, 2021, 13, 57350-57361.	8.0	6
2257	Interface Catalysis of Nickel Molybdenum (NiMo) Alloys on Two-Dimensional (2D) MXene for Enhanced Hydrogen Electrochemistry. Journal of Physical Chemistry Letters, 2021, 12, 11361-11370.	4.6	26
2258	Electrochemically Fabricated Superhydrophilic/Superaerophobic Manganese Oxide Nanowires at Discontinuous Solid–Liquid Interfaces for Enhanced Oxygen Evolution Performances. Advanced Materials Interfaces, 2022, 9, 2101478.	3.7	8
2259	Non-precious hydrogen evolution reaction catalysts: Stepping forward to practical polymer electrolyte membrane-based zero-gap water electrolyzers. Chemical Engineering Journal, 2022, 433, 133681.	12.7	28
2260	Enabling durable selectivity of CO2 electroreduction to formate achieved by a multi-layer SnOx structure. Applied Surface Science, 2022, 579, 151971.	6.1	3
2261	Theoretical Prediction of a Bi-Doped Î ² -Antimonene Monolayer as a Highly Efficient Photocatalyst for Oxygen Reduction and Overall Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 56254-56264.	8.0	10
2262	In Situ Magnetic Alignment of a Slurry of Tandem Semiconductor Microwires Using a Ni Catalyst. Small, 2022, 18, 2103822.	10.0	1
2263	Triple Product Overall Water Splitting – An Environment Friendly and New Direction Water Splitting in Seaâ€Water Mimicking Electrolyte. ChemistrySelect, 2021, 6, 12316-12322.	1.5	4
2264	Stabilizing Hydrous β-NiOOH for Efficient Electrocatalytic Water Oxidation by Integrating Y and Co into Amorphous Ni-Based Nanoparticles. ACS Applied Materials & Interfaces, 2021, 13, 58682-58690.	8.0	7
2265	Dynamics of photoconversion processes: the energetic cost of lifetime gain in photosynthetic and photovoltaic systems. Chemical Society Reviews, 2021, 50, 13372-13409.	38.1	10
2266	Construction of a three-dimensional S,N co-doped ZIF-67 derivative assisted by PEDOT nanowires and its application in rechargeable Zn–air batteries. New Journal of Chemistry, 2021, 45, 22787-22797.	2.8	5
2267	Mixed metal–antimony oxide nanocomposites: low pH water oxidation electrocatalysts with outstanding durability at ambient and elevated temperatures. Journal of Materials Chemistry A, 2021, 9, 27468-27484.	10.3	19
2268	Revisiting the Impact of Morphology and Oxidation State of Cu on CO ₂ Reduction Using Electrochemical Flow Cell. Journal of Physical Chemistry Letters, 2022, 13, 345-351.	4.6	13
2269	Engineering Surface Architectures for Improved Durability in III–V Photocathodes. ACS Applied Materials & Interfaces, 2022, 14, 20385-20392.	8.0	6

#	Article	IF	CITATIONS
2270	Synergistic phase and crystallinity engineering in cubic RuSe ₂ catalysts towards efficient hydrogen evolution reaction. CrystEngComm, 2022, 24, 620-627.	2.6	11
2271	Glycine-nitrate derived cobalt-doped BiPO4: An efficient OER catalyst for alkaline electrochemical cells. Solid State Sciences, 2022, 124, 106803.	3.2	6
2272	Enhancement of oxygen evolution reaction by X-doped (XÂ= Se, S, P) holey graphitic carbon shell encapsulating NiCoFe nanoparticles: a combined experimental and theoretical study. Materials Today Chemistry, 2022, 23, 100706.	3.5	4
2273	Interfacial electronic modulation on heterostructured NiSe@CoFe LDH nanoarrays for enhancing oxygen evolution reaction and water splitting by facilitating the deprotonation of OH to O. Chemical Engineering Journal, 2022, 431, 134080.	12.7	85
2274	P and Se-codopants triggered basal plane active sites in NbS2 3D nanosheets toward electrocatalytic hydrogen evolution. Applied Surface Science, 2022, 581, 152419.	6.1	7
2275	Metal/antiperovskite metal nitride composites Ag/AgNNi3 as novel efficient electrocatalysts for hydrogen evolution reaction in alkaline media. Journal of Materials Science and Technology, 2022, 112, 222-229.	10.7	8
2276	Evaluating Electrocatalytic Activity of Metal-Substituted Hafnium Diboride (Hf _{1- <i>x</i>}) Tj ETQq0 (Electronic Journal, 0, , .	0 0 rgBT /0 0.4	Overlock 10 0
2277	Challenges of Fuel Cell Technologies for the Needs of the Energy Transition to a Zero-carbon Technology. Žurnal inženernih Nauk, 2021, 8, .	0.6	1
2279	[NiFe]-(Oxy)Sulfides Derived from NiFe2O4 for the Alkaline Hydrogen Evolution Reaction. Energies, 2022, 15, 543.	3.1	5
2280	Solar Water Splitting Using Earthâ€Abundant Electrocatalysts Driven by Highâ€Efficiency Perovskite Solar Cells. ChemSusChem, 2022, 15, .	6.8	12
2281	Overcoming Hurdles in Oxygen Evolution Catalyst Discovery via Codesign. Chemistry of Materials, 2022, 34, 899-910.	6.7	17
2282	Mesoporous High-Entropy Oxide Thin Films: Electrocatalytic Water Oxidation on High-Surface-Area Spinel (Cr _{0.2} Mn _{0.2} Fe _{0.2} Co _{0.2} Ni _{0.2}) ₃ O< Electrodes. ACS Applied Energy Materials. 2022. 5. 717-730.	sub>4 <td>ub?</td>	u b ?
2283	Insights on the Corrosion and Degradation of MXenes as Electrocatalysts for Hydrogen Evolution Reaction. ChemCatChem, 2022, 14, .	3.7	7
2284	Demonstration of photoreactor platform for on-sun unassisted photoelectrochemical hydrogen generation with tandem Ill–V photoelectrodes. Chem Catalysis, 2022, 2, 195-209.	6.1	14
2285	Surfaceâ€Tailored Medium Entropy Alloys as Radically Low Overpotential Oxygen Evolution Electrocatalysts. Small, 2022, 18, e2105611.	10.0	36
2286	Characterization of a Dynamic Y ₂ Ir ₂ O ₇ Catalyst during the Oxygen Evolution Reaction in Acid. Journal of Physical Chemistry C, 2022, 126, 1751-1760.	3.1	17
2287	Metal-containing heteroatom doped carbon nanomaterials for ORR, OER, and HER. , 2022, , 169-211.		0
2288	IrO ₂ -Modified RuO ₂ Nanowires/Nitrogen-Doped Carbon Composite for Effective Overall Water Splitting in All pH. Energy & Fuels, 2022, 36, 1015-1026.	5.1	36

#	Article	IF	Citations
2289	Two-Dimensional Conjugated Metal–Organic Frameworks for Electrocatalysis: Opportunities and Challenges. ACS Nano, 2022, 16, 1759-1780.	14.6	94
2291	Dentritic hemaitite thinfilms with ferrous lactate overlayers for efficient photoelectrochemical water splitting. Solar Energy, 2022, 231, 897-907.	6.1	3
2292	Advances of the functionalized carbon nitrides for electrocatalysis. , 2022, 4, 211-236.		33
2293	Anode Catalysts in CO ₂ Electrolysis: Challenges and Untapped Opportunities. ACS Catalysis, 2022, 12, 1037-1051.	11.2	64
2294	Recent advances in non-precious group metal-based catalysts for water electrolysis and beyond. Journal of Materials Chemistry A, 2021, 10, 50-88.	10.3	44
2295	Rapid Synthesis of Highâ€Entropy Oxide Microparticles. Small, 2022, 18, e2104761.	10.0	41
2296	Regulating Ni site in NiV LDH for efficient electrocatalytic production of formate and hydrogen by glycerol electrolysis. Rare Metals, 2022, 41, 1583-1594.	7.1	29
2297	Method to Determine the Bifunctional Index for the Oxygen Electrocatalysis from Theory. ChemElectroChem, 2022, 9, .	3.4	13
2298	Boosting the electronic and catalytic properties of 2D semiconductors with supramolecular 2D hydrogen-bonded superlattices. Nature Communications, 2022, 13, 510.	12.8	19
2299	Fe–Co–Ni trimetallic organic framework chrysanthemum-like nanoflowers: efficient and durable oxygen evolution electrocatalysts. Journal of Materials Chemistry A, 2022, 10, 4230-4241.	10.3	37
2300	Structure–Stability Relationship of Amorphous IrO ₂ –Ta ₂ O ₅ Electrocatalysts on Ti Felt for Oxygen Evolution in Sulfuric Acid. Journal of Physical Chemistry C, 2022, 126, 1817-1827.	3.1	7
2301	Toward an e-chemistree: Materials for electrification of the chemical industry. MRS Bulletin, 2021, 46, 1187-1196.	3.5	31
2302	Screening and Understanding Lattice Silicon ontrolled Catalytically Active Site Motifs from a Library of Transition Metalâ€5ilicon Intermetallics. Small, 2022, 18, e2107371.	10.0	12
2303	Interfacially coupled thin sheet-like NiO/NiMoO ₄ nanocomposites synthesized by a simple reflux method for excellent electrochemical performance. Dalton Transactions, 2022, 51, 3992-4009.	3.3	4
2304	Ru nanoparticles supported on alginate-derived graphene as hybrid electrodes for the hydrogen evolution reaction. New Journal of Chemistry, 2021, 46, 49-56.	2.8	4
2305	Twoâ€Dimensional Metal–Organic Framework Nanosheets: Synthesis and Applications in Electrocatalysis and Photocatalysis. ChemSusChem, 2022, 15, .	6.8	33
2306	Heterostructure of RuO ₂ â€RuP ₂ /Ru Derived from HMTâ€based Coordination Polymers as Superior pHâ€Universal Electrocatalyst for Hydrogen Evolution Reaction. Small, 2022, 18, e2105168.	10.0	19
2307	Electrodeposited laser – nanostructured electrodes for increased hydrogen production. International Journal of Hydrogen Energy, 2022, 47, 9527-9536.	7.1	8

#	Article	IF	CITATIONS
2308	Water dissociation on Mixed Co-Fe oxide bilayer nanoislands on Au(111). Journal of Physics Condensed Matter, 2022, , .	1.8	2
2309	Rapid <i>In-situ</i> Growth of Oxygen-defect Rich Fe(OH)3@Co(OH)2@NF Nanoarray as Efficient OER Electrocatalyst. Chemistry Letters, 2022, 51, 440-444.	1.3	0
2310	Boosted electrolytic hydrogen production at tailor-tuned nano-dendritic Ni-doped Co foam-like catalyst. Electrochimica Acta, 2022, 410, 139992.	5.2	11
2311	A quick guide to the assessment of key electrochemical performance indicators for the oxygen reduction reaction: A comprehensive review. International Journal of Hydrogen Energy, 2022, 47, 7113-7138.	7.1	31
2312	Selectively Growing a Highly Active Interface of Mixed Nb–Rh Oxide/2D Carbon for Electrocatalytic Hydrogen Production. Advanced Science, 2022, 9, e2104706.	11.2	15
2313	Non-catalytic, instant iridium (Ir) leaching: A non-negligible aspect in identifying Ir-based perovskite oxygen-evolving electrocatalysts. Chinese Journal of Catalysis, 2022, 43, 885-893.	14.0	17
2314	Porous metal oxide electrocatalytic nanomaterials for energy conversion: Oxygen defects and selection techniques. Coordination Chemistry Reviews, 2022, 457, 214389.	18.8	46
2315	Highly active postspinel-structured catalysts for oxygen evolution reaction. RSC Advances, 2022, 12, 5094-5104.	3.6	3
2316	Development of Cu3N electrocatalyst for hydrogen evolution reaction in alkaline medium. Scientific Reports, 2022, 12, 2004.	3.3	14
2317	Atomic Layer Deposition of Iridium Using a Tricarbonyl Cyclopropenyl Precursor and Oxygen. Chemistry of Materials, 2022, 34, 1533-1543.	6.7	7
2318	Controlled Growth of Singleâ€Crystal Pd Quantum Dots on 2D Carbon for Large Current Density Hydrogen Evolution. Advanced Functional Materials, 2022, 32, .	14.9	19
2319	Metal-free pristine halloysite nanotubes: Electrochemically active and stable oxygen evolution reaction. Applied Clay Science, 2022, 219, 106442.	5.2	10
2320	Amorphous Ir atomic clusters anchored on crystalline IrO2 nanoneedles for proton exchange membrane water oxidation. Journal of Power Sources, 2022, 524, 231069.	7.8	25
2321	Evaluating electrocatalytic activity of metal-substituted hafnium diboride (Hf1-TMB2; TM = Ni and Co) toward water splitting. Journal of Alloys and Compounds, 2022, 905, 164148.	5.5	5
2322	Trimetallic oxide-hydroxide porous nanosheets for efficient water oxidation. Chemical Engineering Journal, 2022, 435, 135019.	12.7	13
2323	Simultaneous integration of low-level rhenium (Re) doping and nitrogen-functionalized 3D carbon backbone into nickel-iron hydroxide (NiFeOH) to amplify alkaline water electrolysis at high current densities. Chemical Engineering Journal, 2022, 435, 135184.	12.7	13
2324	Composition-controlled high entropy metal glycerate as high-performance electrocatalyst for oxygen evolution reaction. Applied Materials Today, 2022, 27, 101398.	4.3	10
2325	Vacancies and interfaces engineering of core–shell heterostuctured NiCoP/NiO as trifunctional electrocatalysts for overall water splitting and zinc-air batteries. Green Energy and Environment, 2023, 8, 601-611.	8.7	15

#	Article	IF	Citations
2326	Structure–Property Relationships in Redox-Derivatized Metal–Insulator–Semiconductor (MIS) Photoanodes. Journal of Physical Chemistry C, 2020, 124, 25907-25916.	3.1	11
2327	Valence oscillation and dynamic active sites in monolayer NiCo hydroxides for water oxidation. Nature Catalysis, 2021, 4, 1050-1058.	34.4	272
2328	Phase-Controlled NiO Nanoparticles on Reduced Graphene Oxide as Electrocatalysts for Overall Water Splitting. Nanomaterials, 2021, 11, 3379.	4.1	15
2329	Simultaneous Integration of Low-Level Rhenium (Re) Doping and Nitrogen-Functionalized 3d Carbon Backbone into Nickel-Iron Hydroxide (Nifeoh) to Amplify Alkaline Water Electrolysis at High Current Densities. SSRN Electronic Journal, 0, , .	0.4	0
2330	Metal Sulfide Nanocomposites for Energy Harvesting Applications. Engineering Materials, 2022, , 567-612.	0.6	1
2331	Coupling Co2 Reduction with Ch3oh Oxidation for Efficient Electrosynthesis of Formate on Hierarchical Bifunctional Cusn Alloy. SSRN Electronic Journal, 0, , .	0.4	0
2332	Nanocomposites Materials and Their Applications: Current and Future Trends. Engineering Materials, 2022, , 3-14.	0.6	1
2333	Encapsulated RuP ₂ –RuS ₂ nanoheterostructure with regulated interfacial charge redistribution for synergistically boosting hydrogen evolution electrocatalysis. Nanoscale, 2022, 14, 6258-6267.	5.6	10
2334	Engineering the Electronic Structure of Single Atom Ru Sites via Compressive Strain Boosts Acidic Water Oxidation Electrocatalysis. Springer Theses, 2022, , 55-92.	0.1	3
2335	Lewis acid protection turns cyanide containing [FeFe]-hydrogenase mimics into proton reduction catalysts. Dalton Transactions, 2022, 51, 4634-4643.	3.3	4
2336	Interfacial Engineering of 1d/2d Heterostructured Photoanode for Efficient Photoelectrochemical Water Splitting. SSRN Electronic Journal, 0, , .	0.4	0
2337	Sustainable and safer nanoclay composites for multifaceted applications. Green Chemistry, 2022, 24, 3081-3114.	9.0	28
2338	Tailoring defects in 2D materials for electrocatalysis. , 2022, , 303-337.		0
2339	Near-Infrared-Driven Photoelectrocatalytic Oxidation of Urea on La-Ni-Based Perovskites. SSRN Electronic Journal, 0, , .	0.4	0
2340	Exploiting heat transfer to achieve efficient photoelectrochemical CO ₂ reduction under light concentration. Energy and Environmental Science, 2022, 15, 2061-2070.	30.8	12
2341	Elucidating the Formation and Structural Evolution of Platinum Single-Site Catalysts for the Hydrogen Evolution Reaction. ACS Catalysis, 2022, 12, 3173-3180.	11.2	18
2342	Ultraâ€Đurability and Enhanced Activity of Amorphous Cobalt Anchored Polyaniline Synergistic towards Electrocatalytic Water Oxidation. ChemistrySelect, 2022, 7, .	1.5	14
2343	Electrocatalysts for the Oxygen Reduction Reaction: From Bimetallic Platinum Alloys to Complex Solid Solutions. ChemEngineering, 2022, 6, 19.	2.4	5

#	Article	IF	CITATIONS
2344	Nickel-Based Electrocatalysts for Water Electrolysis. Energies, 2022, 15, 1609.	3.1	21
2345	Perovskite Oxides as Electrocatalysts for Hydrogen Evolution Reaction. ACS Omega, 2022, 7, 7444-7451.	3.5	38
2346	Advances in Oxygen Evolution Electrocatalysts for Proton Exchange Membrane Water Electrolyzers. Advanced Energy Materials, 2022, 12, .	19.5	105
2347	Solar-Driven Hydrogen Production: Recent Advances, Challenges, and Future Perspectives. ACS Energy Letters, 2022, 7, 1043-1065.	17.4	247
2348	Nickel-Based Metal-Organic Frameworks as Electrocatalysts for the Oxygen Evolution Reaction (OER). Molecules, 2022, 27, 1241.	3.8	28
2349	Toward stable photoelectrochemical water splitting using NiOOH coated hierarchical nitrogen-doped ZnO-Si nanowires photoanodes. Journal of Energy Chemistry, 2022, 71, 45-55.	12.9	24
2350	Iron-encapsulated CNTs on carbon fiber with high-performance EMI shielding and electrocatalytic activity. Advanced Composites and Hybrid Materials, 2022, 5, 2429-2439.	21.1	30
2351	Improved 3D porous structures of Ni electrodes prepared by high-pressure cold spray and post annealing for water splitting. International Journal of Hydrogen Energy, 2022, 47, 13226-13239.	7.1	3
2352	Sequential Phase Conversionâ€Induced Phosphides Heteronanorod Arrays for Superior Hydrogen Evolution Performance to Pt in Wide pH Media. Advanced Materials, 2022, 34, e2107548.	21.0	73
2353	Polar Layered Intermetallic LaCo ₂ P ₂ as a Water Oxidation Electrocatalyst. ACS Applied Materials & Interfaces, 2022, 14, 14120-14128.	8.0	4
2354	Microphase Separation Engineering toward 3D Porous Carbon Assembled from Nanosheets for Flexible All-Solid-State Supercapacitors. ACS Applied Materials & Interfaces, 2022, 14, 13250-13260.	8.0	31
2355	Carboxylated carbon quantum dot-induced binary metal–organic framework nanosheet synthesis to boost the electrocatalytic performance. Materials Today, 2022, 54, 42-51.	14.2	76
2356	Interface-Engineered Porous Pt–PdO Nanostructures for Highly Efficient Hydrogen Evolution and Oxidation Reactions in Base and Acid. ACS Sustainable Chemistry and Engineering, 2022, 10, 3704-3715.	6.7	16
2357	Influence of Fermiâ€Level Engineering in Multiâ€Interface CuO/Cu ₂ 0 rGO <i>h</i> â€WO ₃ rGO Photoelectrodes on Photoelectrochemical CO ₂ Reduction. Energy Technology, 2022, 10, .	3.8	2
2358	Mixed B-site ruddlesden-popper phase Sr2(Ru Ir1-)O4 enables enhanced activity for oxygen evolution reaction. Journal of Energy Chemistry, 2022, 70, 623-629.	12.9	21
2360	From Nickel Foam to Highly Active NiFeâ€based Oxygen Evolution Catalysts. ChemElectroChem, 2022, 9, .	3.4	3
2361	Double Hypercrosslinked Porous Organic Polymer-Derived Electrocatalysts for a Water Splitting Device. ACS Applied Energy Materials, 2022, 5, 3269-3274.	5.1	6
2362	Three-dimensional hierarchical nanoporous (Mn,Ni)-Doped Cu2S architecture towards high-efficiency overall water splitting. International Journal of Hydrogen Energy, 2022, 47, 11827-11840.	7.1	7

