

Precision and correctness in the evaluation of electrocatalytic activity parameters with a critical assessment

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Citation Report

#	ARTICLE	IF	CITATIONS
2	Ultra-fast pyrolysis of ferrocene to form Fe/C heterostructures as robust oxygen evolution electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21577-21584.	10.3	50
3	Simple preparation of carbonâ€bimetal oxide nanospinels for high-performance bifunctional oxygen electrocatalysts. <i>New Journal of Chemistry</i> , 2018, 42, 20156-20162.	2.8	8
4	Study on the Stability of $\text{Co}_x\text{M}_{3-x}\text{O}_4$ (M = Ni, Mn and Ce) Nanowire Array Electrodes for Electrochemical Oxygen Evolution at Large Current Densities. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3496-A3503.	2.9	10
5	Remarkable Bifunctional Oxygen and Hydrogen Evolution Electrocatalytic Activities with Trace-Level Fe Doping in Ni- and Co-Layered Double Hydroxides for Overall Water-Splitting. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 42453-42468.	8.0	107
6	A New Class of $\text{Zn}_{1-x}\text{Fe}_x\text{Oxyselenide}$ and $\text{Zn}_{1-x}\text{Fe}_x\text{LDH}$ Nanostructured Material with Remarkable Bifunctional Oxygen and Hydrogen Evolution Electrocatalytic Activities for Overall Water Splitting. <i>Small</i> , 2018, 14, e1803638.	10.0	56
7	Electrochemical Corrosion Engineering for Niâ€Fe Oxides with Superior Activity toward Water Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 42217-42224.	8.0	38
8	Earth-Abundant Electrocatalysts in Proton Exchange Membrane Electrolyzers. <i>Catalysts</i> , 2018, 8, 657.	3.5	51
9	Sulfur-Doped Dicobalt Phosphide Outperforming Precious Metals as a Bifunctional Electrocatalyst for Alkaline Water Electrolysis. <i>Chemistry of Materials</i> , 2018, 30, 8861-8870.	6.7	71
10	Enhancement of Bromine Reversibility using Chemically Modified Electrodes and their Applications in Zinc Bromine Hybrid Redox Flow Batteries. <i>ChemElectroChem</i> , 2018, 5, 3411-3418.	3.4	24
11	Efficient Electrocatalytic Oxygen Evolution at Extremely High Current Density over 3D Ultrasmall Zeroâ€Valent Ironâ€Coupled Nickel Sulfide Nanosheets. <i>ChemElectroChem</i> , 2018, 5, 3866-3872.	3.4	43
12	Cobalt-Iron Oxide Nanoarrays Supported on Carbon Fiber Paper with High Stability for Electrochemical Oxygen Evolution at Large Current Densities. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 39809-39818.	8.0	60
13	$\text{gâ€C}_{3}\text{N}_4/\text{CeO}_2/\text{Fe}_3\text{O}_4$ Ternary Composite as an Efficient Bifunctional Catalyst for Overall Water Splitting. <i>ChemCatChem</i> , 2018, 10, 5587-5592.	3.7	37
14	Microwave annealing promoted in-situ electrochemical activation of Ni_3S_2 nanowires for water electrolysis. <i>Journal of Catalysis</i> , 2018, 368, 112-119.	6.2	15
15	Stabilization of Cobalt-Polyoxometalate over Poly(ionic liquid) Composites for Efficient Electrocatalytic Water Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 38872-38879.	8.0	32
16	Emerging Materials in Heterogeneous Electrocatalysis Involving Oxygen for Energy Harvesting. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 33737-33767.	8.0	52
17	General Construction of Molybdenumâ€Based Nanowire Arrays for pHâ€Universal Hydrogen Evolution Electrocatalysis. <i>Advanced Functional Materials</i> , 2018, 28, 1804600.	14.9	134
18	Earthâ€Abundant Transitionâ€Metalâ€Based Electrocatalysts for Water Electrolysis to Produce Renewable Hydrogen. <i>Chemistry - A European Journal</i> , 2018, 24, 18334-18355.	3.3	203
19	Construction of a hierarchical NiFe layered double hydroxide with a 3D mesoporous structure as an advanced electrocatalyst for water oxidation. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 1795-1799.	6.0	15

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20	Hierarchical CoP/Ni ₅ P ₄ /CoP microsheet arrays as a robust pH-universal electrocatalyst for efficient hydrogen generation. Energy and Environmental Science, 2018, 11, 2246-2252.	30.8	306
21	Sloughing a Precursor Layer to Expose Active Stainless Steel Catalyst for Water Oxidation. ACS Applied Materials & Interfaces, 2018, 10, 24499-24507.	8.0	25
22	FeP Nanocrystals Embedded in N-Doped Carbon Nanosheets for Efficient Electrocatalytic Hydrogen Generation over a Broad pH Range. ACS Sustainable Chemistry and Engineering, 2018, 6, 11587-11594.	6.7	56
23	Metal-Organic Framework Based Catalysts for Hydrogen Evolution. Advanced Energy Materials, 2018, 8, 1801193.	19.5	345
24	Electroless Plating of Highly Efficient Bifunctional Boride-Based Electrodes toward Practical Overall Water Splitting. Advanced Energy Materials, 2018, 8, 1801372.	19.5	127
25	Shrinking the Hydrogen Overpotential of Cu by 1 V and Imparting Ultralow Charge Transfer Resistance for Enhanced H ₂ Evolution. ACS Catalysis, 2018, 8, 5686-5697.	11.2	42
26	Modification of MIL-125(Ti) by Incorporating Various Transition Metal Oxide Nanoparticles for Enhanced Photocurrent during Hydrogen and Oxygen Evolution Reactions. ChemistrySelect, 2019, 4, 8508-8515.	1.5	15
27	Double functionalization of N-doped carbon carved hollow nanocubes with mixed metal phosphides as efficient bifunctional catalysts for electrochemical overall water splitting. Nano Energy, 2019, 65, 103995.	16.0	111
28	Fe-doping effect on CoTe catalyst with greatly boosted intrinsic activity for electrochemical oxygen evolution reaction. Electrochimica Acta, 2019, 321, 134656.	5.2	44
29	Mechanism and Key Parameters for Catalyst Evaluation. SpringerBriefs in Materials, 2019, , 11-29.	0.3	1
30	Bi-metallic MOFs possessing hierarchical synergistic effects as high performance electrocatalysts for overall water splitting at high current densities. Applied Catalysis B: Environmental, 2019, 258, 118023.	20.2	114
31	Ultrathin PdFePb nanowires: One-pot aqueous synthesis and efficient electrocatalysis for polyhydric alcohol oxidation reaction. Journal of Colloid and Interface Science, 2019, 555, 276-283.	9.4	26
32	In Situ Transformation of Prussian Blue Analogue-Derived Bimetallic Carbide Nanocubes by Water Oxidation: Applications for Energy Storage and Conversion. Chemistry - A European Journal, 2020, 26, 4052-4062.	3.3	23
33	High loading accessible active sites via designable 3D-printed metal architecture towards promoting electrocatalytic performance. Journal of Materials Chemistry A, 2019, 7, 18338-18347.	10.3	35
34	Electroreduction of carbon dioxide to formate at high current densities using tin and tin oxide gas diffusion electrodes. Journal of Applied Electrochemistry, 2019, 49, 917-928.	2.9	45
35	Polymorph nickel titanate nanofibers as bifunctional electrocatalysts towards hydrogen and oxygen evolution reactions. Dalton Transactions, 2019, 48, 12684-12698.	3.3	9
36	Double-catalytic-site engineering of nickel-based electrocatalysts by group VB metals doping coupling with in-situ cathodic activation for hydrogen evolution. Applied Catalysis B: Environmental, 2019, 258, 117984.	20.2	29
37	Organic-Inorganic Cobalt-Phosphonate-Derived Hollow Cobalt Phosphate Spherical Hybrids for Highly Efficient Oxygen Evolution. ACS Sustainable Chemistry and Engineering, 2019, 7, 13559-13568.	6.7	58

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38	An Fe-doped NiTe bulk crystal as a robust catalyst for the electrochemical oxygen evolution reaction. Chemical Communications, 2019, 55, 9347-9350.	4.1	61
39	Detection of Lignin Motifs with RuO ₂ -DNA as an Active Catalyst via Surface-Enhanced Raman Scattering Studies. ACS Sustainable Chemistry and Engineering, 2019, 7, 18463-18475.	6.7	18
40	In Situ Modified Nitrogen-Enriched ZIF-67 Incorporated ZIF-7 Nanofiber: An Unusual Electrocatalyst for Water Oxidation. Inorganic Chemistry, 2019, 58, 13826-13835.	4.0	33
41	Cu ₂ -xSe@CuO core-shell assembly grew on copper foam for efficient oxygen evolution. International Journal of Hydrogen Energy, 2019, 44, 31979-31986.	7.1	17
42	Heterolayered Ni-Fe Hydroxide/Oxide Nanostructures Generated on a Stainless-Steel Substrate for Efficient Alkaline Water Splitting. ACS Applied Materials & Interfaces, 2019, 11, 44161-44169.	8.0	59
43	Fluorine-Anion-Modulated Electron Structure of Nickel Sulfide Nanosheet Arrays for Alkaline Hydrogen Evolution. ACS Energy Letters, 2019, 4, 2905-2912.	17.4	159
44	Highly Stable Nanocrystal Engineered Palladium Decorated Cuprous Oxide Photocathode for Hydrogen Generation. Advanced Materials Interfaces, 2019, 6, 1901099.	3.7	3
45	Cobalt nitride nanoflakes supported on Ni foam as a high-performance bifunctional catalyst for hydrogen production via urea electrolysis. Journal of Chemical Sciences, 2019, 131, 1.	1.5	8
46	Comparison of Water Sampling between Environmental DNA Metabarcoding and Conventional Microscopic Identification: A Case Study in Gwangyang Bay, South Korea. Applied Sciences (Switzerland), 2019, 9, 3272.	2.5	25
47	Electrochemically engineering defect-rich nickel-iron layered double hydroxides as a whole water splitting electrocatalyst. International Journal of Hydrogen Energy, 2019, 44, 23689-23698.	7.1	14
48	Self-supported CoFe LDH/Co _{0.85} Se nanosheet arrays as efficient electrocatalysts for the oxygen evolution reaction. Catalysis Science and Technology, 2019, 9, 5736-5744.	4.1	37
49	Precipitating Metal Nitrate Deposition of Amorphous Metal Oxyhydroxide Electrodes Containing Ni, Fe, and Co for Electrocatalytic Water Oxidation. ACS Catalysis, 2019, 9, 9650-9662.	11.2	43
50	Simple vapor-solid-reaction route for porous Cu ₂ O nanorods with good HER catalytic activity. Dalton Transactions, 2019, 48, 823-832.	3.3	21
51	Electrosynthesis of copper phosphide thin films for efficient water oxidation. Materials Letters, 2019, 241, 243-247.	2.6	33
52	Membrane free water electrolysis under 1.23 V with Ni ₃ Se ₄ /Ni anode in alkali and Pt cathode in acid. Applied Surface Science, 2019, 478, 784-792.	6.1	34
53	Electrochemically chopped WS ₂ quantum dots as an efficient and stable electrocatalyst for water reduction. Catalysis Science and Technology, 2019, 9, 223-231.	4.1	32
54	Superior Oxygen Evolution Reaction Performance of Co ₃ O ₄ /NiCo ₂ O ₄ /Ni Foam Composite with Hierarchical Structure. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	7
55	Hierarchical Iron-Doped Nickel Diselenide Hollow Spheres for Efficient Oxygen Evolution Electrocatalysis. ACS Applied Energy Materials, 2019, 2, 4737-4744.	5.1	33

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56	Scanning Electrochemical Cell Microscopy (SECCM) Chronopotentiometry: Development and Applications in Electroanalysis and Electrocatalysis. <i>Analytical Chemistry</i> , 2019, 91, 9229-9237.	6.5	55
57	Facile Fabrication of Highly Efficient Photoelectrocatalysts $M_{x/y}O_{x/y}@NH_2 \cdot MIL-125(Ti)$ for Enhanced Hydrogen Evolution Reaction. <i>ChemistrySelect</i> , 2019, 4, 6996-7002.	1.5	11
58	Coexisting Few-Layer Assemblies of NiO and MoO_3 Deposited on Vulcan Carbon as an Efficient and Durable Electrocatalyst for Water Oxidation. <i>ACS Applied Energy Materials</i> , 2019, 2, 4987-4998.	5.1	15
59	On the Synthesis of Morphology-Controlled Transition Metal Dichalcogenides via Chemical Vapor Deposition for Electrochemical Hydrogen Generation. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1900257.	2.4	18
60	Advanced Cu_3Sn and Selenized $Cu_3Sn@Cu$ Foam as Electrocatalysts for Water Oxidation under Alkaline and Near-Neutral Conditions. <i>Inorganic Chemistry</i> , 2019, 58, 9490-9499.	4.0	29
61	Noble-Metal-Free Colloidal Copper Based Low Overpotential Water Oxidation Electrocatalyst. <i>ChemCatChem</i> , 2019, 11, 6022-6030.	3.7	22
62	Spinel Cobalt Titanium Binary Oxide as an All-Non-Precious Water Oxidation Electrocatalyst in Acid. <i>Inorganic Chemistry</i> , 2019, 58, 8570-8576.	4.0	55
63	Vanadium doping over Ni_3S_2 nanosheet array for improved overall water splitting. <i>Applied Surface Science</i> , 2019, 489, 815-823.	6.1	50
64	3D CVD graphene oxide-coated Ni foam as carbo- and electro-catalyst towards hydrogen evolution reaction in acidic solution: In situ electrochemical gas chromatography. <i>Carbon</i> , 2019, 151, 109-119.	10.3	28
65	Effect of Ion Diffusion in Cobalt Molybdenum Bimetallic Sulfide toward Electrocatalytic Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 21634-21644.	8.0	47
66	One-Pot Synthesis of Heterobimetallic Metal-Organic Frameworks (MOFs) for Multifunctional Catalysis. <i>Chemistry - A European Journal</i> , 2019, 25, 10490-10498.	3.3	99
67	Earth-abundant transition metal and metal oxide nanomaterials: Synthesis and electrochemical applications. <i>Progress in Materials Science</i> , 2019, 106, 100574.	32.8	184
68	MnO_2 nanowires anchored on mesoporous graphitic carbon nitride ($MnO_2@mpg-C_3N_4$) as a highly efficient electrocatalyst for the oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 17995-18006.	7.1	73
69	The oxygen evolution reaction enabled by transition metal phosphide and chalcogenide pre-catalysts with dynamic changes. <i>Chemical Communications</i> , 2019, 55, 8744-8763.	4.1	246
70	Layer-by-Layer Coating of Cobalt-Based Ink for Large-Scale Fabrication of OER Electrocatalyst. <i>Energy Technology</i> , 2019, 7, 1900603.	3.8	6
71	$Co_{0.85}Se$ on three-dimensional hierarchical porous graphene-like carbon for highly effective oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 10182-10189.	7.1	19
72	A facile and controllable, deep eutectic solvent aided strategy for the synthesis of graphene encapsulated metal phosphides for enhanced electrocatalytic overall water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13455-13459.	10.3	34
73	Evaluating DNA Derived and Hydrothermally Aided Cobalt Selenide Catalysts for Electrocatalytic Water Oxidation. <i>Inorganic Chemistry</i> , 2019, 58, 6877-6884.	4.0	21

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74	Bifunctional 2D Electrocatalysts of Transition Metal Hydroxide Nanosheet Arrays for Water Splitting and Urea Electrolysis. ACS Sustainable Chemistry and Engineering, 2019, 7, 10035-10043.	6.7	184
75	Do the Evaluation Parameters Reflect Intrinsic Activity of Electrocatalysts in Electrochemical Water Splitting?. ACS Energy Letters, 2019, 4, 1260-1264.	17.4	309
76	Recent advances in transition metal-based electrocatalysts for alkaline hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 14971-15005.	10.3	501
77	NiFe/(Ni,Fe) ₃ S ₂ Core/Shell Nanowire Arrays as Outstanding Catalysts for Electrolytic Water Splitting at High Current Densities. Small Methods, 2019, 3, 1900234.	8.6	28
78	Single atom tungsten doped ultrathin γ -Ni(OH) ₂ for enhanced electrocatalytic water oxidation. Nature Communications, 2019, 10, 2149.	12.8	363
79	Fe ₃ C@Co Nanoparticles Encapsulated in a Hierarchical Structure of N-Doped Carbon as a Multifunctional Electrocatalyst for ORR, OER, and HER. Advanced Functional Materials, 2019, 29, 1901949.	14.9	297
80	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
81	Recent Progress in Bifunctional Electrocatalysts for Overall Water Splitting under Acidic Conditions. ChemElectroChem, 2019, 6, 3244-3253.	3.4	79
82	In Situ Mn-Doping-Promoted Conversion of Co(OH) ₂ to Co ₃ O ₄ as an Active Electrocatalyst for Oxygen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 9690-9698.	6.7	36
83	Co ₃ O ₄ @Cu-Based Conductive Metal-Organic Framework Core-Shell Nanowire Electrocatalysts Enable Efficient Low-Overall-Potential Water Splitting. Chemistry - A European Journal, 2019, 25, 6575-6583.	3.3	64
84	Phosphorus-Rich Metal Phosphides: Direct and Tin Flux-Assisted Synthesis and Evaluation as Hydrogen Evolution Electrocatalysts. Inorganic Chemistry, 2019, 58, 5013-5024.	4.0	38
85	A Powder Metallurgy Route to Produce Raney-Nickel Electrodes for Alkaline Water Electrolysis. Journal of the Electrochemical Society, 2019, 166, F357-F363.	2.9	20
86	3D Metallic Ti@Ni _{0.85} Se with Triple Hierarchy as High-Efficiency Electrocatalyst for Overall Water Splitting. ChemSusChem, 2019, 12, 2271-2277.	6.8	22
87	Mesoporous Ultrathin Cobalt Oxides Nanosheets Grown on Carbon Cloth as a High-Performance Electrode for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 1977-1987.	5.1	18
88	Electrospun cobalt-ZIF micro-fibers for efficient water oxidation under unique pH conditions. Catalysis Science and Technology, 2019, 9, 1847-1856.	4.1	43
89	Hierarchical Edge-Rich Nickel Phosphide Nanosheet Arrays as Efficient Electrocatalysts toward Hydrogen Evolution in Both Alkaline and Acidic Conditions. ACS Sustainable Chemistry and Engineering, 2019, 7, 7804-7811.	6.7	48
90	In-situ growth of nitrogen-doped mesoporous carbon nanostructure supported nickel metal nanoparticles for oxygen evolution reaction in an alkaline electrolyte. Electrochimica Acta, 2019, 306, 617-626.	5.2	7
91	Amorphous nickel sulfide nanosheets with embedded vanadium oxide nanocrystals on nickel foam for efficient electrochemical water oxidation. Journal of Materials Chemistry A, 2019, 7, 10534-10542.	10.3	65

#	ARTICLE	IF	CITATIONS
92	Provoking electrocatalytic activity with bio-molecules at inactive gas diffusion layers. <i>Materials Today Energy</i> , 2019, 12, 318-326.	4.7	5
93	Nanoscale palladium as a new benchmark electrocatalyst for water oxidation at low overpotential. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9137-9144.	10.3	65
94	Ruthenium Nanoparticles for Catalytic Water Splitting. <i>ChemSusChem</i> , 2019, 12, 2493-2514.	6.8	93
95	Hydrogen production by PEM water electrolysis – A review. <i>Materials Science for Energy Technologies</i> , 2019, 2, 442-454.	1.8	708
96	Controlled synthesis of bifunctional particle-like Mo/Mn-Ni _x S _y /NF electrocatalyst for highly efficient overall water splitting. <i>Dalton Transactions</i> , 2019, 48, 6718-6729.	3.3	46
97	Electrochemically Driven Coordination Tuning of FeOOH Integrated on Carbon Fiber Paper for Enhanced Oxygen Evolution. <i>Small</i> , 2019, 15, e1901015.	10.0	46
98	Bottom-up MOF-intermediated synthesis of 3D hierarchical flower-like cobalt-based homobimetallic phosphide composed of ultrathin nanosheets for highly efficient oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2019, 249, 147-154.	20.2	111
99	Intermetallic compounds with high hydrogen evolution reaction performance: a case study of a MCo ₂ (M = Ti, Zr, Hf and Sc) series. <i>Chemical Communications</i> , 2019, 55, 14406-14409.	4.1	23
100	Engineering FeNi alloy nanoparticles via synergistic ultralow Pt doping and nanocarbon encapsulation for efficient hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24347-24355.	10.3	39
101	Cobalt tungsten oxide hydroxide hydrate (CTOHH) on DNA scaffold: an excellent bi-functional catalyst for oxygen evolution reaction (OER) and aromatic alcohol oxidation. <i>Dalton Transactions</i> , 2019, 48, 17117-17131.	3.3	25
102	Surface-assembled non-noble metal nanoscale Ni-colloidal thin-films as efficient electrocatalysts for water oxidation. <i>RSC Advances</i> , 2019, 9, 37274-37286.	3.6	16
103	Cobalt Nitride Supported on Nickel Foam as Bifunctional Catalyst Electrodes for Urea Electrolysis-Assisted Hydrogen Generation. <i>Nano</i> , 2019, 14, 1950152.	1.0	3
104	Anchoring NiTe domains with unusual composition on Pb _{0.95} Ni _{0.05} Te nanorod as superior lithium-ion battery anodes and oxygen evolution catalysts. <i>Materials Today Energy</i> , 2019, 11, 199-210.	4.7	14
105	Electrodeposited Copper–Cobalt–Phosphide: A Stable Bifunctional Catalyst for Both Hydrogen and Oxygen Evolution Reactions. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 3092-3100.	6.7	62
106	Colloidal synthesis of high-performance FeSe/CoSe nanocomposites for electrochemical oxygen evolution reaction. <i>Electrochimica Acta</i> , 2019, 297, 197-205.	5.2	39
107	Co ₉ S ₈ –Ni ₃ S ₂ heterointerfaced nanotubes on Ni foam as highly efficient and flexible bifunctional electrodes for water splitting. <i>Electrochimica Acta</i> , 2019, 299, 152-162.	5.2	82
108	Dispersive Single-Atom Metals Anchored on Functionalized Nanocarbons for Electrochemical Reactions. <i>Topics in Current Chemistry</i> , 2019, 377, 4.	5.8	29
109	(003)-Facet-exposed Ni ₃ S ₂ nanoporous thin films on nickel foil for efficient water splitting. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 693-702.	20.2	129

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110	Ta ₃ N ₅ /Co(OH) _x composites as photocatalysts for photoelectrochemical water splitting. Photochemical and Photobiological Sciences, 2019, 18, 837-844.	2.9	14
111	Surface reconstruction of cobalt phosphide nanosheets by electrochemical activation for enhanced hydrogen evolution in alkaline solution. Chemical Science, 2019, 10, 2019-2024.	7.4	163
112	Ultrasmall Ni/NiO Nanoclusters on Thiol-Functionalized and -Exfoliated Graphene Oxide Nanosheets for Durable Oxygen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 363-371.	5.1	74
113	Single cobalt atom anchored on N-doped graphyne for boosting the overall water splitting. Applied Surface Science, 2020, 502, 144155.	6.1	50
114	Multifunctional Transition Metal-Based Phosphides in Energy-Related Electrocatalysis. Advanced Energy Materials, 2020, 10, 1902104.	19.5	322
115	A Facile Synthesis of FeCo Nanoparticles Encapsulated in Hierarchical N-Doped Carbon Nanotube/Nanofiber Hybrids for Overall Water Splitting. ChemCatChem, 2020, 12, 932-943.	3.7	39
116	Morphology engineering of 3D nanostructure MMNS as bifunctional electrocatalysts towards high-efficient overall water splitting. Applied Surface Science, 2020, 502, 144147.	6.1	14
117	Efficient electrocatalytic proton reduction on CoP nanocrystals embedded in microporous P, N Co-doped carbon spheres with dual active sites. Carbon, 2020, 156, 529-537.	10.3	22
118	One pot solvothermal synthesis of Co ₃ O ₄ @UiO-66 and CuO@UiO-66 for improved current density towards hydrogen evolution reaction. Materials Chemistry and Physics, 2020, 239, 122320.	4.0	20
119	Stannites – A New Promising Class of Durable Electrocatalysts for Efficient Water Oxidation. ChemCatChem, 2020, 12, 1161-1168.	3.7	18
120	Metal Boride-Based Catalysts for Electrochemical Water-Splitting: A Review. Advanced Functional Materials, 2020, 30, 1906481.	14.9	268
121	Interface engineering in transition metal carbides for electrocatalytic hydrogen generation and nitrogen fixation. Materials Horizons, 2020, 7, 32-53.	12.2	61
122	Assembling amorphous (Fe-Ni)Co -OH/Ni ₃ S ₂ nanohybrids with S-vacancy and interfacial effects as an ultra-highly efficient electrocatalyst: Inner investigation of mechanism for alkaline water-to-hydrogen/oxygen conversion. Applied Catalysis B: Environmental, 2020, 263, 118338.	20.2	73
123	Three-dimensional mesoporous Ir-Ru binary oxides with improved activity and stability for water electrolysis. Catalysis Today, 2020, 352, 39-46.	4.4	30
124	Electrodeposition of self-supported Ni-Mo-P film on Ni foam as an affordable and high-performance electrocatalyst toward hydrogen evolution reaction. Electrochimica Acta, 2020, 335, 135643.	5.2	88
125	A highly efficient electrocatalyst based on double perovskite cobaltites with immense intrinsic catalytic activity for water oxidation. Chemical Communications, 2020, 56, 1030-1033.	4.1	10
126	Fabrication of practical catalytic electrodes using insulating and eco-friendly substrates for overall water splitting. Energy and Environmental Science, 2020, 13, 102-110.	30.8	98
127	Mixed Metal Phosphide Chainmail Catalysts Confined in N-Doped Porous Carbon Nanoboxes as Highly Efficient Water-Oxidation Electrocatalysts with Ultralow Overpotentials and Tafel Slopes. ACS Applied Materials & Interfaces, 2020, 12, 7153-7161.	8.0	47

