

A review on fundamentals for designing oxygen evolution

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Interplanar Growth of 2D Nonâ€Van der Waals Co ₂ Nâ€Based Heterostructures for Efficient Overall Water Splitting. <i>Advanced Energy Materials</i> , 2020, 10, 2002214.	10.2	36
2	Oxygen-deficient 3D-ordered multistage porous interfacial catalysts with enhanced water oxidation performance. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22886-22892.	5.2	25
3	Conversion of Methane into Liquid Fuelsâ€Bridging Thermal Catalysis with Electrocatalysis. <i>Advanced Energy Materials</i> , 2020, 10, 2002154.	10.2	57
4	Molecular Functionalization of NiO Nanocatalyst for Enhanced Water Oxidation by Electronic Structure Engineering. <i>ChemSusChem</i> , 2020, 13, 5901-5909.	3.6	14
5	Engineering Lower Coordination Atoms onto NiO/Co ₃ O ₄ Heterointerfaces for Boosting Oxygen Evolution Reactions. <i>ACS Catalysis</i> , 2020, 10, 12376-12384.	5.5	223
6	Low-iridium electrocatalysts for acidic oxygen evolution. <i>Dalton Transactions</i> , 2020, 49, 15568-15573.	1.6	19
7	A unique space confined strategy to construct defective metal oxides within porous nanofibers for electrocatalysis. <i>Energy and Environmental Science</i> , 2020, 13, 5097-5103.	15.6	80
8	Emerging linear activity trend in the oxygen evolution reaction with dual-active-sites mechanism. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20946-20952.	5.2	17
9	Coordination polymers as heterogeneous catalysts in hydrogen evolution and oxygen evolution reactions. <i>Chemical Communications</i> , 2020, 56, 10824-10842.	2.2	61
10	An advantage combined strategy for preparing bi-functional electrocatalyst in rechargeable zinc-air batteries. <i>Chemical Engineering Journal</i> , 2020, 402, 126214.	6.6	21
11	Electronic structure engineering on two-dimensional (2D) electrocatalytic materials for oxygen reduction, oxygen evolution, and hydrogen evolution reactions. <i>Nano Energy</i> , 2020, 77, 105080.	8.2	157
12	Fabricating nano-IrO ₂ @amorphous Ir-MOF composites for efficient overall water splitting: a one-pot solvothermal approach. <i>Journal of Materials Chemistry A</i> , 2020, 8, 25687-25695.	5.2	26
13	NiCoO ₂ @CeO ₂ Nanoboxes for Ultrasensitive Electrochemical Immunosensing Based on the Oxygen Evolution Reaction in a Neutral Medium: Application for Interleukin-6 Detection. <i>Analytical Chemistry</i> , 2020, 92, 16267-16273.	3.2	32
14	Ultrathin-shell IrCo hollow nanospheres as highly efficient electrocatalysts towards the oxygen evolution reaction in acidic media. <i>Nanoscale</i> , 2020, 12, 24070-24078.	2.8	23
15	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.	2.4	23
16	Ni ₁₇ W ₃ â€W Interconnected Hybrid Prepared by Atmosphereâ€and Thermalâ€Induced Phase Separation for Efficient Electrocatalysis of Alkaline Hydrogen Evolution. <i>Small</i> , 2020, 16, e2005184.	5.2	31
17	Rational Design of Metalâ€Organic Frameworks towards Efficient Electrocatalysis. , 2020, 2, 1251-1267.		65
18	Emerging Strategies for Developing High-Performance Perovskite-Based Materials for Electrochemical Water Splitting. <i>Energy & Fuels</i> , 2020, 34, 10547-10567.	2.5	52

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19	Transition metal-based metal-organic frameworks for oxygen evolution reaction. <i>Coordination Chemistry Reviews</i> , 2020, 424, 213488.	9.5	137
20	Novel Bi-Doped Amorphous SnO ₂ Nanoshells for Efficient Electrochemical CO ₂ Reduction into Formate at Low Overpotentials. <i>Advanced Materials</i> , 2020, 32, e2002822.	11.1	104
21	Cobalt Nanoparticles Dispersed Nitrogen-Doped Graphitic Nanospheres-Based Rechargeable High Performance Zinc-Air Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 7813-7824.	2.5	12
22	Iridium-based nanomaterials for electrochemical water splitting. <i>Nano Energy</i> , 2020, 78, 105270.	8.2	192
23	Ultrafine NiFe clusters anchored on N-doped carbon as bifunctional electrocatalysts for efficient water and urea oxidation. <i>Dalton Transactions</i> , 2020, 49, 13962-13969.	1.6	28
24	Oxygen-deficient perovskites for oxygen evolution reaction in alkaline media: a review. <i>Emergent Materials</i> , 2020, 3, 567-590.	3.2	47
25	Understanding and Optimizing Ultra-Thin Coordination Polymer Derivatives with High Oxygen Evolution Performance. <i>Advanced Energy Materials</i> , 2020, 10, 2002228.	10.2	28
26	Origin of the enhanced oxygen evolution reaction activity and stability of a nitrogen and cerium co-doped CoS ₂ electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22694-22702.	5.2	23
27	Mesoporous Nanoarchitectures for Electrochemical Energy Conversion and Storage. <i>Advanced Materials</i> , 2020, 32, e2004654.	11.1	109
28	Recent Progress of Two-Dimensional Metal-Organic Frameworks and Their Derivatives for Oxygen Evolution Electrocatalysis. <i>ChemElectroChem</i> , 2020, 7, 4695-4712.	1.7	21
29	Sequential Electrodeposition of Bifunctional Catalytically Active Structures in MoO ₃ /Ni-NiO Composite Electrocatalysts for Selective Hydrogen and Oxygen Evolution. <i>Advanced Materials</i> , 2020, 32, e2003414.	11.1	206
30	FeNi-Layered Double-Hydroxide Nanoflakes with Potential for Intrinsically High Water-Oxidation Catalytic Activity. <i>ACS Applied Energy Materials</i> , 2020, 3, 9040-9050.	2.5	16
31	Sulfur-Doped Carbon Nanohorn Bifunctional Electrocatalyst for Water Splitting. <i>Nanomaterials</i> , 2020, 10, 2416.	1.9	7
32	Engineering NiFe layered double hydroxide by valence control and intermediate stabilization toward the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 26130-26138.	5.2	62
33	Three-Dimensional Ni Foam-Supported CoO Nanoparticles/N-Doped Carbon Multilayer Nanocomposite Electrode for Oxygen Evolution. <i>ACS Applied Nano Materials</i> , 2020, 3, 11416-11425.	2.4	6
34	Atomically dispersed metal active centers as a chemically tunable platform for energy storage devices. <i>Journal of Materials Chemistry A</i> , 2020, 8, 15358-15372.	5.2	16
35	Bifunctional and binder-free S-doped Ni-P nanospheres electrocatalyst fabricated by pulse electrochemical deposition method for overall water splitting. <i>Journal of Colloid and Interface Science</i> , 2020, 577, 265-278.	5.0	29
36	Metal-Rich Chalcogenides as Sustainable Electrocatalysts for Oxygen Evolution and Reduction: State of the Art and Future Perspectives. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 2679-2690.	1.0	27

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37	2D MOFs with Ni(II), Cu(II), and Co(II) as Efficient Oxygen Evolution Electrocatalysts: Rationalization of Catalytic Performance <i>vs</i> Structure of the MOFs and Potential of the Redox Couples. ACS Applied Materials & Interfaces, 2020, 12, 33679-33689.	4.0	64
38	Recent Progress in Electrocatalysts for Acidic Water Oxidation. Advanced Energy Materials, 2020, 10, 2000478.	10.2	162
39	Synergy of copper doping and oxygen vacancies in porous CoOOH nanoplates for efficient water oxidation. Chemical Engineering Journal, 2021, 405, 126198.	6.6	38
40	A Glassâ€Ceramic with Accelerated Surface Reconstruction toward the Efficient Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2021, 60, 3773-3780.	7.2	164
41	Facile Access to an Active NiOOH Electrocatalyst for Durable Water Oxidation Derived From an Intermetallic Nickel Germanide Precursor. Angewandte Chemie - International Edition, 2021, 60, 4640-4647.	7.2	119
42	CO ₂ Electrolysis in Integrated Artificial Photosynthesis Systems. Chemistry Letters, 2021, 50, 166-179.	0.7	17
43	Fullerenes as Key Components for Lowâ€Dimensional (Photo)electrocatalytic Nanohybrid Materials. Angewandte Chemie - International Edition, 2021, 60, 122-141.	7.2	64
44	Recent Progress on NiFeâ€Based Electrocatalysts for Alkaline Oxygen Evolution. Advanced Sustainable Systems, 2021, 5, .	2.7	50
45	Rational hetero-interface design of Fe ₃ N@Ni ₂ Co-LDHs as high efficient electrocatalyst for oxygen evolution reaction. Journal of Alloys and Compounds, 2021, 853, 157353.	2.8	25
46	Ni-based layered double hydroxide catalysts for oxygen evolution reaction. Materials Today Physics, 2021, 16, 100292.	2.9	108
47	A historical perspective on porphyrin-based metalâ€organic frameworks and their applications. Coordination Chemistry Reviews, 2021, 429, 213615.	9.5	140
48	On the molecular properties of graphene-pyrazines conjugated Ru and Fe complexes: Computational insights. Materials Today Communications, 2021, 26, 101694.	0.9	0
49	Unlocking the Potential of Mechanochemical Coupling: Boosting the Oxygen Evolution Reaction by Mating Proton Acceptors with Electron Donors. Advanced Functional Materials, 2021, 31, 2008077.	7.8	40
50	Electronic modulation and interface engineering of electrospun nanomaterialsâ€based electrocatalysts toward water splitting. , 2021, 3, 101-128.		134
51	Multilayer hollow MnCo ₂ O ₄ microsphere with oxygen vacancies as efficient electrocatalyst for oxygen evolution reaction. Chemical Engineering Journal, 2021, 421, 127831.	6.6	84
52	Facile Access to an Active NiOOH Electrocatalyst for Durable Water Oxidation Derived From an Intermetallic Nickel Germanide Precursor. Angewandte Chemie, 2021, 133, 4690-4697.	1.6	23
53	Integrating NiMoO wafer as a heterogeneous â€turboâ€™ for engineering robust Ru-based electrocatalyst for overall water splitting. Chemical Engineering Journal, 2021, 420, 127686.	6.6	24
54	In situ construction of N-doped amorphous CoFe selenites toward efficient electrocatalytic water oxidation. Journal of Power Sources, 2021, 483, 229196.	4.0	15

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55	Enhanced electrocatalytic performance of FeNiCoP amorphous alloys as oxygen-evolving catalysts for electrolytic water splitting application. <i>Electrochimica Acta</i> , 2021, 368, 137618.	2.6	33
56	A Glass-Ceramic with Accelerated Surface Reconstruction toward the Efficient Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2021, 133, 3817-3824.	1.6	28
57	Integrated transition metal and compounds with carbon nanomaterials for electrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 3786-3827.	5.2	140
58	Transforming Damage into Benefit: Corrosion Engineering Enabled Electrocatalysts for Water Splitting. <i>Advanced Functional Materials</i> , 2021, 31, 2009032.	7.8	70
59	Formation of sandwiched leaf-like CNTs-Co/ZnCo ₂ O ₄ @NC-CNTs nanohybrids for high-power-density rechargeable Zn-air batteries. <i>Nano Energy</i> , 2021, 82, 105710.	8.2	133
60	Progress and Challenge of Amorphous Catalysts for Electrochemical Water Splitting. , 2021, 3, 136-147.		143
61	High Density and Unit Activity Integrated in Amorphous Catalysts for Electrochemical Water Splitting. <i>Small Structures</i> , 2021, 2, 2000096.	6.9	102
62	Advanced Oxygen Electrocatalysis in Energy Conversion and Storage. <i>Advanced Functional Materials</i> , 2021, 31, 2007602.	7.8	86
63	Reconstructed Water Oxidation Electrocatalysts: The Impact of Surface Dynamics on Intrinsic Activities. <i>Advanced Functional Materials</i> , 2021, 31, 2008190.	7.8	161
64	Fullerenes as Key Components for Low-Dimensional (Photo)electrocatalytic Nanohybrid Materials. <i>Angewandte Chemie</i> , 2021, 133, 124-143.	1.6	11
65	Applications of Atomically Dispersed Oxygen Reduction Catalysts in Fuel Cells and Zinc-Air Batteries. <i>Energy and Environmental Materials</i> , 2021, 4, 307-335.	7.3	58
66	Photothermally boosted water splitting electrocatalysis by broadband solar harvesting nickel phosphide within a quasi-MOF. <i>Journal of Materials Chemistry A</i> , 2021, 9, 16479-16488.	5.2	30
67	Molecular and heterogeneous water oxidation catalysts: recent progress and joint perspectives. <i>Chemical Society Reviews</i> , 2021, 50, 2444-2485.	18.7	102
68	Tuning the intrinsic catalytic activities of oxygen-evolution catalysts by doping: a comprehensive review. <i>Journal of Materials Chemistry A</i> , 2021, 9, 20131-20163.	5.2	110
69	Thermally activated carbon-nitrogen vacancies in double-shelled NiFe Prussian blue analogue nanocages for enhanced electrocatalytic oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12734-12745.	5.2	25
70	Cerium substitution in LaCoO ₃ perovskite oxide as bifunctional electrocatalysts for hydrogen and oxygen evolution reactions. <i>Nanoscale</i> , 2021, 13, 9952-9959.	2.8	41
71	Structural and electronic modulation of conductive MOFs for efficient oxygen evolution reaction electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11248-11254.	5.2	33
72	Multimetallic nanostructures for electrocatalytic oxygen evolution reaction in acidic media. <i>Materials Chemistry Frontiers</i> , 2021, 5, 4445-4473.	3.2	14

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73	Regulated iron corrosion towards fabricating large-area self-supporting electrodes for efficient oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 0, , .	5.2	14
74	Ir-based bifunctional electrocatalysts for overall water splitting. <i>Catalysis Science and Technology</i> , 2021, 11, 4673-4689.	2.1	53
75	Tailoring the catalytic activity of nickel sites in NiFe ₂ O ₄ by cobalt substitution for highly enhanced oxygen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2668-2677.	2.5	12
76	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.	2.5	33
77	Ultrathin amorphous iron-doped cobalt-molybdenum hydroxide nanosheets for advanced oxygen evolution reactions. <i>Nanoscale</i> , 2021, 13, 3153-3160.	2.8	24
78	Atomic heterointerface engineering overcomes the activity limitation of electrocatalysts and promises highly-efficient alkaline water splitting. <i>Energy and Environmental Science</i> , 2021, 14, 5228-5259.	15.6	198
79	Cobalt phosphide nanowires with adjustable iridium, realizing excellent bifunctional activity for acidic water splitting. <i>Dalton Transactions</i> , 2021, 50, 7364-7371.	1.6	12
80	Research Progress of Electrocatalyst for Hydrogen Evolution Reaction. <i>Hans Journal of Nanotechnology</i> , 2021, 11, 155-165.	0.1	0
81	Operando attenuated total reflection Fourier-transform infrared (ATR-FTIR) spectroscopy for water splitting. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 133001.	1.3	12
82	Synergistically enhanced performance of transition-metal doped Ni ₂ P for supercapacitance and overall water splitting. <i>Dalton Transactions</i> , 2021, 50, 11821-11833.	1.6	25
83	Recent advances in doped ruthenium oxides as high-efficiency electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 15506-15521.	5.2	73
84	Nickel pyrophosphate combined with graphene nanoribbon used as efficient catalyst for OER. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11255-11267.	5.2	36
85	A NiN ₃ -embedded MoS ₂ monolayer as a promising electrocatalyst with high activity for the oxygen evolution reaction: a computational study. <i>Sustainable Energy and Fuels</i> , 2021, 5, 3330-3339.	2.5	7
86	Fe-Doping induced divergent growth of Ni-Fe alloy nanoparticles for enhancing the electrocatalytic oxygen reduction. <i>Catalysis Science and Technology</i> , 2021, 11, 5171-5179.	2.1	7
87	Recent advances in activating surface reconstruction for the high-efficiency oxygen evolution reaction. <i>Chemical Society Reviews</i> , 2021, 50, 8428-8469.	18.7	452
88	Thermodynamically driven metal diffusion strategy for controlled synthesis of high-entropy alloy electrocatalysts. <i>Chemical Communications</i> , 2021, 57, 10027-10030.	2.2	21
89	Two-dimensional conductive metal-organic frameworks with dual metal sites toward the electrochemical oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1623-1629.	5.2	38
90	Single-layer CoFe hydroxides for efficient electrocatalytic oxygen evolution. <i>Chemical Communications</i> , 2021, 57, 7653-7656.	2.2	12

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91	Multi-chambered, carbon-coated Ni _{0.4} Fe _{2.6} O ₄ nanoparticle superlattice microspheres for boosting water oxidation reaction. <i>Aggregate</i> , 2021, 2, e17.	5.2	10
92	Defective two-dimensional layered heterometallic phosphonates as highly efficient oxygen evolution electrocatalysts. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 4448-4457.	3.0	6
93	The electronic structure of transition metal oxides for oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 19465-19488.	5.2	90
94	Lattice oxygen redox chemistry in solid-state electrocatalysts for water oxidation. <i>Energy and Environmental Science</i> , 2021, 14, 4647-4671.	15.6	190
95	Defects tailoring IrO ₂ @TiN _{1+x} nano-heterojunctions for superior water oxidation activity and stability. <i>Materials Chemistry Frontiers</i> , 2021, 5, 8047-8055.	3.2	5
96	A bimetal hierarchical layer structure MOF grown on Ni foam as a bifunctional catalyst for the OER and HER. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 2889-2899.	3.0	57
97	Reaping the catalytic benefits of both surface (NiFe ₂ O ₄) and underneath (Ni ₃ Fe) layers for the oxygen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2704-2714.	2.5	4
98	An enhanced oxygen evolution reaction on 2D CoOOH <i>via</i> strain engineering: an insightful view from spin state transition. <i>Journal of Materials Chemistry A</i> , 2021, 9, 17749-17759.	5.2	44
99	Five novel MOFs with various dimensions as efficient catalysts for oxygen evolution reactions. <i>CrystEngComm</i> , 2021, 23, 5475-5480.	1.3	6
100	Highly efficient H ₂ production and size-selective AgCl synthesis <i>via</i> electrolytic cell design. <i>Journal of Materials Chemistry A</i> , 2021, 9, 22871-22877.	5.2	2
101	Tailoring the cationic and anionic sites of LaFeO ₃ -based perovskite generates multiple vacancies for efficient water oxidation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 16906-16916.	5.2	29
102	Interfacial La Diffusion in the CeO ₂ /LaFeO ₃ Hybrid for Enhanced Oxygen Evolution Activity. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 2799-2806.	4.0	38
103	Synergistic recycling and conversion of spent Li-ion battery leachate into highly efficient oxygen evolution catalysts. <i>Green Chemistry</i> , 2021, 23, 6538-6547.	4.6	42
104	The Electrochemical Tuning of Transition Metal-Based Materials for Electrocatalysis. <i>Electrochemical Energy Reviews</i> , 2021, 4, 146-168.	13.1	30
105	Dynamically Stable Active Sites from Surface Evolution of Perovskite Materials during the Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2021, 143, 2741-2750.	6.6	156
106	Stepwise chemical oxidation to access ultrathin metal (oxy)-hydroxide nanosheets for the oxygen evolution reaction. <i>Nanoscale</i> , 2021, 13, 15755-15762.	2.8	11
107	Designing High-Valence Metal Sites for Electrochemical Water Splitting. <i>Advanced Functional Materials</i> , 2021, 31, 2009779.	7.8	195
108	Hydrogen production from water electrolysis: role of catalysts. <i>Nano Convergence</i> , 2021, 8, 4.	6.3	540

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109	Hybrid Zeolitic Imidazolate Frameworks for Promoting Electrocatalytic Oxygen Evolution via a Dual-Site Relay Mechanism. <i>Inorganic Chemistry</i> , 2021, 60, 3074-3081.	1.9	17
110	Spatial Confinement of a Carbon Nanocone for an Efficient Oxygen Evolution Reaction. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2252-2258.	2.1	4
111	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.	1.9	18
112	Site Management Prompts the Dynamic Reconstructed Active Phase of Perovskite Oxide OER Catalysts. <i>Advanced Energy Materials</i> , 2021, 11, 2003755.	10.2	171
113	In Situ Growth of Ni-Based Metal-Organic Framework Nanosheets on Carbon Nanotube Films for Efficient Oxygen Evolution Reaction. <i>Inorganic Chemistry</i> , 2021, 60, 3439-3446.	1.9	19
115	Substituent position effect of Co porphyrin on oxygen electrocatalysis. <i>Chinese Chemical Letters</i> , 2021, 32, 2841-2845.	4.8	33
116	Interfacial engineering of heterogeneous catalysts for electrocatalysis. <i>Materials Today</i> , 2021, 48, 115-134.	8.3	96
117	Ni _{0.85} Se/MoSe ₂ Interfacial Structure: An Efficient Electrocatalyst for Alkaline Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 2828-2837.	2.5	60
118	<i>Ab Initio</i> Thermodynamics and Kinetics of the Lattice Oxygen Evolution Reaction in Iridium Oxides. <i>ACS Energy Letters</i> , 2021, 6, 1124-1133.	8.8	56
119	Ni _{0.58} Al _{0.42} alloy growth on various conductive substrates and their use as advanced self-supportive electrocatalysts for boosted oxygen evolution catalysis. <i>Journal of Alloys and Compounds</i> , 2021, 858, 157729.	2.8	7
120	Recent Development of Oxygen Evolution Electrocatalysts in Acidic Environment. <i>Advanced Materials</i> , 2021, 33, e2006328.	11.1	392
121	Electrocatalytic Refinery for Sustainable Production of Fuels and Chemicals. <i>Angewandte Chemie</i> , 2021, 133, 19724-19742.	1.6	30
122	Electrocatalytic Refinery for Sustainable Production of Fuels and Chemicals. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19572-19590.	7.2	341
123	Exclusive Strain Effect Boosts Overall Water Splitting in PdCu/Ir Core/Shell Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 8243-8250.	7.2	163
124	Rejuvenating the Geometric Electrocatalytic OER Performance of Crystalline Co ₃ O ₄ by Microstructure Engineering with Sulfate. <i>Chemistry - an Asian Journal</i> , 2021, 16, 988-998.	1.7	5
125	Facilitating the Deprotonation of OH to O through Fe ⁴⁺ -Induced States in Perovskite LaNiO ₃ Enables a Fast Oxygen Evolution Reaction. <i>Small</i> , 2021, 17, e2006930.	5.2	40
126	Noble metal-free electrocatalytic materials for water splitting in alkaline electrolyte. <i>EnergyChem</i> , 2021, 3, 100053.	10.1	68
127	Ultralow ruthenium loading Cobalt-molybdenum binary alloy as highly efficient and super-stable electrocatalyst for water splitting. <i>Applied Surface Science</i> , 2021, 541, 148518.	3.1	25