#	Article	IF	CITATIONS
2363	Empirical approach for configuring highâ€entropy catalysts in alkaline water electrolysis. International Journal of Energy Research, 2022, 46, 9938-9947.	4.5	5
2364	A Numerical Prediction of 4th-Order Kinetics for Photocatalytic Oxygen Evolution Reactions. Catalysis Letters, 2023, 153, 138-149.	2.6	5
2365	Highly Durable Heterogeneous Atomic Catalysts. Accounts of Chemical Research, 2022, 55, 1372-1382.	15.6	15
2366	Reduction of Transition-Metal Columbite-Tantalite as a Highly Efficient Electrocatalyst for Water Splitting. ACS Applied Materials & Interfaces, 2022, 14, 15090-15102.	8.0	3
2367	Creating Functional Oxynitride–Silicon Interfaces and SrNbO ₂ N Thin Films for Photoelectrochemical Applications. Journal of Physical Chemistry C, 2022, 126, 5970-5979.	3.1	1
2368	The nature of synergistic effects in transition metal oxides/in-situ intermediate-hydroxides for enhanced oxygen evolution reaction. Current Opinion in Electrochemistry, 2022, 34, 100987.	4.8	7
2369	Synergy between Cobalt–Chromium-Layered Double Hydroxide Nanosheets and Oxidized Carbon Nanotubes for Electrocatalytic Oxygen Evolution. ACS Applied Nano Materials, 2022, 5, 4091-4101.	5.0	4
2370	Oxygen Evolution Reaction in Alkaline Environment: Material Challenges and Solutions. Advanced Functional Materials, 2022, 32, .	14.9	209
2371	Latticeâ€Matching Formed Mesoporous Transition Metal Oxide Heterostructures Advance Water Splitting by Active Fe–O–Cu Bridges. Advanced Energy Materials, 2022, 12, .	19.5	139
2372	NiPN/Ni Nanoparticle-Decorated Carbon Nanotube Forest as an Efficient Bifunctional Electrocatalyst for Overall Water Splitting in an Alkaline Electrolyte. ACS Applied Nano Materials, 2022, 5, 5335-5345.	5.0	4
2373	Three-dimensional hierarchical flowers-like cobalt-nickel sulfide constructed on graphitic carbon nitride: Bifunctional non-noble electrocatalyst for overall water splitting. Electrochimica Acta, 2022, 418, 140346.	5.2	20
2374	A crucial role of enhanced Volmer-Tafel mechanism in improving the electrocatalytic activity via synergetic optimization of host, interlayer, and surface features of 2D nanosheets. Applied Catalysis B: Environmental, 2022, 312, 121391.	20.2	12
2375	Oxygen Vacancyâ€Enhanced Ternary Nickelâ€Tungstenâ€Cerium Metal Alloyâ€Oxides for Efficient Alkaline Electrochemical Full Cell Water Splitting Using Anion Exchange Membrane. ChemElectroChem, 2022, 9, .	3.4	6
2376	From fundamentals and theories to heterostructured electrocatalyst design: An in-depth understanding of alkaline hydrogen evolution reaction. Nano Energy, 2022, 98, 107231.	16.0	76
2377	Laser in situ synthesis of NiFe2O4 nanoparticle-anchored NiFe(OH)x nanosheets as advanced electrocatalysts for the oxygen evolution and urea oxidation reactions. Electrochimica Acta, 2022, 411, 140074.	5.2	13
2378	Statistical analysis of breaking scaling relation in the oxygen evolution reaction. Electrochimica Acta, 2022, 412, 140125.	5.2	12
2379	Synthesis of Co3O4@TiO2 catalysts for oxygen evolution and oxygen reduction reactions. Microporous and Mesoporous Materials, 2022, 335, 111844.	4.4	11
2380	Covalent organic polymer derived N–doped carbon confined FeNi alloys as bifunctional oxygen electrocatalyst for rechargeable zinc-air battery. International Journal of Hydrogen Energy, 2022, 47, 16025-16035.	7.1	10

#	Article	IF	CITATIONS
2381	Iridiumâ€Functionalized Metalâ€Organic Framework Nanocrystals Interconnected by Carbon Nanotubes Competent for Electrocatalytic Water Oxidation. ChemCatChem, 2022, 14, .	3.7	5
2382	Preparation of NiCo-LDH@NiCoV-LDH interconnected nanosheets as high-performance electrocatalysts for overall water splitting. International Journal of Hydrogen Energy, 2022, 47, 15583-15592.	7.1	29
2383	Electronic Structure Engineering of Singleâ€Atom Ru Sites via Co–N4 Sites for Bifunctional pHâ€Universal Water Splitting. Advanced Materials, 2022, 34, e2110103.	21.0	199
2384	Effect of Se content on the oxygen evolution reaction activity and capacitive performance of MoSe2 nanoflakes. Electrochimica Acta, 2022, 412, 140109.	5.2	25
2385	Effect of different alkali metal cations on the oxygen evolution activity and battery capacity of nickel electrodes in concentrated hydroxide electrolytes. Electrochimica Acta, 2022, 415, 140255.	5.2	6
2386	Enhancement of hydrogen evolution reaction kinetics in alkaline media by fast galvanic displacement of nickel with rhodium – From smooth surfaces to electrodeposited nickel foams. Electrochimica Acta, 2022, 414, 140214.	5.2	10
2387	NiMo@C3N5 heterostructures with multiple electronic transmission channels for highly efficient hydrogen evolution from alkaline electrolytes and seawater. Chemical Engineering Journal, 2022, 438, 135379.	12.7	42
2388	Ion implantation synthesis of long-term stable high-entropy metallic glass nanoparticles. Journal of Alloys and Compounds, 2022, 906, 164303.	5.5	8
2389	Classifying and benchmarking high-entropy alloys and associated materials for electrocatalysis: A brief review of best practices. Current Opinion in Electrochemistry, 2022, 34, 100976.	4.8	17
2390	Improving intrinsic electrocatalytic activity of layered transition metal chalcogenides as electrocatalysts for water splitting. Current Opinion in Electrochemistry, 2022, 34, 100982.	4.8	7
2391	From Stochastic Selfâ€Assembly of Nanoparticles to Nanostructured (Photo)Electrocatalysts for Renewable Powerâ€ŧoâ€X Applications via Scalable Flame Synthesis. Advanced Functional Materials, 2022, 32, .	14.9	12
2392	Atomic Metal–Support Interaction Enables Reconstruction-Free Dual-Site Electrocatalyst. Journal of the American Chemical Society, 2022, 144, 1174-1186.	13.7	191
2393	Revealing the pH-Universal Electrocatalytic Activity of Co-Doped RuO ₂ toward the Water Oxidation Reaction. ACS Applied Materials & amp; Interfaces, 2022, 14, 1077-1091.	8.0	45
2394	Platinum single-atom catalyst with self-adjustable valence state for large-current-density acidic water oxidation. EScience, 2022, 2, 102-109.	41.6	106
2395	Porous Carbon Nanofibers Derived from Silk Fibroin through Electrospinning as N-Doped Metal-Free Catalysts for Hydrogen Evolution Reaction in Acidic and Alkaline Solutions. ACS Applied Materials & Interfaces, 2022, 14, 834-849.	8.0	15
2396	W Doping in Ni ₁₂ P ₅ as a Platform to Enhance Overall Electrochemical Water Splitting. ACS Applied Materials & Interfaces, 2022, 14, 581-589.	8.0	29
2398	Metallic glasses and metallic glass nanostructures for functional electrocatalytic applications. Chinese Chemical Letters, 2022, 33, 2327-2344.	9.0	10
2399	Factors Influencing Catalytic Activity of Size-Specific Triphenylphosphine-Ligated Gold Nanoclusters in the Electrocatalytic Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2022, 126, 246-260.	3.1	12

#	Article	IF	CITATIONS
2400	Sea-Urchin-Like Carbon Nanospheres for Electrocatalytic Dechlorination of 1,2-Dichloroethane. ACS Applied Nano Materials, 2021, 4, 13090-13098.	5.0	13
2401	Synthesis of Cobalt-Nickel Nanoparticles via a Liquid-Phase Reduction Process. Journal of Nanotechnology, 2021, 2021, 1-7.	3.4	6
2402	Highâ€performance Teâ€doped <scp> Co ₃ O ₄ </scp> nanocatalysts for oxygen evolution reaction. International Journal of Energy Research, 2022, 46, 5963-5972.	4.5	10
2404	Effect of doping TiO ₂ with Mn for electrocatalytic oxidation in acid and alkaline electrolytes. Energy Advances, 2022, 1, 357-366.	3.3	4
2405	Double Perovskite Type (Nh4)3fexco1-Xf6 Electrocatalyst Synthesized Via Low-Temperature Reaction for Efficient Water Oxidation. SSRN Electronic Journal, 0, , .	0.4	0
2406	Achieving ultra-dispersed 1T-Co-MoS ₂ @HMCS <i>via</i> space-confined engineering for highly efficient hydrogen evolution in the universal pH range. Inorganic Chemistry Frontiers, 2022, 9, 2617-2627.	6.0	5
2407	Highly efficient and stable Ru nanoparticle electrocatalyst for the hydrogen evolution reaction in alkaline conditions. Catalysis Science and Technology, 2022, 12, 3606-3613.	4.1	5
2408	Direct Fabrication of Nanoscale NiVO <i>_x</i> Electrocatalysts over Nickel Foam for a High-Performance Oxygen Evolution Reaction. ACS Applied Energy Materials, 2022, 5, 4318-4328.	5.1	9
2409	Charge Transfer of Interfacial Catalysts for Hydrogen Energy. , 2022, 4, 967-977.		35
2410	Computational atomicâ€scale design and experimental verification for layered double hydroxide as an efficient alkaline oxygen evolution reaction catalyst. International Journal of Energy Research, 2022, 46, 11972-11988.	4.5	6
2411	Single-Source Deposition of Mixed-Metal Oxide Films Containing Zirconium and 3d Transition Metals for (Photo)electrocatalytic Water Oxidation. Inorganic Chemistry, 2022, 61, 6223-6233.	4.0	4
2412	Anion-Exchange Membrane Water Electrolyzers. Chemical Reviews, 2022, 122, 11830-11895.	47.7	177
2413	Charge Separation Efficiency in WO ₃ /BiVO ₄ Photoanodes with CoFe Prussian Blue Catalyst Studied by Wavelengthâ€Dependent Intensityâ€Modulated Photocurrent Spectroscopy. Solar Rrl, 2022, 6, .	5.8	9
2414	Structurally Precise Two-Transition-Metal Water Oxidation Catalysts: Quantifying Adjacent 3d Metals by Synchrotron X-Radiation Anomalous Dispersion Scattering. Inorganic Chemistry, 2022, 61, 6252-6262.	4.0	7
2415	DNA Origami-Templated Bimetallic Core–Shell Nanostructures for Enhanced Oxygen Evolution Reaction. Journal of Physical Chemistry C, 2022, 126, 6915-6924.	3.1	9
2416	Cu, Fe Dualâ^'modified Ni3S2 nanosheets on nickel foam for bifunctional electrocatalytic water spitting. FlatChem, 2022, 33, 100368.	5.6	7
2417	Sr3Mn2O6 and Sr3FeMnO6 for oxygen and hydrogen evolution electrocatalysis. Journal of Solid State Electrochemistry, 2022, 26, 1303.	2.5	2
2418	Two-Dimensionally Assembled Pd–Pt–Ir Supernanosheets with Subnanometer Interlayer Spacings toward High-Efficiency and Durable Water Splitting. ACS Catalysis, 2022, 12, 5305-5315.	11.2	26

#	Article	IF	Citations
2419	Coupling CO2 reduction with CH3OH oxidation for efficient electrosynthesis of formate on hierarchical bifunctional CuSn alloy. Nano Energy, 2022, 98, 107277.	16.0	38
2420	Electrochemical performance of metal-organic framework MOF(Ni) doped graphene. International Journal of Hydrogen Energy, 2022, 47, 16741-16749.	7.1	23
2421	Low-temperature synthesized Mo2C and novel Mo2C–MnO2 heterostructure for highly efficient hydrogen evolution reaction and high-performance capacitors. Journal of Power Sources, 2022, 535, 231450.	7.8	21
2422	Boosting photocatalytic hydrogen evolution via regulating Pt chemical states. Chemical Engineering Journal, 2022, 442, 136334.	12.7	23
2423	Highly Efficient Hydrogen Evolution in Alkaline Medium by Ternary Cobalt Molybdenum Nitride on Self-standing Porous Copper Foam. Chemical Engineering Journal Advances, 2022, 11, 100303.	5.2	2
2429	Two-in-one template-assisted construction of hollow phosphide nanotubes for electrochemical energy storage. Inorganic Chemistry Frontiers, 0, , .	6.0	1
2430	Nitrogen-doped carbon encapsulating a RuCo heterostructure for enhanced electrocatalytic overall water splitting. CrystEngComm, 2022, 24, 4208-4214.	2.6	1
2431	Incorporating Au ₁₁ nanoclusters on MoS ₂ nanosheet edges for promoting the hydrogen evolution reaction at the interface. Nanoscale, 2022, 14, 7919-7926.	5.6	9
2432	Novel MOF-derived 3D hierarchical needlelike array architecture with excellent EMI shielding, thermal insulation and supercapacitor performance. Nanoscale, 2022, 14, 7322-7331.	5.6	69
2433	Ni3fe Nanoparticles Encapsulated by N-Doped Carbon Derived from Mofs for Oxygen Evolution Reaction. SSRN Electronic Journal, O, , .	0.4	0
2434	Accelerating hydrazine-assisted hydrogen production kinetics with Mn dopant modulated CoS ₂ nanowire arrays. Inorganic Chemistry Frontiers, 2022, 9, 3047-3058.	6.0	53
2435	Electrocatalytic water oxidation performance in an extended porous organic framework with a covalent alliance of distinct Ru sites. Nanoscale, 2022, 14, 7621-7633.	5.6	16
2436	Electrodeposition of Ni particles on laser nanostructured electrodes for enhanced hydrogen evolution reaction. Materials Today: Proceedings, 2022, 67, 953-958.	1.8	3
2437	Controllable preparation of green biochar based high-performance supercapacitors. Ionics, 2022, 28, 2525-2561.	2.4	14
2438	Unraveling Molecular Fingerprints of Catalytic Sulfur Poisoning at the Nanometer Scale with Near-Field Infrared Spectroscopy. Journal of the American Chemical Society, 2022, 144, 8848-8860.	13.7	8
2439	Direct and indirect role of Fe doping in NiOOH monolayer for water oxidation catalysis**. ChemPhysChem, 2022, 23, .	2.1	3
2440	Comparison of Hydrothermally-Grown vs Electrodeposited Cobalt Sulfide Nanostructures as Modified Electrodes for Oxygen Evolution and Electrochemical Sensing Applications. Journal of the Electrochemical Society, 2022, 169, 056505.	2.9	0
2441	Reduced Graphene Oxide Supported Zinc Tungstate Nanoparticles as Proficient Electro-Catalysts for Hydrogen Evolution Reactions. Catalysts, 2022, 12, 530.	3.5	3

#	Article	IF	CITATIONS
2442	Fe5Ge2Te2: Ironâ€rich Layered Chalcogenide for Highly Efficient Hydrogen Evolution. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 0, , .	1.2	0
2443	Black phosphorous dots phosphatized bio-based carbon nanofibers/bimetallic organic framework as catalysts for oxygen evolution reaction. International Journal of Hydrogen Energy, 2022, 47, 17194-17203.	7.1	6
2444	Exploring Electrochemical Flow-Cell Designs and Parameters for CO ₂ Reduction to Formate under Industrially Relevant Conditions. Journal of the Electrochemical Society, 2022, 169, 054511.	2.9	3
2445	Hierarchical BaTiO3/NiFe2O4 nanocomposite as an efficacious photoanode for photoelectrochemical water splitting. Ceramics International, 2022, 48, 29136-29143.	4.8	10
2446	Anionic and Cationic Co-Substitutions of S into Vertically Aligned WTe ₂ Nanosheets as Catalysis for Hydrogen Evolution under Alkaline Conditions. ACS Applied Nano Materials, 2022, 5, 7123-7131.	5.0	3
2447	Functionalized rGO-Pd nanocomposites as high-performance catalysts for hydrogen generation via water electrolysis. Electrochimica Acta, 2022, 422, 140513.	5.2	7
2448	Review—Recent Advances in the Development of Porous Carbon-Based Electrocatalysts for Water-Splitting Reaction. Journal of the Electrochemical Society, 2022, 169, 054519.	2.9	4
2449	Highly efficient and stable WO3/MoS2-MoOX photoanode for photoelectrochemical hydrogen production; a collaborative approach of facet engineering and P-N junction. Chemical Engineering Journal, 2022, 446, 136830.	12.7	18
2450	Tuning the Electronic Structure of Layered Co-based Serpentine Nanosheets for Efficient Oxygen Evolution Reaction. Journal Physics D: Applied Physics, 0, , .	2.8	2
2451	Urea electrooxidation-boosted hydrogen production on nitrogen-doped porous carbon nanorod-supported nickel phosphide nanoparticles. Journal of Energy Chemistry, 2022, 72, 88-96.	12.9	25
2452	Regulating local charges of atomically dispersed Mo+ sites by nitrogen coordination on cobalt nanosheets to trigger water dissociation for boosted hydrogen evolution in alkaline media. Journal of Energy Chemistry, 2022, 72, 125-132.	12.9	17
2453	MOF-based bimetallic diselenide nanospheres as a bifunctional efficient electrocatalysts for overall water splitting. Journal of Physics and Chemistry of Solids, 2022, 167, 110780.	4.0	4
2454	Mesoporous Ce–Fe–Ni nanocomposites encapsulated in carbon-nanofibers: Synthesis, characterization and catalytic behavior in oxygen evolution reaction. Carbon, 2022, 196, 186-202.	10.3	7
2455	Recent advances of amorphous-phase-engineered metal-based catalysts for boosted electrocatalysis. Journal of Materials Science and Technology, 2022, 127, 1-18.	10.7	18
2456	Morphological and Electronic Optimization of Nanostructured FeCoNi-Based Electrocatalysts by Al Dopants for Neutral/Alkaline Water Splitting. ACS Applied Energy Materials, 2022, 5, 5886-5900.	5.1	4
2457	Platinum nanoclusters by atomic layer deposition on three-dimensional TiO2 nanotube array for efficient hydrogen evolution. Materials Today Energy, 2022, 27, 101042.	4.7	8
2458	Ni(NO3)2-induced high electrocatalytic hydrogen evolution performance of self-supported fold-like WC coating on carbon fiber paper prepared through molten salt method. Electrochimica Acta, 2022, 422, 140553.	5.2	31
2459	Tailoring Oxygen Reduction Reaction Pathway on Spinel Oxides via Surficial Geometricalâ€6ite Occupation Modification Driven by the Oxygen Evolution Reaction. Advanced Materials, 2022, 34, e2202874.	21.0	52

#	Article	IF	CITATIONS
2460	Polyoxometalate-based composite cluster with core–shell structure: Co ₄ (PW ₉) ₂ @graphdiyne as stable electrocatalyst for oxygen evolution and its mechanism research. New Journal of Chemistry, 2022, 46, 11553-11561.	2.8	1
2461	Water electrolysis: from textbook knowledge to the latest scientific strategies and industrial developments. Chemical Society Reviews, 2022, 51, 4583-4762.	38.1	453
2462	Low-temperature water electrolysis: fundamentals, progress, and new strategies. Materials Advances, 2022, 3, 5598-5644.	5.4	50
2463	Low-temperature liquid reflux synthesis of core@shell structured Ni@Fe-doped NiCo nanoparticles decorated on carbon nanotubes as a bifunctional electrocatalyst for Zn–air batteries. Journal of Materials Chemistry A, 2022, 10, 13088-13096.	10.3	7
2464	Electrocatalytic Investigations into a PdNi Nanostructured Alloy Supported over a Graphite Sheet toward Pt-like Hydrogen Evolution Activity. Energy & Fuels, 2022, 36, 5910-5919.	5.1	10
2465	Improved OER performance of an Anderson-supported cobalt coordination polymer by assembling with acetylene black. Journal of Materials Chemistry A, 2022, 10, 12805-12810.	10.3	11
2466	Nickel Site Modification by High-Valence Doping: Effect of Tantalum Impurities on the Alkaline Water Electro-Oxidation by NiO Probed by Operando Raman Spectroscopy. ACS Catalysis, 2022, 12, 6506-6516.	11.2	25
2467	NiPd nano-alloy film as a promising low overpotential electrocatalyst for high activity water oxidation reaction. Journal of Environmental Chemical Engineering, 2022, 10, 107959.	6.7	11
2468	Enhanced OER performance of NiFeB amorphous alloys by surface self-reconstruction. International Journal of Hydrogen Energy, 2022, 47, 20718-20728.	7.1	26
2469	Construction of a binder-free non-enzymatic glucose sensor based on Cu@Ni core–shell nanoparticles anchored on 3D chiral carbon nanocoils-nickel foam hierarchical scaffold. Journal of Colloid and Interface Science, 2022, 624, 320-337.	9.4	35
2470	Interfacial synergies between single-atomic Pt and CoS for enhancing hydrogen evolution reaction catalysis. Applied Catalysis B: Environmental, 2022, 315, 121534.	20.2	63
2471	Solar H ₂ production systems: current status and prospective applications. Green Chemistry, 2022, 24, 5379-5402.	9.0	60
2472	In-Situ Growth of Res2/Nis Heterostructure on Ni Foam as an Ultra-Stable Electrocatalyst for Alkaline Hydrogen Generation. SSRN Electronic Journal, 0, , .	0.4	0
2473	Activity of Carbon-Encapsulated Ni12-XfexpÂCatalysts for the Oxygen Evolution Reaction: Combination of High Activity and Stability. SSRN Electronic Journal, 0, , .	0.4	0
2474	Interconnected Hierarchical Porous Carbon Nanosheets Derived from Renewable Biomass for Efficient Oxygen Evolution Reaction. SSRN Electronic Journal, 0, , .	0.4	0
2475	Synergistically coupling Pt with Ni towards accelerated water dissociation for enhanced alkaline hydrogen evolution. Journal of Materials Chemistry A, 2022, 10, 13727-13734.	10.3	25
2476	In-situ hydrothermal synthesis of Ni–MoO2 heterostructure on porous bulk NiMo alloy for efficient hydrogen evolution reaction. Transactions of Nonferrous Metals Society of China, 2022, 32, 1598-1608.	4.2	8
2477	Zirconyl chloride and its uses in phosphorus chemistry. Chemical Papers, 0, , .	2.2	0

