

Exceptional performance of hierarchical Ni–Fe oxyhydroxide electrocatalysts for large current density water splitting

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Bimetallic organic framework MIL-53(Co-Fe): an efficient and robust electrocatalyst for the oxygen evolution reaction. <i>Nanoscale</i> , 2020, 12, 67-71.	2.8	98
2	Controllable synthesis of CoFeMo layered double hydroxide nanoarrays for promoting the oxygen evolution reaction. <i>Dalton Transactions</i> , 2020, 49, 15417-15424.	1.6	20
3	Ultrathinning Nickel Sulfide with Modulated Electron Density for Efficient Water Splitting. <i>Advanced Energy Materials</i> , 2020, 10, 2001963.	10.2	224
4	Design and operando/in situ characterization of precious-metal-free electrocatalysts for alkaline water splitting. , 2020, 2, 582-613.		105
5	One stable electrocatalyst for two evolution reactions by one-pot combustion synthesis. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 22691-22699.	3.8	8
6	Anion Etching for Accessing Rapid and Deep Self-Reconstruction of Precatalysts for Water Oxidation. <i>Matter</i> , 2020, 3, 2124-2137.	5.0	177
7	Surface Reconstruction and Phase Transition on Vanadium-Cobalt-Iron Trimetal Nitrides to Form Active Oxyhydroxide for Enhanced Electrocatalytic Water Oxidation. <i>Advanced Energy Materials</i> , 2020, 10, 2002464.	10.2	155
8	Influence of Composition on Performance in Metallic Iron-Nickel-Cobalt Ternary Anodes for Alkaline Water Electrolysis. <i>ACS Catalysis</i> , 2020, 10, 12139-12147.	5.5	20
9	Tailoring the d-Band Centers Endows (Ni _{1-x} Fe _x) ₂ P Nanosheets with Efficient Oxygen Evolution Catalysis. <i>ACS Catalysis</i> , 2020, 10, 9086-9097.	5.5	417
10	Electronic modulation by N incorporation boosts the electrocatalytic performance of urchin-like Ni ₅ P ₄ hollow microspheres for hydrogen evolution. <i>Chemical Engineering Journal</i> , 2020, 402, 126302.	6.6	50
11	Pulse Electrodeposition of a Superhydrophilic and Binder-Free Ni-Fe-P Nanostructure as Highly Active and Durable Electrocatalyst for Both Hydrogen and Oxygen Evolution Reactions. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 53719-53730.	4.0	76
12	Amorphous CoO ₂ -Decorated Crystalline RuO ₂ Nanosheets as Bifunctional Catalysts for Boosting Overall Water Splitting at Large Current Density. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17520-17526.	3.2	95
13	Hexadecyltrimethylammonium hydroxide promotes electrocatalytic activity for the oxygen evolution reaction. <i>Communications Chemistry</i> , 2020, 3, .	2.0	2
14	Efficient Water Splitting Actualized through an Electrochemistry-Induced Heterostructured Antiperovskite/(Oxy)Hydroxide Hybrid. <i>Small</i> , 2020, 16, e2006800.	5.2	36
15	The Effect of the Coordination Environment of Atomically Dispersed Fe and N Co-doped Carbon Nanosheets on CO ₂ Electroreduction. <i>ChemElectroChem</i> , 2020, 7, 4767-4772.	1.7	17
16	One-step electrodeposition of cauliflower-like Ni-Fe-Sn particles as a highly-efficient electrocatalyst for the hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 24615-24625.	3.8	13
17	Highly Enhanced OER Activity of Amorphous Co ₃ O ₄ via Fabricating Hybrid Amorphous-Crystalline Gold Nanostructures. <i>ChemistrySelect</i> , 2020, 5, 9357-9361.	0.7	6
18	Coupling NiCo Alloy and CeO ₂ to Enhance Electrocatalytic Hydrogen Evolution in Alkaline Solution. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000122.	2.7	36