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128	Structural Anisotropy Determining the Oxygen Evolution Mechanism of Strongly Correlated Perovskite Nickelate Electrocatalyst. ACS Sustainable Chemistry and Engineering, 2021, 9, 4262-4270.	3.2	26
129	Exclusive Strain Effect Boosts Overall Water Splitting in PdCu/Ir Core/Shell Nanocrystals. Angewandte Chemie, 2021, 133, 8324-8331.	1.6	18
130	Nitrogen-Coordinated CoS ₂ @NC Yolk-Shell Polyhedrons Catalysts Derived from a Metal-Organic Framework for a Highly Reversible Li-O ₂ Battery. ACS Applied Materials & Interfaces, 2021, 13, 17658-17667.	4.0	43
131	Switching the O-O Bond Formation Pathways of Ru-pda Water Oxidation Catalyst by Third Coordination Sphere Engineering. Research, 2021, 2021, 9851231.	2.8	7
132	NiCo-LDH nanosheets strongly coupled with GO-CNTs as a hybrid electrocatalyst for oxygen evolution reaction. Nano Research, 2021, 14, 4783-4788.	5.8	52
133	Donor-Acceptor Couples of Metal and Metal Oxides with Enriched Ni ³⁺ Active Sites for Oxygen Evolution. ACS Applied Materials & Interfaces, 2021, 13, 17501-17510.	4.0	29
134	Cobalt diselenide (001) surface with short-range Co-Co interaction triggering high-performance electrocatalytic oxygen evolution. Nano Research, 2021, 14, 4848-4856.	5.8	17
135	Modulating the potential-determining step in oxygen evolution reaction by regulating the cobalt valence in NiCo ₂ O ₄ via Ru substitution. Applied Surface Science, 2021, 544, 148897.	3.1	9
136	Partially reduced NiO by cellulose as a highly active catalyst for oxygen evolution reaction: synergy between in situ generated Ni ³⁺ and lattice oxygen. International Journal of Energy Research, 2021, 45, 15544-15556.	2.2	6
137	3D Porous Ru-Doped NiCo-MOF Hollow Nanospheres for Boosting Oxygen Evolution Reaction Electrocatalysis. Inorganic Chemistry, 2021, 60, 5882-5889.	1.9	59
138	MOF-Derived Fe-Doped Ni@NC Hierarchical Hollow Microspheres as an Efficient Electrocatalyst for Alkaline Oxygen Evolution Reaction. ACS Omega, 2021, 6, 11077-11082.	1.6	20
139	Phase-Segregated SrCo _{0.8} Fe _{0.5} O ₃ /Fe _x O _y Heterostructured Catalyst Promotes Alkaline Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2021, 13, 17439-17449.	4.0	28
140	Metal-free red phosphorus-black phosphorus/carbon nanotubes heterostructured electrocatalyst for efficient oxygen evolution reaction. Composites Communications, 2021, 24, 100624.	3.3	9
141	Electrocatalysis for the Oxygen Evolution Reaction in Acidic Media: Progress and Challenges. Applied Sciences (Switzerland), 2021, 11, 4320.	1.3	41
142	Heteroatom-doped porous carbon-supported single-atom catalysts for electrocatalytic energy conversion. Journal of Energy Chemistry, 2021, 63, 54-73.	7.1	16
143	Transition Metal-Based 2D Layered Double Hydroxide Nanosheets: Design Strategies and Applications in Oxygen Evolution Reaction. Nanomaterials, 2021, 11, 1388.	1.9	24
144	Well-dispersed NiCoS ₂ nanoparticles/rGO composite with a large specific surface area as an oxygen evolution reaction electrocatalyst. Rare Metals, 2021, 40, 3156-3165.	3.6	51
145	Multidimensional Nonstoichiometric Electrode Materials for Electrochemical Energy Conversion and Storage. Advanced Energy Materials, 2022, 12, 2100640.	10.2	25

#	ARTICLE	IF	CITATIONS
146	Dynamic Surface Chemistry of Catalysts in Oxygen Evolution Reaction. <i>Small Science</i> , 2021, 1, 2100011.	5.8	59
147	Cobalt Phosphorous Trisulfide as a High-Performance Electrocatalyst for the Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 23638-23646.	4.0	31
148	Advanced High Entropy Perovskite Oxide Electrocatalyst for Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , 2021, 31, 2101632.	7.8	231
149	Manganese dioxides for oxygen electrocatalysis in energy conversion and storage systems over full pH range. <i>Journal of Power Sources</i> , 2021, 494, 229779.	4.0	37
150	First Principle Studies to Tailor Graphene Through Synergistic Effect as a Highly Efficient Electrocatalyst for Oxygen Evolution Reaction. <i>ChemPhysChem</i> , 2021, 22, 1141-1147.	1.0	2
151	Controllable Growth of Tree-Like Freestanding Electrodes Induced by High-Frequency Pulse Currents for Efficient Water Splitting and Pseudocapacitance. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 7587-7601.	3.2	2
152	Ni III δ -rich NiFeBa as an Efficient Catalyst for Water Oxidation. <i>ChemSusChem</i> , 2021, 14, 2516-2520.	3.6	2
153	A discussion on the possible involvement of singlet oxygen in oxygen electrocatalysis. <i>JPhys Energy</i> , 2021, 3, 031004.	2.3	31
154	The Sabatier Principle in Electrocatalysis: Basics, Limitations, and Extensions. <i>Frontiers in Energy Research</i> , 2021, 9, .	1.2	175
155	Spin Effect on Oxygen Electrocatalysis. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100034.	2.8	32
156	High-Performance Ammonium Cobalt Phosphate Nanosheet Electrocatalyst for Alkaline Saline Water Oxidation. <i>Advanced Science</i> , 2021, 8, 2100498.	5.6	45
157	Correlation and Improvement of Bimetallic Electronegativity on Metal-Organic Frameworks for Electrocatalytic Water Oxidation. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100055.	2.8	8
158	In-situ Generated Trimetallic Molybdate Nanoflowers on Ni Foam Assisted with Microwave for Highly Enhanced Oxygen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2021, 27, 9044-9053.	1.7	9
159	Unusual Role of Point Defects in Perovskite Nickelate Electrocatalysts. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 24887-24895.	4.0	9
160	Metal Substitution Steering Electron Correlations in Pyrochlore Ruthenates for Efficient Acidic Water Oxidation. <i>ACS Nano</i> , 2021, 15, 8537-8548.	7.3	54
161	Tailored Brownmillerite Oxide Catalyst with Multiple Electronic Functionalities Enables Ultrafast Water Oxidation. <i>Chemistry of Materials</i> , 2021, 33, 5233-5241.	3.2	32
162	Advanced Transition Metal-Based OER Electrocatalysts: Current Status, Opportunities, and Challenges. <i>Small</i> , 2021, 17, e2100129.	5.2	293
163	Iron-facilitated surface reconstruction to in-situ generate nickel-iron oxyhydroxide on self-supported FeNi alloy fiber paper for efficient oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119902.	10.8	105

#	ARTICLE	IF	CITATIONS
164	Synergistic Coupling of Nickel Boride with Ru Cluster as a Highly Active Multifunctional Electrocatalyst for Overall Water Splitting and Glucose Electrolysis. <i>Advanced Sustainable Systems</i> , 2021, 5, 2000184.	2.7	20
165	Recent Advances on MOF Derivatives for Non-Noble Metal Oxygen Electrocatalysts in Zinc-Air Batteries. <i>Nano-Micro Letters</i> , 2021, 13, 137.	14.4	84
166	Mechanisms of water oxidation on heterogeneous catalyst surfaces. <i>Nano Research</i> , 2021, 14, 3446-3457.	5.8	34
167	Recent Advances in Electrocatalysts for Alkaline Hydrogen Oxidation Reaction. <i>Small</i> , 2021, 17, e2100391.	5.2	56
168	CoMo carbide/nitride from bimetallic MOF precursors for enhanced OER performance. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 22268-22276.	3.8	78
169	Structural advantages and enhancement strategies of heterostructure water-splitting electrocatalysts. <i>Cell Reports Physical Science</i> , 2021, 2, 100443.	2.8	66
170	Surface Reconstruction for Forming the $[\text{IrO}_6]^-$ Framework: Key Structure for Stable and Activated OER Performance in Acidic Media. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 29654-29663.	4.0	26
171	Improving the electrocatalytic activity of NiFe bimetal-organic framework toward oxygen evolution reaction by Zr doping. <i>Electrochimica Acta</i> , 2021, 381, 138292.	2.6	22
172	Electronic structure regulations of single-atom site catalysts and their effects on the electrocatalytic performances. <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	29
173	Interfacial Interactions between Co-Based Cocatalysts and Semiconducting Light Absorbers for Solar-Light-Driven Redox Reactions. <i>Solar Rrl</i> , 2021, 5, 2100234.	3.1	2
174	Photocatalytic Oxidation Reactions Mediated by Covalent Organic Frameworks and Related Extended Organic Materials. <i>Frontiers in Chemistry</i> , 2021, 9, 708312.	1.8	10
175	Surface Electronic Modulation with Hetero-Single Atoms to Enhance Oxygen Evolution Catalysis. <i>ACS Nano</i> , 2021, 15, 11891-11897.	7.3	27
176	Molecular metal nanoclusters for ORR, HER and OER: Achievements, opportunities and challenges. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 25771-25781.	3.8	56
177	One-step integration of Co Ni phosphides in N, P co-doped carbons towards highly efficient oxygen electrocatalysis for rechargeable Zn-air battery. <i>Applied Surface Science</i> , 2021, 554, 149670.	3.1	14
178	In Silico Design of Covalent Organic Framework-Based Electrocatalysts. <i>Jacs Au</i> , 2021, 1, 1497-1505.	3.6	28
179	Revealing Active Function of Multicomponent Electrocatalysts from In Situ Nickel Redox for Oxygen Evolution. <i>Journal of Physical Chemistry C</i> , 2021, 125, 16420-16427.	1.5	5
180	Single-Atom Doping and High-Valence State for Synergistic Enhancement of NiO Electrocatalytic Water Oxidation. <i>Small</i> , 2021, 17, e2102448.	5.2	28
183	Highly Enhanced OER Performance by Er-Doped Fe-MOF Nanoarray at Large Current Densities. <i>Nanomaterials</i> , 2021, 11, 1847.	1.9	8

#	ARTICLE	IF	CITATIONS
184	2D Heterostructure of Amorphous CoFeB Coating Black Phosphorus Nanosheets with Optimal Oxygen Intermediate Absorption for Improved Electrocatalytic Water Oxidation. ACS Nano, 2021, 15, 12418-12428.	7.3	67
185	Conductive Metal-Organic Frameworks: Electronic Structure and Electrochemical Applications. Chemistry - A European Journal, 2021, 27, 11482-11538.	1.7	25
186	Fluorine doped CNTs for efficient OER activity outperforming iridium supported carbon electrocatalyst. Journal of Applied Electrochemistry, 2021, 51, 1573-1581.	1.5	15
187	Unravelling the roles of alkali-metal cations for the enhanced oxygen evolution reaction in alkaline media. Applied Catalysis B: Environmental, 2021, 288, 119981.	10.8	34
188	Stability challenges of electrocatalytic oxygen evolution reaction: From mechanistic understanding to reactor design. Joule, 2021, 5, 1704-1731.	11.7	416
189	^{sc}MOFsâ€Derived Nâ€Doped Carbonâ€Encapsulated</sup> Metal/Alloy Electrocatalysts to Tune the Electronic Structure and Reactivity of Carbon Active Sites^{â€}. Chinese Journal of Chemistry, 2021, 39, 2626-2637.	2.6	18
190	Facile Synthesis of Carbon Cloth Supported Cobalt Carbonate Hydroxide Hydrate Nanoarrays for Highly Efficient Oxygen Evolution Reaction. Frontiers in Chemistry, 2021, 9, 754357.	1.8	7
191	Magnetic NiFe₂O₄ Nanoparticles Prepared via Nonâ€Aqueous Microwaveâ€Assisted Synthesis for Application in Electrocatalytic Water Oxidation. Chemistry - A European Journal, 2021, 27, 16990-17001.	1.7	21
192	Heterostructured Auâ€Ir Catalysts for Enhanced Oxygen Evolution Reaction. , 2021, 3, 1440-1447.		20
193	Mechanistic insights into lepidocrocite conversion to hematite from variable temperature Raman microscopy. JPhys Energy, 2021, 3, 044002.	2.3	6
194	Recent Progress on Structurally Ordered Materials for Electrocatalysis. Advanced Energy Materials, 2021, 11, 2101937.	10.2	65
195	Rational Design of Superior Electrocatalysts for Water Oxidation: Crystalline or Amorphous Structure?. Small Science, 2021, 1, 2100030.	5.8	44
196	Confined Ir single sites with triggered lattice oxygen redox: Toward boosted and sustained water oxidation catalysis. Joule, 2021, 5, 2164-2176.	11.7	183
197	Temperature-controlled fabrication of Co-Fe-based nanoframes for efficient oxygen evolution. Science China Materials, 2022, 65, 431-441.	3.5	35
198	Electro catalytic oxidation reactions for harvesting alternative energy over non noble metal oxides: Are we a step closer to sustainable energy solution?. Advanced Powder Technology, 2021, 32, 2663-2689.	2.0	21
199	Activating localized lattice oxygen for durable acidic water oxidation. Chem Catalysis, 2021, 1, 506-508.	2.9	4
200	Direct Observation of Oxygen Evolution and Surface Restructuring on Mn₂O₃ Nanocatalysts Using <i>In</i> <i>Situ</i> and <i>Ex Situ</i> Transmission Electron Microscopy. Nano Letters, 2021, 21, 7012-7020.	4.5	19
201	On the Lattice Oxygen Evolution Mechanism: Avoiding Pitfalls. ChemCatChem, 2021, 13, 4066-4074.	1.8	22

#	ARTICLE	IF	CITATIONS
202	Recent Progress in the Development of Advanced Functionalized Electrodes for Oxygen Evolution Reaction: An Overview. <i>Materials</i> , 2021, 14, 4420.	1.3	3
203	Conjugated Porous Polymers: Groundbreaking Materials for Solar Energy Conversion. <i>Advanced Energy Materials</i> , 2021, 11, 2101530.	10.2	44
204	In situ-grown Co ₃ O ₄ nanorods on carbon cloth for efficient electrocatalytic oxidation of urea. <i>Journal of Nanostructure in Chemistry</i> , 2021, 11, 735-749.	5.3	25
205	Hierarchical NiFe Hydroxide/Ni ₃ N Nanosheet-on-Nanosheet Heterostructures for Bifunctional Oxygen Evolution and Urea Oxidation Reactions. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 12584-12590.	3.2	35
206	Multi-Sites Electrocatalysis in High-Entropy Alloys. <i>Advanced Functional Materials</i> , 2021, 31, 2106715.	7.8	128
207	Exceptionally Robust Face-Sharing Motifs Enable Efficient and Durable Water Oxidation. <i>Advanced Materials</i> , 2021, 33, e2103392.	11.1	36
208	Tertiary-Amine-Assisted Synthesis of Hierarchical Porous Nitrogen-Incorporated Cobalt-Iron (Oxy)hydroxide Nanosheets for Improved Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 8866-8874.	2.5	8
209	In Situ/Operando Capturing Unusual Ir ⁶⁺ Facilitating Ultrafast Electrocatalytic Water Oxidation. <i>Advanced Functional Materials</i> , 2021, 31, 2104746.	7.8	29
210	Construction of nickel- and iron-coordinated poly(5-amino-1,10-phenanthroline) film for electrocatalytic water oxidation reactions. <i>Journal of Power Sources</i> , 2021, 506, 230109.	4.0	4
211	Structure-property correlations for analysis of heterogeneous electrocatalysts. <i>Chemical Physics Reviews</i> , 2021, 2, .	2.6	8
212	Acid-induced topological morphology modulation of graphitic carbon nitride homojunctions as advanced metal-free catalysts for OER and pollutant degradation. <i>Journal of Materials Science and Technology</i> , 2021, 86, 210-218.	5.6	18
213	Time-Retrenched Synthesis of BaTaO ₂ N by Localizing an NH ₃ Delivery System for Visible-Light-Driven Photoelectrochemical Water Oxidation at Neutral pH: Solid-State Reaction or Flux Method?. <i>ACS Applied Energy Materials</i> , 2021, 4, 9315-9327.	2.5	11
214	Structural Effects on Dioxygen Evolution from Ru(V)=Oxo Complexes. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 3565-3577.	1.0	2
215	Bifunctional Water-Splitting Electrocatalysis Achieved by Defect Order in La ₂ Fe ₃ O ₈ (A = Ca, Sr). <i>ACS Applied Energy Materials</i> , 2021, 4, 12063-12066.	2.5	15
216	Nickel ferrocyanide as a high-performance urea oxidation electrocatalyst. <i>Nature Energy</i> , 2021, 6, 904-912.	19.8	305
217	Phosphorized CoNi ₂ S ₄ Yolk-Shell Spheres for Highly Efficient Hydrogen Production via Water and Urea Electrolysis. <i>Angewandte Chemie</i> , 2021, 133, 23067-23073.	1.6	14
218	Self-Supported Electrocatalysts for Practical Water Electrolysis. <i>Advanced Energy Materials</i> , 2021, 11, 2102074.	10.2	161
219	Surface-Electronic-Structure Reconstruction of Perovskite via Double-Cation Gradient Etching for Superior Water Oxidation. <i>Nano Letters</i> , 2021, 21, 8166-8174.	4.5	29

#	ARTICLE	IF	CITATIONS
220	Reaction on a Rink: Kondo-Enhanced Heterogeneous Single-Atom Catalysis. <i>Journal of Physical Chemistry C</i> , 0, , .	1.5	0
221	Constructing a Graphene-Encapsulated Amorphous/Crystalline Heterophase NiFe Alloy by Microwave Thermal Shock for Boosting the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2021, 11, 12284-12292.	5.5	93
222	Enhancing the activity of metal-organic nanosheets for oxygen evolution reaction by substituent effects. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 306-312.	5.0	8
223	Restructuring highly electron-deficient metal-metal oxides for boosting stability in acidic oxygen evolution reaction. <i>Nature Communications</i> , 2021, 12, 5676.	5.8	92
224	Bimetallic Cu ⁺ Co ²⁺ Se Nanotube Arrays Assembled on 3D Framework: an Efficient Bifunctional Electrocatalyst for Overall Water Splitting. <i>ChemSusChem</i> , 2021, 14, 5065-5074.	3.6	13
225	Modification of NiFe layered double hydroxide by lanthanum doping for boosting water splitting. <i>Electrochimica Acta</i> , 2021, 390, 138824.	2.6	30
226	NiCo-Based Electrocatalysts for the Alkaline Oxygen Evolution Reaction: A Review. <i>ACS Catalysis</i> , 2021, 11, 12485-12509.	5.5	204
227	Insight into Structural Evolution, Active Sites, and Stability of Heterogeneous Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	140
228	Morphological-modulated FeNi-based amorphous alloys as efficient alkaline water splitting electrocatalysts. <i>Electrochimica Acta</i> , 2021, 389, 138756.	2.6	13
229	Atomic layer deposition of electrocatalytic layer of MoS ₂ onto metal-based 3D-printed electrode toward tailoring hydrogen evolution efficiency. <i>Applied Materials Today</i> , 2021, 24, 101131.	2.3	8
230	Optimization of a Hierarchical Porous-Structured Reactor to Mitigate Mass Transport Limitations for Efficient Electrocatalytic Ammonia Oxidation through a Three-Electron-Transfer Pathway. <i>Environmental Science & Technology</i> , 2021, 55, 12596-12606.	4.6	24
231	Effect of Cu-doping on the activity of calcium cobaltite for oxygen evolution reaction. <i>Materials Letters</i> , 2021, 298, 130026.	1.3	8
232	Utilizing tannic acid and polypyrrole to induce reconstruction to optimize the activity of MOF-derived electrocatalyst for water oxidation in seawater. <i>Chemical Engineering Journal</i> , 2022, 430, 132632.	6.6	15
233	Ni Nanoparticles on Ni Core/N-Doped Carbon Shell Heterostructures for Electrocatalytic Oxygen Evolution. <i>ACS Applied Nano Materials</i> , 2021, 4, 9418-9429.	2.4	21
234	Highly porous Co-doped NiO nanorods: facile hydrothermal synthesis and electrocatalytic oxygen evolution properties. <i>Royal Society Open Science</i> , 2021, 8, 202352.	1.1	7
235	Magnetic Enhancement of Oxygen Evolution in CoNi@C Nanosheets. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 12376-12384.	3.2	21
236	Dopamine-Assisted Coral Films of Cobalt as Bifunctional Electrodes for Overall Water Splitting. <i>Energy Technology</i> , 0, , 2100264.	1.8	1
237	A universal electrochemical activation enabling lattice oxygen activation in nickel-based catalyst for efficient water oxidation. <i>Chemical Engineering Journal</i> , 2022, 430, 132736.	6.6	22

#	ARTICLE	IF	CITATIONS
238	Construction of iridium oxide nanoparticle modified indium tin oxide electrodes with polycarboxylic acids and pyrophosphoric acid and their application to water oxidation reactions. <i>Electrochimica Acta</i> , 2021, 389, 138683.	2.6	4
239	2-Methylimidazole-induced reconstruction of cobalt (oxy)hydroxide electrocatalysts toward efficient water oxidation. <i>Chemical Engineering Journal</i> , 2021, 420, 129717.	6.6	15
240	Electron Complementation-Induced V-Co Phosphide for Efficient Overall Water Splitting. <i>Advanced Energy Materials</i> , 2021, 11, 2101758.	10.2	92
241	Nanostructured Metal Borides for Energy-Related Electrocatalysis: Recent Progress, Challenges, and Perspectives. <i>Small Methods</i> , 2021, 5, e2100699.	4.6	47
242	Insight into Structural Evolution, Active Sites, and Stability of Heterogeneous Electrocatalysts. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	38
243	Atomic layer deposition triggered Fe-In-S cluster and gradient energy band in ZnInS photoanode for improved oxygen evolution reaction. <i>Nature Communications</i> , 2021, 12, 5247.	5.8	36
244	Phosphorized CoNi ₂ S ₄ Yolk-Shell Spheres for Highly Efficient Hydrogen Production via Water and Urea Electrolysis. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22885-22891.	7.2	191
245	Tunable one-dimensional inorganic perovskite nanomeshes library for water splitting. <i>Nano Energy</i> , 2021, 88, 106251.	8.2	12
246	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.	3.8	10
247	Electrooxidation-enabled electroactive high-valence ferritic species in NiFe layered double hydroxide arrays as efficient oxygen evolution catalysts. <i>Journal of Colloid and Interface Science</i> , 2021, 599, 168-177.	5.0	14
248	Aligned Co ₃ O ₄ -CoOOH heterostructure nanosheet arrays grown on carbon paper with oxygen vacancies for enhanced and robust oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 34287-34297.	3.8	14
249	Transition-metal alloy electrocatalysts with active sites modulated by metal-carbide heterophases for efficient oxygen evolution. <i>Nano Energy</i> , 2021, 88, 106216.	8.2	38
250	Engineering superhydrophilic/superaerophobic hierarchical structures of Co-CH@NiFe-LDH/NF to boost the oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 422, 130123.	6.6	62
251	ZIF-67-derived Mn doped Co ₉ S ₈ supported on N-Enriched porous carbon polyhedron as an efficient electrocatalyst for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 38724-38732.	3.8	18
252	Ni-decorated Fe-/N- co-doped carbon anchored on porous cobalt oxide nanowires arrays for efficient electrocatalytic oxygen evolution. <i>Chemical Engineering Science</i> , 2021, 243, 116774.	1.9	12
253	Modulating electronic structure of metal-organic framework derived catalysts for electrochemical water oxidation. <i>Coordination Chemistry Reviews</i> , 2021, 447, 214144.	9.5	45
254	Bimetallic NiSe _{0.1} MoS _{6.4} sulfoselenide nanosheets supported on nickel foam for efficient hydrogen evolution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 628, 127228.	2.3	1
255	Tuning electronic structure of CoNi LDHs via surface Fe doping for achieving effective oxygen evolution reaction. <i>Applied Surface Science</i> , 2021, 565, 150506.	3.1	35