#	Article	IF	CITATIONS
2478	Electrochemical Water Splitting: Bridging the Gaps Between Fundamental Research and Industrial Applications. Energy and Environmental Materials, 2023, 6, .	12.8	89
2479	Porphyrin-based framework materials for energy conversion. , 2022, 1, e9120009.		174
2480	Photoelectrochemical Oxygen Evolution on Mesoporous Hematite Films Prepared from Maghemite Nanoparticles. Journal of the Electrochemical Society, 2022, 169, 056522.	2.9	0
2481	Near-infrared-driven photoelectrocatalytic oxidation of urea on La-Ni-based perovskites. Chemical Engineering Journal, 2022, 446, 137240.	12.7	13
2482	Efficient Electrochemical Reconstruction of a Cobalt- and Silver-Based Precatalytic Oxalate Framework for Boosting the Alkaline Water Oxidation Performance. ACS Sustainable Chemistry and Engineering, 2022, 10, 7265-7276.	6.7	10
2483	Recent advances in cobalt phosphide-based materials for electrocatalytic water splitting: From catalytic mechanism and synthesis method to optimization design. Nano Materials Science, 2022, , .	8.8	9
2484	Role of V doping in core–shell heterostructured Bi2Te3/Sb2Te3 for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2022, 47, 21361-21368.	7.1	3
2485	Metal coordination determines the catalytic activity of IrO2 nanoparticles for the oxygen evolution reaction. Journal of Catalysis, 2022, 412, 78-86.	6.2	13
2486	One-step synthesis of NiS2/rGO composite for efficient electrocatalytic urea oxidation. MRS Energy & Sustainability, 2022, 9, 324-331.	3.0	1
2487	Stabilization of a Mnâ^'Co Oxide During Oxygen Evolution in Alkaline Media. ChemElectroChem, 2022, 9,	3.4	6
2488	The surface of metal boride tinted by oxygen evolution reaction for enhanced water electrolysis. Journal of Energy Chemistry, 2022, 72, 509-515.	12.9	19
2489	Normalization of the EOR catalytic efficiency measurements based on RRDE study for simply fabricated cost-effective Co/graphite electrode for DAEFCs. Journal of Electroanalytical Chemistry, 2022, 918, 116488.	3.8	1
2490	Configurationâ€Dependent Bimetallic Metalâ€Organic Frameworks Nanorods for Efficient Electrocatalytic Water Oxidation. ChemElectroChem, 0, , .	3.4	0
2491	Synergic Effect of Fe-Doping and Ni3s2/Mns Heterointerface to Boost Efficient Oxygen Evolution Reaction. SSRN Electronic Journal, 0, , .	0.4	0
2492	A Highly Efficient High-Entropy Metal Hydroxymethylate Electrocatalyst for Oxygen Evolution Reaction. SSRN Electronic Journal, 0, , .	0.4	0
2493	Empirical analysis and recent advances in metal-organic framework-derived electrocatalysts for oxygen reduction, hydrogen and oxygen evolution reactions. Materials Chemistry and Physics, 2022, 289, 126438.	4.0	7
2494	Brà nsted Acid-Functionalized Ionic Co(II) Framework: A Tailored Vessel for Electrocatalytic Oxygen Evolution and Size-Exclusive Optical Speciation of Biothiols. ACS Applied Materials & Interfaces, 2022, 14, 29773-29787.	8.0	17
2495	Metastable Phase-Controlled Synthesis of Mesoporous Molybdenum Carbides for Efficient Alkaline Hydrogen Evolution. ACS Catalysis, 2022, 12, 7415-7426.	11.2	27

#	Article	IF	Citations
2496	Synergetic Dualâ€Atom Catalysts: The Next Boom of Atomic Catalysts. ChemSusChem, 2022, 15, .	6.8	31
2497	Electrodeposition of polyaniline on high electroactive indium tin oxide nanoparticles-modified fluorine doped tin oxide electrode for fabrication of high-performance hybrid supercapacitor. Arabian Journal of Chemistry, 2022, 15, 104058.	4.9	28
2498	Counter Electrode Reactions—Important Stumbling Blocks on the Way to a Working Electroâ€organic Synthesis. Angewandte Chemie - International Edition, 2022, 61, .	13.8	42
2499	Reaktionen an der Gegenelektrode – wichtige Stolpersteine auf dem Weg einer funktionierenden elektroâ€organischen Synthese. Angewandte Chemie, 2022, 134, .	2.0	5
2500	Failure Modes of Platinized pn ⁺ -GaInP Photocathodes for Solar-Driven H ₂ Evolution. ACS Applied Materials & Interfaces, 2022, 14, 26622-26630.	8.0	4
2501	Stainless steel supported NiS/CeS nanocomposite for significantly enhanced oxygen evolution reaction in alkaline media. Journal of Solid State Electrochemistry, 2022, 26, 2107-2118.	2.5	17
2502	Serpentine Ni ₃ Ge ₂ O ₅ (OH) ₄ Nanosheets Grow on Porous Mo ₂ N for an Efficient Oxygen Evolution Reaction. Energy & Fuels, 2022, 36, 11467-11476.	5.1	4
2503	Reactive Sputtered Ir _{1â^'y} Ni _y O _x Electrocatalysts For The Oxygen Evolution Reaction in Alkaline Media. Journal of the Electrochemical Society, 2022, 169, 076501.	2.9	1
2504	Enhanced Electrochemical Hydrogen Evolution of WTe2 by Introducing Te vacancies. International Journal of Electrochemical Science, 2022, 17, 220738.	1.3	0
2505	Electrochemical surface activation of commercial tungsten carbide for enhanced electrocatalytic hydrogen evolution and methanol oxidation reactions. Journal of Electroanalytical Chemistry, 2022, 919, 116525.	3.8	1
2506	Hierarchical heterogeneous NiFe-LDH/Ni/NM nanosheets grown in situ for stably overall water splitting at large current densities. Journal of Electroanalytical Chemistry, 2022, 919, 116527.	3.8	3
2507	Unveiling the active sites of ultrathin Co-Fe layered double hydroxides for the oxygen evolution reaction. Chinese Journal of Catalysis, 2022, 43, 2240-2248.	14.0	60
2508	The characteristics of excellent electrocatalytic hydrogen evolution for FeCoNi based high entropy alloys. Sustainable Materials and Technologies, 2022, 33, e00455.	3.3	3
2509	Ni3Fe nanoparticles encapsulated by N-doped carbon derived from MOFs for oxygen evolution reaction. Journal of Alloys and Compounds, 2022, 919, 165799.	5.5	9
2510	WS2-doped CuCo2S4 hollow nano-prisms as high-efficiency Pt-free bifunctional electrocatalysts for dye-sensitized solar cell and acid hydrogen evolution reaction. Applied Surface Science, 2022, 599, 153989.	6.1	11
2511	Room temperature, fast fabrication of square meter-sized oxygen evolution electrode toward industrial alkaline electrolyzer. Applied Catalysis B: Environmental, 2022, 316, 121605.	20.2	17
2512	MOF-derived CoFe alloy nanoparticles encapsulated within N,O Co-doped multilayer graphitized shells as an efficient bifunctional catalyst for zinc-air batteries. Journal of Materials Chemistry A, 2022, 10, 14866-14874.	10.3	12
2514	Experimental correlation of Mn ³⁺ cation defects and electrocatalytic activity of α-MnO ₂ – an X-ray photoelectron spectroscopy study. Journal of Materials Chemistry A, 2022, 10, 15811-15838.	10.3	5

#	Article	IF	CITATIONS
2515	High Current Density Oxygen Evolution in Carbonate Buffered Solution Achieved by Active Site Densification and Electrolyte Engineering. SSRN Electronic Journal, 0, , .	0.4	0
2516	Structurally Engineered Anisotropic Cobaltâ€Based Nanostructures for Efficient Chlorine and Oxygen Evolution. Advanced Materials Interfaces, 2022, 9, .	3.7	6
2517	Vanadate Encapsulated Polyoxoborate Framework with [V ₁₂ B ₁₈] Clusters: An Efficient Bifunctional Electrocatalyst for Oxygen and Hydrogen Evolution Reactions. Crystal Growth and Design, 2022, 22, 4666-4672.	3.0	11
2518	Pt Single Atom Electrocatalysts at Graphene Edges for Efficient Alkaline Hydrogen Evolution. Advanced Functional Materials, 2022, 32, .	14.9	38
2519	Anion Exchange Membrane Water Electrolysis from Catalyst Design to the Membrane Electrode Assembly. Energy Technology, 2022, 10, .	3.8	11
2520	Controlled Synthesis of Transition Metal Phosphide Nanoparticles to Establish Composition-Dependent Trends in Electrocatalytic Activity. Chemistry of Materials, 2022, 34, 6255-6267.	6.7	17
2521	Supporting electrolyte interaction with the AACVD synthesized Rh thin film influences the OER activity. International Journal of Hydrogen Energy, 2022, 47, 28740-28751.	7.1	8
2522	Interconnected hierarchical nanoarchitectonics of porous carbon nanosheets derived from renewable biomass for efficient oxygen evolution reaction. Journal of Alloys and Compounds, 2022, 923, 166321.	5.5	8
2523	The Utilization of Iridium Nanoparticles Impregnated on Metal Oxides (Ceria, Titania, and Zirconia) with a Simple and Ecologically Safe Synthesis Approach in Oxygen Evolution Reactions. Journal of the Electrochemical Society, 0, , .	2.9	0
2524	Role of macrocyclic salen-type Schiff base ligands in one-dimensional Co(II) complexes for superior activities toward oxygen reduction/evolution reactions. International Journal of Hydrogen Energy, 2022, 47, 27000-27011.	7.1	5
2525	Highly Efficient and Stable Saline Water Electrolysis Enabled by Selfâ€Supported Nickelâ€Iron Phosphosulfide Nanotubes With Heterointerfaces and Underâ€Coordinated Metal Active Sites. Advanced Functional Materials, 2022, 32, .	14.9	60
2526	Two-Dimensional NH ₄ V ₃ O ₈ Nanoflakes as Efficient Energy Conversion and Storage Materials for the Hydrogen Evolution Reaction and Supercapacitors. ACS Omega, 2022, 7, 25433-25442.	3.5	9
2527	Protonated Iridate Nanosheets with a Highly Active and Stable Layered Perovskite Framework for Acidic Oxygen Evolution. ACS Catalysis, 2022, 12, 8658-8666.	11.2	34
2528	ZIF-67 derived Mo2N/Mo2C heterostructure as high-efficiency electrocatalyst for hydrogen evolution reaction. Journal of Alloys and Compounds, 2022, 922, 166216.	5.5	14
2529	Carbide-directed enhancement of electrochemical hydrogen evolution reaction on tungsten carbide–oxide heterostructure. Chemical Engineering Journal, 2022, 450, 137915.	12.7	12
2530	Bimetallic-ZIFs derived quaternary amorphous LDHs decorated with crystalline Ag nanoparticles for highly efficient oxygen evolution reaction. Chemical Engineering Journal, 2022, 449, 137901.	12.7	18
2531	α-MoB ₂ Nanosheets for Hydrogen Evolution in Alkaline and Acidic Media. ACS Applied Nano Materials, 2022, 5, 10183-10191.	5.0	9
2532	Electrochemically prepared Fe: NiO thin film catalysis for oxygen evolution reaction. Journal of Materials Science: Materials in Electronics, 2022, 33, 18180-18186.	2.2	2

#	Article	IF	CITATIONS
2533	Zero-crossover electrochemical CO2 reduction to ethylene with co-production of valuable chemicals. Chem Catalysis, 2022, 2, 2077-2095.	6.1	10
2534	MoS ₂ and WS ₂ Nanosheets Decorated on Metal–Organic Framework-Derived Cobalt/Carbon Nanostructures as Electrocatalysts for Hydrogen Evolution. ACS Applied Nano Materials, 2022, 5, 10696-10703.	5.0	10
2535	Activity of Carbon-Encapsulated Ni12â [~] 'Fe P Catalysts for the Oxygen Evolution Reaction: Combination of High Activity and Stability. Applied Catalysis A: General, 2022, , 118786.	4.3	1
2536	Size-Dependent Electrocatalytic Water Oxidation Activity for a Series of Atomically Precise Nickel-Thiolate Clusters. Inorganic Chemistry, 2023, 62, 1875-1884.	4.0	6
2537	Ionic liquid-assisted synthesis of cobalt‑iron difluoride electrocatalysts for oxygen evolution reaction. Catalysis Communications, 2022, 169, 106482.	3.3	1
2538	Coupling ceria with dual-phased molybdenum carbides for efficient and stable hydrogen evolution electrocatalysis at large-current-density in freshwater and seawater. Applied Catalysis B: Environmental, 2022, 317, 121774.	20.2	21
2539	Titanium Substitution Effects on the Structure, Activity, and Stability of Nanoscale Ruthenium Oxide Oxygen Evolution Electrocatalysts: Experimental and Computational Study. ACS Applied Nano Materials, 2022, 5, 11752-11775.	5.0	8
2540	Sustainable oxygen evolution electrocatalysis in aqueous 1 M H2SO4 with earth abundant nanostructured Co3O4. Nature Communications, 2022, 13, .	12.8	55
2541	Synergizing high valence metal sites and amorphous/crystalline interfaces in electrochemical reconstructed CoFeOOH heterostructure enables efficient oxygen evolution reaction. Nano Research, 2022, 15, 8857-8864.	10.4	13
2542	Synthesis, Physical Properties and Electrocatalytic Performance of Nickel Phosphides for Hydrogen Evolution Reaction of Water Electrolysis. Nanomaterials, 2022, 12, 2935.	4.1	11
2543	Electrochemically Tuned Synergistic Nanoâ€Interface of a Tertiary Ni(OH) ₂ â^'NiO(OH)/Ni _x P Heterojunction Material for Enhanced and Durable Alkaline Water Splitting. ChemistrySelect, 2022, 7, .	1.5	2
2544	Facile electrochemical synthesis of Ni-Sb nanostructure supported on graphite as an affordable bifunctional electrocatalyst for hydrogen and oxygen evolution reactions. Journal of Electroanalytical Chemistry, 2022, 922, 116726.	3.8	4
2545	Synergic effect of Fe-doping and Ni3S2/MnS heterointerface to boost efficient oxygen evolution reaction. Electrochimica Acta, 2022, 430, 141088.	5.2	7
2546	Importance of Phase Purity in Two-Dimensional β-Co(OH) ₂ for Driving Oxygen Evolution. ACS Applied Nano Materials, 2022, 5, 12209-12216.	5.0	6
2547	Ultrafine molybdenum silicide nanoparticles as efficient hydrogen evolution electrocatalyst in acidic medium. International Journal of Hydrogen Energy, 2022, 47, 28924-28931.	7.1	4
2548	Nanostructure MoS ₂ electrocatalyst modified large area carbon electrode for efficient hydrogen evolution. Physica Scripta, 2022, 97, 095003.	2.5	2
2549	Stability Design Principles of Manganese-Based Oxides in Acid. Chemistry of Materials, 2022, 34, 7774-7787.	6.7	17
2550	Surface Boron Modulation on Cobalt Oxide Nanocrystals for Electrochemical Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2022, 61, .	13.8	26

#	Article	IF	CITATIONS
2551	Recent advances in nonâ€precious Niâ€based promising catalysts for water splitting application. International Journal of Energy Research, 2022, 46, 17829-17847.	4.5	17
2552	Te-mediated electro-driven oxygen evolution reaction. , 2022, 1, e9120029.		165
2553	Lattice Strain Enhances the Activity of Irâ^'IrO ₂ /C for Acidic Oxygen Evolution Reaction. ChemElectroChem, 2022, 9, .	3.4	4
2554	Interfacial engineering of 1D/2D heterostructured photoanode for efficient photoelectrochemical water splitting. Nanotechnology, 2022, 33, 495402.	2.6	1
2555	A Single Source, Scalable Route for Direct Isolation of Earth-Abundant Nanometal Carbide Water-Splitting Electrocatalysts. Inorganic Chemistry, 2022, 61, 13836-13845.	4.0	10
2556	Surface boron modulation on cobalt oxide nanocrystals for electrochemical oxygen evolution reaction. Angewandte Chemie, 0, , .	2.0	0
2557	Grafting of Pd on Covalently and Noncovalently Modified Nâ€Doped Graphene for Electrocatalysis. Advanced Materials Interfaces, 2022, 9, .	3.7	4
2558	Unique three-dimensional heterostructure of MoS2@Co-MOF decorated with Co-Al layered double hydroxide: An effective synergistic alkaline hydrogen evolution electrocatalyst. Electrochimica Acta, 2022, 430, 141072.	5.2	9
2559	Heterostructure engineering of the Fe-doped Ni phosphides/Ni sulfide p-p junction for high-efficiency oxygen evolution. Journal of Alloys and Compounds, 2022, 924, 166613.	5.5	8
2560	Hierarchical macro-mesoporous electrocatalysts with dual-active sites of Ru single atoms and monodispersed Ru–Mo nanoclusters for efficient hydrogen evolution. Materials Today Chemistry, 2022, 26, 101046.	3.5	0
2561	Modeling Hydrogen and Oxygen Evolution Reactions on Single Atom Catalysts with Density Functional Theory: Role of the Functional. Advanced Theory and Simulations, 2023, 6, .	2.8	20
2562	Key criteria for next-generation dimensionally stable electrodes towards large-scale green hydrogen production by water electrolysis. Current Opinion in Electrochemistry, 2022, 36, 101136.	4.8	10
2563	Hematite Photoanodes Decorated with a Zn-doped Fe2O3 Catalyst for Efficient Photoelectrochemical Water Oxidation. International Journal of Electrochemical Science, 0, , ArticleID:22106.	1.3	1
2564	Efficient alkaline seawater oxidation by a three-dimensional core-shell dendritic NiCo@NiFe layered double hydroxide electrode. Materials Today Physics, 2022, 27, 100841.	6.0	20
2565	High-performance microfluidic electrochemical reactor for efficient hydrogen evolution. Applied Energy, 2022, 325, 119887.	10.1	8
2566	Controlled synthesis of Fe doped NiCoM (M=O, P, S and Se) as robust electrocatalyst for urea electrolysis. Journal of Alloys and Compounds, 2022, 928, 167094.	5.5	19
2567	Two-dimensional MgAl2S4 as potential photocatalyst for water splitting and strategies to boost its performance. Applied Surface Science, 2022, 605, 154826.	6.1	3
2568	A comprehensive review on green perspectives of electrocoagulation integrated with advanced processes for effective pollutants removal from water environment. Environmental Research, 2022, 215, 114294.	7.5	46

#	Article	IF	CITATIONS
2569	Tuning the band (p and d) center and enhancing the active sites by nitrogen(N) doping on iridium diphosphide (IrP2) for accelerating pH-universal water electrolysis. Applied Catalysis B: Environmental, 2022, 319, 121906.	20.2	15
2570	In-situ growth of ReS2/NiS heterostructure on Ni foam as an ultra-stable electrocatalyst for alkaline hydrogen generation. Chemical Engineering Journal, 2023, 451, 138905.	12.7	12
2571	Ultra-low Ru doped MOF-derived hollow nanorods for efficient oxygen evolution reaction. Inorganic Chemistry Frontiers, 2022, 9, 6158-6166.	6.0	11
2572	The <i>in situ</i> formation of defective CoOOH catalysts from semi-oxidized Co for alkaline oxygen evolution reaction. Journal of Materials Chemistry A, 2022, 10, 20011-20017.	10.3	12
2573	Two-Dimensional Mgal2s4 as Potential Photocatalyst for Water Splitting and Strategies to Boost its Performance. SSRN Electronic Journal, 0, , .	0.4	0
2574	Benchmarking in electrocatalysis. , 2023, , 492-550.		2
2575	How to switch from a poor PEDOT:X oxygen evolution reaction (OER) to a good one. A study on dual redox reversible PEDOT:metallacarborane. Journal of Materials Chemistry A, 2022, 10, 16182-16192.	10.3	2
2576	Photoelectrochemical water splitting with a triazine based covalent organic framework. Sustainable Energy and Fuels, 2022, 6, 4248-4255.	4.9	6
2577	In-Situ Desalination-Coupled Electrolysis with Concurrent One-Step-Synthesis of Value-Added Chemicals. SSRN Electronic Journal, 0, , .	0.4	0
2578	3D Hierarchical V and N-codoped MoS2/rGO Composite as a Potential Electrode Material Towards Hydrogen Evolution Reaction in Acidic and Alkaline pH. Springer Proceedings in Materials, 2022, , 155-169.	0.3	0
2579	Emerging single-atom iron catalysts for advanced catalytic systems. Nanoscale Horizons, 2022, 7, 1340-1387.	8.0	12
2580	Ultra-low voltage bipolar hydrogen production from biomass-derived aldehydes and water in membrane-less electrolyzers. Energy and Environmental Science, 2022, 15, 4175-4189.	30.8	28
2581	In-situ corrosion induced Zr-doped Ni/Fe (oxy)hydroxide layer on Ni-Fe foam realizing efficient electrocatalysis for oxygen evolution reaction. Applied Surface Science, 2023, 607, 155043.	6.1	4
2582	Synthesis of self-supported metal fiber felt electrode for electrocatalytic hydrogen evolution. Materials Letters, 2023, 330, 133260.	2.6	0
2583	Impacts of ruthenium valence state on the electrocatalytic activity of ruthenium ion-complexed graphitic carbon nitride/reduced graphene oxide nanosheets towards hydrogen evolution reaction. Journal of Colloid and Interface Science, 2023, 629, 591-597.	9.4	6
2584	Stabilizing the Unstable: Chromium Coating on NiMo Electrode for Enhanced Stability in Intermittent Water Electrolysis. ACS Applied Materials & Interfaces, 2022, 14, 40822-40833.	8.0	8
2585	Metal–Organic Framework Integrating Ionic Framework and Bimetallic Coupling Effect for Highly Efficient Oxygen Evolution Reaction. Advanced Science, 2022, 9, .	11.2	11
2586	Hydrogen Evolution Electrocatalysis with a Molecular Cobalt Bis(alkylimidazole)methane Complex in DMF: a critical activity analysis. ChemSusChem, 0, , .	6.8	3

