

Nickel-<sup>2+</sup>Iron Oxyhydroxide Oxygen-Evolution Electrode  
Incidental Iron Incorporation

Journal of the American Chemical Society

136, 6744-6753

DOI: 10.1021/ja502379c

Citation Report

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 20 | Solution-Deposited F:SnO <sub>2</sub> /TiO <sub>2</sub> as a Base-Stable Protective Layer and Antireflective Coating for Microtextured Buried-Junction H <sub>2</sub> -evolving Si Photocathodes. ACS Applied Materials & Interfaces, 2014, 6, 22830-22837. | 4.0 | 84        |
| 21 | Enhanced oxygen evolution activity by NiO <sub>x</sub> and Ni(OH) <sub>2</sub> nanoparticles. Faraday Discussions, 2014, 176, 363-379.  | 1.6 | 183       |
| 22 | Mosaic Texture and Double- <i>c</i> -Axis Periodicity of $\hat{\Gamma}^2$ -NiOOH: Insights from First-Principles and Genetic Algorithm Calculations. Journal of Physical Chemistry Letters, 2014, 5, 3981-3985.   | 2.1 | 65        |
| 23 | Engineered Electronic States of Transition Metal Doped TiO <sub>2</sub> Nanocrystals for Low Overpotential Oxygen Evolution Reaction. Journal of Physical Chemistry C, 2014, 118, 29499-29506.  | 1.5 | 109       |
| 24 | Benchmarking the Stability of Oxygen Evolution Reaction Catalysts: The Importance of Monitoring Mass Losses. ChemElectroChem, 2014, 1, 2075-2081.   | 1.7 | 301       |
| 25 | NiCo <sub>2</sub> O <sub>4</sub> /C prepared by one-step intermittent microwave heating method for oxygen evolution reaction in splitter. Journal of Alloys and Compounds, 2014, 617, 115-119.  | 2.8 | 24        |
| 26 | Highly Active Mixed-Metal Nanosheet Water Oxidation Catalysts Made by Pulsed-Laser Ablation in Liquids. Journal of the American Chemical Society, 2014, 136, 13118-13121.   | 6.6 | 278       |
| 27 | Unusual synergistic effects upon incorporation of Fe and/or Ni into mesoporous Co <sub>3</sub> O <sub>4</sub> for enhanced oxygen evolution. Chemical Communications, 2014, 50, 10122.  | 2.2 | 150       |
| 28 | Electrodeposition of Ni-doped FeOOH oxygen evolution reaction catalyst for photoelectrochemical water splitting. Journal of Materials Chemistry A, 2014, 2, 14957.  | 5.2 | 88        |
| 29 | Pt-Mn <sub>3</sub> O <sub>4</sub> /C as efficient electrocatalyst for oxygen evolution reaction in water electrolysis. Electrochimica Acta, 2014, 146, 119-124.   | 2.6 | 35        |
| 30 | An Approach to Understanding the Electrocatalytic Activity Enhancement by Superexchange Interaction toward OER in Alkaline Media of Ni <sup>II</sup> -Fe LDH. Journal of Physical Chemistry C, 2014, 118, 22432-22438.                                      | 1.5 | 185       |
| 31 | Iron-Treated NiO as a Highly Transparent p-Type Protection Layer for Efficient Si-Based Photoanodes. Journal of Physical Chemistry Letters, 2014, 5, 3456-3461.   | 2.1 | 93        |
| 32 | Cobalt-Oxide-Based Materials as Water Oxidation Catalyst: Recent Progress and Challenges. ACS Catalysis, 2014, 4, 3701-3714.  | 5.5 | 451       |
| 33 | Water photolysis at 12.3% efficiency via perovskite photovoltaics and Earth-abundant catalysts. Science, 2014, 345, 1593-1596.  | 6.0 | 2,260     |
| 34 | Infrared-driven unimolecular reaction of CH <sub>3</sub> CHO Criegee intermediates to OH radical products. Science, 2014, 345, 1596-1598.   | 6.0 | 125       |
| 35 | Hierarchical construction of an ultrathin layered double hydroxide nanoarray for highly-efficient oxygen evolution reaction. Nanoscale, 2014, 6, 11789-11794.   | 2.8 | 169       |
| 36 | Nanoscale Limitations in Metal Oxide Electrocatalysts for Oxygen Evolution. Nano Letters, 2014, 14, 5853-5857.  | 4.5 | 69        |
| 37 | Improved Stability of Polycrystalline Bismuth Vanadate Photoanodes by Use of Dual-Layer Thin TiO <sub>2</sub> /Ni Coatings. Journal of Physical Chemistry C, 2014, 118, 19618-19624.  | 1.5 | 129       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 38 | Nonstoichiometric Perovskite $\text{CaMnO}_{3-x}$ for Oxygen Electrocatalysis with High Activity. <i>Inorganic Chemistry</i> , 2014, 53, 9106-9114.  | 1.9  | 202       |
| 39 | Porous Nickel-Iron Oxide as a Highly Efficient Electrocatalyst for Oxygen Evolution Reaction. <i>Advanced Science</i> , 2015, 2, 1500199.  | 5.6  | 241       |
| 40 | Creating Highly Active Atomic Layer Deposited NiO Electrocatalysts for the Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2015, 5, 1500412.   | 10.2 | 217       |
| 41 | Toward an Active and Stable Catalyst for Oxygen Evolution in Acidic Media: $\text{TiO}_2$ -Stabilized $\text{MnO}_2$ . <i>Advanced Energy Materials</i> , 2015, 5, 1500991.  | 10.2 | 177       |
| 42 | NiSe Nanowire Film Supported on Nickel Foam: An Efficient and Stable 3D Bifunctional Electrode for Full Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 9351-9355.                           | 7.2  | 1,242     |
| 44 | Molecular Mixed-Metal Manganese Oxido Cubanes as Precursors to Heterogeneous Oxygen Evolution Catalysts. <i>Chemistry - A European Journal</i> , 2015, 21, 13420-13430.  | 1.7  | 20        |
| 45 | Spatially Confined Hybridization of Nanometer-Sized NiFe Hydroxides into Nitrogen-Doped Graphene Frameworks Leading to Superior Oxygen Evolution Reactivity. <i>Advanced Materials</i> , 2015, 27, 4516-4522.              | 11.1 | 612       |
| 46 | On the Role of Metals in Nitrogen-Doped Carbon Electrocatalysts for Oxygen Reduction. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 10102-10120.  | 7.2  | 583       |
| 47 | Multi-Phased Electrode Materials for the Electroevolution of Oxygen. <i>Solid State Phenomena</i> , 2015, 228, 23-31.  | 0.3  | 1         |
| 48 | Near-infrared-driven decomposition of metal precursors yields amorphous electrocatalytic films. <i>Science Advances</i> , 2015, 1, e1400215.   | 4.7  | 48        |
| 49 | Rapid Synthesis and Efficient Electrocatalytic Oxygen Reduction/Evolution Reaction of $\text{CoMn}_2\text{O}_4$ Nanodots Supported on Graphene. <i>Inorganic Chemistry</i> , 2015, 54, 5467-5474.                          | 1.9  | 117       |
| 50 | $\text{Ni}_2\text{P}$ as a Janus catalyst for water splitting: the oxygen evolution activity of $\text{Ni}_2\text{P}$ nanoparticles. <i>Energy and Environmental Science</i> , 2015, 8, 2347-2351.                         | 15.6 | 1,487     |
| 51 | Stainless steel made to rust: a robust water-splitting catalyst with benchmark characteristics. <i>Energy and Environmental Science</i> , 2015, 8, 2685-2697.  | 15.6 | 180       |
| 52 | Efficient Electrocatalytic Water Oxidation by Using Amorphous Ni-Co Double Hydroxides Nanocages. <i>Advanced Energy Materials</i> , 2015, 5, 1401880.  | 10.2 | 307       |
| 53 | Stable Cobalt Nanoparticles and Their Monolayer Array as an Efficient Electrocatalyst for Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2015, 137, 7071-7074.                               | 6.6  | 299       |
| 54 | Photocatalysis fundamentals and surface modification of $\text{TiO}_2$ nanomaterials. <i>Chinese Journal of Catalysis</i> , 2015, 36, 2049-2070.   | 6.9  | 458       |
| 55 | In Situ Observation of Active Oxygen Species in Fe-Containing Ni-Based Oxygen Evolution Catalysts: The Effect of pH on Electrochemical Activity. <i>Journal of the American Chemical Society</i> , 2015, 137, 15112-15121. | 6.6  | 459       |
| 56 | A high-performance three-dimensional Ni-Fe layered double hydroxide/graphene electrode for water oxidation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6921-6928.  | 5.2  | 291       |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 57 | Nanoarray based "superaerophobic" surfaces for gas evolution reaction electrodes. <i>Materials Horizons</i> , 2015, 2, 294-298.  | 6.4 | 146       |
| 58 | A Superlattice of Alternately Stacked Ni-Fe Hydroxide Nanosheets and Graphene for Efficient Splitting of Water. <i>ACS Nano</i> , 2015, 9, 1977-1984.  | 7.3 | 635       |
| 59 | Hydrothermal Continuous Flow Synthesis and Exfoliation of NiCo Layered Double Hydroxide Nanosheets for Enhanced Oxygen Evolution Catalysis. <i>Nano Letters</i> , 2015, 15, 1421-1427.   | 4.5 | 933       |
| 60 | Stable Solar-Driven Water Oxidation to O <sub>2</sub> (g) by Ni-Oxide-Coated Silicon Photoanodes. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 592-598.   | 2.1 | 144       |
| 61 | Contributions to activity enhancement via Fe incorporation in Ni-(oxy)hydroxide/borate catalysts for near-neutral pH oxygen evolution. <i>Chemical Communications</i> , 2015, 51, 5261-5263.   | 2.2 | 138       |
| 62 | Development of optically transparent water oxidation catalysts using manganese pyrophosphate compounds. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2015, 152, 139-145.   | 1.7 | 2         |
| 63 | Improving Oxygen Electrochemistry through Nanoscopic Confinement. <i>ChemCatChem</i> , 2015, 7, 738-742.   | 1.8 | 106       |
| 64 | Precious-Metal-Free Co-Fe-O/rGO Synergetic Electrocatalysts for Oxygen Evolution Reaction by a Facile Hydrothermal Route. <i>ChemSusChem</i> , 2015, 8, 659-664.   | 3.6 | 71        |
| 65 | Identification of Highly Active Fe Sites in (Ni,Fe)OOH for Electrocatalytic Water Splitting. <i>Journal of the American Chemical Society</i> , 2015, 137, 1305-1313.   | 6.6 | 2,018     |
| 66 | Fast and Simple Preparation of Iron-Based Thin Films as Highly Efficient Water Oxidation Catalysts in Neutral Aqueous Solution. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4870-4875.  | 7.2 | 256       |
| 67 | Cobalt-Iron (Oxy)hydroxide Oxygen Evolution Electrocatalysts: The Role of Structure and Composition on Activity, Stability, and Mechanism. <i>Journal of the American Chemical Society</i> , 2015, 137, 3638-3648.                                 | 6.6 | 1,587     |
| 68 | Nickel nitride as an efficient electrocatalyst for water splitting. <i>Journal of Materials Chemistry A</i> , 2015, 3, 8171-8177.  | 5.2 | 408       |
| 69 | Metallic Nickel Nitride Nanosheets Realizing Enhanced Electrochemical Water Oxidation. <i>Journal of the American Chemical Society</i> , 2015, 137, 4119-4125.   | 6.6 | 1,004     |
| 70 | Stable solar-driven oxidation of water by semiconducting photoanodes protected by transparent catalytic nickel oxide films. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3612-3617.         | 3.3 | 180       |
| 71 | Impact of Electrocatalyst Activity and Ion Permeability on Water-Splitting Photoanodes. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2427-2433.   | 2.1 | 59        |
| 72 | Towards superior oxygen evolution through graphene barriers between metal substrates and hydroxide catalysts. <i>Journal of Materials Chemistry A</i> , 2015, 3, 16183-16189.  | 5.2 | 54        |
| 73 | Amorphous Nickel Hydroxide Nanosheets with Ultrahigh Activity and Super-Long-Term Cycle Stability as Advanced Water Oxidation Catalysts. <i>Crystal Growth and Design</i> , 2015, 15, 4475-4483.   | 1.4 | 51        |
| 74 | Understanding the Effect of Monomeric Iridium(III/IV) Aquo Complexes on the Photoelectrochemistry of IrO <sub>2</sub> -N <sub>2</sub> O-Catalyzed Water-Splitting Systems. <i>Journal of the American Chemical Society</i> , 2015, 137, 8749-8757. | 6.6 | 41        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 75 | Ultrathin nickel-iron layered double hydroxide nanosheets intercalated with molybdate anions for electrocatalytic water oxidation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 16348-16353.  | 5.2  | 209       |
| 76 | The Influence of Structure and Processing on the Behavior of TiO <sub>2</sub> Protective Layers for Stabilization of n-Si/TiO <sub>2</sub> /Ni Photoanodes for Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 15189-15199. | 4.0  | 114       |
| 77 | p-Type Transparent Conducting Oxide/n-Type Semiconductor Heterojunctions for Efficient and Stable Solar Water Oxidation. <i>Journal of the American Chemical Society</i> , 2015, 137, 9595-9603.  | 6.6  | 122       |
| 78 | Nickel-rich layered LiNi <sub>1-x</sub> M <sub>x</sub> O <sub>2</sub> (M = Mn, Fe, and Co) electrocatalysts with high oxygen evolution reaction activity. <i>Journal of Materials Chemistry A</i> , 2015, 3, 16604-16612.                             | 5.2  | 44        |
| 79 | Role of Catalyst Preparation on the Electrocatalytic Activity of Ni <sub>1-x</sub> Fe <sub>x</sub> OOH for the Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2015, 119, 18303-18316.  | 1.5  | 114       |
| 80 | An Optically Transparent Iron Nickel Oxide Catalyst for Solar Water Splitting. <i>Journal of the American Chemical Society</i> , 2015, 137, 9927-9936.  | 6.6  | 247       |
| 81 | Lindqvist Polyoxoniobate Ion-Assisted Electrodeposition of Cobalt and Nickel Water Oxidation Catalysts. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 16632-16644.   | 4.0  | 35        |
| 82 | A First-Principles Study of Oxygen Formation Over NiFe-Layered Double Hydroxides Surface. <i>Catalysis Letters</i> , 2015, 145, 1541-1548.  | 1.4  | 61        |
| 83 | Impurity Ion Complexation Enhances Carbon Dioxide Reduction Catalysis. <i>ACS Catalysis</i> , 2015, 5, 4479-4484.   | 5.5  | 219       |
| 84 | Structural Characteristics and Eutaxy in the Photo-Deposited Amorphous Iron Oxide Oxygen Evolution Catalyst. <i>Chemistry of Materials</i> , 2015, 27, 3462-3470.   | 3.2  | 28        |
| 85 | A high surface area flower-like Ni-Fe layered double hydroxide for electrocatalytic water oxidation reaction. <i>Dalton Transactions</i> , 2015, 44, 11592-11600.   | 1.6  | 90        |
| 86 | Tantalum Nitride Nanorod Arrays: Introducing Ni-Fe Layered Double Hydroxides as a Cocatalyst Strongly Stabilizing Photoanodes in Water Splitting. <i>Chemistry of Materials</i> , 2015, 27, 2360-2366.  | 3.2  | 158       |
| 87 | Multiphase Nanostructure of a Quinary Metal Oxide Electrocatalyst Reveals a New Direction for OER Electrocatalyst Design. <i>Advanced Energy Materials</i> , 2015, 5, 1402307.  | 10.2 | 85        |
| 88 | Surface Oxidation of Stainless Steel: Oxygen Evolution Electrocatalysts with High Catalytic Activity. <i>ACS Catalysis</i> , 2015, 5, 2671-2680.  | 5.5  | 153       |
| 90 | Layered transition metal oxyhydroxides as tri-functional electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2015, 3, 11920-11929.  | 5.2  | 80        |
| 91 | Alkaline Electrolyte and Fe Impurity Effects on the Performance and Active-Phase Structure of NiOOH Thin Films for OER Catalysis Applications. <i>Journal of Physical Chemistry C</i> , 2015, 119, 11475-11481.                                       | 1.5  | 110       |
| 92 | Trinary Layered Double Hydroxides as High-Performance Bifunctional Materials for Oxygen Electrocatalysis. <i>Advanced Energy Materials</i> , 2015, 5, 1500245.  | 10.2 | 328       |
| 93 | Iron-Doped Nickel Oxide Nanocrystals as Highly Efficient Electrocatalysts for Alkaline Water Splitting. <i>ACS Nano</i> , 2015, 9, 5180-5188.   | 7.3  | 446       |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 94  | Surface Modification of CoO <sub>x</sub> Loaded BiVO <sub>4</sub> Photoanodes with Ultrathin p-Type NiO Layers for Improved Solar Water Oxidation. <i>Journal of the American Chemical Society</i> , 2015, 137, 5053-5060.   | 6.6  | 542       |
| 95  | Effects of Fe Electrolyte Impurities on Ni(OH) <sub>2</sub> /NiOOH Structure and Oxygen Evolution Activity. <i>Journal of Physical Chemistry C</i> , 2015, 119, 7243-7254.   | 1.5  | 806       |
| 96  | Electrochemistry of Nanostructured Layered Transition-Metal Dichalcogenides. <i>Chemical Reviews</i> , 2015, 115, 11941-11966.   | 23.0 | 719       |
| 97  | Pulse-Electrodeposited Ni-Fe (Oxy)hydroxide Oxygen Evolution Electrocatalysts with High Geometric and Intrinsic Activities at Large Mass Loadings. <i>ACS Catalysis</i> , 2015, 5, 6680-6689.  | 5.5  | 265       |
| 98  | Nature of Activated Manganese Oxide for Oxygen Evolution. <i>Journal of the American Chemical Society</i> , 2015, 137, 14887-14904.  | 6.6  | 359       |
| 99  | Efficient Electrocatalytic Water Oxidation at Neutral and High pH by Adventitious Nickel at Nanomolar Concentrations. <i>Journal of the American Chemical Society</i> , 2015, 137, 13980-13988.  | 6.6  | 84        |
| 101 | Electrochemical Synthesis of Photoelectrodes and Catalysts for Use in Solar Water Splitting. <i>Chemical Reviews</i> , 2015, 115, 12839-12887.   | 23.0 | 481       |
| 102 | Rising Again: Opportunities and Challenges for Platinum-Free Electrocatalysts. <i>Chemistry of Materials</i> , 2015, 27, 7218-7235.  | 3.2  | 131       |
| 103 | Catalytic Oxygen Evolution by Cobalt Oxide Thin Films. <i>Topics in Current Chemistry</i> , 2015, 371, 173-213.  | 4.0  | 46        |
| 104 | A Ni(OH) <sub>2</sub> -modified Ti-doped $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> photoanode for improved photoelectrochemical oxidation of urea: the role of Ni(OH) <sub>2</sub> as a cocatalyst. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23924-23930. | 1.3  | 59        |
| 105 | Fast electrosynthesis of Fe-containing layered double hydroxide arrays toward highly efficient electrocatalytic oxidation reactions. <i>Chemical Science</i> , 2015, 6, 6624-6631.   | 3.7  | 378       |
| 106 | <i>In Situ</i> X-ray Absorption Near-Edge Structure Study of Advanced NiFe(OH) <sub>x</sub> Electrocatalyst on Carbon Paper for Water Oxidation. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19573-19583.  | 1.5  | 146       |
| 107 | A Fe-doped Ni <sub>3</sub> S <sub>2</sub> particle film as a high-efficiency robust oxygen evolution electrode with very high current density. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23207-23212.   | 5.2  | 308       |
| 108 | Enhancement Effect of Noble Metals on Manganese Oxide for the Oxygen Evolution Reaction. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4178-4183.  | 2.1  | 89        |
| 109 | Structural and Electronic Features of $\gamma$ -Ni(OH) <sub>2</sub> and $\gamma$ -NiOOH from First Principles. <i>Journal of Physical Chemistry C</i> , 2015, 119, 24315-24322.  | 1.5  | 145       |
| 110 | Facile synthesis of Fe/Ni bimetallic oxide solid-solution nanoparticles with superior electrocatalytic activity for oxygen evolution reaction. <i>Nano Research</i> , 2015, 8, 3815-3822.  | 5.8  | 94        |
| 111 | Layered double hydroxides toward electrochemical energy storage and conversion: design, synthesis and applications. <i>Chemical Communications</i> , 2015, 51, 15880-15893.  | 2.2  | 361       |
| 112 | Oxygen Evolution Reaction Electrocatalysis on Transition Metal Oxides and (Oxy)hydroxides: Activity Trends and Design Principles. <i>Chemistry of Materials</i> , 2015, 27, 7549-7558.   | 3.2  | 944       |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 113 | Reversible adapting layer produces robust single-crystal electrocatalyst for oxygen evolution. Nature Communications, 2015, 6, 8106.  | 5.8  | 377       |
| 114 | Pt/Ni(OH) <sub>2</sub> â€“NiOOH/Pd multi-walled hollow nanorod arrays as superior electrocatalysts for formic acid electrooxidation. Chemical Science, 2015, 6, 6991-6998.  | 3.7  | 55        |
| 115 | Electrochemical Study of the Energetics of the Oxygen Evolution Reaction at Nickel Iron (Oxy)Hydroxide Catalysts. Journal of Physical Chemistry C, 2015, 119, 19022-19029.  | 1.5  | 282       |
| 116 | Facet-dependent activity and stability of Co <sub>3</sub> O <sub>4</sub> nanocrystals towards the oxygen evolution reaction. Physical Chemistry Chemical Physics, 2015, 17, 29387-29393.                              | 1.3  | 190       |
| 117 | Advanced and In Situ Analytical Methods for Solar Fuel Materials. Topics in Current Chemistry, 2015, 371, 253-324.  | 4.0  | 4         |
| 118 | Oxygen Evolution Catalyzed by Nickelâ€“Iron Oxide Nanocrystals with a Nonequilibrium Phase. ACS Applied Materials & Interfaces, 2015, 7, 19755-19763.   | 4.0  | 49        |
| 119 | Effect of Rh oxide as a cocatalyst over Bi <sub>0.5</sub> VO <sub>4</sub> on photocatalytic overall water splitting. Applied Surface Science, 2015, 355, 1069-1074.   | 3.1  | 22        |
| 120 | Nonstoichiometric Oxides as Low-Cost and Highly-Efficient Oxygen Reduction/Evolution Catalysts for Low-Temperature Electrochemical Devices. Chemical Reviews, 2015, 115, 9869-9921.                                   | 23.0 | 770       |
| 121 | Revised Oxygen Evolution Reaction Activity Trends for First-Row Transition-Metal (Oxy)hydroxides in Alkaline Media. Journal of Physical Chemistry Letters, 2015, 6, 3737-3742.  | 2.1  | 417       |
| 122 | Manganese oxides supported on hydrogenated TiO <sub>2</sub> nanowire array catalysts for the electrochemical oxygen evolution reaction in water electrolysis. Journal of Materials Chemistry A, 2015, 3, 21308-21313. | 5.2  | 44        |
| 123 | Metallic Ironâ€“Nickel Sulfide Ultrathin Nanosheets As a Highly Active Electrocatalyst for Hydrogen Evolution Reaction in Acidic Media. Journal of the American Chemical Society, 2015, 137, 11900-11903.             | 6.6  | 609       |
| 124 | CoTiO <sub>x</sub> Catalysts for the Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2015, 162, H841-H846.   | 1.3  | 14        |
| 125 | Nickelâ€“iron foam as a three-dimensional robust oxygen evolution electrode with high activity. International Journal of Hydrogen Energy, 2015, 40, 13258-13263.  | 3.8  | 48        |
| 126 | An Iron-based Film for Highly Efficient Electrocatalytic Oxygen Evolution from Neutral Aqueous Solution. ACS Applied Materials & Interfaces, 2015, 7, 21852-21859.  | 4.0  | 161       |
| 127 | Operando Analysis of NiFe and Fe Oxyhydroxide Electrocatalysts for Water Oxidation: Detection of Fe <sup>4+</sup> by MÃ¶ssbauer Spectroscopy. Journal of the American Chemical Society, 2015, 137, 15090-15093.       | 6.6  | 684       |
| 128 | Fe (Oxy)hydroxide Oxygen Evolution Reaction Electrocatalysis: Intrinsic Activity and the Roles of Electrical Conductivity, Substrate, and Dissolution. Chemistry of Materials, 2015, 27, 8011-8020.                   | 3.2  | 395       |
| 129 | Dual-sized NiFe layered double hydroxides in situ grown on oxygen-decorated self-dispersal nanocarbon as enhanced water oxidation catalysts. Journal of Materials Chemistry A, 2015, 3, 24540-24546.                  | 5.2  | 124       |
| 130 | Nickelâ€“cobalt layered double hydroxide nanosheets as high-performance electrocatalyst for oxygen evolution reaction. Journal of Power Sources, 2015, 27, 445-451.   | 4.0  | 494       |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 131 | Synergism between polyurethane and polydopamine in the synthesis of Ni-Fe alloy monoliths. <i>Chemical Communications</i> , 2015, 51, 1922-1925.  | 2.2  | 29        |
| 132 | Co intake mediated formation of ultrathin nanosheets of transition metal LDHs as an advanced electrocatalyst for oxygen evolution reaction. <i>Chemical Communications</i> , 2015, 51, 1120-1123.                     | 2.2  | 195       |
| 133 | Water Oxidation at Electrodes Modified with Earth-Abundant Transition-Metal Catalysts. <i>ChemElectroChem</i> , 2015, 2, 37-50.   | 1.7  | 213       |
| 134 | Understanding the Role of Gold Nanoparticles in Enhancing the Catalytic Activity of Manganese Oxides in Water Oxidation Reactions. <i>Angewandte Chemie</i> , 2015, 127, 2375-2380.                                   | 1.6  | 27        |
| 135 | A mini review of NiFe-based materials as highly active oxygen evolution reaction electrocatalysts. <i>Nano Research</i> , 2015, 8, 23-39.   | 5.8  | 1,201     |
| 136 | Semiconductor-based photocatalysts and photoelectrochemical cells for solar fuel generation: a review. <i>Catalysis Science and Technology</i> , 2015, 5, 1360-1384.  | 2.1  | 824       |
| 137 | Understanding the Role of Gold Nanoparticles in Enhancing the Catalytic Activity of Manganese Oxides in Water Oxidation Reactions. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 2345-2350.            | 7.2  | 119       |
| 138 | Porous Nickel-Iron Selenide Nanosheets as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 19386-19392.                                      | 4.0  | 284       |
| 139 | Graphitic Mesoporous Carbon Loaded with Iron-Nickel Hydroxide for Superior Oxygen Evolution Reactivity. <i>ChemSusChem</i> , 2016, 9, 1835-1842.  | 3.6  | 32        |
| 140 | Advances in Hybrid Electrocatalysts for Oxygen Evolution Reactions: Rational Integration of NiFe Layered Double Hydroxides and Nanocarbon. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 473-486. | 1.2  | 106       |
| 141 | The Origin of Catalytic Activity of Nickel Phosphate for Oxygen Evolution in Alkaline Solution and its Further Enhancement by Iron Substitution. <i>ChemElectroChem</i> , 2016, 3, 615-621.                           | 1.7  | 81        |
| 142 | Further Investigation of a Nickel-Based Homogeneous Water Oxidation Catalyst with Two Labile Sites. <i>ChemSusChem</i> , 2016, 9, 485-491.  | 3.6  | 65        |
| 143 | Design Criteria, Operating Conditions, and Nickel-Iron Hydroxide Catalyst Materials for Selective Seawater Electrolysis. <i>ChemSusChem</i> , 2016, 9, 962-972.   | 3.6  | 467       |
| 144 | Recent Advances in the Synthesis of Layered, Double-Hydroxide-Based Materials and Their Applications in Hydrogen and Oxygen Evolution. <i>Energy Technology</i> , 2016, 4, 354-368.                                   | 1.8  | 84        |
| 145 | FeOOH/Co/FeOOH Hybrid Nanotube Arrays as High-Performance Electrocatalysts for the Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2016, 128, 3758-3762.  | 1.6  | 128       |
| 146 | FeOOH/Co/FeOOH Hybrid Nanotube Arrays as High-Performance Electrocatalysts for the Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3694-3698.                                 | 7.2  | 611       |
| 147 | Enhanced Charge Separation through ALD-Modified Fe <sub>2</sub> O <sub>3</sub> /Fe <sub>2</sub> TiO <sub>5</sub> Nanorod Heterojunction for Photoelectrochemical Water Oxidation. <i>Small</i> , 2016, 12, 3415-3422. | 5.2  | 124       |
| 148 | Promoting the Water Oxidation Catalysis by Synergistic Interactions between Ni(OH) <sub>2</sub> and Carbon Nanotubes. <i>Advanced Energy Materials</i> , 2016, 6, 1600516.  | 10.2 | 68        |



| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 149 | Effect of the Synthesis Route and Fe Presence on the Redox Activity of Ni in Layered Double Hydroxides. <i>ChemElectroChem</i> , 2016, 3, 1320-1328.  | 1.7 | 14        |
| 150 | Quick Determination of Electroactive Surface Area of Some Oxide Electrode Materials. <i>Electroanalysis</i> , 2016, 28, 2394-2399.  | 1.5 | 57        |
| 151 | Promoting Active Species Generation by Plasmon-Induced Hot-Electron Excitation for Efficient Electrocatalytic Oxygen Evolution. <i>Journal of the American Chemical Society</i> , 2016, 138, 9128-9136.                                   | 6.6 | 341       |
| 152 | The goldilocks electrolyte: examining the performance of iron/nickel oxide thin films as catalysts for electrochemical water splitting in various aqueous NaOH solutions. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11397-11407. | 5.2 | 47        |
| 153 | Abnormal Cathodic Photocurrent Generated on an n-Type FeOOH Nanorod Array Photoelectrode. <i>Chemistry - A European Journal</i> , 2016, 22, 4802-4808.  | 1.7 | 6         |
| 154 | MOF-Derived Noble Metal Free Catalysts for Electrochemical Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 35390-35397.   | 4.0 | 151       |
| 155 | Hydrogen Diffusivity and Electrolyte Permeability of the Zirfon PERL Separator for Alkaline Water Electrolysis. <i>Journal of the Electrochemical Society</i> , 2016, 163, F1480-F1488.   | 1.3 | 100       |
| 156 | Hydrotalcite-like Ni(OH) <sub>2</sub> Nanosheets in Situ Grown on Nickel Foam for Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 33601-33607.  | 4.0 | 204       |
| 157 | One-Step Synthesis of a Self-Supported Copper Phosphide Nanobush for Overall Water Splitting. <i>ACS Omega</i> , 2016, 1, 1367-1373.  | 1.6 | 113       |
| 158 | Au-NiCo <sub>2</sub> O <sub>4</sub> supported on three-dimensional hierarchical porous graphene-like material for highly effective oxygen evolution reaction. <i>Scientific Reports</i> , 2016, 6, 23398.                                 | 1.6 | 62        |
| 159 | Zero-Gap Alkaline Water Electrolysis Using Ion-Solvating Polymer Electrolyte Membranes at Reduced KOH Concentrations. <i>Journal of the Electrochemical Society</i> , 2016, 163, F3125-F3131.   | 1.3 | 97        |
| 160 | Semiconductor Electrolyte Interfaces: Theory, Experiment, and Applications in Photoelectrochemical Water Splitting. <i>Accounts of Chemical Research</i> , 2016, 49, 733-740.   | 7.6 | 281       |
| 161 | Oxygen Evolution Reaction Dynamics, Faradaic Charge Efficiency, and the Active Metal Redox States of Ni-Fe Oxide Water Splitting Electrocatalysts. <i>Journal of the American Chemical Society</i> , 2016, 138, 5603-5614.                | 6.6 | 888       |
| 162 | Bulky crystalline BiVO <sub>4</sub> thin films for efficient solar water splitting. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9858-9864.   | 5.2 | 40        |
| 163 | Surface-Oxidized Dicobalt Phosphide Nanoneedles as a Nonprecious, Durable, and Efficient OER Catalyst. <i>ACS Energy Letters</i> , 2016, 1, 169-174.  | 8.8 | 251       |
| 164 | Transparent Nanoparticulate FeOOH Improves the Performance of a WO <sub>3</sub> Photoanode in a Tandem Water-Splitting Device. <i>Journal of Physical Chemistry C</i> , 2016, 120, 10941-10950.   | 1.5 | 52        |
| 165 | Three-dimensional flexible electrode derived from low-cost nickel phytate with improved electrochemical performance. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9486-9495.  | 5.2 | 28        |
| 166 | Synthetic advancements and catalytic applications of nickel nitride. <i>Catalysis Science and Technology</i> , 2016, 6, 4059-4076.  | 2.1 | 45        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 167 | A Place in the Sun for Artificial Photosynthesis?. ACS Energy Letters, 2016, 1, 121-135.  | 8.8  | 163       |
| 168 | Enhanced photoelectrochemical water splitting via SILAR-deposited Ti-doped hematite thin films with an FeOOH overlayer. Journal of Materials Chemistry A, 2016, 4, 6495-6504.   | 5.2  | 36        |
| 169 | Atomically monodisperse nickel nanoclusters as highly active electrocatalysts for water oxidation. Nanoscale, 2016, 8, 9695-9703.   | 2.8  | 80        |
| 170 | Experimental and Computational Evidence of Highly Active Fe Impurity Sites on the Surface of Oxidized Au for the Electrocatalytic Oxidation of Water in Basic Media. ChemElectroChem, 2016, 3, 66-73.                                   | 1.7  | 44        |
| 171 | Engineering Band Edge Positions of Nickel Oxyhydroxide through Facet Selection. Journal of Physical Chemistry C, 2016, 120, 8104-8108.  | 1.5  | 34        |
| 172 | High catalytic activity of oxygen-induced (200) surface of Ta <sub>2</sub> O <sub>5</sub> nanolayer towards durable oxygen evolution reaction. Nano Energy, 2016, 25, 60-67.  | 8.2  | 36        |
| 173 | Development of efficient electrocatalysts via molecular hybridization of NiMn layered double hydroxide nanosheets and graphene. Nanoscale, 2016, 8, 10425-10432.  | 2.8  | 134       |
| 174 | Iron and nickel co-doped cobalt hydroxide nanosheets with enhanced activity for oxygen evolution reaction. RSC Advances, 2016, 6, 42255-42262.  | 1.7  | 37        |
| 175 | Vanadium nanobelts coated nickel foam 3D bifunctional electrode with excellent catalytic activity and stability for water electrolysis. Nanoscale, 2016, 8, 10731-10738.  | 2.8  | 78        |
| 176 | Ultra-durable two-electrode Zn <sup>2+</sup> /air secondary batteries based on bifunctional titania nanocatalysts: a Co <sup>2+</sup> dopant boosts the electrochemical activity. Journal of Materials Chemistry A, 2016, 4, 7841-7847. | 5.2  | 30        |
| 177 | Hierarchical iron nickel oxide architectures derived from metal-organic frameworks as efficient electrocatalysts for oxygen evolution reaction. Electrochimica Acta, 2016, 208, 17-24.  | 2.6  | 86        |
| 178 | General Strategy for the Synthesis of Transition Metal Phosphide Films for Electrocatalytic Hydrogen and Oxygen Evolution. ACS Applied Materials & Interfaces, 2016, 8, 12798-12803.  | 4.0  | 256       |
| 179 | Photoelectrochemical Solar Fuel Production. , 2016, , .   |      | 87        |
| 180 | The Oxygen Evolution Reaction: Mechanistic Concepts and Catalyst Design. , 2016, , 41-104.  |      | 81        |
| 181 | Advanced Photoelectrochemical Characterization: Principles and Applications of Dual-Working-Electrode Photoelectrochemistry. , 2016, , 323-351.   |      | 2         |
| 182 | Oxygen evolution catalytic behaviour of Ni doped Mn <sub>3</sub> O <sub>4</sub> in alkaline medium. RSC Advances, 2016, 6, 48995-49002.   | 1.7  | 57        |
| 183 | In situ decomposition of metal-organic frameworks into ultrathin nanosheets for the oxygen evolution reaction. Nano Research, 2016, 9, 1856-1865.   | 5.8  | 78        |
| 184 | An efficient bifunctional two-component catalyst for oxygen reduction and oxygen evolution in reversible fuel cells, electrolyzers and rechargeable air electrodes. Energy and Environmental Science, 2016, 9, 2020-2024.               | 15.6 | 221       |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 185 | Ultrafine NiO Nanosheets Stabilized by TiO <sub>2</sub> from Monolayer NiTi-LDH Precursors: An Active Water Oxidation Electrocatalyst. <i>Journal of the American Chemical Society</i> , 2016, 138, 6517-6524.                                | 6.6 | 597       |
| 186 | Coaxial ultrathin Co <sub>1-x</sub> Fe <sub>x</sub> O <sub>x</sub> nanosheet coating on carbon nanotubes for water oxidation with excellent activity. <i>RSC Advances</i> , 2016, 6, 80613-80620.   | 1.7 | 15        |
| 187 | Acidic or Alkaline? Towards a New Perspective on the Efficiency of Water Electrolysis. <i>Journal of the Electrochemical Society</i> , 2016, 163, F3197-F3208.  | 1.3 | 232       |
| 188 | In Situ Rapid Formation of a Nickel-Iron-Based Electrocatalyst for Water Oxidation. <i>ACS Catalysis</i> , 2016, 6, 6987-6992.  | 5.5 | 103       |
| 189 | Co <sub>4</sub> S <sub>3</sub> /Ni <sub>x</sub> S <sub>6</sub> (7 ≤ x ≤ 6)/NiOOH in-situ encapsulated carbon-based hybrid as a high-efficient oxygen electrode catalyst in alkaline media. <i>Electrochimica Acta</i> , 2016, 213, 163-173.   | 2.6 | 31        |
| 190 | Synthesis and characterization of Ni-P-Ag composite coating as efficient electrocatalyst for alkaline hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2016, 219, 377-385.   | 2.6 | 29        |
| 191 | Fe <sub>3</sub> O <sub>4</sub> @NiFe <sub>x</sub> O <sub>y</sub> Nanoparticles with Enhanced Electrocatalytic Properties for Oxygen Evolution in Carbonate Electrolyte. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 29461-29469. | 4.0 | 34        |
| 192 | Nanostructured Bifunctional Redox Electrocatalysts. <i>Small</i> , 2016, 12, 5656-5675.   | 5.2 | 174       |
| 193 | Toward a nanosized iron based water-oxidizing catalyst. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 22635-22642.  | 3.8 | 10        |
| 194 | Photoelectrochemical Investigation of the Mechanism of Enhancement of Water Oxidation at the Hematite Nanorod Array Modified with NiBi. <i>Journal of Physical Chemistry C</i> , 2016, 120, 22766-22776.                                      | 1.5 | 10        |
| 195 | Carbon-Coated Nickel Phosphide Nanosheets as Efficient Dual-Electrocatalyst for Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 27850-27858.  | 4.0 | 113       |
| 196 | Iron-Doped Nickel Phosphate as Synergistic Electrocatalyst for Water Oxidation. <i>Chemistry of Materials</i> , 2016, 28, 5659-5666.  | 3.2 | 262       |
| 197 | Solar-Driven H <sub>2</sub> O <sub>2</sub> Generation From H <sub>2</sub> O and O <sub>2</sub> Using Earth-Abundant Mixed-Metal Oxide@Carbon Nitride Photocatalysts. <i>ChemSusChem</i> , 2016, 9, 2470-2479.                                 | 3.6 | 75        |
| 198 | Dehydrated layered double hydroxides: Alcohothermal synthesis and oxygen evolution activity. <i>Nano Research</i> , 2016, 9, 3152-3161.   | 5.8 | 30        |
| 199 | Electrochemical Partial Reforming of Ethanol into Ethyl Acetate Using Ultrathin Co <sub>3</sub> O <sub>4</sub> Nanosheets as a Highly Selective Anode Catalyst. <i>ACS Central Science</i> , 2016, 2, 538-544.                                | 5.3 | 120       |
| 200 | Highly Conformal Deposition of an Ultrathin FeOOH Layer on a Hematite Nanostructure for Efficient Solar Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10854-10858.  | 7.2 | 200       |
| 201 | Highly Conformal Deposition of an Ultrathin FeOOH Layer on a Hematite Nanostructure for Efficient Solar Water Splitting. <i>Angewandte Chemie</i> , 2016, 128, 11012-11016.   | 1.6 | 32        |
| 202 | Electronic Structure of the (Undoped and Fe-Doped) NiOOH O <sub>2</sub> Evolution Electrocatalyst. <i>Journal of Physical Chemistry C</i> , 2016, 120, 18999-19010.   | 1.5 | 52        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 203 | A Cobalt-Based Film for Highly Efficient Electrocatalytic Water Oxidation in Neutral Aqueous Solution. <i>ChemCatChem</i> , 2016, 8, 2757-2760.  | 1.8  | 13        |
| 204 | On How Experimental Conditions Affect the Electrochemical Response of Disordered Nickel Oxyhydroxide Films. <i>Chemistry of Materials</i> , 2016, 28, 5635-5642.   | 3.2  | 22        |
| 205 | Designing efficient doped NiOOH catalysts for water splitting with first principles calculations. <i>ChemistrySelect</i> , 2016, 1, 911-916.   | 0.7  | 26        |
| 206 | Critical role of interfacial effects on the reactivity of semiconductor-cocatalyst junctions for photocatalytic oxygen evolution from water. <i>Catalysis Science and Technology</i> , 2016, 6, 6836-6844.   | 2.1  | 11        |
| 207 | Competent overall water-splitting electrocatalysts derived from ZIF-67 grown on carbon cloth. <i>RSC Advances</i> , 2016, 6, 73336-73342.  | 1.7  | 55        |
| 208 | Two-step synthesis of binary Ni-Fe sulfides supported on nickel foam as highly efficient electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2016, 4, 13499-13508.   | 5.2  | 250       |
| 209 | Ternary FeNiS <sub>2</sub> ultrathin nanosheets as an electrocatalyst for both oxygen evolution and reduction reactions. <i>Nano Energy</i> , 2016, 27, 526-534.   | 8.2  | 166       |
| 210 | Transition-Metal (Co, Ni, and Fe)-Based Electrocatalysts for the Water Oxidation Reaction. <i>Advanced Materials</i> , 2016, 28, 9266-9291.  | 11.1 | 1,392     |
| 211 | One-Step Hydrothermal Deposition of Ni:FeOOH onto Photoanodes for Enhanced Water Oxidation. <i>ACS Energy Letters</i> , 2016, 1, 624-632.  | 8.8  | 122       |
| 212 | Enhancement of oxygen evolution performance through synergetic action between NiFe metal core and NiFeO <sub>x</sub> shell. <i>Chemical Communications</i> , 2016, 52, 11803-11806.  | 2.2  | 40        |
| 213 | Iron-Nickel Nitride Nanostructures in Situ Grown on Surface-Redox-Etching Nickel Foam: Efficient and Ultrasustainable Electrocatalysts for Overall Water Splitting. <i>Chemistry of Materials</i> , 2016, 28, 6934-6941.   | 3.2  | 453       |
| 214 | Porous FeNi oxide nanosheets as advanced electrochemical catalysts for sustained water oxidation. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14939-14943.  | 5.2  | 63        |
| 215 | Electroactivity of Ni-Fe cathodes in alkaline water electrolysis and effect of corrosion. <i>Corrosion Science</i> , 2016, 112, 255-263.   | 3.0  | 21        |
| 216 | NiFe Layered-Double-Hydroxide-Derived NiO <sub>2</sub> /NiFe <sub>2</sub> O <sub>4</sub> /Reduced Graphene Oxide Architectures for Enhanced Electrocatalysis of Alkaline Water Splitting. <i>ChemElectroChem</i> , 2016, 3, 1927-1936.   | 1.7  | 64        |
| 217 | Rate Law Analysis of Water Oxidation and Hole Scavenging on a BiVO <sub>4</sub> Photoanode. <i>ACS Energy Letters</i> , 2016, 1, 618-623.  | 8.8  | 76        |
| 218 | X-ray Spectroscopic Characterization of Co(IV) and Metal-Metal Interactions in Co <sub>4</sub> O <sub>4</sub> : Electronic Structure Contributions to the Formation of High-Valent States Relevant to the Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2016, 138, 11017-11030. | 6.6  | 94        |
| 219 | Hierarchical NiFe Layered Double Hydroxide Hollow Microspheres with Highly-Efficient Behavior toward Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 33697-33703.  | 4.0  | 175       |
| 220 | Tandem Core-Shell Si <sub>3</sub> N <sub>5</sub> Photoanodes for Photoelectrochemical Water Splitting. <i>Nano Letters</i> , 2016, 16, 7565-7572.  | 4.5  | 99        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 221 | Direct Observation of Photoinduced Charge Separation in Ruthenium Complex/Ni(OH) <sub>2</sub> Nanoparticle Hybrid. <i>Scientific Reports</i> , 2016, 5, 18505.   | 1.6  | 6         |
| 222 | Role of Fe in the oxidation of methanol electrocatalyzed by Ni based layered double hydroxides: X-ray spectroscopic and electrochemical studies. <i>RSC Advances</i> , 2016, 6, 110976-110985.   | 1.7  | 24        |
| 223 | Fe <sub>2</sub> O <sub>3</sub> hollow nanorods/CNT composites as an efficient electrocatalyst for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2016, 222, 1316-1325.  | 2.6  | 82        |
| 224 | Anion and Cation Modulation in Metal Compounds for Bifunctional Overall Water Splitting. <i>ACS Nano</i> , 2016, 10, 8738-8745.  | 7.3  | 376       |
| 225 | Solar-Driven Reduction of 1 atm of CO <sub>2</sub> to Formate at 10% Energy-Conversion Efficiency by Use of a TiO <sub>2</sub> -Protected III-V Tandem Photoanode in Conjunction with a Bipolar Membrane and a Pd/C Cathode. <i>ACS Energy Letters</i> , 2016, 1, 764-770. | 8.8  | 173       |
| 226 | Porous cobalt-iron nitride nanowires as excellent bifunctional electrocatalysts for overall water splitting. <i>Chemical Communications</i> , 2016, 52, 12614-12617.   | 2.2  | 251       |
| 227 | An efficient and inexpensive water-oxidizing manganese-based oxide electrode. <i>Dalton Transactions</i> , 2016, 45, 16948-16954.  | 1.6  | 13        |
| 228 | Ternary Metal Phosphide with Triple-Layered Structure as a Low-Cost and Efficient Electrocatalyst for Bifunctional Water Splitting. <i>Advanced Functional Materials</i> , 2016, 26, 7644-7651.  | 7.8  | 389       |
| 229 | Disclosing the High Activity of Ceramic Metallics in the Oxygen Evolution Reaction: Nickel Materials as a Case Study. <i>ChemSusChem</i> , 2016, 9, 2928-2932.   | 3.6  | 25        |
| 230 | Highly Ordered Mesoporous Bimetallic Phosphides as Efficient Oxygen Evolution Electrocatalysts. <i>ACS Energy Letters</i> , 2016, 1, 792-796.  | 8.8  | 139       |
| 231 | A Gibeon meteorite yields a high-performance water oxidation electrocatalyst. <i>Energy and Environmental Science</i> , 2016, 9, 3448-3455.  | 15.6 | 35        |
| 232 | In Situ Coupling of Strung Co <sub>4</sub> N and Intertwined N-C Fibers toward Free-Standing Bifunctional Cathode for Robust, Efficient, and Flexible Zn-Air Batteries. <i>Journal of the American Chemical Society</i> , 2016, 138, 10226-10231.                          | 6.6  | 839       |
| 233 | Nanostructured hybrid NiFeOOH/CNT electrocatalysts for oxygen evolution reaction with low overpotential. <i>RSC Advances</i> , 2016, 6, 74536-74544.   | 1.7  | 28        |
| 234 | Electrocatalytic Performance and Stability of Nanostructured Fe-Ni Pyrite-Type Diphosphide Catalyst Supported on Carbon Paper. <i>Journal of Physical Chemistry C</i> , 2016, 120, 16537-16544.  | 1.5  | 53        |
| 235 | Identification of Surface Reactivity Descriptor for Transition Metal Oxides in Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2016, 138, 9978-9985.  | 6.6  | 345       |
| 236 | Electro-Oxidation of Ni <sub>42</sub> Steel: A Highly Active Bifunctional Electrocatalyst. <i>Advanced Functional Materials</i> , 2016, 26, 6402-6417.   | 7.8  | 90        |
| 237 | Simultaneous H <sub>2</sub> Generation and Biomass Upgrading in Water by an Efficient Noble-Metal-Free Bifunctional Electrocatalyst. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9913-9917.   | 7.2  | 435       |
| 238 | Ni-Fe-Based (Oxy)hydroxide Catalysts for Oxygen Evolution Reaction in Non-Acidic Electrolytes. <i>Advanced Energy Materials</i> , 2016, 6, 1600621.  | 10.2 | 765       |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 239 | Simultaneous H <sub>2</sub> Generation and Biomass Upgrading in Water by an Efficient Noble-Metal-Free Bifunctional Electrocatalyst. <i>Angewandte Chemie</i> , 2016, 128, 10067-10071.  | 1.6  | 94        |
| 240 | Benchmarking Density Functional Theory Based Methods To Model NiOOH Material Properties: Hubbard and van der Waals Corrections vs Hybrid Functionals. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 3807-3812.               | 2.3  | 47        |
| 241 | Exploring the kinetic and thermodynamic aspects of four-electron electrochemical reactions: electrocatalysis of oxygen evolution by metal oxides and biological systems. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 22364-22372. | 1.3  | 20        |
| 242 | Nickel-vanadium monolayer double hydroxide for efficient electrochemical water oxidation. <i>Nature Communications</i> , 2016, 7, 11981.   | 5.8  | 808       |
| 243 | Gold-supported cerium-doped NiOx catalysts for water oxidation. <i>Nature Energy</i> , 2016, 1, .  | 19.8 | 458       |
| 244 | Parameterization of Water Electrooxidation Catalyzed by Metal Oxides Using Fourier Transformed Alternating Current Voltammetry. <i>Journal of the American Chemical Society</i> , 2016, 138, 16095-16104.                                    | 6.6  | 48        |
| 245 | Performance Limits of Photoelectrochemical CO <sub>2</sub> Reduction Based on Known Electrocatalysts and the Case for Two-Electron Reduction Products. <i>Chemistry of Materials</i> , 2016, 28, 8844-8850.                                  | 3.2  | 30        |
| 246 | Low Overpotential Water Splitting Using Cobalt-Cobalt Phosphide Nanoparticles Supported on Nickel Foam. <i>ACS Energy Letters</i> , 2016, 1, 1192-1198.  | 8.8  | 143       |
| 247 | ACS Energy Letters: Elevating Solar Fuels and Electrocatalysis Research. <i>ACS Energy Letters</i> , 2016, 1, 920-921.   | 8.8  | 7         |
| 248 | Enhanced Water Oxidation Catalysis of Nickel Oxyhydroxide through the Addition of Vacancies. <i>Journal of Physical Chemistry C</i> , 2016, 120, 25405-25410.  | 1.5  | 43        |
| 249 | A nickel iron diselenide-derived efficient oxygen-evolution catalyst. <i>Nature Communications</i> , 2016, 7, 12324.   | 5.8  | 807       |
| 250 | Generation of Transparent Oxygen Evolution Electrode Consisting of Regularly Ordered Nanoparticles from Self-Assembly Cobalt Phthalocyanine as a Template. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 32376-32384.             | 4.0  | 12        |
| 251 | Synergistic Electrochemical CO <sub>2</sub> Reduction and Water Oxidation with a Bipolar Membrane. <i>ACS Energy Letters</i> , 2016, 1, 1143-1148.   | 8.8  | 134       |
| 252 | Recent Trends and Perspectives in Electrochemical Water Splitting with an Emphasis on Sulfide, Selenide, and Phosphide Catalysts of Fe, Co, and Ni: A Review. <i>ACS Catalysis</i> , 2016, 6, 8069-8097.                                     | 5.5  | 1,936     |
| 253 | Detection of Intermediate Species in Oxygen Evolution on Hematite Electrodes Using Spectroelectrochemical Measurements. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24827-24834.   | 1.5  | 48        |
| 254 | Hierarchical nickel-cobalt phosphide yolk-shell spheres as highly active and stable bifunctional electrocatalysts for overall water splitting. <i>Nanoscale</i> , 2016, 8, 19129-19138.  | 2.8  | 140       |
| 255 | Synthesis of Cobalt Sulfide/Sulfur Doped Carbon Nanocomposites with Efficient Catalytic Activity in the Oxygen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2016, 22, 18259-18264.  | 1.7  | 43        |
| 256 | Earth-Abundant Heterogeneous Water Oxidation Catalysts. <i>Chemical Reviews</i> , 2016, 116, 14120-14136.  | 23.0 | 1,259     |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 257 | A Frontâ€illuminated Nanostructured Transparent BiVO <sub>4</sub> Photoanode for >2% Efficient Water Splitting. <i>Advanced Energy Materials</i> , 2016, 6, 1501645.   | 10.2 | 313       |
| 258 | Amorphous Cobalt Boride (Co <sub>2</sub> B) as a Highly Efficient Nonprecious Catalyst for Electrochemical Water Splitting: Oxygen and Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2016, 6, 1502313.                                   | 10.2 | 686       |
| 259 | The Role of Anions in Metal Chalcogenide Oxygen Evolution Catalysis: Electrodeposited Thin Films of Nickel Sulfide as â€Pre-catalystsâ€. <i>ACS Energy Letters</i> , 2016, 1, 195-201.  | 8.8  | 328       |
| 260 | Converting CoMoO <sub>4</sub> into CoO/MoO <sub>x</sub> for Overall Water Splitting by Hydrogenation. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 3743-3749.  | 3.2  | 134       |
| 261 | Three fundamental questions on one of our best water oxidation catalysts: a critical perspective. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.   | 0.5  | 25        |
| 262 | Ni-based heterogeneous catalyst from a designed molecular precursor for the efficient electrochemical water oxidation. <i>Chemical Communications</i> , 2016, 52, 9255-9258.  | 2.2  | 21        |
| 263 | Efficient and Stable Evolution of Oxygen Using Pulse-Electrodeposited Ir/Ni Oxide Catalyst in Fe-Spiked KOH Electrolyte. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 15985-15990.  | 4.0  | 46        |
| 264 | Production of Ni(OH) <sub>2</sub> nanosheets by liquid phase exfoliation: from optical properties to electrochemical applications. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11046-11059.  | 5.2  | 71        |
| 265 | Oxidatively Electrodeposited Thin-Film Transition Metal (Oxy)hydroxides as Oxygen Evolution Catalysts. <i>Journal of the American Chemical Society</i> , 2016, 138, 8946-8957.  | 6.6  | 376       |
| 266 | Nanostructured catalysts for electrochemical water splitting: current state and prospects. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11973-12000.  | 5.2  | 823       |
| 267 | Fe/Ni Metalâ€Organic Frameworks and Their Binder-Free Thin Films for Efficient Oxygen Evolution with Low Overpotential. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 16736-16743.  | 4.0  | 198       |
| 268 | Proton-Induced Trap States, Injection and Recombination Dynamics in Water-Splitting Dye-Sensitized Photoelectrochemical Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 16727-16735.  | 4.0  | 35        |
| 269 | Mn-doping and NiFe layered double hydroxide coating: Effective approaches to enhancing the performance of Î±-Fe <sub>2</sub> O <sub>3</sub> in photoelectrochemical water oxidation. <i>Journal of Catalysis</i> , 2016, 340, 261-269.            | 3.1  | 107       |
| 270 | Metalâ€organic framework-derived hybrid of Fe <sub>3</sub> C nanorod-encapsulated, N-doped CNTs on porous carbon sheets for highly efficient oxygen reduction and water oxidation. <i>Catalysis Science and Technology</i> , 2016, 6, 6365-6371. | 2.1  | 63        |
| 271 | A novel Ni-Schiff base complex derived electrocatalyst for oxygen evolution reaction. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 2737-2747.   | 1.2  | 8         |
| 272 | Bifunctional Porous NiFe/NiCo <sub>2</sub> O <sub>4</sub> /Ni Foam Electrodes with Triple Hierarchy and Double Synergies for Efficient Whole Cell Water Splitting. <i>Advanced Functional Materials</i> , 2016, 26, 3515-3523.                    | 7.8  | 545       |
| 273 | Graphitic Nanoshell/Mesoporous Carbon Nanohybrids as Highly Efficient and Stable Bifunctional Oxygen Electrocatalysts for Rechargeable Aqueous Naâ€Air Batteries. <i>Advanced Energy Materials</i> , 2016, 6, 1501794.                           | 10.2 | 120       |
| 274 | A Nickelâ€Based Integrated Electrode from an Autologous Growth Strategy for Highly Efficient Water Oxidation. <i>Advanced Energy Materials</i> , 2016, 6, 1502489.   | 10.2 | 138       |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 275 | Back-Illuminated Si-Based Photoanode with Nickel Cobalt Oxide Catalytic Protection Layer. <i>ChemElectroChem</i> , 2016, 3, 1546-1552.   | 1.7  | 22        |
| 276 | Temperature Dependence of Electrocatalytic and Photocatalytic Oxygen Evolution Reaction Rates Using NiFe Oxide. <i>ACS Catalysis</i> , 2016, 6, 1713-1722.   | 5.5  | 145       |
| 277 | A highly active oxygen evolution electrocatalyst: Ultrathin CoNi double hydroxide/CoO nanosheets synthesized via interface-directed assembly. <i>Nano Research</i> , 2016, 9, 713-725.                     | 5.8  | 171       |
| 278 | Vapor-Phase Atomic Layer Deposition of Nickel Sulfide and Its Application for Efficient Oxygen-Evolution Electrocatalysis. <i>Chemistry of Materials</i> , 2016, 28, 1155-1164.                            | 3.2  | 144       |
| 279 | First row transition metal catalysts for solar-driven water oxidation produced by electrodeposition. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6724-6741.   | 5.2  | 80        |
| 280 | Unprecedented metal-free 3D porous carbonaceous electrodes for full water splitting. <i>Energy and Environmental Science</i> , 2016, 9, 1210-1214.   | 15.6 | 291       |
| 281 | Tuning Composition and Activity of Cobalt Titanium Oxide Catalysts for the Oxygen Evolution Reaction. <i>Electrochimica Acta</i> , 2016, 193, 240-245.   | 2.6  | 26        |
| 282 | Ordered Mesoporous Nickel Sphere Arrays for Highly Efficient Electrocatalytic Water Oxidation. <i>ACS Catalysis</i> , 2016, 6, 1446-1450.  | 5.5  | 105       |
| 283 | Efficient Electrochemical Water Splitting Catalyzed by Electrodeposited Nickel Diselenide Nanoparticles Based Film. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 4718-4723.                    | 4.0  | 239       |
| 284 | Iron triad (Fe, Co, Ni) ternary phosphide nanosheet arrays as high-performance bifunctional electrodes for full water splitting in basic and neutral conditions. <i>RSC Advances</i> , 2016, 6, 9647-9655. | 1.7  | 64        |
| 285 | The importance of nickel oxyhydroxide deprotonation on its activity towards electrochemical water oxidation. <i>Chemical Science</i> , 2016, 7, 2639-2645.   | 3.7  | 494       |
| 286 | Facile Synthesis of Nickel-Iron/Nanocarbon Hybrids as Advanced Electrocatalysts for Efficient Water Splitting. <i>ACS Catalysis</i> , 2016, 6, 580-588.  | 5.5  | 354       |
| 287 | Development of solar fuels photoanodes through combinatorial integration of Ni-La-Co-Ce oxide catalysts on BiVO <sub>4</sub> . <i>Energy and Environmental Science</i> , 2016, 9, 565-580.                 | 15.6 | 61        |
| 288 | Voltammetric Study and Electrodeposition of Ni(II)/Fe(II) in the Ionic Liquid 1-Butyl-1-Methylpyrrolidinium Dicyanamide. <i>Journal of the Electrochemical Society</i> , 2016, 163, D9-D16.                | 1.3  | 27        |
| 289 | Effect of interlayer anions on [NiFe]-LDH nanosheet water oxidation activity. <i>Energy and Environmental Science</i> , 2016, 9, 1734-1743.  | 15.6 | 446       |
| 290 | Homogeneously dispersed multimetal oxygen-evolving catalysts. <i>Science</i> , 2016, 352, 333-337.   | 6.0  | 1,948     |
| 291 | Alkoxide-intercalated NiFe-layered double hydroxides magnetic nanosheets as efficient water oxidation electrocatalysts. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 478-487.                           | 3.0  | 58        |
| 292 | Amorphous mixed-metal hydroxide nanostructures for advanced water oxidation catalysts. <i>Nanoscale</i> , 2016, 8, 5015-5023.  | 2.8  | 60        |



| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 293 | Iron vs Aluminum Based Layered Double Hydroxides as Water Splitting Catalysts. <i>Electrochimica Acta</i> , 2016, 188, 653-660.   | 2.6  | 49        |
| 294 | Guest-host modulation of multi-metallic (oxy)hydroxides for superb water oxidation. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3210-3216.   | 5.2  | 62        |
| 295 | Accounting for the Dynamic Oxidative Behavior of Nickel Anodes. <i>Journal of the American Chemical Society</i> , 2016, 138, 1561-1567.   | 6.6  | 91        |
| 296 | Precious-metal-free Co-Fe-O coupled nitrogen-enriched porous carbon nanosheets derived from Schiff-base porous polymers as superior electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6505-6512.                       | 5.2  | 89        |
| 297 | Effects of Intentionally Incorporated Metal Cations on the Oxygen Evolution Electrocatalytic Activity of Nickel (Oxy)hydroxide in Alkaline Media. <i>ACS Catalysis</i> , 2016, 6, 2416-2423.  | 5.5  | 199       |
| 298 | Highly-active oxygen evolution electrocatalyzed by a Fe-doped NiSe nanoflake array electrode. <i>Chemical Communications</i> , 2016, 52, 4529-4532.   | 2.2  | 116       |
| 299 | Carbon coated porous nickel phosphides nanoplates for highly efficient oxygen evolution reaction. <i>Energy and Environmental Science</i> , 2016, 9, 1246-1250.   | 15.6 | 839       |
| 300 | Amorphous Ni-B alloy nanoparticle film on Ni foam: rapid alternately dipping deposition for efficient overall water splitting. <i>Nanotechnology</i> , 2016, 27, 12LT01.  | 1.3  | 86        |
| 301 | Stainless steel as an efficient electrocatalyst for water oxidation in alkaline solution. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 5230-5233.  | 3.8  | 75        |
| 302 | Effect of doping $\text{Ni}^{2+}$ -NiOOH with Co on the catalytic oxidation of water: DFT+U calculations. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 7490-7501.   | 1.3  | 32        |
| 303 | High Activity Oxygen Evolution Reaction Catalysts from Additive-Controlled Electrodeposited Ni and NiFe Films. <i>ACS Catalysis</i> , 2016, 6, 1159-1164.   | 5.5  | 146       |
| 304 | Surface Interrogation Scanning Electrochemical Microscopy of $\text{Ni}_x\text{Fe}_x\text{OOH}$ (0 <math>x</math> <math>\leq 0.27) Oxygen Evolving Catalyst: Kinetics of the $\text{Fe}$ -Iron Sites. <i>Journal of the American Chemical Society</i> , 2016, 138, 313-318. | 6.6  | 280       |
| 305 | Ambient-Pressure XPS Study of a Ni-Fe Electrocatalyst for the Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2016, 120, 2247-2253.   | 1.5  | 336       |
| 306 | When Layered Nickel-Cobalt Silicate Hydroxide Nanosheets Meet Carbon Nanotubes: A Synergetic Coaxial Nanocable Structure for Enhanced Electrocatalytic Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 945-951.                                   | 4.0  | 97        |
| 307 | Charge-Transfer Effects in Ni-Fe and Ni-Fe-Co Mixed-Metal Oxides for the Alkaline Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2016, 6, 155-161.   | 5.5  | 413       |
| 308 | In-grown structure of NiFe mixed metal oxides and CNT hybrid catalysts for oxygen evolution reaction. <i>Chemical Communications</i> , 2016, 52, 1439-1442.   | 2.2  | 74        |
| 309 | Nickel selenide as a high-efficiency catalyst for oxygen evolution reaction. <i>Energy and Environmental Science</i> , 2016, 9, 1771-1782.  | 15.6 | 632       |
| 310 | Protection of inorganic semiconductors for sustained, efficient photoelectrochemical water oxidation. <i>Catalysis Today</i> , 2016, 262, 11-23.  | 2.2  | 87        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 311 | Transition metal based layered double hydroxides tailored for energy conversion and storage. <i>Materials Today</i> , 2016, 19, 213-226.  | 8.3  | 464       |
| 312 | Solar Energy for Fuels. <i>Topics in Current Chemistry</i> , 2016, , .  | 4.0  | 7         |
| 313 | Improving the stability and selectivity for the oxygen-evolution reaction on semiconducting $WO_3$ photoelectrodes with a solid-state $FeOOH$ catalyst. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2960-2968.                                 | 5.2  | 55        |
| 314 | Dimensionally stable Ni Fe@Co/Ti nanoporous electrodes by reactive deposition for water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 7143-7150.  | 3.8  | 5         |
| 315 | Highly Active Three-Dimensional NiFe/Cu <sub>2</sub> O Nanowires/Cu Foam Electrode for Water Oxidation. <i>ChemSusChem</i> , 2017, 10, 1475-1481.   | 3.6  | 53        |
| 316 | In situ electrochemical formation of core-shell nickel-iron disulfide and oxyhydroxide heterostructured catalysts for a stable oxygen evolution reaction and the associated mechanisms. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4335-4342. | 5.2  | 166       |
| 317 | Direct growth of ternary Ni-Fe-P porous nanorods onto nickel foam as a highly active, robust bi-functional electrocatalyst for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2496-2503.                                 | 5.2  | 172       |
| 318 | Ultrafast Electrodeposition of Ni-Fe Hydroxide Nanosheets on Nickel Foam as Oxygen Evolution Anode for Energy-Saving Electrolysis of $Na_2CO_3/NaHCO_3$ . <i>ChemElectroChem</i> , 2017, 4, 1044-1050.  | 1.7  | 31        |
| 319 | Mixed-Metal Tungsten Oxide Photoanode Materials Made by Pulsed-Laser in Liquids Synthesis. <i>ChemPhysChem</i> , 2017, 18, 1091-1100.   | 1.0  | 14        |
| 320 | Petal-like hierarchical array of ultrathin $Ni(OH)_2$ nanosheets decorated with $Ni(OH)_2$ nanoburls: a highly efficient OER electrocatalyst. <i>Catalysis Science and Technology</i> , 2017, 7, 882-893.   | 2.1  | 123       |
| 321 | Intralayered Ostwald Ripening to Ultrathin Nanomesh Catalyst with Robust Oxygen-Evolving Performance. <i>Advanced Materials</i> , 2017, 29, 1604765.  | 11.1 | 283       |
| 322 | A Thin NiFe Hydroxide Film Formed by Stepwise Electrodeposition Strategy with Significantly Improved Catalytic Water Oxidation Efficiency. <i>Advanced Energy Materials</i> , 2017, 7, 1602547.   | 10.2 | 183       |
| 323 | Facile synthesis of pyrite-type binary nickel iron diselenides as efficient electrocatalyst for oxygen evolution reaction. <i>Applied Surface Science</i> , 2017, 401, 17-24.   | 3.1  | 63        |
| 324 | Hemin-mediated construction of iridium oxide with superior stability for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2959-2971.   | 5.2  | 15        |
| 325 | Mesoporous Ni-Fe oxide multi-composite hollow nanocages for efficient electrocatalytic water oxidation reactions. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4320-4324.   | 5.2  | 108       |
| 326 | Influence of iron doping on tetravalent nickel content in catalytic oxygen evolving films. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 1486-1491.   | 3.3  | 488       |
| 327 | Nickel enhanced the catalytic activities of amorphous copper for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4331-4334.   | 5.2  | 37        |
| 328 | Earth-abundant catalysts for electrochemical and photoelectrochemical water splitting. <i>Nature Reviews Chemistry</i> , 2017, 1, .   | 13.8 | 2,578     |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 329 | Tracking Catalyst Redox States and Reaction Dynamics in Ni <sup>II</sup> -Fe Oxyhydroxide Oxygen Evolution Reaction Electrocatalysts: The Role of Catalyst Support and Electrolyte pH. <i>Journal of the American Chemical Society</i> , 2017, 139, 2070-2082.   | 6.6  | 518       |
| 330 | Iron-chelated hydrogel-derived bifunctional oxygen electrocatalyst for high-performance rechargeable Zn <sup>II</sup> -air batteries. <i>Nano Research</i> , 2017, 10, 4436-4447.  | 5.8  | 98        |
| 331 | Electrocatalysis for the oxygen evolution reaction: recent development and future perspectives. <i>Chemical Society Reviews</i> , 2017, 46, 337-365.   | 18.7 | 4,505     |
| 332 | Junction behavior of n-Si photoanodes protected by thin Ni elucidated from dual working electrode photoelectrochemistry. <i>Energy and Environmental Science</i> , 2017, 10, 570-579.  | 15.6 | 91        |
| 333 | NixWO <sub>2.72</sub> nanorods as an efficient electrocatalyst for oxygen evolution reaction. <i>Green Energy and Environment</i> , 2017, 2, 119-123.  | 4.7  | 15        |
| 334 | Operando investigation of Au-MnO <sub>x</sub> thin films with improved activity for the oxygen evolution reaction. <i>Electrochimica Acta</i> , 2017, 230, 22-28.  | 2.6  | 39        |
| 335 | Transient Behavior of Ni@NiO <sub>x</sub> Functionalized SrTiO <sub>3</sub> in Overall Water Splitting. <i>ACS Catalysis</i> , 2017, 7, 1610-1614.   | 5.5  | 88        |
| 336 | Electrodeposition-Solvothermal Access to Ternary Mixed Metal Ni-Co-Fe Sulfides for Highly Efficient Electrocatalytic Water Oxidation in Alkaline Media. <i>Electrochimica Acta</i> , 2017, 230, 151-159.   | 2.6  | 54        |
| 337 | X-ray Photoelectron Spectroscopic Investigation of Plasma-Enhanced Chemical Vapor Deposited NiO <sub>x</sub> , NiO <sub>x</sub> (OH) <sub>y</sub> , and CoNiO <sub>x</sub> (OH) <sub>y</sub> : Influence of the Chemical Composition on the Catalytic Activity for the Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2017, 121, 6455-6463. | 1.5  | 202       |
| 338 | Silicone Nanofilament-Supported Mixed Nickel-Metal Oxides for Alkaline Water Electrolysis. <i>Journal of the Electrochemical Society</i> , 2017, 164, F203-F208.   | 1.3  | 7         |
| 339 | Fe-Treated Heteroatom (S/N/B/P)-Doped Graphene Electrocatalysts for Water Oxidation. <i>ACS Catalysis</i> , 2017, 7, 2381-2391.  | 5.5  | 99        |
| 340 | An efficient ternary CoP <sub>2x</sub> Se <sub>2(1-x)</sub> nanowire array for overall water splitting. <i>Nanoscale</i> , 2017, 9, 3995-4001.   | 2.8  | 72        |
| 341 | A comparison of the chemical, optical and electrocatalytic properties of water-oxidation catalysts for use in integrated solar-fuel generators. <i>Energy and Environmental Science</i> , 2017, 10, 987-1002.  | 15.6 | 50        |
| 342 | Photocurrent of BiVO <sub>4</sub> is limited by surface recombination, not surface catalysis. <i>Chemical Science</i> , 2017, 8, 3712-3719.  | 3.7  | 409       |
| 343 | One-Step In Situ Growth of Iron-Nickel Sulfide Nanosheets on FeNi Alloy Foils: High-Performance and Self-Supported Electrodes for Water Oxidation. <i>Small</i> , 2017, 13, 1604161.   | 5.2  | 177       |
| 344 | Preparation and phase transition of FeOOH nanorods: strain effects on catalytic water oxidation. <i>Nanoscale</i> , 2017, 9, 4751-4758.  | 2.8  | 50        |
| 345 | Ultrathin Iron-Cobalt Oxide Nanosheets with Abundant Oxygen Vacancies for the Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2017, 29, 1606793.  | 11.1 | 1,144     |
| 346 | A self-assembled Ni(cyclam)-BTC network on ITO for an oxygen evolution catalyst in alkaline solution. <i>Chemical Communications</i> , 2017, 53, 3454-3457.  | 2.2  | 11        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 347 | Strategies for stable water splitting via protected photoelectrodes. <i>Chemical Society Reviews</i> , 2017, 46, 1933-1954.  | 18.7 | 427       |
| 348 | Hexagonal Arrays of Cylindrical Nickel Microstructures for Improved Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 7036-7043.   | 4.0  | 21        |
| 349 | Ni <sup>II</sup> Coordination to an Al <sup>B</sup> -Based Metal-Organic Framework Made from 2-Aminoterephthalate for Photocatalytic Overall Water Splitting. <i>Angewandte Chemie</i> , 2017, 129, 3082-3086.                                     | 1.6  | 37        |
| 350 | Ni <sup>II</sup> Coordination to an Al <sup>B</sup> -Based Metal-Organic Framework Made from 2-Aminoterephthalate for Photocatalytic Overall Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3036-3040.              | 7.2  | 175       |
| 351 | Design and Application of Foams for Electrocatalysis. <i>ChemCatChem</i> , 2017, 9, 1721-1743.   | 1.8  | 245       |
| 352 | Promoting charge carrier utilization by integrating layered double hydroxide nanosheet arrays with porous BiVO <sub>4</sub> photoanode for efficient photoelectrochemical water splitting. <i>Science China Materials</i> , 2017, 60, 193-207.     | 3.5  | 57        |
| 353 | The secret behind the success of doping nickel oxyhydroxide with iron. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 7491-7497.   | 1.3  | 51        |
| 354 | Iron-doped NiCoO <sub>2</sub> nanoplates as efficient electrocatalysts for oxygen evolution reaction. <i>Applied Surface Science</i> , 2017, 407, 177-184.   | 3.1  | 40        |
| 355 | Electrochemical Carbon Dioxide Reduction at Nanostructured Gold, Copper, and Alloy Materials. <i>Energy Technology</i> , 2017, 5, 775-795.   | 1.8  | 108       |
| 356 | Characterization of NiFe oxyhydroxide electrocatalysts by integrated electronic structure calculations and spectroelectrochemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3050-3055. | 3.3  | 175       |
| 357 | FeCoNi Alloy as Noble Metal-Free Electrocatalyst for Oxygen Evolution Reaction (OER). <i>ChemistrySelect</i> , 2017, 2, 1630-1636.   | 0.7  | 66        |
| 358 | Multilayer Ni/Fe thin films as oxygen evolution catalysts for solar fuel production. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 104003.   | 1.3  | 15        |
| 359 | Valence- and element-dependent water oxidation behaviors: in situ X-ray diffraction, absorption and electrochemical impedance spectroscopies. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 8681-8693.                                    | 1.3  | 80        |
| 360 | Electrochemical Hydrogen Evolution at Ordered Mo <sub>7</sub> Ni <sub>7</sub> . <i>ACS Catalysis</i> , 2017, 7, 3375-3383.   | 5.5  | 62        |
| 361 | Standardized Benchmarking of Water Splitting Catalysts in a Combined Electrochemical Flow Cell/Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES) Setup. <i>ACS Catalysis</i> , 2017, 7, 3768-3778.                                | 5.5  | 73        |
| 362 | Highly active Ni-Fe double hydroxides as anode catalysts for electrooxidation of urea. <i>New Journal of Chemistry</i> , 2017, 41, 4190-4196.  | 1.4  | 79        |
| 363 | Stabilizing the MXenes by Carbon Nanoplatinating for Developing Hierarchical Nanohybrids with Efficient Lithium Storage and Hydrogen Evolution Capability. <i>Advanced Materials</i> , 2017, 29, 1607017.  | 11.1 | 583       |
| 364 | Improved Electrochemical Phase Diagrams from Theory and Experiment: The Ni-Water System and Its Complex Compounds. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9782-9789.  | 1.5  | 163       |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 365 | Photoelectrochemical Oxygen Evolution Reaction Activity of Amorphous Co <sup>2+</sup> /La Double Hydroxide-BiVO <sub>4</sub> Fabricated by Pulse Plating Electrodeposition. ACS Energy Letters, 2017, 2, 1062-1069.                                   | 8.8  | 51        |
| 366 | Facile and Scalable Synthesis of Robust Ni(OH) <sub>2</sub> Nanoplate Arrays on NiAl Foil as Hierarchical Active Scaffold for Highly Efficient Overall Water Splitting. Advanced Science, 2017, 4, 1700084.   | 5.6  | 85        |
| 367 | Cobalt-Borate Nanoarray: An Efficient and Durable Electrocatalyst for Water Oxidation under Benign Conditions. ACS Applied Materials & Interfaces, 2017, 9, 15383-15387.  | 4.0  | 30        |
| 368 | In situ growth of ultrathin Ni <sup>2+</sup> /Fe LDH nanosheets for high performance oxygen evolution reaction. Inorganic Chemistry Frontiers, 2017, 4, 1173-1181.  | 3.0  | 57        |
| 369 | Anionic Regulated NiFe (Oxy)Sulfide Electrocatalysts for Water Oxidation. Small, 2017, 13, 1700610.   | 5.2  | 150       |
| 370 | Influence on the Electrocatalytic Water Oxidation of M <sup>2+</sup> /M <sup>3+</sup> Cation Arrangement in NiFe LDH: Experimental and Theoretical DFT Evidences. Electrocatalysis, 2017, 8, 383-391.   | 1.5  | 15        |
| 371 | Highly active catalyst derived from a 3D foam of Fe(PO <sub>3</sub> ) <sub>2</sub> /Ni <sub>2</sub> P for extremely efficient water oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5607-5611. | 3.3  | 302       |
| 372 | Ni <sup>2+</sup> /Fe Nitride Nanoplates on Nitrogen-Doped Graphene as a Synergistic Catalyst for Reversible Oxygen Evolution Reaction and Rechargeable Zn-Air Battery. Small, 2017, 13, 1700099.  | 5.2  | 151       |
| 373 | Electronic structure of $\gamma$ -NiOOH with hydrogen vacancies and implications for energy conversion applications. MRS Communications, 2017, 7, 206-213.  | 0.8  | 4         |
| 374 | Theoretical Insights to Bulk Activity Towards Oxygen Evolution in Oxyhydroxides. Catalysis Letters, 2017, 147, 1533-1539.   | 1.4  | 43        |
| 375 | Evaluation of electrodeposited $\gamma$ -Mn <sub>2</sub> O <sub>3</sub> as a catalyst for the oxygen evolution reaction. Catalysis Today, 2017, 290, 2-9.   | 2.2  | 65        |
| 376 | Hydrothermal Synthesis of Monolithic Co <sub>3</sub> Se <sub>4</sub> Nanowire Electrodes for Oxygen Evolution and Overall Water Splitting with High Efficiency and Extraordinary Catalytic Stability. Advanced Energy Materials, 2017, 7, 1602579.    | 10.2 | 267       |
| 377 | On the Electrolytic Stability of Iron-Nickel Oxides. Chem, 2017, 2, 590-597.  | 5.8  | 104       |
| 378 | Self-Assembled Molecular Hybrids of CoS-DNA for Enhanced Water Oxidation with Low Cobalt Content. Inorganic Chemistry, 2017, 56, 6734-6745.   | 1.9  | 93        |
| 379 | Electrochemically Identified Ultrathin Water-Oxidation Catalyst in Neutral pH Solution Containing Ni <sup>2+</sup> and Its Combination with Photoelectrode. ACS Omega, 2017, 2, 432-442.  | 1.6  | 13        |
| 380 | Enhanced Electrocatalytic Oxygen Evolution in Au <sup>2+</sup> /Fe Nanoalloys. Angewandte Chemie - International Edition, 2017, 56, 6589-6593.  | 7.2  | 72        |
| 381 | Oxygen evolution reaction over Fe site of BaZr <sub>x</sub> Fe <sub>1-x</sub> O <sub>3-<math>\delta</math></sub> perovskite oxides. Electrochimica Acta, 2017, 241, 433-439.  | 2.6  | 67        |
| 382 | Enhanced Electrocatalytic Oxygen Evolution in Au <sup>2+</sup> /Fe Nanoalloys. Angewandte Chemie, 2017, 129, 6689-6693.   | 1.6  | 5         |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 383 | Partial-sacrificial-template Synthesis of Fe/Ni Phosphides on Ni Foam: a Strongly Stabilized and Efficient Catalyst for Electrochemical Water Splitting. <i>Electrochimica Acta</i> , 2017, 242, 260-267.   | 2.6  | 61        |
| 384 | Design of template-stabilized active and earth-abundant oxygen evolution catalysts in acid. <i>Chemical Science</i> , 2017, 8, 4779-4794.   | 3.7  | 172       |
| 385 | Ultrafine Metal Nanoparticles/Ni-Doped Porous Carbon Hybrids Coated on Carbon Fibers as Flexible and Binder-Free Water Splitting Catalysts. <i>Advanced Energy Materials</i> , 2017, 7, 1700220.  | 10.2 | 156       |
| 386 | Highly Sensitive Nonenzymatic Glucose Sensor Based on 3D Ultrathin NiFe Layered Double Hydroxide Nanosheets. <i>Electroanalysis</i> , 2017, 29, 1755-1761.  | 1.5  | 63        |
| 387 | In situ formation of highly active Ni-Fe based oxygen-evolving electrocatalysts via simple reactive dip-coating. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11009-11015.  | 5.2  | 85        |
| 388 | Integrating natural biomass electro-oxidation and hydrogen evolution: using a porous Fe-doped CoP nanosheet array as a bifunctional catalyst. <i>Chemical Communications</i> , 2017, 53, 5710-5713.   | 2.2  | 138       |
| 389 | NiFe Alloy Protected Silicon Photoanode for Efficient Water Splitting. <i>Advanced Energy Materials</i> , 2017, 7, 1601805.   | 10.2 | 109       |
| 390 | Core-shell structured Ni <sub>2</sub> P <sub>5</sub> /Ni <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> hollow spheres as difunctional and efficient electrocatalysts for overall water electrolysis. <i>Applied Catalysis B: Environmental</i> , 2017, 204, 486-496. | 10.8 | 148       |
| 391 | One-step electroreductively deposited iron-cobalt composite films as efficient bifunctional electrocatalysts for overall water splitting. <i>Nano Energy</i> , 2017, 38, 576-584.   | 8.2  | 65        |
| 392 | Efficient Overall Water-Splitting Electrocatalysis Using Lepidocrocite VOOH Hollow Nanospheres. <i>Angewandte Chemie</i> , 2017, 129, 588-592.  | 1.6  | 63        |
| 393 | Multi-Component Fe-Ni Hydroxide Nanocatalyst for Oxygen Evolution and Methanol Oxidation Reactions under Alkaline Conditions. <i>ACS Catalysis</i> , 2017, 7, 365-379.  | 5.5  | 154       |
| 394 | Efficient Overall Water-Splitting Electrocatalysis Using Lepidocrocite VOOH Hollow Nanospheres. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 573-577.   | 7.2  | 209       |
| 395 | Binderless, Free-Standing Porous Interconnects of Ni-Fe Alloy Decorated Reduced Graphene Oxide for Oxygen Evolution Reaction. <i>Langmuir</i> , 2017, 33, 2-10.   | 1.6  | 30        |
| 396 | Understanding Structure-Dependent Catalytic Performance of Nickel Selenides for Electrochemical Water Oxidation. <i>ACS Catalysis</i> , 2017, 7, 310-315.   | 5.5  | 155       |
| 397 | Layered Fe-Substituted LiNiO <sub>2</sub> Electro-catalysts for High-Efficiency Oxygen Evolution Reaction. <i>ACS Energy Letters</i> , 2017, 2, 1654-1660.  | 8.8  | 46        |
| 398 | In situ surface engineering of nickel inverse opal for enhanced overall electrocatalytic water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14873-14880.   | 5.2  | 31        |
| 399 | Hierarchically structured, oxygen deficient, tungsten oxide morphologies for enhanced photoelectrochemical charge transfer and stability. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14898-14905.   | 5.2  | 33        |
| 400 | Exfoliation of layered double hydroxide solids into functional nanosheets. <i>Applied Clay Science</i> , 2017, 144, 60-78.  | 2.6  | 87        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 401 | Free-standing Holey Ni(OH) <sub>2</sub> Nanosheets with Enhanced Activity for Water Oxidation. <i>Small</i> , 2017, 13, 1700334.   | 5.2  | 97        |
| 402 | In situ/Operando studies of electrocatalysts using hard X-ray spectroscopy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2017, 221, 18-27.  | 0.8  | 53        |
| 403 | Influence of Electrolyte Cations on Ni(Fe)OOH Catalyzed Oxygen Evolution Reaction. <i>Chemistry of Materials</i> , 2017, 29, 4761-4767.  | 3.2  | 105       |
| 404 | Colloidal synthesis of iridium-iron nanoparticles for electrocatalytic oxygen evolution. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1199-1203.   | 2.5  | 19        |
| 405 | Monolithic Photoassisted Water Splitting Device Using Anodized Ni-Fe Oxygen Evolution Catalytic Substrate. <i>Advanced Energy Materials</i> , 2017, 7, 1700659.  | 10.2 | 35        |
| 406 | A Cost-Efficient Bifunctional Ultrathin Nanosheets Array for Electrochemical Overall Water Splitting. <i>Small</i> , 2017, 13, 1700355.  | 5.2  | 72        |
| 407 | Earth-abundant amorphous catalysts for electrolysis of water. <i>Chinese Journal of Catalysis</i> , 2017, 38, 991-1005.  | 6.9  | 66        |
| 408 | Hierarchically mesoporous nickel-iron nitride as a cost-efficient and highly durable electrocatalyst for Zn-air battery. <i>Nano Energy</i> , 2017, 39, 77-85.   | 8.2  | 216       |
| 409 | Amorphous Metallic NiFeP: A Conductive Bulk Material Achieving High Activity for Oxygen Evolution Reaction in Both Alkaline and Acidic Media. <i>Advanced Materials</i> , 2017, 29, 1606570.   | 11.1 | 441       |
| 410 | Topotactic reduction of layered double hydroxides for atomically thick two-dimensional non-noble-metal alloy. <i>Nano Research</i> , 2017, 10, 2988-2997.  | 5.8  | 38        |
| 411 | Enhancing electrocatalytic total water splitting at few layer Pt-NiFe layered double hydroxide interfaces. <i>Nano Energy</i> , 2017, 39, 30-43.   | 8.2  | 236       |
| 412 | Post-synthetic Immobilization of Ni Ions in a Porous Organic Polymer-Graphene Composite for Non-noble Metal Electrocatalytic Water Oxidation. <i>ChemCatChem</i> , 2017, 9, 2946-2951.   | 1.8  | 16        |
| 413 | Highly Stable Three-dimensional Porous Nickel-iron Nitride Nanosheets for Full Water Splitting at High Current Densities. <i>Chemistry - A European Journal</i> , 2017, 23, 10187-10194.   | 1.7  | 61        |
| 414 | Highly stable three-dimensional nickel-iron oxyhydroxide catalysts for oxygen evolution reaction at high current densities. <i>Electrochimica Acta</i> , 2017, 245, 770-779.   | 2.6  | 37        |
| 415 | Hierarchical Fe-doped NiO x nanotubes assembled from ultrathin nanosheets containing trivalent nickel for oxygen evolution reaction. <i>Nano Energy</i> , 2017, 38, 167-174.   | 8.2  | 160       |
| 416 | Highly active and durable electrocatalytic water oxidation by a NiB <sub>0.45</sub> /NiO core-shell heterostructured nanoparticulate film. <i>Nano Energy</i> , 2017, 38, 175-184.   | 8.2  | 71        |
| 417 | Electronic and Morphological Dual Modulation of Cobalt Carbonate Hydroxides by Mn Doping toward Highly Efficient and Stable Bifunctional Electrocatalysts for Overall Water Splitting. <i>Journal of the American Chemical Society</i> , 2017, 139, 8320-8328. | 6.6  | 745       |
| 418 | Pulsed laser-deposited n-Si/NiO <sub>x</sub> photoanodes for stable and efficient photoelectrochemical water splitting. <i>Catalysis Science and Technology</i> , 2017, 7, 2632-2638.  | 2.1  | 24        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 419 | Bimetallic Niâ€“Mo nitride nanotubes as highly active and stable bifunctional electrocatalysts for full water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13648-13658.  | 5.2 | 191       |
| 420 | Chemical Recognition of Active Oxygen Species on the Surface of Oxygen Evolution Reaction Electrocatalysts. <i>Angewandte Chemie</i> , 2017, 129, 8778-8782.  | 1.6 | 54        |
| 421 | Chemical Recognition of Active Oxygen Species on the Surface of Oxygen Evolution Reaction Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 8652-8656.   | 7.2 | 115       |
| 422 | An alkaline electro-activated Feâ€“Ni phosphide nanoparticle-stack array for high-performance oxygen evolution under alkaline and neutral conditions. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13329-13335.   | 5.2 | 135       |
| 423 | Laccase-Catalyzed Bioelectrochemical Oxidation of Water Assisted with Visible Light. <i>ACS Catalysis</i> , 2017, 7, 4881-4889.   | 5.5 | 20        |
| 424 | Adjusting the electronic structure by Ni incorporation: a generalized in situ electrochemical strategy to enhance water oxidation activity of oxyhydroxides. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13336-13340.  | 5.2 | 49        |
| 425 | Facile fabrication of robust 3D Feâ€“NiSe nanowires supported on nickel foam as a highly efficient, durable oxygen evolution catalyst. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14639-14645.  | 5.2 | 74        |
| 426 | Synthesis of Nickel Phosphide Electrocatalysts from Hybrid Metal Phosphonates. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 14013-14022.  | 4.0 | 59        |
| 427 | Study of the Oxygen Evolution Reaction Catalytic Behavior of $\text{Co}_{1-x}\text{Ni}_x\text{Fe}_2\text{O}_4$ in Alkaline Medium. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 13132-13141.  | 4.0 | 112       |
| 428 | In situ electrochemically converting $\text{Fe}_2\text{O}_3\text{-Ni(OH)}_2$ to $\text{NiFe}_2\text{O}_4\text{-NiOOH}$ : a highly efficient electrocatalyst towards water oxidation. <i>Science China Materials</i> , 2017, 60, 324-334.  | 3.5 | 107       |
| 429 | The effects of Al substitution and partial dissolution on ultrathin NiFeAl ternary layered double hydroxide nanosheets for oxygen evolution reaction in alkaline solution. <i>Nano Energy</i> , 2017, 35, 350-357.  | 8.2 | 237       |
| 430 | Manganeseâ€“Cobalt Oxide Cubanes Relevant to Manganese-Doped Water Oxidation Catalysts. <i>Journal of the American Chemical Society</i> , 2017, 139, 5579-5587.   | 6.6 | 47        |
| 431 | Atomic-scale topochemical preparation of crystalline $\text{Fe}^{3+}$ -doped $\text{Ni(OH)}_2$ for an ultrahigh-rate oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7753-7758.   | 5.2 | 80        |
| 432 | Ni Nanoparticles Decorated NiFe Layered Double Hydroxide as Bifunctional Electrochemical Catalyst. <i>Journal of the Electrochemical Society</i> , 2017, 164, H307-H310.  | 1.3 | 62        |
| 433 | Orthorhombic $\text{NiOOH}$ Nanosheet Arrays: Phase Conversion and Efficient Bifunctional Electrocatalysts for Full Water Splitting. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 3808-3818.   | 3.2 | 92        |
| 434 | Decorating unoxidized-carbon nanotubes with homogeneous Ni-Co spinel nanocrystals show superior performance for oxygen evolution/reduction reactions. <i>Scientific Reports</i> , 2017, 7, 45384.   | 1.6 | 48        |
| 435 | A general approach to synthesise ultrathin NiM (M = Fe, Co, Mn) hydroxide nanosheets as high-performance low-cost electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7769-7775.   | 5.2 | 94        |
| 436 | In situ characterization of cofacial $\text{Co(IV)}$ centers in $\text{Co}_4\text{O}_4$ cubane: Modeling the high-valent active site in oxygen-evolving catalysts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3855-3860. | 3.3 | 93        |



| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 437 | Impact of Silicon Resistivity on the Performance of Silicon Photoanode for Efficient Water Oxidation Reaction. <i>ACS Catalysis</i> , 2017, 7, 3277-3283.   | 5.5  | 35        |
| 438 | Microwave-assisted synthesis of a nanoamorphous (Ni <sub>0.8</sub> ,Fe <sub>0.2</sub> ) oxide oxygen-evolving electrocatalyst containing only $\alpha$ -sites. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11661-11670.                                      | 5.2  | 36        |
| 439 | A facile method to synthesize boron-doped Ni/Fe alloy nano-chains as electrocatalyst for water oxidation. <i>Journal of Power Sources</i> , 2017, 349, 68-74.   | 4.0  | 45        |
| 440 | Hierarchically Structured 3D Integrated Electrodes by Galvanic Replacement Reaction for Highly Efficient Water Splitting. <i>Advanced Energy Materials</i> , 2017, 7, 1700107.  | 10.2 | 116       |
| 441 | Three dimensionally ordered mesoporous hydroxylated Ni <sub>x</sub> Co <sub>3-x</sub> O <sub>4</sub> spinels for the oxygen evolution reaction: on the hydroxyl-induced surface restructuring effect. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7173-7183. | 5.2  | 52        |
| 442 | Investigating the behavior of various cocatalysts on LaTaON <sub>2</sub> photoanode for visible light water splitting. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 656-662.  | 1.3  | 33        |
| 443 | Photodeposited ruthenium dioxide films for oxygen evolution reaction electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1575-1580.  | 5.2  | 24        |
| 444 | An Operando Investigation of (Ni-Fe-Co-Ce)O <sub>x</sub> System as Highly Efficient Electrocatalyst for Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2017, 7, 1248-1258.   | 5.5  | 156       |
| 445 | Recent developments in electrochemical water oxidation. <i>Current Opinion in Electrochemistry</i> , 2017, 1, 40-45.  | 2.5  | 50        |
| 446 | Crystalline Cobalt Oxide Films for Sustained Electrocatalytic Oxygen Evolution under Strongly Acidic Conditions. <i>Chemistry of Materials</i> , 2017, 29, 950-957.   | 3.2  | 173       |
| 447 | A facile and efficient strategy to gram-scale preparation of composition-controllable Ni-Fe LDHs nanosheets for superior OER catalysis. <i>Electrochimica Acta</i> , 2017, 225, 303-309.  | 2.6  | 46        |
| 448 | Substitution of native silicon oxide by titanium in Ni-coated silicon photoanodes for water splitting solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1996-2003.  | 5.2  | 20        |
| 449 | Developments of Metal Phosphides as Efficient OER Precatalysts. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 144-152.  | 2.1  | 290       |
| 450 | Improving the performance of porous nickel foam for water oxidation using hydrothermally prepared Ni and Fe metal oxides. <i>Sustainable Energy and Fuels</i> , 2017, 1, 207-216.   | 2.5  | 38        |
| 451 | Vertically Aligned Porous Nickel(II) Hydroxide Nanosheets Supported on Carbon Paper with Long-Term Oxygen Evolution Performance. <i>Chemistry - an Asian Journal</i> , 2017, 12, 543-551.   | 1.7  | 118       |
| 452 | Highly efficient Fe <sub>x</sub> Ni <sub>1-x</sub> O <sub>y</sub> /CP electrode prepared via simple soaking and heating treatments for electrocatalytic water oxidation. <i>Journal of Energy Chemistry</i> , 2017, 26, 428-432.                                    | 7.1  | 15        |
| 453 | Ultrastable low-bias water splitting photoanodes via photocorrosion inhibition and in situ catalyst regeneration. <i>Nature Energy</i> , 2017, 2, .   | 19.8 | 298       |
| 454 | Enhancing Oxygen Evolution Reaction at High Current Densities on Amorphous-Like Ni-Fe-S Ultrathin Nanosheets via Oxygen Incorporation and Electrochemical Tuning. <i>Advanced Science</i> , 2017, 4, 1600343.   | 5.6  | 121       |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 455 | Materials for solar fuels and chemicals. <i>Nature Materials</i> , 2017, 16, 70-81.   | 13.3 | 1,163     |
| 456 | Amorphous Ni <sub>0.75</sub> Fe <sub>0.25</sub> (OH) <sub>2</sub> Decorated Layered Double Perovskite Pr <sub>0.5</sub> Ba <sub>0.5</sub> CoO <sub>3</sub> for Highly Efficient and Stable Water Oxidation. <i>ChemElectroChem</i> , 2017, 4, 550-556.      | 1.7  | 10        |
| 457 | Highly crystallized $\gamma$ -FeOOH for a stable and efficient oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2021-2028.   | 5.2  | 140       |
| 458 | Reduced Graphene Oxide Supported Nickel-Manganese-Cobalt Spinel Ternary Oxide Nanocomposites and Their Chemically Converted Sulfide Nanocomposites as Efficient Electrocatalysts for Alkaline Water Splitting. <i>ACS Catalysis</i> , 2017, 7, 819-832.     | 5.5  | 101       |
| 459 | Vertically Aligned FeOOH/NiFe Layered Double Hydroxides Electrode for Highly Efficient Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 464-471.   | 4.0  | 174       |
| 460 | Improving the catalytic performance of nickel-iron oxide to oxygen evolution reaction by refining its particles with the assistance of ionic liquid. <i>Ionics</i> , 2017, 23, 789-794.   | 1.2  | 6         |
| 461 | Electro-oxidation of a cobalt based steel in LiOH: a non-noble metal based electro-catalyst suitable for durable water-splitting in an acidic milieu. <i>Nanoscale</i> , 2017, 9, 17829-17838.  | 2.8  | 23        |
| 462 | Amorphous NiFe(oxy)hydroxide nanosheet integrated partially exfoliated graphite foil for high efficiency oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24208-24216.   | 5.2  | 63        |
| 463 | High-efficient electrocatalysts by unconventional acid-etching for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24153-24158.   | 5.2  | 26        |
| 464 | 3D nickel-cobalt diselenide nanonetwork for highly efficient oxygen evolution. <i>Science Bulletin</i> , 2017, 62, 1373-1379.   | 4.3  | 69        |
| 465 | Advances in efficient electrocatalysts based on layered double hydroxides and their derivatives. <i>Journal of Energy Chemistry</i> , 2017, 26, 1094-1106.  | 7.1  | 93        |
| 466 | Visualizing the Nano Cocatalyst Aligned Electric Fields on Single Photocatalyst Particles. <i>Nano Letters</i> , 2017, 17, 6735-6741.   | 4.5  | 164       |
| 467 | Fabrication of Nanoporous Nickel-Iron Hydroxylphosphate Composite as Bifunctional and Reversible Catalyst for Highly Efficient Intermittent Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 35837-35846.                          | 4.0  | 76        |
| 468 | Microwave-Assisted Synthesis of a Stainless Steel Mesh-Supported Co <sub>3</sub> O <sub>4</sub> Microrod Array As a Highly Efficient Catalyst for Electrochemical Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 11069-11079. | 3.2  | 35        |
| 469 | Iron hydroxyphosphate and Sn-incorporated iron hydroxyphosphate: efficient and stable electrocatalysts for oxygen evolution reaction. <i>Catalysis Science and Technology</i> , 2017, 7, 5092-5104.   | 2.1  | 34        |
| 470 | Recovered spinel MnCo <sub>2</sub> O <sub>4</sub> from spent lithium-ion batteries for enhanced electrocatalytic oxygen evolution in alkaline medium. <i>Dalton Transactions</i> , 2017, 46, 14382-14392.   | 1.6  | 72        |
| 471 | Chemical Insights from Theoretical Electronic States in Nickel Hydroxide and Monolayer Surface Model. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24603-24611.  | 1.5  | 5         |
| 472 | Surface and Interface Engineering for Photoelectrochemical Water Oxidation. <i>Joule</i> , 2017, 1, 290-305.  | 11.7 | 156       |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 473 | CoSe <sub>x</sub> nanocrystalline-dotted CoCo layered double hydroxide nanosheets: a synergetic engineering process for enhanced electrocatalytic water oxidation. <i>Nanoscale</i> , 2017, 9, 16256-16263.                                     | 2.8  | 38        |
| 474 | Potentiostatic phase formation of $\hat{I}^2$ -CoOOH on pulsed laser deposited biphasic cobalt oxide thin film for enhanced oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23053-23066.                                   | 5.2  | 50        |
| 475 | Overall Water Splitting with Room-Temperature Synthesized NiFe Oxyfluoride Nanoporous Films. <i>ACS Catalysis</i> , 2017, 7, 8406-8412.   | 5.5  | 91        |
| 476 | Mechanistic understanding on oxygen evolution reaction on $\hat{I}^3$ -FeOOH (010) under alkaline condition based on DFT computational study. <i>Chinese Journal of Catalysis</i> , 2017, 38, 1621-1628.  | 6.9  | 17        |
| 477 | Self-Supported Hierarchical FeCoNi-LTH/NiCo <sub>2</sub> O <sub>4</sub> /CC Electrodes with Enhanced Bifunctional Performance for Efficient Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 36917-36926.      | 4.0  | 76        |
| 478 | Chemical-state evolution of Ni in Mn Ni/polypyrrole nanocomposites under bifunctional air electrode conditions, investigated by quasi-in situ multi-scale soft X-ray absorption spectroscopy. <i>Materials Today Energy</i> , 2017, 6, 154-163. | 2.5  | 6         |
| 479 | Morphology Dynamics of Single-Layered Ni(OH) <sub>2</sub> /NiOOH Nanosheets and Subsequent Fe Incorporation Studied by <i>in Situ</i> Electrochemical Atomic Force Microscopy. <i>Nano Letters</i> , 2017, 17, 6922-6926.                       | 4.5  | 121       |
| 480 | Charge Transfer in Ultrafine LDH Nanosheets/Graphene Interface with Superior Capacitive Energy Storage Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 37645-37654.   | 4.0  | 134       |
| 481 | Ionic Processes in Water Electrolysis: The Role of Ion-Selective Membranes. <i>ACS Energy Letters</i> , 2017, 2, 2625-2634.   | 8.8  | 68        |
| 482 | Benzoate Anions-Intercalated Layered Nickel Hydroxide Nanobelts Array: An Earth-Abundant Electrocatalyst with Greatly Enhanced Oxygen Evolution Activity. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 9625-9629.                | 3.2  | 36        |
| 483 | Core-Shell Au@Metal-Oxide Nanoparticle Electrocatalysts for Enhanced Oxygen Evolution. <i>Nano Letters</i> , 2017, 17, 6040-6046.   | 4.5  | 135       |
| 484 | High-Performance Oxygen Evolution Anode from Stainless Steel via Controlled Surface Oxidation and Cr Removal. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 10072-10083.  | 3.2  | 80        |
| 485 | Vapor-fed solar hydrogen production exceeding 15% efficiency using earth abundant catalysts and anion exchange membrane. <i>Sustainable Energy and Fuels</i> , 2017, 1, 2061-2065.  | 2.5  | 37        |
| 486 | Dealloying-directed synthesis of efficient mesoporous CoFe-based catalysts towards the oxygen evolution reaction and overall water splitting. <i>Nanoscale</i> , 2017, 9, 16467-16475.  | 2.8  | 67        |
| 487 | Photo-Induced Performance Enhancement of Tantalum Nitride for Solar Water Oxidation. <i>Joule</i> , 2017, 1, 831-842.   | 11.7 | 46        |
| 488 | Functionalized Carbon Nanotubes with Ni(II) Bipyridine Complexes as Efficient Catalysts for the Alkaline Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2017, 7, 8033-8041.  | 5.5  | 56        |
| 489 | Bifunctional NiFe inverse opal electrocatalysts with heterojunction Si solar cells for 9.54%-efficient unassisted solar water splitting. <i>Nano Energy</i> , 2017, 42, 1-7.  | 8.2  | 43        |
| 490 | The promoting effect of tetravalent cerium on the oxygen evolution activity of copper oxide catalysts. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 31545-31552.  | 1.3  | 44        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 491 | Origin of Photoelectrochemical Generation of Dihydrogen by a Dye-Sensitized Photocathode without an Intentionally Introduced Catalyst. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25836-25846.                    | 1.5  | 16        |
| 492 | Hexagonal Sphericon Hematite with High Performance for Water Oxidation. <i>Advanced Materials</i> , 2017, 29, 1703792.   | 11.1 | 46        |
| 493 | Domain Structures of Ni and NiFe (Oxy)Hydroxide Oxygen-Evolution Catalysts from X-ray Pair Distribution Function Analysis. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25421-25429.                                | 1.5  | 25        |
| 494 | Highly Efficient and Stable Water Oxidation Electrocatalysis with a Very Low Overpotential using FeNiP Substitutional Solid Solution Nanoplate Arrays. <i>Advanced Materials</i> , 2017, 29, 1704075.                      | 11.1 | 163       |
| 495 | From 3D to 2D Co and Ni Oxyhydroxide Catalysts: Elucidation of the Active Site and Influence of Doping on the Oxygen Evolution Activity. <i>ACS Catalysis</i> , 2017, 7, 8558-8571.  | 5.5  | 50        |
| 496 | Characterization of Electrocatalytic Water Splitting and CO <sub>2</sub> Reduction Reactions Using In Situ/Operando Raman Spectroscopy. <i>ACS Catalysis</i> , 2017, 7, 7873-7889.   | 5.5  | 196       |
| 497 | Highly Active Fe Sites in Ultrathin Pyrrhotite Fe <sub>7</sub> S <sub>8</sub> Nanosheets Realizing Efficient Electrocatalytic Oxygen Evolution. <i>ACS Central Science</i> , 2017, 3, 1221-1227.                           | 5.3  | 136       |
| 498 | Rapid Quantification of Film Thickness and Metal Loading for Electrocatalytic Metal Oxide Films. <i>Chemistry of Materials</i> , 2017, 29, 7272-7277.  | 3.2  | 11        |
| 499 | Coupling Ag-doping and rich oxygen vacancies in mesoporous NiCoO nanorods supported on nickel foam for highly efficient oxygen evolution. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 1783-1790.                       | 3.0  | 34        |
| 500 | Evolution of layered double hydroxides (LDH) as high performance water oxidation electrocatalysts: A review with insights on structure, activity and mechanism. <i>Materials Today Energy</i> , 2017, 6, 1-26.             | 2.5  | 301       |
| 501 | One-Step Growth of Iron-Nickel Bimetallic Nanoparticles on FeNi Alloy Foils: Highly Efficient Advanced Electrodes for the Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 28627-28634. | 4.0  | 116       |
| 502 | In situ decoration of stainless steel nanoparticles for synergistic enhancement of Ni(OH) <sub>2</sub> oxygen evolution reaction catalysis. <i>Materials Chemistry Frontiers</i> , 2017, 1, 2376-2382.                     | 3.2  | 19        |
| 503 | Rational Design of Cobalt-Iron Selenides for Highly Efficient Electrochemical Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 33833-33840.   | 4.0  | 140       |
| 504 | Controlled Synthesis of 3D Flower-like Ni <sub>2</sub> P Composed of Mesoporous Nanoplates for Overall Water Splitting. <i>Chemistry - an Asian Journal</i> , 2017, 12, 2956-2961.   | 1.7  | 30        |
| 505 | Enhanced Oxygen Evolution during Water Electrolysis at De-Alloyed Nickel Thin Film Electrodes. <i>Journal of the Electrochemical Society</i> , 2017, 164, F1196-F1203.   | 1.3  | 7         |
| 506 | Enhancing the water oxidation activity of Ni <sub>2</sub> P nanocatalysts by iron-doping and electrochemical activation. <i>Electrochimica Acta</i> , 2017, 253, 498-505.  | 2.6  | 40        |
| 508 | An advanced flower-like Co-Ni/PI-CNT film electrocatalyst for oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2017, 729, 19-26.  | 2.8  | 5         |
| 509 | PVP-assisted synthesis of porous CoO prisms with enhanced electrocatalytic oxygen evolution properties. <i>Journal of Energy Chemistry</i> , 2017, 26, 1210-1216.  | 7.1  | 26        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 510 | Atomic-Level Coupled Interfaces and Lattice Distortion on CuS/NiS <sub>2</sub> Nanocrystals Boost Oxygen Catalysis for Flexible Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1703779.                                       | 7.8  | 200       |
| 511 | Urea-glass preparation of titanium niobium nitrides and subsequent oxidation to photoactive titanium niobium oxynitrides. <i>Dalton Transactions</i> , 2017, 46, 12081-12087.   | 1.6  | 7         |
| 512 | Phosphorus and Fluorine Co-Doping Induced Enhancement of Oxygen Evolution Reaction in Bimetallic Nitride Nanorods Arrays: Ionic Liquid-Driven and Mechanism Clarification. <i>Chemistry - A European Journal</i> , 2017, 23, 16862-16870.         | 1.7  | 41        |
| 513 | Two-dimensional metal-organic frameworks with high oxidation states for efficient electrocatalytic urea oxidation. <i>Chemical Communications</i> , 2017, 53, 10906-10909.  | 2.2  | 328       |
| 514 | FeNi <sub>2</sub> Se <sub>4</sub> -Reduced Graphene Oxide Nanocomposite: Enhancing Bifunctional Electrocatalytic Activity for Oxygen Evolution and Reduction through Synergistic Effects. <i>Advanced Sustainable Systems</i> , 2017, 1, 1700086. | 2.7  | 35        |
| 515 | <i>In Situ</i> Characterization of Ni and Ni/Fe Thin Film Electrodes for Oxygen Evolution in Alkaline Media by a Raman-Coupled Scanning Electrochemical Microscope Setup. <i>Analytical Chemistry</i> , 2017, 89, 10679-10686.                    | 3.2  | 57        |
| 516 | Oxygen evolution on Fe-doped NiO electrocatalysts deposited via microplasma. <i>Nanoscale</i> , 2017, 9, 15070-15082.   | 2.8  | 60        |
| 517 | Ultrafast and large scale preparation of superior catalyst for oxygen evolution reaction. <i>Journal of Power Sources</i> , 2017, 365, 320-326.   | 4.0  | 41        |
| 518 | Electrocatalytic water oxidation at amorphous trimetallic oxides based on FeCoNiO <sub>x</sub> . <i>RSC Advances</i> , 2017, 7, 43083-43089.  | 1.7  | 30        |
| 519 | Nickel-Based Electrocatalysts for Energy-Related Applications: Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution Reactions. <i>ACS Catalysis</i> , 2017, 7, 7196-7225.   | 5.5  | 857       |
| 520 | Anomalous in situ Activation of Carbon-Supported Ni <sub>2</sub> P Nanoparticles for Oxygen Evolving Electrocatalysis in Alkaline Media. <i>Scientific Reports</i> , 2017, 7, 8236.   | 1.6  | 21        |
| 521 | Autologous growth of nickel oxyhydroxides with in situ electrochemical iron doping for efficient oxygen evolution reactions. <i>Materials Chemistry Frontiers</i> , 2017, 1, 2541-2546.   | 3.2  | 24        |
| 522 | A Highly Versatile and Adaptable Artificial Leaf with Floatability and Planar Compact Design Applicable in Various Natural Environments. <i>Advanced Materials</i> , 2017, 29, 1702431.   | 11.1 | 13        |
| 523 | Effects of Gold Substrates on the Intrinsic and Extrinsic Activity of High-Loading Nickel-Based Oxyhydroxide Oxygen Evolution Catalysts. <i>ACS Catalysis</i> , 2017, 7, 5399-5409.   | 5.5  | 120       |
| 524 | NiFe Layered Double Hydroxide Nanoparticles on Co,Ni-Codoped Carbon Nanoframes as Efficient Bifunctional Catalysts for Rechargeable Zinc-Air Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1700467.                                      | 10.2 | 422       |
| 525 | Copper Cobalt Sulfide Nanosheets Realizing a Promising Electrocatalytic Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2017, 7, 5871-5879.   | 5.5  | 437       |
| 526 | Enhanced photoelectrochemical water splitting of hematite multilayer nanowire photoanodes by tuning the surface state via bottom-up interfacial engineering. <i>Energy and Environmental Science</i> , 2017, 10, 2124-2136.                       | 15.6 | 185       |
| 527 | Supercritical fluid processing for the synthesis of NiS <sub>2</sub> nanostructures as efficient electrocatalysts for electrochemical oxygen evolution reactions. <i>Catalysis Science and Technology</i> , 2017, 7, 3591-3597.                   | 2.1  | 44        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 528 | Surface configuration and wettability of nickel(oxy)hydroxides: a first-principles investigation. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 22659-22669.  | 1.3 | 31        |
| 529 | Electrochemical synthesis of Au-Ni(OH) <sub>2</sub> -nanocomposite on glassy carbon electrode as highly active bifunctional electrocatalyst for oxygen evolution and oxygen reduction reactions. <i>Electrochemistry Communications</i> , 2017, 82, 61-65. | 2.3 | 18        |
| 530 | Monodispersed Mesoporous Silica Spheres Supported Co <sub>3</sub> O <sub>4</sub> as Robust Catalyst for Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2017, 9, 4238-4243.  | 1.8 | 15        |
| 531 | A NiFe-Based Hierarchically Structured 3D Electrode by Hydrothermal Deposition for Highly Efficient Water Oxidation. <i>Electrochimica Acta</i> , 2017, 247, 835-842.  | 2.6 | 12        |
| 532 | From a Molecular 2FeS <sub>2</sub> Precursor to a Highly Efficient Iron Diselenide Electrocatalyst for Overall Water Splitting. <i>Angewandte Chemie</i> , 2017, 129, 10642-10646.   | 1.6 | 31        |
| 533 | From a Molecular 2FeS <sub>2</sub> Precursor to a Highly Efficient Iron Diselenide Electrocatalyst for Overall Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10506-10510.  | 7.2 | 167       |
| 534 | Promotional Effect of Fe Impurities in Graphene Precursors on the Activity of MnO <sub>x</sub> /Graphene Electrocatalysts for the Oxygen Evolution and Oxygen Reduction Reactions. <i>ChemElectroChem</i> , 2017, 4, 2835-2841.                            | 1.7 | 17        |
| 535 | Nanostructured materials on 3D nickel foam as electrocatalysts for water splitting. <i>Nanoscale</i> , 2017, 9, 12231-12247.   | 2.8 | 403       |
| 536 | Synthesis and oxygen evolution reaction (OER) catalytic performance of Ni <sub>2</sub> X <sub>2</sub> Ru <sub>x</sub> P nanocrystals: enhancing activity by dilution of the noble metal. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17609-17618.   | 5.2 | 59        |
| 537 | Interface-Engineered Ni(OH) <sub>2</sub> -like FeOOH Electrocatalysts for Highly Efficient and Stable Oxygen Evolution Reaction. <i>Chemistry - an Asian Journal</i> , 2017, 12, 2720-2726.  | 1.7 | 43        |
| 538 | Interface Control of Photoelectrochemical Water Oxidation Performance with Ni <sub>1-x</sub> Fe <sub>x</sub> O <sub>y</sub> Modified Hematite Photoanodes. <i>Chemistry of Materials</i> , 2017, 29, 6674-6683.  | 3.2 | 61        |
| 539 | Tri-metallic phytate in situ electrodeposited on 3D Ni foam as a highly efficient electrocatalyst for enhanced overall water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18786-18792.  | 5.2 | 24        |
| 540 | Post-Synthetic Immobilization of Ni Ions in Porous-Organic Polymer-Graphene Composite for the Non-Noble Metal Electrocatalytic Water Oxidation. <i>ChemCatChem</i> , 2017, 9, 2894-2894.   | 1.8 | 0         |
| 541 | Electrochemical study of the promoting effect of Fe on oxygen evolution at thin NiFeBi films and the inhibiting effect of Al in borate electrolyte. <i>Catalysis Science and Technology</i> , 2017, 7, 3876-3891.  | 2.1 | 17        |
| 542 | Direct in Situ Measurement of Charge Transfer Processes During Photoelectrochemical Water Oxidation on Catalyzed Hematite. <i>ACS Central Science</i> , 2017, 3, 1015-1025.  | 5.3 | 61        |
| 543 | Room-Temperature Synthesis FeNiCo Layered Double Hydroxide as an Excellent Electrochemical Water Oxidation Catalyst. <i>Journal of the Electrochemical Society</i> , 2017, 164, H755-H759.   | 1.3 | 26        |
| 544 | A self-generated and degradation-resistive cratered stainless steel electrocatalyst for efficient water oxidation in a neutral electrolyte. <i>Journal of Materials Chemistry A</i> , 2017, 5, 19210-19219.  | 5.2 | 23        |
| 545 | Understanding the Oxygen Evolution Reaction on a Two-Dimensional NiO <sub>2</sub> Catalyst. <i>ChemElectroChem</i> , 2017, 4, 2764-2770.   | 1.7 | 29        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 546 | An Optically and Electrochemically Decoupled Monolithic Photoelectrochemical Cell for High-Performance Solar-Driven Water Splitting. <i>Nano Letters</i> , 2017, 17, 5416-5422.   | 4.5  | 46        |
| 547 | Amorphous Bimetallic Oxide-Graphene Hybrids as Bifunctional Oxygen Electrocatalysts for Rechargeable Zn-Air Batteries. <i>Advanced Materials</i> , 2017, 29, 1701410.   | 11.1 | 243       |
| 548 | Stabilizing Silicon Photocathodes by Solution-Deposited Ni-Fe Layered Double Hydroxide for Efficient Hydrogen Evolution in Alkaline Media. <i>ACS Energy Letters</i> , 2017, 2, 1939-1946.  | 8.8  | 61        |
| 549 | Three-dimensional printed cellular stainless steel as a high-activity catalytic electrode for oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18176-18182.   | 5.2  | 68        |
| 550 | Biosensing of Cholesterol and Glucose Facilitated by Cationic Polymer Overlayers on Ni(OH) <sub>2</sub> /NiOOH at Physiological pH. <i>Journal of the Electrochemical Society</i> , 2017, 164, H561-H571.   | 1.3  | 8         |
| 551 | Reactive Fe-Sites in Ni/Fe (Oxy)hydroxide Are Responsible for Exceptional Oxygen Electrocatalysis Activity. <i>Journal of the American Chemical Society</i> , 2017, 139, 11361-11364.   | 6.6  | 532       |
| 552 | Spectroscopic identification of active sites for the oxygen evolution reaction on iron-cobalt oxides. <i>Nature Communications</i> , 2017, 8, 2022.   | 5.8  | 147       |
| 553 | Ultrathin metal-organic framework array for efficient electrocatalytic water splitting. <i>Nature Communications</i> , 2017, 8, 15341.  | 5.8  | 1,042     |
| 554 | Amorphous Co-Fe-P nanospheres for efficient water oxidation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25378-25384.  | 5.2  | 100       |
| 555 | Hierarchical Mesoporous NiO/MnO <sub>2</sub> @PANI Core-Shell Microspheres, Highly Efficient and Stable Bifunctional Electrocatalysts for Oxygen Evolution and Reduction Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 42676-42687. | 4.0  | 100       |
| 556 | Interface Engineering of Ni <sub>3</sub> N@Fe <sub>3</sub> N Heterostructure Supported on Carbon Fiber for Enhanced Water Oxidation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 14245-14251.                                      | 1.8  | 35        |
| 557 | A facile and scalable complexation-precipitation method of iron doped nickel hydroxide nanosheets as a superior oxygen evolution catalyst. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 26575-26585.                                       | 3.8  | 30        |
| 558 | Crystal lattice distortion in ultrathin Co(OH) <sub>2</sub> nanosheets inducing elongated Co-OH bonds for highly efficient oxygen evolution reaction. <i>Green Chemistry</i> , 2017, 19, 5809-5817.   | 4.6  | 43        |
| 559 | Ni <sub>3</sub> N@Ni-Ci nanoarray as a highly active and durable non-noble-metal electrocatalyst for water oxidation at near-neutral pH. <i>Journal of Catalysis</i> , 2017, 356, 165-172.  | 3.1  | 140       |
| 560 | Synergistic Activity of Co and Fe in Amorphous Co <sub>x</sub> Fe <sub>1-x</sub> B Catalyst for Efficient Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 40333-40343.  | 4.0  | 145       |
| 561 | Structured Iron Diselenide-Derived Oxide: A Highly Efficient Electrocatalyst for Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 40351-40359.   | 4.0  | 61        |
| 562 | Tuning Mixed Nickel Iron Phosphosulfide Nanosheet Electrocatalysts for Enhanced Hydrogen and Oxygen Evolution. <i>ACS Catalysis</i> , 2017, 7, 8549-8557.   | 5.5  | 268       |
| 563 | Atomically dispersed hybrid nickel-iridium sites for photoelectrocatalysis. <i>Nature Communications</i> , 2017, 8, 1341.   | 5.8  | 37        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 564 | NiFeCr Hydroxide Holey Nanosheet as Advanced Electrocatalyst for Water Oxidation. ACS Applied Materials & Interfaces, 2017, 9, 41239-41245.   | 4.0  | 96        |
| 565 | Surface Restructuring of Nickel Sulfide Generates Optimally Coordinated Active Sites for Oxygen Reduction Catalysis. Joule, 2017, 1, 600-612.   | 11.7 | 89        |
| 566 | Strategies for Efficient Charge Separation and Transfer in Artificial Photosynthesis of Solar Fuels. ChemSusChem, 2017, 10, 4277-4305.  | 3.6  | 75        |
| 567 | Fixierung von NiFe-Hydroxide-Pulverkatalysatoren für die postelektrolytische strukturelle Charakterisierung von Elektrokatalysatoren für die Sauerstoffevolution. Angewandte Chemie, 2017, 129, 11411-11416.  | 1.6  | 15        |
| 568 | Powder Catalyst Fixation for Post-Electrolysis Structural Characterization of NiFe Layered Double Hydroxide Based Oxygen Evolution Reaction Electrocatalysts. Angewandte Chemie - International Edition, 2017, 56, 11258-11262.                                 | 7.2  | 130       |
| 569 | Sugar Blowing-Induced Porous Cobalt Phosphide/Nitrogen-Doped Carbon Nanostructures with Enhanced Electrochemical Oxidation Performance toward Water and Other Small Molecules. Small, 2017, 13, 1700796.  | 5.2  | 65        |
| 570 | Dual Mechanisms: Hydrogen Transfer during Water Oxidation Catalysis of Pure and Fe-Doped Nickel Oxyhydroxide. Journal of Physical Chemistry C, 2017, 121, 16819-16824.  | 1.5  | 18        |
| 571 | Hollow nanocubes composed of well-dispersed mixed metal-rich phosphides in N-doped carbon as highly efficient and durable electrocatalysts for the oxygen evolution reaction at high current densities. Journal of Materials Chemistry A, 2017, 5, 19656-19663. | 5.2  | 93        |
| 572 | Directly growing hierarchical nickel-copper hydroxide nanowires on carbon fibre cloth for efficient electrooxidation of ammonia. Applied Catalysis B: Environmental, 2017, 218, 470-479.  | 10.8 | 122       |
| 573 | Electrodeposition of Cobalt Nickel Hydroxide Composite as a High-Efficiency Catalyst for Hydrogen Evolution Reactions. Journal of the Electrochemical Society, 2017, 164, H587-H592.  | 1.3  | 27        |
| 574 | Bifunctional Iron-Nickel Nitride Nanoparticles as Flexible and Robust Electrode for Overall Water Splitting. Electrochimica Acta, 2017, 247, 666-673.   | 2.6  | 92        |
| 575 | Controlling the amount of co-catalyst as a critical factor in determining the efficiency of photoelectrodes: The case of nickel (II) hydroxide on vanadate photoanodes. Applied Catalysis B: Environmental, 2017, 217, 437-447.                                 | 10.8 | 24        |
| 576 | Oxygen evolution catalysis in alkaline conditions over hard templated nickel-cobalt based spinel oxides. International Journal of Hydrogen Energy, 2017, 42, 27910-27918.   | 3.8  | 36        |
| 577 | A facile conversion of a Ni/Fe coordination polymer to a robust electrocatalyst for the oxygen evolution reaction. RSC Advances, 2017, 7, 32819-32825.  | 1.7  | 21        |
| 578 | A Density Functional Assessment of Oxygen Evolution Reaction Mechanisms on $\beta$ -NiOOH. ACS Catalysis, 2017, 7, 5329-5339.   | 5.5  | 110       |
| 579 | Iron-Induced Activation of Ordered Mesoporous Nickel Cobalt Oxide Electrocatalyst for the Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 21225-21233.  | 4.0  | 96        |
| 580 | A highly active and stable $\text{La}_{0.5}\text{Sr}_{0.5}\text{Ni}_{0.4}\text{Fe}_{0.6}\text{O}_{3-\delta}$ perovskite electrocatalyst for oxygen evolution reaction in alkaline media. Electrochimica Acta, 2017, 246, 997-1003.                              | 2.6  | 41        |
| 581 | Electrolytic $\text{CO}_2$ Reduction in Tandem with Oxidative Organic Chemistry. ACS Central Science, 2017, 3, 778-783.   | 5.3  | 93        |



| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 582 | Interfacial engineering of metal-insulator-semiconductor junctions for efficient and stable photoelectrochemical water oxidation. <i>Nature Communications</i> , 2017, 8, 15968.  | 5.8  | 177       |
| 583 | Amorphous nickel-iron oxides/carbon nanohybrids for an efficient and durable oxygen evolution reaction. <i>Nano Research</i> , 2017, 10, 3629-3637.   | 5.8  | 42        |
| 584 | Identifying the Active Sites on N-doped Graphene toward Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2017, 9, 846-852.   | 1.8  | 45        |
| 585 | Synergistic Effect of Cobalt and Iron in Layered Double Hydroxide Catalysts for the Oxygen Evolution Reaction. <i>ChemSusChem</i> , 2017, 10, 156-165.  | 3.6  | 117       |
| 586 | Metallic NiPS <sub>3</sub> @NiOOH Core-Shell Heterostructures as Highly Efficient and Stable Electrocatalyst for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2017, 7, 229-237.  | 5.5  | 233       |
| 587 | Electrocatalytic Oxygen Evolution Reaction in Acidic Environments – Reaction Mechanisms and Catalysts. <i>Advanced Energy Materials</i> , 2017, 7, 1601275.   | 10.2 | 847       |
| 588 | Simple Aqueous Preparation of High Activity and Stability NiFe Hydrous Oxide Catalysts for Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1106-1112.  | 3.2  | 24        |
| 589 | Bifunctional Ni <sub>1-x</sub> Fe <sub>x</sub> layered double hydroxides/Ni foam electrodes for high-efficient overall water splitting: A study on compositional tuning and valence state evolution. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 5560-5568. | 3.8  | 55        |
| 590 | Measurement Techniques for the Study of Thin Film Heterogeneous Water Oxidation Electrocatalysts. <i>Chemistry of Materials</i> , 2017, 29, 120-140.  | 3.2  | 473       |
| 591 | Superior Electrochemical Oxygen Evolution Enabled by Three-Dimensional Layered Double Hydroxide Nanosheet Superstructures. <i>ChemCatChem</i> , 2017, 9, 84-88.   | 1.8  | 40        |
| 592 | CoO functionalized IrO <sub>2</sub> -Sb <sub>2</sub> O <sub>5</sub> -SnO <sub>2</sub> anode with an enhanced activity and stability for electrocatalytic oxygen evolution. <i>Journal of Alloys and Compounds</i> , 2017, 696, 257-265.                                     | 2.8  | 24        |
| 593 | Surface Electrochemical Modification of a Nickel Substrate to Prepare a NiFe-based Electrode for Water Oxidation. <i>ChemSusChem</i> , 2017, 10, 394-400.   | 3.6  | 63        |
| 594 | Effect of Chromium Doping on Electrochemical Water Oxidation Activity by Co <sub>3-x</sub> Cr <sub>x</sub> O <sub>4</sub> Spinel Catalysts. <i>ACS Catalysis</i> , 2017, 7, 443-451.  | 5.5  | 92        |
| 595 | Self-supported ternary Ni-Fe-P nanosheets derived from metal-organic frameworks as efficient overall water splitting electrocatalysts. <i>Electrochimica Acta</i> , 2017, 258, 423-432.   | 2.6  | 90        |
| 596 | Hybrid Organic-Inorganic Transition-Metal Phosphonates as Precursors for Water Oxidation Electrocatalysts. <i>Advanced Functional Materials</i> , 2017, 27, 1703158.  | 7.8  | 55        |
| 597 | Quartz Crystal Microbalance Electronic Interfacing Systems: A Review. <i>Sensors</i> , 2017, 17, 2799.  | 2.1  | 126       |
| 598 | Facile Synthesis of Ni-Co LDH Nanocages with Improved Electrocatalytic Activity for Water Oxidation Reaction. <i>International Journal of Electrochemical Science</i> , 2017, 12, 10003-10014.  | 0.5  | 23        |
| 599 | Surface Oxidation of AuNi Heterodimers to Achieve High Activities toward Hydrogen/Oxygen Evolution and Oxygen Reduction Reactions. <i>Small</i> , 2018, 14, e1703749.   | 5.2  | 60        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 600 | Fe <sub>3</sub> O <sub>4</sub> @NiS <sub>x</sub> /rGO composites with amounts of heterointerfaces and enhanced electrocatalytic properties for oxygen evolution. <i>Applied Surface Science</i> , 2018, 442, 256-263.                            | 3.1  | 51        |
| 601 | Precision and correctness in the evaluation of electrocatalytic water splitting: revisiting activity parameters with a critical assessment. <i>Energy and Environmental Science</i> , 2018, 11, 744-771.   | 15.6 | 1,055     |
| 602 | Tracking precursor degradation during the photo-induced formation of amorphous metal oxide films. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4544-4549.  | 5.2  | 6         |
| 603 | Iron Hydroxide-Modified Nickel Hydroxylphosphate Single-Wall Nanotubes as Efficient Electrocatalysts for Oxygen Evolution Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 9407-9414.  | 4.0  | 38        |
| 604 | Challenges and Prospects in Solar Water Splitting and CO <sub>2</sub> Reduction with Inorganic and Hybrid Nanostructures. <i>ACS Catalysis</i> , 2018, 8, 3602-3635.   | 5.5  | 365       |
| 605 | In Situ Synthesis of Core-Shell-Ni <sub>3</sub> Fe(OH) <sub>9</sub> /Ni <sub>3</sub> Fe Hybrid Nanostructures as Highly Active and Stable Bifunctional Catalysts for Water Electrolysis. <i>ACS Applied Energy Materials</i> , 2018, 1, 986-992. | 2.5  | 15        |
| 606 | pH-Dependent Catalytic Reaction Pathway for Water Splitting at the BiVO <sub>4</sub> -Water Interface from the Band Alignment. <i>ACS Energy Letters</i> , 2018, 3, 829-834.   | 8.8  | 41        |
| 607 | NiOOH Exfoliation-Free Nickel Octahedra as Highly Active and Durable Electrocatalysts Toward the Oxygen Evolution Reaction in an Alkaline Electrolyte. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 10115-10122.                    | 4.0  | 68        |
| 608 | Single-Atom Au/NiFe Layered Double Hydroxide Electrocatalyst: Probing the Origin of Activity for Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2018, 140, 3876-3879.  | 6.6  | 817       |
| 609 | A structurally versatile nickel phosphite acting as a robust bifunctional electrocatalyst for overall water splitting. <i>Energy and Environmental Science</i> , 2018, 11, 1287-1298.  | 15.6 | 205       |
| 610 | The role of Cr doping in Ni Fe oxide/(oxy)hydroxide electrocatalysts for oxygen evolution. <i>Electrochimica Acta</i> , 2018, 265, 10-18.  | 2.6  | 79        |
| 611 | Activating CoOOH Porous Nanosheet Arrays by Partial Iron Substitution for Efficient Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2018, 130, 2702-2706.  | 1.6  | 50        |
| 612 | Performance and failure modes of Si anodes patterned with thin-film Ni catalyst islands for water oxidation. <i>Sustainable Energy and Fuels</i> , 2018, 2, 983-998.   | 2.5  | 24        |
| 613 | In situ formation of molecular Ni-Fe active sites on heteroatom-doped graphene as a heterogeneous electrocatalyst toward oxygen evolution. <i>Science Advances</i> , 2018, 4, eaap7970.  | 4.7  | 176       |
| 614 | Earth-Abundant Silicon for Facilitating Water Oxidation over Iron-Based Perovskite Electrocatalyst. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701693.   | 1.9  | 53        |
| 615 | pH-Dependent Surface Chemistry from First Principles: Application to the BiVO <sub>4</sub> (010)-Water Interface. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 10011-10021.   | 4.0  | 46        |
| 616 | Promotion of electrochemical oxygen evolution reaction by chemical coupling of cobalt to molybdenum carbide. <i>Applied Catalysis B: Environmental</i> , 2018, 227, 340-348.   | 10.8 | 110       |
| 617 | Room temperature-formed iron-doped nickel hydroxide on nickel foam as a 3D electrode for low polarized and high-current-density oxygen evolution. <i>Chemical Communications</i> , 2018, 54, 3262-3265.  | 2.2  | 43        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 618 | Oxygen Evolution Catalysis with M <sup>III</sup> ssbauerite <sup>III</sup> A Trivalent Iron <sup>III</sup> Only Layered Double Hydroxide. Chemistry - A European Journal, 2018, 24, 9004-9008.  | 1.7 | 15        |
| 619 | Low-Symmetry Mesoporous Titanium Dioxide (TiO <sub>2</sub> ) Electrocatalyst for Efficient and Durable Oxygen Evolution in Aqueous Alkali. Journal of the Electrochemical Society, 2018, 165, H300-H309.  | 1.3 | 17        |
| 620 | Freestanding Non-Precious Metal Electrocatalysts for Oxygen Evolution and Reduction Reactions. ChemElectroChem, 2018, 5, 1786-1804.   | 1.7 | 32        |
| 621 | A Cu <sub>2</sub> Se <sup>III</sup> Cu <sub>2</sub> O film electrodeposited on titanium foil as a highly active and stable electrocatalyst for the oxygen evolution reaction. Chemical Communications, 2018, 54, 4979-4982.                                     | 2.2 | 42        |
| 622 | Highly dispersed and disordered nickel <sup>III</sup> iron layered hydroxides and sulphides: robust and high-activity water oxidation catalysts. Sustainable Energy and Fuels, 2018, 2, 1561-1573.  | 2.5 | 29        |
| 623 | Boosting the oxygen evolution reaction in non-precious catalysts by structural and electronic <sup>III</sup> engineering. Journal of Materials Chemistry A, 2018, 6, 10253-10263.   | 5.2 | 54        |
| 624 | Hierarchically Structured FeNiO <sub>x</sub> H <sub>y</sub> Electrocatalyst Formed by In <sup>III</sup> ...Situ Transformation of Metal Phosphate for Efficient Oxygen Evolution Reaction. ChemSusChem, 2018, 11, 1761-1767.                                    | 3.6 | 20        |
| 625 | Water Oxidation Catalysis for NiOOH by a Metropolis Monte Carlo Algorithm. Journal of Chemical Theory and Computation, 2018, 14, 2380-2385.   | 2.3 | 11        |
| 626 | An Efficient and Robust Surface-Modified Iron Electrode for Oxygen Evolution in Alkaline Water Electrolysis. Journal of the Electrochemical Society, 2018, 165, F392-F400.  | 1.3 | 14        |
| 627 | Layered Bimetallic Iron <sup>III</sup> Nickel Alkoxide Microspheres as High-Performance Electrocatalysts for Oxygen Evolution Reaction in Alkaline Media. ACS Sustainable Chemistry and Engineering, 2018, 6, 6117-6125.  | 3.2 | 67        |
| 628 | Influence of Fe(III) doping on the crystal structure and properties of hydrothermally prepared $\beta$ -Ni(OH) <sub>2</sub> nanostructures. Journal of Alloys and Compounds, 2018, 750, 687-695.  | 2.8 | 30        |
| 629 | Tuning the morphology and Fe/Ni ratio of a bimetallic Fe-Ni-S film supported on nickel foam for optimized electrolytic water splitting. Journal of Colloid and Interface Science, 2018, 523, 121-132.   | 5.0 | 48        |
| 630 | Hierarchically porous Mo-doped Ni <sup>III</sup> Fe oxide nanowires efficiently catalyzing oxygen/hydrogen evolution reactions. Journal of Materials Chemistry A, 2018, 6, 8430-8440.   | 5.2 | 65        |
| 631 | Transition <sup>III</sup> Metal <sup>III</sup> Based Electrocatalysts as Cocatalysts for Photoelectrochemical Water Splitting: A Mini Review. Small, 2018, 14, e1704179.  | 5.2 | 182       |
| 632 | Electrolysis of Natural Waters Contaminated with Transition <sup>III</sup> Metal Ions: Identification of A Metastable FePb <sup>III</sup> Based Oxygen <sup>III</sup> Evolution Catalyst Operating in Weakly Acidic Solutions. ChemPlusChem, 2018, 83, 704-710. | 1.3 | 9         |
| 633 | A combination <sup>III</sup> decomposition method to synthesize two-dimensional metal sulfide <sup>III</sup> amine hybrid nanosheets: a highly efficient Fe-based water oxidation electrocatalyst. Chemical Communications, 2018, 54, 4617-4620.                | 2.2 | 11        |
| 634 | Iron and cobalt hydroxides: Describing the oxygen evolution reaction activity trend with the amount of electrocatalyst. Electrochimica Acta, 2018, 274, 224-232.  | 2.6 | 6         |
| 635 | Amorphous Ni(Fe)O H <sup>III</sup> -coated nanocone arrays self-supported on stainless steel mesh as a promising oxygen-evolving anode for large scale water splitting. Journal of Power Sources, 2018, 389, 160-168.   | 4.0 | 20        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 636 | Nickel-iron catalysts for electrochemical water oxidation – redox synergism investigated by <i>in situ</i> X-ray spectroscopy with millisecond time resolution. <i>Sustainable Energy and Fuels</i> , 2018, 2, 1986-1994.   | 2.5  | 64        |
| 637 | Self-Supported Stainless Steel Nanocone Array Coated with a Layer of Ni-Fe Oxides/(Oxy)hydroxides as a Highly Active and Robust Electrode for Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 8786-8796.   | 4.0  | 64        |
| 638 | Radially Aligned Hierarchical Nickel/Nickel-Iron (Oxy)hydroxide Nanotubes for Efficient Electrocatalytic Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 8585-8593.  | 4.0  | 69        |
| 639 | Surface Sensitive Nickel Electrodeposition in Deep Eutectic Solvent. <i>ACS Applied Energy Materials</i> , 2018, 1, 1016-1028.  | 2.5  | 38        |
| 640 | Amorphous NiFe Nanotube Arrays Bifunctional Electrocatalysts for Efficient Electrochemical Overall Water Splitting. <i>ACS Applied Energy Materials</i> , 2018, 1, 1210-1217.   | 2.5  | 84        |
| 641 | Blending Fe <sub>3</sub> O <sub>4</sub> into a Ni/NiO composite for efficient and stable bifunctional electrocatalyst. <i>Electrochimica Acta</i> , 2018, 264, 225-232.   | 2.6  | 42        |
| 642 | Self-Assembly of Ni-Fe Layered Double Hydroxide on Fe Foam as 3D Integrated Electrocatalysts for Oxygen Evolution: Dependence of the Catalytic Performance on Anions under <i>In Situ</i> Condition. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 2893-2897. | 3.2  | 44        |
| 643 | From the inside-out: leached metal impurities in multiwall carbon nanotubes for purification or electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4686-4694.   | 5.2  | 23        |
| 644 | A novel strategy for preparing layered double hydroxide/exfoliated carbon nanostructures composites as superior electrochemical catalysts with respect to oxygen evolution and methanol oxidation. <i>Journal of Alloys and Compounds</i> , 2018, 744, 347-356.             | 2.8  | 13        |
| 645 | <i>In Situ</i> Synthesis of Efficient Water Oxidation Catalysts in Laser-Induced Graphene. <i>ACS Energy Letters</i> , 2018, 3, 677-683.  | 8.8  | 91        |
| 646 | A wafer-scale 1 nm Ni(OH) <sub>2</sub> nanosheet with superior electrocatalytic activity for the oxygen evolution reaction. <i>Nanoscale</i> , 2018, 10, 5054-5059.   | 2.8  | 31        |
| 647 | Controlled hydrothermal synthesis of graphene supported NiCo <sub>2</sub> O <sub>4</sub> coral-like nanostructures: An efficient electrocatalyst for overall water splitting. <i>Applied Surface Science</i> , 2018, 449, 203-212.  | 3.1  | 37        |
| 648 | Dendritic core-shell nickel-iron-copper metal/metal oxide electrode for efficient electrocatalytic water oxidation. <i>Nature Communications</i> , 2018, 9, 381.  | 5.8  | 322       |
| 649 | A review of anion-regulated multi-anion transition metal compounds for oxygen evolution electrocatalysis. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 521-534.  | 3.0  | 123       |
| 650 | Recent Progress on Multimetal Oxide Catalysts for the Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2018, 8, 1702774.   | 10.2 | 615       |
| 651 | Silver/Nickel Oxide (Ag/NiO) Nanocomposites Produced Via a Citrate Sol-Gel Route as Electrocatalyst for the Oxygen Evolution Reaction (OER) in Alkaline Medium. <i>Electrocatalysis</i> , 2018, 9, 279-286.   | 1.5  | 30        |
| 652 | Liquid Exfoliated Co(OH) <sub>2</sub> Nanosheets as Low-Cost, Yet High-Performance, Catalysts for the Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2018, 8, 1702965.   | 10.2 | 92        |
| 653 | Highly Active Trimetallic NiFeCr Layered Double Hydroxide Electrocatalysts for Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2018, 8, 1703189.  | 10.2 | 509       |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 654 | High-Performance Silicon Photoanode Enhanced by Gold Nanoparticles for Efficient Water Oxidation. ACS Applied Materials & Interfaces, 2018, 10, 6262-6268.  | 4.0  | 26        |
| 655 | Construction of orderly hierarchical FeOOH/NiFe layered double hydroxides supported on cobaltous carbonate hydroxide nanowire arrays for a highly efficient oxygen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 3397-3401.  | 5.2  | 67        |
| 656 | Steel: The Resurrection of a Forgotten Water-Splitting Catalyst. ACS Energy Letters, 2018, 3, 574-591.  | 8.8  | 122       |
| 657 | Wet-chemistry topotactic synthesis of bimetallic iron-nickel sulfide nanoarrays: an advanced and versatile catalyst for energy efficient overall water and urea electrolysis. Journal of Materials Chemistry A, 2018, 6, 4346-4353.   | 5.2  | 181       |
| 658 | Graphene Defects Trap Atomic Ni Species for Hydrogen and Oxygen Evolution Reactions. Chem, 2018, 4, 285-297.  | 5.8  | 624       |
| 659 | A facile co-precipitation synthesis of robust FeCo phosphate electrocatalysts for efficient oxygen evolution. Electrochimica Acta, 2018, 264, 244-250.  | 2.6  | 36        |
| 660 | Activating CoOOH Porous Nanosheet Arrays by Partial Iron Substitution for Efficient Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2018, 57, 2672-2676.  | 7.2  | 474       |
| 661 | Tuning Electronic Structure of NiFe Layered Double Hydroxides with Vanadium Doping toward High Efficient Electrocatalytic Water Oxidation. Advanced Energy Materials, 2018, 8, 1703341.   | 10.2 | 505       |
| 662 | Facile Templateless Fabrication of a Cobalt Oxyhydroxide Nanosheet Film with Nanoscale Porosity as an Efficient Electrocatalyst for Water Oxidation. ChemPhotoChem, 2018, 2, 332-339.   | 1.5  | 4         |
| 663 | Co <sub>3</sub> O <sub>4</sub> and Fe <sub>3</sub> O <sub>4</sub> Nanoparticles/Films Synthesized in a Vapor-Fed Flame Aerosol Reactor for Oxygen Evolution. ACS Applied Energy Materials, 2018, 1, 655-665.  | 2.5  | 20        |
| 664 | Manipulating the Architecture of Atomically Thin Transition Metal (Hydr)oxides for Enhanced Oxygen Evolution Catalysis. ACS Nano, 2018, 12, 1878-1886.  | 7.3  | 57        |
| 665 | Iron-Doped NiCoP Porous Nanosheet Arrays as a Highly Efficient Electrocatalyst for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2018, 1, 571-579.   | 2.5  | 99        |
| 666 | Mo- and Fe-Modified Ni(OH) <sub>2</sub> /NiOOH Nanosheets as Highly Active and Stable Electrocatalysts for Oxygen Evolution Reaction. ACS Catalysis, 2018, 8, 2359-2363.  | 5.5  | 290       |
| 667 | Electrocatalytic Water Oxidation by Single Site and Small Nuclearity Clusters of Cobalt. Journal of the Electrochemical Society, 2018, 165, H3028-H3033.  | 1.3  | 13        |
| 668 | Scalable one-step electrochemical deposition of nanoporous amorphous S-doped NiFe <sub>2</sub> O <sub>4</sub> /Ni <sub>3</sub> Fe composite films as highly efficient electrocatalysts for oxygen evolution with ultrahigh stability. Journal of Materials Chemistry A, 2018, 6, 1551-1560. | 5.2  | 96        |
| 669 | Interface engineered <i>in situ</i> anchoring of Co <sub>9</sub> S <sub>8</sub> nanoparticles into a multiple doped carbon matrix: highly efficient zinc-air batteries. Nanoscale, 2018, 10, 2649-2657.   | 2.8  | 66        |
| 670 | Enhanced Catalysis of the Electrochemical Oxygen Evolution Reaction by Iron(III) Ions Adsorbed on Amorphous Cobalt Oxide. ACS Catalysis, 2018, 8, 807-814.  | 5.5  | 163       |
| 671 | Integration of FeOOH and Zeolitic Imidazolate Framework-Derived Nanoporous Carbon as an Efficient Electrocatalyst for Water Oxidation. Advanced Energy Materials, 2018, 8, 1702598.   | 10.2 | 79        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 672 | Understanding the incorporating effect of Co <sup>2+</sup> /Co <sup>3+</sup> in NiFe-layered double hydroxide for electrocatalytic oxygen evolution reaction. <i>Journal of Catalysis</i> , 2018, 358, 100-107.   | 3.1  | 194       |
| 673 | Electrolysis of Gaseous CO <sub>2</sub> to CO in a Flow Cell with a Bipolar Membrane. <i>ACS Energy Letters</i> , 2018, 3, 149-154.   | 8.8  | 265       |
| 674 | Tuning Redox Transitions via Inductive Effect in Metal Oxides and Complexes, and Implications in Oxygen Electrocatalysis. <i>Joule</i> , 2018, 2, 225-244.  | 11.7 | 283       |
| 675 | Suppressing Ion Transfer Enables Versatile Measurements of Electrochemical Surface Area for Intrinsic Activity Comparisons. <i>Journal of the American Chemical Society</i> , 2018, 140, 2397-2400.   | 6.6  | 138       |
| 676 | Reduced Graphene Oxide-Wrapped Co <sub>9</sub> S <sub>8</sub> /Co,Fe-N Composite as Bifunctional Electrocatalyst for Oxygen Reduction and Evolution. <i>Small</i> , 2018, 14, 1703748.  | 5.2  | 117       |
| 677 | Enhancing Full Water-Splitting Performance of Transition Metal Bifunctional Electrocatalysts in Alkaline Solutions by Tailoring CeO <sub>2</sub> -Transition Metal Oxides-Ni Nanointerfaces. <i>ACS Energy Letters</i> , 2018, 3, 290-296.  | 8.8  | 152       |
| 678 | CoFe-CoFe <sub>2</sub> O <sub>4</sub> /N-doped carbon nanocomposite derived from in situ pyrolysis of a single source precursor as a superior bifunctional electrocatalyst for water splitting. <i>Electrochimica Acta</i> , 2018, 262, 18-26.                                    | 2.6  | 28        |
| 679 | Fe-doped NiO mesoporous nanosheets array for highly efficient overall water splitting. <i>Journal of Catalysis</i> , 2018, 358, 243-252.  | 3.1  | 192       |
| 680 | Enhancement Effect of Borate Doping on the Oxygen Evolution Activity of Ni-Nickel Hydroxide. <i>ACS Applied Nano Materials</i> , 2018, 1, 751-758.  | 2.4  | 39        |
| 681 | Active-Site-Enriched Iron-Doped Nickel/Cobalt Hydroxide Nanosheets for Enhanced Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2018, 8, 5382-5390.   | 5.5  | 311       |
| 682 | Electrochemical Water Splitting by Pseudo-spinel, Disordered and Layered Lithium Nickel Oxides: Correlation between Structural Motifs and Catalytic Properties. <i>ChemCatChem</i> , 2018, 10, 2551-2557.   | 1.8  | 7         |
| 683 | Facile Synthesis of FeOOH Quantum Dots Modified ZnO Nanorods Films via a Metal-Solating Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 7789-7798.   | 3.2  | 31        |
| 684 | Intensification of anodic charge transfer by contaminant degradation for efficient H <sub>2</sub> production. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10297-10303.   | 5.2  | 28        |
| 685 | A Stable and Electrocatalytic Iron Electrode for Oxygen Evolution in Alkaline Water Electrolysis. <i>Topics in Catalysis</i> , 2018, 61, 591-600.   | 1.3  | 10        |
| 686 | Spatially-controlled NiCo <sub>2</sub> O <sub>4</sub> @MnO <sub>2</sub> core-shell nanoarray with hollow NiCo <sub>2</sub> O <sub>4</sub> cores and MnO <sub>2</sub> flake shells: an efficient catalyst for oxygen evolution reaction. <i>Nanotechnology</i> , 2018, 29, 285401. | 1.3  | 16        |
| 687 | Electrocatalytic oxygen evolution with pure and substituted M <sub>6</sub> (SR) <sub>12</sub> (M = Pd, Fe, Rh) complexes. <i>Computational Materials Science</i> , 2018, 150, 283-290.  | 1.4  | 5         |
| 688 | Activation/deactivation behavior of nano-NiOx based anodes towards the OER: Influence of temperature. <i>Electrochimica Acta</i> , 2018, 276, 176-183.  | 2.6  | 30        |
| 689 | Facile Dispersion of Nanosized NiFeP for Highly Effective Catalysis of Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 7206-7211.  | 3.2  | 46        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 690 | Novel NiFe/NiFe-LDH composites as competitive catalysts for clean energy purposes. Applied Surface Science, 2018, 447, 107-116.  | 3.1  | 29        |
| 691 | $\hat{I}^{\pm}$ - and $\hat{I}^3$ -FeOOH: Stability, Reversibility, and Nature of the Active Phase under Hydrogen Evolution. ACS Applied Energy Materials, 2018, 1, 1716-1725.                       | 2.5  | 26        |
| 692 | Insights into the Active Electrocatalytic Areas of Layered Double Hydroxide and Amorphous Nickel-Iron Oxide Oxygen Evolution Electrocatalysts. ACS Applied Energy Materials, 2018, 1, 1415-1423.     | 2.5  | 23        |
| 693 | Heteroatom (P, B, or S) incorporated NiFe-based nanocubes as efficient electrocatalysts for the oxygen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 7062-7069.                     | 5.2  | 98        |
| 694 | Catalyst Deposition on Photoanodes: The Roles of Intrinsic Catalytic Activity, Catalyst Electrical Conductivity, and Semiconductor Morphology. ACS Energy Letters, 2018, 3, 961-969.                 | 8.8  | 47        |
| 695 | Activation of a Ni electrocatalyst through spontaneous transformation of nickel sulfide to nickel hydroxide in an oxygen evolution reaction. Applied Catalysis B: Environmental, 2018, 233, 130-135. | 10.8 | 103       |
| 696 | Rapid Synthesis and Correlative Measurements of Electrocatalytic Nickel/Iron Oxide Nanoparticles. Scientific Reports, 2018, 8, 4584.   | 1.6  | 16        |
| 697 | Graphdiyne: a superior carbon additive to boost the activity of water oxidation catalysts. Nanoscale Horizons, 2018, 3, 317-326.   | 4.1  | 116       |
| 698 | Ternary nickel iron phosphide supported on nickel foam as a high-efficiency electrocatalyst for overall water splitting. International Journal of Hydrogen Energy, 2018, 43, 7299-7306.              | 3.8  | 76        |
| 699 | Triple Ni-Co-Mo metal sulfides with one-dimensional and hierarchical nanostructures towards highly efficient hydrogen evolution reaction. Journal of Catalysis, 2018, 361, 204-213.                  | 3.1  | 115       |
| 700 | Emerging Two-Dimensional Nanomaterials for Electrocatalysis. Chemical Reviews, 2018, 118, 6337-6408.   | 23.0 | 1,552     |
| 701 | In situ growth of iron-nickel nitrides on carbon nanotubes with enhanced stability and activity for oxygen evolution reaction. Electrochimica Acta, 2018, 267, 8-14.                                 | 2.6  | 45        |
| 702 | Steel-based electrocatalysts for efficient and durable oxygen evolution in acidic media. Catalysis Science and Technology, 2018, 8, 2104-2116.   | 2.1  | 35        |
| 703 | Electrodeposited NiCu bimetal on carbon paper as stable non-noble anode for efficient electrooxidation of ammonia. Applied Catalysis B: Environmental, 2018, 237, 1101-1109.                         | 10.8 | 130       |
| 704 | Chemically Deposited Cobalt-Based Oxygen Evolution Electrocatalysts on DOPA-Displaying Viruses. ChemCatChem, 2018, 10, 165-169.  | 1.8  | 4         |
| 705 | Solar Hydrogen Energy Conversion Based on Water Splitting. Advanced Energy Materials, 2018, 8, 1701620.  | 10.2 | 429       |
| 706 | Co(OH) <sub>2</sub> hollow nanoflowers as highly efficient electrocatalysts for oxygen evolution reaction. Journal of Materials Research, 2018, 33, 568-580.   | 1.2  | 22        |
| 707 | Cobalt-Iron Pyrophosphate Porous Nanosheets as Highly Active Electrocatalysts for the Oxygen Evolution Reaction. ChemElectroChem, 2018, 5, 36-43.  | 1.7  | 36        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 708 | Transition metal doping effects in Co-phosphate catalysts for water splitting studied with XAS. Journal of Electron Spectroscopy and Related Phenomena, 2018, 224, 3-7.  | 0.8  | 14        |
| 709 | An integrated electrochemical device based on earth-abundant metals for both energy storage and conversion. Energy Storage Materials, 2018, 11, 282-293.   | 9.5  | 82        |
| 710 | Photoelectrochemical Water Oxidation by GaAs Nanowire Arrays Protected with Atomic Layer Deposited NiO <sub>x</sub> Electrocatalysts. Journal of Electronic Materials, 2018, 47, 932-937.  | 1.0  | 6         |
| 711 | Electrochemical water oxidation: The next five years. Current Opinion in Electrochemistry, 2018, 7, 31-35.   | 2.5  | 41        |
| 712 | Eutectic <sup>∞</sup> Derived Mesoporous Ni <sup>∞</sup> Fe <sup>∞</sup> O Nanowire Network Catalyzing Oxygen Evolution and Overall Water Splitting. Advanced Energy Materials, 2018, 8, 1701347.  | 10.2 | 281       |
| 713 | Chemical transformation of iron alkoxide nanosheets to FeOOH nanoparticles for highly active and stable oxygen evolution electrocatalysts. Journal of Industrial and Engineering Chemistry, 2018, 58, 100-104.                           | 2.9  | 42        |
| 714 | Hierarchical Hollow Nanoprisms Based on Ultrathin Ni <sup>∞</sup> Fe Layered Double Hydroxide Nanosheets with Enhanced Electrocatalytic Activity towards Oxygen Evolution. Angewandte Chemie - International Edition, 2018, 57, 172-176. | 7.2  | 507       |
| 715 | A Highly Efficient Oxygen Evolution Catalyst Consisting of Interconnected Nickel <sup>∞</sup> Iron <sup>∞</sup> Layered Double Hydroxide and Carbon Nanodomains. Advanced Materials, 2018, 30, 1705106.                                  | 11.1 | 209       |
| 716 | Synergistic Effect of Inactive Iron Oxide Core on Active Nickel Phosphide Shell for Significant Enhancement in Oxygen Evolution Reaction Activity. ACS Energy Letters, 2018, 3, 141-148.   | 8.8  | 74        |
| 717 | Hierarchical Hollow Nanoprisms Based on Ultrathin Ni <sup>∞</sup> Fe Layered Double Hydroxide Nanosheets with Enhanced Electrocatalytic Activity towards Oxygen Evolution. Angewandte Chemie, 2018, 130, 178-182.                        | 1.6  | 72        |
| 718 | A Permselective CeO <sub>x</sub> Coating To Improve the Stability of Oxygen Evolution Electrocatalysts. Angewandte Chemie, 2018, 130, 1632-1636.   | 1.6  | 28        |
| 719 | A Permselective CeO <sub>x</sub> Coating To Improve the Stability of Oxygen Evolution Electrocatalysts. Angewandte Chemie - International Edition, 2018, 57, 1616-1620.  | 7.2  | 121       |
| 720 | Mixed NiO/NiCo <sub>2</sub> O <sub>4</sub> Nanocrystals Grown from the Skeleton of a 3D Porous Nickel Network as Efficient Electrocatalysts for Oxygen Evolution Reactions. ACS Applied Materials & Interfaces, 2018, 10, 417-426.       | 4.0  | 83        |
| 721 | Reversible Structural Evolution of NiCoO <sub>x</sub> H <sub>y</sub> during the Oxygen Evolution Reaction and Identification of the Catalytically Active Phase. ACS Catalysis, 2018, 8, 1238-1247.                                       | 5.5  | 153       |
| 722 | Amorphous Cobalt Vanadium Oxide as a Highly Active Electrocatalyst for Oxygen Evolution. ACS Catalysis, 2018, 8, 644-650.  | 5.5  | 220       |
| 723 | Low-Voltage Electrolytic Hydrogen Production Derived from Efficient Water and Ethanol Oxidation on Fluorine-Modified FeOOH Anode. ACS Catalysis, 2018, 8, 526-530.   | 5.5  | 116       |
| 724 | Free-standing single-crystalline NiFe-hydroxide nanoflake arrays: a self-activated and robust electrocatalyst for oxygen evolution. Chemical Communications, 2018, 54, 463-466.  | 2.2  | 107       |
| 725 | Remarkably enhanced water splitting activity of nickel foam due to simple immersion in a ferric nitrate solution. Nano Research, 2018, 11, 3959-3971.  | 5.8  | 88        |



| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 726 | Scalable Fabrication of Highly Active and Durable Membrane Electrodes toward Water Oxidation. <i>Small</i> , 2018, 14, 1702109.   | 5.2  | 20        |
| 727 | Facile synthesis of CuFe <sub>2</sub> O <sub>4</sub> crystals efficient for water oxidation and H <sub>2</sub> O <sub>2</sub> reduction. <i>Journal of Alloys and Compounds</i> , 2018, 735, 654-659.   | 2.8  | 31        |
| 728 | From Enzymes to Functional Materials—Towards Activation of Small Molecules. <i>Chemistry - A European Journal</i> , 2018, 24, 1471-1493.  | 1.7  | 55        |
| 729 | Effects of redox-active interlayer anions on the oxygen evolution reactivity of NiFe-layered double hydroxide nanosheets. <i>Nano Research</i> , 2018, 11, 1358-1368.   | 5.8  | 134       |
| 730 | Rapid synthesis of Co <sub>3</sub> O <sub>4</sub> nanosheet arrays on Ni foam by <i>in situ</i> electrochemical oxidization of air-plasma engraved Co(OH) <sub>2</sub> for efficient oxygen evolution. <i>Chemical Communications</i> , 2018, 54, 12698-12701.                        | 2.2  | 31        |
| 731 | Ultra-fast pyrolysis of ferrocene to form Fe/C heterostructures as robust oxygen evolution electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21577-21584.  | 5.2  | 50        |
| 732 | <i>In situ</i> synthesis of nitrogen doped carbon with embedded Co@Co <sub>3</sub> O <sub>4</sub> nanoparticles as a bifunctional electrocatalyst for oxygen reduction and oxygen evolution reactions. <i>Chemical Communications</i> , 2018, 54, 12746-12749.                        | 2.2  | 25        |
| 733 | <i>Operando</i> X-ray absorption investigations into the role of Fe in the electrochemical stability and oxygen evolution activity of Ni <sub>1-x</sub> Fe <sub>x</sub> O <sub>y</sub> nanoparticles. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24534-24549.                 | 5.2  | 45        |
| 734 | Chapter 3. Understanding the Effects of Composition and Structure on the Oxygen Evolution Reaction (OER) Occurring on NiFeOx Catalysts. <i>RSC Energy and Environment Series</i> , 2018, , 79-116.  | 0.2  | 3         |
| 735 | Identification of Stabilizing High-Valent Active Sites by Operando High-Energy Resolution Fluorescence-Detected X-ray Absorption Spectroscopy for High-Efficiency Water Oxidation. <i>Journal of the American Chemical Society</i> , 2018, 140, 17263-17270.                          | 6.6  | 92        |
| 736 | Study on the Stability of Co <sub>x</sub> M <sub>3-x</sub> O <sub>4</sub> (M = Ni, Mn and Ce) Nanowire Array Electrodes for Electrochemical Oxygen Evolution at Large Current Densities. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3496-A3503.                      | 1.3  | 10        |
| 737 | Facile Preparation of Amorphous Fe–Co–Ni Hydroxide Arrays: A Highly Efficient Integrated Electrode for Water Oxidation. <i>Inorganic Chemistry</i> , 2018, 57, 15610-15617.   | 1.9  | 21        |
| 738 | Heterogeneous Molten Salt Design Strategy toward Coupling Cobalt–Cobalt Oxide and Carbon for Efficient Energy Conversion and Storage. <i>Advanced Energy Materials</i> , 2018, 8, 1800762.  | 10.2 | 51        |
| 739 | Influence of Electrolytic Conditions on the Preparation of NiOOH by Catalytic Electrolysis Method. <i>International Journal of Electrochemical Science</i> , 2018, 13, 2718-2730.   | 0.5  | 3         |
| 740 | Porous CoO-CeO <sub>2</sub> heterostructures as highly active and stable electrocatalysts for water oxidation. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 22529-22537.   | 3.8  | 35        |
| 741 | Understanding Synergism of Cobalt Metal and Copper Oxide toward Highly Efficient Electrocatalytic Oxygen Evolution. <i>ACS Catalysis</i> , 2018, 8, 12030-12040.  | 5.5  | 60        |
| 742 | Remarkable Bifunctional Oxygen and Hydrogen Evolution Electrocatalytic Activities with Trace-Level Fe Doping in Ni- and Co-Layered Double Hydroxides for Overall Water-Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 42453-42468.                              | 4.0  | 107       |
| 743 | A New Class of Zn <sub>1-x</sub> Fe <sub>x</sub> Oxyselenide and Zn <sub>1-x</sub> Fe <sub>x</sub> LDH Nanostructured Material with Remarkable Bifunctional Oxygen and Hydrogen Evolution Electrocatalytic Activities for Overall Water Splitting. <i>Small</i> , 2018, 14, e1803638. | 5.2  | 56        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 744 | Impact of nanoparticle size and lattice oxygen on water oxidation on NiFeOxHy. Nature Catalysis, 2018, 1, 820-829.   | 16.1 | 344       |
| 745 | Electrochemical Corrosion Engineering for Ni-Fe Oxides with Superior Activity toward Water Oxidation. ACS Applied Materials & Interfaces, 2018, 10, 42217-42224.   | 4.0  | 38        |
| 746 | Ir-Ni Bimetallic OER Catalysts Prepared by Controlled Ni Electrodeposition on Irpoly and Ir(111) Surfaces, 2018, 1, 165-186.   | 1.0  | 17        |
| 747 | Oxygen Evolution Reaction Catalyzed by Cost-Effective Metal Oxides. , 2018, , 785-795.   |      | 1         |
| 748 | Amorphous Iron and Cobalt Based Phosphate Nanosheets Supported on Nickel Foam as Superior Catalysts for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2018, 1, 6764-6768.                       | 2.5  | 18        |
| 749 | Effects of Metal Combinations on the Electrocatalytic Properties of Transition-Metal-Based Layered Double Hydroxides for Water Oxidation: A Perspective with Insights. ACS Omega, 2018, 3, 16529-16541.      | 1.6  | 42        |
| 750 | Nanotube Array-Like WO <sub>3</sub> Photoanode with Dual-Layer Oxygen-Evolution Cocatalysts for Photoelectrocatalytic Overall Water Splitting. ACS Applied Energy Materials, 2018, 1, 6871-6880.             | 2.5  | 60        |
| 751 | Supported metal oxide nanoparticle electrocatalysts: How immobilization affects catalytic performance. Applied Catalysis A: General, 2018, 568, 11-15.   | 2.2  | 7         |
| 752 | In Situ Fabrication of a Nickel/Molybdenum Carbide-Anchored N-Doped Graphene/CNT Hybrid: An Efficient (Pre)catalyst for OER and HER. ACS Applied Materials & Interfaces, 2018, 10, 35025-35038.              | 4.0  | 185       |
| 753 | Quaternary bimetallic phosphosulphide nanosheets derived from prussian blue analogues: Origin of the ultra-high activity for oxygen evolution. Journal of Power Sources, 2018, 403, 90-96.                   | 4.0  | 87        |
| 754 | NiFe Oxide Nanocatalysts Grown on Carbonized Algal Cells for Enhanced Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2018, 165, J3157-J3165.   | 1.3  | 2         |
| 755 | Enhanced Oxygen Evolution Reaction for Single Atomic Co Catalyst via Support Modification: A Density Functional Theory Design Prediction. Inorganic Chemistry, 2018, 57, 13020-13026.                        | 1.9  | 25        |
| 756 | Electrocatalytic Properties of (100)-, (110)-, and (111)-Oriented NiO Thin Films toward the Oxygen Evolution Reaction. Journal of Physical Chemistry C, 2018, 122, 22252-22263.                              | 1.5  | 33        |
| 757 | Suppressing buoyant force: New avenue for long-term durability of oxygen evolution catalysts. Nano Energy, 2018, 54, 184-191.  | 8.2  | 33        |
| 758 | Ce-Directed Double-Layered Nanosheet Architecture of NiFe-Based Hydroxide as Highly Efficient Water Oxidation Electrocatalyst. ACS Sustainable Chemistry and Engineering, 2018, 6, 15411-15418.              | 3.2  | 32        |
| 759 | A Perspective on Low-Temperature Water Electrolysis – Challenges in Alkaline and Acidic Technology. International Journal of Electrochemical Science, 2018, 13, 1173-1226.                                   | 0.5  | 197       |
| 760 | Cobalt-Iron Oxide Nanoarrays Supported on Carbon Fiber Paper with High Stability for Electrochemical Oxygen Evolution at Large Current Densities. ACS Applied Materials & Interfaces, 2018, 10, 39809-39818. | 4.0  | 60        |
| 761 | 3D Core-Shell NiFeCr Catalyst on a Cu Nanoarray for Water Oxidation: Synergy between Structural and Electronic Modulation. ACS Energy Letters, 2018, 3, 2865-2874.   | 8.8  | 85        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 762 | Catalyst or Precatalyst? The Effect of Oxidation on Transition Metal Carbide, Pnictide, and Chalcogenide Oxygen Evolution Catalysts. <i>ACS Energy Letters</i> , 2018, 3, 2956-2966.                      | 8.8 | 309       |
| 763 | Revealing pH-Dependent Activities and Surface Instabilities for Ni-Based Electrocatalysts during the Oxygen Evolution Reaction. <i>ACS Energy Letters</i> , 2018, 3, 2884-2890.                           | 8.8 | 74        |
| 764 | Interfacial Interaction between FeOOH and Ni-Fe LDH to Modulate the Local Electronic Structure for Enhanced OER Electrocatalysis. <i>ACS Catalysis</i> , 2018, 8, 11342-11351.                            | 5.5 | 414       |
| 765 | Intercalation of Li into a Co-Containing Steel-Ceramic Composite: Substantial Oxygen Evolution at Almost Zero Overpotential. <i>ACS Catalysis</i> , 2018, 8, 10914-10925.                                 | 5.5 | 17        |
| 766 | Conjugated Molecule Boosts Metal-Organic Frameworks as Efficient Oxygen Evolution Reaction Catalysts. <i>Small</i> , 2018, 14, e1803576.  | 5.2 | 94        |
| 767 | Atomistic Investigation of Doping Effects on Electrocatalytic Properties of Cobalt Oxides for Water Oxidation. <i>Advanced Science</i> , 2018, 5, 1801632.  | 5.6 | 17        |
| 768 | Nickel-Carbon-Zirconium Material Derived from Nickel-Oxide Clusters Installed in a Metal-Organic Framework Scaffold by Atomic Layer Deposition. <i>Langmuir</i> , 2018, 34, 14143-14150.                  | 1.6 | 16        |
| 769 | Stabilization of Cobalt-Polyoxometalate over Poly(ionic liquid) Composites for Efficient Electrocatalytic Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 38872-38879.         | 4.0 | 32        |
| 770 | High performance duckweed-derived carbon support to anchor NiFe electrocatalysts for efficient solar energy driven water splitting. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18948-18959.       | 5.2 | 58        |
| 771 | Nickel-Based Bicarbonates as Bifunctional Catalysts for Oxygen Evolution and Reduction Reaction in Alkaline Media. <i>Chemistry - A European Journal</i> , 2018, 24, 17665-17671.                         | 1.7 | 15        |
| 772 | Thermodynamic Evaluation of Trace-Amount Transition-Metal-Ion Doping in NiOOH Films. <i>Journal of the Electrochemical Society</i> , 2018, 165, F907-F913.  | 1.3 | 7         |
| 773 | Mechanistic Study of the Synergy between Iron and Transition Metals for the Catalysis of the Oxygen Evolution Reaction. <i>ChemSusChem</i> , 2018, 11, 3790-3795.   | 3.6 | 32        |
| 774 | Bimetal-decorated nanocarbon as a superior electrocatalyst for overall water splitting. <i>Journal of Power Sources</i> , 2018, 401, 312-321.   | 4.0 | 41        |
| 775 | Needle grass array of nanostructured nickel cobalt sulfide electrode for clean energy generation. <i>Surface and Coatings Technology</i> , 2018, 354, 306-312.  | 2.2 | 26        |
| 776 | CeO <sub>2</sub> -Decorated NiFe-Layered Double Hydroxide for Efficient Alkaline Hydrogen Evolution by Oxygen Vacancy Engineering. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 35145-35153. | 4.0 | 156       |
| 777 | Recent progress in iron oxide based photoanodes for solar water splitting. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 473002.  | 1.3 | 44        |
| 778 | Structural engineering of transition metal-based nanostructured electrocatalysts for efficient water splitting. <i>Frontiers of Chemical Science and Engineering</i> , 2018, 12, 838-854.                 | 2.3 | 40        |
| 779 | Hierarchical coral-like FeNi(OH) /Ni via mild corrosion of nickel as an integrated electrode for efficient overall water splitting. <i>Chinese Journal of Catalysis</i> , 2018, 39, 1736-1745.            | 6.9 | 34        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 780 | <i>Anthocephalus cadamba</i> shaped FeNi encapsulated carbon nanostructures for metal-free air batteries as a resilient bifunctional oxygen electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2018, 6, 20411-20420.                 | 5.2  | 67        |
| 781 | An Intriguing Pea-Like Nanostructure of Cobalt Phosphide on Molybdenum Carbide Incorporated Nitrogen-Doped Carbon Nanosheets for Efficient Electrochemical Water Splitting. <i>ChemSusChem</i> , 2018, 11, 3956-3964.                        | 3.6  | 55        |
| 782 | Layered Double Hydroxide-Based Catalysts: Recent Advances in Preparation, Structure, and Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1802943.   | 7.8  | 317       |
| 783 | Alkaline Water Electrolysis by NiZn-Double Hydroxide-Derived Porous Nickel Selenide-Nitrogen-Doped Graphene Composite. <i>ACS Applied Energy Materials</i> , 0, , .  | 2.5  | 8         |
| 784 | Template Electro-Etching-Mediated FeOOH Nanotubes as Highly Efficient Photoactive Electrocatalysts for Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 0, , .   | 2.5  | 5         |
| 785 | Charge State Manipulation of Cobalt Selenide Catalyst for Overall Seawater Electrolysis. <i>Advanced Energy Materials</i> , 2018, 8, 1801926.  | 10.2 | 264       |
| 786 | Bifunctional CoNi/CoFe <sub>2</sub> O <sub>4</sub> /Ni foam electrodes for efficient overall water splitting at a high current density. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19221-19230.                                      | 5.2  | 140       |
| 787 | Earth-Abundant Transition-Metal-Based Electrocatalysts for Water Electrolysis to Produce Renewable Hydrogen. <i>Chemistry - A European Journal</i> , 2018, 24, 18334-18355.  | 1.7  | 203       |
| 788 | In Situ Vertical Growth of Fe-Ni Layered Double-Hydroxide Arrays on Fe-Ni Alloy Foil: Interfacial Layer Enhanced Electrocatalyst with Small Overpotential for Oxygen Evolution Reaction. <i>ACS Energy Letters</i> , 2018, 3, 2357-2365.     | 8.8  | 150       |
| 789 | Operando X-Ray Absorption Spectroscopy Shows Iron Oxidation Is Concurrent with Oxygen Evolution in Cobalt-Iron (Oxy)hydroxide Electrocatalysts. <i>Angewandte Chemie</i> , 2018, 130, 13022-13026.   | 1.6  | 28        |
| 790 | A facile, one-step electroless deposition of NiFeOOH nanosheets onto photoanodes for highly durable and efficient solar water oxidation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 20678-20685.                                     | 5.2  | 31        |
| 791 | Controlling Proton and Electron Transfer Rates to Enhance the Activity of an Oxygen Reduction Electrocatalyst. <i>Angewandte Chemie</i> , 2018, 130, 13668-13671.  | 1.6  | 2         |
| 792 | Controlling Proton and Electron Transfer Rates to Enhance the Activity of an Oxygen Reduction Electrocatalyst. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13480-13483.   | 7.2  | 31        |
| 793 | Three-Dimensional Hierarchical Multimetal-LDH Nanoflakes and Their Derived Spinel Oxides for Efficient Oxygen Evolution. <i>ACS Applied Energy Materials</i> , 2018, 1, 4998-5007.   | 2.5  | 11        |
| 794 | Selective Reduction-Oxidation Strategy to the Conductivity-Enhancing Ag-Decorated Co-Based 2D Hydroxides as Efficient Electrocatalyst in Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 13420-13426. | 3.2  | 27        |
| 795 | Iron-based heterogeneous catalysts for oxygen evolution reaction; change in perspective from activity promoter to active catalyst. <i>Journal of Power Sources</i> , 2018, 395, 106-127.   | 4.0  | 68        |
| 796 | <i>In situ</i> growth of well-ordered NiFe-MOF-74 on Ni foam by Fe <sup>2+</sup> induction as an efficient and stable electrocatalyst for water oxidation. <i>Chemical Communications</i> , 2018, 54, 7046-7049.                             | 2.2  | 176       |
| 797 | Highly stable and efficient non-precious metal electrocatalysts of Mo-doped NiOOH nanosheets for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 12140-12145.   | 3.8  | 26        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 798 | Improving the Wettability of Thin-Film Rotating Disk Electrodes for Reliable Activity Evaluation of Oxygen Electrocatalysts by Triggering Oxygen Reduction at the Catalyst-Electrolyte-Bubble Triple Phase Boundaries. <i>Journal of the Electrochemical Society</i> , 2018, 165, F436-F440. | 1.3  | 9         |
| 799 | Synergy between Fe and Ni in the optimal performance of (Ni,Fe)OOH catalysts for the oxygen evolution reaction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5872-5877.   | 3.3  | 380       |
| 800 | Electrochemical trapping of metastable Mn <sup>3+</sup> ions for activation of MnO <sub>2</sub> oxygen evolution catalysts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E5261-E5268.   | 3.3  | 173       |
| 801 | NiFe (Oxy) Hydroxides Derived from NiFe Disulfides as an Efficient Oxygen Evolution Catalyst for Rechargeable Zn-Air Batteries: The Effect of Surface S Residues. <i>Advanced Materials</i> , 2018, 30, e1800757.  | 11.1 | 219       |
| 802 | Transition Metal Oxides as Electrocatalysts for the Oxygen Evolution Reaction in Alkaline Solutions: An Application-Inspired Renaissance. <i>Journal of the American Chemical Society</i> , 2018, 140, 7748-7759.  | 6.6  | 1,157     |
| 803 | Borate-ion intercalated Ni Fe layered double hydroxide to simultaneously boost mass transport and charge transfer for catalysis of water oxidation. <i>Journal of Colloid and Interface Science</i> , 2018, 528, 36-44.  | 5.0  | 50        |
| 804 | Direct Electrolytic Splitting of Seawater: Activity, Selectivity, Degradation, and Recovery Studied from the Molecular Catalyst Structure to the Electrolyzer Cell Level. <i>Advanced Energy Materials</i> , 2018, 8, 1800338.   | 10.2 | 185       |
| 805 | Ultrathin Amorphous Iron-Nickel Boride Nanosheets for Highly Efficient Electrocatalytic Oxygen Production. <i>Chemistry - A European Journal</i> , 2018, 24, 18502-18511.  | 1.7  | 82        |
| 806 | Engineering a stereo-film of FeNi <sub>3</sub> nanosheet-covered FeOOH arrays for efficient oxygen evolution. <i>Nanoscale</i> , 2018, 10, 10971-10978.  | 2.8  | 40        |
| 807 | Metal-Organic Framework Hybrid-Assisted Formation of Co <sub>3</sub> O <sub>4</sub> /Co-Fe Oxide Double-Shelled Nanoboxes for Enhanced Oxygen Evolution. <i>Advanced Materials</i> , 2018, 30, e1801211.   | 11.1 | 374       |
| 808 | Electron-Blocking and Oxygen Evolution Catalyst Layers by Plasma-Enhanced Atomic Layer Deposition of Nickel Oxide. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701531.  | 1.9  | 18        |
| 809 | An alkaline water electrolyzer with nickel electrodes enables efficient high current density operation. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 11932-11938.   | 3.8  | 66        |
| 810 | Promoting Oxygen Evolution Reactions through Introduction of Oxygen Vacancies to Benchmark NiFe-OOH Catalysts. <i>ACS Energy Letters</i> , 2018, 3, 1515-1520.   | 8.8  | 249       |
| 811 | Water splitting by electrolysis at high current densities under 1.6 volts. <i>Energy and Environmental Science</i> , 2018, 11, 2858-2864.  | 15.6 | 438       |
| 812 | Tuning Electronic Push/Pull of Ni-Based Hydroxides To Enhance Hydrogen and Oxygen Evolution Reactions for Water Splitting. <i>ACS Catalysis</i> , 2018, 8, 5621-5629.  | 5.5  | 146       |
| 813 | Uniquely integrated Fe-doped Ni(OH) <sub>2</sub> nanosheets for highly efficient oxygen and hydrogen evolution reactions. <i>Nanoscale</i> , 2018, 10, 10620-10628.  | 2.8  | 142       |
| 814 | Oxygen Evolution Reaction on Ni-based Two-dimensional (2D) Titanate Nanosheets: Investigation on Effect of Fe Co-doping and Fe Incorporation from Electrolyte on the Activity. <i>ChemistrySelect</i> , 2018, 3, 5130-5137.  | 0.7  | 9         |
| 815 | Sloughing a Precursor Layer to Expose Active Stainless Steel Catalyst for Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 24499-24507.  | 4.0  | 25        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 816 | New Iron-Cobalt Oxide Catalysts Promoting BiVO <sub>4</sub> Films for Photoelectrochemical Water Splitting. <i>Advanced Functional Materials</i> , 2018, 28, 1802685.   | 7.8  | 248       |
| 817 | Elucidating the performance and unexpected stability of partially coated water-splitting silicon photoanodes. <i>Energy and Environmental Science</i> , 2018, 11, 2590-2599.  | 15.6 | 50        |
| 818 | An ultrathin nickel-based film electrodeposited from a Ni-Tris molecular precursor for highly efficient electrocatalytic water oxidation. <i>Electrochimica Acta</i> , 2018, 283, 104-110.                              | 2.6  | 12        |
| 819 | Binary Transition-Metal Oxide Hollow Nanoparticles for Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 24715-24724.  | 4.0  | 60        |
| 820 | High-performance bifunctional porous non-noble metal phosphide catalyst for overall water splitting. <i>Nature Communications</i> , 2018, 9, 2551.  | 5.8  | 812       |
| 821 | A Highly Effective, Stable Oxygen Evolution Catalyst Derived from Transition Metal Selenides and Phosphides. <i>Particle and Particle Systems Characterization</i> , 2018, 35, 1800135.                                 | 1.2  | 28        |
| 822 | Geometric distortions in nickel (oxy)hydroxide electrocatalysts by redox inactive iron ions. <i>Energy and Environmental Science</i> , 2018, 11, 2476-2485.   | 15.6 | 83        |
| 823 | Effect of transition-metal-ion dopants on the oxygen evolution reaction on NiOOH(0001). <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 19525-19531.   | 1.3  | 33        |
| 824 | Laser processed Ni-Fe alloys as electrocatalyst toward oxygen evolution reaction. <i>Materials Research Express</i> , 2018, 5, 066527.  | 0.8  | 9         |
| 825 | Tin Oxide as a Protective Heterojunction with Silicon for Efficient Photoelectrochemical Water Oxidation in Strongly Acidic or Alkaline Electrolytes. <i>Advanced Energy Materials</i> , 2018, 8, 1801155.              | 10.2 | 34        |
| 826 | Influence of Temperature and Electrolyte Concentration on the Structure and Catalytic Oxygen Evolution Activity of Nickel-Iron Layered Double Hydroxide. <i>Chemistry - A European Journal</i> , 2018, 24, 13773-13777. | 1.7  | 57        |
| 827 | High resolution, binder-free investigation of the intrinsic activity of immobilized NiFe LDH nanoparticles on etched carbon nanoelectrodes. <i>Nano Research</i> , 2018, 11, 6034-6044.                                 | 5.8  | 7         |
| 828 | Extracting Knowledge from Data through Catalysis Informatics. <i>ACS Catalysis</i> , 2018, 8, 7403-7429.  | 5.5  | 179       |
| 829 | Improving Electrocatalysts for Oxygen Evolution Using Ni <sub>3</sub> Fe <sub>3</sub> O <sub>4</sub> /Ni Hybrid Nanostructures Formed by Solvothermal Synthesis. <i>ACS Energy Letters</i> , 2018, 3, 1698-1707.        | 8.8  | 132       |
| 830 | Binary Ni <sub>2</sub> FeO <sub>x</sub> anchored on modified graphite for efficient and durable oxygen evolution electrocatalysis. <i>Sustainable Energy and Fuels</i> , 2018, 2, 2160-2164.                            | 2.5  | 4         |
| 831 | Catalysts from earth abundant materials in a scalable, stand-alone photovoltaic-electrochemical module for solar water splitting. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15968-15976.                       | 5.2  | 19        |
| 832 | Activity enhancement via borate incorporation into a NiFe (oxy)hydroxide catalyst for electrocatalytic oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16959-16964.                                | 5.2  | 21        |
| 833 | Self-Assemble and In Situ Formation of Ni <sub>1</sub> Fe <sub>x</sub> PS <sub>3</sub> Nanomosaic-Decorated MXene Hybrids for Overall Water Splitting. <i>Advanced Energy Materials</i> , 2018, 8, 1801127.             | 10.2 | 204       |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 834 | Synthesis of a Highly Efficient Oxygen Evolution Electrocatalyst by Incorporation of Iron into Nanoscale Cobalt Borides. <i>ChemSusChem</i> , 2018, 11, 3150-3156.   | 3.6  | 41        |
| 835 | Carbon-Supported Iron Phosphides: Highest Intrinsic Oxygen Evolution Activity of the Iron Triad. <i>ACS Applied Energy Materials</i> , 2018, 1, 3593-3597.   | 2.5  | 9         |
| 836 | Phase Exploration and Identification of Multinary Transition-Metal Selenides as High-Efficiency Oxygen Evolution Electrocatalysts through Combinatorial Electrodeposition. <i>ACS Catalysis</i> , 2018, 8, 8273-8289.            | 5.5  | 76        |
| 837 | In-situ ammonia-modulated silver oxide as efficient oxygen evolution catalyst in neutral organic carboxylate buffer. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 14379-14387.                                    | 3.8  | 2         |
| 838 | Host-Guest Engineering of Layered Double Hydroxides towards Efficient Oxygen Evolution Reaction: Recent Advances and Perspectives. <i>Catalysts</i> , 2018, 8, 214.  | 1.6  | 21        |
| 839 | Effects of the Aqueous Environment on the Stability and Chemistry of $\text{Fe}^{2+}$ -NiOOH Surfaces. <i>Chemistry of Materials</i> , 2018, 30, 5205-5219.  | 3.2  | 41        |
| 840 | Tailored transition metal-doped nickel phosphide nanoparticles for the electrochemical oxygen evolution reaction (OER). <i>Chemical Communications</i> , 2018, 54, 8630-8633.  | 2.2  | 73        |
| 841 | Iron Is the Active Site in Nickel/Iron Water Oxidation Electrocatalysts. <i>Molecules</i> , 2018, 23, 903.   | 1.7  | 66        |
| 842 | Robust bifunctional oxygen electrocatalyst with a rigid and flexible structure for air-cathodes. <i>NPG Asia Materials</i> , 2018, 10, 618-629.  | 3.8  | 83        |
| 843 | Nickel oxide-polypyrrole nanocomposite electrode materials for electrocatalytic water oxidation. <i>Catalysis Science and Technology</i> , 2018, 8, 4030-4043.   | 2.1  | 20        |
| 844 | Coupling confinement activating cobalt oxide ultra-small clusters for high-turnover oxygen evolution electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15684-15689.   | 5.2  | 25        |
| 845 | Role of cobalt-iron (oxy)hydroxide ( $\text{CoFeO}_x$ ) as oxygen evolution catalyst on hematite photoanodes. <i>Energy and Environmental Science</i> , 2018, 11, 2972-2984.   | 15.6 | 120       |
| 846 | Non-Noble Metal Oxides and their Application as Bifunctional Catalyst in Reversible Fuel Cells and Rechargeable Air Batteries. <i>ChemCatChem</i> , 2018, 10, 4162-4171.   | 1.8  | 35        |
| 847 | Monolithic nanoporous Ni Fe alloy by dealloying laser processed Ni Fe Al as electrocatalyst toward oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 15234-15244.                           | 3.8  | 40        |
| 848 | In situ formation of $\text{Ni}_3\text{Se}_4$ nanorod arrays as versatile electrocatalysts for electrochemical oxidation reactions in hybrid water electrolysis. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15653-15658. | 5.2  | 84        |
| 849 | Resolution of Electronic and Structural Factors Underlying Oxygen-Evolving Performance in Amorphous Cobalt Oxide Catalysts. <i>Journal of the American Chemical Society</i> , 2018, 140, 10710-10720.                            | 6.6  | 54        |
| 850 | Oxygen evolution catalytic performance of quantum dot nickel-iron double hydroxide/reduced graphene oxide composites. <i>Materials Letters</i> , 2018, 231, 24-27.   | 1.3  | 16        |
| 851 | Boosting electrocatalytic oxygen evolution by synergistically coupling layered double hydroxide with MXene. <i>Nano Energy</i> , 2018, 44, 181-190.  | 8.2  | 458       |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 852 | Oxygen Evolution Activity and Chemical Stability of Ni and Fe Based Perovskites in Alkaline Media. <i>Journal of the Electrochemical Society</i> , 2018, 165, F827-F835.   | 1.3  | 15        |
| 853 | A porphyrin covalent organic framework cathode for flexible Zn-air batteries. <i>Energy and Environmental Science</i> , 2018, 11, 1723-1729.   | 15.6 | 298       |
| 854 | A sea-change: manganese doped nickel/nickel oxide electrocatalysts for hydrogen generation from seawater. <i>Energy and Environmental Science</i> , 2018, 11, 1898-1910.   | 15.6 | 192       |
| 855 | Conversion of Iron Ore into an Active Catalyst for the Oxygen Evolution Reaction. <i>Advanced Sustainable Systems</i> , 2018, 2, 1800019.  | 2.7  | 11        |
| 856 | In Silico Discovery of New Dopants for Fe-Doped Ni Oxyhydroxide (Ni <sub>1-x</sub> Fe <sub>x</sub> OOH) Catalysts for Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2018, 140, 6745-6748.                       | 6.6  | 274       |
| 857 | NiFe-Based Metal-Organic Framework Nanosheets Directly Supported on Nickel Foam Acting as Robust Electrodes for Electrochemical Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2018, 8, 1800584.                                | 10.2 | 442       |
| 858 | Hierarchical Design of NiOOH@Amorphous Ni-P Bilayer on a 3D Mesh Substrate for High-Efficiency Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 30273-30282.   | 4.0  | 27        |
| 859 | Boosting Hydrogen Production by Anodic Oxidation of Primary Amines over a NiSe Nanorod Electrode. <i>Angewandte Chemie</i> , 2018, 130, 13347-13350.   | 1.6  | 69        |
| 860 | Nickel Molybdenum Nitride Nanorods Grown on Ni Foam as Efficient and Stable Bifunctional Electrocatalysts for Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 30400-30408.                                  | 4.0  | 97        |
| 861 | Study of the Active Sites in Porous Nickel Oxide Nanosheets by Manganese Modulation for Enhanced Oxygen Evolution Catalysis. <i>ACS Energy Letters</i> , 2018, 3, 2150-2158.   | 8.8  | 131       |
| 862 | Roles of soluble species in the alkaline oxygen evolution reaction on a nickel anode. <i>Chemical Communications</i> , 2018, 54, 10116-10119.  | 2.2  | 26        |
| 863 | An Integrating Photoanode of WO <sub>3</sub> /Fe <sub>2</sub> O <sub>3</sub> Heterojunction Decorated with NiFe-LDH to Improve PEC Water Splitting Efficiency. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12906-12913.        | 3.2  | 96        |
| 864 | Operando X-ray Absorption Spectroscopy Shows Iron Oxidation Is Concurrent with Oxygen Evolution in Cobalt-Iron (Oxy)hydroxide Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12840-12844.                      | 7.2  | 131       |
| 865 | Operando Spectroscopic Identification of Active Sites in NiFe Prussian Blue Analogues as Electrocatalysts: Activation of Oxygen Atoms for Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2018, 140, 11286-11292. | 6.6  | 328       |
| 866 | Hydrogen transfer through different crystal phases of nickel oxy/hydroxide. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 25169-25178.  | 1.3  | 10        |
| 867 | A Review of Precious-Metal-Free Bifunctional Oxygen Electrocatalysts: Rational Design and Applications in Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1803329.  | 7.8  | 524       |
| 868 | Boosting Hydrogen Production by Anodic Oxidation of Primary Amines over a NiSe Nanorod Electrode. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13163-13166.  | 7.2  | 312       |
| 869 | Iron-Incorporated Ni(OH) <sub>2</sub> Hierarchical Nanosheet Arrays for Electrocatalytic Urea Oxidation. <i>Chemistry - A European Journal</i> , 2018, 24, 18408-18412.  | 1.7  | 114       |



| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 870 | Exceptional electrocatalytic oxygen evolution via tunable charge transfer interactions in $\text{La}_{0.5}\text{Sr}_{1.5}\text{Ni}_{1-x}\text{Fe}_x\text{O}_{4\pm\delta}$ Ruddlesden-Popper oxides. <i>Nature Communications</i> , 2018, 9, 3150. | 5.8 | 161       |
| 871 | Nanostructured NiFe (oxy)hydroxide with easily oxidized Ni towards efficient oxygen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16810-16817.  | 5.2 | 61        |
| 872 | Ni/Co-based nanosheet arrays for efficient oxygen evolution reaction. <i>Nano Energy</i> , 2018, 52, 360-368.   | 8.2 | 135       |
| 873 | Free-Sustaining Three-Dimensional S235 Steel-Based Porous Electrocatalyst for Highly Efficient and Durable Oxygen Evolution. <i>ChemSusChem</i> , 2018, 11, 3661-3671.  | 3.6 | 24        |
| 874 | Ultrafast Electron Trapping and Defect-Mediated Recombination in NiO Probed by Femtosecond Extreme Ultraviolet Reflection-Absorption Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5047-5054.                             | 2.1 | 40        |
| 875 | Optimization of the Activity of Ni-Based Nanostructures for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2018, 1, 4554-4563.  | 2.5 | 21        |
| 876 | Comparison Study toward the Influence of the Second Metals Doping on the Oxygen Evolution Activity of Cobalt Nitrides. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11457-11465.   | 3.2 | 51        |
| 877 | Coupling of Nickel Boride and $\text{Ni}(\text{OH})_2$ Nanosheets with Hierarchical Interconnected Conductive Porous Structure Synergizes the Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2018, 10, 4555-4561.                                | 1.8 | 23        |
| 878 | Sub-3-nm pores in two-dimensional nanomesh promoting the generation of electroactive phase for robust water oxidation. <i>Nano Energy</i> , 2018, 53, 74-82.  | 8.2 | 94        |
| 879 | Effect of Saturating the Electrolyte with Oxygen on the Activity for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2018, 8, 9359-9363.  | 5.5 | 51        |
| 880 | Molten salt-assisted <i>c</i> -axis-oriented growth of $\text{Ta}_3\text{N}_5$ nanorod arrays with enhanced charge transport for efficient photoelectrochemical water oxidation. <i>CrystEngComm</i> , 2018, 20, 5364-5369.                       | 1.3 | 16        |
| 881 | NiFeOx as a Bifunctional Electrocatalyst for Oxygen Reduction (OR) and Evolution (OE) Reaction in Alkaline Media. <i>Catalysts</i> , 2018, 8, 328.  | 1.6 | 25        |
| 882 | Multifunctional nanostructured electrocatalysts for energy conversion and storage: current status and perspectives. <i>Nanoscale</i> , 2018, 10, 11241-11280.   | 2.8 | 258       |
| 883 | Insight into water oxidation activity enhancement of Ni-based electrocatalysts interacting with modified carbon supports. <i>Electrochimica Acta</i> , 2018, 281, 684-691.  | 2.6 | 8         |
| 884 | Plasmon-Promoted Electrochemical Oxygen Evolution Catalysis from Gold Decorated $\text{MnO}_2$ Nanosheets under Green Light. <i>Advanced Functional Materials</i> , 2018, 28, 1801573.  | 7.8 | 70        |
| 885 | $\text{NiPS}_3$ Nanosheet-Graphene Composites as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. <i>ACS Nano</i> , 2018, 12, 5297-5305.  | 7.3 | 104       |
| 886 | Self-Supported FeNi-P Nanosheets with Thin Amorphous Layers for Efficient Electrocatalytic Water Splitting. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 9640-9648.  | 3.2 | 71        |
| 887 | Direct Synthesis and Anion Exchange of Noncarbonate-Intercalated NiFe-Layered Double Hydroxides and the Influence on Electrocatalysis. <i>Chemistry of Materials</i> , 2018, 30, 4321-4330.   | 3.2 | 123       |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 888 | Surface engineering by a novel electrochemical activation method for the synthesis of Co <sup>3+</sup> enriched Co(OH) <sub>2</sub> /CoOOH heterostructure for water oxidation. <i>Journal of Power Sources</i> , 2018, 396, 395-403. | 4.0  | 54        |
| 889 | Degree of Geometric Tilting Determines the Activity of FeO <sub>6</sub> Octahedra for Water Oxidation. <i>Chemistry of Materials</i> , 2018, 30, 4313-4320.   | 3.2  | 54        |
| 890 | Transient photocurrents on catalyst-modified n-Si photoelectrodes: insight from dual-working electrode photoelectrochemistry. <i>Sustainable Energy and Fuels</i> , 2018, 2, 1995-2005.   | 2.5  | 15        |
| 891 | Nanostructured FeNi <sub>3</sub> Incorporated with Carbon Doped with Multiple Nonmetal Elements for the Oxygen Evolution Reaction. <i>ChemSusChem</i> , 2018, 11, 2703-2709.  | 3.6  | 75        |
| 892 | Pearson's principle-inspired strategy for the synthesis of amorphous transition metal hydroxide hollow nanocubes for electrocatalytic oxygen evolution. <i>Materials Chemistry Frontiers</i> , 2018, 2, 1523-1528.                    | 3.2  | 33        |
| 893 | A <sup>À</sup> surface-modified antiperovskite as <sup>À</sup> an electrocatalyst for water oxidation. <i>Nature Communications</i> , 2018, 9, 2326.  | 5.8  | 87        |
| 894 | Microporous 2D NiCoFe phosphate nanosheets supported on Ni foam for efficient overall water splitting in alkaline media. <i>Nanoscale</i> , 2018, 10, 12975-12980.  | 2.8  | 94        |
| 895 | Defect-Enhanced Charge Separation and Transfer within Protection Layer/Semiconductor Structure of Photoanodes. <i>Advanced Materials</i> , 2018, 30, e1801773.  | 11.1 | 81        |
| 896 | Low onset potential on single crystal Ta <sub>3</sub> N <sub>5</sub> polyhedron array photoanode with preferential exposure of {001} facets. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 665-672.                          | 10.8 | 31        |
| 897 | Three-dimensional NiCu layered double hydroxide nanosheets array on carbon cloth for enhanced oxygen evolution. <i>Electrochimica Acta</i> , 2018, 282, 735-742.  | 2.6  | 57        |
| 898 | Organic chemistry at anodes and photoanodes. <i>Sustainable Energy and Fuels</i> , 2018, 2, 1905-1927.  | 2.5  | 76        |
| 899 | Boosting water oxidation electrocatalysts with surface engineered amorphous cobalt hydroxide nanoflakes. <i>Nanoscale</i> , 2018, 10, 12991-12996.  | 2.8  | 55        |
| 900 | In <sup>À</sup> situ <sup>À</sup> Methoden zur Charakterisierung elektrochemischer NiFe <sup>À</sup> Sauerstoffentwicklungskatalysatoren. <i>Angewandte Chemie</i> , 2019, 131, 1264-1277.  | 1.6  | 21        |
| 901 | Transformation of waste tin-plated steel to iron nanosheets and their application in generation of oxygen. <i>International Journal of Environmental Science and Technology</i> , 2019, 16, 3669-3678.                                | 1.8  | 8         |
| 902 | Proton <sup>À</sup> Electron Conductivity in Thin Films of a Cobalt <sup>À</sup> Oxygen Evolving Catalyst. <i>ACS Applied Energy Materials</i> , 2019, 2, 3-12.   | 2.5  | 39        |
| 903 | Application of In Situ Techniques for the Characterization of NiFe <sup>À</sup> Based Oxygen Evolution Reaction (OER) Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1252-1265.                       | 7.2  | 443       |
| 904 | Recent progress in functionalized layered double hydroxides and their application in efficient electrocatalytic water oxidation. <i>Journal of Energy Chemistry</i> , 2019, 32, 93-104.   | 7.1  | 70        |
| 905 | Fe-doped Co <sub>3</sub> O <sub>4</sub> @C nanoparticles derived from layered double hydroxide used as efficient electrocatalyst for oxygen evolution reaction. <i>Journal of Energy Chemistry</i> , 2019, 32, 63-70.                 | 7.1  | 47        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 906 | Recent Progress on Nickel-Based Oxide/(Oxy)Hydroxide Electrocatalysts for the Oxygen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2019, 25, 703-713.  | 1.7 | 170       |
| 907 | Fe-doping effect on CoTe catalyst with greatly boosted intrinsic activity for electrochemical oxygen evolution reaction. <i>Electrochimica Acta</i> , 2019, 321, 134656.   | 2.6 | 44        |
| 908 | Print-Light-Synthesis of Ni and NiFe-Nanoscale Catalysts for Oxygen Evolution. <i>ACS Applied Energy Materials</i> , 2019, 2, 6322-6331.   | 2.5 | 15        |
| 909 | Electrosynthesis, activation, and applications of nickel-iron oxyhydroxide in (photo-)electrochemical water splitting at near neutral condition. <i>Electrochimica Acta</i> , 2019, 321, 134667.   | 2.6 | 9         |
| 910 | Novel one-step synthesis of core@shell iron-nickel alloy nanoparticles coated by carbon layers for efficient oxygen evolution reaction electrocatalysis. <i>Journal of Power Sources</i> , 2019, 438, 226988.  | 4.0 | 40        |
| 911 | Iron tungsten mixed composite as a robust oxygen evolution electrocatalyst. <i>Chemical Communications</i> , 2019, 55, 10944-10947.  | 2.2 | 28        |
| 912 | Identical Location STEM analysis on $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$ Oxygen-Evolution Catalysts. <i>Microscopy and Microanalysis</i> , 2019, 25, 2052-2053.  | 0.2 | 1         |
| 913 | Evidence of Variations in Atomic Distribution in Disordered Mixed Metal Hydroxides. <i>MRS Advances</i> , 2019, 4, 1843-1850.  | 0.5 | 4         |
| 914 | Electrochemical oxidation of H <sub>2</sub> S on polycrystalline Ni electrodes. <i>Journal of Applied Electrochemistry</i> , 2019, 49, 929-936.  | 1.5 | 11        |
| 915 | Synthesis and Characterization of Fe <sup>3+</sup> and CeO <sub>2</sub> Co-decorated NiOOH Electrocatalysts Supported by Nickel Foam for the Oxygen Evolution Reaction. <i>International Journal of Electrochemical Science</i> , 2019, 14, 6532-6545. | 0.5 | 13        |
| 916 | Scaled-Up Synthesis of Amorphous NiFeMo Oxides and Their Rapid Surface Reconstruction for Superior Oxygen Evolution Catalysis. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15772-15777.   | 7.2 | 426       |
| 917 | Oxygen Vacancy and Chemical Ordering Control Oxygen Evolution Activity of $\text{Sr}_{2-x}\text{Ca}_x\text{Fe}_2\text{O}_{6-\delta}$ Perovskites. <i>ACS Applied Energy Materials</i> , 2019, 2, 6140-6145.  | 2.5 | 18        |
| 918 | A Cobalt-Iron Double-Atom Catalyst for the Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2019, 141, 14190-14199.  | 6.6 | 401       |
| 919 | Enhanced Photoelectrochemical Performance of WO <sub>3</sub> -Based Composite Photoanode Coupled with Carbon Quantum Dots and NiFe Layered Double Hydroxide. <i>ChemSusChem</i> , 2019, 12, 4685-4692.   | 3.6 | 27        |
| 920 | Fe <sup>2+</sup> -Doped Layered Double (Ni, Fe) Hydroxides as Efficient Electrocatalysts for Water Splitting and Self-Powered Electrochemical Systems. <i>Small</i> , 2019, 15, e1902551.  | 5.2 | 114       |
| 921 | Engineering Surface Structure of Spinel Oxides via High-Valent Vanadium Doping for Remarkably Enhanced Electrocatalytic Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 33012-33021.                              | 4.0 | 70        |
| 922 | Hybrid Ni(OH) <sub>2</sub> /FeOOH@NiFe Nanosheet Catalysts toward Highly Efficient Oxygen Evolution Reaction with Ultralong Stability over 1000 Hours. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 14601-14610.                        | 3.2 | 39        |
| 923 | Scaled-Up Synthesis of Amorphous NiFeMo Oxides and Their Rapid Surface Reconstruction for Superior Oxygen Evolution Catalysis. <i>Angewandte Chemie</i> , 2019, 131, 15919-15924.  | 1.6 | 62        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 924 | Water Splitting Exceeding 17% Solar-to-Hydrogen Conversion Efficiency Using Solution-Processed Ni-Based Electrocatalysts and Perovskite/Si Tandem Solar Cell. ACS Applied Materials & Interfaces, 2019, 11, 33835-33843. | 4.0  | 67        |
| 925 | Facile Protocol for Alkaline Electrolyte Purification and Its Influence on a Ni-Co Oxide Catalyst for the Oxygen Evolution Reaction. ACS Catalysis, 2019, 9, 8165-8170.  | 5.5  | 59        |
| 926 | Bi-metallic MOFs possessing hierarchical synergistic effects as high performance electrocatalysts for overall water splitting at high current densities. Applied Catalysis B: Environmental, 2019, 258, 118023.          | 10.8 | 114       |
| 927 | Anisotropic iron-doping patterns in two-dimensional cobalt oxide nanoislands on Au(111). Nano Research, 2019, 12, 2364-2372.   | 5.8  | 4         |
| 928 | Hydrogen Bubble Templating of Fractal Ni Catalysts for Water Oxidation in Alkaline Media. ACS Applied Energy Materials, 2019, 2, 5734-5743.  | 2.5  | 20        |
| 929 | An iron incorporation-induced nickel hydroxide multiphase with a 2D/3D hierarchical sheet-on-sheet structure for electrocatalytic water oxidation. Chemical Communications, 2019, 55, 10138-10141.                       | 2.2  | 15        |
| 930 | Fe/Ni bimetal organic framework as efficient oxygen evolution catalyst with low overpotential. Journal of Colloid and Interface Science, 2019, 555, 541-547.   | 5.0  | 88        |
| 931 | Ni <sup>3+</sup> -Induced Hole States Enhance the Oxygen Evolution Reaction Activity of Ni <sub>3</sub> Co <sub>3</sub> O <sub>4</sub> Electrocatalysts. Chemistry of Materials, 2019, 31, 7618-7625.                    | 3.2  | 76        |
| 932 | Autogenous Growth of Hierarchical NiFe(OH)/FeS Nanosheet-on-Microsheet Arrays for Synergistically Enhanced High-Output Water Oxidation. Advanced Functional Materials, 2019, 29, 1902180.                                | 7.8  | 179       |
| 933 | Efficient and Highly Transparent Ultra-Thin Nickel-Iron Oxyhydroxide Catalyst for Oxygen Evolution Prepared by Successive Ionic Layer Adsorption and Reaction. ChemPhotoChem, 2019, 3, 1050-1054.                        | 1.5  | 6         |
| 934 | Highly Active Ternary Nickel-Iron oxide as Bifunctional Catalyst for Electrochemical Water Splitting. ChemistrySelect, 2019, 4, 7791-7796.   | 0.7  | 53        |
| 935 | P-Doped Iron-Nickel Sulfide Nanosheet Arrays for Highly Efficient Overall Water Splitting. ACS Applied Materials & Interfaces, 2019, 11, 27667-27676.  | 4.0  | 155       |
| 936 | Initiating an efficient electrocatalyst for water splitting via valence configuration of cobalt-iron oxide. Applied Catalysis B: Environmental, 2019, 258, 117968.   | 10.8 | 70        |
| 937 | Stainless Steel as A Bi-Functional Electrocatalyst—A Top-Down Approach. Materials, 2019, 12, 2128.   | 1.3  | 21        |
| 938 | Expansion of the urea electrocatalytic oxidation window by adsorbed nickel ions. Journal of Applied Electrochemistry, 2019, 49, 883-893.   | 1.5  | 12        |
| 939 | Influence of the Interlayer Space on the Water Oxidation Performance in a Family of Surfactant-Intercalated NiFe-Layered Double Hydroxides. Chemistry of Materials, 2019, 31, 6798-6807.                                 | 3.2  | 71        |
| 940 | Expediting in-Situ Electrochemical Activation of Two-Dimensional Metal-Organic Frameworks for Enhanced OER Intrinsic Activity by Iron Incorporation. ACS Catalysis, 2019, 9, 7356-7364.                                  | 5.5  | 215       |
| 941 | Effects of Metal Electrode Support on the Catalytic Activity of Fe(oxy)hydroxide for the Oxygen Evolution Reaction in Alkaline Media. ChemPhysChem, 2019, 20, 3089-3095.   | 1.0  | 39        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 942 | Investigation of the electrocatalytic performance for oxygen evolution reaction of Fe-doped lanthanum nickelate deposited on pyrolytic graphite sheets. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 21659-21672.                   | 3.8  | 13        |
| 943 | Self-gating in semiconductor electrocatalysis. <i>Nature Materials</i> , 2019, 18, 1098-1104.  | 13.3 | 167       |
| 944 | Shaping well-defined noble-metal-based nanostructures for fabricating high-performance electrocatalysts: advances and perspectives. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 2582-2618.   | 3.0  | 51        |
| 945 | Three-dimensional interconnected core-shell networks with Ni(Fe)OOH and Mn-C active species together as high-efficiency oxygen catalysts for rechargeable Zn-air batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19045-19059.        | 5.2  | 70        |
| 946 | High-Efficiency Electrocatalytic Water Oxidation on Trimetal-Based Fe-Co-Cr Oxide. <i>ACS Applied Energy Materials</i> , 2019, 2, 5584-5590.   | 2.5  | 7         |
| 947 | An earth-abundant, amorphous cobalt-iron-borate (Co-Fe-Bi) prepared on Ni foam as highly efficient and durable electrocatalysts for oxygen evolution. <i>Applied Surface Science</i> , 2019, 495, 143462.  | 3.1  | 12        |
| 948 | Insight into the Degradation Mechanisms of Atomic Layer Deposited TiO <sub>2</sub> as Photoanode Protective Layer. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 29725-29735.  | 4.0  | 29        |
| 949 | Self-Growing NiFe-Based Hybrid Nanosheet Arrays on Ni Nanowires for Overall Water Splitting. <i>ACS Applied Energy Materials</i> , 2019, 2, 5465-5471.   | 2.5  | 22        |
| 950 | Synthesis of MnNiO <sub>3</sub> /Mn <sub>3</sub> O <sub>4</sub> nanocomposites for the water electrolysis process. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 92, 1-11.  | 1.1  | 3         |
| 951 | NiCoFe oxide amorphous nanoheterostructures for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 22991-23001.  | 3.8  | 39        |
| 952 | A mesoporous C,N-co doped Co-based phosphate ultrathin nanosheet derived from a phosphonate-based-MOF as an efficient electrocatalyst for water oxidation. <i>Catalysis Science and Technology</i> , 2019, 9, 4718-4724.                           | 2.1  | 22        |
| 953 | One-step solid-phase boronation to fabricate self-supported porous FeNiB/FeNi foam for efficient electrocatalytic oxygen evolution and overall water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19554-19564.                    | 5.2  | 68        |
| 954 | Mechanochemical synthesis of multi-site electrocatalysts as bifunctional zinc-air battery electrodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19355-19363.  | 5.2  | 53        |
| 955 | Iron and Nickel Mixed Oxides Derived From NiFe-PBA for Oxygen Evolution Electrocatalysis. <i>Frontiers in Chemistry</i> , 2019, 7, 539.  | 1.8  | 22        |
| 956 | [MoS <sub>4</sub> ] <sup>2-</sup> -Intercalated NiCo-Layered Double Hydroxide Nanospikes: An Efficiently Synergized Material for Urine To Direct H <sub>2</sub> Generation. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 25917-25927. | 4.0  | 23        |
| 957 | Flower-like NiFe Oxide Nanosheets on Ni Foam as Efficient Bifunctional Electrocatalysts for the Overall Water Splitting. <i>International Journal of Electrochemical Science</i> , 2019, , 4878-4890.  | 0.5  | 5         |
| 958 | Enhancement of Oxygen Evolution Activity of Nickel Oxyhydroxide by Electrolyte Alkali Cations. <i>Angewandte Chemie</i> , 2019, 131, 13133-13137.  | 1.6  | 25        |
| 959 | Bifunctional iron nickel phosphide nanocatalysts supported on porous carbon for highly efficient overall water splitting. <i>Sustainable Materials and Technologies</i> , 2019, 22, e00117.  | 1.7  | 21        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 960 | Amorphous NiFe-based nanocubes as efficient photo-Fenton catalyst for fast degradation of methylene blue. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019, 102, 202-211.                                      | 2.7  | 8         |
| 961 | Interfacing Epitaxial Dinickel Phosphide to 2D Nickel Thiophosphate Nanosheets for Boosting Electrocatalytic Water Splitting. <i>ACS Nano</i> , 2019, 13, 7975-7984.  | 7.3  | 171       |
| 962 | Cobalt iron phosphide nanoparticles embedded within a carbon matrix as highly efficient electrocatalysts for the oxygen evolution reaction. <i>Chemical Communications</i> , 2019, 55, 9212-9215.                                 | 2.2  | 23        |
| 963 | Integrating Hydrogen Production with Aqueous Selective Semi-Dehydrogenation of Tetrahydroisoquinolines over a Ni <sub>2</sub> P Bifunctional Electrode. <i>Angewandte Chemie</i> , 2019, 131, 12142-12145.                        | 1.6  | 138       |
| 964 | Integrating Hydrogen Production with Aqueous Selective Semi-Dehydrogenation of Tetrahydroisoquinolines over a Ni <sub>2</sub> P Bifunctional Electrode. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 12014-12017. | 7.2  | 189       |
| 965 | Harnessing Native Iron Ore as an Efficient Electrocatalyst for Overall Water Splitting. <i>ChemElectroChem</i> , 2019, 6, 3667-3673.  | 1.7  | 13        |
| 966 | Ir-Ni(OH) <sub>2</sub> Originated from Electro-Oxidation of NiSe <sub>2</sub> Supported by Carbon Nanoarray on Carbon Cloth for Efficient Water Oxidation. <i>Small</i> , 2019, 15, e1902222.                                     | 5.2  | 18        |
| 967 | Hydrothermally synthesized Iron Phosphate Hydroxide thin film electrocatalyst for electrochemical water splitting. <i>Electrochimica Acta</i> , 2019, 319, 118-128.   | 2.6  | 19        |
| 968 | Ir-O-V Catalytic Group in Ir-Doped NiV(OH) <sub>2</sub> for Overall Water Splitting. <i>ACS Energy Letters</i> , 2019, 4, 1823-1829.  | 8.8  | 147       |
| 969 | Design of Multi-Metallic-Based Electrocatalysts for Enhanced Water Oxidation. <i>ChemPhysChem</i> , 2019, 20, 2936-2945.  | 1.0  | 48        |
| 970 | A review of transition metal-based bifunctional oxygen electrocatalysts. <i>Journal of the Chinese Chemical Society</i> , 2019, 66, 829-865.  | 0.8  | 82        |
| 971 | A hierarchically porous and hydrophilic 3D nickel-iron/MXene electrode for accelerating oxygen and hydrogen evolution at high current densities. <i>Nano Energy</i> , 2019, 63, 103880.   | 8.2  | 275       |
| 972 | An Fe-doped NiTe bulk crystal as a robust catalyst for the electrochemical oxygen evolution reaction. <i>Chemical Communications</i> , 2019, 55, 9347-9350.   | 2.2  | 61        |
| 973 | Ni-Fe Phosphate/Ni Foam Electrode: Facile Hydrothermal Synthesis and Ultralong Oxygen Evolution Reaction Durability. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18332-18340.                                     | 3.2  | 40        |
| 974 | Water Oxidation Catalysts for Artificial Photosynthesis. <i>Advanced Materials</i> , 2019, 31, e1902069.  | 11.1 | 215       |
| 975 | Adjustable Ternary FeCoNi Nanohybrids for Enhanced Oxygen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2019, 25, 15361-15366.  | 1.7  | 7         |
| 976 | Chemical Structure of Fe-Ni Nanoparticles for Efficient Oxygen Evolution Reaction Electrocatalysis. <i>ACS Omega</i> , 2019, 4, 17209-17222.  | 1.6  | 26        |
| 977 | Electrosynthesis of Hydrogen Peroxide by Phase-Transfer Catalysis. <i>Joule</i> , 2019, 3, 2942-2954.   | 11.7 | 89        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 978 | Current Status of Self-Supported Catalysts for Robust and Efficient Water Splitting for Commercial Electrolyzer. <i>ChemCatChem</i> , 2019, 11, 5898-5912.  | 1.8 | 47        |
| 979 | Ultrasmall Co@Co(OH) <sub>2</sub> Nanoclusters Embedded in N-Enriched Mesoporous Carbon Networks as Efficient Electrocatalysts for Water Oxidation. <i>ChemSusChem</i> , 2019, 12, 5117-5125.   | 3.6 | 26        |
| 980 | Effect and Prevention of Trace Ag <sup>+</sup> Contamination from Ag/AgCl Reference Electrodes on CO <sub>2</sub> Reduction Product Distributions at Polycrystalline Copper Electrodes. <i>ACS Applied Energy Materials</i> , 2019, 2, 8283-8293. | 2.5 | 26        |
| 981 | NiMoFe and NiMoFeP as Complementary Electrocatalysts for Efficient Overall Water Splitting and Their Application in PV-Electrolysis with STH 12.3%. <i>Small</i> , 2019, 15, e1905501.  | 5.2 | 55        |
| 982 | Enhanced oxygen evolution reaction over glassy carbon electrode modified with NiOx and Fe <sub>3</sub> O <sub>4</sub> . <i>Korean Journal of Chemical Engineering</i> , 2019, 36, 1932-1939.  | 1.2 | 17        |
| 983 | Stoichiometry-Controlled Synthesis of Nanoparticulate Mixed-Metal Oxyhydroxide Oxygen Evolving Catalysts by Electrochemistry in Aqueous Nanodroplets. <i>Chemistry - A European Journal</i> , 2020, 26, 4039-4043.                                | 1.7 | 13        |
| 984 | A bio-inspired coordination polymer as outstanding water oxidation catalyst via second coordination sphere engineering. <i>Nature Communications</i> , 2019, 10, 5074.  | 5.8 | 203       |
| 985 | Spectroelectrochemical study of water oxidation on nickel and iron oxyhydroxide electrocatalysts. <i>Nature Communications</i> , 2019, 10, 5208.  | 5.8 | 118       |
| 986 | Atomic Insights of Iron Doping in Nickel Hydroxide Nanosheets for Enhanced Oxygen Catalysis to Boost Broad Temperature Workable Zinc-Air Batteries. <i>ChemCatChem</i> , 2019, 11, 6002-6007.   | 1.8 | 17        |
| 987 | The complete genome sequence of the thermophilic bacterium <i>Laceyella sacchari</i> FBKL4.010 reveals the basis for tetramethylpyrazine biosynthesis in Moutai-flavor Daqu. <i>MicrobiologyOpen</i> , 2019, 8, e922.                             | 1.2 | 8         |
| 988 | NiFe Oxalate Nanomesh Array with Homogenous Doping of Fe for Electrocatalytic Water Oxidation. <i>Small</i> , 2019, 15, e1904579.   | 5.2 | 51        |
| 989 | Novel alkaline water electrolysis with nickel-iron gas diffusion electrode for oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 29862-29875.   | 3.8 | 24        |
| 990 | Electronic Structure and Crystalline Phase Dual Modulation via Anion-Cation Co-doping for Boosting Oxygen Evolution with Long-Term Stability Under Large Current Density. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 34819-34826.  | 4.0 | 33        |
| 991 | Modulating the Electronic Structure of Porous Nanocubes Derived from Trimetallic Metal-Organic Frameworks to Boost Oxygen Evolution Reaction Performance. <i>Chemistry - an Asian Journal</i> , 2019, 14, 3357-3362.                              | 1.7 | 7         |
| 992 | Mesoporous Nanocast Electrocatalysts for Oxygen Reduction and Oxygen Evolution Reactions. <i>Inorganics</i> , 2019, 7, 98.  | 1.2 | 17        |
| 993 | Structure-property relationship of graphene coupled metal (Ni, Co, Fe) (oxy)hydroxides for efficient electrochemical evolution of oxygen. <i>Journal of Catalysis</i> , 2019, 377, 619-628.   | 3.1 | 15        |
| 994 | Degradation and regeneration mechanisms of NiO protective layers deposited by ALD on photoanodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21892-21902.   | 5.2 | 12        |
| 995 | Investigation of mixed-metal (oxy)fluorides as a new class of water oxidation electrocatalysts. <i>Chemical Science</i> , 2019, 10, 9209-9218.  | 3.7 | 47        |

| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 996  | Probing the Role of Internalized Geometric Strain on Heterogeneous Electrocatalysis. <i>Chemistry of Materials</i> , 2019, 31, 7522-7530.   | 3.2 | 14        |
| 997  | Effects of iron doping on the hydrogen evolution reaction performance of self-supported nickel selenides. <i>Results in Physics</i> , 2019, 14, 102522.   | 2.0 | 5         |
| 998  | Role of Lattice Oxygen in the Oxygen Evolution Reaction on Co <sub>3</sub> O <sub>4</sub> : Isotope Exchange Determined Using a Small-Volume Differential Electrochemical Mass Spectrometry Cell Design. <i>Analytical Chemistry</i> , 2019, 91, 12653-12660. | 3.2 | 26        |
| 999  | Controllable electrodeposition of binary metal films from deep eutectic solvent as an efficient and durable catalyst for the oxygen evolution reaction. <i>Dalton Transactions</i> , 2019, 48, 14748-14757.   | 1.6 | 17        |
| 1000 | Synergetic Effects of Dual Electrocatalysts for High-Performance Solar-Driven Water Oxidation. <i>ACS Applied Energy Materials</i> , 2019, 2, 7256-7262.  | 2.5 | 7         |
| 1001 | Nickel–Vanadium Layered Double Hydroxide under Water-Oxidation Reaction: New Findings and Challenges. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17252-17262.  | 3.2 | 35        |
| 1002 | Iron-induced 3D nanoporous iron-cobalt oxyhydroxide on carbon cloth as a highly efficient electrode for oxygen evolution reaction. <i>Chinese Journal of Catalysis</i> , 2019, 40, 1540-1547.   | 6.9 | 25        |
| 1003 | Bimetallic Iron–Cobalt Catalysts and Their Applications in Energy-Related Electrochemical Reactions. <i>Catalysts</i> , 2019, 9, 762.   | 1.6 | 16        |
| 1004 | Oxygen evolution on gold: The effects of alkali-metal cations and iron impurities from alkaline electrolytes. <i>Journal of Catalysis</i> , 2019, 378, 277-282.   | 3.1 | 7         |
| 1005 | Structural evolution of CoMoO <sub>4</sub> to CoOOH by ion electrochemical etching for boosting oxygen evolution reaction. <i>Journal of Power Sources</i> , 2019, 442, 227252.   | 4.0 | 65        |
| 1006 | Hexagonal $\sqrt{2}$ -Ni(OH) <sub>2</sub> nanoplates with oxygen vacancies as efficient catalysts for the oxygen evolution reaction. <i>Electrochimica Acta</i> , 2019, 324, 134868.  | 2.6 | 37        |
| 1007 | In operando Raman investigation of Fe doping influence on catalytic NiO intermediates for enhanced overall water splitting. <i>Nano Energy</i> , 2019, 66, 104118.  | 8.2 | 215       |
| 1008 | Highly Active Cobalt-Based Electrocatalysts with Facile Incorporation of Dopants for the Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3491-3495.   | 7.2 | 67        |
| 1009 | Facile synthesis of hollow Co <sub>3</sub> O <sub>4</sub> -embedded carbon/reduced graphene oxides nanocomposites for use as efficient electrocatalysts in oxygen evolution reaction. <i>Electrochimica Acta</i> , 2019, 300, 123-130.                        | 2.6 | 60        |
| 1010 | Laser synthesis of oxygen vacancy-modified CoOOH for highly efficient oxygen evolution. <i>Chemical Communications</i> , 2019, 55, 2904-2907.   | 2.2 | 110       |
| 1011 | Formation of unexpectedly active Ni–Fe oxygen evolution electrocatalysts by physically mixing Ni and Fe oxyhydroxides. <i>Chemical Communications</i> , 2019, 55, 818-821.  | 2.2 | 57        |
| 1012 | Recent advances in layered double hydroxide electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 5069-5089.   | 5.2 | 422       |
| 1013 | Direct urea fuel cells: Challenges and opportunities. <i>Journal of Power Sources</i> , 2019, 417, 159-175.   | 4.0 | 234       |



| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 1014 | Bimetallic metal-organic framework nanosheets as efficient electrocatalysts for oxygen evolution reaction. <i>Journal of Solid State Chemistry</i> , 2019, 272, 32-37.  | 1.4 | 47        |
| 1015 | Electromodified NiFe Alloys as Electrocatalysts for Water Oxidation: Mechanistic Implications of Time-Resolved UV/Vis Tracking of Oxidation State Changes. <i>ChemSusChem</i> , 2019, 12, 1966-1976.                        | 3.6 | 33        |
| 1016 | Metal-Organic Framework-Derived Hierarchical (Co,Ni)Se <sub>2</sub> @NiFe LDH Hollow Nanocages for Enhanced Oxygen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 8106-8114.                          | 4.0 | 214       |
| 1017 | Highly active oxygen evolution reaction model electrode based on supported gas-phase NiFe clusters. <i>Catalysis Today</i> , 2019, 334, 59-67.  | 2.2 | 20        |
| 1018 | An autodriven, solar fuel collection for a highly compact, biomimetic-modified artificial leaf without membrane. <i>Nano Energy</i> , 2019, 58, 484-491.  | 8.2 | 15        |
| 1019 | Amorphous Nanocages of Cu-Ni-Fe Hydr(oxy)oxide Prepared by Photocorrosion For Highly Efficient Oxygen Evolution. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4189-4194.                                    | 7.2 | 179       |
| 1020 | Ar Plasma-Exfoliated Ultrathin NiCo-Layered Double Hydroxide Nanosheets for Enhanced Oxygen Evolution. <i>ACS Applied Energy Materials</i> , 2019, 2, 1162-1168.  | 2.5 | 65        |
| 1021 | Revealing High Oxygen Evolution Catalytic Activity of Fluorine-Doped Carbon in Alkaline Media. <i>Materials</i> , 2019, 12, 211.  | 1.3 | 7         |
| 1022 | Amorphous Nanocages of Cu-Ni-Fe Hydr(oxy)oxide Prepared by Photocorrosion For Highly Efficient Oxygen Evolution. <i>Angewandte Chemie</i> , 2019, 131, 4233-4238.   | 1.6 | 38        |
| 1023 | Defect-Rich NiCeO <sub>x</sub> Electrocatalyst with Ultrahigh Stability and Low Overpotential for Water Oxidation. <i>ACS Catalysis</i> , 2019, 9, 1605-1611.   | 5.5 | 113       |
| 1024 | Triple hierarchy and double synergies of NiFe/Co <sub>9</sub> S <sub>8</sub> /carbon cloth: a new and efficient electrocatalyst for the oxygen evolution reaction. <i>Nanoscale</i> , 2019, 11, 3378-3385.                  | 2.8 | 47        |
| 1025 | Highly Active Cobalt-Based Electrocatalysts with Facile Incorporation of Dopants for the Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2019, 131, 3529-3533.  | 1.6 | 36        |
| 1026 | Synthesis and electrochemical performance of nickel-cobalt oxide/carbon nanocomposites for use in efficient oxygen evolution reaction. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 4144-4151. | 1.1 | 11        |
| 1027 | Electrocatalytic water oxidation over AlFe <sub>2</sub> B <sub>2</sub> . <i>Chemical Science</i> , 2019, 10, 2796-2804.   | 3.7 | 52        |
| 1028 | Membrane free water electrolysis under 1.23 V with Ni <sub>3</sub> Se <sub>4</sub> /Ni anode in alkali and Pt cathode in acid. <i>Applied Surface Science</i> , 2019, 478, 784-792.   | 3.1 | 34        |
| 1029 | Optimizing Ni-Fe Oxide Electrocatalysts for Oxygen Evolution Reaction by Using Hard Templating as a Toolbox. <i>ACS Applied Energy Materials</i> , 2019, 2, 1199-1209.  | 2.5 | 71        |
| 1030 | Ultrafast fabrication of amorphous bimetallic hydroxide layer on nickel nanocones array for oxygen evolution electrocatalyst. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 5899-5911.                        | 3.8 | 24        |
| 1031 | Synergetic catalytic behavior of AgNi-OH-Pi nanostructures on Zr:BiVO <sub>4</sub> photoanode for improved stability and photoelectrochemical water splitting performance. <i>Journal of Catalysis</i> , 2019, 371, 10-19.  | 3.1 | 24        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1032 | High-Density Cobalt Nanoparticles Encapsulated with Nitrogen-Doped Carbon Nanoshells as a Bifunctional Catalyst for Rechargeable Zinc-Air Battery. <i>Materials</i> , 2019, 12, 243.  | 1.3  | 10        |
| 1033 | Synthesis of high crystalline nickel-iron hydroxide-like compound as an efficient electrocatalyst for oxygen evolution reaction. <i>International Journal of Energy Research</i> , 2019, 43, 1460-1467.                             | 2.2  | 24        |
| 1034 | A Ni-loaded, metal-organic framework-graphene composite as a precursor for <i>in situ</i> electrochemical deposition of a highly active and durable water oxidation nanocatalyst. <i>Chemical Communications</i> , 2019, 55, 31-34. | 2.2  | 37        |
| 1035 | A bio-inspired 3D quasi-fractal nanostructure for an improved oxygen evolution reaction. <i>Chemical Communications</i> , 2019, 55, 357-360.  | 2.2  | 5         |
| 1036 | Amorphous Ni-Fe double hydroxide hollow nanocubes enriched with oxygen vacancies as efficient electrocatalytic water oxidation catalysts. <i>Chemical Communications</i> , 2019, 55, 1044-1047.                                     | 2.2  | 102       |
| 1037 | Layered and two dimensional metal oxides for electrochemical energy conversion. <i>Energy and Environmental Science</i> , 2019, 12, 41-58.  | 15.6 | 310       |
| 1038 | Direct observation of active catalyst surface phases and the effect of dynamic self-optimization in NiFe-layered double hydroxides for alkaline water splitting. <i>Energy and Environmental Science</i> , 2019, 12, 572-581.       | 15.6 | 453       |
| 1039 | High-performance oxygen evolution electrocatalysis by boronized metal sheets with self-functionalized surfaces. <i>Energy and Environmental Science</i> , 2019, 12, 684-692.  | 15.6 | 169       |
| 1040 | Facile synthesis of nanoporous Ni-Fe-P bifunctional catalysts with high performance for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2518-2523.  | 5.2  | 78        |
| 1041 | Nickel-iron selenide polyhedral nanocrystal with optimized surface morphology as a high-performance bifunctional electrocatalyst for overall water splitting. <i>Applied Surface Science</i> , 2019, 488, 326-334.                  | 3.1  | 47        |
| 1042 | Hydrothermally Synthesized Cobalt Borophosphate as an Electrocatalyst for Water Oxidation in the pH Range from 7 to 14. <i>ChemElectroChem</i> , 2019, 6, 3132-3138.  | 1.7  | 5         |
| 1043 | A highly active oxygen evolution electrocatalyst: Ni-Fe-layered double hydroxide intercalated with the Molybdate and Vanadate anions. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 14842-14852.                      | 3.8  | 52        |
| 1044 | Structural Monitoring of NiB <sub>2</sub> Modified BiVO <sub>4</sub> Photoanodes Using <i>In Situ</i> Soft and Hard X-ray Absorption Spectroscopies. <i>ACS Applied Energy Materials</i> , 2019, 2, 4126-4134.                      | 2.5  | 6         |
| 1045 | Hierarchical Iron-Doped Nickel Diselenide Hollow Spheres for Efficient Oxygen Evolution Electrocatalysis. <i>ACS Applied Energy Materials</i> , 2019, 2, 4737-4744.   | 2.5  | 33        |
| 1046 | Rational construction of cross-linked porous nickel arrays for efficient oxygen evolution reaction. <i>Chinese Journal of Catalysis</i> , 2019, 40, 1063-1069.  | 6.9  | 9         |
| 1047 | Increased charge and mass transfer derived-sheet-like Fe <sub>0.67</sub> Ni <sub>0.33</sub> OOH-Fe <sub>2</sub> O <sub>3</sub> @NF array for robust oxygen evolution reaction. <i>Applied Surface Science</i> , 2019, 493, 351-358. | 3.1  | 19        |
| 1048 | Atomic-scale perturbation of oxygen octahedra via surface ion exchange in perovskite nickelates boosts water oxidation. <i>Nature Communications</i> , 2019, 10, 2713.  | 5.8  | 96        |
| 1049 | Reliable electrochemical phase diagrams of magnetic transition metals and related compounds from high-throughput <i>ab initio</i> calculations. <i>Npj Materials Degradation</i> , 2019, 3, .                                       | 2.6  | 30        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1050 | Unconventional CN vacancies suppress iron-leaching in Prussian blue analogue pre-catalyst for boosted oxygen evolution catalysis. <i>Nature Communications</i> , 2019, 10, 2799.  | 5.8  | 202       |
| 1051 | Enhancement of Oxygen Evolution Activity of Nickel Oxyhydroxide by Electrolyte Alkali Cations. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 12999-13003.  | 7.2  | 182       |
| 1052 | Mixed Transition Metal Oxide with Vacancy-Induced Lattice Distortion for Enhanced Catalytic Activity of Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2019, 9, 7099-7108.   | 5.5  | 85        |
| 1053 | Electrochemical characterization of manganese oxides as a water oxidation catalyst in proton exchange membrane electrolyzers. <i>Royal Society Open Science</i> , 2019, 6, 190122.  | 1.1  | 23        |
| 1054 | Perspectives on Low-Temperature Electrolysis and Potential for Renewable Hydrogen at Scale. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2019, 10, 219-239.  | 3.3  | 223       |
| 1055 | Direct magnetic enhancement of electrocatalytic water oxidation in alkaline media. <i>Nature Energy</i> , 2019, 4, 519-525.   | 19.8 | 413       |
| 1056 | On the reconstruction of NiMo electrocatalysts by <i>operando</i> spectroscopy. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15031-15035.   | 5.2  | 24        |
| 1057 | Synthesis of Ni-Co-Fe layered double hydroxide and Fe <sub>2</sub> O <sub>3</sub> /Graphene nanocomposites as actively materials for high electrochemical performance supercapacitors. <i>Electrochimica Acta</i> , 2019, 317, 83-92. | 2.6  | 104       |
| 1058 | Artificial photosynthesis systems for catalytic water oxidation. <i>Advances in Inorganic Chemistry</i> , 2019, 74, 3-59.   | 0.4  | 35        |
| 1059 | An Fe-doped NiV LDH ultrathin nanosheet as a highly efficient electrocatalyst for efficient water oxidation. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1890-1896.   | 3.0  | 61        |
| 1060 | Amorphous outperforms crystalline nanomaterials: surface modifications of molecularly derived CoP electro(pre)catalysts for efficient water-splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15749-15756.                | 5.2  | 113       |
| 1061 | Free-standing S, N co-doped graphene/Ni foam as highly efficient and stable electrocatalyst for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2019, 317, 408-415.   | 2.6  | 19        |
| 1062 | Nickel-Based Transition Metal Nitride Electrocatalysts for the Oxygen Evolution Reaction. <i>ChemSusChem</i> , 2019, 12, 3941-3954.   | 3.6  | 150       |
| 1063 | Spark-plasma-sintered porous electrodes for efficient oxygen evolution in alkaline water electrolysis. <i>Electrochimica Acta</i> , 2019, 317, 128-138.   | 2.6  | 9         |
| 1064 | Highly Conductive Bimetallic Ni-Fe Metal Organic Framework as a Novel Electrocatalyst for Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 9743-9749.   | 3.2  | 123       |
| 1065 | Oxygen Isotope Labeling Experiments Reveal Different Reaction Sites for the Oxygen Evolution Reaction on Nickel and Nickel Iron Oxides. <i>Angewandte Chemie</i> , 2019, 131, 10401-10405.  | 1.6  | 63        |
| 1066 | Oxygen Isotope Labeling Experiments Reveal Different Reaction Sites for the Oxygen Evolution Reaction on Nickel and Nickel Iron Oxides. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10295-10299.                     | 7.2  | 224       |
| 1067 | Mesoporous spinel NiFe oxide cubes as advanced electrocatalysts for oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 16368-16377.  | 3.8  | 22        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1068 | Single atom tungsten doped ultrathin $\text{Ni}(\text{OH})_2$ for enhanced electrocatalytic water oxidation. <i>Nature Communications</i> , 2019, 10, 2149.  | 5.8  | 363       |
| 1069 | Bifunctional nickel oxide-based nanosheets for highly efficient overall urea splitting. <i>Chemical Communications</i> , 2019, 55, 6555-6558.  | 2.2  | 53        |
| 1070 | First principles calculations of surface dependent electronic structures: a study on $\beta\text{-FeOOH}$ and $\gamma\text{-FeOOH}$ . <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 18486-18494.                                | 1.3  | 17        |
| 1071 | Insight into the role of Ni-Fe dual sites in the oxygen evolution reaction based on atomically metal-doped polymeric carbon nitride. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14001-14010.                                     | 5.2  | 97        |
| 1072 | An Amorphous Nickel-Iron Based Electrocatalyst with Unusual Local Structures for Ultrafast Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2019, 31, e1900883.  | 11.1 | 243       |
| 1073 | NiO/NiS Heterostructures: An Efficient and Stable Electrocatalyst for Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2019, 2, 3587-3594.   | 2.5  | 71        |
| 1074 | Expanding Multinary Selenide Based High-Efficiency Oxygen Evolution Electrocatalysts through Combinatorial Electrodeposition: Case Study with Fe-Cu-Co Selenides. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 9588-9600. | 3.2  | 64        |
| 1075 | Unique nanosheet-nanowire structured CoMnFe layered triple hydroxide arrays as self-supporting electrodes for a high-efficiency oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13130-13141.               | 5.2  | 67        |
| 1076 | Influence of Electrochemical Aging on Bead-Blasted Nickel Electrodes for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2019, 2, 3166-3178.  | 2.5  | 5         |
| 1077 | Investigation of Fe-Based Integrated Electrodes for Water Oxidation in Neutral and Alkaline Solutions. <i>Journal of Physical Chemistry C</i> , 2019, 123, 12313-12320.  | 1.5  | 16        |
| 1078 | Valence Engineering via Selective Atomic Substitution on Tetrahedral Sites in Spinel Oxide for Highly Enhanced Oxygen Evolution Catalysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 8136-8145.                       | 6.6  | 220       |
| 1079 | Metal-Organic Framework-Derived Nitrogen-Doped Hybrid Nickel-Iron Sulfide Architectures on Carbon Cloth as Efficient Electrocatalysts for the Oxygen Evolution Reaction. <i>ChemElectroChem</i> , 2019, 6, 2741-2747.                    | 1.7  | 20        |
| 1080 | In-situ synthesis of bimetallic phosphide with carbon tubes as an active electrocatalyst for oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2019, 254, 292-299.  | 10.8 | 141       |
| 1081 | Stepwise Electrochemical Construction of $\text{FeOOH}/\text{Ni}(\text{OH})_2$ on Ni Foam for Enhanced Electrocatalytic Oxygen Evolution. <i>ACS Applied Energy Materials</i> , 2019, 2, 3927-3935.                                      | 2.5  | 87        |
| 1082 | Efficiency and stability of narrow-gap semiconductor-based photoelectrodes. <i>Energy and Environmental Science</i> , 2019, 12, 2345-2374.   | 15.6 | 88        |
| 1083 | Activating Three-Dimensional Networks of Fe@Ni Nanofibers via Fast Surface Modification for Efficient Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 18342-18348.                                    | 4.0  | 29        |
| 1084 | A General Method to Probe Oxygen Evolution Intermediates at Operating Conditions. <i>Joule</i> , 2019, 3, 1498-1509.   | 11.7 | 243       |
| 1085 | <i>In situ</i> growth of layered double hydroxides on boehmite AlOOH for active and stable oxygen evolution in alkaline media. <i>Nanoscale</i> , 2019, 11, 10348-10357.   | 2.8  | 13        |

| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 1086 | Fe-Doping in Double Perovskite PrBaCo <sub>2</sub> (1-x)Fe <sub>2x</sub> O <sub>6</sub> - $\hat{\Gamma}$ : Insights into Structural and Electronic Effects to Enhance Oxygen Evolution Catalyst Stability. <i>Catalysts</i> , 2019, 9, 263. | 1.6 | 25        |
| 1087 | A Single-Crystal Open-Capsule Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2019, 141, 7906-7916.  | 6.6 | 179       |
| 1088 | (Photo) electrochemical water oxidation at anodic TiO <sub>2</sub> nanotubes modified by electrodeposited NiFe oxy-hydroxides catalysts. <i>Electrochimica Acta</i> , 2019, 308, 91-98.   | 2.6 | 20        |
| 1089 | Solution blow spun nickel oxide/carbon nanocomposite hollow fibres as an efficient oxygen evolution reaction electrocatalyst. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 14877-14888.                                      | 3.8 | 44        |
| 1090 | Partially sulfurated ultrathin nickel-iron carbonate hydroxides nanosheet boosting the oxygen evolution reaction. <i>Electrochimica Acta</i> , 2019, 309, 57-64.  | 2.6 | 37        |
| 1091 | Substrate participation ultrafast synthesis of amorphous NiFe nanosheets on iron foam at room temperature toward highly efficient oxygen evolution reaction. <i>Journal of Energy Chemistry</i> , 2019, 35, 197-203.                        | 7.1 | 20        |
| 1092 | Sea urchin-like Ni-Fe sulfide architectures as efficient electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12350-12357.  | 5.2 | 109       |
| 1093 | Hierarchically Coupled Ni:FeOOH Nanosheets on 3D N-Doped Graphite Foam as Self-Supported Electrocatalysts for Efficient and Durable Water Oxidation. <i>ACS Catalysis</i> , 2019, 9, 5025-5034.   | 5.5 | 89        |
| 1094 | Homogeneously Distributed NiFe Alloy Nanoparticles on 3D Carbon Fiber Network as a Bifunctional Electrocatalyst for Overall Water Splitting. <i>ChemElectroChem</i> , 2019, 6, 2497-2502.   | 1.7 | 31        |
| 1095 | Effects of Incorporated Iron or Cobalt on the Ethanol Oxidation Activity of Nickel (Oxy)Hydroxides in Alkaline Media. <i>Electrocatalysis</i> , 2019, 10, 489-498.  | 1.5 | 26        |
| 1096 | Nanocubic bimetallic organic framework self-templated from Ni precursor as efficient electrocatalysts for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 11705-11716.                               | 3.8 | 11        |
| 1097 | Enhancing the Performance of Ni-Mo Alkaline Hydrogen Evolution Electrocatalysts with Carbon Supports. <i>ACS Applied Energy Materials</i> , 2019, 2, 2524-2533.   | 2.5 | 43        |
| 1098 | Can Ni Complexes Behave as Molecular Water Oxidation Catalysts?. <i>ACS Catalysis</i> , 2019, 9, 3936-3945.   | 5.5 | 64        |
| 1099 | Identifying high-efficiency oxygen evolution electrocatalysts from Co-Ni-Cu based selenides through combinatorial electrodeposition. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9877-9889.  | 5.2 | 80        |
| 1100 | Solar-driven, highly sustained splitting of seawater into hydrogen and oxygen fuels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6624-6629.   | 3.3 | 524       |
| 1101 | Modeling Corrosion with First-Principles Electrochemical Phase Diagrams. <i>Annual Review of Materials Research</i> , 2019, 49, 53-77.  | 4.3 | 40        |
| 1102 | Ultrafine Metallic Nickel Domains and Reduced Molybdenum States Improve Oxygen Evolution Reaction of NiFeMo Electrocatalysts. <i>Small</i> , 2019, 15, e1804764.  | 5.2 | 35        |
| 1103 | Direct Electrolytic Splitting of Seawater: Opportunities and Challenges. <i>ACS Energy Letters</i> , 2019, 4, 933-942.  | 8.8 | 578       |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1104 | Active Site Identification and Evaluation Criteria of In Situ Grown CoTe and NiTe Nanoarrays for Hydrogen Evolution and Oxygen Evolution Reactions. <i>Small Methods</i> , 2019, 3, 1900113.  | 4.6  | 78        |
| 1105 | 2D Layered Double Hydroxides for Oxygen Evolution Reaction: From Fundamental Design to Application. <i>Advanced Energy Materials</i> , 2019, 9, 1803358.  | 10.2 | 467       |
| 1106 | Amorphous nickel sulfide nanosheets with embedded vanadium oxide nanocrystals on nickel foam for efficient electrochemical water oxidation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10534-10542.   | 5.2  | 65        |
| 1107 | Nitrogen-Doped Sponge Ni Fibers as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. <i>Nano-Micro Letters</i> , 2019, 11, 21.   | 14.4 | 70        |
| 1108 | Pulsed laser deposition of nickel oxide films with improved optical properties to functionalize solar light absorbing photoanodes and very low overpotential for water oxidation catalysis. <i>Materials Science in Semiconductor Processing</i> , 2019, 97, 29-34. | 1.9  | 13        |
| 1109 | Functional Role of Fe-Doping in Co-Based Perovskite Oxide Catalysts for Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2019, 141, 5231-5240.  | 6.6  | 250       |
| 1110 | Cobalt-Vanadium Hydroxide Nanoneedles with a Free-Standing Structure as High-Performance Oxygen Evolution Reaction Electrocatalysts. <i>ChemElectroChem</i> , 2019, 6, 2050-2055.   | 1.7  | 24        |
| 1111 | High-performance electrolytic oxygen evolution with a seamless armor core-shell FeCoNi oxynitride. <i>Nanoscale</i> , 2019, 11, 7239-7246.  | 2.8  | 28        |
| 1112 | Nanoporous gold supported chromium-doped NiFe oxyhydroxides as high-performance catalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9690-9697.  | 5.2  | 33        |
| 1113 | 2D Electron Gas and Oxygen Vacancy Induced High Oxygen Evolution Performances for Advanced Co <sub>3</sub> O <sub>4</sub> /CeO <sub>2</sub> Nanohybrids. <i>Advanced Materials</i> , 2019, 31, e1900062.  | 11.1 | 242       |
| 1114 | The Role of Aluminum in Promoting Ni-Fe-OOH Electrocatalysts for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2019, 2, 3488-3499.   | 2.5  | 30        |
| 1115 | Pt embedded Ni <sub>3</sub> Se <sub>2</sub> @NiOOH core-shell dendrite-like nanoarrays on nickel as bifunctional electrocatalysts for overall water splitting. <i>Science China Materials</i> , 2019, 62, 1096-1104.  | 3.5  | 43        |
| 1116 | Co-Fe/MIL-101(Cr) hybrid catalysts: Preparation and their electrocatalysis in oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 11754-11764.   | 3.8  | 16        |
| 1117 | Ternary Ni-Co-Fe oxyhydroxide oxygen evolution catalysts: Intrinsic activity trends, electrical conductivity, and electronic band structure. <i>Nano Research</i> , 2019, 12, 2288-2295.  | 5.8  | 134       |
| 1118 | Catalyzing overall water splitting at an ultralow cell voltage of 1.42%V via coupled Co-doped NiO nanosheets with carbon. <i>Applied Catalysis B: Environmental</i> , 2019, 252, 214-221.   | 10.8 | 92        |
| 1119 | Plasmonic hot charge carriers activated Ni centres of metal-organic frameworks for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10601-10609.   | 5.2  | 51        |
| 1120 | Deep Eutectic Solvent-Mediated Hierarchically Structured Fe-Based Organic-Inorganic Hybrid Catalyst for Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2019, 2, 3343-3351.  | 2.5  | 23        |
| 1121 | Ambient Fast Synthesis and Active Sites Deciphering of Hierarchical Foam-Like Trimetal-Organic Framework Nanostructures as a Platform for Highly Efficient Oxygen Evolution Electrocatalysis. <i>Advanced Materials</i> , 2019, 31, e1901139.                       | 11.1 | 374       |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1122 | Oxygen Evolution on in Situ Selective Formation of AgO: Plane Is the Key Factor. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10967-10973.   | 1.5  | 4         |
| 1123 | Approaches for measuring the surface areas of metal oxide electrocatalysts for determining their intrinsic electrocatalytic activity. <i>Chemical Society Reviews</i> , 2019, 48, 2518-2534.  | 18.7 | 483       |
| 1124 | Metal-organic layer derived metal hydroxide nanosheets for highly efficient oxygen evolution. <i>Chemical Communications</i> , 2019, 55, 5467-5470.   | 2.2  | 33        |
| 1125 | A novel particle-in-nanoplate architecture of iron nickel phosphide intertwined with carbon nanotubes for efficient water oxidation and high-performance sodium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2019, 791, 1220-1230.           | 2.8  | 20        |
| 1126 | Binding Energy Optimization Strategy Inducing Enhanced Catalytic Performance on MIL-100(FeNi) To Catalyze Water Oxidation Directly. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7496-7501.  | 3.2  | 29        |
| 1127 | Se-Doping Activates FeOOH for Cost-Effective and Efficient Electrochemical Water Oxidation. <i>Journal of the American Chemical Society</i> , 2019, 141, 7005-7013.   | 6.6  | 460       |
| 1128 | Synthesis of Si-O-Bridged $\text{C}_3\text{N}_4/\text{WO}_3$ 2D-Heterojunctional Nanocomposites as Efficient Photocatalysts for Aerobic Alcohol Oxidation and Mechanism Insight. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 9916-9927. | 3.2  | 44        |
| 1129 | Boosting the oxygen evolution electrocatalysis of layered nickel hydroxidenitrate nanosheets by iron doping. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 10627-10636.   | 3.8  | 34        |
| 1130 | Edge/Defect Sites in $\text{Co}_1\text{Fe}_m(\text{OH})_x$ Nanoplates Responsible for Water Oxidation Activity. <i>ChemSusChem</i> , 2019, 12, 2755-2762.   | 3.6  | 5         |
| 1131 | Three-dimensional layered double hydroxides on carbon nanofibers: The engineered mass transfer channels and active sites towards oxygen evolution reaction. <i>Applied Surface Science</i> , 2019, 485, 41-47.  | 3.1  | 22        |
| 1132 | Electrochemically Driven Coordination Tuning of FeOOH Integrated on Carbon Fiber Paper for Enhanced Oxygen Evolution. <i>Small</i> , 2019, 15, e1901015.  | 5.2  | 46        |
| 1133 | Palladium nanoparticles supported by metal-organic frameworks derived FeNi <sub>3</sub> C <sub>x</sub> nanorods as efficient oxygen reversible catalysts for rechargeable Zn-Air batteries. <i>Electrochimica Acta</i> , 2019, 307, 403-413.            | 2.6  | 21        |
| 1134 | A metal-organic framework converted catalyst that boosts photo-electrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 11143-11149.   | 5.2  | 59        |
| 1135 | Synergistic Coupling of Anionic Ligands To Optimize the Electronic and Catalytic Properties of Metal-Organic Framework-Converted Oxygen-Evolving Catalysts. <i>ACS Applied Energy Materials</i> , 2019, 2, 2138-2148.                                   | 2.5  | 31        |
| 1136 | Changes in the structure of electrodeposited manganese oxide water oxidation catalysts revealed by in-operando Raman spectroscopy. <i>Journal of Catalysis</i> , 2019, 371, 287-290.  | 3.1  | 8         |
| 1137 | Rational Design of Nanoarray Architectures for Electrocatalytic Water Splitting. <i>Advanced Functional Materials</i> , 2019, 29, 1808367.  | 7.8  | 298       |
| 1138 | Synergistic effect of charge transfer and short H-bonding on nanocatalyst surface for efficient oxygen evolution reaction. <i>Nano Energy</i> , 2019, 59, 443-452.  | 8.2  | 28        |
| 1139 | Amorphous film of cerium doped cobalt oxide as a highly efficient electrocatalyst for oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7526-7532.  | 5.2  | 72        |

| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 1140 | A 2D NiFe Bimetallic Metal-Organic Frameworks for Efficient Oxygen Evolution Electrocatalysis. <i>Energy and Environmental Materials</i> , 2019, 2, 18-21.  | 7.3 | 56        |
| 1141 | NiFeOx nanosheets tight-coupled with Bi <sub>2</sub> WO <sub>6</sub> nanosheets to improve the electrocatalyst for oxygen evolution reaction. <i>Applied Surface Science</i> , 2019, 478, 969-980.                  | 3.1 | 17        |
| 1142 | Bimetal-Organic Framework-Derived Porous Rodlike Cobalt/Nickel Nitride for All-pH Value Electrochemical Hydrogen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 8018-8024.                    | 4.0 | 99        |
| 1143 | Trends and Descriptors of Metal-Modified Transition Metal Carbides for Hydrogen Evolution in Alkaline Electrolyte. <i>ACS Catalysis</i> , 2019, 9, 2415-2422.   | 5.5 | 74        |
| 1144 | Uncovering The Role of Oxygen in Ni-Fe(OxHy) Electrocatalysts using In situ Soft X-ray Absorption Spectroscopy during the Oxygen Evolution Reaction. <i>Scientific Reports</i> , 2019, 9, 1532.                     | 1.6 | 112       |
| 1145 | Laser structured nickel-iron electrodes for oxygen evolution in alkaline water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 12671-12684.   | 3.8 | 40        |
| 1146 | An Unconventional Iron Nickel Catalyst for the Oxygen Evolution Reaction. <i>ACS Central Science</i> , 2019, 5, 558-568.  | 5.3 | 263       |
| 1147 | Mo-doped Ni <sub>2</sub> P hollow nanostructures: highly efficient and durable bifunctional electrocatalysts for alkaline water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7636-7643.            | 5.2 | 110       |
| 1148 | Facile fabrication and nanostructure control of mesoporous iridium oxide films for efficient electrocatalytic water oxidation. <i>Energy</i> , 2019, 173, 278-289.  | 4.5 | 12        |
| 1149 | A new metal-organic open framework enabling facile synthesis of carbon encapsulated transition metal phosphide/sulfide nanoparticle electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7168-7178. | 5.2 | 50        |
| 1150 | Ultralow Fe <sup>III</sup> Ion Doping Triggered Generation of Ni <sub>3</sub> S <sub>2</sub> Ultrathin Nanosheet for Enhanced Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2019, 11, 2011-2016.                  | 1.8 | 29        |
| 1151 | One-step synthesis of bimetallic Ni-Fe phosphates and their highly electrocatalytic performance for water oxidation. <i>Materials Research Bulletin</i> , 2019, 114, 80-84.   | 2.7 | 10        |
| 1152 | Tailorable surface sulfur chemistry of mesoporous Ni <sub>3</sub> S <sub>2</sub> particles for efficient oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7548-7552.                            | 5.2 | 72        |
| 1153 | Microwave Synthesis of Ultrathin Nickel Hydroxide Nanosheets with Iron Incorporation for Electrocatalytic Water Oxidation. <i>ACS Applied Energy Materials</i> , 2019, 2, 1961-1968.                                | 2.5 | 24        |
| 1154 | Controlling the 3-D morphology of Ni-Fe-based nanocatalysts for the oxygen evolution reaction. <i>Nanoscale</i> , 2019, 11, 8170-8184.  | 2.8 | 18        |
| 1155 | The effect of Fe as constituent in Ni-base alloys on the oxygen evolution reaction in alkaline solutions at high current densities. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 6392-6402.          | 3.8 | 17        |
| 1156 | Cobalt/Cobalt Oxide Surface for Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 6093-6105.   | 3.2 | 44        |
| 1157 | Synergistic Effects of Mo <sub>2</sub> C@Co <sub>x</sub> Fe <sub>y</sub> Core-Shell Nanoparticles in Electrocatalytic Overall Water Splitting Reaction. <i>Energy Technology</i> , 2019, 7, 1801121.                | 1.8 | 7         |



| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 1158 | Structural and electronic properties of Fe dopants in cobalt oxide nanoislands on Au(111). <i>Journal of Chemical Physics</i> , 2019, 150, 041731.  | 1.2 | 14        |
| 1159 | Cooperative Catalytic Behavior of SnO <sub>2</sub> and NiWO <sub>4</sub> over BiVO <sub>4</sub> Photoanodes for Enhanced Photoelectrochemical Water Splitting Performance. <i>Catalysts</i> , 2019, 9, 879.                                     | 1.6 | 13        |
| 1160 | Promoting Electrocatalytic Oxygen Evolution over Transition-Metal Phosphide-Based Nanocomposites via Architectural and Electronic Engineering. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 46825-46838.                           | 4.0 | 34        |
| 1161 | Vapor-fed electrolysis of water using earth-abundant catalysts in Nafion or in bipolar Nafion/poly(benzimidazolium) membranes. <i>Sustainable Energy and Fuels</i> , 2019, 3, 3611-3626.  | 2.5 | 14        |
| 1162 | Iron carbonate hydroxide templated binary metal-organic frameworks for highly efficient electrochemical water oxidation. <i>Chemical Communications</i> , 2019, 55, 14773-14776.  | 2.2 | 41        |
| 1163 | An amorphous FeNiO <sub>x</sub> thin film obtained by anodic electrodeposition as an electrocatalyst toward the oxygen evolution reaction. <i>New Journal of Chemistry</i> , 2019, 43, 19422-19428.   | 1.4 | 9         |
| 1164 | An Fe stabilized metallic phase of NiS <sub>2</sub> for the highly efficient oxygen evolution reaction. <i>Nanoscale</i> , 2019, 11, 23217-23225.   | 2.8 | 66        |
| 1165 | Surface dual-oxidation induced metallic copper doping into NiFe electrodes for electrocatalytic water oxidation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 22889-22897.  | 5.2 | 26        |
| 1166 | The sensitivity of Cu for electrochemical carbon dioxide reduction to hydrocarbons as revealed by high throughput experiments. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26785-26790.  | 5.2 | 10        |
| 1167 | Stability profiles of transition metal oxides in the oxygen evolution reaction in alkaline medium. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25865-25877.  | 5.2 | 40        |
| 1168 | Dissolution-Induced Surface Roughening and Oxygen Evolution Electrocatalysis of Alkaline-Earth Iridates in Acid. <i>CheM</i> , 2019, 5, 3243-3259.  | 5.8 | 98        |
| 1169 | Understanding Electrochemical Stabilities of Ni-Based Nanofilms from a Comparative Theory-Experiment Approach. <i>Journal of Physical Chemistry C</i> , 2019, 123, 28925-28940.   | 1.5 | 11        |
| 1170 | Ni <sup>2+</sup> /Fe (Oxy)hydroxide Modified Graphene Additive Manufactured (3D-Printed) Electrochemical Platforms as an Efficient Electrocatalyst for the Oxygen Evolution Reaction. <i>ChemElectroChem</i> , 2019, 6, 5633-5641.              | 1.7 | 32        |
| 1171 | Coating of Ni on Fe (oxy)hydroxide: Superior Catalytic Activity for Oxygen-Involved Reaction During Water Splitting. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 19832-19838.   | 3.2 | 17        |
| 1172 | Identifying the crystal and electronic structure evolution in tri-component transition metal oxide nanosheets for efficient electrocatalytic oxygen evolution. <i>EcoMat</i> , 2019, 1, e12005.   | 6.8 | 14        |
| 1173 | Rational Design Combining Morphology and Charge-Dynamic for Hematite/Nickel-Iron Oxide Thin-Layer Photoanodes: Insights into the Role of the Absorber/Catalyst Junction. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 48002-48012. | 4.0 | 3         |
| 1174 | Modulated transition metal-oxygen covalency in the octahedral sites of CoFe layered double hydroxides with vanadium doping leading to highly efficient electrocatalysts. <i>Nanoscale</i> , 2019, 11, 23296-23303.                              | 2.8 | 48        |
| 1175 | Nickel foam and stainless steel mesh as electrocatalysts for hydrogen evolution reaction, oxygen evolution reaction and overall water splitting in alkaline media. <i>RSC Advances</i> , 2019, 9, 31563-31571.                                  | 1.7 | 151       |

| #    | ARTICLE  | IF  | CITATIONS |
|------|--|-----|-----------|
| 1176 | Revealing Ni-based layered double hydroxides as high-efficiency electrocatalysts for the oxygen evolution reaction: a DFT study. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23091-23097.                                 | 5.2 | 75        |
| 1177 | Facile fabrication of a hierarchical NiCoFeP hollow nanoprism for efficient oxygen evolution in the Zn-air battery. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24964-24972.  | 5.2 | 65        |
| 1178 | Electrocatalytic Properties of Ni-Doped BaFe <sub>12</sub> O <sub>19</sub> for Oxygen Evolution in Alkaline Solution. <i>Open Chemistry</i> , 2019, 17, 1382-1392.   | 1.0 | 5         |
| 1179 | Co <sub>2</sub> P@NiCo <sub>2</sub> O <sub>4</sub> bi-functional electrocatalyst with low overpotential for water splitting in wide range pH electrolytes. <i>Journal of Colloid and Interface Science</i> , 2019, 534, 55-63.   | 5.0 | 34        |
| 1180 | One-pot synthesis of Fe <sub>2</sub> O <sub>3</sub> /C by urea combustion method as an efficient electrocatalyst for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 2877-2882.           | 3.8 | 13        |
| 1181 | Defect-Rich 2D Material Networks for Advanced Oxygen Evolution Catalysts. <i>ACS Energy Letters</i> , 2019, 4, 328-336.  | 8.8 | 148       |
| 1182 | Vertically Aligned Ni Nanowires as a Platform for Kinetically Limited Water-Splitting Electrocatalysis. <i>Journal of Physical Chemistry C</i> , 2019, 123, 1082-1093.   | 1.5 | 5         |
| 1183 | Tuning the Electronic Structure of NiO via Li Doping for the Fast Oxygen Evolution Reaction. <i>Chemistry of Materials</i> , 2019, 31, 419-428.  | 3.2 | 78        |
| 1184 | Homogeneous cobalt and iron oxide hollow nanocages derived from ZIF-67 etched by Fe species for enhanced water oxidation. <i>Electrochimica Acta</i> , 2019, 296, 418-426.   | 2.6 | 25        |
| 1185 | Nickel-iron layered double hydroxides and reduced graphene oxide composite with robust lithium ion adsorption ability for high-capacity energy storage systems. <i>Electrochimica Acta</i> , 2019, 296, 190-197.                 | 2.6 | 42        |
| 1186 | Recent advances in transition metal-based catalysts with heterointerfaces for energy conversion and storage. <i>Materials Today Chemistry</i> , 2019, 11, 16-28.   | 1.7 | 72        |
| 1187 | Earth-Abundant Oxygen Electrocatalysts for Alkaline Anion-Exchange-Membrane Water Electrolysis: Effects of Catalyst Conductivity and Comparison with Performance in Three-Electrode Cells. <i>ACS Catalysis</i> , 2019, 9, 7-15. | 5.5 | 189       |
| 1188 | Coordination-assisted synthesis of iron-incorporated cobalt oxide nanoplates for enhanced oxygen evolution. <i>Materials Today Chemistry</i> , 2019, 11, 112-118.  | 1.7 | 30        |
| 1189 | Site Activity and Population Engineering of NiRu-Layered Double Hydroxide Nanosheets Decorated with Silver Nanoparticles for Oxygen Evolution and Reduction Reactions. <i>ACS Catalysis</i> , 2019, 9, 117-129.                  | 5.5 | 103       |
| 1190 | Nanosheets of Nickel Iron Hydroxy Carbonate Hydrate with Pronounced OER Activity under Alkaline and Near-Neutral Conditions. <i>Inorganic Chemistry</i> , 2019, 58, 1895-1904.   | 1.9 | 68        |
| 1191 | Exceptional electrocatalytic oxygen evolution efficiency and stability from electrodeposited NiFe alloy on Ni foam. <i>Electrochimica Acta</i> , 2019, 299, 567-574.   | 2.6 | 57        |
| 1192 | High-Temperature One-Step Synthesis of Efficient Nanostructured Bismuth Vanadate Photoanodes for Water Oxidation. <i>Energy Technology</i> , 2019, 7, 1801052.   | 1.8 | 23        |
| 1193 | Fabrication of NiFe layered double hydroxide with well-defined laminar superstructure as highly efficient oxygen evolution electrocatalysts. <i>Nano Research</i> , 2019, 12, 1327-1331.   | 5.8 | 53        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1194 | Laser-Induced Graphene Hybrid Catalysts for Rechargeable Zn-Air Batteries. ACS Applied Energy Materials, 2019, 2, 1460-1468.   | 2.5  | 55        |
| 1195 | Green synthesis of NiFe LDH/Ni foam at room temperature for highly efficient electrocatalytic oxygen evolution reaction. Science China Materials, 2019, 62, 681-689.   | 3.5  | 70        |
| 1196 | Iron-Doped Nickel Molybdate with Enhanced Oxygen Evolution Kinetics. Chemistry - A European Journal, 2019, 25, 280-284.  | 1.7  | 38        |
| 1197 | Monolithic Ni <sub>x</sub> My (M = OH, P, S, Se) nanosheets as efficient and stable electrocatalysts for overall water splitting. Electrochimica Acta, 2019, 295, 148-156.   | 2.6  | 21        |
| 1198 | Modes of Fe Incorporation in Co-Fe (Oxy)hydroxide Oxygen Evolution Electrocatalysts. ChemSusChem, 2019, 12, 2015-2021.   | 3.6  | 55        |
| 1199 | Application of Sm <sub>0.8</sub> Sr <sub>0.2</sub> Fe <sub>1-x</sub> Co <sub>x</sub> O <sub>3-δ</sub> (x = 0.2, 0.5, 0.8) Perovskite for the Oxygen Evolution Reaction in Alkaline Media. Electrocatalysis, 2019, 10, 305-313.           | 1.5  | 10        |
| 1200 | A practical-oriented NiFe-based water-oxidation catalyst enabled by ambient redox and hydrolysis co-precipitation strategy. Applied Catalysis B: Environmental, 2019, 244, 844-852.  | 10.8 | 125       |
| 1201 | Pristine Transition-Metal-Based Metal-Organic Frameworks for Electrocatalysis. ChemElectroChem, 2019, 6, 1273-1299.  | 1.7  | 78        |
| 1202 | Unraveling Oxygen Evolution on Iron-Doped <sup>2</sup> Nickel Oxyhydroxide: The Key Role of Highly Active Molecular-like Sites. Journal of the American Chemical Society, 2019, 141, 693-705.  | 6.6  | 176       |
| 1203 | Ultrasmall Ni/NiO Nanoclusters on Thiol-Functionalized and -Exfoliated Graphene Oxide Nanosheets for Durable Oxygen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 363-371.  | 2.5  | 74        |
| 1204 | Fluoride-Induced Dynamic Surface Self-Reconstruction Produces Unexpectedly Efficient Oxygen-Evolution Catalyst. Nano Letters, 2019, 19, 530-537.   | 4.5  | 210       |
| 1205 | Dual Tuning of Composition and Nanostructure of Hierarchical Hollow Nanopolyhedra Assembled by NiCo-Layered Double Hydroxide Nanosheets for Efficient Electrocatalytic Oxygen Evolution. ACS Applied Energy Materials, 2019, 2, 312-319. | 2.5  | 39        |
| 1206 | Insights into Ni-Fe couple in perovskite electrocatalysts for highly efficient electrochemical oxygen evolution. Electrochimica Acta, 2019, 293, 240-246.  | 2.6  | 30        |
| 1207 | Ultrafine monolayer Co-containing layered double hydroxide nanosheets for water oxidation. Journal of Energy Chemistry, 2019, 34, 57-63.   | 7.1  | 78        |
| 1208 | Rational Design of Transition Metal-Based Materials for Highly Efficient Electrocatalysis. Small Methods, 2019, 3, 1800211.  | 4.6  | 250       |
| 1209 | Loading of Ag on Fe-Co-S/N-doped carbon nanocomposite to achieve improved electrocatalytic activity for oxygen evolution reaction. Journal of Alloys and Compounds, 2019, 773, 40-49.  | 2.8  | 44        |
| 1210 | Template-free synthesis of three-dimensional NiFe-LDH hollow microsphere with enhanced OER performance in alkaline media. Journal of Energy Chemistry, 2019, 33, 130-137.  | 7.1  | 121       |
| 1211 | Hydrogen treatment and FeOOH overlayer: Effective approaches for enhancing the photoelectrochemical water oxidation performance of bismuth vanadate thin films. Catalysis Today, 2019, 321-322, 87-93.                                   | 2.2  | 7         |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1212 | Structural Evolution of Metal (Oxy)hydroxide Nanosheets during the Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 5590-5594.   | 4.0  | 58        |
| 1213 | Coupling efficient biomass upgrading with H <sub>2</sub> production <i>via</i> bifunctional Cu <sub>x</sub> S@NiCo-LDH core-shell nanoarray electrocatalysts. Journal of Materials Chemistry A, 2020, 8, 1138-1146.                            | 5.2  | 132       |
| 1214 | Water Oxidation Catalysts from Waste Metal Resources: A Facile Metal-Organic Electrochemical Approach. Zeitschrift Fur Physikalische Chemie, 2020, 234, 1097-1113.   | 1.4  | 3         |
| 1215 | Prognostic role of RECK in pathological outcome-dependent buccal mucosa squamous cell carcinoma. Oral Diseases, 2020, 26, 62-71.   | 1.5  | 4         |
| 1216 | Structural instability-induced high-performance NiFe layered double hydroxides as oxygen evolution reaction catalysts for pH-near-neutral borate electrolyte: The role of intercalates. Applied Catalysis B: Environmental, 2020, 263, 118343. | 10.8 | 39        |
| 1217 | Oxygen Evolution Reaction on Single-Walled Carbon Nanotubes Noncovalently Functionalized with Metal Phthalocyanines. ChemElectroChem, 2020, 7, 428-436.  | 1.7  | 28        |
| 1218 | OER Catalysis at Activated and Codeposited NiFe-Oxo/Hydroxide Thin Films Is Due to Postdeposition Surface-Fe and Is Not Sustainable without Fe in Solution. ACS Catalysis, 2020, 10, 20-35.  | 5.5  | 102       |
| 1219 | Trimetallic Mn-Fe-Ni Oxide Nanoparticles Supported on Multi-Walled Carbon Nanotubes as High-Performance Bifunctional ORR/OER Electrocatalyst in Alkaline Media. Advanced Functional Materials, 2020, 30, 1905992.                              | 7.8  | 209       |
| 1220 | Transforming Ni-Coagulated Polyferriertic Sulfate Sludge into Porous Heteroatom-Doped Carbon-Supported Transition Metal Phosphide: An Efficient Catalyst for Oxygen Evolution Reaction. Energy Technology, 2020, 8, 1900995.                   | 1.8  | 7         |
| 1221 | Understanding the Enhancement of the Catalytic Properties of Goethite by Transition Metal Doping: Critical Role of O* Formation Energy Relative to OH* and OOH*. ACS Applied Energy Materials, 2020, 3, 1634-1643.                             | 2.5  | 17        |
| 1222 | Role of Transition Metals in Layered Double Hydroxides for Differentiating the Oxygen Evolution and Nonenzymatic Glucose Sensing. ACS Applied Materials & Interfaces, 2020, 12, 6193-6204.   | 4.0  | 48        |
| 1223 | Identifying the role of Ni and Fe in Ni-Fe co-doped orthorhombic CoSe <sub>2</sub> for driving enhanced electrocatalytic activity for oxygen evolution reaction. Electrochimica Acta, 2020, 335, 135682.                                       | 2.6  | 39        |
| 1224 | Single Nanometer-Sized NiFe-Layered Double Hydroxides as Anode Catalyst in Anion Exchange Membrane Water Electrolysis Cell with Energy Conversion Efficiency of 74.7% at 1.0 A cm <sup>2</sup> . ACS Catalysis, 2020, 10, 1886-1893.           | 5.5  | 91        |
| 1225 | Photodeposition fabrication of hierarchical layered Co-doped Ni oxyhydroxide (Ni <sub>x</sub> Co <sub>1-x</sub> OOH) catalysts with enhanced electrocatalytic performance for oxygen evolution reaction. Nano Research, 2020, 13, 246-254.     | 5.8  | 28        |
| 1226 | Enhanced PEC performance of hematite photoanode coupled with bimetallic oxyhydroxide NiFeOOH through a simple electroless method. Applied Catalysis B: Environmental, 2020, 265, 118580.   | 10.8 | 162       |
| 1227 | A coaxial three-layer (Ni, Fe)O <sub>x</sub> H <sub>y</sub> /Ni/Cu mesh electrode: excellent oxygen evolution reaction activity for water electrolysis. Catalysis Science and Technology, 2020, 10, 1803-1808.                                 | 2.1  | 9         |
| 1228 | Exceptional performance of hierarchical Ni-Fe oxyhydroxide@NiFe alloy nanowire array electrocatalysts for large current density water splitting. Energy and Environmental Science, 2020, 13, 86-95.  | 15.6 | 698       |
| 1229 | Iron-nickel oxide: a promising strategy for water oxidation. New Journal of Chemistry, 2020, 44, 1517-1523.  | 1.4  | 8         |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1230 | Loading FeOOH on Ni(OH) <sub>2</sub> hollow nanorods to obtain a three-dimensional sandwich catalyst with strong electron interactions for an efficient oxygen evolution reaction. <i>Nanoscale</i> , 2020, 12, 983-990.         | 2.8  | 69        |
| 1231 | Room-temperature synthesis of Ni <sub>1-x</sub> Fe <sub>x</sub> (oxy)hydroxides: structure-activity relationship for the oxygen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2020, 4, 932-939.                      | 2.5  | 6         |
| 1232 | Galvanic displacement on electrodeposited tangled Zn nanowire sacrificial template for preparing porous and hollow Ni electrodes in ionic liquid. <i>Journal of Molecular Liquids</i> , 2020, 298, 112050.                       | 2.3  | 8         |
| 1233 | EPR Spectroscopy of Iron- and Nickel-Doped [ZnAl]-Layered Double Hydroxides: Modeling Active Sites in Heterogeneous Water Oxidation Catalysts. <i>Journal of the American Chemical Society</i> , 2020, 142, 1838-1845.           | 6.6  | 28        |
| 1234 | A review on NiFe-based electrocatalysts for efficient alkaline oxygen evolution reaction. <i>Journal of Power Sources</i> , 2020, 448, 227375.   | 4.0  | 217       |
| 1235 | Developments and Perspectives in 3d Transition-Metal-Based Electrocatalysts for Neutral and Near-Neutral Water Electrolysis. <i>Advanced Energy Materials</i> , 2020, 10, 1902666.   | 10.2 | 226       |
| 1236 | Nonprecious anodic catalysts for low-molecular-hydrocarbon fuel cells: Theoretical consideration and current progress. <i>Progress in Energy and Combustion Science</i> , 2020, 77, 100805.                                      | 15.8 | 107       |
| 1237 | Methods for Electrocatalysis. , 2020, , .  |      | 2         |
| 1238 | Vertical Nickel-Iron layered double hydroxide nanosheets grown on hills-like nickel framework for efficient water oxidation and splitting. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 3986-3994.                | 3.8  | 13        |
| 1239 | <i>In situ</i> fabrication of dynamic self-optimizing Ni <sub>3</sub> S <sub>2</sub> nanosheets as an efficient catalyst for the oxygen evolution reaction. <i>Dalton Transactions</i> , 2020, 49, 70-78.                        | 1.6  | 19        |
| 1240 | Strain stabilized nickel hydroxide nanoribbons for efficient water splitting. <i>Energy and Environmental Science</i> , 2020, 13, 229-237.   | 15.6 | 78        |
| 1241 | Temperature-regulated reversible transformation of spinel-to-oxyhydroxide active species for electrocatalytic water oxidation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1631-1635.                                     | 5.2  | 33        |
| 1242 | A sacrificial Zn strategy enables anchoring of metal single atoms on the exposed surface of holey 2D molybdenum carbide nanosheets for efficient electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3071-3082. | 5.2  | 48        |
| 1243 | Selectively Etching Vanadium Oxide to Modulate Surface Vacancies of Unary Metal-Based Electrocatalysts for High-Performance Water Oxidation. <i>Advanced Energy Materials</i> , 2020, 10, 1903571.                               | 10.2 | 64        |
| 1244 | Sulfate-Functionalized Nickel Hydroxide Nanobelts for Sustained Oxygen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 443-450.   | 4.0  | 31        |
| 1245 | Amorphous Catalysts and Electrochemical Water Splitting: An Untold Story of Harmony. <i>Small</i> , 2020, 16, e1905779.  | 5.2  | 424       |
| 1246 | Three-Dimensional Hierarchical Porous Nanotubes Derived from Metal-Organic Frameworks for Highly Efficient Overall Water Splitting. <i>IScience</i> , 2020, 23, 100761.  | 1.9  | 26        |
| 1247 | Strongly Cooperative Nano-CoO/Co Active Phase in Hierarchically Porous Nitrogen-Doped Carbon Microspheres for Efficient Bifunctional Oxygen Electrocatalysis. <i>ACS Applied Energy Materials</i> , 2020, 3, 1328-1337.          | 2.5  | 17        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1248 | Laser Fragmentation-Induced Defect-Rich Cobalt Oxide Nanoparticles for Electrochemical Oxygen Evolution Reaction. <i>ChemSusChem</i> , 2020, 13, 520-528.   | 3.6  | 55        |
| 1249 | Electrochemically Aged Ni Electrodes Supporting NiFe <sub>2</sub> O <sub>4</sub> Nanoparticles for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2020, 3, 387-400.   | 2.5  | 9         |
| 1250 | Oxygen Evolution on Metal-Oxide Hydroxides: Beneficial Role of Mixing Fe, Co, Ni Explained via Bifunctional Edge/acceptor Route. <i>ChemCatChem</i> , 2020, 12, 1436-1442.  | 1.8  | 21        |
| 1251 | Interlaced rosette-like MoS <sub>2</sub> /Ni <sub>3</sub> S <sub>2</sub> /NiFe-LDH grown on nickel foam: A bifunctional electrocatalyst for hydrogen production by urea-assisted electrolysis. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 23-35. | 3.8  | 61        |
| 1252 | Effective removal of chlorinated organic pollutants by bimetallic iron-nickel sulfide activation of peroxydisulfate. <i>Chinese Chemical Letters</i> , 2020, 31, 1535-1539.   | 4.8  | 34        |
| 1253 | H <sub>2</sub> O <sub>2</sub> -sensing abilities of mixed-metal (Fe-Ni) Prussian blue analogs in a wide pH range. <i>Inorganica Chimica Acta</i> , 2020, 502, 119314.   | 1.2  | 9         |
| 1254 | Engineering Active Fe Sites on Nickel-Iron Layered Double Hydroxide through Component Segregation for Oxygen Evolution Reaction. <i>ChemSusChem</i> , 2020, 13, 811-818.  | 3.6  | 62        |
| 1255 | Chemically Deposited Amorphous Zn-Doped NiFeO <sub>x</sub> H <sub>y</sub> for Enhanced Water Oxidation. <i>ACS Catalysis</i> , 2020, 10, 235-244.   | 5.5  | 86        |
| 1256 | Preparation of Co-Fe oxides immobilized on carbon paper using water-dispersible Prussian-blue analog nanoparticles and their oxygen evolution reaction (OER) catalytic activities. <i>Inorganica Chimica Acta</i> , 2020, 502, 119345.                            | 1.2  | 15        |
| 1257 | Enhanced stability of silicon for photoelectrochemical water oxidation through self-healing enabled by an alkaline protective electrolyte. <i>Energy and Environmental Science</i> , 2020, 13, 4132-4141.   | 15.6 | 14        |
| 1258 | Synthesis and growth mechanism of bamboo like N-doped CNT/Graphene nanostructure incorporated with hybrid metal nanoparticles for overall water splitting. <i>Carbon</i> , 2020, 170, 452-463.  | 5.4  | 59        |
| 1259 | One stable electrocatalyst for two evolution reactions by one-pot combustion synthesis. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 22691-22699.  | 3.8  | 8         |
| 1260 | Ni/NiO nanosheets for alkaline hydrogen evolution reaction: In situ electrochemical-Raman study. <i>Electrochimica Acta</i> , 2020, 361, 137040.  | 2.6  | 148       |
| 1261 | Membrane Electrolyzers for Impure-Water Splitting. <i>Joule</i> , 2020, 4, 2549-2561.   | 11.7 | 102       |
| 1262 | Is nickel phosphide an efficient catalyst for the oxygen-evolution reaction at low overpotentials?. <i>New Journal of Chemistry</i> , 2020, 44, 19630-19641.  | 1.4  | 22        |
| 1263 | Iron-regulated NiPS for enhanced oxygen evolution efficiency. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23580-23589.   | 5.2  | 30        |
| 1264 | Highly efficient and robust sulfur-doped nickel-cobalt oxide towards oxygen evolution reaction. <i>Molecular Catalysis</i> , 2020, 496, 111175.   | 1.0  | 2         |
| 1265 | Interlayer ligand engineering of $\text{Ni}(\text{OH})_2$ for oxygen evolution reaction. <i>Science China Chemistry</i> , 2020, 63, 1684-1693.  | 4.2  | 15        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1266 | Accelerating hydrogen evolution in Ru-doped FeCoP nanoarrays with lattice distortion toward highly efficient overall water splitting. <i>Catalysis Science and Technology</i> , 2020, 10, 8314-8324.   | 2.1  | 24        |
| 1267 | Water oxidation by a nickel complex: New challenges and an alternative mechanism. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 33563-33573.   | 3.8  | 64        |
| 1268 | Boron-Doped Graphene Oxide-Supported Nickel Nitride Nanoparticles for Electrocatalytic Oxygen Evolution in Alkaline Electrolytes. <i>ACS Applied Nano Materials</i> , 2020, 3, 9924-9930.  | 2.4  | 21        |
| 1269 | Sol-gel Synthesis of Ce <sub>0.8</sub> Sr <sub>0.2</sub> Co <sub>1-(x+y)</sub> Ni <sub>x</sub> Fe <sub>y</sub> O <sub>3-<math>\hat{\imath}</math></sub> (x = 0.1, 0.2, and y = 0.2, 0.5, 0.7) a Nanocomposite-Type Electrocatalyst for the Oxygen Evolution Reaction in Alkaline Media. <i>Electrocatalysis</i> , 2020, 11, 628-641. | 1.5  | 0         |
| 1270 | S-doped Co-Fe-Pi nanosheets as highly efficient oxygen evolution electrocatalysts in alkaline media. <i>Electrochimica Acta</i> , 2020, 362, 137123.   | 2.6  | 9         |
| 1271 | Effect of anion exchange ionomer content on electrode performance in AEM water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 28272-28284.  | 3.8  | 70        |
| 1272 | Small Polarons and Surface Defects in Metal Oxide Photocatalysts Studied Using XUV Reflection-Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2020, 124, 22853-22870.  | 1.5  | 24        |
| 1273 | Ultrathin Nanosheet-Assembled Co-Fe Hydroxide Nanotubes: Sacrificial Template Synthesis, Topotactic Transformation, and Their Application as Electrocatalysts for Efficient Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 46578-46587.  | 4.0  | 12        |
| 1274 | Influence of Composition on Performance in Metallic Iron-Nickel-Cobalt Ternary Anodes for Alkaline Water Electrolysis. <i>ACS Catalysis</i> , 2020, 10, 12139-12147.   | 5.5  | 20        |
| 1275 | Tuning Cu Overvoltage for a Copper-Telluride System in Electrocatalytic Water Reduction and Feasible Feedstock Conversion: A New Approach. <i>Inorganic Chemistry</i> , 2020, 59, 11129-11141.   | 1.9  | 20        |
| 1276 | Unveiling the Origin of Catalytic Sites of Pt Nanoparticles Decorated on Oxygen-Deficient Vanadium-Doped Cobalt Hydroxide Nanosheet for Hybrid Sodium-Air Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 7464-7473.   | 2.5  | 9         |
| 1277 | Ni foam electrode solution impregnated with Ni-Fe <sub>x</sub> (OH) <sub>y</sub> catalysts for efficient oxygen evolution reaction in alkaline electrolyzers. <i>RSC Advances</i> , 2020, 10, 25426-25434.   | 1.7  | 4         |
| 1278 | Understanding the Synergistic Effect in Oxygen Evolution Reaction Catalysis from Chemical Kinetics Point of View: An Iron Oxide/Nickel Oxide Case Study. <i>Journal of the Electrochemical Society</i> , 2020, 167, 116514.  | 1.3  | 11        |
| 1279 | Construction of FeCo <sub>2</sub> O <sub>4</sub> @N-Doped Carbon Dots Nanoflowers as Binder Free Electrode for Reduction and Oxidation of Water. <i>Materials</i> , 2020, 13, 3119.  | 1.3  | 18        |
| 1280 | Active Site Engineering in Porous Electrocatalysts. <i>Advanced Materials</i> , 2020, 32, e2002435.  | 11.1 | 304       |
| 1281 | Stoichiometry-Dependent Oxygen Evolution Electrocatalysis on Open-Tubular Nitrogen-Doped Carbon Column Supported Transition Metal Oxides. <i>ACS Applied Energy Materials</i> , 2020, 3, 2010-2019.  | 2.5  | 6         |
| 1282 | Self-crosslinkable polyaniline with coordinated stabilized CoOOH nanosheets as a high-efficiency electrocatalyst for oxygen evolution reaction. <i>Applied Surface Science</i> , 2020, 529, 147173.  | 3.1  | 25        |
| 1283 | Evaluation of sputtered nickel oxide, cobalt oxide and nickel-cobalt oxide on n-type silicon photoanodes for solar-driven O <sub>2</sub> (g) evolution from water. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13955-13963.   | 5.2  | 9         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1284 | Hierarchical Highly Wrinkled Trimetallic NiFeCu Phosphide Nanosheets on Nanodendrite Ni <sub>3</sub> S <sub>2</sub> /Ni Foam as an Efficient Electrocatalyst for the Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2020, 12, 36268-36276.          | 4.0  | 44        |
| 1285 | Electronic coupling strategy to boost water oxidation efficiency based on the modelling of trimetallic hydroxides Ni <sub>1-x</sub> Fe <sub>x</sub> Cr <sub>y</sub> (OH) <sub>2</sub> : From theory to experiment. Chemical Engineering Journal, 2020, 402, 126144. | 6.6  | 11        |
| 1286 | Atomic force microscopy: Emerging illuminated and <i>operando</i> techniques for solar fuel research. Journal of Chemical Physics, 2020, 153, 020902.   | 1.2  | 25        |
| 1287 | V(III)-Doped Nickel Oxide-Based Nanocatalysts for Electrochemical Water Splitting: Influence of Phase, Composition, and Doping on the Electrocatalytic Activity. Chemistry of Materials, 2020, 32, 10394-10406.   | 3.2  | 14        |
| 1288 | Nb-incorporated Fe (oxy)hydroxide derived from structural transformation for efficient oxygen evolution electrocatalysis. Journal of Materials Chemistry A, 2020, 8, 24598-24607.   | 5.2  | 18        |
| 1289 | Hexadecyltrimethylammonium hydroxide promotes electrocatalytic activity for the oxygen evolution reaction. Communications Chemistry, 2020, 3, .   | 2.0  | 2         |
| 1290 | Recent Progress on NiFe-Based Electrocatalysts for the Oxygen Evolution Reaction. Small, 2020, 16, e2003916.  | 5.2  | 192       |
| 1291 | Highly active hollow mesoporous NiFeCr hydroxide as an electrode material for the oxygen evolution reaction and a redox capacitor. Chemical Communications, 2020, 56, 15549-15552.  | 2.2  | 16        |
| 1292 | High performance binder-free Fe-Ni hydroxides on nickel foam prepared in piranha solution for the oxygen evolution reaction. Sustainable Energy and Fuels, 2020, 4, 6311-6320.  | 2.5  | 14        |
| 1293 | Structural Evolution in Photodeposited Nickel (oxy)hydroxide Oxygen Evolution Electrocatalysts. ACS Applied Energy Materials, 2020, 3, 12407-12416.   | 2.5  | 5         |
| 1294 | Key activity descriptors of nickel-iron oxygen evolution electrocatalysts in the presence of alkali metal cations. Nature Communications, 2020, 11, 6181.   | 5.8  | 80        |
| 1295 | Facile Synthesis of Hierarchical CuS and CuCo <sub>2</sub> S <sub>4</sub> Structures from an Ionic Liquid Precursor for Electrocatalysis Applications. ACS Applied Materials & Interfaces, 2020, 12, 52560-52570.   | 4.0  | 20        |
| 1296 | Self-activated anodic nanoporous stainless steel electrocatalysts with high durability for the hydrogen evolution reaction. Electrochimica Acta, 2020, 364, 137315.   | 2.6  | 26        |
| 1297 | Why Do We Use the Materials and Operating Conditions We Use for Heterogeneous (Photo)Electrochemical Water Splitting?. ACS Catalysis, 2020, 10, 11177-11234.  | 5.5  | 89        |
| 1298 | Fabrication of layered double hydroxide microcapsules mediated by cerium doping in metal-organic frameworks for boosting water splitting. Energy and Environmental Science, 2020, 13, 2949-2956.  | 15.6 | 126       |
| 1299 | Separating bulk and surface processes in NiO <sub>x</sub> electrocatalysts for water oxidation. Sustainable Energy and Fuels, 2020, 4, 5024-5030.   | 2.5  | 26        |
| 1300 | Improved water oxidation performance of ultra-thin planar hematite photoanode: Synergistic effect of In/Sn doping and an overlayer of metal oxyhydroxides. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 401, 112781.                              | 2.0  | 2         |
| 1301 | Synergizing hole accumulation and transfer on composite Ni/CoO <sub>x</sub> for photoelectrochemical water oxidation. Chemical Communications, 2020, 56, 10179-10182.   | 2.2  | 3         |



| #    | ARTICLE  | IF  | CITATIONS |
|------|--|-----|-----------|
| 1302 | Oxidation of carbon monoxide over various nickel oxide catalysts in different conditions: A review. <i>Chemical Engineering Journal Advances</i> , 2020, 1, 100008.  | 2.4 | 33        |
| 1303 | Oxygen Evolution and Reduction on Fe-doped NiOOH: Influence of Solvent, Dopant Position and Reaction Mechanism. <i>Topics in Catalysis</i> , 2020, 63, 833-845.  | 1.3 | 19        |
| 1304 | Ni <sub>1-x</sub> (HPO <sub>3</sub> ) <sub>8</sub> (OH) <sub>6</sub> multifunctional materials: Electrodes for oxygen evolution reaction and potential visible-light active photocatalysts. <i>Journal of Alloys and Compounds</i> , 2020, 848, 156595.  | 2.8 | 10        |
| 1305 | High-Valent Nickel Promoted by Atomically Embedded Copper for Efficient Water Oxidation. <i>ACS Catalysis</i> , 2020, 10, 9725-9734.   | 5.5 | 100       |
| 1306 | Self-templating synthesis of hollow NiFe hydroxide nanospheres for efficient oxygen evolution reaction. <i>Electrochimica Acta</i> , 2020, 357, 136869.  | 2.6 | 7         |
| 1307 | The surface structure of $\hat{1}^2$ -NiOOH (001) under reaction conditions and its effect on OER activity: An ab initio study. <i>Molecular Catalysis</i> , 2020, 493, 111082.  | 1.0 | 1         |
| 1308 | High intrinsic activity of the oxygen evolution reaction in low-cost NiO nanowall electrocatalysts. <i>Materials Advances</i> , 2020, 1, 1971-1979.  | 2.6 | 27        |
| 1309 | Evaluation of electrochemical properties of organic template assisted PdO incorporated NiO for H <sub>2</sub> /O <sub>2</sub> evolution. <i>Microchemical Journal</i> , 2020, 158, 105282.   | 2.3 | 2         |
| 1310 | Enhanced stability and ultrahigh activity of amorphous ripple nanostructured Ni-doped Fe oxyhydroxide electrode toward synergetic electrocatalytic water splitting. <i>RSC Advances</i> , 2020, 10, 26364-26373.   | 1.7 | 29        |
| 1311 | Rational design of NiFe LDH@Ni <sub>3</sub> N nano/microsheet arrays as a bifunctional electrocatalyst for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17202-17211.  | 5.2 | 89        |
| 1312 | Spectroelectrochemical Tracking of Nickel Hydroxide Reveals Its Irreversible Redox States upon Operation at High Current Density. <i>ACS Catalysis</i> , 2020, 10, 9451-9457.  | 5.5 | 45        |
| 1313 | Investigation of the stability of NiFe-(oxy)hydroxide anodes in alkaline water electrolysis under industrially relevant conditions. <i>Catalysis Science and Technology</i> , 2020, 10, 5593-5601.   | 2.1 | 35        |
| 1314 | <i>In situ</i> growth of Fe and Nb co-doped $\hat{1}^2$ -Ni(OH) <sub>2</sub> nanosheet arrays on nickel foam for an efficient oxygen evolution reaction. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 3465-3474.  | 3.0 | 16        |
| 1315 | Lattice oxygen activation enabled by high-valence metal sites for enhanced water oxidation. <i>Nature Communications</i> , 2020, 11, 4066.   | 5.8 | 337       |
| 1316 | Development of Ni-Fe based ternary metal hydroxides as highly efficient oxygen evolution catalysts in AEM water electrolysis for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 24232-24247.   | 3.8 | 55        |
| 1317 | Using nature's blueprint to expand catalysis with Earth-abundant metals. <i>Science</i> , 2020, 369, .   | 6.0 | 306       |
| 1318 | Dual-modulation of phase and electronic structure in hierarchical Ni <sub>3</sub> Fe/Ni <sub>3</sub> FeN catalyst by Mo-doping to achieve efficient oxygen evolution reaction. <i>Applied Surface Science</i> , 2020, 529, 147172.   | 3.1 | 10        |
| 1319 | Crystal phase determined Fe active sites on Fe <sub>2</sub> O <sub>3</sub> ( $\hat{1}^3$ - and $\hat{1}^{\pm}$ -Fe <sub>2</sub> O <sub>3</sub> ) yolk-shell microspheres and their phase dependent electrocatalytic oxygen evolution reaction. <i>Applied Surface Science</i> , 2020, 533, 147368. | 3.1 | 26        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1320 | Discovering Competing Electrocatalytic Mechanisms and Their Overpotentials: Automated Enumeration of Oxygen Evolution Pathways. <i>Journal of Physical Chemistry C</i> , 2020, 124, 24883-24898.                          | 1.5  | 7         |
| 1321 | High-performance and stable photoelectrochemical water splitting cell with organic-photoactive-layer-based photoanode. <i>Nature Communications</i> , 2020, 11, 5509.   | 5.8  | 103       |
| 1322 | Non-precious-metal catalysts for alkaline water electrolysis: <i>operando</i> characterizations, theoretical calculations, and recent advances. <i>Chemical Society Reviews</i> , 2020, 49, 9154-9196.                    | 18.7 | 448       |
| 1323 | Cubic Nanostructures of Nickel–Cobalt Carbonate Hydroxide Hydrate as a High-Performance Oxygen Evolution Reaction Electrocatalyst in Alkaline and Near-Neutral Media. <i>Inorganic Chemistry</i> , 2020, 59, 16690-16702. | 1.9  | 24        |
| 1324 | Structural transformation of highly active metal–organic framework electrocatalysts during the oxygen evolution reaction. <i>Nature Energy</i> , 2020, 5, 881-890.  | 19.8 | 647       |
| 1325 | Boosting Hole Transfer in the Fluorine-Doped Hematite Photoanode by Depositing Ultrathin Amorphous FeOOH/CoOOH Cocatalysts. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 49705-49712.                        | 4.0  | 76        |
| 1326 | Molten-Salt-Protected Pyrolysis for Fabricating Perovskite Nanocrystals with Promoted Water Oxidation Behavior. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 16711-16719.                                  | 3.2  | 17        |
| 1327 | Retention of anions in cobalt hydroxide with Ni substitution to emphasize the role of anions and cations for high current density in oxygen evolution reactions. <i>Dalton Transactions</i> , 2020, 49, 16962-16969.      | 1.6  | 7         |
| 1328 | Charge-Carrier Dynamics at the CuWO <sub>4</sub> /Electrocatalyst Interface for Photoelectrochemical Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 50592-50599.                              | 4.0  | 10        |
| 1329 | Functionalized Co <sub>3</sub> O <sub>4</sub> graphitic nanoparticles: A high performance electrocatalyst for the oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 31380-31388.     | 3.8  | 21        |
| 1330 | Understanding and Optimizing Ultra-Thin Coordination Polymer Derivatives with High Oxygen Evolution Performance. <i>Advanced Energy Materials</i> , 2020, 10, 2002228.  | 10.2 | 28        |
| 1331 | Self-derivation-behaviour of substrates realizing enhanced oxygen evolution reaction. <i>Chemical Communications</i> , 2020, 56, 12399-12402.   | 2.2  | 12        |
| 1332 | Two-Dimensional Nanomesh Arrays as Bifunctional Catalysts for N <sub>2</sub> Electrolysis. <i>ACS Catalysis</i> , 2020, 10, 11371-11379.  | 5.5  | 55        |
| 1333 | Efficient electrocatalyst of $\text{Fe}_2\text{O}_3$ nanorings for oxygen evolution reaction in acidic conditions. <i>RSC Advances</i> , 2020, 10, 29077-29081.   | 1.7  | 6         |
| 1334 | Balancing the Activity and Selectivity of Propane Oxidative Dehydrogenation on NiOOH (001) and (010). <i>Transactions of Tianjin University</i> , 2020, 26, 341-351.  | 3.3  | 13        |
| 1335 | Phase segregation reversibility in mixed-metal hydroxide water oxidation catalysts. <i>Nature Catalysis</i> , 2020, 3, 743-753.   | 16.1 | 199       |
| 1336 | Strong Catalyst–Support Interactions in Electrochemical Oxygen Evolution on Ni–Fe Layered Double Hydroxide. <i>ACS Energy Letters</i> , 2020, 5, 3185-3194.   | 8.8  | 44        |
| 1337 | NaBH <sub>4</sub> induces a high ratio of Ni <sup>3+</sup> /Ni <sup>2+</sup> boosting OER activity of the NiFe LDH electrocatalyst. <i>RSC Advances</i> , 2020, 10, 33475-33482.  | 1.7  | 62        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1338 | Bulk vs Intrinsic Activity of NiFeO <sub>x</sub> Electro catalysts in the Oxygen Evolution Reaction: The Influence of Catalyst Loading, Morphology, and Support Material. ACS Catalysis, 2020, 10, 11768-11778.                        | 5.5  | 23        |
| 1339 | Hydroxylated high-entropy alloy as highly efficient catalyst for electrochemical oxygen evolution reaction. Science China Materials, 2020, 63, 2613-2619.  | 3.5  | 35        |
| 1340 | Regulation of Morphology and Electronic Structure of NiSe <sub>2</sub> by Fe for High Effective Oxygen Evolution Reaction. Chemistry - an Asian Journal, 2020, 15, 3845-3852.  | 1.7  | 17        |
| 1341 | Simultaneous Sulfite Electrolysis and Hydrogen Production Using Ni Foam-Based Three-Dimensional Electrodes. Environmental Science & Technology, 2020, 54, 12511-12520.   | 4.6  | 18        |
| 1342 | Capturing the active sites of multimetallic (oxy)hydroxides for the oxygen evolution reaction. Energy and Environmental Science, 2020, 13, 4225-4237.  | 15.6 | 186       |
| 1343 | Co-Induced Electronic Optimization of Hierarchical NiFe LDH for Oxygen Evolution. Small, 2020, 16, e2002426.   | 5.2  | 263       |
| 1344 | Boosted Oxygen Evolution Reactivity via Atomic Iron Doping in Cobalt Carbonate Hydroxide Hydrate. ACS Applied Materials & Interfaces, 2020, 12, 40220-40228.   | 4.0  | 42        |
| 1345 | Tuning Hole Accumulation of Metal Oxides Promotes the Oxygen Evolution Rate. ACS Catalysis, 2020, 10, 10427-10435.   | 5.5  | 10        |
| 1346 | Construction of a Pliable Electrode System for Effective Electrochemical Oxygen Evolution Reaction: Direct Growth of Nickel/Iron/Selenide Nanohybrids on Nickel Foil. ACS Sustainable Chemistry and Engineering, 2020, 8, 13859-13867. | 3.2  | 12        |
| 1347 | Genuine Active Species Generated from Fe <sub>3</sub> N Nanotube by Synergistic CoNi Doping for Boosted Oxygen Evolution Catalysis. Small, 2020, 16, e2003824.   | 5.2  | 31        |
| 1348 | Engineering NiFe layered double hydroxide by valence control and intermediate stabilization toward the oxygen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 26130-26138.  | 5.2  | 62        |
| 1349 | Stabilizing the OOH* intermediate via pre-adsorbed surface oxygen of a single Ru atom-bimetallic alloy for ultralow overpotential oxygen generation. Energy and Environmental Science, 2020, 13, 5152-5164.                            | 15.6 | 94        |
| 1350 | Atomic-Level Manipulations in Oxides and Alloys for Electrocatalysis of Oxygen Evolution and Reduction. ACS Nano, 2020, 14, 14323-14354.   | 7.3  | 37        |
| 1351 | Activating Iron Based Materials for Overall Electrochemical Water Splitting via the Incorporation of Noble Metals. Chemistry - an Asian Journal, 2020, 15, 4339-4346.  | 1.7  | 8         |
| 1352 | Complete Reconstruction of Hydrate Pre-Catalysts for Ultrastable Water Electrolysis in Industrial-Concentration Alkali Media. Cell Reports Physical Science, 2020, 1, 100241.  | 2.8  | 117       |
| 1353 | A soft molecular 2Fe-2As precursor approach to the synthesis of nanostructured FeAs for efficient electrocatalytic water oxidation. Chemical Science, 2020, 11, 11834-11842.   | 3.7  | 30        |
| 1354 | Amorphous Multimetal Alloy Oxygen Evolving Catalysts. , 2020, 2, 624-632.  |      | 45        |
| 1355 | Ultrathin sulfate-intercalated NiFe-layered double hydroxide nanosheets for efficient electrocatalytic oxygen evolution. RSC Advances, 2020, 10, 12145-12150.  | 1.7  | 23        |

| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 1356 | The Role of Fe Species on NiOOH in Oxygen Evolution Reactions. ACS Catalysis, 2020, 10, 6254-6261.  | 5.5 | 93        |
| 1357 | Iron-doped NiSe <sub>2</sub> in-situ grown on graphene as an efficient electrocatalyst for oxygen evolution reaction. Journal of Electroanalytical Chemistry, 2020, 866, 114134.  | 1.9 | 19        |
| 1358 | Advancement of Platinum (Pt)-Free (Non-Pt Precious Metals) and/or Metal-Free (Non-Precious-Metals) Electrocatalysts in Energy Applications: A Review and Perspectives. Energy & Fuels, 2020, 34, 6634-6695.   | 2.5 | 100       |
| 1359 | In-situ structure and catalytic mechanism of NiFe and CoFe layered double hydroxides during oxygen evolution. Nature Communications, 2020, 11, 2522.  | 5.8 | 594       |
| 1360 | Modern Chemical Routes for the Controlled Synthesis of Anisotropic Bimetallic Nanostructures and Their Application in Catalysis. Frontiers in Chemistry, 2020, 8, 357.  | 1.8 | 34        |
| 1361 | Optimizing Platinum Location on Nickel Hydroxide Nanosheets to Accelerate the Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2020, 12, 24683-24692.   | 4.0 | 21        |
| 1362 | Photoelectrochemical water splitting: a road from stable metal oxides to protected thin film solar cells. Journal of Materials Chemistry A, 2020, 8, 10625-10669.   | 5.2 | 162       |
| 1363 | Na <sub>4</sub> Ni <sub>3</sub> P <sub>4</sub> O <sub>15</sub> "Ni(OH) <sub>2</sub> core" shell nanoparticles as hybrid electrocatalysts for the oxygen evolution reaction in alkaline electrolytes. Dalton Transactions, 2020, 49, 8226-8237.        | 1.6 | 12        |
| 1364 | Selective structure transformation for NiFe/NiFe <sub>2</sub> O <sub>4</sub> embedded porous nitrogen-doped carbon nanosphere with improved oxygen evolution reaction activity. Chemical Engineering Journal, 2020, 395, 125170.                      | 6.6 | 127       |
| 1365 | Oxygen-evolution reaction by nickel/nickel oxide interface in the presence of ferrate(VI). Scientific Reports, 2020, 10, 8757.  | 1.6 | 59        |
| 1366 | Tuning the oxygen evolution reaction activity of Ni- and Co-modified Fe(OH) <sub>2</sub> electrodes through structure and composition control. International Journal of Hydrogen Energy, 2020, 45, 17076-17087.                                       | 3.8 | 11        |
| 1367 | 3D freestanding flower-like nickel-cobalt layered double hydroxides enriched with oxygen vacancies as efficient electrocatalysts for water oxidation. Sustainable Materials and Technologies, 2020, 25, e00170.                                       | 1.7 | 8         |
| 1368 | Fe <sub>3</sub> O <sub>4</sub> /FeS <sub>2</sub> heterostructures enable efficient oxygen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 14145-14151.   | 5.2 | 36        |
| 1369 | Dual Role of Silver Moieties Coupled with Ordered Mesoporous Cobalt Oxide towards Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2020, 59, 16544-16552.   | 7.2 | 64        |
| 1370 | Mechanism of Oxygen Evolution Catalyzed by Cobalt Oxyhydroxide: Cobalt Superoxide Species as a Key Intermediate and Dioxygen Release as a Rate-Determining Step. Journal of the American Chemical Society, 2020, 142, 11901-11914.                    | 6.6 | 452       |
| 1371 | Tuning CoFe and NiFe spinel oxide compositions by a fast glycine-nitrate autocombustion for oxygen evolution electrocatalysts and implications from their cyclic voltammograms on the role of Fe. Materials Chemistry and Physics, 2020, 253, 123339. | 2.0 | 12        |
| 1372 | Iron oxide promoted nickel/nickel oxide rough nanorods for efficient urea assisted water splitting. Electrochimica Acta, 2020, 353, 136516.   | 2.6 | 39        |
| 1373 | Dual Role of Silver Moieties Coupled with Ordered Mesoporous Cobalt Oxide towards Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie, 2020, 132, 16687.  | 1.6 | 23        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1374 | Trimetallic conductive metal-organic frameworks as precatalysts for the oxygen evolution reaction with enhanced activity. <i>Sustainable Energy and Fuels</i> , 2020, 4, 4589-4597.   | 2.5  | 20        |
| 1375 | Enabling Iron-Based Highly Effective Electrochemical Water-Splitting and Selective Oxygenation of Organic Substrates through In Situ Surface Modification of Intermetallic Iron Stannide Precatalyst. <i>Advanced Energy Materials</i> , 2020, 10, 2001377. | 10.2 | 96        |
| 1376 | First-Principles Study on Chromium-Substituted $\gamma$ -Cobalt Oxyhydroxides for Efficient Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2020, 3, 6486-6491.  | 2.5  | 9         |
| 1377 | Surface-Guided Formation of Amorphous Mixed-Metal Oxyhydroxides on Ultrathin $\text{MnO}_2$ Nanosheet Arrays for Efficient Electrocatalytic Oxygen Evolution. <i>Advanced Energy Materials</i> , 2020, 10, 2001059.   | 10.2 | 87        |
| 1378 | Quo vadis water oxidation?. <i>Catalysis Today</i> , 2020, , .  | 2.2  | 10        |
| 1379 | Novel (Ni, Fe) $\text{S}_2$ /(Ni, Fe) $\text{S}_4$ solid solution hybrid: an efficient electrocatalyst with robust oxygen-evolving performance. <i>Science China Chemistry</i> , 2020, 63, 1030-1039.   | 4.2  | 22        |
| 1380 | Doping of Fe on room-temperature-synthesized CoNi layered double hydroxide as an excellent bifunctional catalyst in alkaline media. <i>Journal of the Iranian Chemical Society</i> , 2020, 17, 2943-2956.   | 1.2  | 14        |
| 1381 | Solid-acid-mediated electronic structure regulation of electrocatalysts and scaling relation breaking of oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2020, 277, 119237.  | 10.8 | 42        |
| 1382 | Core-Shell Dendritic Superstructural Catalysts by Design for Highly Efficient and Stable Electrochemical Oxygen Evolution Reaction. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000777.  | 1.9  | 8         |
| 1383 | Preparation of $\text{Sb}_2\text{O}_3/\text{Sb}_2\text{S}_3/\text{FeOOH}$ composite photoanodes for enhanced photoelectrochemical water oxidation. <i>Transactions of Nonferrous Metals Society of China</i> , 2020, 30, 1625-1634.                         | 1.7  | 14        |
| 1384 | Compositional engineering of sulfides, phosphides, carbides, nitrides, oxides, and hydroxides for water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13415-13436.  | 5.2  | 124       |
| 1385 | Functional Role of Fe, Cu-Doping in Ni-Based Perovskite Electrocatalysts for Oxygen Evolution Reaction. <i>Nano</i> , 2020, 15, 2050077.  | 0.5  | 5         |
| 1386 | FeNi alloy nanoparticles embedded in electrospun nitrogen-doped carbon fibers for efficient oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2020, 578, 805-813.  | 5.0  | 33        |
| 1387 | Impact of Alkali Metal Cations and Iron Impurities on the Evolution of Hydrogen on Cu Electrodes in Alkaline Electrolytes. <i>Journal of the Electrochemical Society</i> , 2020, 167, 106505.   | 1.3  | 16        |
| 1388 | Recent Studies on Multifunctional Electrocatalysts for Fuel Cell by Various Nanomaterials. <i>Catalysts</i> , 2020, 10, 621.  | 1.6  | 4         |
| 1389 | Constructing an Adaptive Heterojunction as a Highly Active Catalyst for the Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2020, 32, e2001292.  | 11.1 | 122       |
| 1390 | Cation insertion to break the activity/stability relationship for highly active oxygen evolution reaction catalyst. <i>Nature Communications</i> , 2020, 11, 1378.  | 5.8  | 79        |
| 1391 | Dynamic stability of active sites in hydr(oxy)oxides for the oxygen evolution reaction. <i>Nature Energy</i> , 2020, 5, 222-230.  | 19.8 | 540       |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1392 | Aqueous electrocatalytic CO <sub>2</sub> reduction using metal complexes dispersed in polymer ion gels. <i>Chemical Communications</i> , 2020, 56, 4440-4443.   | 2.2  | 21        |
| 1393 | Green hydrogen from anion exchange membrane water electrolysis: a review of recent developments in critical materials and operating conditions. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2114-2133.                             | 2.5  | 367       |
| 1394 | Organic template-based ZnO embedded Mn <sub>3</sub> O <sub>4</sub> nanoparticles: synthesis and evaluation of their electrochemical properties towards clean energy generation. <i>RSC Advances</i> , 2020, 10, 9854-9867.            | 1.7  | 21        |
| 1395 | Aktivitätssteigerung der Wasserstoffentwicklung von Platinelektroden in alkalischen Medien unter Verwendung von Ni-Fe-Clustern. <i>Angewandte Chemie</i> , 2020, 132, 11026-11031.  | 1.6  | 8         |
| 1396 | Revealing the Impact of Electrolyte Composition for Co-Based Water Oxidation Catalysts by the Study of Reaction Kinetics Parameters. <i>ACS Catalysis</i> , 2020, 10, 4160-4170.  | 5.5  | 43        |
| 1397 | Facile Synthesis of an Efficient Ni-Fe-Co Based Oxygen Evolution Reaction Electrocatalyst. <i>Journal of the Electrochemical Society</i> , 2020, 167, 046507.   | 1.3  | 26        |
| 1398 | Mesoporous Iron-doped MoS <sub>2</sub> /CoMoS <sub>4</sub> Heterostructures through Organic-Metal Cooperative Interactions on Spherical Micelles for Electrochemical Water Splitting. <i>ACS Nano</i> , 2020, 14, 4141-4152.          | 7.3  | 156       |
| 1399 | Mesoporous Ternary Nitrides of Earth-Abundant Metals as Oxygen Evolution Electrocatalyst. <i>Nano-Micro Letters</i> , 2020, 12, 79.   | 14.4 | 63        |
| 1400 | Ultrathin FeP Nanosheets as an Efficient Catalyst for Electrocatalytic Water Oxidation: Promoted Intermediates Adsorption by Surface Defects. <i>ACS Applied Energy Materials</i> , 2020, 3, 3577-3585.                               | 2.5  | 42        |
| 1401 | Undoped SnO <sub>2</sub> as a Support for Ni Species to Boost Oxygen Generation through Alkaline Water Electrolysis. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 18407-18420.   | 4.0  | 17        |
| 1402 | Copper facilitated nickel oxy-hydroxide films as efficient synergistic oxygen evolution electrocatalyst. <i>Journal of Catalysis</i> , 2020, 384, 189-198.  | 3.1  | 5         |
| 1403 | Controlled Assembly of Cu/Co-Oxide Beaded Nanoclusters on Thiolated Graphene Oxide Nanosheets for High-Performance Oxygen Evolution Catalysts. <i>Chemistry - A European Journal</i> , 2020, 26, 11209-11219.                         | 1.7  | 15        |
| 1404 | Ternary NiFeTiOOH Catalyst for the Oxygen Evolution Reaction: Study of the Effect of the Addition of Ti at Different Loadings. <i>ACS Catalysis</i> , 2020, 10, 4879-4887.  | 5.5  | 21        |
| 1405 | Trifunctional catalytic activities of trimetallic FeCoNi alloy nanoparticles embedded in a carbon shell for efficient overall water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9021-9031.                          | 5.2  | 72        |
| 1406 | Establishing Performance Baselines for the Oxygen Evolution Reaction in Alkaline Electrolytes. <i>Journal of the Electrochemical Society</i> , 2020, 167, 044503.   | 1.3  | 28        |
| 1407 | Self-supported Reevesite Ni-Fe Layered Double Hydroxide Nanosheet Arrays for Efficient Water Oxidation. <i>ChemistrySelect</i> , 2020, 5, 3062-3068.  | 0.7  | 10        |
| 1408 | Controlled engineering of nickel carbide induced N-enriched carbon nanotubes for hydrogen and oxygen evolution reactions in wide pH range. <i>Electrochimica Acta</i> , 2020, 341, 136032.  | 2.6  | 45        |
| 1409 | Quantitative Resolution of Complex Stoichiometric Changes during Electrochemical Cycling by Density Functional Theory-Assisted Electrochemical Quartz Crystal Microbalance. <i>ACS Applied Energy Materials</i> , 2020, 3, 3347-3357. | 2.5  | 14        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1410 | A review on fundamentals for designing oxygen evolution electrocatalysts. <i>Chemical Society Reviews</i> , 2020, 49, 2196-2214.  | 18.7 | 1,466     |
| 1411 | Designed Formation of Double-Shelled Ni-Fe Layered-Hydroxide Nanocages for Efficient Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2020, 32, e1906432.   | 11.1 | 305       |
| 1412 | Enhancing the Hydrogen Evolution Reaction Activity of Platinum Electrodes in Alkaline Media Using Nickel-Iron Clusters. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10934-10938.   | 7.2  | 70        |
| 1413 | Tuning Surface Electronic Structure of Two-Dimensional Cobalt-Based Hydroxide Nanosheets for Highly Efficient Water Oxidation. <i>ChemCatChem</i> , 2020, 12, 2823-2832.  | 1.8  | 24        |
| 1414 | Prussian blue analogue-derived porous bimetallic oxides Fe <sub>3</sub> O <sub>4</sub> -NiO/NF as urea oxidation electrocatalysis. <i>Chemical Papers</i> , 2020, 74, 4473-4480.  | 1.0  | 12        |
| 1415 | Hydrogen Production from Urea Sewage on NiFe-Based Porous Electrocatalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 0, , .   | 3.2  | 15        |
| 1416 | Bifunctional Heterostructured Transition Metal Phosphides for Efficient Electrochemical Water Splitting. <i>Advanced Functional Materials</i> , 2020, 30, 2003261.  | 7.8  | 352       |
| 1417 | Iron-doped cobalt phosphate 1D amorphous ultrathin nanowires as a highly efficient electrocatalyst for water oxidation. <i>Sustainable Energy and Fuels</i> , 2020, 4, 4704-4712.   | 2.5  | 16        |
| 1418 | A new concept analogous to homogeneous catalysis to construct in-situ regenerative electrodes for long-term oxygen evolution reaction. <i>Nano Energy</i> , 2020, 76, 105115.   | 8.2  | 14        |
| 1419 | Template-stabilized oxidic nickel oxygen evolution catalysts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 16187-16192.  | 3.3  | 41        |
| 1420 | An integrated photoanode based on non-critical raw materials for robust solar water splitting. <i>Materials Advances</i> , 2020, 1, 1202-1211.  | 2.6  | 4         |
| 1421 | Characterizing electronic and atomic structures for amorphous and molecular metal oxide catalysts at functional interfaces by combining soft X-ray spectroscopy and high-energy X-ray scattering. <i>Nanoscale</i> , 2020, 12, 13276-13296. | 2.8  | 14        |
| 1422 | Synergetic modulation of the electronic structure and hydrophilicity of nickel-iron hydroxide for efficient oxygen evolution by UV/ozone treatment. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13437-13442.                         | 5.2  | 15        |
| 1423 | A hybrid of MIL-53(Fe) and conductive sulfide as a synergistic electrocatalyst for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14574-14582.   | 5.2  | 41        |
| 1424 | Efficient Oxygen Evolution and Gas Bubble Release Achieved by a Low Gas Bubble Adhesive Iron-Nickel Vanadate Electrocatalyst. <i>Small</i> , 2020, 16, e2002412.  | 5.2  | 77        |
| 1425 | Fe doped metal organic framework (Ni)/carbon black nanosheet as highly active electrocatalyst for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 21431-21441.                                       | 3.8  | 23        |
| 1426 | Fe-Based Electrocatalysts for Oxygen Evolution Reaction: Progress and Perspectives. <i>ACS Catalysis</i> , 2020, 10, 4019-4047.   | 5.5  | 379       |
| 1427 | The role of ultra-thin MnO <sub>x</sub> co-catalysts on the photoelectrochemical properties of BiVO <sub>4</sub> photoanodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 5508-5516.   | 5.2  | 23        |

| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 1428 | Single-Step Electrochemical Synthesis of Cobalt Nanoclusters Embedded on Dense Graphite Sheets for Electrocatalysis of the Oxygen Evolution Reaction. <i>ACS Applied Nano Materials</i> , 2020, 3, 2705-2712.                             | 2.4 | 9         |
| 1429 | Two-sites are better than one: revisiting the OER mechanism on CoOOH by DFT with electrode polarization. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 7031-7038.  | 1.3 | 45        |
| 1430 | An amorphous trimetallic (Ni-Co-Fe) hydroxide-sheathed 3D bifunctional electrode for superior oxygen evolution and high-performance cable-type flexible zinc-air batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 5601-5611. | 5.2 | 57        |
| 1431 | Higher-Valent Nickel Oxides with Improved Oxygen Evolution Activity and Stability in Alkaline Media Prepared by High-Temperature Treatment of Ni(OH) <sub>2</sub> . <i>ACS Catalysis</i> , 2020, 10, 3595-3603.                           | 5.5 | 70        |
| 1432 | Deciphering Iron-Dependent Activity in Oxygen Evolution Catalyzed by Nickel-Iron Layered Double Hydroxide. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8072-8077.  | 7.2 | 274       |
| 1433 | Hybridizing amorphous nickel cobalt phosphate and nickel phosphide as an efficient bifunctional nanocatalyst towards overall water splitting. <i>Catalysis Today</i> , 2020, 358, 215-220.  | 2.2 | 16        |
| 1434 | The effect of Fe(III) cations in electrolyte on oxygen evolution catalytic activity of Ni(OH) <sub>2</sub> electrode. <i>Journal of Colloid and Interface Science</i> , 2020, 569, 50-56.   | 5.0 | 21        |
| 1435 | Deciphering Iron-Dependent Activity in Oxygen Evolution Catalyzed by Nickel-Iron Layered Double Hydroxide. <i>Angewandte Chemie</i> , 2020, 132, 8149-8154.   | 1.6 | 56        |
| 1436 | Secondary Transition-Metal Dopants for Enhanced Electrochemical O <sub>2</sub> Formation and Desorption on Fe-Doped $\gamma$ -NiOOH. <i>ACS Energy Letters</i> , 2020, 5, 962-967.  | 8.8 | 14        |
| 1437 | Strongly Coupled Ni/Ni(OH) <sub>2</sub> Hybrid Nanocomposites as Highly Active Bifunctional Electrocatalysts for Overall Water Splitting. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4431-4439.                          | 3.2 | 54        |
| 1438 | Ultrafine $\gamma$ -CoOOH Nanorods Activated with Iron for Exceptional Oxygen Evolution Reaction. <i>Langmuir</i> , 2020, 36, 2223-2230.  | 1.6 | 21        |
| 1439 | Review—Electronic Circuit Systems for Piezoelectric Resonance Sensors. <i>Journal of the Electrochemical Society</i> , 2020, 167, 037560.   | 1.3 | 16        |
| 1440 | Electroless Plating of NiFeP Alloy on the Surface of Silicon Photoanode for Efficient Photoelectrochemical Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 11479-11488.  | 4.0 | 28        |
| 1441 | NiFe Layered Double Hydroxide (LDH) Nanosheet Catalysts with Fe as Electron Transfer Mediator for Enhanced Persulfate Activation. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 968-973.                                       | 2.1 | 59        |
| 1442 | Facet-Independent Oxygen Evolution Activity of Pure $\gamma$ -NiOOH: Different Chemistries Leading to Similar Overpotentials. <i>Journal of the American Chemical Society</i> , 2020, 142, 3600-3612.                                     | 6.6 | 114       |
| 1443 | Noninnocent Influence of Host $\gamma$ -NiOOH Redox Activity on Transition-Metal Dopants' Efficacy as Active Sites in Electrocatalytic Water Oxidation. <i>ACS Catalysis</i> , 2020, 10, 2720-2734.                                       | 5.5 | 32        |
| 1444 | Oxygen Evolution Activity on NiOOH Catalysts: Four-Coordinated Ni Cation as the Active Site and the Hydroperoxide Mechanism. <i>ACS Catalysis</i> , 2020, 10, 2581-2590.  | 5.5 | 71        |
| 1445 | A bifunctional nanoporous Ni-Co-Se electrocatalyst with a superaerophobic surface for water and hydrazine oxidation. <i>Nanoscale</i> , 2020, 12, 4426-4434.  | 2.8 | 101       |



| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 1446 | Boosting electrocatalytic water splitting via metal-metalloid combined modulation in quaternary Ni-Fe-P-B amorphous compound. <i>Nano Research</i> , 2020, 13, 447-454.   | 5.8 | 77        |
| 1447 | Tailored NiFe Catalyst on Silicon Photoanode for Efficient Photoelectrochemical Water Oxidation. <i>Journal of Physical Chemistry C</i> , 2020, 124, 2844-2850.   | 1.5 | 19        |
| 1448 | Tuning the oxygen evolution electrocatalysis on NiFe-layered double hydroxides via sulfur doping. <i>Chinese Journal of Catalysis</i> , 2020, 41, 847-852.  | 6.9 | 53        |
| 1449 | Single Step Grown NiFe Sponges as Efficient Water Splitting Electrocatalysts in Alkaline Medium. <i>ChemistrySelect</i> , 2020, 5, 1385-1395.   | 0.7 | 3         |
| 1450 | Emerging covalent organic frameworks tailored materials for electrocatalysis. <i>Nano Energy</i> , 2020, 70, 104525.  | 8.2 | 143       |
| 1451 | Non-redox doping boosts oxygen evolution electrocatalysis on hematite. <i>Chemical Science</i> , 2020, 11, 2464-2471.   | 3.7 | 26        |
| 1452 | Interface passivation to overcome shunting in semiconductor-catalyst junctions. <i>Chemical Communications</i> , 2020, 56, 2570-2573.   | 2.2 | 10        |
| 1453 | Optimizing the surface state of cobalt-iron bimetallic phosphide via regulating phosphorus vacancies. <i>Chemical Communications</i> , 2020, 56, 2602-2605.   | 2.2 | 29        |
| 1454 | Solution-Phase Activation and Functionalization of Colloidal WS <sub>2</sub> Nanosheets with Ni Single Atoms. <i>ACS Nano</i> , 2020, 14, 2238-2247.  | 7.3 | 46        |
| 1455 | Layered transition-metal hydroxides for alkaline hydrogen evolution reaction. <i>Chinese Journal of Catalysis</i> , 2020, 41, 574-591.  | 6.9 | 72        |
| 1456 | Recent Advances on the Use of Nickel Nano Layered Double Hydroxides as Green, and Efficient, Catalysts for Water Splitting. <i>Catalysis Letters</i> , 2020, 150, 1942-1956.                                      | 1.4 | 22        |
| 1457 | Insights into Redox Reactions and Ionic Transfers in Nickel/Iron Layered Double Hydroxide in Potassium Hydroxide. <i>Journal of Physical Chemistry C</i> , 2020, 124, 3037-3049.                                  | 1.5 | 9         |
| 1458 | Demystifying the active roles of NiFe-based oxides/(oxy)hydroxides for electrochemical water splitting under alkaline conditions. <i>Coordination Chemistry Reviews</i> , 2020, 408, 213177.                      | 9.5 | 104       |
| 1459 | Electronic modulation of nickel phosphide by iron doping and its assembly on a graphene framework for efficient electrocatalytic water oxidation. <i>Journal of Alloys and Compounds</i> , 2020, 824, 153913.     | 2.8 | 15        |
| 1460 | Reversible ternary nickel-cobalt-iron catalysts for intermittent water electrolysis. <i>EcoMat</i> , 2020, 2, e12012.   | 6.8 | 14        |
| 1461 | Alloy Foam-Derived Ni <sub>0.86</sub> Fe <sub>2.14</sub> O <sub>4</sub> Hexagonal Plates as an Efficient Electrochemical Catalyst for the Oxygen Evolution Reaction. <i>ChemistrySelect</i> , 2020, 5, 1578-1585. | 0.7 | 2         |
| 1462 | Trace Fe Incorporation into Ni-(oxy)hydroxide Stabilizes Ni <sup>3+</sup> Sites for Anodic Oxygen Evolution: A Double Thin-Layer Study. <i>Langmuir</i> , 2020, 36, 5126-5133.                                    | 1.6 | 18        |
| 1463 | Conformal SnO <sub>x</sub> heterojunction coatings for stabilized photoelectrochemical water oxidation using arrays of silicon microcones. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9292-9301.          | 5.2 | 12        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1464 | Few-atom cluster model systems for a hydrogen economy. <i>Advances in Physics: X</i> , 2020, 5, 1754132.  | 1.5  | 8         |
| 1465 | Electroless Plating of Transition Metal Boride with High Boron Content as Superior HER Electrocatalyst. <i>ChemCatChem</i> , 2020, 12, 3068-3075.   | 1.8  | 23        |
| 1466 | Unique advantages of 2D inorganic nanosheets in exploring high-performance electrocatalysts: Synthesis, application, and perspective. <i>Coordination Chemistry Reviews</i> , 2020, 415, 213280.  | 9.5  | 70        |
| 1467 | A Universal Strategy for Carbon-Supported Transition Metal Phosphides as High-Performance Bifunctional Electrocatalysts towards Efficient Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 19447-19456. | 4.0  | 103       |
| 1468 | Role of Sulfur Incorporation in p-Type Nickel Oxide (p-NiO) on n-Type Silicon (n-Si) Photoelectrodes for Water Oxidation Reactions. <i>ACS Applied Energy Materials</i> , 2020, 3, 4255-4264.   | 2.5  | 9         |
| 1469 | Interfacial coordination assembly of tannic acid with metal ions on three-dimensional nickel hydroxide nanowalls for efficient water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 15845-15852.                           | 5.2  | 95        |
| 1470 | Synthesis of an amorphous <i>Geobacter</i> -manganese oxide biohybrid as an efficient water oxidation catalyst. <i>Green Chemistry</i> , 2020, 22, 5610-5618.   | 4.6  | 11        |
| 1471 | Recent Advances in Non-Noble Bifunctional Oxygen Electrocatalysts toward Large-Scale Production. <i>Advanced Functional Materials</i> , 2020, 30, 2000503.  | 7.8  | 226       |
| 1472 | Ni <sub>3</sub> Fe nanoparticles enclosed by B-doped carbon for efficient bifunctional performances of oxygen and hydrogen evolution reactions. <i>Journal of Alloys and Compounds</i> , 2020, 835, 155267.                               | 2.8  | 46        |
| 1473 | Recent Progress in Electrocatalysts for Acidic Water Oxidation. <i>Advanced Energy Materials</i> , 2020, 10, 2000478.   | 10.2 | 162       |
| 1474 | In-situ synthesis of free-standing FeNi-oxyhydroxide nanosheets as a highly efficient electrocatalyst for water oxidation. <i>Chemical Engineering Journal</i> , 2020, 395, 125180.   | 6.6  | 100       |
| 1475 | Effect of microstructure and internal stress on hydrogen absorption into Ni thin film electrodes during alkaline water electrolysis. <i>Electrochimica Acta</i> , 2020, 340, 135970.  | 2.6  | 11        |
| 1476 | Three-Dimensional Amorphous NiCoFe Nanowire@Nanosheets Catalysts for Enhanced Oxygen Evolution Reaction. <i>Journal of the Electrochemical Society</i> , 2020, 167, 064514.   | 1.3  | 7         |
| 1477 | Rapid microwave-assisted preparation of high-performance bifunctional Ni <sub>3</sub> Fe/Co-N-C for rechargeable Zn-air battery. <i>Chemical Engineering Journal</i> , 2020, 395, 125151.   | 6.6  | 52        |
| 1478 | Recent progress in self-supported two-dimensional transition metal oxides and (oxy)hydroxides as oxygen evolution reaction catalysts. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2625-2637.   | 2.5  | 28        |
| 1479 | In situ synthesis of Fe-doped NiC <sub>2</sub> O <sub>4</sub> nanorods for efficient oxygen evolution activity and overall water splitting. <i>Electrochimica Acta</i> , 2020, 345, 136228.   | 2.6  | 8         |
| 1480 | Recent progress of precious-metal-free electrocatalysts for efficient water oxidation in acidic media. <i>Journal of Energy Chemistry</i> , 2020, 51, 113-133.  | 7.1  | 66        |
| 1481 | Updates on the Roadmap for Photocatalysis. <i>ACS Catalysis</i> , 2020, 10, 5493-5501.  | 5.5  | 293       |

| #    | ARTICLE  | IF  | CITATIONS |
|------|--|-----|-----------|
| 1482 | Enhancement of HER kinetics with RhNiFe for high-rate water electrolysis. <i>Catalysis Science and Technology</i> , 2020, 10, 3681-3693.   | 2.1 | 20        |
| 1483 | Fe-leaching induced surface reconstruction of Ni-Fe alloy on N-doped carbon to boost oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2020, 394, 124977.   | 6.6 | 61        |
| 1484 | Controllable structure reconstruction of nickel-iron compounds toward highly efficient oxygen evolution. <i>Nanoscale</i> , 2020, 12, 10751-10759.   | 2.8 | 19        |
| 1485 | Hierarchically devising NiFeO <sub>H</sub> catalyst with surface Fe active sites for efficient oxygen evolution reaction. <i>Catalysis Today</i> , 2021, 364, 140-147.   | 2.2 | 14        |
| 1486 | Binder-free quaternary Ni-Fe-W-Mo alloy as a highly efficient electrocatalyst for oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2021, 853, 157265.   | 2.8 | 15        |
| 1487 | Spectroscopic and Electrokinetic Evidence for a Bifunctional Mechanism of the Oxygen Evolution Reaction**. <i>Angewandte Chemie</i> , 2021, 133, 3132-3140.  | 1.6 | 34        |
| 1488 | Oxygen-evolution reaction by gold and cobalt in iron and nickel free electrolyte. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 1509-1516.   | 3.8 | 18        |
| 1489 | Enhanced oxygen evolution reaction activity of flower-like FeOOH via the synergistic effect of sulfur. <i>Chemical Engineering Journal</i> , 2021, 420, 127587.  | 6.6 | 38        |
| 1490 | NiFe hydroxide pillared by metaborate for efficient oxygen evolution reaction. <i>Electrochimica Acta</i> , 2021, 366, 137427.   | 2.6 | 7         |
| 1491 | Carbon hybrid with 3D nano-forest architecture in-situ catalytically constructed by CoFe alloy as advanced multifunctional electrocatalysts for Zn-air batteries-driven water splitting. <i>Journal of Energy Chemistry</i> , 2021, 53, 422-432. | 7.1 | 42        |
| 1492 | Oxygen Vacancy-Induced Electron Density Tuning of Fe <sub>3</sub> O <sub>4</sub> for Enhanced Oxygen Evolution Catalysis. <i>Energy and Environmental Materials</i> , 2021, 4, 392-398.  | 7.3 | 45        |
| 1493 | Fe induced nanostructure reorganization and electronic structure modulation over CoNi (oxy)hydroxide nanorod arrays for boosting oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 403, 126304.                             | 6.6 | 75        |
| 1494 | Fast cathodic reduction electrodeposition of a binder-free cobalt-doped Ni-MOF film for directly sensing of levofloxacin. <i>Journal of Alloys and Compounds</i> , 2021, 851, 156823.  | 2.8 | 33        |
| 1495 | Boosting the electrocatalytic performance of NiFe layered double hydroxides for the oxygen evolution reaction by exposing the highly active edge plane (012). <i>Chemical Science</i> , 2021, 12, 650-659.                                       | 3.7 | 68        |
| 1496 | Cost-effective and efficient water and urea oxidation catalysis using nickel-iron oxyhydroxide nanosheets synthesized by an ultrafast method. <i>Journal of Colloid and Interface Science</i> , 2021, 584, 760-769.                              | 5.0 | 51        |
| 1497 | Development Trends on Nickel-Based Electrocatalysts for Direct Hydrazine Fuel Cells. <i>ChemCatChem</i> , 2021, 13, 81-110.  | 1.8 | 38        |
| 1498 | Anion-mediated transition metal electrocatalysts for efficient water electrolysis: Recent advances and future perspectives. <i>Coordination Chemistry Reviews</i> , 2021, 427, 213552.   | 9.5 | 66        |
| 1499 | Ni-based layered double hydroxide catalysts for oxygen evolution reaction. <i>Materials Today Physics</i> , 2021, 16, 100292.  | 2.9 | 108       |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1500 | Spectroscopic and Electrokinetic Evidence for a Bifunctional Mechanism of the Oxygen Evolution Reaction**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 3095-3103.                           | 7.2  | 176       |
| 1501 | Prospect of Ni-related metal oxides for high-performance supercapacitor electrodes. <i>Journal of Materials Science</i> , 2021, 56, 1897-1918.   | 1.7  | 11        |
| 1502 | Ni(II)/Ni(III) redox couple endows Ni foam-supported Ni <sub>2</sub> P with excellent capability for direct ammonia oxidation. <i>Chemical Engineering Journal</i> , 2021, 404, 126795.                      | 6.6  | 72        |
| 1503 | Identification of highly active surface iron sites on Ni(OOH) for the oxygen evolution reaction by atomic layer deposition. <i>Journal of Catalysis</i> , 2021, 394, 476-485.                                | 3.1  | 8         |
| 1504 | NiFe hydroxide nanosheet synthesized by in-situ chelation for highly efficient oxygen evolution reaction. <i>Materials Chemistry and Physics</i> , 2021, 258, 123918.  | 2.0  | 10        |
| 1505 | “The Fe Effect”: A review unveiling the critical roles of Fe in enhancing OER activity of Ni and Co based catalysts. <i>Nano Energy</i> , 2021, 80, 105514.  | 8.2  | 437       |
| 1506 | In-situ constructed Ru-rich porous framework on NiFe-based ribbon for enhanced oxygen evolution reaction in alkaline solution. <i>Journal of Materials Science and Technology</i> , 2021, 70, 197-204.       | 5.6  | 23        |
| 1507 | Optical and electrochemical effects of H <sub>2</sub> and O <sub>2</sub> bubbles at upward-facing Si photoelectrodes. <i>Energy and Environmental Science</i> , 2021, 14, 414-423.                           | 15.6 | 26        |
| 1508 | Electrocatalytic Water Oxidation by a Phosphorus-Nitrogen O <sub>3</sub> -Pincer Cobalt Complex. <i>Inorganic Chemistry</i> , 2021, 60, 614-622.   | 1.9  | 14        |
| 1509 | Surface reconstruction of Ni doped Co-Fe Prussian blue analogues for enhanced oxygen evolution. <i>Catalysis Science and Technology</i> , 2021, 11, 1110-1115.   | 2.1  | 22        |
| 1510 | Local probe investigation of electrocatalytic activity. <i>Chemical Science</i> , 2021, 12, 71-98.   | 3.7  | 13        |
| 1511 | A robust bifunctional catalyst for rechargeable Zn-air batteries: Ultrathin NiFe-LDH nanowalls vertically anchored on soybean-derived Fe-N-C matrix. <i>Nano Research</i> , 2021, 14, 1175-1186.             | 5.8  | 43        |
| 1512 | 2D MOF-derived porous NiCoSe nanosheet arrays on Ni foam for overall water splitting. <i>CrystEngComm</i> , 2021, 23, 69-81.   | 1.3  | 37        |
| 1513 | Carbon nanotube boosting electrocatalytic oxygen evolution of NiFe-polyphenol coordination catalyst through donor-acceptor modulation. <i>Journal of Colloid and Interface Science</i> , 2021, 582, 396-404. | 5.0  | 13        |
| 1514 | Fluorination-enabled Reconstruction of NiFe Electrocatalysts for Efficient Water Oxidation. <i>Nano Letters</i> , 2021, 21, 492-499.   | 4.5  | 190       |
| 1515 | Recent Advances in Electrocatalysis of Oxygen Evolution Reaction using Noble-Metal, Transition-Metal, and Carbon-Based Materials. <i>ChemElectroChem</i> , 2021, 8, 447-483.                                 | 1.7  | 68        |
| 1516 | Regulated coordination environment of Ni single atom catalyst toward high-efficiency oxygen electrocatalysis for rechargeable Zinc-air batteries. <i>Energy Storage Materials</i> , 2021, 35, 723-730.       | 9.5  | 89        |
| 1517 | Magnetic field enhancement of electrochemical hydrogen evolution reaction probed by magneto-optics. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 3346-3353.                                   | 3.8  | 18        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1518 | Resolving Potential-Dependent Degradation of Electrodeposited Ni(OH) <sub>2</sub> Catalysts in Alkaline Oxygen Evolution Reaction (OER): In Situ XANES Studies. <i>Applied Catalysis B: Environmental</i> , 2021, 284, 119729.   | 10.8 | 54        |
| 1519 | Efficient electrocatalytic oxygen evolution at ultra-high current densities over 3D Fe, N doped Ni(OH) <sub>2</sub> nanosheets. <i>Chinese Chemical Letters</i> , 2021, 32, 1210-1214.   | 4.8  | 18        |
| 1520 | Nanostructured metallic FeNi <sub>2</sub> S <sub>4</sub> with reconstruction to generate FeNi-based oxide as a highly-efficient oxygen evolution electrocatalyst. <i>Nano Energy</i> , 2021, 81, 105619.                         | 8.2  | 68        |
| 1521 | Spinel nano-ferrites as low-cost (photo)electrocatalysts with unique electronic properties in solar energy conversion systems. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 3510-3529.                            | 3.8  | 20        |
| 1522 | 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       |
| 1523 | Prussian blue analogues as platform materials for understanding and developing oxygen evolution reaction electrocatalysts. <i>Journal of Catalysis</i> , 2021, 393, 390-398.   | 3.1  | 19        |
| 1524 | Modular Design of Highly Active Unitized Reversible Fuel Cell Electrocatalysts. <i>ACS Energy Letters</i> , 2021, 6, 177-183.  | 8.8  | 22        |
| 1525 | Tracking the role of Fe in NiFe-layered double hydroxide for solar water oxidation and prototype demonstration towards PV assisted solar water-splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 2143-2155. | 3.8  | 16        |
| 1526 | Hierarchical porous Ni, Fe-codoped Co-hydroxide arrays derived from metal-organic-frameworks for enhanced oxygen evolution. <i>Chemical Communications</i> , 2021, 57, 1522-1525.  | 2.2  | 15        |
| 1527 | High Density and Unit Activity Integrated in Amorphous Catalysts for Electrochemical Water Splitting. <i>Small Structures</i> , 2021, 2, 2000096.  | 6.9  | 102       |
| 1528 | Topotactically constructed nickel-iron (oxy)hydroxide with abundant in-situ produced high-valent iron species for efficient water oxidation. <i>Journal of Energy Chemistry</i> , 2021, 57, 212-218.                             | 7.1  | 50        |
| 1529 | Deposition of FeOOH layers onto porous PbO <sub>2</sub> by galvanic displacement and their use as electrocatalysts for oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2021, 880, 114844.             | 1.9  | 9         |
| 1530 | Facile synthesis of Ni-, Co-, Cu-metal organic frameworks electrocatalyst boosting for hydrogen evolution reaction. <i>Journal of Materials Science and Technology</i> , 2021, 72, 172-179.                                      | 5.6  | 43        |
| 1531 | Advanced Oxygen Electrocatalysis in Energy Conversion and Storage. <i>Advanced Functional Materials</i> , 2021, 31, 2007602.   | 7.8  | 86        |
| 1532 | Reconstructed Water Oxidation Electrocatalysts: The Impact of Surface Dynamics on Intrinsic Activities. <i>Advanced Functional Materials</i> , 2021, 31, 2008190.  | 7.8  | 161       |
| 1533 | Tailoring the activity of NiFe layered double hydroxide with CeCO <sub>3</sub> OH as highly efficient water oxidation electrocatalyst. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 2018-2025.                    | 3.8  | 10        |
| 1534 | Strategies to Develop Earth-Abundant Heterogeneous Oxygen Evolution Reaction Catalysts for pH-Neutral or pH-Near-Neutral Electrolytes. <i>Small Methods</i> , 2021, 5, e2000719.   | 4.6  | 31        |
| 1535 | Voltammetric detection of caffeine content in different tea stuffs by using Co <sub>3</sub> O <sub>4</sub> /GCE-Nafion electrode. <i>Journal of the Iranian Chemical Society</i> , 2021, 18, 701-708.                            | 1.2  | 4         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1536 | Mixed-metal hybrid ultramicroporous material (HUM) precursor to graphene-supported tetrataenite as a highly active and durable NPG catalyst for the OER. Dalton Transactions, 2021, 50, 5311-5317.  | 1.6  | 3         |
| 1537 | Interface engineering with an AlO <sub>x</sub> dielectric layer enabling an ultrastable Ta <sub>3</sub> N <sub>5</sub> photoanode for photoelectrochemical water oxidation. Journal of Materials Chemistry A, 2021, 9, 11285-11290.       | 5.2  | 17        |
| 1538 | Molecular and heterogeneous water oxidation catalysts: recent progress and joint perspectives. Chemical Society Reviews, 2021, 50, 2444-2485.   | 18.7 | 102       |
| 1539 | Tuning the intrinsic catalytic activities of oxygen-evolution catalysts by doping: a comprehensive review. Journal of Materials Chemistry A, 2021, 9, 20131-20163.  | 5.2  | 110       |
| 1540 | Thermally activated carbonâ€“nitrogen vacancies in double-shelled NiFe Prussian blue analogue nanocages for enhanced electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2021, 9, 12734-12745.                           | 5.2  | 25        |
| 1541 | Analysis of Solid-State Reaction Mechanisms with Two-Dimensional Fourier Transform Infrared Correlation Spectroscopy. Inorganic Chemistry, 2021, 60, 2304-2314.   | 1.9  | 3         |
| 1542 | Design of molecular water oxidation catalysts with earth-abundant metal ions. Chemical Society Reviews, 2021, 50, 6790-6831.  | 18.7 | 102       |
| 1543 | Bimetallic cyclic redox couple in dimanganese copper oxide supported by nickel borate for boosted alkaline electrocatalytic oxygen evolution reaction. Sustainable Energy and Fuels, 2021, 5, 2517-2527.                                  | 2.5  | 5         |
| 1544 | Alkaline Anion Exchange Membrane (AEM) Water Electrolysersâ€“Current/Future Perspectives in Electrolysers for Hydrogen. , 2022, , 473-504.  |      | 2         |
| 1545 | Graphene-coated nanoporous nickel towards a metal-catalyzed oxygen evolution reaction. Nanoscale, 2021, 13, 10916-10924.  | 2.8  | 13        |
| 1546 | Metalâ€“organic framework (MOF) derived flower-shaped CoSe <sub>2</sub> nanoplates as a superior bifunctional electrocatalyst for both oxygen and hydrogen evolution reactions. Sustainable Energy and Fuels, 2021, 5, 4992-5000.         | 2.5  | 22        |
| 1547 | Efficient overall water splitting catalyzed by robust FeNi <sub>3</sub> N nanoparticles with hollow interiors. Journal of Materials Chemistry A, 2021, 9, 7750-7758.  | 5.2  | 48        |
| 1548 | Soft x-ray spectroscopies in liquids and at solidâ€“liquid interface at BACH beamline at Elettra. Review of Scientific Instruments, 2021, 92, 015115.   | 0.6  | 3         |
| 1549 | A direct Z-scheme mechanism for selective hydrogenation of aromatic nitro compounds over a hybrid photocatalyst composed of ZnIn <sub>2</sub> S <sub>4</sub> and WO <sub>3</sub> nanorods. New Journal of Chemistry, 2021, 45, 3298-3310. | 1.4  | 9         |
| 1550 | Surface Reconstruction-Associated Partially Amorphized Bismuth Oxychloride for Boosted Photocatalytic Water Oxidation. ACS Applied Materials & Interfaces, 2021, 13, 5088-5098.   | 4.0  | 18        |
| 1551 | Lattice Matching Growth of Conductive Hierarchical Porous MOF/LDH Heteronanotube Arrays for Highly Efficient Water Oxidation. Advanced Materials, 2021, 33, e2006351.   | 11.1 | 155       |
| 1552 | Electrochemical behavior of a Ni <sub>3</sub> N OER precatalyst in Fe-purified alkaline media: the impact of self-oxidation and Fe incorporation. Materials Advances, 2021, 2, 2299-2309.   | 2.6  | 28        |
| 1553 | Nickel pyrophosphate combined with graphene nanoribbon used as efficient catalyst for OER. Journal of Materials Chemistry A, 2021, 9, 11255-11267.  | 5.2  | 36        |