#	ARTICLE	IF	CITATIONS
256	Exceptional lattice-oxygen participation on artificially controllable electrochemistry-induced crystalline-amorphous phase to boost oxygen-evolving performance. Applied Catalysis B: Environmental, 2021, 297, 120484.	10.8	41
257	Trifunctional Pt coupled with NiFe hydroxide synthesized via corrosion engineering to boost the cleavage of water molecule for alkaline water-splitting. Applied Catalysis B: Environmental, 2021, 297, 120395.	10.8	109
258	Enabling the life-cycle consideration and approach for the design of efficient water splitting catalyst via engineering amorphous precursor. Applied Catalysis B: Environmental, 2021, 296, 120335.	10.8	1
259	Stable and active NiFeW layered double hydroxide for enhanced electrocatalytic oxygen evolution reaction. Chemical Engineering Journal, 2021, 426, 130768.	6.6	42
260	Manipulating and probing the structural self-optimization in oxygen evolution reaction catalysts. Current Opinion in Electrochemistry, 2021, 30, 100788.	2.5	11
261	Porous Mn-doped cobalt phosphide nanosheets as highly active electrocatalysts for oxygen evolution reaction. Chemical Engineering Journal, 2021, 425, 131642.	6.6	71
262	High-valent Zirconium-doping modified Co ₃ O ₄ weave-like nanoarray boosts oxygen evolution reaction. Journal of Alloys and Compounds, 2021, 886, 161172.	2.8	26
263	Constructing accelerated charge transfer channels along V-Co-Fe via introduction of V into CoFe-layered double hydroxides for overall water splitting. Applied Catalysis B: Environmental, 2021, 298, 120587.	10.8	52
264	N, P doped carbon nanotubes confined WN-Ni Mott-Schottky heterogeneous electrocatalyst for water splitting and rechargeable zinc-air batteries. Applied Catalysis B: Environmental, 2021, 298, 120511.	10.8	77
265	CoNi nanoalloys embedded in N-doped carbon nanofibers derived from layered bimetal-organic framework and as efficient oxygen electrocatalyst. Journal of Alloys and Compounds, 2021, 888, 161588.	2.8	10
266	Defect and interface engineering for electrochemical nitrogen reduction reaction under ambient conditions. Journal of Energy Chemistry, 2022, 65, 448-468.	7.1	38
267	Nanostructured hexaazatrinaphthalene based polymers for advanced energy conversion and storage. Chemical Engineering Journal, 2022, 427, 130995.	6.6	16
268	Understanding the activity and stability of flame-made Co ₃ O ₄ spinels: A route towards the scalable production of highly performing OER electrocatalysts. Chemical Engineering Journal, 2022, 429, 132180.	6.6	56
269	Rational design of electrospun nanofiber-typed electrocatalysts for water splitting: A review. Chemical Engineering Journal, 2022, 428, 131133.	6.6	42
270	Ultrafast, scalable and green synthesis of amorphous iron-nickel based durable water oxidation electrode with very high intrinsic activity via potential pulses. Chemical Engineering Journal, 2022, 428, 130688.	6.6	2
271	Correlating the electronic structure of perovskite La _{1-x} Sr _x CoO ₃ with activity for the oxygen evolution reaction: The critical role of Co 3d hole state. Journal of Energy Chemistry, 2022, 65, 637-645.	7.1	39
272	Single-atom catalysts for CO oxidation, CO ₂ reduction, and O ₂ electrochemistry. Journal of Energy Chemistry, 2022, 65, 254-279.	7.1	56
273	FeOOH decorated CoP porous nanofiber for enhanced oxygen evolution activity. Chemical Engineering Journal, 2022, 428, 131130.	6.6	38

#	ARTICLE	IF	CITATIONS
274	Phosphorus-induced reconstruction of Sub-2 nm ultrafine spinel type CoO nanosheets for efficient water oxidation. <i>Journal of Alloys and Compounds</i> , 2021, 889, 161704.	2.8	4
275	Amorphous High-entropy Non-precious metal oxides with surface reconstruction toward highly efficient and durable catalyst for oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 635-644.	5.0	42
276	A Review on CeO ₂ -Based Electrocatalyst and Photocatalyst in Energy Conversion. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2000063.	2.8	60
277	Ethylene glycol-mediated one-pot synthesis of Fe incorporated γ -Ni(OH) ₂ nanosheets with enhanced intrinsic electrocatalytic activity and long-term stability for alkaline water oxidation. <i>Dalton Transactions</i> , 2021, 50, 7305-7313.	1.6	11
278	Oxygen vacancy enriched NiMoO ₄ nanorods via microwave heating: a promising highly stable electrocatalyst for total water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11691-11704.	5.2	65
279	Electrocatalysis using nanomaterials. <i>Frontiers of Nanoscience</i> , 2021, 18, 343-420.	0.3	2
280	Ruthenium Core-Shell Engineering with Nickel Single Atoms for Selective Oxygen Evolution via Nondestructive Mechanism. <i>Advanced Energy Materials</i> , 2021, 11, 2003448.	10.2	124
281	Surface Fluorination Engineering of NiFe Prussian Blue Analogue Derivatives for Highly Efficient Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 5142-5152.	4.0	51
282	Facile water oxidation by dinuclear mixed-valence Co ^{III} /Co ^{II} complexes: the role of coordinated water. <i>Dalton Transactions</i> , 2021, 50, 14257-14263.	1.6	4
283	Rational catalyst design for oxygen evolution under acidic conditions: strategies toward enhanced electrocatalytic performance. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5890-5914.	5.2	65
284	Green synthesis of silver nanoparticles using <i>Biophytum sensitivum</i> extract and its electrocatalytic activity towards dioxygen reduction. <i>Materials Today: Proceedings</i> , 2021, 47, 1767-1772.	0.9	1
285	Intense nano-interfacial interactivity stimulates the OER in a MOF-derived superhydrophilic CuO@NiO heterostructure. <i>Sustainable Energy and Fuels</i> , 2021, 5, 5505-5512.	2.5	9
286	Non-carbon-supported single-atom site catalysts for electrocatalysis. <i>Energy and Environmental Science</i> , 2021, 14, 2809-2858.	15.6	198
287	A binuclear Co-based metal-organic framework towards efficient oxygen evolution reaction. <i>Chemical Communications</i> , 2021, 57, 5016-5019.	2.2	23
288	“Highway” Toward Efficient Water Oxidation. <i>Matter</i> , 2021, 4, 21-22.	5.0	7
289	Hetero Atom Doped Graphene Nanoarchitectonics as Electrocatalysts Towards the Oxygen Reduction and Evolution Reactions in Acidic Medium. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2021, 31, 1859-1876.	1.9	15
290	Interlayer confinement synthesis of Ir nanodots/dual carbon as an electrocatalyst for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4176-4183.	5.2	14
291	An over 20% solar-to-hydrogen efficiency system comprising a self-reconstructed NiCoFe-based hydroxide nanosheet electrocatalyst and monolithic perovskite/silicon tandem solar cell. <i>Journal of Materials Chemistry A</i> , 2021, 9, 14085-14092.	5.2	29

#	ARTICLE	IF	CITATIONS
292	Mechanochemically Synthesized PAN-Based Co-N-Doped Carbon Materials as Electrocatalyst for Oxygen Evolution Reaction. <i>Nanomaterials</i> , 2021, 11, 290.	1.9	10
293	Electrochemically dealloyed nanoporous Fe ₄₀ Ni ₂₀ Co ₂₀ P ₁₅ C ₅ metallic glass for efficient and stable electrocatalytic hydrogen and oxygen generation. <i>RSC Advances</i> , 2021, 11, 7369-7380.	1.7	13
294	Wetting-regulated gas-involving (photo)electrocatalysis: biomimetics in energy conversion. <i>Chemical Society Reviews</i> , 2021, 50, 10674-10699.	18.7	63
295	Postface: Conclusion on Renewable Energy Strategies for a Sustainable Future: Part A: Role of Energy Storage. , 2021, , 839-846.		2
296	Enhanced urea oxidization electrocatalysis on spinel cobalt oxide nanowires <i>via</i> on-site electrochemical defect engineering. <i>Materials Chemistry Frontiers</i> , 2021, 5, 3717-3724.	3.2	16
297	Active Phase on SrCo _{1-x} Fe _x O _{3-δ} (0 ≤ x ≤ 0.5) Perovskite for Water Oxidation: Reconstructed Surface versus Remaining Bulk. <i>Jacs Au</i> , 2021, 1, 108-115.	3.6	47
298	Two-dimensional layered double hydroxides as a platform for electrocatalytic oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9389-9430.	5.2	83
299	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.	1.9	91
300	Morphology regulation of metal-organic framework-derived nanostructures for efficient oxygen evolution electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18215-18219.	5.2	168
301	Hybrid photoanodes for visible light-driven water oxidation: the beneficial and detrimental effects of nickel oxide cocatalyst. <i>JPhys Energy</i> , 2020, 2, 044001.	2.3	9
302	Self-supported Cu ₃ P nanowire electrode as an efficient electrocatalyst for the oxygen evolution reaction. <i>RSC Advances</i> , 2021, 11, 34137-34143.	1.7	10
303	Supramolecular Modulation of Molecular Conformation of Metal Porphyrins toward Remarkably Enhanced Multipurpose Electrocatalysis and Ultrahigh Performance Zinc-Air Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2102062.	10.2	27
304	Bionic sunflower-like structure of polydopamine-confined NiFe-based quantum dots for electrocatalytic oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2022, 302, 120833.	10.8	25
305	Direct Electrosynthesis of Selective Transition-Metal Chalcogenides as Functional Catalysts with a Tunable Activity for Efficient Water Electrolysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 14911-14917.	3.2	19
306	Engineering Lattice Oxygen Activation of Iridium Clusters Stabilized on Amorphous Bimetal Borides Array for Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 27126-27134.	7.2	106
307	Nickel(hydro)oxide/graphdiyne Catalysts for Efficient Oxygen Production Reaction. <i>Chemical Research in Chinese Universities</i> , 2021, 37, 1268-1274.	1.3	10
308	Emerging Electrocatalysts for Water Oxidation under Near-Neutral CO ₂ Reduction Conditions. <i>Advanced Materials</i> , 2022, 34, e2105852.	11.1	34
309	Engineering Ultrafine NiFe-LDH into Self-Supporting Nanosheets: Separation and Reunion Strategy to Expose Additional Edge Sites for Oxygen Evolution. <i>Small</i> , 2021, 17, e2103785.	5.2	35

#	ARTICLE	IF	CITATIONS
310	Simulating Current Distribution of Oxygen Evolution Reaction in Microcells Using Finite Element Method. <i>Journal of the Electrochemical Society</i> , 2021, 168, 106508.	1.3	5
311	Scalable Synthesis of NiFe-LDH/Ni ₉ S ₈ /NF Nanosheets by Two-Step Corrosion for Efficient Oxygen Electrocatalysis. <i>ChemCatChem</i> , 2022, 14, .	1.8	10
312	Identification of the Active-Layer Structures for Acidic Oxygen Evolution from 9R-BaIrO ₃ Electrocatalyst with Enhanced Iridium Mass Activity. <i>Journal of the American Chemical Society</i> , 2021, 143, 18001-18009.	6.6	73
313	Phase-Controllable Growth Ni _x P _y Modified CdS@Ni ₃ S ₂ Electrodes for Efficient Electrocatalytic and Enhanced Photoassisted Electrocatalytic Overall Water Splitting. <i>Small Methods</i> , 2021, 5, e2100878.	4.6	37
314	Tailoring Competitive Adsorption Sites by Oxygen Vacancy on Cobalt Oxides to Enhance the Electrooxidation of Biomass. <i>Advanced Materials</i> , 2022, 34, e2107185.	11.1	162
315	Engineering Lattice Oxygen Activation of Iridium Clusters Stabilized on Amorphous Bimetal Borides Array for Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2021, 133, 27332-27340.	1.6	6
316	Enhanced Catalytic Mechanism of Twin-Structured BiVO ₄ . <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 10610-10615.	2.1	4
317	Constructing the Fe/Cr double (oxy)hydroxides on Fe ₃ O ₄ for boosting the electrochemical oxygen evolution in alkaline seawater and domestic sewage. <i>Applied Catalysis B: Environmental</i> , 2022, 302, 120847.	10.8	30
318	Recent advances in structural engineering of 2D hexagonal boron nitride electrocatalysts. <i>Nano Energy</i> , 2022, 91, 106661.	8.2	49
319	Exploiting the flexibility of the pyrochlore composition for acid-resilient iridium oxide electrocatalysts in proton exchange membranes. <i>Journal of Materials Chemistry A</i> , 2021, 9, 25114-25127.	5.2	8
320	Electrocatalytic performance of Mn-adsorbed g-C ₃ N ₄ : a first-principles study. <i>Journal of Materials Chemistry A</i> , 2021, 9, 26266-26276.	5.2	12
321	Recent advances of two-dimensional CoFe layered-double-hydroxides for electrocatalytic water oxidation. <i>Chinese Chemical Letters</i> , 2022, 33, 2845-2855.	4.8	15
322	Ce-Doped FeNi-Layered Double Hydroxide Nanosheets Grown on an Open-Framework Nickel Phosphate Nanorod Array for Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 12836-12847.	2.5	13
323	High-Entropy Alloys for Electrocatalysis: Design, Characterization, and Applications. <i>Small</i> , 2022, 18, e2104339.	5.2	82
324	Solution-Processed Graphene Thin-Film Enables Binder-Free, Efficient Loading of Nanocatalysts for Electrochemical Water Splitting. <i>Advanced Materials Interfaces</i> , 2021, 8, 2101576.	1.9	7
325	Hollow CoS _x Nanoparticles Grown on FeCo-LDH Microtubes for Enhanced Electrocatalytic Performances for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 12211-12223.	2.5	14
326	In Situ/Operando Insights into the Stability and Degradation Mechanisms of Heterogeneous Electrocatalysts. <i>Small</i> , 2022, 18, e2104205.	5.2	14
327	The Effect of Cation Mixing in LiNiO ₂ toward the Oxygen Evolution Reaction. <i>ChemElectroChem</i> , 2021, 8, 70-76.	1.7	4

#	ARTICLE	IF	CITATIONS
328	Recent advances in carbon substrate supported nonprecious nanoarrays for electrocatalytic oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2021, 9, 25773-25795.	5.2	71
329	Design strategies of phosphorus-containing catalysts for photocatalytic, photoelectrochemical and electrocatalytic water splitting. <i>Green Chemistry</i> , 2022, 24, 713-747.	4.6	45
330	Defective high-entropy rocksalt oxide with enhanced metal-oxygen covalency for electrocatalytic oxygen evolution. <i>Chinese Journal of Catalysis</i> , 2022, 43, 122-129.	6.9	50
331	Epitaxial oxide thin films for oxygen electrocatalysis: A tutorial review. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2022, 40, 010801.	0.9	12
332	Rational introduction of S and P in multi-stage electrocatalyst to drive a large-current-density water oxidation reaction and overall water splitting. <i>Journal of Power Sources</i> , 2022, 518, 230757.	4.0	14
333	Solar-driven photoelectron injection effect on MgCo ₂ O ₄ @WO ₃ core-shell heterostructure for efficient overall water splitting. <i>Applied Surface Science</i> , 2022, 578, 152049.	3.1	41
334	Engineering Efficient Ni ₂ C/CNT Hybrid Nanostructures for pH-Universal Oxygen Evolution. <i>Journal of Physical Chemistry C</i> , 2021, 125, 26003-26012.	1.5	6
335	Substrate molecule adsorption energy: An activity descriptor for electrochemical oxidation of 5-Hydroxymethylfurfural (HMF). <i>Chemical Engineering Journal</i> , 2022, 433, 133842.	6.6	35
336	Ga doped Ni ₃ S ₂ ultrathin nanosheet arrays supported on Ti ₃ C ₂ -MXene/Ni foam: An efficient and stable 3D electrocatalyst for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 2958-2966.	3.8	23
337	Recent Progress on Transition Metal Based Layered Double Hydroxides Tailored for Oxygen Electrode Reactions. <i>Catalysts</i> , 2021, 11, 1394.	1.6	8
338	Controllable Synthesis of Graphene-Encapsulated NiFe Nanofiber for Oxygen Evolution Reaction Application. <i>Journal of Composites Science</i> , 2021, 5, 314.	1.4	1
339	Observation of 4th-order water oxidation kinetics by time-resolved photovoltage spectroscopy. <i>IScience</i> , 2021, 24, 103500.	1.9	8
340	Recent progress and perspective of cobalt-based catalysts for water splitting: design and nanoarchitectonics. <i>Materials Today Energy</i> , 2022, 23, 100911.	2.5	28
341	Surface chemical reconstruction of hierarchical hollow inverse-spinel manganese cobalt oxide boosting oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 431, 133829.	6.6	72
342	Local Environment Determined Reactant Adsorption Configuration for Enhanced Electrocatalytic Acetone Hydrogenation to Propane. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	26
343	Constructing a Hetero-interface Composed of Oxygen Vacancy-Enriched Co ₃ O ₄ and Crystalline-Amorphous NiFe-LDH for Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2021, 11, 14338-14351.	5.5	134
344	Urchin-liked Fe _x Co _{1-x} /CoOOH/FeOOH nanoparticles for highly efficient oxygen evolution reaction. <i>Applied Surface Science</i> , 2022, 577, 151830.	3.1	11
345	NiFe Layered Double Hydroxides Grown on a Corrosion-Cell Cathode for Oxygen Evolution Electrocatalysis. <i>Advanced Energy Materials</i> , 2022, 12, 2102372.	10.2	51

#	ARTICLE	IF	CITATIONS
346	Defect engineering of nanostructures: Insights into photoelectrochemical water splitting. <i>Materials Today</i> , 2022, 52, 133-160.	8.3	49
347	Photons or Electrons? A Critical Comparison of Electrochemistry and Photoredox Catalysis for Organic Synthesis. <i>Chemical Reviews</i> , 2022, 122, 2487-2649.	23.0	210
348	Local Environment Determined Reactant Adsorption Configuration for Enhanced Electrocatalytic Acetone Hydrogenation to Propane. <i>Angewandte Chemie</i> , 0, , .	1.6	4
349	Boosting the Electrocatalytic Conversion of Nitrogen to Ammonia on Metal-Phthalocyanine-Based Two-Dimensional Conjugated Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021, 143, 19992-20000.	6.6	100
350	High-density ultrafine RuP ₂ with strong catalyst-support interaction driven by dual-ligand and tungsten-oxygen sites for hydrogen evolution at 1.2 V. <i>Applied Catalysis B: Environmental</i> , 2022, 304, 120917.	10.8	17
351	Amorphous C,N Codoping Cobalt Phosphates Simply Fabricated via a Mild Host-Guest Strategy as Bifunctional Electrocatalysts for Zinc-Air Batteries. <i>Energy Technology</i> , 2022, 10, 2100940.	1.8	4
352	Unlocking the electrocatalytic activity of natural chalcopyrite using mechanochemistry. <i>Journal of Energy Chemistry</i> , 2022, 68, 275-283.	7.1	22
353	High entropy spinel metal oxide (CoCrFeMnNi) ₃ O ₄ nanoparticles as novel efficient electrocatalyst for methanol oxidation and oxygen evolution reactions. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 106932.	3.3	51
354	Graphene-based materials as electrocatalysts for the oxygen evolution reaction: a review. <i>Sustainable Energy and Fuels</i> , 2022, 6, 640-663.	2.5	23
355	Perovskite With Tunable Active-Sites Oxidation State by High-Valence W for Enhanced Oxygen Evolution Reaction. <i>Frontiers in Chemistry</i> , 2021, 9, 809111.	1.8	4
356	Recent advances in the pre-oxidation process in electrocatalytic urea oxidation reactions. <i>Chemical Communications</i> , 2022, 58, 2430-2442.	2.2	71
357	Modulation engineering of alkaline oxygen evolution reaction based on microwave activation of Ni, Fe bimetal doped MnO ₂ . <i>Catalysis Communications</i> , 2022, 162, 106380.	1.6	5
358	First principles study on electronic properties and oxygen evolution mechanism of 2D bimetallic N-doped graphene. <i>Journal of Molecular Graphics and Modelling</i> , 2022, 111, 108101.	1.3	5
359	Alkaline oxygen evolution: exploring synergy between fcc and hcp cobalt nanoparticles entrapped in N-doped graphene. <i>Materials Today Chemistry</i> , 2022, 23, 100668.	1.7	20
360	Nanoarchitected porous Cu-CoP nanoplates as electrocatalysts for efficient oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 432, 134303.	6.6	35
361	Tuning the interfacial electronic coupling of NiO via CeO ₂ and nitrogen co-decoration for highly efficient oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 432, 134255.	6.6	28
362	Motivating borate doped FeNi layered double hydroxides by molten salt method toward efficient oxygen evolution. <i>Journal of Colloid and Interface Science</i> , 2022, 610, 173-181.	5.0	25
363	Encapsulated ruthenium nanoparticles activated few-layer carbon frameworks as high robust oxygen evolution electrocatalysts in acidic media. <i>Journal of Colloid and Interface Science</i> , 2022, 612, 488-495.	5.0	10

#	ARTICLE	IF	CITATIONS
364	Morphology controllable NiCo ₂ S ₄ nanostructure on carbon cloth for enhanced electrocatalytic water oxidation. <i>Journal of Alloys and Compounds</i> , 2022, 897, 163152.	2.8	6
365	Sulfur-doping/leaching induced structural transformation toward boosting electrocatalytic water splitting. <i>Applied Catalysis B: Environmental</i> , 2022, 305, 121030.	10.8	40
366	Amorphous MoS electro-synthesized in alkaline electrolyte for superior hydrogen evolution. <i>Journal of Alloys and Compounds</i> , 2022, 900, 163509.	2.8	8
367	Deeply self-reconstructing CoFe(H ₃ O)(PO ₄) ₂ to low-crystalline Fe _{0.5} Co _{0.5} OOH with Fe ³⁺ and Fe ²⁺ motifs for oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2022, 304, 120986.	10.8	36
368	Grain boundary density and electronic dual modulation of intermetallic Co ₂ B by Fe doping toward efficient catalyst for oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2022, 305, 121034.	10.8	30
369	Bulk and surface dual modification of nickel-cobalt spinel with ruthenium toward highly efficient overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2022, 305, 121081.	10.8	34
370	Rational design of metal oxide catalysts for electrocatalytic water splitting. <i>Nanoscale</i> , 2021, 13, 20324-20353.	2.8	38
371	Stability and deactivation of OER electrocatalysts: A review. <i>Journal of Energy Chemistry</i> , 2022, 69, 301-329.	7.1	168
372	Realizing electrochemical transformation of a metal-organic framework precatalyst into a metal hydroxide-oxy(hydroxide) active catalyst during alkaline water oxidation. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3843-3868.	5.2	44
373	In Situ Carbon Corrosion and Cu Leaching as a Strategy for Boosting Oxygen Evolution Reaction in Multimetal Electrocatalysts. <i>Advanced Materials</i> , 2022, 34, e2109108.	11.1	24
374	Edge-segregated ternary Pd-Pt-Ni spiral nanosheets as high-performance bifunctional oxygen redox electrocatalysts for rechargeable zinc-air batteries. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3808-3817.	5.2	17
375	Improved Oxygen Redox Activity by High-Valent Fe and Co ³⁺ Sites in the Perovskite LaNi _{1-x} Fe _{0.5x} Co _{0.5x} O ₃ . <i>ACS Applied Energy Materials</i> , 2022, 5, 343-354.	2.5	18
376	Mesoporous High-Entropy Oxide Thin Films: Electrocatalytic Water Oxidation on High-Surface-Area Spinel (Cr _{0.2} Mn _{0.2} Fe _{0.2} Co _{0.2} Ni _{0.2}) ₃ O ₄ Electrodes. <i>ACS Applied Energy Materials</i> , 2022, 5, 717-730.	2.5	29
377	Dynamics and control of active sites in hierarchically nanostructured cobalt phosphide/chalcogenide-based electrocatalysts for water splitting. <i>Energy and Environmental Science</i> , 2022, 15, 727-739.	15.6	96
378	Hybrid Water Electrolysis: A New Sustainable Avenue for Energy-Saving Hydrogen Production. , 2022, 1, 100002.		38
379	Anti-Ferromagnetic RuO ₂ : A Stable and Robust OER Catalyst over a Large Range of Surface Terminations. <i>Journal of Physical Chemistry C</i> , 2022, 126, 1337-1345.	1.5	21
380	Operando Monitoring and Deciphering the Structural Evolution in Oxygen Evolution Electrocatalysis. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	90
381	Catalyst overcoating engineering towards high-performance electrocatalysis. <i>Chemical Society Reviews</i> , 2022, 51, 188-236.	18.7	53