#	Article	IF	CITATIONS
2587	Glassy Carbon Substrate Oxidation Effects on Electrode Stability for Oxygen Evolution Reaction Catalysis Stability Benchmarking. ACS Applied Energy Materials, 2022, 5, 12206-12218.	5.1	15
2588	Experimental investigations on morphology controlled bifunctional NiO nano-electrocatalysts for oxygen and hydrogen evolution. International Journal of Hydrogen Energy, 2022, 47, 39018-39029.	7.1	13
2589	Direct O–O Coupling Promoted the Oxygen Evolution Reaction by Dual Active Sites from Ag/LaNiO ₃ Interfaces. ACS Applied Energy Materials, 2022, 5, 14658-14668.	5.1	8
2590	Inner Co Synergizing Outer Ru Supported on Carbon Nanotubes for Efficient pH-Universal Hydrogen Evolution Catalysis. Nano-Micro Letters, 2022, 14, .	27.0	39
2591	Versatile Bifunctional and Supported IrNi Oxide Catalyst for Photoelectrochemical Water Splitting. Catalysts, 2022, 12, 1056.	3.5	0
2592	Modeling the Photostability of Solar Water-Splitting Devices and Stabilization Strategies. ACS Applied Materials & Interfaces, 2022, 14, 43095-43108.	8.0	5
2593	Comparison of Oxygen Adsorption and Platinum Dissolution in Acid and Alkaline Solutions Using Electrochemical Quartz Crystal Microbalance. ChemElectroChem, 2022, 9, .	3.4	2
2594	Efficient and Stable MoO _{<i>X</i>} @Mo-BiVO ₄ Photoanodes for Photoelectrochemical Water Oxidation: Optimization and Understanding. ACS Applied Energy Materials, 2022, 5, 11568-11580.	5.1	7
2595	Nonâ€Covalent Integration of a [FeFe]â€Hydrogenase Mimic to Multiwalled Carbon Nanotubes for Electrocatalytic Hydrogen Evolution. Chemistry - A European Journal, 2022, 28, .	3.3	10
2596	A highly efficient high-entropy metal hydroxymethylate electrocatalyst for oxygen evolution reaction. Chemical Engineering Journal, 2023, 453, 139510.	12.7	4
2598	Layered Double Hydroxides for Oxygen Evolution Reaction towards Efficient Hydrogen Generation. Energy Material Advances, 2022, 2022, .	11.0	16
2599	<scp>SnTe</scp> nanomaterial decorated over graphene nanosheet for robust <scp>OER</scp> activity. International Journal of Energy Research, 2022, 46, 24622-24632.	4.5	6
2600	Two-dimensional double transition metal carbides as superior bifunctional electrocatalysts for overall water splitting. Electrochimica Acta, 2022, 434, 141257.	5.2	20
2601	Recent advance in MXenes: New horizons in electrocatalysis and environmental remediation technologies. Progress in Solid State Chemistry, 2022, 68, 100370.	7.2	9
2602	A Unified Theory for H ₂ Evolution on Mo-Based Electrocatalysts. ACS Energy Letters, 2022, 7, 3695-3702.	17.4	15
2603	Spectroelectrochemical Examination of the Ferro-Ferricyanide Redox Reaction: Impacts of Electrode Thickness and Applied Potential. Journal of the Electrochemical Society, 2022, 169, 106501.	2.9	1
2604	Optimised Ni ³⁺ /Ni ²⁺ and Mn ³⁺ /Mn ²⁺ Ratios in Nickel Manganese Layered Double Hydroxide for Boosting Oxygen and Hydrogen Evolution Reactions. ChemElectroChem, 2022, 9, .	3.4	3
2605	Bias-free solar hydrogen production at 19.8 mA cmâ^'2 using perovskite photocathode and lignocellulosic biomass. Nature Communications, 2022, 13,	12.8	33

#	Article	IF	CITATIONS
2606	2D siloxene supported NiO/Co3O4 electrocatalyst for the stable and efficient hydrogen evolution reaction. Current Applied Physics, 2022, 44, 102-109.	2.4	2
2607	Design and construction of a novel hierarchical Ag/{1 1 1}Ag3PO4/PANI/Pt photoanode with boosted interfacial charge transfer rate and high photocurrent densityÂ>Â16ÂmA/cm2 for sunlight-driven water splitting. Energy Conversion and Management, 2022, 271, 116298.	9.2	5
2608	Accelerating the surface reconstruction of cobalt phosphide via dual-doping engineering for high-performance water electrolysis. Journal of Power Sources, 2022, 551, 232181.	7.8	7
2609	Sulfur Incorporation into NiFe Oxygen Evolution Electrocatalysts for Improved High Current Density Operation. Materials Advances, 0, , .	5.4	0
2610	Catalytically active silver nanoparticles stabilized on a thiol-functionalized metal–organic framework for an efficient hydrogen evolution reaction. Nanoscale, 2022, 14, 17345-17353.	5.6	5
2611	Multifunctional Na-enriched Ni–Fe/Ni–P plates for highly efficient photo- and electrocatalytic water splitting reactions. New Journal of Chemistry, 2022, 46, 22256-22267.	2.8	2
2612	Constructing hierarchical nanosheet-on-microwire FeCo LDH@Co3O4 arrays for high-rate water oxidation. Nano Research, 2022, 15, 10021-10028.	10.4	11
2613	Morphology Effect of Co ₃ O ₄ Nanooctahedron in Boosting Oxygen Reduction and Oxygen Evolution Reactions. Energy & amp; Fuels, 2022, 36, 13863-13872.	5.1	3
2614	Substituent Effects in Iron Porphyrin Catalysts for the Hydrogen Evolution Reaction**. Chemistry - A European Journal, 2023, 29, .	3.3	9
2615	Emerging noble metal-free Mo-based bifunctional catalysts for electrochemical energy conversion. Nano Research, 2022, 15, 10234-10267.	10.4	9
2616	Engineering the Structural Defects of Spinel Oxide Nanoneedles by Doping of V for a Highly Efficient Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2022, 14, 50055-50067.	8.0	13
2617	Modular Flow Reactors for Valorization of Kraft Lignin and Lowâ€Voltage Hydrogen Production. Advanced Science, 2022, 9, .	11.2	6
2618	Improved Activity of PdO Supported over Co ₃ O ₄ in the Electrocatalytic Oxygen Evolution Reaction in a Wide pH Range. Energy & Fuels, 2022, 36, 12719-12728.	5.1	2
2619	Promoting nickel oxidation state transitions in single-layer NiFeB hydroxide nanosheets for efficient oxygen evolution. Nature Communications, 2022, 13, .	12.8	101
2620	Interfacial Design of a Ta ₃ N ₅ Thin-Film Photoanode for Highly Stable Oxygen Evolution over a Wide pH Range. ACS Sustainable Chemistry and Engineering, 2022, 10, 14705-14714.	6.7	5
2621	Advanced Two-Dimensional Materials for Green Hydrogen Generation: Strategies toward Corrosion Resistance Seawater Electrolysis─Review and Future Perspectives. Energy & Fuels, 2022, 36, 13417-13450.	5.1	18
2622	Water electrolysis. Nature Reviews Methods Primers, 2022, 2, .	21.2	70
2623	Highly active and stable amorphous IrOx/CeO2 nanowires for acidic oxygen evolution. Nano Energy, 2022, 104, 107960.	16.0	43

#	Article	IF	CITATIONS
2624	Powdered Mn _{<i>y</i>} Sb _{1–<i>y</i>} O _{<i>x</i>} Catalysts for Cerium-Mediated Oxygen Evolution in Acidic Environments. ACS Energy Letters, 2022, 7, 4258-4264.	17.4	3
2625	Fe-doped NiSe2 nanoparticles as efficient and stable electrocatalysts for oxygen evolution reaction. Chemical Physics Letters, 2022, 808, 140126.	2.6	5
2626	Freestanding μm-thin nanomesh electrodes exceeding 100x current density enhancement for high-throughput electrochemical applications. Materials Today Energy, 2022, 30, 101172.	4.7	4
2627	Self-supported Mo-doped TiO2 electrode for ambient electrocatalytic nitrogen oxidation. Electrochimica Acta, 2022, 435, 141333.	5.2	6
2628	NiFeOxHy/Ni3Fe interface design via electropassivation for superior catalysis of HER. Journal of Environmental Chemical Engineering, 2022, 10, 108736.	6.7	9
2629	N+ irradiation regulates surface defects and doping towards efficient hydrogen evolution reaction on Sb2Te3. Applied Surface Science, 2023, 609, 155347.	6.1	7
2630	Fabrication of 3D ordered mesoporous MoS2/C composite with few-layered MoS2 for electrochemical hydrogen evolution. Journal of Fuel Chemistry and Technology, 2022, 50, 1288-1298.	2.0	2
2631	Electrochemical activation strategy assisted morphology engineering Co-Fe layered double hydroxides for oxygen hydrogen evolution and supercapacitor. Journal of Colloid and Interface Science, 2023, 632, 186-195.	9.4	32
2632	Double Perovskite-Type (NH ₄) ₃ Fe _{<i>x</i>} Co _{1–<i>x</i>} F ₆ Electrocatalyst for Efficient Water Oxidation. ACS Applied Energy Materials, 2022, 5, 13981-13989.	5.1	0
2633	NCNT grafted perovskite oxide as an active bifunctional electrocatalyst for rechargeable zinc-air battery. Materials Today Nano, 2023, 21, 100287.	4.6	15
2634	Facile synthesis of transition metal oxide SnO2/MnO2 hierarchical nanostructure: As an efficient electrocatalyst for robust oxygen evolution reaction. Surfaces and Interfaces, 2023, 36, 102467.	3.0	5
2635	Tuning the d-Band States of Ni-Based Serpentine Materials via Fe ³⁺ Doping for Efficient Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2022, 14, 52857-52867.	8.0	11
2636	Temperature Dependence of Oxygen Evolution Reaction Activity in Alkaline Solution at Ni–Co Oxide Catalysts with Amorphous/Crystalline Surfaces. ACS Catalysis, 2022, 12, 14209-14219.	11.2	20
2637	Demonstration of a three compartment solar electrolyser with gas phase cathode producing formic acid from CO2 and water using Earth abundant metals. Frontiers in Chemical Engineering, 0, 4, .	2.7	0
2638	High Current Density Oxygen Evolution in Carbonate Buffered Solution Achieved by Active Site Densification and Electrolyte Engineering. ChemSusChem, 2023, 16, .	6.8	6
2639	Enhancing Hydrogen Evolution Reaction via Synergistic Interaction between the [Mo ₃ S ₁₃] ^{2–} Cluster Co-Catalyst and WSe ₂ Photocathode. ACS Applied Materials & Interfaces, 2022, 14, 52815-52824.	8.0	6
2640	Tailoring electronic structure of Ni-Fe oxide by V incorporation for effective electrocatalytic water oxidation. Applied Surface Science, 2023, 611, 155732.	6.1	6
2641	Activation of inert Ag by nanoplasmonic synergy for enhanced hydrogen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 3316-3327.	7.1	2
#	Article	IF	CITATIONS
------	---	------	-----------
2642	Engineering Coupled NiS _{<i>x</i>} â€WO _{2.9} Heterostructure as pHâ€Universal Electrocatalyst for Hydrogen Evolution Reaction. ChemSusChem, 2023, 16, .	6.8	7
2643	Modulation to favorable surface adsorption energy for oxygen evolution reaction intermediates over carbon-tunable alloys towards sustainable hydrogen production. Materials for Renewable and Sustainable Energy, 2022, 11, 169-213.	3.6	3
2644	In Situ Quantification of the Active Sites, Turnover Frequency, and Stability of Ni–Fe (Oxy)hydroxides for the Oxygen Evolution Reaction. ACS Catalysis, 2022, 12, 14280-14289.	11.2	16
2645	Recent Advancements in Two-Dimensional Layered Molybdenum and Tungsten Carbide-Based Materials for Efficient Hydrogen Evolution Reactions. Nanomaterials, 2022, 12, 3884.	4.1	3
2646	Feâ€Incorporated Ni/MoO ₂ Hollow Heterostructure Nanorod Arrays for Highâ€Efficiency Overall Water Splitting in Alkaline and Seawater Media. Small, 2022, 18, .	10.0	38
2647	Progress of Heterogeneous Iridium-Based Water Oxidation Catalysts. ACS Nano, 2022, 16, 17761-17777.	14.6	29
2648	Highly Durable Bifunctional Gas Diffusion Electrodes Fabricated with Melilite-Type Fe/Co/Ni-Mixed Oxide Electrocatalysts. ACS Applied Energy Materials, 2022, 5, 15502-15509.	5.1	1
2649	Aerogels-Inspired based Photo and Electrocatalyst for Water Splitting to Produce Hydrogen. Applied Materials Today, 2022, 29, 101670.	4.3	4
2650	Theory-guided electrocatalyst engineering: From mechanism analysis to structural design. Chinese Journal of Catalysis, 2022, 43, 2987-3018.	14.0	45
2651	Metal-doped nickel-based chalcogenides and phosphochalcogenides for electrochemical water splitting. Energy Advances, 0, , .	3.3	3
2652	Preparation and bifunctional properties of the A-site-deficient SrTi _{0.3} Fe _{0.6} Ni _{0.1} O _{3â^'<i>δ</i>} perovskite. RSC Advances, 2022, 12, 33789-33800.	3.6	2
2653	Understanding the stabilization effect of the hydrous IrO _{<i>x</i>} layer formed on the iridium oxide surface during the oxygen evolution reaction in acid. Inorganic Chemistry Frontiers, 2023, 10, 776-786.	6.0	6
2654	High-performing catalysts for energy-efficient commercial alkaline water electrolysis. Sustainable Energy and Fuels, 2022, 7, 31-60.	4.9	18
2655	Tuning electrocatalytic water oxidation by MnO _{<i>x</i>} through the incorporation of abundant metal cations. Sustainable Energy and Fuels, 2022, 7, 92-105.	4.9	3
2656	Synthesis of quinacridone derivative supported on ZnO hexagonal as a new electrocatalyst for hydrogen evolution reaction. Journal of Electroanalytical Chemistry, 2023, 928, 117029.	3.8	3
2657	Facile synthesis of graphene quantum dots/ZSM-5 type metalosilicate composites and evaluating their performance in photocatalytic degradation of methylene blue and electrochemical water splitting. Advanced Powder Technology, 2023, 34, 103892.	4.1	5
2658	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.	14.0	47
2659	lrO ₂ -Stablized La ₂ IrO ₆ perovskite nanotubes <i>via</i> corner-shared interconnections as highly-efficient oxygen evolution electrocatalysts. Chemical Communications, 2022, 59, 183-186.	4.1	3

#	Article	IF	CITATIONS
2660	Rhenium anchored Ti ₃ C ₂ T _{<i>x</i>} (MXene) nanosheets for electrocatalytic hydrogen production. Nanoscale Advances, 2023, 5, 349-355.	4.6	5
2661	Annealing and electrochemically activated amorphous ribbons: Surface nanocrystallization and oxidation effects enhanced for oxygen evolution performance. Journal of Colloid and Interface Science, 2023, 633, 303-313.	9.4	4
2662	Ti2+ and Ti4+ species enriched MXene electrocatalyst for highly efficient hydrogen evolution and oxygen evolution reaction kinetics. Applied Surface Science, 2023, 612, 155883.	6.1	19
2664	Elevated electrocatalytic performance of A-site non-stoichiometric LaxNiO3 perovskites towards methanol oxidation reaction in NaOH solution. Journal of Solid State Electrochemistry, 0, , .	2.5	Ο
2665	Rational engineering of metal–organic coordination networks into facetâ€controlled phosphides for overall water splitting. EcoMat, 2023, 5, .	11.9	2
2666	Hydrogen Evolution Volcano(es)—From Acidic to Neutral and Alkaline Solutions. Catalysts, 2022, 12, 1541.	3.5	3
2667	Controlling degradable activities of water oxidation anode via facile surface reconstruction. Applied Surface Science, 2023, 614, 155741.	6.1	2
2668	Fabrication of Earth-Abundant Electrocatalysts Based on Green-Chemistry Approaches to Achieve Efficient Alkaline Water Splitting—A Review. Sustainability, 2022, 14, 16359.	3.2	2
2669	High-Performance Oxygen Evolution Reaction Electrocatalysts Discovered via High-Throughput Aerogel Synthesis. ACS Catalysis, 2023, 13, 601-611.	11.2	5
2670	Tuning of eg electron occupancy of MnCo2O4 spinel for oxygen evolution reaction by partial substitution of Co by Fe at octahedral sites. International Journal of Hydrogen Energy, 2023, 48, 8854-8866.	7.1	7
2671	Facile One-Pot Synthesis of Nickel Nanoparticles by Hydrothermal Method. Materials, 2023, 16, 76.	2.9	2
2672	Electrodeposition of Cobalt Oxide Nanoparticles on Stainless Steel for Electrocatalytic Water Oxidation. Topics in Catalysis, 0, , .	2.8	3
2673	A Novel Electrode for Valueâ€Generating Anode Reactions in Water Electrolyzers at Industrial Current Densities. Angewandte Chemie - International Edition, 2023, 62, .	13.8	26
2674	Photoexcitation of Fe ₃ O Nodes in MOF Drives Water Oxidation at pH=1 When Ru Catalyst Is Present. ChemSusChem, 2023, 16, .	6.8	2
2675	Electrochemical Oxidation of Primary Alcohols Using a Co ₂ NiO ₄ Catalyst: Effects of Alcohol Identity and Electrochemical Bias on Product Distribution. ACS Catalysis, 2023, 13, 515-529.	11.2	9
2676	A Novel Electrode for Valueâ€Generating Anode Reactions in Water Electrolyzers at Industrial Current Densities. Angewandte Chemie, 2023, 135, .	2.0	4
2677	Fabrication of In(OH)3–In2S3–Cu2O nanofiber for highly efficient photocatalytic hydrogen evolution under blue light LED excitation. International Journal of Hydrogen Energy, 2023, 48, 9318-9332.	7.1	10
2678	Interfacial Engineering of Polycrystalline Pt ₅ P ₂ Nanocrystals and Amorphous Nickel Phosphate Nanorods for Electrocatalytic Alkaline Hydrogen Evolution. Small, 2023, 19, .	10.0	12

#	Article	IF	CITATIONS
2679	Understanding Cation Effects on the Hydrogen Evolution Reaction. ACS Energy Letters, 2023, 8, 657-665.	17.4	31
2680	Undulated Ni(II)-Framework with In Situ-Grafted Open-Metal and Basic Sites for High-Performance Electrochemical Water Oxidation and Flexible Composite-Driven Size-Exclusive Autotandem Catalysis. ACS Sustainable Chemistry and Engineering, 2023, 11, 979-993.	6.7	11
2681	Active Surface Area and Intrinsic Catalytic Oxygen Evolution Reactivity of NiFe LDH at Reactive Electrode Potentials Using Capacitances. ACS Catalysis, 2023, 13, 1186-1196.	11.2	36
2682	Harvesting the two-electron process for solar water splitting. Cell Reports Physical Science, 2023, 4, 101211.	5.6	5
2683	Technologische Pfade für die Herstellung von komprimiertem und hochreinem Wasserstoff mit Hilfe von Sonnenenergie. Angewandte Chemie, 2023, 135, .	2.0	2
2684	Interface engineering of the NiCo2O4@MoS2/TM heterostructure to realize the efficient alkaline oxygen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 12176-12184.	7.1	22
2685	Electrode Integration of Synthetic Hydrogenase as Bioinspired and Noble Metal-Free Cathodes for Hydrogen Evolution. ACS Catalysis, 2023, 13, 1246-1256.	11.2	3
2686	A New Approach to the Synthesis of Nanocrystalline Cobalt Boride in the Course of the Thermal Decomposition of Cobalt Complexes [Co(DMF)6]2+ with Boron Cluster Anions. Molecules, 2023, 28, 453.	3.8	8
2687	Improving the Catalytic Performance of the Hydrogen Evolution Reaction of αâ€MoB ₂ via Rational Doping by Transition Metal Elements. ChemPhysChem, 2023, 24, .	2.1	1
2688	In Situ Detection of Electrochemical Reaction Surface Area by Optical Weak Measurement. Analytical Chemistry, 2023, 95, 2176-2182.	6.5	0
2689	Redrawing HER Volcano with Interfacial Processes—The Role of Hydrogen Spillover in Boosting H2 Evolution in Alkaline Media. Catalysts, 2023, 13, 89.	3.5	3
2690	Optimizing the Electronic Structure of Ruthenium Oxide by Neodymium Doping for Enhanced Acidic Oxygen Evolution Catalysis. Advanced Functional Materials, 2023, 33, .	14.9	29
2691	Al–Pt compounds catalyzing the oxygen evolution reaction. Dalton Transactions, 2023, 52, 1433-1440.	3.3	2
2692	Controlled synthesis of W–Co3S4@Co3O4 as an environmentally friendly and low cost electrocatalyst for overall water splitting. International Journal of Hydrogen Energy, 2023, 48, 12739-12752.	7.1	10
2693	Adsorbed <i>p</i> â€Aminothiophenol Molecules on Platinum Nanoparticles Improve Electrocatalytic Hydrogen Evolution. Small, 2023, 19, .	10.0	6
2694	Insight on the choice of sensitizers/dyes for dye sensitized solar cells: A review. Dyes and Pigments, 2023, 213, 111087.	3.7	34
2695	Growth of Ultrathin Well-Defined and Crystalline Films of Co ₃ O ₄ and CoOOH by Electrodeposition. Journal of the Electrochemical Society, 2023, 170, 012501.	2.9	2
2696	Electrodeposition of Stable Noble-Metal-Free Co-P Electrocatalysts for Hydrogen Evolution Reaction. Materials, 2023, 16, 593.	2.9	4