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128	Karst landform-featured monolithic electrode for water electrolysis in neutral media. <i>Energy and Environmental Science</i> , 2020, 13, 174-182.	30.8	109
129	Multifunctional solution blow spun NiFe@NiFe ₂ O ₄ composite nanofibers: Structure, magnetic properties and OER activity. <i>Journal of Physics and Chemistry of Solids</i> , 2020, 139, 109325.	4.0	34
130	Ultrahigh electrocatalytic activity and durability of bimetallic Au@Ni core-shell nanoparticles supported on rGO for methanol oxidation reaction in alkaline electrolyte. <i>Journal of Alloys and Compounds</i> , 2020, 822, 153322.	5.5	18
131	Developments and Perspectives in 3d Transition Metal-Based Electrocatalysts for Neutral and Near-Neutral Water Electrolysis. <i>Advanced Energy Materials</i> , 2020, 10, 1902666.	19.5	226
132	Vertical Nickel-Iron layered double hydroxide nanosheets grown on hills-like nickel framework for efficient water oxidation and splitting. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 3986-3994.	7.1	13
133	Straightforward fabrication of robust Fe-doped Ni ₃ Se ₂ supported nickel foam as a highly efficient electrocatalyst for the oxygen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2020, 4, 1150-1156.	4.9	25
134	Stacked Co ₆ W ₆ C nanocrystals anchored on N-doping carbon nanofibers with excellent electrocatalytic performance for HER in wide-range pH. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 1901-1910.	7.1	14
135	Electrochemical Impedance Spectroscopy of Metal Oxide Electrodes for Energy Applications. <i>ACS Applied Energy Materials</i> , 2020, 3, 66-98.	5.1	540
136	Bifunctional CdS@Co ₉ S ₈ /Ni ₃ S ₂ catalyst for efficient electrocatalytic and photo-assisted electrocatalytic overall water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3083-3096.	10.3	78
137	Fabrication of Hollow CoP/TiO _x Heterostructures for Enhanced Oxygen Evolution Reaction. <i>Small</i> , 2020, 16, e1905075.	10.0	117
138	Hierarchical micro-reactor as electrodes for water splitting by metal rod tipped carbon nanocapsule self-assembly in carbonized wood. <i>Applied Catalysis B: Environmental</i> , 2020, 264, 118536.	20.2	25
139	Selectively Etching Vanadium Oxide to Modulate Surface Vacancies of Unary Metal-Based Electrocatalysts for High-Performance Water Oxidation. <i>Advanced Energy Materials</i> , 2020, 10, 1903571.	19.5	64
140	Self-standing Substrates. <i>Engineering Materials</i> , 2020, , .	0.6	2
141	V ³⁺ Incorporated Fe^{2+} -Co(OH) ₂ : A Robust and Efficient Electrocatalyst for Water Oxidation. <i>Inorganic Chemistry</i> , 2020, 59, 730-740.	4.0	20
142	Amorphous Catalysts and Electrochemical Water Splitting: An Untold Story of Harmony. <i>Small</i> , 2020, 16, e1905779.	10.0	424
143	N-doped carbon armored metal phosphides grown in-situ on nickel foam as chainmail catalysts toward high efficiency electrolytic water splitting. <i>Journal of Colloid and Interface Science</i> , 2020, 562, 42-51.	9.4	32
144	Hierarchical growth of vertically standing Fe ₃ O ₄ -FeSe/CoSe ₂ nano-array for high effective oxygen evolution reaction. <i>Materials Research Bulletin</i> , 2020, 122, 110680.	5.2	17
145	Electrocatalytic water oxidation reaction promoted by cobalt-Prussian blue and its thermal decomposition product under mild conditions. <i>Dalton Transactions</i> , 2020, 49, 16488-16497.	3.3	13

#	ARTICLE	IF	CITATIONS
146	Boosting the oxygen evolution activity of copper foam containing trace Ni by intentionally supplementing Fe and forming nanowires in anodization. <i>Electrochimica Acta</i> , 2020, 364, 137170.	5.2	16
147	Robust non-Pt noble metal-based nanomaterials for electrocatalytic hydrogen generation. <i>Applied Physics Reviews</i> , 2020, 7, .	11.3	28
148	One step preparation of Fe doped CoSe ₂ supported on nickel foam by facile electrodeposition method as a highly efficient oxygen evolution reaction electrocatalyst. <i>Journal of Electroanalytical Chemistry</i> , 2020, 878, 114595.	3.8	21
149	A Simple Route for the Synthesis of Cobalt Phosphate Nanoparticles for Electrocatalytic Water Oxidation in Alkaline Medium. <i>Energy & Fuels</i> , 2020, 34, 12891-12899.	5.1	23
150	In Situ Growth of Tetrametallic FeCoMnNi-MOF-74 on Nickel Foam as Efficient Bifunctional Electrocatalysts for the Evolution Reaction of Oxygen and Hydrogen. <i>Inorganic Chemistry</i> , 2020, 59, 15467-15477.	4.0	41
151	Coordination polymers as heterogeneous catalysts in hydrogen evolution and oxygen evolution reactions. <i>Chemical Communications</i> , 2020, 56, 10824-10842.	4.1	61
152	Porous Fe-Doped $\text{Ni}(\text{OH})_2$ Nanopyramid Array Electrodes for Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 36208-36219.	8.0	56
153	Tuning Cu Overvoltage for a Copper–Telluride System in Electrocatalytic Water Reduction and Feasible Feedstock Conversion: A New Approach. <i>Inorganic Chemistry</i> , 2020, 59, 11129-11141.	4.0	20
154	Recent advances in metal–organic frameworks for electrocatalytic hydrogen evolution and overall water splitting reactions. <i>Dalton Transactions</i> , 2020, 49, 12483-12502.	3.3	50
155	TaS ₂ , TaSe ₂ , and Their Heterogeneous Films as Catalysts for the Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2020, 10, 3313-3325.	11.2	60
156	Systematic study of the influence of iR compensation on water electrolysis. <i>Materials Today Physics</i> , 2020, 14, 100253.	6.0	56
157	Hydrogen evolution on non-metal oxide catalysts. <i>JPhys Energy</i> , 2020, 2, 042002.	5.3	16
158	Nanocomposites formed by combination of urchin like NiS with Ni-nanoparticles/N-doped nanoporous carbon, derived from nickel organic framework, and decorated with RuO ₂ nanoparticles: Construction and kinetics for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2020, 355, 136710.	5.2	2
159	Trifunctional Single-Atomic Ru Sites Enable Efficient Overall Water Splitting and Oxygen Reduction in Acidic Media. <i>Small</i> , 2020, 16, e2002888.	10.0	120
160	Microwave-Induced Structural Engineering and Pt Trapping in TaS_2 for the Hydrogen Evolution Reaction. <i>Small</i> , 2020, 16, e2003372.	10.0	18
161	Se Doping Regulates the Activity of NiTe ₂ for Electrocatalytic Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2020, 124, 26793-26800.	3.1	12
162	Two-dimensional bimetallic CoFe selenite <i>via</i> metal-ion assisted self-assembly for enhanced oxygen evolution reaction. <i>New Journal of Chemistry</i> , 2020, 44, 20148-20154.	2.8	7
163	Nickel-Rich Phosphide (Ni ₁₂ P ₅) Nanosheets Coupled with Oxidized Multiwalled Carbon Nanotubes for Oxygen Evolution. <i>ACS Applied Nano Materials</i> , 2020, 3, 10914-10921.	5.0	23

#	ARTICLE	IF	CITATIONS
164	Pulse electrodeposited, morphology controlled organic–inorganic nanohybrids as bifunctional electrocatalysts for urea oxidation. <i>Nanoscale</i> , 2020, 12, 23596-23606.	5.6	16
165	Identifying the Geometric Site Dependence of Spinel Oxides for the Electrooxidation of 5-Hydroxymethylfurfural. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19215-19221.	13.8	211
166	Composition-balanced trimetallic MOFs as ultra-efficient electrocatalysts for oxygen evolution reaction at high current densities. <i>Applied Catalysis B: Environmental</i> , 2020, 279, 119375.	20.2	102
167	Lanthanum doped copper oxide nanoparticles enabled proficient bi-functional electrocatalyst for overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 24684-24696.	7.1	36
168	2D DUT-8(Ni)-derived Ni@C nanosheets for efficient hydrogen evolution. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 2461-2467.	2.5	8
169	Porphyrin coordination polymer/Co ^{1-x} S composite electrocatalyst for efficient oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2020, 400, 125975.	12.7	48
170	Identifying the Geometric Site Dependence of Spinel Oxides for the Electrooxidation of 5-Hydroxymethylfurfural. <i>Angewandte Chemie</i> , 2020, 132, 19377-19383.	2.0	41
171	Facile synthesis of porous iridium-palladium-plumbum wire-like nanonetworks with boosted catalytic performance for hydrogen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2020, 580, 99-107.	9.4	12
172	Developing efficient catalysts for the OER and ORR using a combination of Co, Ni, and Pt oxides along with graphene nanoribbons and NiCo ₂ O ₄ . <i>Journal of Materials Chemistry A</i> , 2020, 8, 17691-17705.	10.3	95
173	Boosting hydrogen and oxygen evolution reactions on electrodeposited nickel electrodes <i>via</i> simultaneous mesoporosity, magnetohydrodynamics and high gradient magnetic force. <i>Journal of Materials Chemistry A</i> , 2020, 8, 24782-24799.	10.3	9
174	Non-precious-metal catalysts for alkaline water electrolysis: <i>operando</i> characterizations, theoretical calculations, and recent advances. <i>Chemical Society Reviews</i> , 2020, 49, 9154-9196.	38.1	448
175	Cubic Nanostructures of Nickel–Cobalt Carbonate Hydroxide Hydrate as a High-Performance Oxygen Evolution Reaction Electrocatalyst in Alkaline and Near-Neutral Media. <i>Inorganic Chemistry</i> , 2020, 59, 16690-16702.	4.0	24
176	Controllable Conversion from Single-Crystal Nanorods to Polycrystalline Nanosheets of NiCoV-LTH for Oxygen Evolution Reaction at Large Current Density. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 16091-16096.	6.7	25
177	Hf ₂ B ₂ Ir ₅ : A Self-Optimizing Catalyst for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2020, 3, 11042-11052.	5.1	13
178	Correlating the Local Electrocatalytic Activity of Amorphous Molybdenum Sulfide Thin Films with Microscopic Composition, Structure, and Porosity. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 44307-44316.	8.0	27
179	Enhanced Electrochemical Properties and OER Performances by Cu Substitution in NiCo ₂ O ₄ Spinel Structure. <i>Nanomaterials</i> , 2020, 10, 1727.	4.1	37
180	Alkali-Etched Ni(II)-Based Metal–Organic Framework Nanosheet Arrays for Electrocatalytic Overall Water Splitting. <i>Small</i> , 2020, 16, e1906564.	10.0	84
181	In Situ Transformed Cobalt Metal–Organic Framework Electrocatalysts for the Electrochemical Oxygen Evolution Reaction. <i>Inorganic Chemistry</i> , 2020, 59, 12252-12262.	4.0	37

#	ARTICLE	IF	CITATIONS
182	Metalâ€Molybdenum Sulfide Nanosheet Arrays Prepared by Anion Exchange as Catalysts for Hydrogen Evolution. Energy Technology, 2020, 8, 2000595.	3.8	2
183	Metal oxide-based materials as an emerging family of hydrogen evolution electrocatalysts. Energy and Environmental Science, 2020, 13, 3361-3392.	30.8	370
184	Regulating the electronic structure of CoMoO ₄ microrod by phosphorus doping: an efficient electrocatalyst for the hydrogen evolution reaction. Dalton Transactions, 2020, 49, 13152-13159.	3.3	17
185	Enhancing the oxygen evolution activity of nitrogen-doped graphitic carbon shell-embedded nickel/nickel oxide nanoparticles by surface dissolution. Materials Chemistry Frontiers, 2020, 4, 3267-3279.	5.9	20
186	Construction of hierarchical NiFe-LDH/FeCoS ₂ /CFC composites as efficient bifunctional electrocatalysts for hydrogen and oxygen evolution reaction. Journal of Materials Science, 2020, 55, 16625-16640.	3.7	32
187	Bifunctional catalytic activity of Niâ€Co layered double hydroxide for the electro-oxidation of water and methanol. Sustainable Energy and Fuels, 2020, 4, 5254-5263.	4.9	48
188	Sequential Electrodeposition of Bifunctionally Active Structures in MoO ₃ /Niâ€NiO Composite Electrocatalysts for Selective Hydrogen and Oxygen Evolution. Advanced Materials, 2020, 32, e2003414.	21.0	206
189	Boosted Oxygen Evolution Reactivity via Atomic Iron Doping in Cobalt Carbonate Hydroxide Hydrate. ACS Applied Materials & Interfaces, 2020, 12, 40220-40228.	8.0	42
190	Tailoring the electronic structure by constructing the heterointerface of RuO ₂ â€NiO for overall water splitting with ultralow overpotential and extra-long lifetime. Journal of Materials Chemistry A, 2020, 8, 18945-18954.	10.3	29
191	FeNi-Layered Double-Hydroxide Nanoflakes with Potential for Intrinsically High Water-Oxidation Catalytic Activity. ACS Applied Energy Materials, 2020, 3, 9040-9050.	5.1	16
192	Surface <i>in situ</i> self-reconstructing hierarchical structures derived from ferrous carbonate as efficient bifunctional iron-based catalysts for oxygen and hydrogen evolution reactions. Journal of Materials Chemistry A, 2020, 8, 18367-18375.	10.3	23
193	Synergistically Coupling Phosphorus-Doped Molybdenum Carbide with MXene as a Highly Efficient and Stable Electrocatalyst for Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2020, 8, 12990-12998.	6.7	42
194	Ni alloy nanowires as high efficiency electrode materials for alkaline electrolyzers. International Journal of Hydrogen Energy, 2021, 46, 35777-35789.	7.1	17
195	Chemical Leaching of Inactive Cr and Subsequent Electrochemical Resurfacing of Catalytically Active Sites in Stainless Steel for High-Rate Alkaline Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 12596-12606.	5.1	21
196	MoS ₂ /CoAl-LDH heterostructure for enhanced efficient of oxygen evolution reaction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 607, 125419.	4.7	13
197	CO ₂ -free energy circulation systemâ€Polymer electrolyte alcohol electro-synthesis cell with a low iridium content anode based on in situ growth method. Electrochimica Acta, 2020, 361, 137078.	5.2	1
198	Bismuth iron molybdenum oxide solid solution: a novel and durable electrocatalyst for overall water splitting. Chemical Communications, 2020, 56, 7293-7296.	4.1	15
199	Corrosion and Alloy Engineering in Rational Design of High Current Density Electrodes for Efficient Water Splitting. Advanced Energy Materials, 2020, 10, 1904020.	19.5	109

#	ARTICLE	IF	CITATIONS
200	Appropriate Use of Electrochemical Impedance Spectroscopy in Water Splitting Electrocatalysis. ChemElectroChem, 2020, 7, 2297-2308.	3.4	154
201	Electrodeposited Organic-Inorganic Nanohybrid as Robust Bifunctional Electrocatalyst for Water Splitting. Inorganic Chemistry, 2020, 59, 7469-7478.	4.0	15
202	Metal-organic polydopamine framework-derived (Co)/N-doped carbon hollow nanocubes as efficient oxygen electrocatalysts. Sustainable Energy and Fuels, 2020, 4, 3370-3377.	4.9	13
203	Enhanced photoelectrochemical hydrogen evolution by 2D nanoleaf structured CuO. Journal of Applied Physics, 2020, 127, 194902.	2.5	8
204	Ultrathin 2D nanosheet based 3D hierarchical hollow polyhedral CoM/C (M=Ni, Cu, Mn) phosphide nanocages as superior electrocatalysts toward oxygen evolution reaction. Chemical Engineering Journal, 2020, 398, 125467.	12.7	27
205	Graphene-nanoplatelets-supported NiFe-MOF: high-efficiency and ultra-stable oxygen electrodes for sustained alkaline anion exchange membrane water electrolysis. Energy and Environmental Science, 2020, 13, 3447-3458.	30.8	197
206	Strong electronic coupled FeNi ₃ /Fe ₂ (MoO ₄) ₃ nanohybrids for enhancing the electrocatalytic activity for the oxygen evolution reaction. Inorganic Chemistry Frontiers, 2020, 7, 2791-2798.	6.0	5
207	Ferroelectric-field accelerated charge transfer in 2D CuInP2S6 heterostructure for enhanced photocatalytic H ₂ evolution. Nano Energy, 2020, 76, 104972.	16.0	84
208	High performance multicomponent bifunctional catalysts for overall water splitting. Journal of Materials Chemistry A, 2020, 8, 13795-13805.	10.3	51
209	Water Splitting: From Electrode to Green Energy System. Nano-Micro Letters, 2020, 12, 131.	27.0	288
210	Electroactive P-Ani/core-shell/TiO ₂ /TiO ₂ -WO ₃ employed surface engineering of Ni-P electrodes for alkaline hydrogen evolution reaction. Journal of Industrial and Engineering Chemistry, 2020, 87, 198-212.	5.8	9
211	Novel Materials for Sustainable Energy Conversion and Storage. Materials, 2020, 13, 2475.	2.9	1
212	High performance, 3D-hierarchical CoS ₂ /CoSe@C nanohybrid as an efficient electrocatalyst for hydrogen evolution reaction. Journal of Alloys and Compounds, 2020, 838, 155537.	5.5	30
213	CoP ₂ Nanoparticles Deposited on Nanometer-Thick Pt-Coated Fluorine-Doped Tin Oxide Substrates as Electrocatalysts for Simultaneous Hydrogen Evolution and Oxygen Evolution. ACS Applied Nano Materials, 2020, 3, 6507-6515.	5.0	12
214	Stable overall water splitting in an asymmetric acid/alkaline electrolyzer comprising a bipolar membrane sandwiched by bifunctional cobalt-nickel phosphide nanowire electrodes. , 2020, 2, 646-655.		79
215	Understanding the Co-Mo Compositional Modulation and Fe-Interplay in Multicomponent Sulfide Electrocatalysts for Oxygen and Hydrogen Evolution Reactions. ChemElectroChem, 2020, 7, 2740-2751.	3.4	10
216	Facile Route to Achieve Co@Mo ₂ C Encapsulated by N-Doped Carbon as Efficient Electrocatalyst for Overall Water Splitting in Alkaline Media. Journal of the Electrochemical Society, 2020, 167, 044520.	2.9	10
217	A dinuclear iron complex as an efficient electrocatalyst for homogeneous water oxidation reaction. Catalysis Science and Technology, 2020, 10, 2830-2837.	4.1	18

#	ARTICLE	IF	CITATIONS
218	Polymeric Nanofibers Containing CoNi-Based Zeolitic Imidazolate Framework Nanoparticles for Electrocatalytic Water Oxidation. ACS Applied Nano Materials, 2020, 3, 4274-4282.	5.0	35
219	One-dimensional hierarchical nanostructures of NiCo ₂ O ₄ , NiCo ₂ S ₄ and NiCo ₂ Se ₄ with superior electrocatalytic activities toward efficient oxygen evolution reaction. Nanotechnology, 2020, 31, 295405.	2.6	22
220	Controlled engineering of nickel carbide induced N-enriched carbon nanotubes for hydrogen and oxygen evolution reactions in wide pH range. Electrochimica Acta, 2020, 341, 136032.	5.2	45
221	Heterostructured CoSe ₂ /FeSe ₂ Nanoparticles with Abundant Vacancies and Strong Electronic Coupling Supported on Carbon Nanorods for Oxygen Evolution Electrocatalysis. ACS Sustainable Chemistry and Engineering, 2020, 8, 4658-4666.	6.7	56
222	Employing DNA scaffold with rhenium electrocatalyst for enhanced HER activities. Applied Surface Science, 2020, 528, 147049.	6.1	11
223	Innovative multifunctional hybrid photoelectrode design based on a ternary heterojunction with super-enhanced efficiency for artificial photosynthesis. Scientific Reports, 2020, 10, 10669.	3.3	4
224	Iron-doped cobalt phosphate 1D amorphous ultrathin nanowires as a highly efficient electrocatalyst for water oxidation. Sustainable Energy and Fuels, 2020, 4, 4704-4712.	4.9	16
225	A new concept analogous to homogeneous catalysis to construct in-situ regenerative electrodes for long-term oxygen evolution reaction. Nano Energy, 2020, 76, 105115.	16.0	14
226	Phosphorus-Doped Iron Nitride Nanoparticles Encapsulated by Nitrogen-Doped Carbon Nanosheets on Iron Foam In Situ Derived from <i>Saccharomyces Cerevisiae</i> for Electrocatalytic Overall Water Splitting. Small, 2020, 16, e2001980.	10.0	34
227	Highly efficient overall water splitting over a porous interconnected network by nickel cobalt oxysulfide interfacial assembled Cu@Cu ₂ S nanowires. Journal of Materials Chemistry A, 2020, 8, 14746-14756.	10.3	34
228	Developments in DNA metallization strategies for water splitting electrocatalysis: A review. Advances in Colloid and Interface Science, 2020, 282, 102205.	14.7	23
229	Addressing the OER/HER imbalance by a redox transition-induced two-way electron injection in a bifunctional "n" electrode for excellent water splitting. Journal of Materials Chemistry A, 2020, 8, 13218-13230.	10.3	17
230	Enhancing Hydrogen Evolution Reaction Activities of 2H-Phase VS ₂ Layers with Palladium Nanoparticles. Inorganic Chemistry, 2020, 59, 10197-10207.	4.0	24
231	Defect-rich engineering and F dopant Co-modulated NiO hollow dendritic skeleton as a self-supported electrode for high-current density hydrogen evolution reaction. Chemical Engineering Journal, 2020, 401, 126037.	12.7	43
232	Gold-Supported Gadolinium Doped CoB Amorphous Sheet: A New Benchmark Electrocatalyst for Water Oxidation with High Turnover Frequency. Advanced Functional Materials, 2020, 30, 1910309.	14.9	59
233	Peat-derived carbon-based non-platinum group metal type catalyst for oxygen reduction and evolution reactions. Electrochemistry Communications, 2020, 113, 106700.	4.7	12
234	Sugarcane vinasse-derived nanoporous N-S-doped carbon material decorated with Co: A new and efficient multifunctional electrocatalyst. International Journal of Hydrogen Energy, 2020, 45, 9669-9682.	7.1	20
235	In situ growth of 3D walnut-like nano-architecture Mo-Ni ₂ P@NiFe LDH/NF arrays for synergistically enhanced overall water splitting. Journal of Energy Chemistry, 2020, 49, 189-197.	12.9	65

#	ARTICLE	IF	CITATIONS
236	Metal-Rich Chalcogenides for Electrocatalytic Hydrogen Evolution: Activity of Electrodes and Bulk Materials. <i>ChemElectroChem</i> , 2020, 7, 1514-1527.	3.4	55
237	A Low-Temperature Molecular Precursor Approach to Copper-Based Nano-Sized <i>Digenite</i> Mineral for Efficient Electrocatalytic Oxygen Evolution Reaction. <i>Chemistry - an Asian Journal</i> , 2020, 15, 852-859.	3.3	32
238	Electrospun Carbon Nanofibers with Embedded Co-Ceria Nanoparticles for Efficient Hydrogen Evolution and Overall Water Splitting. <i>Materials</i> , 2020, 13, 856.	2.9	20
239	Top-Open Hollow Nanocubes of Ni-Doped Cu Oxides on Ni Foam: Scalable Oxygen Evolution Electrode via Galvanic Displacement and Face-Selective Etching. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 11600-11606.	8.0	15
240	Mesoporous Nanostructured Composite Derived from Thermal Treatment CoFe Prussian Blue Analogue Cages and Electrodeposited NiCo-S as an Efficient Electrocatalyst for an Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 16250-16263.	8.0	53
241	Annexation of Nickel Vanadate ($\text{Ni}_3\text{V}_2\text{O}_8$) Nanocubes on Nanofibers: An Excellent Electrocatalyst for Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4572-4579.	6.7	30
242	Ni ₂ P/rGO/NF Nanosheets As a Bifunctional High-Performance Electrocatalyst for Water Splitting. <i>Materials</i> , 2020, 13, 744.	2.9	11
243	Probing into the effect of heterojunctions between Cu/Mo ₂ C/Mo ₂ N on HER performance. <i>Catalysis Science and Technology</i> , 2020, 10, 2213-2220.	4.1	17
244	MOF Derived Co_3O_4 @Co/NCNT Nanocomposite for Electrochemical Hydrogen Evolution, Flexible Zinc-Air Batteries, and Overall Water Splitting. <i>Inorganic Chemistry</i> , 2020, 59, 3160-3170.	4.0	67
245	Non-Noble-Metal-Based Electrocatalysts toward the Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , 2020, 30, 1910274.	14.9	760
246	Overall water-splitting reaction efficiently catalyzed by a novel bi-functional Ru/Ni ₃ N-Ni electrode. <i>Chemical Communications</i> , 2020, 56, 2352-2355.	4.1	71
247	N-doped bamboo-like CNTs combined with CoFe@CoFe ₂ O ₄ as a highly efficient electrocatalyst towards oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 6629-6635.	7.1	15
248	Spatial Compartmentalization of Cobalt Phosphide in P-Doped Dual Carbon Shells for Efficient Alkaline Overall Water Splitting. <i>Inorganic Chemistry</i> , 2020, 59, 1996-2004.	4.0	45
249	Open-mouth N-doped carbon nanoboxes embedded with mixed metal phosphide nanoparticles as high-efficiency catalysts for electrolytic water splitting. <i>Nanoscale</i> , 2020, 12, 5848-5856.	5.6	32
250	Copper-based homogeneous and heterogeneous catalysts for electrochemical water oxidation. <i>Nanoscale</i> , 2020, 12, 4187-4218.	5.6	79
251	Assessment of electrocatalytic activity through the lens of three surface area normalization techniques. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3154-3159.	10.3	69
252	Effect of cation substitution in MnCo ₂ O ₄ spinel anchored over rGO for enhancing the electrocatalytic activity towards oxygen evolution reaction (OER). <i>International Journal of Hydrogen Energy</i> , 2020, 45, 6391-6403.	7.1	81
253	Recent advancements in heterostructured interface engineering for hydrogen evolution reaction electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2020, 8, 6926-6956.	10.3	158