#	ARTICLE	IF	CITATIONS
382	Controlling the Interfacial Charge Polarization of MOF-Derived 2D vdW Architectures as a Unique Strategy for Bifunctional Oxygen Electrocatalysis. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 3919-3929.	4.0	63
383	Two-Dimensional Conjugated Metal-Organic Frameworks for Electrocatalysis: Opportunities and Challenges. <i>ACS Nano</i> , 2022, 16, 1759-1780.	7.3	94
385	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.	5.2	61
386	Recent advances in non-precious group metal-based catalysts for water electrolysis and beyond. <i>Journal of Materials Chemistry A</i> , 2021, 10, 50-88.	5.2	44
387	Strategies for designing more efficient electrocatalysts towards the urea oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3296-3313.	5.2	80
388	Electrocatalytic Conversion of Glycerol to Oxalate on Ni Oxide Nanoparticles-Modified Oxidized Multiwalled Carbon Nanotubes. <i>ACS Catalysis</i> , 2022, 12, 982-992.	5.5	49
389	A fully noble-metal-free electrocatalyst based on a cobalt-polyoxometalate immobilized in a layered double hydroxide for water oxidation at neutral pH. <i>New Journal of Chemistry</i> , 2022, 46, 3073-3077.	1.4	5
390	Oxygen Evolution Reaction Driven by Charge Transfer from a Cr Complex to Co-Containing Polyoxometalate in a Porous Ionic Crystal. <i>Journal of the American Chemical Society</i> , 2022, 144, 2980-2986.	6.6	32
391	In situ/operando analysis of surface reconstruction of transition metal-based oxygen evolution electrocatalysts. <i>Cell Reports Physical Science</i> , 2022, 3, 100729.	2.8	29
392	<i>In Situ</i> Spectroelectrochemical Detection of Oxygen Evolution Reaction Intermediates with a Carboxylated Graphene-MnO ₂ Electrocatalyst. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 5177-5182.	4.0	14
393	Interfacial interaction induced OER activity of MOF derived superhydrophilic Co ₃ O ₄ -NiO hybrid nanostructures. <i>Dalton Transactions</i> , 2022, 51, 2019-2025.	1.6	8
394	Coordination modulation of iridium single-atom catalyst maximizing water oxidation activity. <i>Nature Communications</i> , 2022, 13, 24.	5.8	99
395	Toward Excellence of Electrocatalyst Design by Emerging Descriptor-Oriented Machine Learning. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	43
396	Activating the lattice oxygen oxidation mechanism in amorphous molybdenum cobalt oxide nanosheets for water oxidation. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3659-3666.	5.2	24
397	Strategies for Electrochemically Sustainable H ₂ Production in Acid. <i>Advanced Science</i> , 2022, 9, e21104916.	5.6	15
398	An Fe-doped Co-oxide electrocatalyst synthesized through a post-modification method toward advanced water oxidation. <i>Dalton Transactions</i> , 2022, 51, 3137-3145.	1.6	5
399	Regulating the Local Spin State and Band Structure in Ni ₃ S ₂ Nanosheet for Improved Oxygen Evolution Activity. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	99
400	Nickel-Rich Ni ₃ N Particles Stimulated by Defective Graphitic Carbon Nitriles for the Effective Oxygen Evolution Reaction. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 2081-2090.	1.8	21

#	ARTICLE	IF	CITATIONS
401	A Superior and Stable Electrocatalytic Oxygen Evolution Reaction by One-Dimensional FeCoP Colloidal Nanostructures. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 5468-5477.	4.0	26
402	Electrode reconstruction strategy for oxygen evolution reaction: maintaining Fe-CoOOH phase with intermediate-spin state during electrolysis. <i>Nature Communications</i> , 2022, 13, 605.	5.8	149
403	Highly active and durable Fe _x Cu _y Ni _{1-x-y} /FeOOH/NiOOH/CuO complex oxides for oxygen evolution reaction in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 6691-6699.	3.8	16
404	Ru-Doped NiFe Layered Double Hydroxide as a Highly Active Electrocatalyst for Oxygen Evolution Reaction. <i>Journal of the Electrochemical Society</i> , 2022, 169, 024503.	1.3	15
405	The Pivotal Role of s-, p-, and f-Block Metals in Water Electrolysis: Status Quo and Perspectives. <i>Advanced Materials</i> , 2022, 34, e2108432.	11.1	55
406	Facile synthesis of self support Fe doped Ni ₃ S ₂ nanosheet arrays for high performance alkaline oxygen evolution. <i>Journal of Electroanalytical Chemistry</i> , 2022, 907, 116047.	1.9	6
407	Exploring the mechanism of electrocatalytic water oxidation on CoO decorated Ti ₃ C ₂ T _x nanoplatelets. <i>Electrochimica Acta</i> , 2022, 409, 139969.	2.6	2
408	Ruthenium-nickel-cobalt alloy nanoparticles embedded in hollow carbon microtubes as a bifunctional mosaic catalyst for overall water splitting. <i>Journal of Colloid and Interface Science</i> , 2022, 612, 710-721.	5.0	31
409	Self-adaptive evolution of nickel silicide nanowires for the enhancement of bifunctional electrocatalytic activities. <i>Chemical Engineering Journal</i> , 2022, 434, 134668.	6.6	5
410	Work function tuned, surface Cs intercalated BiVO ₄ for enhanced photoelectrochemical water splitting reactions. <i>Journal of Energy Chemistry</i> , 2022, 68, 612-623.	7.1	24
411	Self-supported MoO ₂ -MoO ₃ /Ni ₂ P hybrids as a bifunctional electrocatalyst for energy-saving hydrogen generation via urea-water electrolysis. <i>Journal of Colloid and Interface Science</i> , 2022, 614, 337-344.	5.0	18
412	Effects of Fe on electrocatalytic oxygen evolution reaction activity for CoFe layered double hydroxide nanosheets. <i>Journal of Alloys and Compounds</i> , 2022, 903, 163994.	2.8	12
413	Boosting photocatalytic activity through tuning electron spin states and external magnetic fields. <i>Journal of Materials Science and Technology</i> , 2022, 115, 208-220.	5.6	24
414	Boosting oxygen evolution by nickel nitrate hydroxide with abundant grain boundaries via segregated high-valence molybdenum. <i>Journal of Colloid and Interface Science</i> , 2022, 613, 224-233.	5.0	5
415	Modifying the 316L stainless steel surface by an electrodeposition technique: towards high-performance electrodes for alkaline water electrolysis. <i>Sustainable Energy and Fuels</i> , 2022, 6, 1382-1397.	2.5	6
416	Bridging electrocatalyst and cocatalyst studies for solar hydrogen production via water splitting. <i>Chemical Science</i> , 2022, 13, 2824-2840.	3.7	15
417	Highly active postspinel-structured catalysts for oxygen evolution reaction. <i>RSC Advances</i> , 2022, 12, 5094-5104.	1.7	3
418	General heterostructure strategy of photothermal materials for scalable solar-heating hydrogen production without the consumption of artificial energy. <i>Nature Communications</i> , 2022, 13, 776.	5.8	56

#	ARTICLE	IF	CITATIONS
419	The regulation mechanism of cationic substitution in morphology-controlled oxy-spinel for oxygen evolution reaction. <i>Journal of Catalysis</i> , 2022, 407, 221-231.	3.1	14
420	Strong Oxide-Support Interaction over IrO ₂ /V ₂ O ₅ for Efficient pH-Universal Water Splitting. <i>Advanced Science</i> , 2022, 9, e2104636.	5.6	77
421	Regulating metal active sites of atomically-thin nickel-doped spinel cobalt oxide toward enhanced oxygen electrocatalysis. <i>Chemical Engineering Journal</i> , 2022, 435, 134261.	6.6	28
422	Combination of Fe(II)-induced oxygen deficiency and metal doping strategy for construction of high efficiency water oxidation electrocatalysts under industrial-scale current density. <i>Chemical Engineering Journal</i> , 2022, 435, 135048.	6.6	6
423	Trimetallic oxide-hydroxide porous nanosheets for efficient water oxidation. <i>Chemical Engineering Journal</i> , 2022, 435, 135019.	6.6	13
424	Heat-Driven Electricity Coupling Driven Cascade Oxidation Reaction of Redox Couple and Water. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 49-57.	2.1	8
425	Plasma Engineering of Basal Sulfur Sites on MoS ₂ @Ni ₃ S ₂ Nanorods for the Alkaline Hydrogen Evolution Reaction. <i>Advanced Science</i> , 2022, 9, e2104774.	5.6	26
426	Modulating metal-organic frameworks for catalyzing acidic oxygen evolution for proton exchange membrane water electrolysis. <i>SusMat</i> , 2021, 1, 460-481.	7.8	86
427	Surface carbon layer controllable Ni ₃ Fe particles confined in hierarchical N-doped carbon framework boosting oxygen evolution reaction. , 2022, 1, 100020.		124
428	Twelve-Component Free-Standing Nanoporous High-Entropy Alloys for Multifunctional Electrocatalysis. , 2022, 4, 181-189.		50
429	In-situ reconstructed Ru atom array on MnO ₂ with enhanced performance for acidic water oxidation. <i>Nature Catalysis</i> , 2021, 4, 1012-1023.	16.1	324
430	Dynamic coordination transformation of active sites in single-atom MoS ₂ catalysts for boosted oxygen evolution catalysis. <i>Energy and Environmental Science</i> , 2022, 15, 2071-2083.	15.6	33
431	Water Oxidation on CrMnFeCoNi High Entropy Alloy: Improvement Through Rejuvenation and Spin Polarization. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
432	Robust Ru-N Metal-Support Interaction to Promote Self-Powered H ₂ Production Assisted by Hydrazine Oxidation. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
433	Cascading reconstruction to induce highly disordered Fe-Ni(O)OH toward enhanced oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7366-7372.	5.2	26
434	[Ru(tmphen) ₃] ₂ [Fe(CN) ₆] and [Ru(phen) ₃][Fe(CN) ₅ (NO)] complexes and formation of a heterostructured RuO ₂ @Fe ₂ O ₃ nanocomposite as an efficient alkaline HER and OER electrocatalyst. <i>Dalton Transactions</i> , 2022, 51, 6314-6331.	1.6	6
435	Low-Temperature Crystallization of LaFeO ₃ and Inherent Surface Activation for Efficient Oxygen Evolution Reaction Catalysts. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
436	Sustainable and safer nanoclay composites for multifaceted applications. <i>Green Chemistry</i> , 2022, 24, 3081-3114.	4.6	28

#	ARTICLE	IF	CITATIONS
455	Interstitial boron-triggered electron-deficient Os aerogels for enhanced pH-universal hydrogen evolution. <i>Nature Communications</i> , 2022, 13, 1143.	5.8	152
456	Interface design and composition regulation of cobalt-based electrocatalysts for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 10547-10572.	3.8	34
457	Corrosion Chemistry of Electrocatalysts. <i>Advanced Materials</i> , 2022, 34, e2200840.	11.1	43
458	From Nickel Foam to Highly Active NiFe-based Oxygen Evolution Catalysts. <i>ChemElectroChem</i> , 2022, 9, .	1.7	3
459	Correlating Orbital Composition and Activity of $\text{LaMn}_{1-x}\text{Ni}_x\text{O}_3$ Nanostructures toward Oxygen Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2022, 144, 4439-4447.	6.6	22
460	S-doped carbon materials: Synthesis, properties and applications. <i>Carbon</i> , 2022, 195, 328-340.	5.4	55
461	CeO_2 Functionalized Cobalt Layered Double Hydroxide for Efficient Catalytic Oxygen-Evolving Reaction. <i>Small</i> , 2022, 18, e2107594.	5.2	33
462	A Numerical Prediction of 4th-Order Kinetics for Photocatalytic Oxygen Evolution Reactions. <i>Catalysis Letters</i> , 2023, 153, 138-149.	1.4	5
463	S-Doping Triggers Redox Reactivities of Both Iron and Lattice Oxygen in FeOOH for Low-Cost and High-Performance Water Oxidation. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	79
464	The nature of synergistic effects in transition metal oxides/in-situ intermediate-hydroxides for enhanced oxygen evolution reaction. <i>Current Opinion in Electrochemistry</i> , 2022, 34, 100987.	2.5	7
465	Oxygen Evolution Reaction in Alkaline Environment: Material Challenges and Solutions. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	209
466	Bridging the Charge Accumulation and High Reaction Order for High-Rate Oxygen Evolution and Long Stable Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	49
467	Theoretical and experimental study of the effects of cobalt and nickel doping within IrO_2 on the acidic oxygen evolution reaction. <i>Journal of Catalysis</i> , 2022, 408, 64-80.	3.1	10
468	Synthesis of Magnesium Phosphorous Trichalcogenides and Applications in Photoelectrochemical Water Splitting. <i>Small</i> , 2022, 18, e2200355.	5.2	8
469	Electrochemical Urea Oxidation in Different Environment: From Mechanism to Devices. <i>ChemCatChem</i> , 2022, 14, .	1.8	21
470	Partial crystallization of Co-Fe oxyhydroxides towards enhanced oxygen evolution activity. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 16711-16718.	3.8	12
471	Co-embedded carbon nanotubes modified N-doped carbon derived from poly(Schiff base) and zeolitic imidazole frameworks as efficient oxygen electrocatalyst towards rechargeable Zn-air battery. <i>Journal of Power Sources</i> , 2022, 527, 231205.	4.0	13
472	Understanding defect chemistry in TMOS involved electrocatalytic OER; an analysis for advancement. <i>Surfaces and Interfaces</i> , 2022, 30, 101942.	1.5	8

#	ARTICLE	IF	CITATIONS
473	Co@Ni Layered Double Hydroxide for the Electrocatalytic Oxidation of Organic Molecules: An Approach to Lowering the Overall Cell Voltage for the Water Splitting Process. ACS Applied Materials & Interfaces, 2022, 14, 16222-16232.	4.0	21
474	Rapidly electrodeposited NiFe(OH) as the catalyst for oxygen evolution reaction. Inorganic Chemistry Communication, 2022, 139, 109350.	1.8	3
475	Electrochemical synergy between FeNi nanoalloy@tungsten carbide on N-doped graphitized carbon layers as an excellent electrocatalyst for oxygen evolution reaction. Electrochimica Acta, 2022, 415, 140254.	2.6	10
476	Co ₃ W intermetallic compound as an efficient hydrogen evolution electrocatalyst for water splitting and electrocoagulation in non-acidic media. Chemical Engineering Journal, 2022, 438, 135517.	6.6	8
477	Research of high entropy alloys as electrocatalyst for oxygen evolution reaction. Journal of Alloys and Compounds, 2022, 908, 164669.	2.8	56
478	Interfacial microenvironment modulation enhancing catalytic kinetics of bimetallic (oxy)hydroxide heterostructures for highly efficient oxygen evolution reaction. Journal of Alloys and Compounds, 2022, 910, 164879.	2.8	3
479	Structural design for electrocatalytic water splitting to realize industrial-scale deployment: Strategies, advances, and perspectives. Journal of Energy Chemistry, 2022, 70, 129-153.	7.1	60
480	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.	3.1	10
481	Ni ₃ S ₂ -embedded NiFe LDH porous nanosheets with abundant heterointerfaces for high-current water electrolysis. Chemical Engineering Journal, 2022, 442, 136105.	6.6	44
482	Accelerating water oxidation kinetics via synergistic in-layer modification and interlayer reconstruction over hetero-epitaxial Fe-Mn-O nanosheets. Chemical Engineering Journal, 2022, 441, 136122.	6.6	10
483	Silver decorated hydroxides electrocatalysts for efficient oxygen evolution reaction. Chemical Engineering Journal, 2022, 442, 136168.	6.6	11
484	Hierarchical mesoporous S,N-codoped carbon nanostructures composed of Co/Co-Cu-S/carbon nanoplate arrays on carbon nanofibers as a self-supported air cathode for long-lasting rechargeable Zn-air batteries. Science China Technological Sciences, 2022, 65, 693-703.	2.0	6
485	Strain creates excellent catalysts for electrolyzers. Joule, 2021, 5, 3072-3074.	11.7	0
486	Realizing High and Stable Electrocatalytic Oxygen Evolution for Iron-Based Perovskites by Co-Doping-Induced Structural and Electronic Modulation. Advanced Functional Materials, 2022, 32, .	7.8	28
487	Wet-chemical synthesis and applications of amorphous metal-containing nanomaterials. Nano Research, 2023, 16, 4289-4309.	5.8	17
489	In Situ Electronic Redistribution Tuning of NiCo ₂ S ₄ Nanosheets for Enhanced Electrocatalysis. Advanced Functional Materials, 2022, 32, .	7.8	108
490	Eutectic dual-phase microstructure modulated porous high-entropy alloys as high-performance bifunctional electrocatalysts for water splitting. Journal of Materials Chemistry A, 2022, 10, 11110-11120.	5.2	18
491	Alteration of oxygen evolution mechanisms in layered LiCoO ₂ structures by intercalation of alkali metal ions. Journal of Materials Chemistry A, 2022, 10, 10967-10978.	5.2	10

#	ARTICLE	IF	CITATIONS
492	PtSe ₂ on a reduced graphene oxide foil for the alkaline hydrogen evolution reaction. <i>Materials Advances</i> , 2022, 3, 4348-4358.	2.6	6
493	Vacancy-mediated transition metals as efficient electrocatalysts for water splitting. <i>Nanoscale</i> , 2022, 14, 7181-7188.	2.8	8
494	Amorphous FeOOH nanoparticles decorated on defect-rich porous Ni MOF nanosheet based hierarchical architectures toward superior OER performance. <i>New Journal of Chemistry</i> , 2022, 46, 9650-9657.	1.4	8
495	State of the Active Site in La _{1-x} Sr _x CoO ₃ Under Oxygen Evolution Reaction Investigated by Total-Reflection Fluorescence X-Ray Absorption Spectroscopy. <i>ACS Applied Energy Materials</i> , 2022, 5, 4108-4116.	2.5	4
496	Hybridization of 2D Nanomaterials with 3D Graphene Architectures for Electrochemical Energy Storage and Conversion. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	26
497	Carboxyl functionalized double-walled carbon nanotubes for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2022, 419, 140395.	2.6	6
498	A potential-driven switch of activity promotion mode for the oxygen evolution reaction at Co ₃ O ₄ /NiO _x Hy interface. <i>EScience</i> , 2022, 2, 438-444.	25.0	103
499	Several Key Factors for Efficient Electrocatalytic Water Splitting: Active Site Coordination Environment, Morphology Changes and Intermediates Identification. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	5
500	Copper foam-derived electrodes as efficient electrocatalysts for conventional and hybrid water electrolysis. <i>Materials Reports Energy</i> , 2022, 2, 100092.	1.7	9
501	High Configuration Entropy Activated Lattice Oxygen for O ₂ Formation on Perovskite Electrocatalyst. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	96
502	Substrate effect on hydrogen evolution reaction in two-dimensional Mo ₂ C monolayers. <i>Scientific Reports</i> , 2022, 12, 6076.	1.6	3
503	Computational atomic-scale design and experimental verification for layered double hydroxide as an efficient alkaline oxygen evolution reaction catalyst. <i>International Journal of Energy Research</i> , 2022, 46, 11972-11988.	2.2	6
504	In-situ generation of Ni-CoOOH through deep reconstruction for durable alkaline water electrolysis. <i>Chemical Engineering Journal</i> , 2022, 443, 136432.	6.6	38
505	Dual sites modulating MoO ₂ nanospheres for synergistically enhanced electrocatalysis of water oxidation. <i>Chemical Engineering Journal</i> , 2022, 443, 136339.	6.6	18
506	Bamboo-like N,S-doped carbon nanotubes with encapsulated Co nanoparticles as high-performance electrocatalyst for liquid and flexible all-solid-state rechargeable Zn-air batteries. <i>Applied Surface Science</i> , 2022, 593, 153446.	3.1	14
507	Amorphous Ni(â€¦)-based sulfides as bifunctional water and urea oxidation anode electrocatalysts for hydrogen generation from urea-containing water. <i>Applied Catalysis B: Environmental</i> , 2022, 312, 121389.	10.8	76
508	Electrochemistry in Magnetic Fields. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	64
509	Magnetic Field Enhanced Electrocatalytic Oxygen Evolution of NiFeâ€¦DH/Co ₃ O ₄ Heterojunction Supported on Nickel Foam. <i>Small Methods</i> , 2022, 6, e2200084.	4.6	39

#	ARTICLE	IF	CITATIONS
510	Highly efficient oxygen evolution catalysis achieved by NiFe oxyhydroxide clusters anchored on carbon black. <i>Journal of Materials Chemistry A</i> , 2022, 10, 10342-10349.	5.2	13
511	Acceleration of the pre-oxidation process by tuning the degree of sulfurization for promoted oxygen evolution reaction. <i>Chemical Communications</i> , 2022, 58, 6360-6363.	2.2	23
512	è¿†æ¡é†á±žç¡«âCE-ç%©ç”µè\$£æ°æžæ°¢/æžæ°Sââ”ç”µâ,-ââCE-â%©,ç”ç©¶è¿†â±•. <i>Chinese Science Bulletin</i> , 2022, 4, .		2
513	Oxygen Evolution Reaction in Energy Conversion and Storage: Design Strategies Under and Beyond the Energy Scaling Relationship. <i>Nano-Micro Letters</i> , 2022, 14, 112.	14.4	104
514	Regulating the Spin State of Fe ^{III} Enhances the Magnetic Effect of the Molecular Catalysis Mechanism. <i>Journal of the American Chemical Society</i> , 2022, 144, 8204-8213.	6.6	111
515	Filling Octahedral Interstices by Building Geometrical Defects to Construct Active Sites for Boosting the Oxygen Evolution Reaction on NiFe ₂ O ₄ . <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	27
516	Highly Active Ni-Fe Based Oxide Oxygen Evolution Reaction Electrocatalysts for Alkaline Anion Exchange Membrane Electrolyser. <i>Catalysts</i> , 2022, 12, 476.	1.6	2
517	In Situ Electrochemically Formed Ag/NiOOH/Ni ₃ S ₂ Heterostructure Electrocatalysts with Exceptional Performance toward Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 5976-5985.	3.2	15
518	Crystal facet engineering of perovskite cobaltite with optimized electronic regulation for water splitting. <i>Science China Materials</i> , 2022, 65, 2665-2674.	3.5	4
519	Hydrogen as a carrier of renewable energies toward carbon neutrality: State-of-the-art and challenging issues. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2022, 29, 1073-1089.	2.4	27
520	Electrochemistry in Magnetic Fields. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	6
521	Physical Basis of Multi-Energy Coupling-Driven Water Oxidation. <i>Frontiers in Chemistry</i> , 2022, 10, .	1.8	1
522	A tin-incorporated multi-phase perovskite nanocomposite for efficiently catalyzing oxygen evolution reaction. <i>International Journal of Energy Research</i> , 2022, 46, 13079-13088.	2.2	3
523	Single-Phase Perovskite SrIrO ₃ Nanofibers as a Highly Efficient Electrocatalyst for a pH-Universal Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2022, 5, 6146-6154.	2.5	8
524	Merging operando and computational X-ray spectroscopies to study the oxygen evolution reaction. <i>Current Opinion in Electrochemistry</i> , 2022, 35, 101039.	2.5	3
525	Chemical and electrochemical water oxidation catalyzed by heteroleptic Ru(III) complexes of anionic 2,6 pyridine dicarboxylate ligand: Experimental and theoretical study. <i>Polyhedron</i> , 2022, 222, 115898.	1.0	2
526	A universal synthesis of MOF-Hydroxyl for highly active oxygen evolution. <i>Journal of Colloid and Interface Science</i> , 2022, 623, 318-326.	5.0	7
527	MOF-Derived Porous Fe ₃ O ₄ /RuO ₂ -C Composite for Efficient Alkaline Overall Water Splitting. <i>ACS Applied Energy Materials</i> , 2022, 5, 6059-6069.	2.5	20