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19	Multifunctional Nickel Sulfide Nanosheet Arrays for Solar-Enhanced Oxygen Evolution Reaction. <i>Small</i> , 2020, 16, e2002550.	5.2	25
20	In-situ growth and electronic structure modulation of urchin-like Ni-Fe oxyhydroxide on nickel foam as robust bifunctional catalysts for overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 22427-22436.	3.8	14
21	Rational design of NiFe LDH@Ni ₃ N nano/microsheet arrays as a bifunctional electrocatalyst for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17202-17211.	5.2	89
22	An artificial photosynthetic system with CO ₂ -reducing solar-to-fuel efficiency exceeding 20%. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18310-18317.	5.2	31
23	Non-precious-metal catalysts for alkaline water electrolysis: operando characterizations, theoretical calculations, and recent advances. <i>Chemical Society Reviews</i> , 2020, 49, 9154-9196.	18.7	448
24	Recent progress on nanostructured bimetallic electrocatalysts for water splitting and electroreduction of carbon dioxide. <i>Journal of Semiconductors</i> , 2020, 41, 091705.	2.0	13
25	Promoting Electrocatalytic Hydrogen Evolution Reaction and Oxygen Evolution Reaction by Fields: Effects of Electric Field, Magnetic Field, Strain, and Light. <i>Small Methods</i> , 2020, 4, 2000494.	4.6	146
26	Superactive NiFe-LDH/graphene nanocomposites as competent catalysts for water splitting reactions. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 3805-3836.	3.0	85
27	In situ X-ray diffraction and X-ray absorption spectroscopy of electrocatalysts for energy conversion reactions. <i>Journal of Materials Chemistry A</i> , 2020, 8, 19079-19112.	5.2	98
28	Dual Improvement of MnO ₂ Oxygen Evolution Electrocatalysts via Combined Substrate Control and Surface Engineering. <i>ChemCatChem</i> , 2020, 12, 5984-5992.	1.8	5
29	Co-Induced Electronic Optimization of Hierarchical NiFe LDH for Oxygen Evolution. <i>Small</i> , 2020, 16, e2002426.	5.2	263
30	Stabilizing the OOH* intermediate via pre-adsorbed surface oxygen of a single Ru atom-bimetallic alloy for ultralow overpotential oxygen generation. <i>Energy and Environmental Science</i> , 2020, 13, 5152-5164.	15.6	94
31	Activating Iron Based Materials for Overall Electrochemical Water Splitting via the Incorporation of Noble Metals. <i>Chemistry - an Asian Journal</i> , 2020, 15, 4339-4346.	1.7	8
32	Creating active interfaces as a strategy to improve electrochemical water splitting reactions. <i>JPhys Energy</i> , 2020, 2, 041001.	2.3	10
33	Ultrafast room-temperature synthesis of porous S-doped Ni/Fe (oxy)hydroxide electrodes for oxygen evolution catalysis in seawater splitting. <i>Energy and Environmental Science</i> , 2020, 13, 3439-3446.	15.6	507
34	Ni ₃ S ₂ -Co ₉ S ₈ heterostructure nanowires supported on Ni foam as highly efficient and stable electrocatalyst for oxygen evolution reaction. <i>Applied Surface Science</i> , 2020, 526, 146753.	3.1	25
35	Moderate oxophilic CoFe in carbon nanofiber for the oxygen evolution reaction in anion exchange membrane water electrolysis. <i>Electrochimica Acta</i> , 2020, 353, 136521.	2.6	37
36	Defect-Mediated Adsorption of Metal Ions for Constructing Ni Hydroxide/MoS ₂ Heterostructures as High-Performance Water-Splitting Electrocatalysts. <i>ACS Applied Energy Materials</i> , 2020, 3, 7039-7047.	2.5	20

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37	Water Splitting: From Electrode to Green Energy System. Nano-Micro Letters, 2020, 12, 131.	14.4	288