#	ARTICLE	IF	CITATIONS
254	Porous flower-like nickel nitride as highly efficient bifunctional electrocatalysts for less energy-intensive hydrogen evolution and urea oxidation. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 14199-14207.	7.1	36
255	Enhancing the Hydrogen and Oxygen Evolution Reaction Efficiency of Amine Functionalized MOF NH ₂ -UiO-66 via Incorporation of CuO Nanoparticles. <i>Catalysis Letters</i> , 2020, 150, 3314-3326.	2.6	24
256	Multi-channel V-doped CoP hollow nanofibers as high-performance hydrogen evolution reaction electrocatalysts. <i>Nanoscale</i> , 2020, 12, 9144-9151.	5.6	40
257	Nanoscale materials with different dimensions for advanced electrocatalysts. , 2020, , 193-218.		0
258	Achieving Increased Electrochemical Accessibility and Lowered Oxygen Evolution Reaction Activation Energy for Co ²⁺ Sites with a Simple Anion Preoxidation. <i>Journal of Physical Chemistry C</i> , 2020, 124, 9673-9684.	3.1	33
259	Tannic Acid-Mediated <i>In Situ</i> Controlled Assembly of NiFe Alloy Nanoparticles on Pristine Graphene as a Superior Oxygen Evolution Catalyst. <i>ACS Applied Energy Materials</i> , 2020, 3, 3966-3977.	5.1	29
260	Zn-substituted MnCo ₂ O ₄ nanostructure anchored over rGO for boosting the electrocatalytic performance towards methanol oxidation and oxygen evolution reaction (OER). <i>International Journal of Hydrogen Energy</i> , 2020, 45, 14713-14727.	7.1	96
261	The HER/OER mechanistic study of an FeCoNi-based electrocatalyst for alkaline water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9939-9950.	10.3	162
262	Carambola-like metal-organic frameworks for high-performance electrocatalytic oxygen evolution reaction. <i>Journal of Energy Chemistry</i> , 2021, 53, 358-363.	12.9	23
263	Comments on "A facile two-step synthesis of Ag/CuCo ₂ O ₄ supported on nickel foam as a high-performance electrocatalyst for oxygen evolution reaction. <i>Materials Letters</i> 275 (2020) 128094." <i>Materials Letters</i> , 2021, 283, 128951.	2.6	0
264	Fe doped amorphous single layered vanadyl phosphate nanosheets as highly efficient electrocatalyst for water oxidation. <i>Journal of Colloid and Interface Science</i> , 2021, 586, 505-513.	9.4	8
265	An account of the strategies to enhance the water splitting efficiency of noble-metal-free electrocatalysts. <i>Journal of Energy Chemistry</i> , 2021, 59, 160-190.	12.9	48
266	Metal-organic frameworks as template for synthesis of Mn ³⁺ /Mn ⁴⁺ mixed valence manganese cobaltites electrocatalysts for oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2021, 582, 124-136.	9.4	39
267	Cost-effective and efficient water and urea oxidation catalysis using nickel-iron oxyhydroxide nanosheets synthesized by an ultrafast method. <i>Journal of Colloid and Interface Science</i> , 2021, 584, 760-769.	9.4	51
268	Anion-mediated transition metal electrocatalysts for efficient water electrolysis: Recent advances and future perspectives. <i>Coordination Chemistry Reviews</i> , 2021, 427, 213552.	18.8	66
269	Heterogeneous Bimetallic Phosphide Ni ₂ P@Fe ₂ P as an Efficient Bifunctional Catalyst for Water/Seawater Splitting. <i>Advanced Functional Materials</i> , 2021, 31, .	14.9	385
270	In-situ construction of lattice-matching NiP ₂ /NiSe ₂ heterointerfaces with electron redistribution for boosting overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2021, 282, 119584.	20.2	171
271	Cobalt-embedded few-layered carbon nanosheets toward enhanced hydrogen evolution: Rational design and insight into structure-performance correlation. <i>Journal of Energy Chemistry</i> , 2021, 58, 156-161.	12.9	1

#	ARTICLE	IF	CITATIONS
272	“The Fe Effect” A review unveiling the critical roles of Fe in enhancing OER activity of Ni and Co based catalysts. Nano Energy, 2021, 80, 105514.	16.0	437
273	Increasing Electrocatalytic Oxygen Evolution Efficiency through Cobalt-Induced Intrastructural Enhancement and Electronic Structure Modulation. ChemSusChem, 2021, 14, 467-478.	6.8	33
274	Hierarchical MoP/NiFeP hybrid hollow spheres as highly efficient bifunctional electrocatalysts for overall water splitting. Materials Chemistry Frontiers, 2021, 5, 375-385.	5.9	25
275	Simultaneous Preparation and Functionalization of Ultrathin Few-layer Black Phosphorus Nanosheets and Their Electrocatalytic OER and HER Performance. ChemCatChem, 2021, 13, 592-602.	3.7	14
276	Recent advances in structural engineering of molybdenum disulfide for electrocatalytic hydrogen evolution reaction. Chemical Engineering Journal, 2021, 405, 127013.	12.7	91
277	Surface amorphized nickel hydroxy sulphide for efficient hydrogen evolution reaction in alkaline medium. Chemical Engineering Journal, 2021, 408, 127275.	12.7	64
278	Defect-rich bimetallic yolk-shell metal-cyanide frameworks as efficient electrocatalysts for oxygen evolution reactions. Journal of Materials Chemistry A, 2021, 9, 2135-2144.	10.3	20
279	A vast exploration of improvising synthetic strategies for enhancing the OER kinetics of LDH structures: a review. Journal of Materials Chemistry A, 2021, 9, 1314-1352.	10.3	206
280	Double metal-organic frameworks derived Fe-Co-Ni phosphides nanosheets as high-performance electrocatalyst for alkaline electrochemical water splitting. Electrochimica Acta, 2021, 367, 137536.	5.2	26
281	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
282	A review on recent developments in electrochemical hydrogen peroxide synthesis with a critical assessment of perspectives and strategies. Advances in Colloid and Interface Science, 2021, 287, 102331.	14.7	53
283	Oxygen vacancy-based ultrathin Co ₃ O ₄ nanosheets as a high-efficiency electrocatalyst for oxygen evolution reaction. International Journal of Hydrogen Energy, 2021, 46, 5286-5295.	7.1	39
284	Nb ₄ C ₃ T _x (MXene) as a new stable catalyst for the hydrogen evolution reaction. International Journal of Hydrogen Energy, 2021, 46, 1955-1966.	7.1	62
285	Transition-Metal Carbides as Hydrogen Evolution Reduction Electrocatalysts: Synthetic Methods and Optimization Strategies. Chemistry - A European Journal, 2021, 27, 5074-5090.	3.3	41
286	Nonwoven Ni-NiO/carbon fibers for electrochemical water oxidation. International Journal of Hydrogen Energy, 2021, 46, 3798-3810.	7.1	28
287	Solar-boosted electrocatalytic oxygen evolution via catalytic site remodelling of CoCr layered double hydroxide. Applied Catalysis B: Environmental, 2021, 284, 119707.	20.2	26
288	Interface engineering of transitional metal sulfide-MoS ₂ heterostructure composites as effective electrocatalysts for water-splitting. Journal of Materials Chemistry A, 2021, 9, 2070-2092.	10.3	136
289	Water electrolysis using plate electrodes in an electrode-paralleled non-uniform magnetic field. International Journal of Hydrogen Energy, 2021, 46, 3329-3336.	7.1	14

#	ARTICLE	IF	CITATIONS
290	Origin of the electrocatalytic oxygen evolution activity of nickel phosphides: in-situ electrochemical oxidation and Cr doping to achieve high performance. <i>Science Bulletin</i> , 2021, 66, 708-719.	9.0	55
291	Short communication: Molecular architecture based on palladium-salen complex/graphene for low potential water oxidation. <i>Journal of Electroanalytical Chemistry</i> , 2021, 880, 114928.	3.8	7
292	Co ₂ (OH) ₃ Cl and MOF mediated synthesis of porous Co ₃ O ₄ /NC nanosheets for efficient OER catalysis. <i>Applied Surface Science</i> , 2021, 542, 148739.	6.1	40
293	Controllable synthesis of one-dimensional NiS ₂ nanotube and nanorod arrays on nickel foams for efficient electrocatalytic water splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 50-60.	7.1	9
294	Transforming Damage into Benefit: Corrosion Engineering Enabled Electrocatalysts for Water Splitting. <i>Advanced Functional Materials</i> , 2021, 31, 2009032.	14.9	70
295	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.	9.4	30
296	Decoupled amphoteric water electrolysis and its integration with Mn-Zn battery for flexible utilization of renewables. <i>Energy and Environmental Science</i> , 2021, 14, 883-889.	30.8	49
297	High Density and Unit Activity Integrated in Amorphous Catalysts for Electrochemical Water Splitting. <i>Small Structures</i> , 2021, 2, 2000096.	12.0	102
298	A deep eutectic solvent strategy to form defect-rich N, S, and O tridoped carbon/Co ₉ S ₈ hybrid materials for a pH-universal hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2099-2103.	10.3	23
299	Tailoring Binding Abilities by Incorporating Oxophilic Transition Metals on 3D Nanostructured Ni Arrays for Accelerated Alkaline Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2021, 143, 1399-1408.	13.7	161
300	Recent Advances in Electrochemical Water Splitting and Reduction of CO ₂ into Green Fuels on 2D Phosphorene-Based Catalyst. <i>Energy Technology</i> , 2021, 9, .	3.8	14
301	Carbon supported nickel phosphide as efficient electrocatalyst for hydrogen and oxygen evolution reactions. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 622-632.	7.1	39
302	Sol-gel derived MgCr ₂ O ₄ nanoparticles for aqueous supercapacitor and alkaline OER and HER bi-functional electrocatalyst applications. <i>Journal of Alloys and Compounds</i> , 2021, 858, 157679.	5.5	28
303	Enhanced electro-Fenton degradation of sulfonamides using the N, S co-doped cathode: Mechanism for H ₂ O ₂ formation and pollutants decay. <i>Journal of Hazardous Materials</i> , 2021, 403, 123950.	12.4	73
304	Double functionalization strategy toward Co-Fe-P hollow nanocubes for highly efficient overall water splitting with ultra-low cell voltage. <i>Chemical Engineering Journal</i> , 2021, 405, 127002.	12.7	73
305	Toward Active-Site Tailoring in Heterogeneous Catalysis by Atomically Precise Metal Nanoclusters with Crystallographic Structures. <i>Chemical Reviews</i> , 2021, 121, 567-648.	47.7	361
306	Recent trends and insights in nickel chalcogenide nanostructures for water-splitting reactions. <i>Materials Research Innovations</i> , 2021, 25, 29-52.	2.3	35
307	Two-dimension on two-dimension growth: hierarchical Ni _{0.2} Mo _{0.8} N/Fe-doped Ni ₃ N nanosheet array for overall water splitting. <i>RSC Advances</i> , 2021, 11, 19797-19804.	3.6	7

#	ARTICLE	IF	CITATIONS
308	Sustainable oxygen evolution catalysis – electrochemical generation of manganite via corrosion engineering of steel. <i>Materials Advances</i> , 2021, 2, 5650-5656.	5.4	0
309	In situ growth of porous carbon with adjustable morphology on black phosphorus nanosheets for boosting electrocatalytic H ₂ and O ₂ evolution. <i>New Journal of Chemistry</i> , 2021, 45, 12203-12212.	2.8	4
310	Enhanced OER performance of composite Co–Fe-based MOF catalysts via a one-pot ultrasonic-assisted synthetic approach. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1095-1102.	4.9	33
311	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.	30.8	198
312	Bimetallic cyclic redox couple in dimanganese copper oxide supported by nickel borate for boosted alkaline electrocatalytic oxygen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2517-2527.	4.9	5
313	Ultrafine CoRu alloy nanoparticles in situ embedded in Co ₄ N porous nanosheets as high-efficient hydrogen evolution electrocatalysts. <i>Dalton Transactions</i> , 2021, 50, 2973-2980.	3.3	17
314	1T Phase Transition Metal Dichalcogenides for Hydrogen Evolution Reaction. <i>Electrochemical Energy Reviews</i> , 2021, 4, 194-218.	25.5	65
315	Perspective on intermetallics towards efficient electrocatalytic water-splitting. <i>Chemical Science</i> , 2021, 12, 8603-8631.	7.4	74
316	Ru-tweaking of non-precious materials: the tale of a strategy that ensures both cost and energy efficiency in electrocatalytic water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6710-6731.	10.3	46
317	Efficient electrochemical water splitting using copper molybdenum sulfide anchored Ni foam as a high-performance bifunctional catalyst. <i>Materials Advances</i> , 2021, 2, 455-463.	5.4	11
318	Efficient overall water splitting catalyzed by robust FeNi ₃ N nanoparticles with hollow interiors. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7750-7758.	10.3	48
319	DNA-based low resistance palladium nano-spheres for effective hydrogen evolution reaction. <i>Catalysis Science and Technology</i> , 2021, 11, 5868-5880.	4.1	5
320	Design strategies toward transition metal selenide-based catalysts for electrochemical water splitting. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1347-1365.	4.9	30
321	Nickel pyrophosphate combined with graphene nanoribbon used as efficient catalyst for OER. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11255-11267.	10.3	36
322	Gas diffusion electrodes (GDEs) for electrochemical reduction of carbon dioxide, carbon monoxide, and dinitrogen to value-added products: a review. <i>Energy and Environmental Science</i> , 2021, 14, 1959-2008.	30.8	243
323	The structure–activity correlation of bifunctional MnO ₂ polymorphic and MoS ₂ -based heterostructures: a highly efficient, robust electrochemical water oxidation and reduction reaction catalyst in alkaline pH. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1148-1157.	4.9	9
324	Trace amounts of Ru-doped Ni–Fe oxide bone-like structures via single-step anodization: a flexible and bifunctional electrode for efficient overall water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12041-12050.	10.3	30
325	Fine-tuning the water oxidation performance of hierarchical Co ₃ O ₄ nanostructures prepared from different cobalt precursors. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1120-1128.	4.9	4

#	ARTICLE	IF	CITATIONS
326	A bifunctional hexa-filamentous microfibril multimetallic foam: an unconventional high-performance electrode for total water splitting under industrial operation conditions. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4971-4983.	10.3	20
327	Construction of $\text{MoO}_2 @ \text{MoS}_2$ heterostructures <i>in situ</i> on carbon cloth for the hydrogen evolution reaction. <i>New Journal of Chemistry</i> , 2021, 45, 19826-19830.	2.8	6
328	Modularly aromatic-knit graphitizable phenolic network as a tailored platform for electrochemical applications. <i>Energy and Environmental Science</i> , 2021, 14, 3203-3215.	30.8	17
329	Antiproliferative activity and electrochemical oxygen evolution by $\text{Ni}(\text{N}(\text{aroyl})\text{-hydrazine carbodithioates})$ complexes of $\text{N}(\text{aroyl})\text{-hydrazine carbodithioates}$. <i>Dalton Transactions</i> , 2021, 50, 14362-14373.	3.3	9
330	Design of $\text{Ni}_3\text{N}/\text{Co}_2\text{N}$ heterojunctions for boosting electrocatalytic alkaline overall water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 10260-10269.	10.3	57
331	Selective Electrochemical Alkaline Seawater Oxidation Catalyzed by Cobalt Carbonate Hydroxide Nanorod Arrays with Sequential Proton-Electron Transfer Properties. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 905-913.	6.7	25
332	A Co-MOF-derived flower-like CoS@S,N -doped carbon matrix for highly efficient overall water splitting. <i>RSC Advances</i> , 2021, 11, 16823-16833.	3.6	20
333	Earth-Abundant Amorphous Electrocatalysts for Electrochemical Hydrogen Production: A Review. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2000071.	5.8	30
334	Ru doping induces the construction of a unique core-shell microflower self-supporting electrocatalyst for highly efficient overall water splitting. <i>Dalton Transactions</i> , 2021, 50, 13951-13960.	3.3	17
335	Investigation on nanostructured Cu-based electrocatalysts for improvising water splitting: a review. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 234-272.	6.0	103
336	Hydrogen and Potassium Acetate Co-Production from Electrochemical Reforming of Ethanol at Ultrathin Cobalt Sulfide Nanosheets on Nickel Foam. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 4026-4033.	8.0	33
337	Transition metal-based catalysts for electrochemical water splitting at high current density: current status and perspectives. <i>Nanoscale</i> , 2021, 13, 12788-12817.	5.6	142
338	Co-Doped Ni_3N Nanosheets with Electron Redistribution as Bifunctional Electrocatalysts for Efficient Water Splitting. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 1581-1587.	4.6	62
339	Strategies and Perspectives to Catch the Missing Pieces in Energy-Efficient Hydrogen Evolution Reaction in Alkaline Media. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 18981-19006.	13.8	239
340	Sulfur doping optimized intermediate energetics of FeCoOOH for enhanced oxygen evolution catalytic activity. <i>Cell Reports Physical Science</i> , 2021, 2, 100331.	5.6	7
341	Strategies and Perspectives to Catch the Missing Pieces in Energy-Efficient Hydrogen Evolution Reaction in Alkaline Media. <i>Angewandte Chemie</i> , 2021, 133, 19129-19154.	2.0	13
342	Efficient Oxygen Evolution Electrocatalysis on CaFe_2O_4 and Its Reaction Mechanism. <i>ACS Applied Energy Materials</i> , 2021, 4, 3057-3066.	5.1	22
343	Template-Free Synthesis of Zinc Cobalt Oxides/Phosphides ($\text{Co}_2\text{P}/\text{CoO}/\text{ZnCo}_2\text{O}_4$) Hollow Sub-Micron Boxes as Hydrogen Evolution Reaction Catalysts. <i>ChemistrySelect</i> , 2021, 6, 1685-1691.	1.5	3

#	ARTICLE	IF	CITATIONS
344	Surface Decoration of DNA-Aided Amorphous Cobalt Hydroxide <i>via</i> Ag ⁺ Ions as Binder-Free Electrodes toward Electrochemical Oxygen Evolution Reaction. <i>Inorganic Chemistry</i> , 2021, 60, 2680-2693.	4.0	18
345	Engineered Nanoscale Single-Metal-Oxides Catalytic Thin Films for High-Performance Water Oxidation. <i>Energy Technology</i> , 2021, 9, 2000896.	3.8	5
346	Highly Stable Trimetallic (Co, Ni, and Fe) Zeolite Imidazolate Framework Microfibers: An Excellent Electrocatalyst for Water Oxidation. <i>Crystal Growth and Design</i> , 2021, 21, 1800-1809.	3.0	25
347	Nanostructural Co-MoS ₂ /NiCoS supported on reduced Graphene oxide as a high activity electrocatalyst for hydrogen evolution in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 8567-8577.	7.1	11
348	Optimization of Ni-Fe-Based Catalysts for Oxygen Evolution Reaction by Surface and Relaxation Phenomena Analysis. <i>ChemSusChem</i> , 2021, 14, 1737-1746.	6.8	17
349	Electrospun Fe-Incorporated ZIF-67 Nanofibers for Effective Electrocatalytic Water Splitting. <i>Inorganic Chemistry</i> , 2021, 60, 4034-4046.	4.0	49
350	Current progress of molybdenum carbide-based materials for electrocatalysis: potential electrocatalysts with diverse applications. <i>Materials Today Chemistry</i> , 2021, 19, 100411.	3.5	23
351	Revealing the effect of anion-tuning in bimetallic chalcogenides on electrocatalytic overall water splitting. <i>Nano Research</i> , 2021, 14, 4548-4555.	10.4	29
352	Effects of boric acid and water on the deposition of Ni/TiO ₂ composite coatings from deep eutectic solvent. <i>Surface and Coatings Technology</i> , 2021, 409, 126834.	4.8	9
353	Rh ₂ P Nanoparticles Partially Embedded in N/P-Doped Carbon Scaffold at Ultralow Metal Loading for High Current Density Water Electrolysis. <i>ACS Applied Nano Materials</i> , 2021, 4, 3369-3376.	5.0	14
354	The Pitfalls of Using Potentiodynamic Polarization Curves for Tafel Analysis in Electrocatalytic Water Splitting. <i>ACS Energy Letters</i> , 0, , 1607-1611.	17.4	256
355	Heterostructured MoO ₂ @MoS ₂ @Co ₉ S ₈ nanorods as high efficiency bifunctional electrocatalyst for overall water splitting. <i>Applied Surface Science</i> , 2021, 543, 148804.	6.1	53
356	Hierarchical Co and Nb dual-doped MoS ₂ nanosheets shelled micro-TiO ₂ hollow spheres as effective multifunctional electrocatalysts for HER, OER, and ORR. <i>Nano Energy</i> , 2021, 82, 105750.	16.0	220
357	Available Active Sites on μ -Fe ₃ N Nanoparticles Synthesized by a Facile Route for Hydrogen Evolution Reaction. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100070.	3.7	12
358	Critical Review of Platinum Group Metal-Free Materials for Water Electrolysis: Transition from the Laboratory to the Market. <i>Johnson Matthey Technology Review</i> , 2021, 65, 207-226.	1.0	17
359	Boron and phosphorus co-doped NiFe LDHs@NF as a highly efficient self-supporting electrocatalyst for the hydrogen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2021, 886, 115107.	3.8	16
360	Facile modified polyol synthesis of FeCo nanoparticles with oxyhydroxide surface layer as efficient oxygen evolution reaction electrocatalysts. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 15398-15409.	7.1	16
361	Theoretical and experimental investigations of Co-Cu bimetallic alloys-incorporated carbon nanowires as an efficient bi-functional electrocatalyst for water splitting. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 96, 243-253.	5.8	36

#	ARTICLE	IF	CITATIONS
362	Three-dimensional flower-like WP2 nanowire arrays grown on Ni foam for full water splitting. Applied Surface Science, 2021, 546, 148926.	6.1	18
363	Copper telluride nanowires for high performance electrocatalytic water oxidation in alkaline media. Journal of Power Sources, 2021, 491, 229628.	7.8	23
364	Synthesis and characterization of transition metal mixed oxide doped graphene embedded durable electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2021, 46, 16387-16403.	7.1	11
366	Double Perovskite Cobaltites Integrated in a Monolithic and Noble Metal-Free Photoelectrochemical Device for Efficient Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 20313-20325.	8.0	17
367	Morphological and Elemental Investigations on Co-Fe-O Thin Films Deposited by Pulsed Laser Deposition for Alkaline Water Oxidation: Charge Exchange Efficiency as the Prevailing Factor in Comparison with the Adsorption Process. Catalysis Letters, 2022, 152, 438-451.	2.6	4
368	Synergistic Effects of Tungsten Doping and Sulfur Vacancies in MoS ₂ on Enhancement of Hydrogen Evolution. Journal of Physical Chemistry C, 2021, 125, 11369-11379.	3.1	17
369	Highly carbonized tungsten trioxide thin films and their enhanced oxygen evolution related electrocatalytic functions. Journal of Materials Research and Technology, 2021, 12, 2216-2223.	5.8	6
370	A setaria-shaped Pd/Ni-NC electrocatalyst for high efficient hydrogen evolution reaction. Chemical Engineering Journal Advances, 2021, 6, 100101.	5.2	9
371	Electrocatalysts for the hydrogen evolution reaction in alkaline and neutral media. A comparative review. Journal of Power Sources, 2021, 493, 229708.	7.8	151
372	Boron-modified cobalt iron layered double hydroxides for high efficiency seawater oxidation. Nano Energy, 2021, 83, 105838.	16.0	132
373	Electrochemical Construction of Low-Crystalline CoOOH Nanosheets with Short-Range Ordered Grains to Improve Oxygen Evolution Activity. ACS Catalysis, 2021, 11, 6104-6112.	11.2	103
374	Kirkendall effect induced bifunctional hybrid electrocatalyst (Co ₉ S ₈ @MoS ₂ /N-doped hollow carbon) for high performance overall water splitting. Journal of Power Sources, 2021, 493, 229688.	7.8	67
375	Amorphous Nickel-Iron Borophosphate for a Robust and Efficient Oxygen Evolution Reaction. Advanced Energy Materials, 2021, 11, 2100624.	19.5	120
376	Advanced Transition Metal-Based OER Electrocatalysts: Current Status, Opportunities, and Challenges. Small, 2021, 17, e2100129.	10.0	293
377	Selective hydrogen peroxide conversion tailored by surface, interface, and device engineering. Joule, 2021, 5, 1432-1461.	24.0	97
378	Design Principle of Monoclinic NiCo ₂ Se ₄ and Co ₃ Se ₄ Nanoparticles with Opposing Intrinsic and Geometric Electrocatalytic Activity toward the OER. Inorganic Chemistry, 2021, 60, 9542-9551.	4.0	32
379	Enhanced multi-carbon selectivity via CO electroreduction approach. Journal of Catalysis, 2021, 398, 185-191.	6.2	25
380	Integrating well-controlled core-shell structures into superaerophobic electrodes for water oxidation at large current densities. Applied Catalysis B: Environmental, 2021, 286, 119920.	20.2	59