#	ARTICLE	IF	CITATIONS
528	Developments and Perspectives on Robust Nano- and Microstructured Binder-Free Electrodes for Bifunctional Water Electrolysis and Beyond. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	63
529	Tuning the electronic structure and inverse degree of inverse spinel ferrites by integrating samarium orthoferrite for efficient water oxidation. <i>Applied Catalysis B: Environmental</i> , 2022, 315, 121504.	10.8	15
530	Defect-Engineered Hydroxylated Mesoporous Spinel Oxides as Bifunctional Electrocatalysts for Oxygen Reduction and Evolution Reactions. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 23307-23321.	4.0	33
531	Electrooxidation of Alcohols on Mixed Copper-Cobalt Hydroxycarbonates in Alkaline Solution. <i>ChemElectroChem</i> , 2022, 9, .	1.7	6
532	Recent Developments on Cr-Based Electrocatalysts for the Oxygen Evolution Reaction in Alkaline Media. <i>ChemCatChem</i> , 2022, 14, .	1.8	9
533	Recent Development and Future Perspectives of Amorphous Transition Metal-Based Electrocatalysts for Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	158
534	Constructing nickel-iron oxyhydroxides integrated with iron oxides by microorganism corrosion for oxygen evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2202812119.	3.3	21
535	Hierarchical nanocomposites of nickel/iron-layered double hydroxide ultrathin nanosheets strong-coupled with nanocarbon networks for enhanced oxygen evolution reaction. <i>Electrochimica Acta</i> , 2022, 420, 140455.	2.6	14
536	Surface engineering of MOFs as a route to cobalt phosphide electrocatalysts for efficient oxygen evolution reaction. <i>Nano Energy</i> , 2022, 98, 107315.	8.2	31
537	Magnetic Field Enhancing OER Electrocatalysis of NiFe Layered Double Hydroxide. <i>Catalysis Letters</i> , 2023, 153, 673-681.	1.4	15
538	Water electrolysis: from textbook knowledge to the latest scientific strategies and industrial developments. <i>Chemical Society Reviews</i> , 2022, 51, 4583-4762.	18.7	453
539	Triggering Lattice Oxygen Activation of Single-Atomic Mo Sites Anchored on Ni-Fe Oxyhydroxides Nanoarrays for Electrochemical Water Oxidation. <i>Advanced Materials</i> , 2022, 34, e2202523.	11.1	103
540	Lattice Oxygen of PbO ₂ (101) Consuming and Refilling via Electrochemical Ozone Production and H ₂ O Dissociation. <i>Journal of Physical Chemistry C</i> , 2022, 126, 8627-8636.	1.5	7
541	Regulating the electronic structures of mixed B-site pyrochlore to enhance the turnover frequency in water oxidation. <i>Nano Convergence</i> , 2022, 9, 22.	6.3	6
542	Development of New Mixed-Metal Ruthenium and Iridium Oxides as Electrocatalysts for Oxygen Evolution: Part I. <i>Johnson Matthey Technology Review</i> , 2022, 66, 393-405.	0.5	5
543	NiCo-sulfide hetero-structured interface induced highly active nickel-dominated metal sites for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 21352-21360.	3.8	9
544	Heat-Triggered Ferri-to-Paramagnetic Transition Accelerates Redox Couple-Mediated Electrocatalytic Water Oxidation. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	8
545	Oxygen-Plasma-Induced Hetero-Interface NiFe ₂ O ₄ /NiMoO ₄ Catalyst for Enhanced Electrochemical Oxygen Evolution. <i>Materials</i> , 2022, 15, 3688.	1.3	3

#	ARTICLE	IF	CITATIONS
546	Intersite Charge Transfer Enhanced Oxygen Evolution Reactivity on A ₂ IrO ₃ (A=Li, Na, Cu) Delafossite Electrocatalysts. <i>Journal of the Electrochemical Society</i> , 2022, 169, 056523.	1.3	1
547	Ammonium cobalt phosphate with asymmetric coordination sites for enhanced electrocatalytic water oxidation. <i>Chinese Journal of Catalysis</i> , 2022, 43, 1955-1962.	6.9	7
548	Co ₃ O ₄ /NiO with abundant Ni ³⁺ active sites for boosting oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 446, 137036.	6.6	15
549	Co-Mof-Derived Zif@Ni-Co-B150 as an Efficient Electrocatalyst for Oxygen Evolution Reaction. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
550	Chromium-rich Cr _x Ir _{1-x} O ₂ wire-in-tube alloys for boosted water oxidation with long standing electrocatalytic activity. <i>Journal of Materials Chemistry A</i> , 2022, 10, 13803-13813.	5.2	10
551	Defect Structure Regulation and Mass Transfer Improvement of Cobalt-Based Oxides for Enhanced Oxygen Evolution Reaction. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
552	Nickel hydroxide array coated with NiFe alloy nanosheets for overall mixed water splitting. <i>Journal of Alloys and Compounds</i> , 2022, 918, 165564.	2.8	8
553	One-pot hydrothermal synthesis of Co@Ni hexacyanoferrate nanocuboids on Ni-foam as efficient catalysts for oxygen evolution and urea oxidation reactions. <i>Materials Research Express</i> , 2022, 9, 066302.	0.8	2
554	Electrochemical Water Splitting: Bridging the Gaps Between Fundamental Research and Industrial Applications. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	89
555	Cu-Doping Effect on the Electrocatalytic Properties of Self-Supported Cu-Doped Ni ₃ S ₂ Nanosheets for Hydrogen Production via Efficient Urea Oxidation. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 7777-7786.	1.8	23
556	Nitrogen-Rich Carbonaceous Materials for Advanced Oxygen Electrocatalysis: Synthesis, Characterization, and Activity of Nitrogen Sites. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	59
557	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.	1.9	4
558	Vanadium Nitride/Carbon Nanotube Vertical Nanoarrays on Iron Foam for Oxygen Evolution Reaction. <i>ACS Applied Nano Materials</i> , 2022, 5, 7714-7722.	2.4	10
559	Hydrogen production by electrocatalysis using the reaction of acidic oxygen evolution: a review. <i>Environmental Chemistry Letters</i> , 2022, 20, 3429-3452.	8.3	18
560	Boosting the Electrocatalytic Oxygen Evolution of Perovskite LaCo _{1-x} Fe _x O ₃ by the Construction of Yolk-Shell Nanostructures and Electronic Modulation. <i>Small</i> , 2022, 18, .	5.2	31
561	Transition metal (Fe, Ni, and Zn) doping-induced modulation of geometric and electronic structures to optimize the potential-determining step of MnCo ₂ O ₄ for oxygen evolution reaction. <i>Science China Materials</i> , 2022, 65, 2871-2878.	3.5	14
562	Construction of CoNiFe Trimetallic Carbonate Hydroxide Hierarchical Hollow Microflowers with Oxygen Vacancies for Electrocatalytic Water Oxidation. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	27
563	Enhanced photocurrent density for photoelectrochemical catalyzing water oxidation using novel W-doped BiVO ₄ and metal organic framework composites. <i>Journal of Colloid and Interface Science</i> , 2022, 624, 515-526.	5.0	17

#	ARTICLE	IF	CITATIONS
564	Emerging low-nuclearity supported metal catalysts with atomic level precision for efficient heterogeneous catalysis. <i>Nano Research</i> , 2022, 15, 7806-7839.	5.8	201
565	Electrocatalytic activity on single atoms catalysts: Synthesis strategies, characterization, classification, and energy conversion applications. <i>Coordination Chemistry Reviews</i> , 2022, 467, 214600.	9.5	16
566	Integrating trifunctional Co@NC-CNTs@NiFe-LDH electrocatalysts with arrays of porous triangle carbon plates for high-power-density rechargeable Zn-air batteries and self-powered water splitting. <i>Chemical Engineering Journal</i> , 2022, 446, 137049.	6.6	46
567	Design strategies for markedly enhancing energy efficiency in the electrocatalytic CO ₂ reduction reaction. <i>Energy and Environmental Science</i> , 2022, 15, 3603-3629.	15.6	75
568	Sulfide and selenide-based electrocatalyst for oxygen evolution reaction (OER). , 2022, , 463-494.		0
569	High-content atomically distributed W(^v), (^{vi}) on FeCo layered double hydroxide with high oxygen evolution reaction activity. <i>Chemical Communications</i> , 2022, 58, 7678-7681.	2.2	5
570	Confined interface transformation of metal-organic frameworks for highly efficient oxygen evolution reactions. <i>Energy and Environmental Science</i> , 2022, 15, 3830-3841.	15.6	32
571	Dual-metal atoms embedded into two-dimensional covalent organic framework as efficient electrocatalysts for oxygen evolution reaction: A DFT study. <i>Nano Research</i> , 2022, 15, 7994-8000.	5.8	25
572	Study on the Effect of A/B Site Co-Doping on the Oxygen Evolution Reaction Performance of Strontium Cobaltite. <i>Metals</i> , 2022, 12, 991.	1.0	0
573	Atomic Co Embedded in a Covalent Triazine Framework for Efficient Oxygen Evolution Catalysis. <i>Energy & Fuels</i> , 2022, 36, 11601-11608.	2.5	7
574	Boosting electrocatalytic water splitting by magnetic fields. <i>Chem Catalysis</i> , 2022, 2, 2140-2149.	2.9	10
575	Surface Design Strategy of Catalysts for Water Electrolysis. <i>Small</i> , 2022, 18, .	5.2	138
576	Achieving Active and Stable Amorphous Ir ^V O _x OH _y for Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 28706-28715.	4.0	9
578	Recent Progress in Transition-Metal Sulfide Catalyst Regulation for Improved Oxygen Evolution Reaction. <i>Energy & Fuels</i> , 2022, 36, 6675-6694.	2.5	64
579	Surface Activation and Ni ²⁺ Stabilization in NiO/NiS ₂ for Efficient Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	105
580	Surface Activation and Ni ²⁺ Stabilization in NiO/NiS ₂ for Efficient Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	1
581	Phase transition of SrCo _{0.9} Fe _{0.1} O ₃ electrocatalysts and their effects on oxygen evolution reaction. <i>SusMat</i> , 2022, 2, 445-455.	7.8	10
582	Electron spin modulation engineering in oxygen-involved electrocatalysis. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 364002.	0.7	4

#	ARTICLE	IF	CITATIONS
583	Serpentine Ni ₃ Ge ₂ O ₅ (OH) ₄ Nanosheets Grow on Porous Mo ₂ N for an Efficient Oxygen Evolution Reaction. <i>Energy & Fuels</i> , 2022, 36, 11467-11476.	2.5	4
584	Roles of heteroatoms in electrocatalysts for alkaline water splitting: A review focusing on the reaction mechanism. <i>Chinese Journal of Catalysis</i> , 2022, 43, 2091-2110.	6.9	36
585	Robust Ru-N metal-support interaction to promote self-powered H ₂ production assisted by hydrazine oxidation. <i>Nano Energy</i> , 2022, 100, 107467.	8.2	35
586	Metal-organic frameworks and derived materials as photocatalysts for water splitting and carbon dioxide reduction. <i>Coordination Chemistry Reviews</i> , 2022, 469, 214664.	9.5	100
587	Valence-modified selenospinel as ampere-current-bearing oxygen evolution catalysts. <i>Applied Catalysis B: Environmental</i> , 2022, 316, 121649.	10.8	9
588	Operando deciphering the activity origins for potential-induced reconstructed oxygen-evolving catalysts. <i>Applied Catalysis B: Environmental</i> , 2022, 316, 121602.	10.8	10
589	A highly active and stable 3D dandelion spore-structured self-supporting Ir-based electrocatalyst for proton exchange membrane water electrolysis fabricated using structural reconstruction. <i>Energy and Environmental Science</i> , 2022, 15, 3449-3461.	15.6	44
590	Bifunctional Petal-Like Carbon-Nitrogen Doped Nifeox/ Nickel Foam Nanohybrid Electrocatalyst for Efficient Overall Water Splitting. <i>SSRN Electronic Journal</i> , 0, .	0.4	0
591	Rationally Designed Metal-N-C/Mos ₂ Heterostructures as Bifunctional Oxygen Electrocatalysts: A Computational Study. <i>SSRN Electronic Journal</i> , 0, .	0.4	0
592	Construction of Ni ³⁺ -rich nanograin arrays for boosting alkaline water oxidation. <i>Chemical Communications</i> , 2022, 58, 8654-8657.	2.2	6
593	Strain engineering in single-atom catalysts: GaPS ₄ for bifunctional oxygen reduction and evolution. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 4272-4280.	3.0	15
594	Iridium nanohollows with porous walls for acidic water splitting. <i>Journal of Materials Chemistry A</i> , 2022, 10, 20005-20010.	5.2	10
595	Atomic Scale Synergistic Interactions Lead to Breakthrough Catalysts for Electrocatalytic Water Splitting. <i>SSRN Electronic Journal</i> , 0, .	0.4	0
596	Recent research progress on operational stability of metal oxide/sulfide photoanodes in photoelectrochemical cells. , 2022, 1, e9120020.		87
597	Flower-shaped Fe–CoP@C composites derived from MOFs as an efficient electrocatalyst for oxygen evolution reaction. <i>Scientia Sinica Chimica</i> , 2022, 52, 1140-1147.	0.2	1
598	Controllable Synthesis of Ultrathin Defect-Rich LDH Nanoarrays Coupled with MOF-Derived Co@NC Microarrays for Efficient Overall Water Splitting. <i>Small</i> , 2022, 18, .	5.2	54
599	In-situ generate robust Fe@Ni derived nano-catalyst featuring surface reconstruction for enhanced oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 28303-28312.	3.8	13
600	Co ₃ O ₄ CoP Core-Shell Nanoparticles with Enhanced Electrocatalytic Water Oxidation Performance. <i>ACS Applied Nano Materials</i> , 2022, 5, 9150-9158.	2.4	2

#	ARTICLE	IF	CITATIONS
601	Fe-doped Nickel Carbonate Hydroxide Array Electrocatalysts for Enhanced Oxygen Evolution Reaction. <i>ChemistrySelect</i> , 2022, 7, .	0.7	1
602	Anion Exchange Membrane Water Electrolysis from Catalyst Design to the Membrane Electrode Assembly. <i>Energy Technology</i> , 2022, 10, .	1.8	11
603	Amorphous metallic ultrathin nanostructures: A latent ultra-high-density atomic-level catalyst for electrochemical energy conversion. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 26956-26977.	3.8	35
604	Iridium Doped Pyrochlore Ruthenates for Efficient and Durable Electrocatalytic Oxygen Evolution in Acidic Media. <i>Small</i> , 2022, 18, .	5.2	34
605	Water-Locked Eutectic Electrolyte Enables Long-Cycling Aqueous Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 33041-33051.	4.0	21
606	RuO ₂ electronic structure and lattice strain dual engineering for enhanced acidic oxygen evolution reaction performance. <i>Nature Communications</i> , 2022, 13, .	5.8	145
607	Hierarchical anions at the electrode-electrolyte interface for synergized neutral water oxidation. <i>CheM</i> , 2022, 8, 2700-2714.	5.8	20
608	Design of heterojunction with components in different dimensions for electrocatalysis applications. <i>Frontiers of Physics</i> , 2022, 17, .	2.4	2
609	Activating lattice oxygen of two-dimensional MnXn ⁺ 1O ₂ MXenes via zero-dimensional graphene quantum dots for water oxidation. <i>Science China Materials</i> , 2022, 65, 3053-3061.	3.5	12
610	The applications of single-atom alloys in electrocatalysis: Progress and challenges. <i>SmartMat</i> , 2023, 4, .	6.4	19
611	Interface-Coupling of NiFe-LDH on Exfoliated Black Phosphorus for the High-Performance Electrocatalytic Oxygen Evolution Reaction. <i>Frontiers in Chemistry</i> , 0, 10, .	1.8	2
612	The integration of conductive polymelamine and NiFe hydroxides to boost the electrochemical overall water splitting. <i>Electrochimica Acta</i> , 2022, 426, 140773.	2.6	7
613	Accelerating Fe sites saturation coverage through Bi-metal dynamic balances on double-layer hollow MOF nanocages for oxygen evolution. <i>Materials Today Physics</i> , 2022, 27, 100778.	2.9	6
614	Anchoring Ni/NiO heterojunction on freestanding carbon nanofibers for efficient electrochemical water oxidation. <i>Journal of Colloid and Interface Science</i> , 2022, 626, 995-1002.	5.0	4
615	Construction of NiS/Ni ₃ S ₄ heteronanorod arrays in graphitized carbonized wood frameworks as versatile catalysts for efficient urea-assisted water splitting. <i>Journal of Colloid and Interface Science</i> , 2022, 626, 848-857.	5.0	21
616	Optimizing the eg occupancy of magnesium cobalt spinel oxides via Fe substitution to promote oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2022, 921, 166074.	2.8	4
617	Understanding of Oxygen Redox in the Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2022, 34, .	11.1	109
618	Advances in anion vacancy for electrocatalytic oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2022, 921, 116650.	1.9	9

#	ARTICLE	IF	CITATIONS
619	Bimetal-anchored covalent organic frameworks derivatives for efficient alkaline electrolyte oxygen evolution. <i>Journal of Alloys and Compounds</i> , 2022, 924, 166442.	2.8	9
620	Cobalt-iron oxide/black phosphorus nanosheet heterostructure: Electrosynthesis and performance of (photo-)electrocatalytic oxygen evolution. <i>Nano Research</i> , 2023, 16, 6057-6066.	5.8	16
621	Oriented interlayered charge transfer in NiCoFe layered double hydroxide/MoO ₃ stacked heterostructure promoting the oxygen-evolving behavior. <i>Journal of Colloid and Interface Science</i> , 2022, 627, 891-899.	5.0	21
622	Ultrafast transformation of metal-organic frameworks into advanced oxygen evolution electrocatalysts with good universality and scalability. <i>Journal of Materials Chemistry A</i> , 2022, 10, 17552-17560.	5.2	9
623	Titanium Substitution Effects on the Structure, Activity, and Stability of Nanoscale Ruthenium Oxide Oxygen Evolution Electrocatalysts: Experimental and Computational Study. <i>ACS Applied Nano Materials</i> , 2022, 5, 11752-11775.	2.4	8
624	Artificially steering electrocatalytic oxygen evolution reaction mechanism by regulating oxygen defect contents in perovskites. <i>Science Advances</i> , 2022, 8, .	4.7	54
625	Lightest Metal Leads to Big Change: Lithium-Mediated Metal Oxides for Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	13
626	Probing Dynamic Self-Reconstruction on Perovskite Fluorides toward Ultrafast Oxygen Evolution. <i>Advanced Science</i> , 2022, 9, .	5.6	19
627	Electrochemically Tuned Synergistic Nano-Interface of a Tertiary Ni(OH) ₂ ~ NiO(OH)/Ni _x P Heterojunction Material for Enhanced and Durable Alkaline Water Splitting. <i>ChemistrySelect</i> , 2022, 7, .	0.7	2
628	High-Entropy Spinel Oxide Nanoparticles Synthesized via Supercritical Hydrothermal Processing as Oxygen Evolution Electrocatalysts. <i>ACS Applied Energy Materials</i> , 2022, 5, 9292-9296.	2.5	23
629	Dynamics of Both Active Phase and Catalysis Pathway for Spinel Water Oxidation Catalysts. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	21
630	Dense Heterointerfaces and Unsaturated Coordination Synergistically Accelerate Electrocatalysis in Pt/Pt ₅ P ₂ Porous Nanocages. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	23
631	Synergizing Hydrogen Spillover and Deprotonation by the Internal Polarization Field in a MoS ₂ /NiPS ₃ Vertical Heterostructure for Boosted Water Electrolysis. <i>Advanced Materials</i> , 2022, 34, .	11.1	122
632	Tuning the Electronic Structure of Cobalt Selenide on Copper Foam by Introducing a Ni Buffer Layer for Highly Efficient Electrochemical Water Splitting. <i>Inorganic Chemistry</i> , 2022, 61, 13218-13225.	1.9	11
633	Combined Corner-Sharing and Edge-Sharing Networks in Hybrid Nanocomposite with Unusual Lattice-Oxygen Activation for Efficient Water Oxidation. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	26
634	Constructing Ag modified NiCoSe ₂ hybrid nanosheet on 3D-nickel foam as a robust oxygen evolution reaction electrocatalyst. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 31656-31664.	3.8	3
635	Advances in theoretical calculations of MXenes as hydrogen and oxygen evolution reaction (water) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.3	6
636	Electron transfer dynamics and electrocatalytic oxygen evolution activities of the Co ₃ O ₄ nanoparticles attached to indium tin oxide by self-assembled monolayers. <i>Frontiers in Chemistry</i> , 0, 10, .	1.8	2

#	ARTICLE	IF	CITATIONS
637	Enhancement of Electrocatalytic Activity as a Function of Structural Order in Perovskite Oxides. ACS Catalysis, 2022, 12, 10333-10337.	5.5	16
638	Metal-Support Interaction Can Deactivate IrO ₂ /Sb:SnO ₂ OER Catalysts in Polyol Process. ACS Applied Energy Materials, 2022, 5, 9297-9302.	2.5	10
639	Operando Direct Observation of Stable Water-Oxidation Intermediates on Ca ₂ IrO ₄ Nanocrystals for Efficient Acidic Oxygen Evolution. Nano Letters, 2022, 22, 6988-6996.	4.5	18
640	Effect of the Charge State on the Catalytic Activity of a Fullerene-Based Molecular Electrocatalyst: A Theoretical Study. Journal of Physical Chemistry Letters, 2022, 13, 7392-7397.	2.1	4
641	Engineering membrane electrode assembly for advanced polymer electrolyte water electrolyzer. Science China Materials, 2022, 65, 3243-3272.	3.5	10
642	High Performance Bifunctional Electrocatalysts Designed Based on Transition-Metal Sulfides for Rechargeable Zn-Air Batteries. Chemistry - A European Journal, 2022, 28, .	1.7	9
643	Supported Iridium-Based Oxygen Evolution Reaction Electrocatalysts - Recent Developments. ChemCatChem, 2022, 14, .	1.8	14
644	Plasmon-promoted oxygen evolution catalysis with Ag nanocrystals loaded Ir-Co(OH) ₂ nanosheets. Advanced Powder Technology, 2022, 33, 103728.	2.0	6
645	Application of heteroatom doping strategy in electrolyzed water catalytic materials. Journal of Electroanalytical Chemistry, 2022, 921, 116679.	1.9	10
646	Anion Exchange Membrane Water Electrolyzer: Electrode Design, Lab-Scaled Testing System and Performance Evaluation. EnergyChem, 2022, 4, 100087.	10.1	64
647	Single Ni atom embedded Janus WSe monolayer as a cost-effective electrocatalyst for oxygen evolution reaction. Molecular Catalysis, 2022, 530, 112625.	1.0	3
648	Design and syntheses of hybrid zeolitic imidazolate frameworks. Coordination Chemistry Reviews, 2022, 471, 214759.	9.5	20
649	Highly efficient oxygen evolution reaction enabled by phosphorus-boron facilitating surface reconstruction of amorphous high-entropy materials. Journal of Colloid and Interface Science, 2022, 628, 242-251.	5.0	12
650	Design strategies of perovskite nanofibers electrocatalysts for water splitting: A mini review. Chemical Engineering Journal, 2023, 451, 138710.	6.6	33
651	The critical role of A, B-site cations and oxygen vacancies on the OER electrocatalytic performances of Bi _{0.15} Sr _{0.85} Co _{1-x} Fe _{0.3x} (0.2 ≤ x ≤ 1) perovskites in alkaline media. Chemical Engineering Journal, 2023, 451, 138646.	20.3	16
652	High efficiency of self-assembly between exfoliated MXene and layered-double-hydroxide nanosheets in exploring high-performance oxygen evolution reaction electrocatalysts. 2D Materials, 2022, 9, 044005.	2.0	2
653	Bifunctional petal-like carbon-nitrogen covered NiFeOx/nickel foam nanohybrid electrocatalyst for efficient overall water splitting. Journal of Electroanalytical Chemistry, 2022, 922, 116764.	1.9	1
654	Three-dimensional porous nanosheets array FeVO ₄ /NF-a catalyst for oxygen evolution reaction at industrially relevant current densities. Journal of Alloys and Compounds, 2022, 929, 167312.	2.8	4