38	Core-Shell Structured NiFeSn@NiFe (Oxy)Hydroxide Nanospheres from an Electrochemical Strategy for Electrocatalytic Oxygen Evolution Reaction. Advanced Science, 2020, 7, 1903777.	5.6	69
39	Nickel-iron borate coated nickel-iron boride hybrid for highly stable and active oxygen evolution electrocatalysis. Chinese Chemical Letters, 2020, 31, 2469-2472.	4.8	30
40	Improved hydrogen generation via a urea-assisted method over 3D hierarchical NiMo-based composite microrod arrays. Journal of Alloys and Compounds, 2020, 844, 155382.	2.8	46
41	Recent progress on hollow array architectures and their applications in electrochemical energy storage. Nanoscale Horizons, 2020, 5, 1188-1199.	4.1	48
42	Direct Synthesis of Ultrathin Pt Nanowire Arrays as Catalysts for Methanol Oxidation. Small, 2020, 16, e2001135.	5.2	28
43	Boron enhances oxygen evolution reaction activity over Ni foam-supported iron boride nanowires. Journal of Materials Chemistry A, 2020, 8, 13638-13645.	5.2	61
44	Single Ni Atoms and Clusters Embedded in N-Doped Carbon @ Tubes on Fibers Matrix with Bifunctional Activity for Water Splitting at High Current Densities. Small, 2020, 16, e2002511.	5.2	38
45	3D network Ni-based electrocatalysts with interfacial active sites of Ru QDs and Ni(OH) ₂ for efficient hydrogen evolution reaction under large current density in alkaline environment. Electrochimica Acta, 2020, 356, 136732.	2.6	7
46	A 3d-printed composite electrode for sustained electrocatalytic oxygen evolution. Chemical Communications, 2020, 56, 8476-8479.	2.2	7
47	2D CoOOH Sheet-Encapsulated Ni ₂ P into Tubular Arrays Realizing 1000 A cm ⁻² Level-Current-Density Hydrogen Evolution Over 100 h in Neutral Water. Nano-Micro Letters, 2020, 12, 140.	14.4	83
48	Hierarchical self-assembly of NiFe-LDH nanosheets on CoFe ₂ O ₄ @Co ₃ S ₄ nanowires for enhanced overall water splitting. Sustainable Energy and Fuels, 2020, 4, 1933-1944.	2.5	19
49	In situ Grown Ni phosphate@Ni ₁₂ P ₅ Nanorod Arrays as a Unique Core-Shell Architecture: Competitive Bifunctional Electrocatalysts for Urea Electrolysis at Large Current Densities. ACS Sustainable Chemistry and Engineering, 2020, 8, 7463-7471.	3.2	75
50	Trimetallic NiCoFe-Layered Double Hydroxides Nanosheets Efficient for Oxygen Evolution and Highly Selective Oxidation of Biomass-Derived 5-Hydroxymethylfurfural. ACS Catalysis, 2020, 10, 5179-5189.	5.5	272
51	Bonding interface boosts the intrinsic activity and durability of NiSe@Fe ₂ O ₃ heterogeneous electrocatalyst for water oxidation. Science Bulletin, 2021, 66, 52-61.	4.3	44
52	CoP@NC electrocatalyst promotes hydrogen and oxygen productions for overall water splitting in alkaline media. International Journal of Hydrogen Energy, 2021, 46, 2095-2102.	3.8	18
53	A Glass-Ceramic with Accelerated Surface Reconstruction toward the Efficient Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2021, 60, 3773-3780.	7.2	164
54	Recent Progress on NiFe-Based Electrocatalysts for Alkaline Oxygen Evolution. Advanced Sustainable Systems, 2021, 5, .	2.7	50

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55	Fe induced nanostructure reorganization and electronic structure modulation over CoNi (oxy)hydroxide nanorod arrays for boosting oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 403, 126304.	6.6	75
56	Auto-programmed synthesis of metallic aerogels: Core-shell Cu@Fe@Ni aerogels for efficient oxygen evolution reaction. <i>Nano Energy</i> , 2021, 81, 105644.	8.2	50