#	ARTICLE	IF	CITATIONS
381	High-Efficiency Anion-Exchange Membrane Water Electrolyzer Enabled by Ternary Layered Double Hydroxide Anode. <i>Small</i> , 2021, 17, e2100639.	10.0	49
382	Imidazolatic-Framework Bimetal Electrocatalysts with a Mixed-Valence Surface Anchored on an rGO Matrix for Oxygen Reduction, Water Splitting, and Dye Degradation. <i>ACS Omega</i> , 2021, 6, 16029-16042.	3.5	16
383	Sustained Solar-Powered Electrocatalytic H ₂ Production by Seawater Splitting Using Two-Dimensional Vanadium Disulfide. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 8572-8580.	6.7	10
384	Progress of Nonprecious-Metal-Based Electrocatalysts for Oxygen Evolution in Acidic Media. <i>Advanced Materials</i> , 2021, 33, e2003786.	21.0	166
385	Boosting the kinetics of oxygen and hydrogen evolution in alkaline water splitting using nickel ferrite /N-graphene nanocomposite as a bifunctional electrocatalyst. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 21512-21524.	7.1	31
386	Gold nanocrystal decorated trimetallic metal organic frameworks as high performance electrocatalysts for oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119916.	20.2	45
387	Hexagonal nickel selenide nanoflakes decorated carbon fabric: An efficient binder-free water loving electrode for electrochemical water splitting. <i>Solid State Sciences</i> , 2021, 116, 106613.	3.2	7
388	Two-dimensional triazine-based porous framework as a novel metal-free bifunctional electrocatalyst for zinc-air battery. <i>Journal of Colloid and Interface Science</i> , 2021, 591, 253-263.	9.4	17
389	Recent progress in cobalt-based carbon materials as oxygen electrocatalysts for zinc-air battery applications. <i>Materials Today Energy</i> , 2021, 20, 100659.	4.7	31
390	Ce-Modified Ni(OH) ₂ Nanoflowers Supported on NiSe ₂ Octahedra Nanoparticles as High-Efficient Oxygen Evolution Electrocatalyst. <i>Advanced Energy Materials</i> , 2021, 11, 2101266.	19.5	83
391	Impact of interfacial CoOOH on OER catalytic activities and electrochemical behaviors of bimetallic CoNi-LDH nanosheet catalysts. <i>Electrochimica Acta</i> , 2021, 381, 138276.	5.2	53
392	Temperature-Controlled Structural Variations of Meticulous Fibrous Networks of NiFe-Polymeric Zeolite Imidazolate Frameworks for Enhanced Performance in Electrocatalytic Water-Splitting Reactions. <i>Inorganic Chemistry</i> , 2021, 60, 12467-12480.	4.0	10
393	A universal CoO/CoSe ₂ heterostructure electrocatalyst towards hydrogen evolution reaction via in-situ partial surface-oxidation-selenization method. <i>Materials Chemistry and Physics</i> , 2021, 267, 124644.	4.0	9
394	Principles of Water Electrolysis and Recent Progress in Cobalt-, Nickel-, and Iron-Based Oxides for the Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	18
395	Thermoelectric Driven Self-Powered Water Electrolyzer Using Nanostructured CuFeS ₂ Plates as Bifunctional Electrocatalyst. <i>ACS Applied Energy Materials</i> , 2021, 4, 7020-7029.	5.1	31
396	NiCo ₂ S ₄ microspheres grown on N, S co-doped reduced graphene oxide as an efficient bifunctional electrocatalyst for overall water splitting in alkaline and neutral pH. <i>Nano Research</i> , 2022, 15, 950-958.	10.4	75
397	Rechargeable zinc-air batteries with neutral electrolytes: Recent advances, challenges, and prospects. <i>EnergyChem</i> , 2021, 3, 100055.	19.1	59
398	Investigation of electrochemical performance of sol-gel derived MgFe ₂ O ₄ nanospheres as aqueous supercapacitor electrode and bi-functional water splitting electrocatalyst in alkaline medium. <i>Current Applied Physics</i> , 2021, 27, 73-88.	2.4	17

#	ARTICLE	IF	CITATIONS
399	MoS ₂ Decoration Followed by P Inclusion over Ni-Co Bimetallic Metal-Organic Framework-Derived Heterostructures for Water Splitting. <i>Inorganic Chemistry</i> , 2021, 60, 10772-10780.	4.0	22
400	Principles of Water Electrolysis and Recent Progress in Cobalt, Nickel, and Iron-Based Oxides for the Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	286
401	Enhanced Electrocatalysis for Hydrogen Evolution over a Nanoporous NiAlTi/Al ₃ Ti Hybrid. <i>ACS Applied Energy Materials</i> , 2021, 4, 7579-7588.	5.1	6
402	Metal-Organic Framework Derived Nanostructured Bifunctional Electrocatalysts for Water Splitting. <i>ChemElectroChem</i> , 2021, 8, 3782-3803.	3.4	14
403	Carbon Quantum Dots for Energy Applications: A Review. <i>ACS Applied Nano Materials</i> , 2021, 4, 6515-6541.	5.0	145
404	Electrochemical tuning of nickel molybdate nanorod arrays towards promoted electrocatalytic urea oxidation. <i>Applied Catalysis A: General</i> , 2021, 622, 118220.	4.3	11
405	3D self-supporting mixed transition metal oxysulfide nanowires on porous graphene networks for oxygen evolution reaction in alkaline solution. <i>Journal of Electroanalytical Chemistry</i> , 2021, 893, 115308.	3.8	10
406	Atomically controllable in-situ electrochemical treatment of metal-organic-framework-derived cobalt-embedded carbon composites for highly efficient electrocatalytic oxygen evolution. <i>Applied Surface Science</i> , 2021, 554, 149651.	6.1	11
407	Electrochemical detection of uric acid and ascorbic acid using r-GO/NPs based sensors. <i>Electrochimica Acta</i> , 2021, 388, 138652.	5.2	110
408	Activating Inert Sites in Cobalt Silicate Hydroxides for Oxygen Evolution through Atomically Doping. <i>Energy and Environmental Materials</i> , 2022, 5, 655-661.	12.8	21
409	Dysprosium doped copper oxide (Cu _{1-x} Dy _x O) nanoparticles enabled bifunctional electrode for overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 27585-27596.	7.1	12
410	Engineered Modular Design of a Nanoscale CoNP/Au _{nano} Hybrid Assembly for High-Performance Overall Water Splitting. <i>ACS Applied Energy Materials</i> , 2021, 4, 8953-8968.	5.1	16
411	Composition-Balanced Bi-Metallic MOFs Directly Grown on Nickel Foam for High-Efficiency Oxygen Evolution Reaction. <i>Journal of the Electrochemical Society</i> , 2021, 168, 082504.	2.9	6
412	Dischargeable nickel matrix charges iron species for oxygen evolution electrocatalysis. <i>Electrochimica Acta</i> , 2021, 386, 138401.	5.2	10
413	Highly Conductive Amorphous Pentlandite Anchored with Ultrafine Platinum Nanoparticles for Efficient pH-Universal Hydrogen Evolution Reaction. <i>Advanced Functional Materials</i> , 2021, 31, 2105372.	14.9	33
414	Co/MoC Nanoparticles Embedded in Carbon Nanoboxes as Robust Trifunctional Electrocatalysts for a Zn-Air Battery and Water Electrocatalysis. <i>ACS Nano</i> , 2021, 15, 13399-13414.	14.6	141
415	Low-crystalline transition metal oxide/hydroxide on MWCNT by Fenton-reaction-inspired green synthesis for lithium ion battery and OER electrocatalysis. <i>Electrochimica Acta</i> , 2021, 387, 138559.	5.2	19
416	Reduced Graphene Oxide Supported Cobalt-Calcium Phosphate Composite for Electrochemical Water Oxidation. <i>Catalysts</i> , 2021, 11, 960.	3.5	2

#	ARTICLE	IF	CITATIONS
417	Surface engineering of Ni-P electrode by cobalt oxide co-deposition for electrochemical hydrogen evolution reaction. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105300.	6.7	14
418	Determining the Overpotential of Electrochemical Fuel Synthesis Mediated by Molecular Catalysts: Recommended Practices, Standard Reduction Potentials, and Challenges. <i>ChemElectroChem</i> , 2021, 8, 4161-4180.	3.4	31
419	Electronic structure modulation of nickel hydroxide and tungsten nanoparticles for fast structure transformation and enhanced oxygen evolution reaction activity. <i>Chemical Engineering Journal</i> , 2021, 418, 129403.	12.7	21
420	Novel MoSe ₂ @Ni(OH) ₂ nanocomposite as an electrocatalyst for high efficient hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 32471-32479.	7.1	9
421	Self-supported hierarchical porous FeNiCo-based amorphous alloys as high-efficiency bifunctional electrocatalysts toward overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 36731-36741.	7.1	28
422	Highly Effective Electrochemical Water Oxidation by Millerite-Phased Nickel Sulfide Nanoflakes Fabricated on Ni Foam by Aerosol-Assisted Chemical Vapor Deposition. <i>Energy & Fuels</i> , 2021, 35, 16054-16064.	5.1	15
423	The Significance of Properly Reporting Turnover Frequency in Electrocatalysis Research. <i>Angewandte Chemie</i> , 2021, 133, 23235.	2.0	1
424	1D Core-Shell MOFs derived CoP Nanoparticles-Embedded N-doped porous carbon nanotubes anchored with MoS ₂ nanosheets as efficient bifunctional electrocatalysts. <i>Chemical Engineering Journal</i> , 2021, 419, 129977.	12.7	56
425	Graphene oxide supported transition metal mixed oxide nanorichs onto bimetallic phosphide coatings as high performance hydrogen evolution electrodes in alkaline media. <i>Journal of Alloys and Compounds</i> , 2021, 875, 160033.	5.5	10
426	Co ₃ O ₄ @C@FeMoP on nickel foam as bifunctional electrocatalytic electrode for high-performance alkaline water splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 32846-32857.	7.1	14
427	Optimal cobalt-based catalyst containing high-ratio of oxygen vacancy synthesized from metal-organic-framework (MOF) for oxygen evolution reaction (OER) enhancement. <i>Applied Surface Science</i> , 2021, 560, 150035.	6.1	41
428	Using a combination of Co, Mo, and Pt oxides along with graphene nanoribbon and MoSe ₂ as efficient catalysts for OER and HER. <i>Electrochimica Acta</i> , 2021, 391, 138907.	5.2	40
429	Alloying strategy for constructing multi-component nano-catalysts towards efficient and durable oxygen evolution in alkaline electrolyte. <i>Electrochimica Acta</i> , 2021, 391, 138933.	5.2	8
430	Co ₃ O ₄ @carbon with high Co ²⁺ /Co ³⁺ ratios derived from ZIF-67 supported on N-doped carbon nanospheres as stable bifunctional oxygen catalysts. <i>Materials Today Energy</i> , 2021, 21, 100737.	4.7	25
431	Heterostructuring Mesoporous 2D Iridium Nanosheets with Amorphous Nickel Boron Oxide Layers to Improve Electrolytic Water Splitting. <i>Small Methods</i> , 2021, 5, e2100679.	8.6	40
432	One-step ionothermal accompanied thermolysis strategy for N-doped carbon quantum dots hybridized NiFe LDH ultrathin nanosheets for electrocatalytic water oxidation. <i>Electrochimica Acta</i> , 2021, 391, 138932.	5.2	15
433	Self-Supportive Bimetallic Selenide Heteronanostructures as High-Efficiency Electro(pre)catalysts for Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 13114-13123.	6.7	15
434	Recent Progresses in Engineering of Ni and Co based Phosphides for Effective Electrocatalytic Water Splitting. <i>ChemElectroChem</i> , 2021, 8, 4638-4685.	3.4	39

#	ARTICLE	IF	CITATIONS
435	Electrocatalytic Hydrogen Evolution Reaction of Rhenium Metal and Rhenium-Based Intermetallic in Acid and Alkaline Media. <i>European Journal of Inorganic Chemistry</i> , 0, , .	2.0	3
436	The Significance of Properly Reporting Turnover Frequency in Electrocatalysis Research. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23051-23067.	13.8	180
437	Fe-doped calcium cobaltites as electrocatalysts for oxygen evolution reaction. <i>Ceramics International</i> , 2021, 47, 26109-26118.	4.8	6
438	Nitrogen-doped porous carbon encapsulated nickel iron alloy nanoparticles, one-step conversion synthesis for application as bifunctional catalyst for water electrolysis. <i>Electrochimica Acta</i> , 2021, 389, 138785.	5.2	39
439	Carbon supported Ni ₃ N/Ni heterostructure for hydrogen evolution reaction in both acid and alkaline media. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 30739-30749.	7.1	28
440	Evaluation of Manganese Cubanoid Clusters for Water Oxidation Catalysis: From Well-Defined Molecular Coordination Complexes to Catalytically Active Amorphous Films. <i>ChemSusChem</i> , 2021, 14, 4741-4751.	6.8	2
441	Impact of Iron in Three-Dimensional Co-MOF for Electrocatalytic Water Oxidation. <i>Inorganic Chemistry</i> , 2022, 61, 62-72.	4.0	20
442	Comprehensive and High-Throughput Electrolysis of Water and Urea by 5-nm Nickel and Copper Coordination Polymers. <i>Chemistry - an Asian Journal</i> , 2021, 16, 3444-3452.	3.3	7
443	Mixed-dimensional niobium disulfide-graphene foam heterostructures as an efficient catalyst for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 33679-33688.	7.1	10
444	Iron molybdenum selenide supported on reduced graphene oxide as an efficient hydrogen electrocatalyst in acidic and alkaline media. <i>Journal of Colloid and Interface Science</i> , 2021, 602, 384-393.	9.4	12
445	Hollow and substrate-supported Prussian blue, its analogs, and their derivatives for green water splitting. <i>Chinese Journal of Catalysis</i> , 2021, 42, 1843-1864.	14.0	19
446	Ion modification of transition cobalt oxide by soaking strategy for enhanced water splitting. <i>Chemical Engineering Journal</i> , 2021, 423, 130218.	12.7	24
447	Surface structure regulation and evaluation of FeNi-based nanoparticles for oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2021, 297, 120462.	20.2	95
448	Advanced catalyst for hydrogen evolution reaction by dealloying Al-based nanocrystalline alloys. <i>Journal of Alloys and Compounds</i> , 2021, 880, 160548.	5.5	17
449	Polystyrene microsphere assisted synthesis of a Co/PEG comodified PbO ₂ anode and its electrocatalytic oxidation performance. <i>Separation and Purification Technology</i> , 2021, 279, 119792.	7.9	9
450	Synergistic metal-oxide interaction for efficient self-reconstruction of cobalt oxide as highly active water oxidation electrocatalyst. <i>Journal of Catalysis</i> , 2021, 404, 80-88.	6.2	15
451	Recent advances in engineering cobalt carbonate hydroxide for enhanced alkaline water splitting. <i>Journal of Alloys and Compounds</i> , 2021, 887, 161405.	5.5	23
452	Fabrication of the flower-like NiCo ₂ O ₄ @ Ni(OH) ₂ /NiOOH composites supported on nickel foam by the green solvent dimethyl sulfoxide with high performance in supercapacitor and hydrogen evolution reaction. <i>Journal of Physics and Chemistry of Solids</i> , 2021, 159, 110257.	4.0	15

#	ARTICLE	IF	CITATIONS
453	Optimization strategies on the advanced engineering of Co-based nanomaterials for electrochemical oxygen evolution. <i>Journal of Alloys and Compounds</i> , 2022, 890, 161929.	5.5	12
454	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 CO ₂ fixation. <i>Chemical Engineering Journal</i> , 2022, 429, 132301.	12.7	51
455	Evolution of intrinsic 1-3D WO ₃ nanostructures: Tailoring their phase structure and morphology for robust hydrogen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 428, 132013.	12.7	15
456	Combined MOF derivation and fluorination imparted efficient synergism of Fe-Co fluoride for oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 427, 131576.	12.7	56
457	Oxygen vacancy enriched NiMoO ₄ nanorods <i>via</i> microwave heating: a promising highly stable electrocatalyst for total water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11691-11704.	10.3	65
458	A cobalt oxide-polypyrrole nanocomposite as an efficient and stable electrode material for electrocatalytic water oxidation. <i>Sustainable Energy and Fuels</i> , 2021, 5, 4710-4723.	4.9	5
459	HERs in an acidic medium over MoS ₂ nanosheets: from fundamentals to synthesis and the recent progress. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1952-1987.	4.9	30
460	Polyaromatic-terminated iron(ii) clathrochelates as electrocatalysts for efficient hydrogen production in water electrolysis cells with polymer electrolyte membrane. <i>Mendeleev Communications</i> , 2021, 31, 20-23.	1.6	8
461	Advancing the extended roles of 3D transition metal based heterostructures with copious active sites for electrocatalytic water splitting. <i>Dalton Transactions</i> , 2021, 50, 13176-13200.	3.3	17
462	A strategy for preparing high-efficiency and economical catalytic electrodes toward overall water splitting. <i>Nanoscale</i> , 2021, 13, 10624-10648.	5.6	53
463	Electrochemical integration of amorphous NiFe (oxy)hydroxides on surface-activated carbon fibers for high-efficiency oxygen evolution in alkaline anion exchange membrane water electrolysis. <i>Journal of Materials Chemistry A</i> , 2021, 9, 14043-14051.	10.3	127
464	Transition metal-based bimetallic MOFs and MOF-derived catalysts for electrochemical oxygen evolution reaction. <i>Energy and Environmental Science</i> , 2021, 14, 1897-1927.	30.8	415
465	Current Status of Water Electrolysis for Energy Storage. , 2022, , 533-552.		2
466	Tafel Slope Analyses for Homogeneous Catalytic Reactions. <i>Catalysts</i> , 2021, 11, 87.	3.5	16
467	Enhancing electrocatalytic water splitting by surface defect engineering in two-dimensional electrocatalysts. <i>Nanoscale</i> , 2021, 13, 1581-1595.	5.6	38
468	Surface enrichment of iridium on IrCo alloys for boosting hydrogen production. <i>Journal of Materials Chemistry A</i> , 2021, 9, 16898-16905.	10.3	65
469	Hierarchical MoO ₄ ²⁻ Intercalating \pm -Co(OH) ₂ Nanosheet Assemblies: Green Synthesis and Ultrafast Reconstruction for Boosting Electrochemical Oxygen Evolution. <i>Energy & Fuels</i> , 2021, 35, 2775-2784.	5.1	13
470	Current perspectives on 3D ZIFs incorporated with 1D carbon matrices as fibers <i>via</i> electrospinning processes towards electrocatalytic water splitting: a review. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11961-12002.	10.3	50

#	ARTICLE	IF	CITATIONS
471	Enabling and Inducing Oxygen Vacancies in Cobalt Iron Layer Double Hydroxide via Selenization as Precatalysts for Electrocatalytic Hydrogen and Oxygen Evolution Reactions. <i>Inorganic Chemistry</i> , 2021, 60, 2023-2036.	4.0	91
472	Common Pitfalls of Reporting Electrocatalysts for Water Splitting. <i>Chemical Research in Chinese Universities</i> , 2020, 36, 360-365.	2.6	12
473	Co, Mo ₂ C encapsulated in N-doped carbon nanofiber as self-supported electrocatalyst for hydrogen evolution reaction. <i>Chemical Engineering Journal</i> , 2020, 397, 125481.	12.7	68
474	Nickel selenides as pre-catalysts for electrochemical oxygen evolution reaction: A review. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 15763-15784.	7.1	116
475	Metal-organic framework-derived M (M=Fe, Ni, Zn and Mo) doped Co ₉ S ₈ nanoarrays as efficient electrocatalyst for water splitting: The combination of theoretical calculation and experiment. <i>Journal of Catalysis</i> , 2020, 383, 103-116.	6.2	98
476	Multiscale structural optimization: Highly efficient hollow iron-doped metal sulfide heterostructures as bifunctional electrocatalysts for water splitting. <i>Nano Energy</i> , 2020, 75, 104913.	16.0	119
477	A Review on Advanced FeNi-Based Catalysts for Water Splitting Reaction. <i>Energy & Fuels</i> , 2020, 34, 13491-13522.	5.1	158
478	TiO ₂ Nanorod Array Conformally Coated with a Monolayer MoS ₂ Film: An Efficient Electrocatalyst for Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2020, 3, 10854-10862.	5.1	11
479	Gd-Doped Ni-Oxychloride Nanoclusters: New Nanoscale Electrocatalysts for High-Performance Water Oxidation through Surface and Structural Modification. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 468-479.	8.0	33
480	Facile synthesis of nickel-copper hollow spheres as efficient bifunctional electrocatalysts for overall water splitting. <i>Materials Chemistry Frontiers</i> , 2020, 4, 996-1005.	5.9	15
481	Progress in nickel chalcogenide electrocatalyzed hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 4174-4192.	10.3	189
482	Nickel telluride vertically aligned thin film by radio-frequency magnetron sputtering for hydrogen evolution reaction. <i>APL Materials</i> , 2020, 8, .	5.1	9
483	Electrochemical performance of porous Ni-Cr-Mo-Cu alloys for hydrogen evolution reactions in alkali solution. <i>Materials Research Express</i> , 2020, 7, 095505.	1.6	8
484	Ni ₃ S ₂ /MWCNTs/NF Hybrid Nanostructure as Effective Bifunctional Electrocatalysts for Urea Electrolysis Assisted Hydrogen Evolution. <i>Journal of the Electrochemical Society</i> , 2020, 167, 126514.	2.9	8
485	Surface Functionalization of Ordered Mesoporous Hollow Carbon Spheres with Ru Organometallic Compounds as Supports of Low-Pt Content Nanocatalysts for Alkaline Hydrogen and Oxygen Evolution Reactions. <i>MRS Advances</i> , 2020, 5, 2973-2989.	0.9	4
486	Current progressions in transition metal based hydroxides as bi-functional catalysts towards electrocatalytic total water splitting. <i>Sustainable Energy and Fuels</i> , 2021, 5, 6215-6268.	4.9	44
487	Design principles of noble metal-free electrocatalysts for hydrogen production in alkaline media: combining theory and experiment. <i>Nanoscale Advances</i> , 2021, 3, 6797-6826.	4.6	23
488	Bimetallic Zero-Valent Alloy with Measured High-Valent Surface States to Reinforce the Bifunctional Activity in Rechargeable Zinc-Air Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 14868-14880.	6.7	9

#	ARTICLE	IF	CITATIONS
489	Characterizing the Onset Potential Distribution of Pt/C Catalyst Deposition by a Total Internal Reflection Imaging Method. <i>Small</i> , 2021, 17, e2102407.	10.0	6
490	Recent advances in Ni-Fe (Oxy)hydroxide electrocatalysts for the oxygen evolution reaction in alkaline electrolyte targeting industrial applications. <i>Nano Select</i> , 2022, 3, 766-791.	3.7	16
491	Promising 2D/2D MoTe ₂ /Ti ₃ C ₂ T _x Hybrid Materials for Boosted Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 11886-11897.	5.1	29
492	Ultrahigh-Current Density and Long-Term Durability Electrocatalysts for Water Splitting. <i>Small</i> , 2022, 18, e2104513.	10.0	49
493	Interpolation between W Dopant and Co Vacancy in CoOOH for Enhanced Oxygen Evolution Catalysis. <i>Advanced Materials</i> , 2022, 34, e2104667.	21.0	45
494	Self-supported Electrocatalysts. <i>Engineering Materials</i> , 2020, , 177-209.	0.6	1
495	In Situ Fabrication of Nickel-Iron Oxalate Catalysts for Electrochemical Water Oxidation at High Current Densities. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52620-52628.	8.0	36
496	Structural Variations of Metal Oxide-Based Electrocatalysts for Oxygen Evolution Reaction. <i>Small Methods</i> , 2021, 5, e2100834.	8.6	42
497	Synthesis of hierarchical nickel sulfide nanotubes for highly efficient electrocatalytic urea oxidation. <i>Applied Surface Science</i> , 2022, 575, 151708.	6.1	40
498	Covalent Organic Frameworks as Tunable Supports for HER, OER, and ORR Catalysts: A New Addition to Heterogeneous Electrocatalysts. <i>Nanostructure Science and Technology</i> , 2022, , 389-444.	0.1	0
499	An effective Fe/Co tripolyphosphate pre-catalyst for oxygen evolution with alkaline electrolyte. <i>Applied Surface Science</i> , 2022, 575, 151761.	6.1	5
500	Construction of graphitic-N-rich TiO ₂ -N-C interfaces via dye dissociation and reassembly for efficient oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 431, 133246.	12.7	11
501	Enhanced oxygen evolution reaction on polyethyleneimine functionalized graphene oxide in alkaline medium. <i>Molecular Catalysis</i> , 2021, 516, 111960.	2.0	1
502	Fabrication of Ni-MOF-derived composite material for efficient electrocatalytic OER. <i>Journal of Taibah University for Science</i> , 2021, 15, 637-648.	2.5	12
503	Synergistic optimization promoted overall water splitting of CoSe@NiSe ₂ @MoS ₂ heterostructured composites. <i>Chemical Communications</i> , 2021, 57, 12516-12519.	4.1	14
504	Bifunctional nanocatalysts for water splitting and its challenges. , 2020, , 59-95.		1
505	Transcription methodology for rationally designed morphological complex metal oxides: a versatile strategy for improved electrocatalysis. <i>Sustainable Energy and Fuels</i> , 2021, 5, 6392-6405.	4.9	3
506	Interface engineering of the MoS ₂ /NiS ₂ /CoS ₂ nanotube as a highly efficient bifunctional electrocatalyst for overall water splitting. <i>Materials Today Nano</i> , 2022, 17, 100156.	4.6	14