#	ARTICLE	IF	CITATIONS
655	Constructing porous boron doped nickel phosphide (Ni ₂ P) rod arrays with optimized electron coordination for alkaline hydrogen evolution. <i>Journal of Alloys and Compounds</i> , 2022, 927, 166938.	2.8	8
656	Rationally designed metal-N-C/MoS ₂ heterostructures as bifunctional oxygen electrocatalysts: A computational study. <i>Applied Surface Science</i> , 2022, 606, 154969.	3.1	7
657	Redox-active ligands for chemical, electrochemical, and photochemical molecular conversions. <i>Coordination Chemistry Reviews</i> , 2022, 473, 214804.	9.5	16
658	Defect structure regulation and mass transfer improvement of cobalt-based oxides for enhanced oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2022, 928, 167210.	2.8	7
659	Theoretical insights into multi-metal atoms embedded nitrogen-doped graphene as efficient bifunctional catalysts for oxygen reduction and evolution reactions. <i>Applied Surface Science</i> , 2022, 605, 154714.	3.1	10
660	Pt/C as a bifunctional ORR/iodide oxidation reaction (IOR) catalyst for Zn-air batteries with unprecedentedly high energy efficiency of 76.5%. <i>Applied Catalysis B: Environmental</i> , 2023, 320, 121992.	10.8	31
661	Precipitation/dissolution equilibrium to achieve trace iron doping on the surface of γ -Ni(OH) ₂ for electrocatalytic oxygen evolution. <i>Fuel</i> , 2023, 332, 125780.	3.4	9
662	Atomic scale synergistic interactions lead to breakthrough catalysts for electrocatalytic water splitting. <i>Applied Catalysis B: Environmental</i> , 2023, 320, 122016.	10.8	35
663	Rational construction of FeNi ₃ /N doped carbon nanotubes for high-performance and reversible oxygen catalysis reaction for rechargeable Zn-air battery. <i>Chemical Engineering Journal</i> , 2023, 452, 139253.	6.6	19
664	Carbon-Based Nanomaterials for Oxygen Evolution Reaction. <i>Springer Series in Materials Science</i> , 2022, , 147-167.	0.4	0
665	Ce-induced regulation of electron density enhanced the catalytic activity of Co-Mn oxides for water oxidation. <i>Chemical Communications</i> , 2022, 58, 11406-11409.	2.2	3
666	Metal-organic-framework embellished through ion etching method for highly enhanced electrochemical oxygen evolution reaction catalysis. <i>Materials Chemistry Frontiers</i> , 2022, 6, 2750-2759.	3.2	3
667	Valence-variable thiospinels for ampere-scale water electrolysis. <i>Catalysis Science and Technology</i> , 2022, 12, 6875-6882.	2.1	3
668	Boosting of overall water splitting activity by regulating the electron distribution over the active sites of Ce doped NiCo-LDH and atomic level understanding of the catalyst by DFT study. <i>Journal of Materials Chemistry A</i> , 2022, 10, 17488-17500.	5.2	64
669	Boosting ethanol electrooxidation at RhBi alloy and Bi ₂ O ₃ composite surfaces in alkaline media. <i>Journal of Materials Chemistry A</i> , 2022, 10, 20946-20952.	5.2	6
670	Spinel-structured metal oxide-embedded MXene nanocomposites for efficient water splitting reactions. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 5903-5916.	3.0	16
671	Controlled Synthesis of Molybdenum Based Catalyst and Its Performance in Electrolysis of Water. <i>Advances in Analytical Chemistry</i> , 2022, 12, 240-253.	0.1	0
672	Realizing the Synergy of Interface Engineering and Surface Reconstruction in Ni(OH) ₂ for Superior Water Oxidation. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0

#	ARTICLE	IF	CITATIONS
692	Oxygen reactivity regulation via double- μ -exchange interaction for enhanced water oxidation. <i>EcoMat</i> , 2023, 5, .	6.8	9
693	Optimized NiFe-Based Coordination Polymer Catalysts: Sulfur-Tuning and Operando Monitoring of Water Oxidation. <i>ACS Nano</i> , 2022, 16, 15318-15327.	7.3	12
694	Greigite Fe ₃ S ₄ -Derived μ -FeO(OH) Promotes Slow O-O Bond Formation in the Second-Order Oxygen Evolution Reaction Kinetics. <i>Journal of Physical Chemistry C</i> , 2022, 126, 16172-16186.	1.5	11
695	Scalloped nickel/iron vanadium oxide-coated vanadium dioxides based on chemical etching-induced reconstruction strategy for efficient oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 33352-33360.	3.8	4
696	Regulation Strategy of Transition Metal Oxide-Based Electrocatalysts for Enhanced Oxygen Evolution Reaction. <i>Accounts of Materials Research</i> , 2022, 3, 1088-1100.	5.9	29
697	Surface reconstruction-derived heterostructures for electrochemical water splitting. <i>EnergyChem</i> , 2023, 5, 100091.	10.1	36
698	Dual-oxidation-induced lattice disordering in a Prussian blue analog for ultrastable oxygen evolution reaction performance. <i>Journal of Colloid and Interface Science</i> , 2023, 630, 257-265.	5.0	18
699	Surface microstructures and oxygen evolution properties of cobalt oxide deposited on Ir(111) and Pt(111) single crystal substrates. <i>Electrochemical Science Advances</i> , 0, .	1.2	2
700	Kinetically Controlled Mn Doping Effect on Composition Tuned CoMn Hydroxide Nanoflakes for Overall Water Splitting Application. <i>ChemCatChem</i> , 2022, 14, .	1.8	5
701	Modulating hydrogen bonding in single-atom catalysts to break scaling relation for oxygen evolution. <i>Chem Catalysis</i> , 2022, 2, 2764-2777.	2.9	10
702	Boosting Oxygen-Evolving Activity via Atom-Stepped Interfaces Architected with Kinetic Frustration. <i>Advanced Materials</i> , 2023, 35, .	11.1	13
703	Greener reactants, renewable energies and environmental impact mitigation strategies in pyrometallurgical processes: A review. <i>MRS Energy & Sustainability</i> , 2022, 9, 212-247.	1.3	9
704	Structural Fine-Tuning and In-situ Generation of P, O Vacancies in Hollow Co-Ferrocene-MOFs Derived Phosphides for Efficient Water Oxidation. <i>ChemCatChem</i> , 2022, 14, .	1.8	3
705	Tuning the Interface of Co _{1-x} S/Co(OH)F by Atomic Replacement Strategy toward High-Performance Electrocatalytic Oxygen Evolution. <i>ACS Nano</i> , 2022, 16, 15460-15470.	7.3	37
706	Trifunctional Rare-Metal-Free Electrocatalysts Prepared Entirely from Biomass. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	2.8	2
707	Cation Defect Engineering of Transition Metal Electrocatalysts for Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	61
708	Decoupled Electrochemical Hydrazine α -Splitting via a Rechargeable Zn-Hydrazine Battery. <i>Advanced Materials</i> , 2022, 34, .	11.1	18
709	NiMn-based metal-organic framework with optimized eg orbital occupancy as efficient bifunctional electrocatalyst for lithium-oxygen batteries. <i>Chemical Engineering Journal</i> , 2023, 452, 139524.	6.6	10

#	ARTICLE	IF	CITATIONS
710	Ni-B-Co nanoparticles based on ZIF-67 as efficient electrocatalyst for oxygen evolution reaction. Journal of Electroanalytical Chemistry, 2022, 923, 116838.	1.9	3
711	Scalable Electrosynthesis of Formamide through C-N Coupling at the Industrially Relevant Current Density of 120 A cm ⁻² . Angewandte Chemie - International Edition, 2022, 61, .	7.2	20
712	Scalable Electrosynthesis of Formamide through C-N Coupling at the Industrially Relevant Current Density of 120 A cm ⁻² . Angewandte Chemie, 2022, 134, .	1.6	10
713	Non-metal/metalloid modification of perovskite oxide enables lattice oxygen participation in accelerating oxygen evolution activity. International Journal of Hydrogen Energy, 2022, , .	3.8	2
714	Nanoscale hetero-interfaces for electrocatalytic and photocatalytic water splitting. Science and Technology of Advanced Materials, 2022, 23, 587-616.	2.8	4
715	Water oxidation on CrMnFeCoNi high entropy alloy: Improvement through rejuvenation and spin polarization. Journal of Alloys and Compounds, 2022, 929, 167344.	2.8	10
716	Introduction: What is inorganic electrochemistry?. , 2022, , .		0
717	Interfacial engineering of heterostructured Fe ₃ S ₂ /Ni(OH) ₂ nanosheets with tailored d-band center for enhanced oxygen evolution catalysis. Dalton Transactions, 2022, 51, 17391-17396.	1.6	3
718	A dual-strategy of interface and reconstruction engineering to boost efficient alkaline water and seawater oxidation. Sustainable Energy and Fuels, 2022, 6, 5521-5530.	2.5	2
719	Ni-Fe synergic effect in Fe-NiOH boosting oxygen evolution under large current density enabled by the in situ self-corrosion strategy. Journal of Materials Chemistry A, 2022, 10, 22437-22444.	5.2	8
720	Accelerating the Electrocatalytic Performance of NiFe-LDH via Sn Doping toward the Water Oxidation Reaction under Alkaline Condition. Inorganic Chemistry, 2022, 61, 16895-16904.	1.9	14
721	Simultaneously Improved Surface and Bulk Participation of Evolved Perovskite Oxide for Boosting Oxygen Evolution Reaction Activity Using a Dynamic Cation Exchange Strategy. Small, 2022, 18, .	5.2	9
722	Potential dependence of OER/EOP performance on heteroatom-doped carbon materials by grand canonical density functional theory. Journal of Chemical Physics, 2022, 157, .	1.2	4
723	CoMo layered double hydroxide equipped with carbon nanotubes for electrocatalytic oxygen evolution reaction. Nanotechnology, 2023, 34, 065401.	1.3	4
724	Pivotal role of reversible NiO ₆ geometric conversion in oxygen evolution. Nature, 2022, 611, 702-708.	13.7	119
725	Orbital Occupancy and Spin Polarization: From Mechanistic Study to Rational Design of Transition Metal-Based Electrocatalysts toward Energy Applications. ACS Nano, 2022, 16, 17847-17890.	7.3	48
726	Au-TiO ₂ /Ti Hybrid Coating as a Liquid and Gas Diffusion Layer with Improved Performance and Stability in Proton Exchange Membrane Water Electrolyzer. Molecules, 2022, 27, 6644.	1.7	4
727	Deciphering Ligand Controlled Structural Evolution of Prussian Blue Analogues and Their Electrochemical Activation during Alkaline Water Oxidation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	18

#	ARTICLE	IF	CITATIONS
728	Electrodeposited amorphous nickel-iron phosphide and sulfide derived films for electrocatalytic oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 40849-40859.	3.8	19
729	Self-Reconstructed Metal-Organic Framework Heterojunction for Switchable Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 0, , .	1.6	4
730	Application of Thermal Spray Coatings in Electrolysers for Hydrogen Production: Advances, Challenges, and Opportunities. <i>ChemNanoMat</i> , 2022, 8, .	1.5	7
731	Self-Reconstructed Metal-Organic Framework Heterojunction for Switchable Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	53
732	Enhanced Acidic Water Oxidation by Dynamic Migration of Oxygen Species at the Ir/Nb ₂ O ₅ Catalyst/Support Interfaces. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	59
733	Promoting nickel oxidation state transitions in single-layer NiFeB hydroxide nanosheets for efficient oxygen evolution. <i>Nature Communications</i> , 2022, 13, .	5.8	101
734	Hexagonal annular-NiO nanoarchitecture with local p-n homojunctions: Novel formation mechanism and H ₂ S gas sensing properties. <i>Journal of Alloys and Compounds</i> , 2023, 933, 167782.	2.8	4
735	Activated Ni-O-Ir Enhanced Electron Transfer for Boosting Oxygen Evolution Reaction Activity of LaNi _{1-x} Ir _x O ₃ . <i>Small</i> , 2022, 18, .	5.2	7
736	Non-iridium-based electrocatalyst for durable acidic oxygen evolution reaction in proton exchange membrane water electrolysis. <i>Nature Materials</i> , 2023, 22, 100-108.	13.3	195
737	Activity engineering to transition metal phosphides as bifunctional electrocatalysts for efficient water-splitting. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 38983-39000.	3.8	21
738	Heterointerface engineered NiFe(OH) _x /Ni ₃ S ₂ electrocatalysts to overcome the scaling relationship for ultrahigh-current-density water oxidation. <i>Science China Materials</i> , 2023, 66, 634-640.	3.5	10
739	Deciphering Ligand Controlled Structural Evolution of Prussian Blue Analogues and Their Electrochemical Activation during Alkaline Water Oxidation. <i>Angewandte Chemie</i> , 0, , .	1.6	0
740	Ceria-Promoted Reconstruction of Ni-Based Electrocatalysts toward Efficient Oxygen Evolution. <i>ACS Catalysis</i> , 2022, 12, 13951-13960.	5.5	36
741	High-Performing Anion Exchange Membrane Water Electrolysis Using Self-Supported Metal Phosphide Anode Catalysts and an Ether-Free Aromatic Polyelectrolyte. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 854-865.	3.2	12
742	Nickel-Doped Carbon Dots as an Efficient and Stable Electrocatalyst for Urea Oxidation. <i>Small</i> , 2023, 19, .	5.2	9
743	Robust Porous TiN Layer for Improved Oxygen Evolution Reaction Performance. <i>Materials</i> , 2022, 15, 7602.	1.3	7
744	The pH Influence on the Water-Splitting Electrocatalytic Activity of Graphite Electrodes Modified with Symmetrically Substituted Metalloporphyrins. <i>Nanomaterials</i> , 2022, 12, 3788.	1.9	4
745	Tuning d Orbital of Ni Single Atom by Encapsulating Ni Nanoparticle in Carbon Nanotube for Efficient Oxygen Evolution Reaction. <i>Energy & Fuels</i> , 2022, 36, 13159-13167.	2.5	2

#	ARTICLE	IF	CITATIONS
746	Enhanced Acidic Water Oxidation by Dynamic Migration of Oxygen Species at the Ir/Nb ₂ O ₅ Catalyst/Support Interfaces. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	2
747	Mott-Schottky heterojunction of Se/NiSe ₂ as bifunctional electrocatalyst for energy efficient hydrogen production via urea assisted seawater electrolysis. <i>Journal of Colloid and Interface Science</i> , 2023, 630, 844-854.	5.0	19
748	Facile synthesis of nickel diselenide particles for alkaline oxygen evolution by atmospheric pressure hydrothermal method. <i>Ionics</i> , 0, , .	1.2	0
749	Heat-Induced Magnetic Transition for Water Electrolysis on NiFeN@NiFeOOH Core-Shell Assembly. <i>Nano Letters</i> , 2022, 22, 9131-9137.	4.5	4
750	Water splitting performance of metal and non-metal-doped transition metal oxide electrocatalysts. <i>Coordination Chemistry Reviews</i> , 2023, 474, 214864.	9.5	90
751	Current and future trends for spinel-type electrocatalysts in electrocatalytic oxygen evolution reaction. <i>Coordination Chemistry Reviews</i> , 2023, 475, 214869.	9.5	91
752	Improving the electrocatalytic oxygen evolution by <i>in situ</i> constructing 1D Co ₉ S ₈ /Co(OH)F heterointerfaces. <i>New Journal of Chemistry</i> , 2022, 46, 23060-23065.	1.4	1
753	Well-defined hierarchical teddy bear sunflower-like NiCo ₂ O ₄ electrocatalyst for superior water oxidation. <i>Sustainable Energy and Fuels</i> , 0, , .	2.5	3
754	CdN ₄ CO-gra as efficient trifunctional electrocatalyst for the HER, OER and ORR: A density functional theory study. <i>Applied Surface Science</i> , 2023, 610, 155580.	3.1	21
755	Defect-induced electronic modification and surface reconstruction of catalysts during water oxidation process. <i>Chemical Engineering Journal</i> , 2023, 454, 140254.	6.6	16
756	Effect of Proton Transfer on Electrocatalytic Water Oxidation by Manganese Phosphates. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	10
757	Tuning the d-Band States of Ni-Based Serpentine Materials via Fe ³⁺ Doping for Efficient Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 52857-52867.	4.0	11
758	In Situ Reconstruction Ni _{1-x} O Octahedral Active Sites for Promoting Electrocatalytic Oxygen Evolution of Nickel Phosphate. <i>Small</i> , 2023, 19, .	5.2	5
759	Low-temperature crystallization of LaFeO ₃ perovskite with inherent catalytically surface for the enhanced oxygen evolution reaction. <i>Nano Energy</i> , 2023, 105, 108003.	8.2	4
760	Scalable Oxygen-assisted-Fe ²⁺ Etching Approach towards Amorphous/Crystalline Structure Fe-Ni ₂ P Nanoarray for Efficient Water Splitting. <i>Journal of Alloys and Compounds</i> , 2022, , 168073.	2.8	2
761	Effect of Proton Transfer on Electrocatalytic Water Oxidation by Manganese Phosphates. <i>Angewandte Chemie</i> , 0, , .	1.6	5
762	Modulation to favorable surface adsorption energy for oxygen evolution reaction intermediates over carbon-tunable alloys towards sustainable hydrogen production. <i>Materials for Renewable and Sustainable Energy</i> , 2022, 11, 169-213.	1.5	3
763	Effect of Interfacial Strength and Anchoring in a Highly Efficient NiTe ₂ /NF@CuFe Oxygen-Evolution Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 15166-15174.	3.2	2

#	ARTICLE	IF	CITATIONS
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.	1.9	4
765	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, .	5.2	38
766	Unveiling Chemically Robust Bimetallic Squarate-based Metal-organic Frameworks for Electrocatalytic Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	22
767	Boosting large-current-density water oxidation activity and stability by phytic acid-assisted rapid electrochemical corrosion. <i>Journal of Colloid and Interface Science</i> , 2023, 633, 24-31.	5.0	1
768	Laser irradiation synthesized carbon encapsulating ultrafine transition metal nanoparticles for highly efficient oxygen evolution. <i>Journal of Electroanalytical Chemistry</i> , 2023, 928, 117007.	1.9	1
769	Dealloying/exsolution-induced nanoporous perovskite oxides anchored with alloy nanoparticles for the oxygen evolution reaction. <i>CrystEngComm</i> , 2023, 25, 622-631.	1.3	1
770	Electronic structure modification induced electrochemical performance enhancement of bi-functional multi-metal hydroxide. <i>Electrochimica Acta</i> , 2023, 439, 141616.	2.6	3
771	Nanocomposites for Overall Water-Splitting. , 2022, , 1-31.		0
772	Magnetic-field-regulated Ni-Fe-Mo ternary alloy electrocatalysts with enduring spin polarization enhanced oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2023, 455, 140821.	6.6	16
773	High-performing catalysts for energy-efficient commercial alkaline water electrolysis. <i>Sustainable Energy and Fuels</i> , 2022, 7, 31-60.	2.5	18
774	IrO ₂ -Stablized La ₂ IrO ₆ perovskite nanotubes <i>via</i> corner-shared interconnections as highly-efficient oxygen evolution electrocatalysts. <i>Chemical Communications</i> , 2022, 59, 183-186.	2.2	3
775	A robust strategy to boost the proton transfer of heterogeneous catalysts for efficient and sustainable water oxidation towards practical applications. <i>Journal of Materials Chemistry A</i> , 2023, 11, 1335-1342.	5.2	1
776	First-principles study of oxygen evolution on Co ₃ O ₄ with short-range ordered Ir doping. <i>Molecular Catalysis</i> , 2023, 535, 112852.	1.0	2
777	Correlation between oxygen evolution reaction activity and surface compositional evolution in epitaxial La _{0.5} Sr _{0.5} Ni _{1-x} Fe _x O ₃ thin films. <i>Nanoscale</i> , 2023, 15, 1119-1127.	2.8	6
778	Volcano relationships and a new activity descriptor of 2D transition metal-Fe layered double hydroxides for efficient oxygen evolution reaction. <i>Materials Horizons</i> , 0, , .	6.4	8
779	Efficient and durable S-doped Ni/FeOOH electrocatalysts for oxygen evolution reactions. <i>Dalton Transactions</i> , 2023, 52, 1113-1121.	1.6	3
780	Research progress on high entropy alloys and high entropy derivatives as OER catalysts. <i>Journal of Environmental Chemical Engineering</i> , 2023, 11, 109080.	3.3	13
781	Iron-nickel layered dihydroxide nanosheet-wrapped single-layer ordered mesoporous carbon with novel riveting structure as a superior composite electrocatalyst for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2023, 440, 141739.	2.6	1

#	ARTICLE	IF	CITATIONS
782	Realizing the synergy of interface engineering and surface reconstruction in Ni(OH) ₂ for superior water oxidation. <i>Journal of Alloys and Compounds</i> , 2023, 936, 168175.	2.8	2
783	Facile synthesis of Co-Ni layered double hydroxides nanosheets wrapped on a prism-like metal-organic framework for efficient oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2023, 634, 14-21.	5.0	19
784	Two-dimensional template-directed synthesis of one-dimensional kink-rich Pd ₃ Pb nanowires for efficient oxygen reduction. <i>Journal of Colloid and Interface Science</i> , 2023, 634, 827-835.	5.0	3
785	Mesoporous waffle-like N-doped carbon with embedded Co nanoparticles for efficiently electrocatalytic oxygen reduction and evolution. <i>Journal of Colloid and Interface Science</i> , 2023, 633, 374-382.	5.0	8
786	2D/2D core/shell structure of FeCo ₂ O ₄ @NiMn LDH for efficient oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2023, 937, 168478.	2.8	3
787	Construction of NiS@CoFeMoO ₄ /NF nanosheet heterostructures for efficient overall water splitting. <i>Journal of Alloys and Compounds</i> , 2023, 936, 168340.	2.8	9
788	Acid-stable antimonate based catalysts for the electrocatalytic oxygen evolution reaction. <i>Nano Research</i> , 2023, 16, 4691-4697.	5.8	4
789	Cobalt-Doped Iron Phosphate Crystal on Stainless Steel Mesh for Corrosion-Resistant Oxygen Evolution Catalyst. <i>Catalysts</i> , 2022, 12, 1521.	1.6	1
790	Super-exchange effect induced by early 3d metal doping on NiFe ₂ O ₄ (0 0 1) surface for oxygen evolution reaction. <i>Journal of Energy Chemistry</i> , 2023, 78, 21-29.	7.1	5
791	Novel Nanomaterials for Hydrogen Production and Storage: Evaluating the Futurity of Graphene/Graphene Composites in Hydrogen Energy. <i>Energies</i> , 2022, 15, 9085.	1.6	9
792	Light Inducing the Geometric Conversion of NiO ₆ to Trigger a Faster Oxygen Evolution Reaction Pathway: The Coupled Oxygen Evolution Mechanism. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	7
793	Understanding Structural Incorporation of Oxygen Vacancies in Perovskite Cobaltite Films and Potential Consequences for Electrocatalysis. <i>Chemistry of Materials</i> , 2022, 34, 10373-10381.	3.2	4
794	Exploring the Ti ₂ CO ₂ WSe ₂ Heterostructure as a Direct Z-Scheme Photocatalyst for Water Splitting: A Non-Adiabatic Study. <i>Journal of Physical Chemistry C</i> , 2022, 126, 20852-20863.	1.5	14
795	A review of modulation strategies for improving catalytic performance of transition metal phosphides for oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2023, 325, 122313.	10.8	38
796	Sulfate-Decorated Amorphous-Crystalline Cobalt-Iron Oxide Nanosheets to Enhance O-O Coupling in the Oxygen Evolution Reaction. <i>ACS Nano</i> , 2023, 17, 825-836.	7.3	38
797	Contrasting Pr-Ca-MnO ₃ OER Catalysts with Different Valences and Covalences. <i>Journal of Physical Chemistry C</i> , 2023, 127, 177-186.	1.5	1
798	Surface-neutralization engineered NiCo-LDH/phosphate hetero-sheets toward robust oxygen evolution reaction. <i>Green Energy and Environment</i> , 2022, , .	4.7	10
799	Reviving Oxygen Evolution Electrocatalysis of Bulk La-Ni Intermetallics via Gaseous Hydrogen Engineering. <i>Advanced Materials</i> , 2023, 35, .	11.1	18