#	Article	IF	CITATIONS
2697	Recent Advances in Defect-Engineered Transition Metal Dichalcogenides for Enhanced Electrocatalytic Hydrogen Evolution: Perfecting Imperfections. ACS Omega, 2023, 8, 1851-1863.	3.5	6
2698	Galvanic displacement of Co with Rh boosts hydrogen and oxygen evolution reactions in alkaline media. Journal of Solid State Electrochemistry, 2023, 27, 1877-1887.	2.5	0
2699	Silicon Photoelectrodes Prepared by Low-Cost Wet Methods for Solar Photoelectrocatalysis. Accounts of Materials Research, 2023, 4, 133-142.	11.7	10
2700	Technological Pathways to Produce Compressed and Highly Pure Hydrogen from Solar Power. Angewandte Chemie - International Edition, 2023, 62, .	13.8	8
2701	A novel lead-based pseudo dimensional stable anode toward efficient and clean extraction of metallic manganese. Journal of Cleaner Production, 2023, 386, 135806.	9.3	6
2702	Cobalt single atom anchored on N-doped carbon nanoboxes as typical single-atom catalysts (SACs) for boosting the overall water splitting. Chemical Engineering Journal, 2023, 458, 141435.	12.7	27
2703	Highâ€ʿindexâ€ʿfaceted and electron density-optimized Ni3S2 in hierarchical NiWO4-Ni3S2@NiO/NF nanofibers for robust alkaline electrocatalytic hydrogen evolution. Chemical Engineering Journal, 2023, 457, 141188.	12.7	10
2704	Graphitic carbon nitride embedded with single-atom Pt for photo-enhanced electrocatalytic hydrogen evolution reaction. Applied Surface Science, 2023, 615, 156372.	6.1	5
2705	Interface reinforced 2D/2D heterostructure of Cu-Co oxides/FeCo hydroxides as monolithic multifunctional catalysts for rechargeable/flexible zinc-air batteries and self-powered water splitting. Applied Catalysis B: Environmental, 2023, 325, 122332.	20.2	17
2706	Modification of TiO2 nanotubes by graphene–strontium and cobalt molybdate perovskite for efficient hydrogen evolution reaction in acidic medium. Scientific Reports, 2022, 12, .	3.3	0
2707	lridium-titanium oxides for efficient oxygen evolution reaction in acidic media. International Journal of Hydrogen Energy, 2022, , .	7.1	2
2708	Double Perovskite Oxides Bringing a Revelation in Oxygen Evolution Reaction Electrocatalyst Design. ChemElectroChem, 2023, 10, .	3.4	8
2709	A review on electrocatalysis for alkaline oxygen evolution reaction (OER) by Fe-based catalysts. Journal of Materials Science, 0, , .	3.7	3
2710	A comprehensive review on the electrochemical parameters and recent material development of electrochemical water splitting electrocatalysts. RSC Advances, 2023, 13, 3843-3876.	3.6	81
2711	Morphology-Dependent Electrocatalytic Behavior of Cobalt Chromite toward the Oxygen Evolution Reaction in Acidic and Alkaline Medium. Inorganic Chemistry, 2023, 62, 2726-2737.	4.0	18
2712	Efficient Hydrogen Production at pH 7 in Water with a Heterogeneous Electrocatalyst Based on a Neutral Dimeric Cobalt-Dithiolene Complex. ACS Catalysis, 2023, 13, 2367-2373.	11.2	4
2713	Efficient electrochemical NO reduction to NH3 over metal-free g-C3N4 nanosheets and the role of interface microenvironment. Journal of Hazardous Materials, 2023, 448, 130890.	12.4	5
2714	Dual Function of Hypo-d-electronic Transition Metals in the Brewer Intermetallic Phase for the Highly Efficient Electrocatalytic Hydrogen Evolution Reaction in Alkaline Electrolytes. Inorganic Chemistry, 2023, 62, 2188-2196.	4.0	5

#	Article	IF	CITATIONS
2715	Fabrication of fullerene-supported La ₂ O ₃ –C ₆₀ nanocomposites: dual-functional materials for photocatalysis and supercapacitor electrodes. Physical Chemistry Chemical Physics, 2023, 25, 7010-7027.	2.8	12
2716	Cu-Based Materials as Photocatalysts for Solar Light Artificial Photosynthesis: Aspects of Engineering Performance, Stability, Selectivity. Solar, 2023, 3, 87-112.	1.8	3
2717	Rational construction of efficient ZnS quantum dots-supported g-C3N4 with Co3O4 heterostructure composite for bifunctional electrocatalytic hydrogen evolution reaction and environmental pollutant degradation. Journal of Alloys and Compounds, 2023, 942, 169077.	5.5	12
2718	2D noble metals: growth peculiarities and prospects for hydrogen evolution reaction catalysis. Physical Chemistry Chemical Physics, 2023, 25, 8281-8292.	2.8	3
2719	Electrochemically robust oxide-supported dendritic Pt and Ir nanoparticles for highly effective polymer electrolyte membrane-unitized regenerative fuel cells. Journal of Materials Chemistry A, 2023, 11, 5864-5872.	10.3	2
2720	Structural transformation of metal–organic frameworks and identification of electrocatalytically active species during the oxygen evolution reaction under neutral conditions. Inorganic Chemistry Frontiers, 2023, 10, 2961-2977.	6.0	4
2721	Au-Loaded Superparamagnetic Mesoporous Bimetallic CoFeB Nanovehicles for Sensitive Autoantibody Detection. ACS Nano, 2023, 17, 3346-3357.	14.6	22
2722	NiFe Alloy Integrated with Amorphous/Crystalline NiFe Oxide as an Electrocatalyst for Alkaline Hydrogen and Oxygen Evolution Reactions. ACS Omega, 2023, 8, 13068-13077.	3.5	9
2723	Iron Oxyhydroxide: Structure and Applications in Electrocatalytic Oxygen Evolution Reaction. Advanced Functional Materials, 2023, 33, .	14.9	18
2724	Toward Carbon Monoxide Methanation at Mild Conditions on Dual-Site Catalysts. Journal of the American Chemical Society, 0, , .	13.7	3
2725	Anion Exchange Membrane Water Electrolysis: The Future of Green Hydrogen. Journal of Physical Chemistry C, 2023, 127, 7901-7912.	3.1	16
2726	Highly active and stable IrO2 and IrO2–Ta2O5 catalysts for oxygen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 26021-26031.	7.1	4
2727	Prussian blue-derived hollow carbon-wrapped Fe-doped CoS2 nanocages as durable electrocatalyst for efficient hydrogen evolution. Electrochimica Acta, 2023, 448, 142187.	5.2	7
2728	Three-Dimensional Cadmium–Organic Framework with Dual Functions of Oxygen Evolution in Water Splitting and Fenton-like Photocatalytic Removal of Organic Pollutants. Inorganic Chemistry, 2023, 62, 6339-6351.	4.0	2
2729	Tuning the Electronic Properties of Platinum in Hybridâ€Nanoparticle Assemblies for use in Hydrogen Evolution Reaction. Angewandte Chemie, 0, , .	2.0	1
2730	Tuning the Electronic Properties of Platinum in Hybridâ€Nanoparticle Assemblies for use in Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2023, 62, .	13.8	8
2731	Transfer learning aided high-throughput computational design of oxygen evolution reaction catalysts in acid conditions. Journal of Energy Chemistry, 2023, 80, 744-757.	12.9	7
2732	Coordination chemistry in modulating electronic structures of perovskite-type oxide nanocrystals for oxygen evolution catalysis. Coordination Chemistry Reviews, 2023, 485, 215109.	18.8	10

#	Article	IF	CITATIONS
2733	Reviewing perovskite oxide sites influence on electrocatalytic reactions for high energy density devices. Journal of Energy Chemistry, 2023, 81, 1-19.	12.9	11
2734	Fe-doped NiO nanoarray interlayer-modified Pd/Ni foam cathode for enhanced electrocatalytic hydrodechlorination. Journal of Environmental Chemical Engineering, 2023, 11, 109843.	6.7	5
2735	A novel 3D CoNiCu-LDH@CuO micro-flowers on copper foam as efficient electrocatalyst for overall water splitting. Applied Surface Science, 2023, 622, 156874.	6.1	7
2736	One-step growth of Ni3Fe-Fe3C heterostructures well encapsulated in NCNTs as superior self-supported bifunctional electrocatalysts for overall water splitting. Journal of Alloys and Compounds, 2023, 949, 169825.	5.5	2
2737	Novel Fe/N co-doping biochar based electro-Fenton catalytic membrane enabling enhanced tetracycline removal and self-cleaning performance. Journal of Cleaner Production, 2023, 402, 136731.	9.3	6
2738	Emerging trends of electrocatalytic technologies for renewable hydrogen energy from seawater: Recent advances, challenges, and techno-feasible assessment. Journal of Energy Chemistry, 2023, 80, 658-688.	12.9	20
2739	Research Progress of Solar Hydrogen Production Technology under Double Carbon Target. Acta Chimica Sinica, 2022, 80, 1629.	1.4	0
2740	Nanoarchitectonics with the amorphous rhenium phosphide compounds for enhanced catalytic activity of hydrogen evolution reaction. Journal of Alloys and Compounds, 2023, 941, 168961.	5.5	1
2741	Metal-organic framework derived core-shell nanoparticles as high performance bifunctional electrocatalysts for HER and OER. Applied Surface Science, 2023, 616, 156499.	6.1	26
2742	The OER/ORR activities of copper oxyhydroxide series electrocatalysts. Molecular Catalysis, 2023, 537, 112942.	2.0	4
2743	Oxygen Evolution Reaction by Silicate-Stabilized Manganese Oxide. ACS Applied Energy Materials, 2023, 6, 1702-1713.	5.1	2
2744	One-pot synthesis of-carbon-supported MoO2 nanoparticles for efficient oxygen evolution reaction. Materials Chemistry and Physics, 2023, 298, 127432.	4.0	3
2745	A concise perspective on the effect of interpreting the double layer capacitance data over the intrinsic evaluation parameters in oxygen evolution reaction. Materials Today Energy, 2023, 33, 101259.	4.7	13
2746	In-situ desalination-coupled electrolysis with concurrent one-step-synthesis of value-added chemicals. Desalination, 2023, 551, 116431.	8.2	6
2747	Determining the proton diffusion coefficient in highly hydrated iridium oxide films by energy dispersive X-ray absorption spectroscopy. Electrochimica Acta, 2023, 444, 142017.	5.2	1
2748	Kineticâ€Modulated Crystal Phase of Ru for Hydrogen Oxidation. Small, 2023, 19, .	10.0	2
2749	Rhenium Suppresses Iridium (IV) Oxide Crystallization and Enables Efficient, Stable Electrochemical Water Oxidation. Small, 2023, 19, .	10.0	14
2751	Electrocatalytic Performance of Ethanol Oxidation on Ni and Ni/Pd Surface-Decorated Porous Structures Obtained by Molten Salts Deposition/Dissolution of Al-Ni Alloys. International Journal of Molecular Sciences, 2023, 24, 3836.	4.1	1

#	Article	IF	CITATIONS
2752	Ru-CoO heterostructured nanoparticles supported on nitrogen and sulfur codoped graphene nanosheets as effective electrocatalysts for hydrogen evolution reaction in alkaline media. Journal of Electroanalytical Chemistry, 2023, 932, 117272.	3.8	2
2753	Upgrading the detection of electrocatalyst degradation during the oxygen evolution reaction. Current Opinion in Electrochemistry, 2023, 38, 101247.	4.8	8
2754	Surface Structure Engineering of Twoâ€Ðimensional Ni(OH) ₂ with Enhanced Urea Oxidation Performance. ChemistrySelect, 2023, 8, .	1.5	3
2755	Facet Engineering of Advanced Electrocatalysts Toward Hydrogen/Oxygen Evolution Reactions. Nano-Micro Letters, 2023, 15, .	27.0	55
2756	Honeycomb-like MXene/NiFeP _{<i>x</i>} –NC with "continuous" single-crystal enabling high activity and robust durability in electrocatalytic oxygen evolution reactions. Journal of Advanced Ceramics, 2023, 12, 553-564.	17.4	18
2757	Ambient Electrosynthesis toward Singleâ€Atom Sites for Electrocatalytic Green Hydrogen Cycling. Advanced Materials, 2023, 35, .	21.0	26
2759	Synthesis, properties and catalytic performance of the novel, pseudo-spinel, multicomponent transition-metal selenides. Journal of Materials Chemistry A, 2023, 11, 5337-5349.	10.3	1
2760	Rhenium-Based Electrocatalysts for Water Splitting. ACS Materials Au, 2023, 3, 177-200.	6.0	11
2761	Steering carbon dioxide reduction toward C–C coupling using copper electrodes modified with porous molecular films. Nature Communications, 2023, 14, .	12.8	21
2762	Review on Electrochemical Reduction of Nitrogen by Graphdiyne-Based Catalysts: Recent Advances and Outlook. Energy & Fuels, 2023, 37, 3501-3522.	5.1	5
2763	Iron-Doped Monoclinic Strontium Iridate as a Highly Efficient Oxygen Evolution Electrocatalyst in Acidic Media. Nanomaterials, 2023, 13, 797.	4.1	1
2764	Semicrystalline IrO _{<i>x</i>} with Abundant Boundaries for Overall Water Splitting. Inorganic Chemistry, 2023, 62, 4011-4019.	4.0	2
2765	Advancing the Rigor and Reproducibility of Electrocatalyst Stability Benchmarking and Intrinsic Material Degradation Analysis for Water Oxidation. ACS Catalysis, 2023, 13, 3379-3394.	11.2	9
2766	Affordable Green Hydrogen from Alkaline Water Electrolysis: Key Research Needs from an Industrial Perspective. ACS Energy Letters, 2023, 8, 1502-1509.	17.4	40
2767	Reliable reporting of Faradaic efficiencies for electrocatalysis research. Nature Communications, 2023, 14, .	12.8	18
2768	Alkaline ethanol oxidation on porous Fe/Pd–Fe nanostructured bimetallic electrodes. Journal of Applied Electrochemistry, 2023, 53, 1631-1642.	2.9	1
2769	A Bimetallic Phosphide@Hydroxide Interface for High-Performance 5-Hydroxymethylfurfural Electro-Valorization. Journal of Physical Chemistry C, 2023, 127, 4967-4974.	3.1	2
2770	Investigation of the Synergistic Effect in Polypyrrole/Ni-Doped NASICON Composites for an Enhanced Hydrogen Evolution Reaction. Energy & Fuels, 2023, 37, 4552-4565.	5.1	5

#	Article	IF	CITATIONS
2771	Preparation of FeNi-based nanoporous amorphous alloy films and their electrocatalytic oxygen evolution properties. International Journal of Hydrogen Energy, 2023, 48, 19984-19994.	7.1	4
2772	Preparation and Electrochemical Characterisation of an Ironâ€Nickelâ€Doped Sucroseâ€Derived Carbon Material for the Oxygen Evolution Reaction. ChemistrySelect, 2023, 8, .	1.5	7
2773	Insulating High-Entropy Ruthenium Oxide as a Highly Efficient Oxygen-Evolving Electrocatalyst in Acid. ACS Catalysis, 2023, 13, 3983-3989.	11.2	6
2774	Electronic and Lattice Engineering of Ruthenium Oxide towards Highly Active and Stable Water Splitting. Advanced Energy Materials, 2023, 13, .	19.5	32
2775	<scp>NiO</scp> / <scp>MoO₂</scp> / <scp>MoO₃</scp> prepared by normal pulse voltammetry as cathode catalysts to investigate the properties of microbial electrolysis cells. Journal of Chemical Technology and Biotechnology, 2023, 98, 1488-1496.	3.2	1
2776	Analysis of the Scale of Clobal Human Needs and Opportunities for Sustainable Catalytic Technologies. Topics in Catalysis, 2023, 66, 338-374.	2.8	6
2777	Development of a highly stable and active non-precious anode electrocatalyst for oxygen evolution reaction in acidic medium based on nickel and cobalt-containing antimony oxide. Journal of Electroanalytical Chemistry, 2023, 935, 117319.	3.8	1
2778	Electrocatalytic Properties of Co3O4 Prepared on Carbon Fibers by Thermal Metal–Organic Deposition for the Oxygen Evolution Reaction in Alkaline Water Electrolysis. Nanomaterials, 2023, 13, 1021.	4.1	2
2779	Surface Reconstruction of Ni–Fe Layered Double Hydroxide Inducing Chloride Ion Blocking Materials for Outstanding Overall Seawater Splitting. Advanced Functional Materials, 2023, 33, .	14.9	15
2780	Interface engineering of CeO ₂ nanoparticle/Bi ₂ WO ₆ nanosheet nanohybrids with oxygen vacancies for oxygen evolution reactions under alkaline conditions. RSC Advances, 2023, 13, 8873-8881.	3.6	0
2781	Improving Electrocatalytic Activity of MoO ₃ for the Oxygen Evolution Reaction by Incorporation of Li Ions. , 2023, 5, 1196-1201.		8
2782	Understanding the Role of (W, Mo, Sb) Dopants in the Catalyst Evolution and Activity Enhancement of Co ₃ O ₄ during Water Electrolysis via In Situ Spectroelectrochemical Techniques. Small, 2023, 19, .	10.0	7
2783	Tailoring the electrocatalytic activity of multicomponent (Co,Fe,Ni) ₉ S _{8â^'<i>x</i>} Se _{<i>x</i>} pentlandite solid electrodes. Journal of Materials Chemistry A, 2023, 11, 7526-7538.	10.3	1
2784	Electrocatalytic Water Oxidation by Hydrolytically Stable Metalâ€Organic Frameworks at Both Neutral and Alkaline Medium: Inverse Relation of Dimensionality with Catalytic Activity. ChemCatChem, 2023, 15, .	3.7	1
2785	Nd-Gd–Platinum doped TiO2 nanotube arrays catalyst for water splitting in Alkaline Medium. International Journal of Electrochemical Science, 2023, 18, 100112.	1.3	1
2786	Oxygen Evolution/Reduction Reaction Catalysts: From <i>In Situ</i> Monitoring and Reaction Mechanisms to Rational Design. Chemical Reviews, 2023, 123, 6257-6358.	47.7	81
2787	Selfâ€Reconstructed Spinel Surface Structure Enabling the Longâ€Term Stable Hydrogen Evolution Reaction/Oxygen Evolution Reaction Efficiency of FeCoNiRu Highâ€Entropy Alloyed Electrocatalyst. Advanced Science, 2023, 10, .	11.2	22
2788	Selective Ethylene Glycol Oxidation to Formate on Nickel Selenide with Simultaneous Evolution of Hydrogen. Advanced Science, 2023, 10, .	11.2	28

#	Article	IF	CITATIONS
2789	High electrochemical stability and low-agglomeration of defective Co3O4 nanoparticles supported on N-doped graphitic carbon nano-spheres for oxygen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 21723-21734.	7.1	4
2790	Improving the Oxygen Evolution Reaction on Fe ₃ O ₄ (001) with Single-Atom Catalysts. ACS Catalysis, 2023, 13, 4811-4823.	11.2	7
2791	Nanoengineered Zn-modified Nickel Sulfide (NiS) as a bifunctional electrocatalyst for overall water splitting. International Journal of Hydrogen Energy, 2023, 48, 21969-21980.	7.1	6
2792	2D MOFs Containing Bis(azabenzimidazole) and Dicarboxylate Moieties for the Efficient Oxygen Evolution Reaction and CO ₂ Sorption. Crystal Growth and Design, 0, , .	3.0	0
2793	Moiré Superlattice Structure in Twoâ€Đimensional Catalysts: Synthesis, Property and Activity. Small, 2023, 19, .	10.0	2
2794	Ni–Fe Oxides/TiO ₂ Heterojunction Anodes for Reactive Chlorine Generation and Mediated Water Treatment. ACS Applied Materials & Interfaces, 2023, 15, 17867-17878.	8.0	1
2795	Modulating the Electronic Structure of Co in Co–Co ₆ Mo ₆ C ₂ for Effective Oxygen Evolution Reaction. Energy & Fuels, 2023, 37, 6025-6035.	5.1	1
2796	Effect of phosphorus vacancies on activity of Fe-doped Nickel phosphide by NaBH4 reduction for efficient oxygen evolution under alkaline conditions. Journal of Industrial and Engineering Chemistry, 2023, 123, 201-208.	5.8	4
2797	3D Flower-like Zn substituted CuCo2O4 spinel catalyst for electrochemical oxygen evolution reaction. Journal of Electroanalytical Chemistry, 2023, 937, 117406.	3.8	5
2798	Recent progress of two-dimensional metal-organic-frameworks: From synthesis to electrocatalytic oxygen evolution. Nano Research, 2023, 16, 8614-8637.	10.4	6
2799	Atomically Structured Metalâ€Organic Frameworks: A Powerful Chemical Path for Noble Metalâ€Based Electrocatalysts. Advanced Functional Materials, 2023, 33, .	14.9	6
2800	<i>WhereWulff</i> : A Semiautonomous Workflow for Systematic Catalyst Surface Reactivity under Reaction Conditions. Journal of Chemical Information and Modeling, 2023, 63, 2427-2437.	5.4	1
2801	Electrosynthesized CuMgAl Layered Double Hydroxides as New Catalysts for the Electrochemical Reduction of CO ₂ . Advanced Functional Materials, 2023, 33, .	14.9	7
2802	Electrodeposited Ni–Mo coatings as electrocatalytic materials for green hydrogen production. Heliyon, 2023, 9, e15230.	3.2	6
2803	Photo-assisted electrochemical CO ₂ reduction at a boron-doped diamond cathode. Energy Advances, 2023, 2, 733-738.	3.3	2
2804	Recent progress and perspective on molybdenum-based electrocatalysts for water electrolysis. International Journal of Hydrogen Energy, 2023, 48, 26084-26106.	7.1	13
2805	A Perspective on the Recent Amelioration of Co ₃ O ₄ and MnO ₂ Bifunctional Catalysts for Oxygen Electrode Reactions. , 0, , .		0
2806	Co-electrodeposition of Ni-La coating on Ni foam for electrocatalytic hydrogen evolution reaction. Transition Metal Chemistry, 2023, 48, 125-133.	1.4	1