#	ARTICLE	IF	CITATIONS
507	Ce-Doped FeNi-Layered Double Hydroxide Nanosheets Grown on an Open-Framework Nickel Phosphate Nanorod Array for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2021, 4, 12836-12847.	5.1	13
508	Electrodeposition of the manganese-doped nickel-phosphorus catalyst with enhanced hydrogen evolution reaction activity and durability. International Journal of Hydrogen Energy, 2022, 47, 41994-42000.	7.1	4
509	In-situ grown metal-organic framework-derived carbon-coated Fe-doped cobalt oxide nanocomposite on fluorine-doped tin oxide glass for acidic oxygen evolution reaction. Applied Catalysis B: Environmental, 2022, 303, 120899.	20.2	35
510	Why shouldn't double-layer capacitance (Cdl) be always trusted to justify Faradaic electrocatalytic activity differences?. Journal of Electroanalytical Chemistry, 2021, 903, 115842.	3.8	42
511	Recent developments of Co ₃ O ₄ -based materials as catalysts for the oxygen evolution reaction. Catalysis Science and Technology, 2022, 12, 436-461.	4.1	39
512	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
513	The role of proton dynamics on the catalyst-electrolyte interface in the oxygen evolution reaction. Chinese Journal of Catalysis, 2022, 43, 139-147.	14.0	5
514	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
515	Efficient OER nanocomposite electrocatalysts based on Ni and/or Co supported on MoSe ₂ nanoribbons and MoS ₂ nanosheets. Chemical Engineering Journal Advances, 2022, 9, 100206.	5.2	16
516	Functional role of single-atom catalysts in electrocatalytic hydrogen evolution: Current developments and future challenges. Coordination Chemistry Reviews, 2022, 452, 214289.	18.8	54
517	An overview on advances in design and development of materials for electrochemical generation of hydrogen and oxygen. Materials Today Energy, 2022, 23, 100902.	4.7	33
518	Optimization of Oxygen Evolution Reaction with Electroless Deposited Ni-P Catalytic Nanocoating. Nanomaterials, 2021, 11, 3010.	4.1	13
519	Enhancement of the OER Kinetics of the Less-Explored γ -MnO ₂ via Nickel Doping Approaches in Alkaline Medium. Inorganic Chemistry, 2021, 60, 19429-19439.	4.0	17
520	Enhanced Electrochemical Oxygen Evolution Reaction on Hydrogen Embrittled CoSe Surface. Advanced Materials Interfaces, 2021, 4, 2101209.	3.7	2
521	Critical aspects in the development of anodes for use in seawater electrolysis. International Journal of Hydrogen Energy, 2022, 47, 3532-3549.	7.1	30
522	Evaluating Properties of Carbon-Free Nano-NiCoFe-LDHs with Molybdate as Oxygen Evolution Catalysts and Their Applications in Rechargeable Air Electrodes. Energy & Fuels, 2021, 35, 20374-20385.	5.1	7
523	Synergistic effect of reduced graphene oxide layers wrapped in polyaniline sheets to porous blades for boosted oxygen evolution reaction. Journal of Taibah University for Science, 2021, 15, 960-970.	2.5	7
524	Graphene-based materials as electrocatalysts for the oxygen evolution reaction: a review. Sustainable Energy and Fuels, 2022, 6, 640-663.	4.9	23

#	ARTICLE	IF	CITATIONS
525	Efficient oxygen evolution reaction on RuO ₂ nanoparticles decorated onion-like carbon (OLC). <i>Nanotechnology</i> , 2022, 33, 135710.	2.6	1
526	Boundary in electrocatalytic hydrogen evolution reaction: From single metal to binary intermetallic compounds. <i>Catalysis Communications</i> , 2022, 162, 106378.	3.3	8
527	Ni-based overall water splitting electrocatalysts prepared via laser-ablation-in-liquids combined with electrophoretic deposition. <i>Materials Today Chemistry</i> , 2022, 23, 100691.	3.5	10
528	2D MoS ₂ /carbon/polylactic acid filament for 3D printing: Photo and electrochemical energy conversion and storage. <i>Applied Materials Today</i> , 2022, 26, 101301.	4.3	18
529	Implementation of novel pulsed laser ablation strategy to control the morphological growth and enrich the electrochemically active sites of multifunctional Ni@CuO electrocatalyst. <i>Journal of Alloys and Compounds</i> , 2022, 901, 163446.	5.5	16
530	Polyaniline coating enables electronic structure engineering in Fe ₃ O ₄ to promote alkaline oxygen evolution reaction. <i>Nanotechnology</i> , 2022, 33, 155402.	2.6	1
531	Stability and deactivation of OER electrocatalysts: A review. <i>Journal of Energy Chemistry</i> , 2022, 69, 301-329.	12.9	168
532	Unraveling the Function of Metal@Amorphous Support Interactions in Single-Atom Electrocatalytic Hydrogen Evolution. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	4
533	Electronically modulated nickel boron by CeO _x doping as a highly efficient electrocatalyst towards overall water splitting. <i>Dalton Transactions</i> , 2022, 51, 675-684.	3.3	5
534	Ni doping modulated adsorption of hydrogen atoms on CoSe ₂ electrocatalyst for excellent acid hydrogen evolution by water splitting. <i>Ionics</i> , 2022, 28, 1323-1335.	2.4	3
535	Green Synthesis of Self-Supported Ni~Fe Oxyhydroxide Pagoda-Shaped Nanocone Arrays for Electrocatalytic Oxygen Evolution Reaction. <i>ChemElectroChem</i> , 2022, 9, .	3.4	2
536	Unraveling the Function of Metal@Amorphous Support Interactions in Single-Atom Electrocatalytic Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	62
537	Improving the intrinsic activity of electrocatalysts for sustainable energy conversion: where are we and where can we go?. <i>Chemical Science</i> , 2021, 13, 14-26.	7.4	45
538	Recent advances in nanostructured nonoxide materials—Borides, borates, chalcogenides, phosphides, phosphates, nitrides, carbides, alloys, and metal-organic frameworks. , 2022, , 329-368.		2
539	Worrisome Exaggeration of Activity of Electrocatalysts Destined for Steady-State Water Electrolysis by Polarization Curves from Transient Techniques. <i>Journal of the Electrochemical Society</i> , 2022, 169, 014508.	2.9	35
540	Stabilization of ruthenium nanoparticles over NiV-LDH surface for enhanced electrochemical water splitting: an oxygen vacancy approach. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3618-3632.	10.3	61
541	Ruthenium-Doping-Induced Amorphization of VS ₄ Nanostructures with a Rich Sulfur Vacancy for Enhanced Hydrogen Evolution Reaction in a Neutral Electrolyte Medium. <i>Inorganic Chemistry</i> , 2022, 61, 1685-1696.	4.0	15
542	The Substrate Morphology Effect for Sulfur-Rich Amorphous Molybdenum Sulfide for Electrochemical Hydrogen Evolution Reaction. <i>Journal of the Electrochemical Society</i> , 2022, 169, 026519.	2.9	5

#	ARTICLE	IF	CITATIONS
543	Ni(OH) ₂ Coated CoMn-layered double hydroxide nanowires as efficient water oxidation electrocatalysts. New Journal of Chemistry, 2022, 46, 2044-2052.	2.8	12
544	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
545	CeO ₂ decorated bimetallic phosphide nanowire arrays for enhanced oxygen evolution reaction electrocatalysis via interface engineering. Dalton Transactions, 2022, 51, 2923-2931.	3.3	12
546	Current status, research gaps, and future scope for nanomaterials toward visible light photocatalysis. , 2022, , 569-608.		0
548	Heterostructure of RuO ₂ -RuP ₂ /Ru Derived from HMT-based Coordination Polymers as Superior pH-Universal Electrocatalyst for Hydrogen Evolution Reaction. Small, 2022, 18, e2105168.	10.0	19
549	Electronegativity-Induced Charge Balancing to Boost Stability and Activity of Amorphous Electrocatalysts. Advanced Materials, 2022, 34, e2100537.	21.0	39
550	FexNi(1-x) coatings electrodeposited from choline chloride-urea mixture: Magnetic and electrocatalytic properties for water electrolysis. Materials Chemistry and Physics, 2022, 279, 125738.	4.0	7
551	Template synthesis of molybdenum-doped NiFe-layered double hydroxide nanotube as high efficiency electrocatalyst for oxygen evolution reaction. Materials Today Sustainability, 2022, 17, 100101.	4.1	8
552	Synthesis self-supporting bulk porous NiMo@MoS ₂ electrocatalyst to enhance hydrogen evolution in alkaline conditions. Journal of Materials Research and Technology, 2022, 17, 1167-1175.	5.8	6
553	Metal substrates activate NiFe(oxy)hydroxide catalysts for efficient oxygen evolution reaction in alkaline media. Journal of Alloys and Compounds, 2022, 901, 163689.	5.5	16
554	Engineering of Co ₃ O ₄ @Ni ₂ P heterostructure as trifunctional electrocatalysts for rechargeable zinc-air battery and self-powered overall water splitting. Journal of Materials Science and Technology, 2022, 115, 19-28.	10.7	35
555	Crystalline-amorphous interface of mesoporous Ni ₂ P@FePO _x Hy for oxygen evolution at high current density in alkaline-anion-exchange-membrane water-electrolyzer. Applied Catalysis B: Environmental, 2022, 306, 121127.	20.2	90
556	Modifying the 316L stainless steel surface by an electrodeposition technique: towards high-performance electrodes for alkaline water electrolysis. Sustainable Energy and Fuels, 2022, 6, 1382-1397.	4.9	6
557	Route to the Structure-Controlled Synthesis of Fe Nanobelts and Their Oxygen Evolution Reaction Application. Inorganic Chemistry, 2022, 61, 3024-3028.	4.0	3
558	Co ₃ Mo ₃ N nanosheets arrays on nickel foam as highly efficient bifunctional electrocatalysts for overall urea electrolysis. International Journal of Hydrogen Energy, 2022, 47, 11447-11455.	7.1	17
559	Insight into the Fabrication and Characterization of Novel Heterojunctions of Fe ₂ O ₃ and V ₂ O ₅ with TiO ₂ and Graphene Oxide for Enhanced Photocatalytic Hydrogen Evolution: A Comparison Study. Industrial & Engineering Chemistry Research. 2022. 61. 2714-2733.	3.7	10
560	Tunable Hierarchical Hexagonal Nickel Telluride (Ni ₃ Te ₂) Laminated Microsheets as Flexible Counter Electrodes for High-Performance Fibrous Dye-Sensitized Solar Cells: Accelerated Electrocatalysis Reduction of I ³⁻ Ions. SSRN Electronic Journal, 0, , .	0.4	0
561	Enhanced oxygen evolution performance by the partial phase transformation of cobalt/nickel carbonate hydroxide nanosheet arrays in an Fe-containing alkaline electrolyte. Inorganic Chemistry Frontiers, 0, , .	6.0	11

#	ARTICLE	IF	CITATIONS
562	Urchin-Like Conio2 Microspheres Supported on Reduced Graphene Oxide with N and S Co-Doped for Overall Water Splitting with Trace Load as the Bifunctional Electrocatalyst. SSRN Electronic Journal, 0, .	0.4	0
563	drop correction in electrocatalysis: everything one needs to know!. Journal of Materials Chemistry A, 2022, 10, 9348-9354.	10.3	46
564	Nickelâ€salen as a model for bifunctional OER/UOR electrocatalysts: pyrolysis temperatureâ€electrochemical activity interconnection. Inorganic Chemistry Frontiers, 2022, 9, 1973-1983.	6.0	8
565	Layered 2D PtX ₂ (X = S, Se, Te) for the electrocatalytic HER in comparison with Mo/WX ₂ and Pt/C: are we missing the bigger picture?. Energy and Environmental Science, 2022, 15, 1461-1478.	30.8	37
566	A tetra Co(Co^{II} / Co^{III}) complex with an open cubane Co_4O_4 core and square-pyramidal Co^{II} and octahedral Co^{III} centres: bifunctional electrocatalytic activity towards water splitting at neutral pH. Dalton Transactions, 2022, 51, 4510-4521.	3.3	9
567	Unveiling the Optimal Interfacial Synergy of Plasmaâ€Modulated Trimetallic Mnâ€Niâ€Co Phosphides: Tailoring Deposition Ratio for Complementary Water Splitting. Energy and Environmental Materials, 2023, 6, .	12.8	32
568	Nickel-Based Metal-Organic Frameworks as Electrocatalysts for the Oxygen Evolution Reaction (OER). Molecules, 2022, 27, 1241.	3.8	28
569	Vanadium-Doped Nickel Cobalt Layered Double Hydroxide: A High-Performance Oxygen Evolution Reaction Electrocatalyst in Alkaline Medium. Inorganic Chemistry, 2022, 61, 4502-4512.	4.0	53
570	Metalâ€organic frameworkâ€derived phosphide nanomaterials for electrochemical applications. , 2022, 4, 246-281.		48
571	Applications of Nonâ€precious Transition Metal Oxide Nanoparticles in Electrochemistry. Electroanalysis, 2022, 34, 1065-1091.	2.9	17
572	Catalysis of the Water Oxidation Reaction in the Presence of Iron and a Copper Foil. Inorganic Chemistry, 2022, 61, 5653-5664.	4.0	9
573	Nickelâ€Iron Layered Double Hydroxide Dispersions in Ethanol Stabilized by Acetate Anions. Inorganic Chemistry, 2022, 61, 4598-4608.	4.0	6
574	Optimized cobalt and graphitic carbon hybrid catalysts derived from zeolite imidazolate framework for oxygen evolution reaction. International Journal of Energy Research, 2022, 46, 9812-9821.	4.5	2
575	Combinatorial High-Throughput Methods for Designing Hydrogen Evolution Reaction Catalysts. ACS Catalysis, 2022, 12, 3789-3796.	11.2	22
576	Co _x (VO) _y O _z Nanocrystal-Integrated Covalent Organic Polymers as a Highly Active and Durable Catalyst for Electrochemical Water Oxidation: An Untold Role of the VO ²⁺ /VO ₂ ⁺ Redox Couple. ACS Applied Energy Materials, 2022, 5, 2805-2816.	5.1	10
577	Key Role of Lorentz Excitation in the Electromagnetic-Enhanced Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2022, 14, 15243-15249.	8.0	21
578	Hollow Coâ€Based Layered Double Hydroxide Decorated with Ag Nanoparticles for the Oxygen Evolution Reaction. ChemElectroChem, 2022, 9, .	3.4	5
579	An inclusive perspective on the recent development of tungstenâ€based catalysts for overall H_2O splitting : A review. International Journal of Energy Research, 2022, 46, 10228-10258.	4.5	6

#	ARTICLE	IF	CITATIONS
580	Perspective of hydrogen energy and recent progress in electrocatalytic water splitting. Chinese Journal of Chemical Engineering, 2022, 43, 282-296.	3.5	75
581	Hierarchical Fe Doped Co Oxide/Hydroxide Nanosheet Arrays as Highly Efficient Oxygen Evolution Catalysts Prepared by Hydrothermal Etching of FeCo Prussian Blue Analogue. European Journal of Inorganic Chemistry, 0, , .	2.0	0
582	Hierarchical 3D flower like cobalt hydroxide as an efficient bifunctional electrocatalyst for water splitting. Electrochimica Acta, 2022, 411, 140071.	5.2	22
583	Transition metal dichalcogenides as catalysts for the hydrogen evolution reaction: The emblematic case of Inert-ZrSe_2 as catalyst for electrolyzers. Nano Select, 2022, 3, 1069-1081.	3.7	6
584	Bifunctional iron doped CuS catalysts towards highly efficient overall water electrolysis in the alkaline electrolyte. International Journal of Hydrogen Energy, 2022, 47, 16719-16728.	7.1	14
585	Tunable hierarchical hexagonal nickel telluride (Ni_3Te_2) laminated microsheets as flexible counter electrodes for high-performance fibrous dye-sensitized solar cells: Accelerated electrocatalysis reduction of I_3^- ions. Chemical Engineering Journal, 2022, 442, 136286.	12.7	5
586	Self-assembled Pt-CoFe layered double hydroxides for efficient alkaline water/seawater splitting by spontaneous redox synthesis. Journal of Power Sources, 2022, 532, 231353.	7.8	20
587	Hetero-tandem organic solar cells drive water electrolysis with a solar-to-hydrogen conversion efficiency up to 10%. Applied Catalysis B: Environmental, 2022, 309, 121237.	20.2	8
588	A nanoflower composite catalyst in situ grown on conductive iron foam: Revealing the enhancement of OER activity by cooperating of amorphous Ni based nanosheets with spinel NiFe_2O_4 . Applied Surface Science, 2022, 589, 152957.	6.1	29
589	Electron redistribution of ruthenium-tungsten oxides Mott-Schottky heterojunction for enhanced hydrogen evolution. Applied Catalysis B: Environmental, 2022, 308, 121229.	20.2	69
590	FeCo nanoparticles with different compositions as electrocatalysts for oxygen evolution reaction in alkaline solution. Applied Surface Science, 2022, 589, 153041.	6.1	15
591	A nanoflower-like polypyrrole-based cobalt-nickel sulfide hybrid heterostructures with electrons migration to boost overall water splitting. Journal of Colloid and Interface Science, 2022, 618, 1-10.	9.4	11
592	N-doped bimetallic sulfides hollow spheres derived from metal-organic frameworks toward cost-efficient and high performance oxygen evolution reaction. Applied Surface Science, 2022, 591, 153173.	6.1	10
593	Simultaneous electrical and defect engineering of nickel iron metal-organic-framework via co-doping of metalloid and non-metal elements for a highly efficient oxygen evolution reaction. Chemical Engineering Journal, 2022, 439, 135720.	12.7	41
594	Engineering crystalline CoMP-decorated ($\text{M}=\text{Mn, Fe, Ni, Cu, Zn}$) amorphous CoM LDH for high-rate alkaline water splitting. Chemical Engineering Journal, 2022, 441, 136031.	12.7	28
595	Topochemical Transformation of Two-Dimensional VSe_2 into Metallic Nonlayered VO_2 for Water Splitting Reactions in Acidic and Alkaline Media. ACS Nano, 2022, 16, 351-367.	14.6	23
596	Recent Progress in Layered Double Hydroxide-Based Electrocatalyst for Hydrogen Evolution Reaction. ChemElectroChem, 2022, 9, .	3.4	5
597	Surface Roughening Strategy for Highly Efficient Bifunctional Electrocatalyst: Combination of Atomic Layer Deposition and Anion Exchange Reaction. Small Methods, 2022, 6, e2101308.	8.6	15

#	ARTICLE	IF	CITATIONS
598	Surface Atomic Decoration of a Manganite to a Modulable Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2021, 13, 61267-61274.	8.0	4
599	Eggshell-like MoS ₂ Nanostructures with Negative Curvature and Stepped Faces for Efficient Hydrogen Evolution Reactions. ACS Applied Nano Materials, 2021, 4, 14086-14093.	5.0	5
600	PtSe ₂ on a reduced graphene oxide foil for the alkaline hydrogen evolution reaction. Materials Advances, 2022, 3, 4348-4358.	5.4	6
601	Modulation of the coordination environment enhances the electrocatalytic efficiency of Mo single atoms toward water splitting. Journal of Materials Chemistry A, 2022, 10, 8784-8797.	10.3	17
602	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
603	Direct Fabrication of Nanoscale NiVO _x Electrocatalysts over Nickel Foam for a High-Performance Oxygen Evolution Reaction. ACS Applied Energy Materials, 2022, 5, 4318-4328.	5.1	9
604	Superlattice-Like Co-Doped Mn Oxide and NiFe Hydroxide Nanosheets toward an Energetic Oxygen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	9
605	Engineering the semiconducting CdS nanostructures by N-doped rGO for enhancing the adsorption sites: Promising electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2022, 47, 16106-16120.	7.1	1
606	Hybrid Ni ₂ P<scp>CoP</scp> Nanosheets as Efficient and Robust Electrocatalysts for Domestic Wastewater Splitting. Energy and Environmental Materials, 2023, 6, .	12.8	10
607	Heterostructures based on transition metal chalcogenides and layered double hydroxides for enhanced water splitting. Current Opinion in Electrochemistry, 2022, 34, 101016.	4.8	5
608	Nanoporous TiCN with High Specific Surface Area for Enhanced Hydrogen Evolution Reaction. ACS Applied Nano Materials, 2022, 5, 12077-12086.	5.0	9
609	Facile synthesis of multiphase cobalt-iron spinel with enriched oxygen vacancies as a bifunctional oxygen electrocatalyst. Physical Chemistry Chemical Physics, 2022, 24, 13839-13847.	2.8	7
610	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
611	Recent development in MOFs for oxygen evolution reactions. , 2022, , 135-163.		0
612	Catalysts for hydrogen and oxygen evolution reactions (HER/OER) in cells. , 2022, , 457-470.		1
613	A New Route for the Recycling of Spent Lithium-Ion Batteries Towards Advanced Energy Storage, Conversion and Harvesting Systems. SSRN Electronic Journal, 0, , .	0.4	0
614	Rapid and Energetic Solid-State Metathesis Reactions for Iron, Cobalt, and Nickel Boride Formation and Their Investigation as Bifunctional Water Splitting Electrocatalysts. ACS Materials Au, 2022, 2, 489-504.	6.0	11
615	Rational competent electrocatalytic oxygen evolution reaction on stable tailored ternary MoO ₃ -NiO-activated carbon hybrid catalyst. International Journal of Energy Research, 2022, 46, 12549-12564.	4.5	3

#	ARTICLE	IF	CITATIONS
616	A universal synthesis of MOF-Hydroxyl for highly active oxygen evolution. Journal of Colloid and Interface Science, 2022, 623, 318-326.	9.4	7
617	Construction of Integrated Electrodes with Transport Highways for Pureâ€Waterâ€Fed Anion Exchange Membrane Water Electrolysis. Small, 2022, 18, e2200380.	10.0	25
618	Nitrogen-doped carbon armored Cobalt oxide hollow nanocubes electrochemically anchored on fluorine-doped tin oxide substrate for acidic oxygen evolution reaction. Journal of Colloid and Interface Science, 2022, 623, 327-336.	9.4	11
619	Flower-like MOF-74 nanocomposites directed by selenylation towards high-efficient oxygen evolution. Journal of Colloid and Interface Science, 2022, 623, 552-560.	9.4	15
620	Deeper learning in electrocatalysis: realizing opportunities and addressing challenges. Current Opinion in Chemical Engineering, 2022, 36, 100824.	7.8	6
621	Natural light driven photovoltaic-electrolysis water splitting with 12.7% solar-to-hydrogen conversion efficiency using a two-electrode system grown with metal foam. Journal of Power Sources, 2022, 538, 231536.	7.8	21
622	Introduction of high valent Mo6+ in Prussian blue analog derived Co-layered double hydroxide nanosheets for improved water splitting. Materials Today Chemistry, 2022, 25, 100930.	3.5	11
623	NiO_{<i>x</i>}â€FeO_{<i>x</i>} Nanoclusters Anchored on g-C₃N₄ Sheets for Selective Seawater Oxidation with High Corrosion Resistance. ACS Sustainable Chemistry and Engineering, 2022, 10, 6622-6632.	6.7	22
624	Water electrolysis: from textbook knowledge to the latest scientific strategies and industrial developments. Chemical Society Reviews, 2022, 51, 4583-4762.	38.1	453
625	Low-temperature water electrolysis: fundamentals, progress, and new strategies. Materials Advances, 2022, 3, 5598-5644.	5.4	50
626	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
627	Phytic acid assisted ultra-fast<i>in situ</i> construction of Ni foam-supported amorphous Niâ€Fe phytates to enhance catalytic performance for the oxygen evolution reaction. Inorganic Chemistry Frontiers, 2022, 9, 3598-3608.	6.0	9
628	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
629	Bimetallic Intersection in PdFe@FeO<i>x</i>â€ Nanomaterial for Enhanced Water Splitting Electrocatalysis. Advanced Sustainable Systems, 2022, 6, .	5.3	8
630	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
631	Intramolecular hydroxyl nucleophilic attack pathway by a polymeric water oxidation catalyst with single cobalt sites. Nature Catalysis, 2022, 5, 414-429.	34.4	85
632	Development of Electrolyzer Using NiCo(OH)2 Layered Double Hydroxide Catalyst for Efficient Water Oxidation Reaction. Nanomaterials, 2022, 12, 1819.	4.1	4
633	Nanosheet MoS₂-Decorated MoO₂ on Porous Carbon as Electrodes for Efficient Hydrogen Evolution. ACS Applied Nano Materials, 2022, 5, 8175-8183.	5.0	6

#	ARTICLE	IF	CITATIONS
634	Tuning the Electronic Structure of a Ni-Vacancy-Enriched AuNi Spherical Nanoalloy via Electrochemical Etching for Water Oxidation Studies in Alkaline and Neutral Media. <i>Inorganic Chemistry</i> , 2022, 61, 8570-8584.	4.0	4
635	Carbonaceous FeP Synthesized via Carbothermic Reduction of Dephosphorization Slag as Hydrogen Evolution Catalyst for Water Splitting. <i>Inorganics</i> , 2022, 10, 70.	2.7	1
636	Hydrogen production by Electro catalysis using the reaction of Acidic oxygen evolution: a review. <i>Environmental Chemistry Letters</i> , 2022, 20, 3429-3452.	16.2	18
637	Devising SrFe ₂ O ₄ spinel nanoflowers as highly efficient catalyst for enhanced electrochemical water oxidation in different basic concentration. <i>Journal of Electroanalytical Chemistry</i> , 2022, 919, 116465.	3.8	3
638	New microporous nickel phosphonate derivatives N, P-codoped nickel oxides and N, O-codoped nickel phosphides: Potential electrocatalysts for water oxidation. <i>Catalysis Today</i> , 2023, 424, 113771.	4.4	4
639	Water Oxidation in the Presence of a Nickel Coordination Compound: Decomposition Products, Fe Impurity in the Electrolyte, and a Candidate as a Catalyst. <i>Journal of Physical Chemistry C</i> , 2022, 126, 9753-9761.	3.1	10
640	Synthesis, fabrication and processing of sulfide, selenide-based materials for water splitting. , 2022, , 407-427.		0
641	Exploring the synergistic effect of alloying toward hydrogen evolution reaction: a case study of Ni ₃ M (M = Ti, Ge and Sn) series. <i>Dalton Transactions</i> , 2022, 51, 9728-9734.	3.3	4
642	Sulfide and selenide-based electrocatalyst for oxygen evolution reaction (OER). , 2022, , 463-494.		0
643	Dos and don'ts in screening water splitting electrocatalysts. <i>Energy Advances</i> , 2022, 1, 511-523.	3.3	23
644	Ru@Ni ₃ S ₂ nanorod arrays as highly efficient electrocatalysts for the alkaline hydrogen evolution reaction. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3885-3897.	6.0	9
645	Constructing electrospun spinel NiFe ₂ O ₄ nanofibers decorated with palladium ions as nanosheets heterostructure: boosting electrocatalytic activity of HER in alkaline water electrolysis. <i>Nanoscale</i> , 2022, 14, 10360-10374.	5.6	15
646	Layered 2D transition metal (W, Mo, and Pt) chalcogenides for hydrogen evolution reaction. , 2022, , 495-525.		2
647	Brønsted Acid-Functionalized Ionic Co(II) Framework: A Tailored Vessel for Electrocatalytic Oxygen Evolution and Size-Exclusive Optical Speciation of Biothiols. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 29773-29787.	8.0	17
648	Paired Electrolysis of Acrylonitrile and 5-Hydroxymethylfurfural for Simultaneous Generation of Adiponitrile and 2,5-Furandicarboxylic Acid. <i>Catalysts</i> , 2022, 12, 694.	3.5	2
649	Potentialities of nanostructured SnS ₂ for electrocatalytic water splitting: A review. <i>Journal of Alloys and Compounds</i> , 2022, 921, 166018.	5.5	10
650	Microcrystallization and lattice contraction of NiFe LDHs for enhancing water electrocatalytic oxidation. , 2022, 4, 901-913.		49
651	Boosting overall electrochemical water splitting via rare earth doped cupric oxide nanoparticles obtained by co-precipitation technique. <i>Journal of Alloys and Compounds</i> , 2022, 921, 165948.	5.5	8