#	ARTICLE	IF	CITATIONS
800	â€œElectron Complementationâ€•Induced Molybdenum Nitride/Co-Anchored Graphitic Carbon Nitride Porous Nanoparticles for Efficient Overall Water Splitting. <i>Inorganic Chemistry</i> , 2022, 61, 20095-20104.	1.9	0
801	Low-temperature synthesized amorphous quasi-high-entropy carbonate electrocatalyst with superior surface self-optimization for efficient water oxidation. <i>Ceramics International</i> , 2023, 49, 12156-12165.	2.3	3
802	Waste-Derived Catalysts for Water Electrolysis: Circular Economy-Driven Sustainable Green Hydrogen Energy. <i>Nano-Micro Letters</i> , 2023, 15, .	14.4	53
803	High entropy materials based electrocatalysts for water splitting: Synthesis strategies, catalytic mechanisms, and prospects. <i>Nano Research</i> , 2023, 16, 4411-4437.	5.8	16
804	Quantitative Electrocatalytic Upcycling of Polyethylene Terephthalate Plastic and Its Oligomer with a Cobalt-Based One-Dimensional Coordination Polymer Having Open Metal Sites along with Coproduction of Hydrogen. <i>ACS Catalysis</i> , 2023, 13, 469-474.	5.5	16
805	Operando identification of a side-on nickel superoxide intermediate and the mechanism of oxygen evolution on nickel oxyhydroxide. <i>Chem Catalysis</i> , 2023, 3, 100475.	2.9	13
806	Electrochemical Surface Reconstruction of Cu ₂ S to Synthesize CuO with Oxygen Vacancies for Benzyl Alcohol Electro-oxidation in a Wide Voltage Range. <i>Applied Surface Science</i> , 2022, , 156073.	3.1	0
807	Bimetallicâ€•Based Electrocatalysts for Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	31
808	Selectively Enhanced Electrocatalytic Oxygen Evolution within Nanoscopic Channels Fitting a Specific Reaction Intermediate for Seawater Splitting. <i>Small</i> , 2023, 19, .	5.2	11
809	Iridium single atoms incorporated in Co ₃ O ₄ efficiently catalyze the oxygen evolution in acidic conditions. <i>Nature Communications</i> , 2022, 13, .	5.8	72
810	Unveiling the Adsorption Behavior and Redox Properties of PtNi Nanowire for Biomass-Derived Molecules Electrooxidation. <i>ACS Nano</i> , 2022, 16, 21518-21526.	7.3	21
811	Unconventional Phase Synergies with Doping Engineering Over Ni Electrocatalyst Featuring Regulated Electronic State for Accelerated Urea Oxidation. <i>ChemSusChem</i> , 2023, 16, .	3.6	8
812	Identification of the Origin for Reconstructed Active Sites on Oxyhydroxide for Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2023, 35, .	11.1	54
813	Role of Seawater Ions in Forming an Effective Interface between Photocatalyst/Cocatalyst. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 1219-1226.	4.0	3
814	Dependence of the Atomic Structure of Solid Solutions in the Pd-Cu System Ordered According to the B2 Type on the Composition. <i>Processes</i> , 2022, 10, 2632.	1.3	2
815	Altering oxygen binding by redoxâ€•inactive metal substitution to control catalytic activity: oxygen reduction on manganese oxide nanoparticles as a model system. <i>Angewandte Chemie</i> , 0, , .	1.6	0
816	Altering Oxygen Binding by Redoxâ€•Inactive Metal Substitution to Control Catalytic Activity: Oxygen Reduction on Manganese Oxide Nanoparticles as a Model System**. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	4
817	Synthesis of Ni, Co-doped MoS ₂ as Electrocatalyst for Oxygen Evolution Reaction. <i>International Journal of Electrochemical Science</i> , 2022, 17, 221280.	0.5	1

#	ARTICLE	IF	CITATIONS
818	Designing a Built-In Electric Field for Efficient Energy Electrocatalysis. ACS Nano, 2022, 16, 19959-19979.	7.3	82
819	Photoassisted Electrochemical Hydrogen Evolution Reaction of MFe_2O_4 @ Ultrathin Black Phosphorus Amorphous/Crystalline Interface. ACS Applied Materials & Interfaces, 2022, 14, 54748-54757.	4.0	4
821	Plasma-induced exfoliation in NiMn-layered double hydroxides for enhanced oxygen evolution reaction activity. Catalysis Today, 2023, 423, 113997.	2.2	2
822	Constructing $\text{LaNiO}_3/\text{NiO}$ heterostructure via selective dissolution of A-site cations from $\text{La}_{1-x}\text{Sr}_x\text{NiO}_3$ for promoting oxygen evolution reaction. Journal of Alloys and Compounds, 2023, 941, 168908.	2.8	6
823	Mechanisms of Oxygen Evolution Reaction in Metal Oxides: Adsorbate Evolution Mechanism versus Lattice Oxygen Mechanism. , 0, 2, .		0
824	Challenges and Prospects for Zinc-Air Batteries. , 2023, , 205-215.		0
825	Advancements in Liquid Jet Technology and X-ray Spectroscopy for Understanding Energy Conversion Materials during Operation. Accounts of Chemical Research, 0, , .	7.6	0
826	Review and Perspective on Transition Metal Electrocatalysts Toward Carbon-Neutral Energy. Energy & Fuels, 2023, 37, 1545-1576.	2.5	16
827	Introducing High-Valence Iridium Single Atoms into Bimetal Phosphides toward High-Efficiency Oxygen Evolution and Overall Water Splitting. Small, 2023, 19, .	5.2	10
828	Lattice-Strain Engineering for Heterogenous Electrocatalytic Oxygen Evolution Reaction. Advanced Materials, 2023, 35, .	11.1	34
829	Optimizing the Electronic Structure of Ruthenium Oxide by Neodymium Doping for Enhanced Acidic Oxygen Evolution Catalysis. Advanced Functional Materials, 2023, 33, .	7.8	29
830	Slow $\text{O}^{\bullet-}\text{H}$ Dissociation in the First-Order Oxygen Evolution Reaction Kinetics on Polycrystalline $\text{Fe}_3\text{O}_4/\text{FeO}(\text{OH})$. Journal of Physical Chemistry C, 2023, 127, 154-168.	1.5	11
831	Lattice oxygen activation in disordered rocksalts for boosting oxygen evolution. Physical Chemistry Chemical Physics, 2023, 25, 4113-4120.	1.3	2
832	Growth of Ultrathin Well-Defined and Crystalline Films of Co_3O_4 and CoOOH by Electrodeposition. Journal of the Electrochemical Society, 2023, 170, 012501.	1.3	2
833	A Decade of Electrocatalysis with Metal Aerogels: A Perspective. Catalysts, 2023, 13, 167.	1.6	4
834	Acidic oxygen evolution reaction: Mechanism, catalyst classification, and enhancement strategies. , 2023, 2, 53-90.		36
835	Electrochemical scanning probe microscopies for artificial photosynthesis. Nano Research, 2023, 16, 4013-4028.	5.8	2
836	Fabrication of core-shell structured cobalt nanoparticle/carbon nanofiber as a bifunctional catalyst for the oxygen reduction/evolution reactions. Journal of Alloys and Compounds, 2023, 939, 168731.	2.8	7

#	ARTICLE	IF	CITATIONS
837	Ir-IrO ₂ with heterogeneous interfaces and oxygen vacancies-rich surfaces for highly efficient oxygen evolution reaction. <i>Applied Surface Science</i> , 2023, 615, 156333.	3.1	9
838	Machine-Learning-Assisted Discovery of High-Efficient Oxygen Evolution Electrocatalysts. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 170-177.	2.1	5
839	A Highly Active, Long-Lived Oxygen Evolution Electrocatalyst Derived from Open-Frame Iridates. <i>Advanced Materials</i> , 2023, 35, .	11.1	20
840	Tuning OER Electrocatalysts toward LOM Pathway through the Lens of Multi-Descriptor Feature Selection by Artificial Intelligence-Based Approach. , 2023, 5, 299-320.		10
841	Interfacial Evolution on Co-based Oxygen Evolution Reaction Electrocatalysts Probed by Using <i>in situ</i> Surface-Enhanced Raman Spectroscopy. <i>Analytical Chemistry</i> , 0, , .	3.2	2
842	Modern Technologies of Hydrogen Production. <i>Processes</i> , 2023, 11, 56.	1.3	17
843	Preparation and Performance Study of the Anodic Catalyst Layer via Doctor Blade Coating for PEM Water Electrolysis. <i>Membranes</i> , 2023, 13, 24.	1.4	1
844	A self-supported bifunctional MoNi ₄ framework with iron doping for ultra-efficient water splitting. <i>Journal of Materials Chemistry A</i> , 2023, 11, 3408-3417.	5.2	6
845	Double Perovskite Oxides Bringing a Revelation in Oxygen Evolution Reaction Electrocatalyst Design. <i>ChemElectroChem</i> , 2023, 10, .	1.7	8
846	Lattice Oxygen Activation for Enhanced Electrochemical Oxygen Evolution. <i>Journal of Physical Chemistry C</i> , 2023, 127, 2147-2159.	1.5	6
847	Effect of mixed-valence of manganese on water oxidation activity of La _{1-x} CaxMnO ₃ (0 ≤ x ≤ 1) solid solutions. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 15092-15104.	3.8	0
848	Synergistic effects of MoS ₂ -decorated <i>in situ</i> NiFe nanoalloys/NiFe-LDH with superhydrophilicity for electrocatalytic overall water splitting. <i>Inorganic Chemistry Frontiers</i> , 2023, 10, 1603-1613.	3.0	5
849	Recent developments of MXene-based catalysts for hydrogen production by water splitting. <i>Green Chemistry</i> , 2023, 25, 1749-1789.	4.6	24
850	Introduction to perovskites. , 2023, , 3-29.		0
851	A 3D hierarchical electrocatalyst: Core-shell Cu@Cu(OH) ₂ nanorods/MOF octahedra supported on N-doped carbon for oxygen evolution reaction. <i>Nano Research</i> , 2023, 16, 8012-8017.	5.8	13
852	One-pot synthesis of NiFe nanoarrays under an external magnetic field as an efficient oxygen evolution reaction catalyst. <i>RSC Advances</i> , 2023, 13, 4249-4254.	1.7	1
853	Expediting Oxygen Evolution by Optimizing Cation and Anion Complexity in Electrocatalysts Based on Metal Phosphorous Trichalcogenides. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	2
854	Thermodynamic and Kinetic Investigation on Electrogeneration of Hydroxyl Radicals for Water Purification. <i>ACS ES&T Engineering</i> , 2023, 3, 2161-2170.	3.7	3

#	ARTICLE	IF	CITATIONS
855	Elucidating the chirality transfer mechanisms during enantioselective synthesis for the spin-controlled oxygen evolution reaction. <i>Energy and Environmental Science</i> , 2023, 16, 1187-1199.	15.6	6
856	Construction of a S and Fe co-regulated metal Ni electrocatalyst for efficient alkaline overall water splitting. <i>Journal of Materials Chemistry A</i> , 2023, 11, 4661-4671.	5.2	13
857	Ruthenium Azobis(benzothiazole): Electronic Structure and Impact of Substituents on the Electrocatalytic Single-Site Water Oxidation Process. <i>Inorganic Chemistry</i> , 2023, 62, 2769-2783.	1.9	3
858	Construction of a NiFe-LDH catalyst with a three-dimensional unified gas diffusion layer structure via a facile acid etching route for the oxygen evolution reaction. <i>Materials Chemistry Frontiers</i> , 2023, 7, 1335-1344.	3.2	3
859	Recent Progress in Metal Phosphorous Chalcogenides: Potential High-Performance Electrocatalysts. <i>Small</i> , 2023, 19, .	5.2	39
860	Tracking the Role of Defect Types in Co ₃ O ₄ Structural Evolution and Active Motifs during Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2023, 145, 2271-2281.	6.6	77
861	Research progress on the construction of synergistic electrocatalytic ORR/OER self-supporting cathodes for zinc-air batteries. <i>Journal of Materials Chemistry A</i> , 2023, 11, 4400-4427.	5.2	33
862	Electron Modulation and Morphology Engineering Jointly Accelerate Oxygen Reaction to Enhance Zn-Air Battery Performance. <i>Advanced Science</i> , 2023, 10, .	5.6	24
863	One step fabrication of nanostructured nickel thin films on porous nickel foam for drastic electrocatalytic oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 15784-15795.	3.8	15
864	Lead-Free Bismuth-Based Halide Perovskites with Excellent Stability for Visible-Light-Driven Photoelectrochemical Water Splitting. <i>ChemistrySelect</i> , 2023, 8, .	0.7	1
865	Protruding N-doped carbon nanotubes on elongated hexagonal Co-N-C nanoplates as bifunctional oxygen electrocatalysts for Zn-air batteries. <i>Materials Chemistry Frontiers</i> , 2023, 7, 946-954.	3.2	4
866	Expediting Oxygen Evolution by Optimizing Cation and Anion Complexity in Electrocatalysts Based on Metal Phosphorous Trichalcogenides. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	7
867	Conductive Polymer and Nanoparticle-Promoted Polymer Hybrid Coatings for Metallic Bipolar Plates in Proton Membrane Exchange Water Electrolysis. <i>Applied Sciences (Switzerland)</i> , 2023, 13, 1244.	1.3	5
868	Operando Forming of Lattice Vacancy Defect in Ultrathin Crumpled NiVW-Layered Metal Hydroxides Nanosheets for Valorization of Biomass. <i>Small</i> , 2023, 19, .	5.2	12
869	Direct Use of 3d-Transition Metal Organic Framework as Catalyst for Oxygen Evolving Reaction (OER) and Hydrogen Evolving Reaction (HER). <i>Asian Journal of Chemistry</i> , 2023, 35, 277-288.	0.1	1
870	Amine-assisted synthesis of the Ni ₃ Fe alloy encapsulated in nitrogen-doped carbon for high-performance water splitting. <i>Journal of Materials Chemistry A</i> , 2023, 11, 6452-6464.	5.2	10
871	Iridium-based electrocatalysts for the acidic oxygen evolution reaction: engineering strategies to enhance the activity and stability. <i>Materials Chemistry Frontiers</i> , 2023, 7, 1248-1267.	3.2	6
872	Deep Reconstruction of Fe-NiMoO ₄ ·nH ₂ O@NiOOH as Efficient Oxygen Evolution Electrocatalysts. <i>Energy & Fuels</i> , 2023, 37, 3023-3030.	2.5	7

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873	Noble-metal single atom with non-metal co-doped graphene: First-principles investigation of structures, electronic and magnetic properties. <i>Journal of Magnetism and Magnetic Materials</i> , 2023, 568, 170418.	1.0	1
874	High-entropy alloys in water electrolysis: Recent advances, fundamentals, and challenges. <i>Science China Materials</i> , 2023, 66, 1681-1701.	3.5	24
875	Synergistic Effect between Fe ⁴⁺ and Co ⁴⁺ on Oxygen Evolution Reaction Catalysis for CaFe _{1-x} Co _x O ₃ . <i>Materials Transactions</i> , 2023, . . .	0.4	0
876	Dynamically activating Ni-based catalysts with self-anchored mononuclear Fe for efficient water oxidation. <i>Journal of Materials Chemistry A</i> , 2023, 11, 10228-10238.	5.2	5
877	Graphene-based nanocomposites as electrode materials for Zn-air batteries. , 2023, , 395-412.		0
878	Insight into the Mechanism for Catalytic Activity of the Oxygen/Hydrogen Evolution Reaction on a Dual-Site Catalyst. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 2201-2207.	2.1	5
879	Pomegranate-like Ni-doped cobalt boride implanted in B, N-doped carbon nanocages for enhanced electrochemical oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 17468-17477.	3.8	2
880	Customized reaction route for ruthenium oxide towards stabilized water oxidation in high-performance PEM electrolyzers. <i>Nature Communications</i> , 2023, 14, .	5.8	66
881	Divalent Oxidation State Ni as an Active Intermediate in Prussian Blue Analogues for Electrocatalytic Urea Oxidation. <i>Inorganic Chemistry</i> , 2023, 62, 3637-3645.	1.9	3
882	Electrocatalysts based on MoS ₂ and WS ₂ for hydrogen evolution reaction: An overview. , 2023, 2, .		17
883	Rational Strategy for Tuning Electrocatalytic Oxygen Evolution Activity of Perovskite Oxides via Low-Temperature Fluorination. <i>Chemistry of Materials</i> , 2023, 35, 2773-2781.	3.2	1
884	Incorporation of Bismuth Increases the Electrocatalytic Activity of Cobalt Borates for Oxygen Evolution Reaction. <i>ChemPlusChem</i> , 2023, 88, .	1.3	4
885	Defect-Enriched Hollow Porous Carbon Nanocages Enable Highly Efficient Chlorine Evolution Reaction. <i>Advanced Materials</i> , 2023, 35, .	11.1	15
886	Tailoring the Electronic Structure of Ir Alloy Electrocatalysts through Lanthanide (La, Ce, Pr, and) Tj ETQq1 1 0.784314 rgBT /Overlock	2.8	3
887	Nickel-Cobalt-Iron Ternary Layered Double Hydroxide Nanoarrays for Superior Performance of Electrocatalytic Water Splitting. <i>Coatings</i> , 2023, 13, 726.	1.2	1
888	Syntheses and applications of single-atom catalysts for electrochemical energy conversion reactions. <i>Chinese Journal of Catalysis</i> , 2023, 47, 32-66.	6.9	9
889	Unusual double ligand holes as catalytic active sites in LiNiO ₂ . <i>Nature Communications</i> , 2023, 14, .	5.8	16
890	Activating Lattice Oxygen in Spinel ZnCo ₂ O ₄ through Filling Oxygen Vacancies with Fluorine for Electrocatalytic Oxygen Evolution. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	9

#	ARTICLE	IF	CITATIONS
891	Simultaneously mastering operando strain and reconstruction effects via phase-segregation strategy for enhanced oxygen-evolving electrocatalysis. <i>Journal of Energy Chemistry</i> , 2023, 82, 572-580.	7.1	36
892	Synergistic modulation of active site of NiO via cobalt doping by solution combustion for improving oxygen evolution reaction. <i>Materials Chemistry and Physics</i> , 2023, 300, 127540.	2.0	2
893	Competition between Lattice Oxygen and Adsorbate Evolving Mechanisms in Rutile Ru-Based Oxide for the Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 20563-20570.	4.0	12
894	Ultrathin MoS ₂ nanosheets decorated on NiSe nanowire arrays as advanced trifunctional electrocatalyst for overall water splitting and urea electrolysis. <i>Journal of Industrial and Engineering Chemistry</i> , 2023, 121, 510-518.	2.9	8
895	Iron-doped nickel sulfide nanoparticles grown on N-doped reduced graphene oxide as efficient electrocatalysts for oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2023, 936, 117323.	1.9	4
896	In situ self-assembled macroporous interconnected nanosheet arrays of Ni-1,3,5-benzenetricarboxylate metal-organic framework on Ti mesh as high-performance oxygen evolution electrodes. <i>Journal of Colloid and Interface Science</i> , 2023, 639, 274-283.	5.0	3
897	Recent advancement in manganese-based electrocatalyst for green hydrogen production. <i>Journal of Electroanalytical Chemistry</i> , 2023, 937, 117393.	1.9	1
898	Electrocatalytic oxygen evolution activities of metal chalcogenides and phosphides: Fundamentals, origins, and future strategies. <i>Journal of Energy Chemistry</i> , 2023, 81, 167-191.	7.1	31
899	Metallic nickel anchored on amorphous nickel cobalt oxide nanorods as efficient electrocatalysts toward oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2023, 947, 169657.	2.8	0
900	Switching the locus of oxygen reduction and evolution reactions between spinel active phase and carbon carrier upon heteroatoms doping. <i>Catalysis Today</i> , 2023, 418, 114043.	2.2	1
901	Atomic phosphorus induces tunable lattice strain in high entropy alloys and boosts alkaline water splitting. <i>Nano Energy</i> , 2023, 110, 108380.	8.2	18
902	Pt modified NiMoO ₄ -GO/NF nanorods with strong metal-support interaction as efficient bifunctional catalysts for overall water splitting. <i>Journal of Colloid and Interface Science</i> , 2023, 640, 928-939.	5.0	8
903	Hierarchical phosphorus-oxygen incorporated cobalt sulfide hollow micro/nano-reactor for highly-efficient electrocatalytic overall water splitting. <i>Chemical Engineering Journal</i> , 2023, 465, 142853.	6.6	7
904	Synergic effects of FeOOH and CoNi ₂ Se ₄ bilayer nanosheets as highly efficient electrocatalysts for the oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2023, 951, 169979.	2.8	2
905	Charge redistribution in FeOOH nanoarray by ecological oxygen-reduction deposition for boosting electrocatalytic water oxidation. <i>Applied Catalysis B: Environmental</i> , 2023, 330, 122595.	10.8	9
906	Thickness-dependent ²⁺ / ³⁺ -NiOOH transformation of Ni-MOFs in oxygen evolution reaction. <i>Applied Surface Science</i> , 2023, 623, 156991.	3.1	6
907	Raw sugarcane juice assisted hybrid electrolysis for formic acid and hydrogen production based on reversible redox cycle of CoNi LDH. <i>Applied Catalysis B: Environmental</i> , 2023, 331, 122559.	10.8	2
908	N plasma assisted Fe doped NiCo nanosheet arrays for alkaline electrocatalytic oxygen evolution. <i>Journal of Alloys and Compounds</i> , 2023, 941, 168954.	2.8	9