#	Article	IF	CITATIONS
2807	Reduced graphene oxide composite Ni3S2 microspheres grown directly on nickel foam as an efficient electrocatalyst for OER. International Journal of Hydrogen Energy, 2023, 48, 27441-27449.	7.1	8
2808	Control by atomic layer deposition over the chemical composition of nickel cobalt oxide for the oxygen evolution reaction. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2023, 41, .	2.1	1
2809	Highly enhanced electrocatalytic OER activity of water-coordinated copper complexes: effect of lattice water and bridging ligand. RSC Advances, 2023, 13, 12065-12071.	3.6	2
2810	Preparation of Co(OH)2@NiFe/NF bifunctional electrocatalyst by electrodeposition for efficient water splitting. Journal of Solid State Chemistry, 2023, 323, 124048.	2.9	4
2811	Boosting Electrocatalytic Reduction of Nitrate to Ammonia over Co3O4 Nanosheets with Oxygen Vacancies. Metals, 2023, 13, 799.	2.3	5
2812	Ultralow overpotential nitrate reduction to ammonia via a three-step relay mechanism. Nature Catalysis, 2023, 6, 402-414.	34.4	106
2813	Dopant triggered atomic configuration activates water splitting to hydrogen. Nature Communications, 2023, 14, .	12.8	11
2814	A Facile Molecular Approach to Amorphous Nickel Pnictides and Their Reconstruction to Crystalline Potassiumâ€Intercalated γâ€NiOOH _{<i>x</i>xsub> Enabling Highâ€Performance Electrocatalytic Water Oxidation and Selective Oxidation of 5â€Hydroxymethylfurfural. Small, 2023, 19, .}	10.0	7
2815	Ni ₃ V ₂ O ₈ Nanosheets Grafted on 3D Helicalâ€shaped Carbon Nanocoils as A Binderâ€free Hierarchical Composite for Efficient Nonâ€enzymatic Glucose Sensing. Advanced Functional Materials, 2023, 33, .	14.9	8
2816	Singleâ€atom surface anchoring strategy via atomic layer deposition to achieve dual catalysts with remarkable electrochemical performance. EcoMat, 0, , .	11.9	0
2817	Impact of oxygen-vacancies on electrical conductivity and electrocatalytic activity of La3-xCaxFe2GaO9-δ (x = 0, 2; δ = 0, 1). Solid State Sciences, 2023, 141, 107208.	3.2	1
2818	Ironâ€incorporated Ni ₄ Mo Hierarchical Nanorod Arrays for Promoted Electrocatalytic Oxygen Evolution Reaction. ChemistrySelect, 2023, 8, .	1.5	0
2819	Facile synthesis of highly active monolithic water-separated W-doped Ni–Fe–P catalysts. International Journal of Hydrogen Energy, 2023, 48, 27105-27111.	7.1	1
2820	Structural modulation of low-valent iron in LDH-derived Ni ₃ Se ₄ nanosheets: a breakthrough electrocatalyst for the overall water splitting reaction. Journal of Materials Chemistry A, 2023, 11, 10684-10698.	10.3	15
2821	Recent advances in interface engineering of Fe/Co/Ni-based heterostructure electrocatalysts for water splitting. Materials Horizons, 2023, 10, 2312-2342.	12.2	13
2822	Design of advanced electrocatalysts for the high-entropy alloys: Principle, progress, and perspective. Journal of Alloys and Compounds, 2023, 958, 170479.	5.5	8
2823	Electrocatalytic CO2 reduction to syngas. Green Energy and Environment, 2023, , .	8.7	2
2824	Effect of Pyridine on the Electrochemical Parameters of the Hydroxonium Discharge on a Zinc Cathode. Russian Journal of General Chemistry, 2023, 93, 740-745.	0.8	0

#	Article	IF	CITATIONS
2825	A Low ost Ni–Mo Electrocatalyst for Highly Efficient Hydrogen and Oxygen Evolution Reaction. Energy Technology, 0, , .	3.8	1
2826	Stretchable high-entropy alloy nanoflowers enable enhanced alkaline hydrogen evolution catalysis. Applied Catalysis B: Environmental, 2023, 334, 122814.	20.2	15
2827	Construction of Zn-doped RuO2 nanowires for efficient and stable water oxidation in acidic media. Nature Communications, 2023, 14, .	12.8	35
2828	Assembly Engineering of Rh Atoms on CoAl-Layered Double Hydroxide Nanosheets for Boosting Alkaline Water Splitting. ACS Applied Nano Materials, 2023, 6, 7984-7991.	5.0	3
2829	3D nanostructured nickel film supported to a conducting polymer as an electrocatalyst with exceptional properties for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 29865-29876.	7.1	4
2830	Ruthenium Engineered A ₂ B ₂ O ₆ â€Hybrid Columbite Ferrite for Bifunctional pHâ€Universal Water Splitting. Advanced Energy Materials, 2023, 13, .	19.5	6
2831	Three-dimensional copper cobalt hydroxide electrode for anion exchange membrane water electrolyzer. International Journal of Hydrogen Energy, 2023, 48, 29877-29886.	7.1	1
2832	A semiconductor-electrocatalyst nano interface constructed for successive photoelectrochemical water oxidation. Nature Communications, 2023, 14, .	12.8	18
2833	Tuning coordination microenvironment of V2CTx MXene for anchoring single-atom toward efficient multifunctional electrocatalysis. Journal of Colloid and Interface Science, 2023, 645, 833-840.	9.4	3
2834	Stainless steel as gas evolving electrodes in water electrolysis: Enhancing the activity for hydrogen evolution reaction via electrodeposition of Co and CoP catalysts. International Journal of Hydrogen Energy, 2023, 48, 31172-31186.	7.1	2
2835	La- and Mn-doped cobalt spinel oxygen evolution catalyst for proton exchange membrane electrolysis. Science, 2023, 380, 609-616.	12.6	88
2836	Regulating Surface Charge by Embedding Ru Nanoparticles over 2D Hydroxides toward Water Oxidation. ACS Applied Materials & Interfaces, 2023, 15, 26928-26938.	8.0	16
2837	Polymer-based catalyst for photoelectrochemical water splitting. , 2023, , 41-59.		0
2838	Ternary transition metal of Fe/Co/Ni doping on MoSx nanowires for highly efficient electrochemical oxygen evolution. Sustainable Materials and Technologies, 2023, 36, e00645.	3.3	2
2839	Co _{3â^'<i>x</i>} Fe _{<i>x</i>} O ₄ inverse opals with tunable catalytic activity for high-performance overall water splitting. Nanoscale, 2023, 15, 10306-10318.	5.6	2
2840	Fabrication of Nanostructured Catalyst Layers on Stainless Steel and Its Application to the Oxygen Evolution Electrode for Alkaline Water Electrolysis. Materia Japan, 2023, 62, 368-374.	0.1	0
2841	Super-Hydrophilic Co- and Mo-Based Mix-Metallomicellar Film as an Electrocatalyst toward Hydrogen Evolution Reaction. Energy & Fuels, 2023, 37, 8500-8511.	5.1	3
2842	Atomically dispersed metal catalysts towards nitrogen reduction for Ammonia: From homogeneous to heterogeneous. Chemical Engineering Journal, 2023, 468, 143776.	12.7	3

#	Article	IF	CITATIONS
2843	Recent progress on defect-rich electrocatalysts for hydrogen and oxygen evolution reactions. Nano Today, 2023, 50, 101883.	11.9	4
2844	Revisiting electrocatalytic oxygen evolution reaction microkinetics from a mathematical viewpoint. Results in Chemistry, 2023, 5, 100985.	2.0	0
2845	Tuning the activity of cobalt 2-hydroxyphosphonoacetates-derived electrocatalysts for water splitting and oxygen reduction: Insights into the local order by pair distribution function analysis. Applied Catalysis B: Environmental, 2023, 337, 122963.	20.2	0
2846	MXene and Their Composites for Oxygen Evolution Reactions. , 2022, , 1-33.		0
2847	Ni-Activated and Ni–P-Activated Porous Titanium Carbide Ceramic Electrodes as Efficient Electrocatalysts for Overall Water Splitting. ACS Applied Materials & Interfaces, 2023, 15, 28055-28063.	8.0	6
2848	Engineering Superaerophobic Electrodes Using Hydrophilic PEDOT and Colloidal Lithography for Enhanced Bubble Release and Efficient Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2023, 15, 29214-29223.	8.0	2
2849	Controlled synthesis of CoVP as robust electrocatalysts for water, seawater and urea oxidation. International Journal of Hydrogen Energy, 2023, , .	7.1	0
2850	Nickel Based Metal Oxide Electrocatalysts: From Model to Operando Conditions Studied by XPS and Vibrational Spectroscopy. , 2023, , .		0
2851	Constructing Cation Vacancy Defects on NiFe-LDH Nanosheets for Efficient Oxygen Evolution Reaction. Energy Material Advances, 2023, 4, .	11.0	1
2852	Efficient, Stable, and Solventâ€Free Synthesized Singleâ€Atom Catalysts: Carbonized Transition Metalâ€Doped ZIFâ€8 for the Hydrogen Evolution Reaction**. ChemElectroChem, 0, , .	3.4	0
2853	Interface Catalysts of Ni ₃ Fe ₁ Layered Double Hydroxide and Titanium Carbide for High-Performance Water Oxidation in Alkaline and Natural Conditions. Journal of Physical Chemistry Letters, 2023, 14, 5692-5700.	4.6	2
2854	Carbon-Embedded Tungsten Carbide Electrocatalysts Derived from Self-Deposited Tungsten Oxide for the pH-Universal Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2023, 6, 6842-6850.	5.1	1
2855	Recent advances in rhenium-based nanostructures for enhanced electrocatalysis. Applied Catalysis A: General, 2023, 663, 119304.	4.3	0
2857	Cu/MoO2 Schottky heterojunction derived from a new designed POMOFs in-situ as high efficient electrocatalysts for hydrogen evolution reaction in universal-pH electrolytes and seawater. Chemical Engineering Journal, 2023, 470, 144107.	12.7	5
2858	Improving mass transfer in anion exchange membrane water electrolysis by ordered gas diffusion layer. International Journal of Hydrogen Energy, 2023, , .	7.1	0
2859	Polymeric cobalt phthalocyanine on nickel foam as an efficient electrocatalyst for oxygen evolution reaction. International Journal of Hydrogen Energy, 2023, , .	7.1	0
2861	Recent Advances in High-Efficiency Electrocatalytic Water Splitting Systems. Electrochemical Energy Reviews, 2023, 6, .	25.5	11
2862	Heterogeneous bimetallic oxysulfide nanostructure (Ni-Co) as hybrid bifunctional electrocatalyst for sustainable overall alkaline simulated seawater splitting. Journal of Alloys and Compounds, 2023, 965, 171124.	5.5	3

#	Article	IF	CITATIONS
2863	Efficient hydrogen evolution electrocatalysis using nitrogen doped carbon dot decorated palladium copper nanocomposites in acid medium. New Journal of Chemistry, 2023, 47, 14355-14363.	2.8	5
2864	Cationic Defect Engineering in Perovskite La ₂ CoMnO ₆ for Enhanced Electrocatalytic Oxygen Evolution. Inorganic Chemistry, 2023, 62, 11009-11015.	4.0	2
2865	All Printed Photoanode/Photovoltaic Miniâ€Module for Water Splitting. Small Methods, 2023, 7, .	8.6	0
2866	Insights into the High Activity of Ruthenium Phosphide for the Production of Hydrogen in Proton Exchange Membrane Water Electrolyzers. Advanced Energy and Sustainability Research, 2023, 4, .	5.8	5
2867	Interface-induced electron transfer in sandwich-like hierarchical hollow CoP@NC hybrid for boosted hydrogen evolution reaction in alkaline electrolyte. Journal of Alloys and Compounds, 2023, 956, 170315.	5.5	3
2868	Immobilization of Gold Nanoparticles on Postsynthetically Modified NU-1000 for Hydrogen Evolution Reaction. Inorganic Chemistry, 2023, 62, 7195-7202.	4.0	4
2869	Redox-Active and Urea-Engineered-Entangled MOFs for High-Efficiency Water Oxidation and Elevated Temperature Advanced CO ₂ Separation Cum Organic-Site-Driven Mild-Condition Cycloaddition. ACS Applied Materials & Interfaces, 2023, 15, 24504-24516.	8.0	9
2870	Mechanism of Water Dissociation with an Electric Field and a Graphene Oxide Catalyst in a Bipolar Membrane. ACS Catalysis, 2023, 13, 7079-7086.	11.2	4
2872	Influencing electrocatalytic processes through topographically disordered atomic sites. Chem Catalysis, 2023, 3, 100621.	6.1	4
2873	All-Perovskite Tandem Photoelectrodes for Unassisted Solar Hydrogen Production. ACS Energy Letters, 2023, 8, 2611-2619.	17.4	5
2874	Ni(II) and Cu(II) grafted porphyrin-pyrene based conjugated microporous polymers as bifunctional electrocatalysts for overall water splitting. Electrochimica Acta, 2023, 459, 142553.	5.2	7
2875	Catalytic Activity and Stability of Non-Platinum Group Metal Oxides for the Oxygen Evolution Reaction in Anion Exchange Membrane Electrolyzers. Journal of the Electrochemical Society, 2023, 170, 064506.	2.9	1
2876	Achieving 12.0% Solar-to-Hydrogen Efficiency with a Trimetallic-Layer-Protected and Catalyzed Silicon Photoanode Coupled with an Inexpensive Silicon Solar Cell. Engineering, 2023, 25, 128-137.	6.7	1
2877	Applications of Ni-Al Layered Double Hydroxide as Oxygen Evolution Reaction Catalysts Synthesized by Liquid Phase Deposition Process. Electrochemistry, 2023, 91, 067005-067005.	1.4	0
2878	A framework for understanding efficient diurnal CO2 reduction using Si and GaAs photocathodes. Chem Catalysis, 2023, 3, 100641.	6.1	3
2879	Ultrafast and Facile Synthesis of (Ni/Fe/Mo)OOH on Ni Foam for Oxygen Evolution Reaction in Seawater Electrolysis. Catalysts, 2023, 13, 924.	3.5	2
2880	Benchmarking Stability of Iridium Oxide in Acidic Media under Oxygen Evolution Conditions: A Review: Part I. Johnson Matthey Technology Review, 2024, 68, 121-146.	1.0	0
2881	Enhancing the Catalysis for Electrochemical Water Splitting using Tri-metallic Phosphide Surface. Journal of Material Science and Technology Research, 0, 10, 39-49.	0.3	0

#	Article	IF	CITATIONS
2882	Integrated halide perovskite photoelectrochemical cells with solar-driven water-splitting efficiency of 20.8%. Nature Communications, 2023, 14, .	12.8	13
2883	Exploring the linear relationship between potential dynamics and interfacial capacitance: implications for enhancing the turnover frequency in electrochemical water splitting. Journal of Materials Chemistry A, 2023, 11, 15635-15642.	10.3	8
2884	Recent Progress of Amorphous Nanomaterials. Chemical Reviews, 2023, 123, 8859-8941.	47.7	29
2885	Three-dimension structural Co-Fe-P/Cu3P derived from the Prussian blue analogue (PBA) grown on nanorods for oxygen evolution reaction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 675, 131949.	4.7	0
2886	Enabling high loading of well-dispersed Ni ₂ CoP ₂ catalysts on a 3D-printed electrode for efficient electrocatalysis. Journal of Materials Chemistry A, 2023, 11, 15394-15403.	10.3	1
2887	Cable ar Electrocatalysis to Drive Fully Decoupled Water Splitting. Advanced Science, 2023, 10, .	11.2	3
2888	Understanding the Structural Evolution of IrFeCoNiCu High-Entropy Alloy Nanoparticles under the Acidic Oxygen Evolution Reaction. Nano Letters, 2023, 23, 6637-6644.	9.1	10
2889	MoS ₂ Photoelectrodes for Hydrogen Production: Tuning the S-Vacancy Content in Highly Homogeneous Ultrathin Nanocrystals. ACS Applied Materials & Interfaces, 2023, 15, 33514-33524.	8.0	1
2890	N/O co-doping biochar with matched pores prepared by co-pyrolysis and tailoring activation and its balanced electrochemical supercapacitor performance. Journal of Energy Storage, 2023, 71, 108214.	8.1	1
2891	Engineering the structural, optical and photoelectrochemical properties of BaTiO3-CoFe2O4 nanocomposite for photoelectrochemical water splitting. Electrochimica Acta, 2023, 464, 142849.	5.2	3
2892	Highly Active NiOâ€Ni(OH) ₂ â€Cr ₂ O ₃ /Ni Hydrogen Evolution Electrocatalyst through Synergistic Reaction Kinetics. ChemSusChem, 2023, 16, .	6.8	0
2893	Updates on Hydrogen Value Chain: A Strategic Roadmap. Global Challenges, 0, , .	3.6	5
2894	Nanostructured Pine-Like Platinum on Self-Supported Substrates for Robust Hydrogen Evolution Reaction. ACS Applied Nano Materials, 0, , .	5.0	1
2895	Mapping the research landscape of hydrogen production through electrocatalysis: A decade of progress and key trends. Renewable and Sustainable Energy Reviews, 2023, 184, 113490.	16.4	3
2896	Highly electronegative PtAu alloy for simultaneous hydrogen generation and ethanol upgrading. Rare Metals, 2023, 42, 2949-2956.	7.1	2
2897	Revisiting the Activity Cap of Iridium Electrocatalysts for Acidic Water Oxidation. Journal of Physical Chemistry Letters, 2023, 14, 6494-6505.	4.6	1
2898	Effects of the Hydrophobic Block Length Ratio of Poly(vinylbenzyl <i>N</i> methylpiperidinium) Tj ETQq0 0 0 rgB1 Block Copolymers for Anion Exchange Membrane Electrolysis. ACS Applied Polymer Materials, 2023, 5, 5834-5845	/Overloc 4.4	k 10 Tf 50 1 2
2899	Nanoscale Metal Particle Modified Singleâ€Atom Catalyst: Synthesis, Characterization, and Application. Advanced Materials, 2024, 36, .	21.0	6

#	Article	IF	CITATIONS
2900	Iron-Doped Nickel Hydroxide Nanosheets as Efficient Electrocatalysts in Electrochemical Water Splitting. Catalysts, 2023, 13, 1095.	3.5	5
2901	Co3O4 Supported on βâ€Mo2C with Different Interfaces for Electrocatalytic Oxygen Evolution Reaction. ChemSusChem, 0, , .	6.8	0
2902	Potential-dependent transition of reaction mechanisms for oxygen evolution on layered double hydroxides. Nature Communications, 2023, 14, .	12.8	22
2903	Porous cerium-zeolite bifunctional ORR/OER electrocatalysts in alkaline media. Journal of Electroanalytical Chemistry, 2023, 944, 117668.	3.8	0
2904	Toolbox of Advanced Atomic Layer Deposition Processes for Tailoring Large-Area MoS ₂ Thin Films at 150 °C. ACS Applied Materials & Interfaces, 2023, 15, 35565-35579.	8.0	1
2905	Electrodeposition of Ni-Co-S Electrocatalyst Using 2,5-dimercapto-1,3,4-thiadiazole as S Precursor for Hydrogen Evolution Reaction at Neutral pH. Electrocatalysis, 0, , .	3.0	0
2906	Enhanced activity and durability of FeCoCrMoCBY nanoglass in acidic hydrogen evolution reaction. Journal of Materials Science and Technology, 2024, 170, 212-220.	10.7	0
2907	Pd nanoparticles supported on microflower NiMOF modified roughed nickel foam with the enhanced active site for electrochemical dechlorination of trichloroacetic acid. Separation and Purification Technology, 2023, 325, 124598.	7.9	3
2908	Inhibition of In Situ Formed Ni(OH) ₂ on a Pd/Ni Foam Cathode for Efficient Electrocatalytic Hydrodechlorination of Clofibric Acid. Industrial & Engineering Chemistry Research, 0, , .	3.7	0
2909	Deep metal-assisted chemical etching using a porous monolithic AgAu layer to develop neutral-colored transparent silicon photovoltaics. Journal of Materials Chemistry A, O, , .	10.3	0
2910	Unveiling the Hidden Energy Profiles of the Oxygen Evolution Reaction via Machine Learning Analyses. Journal of Physical Chemistry Letters, 0, , 6808-6813.	4.6	0
2911	In Situ-Generated Nanostructured Ni ₂ P in an S,N-Doped Carbon Matrix Using a Metal–Organic Framework and Red Phosphorus as Feedstocks for Boosting Electrocatalysis. ACS Applied Energy Materials, 0, , .	5.1	0
2912	Manipulating Intermetallic Charge Transfer for Switchable External Stimulusâ€Enhanced Water Oxidation Electrocatalysis. Angewandte Chemie, 0, , .	2.0	0
2913	Manipulating Intermetallic Charge Transfer for Switchable External Stimulusâ€Enhanced Water Oxidation Electrocatalysis. Angewandte Chemie - International Edition, 2023, 62, .	13.8	2
2914	Hydrogen Evolution Reaction on Ultra-Smooth Sputtered Nanocrystalline Ni Thin Films in Alkaline Media—From Intrinsic Activity to the Effects of Surface Oxidation. Nanomaterials, 2023, 13, 2085.	4.1	2
2915	A Comparative Study on the Activity and Stability of Iridium-Based Co-Catalysts for Cell Reversal Tolerant PEMFC Anodes. Journal of the Electrochemical Society, 2023, 170, 084505.	2.9	0
2916	High-entropy alloy nanocrystal assembled by nanosheets with d–d electron interaction for hydrogen evolution reaction. Energy and Environmental Science, 2023, 16, 4009-4019.	30.8	9
2917	Enhanced pHâ€Universal Hydrogen Evolution Reactions on the Ru/ <i>a</i> –Ni–MoO ₃ Electrocatalysts. Small Structures, 2023, 4, .	12.0	1

#	Article	IF	CITATIONS
2918	Anchoring SnS nanoflakes on CuCo2O4 acicular sprouts for overall water splitting. International Journal of Hydrogen Energy, 2024, 51, 1016-1027.	7.1	2
2919	Effect of intrinsic and extrinsic activity of electrocatalysts on anion exchange membrane water electrolyzer. Chemical Engineering Journal, 2023, 472, 145150.	12.7	1
2920	Mechanochemically Tailored Silicon Particles for Efficient H ₂ Production: Entropy and Enthalpy Engineering. ACS Sustainable Chemistry and Engineering, 2023, 11, 11769-11780.	6.7	1
2921	Contemporary Strategies for Immobilizing Metallophthalocyanines for Electrochemical Transformations of Carbon Dioxide. Molecules, 2023, 28, 5878.	3.8	1
2922	Exploring the influence of composition and morphology on the oxygen evolution reaction performance of Co-based catalysts. Journal of Alloys and Compounds, 2023, 967, 171627.	5.5	0
2923	Tribological behavior of few-nanometer-thick MoS2 prepared by low-temperature conversion of atomic layer deposited MoOx films. Surface and Coatings Technology, 2023, 471, 129884.	4.8	1
2924	Comparative study of Co3O4(111), CoFe2O4(111), and Fe3O4(111) thin film electrocatalysts for the oxygen evolution reaction. Nature Communications, 2023, 14, .	12.8	7
2925	Surface transformations of electrocatalysts during the oxygen evolution reaction. Chemical Physics Reviews, 2023, 4, 021309.	5.7	0
2926	Degradation Mechanism of Calcium Iridium Oxide for Oxygen Evolution Reaction in Acid. Energy & Fuels, 2023, 37, 13554-13561.	5.1	1
2927	Comparative techno-economic analysis of different PV-assisted direct solar hydrogen generation systems. Energy and Environmental Science, 2023, 16, 4486-4501.	30.8	3
2928	An interfacially stacked covalent porous polymer on graphene favors electronic mobility: ensuring accelerated oxygen reduction reaction kinetics by an <i>in situ</i> study. Journal of Materials Chemistry A, 2023, 11, 18740-18754.	10.3	3
2929	Effect of Activating a Nickel–Molybdenum Catalyst in an Anion Exchange Membrane Water Electrolyzer. ACS Catalysis, 2023, 13, 11589-11597.	11.2	4
2930	Unraveling the role of iron on Ni-Fe alloy nanoparticles during the electrocatalytic ethanol-to-acetate process. Nano Research, 0, , .	10.4	4
2931	Regulation of oxygen vacancies and electronic structures by substituting Ba2+ at A-sites of LaNi0.5Mn0.5O3 double perovskites enabling high-performance catalysts for Mg-air batteries. Applied Surface Science, 2023, 639, 158287.	6.1	1
2933	Controlled synthesis of M doped NiVS (M = Co, Ce and Cr) as a robust electrocatalyst for urea electrolysis. Dalton Transactions, 2023, 52, 13161-13168.	3.3	25
2935	Nano and phase engineering of Fe-Cu alloy exsolved perovskite oxide-based hetero-catalysts for efficient oxygen evolution reaction. Fuel, 2024, 356, 129479.	6.4	7
2936	Main group tin single atom catalyst supported by C5N monolayer for oxygen evolution reactions. Computational and Theoretical Chemistry, 2023, 1229, 114294.	2.5	1
2937	Mn doped CoFe layered double hydroxides lead to d-d orbital repulsion toward advanced electrocatalysts for oxygen evolution reaction. International Journal of Hydrogen Energy, 2024, 51, 281-291.	7.1	0