#	ARTICLE	IF	CITATIONS
652	Interface Synergistic Effect from Hierarchically Porous Cu(OH) ₂ @FCN MOF/CF Nanosheet Arrays Boosting Electrocatalytic Oxygen Evolution. <i>Catalysts</i> , 2022, 12, 625.	3.5	8
653	Anodic corrosion of heteroatom doped graphene oxide supports and its influence on the electrocatalytic oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 22738-22751.	7.1	13
654	A novel self-activation strategy for designing oxygen vacancies-rich nickel ferrite and cobalt ferrite microspheres with large specific surface area for overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 24343-24357.	7.1	12
655	<i>In Situ</i> Grown Mn(II) MOF upon Nickel Foam Acts as a Robust Self-Supporting Bifunctional Electrode for Overall Water Splitting: A Bimetallic Synergistic Collaboration Strategy. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 29722-29734.	8.0	30
656	Selective CO ₂ Reduction to Ethylene Using Imidazolium-Functionalized Copper. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 27823-27832.	8.0	7
657	A novel approach for the fabrication of Cobalt ferrite and Nickel ferrite nanoparticles”magnetic and electrocatalytic studies. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 17100-17112.	2.2	4
658	Recent Advances on Bimetallic Transition Metal Phosphides for Enhanced Hydrogen Evolution Reaction. <i>ChemistrySelect</i> , 2022, 7, .	1.5	7
659	Low-cost Trimetallic Ni-Fe-Mn Oxides/(Oxy)hydroxides Nanosheets Array for Efficient Oxygen Evolution Reaction. <i>European Journal of Inorganic Chemistry</i> , 2022, 2022, .	2.0	1
660	Cr-doped NiZn layered double hydroxides with surface reconstruction toward the enhanced water splitting. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 649, 129324.	4.7	4
661	Synchronous bi-modulation by nanoclusters and single atoms for high-efficient oxygen reduction electrocatalysis. <i>Chemical Engineering Journal</i> , 2022, 446, 137441.	12.7	12
662	Nickel-induced charge redistribution in Ni-Fe/Fe ₃ C@nitrogen-doped carbon nanocage as a robust Mott-Schottky bi-functional oxygen catalyst for rechargeable Zn-air battery. <i>Journal of Colloid and Interface Science</i> , 2022, 625, 521-531.	9.4	22
663	A-site doped ruthenium perovskite bifunctional electrocatalysts with high OER and ORR activity. <i>Journal of Alloys and Compounds</i> , 2022, 920, 165770.	5.5	13
664	Introductory chapter: Fundamentals of photocatalysis and electrocatalysis. , 2022, , 1-30.		0
665	Non-noble electrocatalysts discovered by scaling relations of Gibbs-free energies of key oxygen adsorbates in water oxidation. <i>Journal of Materials Chemistry A</i> , 0, , .	10.3	4
666	A self-supported heterogeneous bimetallic phosphide array electrode enables efficient hydrogen evolution from saline water splitting. <i>Nano Research</i> , 2023, 16, 3658-3664.	10.4	17
667	Vanadate Encapsulated Polyoxoborate Framework with [V ₁₂ B ₁₈] Clusters: An Efficient Bifunctional Electrocatalyst for Oxygen and Hydrogen Evolution Reactions. <i>Crystal Growth and Design</i> , 2022, 22, 4666-4672.	3.0	11
668	Improvement in Oxygen Evolution Performance of NiFe Layered Double Hydroxide Grown in the Presence of 1T-Rich MoS ₂ . <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 31951-31961.	8.0	8
669	Anion Exchange Membrane Water Electrolysis from Catalyst Design to the Membrane Electrode Assembly. <i>Energy Technology</i> , 2022, 10, .	3.8	11

#	ARTICLE	IF	CITATIONS
670	Bimetallic Cobalt–Nickel Electrode Made by a Sputtering Technique for Electrocatalytic Hydrogen Evolution Reaction: Effect of Nickel Ratios. <i>ACS Applied Energy Materials</i> , 2022, 5, 8658-8668.	5.1	9
671	Multimetallic transition metal phosphide nanostructures for supercapacitors and electrochemical water splitting. <i>Nanotechnology</i> , 2022, 33, 432004.	2.6	11
672	Chameleon-Like Reconstruction on Redox Catalysts Adaptive to Alkali Water Electrolysis. <i>Small</i> , 2022, 18, .	10.0	9
673	Unfolding essence of nanoscience for improved water splitting hydrogen generation in the light of newly emergent nanocatalysts. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 26915-26955.	7.1	16
674	Mixed Transition Metal Carbonate Hydroxide-Based Nanostructured Electrocatalysts for Alkaline Oxygen Evolution: Status and Perspectives. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	5.8	7
675	Topochemical domain engineering to construct 2D mosaic heterostructure with internal electric field for high-performance overall water splitting. <i>Nano Energy</i> , 2022, 101, 107566.	16.0	19
676	Co-axial hierarchical structures composed of Mo-S-Ni nanosheets on carbon nanotube backbone for accelerating electrocatalytic hydrogen evolution. <i>Applied Surface Science</i> , 2022, 600, 154066.	6.1	4
677	A new route for the recycling of spent lithium-ion batteries towards advanced energy storage, conversion, and harvesting systems. <i>Nano Energy</i> , 2022, 101, 107595.	16.0	18
678	Urchin-like CoNiO ₂ microspheres supported on reduced graphene oxide with N and S co-doped for overall water splitting with trace load as the bifunctional electrocatalyst. <i>Journal of Alloys and Compounds</i> , 2022, 922, 166254.	5.5	4
679	Microrods-evolved WO ₃ nanospheres with enriched oxygen-vacancies anchored on dodecahedral CoO(Co ²⁺)@carbon as durable catalysts for oxygen reduction/evolution reactions. <i>Applied Surface Science</i> , 2022, 601, 154195.	6.1	5
681	Carbide-directed enhancement of electrochemical hydrogen evolution reaction on tungsten carbide–oxide heterostructure. <i>Chemical Engineering Journal</i> , 2022, 450, 137915.	12.7	12
682	Soft Template-Based Synthesis of Mesoporous Phosphorus- and Boron-Codoped NiFe-Based Alloys for Efficient Oxygen Evolution Reaction. <i>Small</i> , 2022, 18, .	10.0	43
683	Engineering the electronic structure of Ni ₃ FeS with polyaniline for enhanced electrocatalytic performance of overall water splitting. <i>Nanotechnology</i> , 2022, 33, 445701.	2.6	1
684	B, P-co-doped PdCu nanothorn assemblies for enhanced oxygen reduction electrolysis. <i>Nanotechnology</i> , 0, .	2.6	0
685	Cobalt-iron oxide/black phosphorus nanosheet heterostructure: Electrosynthesis and performance of (photo-)electrocatalytic oxygen evolution. <i>Nano Research</i> , 2023, 16, 6057-6066.	10.4	16
686	Size-Dependent Electrocatalytic Water Oxidation Activity for a Series of Atomically Precise Nickel-Thiolate Clusters. <i>Inorganic Chemistry</i> , 2023, 62, 1875-1884.	4.0	6
687	Bimetallic Ni-Mo nitride@C ₃ N ₄ for highly active and stable water catalysis. <i>Frontiers of Materials Science</i> , 2022, 16, .	2.2	4
688	Boosting the Oxygen Evolution Reaction by Controllably Constructing FeNi ₃ /C Nanorods. <i>Nanomaterials</i> , 2022, 12, 2525.	4.1	3

#	ARTICLE	IF	CITATIONS
689	Higher Water-Splitting Performance of Boron-Based Porous CoMnB Electrocatalyst over the Benchmarks at High Current in 1M KOH and Real Sea Water. <i>Advanced Sustainable Systems</i> , 2022, 6, .	5.3	6
690	Engineering Hexagonal/Monoclinic WO ₃ Phase Junctions for Improved Electrochemical Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2022, 5, 9702-9710.	5.1	17
691	Synthesis, Physical Properties and Electrocatalytic Performance of Nickel Phosphides for Hydrogen Evolution Reaction of Water Electrolysis. <i>Nanomaterials</i> , 2022, 12, 2935.	4.1	11
692	In Situ Reconstructed Zn doped Fe _x Ni _{1-x} (OH) ₂ OOH Catalyst for Efficient and Ultraprecise Oxygen Evolution Reaction at High Current Densities. <i>Small</i> , 2022, 18, .	10.0	27
693	Selective Sulfuration of Two-Dimensional Nonlayered MoO ₂ Nanosheets for High-Current-Density Hydrogen Evolution. <i>ACS Applied Energy Materials</i> , 2022, 5, 10483-10489.	5.1	4
694	Importance of Phase Purity in Two-Dimensional Fe-Co(OH) ₂ for Driving Oxygen Evolution. <i>ACS Applied Nano Materials</i> , 2022, 5, 12209-12216.	5.0	6
695	Facile Solvent-Free Synthesis of Metal Thiophosphates and Their Examination as Hydrogen Evolution Electrocatalysts. <i>Molecules</i> , 2022, 27, 5053.	3.8	5
696	Cerium-Doped Nickel Phosphide Nanosheet Arrays as Highly Efficient Electrocatalysts for the Hydrogen Evolution Reaction in Acidic and Alkaline Conditions. <i>ACS Applied Energy Materials</i> , 2022, 5, 10961-10972.	5.1	9
697	Synergistic effect of V and Fe in Ni/Fe/V ternary layered double hydroxides for efficient and durable oxygen evolution reaction. <i>Frontiers of Chemical Science and Engineering</i> , 2023, 17, 102-115.	4.4	6
698	Interfacial composite FeOOH enhanced efficient electrocatalytic oxygen evolution of NiSe ₂ /Ni ₂ O ₃ . <i>Journal of Alloys and Compounds</i> , 2022, 926, 166779.	5.5	6
699	Recent Progress on Bimetallic-Based Spinel as Electrocatalysts for the Oxygen Evolution Reaction. <i>Small</i> , 2022, 18, .	10.0	45
700	Tailor-designed bimetallic Co/Ni macroporous electrocatalyst for efficient glycerol oxidation and water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 32145-32157.	7.1	20
701	Metal-Organic Framework-Derived 2D NiCoP Nanoflakes from Layered Double Hydroxide Nanosheets for Efficient Electrocatalytic Water Splitting at High Current Densities. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 11577-11586.	6.7	20
702	A Single Source, Scalable Route for Direct Isolation of Earth-Abundant Nanometal Carbide Water-Splitting Electrocatalysts. <i>Inorganic Chemistry</i> , 2022, 61, 13836-13845.	4.0	10
703	Ionic liquid-based (nano)catalysts for hydrogen generation and storage. <i>Journal of Molecular Liquids</i> , 2022, 365, 120142.	4.9	7
704	Defect and Interface Engineering of Three-Dimensional Open Nanonetwork Electrocatalysts for Advanced Electrocatalytic Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 38669-38676.	8.0	34
705	Effect of annealing temperature on the bifunctional electrocatalytic properties of strontium nickelate (SrNiO ₃) nanoparticles for efficient overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 30602-30612.	7.1	9
706	Rationally Constructing Chalcogenide-Hydroxide Heterostructures with Amendment of Electronic Structure for Overall Water-Splitting Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 11299-11309.	6.7	26

#	ARTICLE	IF	CITATIONS
707	Multiple carbon interface engineering to boost oxygen evolution of NiFe nanocomposite electrocatalyst. Chinese Journal of Catalysis, 2022, 43, 2354-2362.	14.0	5
708	Optimizing the electronic structure of CoNx via coupling with N-doped carbon for efficient electrochemical hydrogen evolution. Journal of Colloid and Interface Science, 2022, 628, 350-358.	9.4	7
709	Morphology regulation and application of nano cobalt oxide (Co3O4) electrocatalysts for chlorine evolution toward marine anti-biofouling. Journal of Colloid and Interface Science, 2022, 628, 794-806.	9.4	6
710	Enhanced bifunctional aspects of oxygen vacancy rich cation substituted MnCo2O4 intercalated with g-C3N4 as an oxygen evolution and supercapacitor electrode. International Journal of Hydrogen Energy, 2023, 48, 6384-6398.	7.1	8
711	Preparation of a MnO2@C@MnO Core-shell Heterojunction as a Highly Efficient Electrocatalyst for the Oxygen Evolution Reaction. International Journal of Electrochemical Science, 2022, 17, 221050.	1.3	1
712	A Bifunctional Electrocatalyst based on Ni-porphyrin/Vapor-Grown Carbon Fibres for Oxygen Reduction and Evolution Reactions in Alkaline Media. International Journal of Electrochemical Science, 2022, 17, 221013.	1.3	4
713	Identifying the role of oxygen vacancy on cobalt-based perovskites towards peroxymonosulfate activation for efficient iohexol degradation. Applied Catalysis B: Environmental, 2022, 319, 121901.	20.2	45
714	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
715	Polymorphic ternary metal chalcogenide solid solution nanopowder as electrocatalyst for hydrogen and oxygen evolution reaction. Materials Science in Semiconductor Processing, 2022, 152, 107102.	4.0	1
716	One-pot solvothermal synthesis of highly catalytic Janus transition metal phosphides (TMPs) for high performance OER. Fuel, 2023, 331, 125913.	6.4	6
717	One-Pot Solvothermal Synthesis of Highly Catalytic Janus Transition Metal Phosphides (Tmps) for High Performance Oer. SSRN Electronic Journal, 0, , .	0.4	2
718	Identifying the Role of Oxygen Vacancy on Cobalt-Based Perovskites Towards Peroxymonosulfate Activation for Efficient Iohexol Degradation. SSRN Electronic Journal, 0, , .	0.4	0
719	Interfacial engineering of tungstic disulfideâ€“carbide heterojunction for high-current-density hydrogen evolution. RSC Advances, 2022, 12, 27225-27229.	3.6	3
720	Boosting of overall water splitting activity by regulating the electron distribution over the active sites of Ce doped NiCoâ€“LDH and atomic level understanding of the catalyst by DFT study. Journal of Materials Chemistry A, 2022, 10, 17488-17500.	10.3	64
721	Recent advances in hollow nanomaterials with multiple dimensions for electrocatalytic water splitting. Dalton Transactions, 2022, 51, 13559-13572.	3.3	2
722	High-frequency ultrasonic pyrolysis of 200 nm ultrafine Fe-doped NiO hollow spheres for efficient oxygen evolution catalysis. New Journal of Chemistry, 2022, 46, 19685-19693.	2.8	2
723	Plasma-assisted rhodium incorporation in nickelâ€“iron sulfide nanosheets: enhanced catalytic activity and the Janus mechanism for overall water splitting. Inorganic Chemistry Frontiers, 2022, 9, 6237-6247.	6.0	9
724	Homoleptic Ni(<sc>ii</sc>) dithiocarbamate complexes as pre-catalysts for the electrocatalytic oxygen evolution reaction. Dalton Transactions, 2022, 51, 13003-13014.	3.3	10

#	ARTICLE	IF	CITATIONS
725	Magnetic properties of Sn- and Mn-incorporated Co ₂ TiO ₄ from single-step calcination. Dalton Transactions, 2022, 51, 13022-13031.	3.3	1
726	Interface Effect in Mil-53(Fe)/Metal-Phenolic Network (Ni, Co, and Mn) Nanoarchitectures for Efficient Oxygen Evolution Reaction. SSRN Electronic Journal, 0, , .	0.4	0
727	One-pot synthesis and microstructure analysis of Fe-doped NiS ₂ for efficient oxygen evolution electrocatalysis. Materials Advances, 2022, 3, 7125-7131.	5.4	2
728	<i>In situ</i> precise anchoring of Pt single atoms in spinel Mn ₃ O ₄ for a highly efficient hydrogen evolution reaction. Energy and Environmental Science, 2022, 15, 4592-4600.	30.8	84
729	Enhanced Performance of Sn@Pt Core-Shell Nanocatalysts Supported on Two Different Carbon Structures for the Hydrogen Oxidation Reaction in Acid Media. Journal of Chemistry, 2022, 2022, 1-12.	1.9	1
730	Stainless Steel-Supported Amorphous Nickel Phosphide/Nickel as an Electrocatalyst for Hydrogen Evolution Reaction. Nanomaterials, 2022, 12, 3328.	4.1	4
731	Boosting electrochemical hydrogen evolution activity of MoS ₂ nanosheets via facile decoration of Au overlayer. International Journal of Hydrogen Energy, 2022, 47, 41795-41805.	7.1	10
732	2D CoFe-LDH Nanosheet-Incorporated 1D Microfibers as a High-Performance OER Electrocatalyst in Neutral and Alkaline Media. ACS Applied Energy Materials, 2022, 5, 11483-11497.	5.1	23
734	Anodization of a NiFe Foam: An Efficient and Stable Electrode for Oxygen-Evolution Reaction. ACS Applied Energy Materials, 2022, 5, 11098-11112.	5.1	19
735	High valence metals engineering strategies of Fe/Co/Ni-based catalysts for boosted OER electrocatalysis. Journal of Energy Chemistry, 2023, 76, 195-213.	12.9	114
736	Magnetic Field-Assisted Construction and Enhancement of Electrocatalysts. ChemSusChem, 2022, 15, .	6.8	18
737	Electronically Modified Ce ³⁺ Ion Doped 2D NiFe-LDH Nanosheets over a 1D Microfiber: A High-Performance Electrocatalyst for Overall Water Splitting. ACS Applied Energy Materials, 2022, 5, 12768-12781.	5.1	22
738	Plasma-modified iron-doped Ni ₃ S ₂ nanosheet arrays as efficient electrocatalysts for hydrogen evolution reaction. Arabian Journal of Chemistry, 2022, 15, 104317.	4.9	1
739	Interface effect in MIL-53(Fe)/metal-phenolic network (Ni, Co, and Mn) nanoarchitectures for efficient oxygen evolution reaction. Applied Surface Science, 2023, 608, 155184.	6.1	6
740	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
741	Recent Developments in Conductive Polymer-Based Electro-/Photoelectrocatalytic Materials for Effective Hydrogen/Oxygen Evolution Reactions: A Review. ChemElectroChem, 2022, 9, .	3.4	7
742	Systematic development of bimetallic MOF and its phosphide derivative as an efficient multifunctional electrocatalyst for urea-assisted water splitting in alkaline medium. Journal of Electroanalytical Chemistry, 2022, 923, 116825.	3.8	14
743	Recent Development of Nanostructured Nickel Metal-Based Electrocatalysts for Hydrogen Evolution Reaction: A Review. Topics in Catalysis, 2023, 66, 149-181.	2.8	4

#	ARTICLE	IF	CITATIONS
744	Effective Formation of a Mn-ZIF-67 Nanofibrous Network via Electrospinning: An Active Electrocatalyst for OER in Alkaline Medium. ACS Applied Materials & Interfaces, 2022, 14, 46581-46594.	8.0	14
745	Iron-modulated Ni ₃ S ₂ derived from a Ni-MOF-based Prussian blue analogue for a highly efficient oxygen evolution reaction. Dalton Transactions, 2022, 51, 17283-17291.	3.3	5
746	Electrocatalytic water oxidation on CuO@Cu ₂ O modulated cobalt-manganese layered double hydroxide. RSC Advances, 2022, 12, 28954-28960.	3.6	9
747	<i>In situ</i> electrochemical transformation of Ni ²⁺ to NiOOH as an effective electrode for water oxidation reaction. Dalton Transactions, 2022, 51, 17454-17465.	3.3	6
748	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
749	Accelerating the Electrocatalytic Performance of NiFe@LDH via Sn Doping toward the Water Oxidation Reaction under Alkaline Condition. Inorganic Chemistry, 2022, 61, 16895-16904.	4.0	14
750	Deciphering Ligand Controlled Structural Evolution of Prussian Blue Analogues and Their Electrochemical Activation during Alkaline Water Oxidation. Angewandte Chemie - International Edition, 2022, 61, .	13.8	18
751	High-current density alkaline electrolyzers: The role of Nafion binder content in the catalyst coatings and techno-economic analysis. Frontiers in Chemistry, 0, 10, .	3.6	8
752	Deciphering Ligand Controlled Structural Evolution of Prussian Blue Analogues and Their Electrochemical Activation during Alkaline Water Oxidation. Angewandte Chemie, 0, , .	2.0	0
753	Optimized electroless deposition of NiCoP electrocatalysts for enhanced water splitting. Catalysis Today, 2023, 423, 113929.	4.4	3
754	Facile Solid-Phase Method for Preparing a Highly Active and Stable PtZn-Based Oxygen Reduction/Hydrogen Evolution Bifunctional Electrocatalyst: Effect of Bi-Facet Lattice Strain on Catalytic Activity. ACS Applied Energy Materials, 2022, 5, 13791-13801.	5.1	5
755	Design and Preparation of NiFe ₂ O ₄ @FeOOH Composite Electrocatalyst for Highly Efficient and Stable Oxygen Evolution Reaction. Molecules, 2022, 27, 7438.	3.8	3
756	Using coupled Ni and Zn oxides based on ZIF8 as efficient electrocatalyst for OER. Electrochimica Acta, 2022, 435, 141362.	5.2	10
757	Electrostatically directed assembly of two-dimensional ultrathin Co ₂ Ni-MOF/Ti ₃ C ₂ Tx nanosheets for electrocatalytic oxygen evolution. Journal of Colloid and Interface Science, 2023, 630, 363-371.	9.4	17
758	Water splitting performance of metal and non-metal-doped transition metal oxide electrocatalysts. Coordination Chemistry Reviews, 2023, 474, 214864.	18.8	90
759	Nanosized NiFeSe ₂ /NiCo ₂ O ₄ hierarchical arrays on Ni foam as an advanced electrocatalyst for hydrogen generation. Sustainable Energy and Fuels, 2022, 7, 112-121.	4.9	4
760	Well-defined hierarchical teddy bear sunflower-like NiCo ₂ O ₄ electrocatalyst for superior water oxidation. Sustainable Energy and Fuels, 0, , .	4.9	3
761	Self-adaption of Zn introduced Ni-Fe layered double hydroxide for efficient and durable oxygen evolution reaction electrocatalysis. Applied Surface Science, 2023, 610, 155288.	6.1	8

#	ARTICLE	IF	CITATIONS
762	Single-Step Synthesis of Well-Ordered Hierarchical Nickel Nanostructures for Boosting the Oxygen Evolution Reaction. <i>Energy & Fuels</i> , 2022, 36, 13786-13795.	5.1	3
763	Self-standing Co decorated Cu ₂ O/CuS-based porous electrocatalyst for effective hydrogen evolution reaction in basic media. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 4193-4206.	7.1	3
764	Stabilization of Ru NPs over 3D LaCrO ₃ Nanostructures for High-Performance HER Catalysts in Acidic Media. <i>Inorganic Chemistry</i> , 2022, 61, 19407-19416.	4.0	4
765	Recent Advancements in Two-Dimensional Layered Molybdenum and Tungsten Carbide-Based Materials for Efficient Hydrogen Evolution Reactions. <i>Nanomaterials</i> , 2022, 12, 3884.	4.1	3
766	Fe-incorporated Ni/MoO ₂ Hollow Heterostructure Nanorod Arrays for High-Efficiency Overall Water Splitting in Alkaline and Seawater Media. <i>Small</i> , 2022, 18, .	10.0	38
767	Zeolitic imidazolate framework-derived cobalt-based catalysts for water splitting. <i>Materials Today Chemistry</i> , 2022, 26, 101210.	3.5	2
768	Tuning NiCo ₂ O ₄ bifunctionality with nitrogen-doped graphene nanoribbons in oxygen electrocatalysis for zinc-air battery application. <i>Journal of Electroanalytical Chemistry</i> , 2023, 928, 117000.	3.8	9
769	Improved trifunctional electrocatalytic performance of integrated Co ₃ O ₄ spinel oxide morphologies with abundant oxygen vacancies for oxygen reduction and water-splitting reactions. <i>Journal of Alloys and Compounds</i> , 2023, 935, 168079.	5.5	11
770	Interface engineering of iron-doped multiphase nickel hydroxide as an effective electrocatalyst for oxygen evolution reaction. <i>Applied Surface Science</i> , 2023, 611, 155781.	6.1	4
771	Hydrothermal preparation of MoX ₂ (X = S, Se, Te)/TaS ₂ hybrid materials on carbon cloth as efficient electrocatalyst for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 4207-4219.	7.1	2
772	Electrodeposition of self-supported transition metal phosphides nanosheets as efficient hydrazine-assisted electrolytic hydrogen production catalyst. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 4253-4263.	7.1	29
773	Chrysanthemum-like spinel nanomaterials assembled with bundled nanowires as an efficient catalyst for the oxygen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2022, 7, 310-318.	4.9	2
774	Impact of Ligand in Bimetallic Co, Ni-Metal-Organic Framework towards Oxygen Evolution Reaction. <i>Electrochimica Acta</i> , 2023, 439, 141714.	5.2	8
775	Vacancy-fused multiple layers of copper sulfoselenide superstructures: a propitious HER electrocatalyst in acidic medium. <i>Catalysis Science and Technology</i> , 2023, 13, 694-704.	4.1	2
776	Ni-based ultrathin nanostructures for overall electrochemical water splitting. <i>Materials Chemistry Frontiers</i> , 2023, 7, 194-215.	5.9	10
777	Self-supported electrocatalysts for the hydrogen evolution reaction. <i>Materials Chemistry Frontiers</i> , 2023, 7, 567-606.	5.9	33
778	Recent trends in electrochemical catalyst design for hydrogen evolution, oxygen evolution, and overall water splitting. <i>Electrochimica Acta</i> , 2023, 439, 141715.	5.2	14
779	Gold nanoparticles decorated covalent organic polymer as a bimodal catalyst for total water splitting and nitro compound reduction. <i>Materials Today Chemistry</i> , 2023, 27, 101327.	3.5	1