57	Fluorination-enabled Reconstruction of NiFe Electrocatalysts for Efficient Water Oxidation. <i>Nano Letters</i> , 2021, 21, 492-499.	4.5	190
58	Selective anodes for seawater splitting via functionalization of manganese oxides by a plasma-assisted process. <i>Applied Catalysis B: Environmental</i> , 2021, 284, 119684.	10.8	73
59	Interface engineering of transitional metal sulfide@MoS ₂ heterostructure composites as effective electrocatalysts for water-splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2070-2092.	5.2	136
60	Influence of Thermal Treatment on Microstructure and Corrosion Behavior of Amorphous Fe ₄₀ Ni ₄₀ B ₁₂ Si ₈ Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 34-45.	1.1	5
61	Magnetic-field guided synthesis of highly active Ni@CoFe ₂ O ₄ electrocatalysts for oxygen evolution reaction. <i>Renewable Energy</i> , 2021, 165, 612-618.	4.3	20
62	Enabling the full exposure of Fe ₂ P@Ni ₃ P heterostructures in tree-branch-like nanoarrays for promoted urea electrolysis at high current densities. <i>Chemical Engineering Journal</i> , 2021, 417, 128067.	6.6	66
63	Surface-oxidized Fe@Co@Ni alloys anchored to N-doped carbon nanotubes as efficient catalysts for oxygen reduction reaction. <i>Journal of Alloys and Compounds</i> , 2021, 857, 158249.	2.8	42
64	Electrocatalytic Hydrogen Production Trilogy. <i>Angewandte Chemie</i> , 2021, 133, 19702-19723.	1.6	114
65	A Glass@Ceramic with Accelerated Surface Reconstruction toward the Efficient Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2021, 133, 3817-3824.	1.6	28
66	TiN@Co _{5.47} N Composite Material Constructed by Atomic Layer Deposition as Reliable Electrocatalyst for Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , 2021, 31, 2008511.	7.8	38
67	Transforming Damage into Benefit: Corrosion Engineering Enabled Electrocatalysts for Water Splitting. <i>Advanced Functional Materials</i> , 2021, 31, 2009032.	7.8	70
68	Walnut kernel-like iron-cobalt-nickel sulfide nanosheets directly grown on nickel foam: A binder-free electrocatalyst for high-efficiency oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2021, 587, 141-149.	5.0	30
69	Progress and Challenge of Amorphous Catalysts for Electrochemical Water Splitting. , 2021, 3, 136-147.		143
70	Recent perspectives on the structure and oxygen evolution activity for non-noble metal-based catalysts. <i>Journal of Power Sources</i> , 2021, 485, 229335.	4.0	43
71	High Density and Unit Activity Integrated in Amorphous Catalysts for Electrochemical Water Splitting. <i>Small Structures</i> , 2021, 2, 2000096.	6.9	102
72	Advanced Oxygen Electrocatalysis in Energy Conversion and Storage. <i>Advanced Functional Materials</i> , 2021, 31, 2007602.	7.8	86

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74	Electrocatalytic Hydrogen Production Trilogy. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19550-19571.	7.2	220
75	Regulating the adsorption behavior of intermediates on Ir@WO ₃ boosts acidic water oxidation electrocatalysis. <i>Materials Chemistry Frontiers</i> , 2021, 5, 6092-6100.	3.2	17
76	Three-dimensional construction of electrode materials using TiC nanoarray substrates for highly efficient electrogeneration of sulfate radicals and molecular hydrogen in a single electrolysis cell. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11705-11717.	5.2	5
77	Atomic heterointerface engineering overcomes the activity limitation of electrocatalysts and promises highly-efficient alkaline water splitting. <i>Energy and Environmental Science</i> , 2021, 14, 5228-5259.	15.6	198