#	Article	IF	CITATIONS
2938	Investigation of Hydrogen and Oxygen Evolution on Cobalt-Nanoparticles-Supported Graphitic Carbon Nitride. Materials, 2023, 16, 5923.	2.9	2
2939	Synthetic styrene-based bioinspired model of the [FeFe]-hydrogenase active site for electrocatalytic hydrogen evolution. Sustainable Energy and Fuels, 2023, 7, 4967-4976.	4.9	0
2940	Transition metal doped WSi ₂ N ₄ monolayer for water splitting electrocatalysts: a first-principles study. Journal of Physics Condensed Matter, 2023, 35, 485001.	1.8	1
2941	Recent Progress on the Catalysts and Device Designs for (Photo)Electrochemical Onâ€6ite H ₂ O ₂ Production. Advanced Energy Materials, 2023, 13, .	19.5	3
2942	1-D arrays of porous Mn _{0.21} Co _{2.79} O ₄ nanoneedles with an enhanced electrocatalytic activity toward the oxygen evolution reaction. Dalton Transactions, 2023, 52, 12185-12193.	3.3	3
2943	Regulating the selective adsorption of OH* over the equatorial position of Co ₃ O ₄ <i>via</i> doping of Ru ions for efficient water oxidation reaction. Journal of Materials Chemistry A, 2023, 11, 21767-21779.	10.3	6
2944	A survey of Earth-abundant metal oxides as oxygen evolution electrocatalysts in acidic media (pH <) Tj ETQqO C	0 rgBT /O	verlock 10 T
2945	Elucidating the Effect of Nitrogen Occupancy on the Hydrogen Evolution Reaction for a Series of Titanium Oxynitride Electrocatalysts. ChemCatChem, 2023, 15, .	3.7	1
2946	The rotating disc electrode: measurement protocols and reproducibility in the evaluation of catalysts for the oxygen evolution reaction. Energy Advances, 2023, 2, 1823-1830.	3.3	4
2947	Synergistic effect of multiferroicity in GdFeO3 nanoparticles for significant hydrogen production through photo/electrocatalysis. Materials Today Chemistry, 2023, 33, 101713.	3.5	6
2948	A Review on the Application of In-Situ Raman Spectroelectrochemistry to Understand the Mechanisms of Hydrogen Evolution Reaction. ACS Catalysis, 2023, 13, 10570-10601.	11.2	0
2949	Designing active oxides for a durable oxygen evolution reaction. , 2023, 2, 817-827.		6
2950	Hierarchical NiCo-LDH@MoS2/CuS composite as efficient trifunctional electrocatalyst for overall water splitting and asymmetric supercapacitor. Electrochimica Acta, 2023, 469, 143197.	5.2	3
2951	Unraveling the Most Relevant Features for the Design of Iridium Mixed Oxides with High Activity and Durability for the Oxygen Evolution Reaction in Acidic Media. Jacs Au, 2023, 3, 2336-2355.	7.9	4
2952	Pairing CO2 electroreduction with the electrooxidation of pharmaceutical compounds in wastewater. Chemical Papers, 2023, 77, 7015-7025.	2.2	0
2953	Plasmaâ€Driven Synthesis of Selfâ€Supported Nickelâ€Iron Nanostructures for Water Electrolysis. Advanced Materials Interfaces, 2023, 10, .	3.7	0
2954	Enhancement of hydrogen evolution activity by tailoring the electronic structure in ruthenium-heteroatom-doped cobalt iron phosphide nanoframes. Applied Catalysis B: Environmental, 2024, 341, 123327.	20.2	8
2955	Surface Ligand Modification on Ultrathin Ni(OH) ₂ Nanosheets Enabling Enhanced Alkaline Ethanol Oxidation Kinetics. ACS Nano, 2023, 17, 17180-17189.	14.6	5

#	Article	IF	CITATIONS
2956	Nanostructured electrocatalysts for low-temperature water splitting: A review. Electrochimica Acta, 2023, 471, 143335.	5.2	4
2957	Engineering pore-size distribution of metal-loaded carbon catalysts by in situ cavitation for boosting electrochemical mass transfer. Applied Catalysis B: Environmental, 2024, 342, 123396.	20.2	2
2958	Organometal Halide Perovskiteâ€Based Photoelectrochemical Module Systems for Scalable Unassisted Solar Water Splitting. Advanced Science, 2023, 10, .	11.2	0
2959	Nickel nanoparticles supported on carbon surface as an electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2024, 52, 1137-1146.	7.1	0
2960	Electrocatalytic water splitting over perovskite oxide catalysts. Chinese Journal of Catalysis, 2023, 50, 109-125.	14.0	4
2961	Advanced Electrocatalysts for the Oxygen Evolution Reaction: From Single- to Multielement Materials. Catalysts, 2023, 13, 1346.	3.5	3
2962	(M,N) codoping (MÂ= Nb or Ta) and CoO nanoparticle decoration of TiO2 nanotubes: synergistic enhancement of visible photoelectrochemical water splitting. Materials Today Energy, 2023, 37, 101376.	4.7	0
2963	Electrocatalytic Water Oxidation Activity‣tability Maps for Perovskite Oxides Containing 3 <i>d</i> , 4 <i>d</i> and 5 <i>d</i> Transition Metals. Angewandte Chemie - International Edition, 2023, 62, .	13.8	1
2964	Electrocatalytic Water Oxidation Activity‣tability Maps for Perovskite Oxides Containing 3 <i>d</i> , 4 <i>d</i> and 5 <i>d</i> Transition Metals. Angewandte Chemie, 2023, 135, .	2.0	0
2965	Preparation of Trimetallicâ€Organic Framework Film Electrodes via Secondary Growth for Efficient Oxygen Evolution Reaction. Chemistry - A European Journal, 2023, 29, .	3.3	0
2966	Exciting lattice oxygen of nickel–iron bi-metal alkoxide for efficient electrochemical oxygen evolution reaction. Journal of Energy Chemistry, 2024, 88, 194-201.	12.9	2
2967	Effect of Fe and Co Incorporation on Morphology and Oxygen Evolution Reaction Performance of β-Co(OH) ₂ : An In Situ Electrochemical Atomic Force Microscopy Investigation. ACS Applied Energy Materials, 2023, 6, 9875-9884.	5.1	0
2968	Amorphous <i>versus</i> nanocrystalline RuO ₂ electrocatalysts: activity and stability for oxygen evolution reaction in sulfuric acid. Catalysis Science and Technology, 0, , .	4.1	1
2969	Investigation of Zn-Substituted FeCo ₂ O ₄ for the Oxygen Evolution Reaction and Reaction Mechanism Monitoring through <i>In Situ</i> Near-Ambient-Pressure X-ray Photoelectron Spectroscopy. ACS Catalysis, 2023, 13, 13434-13445.	11.2	2
2970	Catalytic Potential and Utility of High Entropy Alloys. , 0, , .		0
2971	Insights into Electrochemical Dehalogenation by Non-Noble Metal Single-Atom Cobalt with High Efficiency and Low Energy Consumption. Environmental Science & Technology, 2023, 57, 14482-14492.	10.0	0
2972	Selective and controlled H ₂ generation upon additive-free HCOOH dehydrogenation over a Pd/NCS nanocatalyst. Nanoscale, 2023, 15, 15975-15981.	5.6	1
2973	Lithium metal deposition under the geometrical confinement effect: Dendritic copper foam current collector. Journal of Colloid and Interface Science, 2024, 653, 697-706.	9.4	3

#	Article	IF	CITATIONS
2974	Participation of the unstable lattice oxygen of cation-exchanged δ-MnO ₂ in the water oxidation reaction. Journal of Materials Chemistry A, 2023, 11, 21686-21693.	10.3	0
2975	Optimal Coatings of Co ₃ O ₄ Anodes for Acidic Water Electrooxidation. Small, 0, , .	10.0	0
2976	Electrolysis of Direct Seawater: Challenges, Strategies, and Future Prospects ^{â€} . Chinese Journal of Chemistry, 2023, 41, 3484-3492.	4.9	1
2977	Development of an FeOOH Electrocatalyst for Water Oxidation from the Recycling of Disposable Body Warmers. Chemistry Letters, 2023, 52, 715-719.	1.3	0
2978	Non-graphitized carbon/Cu2O/Cu0 nanohybrids with improved stability and enhanced photocatalytic H2 production. Scientific Reports, 2023, 13, .	3.3	2
2979	Mesoporous and dual-shelled hollow CeO2@CoNC nanospheres as efficient and stable oxygen reduction reaction electrocatalysts. Electrochimica Acta, 2023, 468, 143180.	5.2	0
2980	Heterostructured NiSe2/MoSe2 electronic modulation for efficient electrocatalysis in urea assisted water splitting reaction. Chinese Journal of Catalysis, 2023, 51, 225-236.	14.0	8
2981	Intermetallic FeSb ₂ in a Multifunctional Role of Highly Selective and Efficient Adsorbent, Catalyst, and HER Electrocatalyst. , 0, , .		2
2982	Regulation of the electronic structure of a RuNi/MoC electrocatalyst for high-efficiency hydrogen evolution in alkaline seawater. Nanoscale, 2023, 15, 16403-16412.	5.6	1
2983	Orange-peel derived carbon-loaded low content ruthenium nanoparticles as ultra-high performance alkaline water HER electrocatalysts. Dalton Transactions, 0, , .	3.3	0
2984	Amorphous MoS ₂ Decorated Ni ₃ S ₂ with a Core–shell Structure of Urchin‣ike on Nickelâ€Foam Efficient Hydrogen Evolution in Acidic and Alkaline Media. Small, 2024, 20, .	10.0	3
2985	Interface strain engineering of Ir clusters on ultrathin NiO nanosheets for electrochemical water splitting over 1800 hours. Journal of Materials Science and Technology, 2024, 177, 214-223.	10.7	3
2986	Efficient and Highly Stable 3D-Printed NiFe and NiCo Bifunctional Electrodes for Practical HER and OER. , 0, , .		1
2987	Spatial, well-defined metal-corrole-based covalent organic polymers for remarkably enhanced multipurpose electrocatalysis and high-performance zinc–air batteries. Catalysis Science and Technology, 0, , .	4.1	0
2988	Interstitial atom-doped NiFe alloy as pre-catalysts boost direct seawater oxygen evolution. Applied Catalysis B: Environmental, 2024, 342, 123376.	20.2	2
2989	Correlations between the Electronic Structure and Energetics of the Catalytic Steps in Homogeneous Water Oxidation Catalysis. Journal of the American Chemical Society, 2023, 145, 23057-23067.	13.7	1
2990	Morphology and Phase-Controlled Synthesis of Defect-Rich Layered Cobalt Hydroxide Nanostructures for the Oxygen Evolution Reaction. , 2023, 1, 2698-2706.		1
2991	Bidirectional pore-creating strategy towards lignin-based heteroatom-doped porous carbon for supercapacitors. Chemical Engineering Journal, 2023, 476, 146640.	12.7	6

#	Article	IF	CITATIONS
2992	Mechanistic investigation of a Ni-catalyzed electrochemical reductive cleavage of the α-O-4 bond in the lignin model compound benzyl phenyl ether. Green Chemistry, 0, , .	9.0	0
2993	Direct ink writing of Ni structures for electrocatalytic water splitting applications. Materials Chemistry and Physics, 2024, 311, 128574.	4.0	1
2994	Engineering the active sites by tuning the Ni and Mn composition in hierarchical heterostructured composites for electrocatalytic water splitting. Electrochimica Acta, 2023, 472, 143372.	5.2	0
2996	Research Trend in Anion Exchange Membrane Water Electrolysis System. Journal of the KNST, 2023, 6, 240-248.	0.1	0
2997	2D/2D heterojunction interface: Engineering of 1T/2H MoS2 coupled with Ti3C2T heterostructured electrocatalysts for pH-universal hydrogen evolution. Journal of Materials Science and Technology, 2024, 179, 86-97.	10.7	5
2998	Charge Selfâ€Regulation of Metallic Heterostructure Ni ₂ P@Co ₉ S ₈ for Alkaline Water Electrolysis with Ultralow Overpotential at Large Current Density. Advanced Science, 0, , .	11.2	0
2999	Octahedral Pd ₃ Cu ₇ Catalysts on Diverse Support Materials for Efficient Hydrogen Evolution: Theoretical Investigation and Mechanistic Perspective. ACS Applied Materials & Interfaces, 2023, 15, 50134-50147.	8.0	1
3000	Direct Electrosynthesis of Metal Nanoparticles on Ti ₃ C ₂ T _{<i>x</i>} -Mxene during Hydrogen Evolution. Inorganic Chemistry, 0, , .	4.0	0
3001	Accelerating water oxidation $\hat{a} \in $ a mixed Co/Fe polyoxometalate with improved turnover characteristics. Chemical Science, 2023, 14, 13722-13733.	7.4	1
3002	Coordination-driven electrocatalysts as an evolving wave of enthusiasm for sustainable hydrogen production. Coordination Chemistry Reviews, 2024, 500, 215496.	18.8	3
3003	Nickel sulfide nanowire-filled carbon nanotubes as electrocatalysts for efficient hydrogen evolution reaction. International Journal of Hydrogen Energy, 2024, 51, 671-680.	7.1	0
3004	Component regulation on ternary FeCoNi nano-bundles as efficient electrocatalysts for driving water oxidation. Journal of Colloid and Interface Science, 2024, 655, 466-473.	9.4	1
3005	Highly efficient and stable vanadium-based electrocatalysts: Stoichiometric iron vanadium sulfides for water-oxidation at large current densities. Chemical Engineering Journal, 2023, 477, 146981.	12.7	0
3006	Oxidized Copper and Molybdenum Species Exclusively Boosting Electrocatalytic Hydrogen Evolution in Non-Extreme pH Carbonate Buffer Electrolyte. ACS Catalysis, 2023, 13, 14725-14736.	11.2	0
3007	MOF-derived interface-rich silver/silver oxide nano-structures as an effective electrocatalyst for oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid (FDCA) with spontaneous FDCA separation in acid media. Sustainable Energy and Fuels, 2023, 7, 5681-5692.	4.9	0
3008	Efficient Synthesis and Enhanced Electrochemical Performance of MnCoO Catalysts for Oxygen Evolution Reaction. Journal of Electronic Materials, 2024, 53, 53-64.	2.2	0
3009	Robust and Bifunctional Electrodeposited NiCoCr Ternary Alloy for Alkaline Water Electrolysis. Advanced Energy and Sustainability Research, 2024, 5, .	5.8	1
3010	Recent progress in understanding the catalyst layer in anion exchange membrane electrolyzers $\hat{a} \in \mathcal{C}$ durability, utilization, and integration. , 0, , .		1

#	Article	IF	CITATIONS
3011	High throughput identification of complex rutile alloys for the acidic oxygen evolution reaction. Journal of Materials Chemistry A, 2023, 11, 25262-25267.	10.3	0
3012	Transition-metal sulfides with excellent hydrogen and oxygen reactions: A mini-review. Journal of Solid State Chemistry, 2024, 329, 124445.	2.9	0
3013	Highly Efficient Cobalt Sulfide Heterostructures Fabricated on Nickel Foam Electrodes for Oxygen Evolution Reaction in Alkaline Water Electrolysis Cells. Surfaces, 2023, 6, 493-508.	2.3	0
3014	Self-supported Cr–Cu2S nanoflakes for hydrogen production from seawater. International Journal of Hydrogen Energy, 2024, 49, 1113-1122.	7.1	2
3015	Standardizing OER Electrocatalyst Benchmarking in Aqueous Electrolytes: Comprehensive Guidelines for Accelerated Stress Tests and Backing Electrodes. ACS Catalysis, 2023, 13, 15375-15392.	11.2	0
3016	Electroactive Prussian Blue Analogues/TiO ₂ Nanocomposites Obtained through SILAR Assembly in Mesoporous Nanoarchitectures. European Journal of Inorganic Chemistry, 0, , .	2.0	0
3017	Improving Electrocatalytic Oxygen Evolution through Local Field Distortion in Mg/Fe Dualâ€site Catalysts. Angewandte Chemie - International Edition, 2023, 62, .	13.8	3
3018	Improving Electrocatalytic Oxygen Evolution through Local Field Distortion in Mg/Fe Dualâ€site Catalysts. Angewandte Chemie, 2023, 135, .	2.0	0
3019	Motivating Inert Strontium Manganate with Iridium Dopants as Efficient Electrocatalysts for Oxygen Evolution in Acidic Electrolyte. Small, 0, , .	10.0	0
3020	Effect of Iron and Vanadium Doping on Structural Phase Transition in Cobalt Diselenide Enabling Superior Oxygen/Hydrogen Electrocatalysis. ACS Applied Energy Materials, 2023, 6, 11718-11731.	5.1	1
3021	IrO2 deposited on RuO2 as core-shell structured RuO2@IrO2 for oxygen evolution reaction in electrochemical water electrolyzer. Molecular Catalysis, 2023, 551, 113619.	2.0	2
3022	Self-oxidized amorphous FeOx@NiOy electrocatalyst with double-shell hollow nanoarchitecture for boosting oxygen evolution reaction. Ceramics International, 2024, 50, 4415-4422.	4.8	1
3023	Recent progress and perspective for oxygen evolution reaction under acidic environments. Materials Chemistry Frontiers, 2024, 8, 986-1014.	5.9	0
3024	Highly efficient water-splitting electrodes with stable operation at 3 A cmâ~'2 in alkaline media through molecular linker assembly-induced all-in-one structured NiMo and NiFe electrocatalysts. Applied Catalysis B: Environmental, 2024, 343, 123563.	20.2	0
3025	â€~Total electrode' and â€~intrinsic' activity parameters in water electrolysis: a comprehensive investigation. Journal of Materials Chemistry A, 2023, 11, 26023-26043.	10.3	2
3026	MoS ₂ –MoO ₂ /Ni ₃ S ₂ /Nickel Foam Electrocatalysts Decorated with NiFeO <i>_x</i> H <i>_y</i> for Energy-Saving Hydrogen Evolution via Urea Oxidation Reaction-Assisted Water Splitting. ACS Applied Nano Materials, 2023, 6, 21556-21570	5.0	3
3027	Electrochemical behavior of V/Ce co-doped carbon shell-coated NiO nanocomposite for alkaline OER and supercapacitor applications. Journal of Energy Storage, 2024, 76, 109556.	8.1	2
3028	Recent advances in Fe–N–C- and Co–N–C-based materials as bifunctional electrocatalysts for oxygen reduction and oxygen evolution. Science China Chemistry, 0, , .	8.2	0

#	ARTICLE Ni-Ti3C2 MXene composite derived from Ni-metal organic framework for electrochemical hydrogen	IF	CITATIONS
3029	evolution reaction in acidic and alkaline medium. International Journal of Hydrogen Energy, 2024, 52, 1164-1171.	7.1	0
3030	Trimetallic nanoarchitectonics of FeCoNi catalyst with modulated spin polarization for enhanced oxygen reduction performance. International Journal of Hydrogen Energy, 2024, 55, 893-903.	7.1	1
3031	A Review of Transition Metal Boride, Carbide, Pnictide, and Chalcogenide Water Oxidation Electrocatalysts. Chemical Reviews, 2023, 123, 12795-13208.	47.7	9
3032	Electrochemical Potential-Dependent Stability and Activity of MoS ₃ during the Hydrogen Evolution Reaction. ACS Catalysis, 2023, 13, 15290-15300.	11.2	0
3033	Nanoengineered, Pd-doped Co@C nanoparticles as an effective electrocatalyst for OER in alkaline seawater electrolysis. Scientific Reports, 2023, 13, .	3.3	1
3034	Hierarchical-heterostructured porous intermetallics in nickel-cobalt-aluminum alloys as efficient electrocatalysts for hydrogen evolution. Chemical Engineering Journal, 2023, 477, 146893.	12.7	0
3035	Lowâ€Iridium ontent IrIn ₂ Intermetallics with an Unconventional Face entered Orthorhombic Phase for Efficient Overall Water Splitting. Advanced Functional Materials, 2024, 34, .	14.9	0
3037	One-step electrodeposition of NiS heterostructures on nickel foam electrodes for hydrogen evolution reaction: On the impact of thiourea content. Results in Chemistry, 2023, 6, 101216.	2.0	1
3038	Exploring the degradation mechanism of nickel–copper–molybdenum hydrogen evolution catalysts during intermittent operation. Chemical Communications, 0, , .	4.1	0
3039	Indispensable Nafion Ionomer for High-Efficiency and Stable Oxygen Evolution Reaction in Alkaline Media. ACS Applied Materials & Interfaces, 2023, 15, 55559-55569.	8.0	3
3040	Electrocatalytic Properties of Oxygen-Deficient Perovskites Ca ₃ Fe _{3–<i>x</i>} Mn _{<i>x</i>} O ₈ (<i>x</i> = 1–2) for the Hydrogen Evolution Reaction. Inorganic Chemistry, 0, , .	4.0	0
3041	Correlating Structural Disorder in Metal (Oxy)hydroxides and Catalytic Activity in Electrocatalytic Oxygen Evolution. Angewandte Chemie - International Edition, 2024, 63, .	13.8	1
3042	Correlating Structural Disorder in Metal (Oxy)hydroxides and Catalytic Activity in Electrocatalytic Oxygen Evolution. Angewandte Chemie, 2024, 136, .	2.0	0
3043	Enhanced hydrogen evolution reaction in FePt film with remanence due to decrease in domain walls. Rare Metals, 2024, 43, 1108-1115.	7.1	0
3044	Industrially Relevant Conditions in Labâ€Scale Analysis for Alkaline Water Electrolysis. ChemElectroChem, 2024, 11, .	3.4	1
3045	Modulating the electronic structure of MoS2 nanosheets by Mn doping for improving hydrogen evolution reaction: an experimental and theoretical DFT-QTAIM study. Materials Today Communications, 2024, 38, 107786.	1.9	0
3046	Promotion of hydrogen evolution from seawater via poly(aniline-co-4-nitroaniline) combined with 3D nickel nanoparticles. Scientific Reports, 2023, 13, .	3.3	3
3047	In Situ Generation of Molybdateâ€Modulated Nickelâ€Iron Oxide Electrodes with High Corrosion Resistance for Efficient Seawater Electrolysis. Advanced Energy Materials, 2024, 14, .	19.5	3