#	ARTICLE	IF	CITATIONS
780	A binary single atom Fe ₃ C Fe N C catalyst by an atomic fence evaporation strategy for high performance ORR/OER and flexible Zinc-air battery. Chemical Engineering Journal, 2023, 454, 140512.	12.7	17
781	Research progress on high entropy alloys and high entropy derivatives as OER catalysts. Journal of Environmental Chemical Engineering, 2023, 11, 109080.	6.7	13
782	Ambiguities and best practices in the determination of active sites and real surface area of monometallic electrocatalytic interfaces. Journal of Colloid and Interface Science, 2023, 634, 169-175.	9.4	7
783	Study on active sites of Mn-doped iron selenide on pencil electrode for electrocatalytic water splitting. Journal of Sol-Gel Science and Technology, 2023, 106, 1-9.	2.4	2
784	Controlling degradable activities of water oxidation anode via facile surface reconstruction. Applied Surface Science, 2023, 614, 155741.	6.1	2
785	Non-Kinetic Effects Convolute Activity and Tafel Analysis for the Alkaline Oxygen Evolution Reaction on NiFeOOH Electrocatalysts. Angewandte Chemie, 2023, 135, .	2.0	11
786	Non-Kinetic Effects Convolute Activity and Tafel Analysis for the Alkaline Oxygen Evolution Reaction on NiFeOOH Electrocatalysts. Angewandte Chemie - International Edition, 2023, 62, .	13.8	27
787	A review of modulation strategies for improving catalytic performance of transition metal phosphides for oxygen evolution reaction. Applied Catalysis B: Environmental, 2023, 325, 122313.	20.2	38
788	Bimetallic-Based Electrocatalysts for Oxygen Evolution Reaction. Advanced Functional Materials, 2023, 33, .	14.9	31
789	Triazine/thiophene-based microporous organic polymer for electrocatalytic hydrogen evolution reaction. Journal of Applied Polymer Science, 2023, 140, .	2.6	2
790	Defect-induced Fe _x Ni _{1-x} Se ₂ nanoparticles based electrocatalysts towards enhanced hydrogen and oxygen evolution reactions. International Journal of Hydrogen Energy, 2023, 48, 7374-7384.	7.1	3
791	Nanoporous CoCu layered double hydroxide nanoplates as bifunctional electrocatalyst for high performance overall water splitting. International Journal of Hydrogen Energy, 2023, 48, 5755-5763.	7.1	4
792	ZIF -67 derived hybrid CuCo ₂ S ₄ @MoS ₂ catalyst for efficient electrocatalytic hydrogen evolution reaction. Journal of Solid State Chemistry, 2023, 319, 123809.	2.9	3
793	Metal Hydroxides for Water Splitting Applications. ACS Symposium Series, 0, , 101-131.	0.5	1
794	Geometrical Engineering of Spinel Oxide Solid Solution to Enhance the Oxygen Evolution Reaction. ACS Applied Energy Materials, 2022, 5, 15239-15246.	5.1	4
795	Ni(II) supramolecular gel-derived Ni(0) nanoclusters decorated with optimal N, O-doped graphitized carbon as bifunctional electrocatalysts for oxygen and hydrogen evolution reactions. International Journal of Hydrogen Energy, 2023, 48, 8115-8126.	7.1	5
796	Screening Nickel-Doped Mo ₂ C Nanorod Arrays for Ultrastable and Efficient Hydrogen Evolution over a Wide pH Range. ChemPlusChem, 0, , .	2.8	0
797	The Influence of Loadings and Substrates on the Performance of Nickel-Based Catalysts for the Oxygen Evolution Reaction. ChemElectroChem, 2023, 10, .	3.4	3

#	ARTICLE	IF	CITATIONS
798	Electronegativity-Induced Valence State Augmentation of Ni and Co through Electronic Redistribution between Co-Ni ₃ N/CeF ₃ Interfaces for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2023, 6, 1763-1770.	5.1	5
799	iRs-corrections induce potentially misjudging toward electrocatalytic water oxidation. Materials Today Energy, 2023, 32, 101246.	4.7	4
800	Deciphering the role of functional synergy in a catalytic molecular assembler: a proof of concept for boosted catalysis via retrosynthetic linker scissoring. Materials Chemistry Frontiers, 2023, 7, 881-896.	5.9	6
801	Selectivity and activity modulation of electrocatalytic carbon dioxide reduction by atomically dispersed dual iron catalysts. Journal of Materials Chemistry A, 2023, 11, 2377-2390.	10.3	1
802	Electronic Structure Modulation of Nickel Sites by Cationic Heterostructures to Optimize Ethanol Electrooxidation Activity in Alkaline Solution. Small, 2023, 19, .	10.0	8
803	In situ formation of nickel sulfide quantum dots embedded into a two-dimensional metal-organic framework for water splitting. Inorganic Chemistry Frontiers, 2023, 10, 1294-1304.	6.0	6
804	Ultrafast Combustion Synthesis of Robust and Efficient Electrocatalysts for High-Current-Density Water Oxidation. ACS Nano, 2023, 17, 1701-1712.	14.6	54
805	Combustion-derived BaNiO ₃ nanoparticles as a potential bifunctional electrocatalyst for overall water splitting. International Journal of Hydrogen Energy, 2023, 48, 14287-14298.	7.1	11
806	Pd-PdO Nanodomains on Amorphous Ru Metallene Oxide for High-Performance Multifunctional Electrocatalysis. Advanced Materials, 2023, 35, .	21.0	51
807	Ni-based Electro/Photo-Catalysts in HER – A Review. Surfaces and Interfaces, 2023, 36, 102619.	3.0	2
808	Surface reconstruction of Fe(III)/NiS nanotubes for generating high-performance oxygen-evolution catalyst. Separation and Purification Technology, 2023, 310, 123164.	7.9	5
809	Cobalt metal-organic framework derived cobalt-nitrogen-carbon material for overall water splitting and supercapacitor. International Journal of Hydrogen Energy, 2023, 48, 9551-9564.	7.1	12
810	Hydrogel Polymer-PBA Nanocomposite Thin Film-Based Bifunctional Catalytic Electrode for Water Splitting: The Unique Role of the Polymer Matrix in Enhancing the Electrocatalytic Efficiency. ACS Applied Materials & Interfaces, 2023, 15, 6687-6696.	8.0	2
811	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
812	E-waste recycled materials as efficient catalysts for renewable energy technologies and better environmental sustainability. Environment, Development and Sustainability, 2024, 26, 5473-5508.	5.0	9
813	Ruthenium Azobis(benzothiazole): Electronic Structure and Impact of Substituents on the Electrocatalytic Single-Site Water Oxidation Process. Inorganic Chemistry, 2023, 62, 2769-2783.	4.0	3
814	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
815	Deep Reconstruction of Fe-NiMoO ₄ ·nH ₂ O@NiOOH as Efficient Oxygen Evolution Electrocatalysts. Energy & Fuels, 2023, 37, 3023-3030.	5.1	7

#	ARTICLE	IF	CITATIONS
816	Comparative Study on Hydrogen Evolution Reaction of Various Cobalt-Selenide-Based Electrocatalysts. <i>International Journal of Energy Research</i> , 2023, 2023, 1-10.	4.5	4
817	Construction of multiple active sites by solution-free self-generating dual-template strategy: Boosting the ORR performance of NiFe/N-doped 3D porous carbon nanosheets. <i>Journal of Alloys and Compounds</i> , 2023, 942, 169095.	5.5	6
818	Monolayer Iron and Iron-Rich Hydroxide Nanosheets Exfoliated from High-Quality Green Rust for Enhanced Electrocatalytic Oxygen Evolution Reaction. <i>Chemistry of Materials</i> , 2023, 35, 1769-1779.	6.7	1
819	Anion Exchange Membrane Water Electrolysis: The Future of Green Hydrogen. <i>Journal of Physical Chemistry C</i> , 2023, 127, 7901-7912.	3.1	16
820	Boosting the Activity of the Oxygen Evolution Reaction through an Electrospun Nickel Manganese-Based Bimetallic Zeolite Imidazolate Framework Fibrous System in Alkaline Medium. <i>Inorganic Chemistry</i> , 2023, 62, 6411-6420.	4.0	4
821	Recent developments on iron and nickel-based transition metal nitrides for overall water splitting: A critical review. <i>Coordination Chemistry Reviews</i> , 2023, 480, 215029.	18.8	43
822	In-situ construction of hexagonal-star-shaped MnCo ₂ S ₄ @MoS ₂ boosting overall water splitting performance at large-current-density: Compositional-electronic regulation, functions, and mechanisms. <i>Chemical Engineering Journal</i> , 2023, 464, 142592.	12.7	9
823	Ni-Co layered double-hydroxide arrays on stainless steel substrate: Interfacial hydroxide layer enhanced electrocatalyst with high stability for oxygen evolution reaction in alkaline media. <i>Journal of Alloys and Compounds</i> , 2023, 946, 169325.	5.5	3
824	Top-down and matchable interfacial engineering to construct hierarchical deformed NiS/NiCoP for hydrogen evolution reaction over a broad pH range. <i>Applied Surface Science</i> , 2023, 622, 156896.	6.1	5
825	Stainless steel supported NiCo ₂ O ₄ active layer for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2023, 453, 142295.	5.2	3
826	Au/TiO ₂ thin film with ultra-low content of gold: An efficient self-supported bifunctional electrocatalyst for oxygen and hydrogen evolution reaction. <i>Catalysis Today</i> , 2023, 418, 114078.	4.4	2
827	In situ facile fabrication of ultrathin Co(OH) ₂ -CoO/graphene oxide nanosheet hybrids with superior oxygen evolution reaction performance. <i>Journal of Alloys and Compounds</i> , 2023, 948, 169780.	5.5	3
828	Core-shell structured tungstocuprate@silver homobenzotriazole complex for supercapacitor and oxygen evolution reaction. <i>Journal of Energy Storage</i> , 2023, 66, 107398.	8.1	5
829	Surface hydroxyl group-enriched nickel cobalt molybdate hydrate for improved oxygen evolution activity in an anion exchange membrane water electrolyzer. <i>Applied Catalysis B: Environmental</i> , 2023, 328, 122504.	20.2	12
830	Surface reconstructing hierarchical structures as robust sulfion oxidation catalysts to produce hydrogen with ultralow energy consumption. <i>Inorganic Chemistry Frontiers</i> , 2023, 10, 1447-1456.	6.0	16
831	Developments in electrocatalysts for electrocatalytic hydrogen evolution reaction with reference to bio-inspired phthalocyanines. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 16569-16592.	7.1	13
832	A concise perspective on the effect of interpreting the double layer capacitance data over the intrinsic evaluation parameters in oxygen evolution reaction. <i>Materials Today Energy</i> , 2023, 33, 101259.	4.7	13
833	Amorphous to Crystalline Ni ₃ S ₂ Nanostructures Anchored on N-Doped Carbon Nanofibers for Electrochemical Splitting of Water. <i>ACS Applied Nano Materials</i> , 2023, 6, 2336-2345.	5.0	3

#	ARTICLE	IF	CITATIONS
834	Recent Advancements in the Synthetic Mechanism and Surface Engineering of Transition Metal Selenides for Energy Storage and Conversion Applications. <i>Energy Technology</i> , 2023, 11, .	3.8	5
835	Nanoarchitectonics of Layered Metal Chalcogenides-Based Ternary Electrocatalyst for Water Splitting. <i>Energies</i> , 2023, 16, 1669.	3.1	3
836	Surface valence regulation of cobalt–nickel foams for glucose oxidation-assisted water electrolysis. <i>Chemical Communications</i> , 2023, 59, 2485-2488.	4.1	4
838	Fluorinated MXenes accelerate the hydrogen evolution activity of <i>in situ</i> induced snowflake-like nano-Pt. <i>Journal of Materials Chemistry A</i> , 2023, 11, 5830-5840.	10.3	9
839	Bi-functional LaM _x Fe _{1-x} O ₃ (M = Cu, Co, Ni) for photo-fenton degradation of methylene blue and photoelectrochemical water splitting. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 17536-17552.	7.1	4
840	Construction of 2D C,N-co-doped ZnO/Co ₃ O ₄ over Ni(OH) ₂ mesoporous ultrathin nanosheets on Ni foam as high-performance electrocatalysts for benzyl-alcohol oxidation and accelerating hydrogen evolution. <i>New Journal of Chemistry</i> , 2023, 47, 5970-5976.	2.8	0
841	Straightforward Preparation of Fe-Based Electrocatalytic Films at Various Substrates for IrO ₂ -like Water Oxidation Activity. <i>Energy & Fuels</i> , 2023, 37, 3934-3941.	5.1	4
842	Hydrogen Production from Water Electrolysis: The Role of OER and HER Electrocatalysts. <i>ACS Symposium Series</i> , 0, , 73-119.	0.5	1
843	Recent developments in transition metal-based MOFs for electrocatalytic water splitting emphasizing fundamental and structural aspects. <i>Materials Chemistry Frontiers</i> , 2023, 7, 2120-2152.	5.9	12
844	Quantum dot-doped CeO _x –NiB with modulated electron density as a highly efficient bifunctional electrocatalyst for water splitting. <i>Nanoscale</i> , 2023, 15, 6321-6332.	5.6	3
845	Intriguing 3D micro-flower structure of Co _{1.11} Te ₂ deposited on Te nanosheets showing an efficient bifunctional electrocatalytic property for overall water splitting. <i>Electrochimica Acta</i> , 2023, 447, 142133.	5.2	1
846	Approach to Evaluation of Electrocatalytic Water Splitting Parameters, Reflecting Intrinsic Activity: Toward the Right Pathway. <i>ChemSusChem</i> , 2023, 16, .	6.8	2
847	Efficient Oxygen Evolution Reaction Catalyzed by Ni/NiO Nanoparticles Produced by Pulsed Laser Ablation in Liquid Environment. <i>Physica Status Solidi (B): Basic Research</i> , 2023, 260, .	1.5	1
848	Probing the electrocatalytic activity of hierarchically mesoporous M-Co ₃ O ₄ (M=Ni, Zn, and Mn) with branched pattern for oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2023, 934, 117298.	3.8	8
849	Melamine-Based Hydrogen-Bonded Systems as Organoelectrocatalysts for Water Oxidation Reaction. <i>ChemSusChem</i> , 0, , .	6.8	1
850	Recent advances and future prospects on Ni ₃ S ₂ -Based electrocatalysts for efficient alkaline water electrolysis. <i>Green Energy and Environment</i> , 2024, 9, 659-683.	8.7	1
851	Scalable Green Synthesis of Ni ₃ N-Encapsulated NC-Layered FeOOH Heterostructures: Bifunctional Electrodes for Sustainable Electrocatalytic Seawater Splitting. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 6556-6566.	6.7	5
852	Tunable Synthesis of Metal-Rich and Phosphorus-Rich Nickel Phosphides and Their Comparative Evaluation as Hydrogen Evolution Electrocatalysts. <i>Inorganic Chemistry</i> , 2023, 62, 4947-4959.	4.0	2

#	ARTICLE	IF	CITATIONS
853	Facile Synthesis of a Nickel-Based Dopamine MOF/Multiwalled Carbon Nanotubes Nanocomposite as an Efficient Electrocatalyst for the Oxygen Evolution Reaction. <i>Energy & Fuels</i> , 2023, 37, 5388-5398.	5.1	2
854	Electrocatalytic activity of MoSi ₂ N ₄ monolayers decorated with single transition metal atoms: a computational study. <i>Nanotechnology</i> , 2023, 34, 245705.	2.6	0
855	WO ₃ Nanorods Decorated with Very Small Amount of Pt for Effective Hydrogen Evolution Reaction. <i>Nanomaterials</i> , 2023, 13, 1071.	4.1	0
856	Novel Strain Engineering Combined with a Microscopic Pore Synergistic Modulated Strategy for Designing Lattice Tensile-Strained Porous V ₂ C-MXene for High-Performance Overall Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 15797-15809.	8.0	10
857	Mechanistic Regulation by Oxygen Vacancies in Structural Evolution Promoting Electrocatalytic Water Oxidation. <i>ACS Catalysis</i> , 2023, 13, 4398-4408.	11.2	7
858	Two-Dimensional Hierarchical CoTe/NiFe Layered Double Hydroxide Heterostructure for High-Performance Electrocatalytic Water Oxidation. <i>ACS Applied Energy Materials</i> , 2023, 6, 3432-3441.	5.1	1
859	Oxygen Evolution/Reduction Reaction Catalysts: From <i>In Situ</i> Monitoring and Reaction Mechanisms to Rational Design. <i>Chemical Reviews</i> , 2023, 123, 6257-6358.	47.7	81
860	NiMo-MOF-Derived Carbon-Armored Ni ₄ Mo Alloy of an Interwoven Nanosheet Structure as an Outstanding pH-Universal Catalyst for Hydrogen Evolution Reaction at High Current Densities. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 20130-20140.	8.0	11
861	One-dimensional metal-organic frameworks: Synthesis, structure and application in electrocatalysis. , 2023, 1, 100010.		2
862	Tailored Electronic Structure of Ir in High Entropy Alloy for Highly Active and Durable Bifunctional Electrocatalyst for Water Splitting under an Acidic Environment. <i>Advanced Materials</i> , 2023, 35, .	21.0	51
863	Design Strategy of Corrosion-Resistant Electrodes for Seawater Electrolysis. <i>Materials</i> , 2023, 16, 2709.	2.9	3
865	CuNi Nanoalloys with Tunable Composition and Oxygen Defects for the Enhancement of the Oxygen Evolution Reaction**. <i>Angewandte Chemie</i> , 2023, 135, .	2.0	1
866	Metal Oxides and Sulfides for Overall Water Splitting. , 2022, , 1-28.		0
867	CuNi Nanoalloys with Tunable Composition and Oxygen Defects for the Enhancement of the Oxygen Evolution Reaction**. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	13.8	9
868	An energy-saving support made of silver nanowire aerogel for hydrogen evolution reaction. <i>Cell Reports Physical Science</i> , 2023, 4, 101377.	5.6	2
869	Highly Efficient Electrocatalytic Hydrogen Production over Carbon Nanotubes Loaded with Platinum Nanoparticles Using Solution Processing. <i>Advanced Materials Interfaces</i> , 2023, 10, .	3.7	1
870	Exploring the Role of Multi-Catalytic Sites in an Amorphous Co-W-B Electrocatalyst for Hydrogen and Oxygen Evolution Reactions. <i>ACS Applied Energy Materials</i> , 2023, 6, 4630-4641.	5.1	7
871	One-Step High-Temperature Electrodeposition of Fe-Based Films as Efficient Water Oxidation Catalysts. <i>Langmuir</i> , 2023, 39, 6088-6101.	3.5	4

#	ARTICLE	IF	CITATIONS
872	Nickel sulfide-based electrocatalysts for overall water splitting. International Journal of Hydrogen Energy, 2023, 48, 27992-28017.	7.1	8
873	A roadmap towards sustainable anode design for alkaline water electrolysis. Applied Catalysis B: Environmental, 2023, 334, 122853.	20.2	9
874	Green synthesis of MnCo ₂ O ₄ nanoparticles grown on 3D nickel foam as a self-supported electrode for oxygen evolution reaction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 672, 131626.	4.7	6
875	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
876	Recent advances in interface engineering of Fe/Co/Ni-based heterostructure electrocatalysts for water splitting. Materials Horizons, 2023, 10, 2312-2342.	12.2	13
877	Electrodeposition of Ni-Mo-P coatings in choline chloride-ethylene glycol deep eutectic electrolyte for high performance electrocatalyst toward hydrogen evolution reaction. Applied Catalysis A: General, 2023, 662, 119267.	4.3	4
878	Designing a promising electrocatalysts based on iron single-atom doped in graphyne-like BN-yne for water splitting application. Journal of Physics and Chemistry of Solids, 2023, 180, 111454.	4.0	1
879	High-valent metal site incorporated heterointerface catalysts for high-performance anion-exchange membrane water electrolyzers. Applied Catalysis B: Environmental, 2023, 333, 122816.	20.2	6
880	Promoting Surface Reconstruction of Low-Cost Stainless Steel Catalyst for Efficient Oxygen Evolution Reaction. Chemistry - A European Journal, 2023, 29, .	3.3	0
881	Regulating Surface Charge by Embedding Ru Nanoparticles over 2D Hydroxides toward Water Oxidation. ACS Applied Materials & Interfaces, 2023, 15, 26928-26938.	8.0	16
882	Electrocatalytic urea oxidation: advances in mechanistic insights, nanocatalyst design, and applications. Journal of Materials Chemistry A, 2023, 11, 15100-15121.	10.3	10
883	Co ₃ Fe ₂ O ₄ inverse opals with tunable catalytic activity for high-performance overall water splitting. Nanoscale, 2023, 15, 10306-10318.	5.6	2
884	High-Valence Oxides for High Performance Oxygen Evolution Electrocatalysis. Advanced Science, 2023, 10, .	11.2	17
885	Rational design of metal organic framework derived porous Au@Co ₃ O ₄ /C nanocomposite materials for the electrochemical overall water splitting. Journal of Materials Science, 2023, 58, 9130-9147.	3.7	2
886	An amorphous FeCoNiMnCr high-entropy alloy supported by 2H-MoS ₂ on carbon cloth as a highly efficient and robust electrocatalyst for water oxidation. New Journal of Chemistry, 2023, 47, 12670-12677.	2.8	2
887	Graphene vs. carbon black supports for Pt nanoparticles: Towards next-generation cathodes for advanced alkaline electrolyzers. Electrochimica Acta, 2023, 462, 142696.	5.2	6
888	Advanced Pt-based electrocatalysts for the hydrogen evolution reaction in alkaline medium. Nanoscale, 2023, 15, 11759-11776.	5.6	12
890	Amorphous and defective Co-P-O@NC ball-in-ball hollow structure for highly efficient electrocatalytic overall water splitting. Journal of Colloid and Interface Science, 2023, 649, 1047-1059.	9.4	2

#	ARTICLE	IF	CITATIONS
891	Electrochemical dealloying-assisted activity enhancement: The next big thing in water electrosplitting!. Nano Energy, 2023, 114, 108624.	16.0	3
892	In Situ Growth of Nano-MoS ₂ on Graphite Substrates as Catalysts for Hydrogen Evolution Reaction. Materials, 2023, 16, 4627.	2.9	0
893	Experimental and Theoretical Insights of Anion Regulation in MOF-Derived Ni-Co-Based Nanosheets for Supercapacitors and Anion Exchange Membrane Water Electrolyzers. ACS Applied Materials & Interfaces, 2023, 15, 32436-32452.	8.0	8
894	Pulsed laser ablation production of Ni/NiO nano electrocatalysts for oxygen evolution reaction. , 2023, 1, .		1
895	A simple postsynthetic in-situ cation exchange strategy to construct Fe-doped Ni ₃ Se ₄ nanoarray for enhanced oxygen evolution reaction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 671, 131637.	4.7	1
896	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
897	Flexible and Binder-Free Iron Phosphide Electrodes Using a Three-Dimensional Support for High Hydrogen Productivity. ChemElectroChem, 0, , .	3.4	0
898	Single Ni atom-anchored BN-yne for enhanced water splitting. Materials Chemistry and Physics, 2023, 305, 127892.	4.0	0
899	Waste is the best: end-of-life lithium ion battery-derived ultra-active Ni ³⁺ -enriched β -Ni(OH) ₂ for the electrocatalytic oxygen evolution reaction. Journal of Materials Chemistry A, 2023, 11, 13687-13696.	10.3	1
900	Phase-Pure High-Entropy Spinel Oxide (Ni,Fe,Mn,Cu,Zn) ₃ O ₄ via Thermal Plasma: A Promising Electrocatalyst for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2023, 6, 5899-5911.	5.1	9
902	Synergetic modulation of a hierarchical nanoflower-like NiMoO ₄ /Ni(OH) ₂ composite toward efficient alkaline water oxidation. Materials Chemistry and Physics, 2023, 305, 127949.	4.0	3
903	A Strongly Coupled Ag(S)@NiO/Nickel Foam Electrode Induced by Laser Direct Writing for Hydrogen Evolution at Ultrahigh Current Densities with Long-Term Durability. Small Methods, 2023, 7, .	8.6	3
904	Structural evolution of a water oxidation catalyst by incorporation of high-valent vanadium from the electrolyte solution. Journal of Materials Chemistry A, 2023, 11, 15906-15914.	10.3	0
905	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
906	A review on consequences of flexible layered double hydroxide-based electrodes: fabrication and water splitting application. Sustainable Energy and Fuels, 2023, 7, 3741-3775.	4.9	4
907	Revealing promotion of interfacial Pt-O-Fe oxygen bridge structure in PtFe/graphene synthesized by a four-electrode electrochemical system on water splitting. International Journal of Hydrogen Energy, 2023, 48, 38728-38741.	7.1	3
908	pH-Induced Size Regulation of Ru Nanocrystals and the Applications Towards Proton Exchange Membrane Water Electrolysis. Chemical Research in Chinese Universities, 2023, 39, 647-653.	2.6	0
909	Investigating into the intricacies of charge storage kinetics in NbMn-oxide composite electrodes for asymmetric supercapacitor and HER applications. Journal of Alloys and Compounds, 2023, 965, 171305.	5.5	7