78	Discovering ultrahigh loading of single-metal-atoms <i>via</i> surface tensile-strain for unprecedented urea electrolysis. <i>Energy and Environmental Science</i> , 2021, 14, 6494-6505.	15.6	79
79	A three-dimensional nanostructure of NiFe(OH) _X nanoparticles/nickel foam as an efficient electrocatalyst for urea oxidation. <i>RSC Advances</i> , 2021, 11, 17352-17359.	1.7	11
80	Low-cost and multi-level structured NiFeMn alloy@NiFeMn oxyhydroxide electrocatalysts for highly efficient overall water splitting. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 2713-2724.	3.0	5
81	Pencil graphite rods decorated with nickel and nickel-iron as low-cost oxygen evolution reaction electrodes. <i>Sustainable Energy and Fuels</i> , 2021, 5, 3929-3938.	2.5	7
82	Atomic layer deposited Al ₂ O ₃ layer confinement: an efficient strategy to synthesize durable MOF-derived catalysts toward the oxygen evolution reaction. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 1432-1438.	3.0	10
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84	Preparation, electrical and electrochemical characterizations of CuCoNiFeMn high-entropy-alloy for overall water splitting at neutral-pH. <i>Journal of Materials Chemistry A</i> , 2021, 9, 16841-16851.	5.2	37
85	Mechanical and Wear Characterization of Ceramic Boron Carbide-Reinforced Al ₂₀₂₄ Alloy Metal Composites. <i>Journal of Bio- and Tribo-Corrosion</i> , 2021, 7, 1.	1.2	17
86	Highly efficient H ₂ production and size-selective AgCl synthesis <i>via</i> electrolytic cell design. <i>Journal of Materials Chemistry A</i> , 2021, 9, 22871-22877.	5.2	2
87	Boosting the charge transfer of FeOOH/Ni(OH) ₂ for excellent oxygen evolution reaction <i>via</i> Cr modification. <i>Dalton Transactions</i> , 2021, 50, 9746-9753.	1.6	15
88	Synthesis of an <i>in situ</i> core-shell interlink ultrathin-nanosheet Fe@Fe _x NiO/Ni@Ni _y CoP nanohybrid by scalable layer-to-layer assembly strategy as an ultra-highly efficient bifunctional electrocatalyst for alkaline/neutral water reduction/oxidation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5833-5847.	5.2	17
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92	Surface reconstruction of NiCoP for enhanced biomass upgrading. <i>Journal of Materials Chemistry A</i> , 2021, 9, 18421-18430.	5.2	52
93	Highly electrocatalytic three-dimensional chain-like nickel-based electrocatalysts with hierarchical structures for hydrogen evolution reactions. <i>Dalton Transactions</i> , 2021, 50, 14724-14729.	1.6	2
94	Transition metal-based catalysts for electrochemical water splitting at high current density: current status and perspectives. <i>Nanoscale</i> , 2021, 13, 12788-12817.	2.8	142
95	Modulating Hydroxyl-Rich Interfaces on Nickel-Copper Double Hydroxide Nanotubes to Pre-activate Alkaline Ammonia Oxidation Reactivity. <i>Chemistry - A European Journal</i> , 2021, 27, 4869-4875.	1.7	11
96	Anionic sulfur-modified FeNi-LDH at various Fe/Ni molar ratios for high-performance OER electrocatalysis. <i>Materials Letters</i> , 2021, 285, 129132.	1.3	16
97	Recent development on self-supported transition metal-based catalysts for water electrolysis at large current density. <i>Applied Materials Today</i> , 2021, 22, 100913.	2.3	42
98	Synthesis of one-dimensional nickel perylene diimide/iron hydroxide nanohybrid as catalyst and precursor for efficient photocatalytic and electrocatalytic water oxidation. <i>Journal of Power Sources</i> , 2021, 489, 229493.	4.0	4