#	Article	IF	CITATIONS
3048	A self-phosphorized carbon-based monolithic chainmail electrode for high-current-density and durable alkaline water splitting. Sustainable Energy and Fuels, 0, , .	4.9	0
3049	Engineering of metal Co/Ni-CoO nanoparticles embedded in N-doped unclosed hollow carbon nanoboxes as a highly efficient bifunctional electrocatalyst for overall water splitting. Surfaces and Interfaces, 2024, 44, 103729.	3.0	2
3050	Electrochemically engineered domain: nickel–hydroxide/nickel nitride composite for alkaline HER electrocatalysis. Journal of Materials Chemistry A, 2024, 12, 1654-1661.	10.3	1
3051	Tetraâ€Coordinated W ₂ S ₃ for Efficient Dualâ€pH Hydrogen Production. Angewandte Chemie - International Edition, 2024, 63, .	13.8	2
3052	Tetra oordinated W ₂ S ₃ for Efficient Dualâ€pH Hydrogen Production. Angewandte Chemie, 2024, 136, .	2.0	0
3053	Unveiled the Structureâ€Selectivity Relationship for Carbon Dioxide Reduction Triggered by Biâ€Doped Cuâ€Based Nanocatalysts. Small, 0, , .	10.0	0
3054	Empowering the Water Oxidation Activity of the Bimetallic Metal–Organic Framework by Annexing Gold Nanoparticles over the Catalytic Surface. Inorganic Chemistry, 0, , .	4.0	0
3055	Simple Immersion in Polar Solvents Induces Targeted 1T Phase Conversion of MoS ₂ for HER: A Greener Approach. ACS Applied Energy Materials, 2024, 7, 1037-1050.	5.1	0
3056	Atomically Confined Ru Sites in Octahedral Co ₃ O ₄ for Highâ€Efficiency Hydrazine Oxidation. Advanced Functional Materials, 0, , .	14.9	0
3057	Electrochemical oxygen generation from VO2 nanoflakes decorated onto graphite sheet. Journal of Alloys and Compounds, 2024, 976, 173058.	5.5	0
3058	Novel insight from in…exâ€situ investigation toward intercalated water in <scp>highâ€performance</scp> oxygen evolution electrocatalysts and their mechanisms. Journal of the Chinese Chemical Society, 2023, 70, 2064-2088.	1.4	0
3059	High-performance artificial leaf: from electrocatalyst design to solar-to-chemical conversion. Materials Chemistry Frontiers, 2024, 8, 1300-1333.	5.9	0
3060	Pyrolysis-free cobalt porphyrin coordination polymer as electrocatalyst for Zn-air batteries and water splitting. Journal of Electroanalytical Chemistry, 2024, 952, 117987.	3.8	0
3061	Review and Perspective of Nickel and Its Derived Catalysts for Different Electrochemical Synthesis Reactions in Alkaline Media for Hydrogen Production. Energy & Fuels, 0, , .	5.1	0
3062	Basic comprehension and recent trends in photoelectrocatalytic systems. Green Chemistry, 2024, 26, 1682-1708.	9.0	0
3063	Amorphous/crystal hybrid cerium-based Mott-Schottky heterojunction as a bifunctional electrocatalyst. Ionics, 0, , .	2.4	0
3064	Ni3Se4/Fe(PO3)2/NF Composites as High-Efficiency Electrocatalysts with a Low Overpotential Toward Oxygen Evolution Reaction. Journal of Materials Chemistry A, 0, , .	10.3	0
3065	Quantifying defects in carbon nanotubes undergoing prolonged electrochemical cycling with Raman phase map. Carbon, 2024, 218, 118753.	10.3	0

#	Article	IF	CITATIONS
3066	CuCo2O4@ACoNi-LDH (A=Fe, Cu, Zn, Cr) as efficient electrocatalyst for freshwater, seawater and urea oxidation reaction. International Journal of Hydrogen Energy, 2024, 54, 937-946.	7.1	1
3067	Immersion-Driven Structural Evolution of NiFeS Nanosheets for Efficient Water Splitting. Nanomaterials, 2024, 14, 23.	4.1	0
3068	Platinumâ€Grafted Twentyâ€Five Atom Gold Nanoclusters for Robust Hydrogen Evolution. Small, 0, , .	10.0	0
3069	Electron and ion behaviors at the graphene/metal interface during the acidic water electrolysis. Chemical Physics Reviews, 2023, 4, .	5.7	0
3070	Raman Spectra of Electrified Si–Water Interfaces: First-Principles Simulations. Journal of Physical Chemistry Letters, 0, , 51-58.	4.6	0
3073	Transition Metal Functionalized C ₃₀ N ₁₂ S ₆ as High-Performance Trifunctional Catalysts with Integrated Descriptors toward Hydrogen Evolution, Oxygen Evolution, and Oxygen Reduction Reactions: A Case of High-Throughput First-Principles Screening within the Framework of TM–N ₂ @C ₃₀ N ₁₀ S ₆ . Langmuir. 0	3.5	0
3074	One-Step Synthesis of Porous FeNiS _{<i>x</i>} Coupled with 1T/2H MoS ₂ via Hydrazine Hydrate-Induced Phase Transformation for Hydrogen Evolution. Industrial & Engineering Chemistry Research, 0, , .	3.7	0
3075	Facile and Green Synthesis of Wellâ€Defined Nanocrystal Oxygen Evolution Catalysts by Rational Crystallization Regulation. Small, 0, , .	10.0	0
3076	Comprehensive investigation of Ni-rich PtNi alloy nanoparticles: structural, magnetic, and catalytic properties for efficient alkaline water electrolysis. Journal of Nanoparticle Research, 2024, 26, .	1.9	0
3077	Vacancy engineering induced reaction kinetics enhancement of cobalt metaphosphate for pH-universal hydrogen evolution. Nano Research, 0, , .	10.4	0
3078	Extremely efficient and stable hydrogen evolution by a Pt/NiOx composite film deposited on a nickel foam using a mixed metal-imidazole casting method. Journal of Materials Chemistry A, 0, , .	10.3	0
3079	Nano-Scale Engineering of Heterojunction for Alkaline Water Electrolysis. Materials, 2024, 17, 199.	2.9	1
3080	Polyoxometalate-Derived Cu-MoO ₂ Nanosheets as Electrocatalysts for Enhanced Acidic Water Oxidation. ACS Applied Nano Materials, 0, , .	5.0	0
3081	Progress and framework of clean energy production: Bibliometric analysis from 2002 to 2022. Energy Strategy Reviews, 2024, 52, 101270.	7.3	2
3082	Electrocatalytic Reactors for Syngas Production From Natural Gas. , 2024, , .		0
3083	Highly efficient electrocatalysts for seawater electrolysis under high current density: A critical review. , 0, , .		0
3084	Recent advances and perspective on transition metal heterogeneous catalysts for efficient electrochemical water splitting. , 2024, 3, 4-31.		0
3085	Toward Next-Generation Heterogeneous Catalysts: Empowering Surface Reactivity Prediction with Machine Learning. Engineering, 2024, , .	6.7	0

#	Article	IF	CITATIONS
3086	S-Decorated NiMoO4 Nanomaterial Heterostructure for Enhanced Hydrogen Generation. Springer Proceedings in Physics, 2024, , 81-88.	0.2	0
3087	Phosphate-based polyanionic insertion materials for oxygen electrocatalysis. Materials Chemistry Frontiers, 2024, 8, 1153-1170.	5.9	0
3088	Breaking boundaries: advancements in solid-state redox mediators for decoupled water electrolysis. Journal of Materials Chemistry A, 2024, 12, 4363-4382.	10.3	0
3089	Precisely Control Relationship between Sulfur Vacancy and H Absorption for BoostingÂHydrogen Evolution Reaction. Nano-Micro Letters, 2024, 16, .	27.0	1
3090	Oxygen-vacancy-enriched Co2NiMo-N hollow polymetallic nitrides for the electrocatalytic hydrogen evolution reaction. Journal of Alloys and Compounds, 2024, 977, 173433.	5.5	0
3091	Dual and Triple Atom Electrocatalysts for Energy Conversion (CO ₂ RR, NRR, ORR, OER, and) Tj ETQq1	10,78431 11.2	ląrgBT /Ov
3092	A novel p-type CoSe2 co-catalyst cooperated with hematite for boosting photoelectrochemical water splitting. Fuel, 2024, 362, 130931.	6.4	0
3093	Multi-scale physics of bipolar membranes in electrochemical processes. , 2024, 1, 45-60.		4
3094	Integrating Multiple Catalytic Active Sites into One Composite System for Highly Efficient and Durable Water Oxidation. ACS Applied Energy Materials, 2024, 7, 941-950.	5.1	0
3095	Molecular Metal Nanoclusters for Water Oxidation Catalysis and Future Potential. , 0, , .		0
3097	Material Dynamics of Manganese-Based Oxychlorides for Oxygen Evolution Reaction in Acid. Chemistry of Materials, 2024, 36, 1299-1307.	6.7	1
3098	Coordination and Architecture Regulation of Electrocatalysts for Sustainable Hydrogen Energy Conversion. Accounts of Materials Research, 2024, 5, 160-172.	11.7	0
3099	The influence of nanostructure and electrolyte concentration on the performance of nickel sulfide (Ni3S2) catalyst for electrochemical overall water splitting. Journal of Colloid and Interface Science, 2024, 660, 502-512.	9.4	0
3100	Climbing the Hydrogen Evolution Volcano with a NiTi Shape Memory Alloy. Journal of Physical Chemistry Letters, 2024, 15, 933-939.	4.6	Ο
3101	Metal oxides for hybrid photoassisted electrochemical energy systems. , 2024, , 607-634.		0
3102	Nitrogen and Sulfur Coâ€Doped Carbonâ€Coated Ni ₃ S ₂ /MoO ₂ Nanowires as Bifunctional Catalysts for Alkaline Seawater Electrolysis. Small, 0, , .	10.0	0
3103	Clearing Up Discrepancies in 2D and 3D Nickel Molybdate Hydrate Structures. Inorganic Chemistry, 2024, 63, 2388-2400.	4.0	0
3104	Controlled doping of ultralow amounts Ru on Ni cathode for PEMWE: Experimental and theoretical elucidation of enhanced performance. Applied Catalysis B: Environmental, 2024, 346, 123738.	20.2	0

#	Article	IF	CITATIONS
3105	Functionality Modulation Toward Thianthreneâ€based Metalâ€Free Electrocatalysts for Water Splitting. Advanced Materials, 2024, 36, .	21.0	0
3106	Tungsten–Iron–Ruthenium Ternary Alloy Immobilized into the Inner Nickel Foam for Highâ€Currentâ€Density Water Oxidation. Small, 0, , .	10.0	0
3107	<i>In Situ</i> and <i>Operando</i> X-ray Scattering Methods in Electrochemistry and Electrocatalysis. Chemical Reviews, 2024, 124, 629-721.	47.7	0
3108	Promoted Overall Water Splitting Catalytic Activity and Durability of Ni ₃ Fe Alloy by Designing Nâ€Doped Carbon Encapsulation. Small, 0, , .	10.0	1
3109	Exploring the role of iron in Fe5Ni4S8 toward oxygen evolution through modulation of electronic orbital occupancy. Journal of Energy Chemistry, 2024, 92, 52-62.	12.9	0
3110	Selection of appropriate electrochemical deposition regime for cerium conversion coating on anodized AA2024-T3 aircraft alloy. Journal of Applied Electrochemistry, 2024, 54, 1171-1202.	2.9	0
3111	Advances and Practical Prospects for Biasâ€Free Photovoltaicâ€Driven Electrochemical Water Splitting Systems. Advanced Energy Materials, 2024, 14, .	19.5	0
3112	Interface engineering towards overall water electrolysis over NiCo ₂ O ₄ /NiMo hybrid catalysts. Catalysis Science and Technology, 2024, 14, 1349-1358.	4.1	0
3113	Enhancing the PEC Efficiency in the Perspective of Crystal Facet Engineering and Modulation of Surfaces. ACS Omega, 2024, 9, 6128-6146.	3.5	0
3114	Electrocatalytic CO2 reduction enhanced by Sb doping in MOF-derived carbon-supported Bi-based materials. Separation and Purification Technology, 2024, 339, 126520.	7.9	0
3115	Tungsten Carbideâ€Based Materials for Electrocatalytic Water Splitting: A Review. ChemElectroChem, 2024, 11, .	3.4	0
3116	Self-templated synthesis of Ni3S2@NiCoN with core-shell structure for effective hydrogen evolution reaction. International Journal of Hydrogen Energy, 2024, 59, 1419-1426.	7.1	0
3117	Heterogeneous interface construction of P-doped MoS2 based on the N-doped graphene oxide aerogels for efficient hydrogen evolution. International Journal of Hydrogen Energy, 2024, 58, 1596-1607.	7.1	0
3118	Boosting Hydrogen Evolution by Methanol Oxidation Reaction on Ni-Based Electrocatalysts: From Fundamental Electrochemistry to Perspectives. ACS Energy Letters, 2024, 9, 853-879.	17.4	4
3119	Thermodynamics of electrochemical urea oxidation reaction coupled with cathodic hydrogen evolution reaction in an alkaline solution: Effect of carbonate formation. International Journal of Hydrogen Energy, 2024, 59, 354-358.	7.1	0
3120	Ir Single Atom-Doped Ni ₂ P Anchored by Carbonized Polymer Dots for Robust Overall Water Splitting. ACS Catalysis, 2024, 14, 3006-3017.	11.2	0
3121	Cobalt decorated S-doped carbon electrocatalyst assembly for enhanced oxygen evolution reaction. Materials Today Sustainability, 2024, 26, 100717.	4.1	0
3122	Hollow structural materials derived from a MOFs/polymer loaded CoRu alloy for significantly boosting electrochemical overall water splitting. Journal of Materials Chemistry A, 2024, 12, 6438-6445.	10.3	0

#	Article	IF	CITATIONS
3123	Electrocatalytic and structural investigation of trimetallic NiFeMo bifunctional electrocatalyst for industrial alkaline water electrolysis. Electrochimica Acta, 2024, 482, 143988.	5.2	0
3124	High-Performance Iridium–Molybdenum Oxide Electrocatalysts for Water Oxidation in Acid: Bayesian Optimization Discovery and Experimental Testing. Journal of the American Chemical Society, 2024, 146, 5511-5522.	13.7	0
3125	Direction of oxygen evolution reaction electrocatalyst evaluation for an anion exchange membrane CO ₂ electrolyzer. , 0, , .		0
3126	Janus MSiSnN4(M= Mo; W):High efficiently overall water splitting photocatalyst triggered by the intrinsic electric field. Molecular Catalysis, 2024, 557, 113964.	2.0	0
3127	Offshore green hydrogen production from wind energy: Critical review and perspective. Renewable and Sustainable Energy Reviews, 2024, 195, 114320.	16.4	0
3128	Biogenically synthesized palladium nanoparticles for hydrogen evolution study: An efficient catalyst for 4-nitrophenol reduction and C-C coupling reactions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2024, 688, 133555.	4.7	0
3129	Assessing the Electrochemical CO ₂ Reduction Reaction Performance Requires More Than Reporting Coulombic Efficiency. Advanced Energy and Sustainability Research, 0, , .	5.8	0
3130	Nickel foam supported Mn-doped NiFe-LDH nanosheet arrays as efficient bifunctional electrocatalysts for methanol oxidation and hydrogen evolution. Journal of Colloid and Interface Science, 2024, 663, 971-980.	9.4	0
3131	Enhancing the Hydrogen Evolution Performance of Tungsten Diphosphide on Carbon Fiber through Ruthenium Modification. ACS Applied Materials & Interfaces, 2024, 16, 12407-12416.	8.0	0
3132	Rational engineering WO3-X/CNTs@carbon fiber membrane for the high-efficient produce H2O2 via electrochemical two-electron water oxidation route. Diamond and Related Materials, 2024, 144, 110969.	3.9	0
3133	Best Practices for Accurately Reporting Electrocatalytic Performance of Nanomaterials. Materials Horizons, 2024, , 95-117.	0.6	0
3134	Utilization of Electrocoagulated Sewage as a Photoelectrocatalyst for Water Splitting. ACS Materials Au, 0, , .	6.0	0
3135	High-entropy oxide (Mg0.2Fe0.2Co0.2Cu0.2Zn0.2)O with rocksalt-to-spinel transformation and its electrocatalytic activity for the oxygen evolution reaction. Journal of Alloys and Compounds, 2024, 985, 174029.	5.5	0
3136	Single-Atom Catalyst for Electrochemical Water Splitting. Materials Horizons, 2024, , 217-242.	0.6	0
3137	Emerging Electrocatalytic Strategies for Hydrogen Production from Water. Materials Horizons, 2024, , 243-263.	0.6	0
3138	Increased Readiness for Water Splitting: NiOâ€Induced Weakening of Bonds in Water Molecules as Possible Cause of Ultraâ€Low Oxygen Evolution Potential. Small, 0, , .	10.0	0
3139	Advanced 3D Network of Nâ€Doped Graphitic Carbon with FeNi Alloy Embedding for Highâ€Performance Rechargeable Znâ€Air Batteries. Advanced Sustainable Systems, 0, , .	5.3	0
3140	Synthesis, Structure, and Properties of 2O-BaPtO ₃ , a Phase Derived from Hexagonal Perovskite. Inorganic Chemistry, 2024, 63, 5098-5106.	4.0	0

#	Article	IF	CITATIONS
3141	14.8% Quantum Efficient Gallium Phosphide Photocatalyst for Hydrogen Evolution. Journal of the American Chemical Society, 2024, 146, 7723-7733.	13.7	0
3142	Modulating Ptâ€N/O Bonds on Coâ€doped WO ₃ for Acid Electrocatalytic Hydrogen Evolution with Over 2000Âh Operation. Advanced Energy Materials, 0, , .	19.5	0
3143	New approach to produce cubic-WC at low temperature for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2024, 62, 1018-1029.	7.1	0
3144	Catalytic Activity and Electrochemical Stability of Ru _{1–<i>x</i>} M _{<i>x</i>} O ₂ (M = Zr, Nb, Ta): Computational and Experimental Study of the Oxygen Evolution Reaction. ACS Applied Materials & amp; Interfaces, 2024, 16, 16373-16398.	8.0	0
3145	In Situ X-ray Absorption Spectroscopy of LaFeO ₃ and LaFeO ₃ /LaNiO ₃ Thin Films in the Electrocatalytic Oxygen Evolution Reaction. Journal of Physical Chemistry C, 2024, 128, 5515-5523.	3.1	0
3146	Optimization of Three-Dimensional-Printed Catalytic Electrodes for Alkaline Water Electrolysis Guided by the Experimental Design Methodology. Energy & Fuels, 2024, 38, 6346-6354.	5.1	0
3147	Catalysis of the Oxygen-Evolution Reaction in 1.0 M Sulfuric Acid by Manganese Antimonate Films Synthesized via Chemical Vapor Deposition. ACS Applied Energy Materials, 0, , .	5.1	0
3149	Experimental characterization and non-isothermal simulation of a zero-gap alkaline electrolyser with nickel-iron porous electrode. International Journal of Hydrogen Energy, 2024, 63, 1158-1173.	7.1	0
3150	Recent Developments in Graphitic Carbon Nitride and Its Interfaces for Effective Water Splitting. Energy Technology, 2024, 12, .	3.8	0
3151	Ruthenium-doped cobalt sulphide electrocatalyst derived from a ruthenium–cobalt Prussian blue analogue (RuCo-PBA) for an enhanced hydrogen evolution reaction (HER). Dalton Transactions, 2024, 53, 6667-6675.	3.3	0
3152	Modification of chitosan-coated magnetic material with glycidyltrimethylammonium chloride and its application as heterogeneous base catalyst for levulinic acid esterification. Materials Advances, 2024, 5, 3838-3849.	5.4	0
3153	CO ₂ Electrolyzers. Chemical Reviews, 2024, 124, 3648-3693.	47.7	0
3154	Tuning the Electrocatalytic Properties of Trimetallic Pentlandites: Stability and Catalytic Activity as a Function of Material Form and Selenium Concentration. , 2024, 6, 1581-1592.		0
3155	Eco-friendly high entropy oxide rock-salt type structure for oxygen evolution reaction obtained by green synthesis. Journal of Electroanalytical Chemistry, 2024, 961, 118191.	3.8	0
3156	Hierarchical FeO H @Ni3B hybrid for efficient alkaline oxygen evolution at high current density. Journal of Energy Chemistry, 2024, 94, 599-607.	12.9	0
3157	Activity and stability of catalysts for electrocatalytic water splitting in acidic media. Science China Materials, 2024, 67, 1124-1128.	6.3	0
3158	Universal Synthesis of Amorphous Metal Oxide Nanomeshes. Small, 0, , .	10.0	0