#	ARTICLE	IF	CITATIONS
909	Interfacial bond endowing FeS ₂ /Bi ₂ S ₃ composites superb OER performance. <i>Materials Chemistry and Physics</i> , 2023, 298, 127398.	2.0	5
910	Ni ₃ N@Ni juncture layer enabled performance enhanced electrocatalytic water oxidation. <i>Journal of Electroanalytical Chemistry</i> , 2023, 938, 117470.	1.9	2
911	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.	2.8	3
912	Nanoarchitectonics with the amorphous rhenium phosphide compounds for enhanced catalytic activity of hydrogen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2023, 941, 168961.	2.8	1
913	Bi-functional Ni ₃ S ₂ @MoS ₂ heterostructure with strong built-in field as highly-efficient electrolytic catalyst. <i>Journal of Electroanalytical Chemistry</i> , 2023, 931, 117185.	1.9	2
914	Enabling Internal Electric Fields to Enhance Energy and Environmental Catalysis. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	34
915	Effects of carbon defects on interfacial anchoring of NiFe-LDH for seawater electro-oxidation. <i>Journal of Materials Chemistry A</i> , 2023, 11, 10277-10286.	5.2	5
916	Robust and Promising Electrocatalytic Oxygen Evolution Reaction by Activated Cu ⁰ /Co ⁰ B Amorphous Nanosheets. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 2541-2553.	3.2	15
917	Morphology control and electronic tailoring of Co _x A _y (A = P, S, Se) electrocatalysts for water splitting. <i>Chemical Engineering Journal</i> , 2023, 460, 141674.	6.6	21
919	Activated FeS ₂ @NiS ₂ Core-Shell Structure Boosting Cascade Reaction for Superior Electrocatalytic Oxygen Evolution. <i>Small</i> , 2023, 19, .	5.2	11
920	Diatomite-like KFeS ₂ for Use in High-Performance Electrodes for Energy Storage and Oxygen Evolution. <i>Nanomaterials</i> , 2023, 13, 643.	1.9	2
921	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, .	1.8	5
922	Handily etching nickel foams into catalyst-substrate fusion self-stabilized electrodes toward industrial-level water electrolysis. , 2023, 5, .		9
923	Coordination Tailoring of Epitaxial Perovskite-Derived Iron Oxide Films for Efficient Water Oxidation Electrocatalysis. <i>ACS Catalysis</i> , 2023, 13, 2751-2760.	5.5	10
925	Toward data- and mechanistic-driven volcano plots in electrocatalysis. <i>Electrochemical Science Advances</i> , 2024, 4, .	1.2	3
926	Phase Purity Regulated by Mechano-Chemical Synthesis of Metal-Organic Frameworks for the Electrocatalytic Oxygen Evolution Reaction. <i>Inorganic Chemistry</i> , 2023, 62, 3457-3463.	1.9	4
927	Current perspectives in utilizing zeolitic imidazolate frameworks to prepare efficient oxygen evolution catalysts. <i>Current Opinion in Electrochemistry</i> , 2023, 38, 101238.	2.5	0
928	Rhenium Suppresses Iridium (IV) Oxide Crystallization and Enables Efficient, Stable Electrochemical Water Oxidation. <i>Small</i> , 2023, 19, .	5.2	14

#	ARTICLE	IF	CITATIONS
929	Recent Advances and New Challenges: Two-Dimensional Metal-Organic Framework and Their Composites/Derivatives for Electrochemical Energy Conversion and Storage. International Journal of Energy Research, 2023, 2023, 1-47.	2.2	3
930	Hydrogen Production from Water Electrolysis: The Role of OER and HER Electrocatalysts. ACS Symposium Series, 0, , 73-119.	0.5	1
931	Facet Engineering of Advanced Electrocatalysts Toward Hydrogen/Oxygen Evolution Reactions. Nano-Micro Letters, 2023, 15, .	14.4	55
933	Two-Dimensional Metal Nanostructures: From Theoretical Understanding to Experiment. Chemical Reviews, 2023, 123, 3443-3492.	23.0	11
934	Phase Evolution on the Hydrogen Adsorption Kinetics of NiFe-Based Heterogeneous Catalysts for Efficient Water Electrolysis. Small Methods, 2023, 7, .	4.6	55
935	Synthesis, properties and catalytic performance of the novel, pseudo-spinel, multicomponent transition-metal selenides. Journal of Materials Chemistry A, 2023, 11, 5337-5349.	5.2	1
936	Achieving Efficient Electrocatalytic Oxygen Evolution in Acidic Media on Yttrium Ruthenate Pyrochlore through Cobalt Incorporation. Advanced Functional Materials, 2023, 33, .	7.8	25
937	Floating Seawater Splitting Device Based on NiFeCrMo Metal Hydroxide Electrocatalyst and Perovskite/Silicon Tandem Solar Cells. ACS Nano, 2023, 17, 4539-4550.	7.3	9
938	Spin Effects in Chemisorption and Catalysis. ACS Catalysis, 2023, 13, 3456-3462.	5.5	18
939	Pd encapsulated core-shell ZIF-8/ZIF-67 for efficient oxygen evolution reaction. Electrochimica Acta, 2023, 447, 142100.	2.6	9
940	High-Entropy Perovskites for Energy Conversion and Storage: Design, Synthesis, and Potential Applications. Small Methods, 2023, 7, .	4.6	14
941	Mo ₂ CT _x MXene supported nickel-iron alloy: an efficient and stable heterostructure to boost oxygen evolution reaction. 2D Materials, 2023, 10, 024005.	2.0	2
942	Enhanced electrocatalytic performance for oxygen evolution reaction via active interfaces of Co ₃ O ₄ arrays@FeO _x /Carbon cloth heterostructure by plasma-enhanced atomic layer deposition. Nanotechnology, 2023, 34, 225703.	1.3	2
943	Hybrid Heterostructure Ni ₃ N NiFeP/FF Self-Supporting Electrode for High-Current-Density Alkaline Water Electrolysis. Small Methods, 2023, 7, .	4.6	11
944	Catalyst-Support Interactions Promoted Acidic Electrochemical Oxygen Evolution Catalysis: A Mini Review. Molecules, 2023, 28, 2262.	1.7	1
945	Recent Advances on Transition-Metal-Based Layered Double Hydroxides Nanosheets for Electrocatalytic Energy Conversion. Advanced Science, 2023, 10, .	5.6	30
946	Applications of Rare Earth Promoted Transition Metal Sulfides in Electrocatalysis ^{â€} . Chinese Journal of Chemistry, 2023, 41, 1740-1752.	2.6	8
947	Probing the electrocatalytic activity of hierarchically mesoporous M-Co ₃ O ₄ (M=Ni, Zn, and Mn) with branched pattern for oxygen evolution reaction. Journal of Electroanalytical Chemistry, 2023, 934, 117298.	1.9	8

#	ARTICLE	IF	CITATIONS
948	Linker Defects in Metal-Organic Frameworks for the Construction of Interfacial Dual Metal Sites with High Oxygen Evolution Activity. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	24
949	Redox chemistry in solid catalysts for regulating oxygen electrode working mechanism in aqueous electrolytes, what's next?. , 2023, 1, 100006.		3
950	Investigation of the oxygen evolution reaction at the NiSe ₂ /WO ₃ nanocomposite catalyst. <i>Materials Today Chemistry</i> , 2023, 29, 101432.	1.7	0
951	Distilling universal activity descriptors for perovskite catalysts from multiple data sources via multi-task symbolic regression. <i>Materials Horizons</i> , 2023, 10, 1651-1660.	6.4	4
952	Controlled synthesis of MOF-derived hollow and yolk-shell nanocages for improved water oxidation and selective ethylene glycol reformation. <i>EScience</i> , 2023, 3, 100118.	25.0	18
953	A High-Entropy Oxide as High-Activity Electrocatalyst for Water Oxidation. <i>ACS Nano</i> , 2023, 17, 5329-5339.	7.3	24
954	Heterostructured mixed metal oxide electrocatalyst for the hydrogen evolution reaction. <i>Frontiers in Chemistry</i> , 0, 11, .	1.8	4
955	Crystalline-Amorphous Interface Coupling of Ni ₃ S ₂ /NiP _x /NF with Enhanced Activity and Stability for Electrocatalytic Oxygen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 15533-15544.	4.0	12
956	Modification of micro/nanoscaled manganese dioxide-based materials and their electrocatalytic applications toward oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2023, 11, 6688-6746.	5.2	13
957	Mechanistic Regulation by Oxygen Vacancies in Structural Evolution Promoting Electrocatalytic Water Oxidation. <i>ACS Catalysis</i> , 2023, 13, 4398-4408.	5.5	7
958	Superior oxygen evolution reaction performance of NiCoFe spinel oxide nanowires in situ grown on $\text{Ni}(\text{OH})_2$ nanosheet-decorated Ni foam: case studies on stoichiometric and off-stoichiometric oxides. <i>Journal of Materials Chemistry A</i> , 2023, 11, 8972-8987.	5.2	7
959	Tailoring the electrocatalytic activity of multicomponent (Co,Fe,Ni) ₉ S ₈ Se pentlandite solid electrodes. <i>Journal of Materials Chemistry A</i> , 2023, 11, 7526-7538.	5.2	1
960	Activating Lattice Oxygen in Spinel ZnCo ₂ O ₄ through Filling Oxygen Vacancies with Fluorine for Electrocatalytic Oxygen Evolution. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	54
961	Hierarchical iron-nickel oxyhydroxide nanosheets directly grown on porous TiFe ₂ -based intermetallics for robust oxygen evolution. <i>Chemical Communications</i> , 2023, 59, 4519-4522.	2.2	1
962	Oxygen Evolution/Reduction Reaction Catalysts: From In Situ Monitoring and Reaction Mechanisms to Rational Design. <i>Chemical Reviews</i> , 2023, 123, 6257-6358.	23.0	81
963	Pluronic-123 Assisted Synthesis of Cobalt Vanadate Microparticles ($\mu\text{-CoV}$ MPs) for Durable Electrochemical Oxygen Evolution Reaction in Seawater and Connate Water. <i>Catalysts</i> , 2023, 13, 636.	1.6	6
964	Elevating the d-Band Center of Ni ₃ S ₂ Nanosheets by Fe Incorporation to Boost the Oxygen Evolution Reaction. <i>Langmuir</i> , 2023, 39, 5375-5383.	1.6	4
965	One-dimensional metal-organic frameworks: Synthesis, structure and application in electrocatalysis. , 2023, 1, 100010.		2

#	ARTICLE	IF	CITATIONS
966	Effect of NaCu ₅ S ₃ composite Ni ₅ Fe-LDH structure on hydrolysis oxygen evolution performance. Wuli Xuebao/Acta Physica Sinica, 2023, 72, 108201.	0.2	0
967	Improving the Oxygen Evolution Reaction on Fe ₃ O ₄ (001) with Single-Atom Catalysts. ACS Catalysis, 2023, 13, 4811-4823.	5.5	7
968	Nanoengineered Zn-modified Nickel Sulfide (NiS) as a bifunctional electrocatalyst for overall water splitting. International Journal of Hydrogen Energy, 2023, 48, 21969-21980.	3.8	6
969	Polysulfide-Induced Synthesis of Coral-Like MoS ₂ /NiS ₂ Nanostructures for Overall Water Splitting. ACS Applied Nano Materials, 2023, 6, 5136-5144.	2.4	3
970	Lattice-disordered high-entropy metal hydroxide nanosheets as efficient precatalysts for bifunctional electro-oxidation. Journal of Colloid and Interface Science, 2023, 642, 41-52.	5.0	19
971	Operando Scanning Electrochemical Probe Microscopy during Electrocatalysis. Chemical Reviews, 2023, 123, 4972-5019.	23.0	24
972	Atomically Dispersed Fe ⁴⁺ Sites and NiFe-LDH Sub-Nanoclusters as an Excellent Air Cathode for Rechargeable Zinc-Air Batteries. ACS Applied Materials & Interfaces, 2023, 15, 16732-16743.	4.0	5
973	Mechanistic Insights on Permeation of Water over Iron Cations in Nanoporous Silicon Oxide Films for Selective H ₂ and O ₂ Evolution. ACS Applied Materials & Interfaces, 2023, 15, 17814-17824.	4.0	0
974	Fe ³⁺ -Preactivated Ni/Co-Based Antiperovskite Nitrides for Boosting Oxygen Evolution: Surface Tuning and Catalytic Mechanism. ACS Catalysis, 2023, 13, 5043-5052.	5.5	4
975	Design Strategy of Corrosion-Resistant Electrodes for Seawater Electrolysis. Materials, 2023, 16, 2709.	1.3	3
976	High-Density Cationic Defects Coupling with Local Alkaline-Enriched Environment for Efficient and Stable Water Oxidation. Angewandte Chemie - International Edition, 2023, 62, .	7.2	8
977	High-Density Cationic Defects Coupling with Local Alkaline-Enriched Environment for Efficient and Stable Water Oxidation. Angewandte Chemie, 2023, 135, .	1.6	2
978	Co ₃ O ₄ /CoS ₂ Heterostructure: Synergistic Interfacial Coupling Induced Superior Electrochemical Performance for Hydrazine Oxidation Reaction. ACS Applied Energy Materials, 2023, 6, 3977-3985.	2.5	2
979	Ex Situ Reconstruction-Shaped Ir/CoO/Perovskite Heterojunction for Boosted Water Oxidation Reaction. ACS Catalysis, 2023, 13, 5007-5019.	5.5	14
980	Constructing highly active interface between layered Ni(OH) ₂ and porous Mo ₂ N for efficient electrocatalytic oxygen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 22091-22100.	3.8	2
981	Lamella-heterostructured nanoporous bimetallic iron-cobalt alloy/oxyhydroxide and cerium oxynitride electrodes as stable catalysts for oxygen evolution. Nature Communications, 2023, 14, .	5.8	28
982	Electrocatalytic water splitting: Mechanism and electrocatalyst design. Nano Research, 2023, 16, 9142-9157.	5.8	39
983	High-entropy single-atom activated carbon catalysts for sustainable oxygen electrocatalysis. Nature Sustainability, 2023, 6, 816-826.	11.5	49

#	ARTICLE	IF	CITATIONS
984	Coordination-driven self-assembly of MOF-based heterostructures for electrocatalytic methanol oxidation. <i>Journal of Solid State Chemistry</i> , 2023, 323, 124035.	1.4	3
985	Self-Dissociation-Oriented Growth of Ultrathin Metal-Organic Framework Nanosheet Arrays for Efficient Oxygen Evolution. <i>Crystal Growth and Design</i> , 0, , .	1.4	1
986	N-doped bimetallic phosphides composite catalysts derived from metal-organic frameworks for electrocatalytic water splitting. <i>Advanced Composites and Hybrid Materials</i> , 2023, 6, .	9.9	11
987	Atomically dispersed Ru oxide catalyst with lattice oxygen participation for efficient acidic water oxidation. <i>CheM</i> , 2023, 9, 1882-1896.	5.8	32
988	Highly Stable and Efficient Oxygen Evolution Electrocatalyst Based on Co Oxides Decorated with Ultrafine Ru Nanoclusters. <i>Small</i> , 2023, 19, .	5.2	7
989	Interface engineering and heterometal doping Co-Mo/FeS for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 25730-25740.	3.8	3
990	Nanorod Array-Based Hierarchical NiO Microspheres as a Bifunctional Electrocatalyst for a Selective and Corrosion-Resistance Seawater Photo/Electrolysis System. <i>ACS Catalysis</i> , 2023, 13, 5516-5528.	5.5	18
991	Recent advances in Ru-based electrocatalysts toward Acid electrochemical water oxidation. <i>Current Opinion in Electrochemistry</i> , 2023, 39, 101296.	2.5	3
992	Photogenerated Carrier-Assisted Electrocatalysts for Efficient Water Splitting. <i>Catalysts</i> , 2023, 13, 712.	1.6	4
993	Geometric and Electronic Engineering of Atomically Dispersed Copper-Cobalt Diatomic Sites for Synergistic Promotion of Bifunctional Oxygen Electrocatalysis in Zinc-Air Batteries. <i>Advanced Materials</i> , 2023, 35, .	11.1	48
994	Atomic understanding of the strain-induced electrocatalysis from DFT calculation: progress and perspective. <i>Physical Chemistry Chemical Physics</i> , 2023, 25, 12565-12586.	1.3	9
995	Tuning of Oxygen Electrocatalysis in Perovskite Oxide Nanoparticles by the Cationic Composition. <i>ACS Catalysis</i> , 2023, 13, 5733-5743.	5.5	5
996	Designing electrocatalysts for seawater splitting: surface/interface engineering toward enhanced electrocatalytic performance. <i>Green Chemistry</i> , 2023, 25, 3767-3790.	4.6	20
997	A brief introduction of electrode fabrication for proton exchange membrane water electrolyzers. <i>JPhys Energy</i> , 0, , .	2.3	1
998	Unraveling the electrophilic oxygen-mediated mechanism for alcohol electrooxidation on NiO. <i>National Science Review</i> , 2023, 10, .	4.6	11
999	Recent Advances in Nanocarbon-Based Nonprecious Metal Catalysts for Oxygen/Hydrogen Reduction/Evolution Reactions and Zn-Air Battery. <i>Bulletin of the Chemical Society of Japan</i> , 2023, 96, 429-443.	2.0	3
1000	Oxygen Vacancies Unfold the Catalytic Potential of NiFe-Layered Double Hydroxides by Promoting Their Electronic Transport for Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2023, 13, 6000-6012.	5.5	26
1001	Interfacial Electronic Modulation on Nickel Cobaltite/Black Phosphorus Heterostructures for Boosting the Electrocatalytic Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 6629-6640.	3.2	8

#	ARTICLE	IF	CITATIONS
1002	Reinforcing Co π -O Covalency via Ce(4f) π -O(2p) π -Co(3d) Gradient Orbital Coupling for High-Efficiency Oxygen Evolution. <i>Advanced Materials</i> , 2023, 35, .	11.1	62
1003	Plasmonic Solar Energy Harvesting by ZnO Nanostructures and Their Composite Interfaces: A Review on Fundamentals, Recent Advances, and Applications. <i>Energy Technology</i> , 2023, 11, .	1.8	2
1004	Intrinsic carbon structural imperfections for enhancing energy conversion electrocatalysts. <i>Chemical Engineering Journal</i> , 2023, 466, 143060.	6.6	7
1005	Promoting Oxygen Reduction Reaction on Carbon-based Materials by Selective Hydrogen Bonding. <i>ChemSusChem</i> , 0, , .	3.6	1
1006	Assembly of NiFe-PBA nanoparticles on nanoflower-like NiFe-PBA@IF as enhanced oxygen evolution electrocatalyst at room temperature. <i>Molecular Catalysis</i> , 2023, 544, 113126.	1.0	1
1015	Recent advances in interface engineering of Fe/Co/Ni-based heterostructure electrocatalysts for water splitting. <i>Materials Horizons</i> , 2023, 10, 2312-2342.	6.4	13
1025	Understanding the complexity in bridging thermal and electrocatalytic methanation of CO ₂ . <i>Chemical Society Reviews</i> , 2023, 52, 3627-3662.	18.7	15
1028	Surface self-reconstruction of catalysts in electrocatalytic oxygen evolution reaction. , 2024, , 316-327.		0
1044	Electrocatalysis by Graphene Materials. , 2023, , 50-80.		0
1047	Nickel Based Metal Oxide Electrocatalysts: From Model to Operando Conditions Studied by XPS and Vibrational Spectroscopy. , 2023, , .		0
1050	Regulation engineering of the surface and structure of perovskite-based electrocatalysts for the oxygen evolution reaction. <i>Materials Chemistry Frontiers</i> , 2023, 7, 4236-4258.	3.2	3
1074	Advances in magnetic field-assisted ECM from magnetoelectric effects to technology applications. <i>International Journal of Advanced Manufacturing Technology</i> , 0, , .	1.5	0
1077	Waste to wealth: direct utilization of spent materials for electrocatalysis and energy storage. <i>Green Chemistry</i> , 2023, 25, 3816-3846.	4.6	5
1084	Order-disorder engineering of RuO ₂ nanosheets towards pH-universal oxygen evolution. <i>Materials Horizons</i> , 2023, 10, 2904-2912.	6.4	3
1102	Recent progress of dual-site catalysts in emerging electrocatalysis: a review. <i>Catalysis Science and Technology</i> , 2023, 13, 4615-4634.	2.1	3
1107	Synthesis of porous LaNiO ₃ thin films by chemical solution deposition for enhanced oxygen evolution reaction. <i>Dalton Transactions</i> , 2023, 52, 9903-9907.	1.6	1
1110	Metal-organic Frameworks and their Derived Structures for Photocatalytic Water Splitting. , 2023, , 1-44.		0
1125	Non-precious metal-based heterostructure catalysts for hydrogen evolution reaction: mechanisms, design principles, and future prospects. <i>Nanoscale</i> , 2023, 15, 13515-13531.	2.8	1

#	ARTICLE	IF	CITATIONS
1128	Designing Oxide Catalysts for Oxygen Electrocatalysis: Insights from Mechanism to Application. Nano-Micro Letters, 2023, 15, .	14.4	11
1129	Chevrel phases: synthesis, structure, and electrocatalytic applications. Materials Chemistry Frontiers, 2023, 7, 5500-5518.	3.2	1
1139	Non-precious metal-based catalysts for water electrolysis to produce H ₂ under industrial conditions. Materials Chemistry Frontiers, 2023, 7, 5661-5692.	3.2	3
1145	Recent Advances in the Comprehension and Regulation of Lattice Oxygen Oxidation Mechanism in Oxygen Evolution Reaction. Transactions of Tianjin University, 2023, 29, 247-253.	3.3	1
1147	Cutting-edge methods for amplifying the oxygen evolution reaction during seawater electrolysis: a brief synopsis. , 2023, 1, 475-485.		2
1165	Recent advances in the rational design of alkaline OER catalysts: from electronic structures to industrial applications. Materials Chemistry Frontiers, 2023, 7, 5187-5214.	3.2	4
1170	Recent advances in metal-organic frameworks for oxygen evolution reaction electrocatalysts. Science China Chemistry, 2023, 66, 2754-2779.	4.2	2
1173	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.	1.7	2
1174	Research progress of spinel CoFe ₂ O ₄ as an electrocatalyst for the oxygen evolution reaction. Catalysis Science and Technology, 0, , .	2.1	0
1175	Amazing enhancement of OER performances: creating a well-designed functional Ni and N-doped carbon layer as a support material for fabricating a NiFe-LDH electrocatalyst. Chemical Communications, 2023, 59, 11572-11575.	2.2	1
1201	High-entropy catalysts for electrochemical water-electrolysis of hydrogen evolution and oxygen evolution reactions. Frontiers in Energy, 0, , .	1.2	2
1206	Metal Oxides for Future Electrochemical Energy Storage Devices: Batteries and Supercapacitors. Progress in Optical Science and Photonics, 2023, , 291-330.	0.3	0
1263	Advances in the mechanism investigation for the oxygen evolution reaction: fundamental theory and monitoring techniques. Materials Chemistry Frontiers, 2024, 8, 603-626.	3.2	1
1299	Recent progress in bimetallic carbide-based electrocatalysts for water splitting. Materials Chemistry Frontiers, 2024, 8, 627-651.	3.2	3
1312	Recent advances in transition metal phosphide-based heterostructure electrocatalysts for the oxygen evolution reaction. Materials Chemistry Frontiers, 2024, 8, 1064-1083.	3.2	0
1327	Application in Catalysis. , 2024, , 221-291.		0
1343	Recent advances in trifunctional electrocatalysts for Zn-air battery and water splitting. Materials Chemistry Frontiers, 0, , .	3.2	0
1348	Oxygen vacancy modulated Fe-doped Co ₃ O ₄ hollow nanosheet arrays for efficient oxygen evolution reaction. Chemical Communications, 2024, 60, 1116-1119.	2.2	1

#	ARTICLE	IF	CITATIONS
1350	Application progress of NiMoO ₄ electrocatalyst in basic oxygen evolution reaction. Catalysis Science and Technology, 2024, 14, 533-554.	2.1	0
1374	Nanomaterials: paving the way for the hydrogen energy frontier. , 2024, 19, .		1
1381	Nanostructure engineering of ruthenium-modified electrocatalysts for efficient electrocatalytic water splitting. Journal of Materials Chemistry A, 2024, 12, 3844-3878.	5.2	1
1401	Two-dimensional metal-organic frameworks and their derivatives: synthesis, 3D printing fabrication, and applications. , 2024, , 163-185.		0
1411	Emerging Technologies in Catalyst Research. Advances in Material Research and Technology, 2024, , 1-21.	0.3	0
1429	Key role of subsurface doping in optimizing active sites of IrO ₂ for the oxygen evolution reaction. Chemical Communications, 2024, 60, 3453-3456.	2.2	0