99	Electrochemically manipulating BiFeO ₃ particles via Bi ³⁺ ion extraction. <i>Journal of the American Ceramic Society</i> , 2021, 104, 3354-3364.	1.9	1
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101	Trimetallic Spinel NiCo ₂ Fe ₂ O ₄ Nanoboxes for Highly Efficient Electrocatalytic Oxygen Evolution. <i>Angewandte Chemie</i> , 2021, 133, 11947-11952.	1.6	33
102	Fe(Co)OOH Dynamically Stable Interface Based on Self-Sacrificial Reconstruction for Long-Term Electrochemical Water Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 17450-17458.	4.0	32
103	Proton-Assisted Reconstruction of Perovskite Oxides: Toward Improved Electrocatalytic Activity. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 22009-22016.	4.0	28
104	General Synthesis of Hierarchically Macro/Mesoporous Fe,Ni-Doped CoSe/N-Doped Carbon Nanoshells for Enhanced Electrocatalytic Oxygen Evolution. <i>Inorganic Chemistry</i> , 2021, 60, 6782-6789.	1.9	13
105	Trimetallic Spinel NiCo ₂ Fe ₂ O ₄ Nanoboxes for Highly Efficient Electrocatalytic Oxygen Evolution. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11841-11846.	7.2	247
106	A 3D binder-free AgNWs@NiMo/PU electrode for efficient hydrogen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2021, 886, 115136.	1.9	2
107	Hornwort-like hollow porous MoO ₃ /NiF ₂ heterogeneous nanowires as high-performance electrocatalysts for efficient water oxidation. <i>Electrochimica Acta</i> , 2021, 379, 138146.	2.6	16
108	Straw-like phosphorus-doped Co ₂ MnO ₄ nanoneedle arrays supported on nickel foam for high-efficiency hydrogen evolution reaction in wide pH range of electrolytes. <i>Applied Surface Science</i> , 2021, 548, 149280.	3.1	31

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110	Advances in metal-organic frameworks and their derivatives for diverse electrocatalytic applications. <i>Electrochemistry Communications</i> , 2021, 126, 107024.	2.3	131
111	Porous NiFe-LDH grown on graphene oxide towards highly efficient OER electrocatalysis. <i>Materials Letters</i> , 2021, 290, 129517.	1.3	14
112	Boron-modified cobalt iron layered double hydroxides for high efficiency seawater oxidation. <i>Nano Energy</i> , 2021, 83, 105838.	8.2	132
113	Syntheses, characterizations and water-electrolysis properties of 2D $\hat{1}\pm$ - and $\hat{1}^2$ -PdSeO ₃ bulk and nanosheet semiconductors. <i>Journal of Solid State Chemistry</i> , 2021, 297, 122018.	1.4	1
114	Synergistic Interfacial and Doping Engineering of Heterostructured NiCo(OH) _x -Co _y W as an Efficient Alkaline Hydrogen Evolution Electrocatalyst. <i>Nano-Micro Letters</i> , 2021, 13, 120.	14.4	28
115	Robust Electrodes for Flexible Energy Storage Devices Based on Bimetallic Encapsulated Core-Shell Multishell Structures. <i>Advanced Science</i> , 2021, 8, e2100911.	5.6	8
116	An efficient way to improve water splitting electrocatalysis by electrodepositing cobalt phosphide nanosheets onto copper nanowires. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 19421-19432.	3.8	10
117	Facile Preparation of a Porous Nanosheet P _X -Doped Fe Bi-Functional Catalyst with Excellent OER and HER Electrocatalytic Activity. <i>ChemistrySelect</i> , 2021, 6, 4979-4990.	0.7	4
118	Interface Engineering of Ni ₃ Fe and FeV ₂ O ₄ Coupling with Carbon-Coated Mesoporous Nanosheets for Boosting Overall Water Splitting at 1500 mA cm ⁻² . <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 8249-8256.	3.2	22