#	ARTICLE	IF	CITATIONS
910	Tuning the Surface Electronic Structure of Amorphous NiWO ₄ by Doping Fe as an Electrocatalyst for OER. Inorganic Chemistry, 2023, 62, 11817-11828.	4.0	7
911	Exfoliated Transition Metal Dichalcogenide-Based Electrocatalysts for Oxygen Evolution Reaction. Advanced Sustainable Systems, 2023, 7, .	5.3	0
912	Metal-Organic Framework-Derived Fe-Doped CoF ₂ /NF Composite as Bifunctional Electrocatalyst for Oxygen Evolution and Hydrazine Oxidation. ACS Applied Nano Materials, 2023, 6, 12754-12763.	5.0	1
913	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
914	Construction of Ni ₄ Mo/MoO ₂ heterostructure on oxygen vacancy enriched NiMoO ₄ nanorods as an efficient bifunctional electrocatalyst for overall water splitting. Journal of Colloid and Interface Science, 2023, 650, 1490-1499.	9.4	2
915	Rational design of novel NiBi-LDH with enhanced overall water splitting activity. International Journal of Hydrogen Energy, 2024, 51, 869-886.	7.1	0
916	Molecular architecture of PANI/V ₂ O ₅ /MnO ₂ composite designed for hydrogen evolution reaction. Surfaces and Interfaces, 2023, 41, 103221.	3.0	3
917	Coupling ferromagnetic ordering electron transfer channels and surface reconstructed active species for spintronic electrocatalysis of water oxidation. Journal of Energy Chemistry, 2023, 85, 570-580.	12.9	6
918	Nanotechnology for Water Splitting: A Sustainable Way to Generate Hydrogen. , 2023, , 223-253.		0
919	Tuning the surface chemistry of La _{0.6} Sr _{0.4} CoO _{3-δ} perovskite via in-situ anchored chemical bonds for enhanced overall water splitting. International Journal of Hydrogen Energy, 2023, , .	7.1	0
920	Two Dimensional Ir-Based Catalysts for Acidic OER. Small, 2023, 19, .	10.0	6
921	Synergistic Interface Engineering of RuO ₂ /Co ₃ O ₄ Heterostructures for Enhanced Overall Water Splitting in Acidic Media. Advanced Energy and Sustainability Research, 2023, 4, .	5.8	2
922	NiFe Alloy Nanoparticles Tuning the Structure, Magnetism, and Application for Oxygen Evolution Reaction Catalysis. Magnetochemistry, 2023, 9, 201.	2.4	3
924	A layered CoSeO ₃ pre-catalyst for electrocatalytic water oxidation. Dalton Transactions, 0, , .	3.3	0
925	Application of Carbonaceous Quantum dots in Energy Storage. , 2023, , 178-191.		0
926	Synergistic enhancement of hydrogen interactions in palladium-silicon-gold metallic glass with multilayered graphene. Journal of Materials Chemistry A, 0, , .	10.3	0
927	Graphene Supported Pillared Ni-Co Metal-Organic Framework as an Efficient Electrocatalyst for the Water Oxidation Reaction. ACS Applied Energy Materials, 2023, 6, 8422-8433.	5.1	0
928	Hierarchical desert plant-like CoNiO ₂ nanowires decoration on MoS ₂ nano-petals for enhanced bi-functional overall water splitting reactions. Sustainable Materials and Technologies, 2023, 37, e00696.	3.3	1

#	ARTICLE	IF	CITATIONS
929	Photo/electrocatalytic hydrogen evolution using Type-II Cu ₂ O/g-C ₃ N ₄ Heterostructure: Density functional theory addresses the improved charge transport efficiency. Journal of Colloid and Interface Science, 2023, 652, 1467-1480.	9.4	17
930	Boosting the inherent activity of NiFe layered double hydroxide via erbium incorporation for water oxidation. Frontiers in Chemistry, 0, 11, .	3.6	0
931	Tuned morphology configuration to augment the electronic structure and durability of iron phosphide for efficient bifunctional electrocatalysis and charge storage. Journal of Energy Storage, 2023, 73, 108824.	8.1	4
932	Investigation of Hydrogen and Oxygen Evolution on Cobalt-Nanoparticles-Supported Graphitic Carbon Nitride. Materials, 2023, 16, 5923.	2.9	2
933	An Amiable Design of Cobalt Single Atoms as the Active Sites for Oxygen Evolution Reaction in Desalinated Seawater. Small, 0, , .	10.0	1
934	Regulating the selective adsorption of OH* over the equatorial position of Co ₃ O ₄ via doping of Ru ions for efficient water oxidation reaction. Journal of Materials Chemistry A, 2023, 11, 21767-21779.	10.3	6
935	Research progress on MOFs and their derivatives as promising and efficient electrode materials for electrocatalytic hydrogen production from water. RSC Advances, 2023, 13, 24393-24411.	3.6	2
936	Flexible direct synthesis of phosphorus-rich CoP ₃ on carbon black and its examination in hydrogen evolution electrocatalysis. Energy Advances, 0, , .	3.3	0
937	Mechanistic insights on Bi-potentiodynamic control towards atomistic synthesis of electrocatalysts for hydrogen evolution reaction. Scientific Reports, 2023, 13, .	3.3	0
938	Hydrophobic and Homogeneous Conductive Carbon Matrix for High-Rate Non-Alkaline Zinc-Air Batteries. Small, 2023, 19, .	10.0	0
939	Synergistic effect of multiferroicity in GdFeO ₃ nanoparticles for significant hydrogen production through photo/electrocatalysis. Materials Today Chemistry, 2023, 33, 101713.	3.5	6
940	Decoration of Au Nanoparticles over LaFeO ₃ : A High Performance Electrocatalyst for Total Water Splitting. Inorganic Chemistry, 2023, 62, 14448-14458.	4.0	2
941	Structure-Property Relationship of Double Perovskite Oxide towards Trifunctional Electrocatalytic Activity: Strategy for Designing and Development. ChemCatChem, 2023, 15, .	3.7	2
942	Wood Derived Flexible and Spongy Architectures for Advanced Electrochemical Energy Storage and Conversion. Advanced Sustainable Systems, 0, , .	5.3	0
943	Ferrum-doped nickel selenide @tri-nickel diselenide heterostructure electrocatalysts with efficient and stable water splitting for hydrogen and oxygen production. Advanced Composites and Hybrid Materials, 2023, 6, .	21.1	2
944	Ni ₃ S ₂ nanocrystals in-situ grown on Ni foam as highly efficient electrocatalysts for alkaline hydrogen evolution. Rare Metals, 2023, 42, 3420-3429.	7.1	3
945	Nanostructured electrocatalysts for low-temperature water splitting: A review. Electrochimica Acta, 2023, 471, 143335.	5.2	4
946	In-situ reconstruction of self-supported amorphous Ni-Mo electrode for stable hydrogen evolution at large and intermittent current density. Molecular Catalysis, 2023, 550, 113541.	2.0	0

#	ARTICLE	IF	CITATIONS
947	Making Ternaryâ€Metal Hydroxysulfide Catalyst via Cathodic Reconstruction with Ion Regulation for Industrialâ€Level Hydrogen Generation. Advanced Energy Materials, 2023, 13, .	19.5	10
948	Controllable tuning graphene composited PtCoYOx nanocomposites to promote electrocatalytic hydrogen evolution. Applied Catalysis A: General, 2023, 665, 119359.	4.3	0
949	Fabrication of multi-morphological Bi2O2(OH)NO3-BiVO4 Z-Scheme heterojunction for enhanced photocatalytic antibiotic removal performance. Journal of Environmental Chemical Engineering, 2023, 11, 110962.	6.7	0
950	Navigating <i>iR</i> Compensation: Practical Considerations for Accurate Study of Oxygen Evolution Catalytic Electrodes. ACS Energy Letters, 2023, 8, 4323-4329.	17.4	3
951	Highly stable MoS2/MnMoO4@Ti nanocomposite electrocatalysts for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2023, , .	7.1	0
952	Recycled Steel from Waste Dead Nickelâ€Metal Hydride (Niâ€MH) Batteries as Efficient Bifunctional Electrodes for Water Splitting: Ideal Way from Waste to Energy. ACS Applied Energy Materials, 2023, 6, 10610-10627.	5.1	0
953	Recent advances in single-atom catalysts for electrochemical water splitting. , 2023, , 199-231.		0
954	Electrostatically connected nanoarchitected electrocatalytic films for boosted water splitting. Nano Research, 2024, 17, 1114-1122.	10.4	1
955	Cobalt-regulated NiFe-LDH for efficient electrocatalytic oxygen evolution in alkaline simulated industrial sewage and natural seawater. Journal of Electroanalytical Chemistry, 2023, 949, 117824.	3.8	0
956	Scalable synthesis of MOFs-derived ZnO/C nanohybrid: efficient electrocatalyst for oxygen evolution reaction in alkaline medium. Journal of the Korean Ceramic Society, 2023, 60, 918-934.	2.3	1
957	<i>Journal of Materials Chemistry A</i> Editorâ€™s choice collection: Advancing electrocatalysts for a sustainable world. Journal of Materials Chemistry A, 2023, 11, 22018-22019.	10.3	0
958	Participation of the unstable lattice oxygen of cation-exchanged Î-MnO₂ in the water oxidation reaction. Journal of Materials Chemistry A, 2023, 11, 21686-21693.	10.3	0
959	Basics of Water Electrolysis. , 2023, , 1-32.		0
961	Quad-metallic MOF-derived carbon-armored pseudo-high entropy alloys as a bifunctional electrocatalyst for alkaline water electrolysis at high current densities. Journal of Materials Chemistry A, 2023, 11, 25283-25297.	10.3	0
962	Thermochemical Water Splitting Cycles. , 2023, , 105-157.		1
963	Fabrication of mesoporous CrTe supported on graphitic carbon nitride as an efficient electrocatalyst for water oxidation. Applied Organometallic Chemistry, 2023, 37, .	3.5	0
964	Breakthroughs and prospects in ruthenium-based electrocatalyst for hydrogen evolution reaction. Journal of Alloys and Compounds, 2023, 968, 172020.	5.5	2
965	ZIF67-derived Coâ€CoO@C nanocomposites as highly efficient and selective oxygen evolution reaction (OER) catalysts for seawater electrolysis. International Journal of Hydrogen Energy, 2024, 49, 780-793.	7.1	1

#	ARTICLE	IF	CITATIONS
966	Tuning the active sites and optimizing the <i>d</i> -spacing value in CoFe-LDH by <i>ex situ</i> intercalation of guest anions: an innovative electrocatalyst for overall water splitting reaction. <i>Catalysis Science and Technology</i> , 2023, 13, 6377-6391.	4.1	3
967	NiFeOOH-Co ₉ S ₈ -Intercalated Nanostructure Arrays for Energy-Efficient H ₂ Production and Sulfion Oxidation at High Current Density. <i>ACS Applied Nano Materials</i> , 0, , .	5.0	1
968	Distribution function of relaxation times: An alternative to classical methods for evaluating the reaction kinetics of oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2023, 476, 146708.	12.7	0
969	Engineering the active sites by tuning the Ni and Mn composition in hierarchical heterostructured composites for electrocatalytic water splitting. <i>Electrochimica Acta</i> , 2023, 472, 143372.	5.2	0
970	A macroporous carbon nanoframe for hosting Mott-Schottky Fe-Co/Mo ₂ C sites as an outstanding bi-functional oxygen electrocatalyst. <i>Materials Horizons</i> , 2023, 10, 5969-5982.	12.2	3
971	Î¿S2 nanoensembles prepared by a simple solvothermal route for hydrogen evolution reaction. <i>FlatChem</i> , 2023, 42, 100566.	5.6	0
972	Nanopalladium-Anchored MXene Nanoflowers for Boosting Electrocatalytic Hydrogen Evolution Reaction. <i>Energy & Fuels</i> , 0, , .	5.1	0
973	Facil Topochemical Prepared Hierarchical Ni-Fe LDH Nanoflowers for Electrochemical Oxygen Elution Reaction. <i>New Journal of Chemistry</i> , 0, , .	2.8	0
974	One-step electrodeposition of V-doped NiFe nanosheets for low-overpotential alkaline oxygen evolution. <i>Dalton Transactions</i> , 2023, 52, 16963-16973.	3.3	1
975	Observing the reconstruction of cobalt oxide model catalyst in electrocatalytic water oxidation. <i>Applied Surface Science</i> , 2024, 644, 158734.	6.1	0
976	Carbon quantum dots conjugated with metal hybrid nanoparticles as advanced electrocatalyst for energy applications – A review. <i>Coordination Chemistry Reviews</i> , 2024, 500, 215499.	18.8	5
977	Construction of Co-Ni-B heteronanosheets electrocatalyst for enhanced oxygen and hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2024, 51, 898-906.	7.1	3
978	An efficient NiO/NiS/NiP heterostructure catalyst for oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2024, 976, 172931.	5.5	1
979	Synthesis of defect-engineered molybdenum sulfides on reduced graphene oxide for enhanced hydrogen evolution reaction kinetics. <i>International Journal of Hydrogen Energy</i> , 2024, 51, 1387-1396.	7.1	0
980	Engineering Oxygen Vacancies in (FeCrCoMnZn) ₃ O ₄ High Entropy Spinel Oxides Through Altering Fabrication Atmosphere for High-Performance Rechargeable Zinc-Air Batteries. <i>Global Challenges</i> , 0, , .	3.6	0
981	Transition-metal sulfides with excellent hydrogen and oxygen reactions: A mini-review. <i>Journal of Solid State Chemistry</i> , 2024, 329, 124445.	2.9	0
982	Multiple Tuning of the Local Environment Enables Selective CO ₂ Electroreduction to Ethylene in Neutral Electrolytes. <i>Advanced Functional Materials</i> , 2024, 34, .	14.9	0
983	Underlying aspects of surface amendment strategies adopted in electrocatalysts for overall water splitting under alkaline conditions. <i>Current Opinion in Electrochemistry</i> , 2024, 43, 101428.	4.8	0

#	ARTICLE	IF	CITATIONS
984	Electrocatalytic activity and surface oxide reconstruction of bimetallic iron-cobalt nanocarbide electrocatalysts for the oxygen evolution reaction. RSC Advances, 2023, 13, 33413-33423.	3.6	1
985	Interfacial carbon dots introduced distribution-structure modulation of Pt loading on graphene towards enhanced electrocatalytic hydrogen evolution reaction. Journal of Colloid and Interface Science, 2024, 656, 214-224.	9.4	1
986	How to extract kinetic information from Tafel analysis in electrocatalysis. Journal of Chemical Physics, 2023, 159, .	3.0	0
987	Total electrode TM and intrinsic TM activity parameters in water electrolysis: a comprehensive investigation. Journal of Materials Chemistry A, 2023, 11, 26023-26043.	10.3	2
988	Engineering core-shell hollow-sphere Fe ₃ O ₄ @FeP@nitrogen-doped-carbon as an advanced bi-functional electrocatalyst for highly-efficient water splitting. Journal of Colloid and Interface Science, 2024, 657, 684-694.	9.4	1
989	Self-Assembled p-n Homojunction in SnS ₂ Nanosheets for Electrocatalytic Hydrogen Evolution: The Role of Sulfur Defects. ACS Applied Nano Materials, 2023, 6, 22057-22068.	5.0	0
990	Interfacial engineering of Fe ₂ O ₃ coupled Co ₃ O ₄ heterostructures anchored on g-C ₃ N ₄ structure for enhanced electrocatalytic performance in alkaline oxygen evolution reaction. International Journal of Hydrogen Energy, 2024, 53, 1445-1456.	7.1	1
991	Optimum iron-pyrophosphate electronic coupling to improve electrochemical water splitting and charge storage. , 2023, 18, .		0
993	MOF-templated CuO and Mn CuO/Cu ₂ O composites as electrocatalyst in oxygen evolution. Journal of Molecular Structure, 2024, 1297, 137018.	3.6	0
994	Interface-Modified Ni-Fe-P/Co-P/NF Alloys for Electrocatalytic Water Splitting in Alkaline Solution. Energy & Fuels, 2023, 37, 19103-19112.	5.1	0
995	Immobilizing Bimetallic RuCo Nanoalloys on Few-Layered MXene as a Robust Bifunctional Electrocatalyst for Overall Water Splitting. Chemistry - A European Journal, 2024, 30, .	3.3	0
996	Highly stable urea oxidation electrolysis via Rh nanoparticles residing in the porous LaNiO ₃ nanocubes. International Journal of Hydrogen Energy, 2024, 56, 16-26.	7.1	0
997	Thermally Evaporated MoO ₃ Nanowires as Oxygen Evolution Reaction Catalysts for Water Splitting Applications. ACS Applied Nano Materials, 0, , .	5.0	0
998	Intermetallic FeNiAs as an Electro(pre)catalyst for Enhanced Electrochemical Water Oxidation. , 0, , .		0
1000	Rapid solid-state metathesis reactions for the formation of cobalt-iron monoboride solid-solutions and investigation of their water splitting electrocatalytic activity. Materials Advances, 0, , .	5.4	0
1001	Electronic structure engineering of electrocatalyst for efficient urea oxidation reaction. Nano Energy, 2024, 121, 109183.	16.0	1
1002	RuSe ₂ /CeO ₂ heterostructure as a novel electrocatalyst for highly efficient alkaline hydrogen evolution. Nanotechnology, 0, , .	2.6	0
1003	Investigation of 2D graphite support for development of iron-graphite composite as electrocatalyst for alkaline water oxidation reaction. Journal of Materials Research, 2024, 39, 663-674.	2.6	0

#	ARTICLE	IF	CITATIONS
1004	Boron Nitride Nanotubes Supported Icosahedral Pd Nanoparticles: Enabling Ultrahigh Current Density-Superior Hydrogen Evolution activity and Theoretical Insights. Applied Catalysis B: Environmental, 2023, , 123609.	20.2	1
1006	Manganeseâ€Doped Bimetallic (Co,Ni) ₂ P Integrated CoP in N,S Coâ€Doped Carbon: Unveiling a Compatible Hybrid Electrocatalyst for Overall Water Splitting. Small, 0, , .	10.0	0
1007	Application progress of NiMoO ₄ electrocatalyst in basic oxygen evolution reaction. Catalysis Science and Technology, 2024, 14, 533-554.	4.1	0
1008	Nickel oxide doped ceria nanoparticles (NiO@CeO ₂) for boosting oxygen evolution reaction and enhancing stability. Applied Surface Science, 2024, 649, 159212.	6.1	0
1009	Fabrication of zirconium ditelluride/graphene oxide nanocomposite array for oxygen evolution and hydrogen evolution reactions. International Journal of Hydrogen Energy, 2024, 56, 525-533.	7.1	0
1010	Rise of wood-based catalytic electrodes for large-scale hydrogen production. Materials Chemistry Frontiers, 2024, 8, 1591-1610.	5.9	0
1011	Breaking boundaries: advancements in solid-state redox mediators for decoupled water electrolysis. Journal of Materials Chemistry A, 2024, 12, 4363-4382.	10.3	0
1013	Bimetallic CPM-37(Ni,Fe) metalâ€organic framework: enhanced porosity, stability and tunable composition. Dalton Transactions, 2024, 53, 4937-4951.	3.3	0
1014	Ce-doped multi-phase NiMo-based phosphorus/sulfide heterostructure for efficient photo-enhanced overall water splitting at high current densities. Journal of Colloid and Interface Science, 2024, 660, 166-176.	9.4	0
1015	Tailoring a Multifunctional PEDOT/Co ₃ O ₄ @CeO ₂ Composite for Sustainable Energy Applications. Advanced Sustainable Systems, 0, , .	5.3	0
1016	Precisely controlled electronic state of Fe-Ni ₃ P electrocatalyst via moderate phosphorization for urea-assisted overall water splitting. Journal of Alloys and Compounds, 2024, 980, 173659.	5.5	0
1017	Sustainable solar-and electro-driven production of high concentration H ₂ O ₂ coupled to electrocatalytic upcycling of polyethylene terephthalate plastic waste. Chemical Engineering Journal, 2024, 482, 149191.	12.7	1
1018	Statistical Designâ€Guided Synthesis of Nanoarchitectonics of Highâ€Performance NiFeMoN Electrocatalyst through Facile Oneâ€Step Magnetron Sputtering. Advanced Science, 2024, 11, , .	11.2	0
1019	Facile Synthesis of Ni-MgO/CNT Nanocomposite for Hydrogen Evolution Reaction. Nanomaterials, 2024, 14, 280.	4.1	1
1020	Trimetallic-organic framework/MXene composite as an oxygen evolution reaction electrocatalyst with elevated intrinsic activity. Journal of Materials Chemistry A, 2024, 12, 4826-4834.	10.3	0
1021	The hydrothermal synthesis of d-Ti ₃ CN/V ₂ O ₅ hollow spheres for enhanced supercapacitors applications. Diamond and Related Materials, 2024, 143, 110881.	3.9	0
1022	Halogen-assisted Ni based MOFs ball-flowers for enhanced electrocatalytic oxygen evolution. International Journal of Hydrogen Energy, 2024, 58, 1295-1301.	7.1	1
1023	Noble-Metal-Free Bifunctional Electrocatalysts for Overall Water Splitting in Alkaline Medium. Advances in Material Research and Technology, 2024, , 279-337.	0.6	0

#	ARTICLE	IF	CITATIONS
1024	Pt loaded on 3D micro-flower-shaped NiFe layered double hydroxides as a highly active and durable methanol oxidation electrocatalyst. Journal of Electroanalytical Chemistry, 2024, 956, 118089.	3.8	0
1025	Tungsten Carbide-Based Materials for Electrocatalytic Water Splitting: A Review. ChemElectroChem, 2024, 11, .	3.4	0
1026	Synthesis and Oxygen Evolution Reaction Application of a Co~Cd Based Bimetallic Metal-Organic Framework. Chemistry - an Asian Journal, 0, , .	3.3	0
1027	Exploring the electrocatalytic prowess of a synergistic 1T-MoS ₂ -metallic Ni composite towards alkaline hydrogen evolution. Materials Advances, 2024, 5, 2805-2817.	5.4	0
1028	Intrinsic Specific Activity Enhancement for Bifunctional Electrocatalytic Activity toward Oxygen and Hydrogen Evolution Reactions via Structural Modification of Nickel Organophosphonates. Inorganic Chemistry, 2024, 63, 3795-3806.	4.0	0
1029	Surface-Active Edge-Rich sites in 2D layered cobalt Hydroxide/Phosphide interfaces for High-Performance aqueous Sodium-Ion energy storage. Chemical Engineering Journal, 2024, 484, 149508.	12.7	0
1031	Trifunctional robust electrocatalysts based on 3D Fe/N-doped carbon nanocubes encapsulating Co ₄ N nanoparticles for efficient battery-powered water electrolyzers. , 0, , .		0
1033	Nitrogen-doped carbon nanostructures embedded with Fe-Co-Cr alloy based nanoparticles as robust electrocatalysts for Zn-air batteries. Journal of Alloys and Compounds, 2024, 984, 173862.	5.5	0
1034	Electrochemical study to explore the capacitance properties of the TiO ₂ /solution interface. Ionics, 2024, 30, 2217-2228.	2.4	0
1035	Pulsed laser deposition as an efficient tool to enhance the performance of electrocatalysis design, strategies and current perspectives. International Journal of Hydrogen Energy, 2024, 60, 668-687.	7.1	0
1036	Nickel and Commercially Available Nickel-Containing Alloys as Electrodes for the Electrochemical Oxygen Evolution. ChemElectroChem, 2024, 11, .	3.4	0
1037	Ni,Fe,Co-LDH Coated Porous Transport Layers for Zero-Gap Alkaline Water Electrolyzers. Nanomaterials, 2024, 14, 407.	4.1	0
1038	Significance of transition metal (Co, Ni and Zn) doping on the nano MnSe for high-performance supercapacitor electrode. Journal of Alloys and Compounds, 2024, 986, 173957.	5.5	0
1039	Recent advancement in water electrolysis for hydrogen production: A comprehensive bibliometric analysis and technology updates. International Journal of Hydrogen Energy, 2024, 60, 780-801.	7.1	0
1040	Effect of molybdenum doping Zn-Co spinel oxide microspheres for efficient electrocatalytic hydrogen production in alkaline media and study supported by DFT. Nano Structures Nano Objects, 2024, 37, 101108.	3.5	0
1041	Best Practices for Accurately Reporting Electrocatalytic Performance of Nanomaterials. Materials Horizons, 2024, , 95-117.	0.6	0
1042	Tuning the oxygen vacancies and mass transfer of porous conductive ceramic supported IrOx catalyst via polyether-derived composite oxide pyrolysis: Toward a highly efficient oxygen evolution reaction catalyst for water electrolysis. Advanced Composites and Hybrid Materials, 2024, 7, .	21.1	0
1043	Cu ₂ O-based trifunctional catalyst for enhanced alkaline water splitting and hydrazine oxidation: Integrating sulfurization, Co incorporation, and LDH heterostructure. Chemical Engineering Journal, 2024, 486, 150175.	12.7	0

#	ARTICLE	IF	CITATIONS
1044	Tetranuclear Co ^{II} ₄ O ₄ Cubane Complex: Effective Catalyst Toward Electrochemical Water Oxidation. Inorganic Chemistry, 2024, 63, 4883-4897.	4.0	0
1045	Effect of Ni Sulfate Residue on Oxygen Evolution Reaction (OER) in Porous NiFe@NiFe Layered Double Hydroxide. Small, 0, , .	10.0	0
1046	Progress and prospects of MXene-based bifunctional electrocatalysts for overall water splitting in alkaline media. International Journal of Hydrogen Energy, 2024, 62, 994-1017.	7.1	0
1047	Interfacial Heterojunction Electronic Modulation on RuSe ₂ @NiFeLDH Heterostructures for Water Splitting. Energy & Fuels, 2024, 38, 6281-6289.	5.1	0
1048	Recent progresses on Janus electrocatalysts for water electrolysis: A critical review. , 2024, 2, .		0
1049	Facile synthesis of amorphous/crystalline Ni-Fe thiophenedicarboxylate coordination polymer nanobelts for efficient water oxidation. Journal of Colloid and Interface Science, 2024, 665, 345-354.	9.4	0
1050	Progress on the Design of Electrocatalysts for Largeâ€Current Hydrogen Production by Tuning Thermodynamic and Kinetic Factors. Advanced Functional Materials, 0, , .	14.9	0
1052	Mechanistic insights into electrocatalytically reduced OER performance in marigold-like trimetallic NiFe-based LDH: charge localisation and d-band orbital filling. Journal of Materials Chemistry A, 2024, 12, 9532-9545.	10.3	0
1053	Nitridated Nickel Mesh as Industrial Water and Alcohol Oxidation Catalyst: Reconstruction and Ironâ€Incorporation Matters. Advanced Energy Materials, 0, , .	19.5	0
1054	Progress in the development of copper oxide-based materials for electrochemical water splitting. International Journal of Hydrogen Energy, 2024, 62, 209-227.	7.1	0