119	Iron-facilitated surface reconstruction to in-situ generate nickel-iron oxyhydroxide on self-supported FeNi alloy fiber paper for efficient oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119902.	10.8	105
120	Layered Ni [~] Co [~] P Electrode Synthesized by CV Electrodeposition for Hydrogen Evolution at Large Currents. <i>ChemCatChem</i> , 2021, 13, 3619-3627.	1.8	6
121	One-step fabrication of heterostructured CoNi-LDH@NiCo alloy for effective alkaline hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 22789-22798.	3.8	18
122	Integrating well-controlled core-shell structures into \hat{e} superaerophobic electrodes for water oxidation at large current densities. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119920.	10.8	59
123	Highly active bifunctional catalyst: Constructing FeWO ₄ -WO ₃ heterostructure for water and hydrazine oxidation at large current density. <i>Nano Research</i> , 2021, 14, 4356-4361.	5.8	16
124	Three-dimensional core-shell CoFe Prussian blue analog at NiCoFe layered ternary hydroxide electrocatalyst for efficient oxygen evolution reaction. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	13
125	Electronic structure engineering through Fe-doping CoP enables hydrogen evolution coupled with electro-Fenton. <i>Nano Energy</i> , 2021, 84, 105943.	8.2	64
126	Heterogeneous Bimetallic Mo _{NiP_x} /NiS _y as a Highly Efficient Electrocatalyst for Robust Overall Water Splitting. <i>Advanced Functional Materials</i> , 2021, 31, 2101532.	7.8	119

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128	Rational design of oxygen evolution reaction catalysts for seawater electrolysis. Trends in Chemistry, 2021, 3, 485-498.	4.4	105
129	Interface engineered NiFe ₂ O ₄ /NiMoO ₄ nanowire arrays for electrochemical oxygen evolution. Applied Catalysis B: Environmental, 2021, 286, 119857.	10.8	138
130	NiMoO ₄ @Co ₃ O ₄ Core-Shell Nanorods: In Situ Catalyst Reconstruction toward High Efficiency Oxygen Evolution Reaction. Advanced Energy Materials, 2021, 11, 2101324.	10.2	97
131	Fe ₂ O ₃ /NiO Interface for the Electrochemical Oxygen Evolution in Seawater and Domestic Sewage. ACS Applied Materials & Interfaces, 2021, 13, 37152-37161.	4.0	32
132	An Innovative Way to Turn Catalyst into Substrate for Highly Efficient Water Splitting. Small, 2021, 17, e2101571.	5.2	14
133	Highly Enhanced OER Performance by Er-Doped Fe-MOF Nanoarray at Large Current Densities. Nanomaterials, 2021, 11, 1847.	1.9	8
134	FeOOH-containing hydrated layered iron vanadate electrocatalyst for superior oxygen evolution reaction and efficient water splitting. Chemical Engineering Journal, 2021, 416, 129165.	6.6	53
135	Highly efficient and robust noble-metal free bifunctional water electrolysis catalyst achieved via complementary charge transfer. Nature Communications, 2021, 12, 4606.	5.8	119
136	Trimetallic Mo-/Ni-/Fe-Based Hybrids Anchored on Hierarchical N-CNTs Arrays with Abundant Defects and Interfaces for Alkaline Water Splitting. Industrial & Engineering Chemistry Research, 2021, 60, 12559-12569.	1.8	10
137	Heterogeneous bimetallic sulfides based seawater electrolysis towards stable industrial-level large current density. Applied Catalysis B: Environmental, 2021, 291, 120071.	10.8	150
138	Rational Design of Vanadium-Modulated Ni ₃ Se ₂ Nanorod@Nanosheet Arrays as a Bifunctional Electrocatalyst for Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2021, 9, 12005-12016.	3.2	38
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