| #    | ARTICLE  | IF  | CITATIONS |
|------|--|-----|-----------|
| 1554 | Synthesis of flower-like nickel-iron-chromium nanostructure compound deposited stainless steel foil as an efficient binder-free electrocatalyst for water splitting. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2649-2659.       | 2.5 | 8         |
| 1555 | Low-cost and multi-level structured NiFeMn alloy@NiFeMn oxyhydroxide electrocatalysts for highly efficient overall water splitting. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 2713-2724.                                       | 3.0 | 5         |
| 1556 | Pencil graphite rods decorated with nickel and nickel-iron as low-cost oxygen evolution reaction electrodes. <i>Sustainable Energy and Fuels</i> , 2021, 5, 3929-3938.   | 2.5 | 7         |
| 1557 | Concisely Synthesized FeNiWO <sub>x</sub> Film as a Highly Efficient and Robust Catalyst for Electrochemical Water Oxidation. <i>ACS Applied Energy Materials</i> , 2021, 4, 1410-1420.  | 2.5 | 23        |
| 1558 | Highly robust, novel aluminum counter cation-based monophosphate tungsten bronze electro-catalysts for oxygen evolution in acidic solution. <i>RSC Advances</i> , 2021, 11, 10681-10687.   | 1.7 | 4         |
| 1559 | Inductive effect as a universal concept to design efficient catalysts for CO <sub>2</sub> electrochemical reduction: electronegativity difference makes a difference. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4626-4647.  | 5.2 | 12        |
| 1560 | High-performance NiOOH/FeOOH electrode for OER catalysis. <i>Journal of Chemical Physics</i> , 2021, 154, 024706.  | 1.2 | 11        |
| 1561 | Synthesis of iron and vanadium co-doped mesoporous cobalt oxide: An efficient and robust catalysts for electrochemical water oxidation. <i>International Journal of Energy Research</i> , 2021, 45, 9422-9437.                       | 2.2 | 12        |
| 1562 | Surface self-reconstruction of nickel foam triggered by hydrothermal corrosion for boosted water oxidation. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 1501-1508.   | 3.8 | 40        |
| 1563 | Trace amounts of Ru-doped Ni-Fe oxide bone-like structures via single-step anodization: a flexible and bifunctional electrode for efficient overall water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12041-12050. | 5.2 | 30        |
| 1564 | Critical practices in conducting electrochemical conversion of 5-hydroxymethylfurfural. <i>Catalysis Science and Technology</i> , 2021, 11, 4882-4888.   | 2.1 | 9         |
| 1565 | Highly Efficient Electrocatalytic Water Splitting. , 2021, , 1335-1367.  |     | 1         |
| 1566 | Recent advances in highly active nanostructured NiFe LDH catalyst for electrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 3180-3208.   | 5.2 | 224       |
| 1567 | Defective two-dimensional layered heterometallic phosphonates as highly efficient oxygen evolution electrocatalysts. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 4448-4457.  | 3.0 | 6         |
| 1568 | 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        |
| 1569 | Recognition of Surface Oxygen Intermediates on NiFe Oxyhydroxide Oxygen-Evolving Catalysts by Homogeneous Oxidation Reactivity. <i>Journal of the American Chemical Society</i> , 2021, 143, 1493-1502.                              | 6.6 | 111       |
| 1570 | Local structural changes in polyamorphous (Ni,Fe)O <sub>x</sub> electrocatalysts suggest a dual-site oxygen evolution reaction mechanism. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13252-13262.                            | 5.2 | 17        |
| 1571 | Tuning the electronic structure of NiCoVO <sub>x</sub> nanosheets through S doping for enhanced oxygen evolution. <i>Nanoscale</i> , 2021, 13, 17022-17027.  | 2.8 | 9         |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1572 | Ultrathin Metal Silicate Hydroxide Nanosheets with Moderate Metal–Oxygen Covalency Enables Efficient Oxygen Evolution. <i>Energy and Environmental Materials</i> , 2022, 5, 231-237.   | 7.3  | 28        |
| 1573 | Role of Synergistic Effect in Oxygen Evolution Reaction over Layered Double Hydroxide. <i>Acta Chimica Sinica</i> , 2021, 79, 216.   | 0.5  | 0         |
| 1574 | Mass transport-enhanced electrodeposition of Ni–S–O films on nickel foam for electrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7736-7749.  | 5.2  | 49        |
| 1575 | Electrochemical stability of stainless-steel-made anode for alkaline water electrolysis: Surface catalyst nanostructures and oxygen evolution overpotentials under applying potential cycle loading. <i>Electrochemistry Communications</i> , 2021, 122, 106902. | 2.3  | 39        |
| 1576 | Shape-selective rhodium nano-huddles on DNA for high efficiency hydrogen evolution reaction in acidic medium. <i>Journal of Materials Chemistry C</i> , 2021, 9, 1709-1720.  | 2.7  | 15        |
| 1577 | Understanding polyoxometalates as water oxidation catalysts through iron vs. cobalt reactivity. <i>Chemical Science</i> , 2021, 12, 8755-8766.   | 3.7  | 23        |
| 1578 | Nickel-Iron Layered Double Hydroxide for Highly Efficient Oxygen Evolution Reaction. <i>E3S Web of Conferences</i> , 2021, 290, 01036.   | 0.2  | 0         |
| 1579 | Decoupled electrochemical water-splitting systems: a review and perspective. <i>Energy and Environmental Science</i> , 2021, 14, 4740-4759.  | 15.6 | 172       |
| 1580 | Design of pre-catalysts for heterogeneous CO <sub>2</sub> electrochemical reduction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 19508-19533.   | 5.2  | 24        |
| 1581 | Durability of anion exchange membrane water electrolyzers. <i>Energy and Environmental Science</i> , 2021, 14, 3393-3419.  | 15.6 | 213       |
| 1582 | 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       |
| 1583 | Enhanced electrocatalytic activity of CuO-SnO <sub>2</sub> nanocomposite in alkaline medium. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.  | 1.1  | 6         |
| 1584 | Improved water oxidation with metal oxide catalysts via a regenerable and redox-inactive ZnOxHy overlay. <i>Chemical Communications</i> , 2021, 57, 10230-10233.   | 2.2  | 1         |
| 1585 | Supercapacitors based on two-dimensional transition metal dichalcogenides and their hybrids. , 2021, , 159-191.  |      | 3         |
| 1586 | Electro-catalysts for oxygen electrodes in seawater electrolyzers (OER) and reversible electrolyzers (OER/ORR). , 2021, , 83-103.  |      | 2         |
| 1587 | Understanding the Structural Evolution of a Nickel Chalcogenide Electrocatalyst Surface for Water Oxidation. <i>Energy &amp; Fuels</i> , 2021, 35, 4387-4403.  | 2.5  | 33        |
| 1588 | Designing High-Valence Metal Sites for Electrochemical Water Splitting. <i>Advanced Functional Materials</i> , 2021, 31, 2009779.  | 7.8  | 195       |
| 1589 | Tailoring Electronegativity of Bimetallic Ni/Fe Metal–Organic Framework Nanosheets for Electrocatalytic Water Oxidation. <i>ACS Applied Nano Materials</i> , 2021, 4, 1967-1975.   | 2.4  | 30        |



| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1590 | Carbon-supported layered double hydroxide nanodots for efficient oxygen evolution: Active site identification and activity enhancement. <i>Nano Research</i> , 2021, 14, 3329-3336.                           | 5.8  | 14        |
| 1591 | Oxygen Evolution Catalysts at Transition Metal Oxide Photoanodes: Their Differing Roles for Solar Water Splitting. <i>Advanced Energy Materials</i> , 2021, 11, 2003111.                                      | 10.2 | 51        |
| 1592 | Enhanced oxygen and hydrogen evolution reaction by zinc doping in cobalt-nickel sulfide heteronanorods. <i>Electrochemical Science Advances</i> , 0, , e202000038.  | 1.2  | 2         |
| 1594 | Unveiling the In Situ Dissolution and Polymerization of Mo in Ni <sub>4</sub> Mo Alloy for Promoting the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7051-7055. | 7.2  | 228       |
| 1595 | Elucidating intrinsic contribution of d-orbital states to oxygen evolution electrocatalysis in oxides. <i>Nature Communications</i> , 2021, 12, 824.  | 5.8  | 63        |
| 1596 | Perovskite Oxide Based Electrodes for the Oxygen Reduction and Evolution Reactions: The Underlying Mechanism. <i>ACS Catalysis</i> , 2021, 11, 3094-3114.   | 5.5  | 115       |
| 1597 | Efficient Oxygen Evolution Electrocatalysis on CaFe <sub>2</sub> O <sub>4</sub> and Its Reaction Mechanism. <i>ACS Applied Energy Materials</i> , 2021, 4, 3057-3066.   | 2.5  | 22        |
| 1598 | Faceted Colloidal Metallic Ni <sub>3</sub> N Nanocrystals: Size-Controlled Solution-Phase Synthesis and Electrochemical Overall Water Splitting. <i>ACS Applied Energy Materials</i> , 2021, 4, 2165-2173.    | 2.5  | 28        |
| 1599 | A Programmable and Automated Platform for Integrated Synthesis and Evaluation of Water Electrolysis Catalysts. <i>Advanced Materials Technologies</i> , 2021, 6, 2001036.                                     | 3.0  | 3         |
| 1600 | Metal-Organic Polymer-Derived Interconnected Fe-Ni Alloy by Carbon Nanotubes as an Advanced Design of Urea Oxidation Catalysts. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 8461-8473.          | 4.0  | 62        |
| 1601 | Optimization of Ni-Co-Fe Based Catalysts for Oxygen Evolution Reaction by Surface and Relaxation Phenomena Analysis. <i>ChemSusChem</i> , 2021, 14, 1737-1746.  | 3.6  | 17        |
| 1602 | Host Modification of Layered Double Hydroxide Electrocatalyst to Boost the Thermodynamic and Kinetic Activity of Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , 2021, 31, 2009743.         | 7.8  | 71        |
| 1603 | Push-Pull Electronic Effects in Surface-Active Sites Enhance Electrocatalytic Oxygen Evolution on Transition Metal Oxides. <i>ChemSusChem</i> , 2021, 14, 1595-1601.  | 3.6  | 10        |
| 1604 | Anionic sulfur-modified FeNi-LDH at various Fe/Ni molar ratios for high-performance OER electrocatalysis. <i>Materials Letters</i> , 2021, 285, 129132.   | 1.3  | 16        |
| 1605 | Unveiling the In Situ Dissolution and Polymerization of Mo in Ni <sub>4</sub> Mo Alloy for Promoting the Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , 2021, 133, 7127-7131.                        | 1.6  | 12        |
| 1606 | Recent progress in in situ/operando analysis tools for oxygen electrocatalysis. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 173001.   | 1.3  | 11        |
| 1607 | Electrochemically Controlled Synthesis of Ultrathin Nickel Hydroxide Nanosheets for Electrocatalytic Oxygen Evolution. <i>Inorganic Chemistry</i> , 2021, 60, 3365-3374.                                      | 1.9  | 24        |
| 1608 | Promotion of Electrochemical Water Oxidation Activity of Au Supported Cobalt Oxide upon Addition of Cr: Insights using <i>in situ</i> Raman Spectroscopy. <i>ChemCatChem</i> , 2021, 13, 2053-2063.           | 1.8  | 9         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1609 | Recent Advances in Bimetallic Transition Metal Nitrides for Hydrogen Evolution Reaction. <i>Ceramist</i> , 2021, 24, 54-66.   | 0.0  | 0         |
| 1610 | Co <sub>1</sub> Al <sub>2</sub> (OH) <sub>m</sub> Layered Double Hydroxide/Graphitic Carbon Nitride Composite Nanostructure: An Efficient Water Oxidation Reaction Electrocatalyst in an Alkaline Electrolyte. <i>Energy &amp; Fuels</i> , 2021, 35, 5206-5216. | 2.5  | 4         |
| 1611 | Surface oxidized iron-nickel nanorods anchoring on graphene architectures for oxygen evolution reaction. <i>Chinese Chemical Letters</i> , 2021, 32, 3579-3583.   | 4.8  | 16        |
| 1612 | Covalent Organic Frameworks for Efficient Energy Electrocatalysis: Rational Design and Progress. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2000090.   | 2.8  | 29        |
| 1613 | Evaluating the effect of membrane-ionomer combinations and supporting electrolytes on the performance of cobalt nanoparticle anodes in anion exchange membrane electrolyzers. <i>Journal of Power Sources</i> , 2021, 488, 229433.                              | 4.0  | 20        |
| 1614 | Functionalization of Mn <sub>2</sub> O <sub>3</sub> / PdO / ZnO electrocatalyst using organic template with accentuated electrochemical potential toward water splitting. <i>International Journal of Energy Research</i> , 2022, 46, 452-463.                  | 2.2  | 11        |
| 1615 | Dendrimer-Ni-Based Material: Toward an Efficient Ni-Fe Layered Double Hydroxide for Oxygen-Evolution Reaction. <i>Inorganic Chemistry</i> , 2021, 60, 6073-6085.  | 1.9  | 23        |
| 1616 | Bismuth oxycarbonate grafted NiFe-LDH supported on g-C <sub>3</sub> N <sub>4</sub> as bifunctional catalyst for photoelectrochemical water splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 12145-12157.                                  | 3.8  | 22        |
| 1617 | Efficient Oxygen Evolution Electrocatalyst by Incorporation of Nickel into Nanoscale Dicalcaboride. <i>ChemCatChem</i> , 2021, 13, 1772-1780.   | 1.8  | 8         |
| 1618 | Redirecting dynamic surface restructuring of a layered transition metal oxide catalyst for superior water oxidation. <i>Nature Catalysis</i> , 2021, 4, 212-222.  | 16.1 | 266       |
| 1619 | Seven steps to reliable cyclic voltammetry measurements for the determination of double layer capacitance. <i>JPhys Energy</i> , 2021, 3, 034013.   | 2.3  | 70        |
| 1620 | NiCu mixed metal oxide catalyst for alkaline hydrogen evolution in anion exchange membrane water electrolysis. <i>Electrochimica Acta</i> , 2021, 371, 137837.  | 2.6  | 60        |
| 1621 | A Bidirectional Nanomodification Approach for Synthesizing Hierarchically Architected Mixed Oxide Electrodes for Oxygen Evolution. <i>Small</i> , 2021, 17, e2007287.   | 5.2  | 3         |
| 1622 | Earth-Abundant Electrocatalysts for Water Splitting: Current and Future Directions. <i>Catalysts</i> , 2021, 11, 429.   | 1.6  | 25        |
| 1623 | Photoelectrochemical performance of titanium dioxide/Prussian blue analogue synthesized by impregnation conversion method as photoanode. <i>Inorganic Chemistry Communication</i> , 2021, 125, 108349.  | 1.8  | 1         |
| 1624 | Tuning Ni-MoO <sub>2</sub> Catalyst-Ionomer and Electrolyte Interaction for Water Electrolyzers with Anion Exchange Membranes. <i>ACS Applied Energy Materials</i> , 2021, 4, 3327-3340.  | 2.5  | 27        |
| 1625 | A high-performance oxygen evolution electrode of nanoporous Ni-based solid solution by simulating natural meteorites. <i>Chemical Engineering Journal</i> , 2021, 410, 128340.  | 6.6  | 26        |
| 1626 | A highly efficient Fe-doped Ni <sub>3</sub> S <sub>2</sub> electrocatalyst for overall water splitting. <i>Nano Research</i> , 2021, 14, 4740-4747.   | 5.8  | 52        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1627 | Design of a Multilayered Oxygen Evolution Electrode with High Catalytic Activity and Corrosion Resistance for Saline Water Splitting. <i>Advanced Functional Materials</i> , 2021, 31, 2101820.   | 7.8  | 103       |
| 1628 | Redox-Mediated Water Splitting for Decoupled H <sub>2</sub> Production. , 2021, 3, 641-651.   |      | 57        |
| 1629 | Trimetallic Spinel NiCo <sub>2</sub> Fe <sub>2</sub> O <sub>4</sub> Nanoboxes for Highly Efficient Electrocatalytic Oxygen Evolution. <i>Angewandte Chemie</i> , 2021, 133, 11947-11952.  | 1.6  | 33        |
| 1630 | Design and fabrication of Pt-free FeNi <sub>2</sub> S <sub>4</sub> /rGO hybrid composite thin films counter electrode for high-performance dye-sensitized solar cells. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 11910-11920. | 1.1  | 4         |
| 1631 | A Co <sub>3</sub> O <sub>4</sub> /CuO composite nanowire array as low-cost and efficient bifunctional electrocatalyst for water splitting. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.   | 1.1  | 9         |
| 1632 | Fe(Co)OOH Dynamically Stable Interface Based on Self-Sacrificial Reconstruction for Long-Term Electrochemical Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 17450-17458.   | 4.0  | 32        |
| 1633 | Rational introduction of borate and phosphate ions on NiCo <sub>2</sub> O <sub>4</sub> surface for high-efficiency overall water splitting. <i>Journal of Power Sources</i> , 2021, 490, 229541.  | 4.0  | 23        |
| 1634 | Î <sup>2</sup> -like FeOOH Nanoswords Activated by Ni Foam and Encapsulated by rGO toward High Current Densities, Durability, and Efficient Oxygen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 18772-18783.                          | 4.0  | 15        |
| 1635 | Oxygen-Evolution Reaction by a Palladium Foil in the Presence of Iron. <i>Inorganic Chemistry</i> , 2021, 60, 5682-5693.  | 1.9  | 26        |
| 1636 | Understanding the Role of Vanadium Vacancies in BiVO <sub>4</sub> for Efficient Photoelectrochemical Water Oxidation. <i>Chemistry of Materials</i> , 2021, 33, 3553-3565.  | 3.2  | 54        |
| 1637 | Constructing Ultrathin W-Doped NiFe Nanosheets via Facile Electrosynthesis as Bifunctional Electrocatalysts for Efficient Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 20070-20080.   | 4.0  | 54        |
| 1638 | Carbon Nitride-Based Photoanode with Enhanced Photostability and Water Oxidation Kinetics. <i>Advanced Functional Materials</i> , 2021, 31, 2101724.  | 7.8  | 29        |
| 1639 | Structural and Electronic Engineering of Ir-Doped Ni-(Oxy)hydroxide Nanosheets for Enhanced Oxygen Evolution Activity. <i>ACS Catalysis</i> , 2021, 11, 5386-5395.  | 5.5  | 75        |
| 1640 | Isolating the Electrocatalytic Activity of a Confined NiFe Motif within Zirconium Phosphate. <i>Advanced Energy Materials</i> , 2021, 11, 2003545.  | 10.2 | 21        |
| 1641 | Trimetallic Spinel NiCo <sub>2</sub> Fe <sub>2</sub> O <sub>4</sub> Nanoboxes for Highly Efficient Electrocatalytic Oxygen Evolution. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11841-11846.   | 7.2  | 247       |
| 1642 | Regenerable Catalyst for Highly Alkaline Water Oxidation. <i>ACS Energy Letters</i> , 2021, 6, 1677-1683.   | 8.8  | 15        |
| 1643 | Synthesis of Ag-Ni-Fe-P Multielemental Nanoparticles as Bifunctional Oxygen Reduction/Evolution Reaction Electrocatalysts. <i>ACS Nano</i> , 2021, 15, 7131-7138.   | 7.3  | 45        |
| 1644 | Amorphous Bimetallic Phosphate-Carbon Precatalyst with Deep Self-Reconstruction toward Efficient Oxygen Evolution Reaction and Zn-Air Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 5345-5355.                                       | 3.2  | 22        |

| #    | ARTICLE  | IF  | CITATIONS |
|------|--|-----|-----------|
| 1645 | Molecular Understanding of the Impact of Saline Contaminants and Alkaline pH on NiFe Layered Double Hydroxide Oxygen Evolution Catalysts. <i>ACS Catalysis</i> , 2021, 11, 6800-6809.  | 5.5 | 50        |
| 1646 | Morphological and compositional modification of $\text{Ni}(\text{OH})_2$ nanoplates by ferrihydrite for enhanced oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 17720-17730.   | 3.8 | 12        |
| 1647 | Solvent Mediated Fabrication of Ditched Hollow Indium Sulfide ( $\text{In}_2\text{S}_3$ ) Spheres for Overall Electrocatalytic Water Splitting. <i>Journal of the Electrochemical Society</i> , 2021, 168, 066510.   | 1.3 | 7         |
| 1648 | Transition Metal-Based 2D Layered Double Hydroxide Nanosheets: Design Strategies and Applications in Oxygen Evolution Reaction. <i>Nanomaterials</i> , 2021, 11, 1388.   | 1.9 | 24        |
| 1649 | Evidence of Mars-van Krevelen Mechanism in the Electrochemical Oxygen Evolution on Ni-Based Catalysts. <i>Angewandte Chemie</i> , 2021, 133, 15108-15115.  | 1.6 | 9         |
| 1650 | Influence of low-spin $\text{Co}^{3+}$ for high-spin $\text{Fe}^{3+}$ substitution on the structural, magnetic, optical and catalytic properties of hematite ( $\text{Fe}_2\text{O}_3$ ) nanorods. <i>Journal of Physics and Chemistry of Solids</i> , 2021, 152, 109929.              | 1.9 | 12        |
| 1651 | Improved oxygen evolution reaction performance with addition of Fe to form $\text{Fe}_y\text{Cu}_{x-y}\text{Co}_3-x\text{O}_4$ and $\text{Fe}_y\text{Ni}_{x-y}\text{Co}_3-x\text{O}_4$ ( $x=0.5, 1$ and $y=0.1, 0.15$ ) spinel oxides. <i>Electrochimica Acta</i> , 2021, 378, 138116. | 2.6 | 7         |
| 1652 | Ligand and Anion Co-Leaching Induced Complete Reconstruction of Polyoxomolybdate/Organic Complex Oxygen-Evolving Pre-Catalysts. <i>Advanced Functional Materials</i> , 2021, 31, 2101792.  | 7.8 | 35        |
| 1653 | Spinel type $\text{Fe}_3\text{O}_4$ polyhedron supported on nickel foam as an electrocatalyst for water oxidation reaction. <i>Journal of Alloys and Compounds</i> , 2021, 863, 158742.  | 2.8 | 17        |
| 1654 | Structural changes of a NiFe-based metal-organic framework during the oxygen-evolution reaction under alkaline conditions. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 19245-19253.  | 3.8 | 44        |
| 1655 | Intrinsic Electrocatalytic Activity for Oxygen Evolution of Crystalline 3d-Transition Metal Layered Double Hydroxides. <i>Angewandte Chemie</i> , 2021, 133, 14567-14578.  | 1.6 | 30        |
| 1656 | Ni III-rich NiFeBa as an Efficient Catalyst for Water Oxidation. <i>ChemSusChem</i> , 2021, 14, 2516-2520.   | 3.6 | 2         |
| 1657 | An Electrochemical Impedance Study of Alkaline Water Splitting Using Fe Doped NiO Nanosheets. <i>Physchem</i> , 2021, 1, 69-81.  | 0.5 | 6         |
| 1658 | Bifunctional electrocatalysts for water splitting from a bimetallic (V doped-Ni <sub>x</sub> Fe <sub>y</sub> ) Metal-Organic framework MOF@Graphene oxide composite. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 42122-42135.  | 3.8 | 33        |
| 1659 | Intrinsic Electrocatalytic Activity for Oxygen Evolution of Crystalline 3d-Transition Metal Layered Double Hydroxides. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14446-14457.   | 7.2 | 170       |
| 1660 | Evidence of Mars-van Krevelen Mechanism in the Electrochemical Oxygen Evolution on Ni-Based Catalysts. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14981-14988.   | 7.2 | 67        |
| 1661 | Elucidating the Role of Hydroxide Electrolyte on Anion-Exchange-Membrane Water Electrolyzer Performance. <i>Journal of the Electrochemical Society</i> , 2021, 168, 054522.  | 1.3 | 54        |
| 1662 | 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         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1663 | Solution-Processed Ni-Based Nanocomposite Electrocatalysts: An Approach to Highly Efficient Electrochemical Water Splitting. <i>ACS Applied Energy Materials</i> , 2021, 4, 5255-5264.  | 2.5  | 16        |
| 1664 | Electronically coupled layered double hydroxide/MXene quantum dot metallic hybrids for high-performance flexible zinc-air batteries. <i>Informa Mater</i> , 2021, 3, 1134-1144.   | 8.5  | 73        |
| 1665 | Nickel-iron hydroxide oxygen evolution electrocatalysts prepared by a simple chemical bath deposition method. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 20313-20324.  | 3.8  | 14        |
| 1666 | Double-Exchange-Induced in situ Conductivity in Nickel-Based Oxyhydroxides: An Effective Descriptor for Electrocatalytic Oxygen Evolution. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16448-16456.                      | 7.2  | 63        |
| 1667 | Insight into the amorphous nickel-iron (oxy)hydroxide catalyst for efficient oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2021, 591, 307-313.   | 5.0  | 34        |
| 1668 | Pulsed Laser in Liquids Made Nanomaterials for Catalysis. <i>Chemical Reviews</i> , 2021, 121, 7568-7637.   | 23.0 | 100       |
| 1669 | Highly Active Nickel-Iron Nanoparticles With and Without Ceria for the Oxygen Evolution Reaction. <i>Electrocatalysis</i> , 2021, 12, 605-618.  | 1.5  | 11        |
| 1670 | Sub-2 nm Ultrathin and Robust 2D FeNi Layered Double Hydroxide Nanosheets Packed with 1D FeNi-MOFs for Enhanced Oxygen Evolution Electrocatalysis. <i>Advanced Functional Materials</i> , 2021, 31, 2103318.                              | 7.8  | 99        |
| 1671 | Self-Optimized Metal-Organic Framework Electrocatalysts with Structural Stability and High Current Tolerance for Water Oxidation. <i>ACS Catalysis</i> , 2021, 11, 7132-7143.   | 5.5  | 77        |
| 1672 | Spin pinning effect to reconstructed oxyhydroxide layer on ferromagnetic oxides for enhanced water oxidation. <i>Nature Communications</i> , 2021, 12, 3634.  | 5.8  | 186       |
| 1673 | Amorphous Ni <sub>x</sub> Fe <sub>x</sub> Oxyhydroxide Nanosheets with Integrated Bulk and Surface Iron for a High and Stable Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 6833-6841.                        | 2.5  | 10        |
| 1674 | Layer-by-Layer Assembly-Based Electrocatalytic Fibril Electrodes Enabling Extremely Low Overpotentials and Stable Operation at 1 A cm <sup>2</sup> in Water-Splitting Reaction. <i>Advanced Functional Materials</i> , 2021, 31, 2102530. | 7.8  | 15        |
| 1675 | Sub-Nanometer Pt Clusters on Defective NiFe LDH Nanosheets as Trifunctional Electrocatalysts for Water Splitting and Rechargeable Hybrid Sodium-Air Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 26891-26903.     | 4.0  | 31        |
| 1676 | Facing Seawater Splitting Challenges by Regeneration with Ni <sup>2+</sup> /Mo <sup>6+</sup> Fe Bifunctional Electrocatalyst for Hydrogen and Oxygen Evolution. <i>ChemSusChem</i> , 2021, 14, 2872-2881.                                 | 3.6  | 45        |
| 1677 | Clean and Affordable Hydrogen Fuel from Alkaline Water Splitting: Past, Recent Progress, and Future Prospects. <i>Advanced Materials</i> , 2021, 33, e2007100.  | 11.1 | 781       |
| 1678 | Mixed-Cation Perovskite La <sub>0.6</sub> Ca <sub>0.4</sub> Fe <sub>0.7</sub> Ni <sub>0.3</sub> O <sub>2.9</sub> as a Stable and Efficient Catalyst for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2021, 11, 8338-8348.        | 5.5  | 24        |
| 1679 | Recent progress in cobalt-based carbon materials as oxygen electrocatalysts for zinc-air battery applications. <i>Materials Today Energy</i> , 2021, 20, 100659.  | 2.5  | 31        |
| 1680 | Approaches to achieve surface sensitivity in the in situ XAS of electrocatalysts. <i>Current Opinion in Electrochemistry</i> , 2021, 27, 100681.  | 2.5  | 17        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1681 | Development of Bimetallic PdNi Electrocatalysts toward Mitigation of Catalyst Poisoning in Direct Borohydride Fuel Cells. <i>ACS Catalysis</i> , 2021, 11, 8417-8430.  | 5.5  | 28        |
| 1682 | Double-Exchange-Induced in situ Conductivity in Nickel-Based Oxyhydroxides: An Effective Descriptor for Electrocatalytic Oxygen Evolution. <i>Angewandte Chemie</i> , 2021, 133, 16584-16592.  | 1.6  | 3         |
| 1683 | Nitrogen and Oxygen Functionalization of Multi-Walled Carbon Nanotubes for Tuning the Bifunctional Oxygen Reduction/Oxygen Evolution Performance of Supported FeCo Oxide Nanoparticles. <i>ChemElectroChem</i> , 2021, 8, 2803-2816.                                     | 1.7  | 13        |
| 1684 | Promoting Oxygen Evolution by Deep Reconstruction via Dynamic Migration of Fluorine Anions. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 34438-34446.   | 4.0  | 24        |
| 1685 | Detection of high-valent iron species in alloyed oxidic cobaltates for catalysing the oxygen evolution reaction. <i>Nature Communications</i> , 2021, 12, 4218.  | 5.8  | 38        |
| 1686 | Highly Efficient Oxygen Evolution Reaction Enabled by Phosphorus Doping of the Fe Electronic Structure in Iron-Nickel Selenide Nanosheets. <i>Advanced Science</i> , 2021, 8, e2101775.  | 5.6  | 109       |
| 1687 | Principles of Water Electrolysis and Recent Progress in Cobalt-, Nickel-, and Iron-Based Oxides for the Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2022, 134, .   | 1.6  | 18        |
| 1688 | Design Principles of NiFe-Layered Double Hydroxide Anode Catalysts for Anion Exchange Membrane Water Electrolyzers. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 37179-37186.   | 4.0  | 36        |
| 1689 | Advances in Understanding the Electrocatalytic Reconstruction Chemistry of Coordination Compounds. <i>Small</i> , 2021, 17, e2100629.  | 5.2  | 10        |
| 1690 | Nickel foam as conductive substrate enhanced low-crystallinity two-dimensional iron hydrogen phosphate for oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2021, 870, 159472.  | 2.8  | 15        |
| 1691 | Electronic interaction boosted electrocatalysis of iridium nanoparticles on nitrogen-doped graphene for efficient overall water splitting in acidic and alkaline media. <i>Chemical Engineering Journal</i> , 2021, 415, 129034.   | 6.6  | 42        |
| 1692 | The Effect of Interlayer Anion Grafting on Water Oxidation Electrocatalysis: A Comparative Study of Ni- and Co-Based Brucite-Type Layered Hydroxides, Layered Double Hydroxides and Hydroxynitrate Salts. <i>Chemistry - A European Journal</i> , 2021, 27, 16930-16937. | 1.7  | 12        |
| 1693 | Principles of Water Electrolysis and Recent Progress in Cobalt-, Nickel-, and Iron-Based Oxides for the Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .  | 7.2  | 286       |
| 1694 | Cobalt Telluride: A Highly Efficient Trifunctional Electrocatalyst for Water Splitting and Oxygen Reduction. <i>ACS Applied Energy Materials</i> , 2021, 4, 8158-8174.   | 2.5  | 36        |
| 1695 | Unveiling Role of Sulfate Ion in Nickel-Iron (oxy)Hydroxide with Enhanced Oxygen-Evolving Performance. <i>Advanced Functional Materials</i> , 2021, 31, 2102772.   | 7.8  | 158       |
| 1696 | Fabrication of Three-Dimensional Porous Materials with NiO Nanowalls for Electrocatalytic Oxygen Evolution. <i>ACS Applied Nano Materials</i> , 2021, 4, 8059-8065.  | 2.4  | 5         |
| 1697 | Bridging NiCo layered double hydroxides and Ni <sub>3</sub> S <sub>2</sub> for bifunctional electrocatalysts: The role of vertical graphene. <i>Chemical Engineering Journal</i> , 2021, 415, 129048.  | 6.6  | 39        |
| 1698 | Interfacing or Doping? Role of Ce in Highly Promoted Water Oxidation of NiFe-Layered Double Hydroxide. <i>Advanced Energy Materials</i> , 2021, 11, 2101281.   | 10.2 | 120       |

| #    | ARTICLE  | IF  | CITATIONS |
|------|--|-----|-----------|
| 1699 | FeOOH-containing hydrated layered iron vanadate electrocatalyst for superior oxygen evolution reaction and efficient water splitting. <i>Chemical Engineering Journal</i> , 2021, 416, 129165.                   | 6.6 | 53        |
| 1700 | Oxygen Electrocatalysis on Mixed-Metal Oxides/Oxyhydroxides: From Fundamentals to Membrane Electrolyzer Technology. <i>Accounts of Materials Research</i> , 2021, 2, 548-558.                                    | 5.9 | 41        |
| 1701 | Highly Active and Durable FeNiCo Oxyhydroxide Oxygen Evolution Reaction Electrocatalysts Derived from Fluoride Precursors. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9465-9473.                | 3.2 | 16        |
| 1702 | Rational construction of vertical few layer graphene/NiO core-shell nanoflake arrays for efficient oxygen evolution reaction. <i>Materials Research Bulletin</i> , 2021, 139, 111260.                            | 2.7 | 11        |
| 1703 | Characteristics of the voltammetric behavior of the hydroxide ion oxidation at disordered mesoporous titanium dioxide electrocatalyst. <i>Journal of Saudi Chemical Society</i> , 2021, 25, 101274.              | 2.4 | 6         |
| 1704 | A Highly Efficient Oxygen Evolution Electrocatalyst Derived from a Metal-Organic Framework and Ketjenblack Carbon Material. <i>ChemPlusChem</i> , 2021, 86, 1106-1115.   | 1.3 | 10        |
| 1705 | An advanced NiFe-LDH nanoclusters arrays for high-efficient full water splitting. <i>Journal of Materials Science</i> , 2021, 56, 19466-19475.   | 1.7 | 4         |
| 1706 | Direct One-Step Growth of Bimetallic Ni <sub>2</sub> Mo <sub>3</sub> N on Ni Foam as an Efficient Oxygen Evolution Electrocatalyst. <i>Materials</i> , 2021, 14, 4768.   | 1.3 | 11        |
| 1707 | Fabrication of tin-doped hematite modified with NiFe-LDH nanoflakes for highly efficient solar water splitting. <i>International Journal of Energy Research</i> , 2021, 45, 19869-19882.                         | 2.2 | 3         |
| 1708 | Switching the O-O bond-formation mechanism by controlling water activity. <i>CheM</i> , 2021, 7, 1981-1982.  | 5.8 | 6         |
| 1709 | Nickel sulphide flakes improved cone-shaped graphite electrode for high-performance OER activity. <i>Bulletin of Materials Science</i> , 2021, 44, 1.  | 0.8 | 4         |
| 1710 | Cost Efficient Photovoltaic Water Electrolysis over Ultrathin Nanosheets of Cobalt/Iron-Molybdenum Oxides for Potential Large Scale Hydrogen Production. <i>Small</i> , 2021, 17, e2102222.                      | 5.2 | 16        |
| 1711 | Selective Se doping of NiFe <sub>2</sub> O <sub>4</sub> on an active NiOOH scaffold for efficient and robust water oxidation. <i>Chinese Journal of Catalysis</i> , 2021, 42, 1395-1403.                         | 6.9 | 51        |
| 1712 | High surface area NiCoP nanostructure as efficient water splitting electrocatalyst for the oxygen evolution reaction. <i>Materials Research Bulletin</i> , 2021, 140, 111312.                                    | 2.7 | 16        |
| 1713 | Probing metal-organic frameworks during water oxidation electrocatalysis. <i>Matter</i> , 2021, 4, 2593-2595.  | 5.0 | 1         |
| 1714 | Recent advances of layered double hydroxides-based bifunctional electrocatalysts for ORR and OER. <i>Materials Today Chemistry</i> , 2021, 21, 100488.   | 1.7 | 15        |
| 1715 | Role of transition-metal electrocatalysts for oxygen evolution with Si-based photoanodes. <i>Chinese Journal of Catalysis</i> , 2021, 42, 1387-1394.   | 6.9 | 8         |
| 1716 | Activating Metal Oxides Nanocatalysts for Electrocatalytic Water Oxidation by Quenching-Induced Near-Surface Metal Atom Functionality. <i>Journal of the American Chemical Society</i> , 2021, 143, 14169-14177. | 6.6 | 101       |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1717 | Vertically FeNi layered double hydroxide/TiO <sub>2</sub> composite for synergistically enhanced photoelectrochemical water splitting. <i>Electrochimica Acta</i> , 2021, 387, 138533.   | 2.6  | 8         |
| 1718 | Host, Suppressor, and Promoter—The Roles of Ni and Fe on Oxygen Evolution Reaction Activity and Stability of NiFe Alloy Thin Films in Alkaline Media. <i>ACS Catalysis</i> , 2021, 11, 10537-10552.                                  | 5.5  | 98        |
| 1719 | Oxygen Evolution Reaction on the Fe <sub>3</sub> O <sub>4</sub> (001) Surface: Theoretical Insights into the Role of Terminal and Bridging Oxygen Atoms. <i>Journal of Physical Chemistry C</i> , 2021, 125, 18752-18761.            | 1.5  | 8         |
| 1720 | Facet Engineering in Ultrathin Two-Dimensional NiFe Metal—Organic Frameworks by Coordination Modulation for Enhanced Electrocatalytic Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 10892-10901.      | 3.2  | 34        |
| 1721 | A synergy establishment by metal-organic framework and carbon quantum dots to enhance electrochemical water oxidation. <i>Chinese Chemical Letters</i> , 2022, 33, 562-566.  | 4.8  | 16        |
| 1722 | Integrating Hydrogen Production and Transfer Hydrogenation with Selenite Promoted Electrooxidation of <i>p</i> -Nitrotoluenes to <i>cis</i> -Nitroethenes. <i>Angewandte Chemie</i> , 2021, 133, 22181-22187.                        | 1.6  | 13        |
| 1723 | Dischargeable nickel matrix charges iron species for oxygen evolution electrocatalysis. <i>Electrochimica Acta</i> , 2021, 386, 138401.  | 2.6  | 10        |
| 1724 | Nanoporous Amorphous Fe <sub>78</sub> Si <sub>9</sub> B <sub>13</sub> Alloys for Hydrogen Evolution in Alkaline Media. <i>Journal of Non-Crystalline Solids</i> , 2021, 566, 120831.   | 1.5  | 9         |
| 1725 | Observation of a potential-dependent switch of water-oxidation mechanism on Co-oxide-based catalysts. <i>CheM</i> , 2021, 7, 2101-2117.  | 5.8  | 42        |
| 1726 | Low-crystalline transition metal oxide/hydroxide on MWCNT by Fenton-reaction-inspired green synthesis for lithium ion battery and OER electrocatalysis. <i>Electrochimica Acta</i> , 2021, 387, 138559.                              | 2.6  | 19        |
| 1727 | Sequenced Successive Ionic Layer Adsorption and Reaction for Rational Design of Ni(OH) <sub>2</sub> /FeOOH Heterostructures with Tailored Catalytic Properties. <i>ACS Applied Energy Materials</i> , 2021, 4, 8252-8261.            | 2.5  | 6         |
| 1728 | Postsynthetic treatment of nickel—iron layered double hydroxides for the optimum catalysis of the oxygen evolution reaction. <i>Npj 2D Materials and Applications</i> , 2021, 5, .   | 3.9  | 12        |
| 1729 | The impact of ultrasonic parameters on the exfoliation of NiFe LDH nanosheets as electrocatalysts for the oxygen evolution reaction in alkaline media. <i>Ultrasonics Sonochemistry</i> , 2021, 76, 105664.                          | 3.8  | 32        |
| 1730 | Coupled Effects of Temperature, Pressure, and pH on Water Oxidation Thermodynamics and Kinetics. <i>ACS Catalysis</i> , 2021, 11, 11305-11319.   | 5.5  | 9         |
| 1731 | Integrating Hydrogen Production and Transfer Hydrogenation with Selenite Promoted Electrooxidation of <i>p</i> -Nitrotoluenes to <i>cis</i> -Nitroethenes. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22010-22016. | 7.2  | 34        |
| 1732 | Metamorphosis of Heterostructured Surface—Mounted Metal—Organic Frameworks Yielding Record Oxygen Evolution Mass Activities. <i>Advanced Materials</i> , 2021, 33, e2103218.   | 11.1 | 43        |
| 1733 | Enhanced oxygen evolution reaction performance of synergistic effect of TiO <sub>2</sub> /Ti <sub>3</sub> C <sub>2</sub> /FeNi LDH. <i>Ceramics International</i> , 2021, 47, 25755-25762.   | 2.3  | 10        |
| 1734 | Structure—property correlations for analysis of heterogeneous electrocatalysts. <i>Chemical Physics Reviews</i> , 2021, 2, .   | 2.6  | 8         |



| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 1735 | Atomic Cation Vacancy Engineering of NiFe Layered Double Hydroxides for Improved Activity and Stability towards the Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2021, 133, 24817-24824.   | 1.6 | 39        |
| 1736 | Ultrafast Two-Step Synthesis of S-Doped Fe/Ni (Oxy)Hydroxide/Ni Nanocone Arrays on Carbon Cloth and Stainless-Steel Substrates for Water-Splitting Applications. <i>ACS Applied Energy Materials</i> , 2021, 4, 10627-10638.  | 2.5 | 15        |
| 1737 | Bifunctional oxovanadate doped cobalt carbonate for high-efficient overall water splitting in alkaline-anion-exchange-membrane water-electrolyzer. <i>Chemical Engineering Journal</i> , 2022, 430, 132623.   | 6.6 | 58        |
| 1738 | Phosphorized CoNi <sub>2</sub> S <sub>4</sub> Yolk-Shell Spheres for Highly Efficient Hydrogen Production via Water and Urea Electrolysis. <i>Angewandte Chemie</i> , 2021, 133, 23067-23073.   | 1.6 | 14        |
| 1739 | In situ hierarchical encapsulation of bimetallic selenides into honeycomb-like nitrogen doped porous carbon nanosheets for highly sensitive and selective guanosine detection. <i>Journal of Colloid and Interface Science</i> , 2021, 598, 181-192.  | 5.0 | 13        |
| 1740 | Laser-induced graphene electrodes for electrochemical ion sensing, pesticide monitoring, and water splitting. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 6201-6212.   | 1.9 | 16        |
| 1741 | Ni <sub>0.67</sub> Fe <sub>0.33</sub> Hydroxide Incorporated with Oxalate for Highly Efficient Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 42870-42879.  | 4.0 | 30        |
| 1742 | Carbon-coated MoSe <sub>2</sub> /Mo <sub>2</sub> CTx (MXene) heterostructure for efficient hydrogen evolution. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 271, 115239.   | 1.7 | 10        |
| 1743 | Molten salt-assisted shape modification of CaFe <sub>2</sub> O <sub>4</sub> nanorods for highly efficient photocatalytic degradation of methylene blue. <i>Optical Materials</i> , 2021, 119, 111295.   | 1.7 | 16        |
| 1744 | NiCo-Based Electrocatalysts for the Alkaline Oxygen Evolution Reaction: A Review. <i>ACS Catalysis</i> , 2021, 11, 12485-12509.   | 5.5 | 204       |
| 1745 | Deprotonation and cation adsorption on the NiOOH/water interface: A grand-canonical first-principles investigation. <i>Electrochimica Acta</i> , 2021, 398, 139253.   | 2.6 | 3         |
| 1746 | Lattice mismatch in Ni <sub>3</sub> Al-based alloy for efficient oxygen evolution. <i>Journal of Materials Science and Technology</i> , 2022, 106, 19-27.   | 5.6 | 10        |
| 1747 | Detection of Spontaneous FeOOH Formation at the Hematite/Ni(Fe)OOH Interface During Photoelectrochemical Water Splitting by Operando X-ray Absorption Spectroscopy. <i>ACS Catalysis</i> , 2021, 11, 12324-12335.   | 5.5 | 18        |
| 1748 | Selenization triggers deep reconstruction to produce ultrathin $\Gamma^3$ -NiOOH toward the efficient water oxidation. <i>Journal of Energy Chemistry</i> , 2021, 63, 651-658.  | 7.1 | 13        |
| 1749 | Understanding the Electronic Structure Evolution of Epitaxial LaNi <sub>1-x</sub> Fe <sub>x</sub> O <sub>3</sub> Thin Films for Water Oxidation. <i>Nano Letters</i> , 2021, 21, 8324-8331.   | 4.5 | 31        |
| 1750 | 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 &amp; Technology</i> , 2021, 55, 12596-12606.                            | 4.6 | 24        |
| 1751 | General and scalable preparation of Prussian blue analogues on arbitrary conductive substrates and their derived metal phosphides as highly efficient and ultra-long-life bifunctional electrocatalysts for overall water splitting. <i>Chemical Engineering Journal</i> , 2021, 420, 129972. | 6.6 | 17        |
| 1752 | Novel monoclinic ABO <sub>4</sub> oxide with single-crystal structure as next generation electrocatalyst for oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 420, 130492.  | 6.6 | 12        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1753 | Insight into Fe Activating One-Dimensional $\text{Ni}(\text{OH})_2$ Nanobelts for Efficient Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2021, 125, 20301-20308.  | 1.5  | 17        |
| 1754 | Facile $\text{Co}_3\text{O}_4$ nanoparticles deposited on polyvinylpyrrolidone for efficient water oxidation in alkaline media. <i>Journal of the Chinese Chemical Society</i> , 0, .  | 0.8  | 0         |
| 1755 | Iron and chromium co-doped cobalt phosphide porous nanosheets as robust bifunctional electrocatalyst for efficient water splitting. <i>Nanotechnology</i> , 2022, 33, 075204.  | 1.3  | 9         |
| 1756 | Instant formation of excellent oxygen evolution catalyst film via controlled spray pyrolysis for electrocatalytic and photoelectrochemical water splitting. <i>Journal of Energy Chemistry</i> , 2022, 66, 657-665.  | 7.1  | 4         |
| 1757 | Iron-doped $\text{NiS}_2$ microcrystals with exposed $\{001\}$ facets for electrocatalytic water oxidation. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 599-604.  | 5.0  | 15        |
| 1758 | NCoCu Carbon Dots Intertwined NiCo Double Hydroxide Nanorod Array for Efficient Electrocatalytic Hydrogen Evolution. <i>ChemCatChem</i> , 2021, 13, 4714-4723.   | 1.8  | 0         |
| 1759 | Mechanism of Nickel-iron Water Oxidation Electrocatalysts. <i>Energy &amp; Fuels</i> , 2021, 35, 19164-19169.  | 2.5  | 18        |
| 1760 | Boosting Activity and Durability of an Electrodeposited $\text{Ni}(\text{OH})_2$ Catalyst Using Carbon Nanotube-Grafted Substrates for the Alkaline Oxygen Evolution Reaction. <i>ACS Applied Nano Materials</i> , 2021, 4, 10267-10274.                               | 2.4  | 7         |
| 1761 | Earth-Abundant Fe and Ni Dually Doped $\text{Co}_2\text{P}$ for Superior Oxygen Evolution Reactivity and as a Bifunctional Electrocatalyst toward Renewable Energy-Powered Overall Alkaline Water Splitting. <i>ACS Applied Energy Materials</i> , 2021, 4, 9969-9981. | 2.5  | 18        |
| 1762 | Atomic Cation Vacancy Engineering of NiFe Layered Double Hydroxides for Improved Activity and Stability towards the Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 24612-24619.   | 7.2  | 259       |
| 1763 | Structural Transformation of Heterogeneous Materials for Electrocatalytic Oxygen Evolution Reaction. <i>Chemical Reviews</i> , 2021, 121, 13174-13212.   | 23.0 | 262       |
| 1764 | Comprehensive Structural Descriptor for Electrocatalytic Oxygen Evolution Activities of Iron Oxides. <i>ChemElectroChem</i> , 2021, 8, 4466-4471.  | 1.7  | 6         |
| 1765 | Amorphous High-Entropy Hydroxides of Tunable Wide Solar Absorption for Solar Water Evaporation. <i>Particle and Particle Systems Characterization</i> , 2021, 38, 2100094.   | 1.2  | 3         |
| 1766 | Synergistic Effects of Co and Fe on the OER activity of $\text{LaCo}_x\text{Fe}_{1-x}\text{O}_3$ . <i>Chemistry - A European Journal</i> , 2021, 27, 17145-17158.  | 1.7  | 14        |
| 1767 | Phosphorized $\text{CoNi}_2\text{S}_4$ 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       |
| 1768 | The Roles of Composition and Mesostucture of Cobalt-Based Spinel Catalysts in Oxygen Evolution Reactions. <i>Chemistry - A European Journal</i> , 2021, 27, 17038-17048.   | 1.7  | 13        |
| 1769 | $\text{Cu}_2\text{Se}$ nanowires shelled with NiFe layered double hydroxide nanosheets for overall water-splitting. <i>Journal of Colloid and Interface Science</i> , 2021, 599, 370-380.  | 5.0  | 57        |
| 1770 | Preparation of biochar-interpenetrated iron-alginate hydrogel as a pH-independent sorbent for removal of Cr(VI) and Pb(II). <i>Environmental Pollution</i> , 2021, 287, 117303.  | 3.7  | 49        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1771 | Corrosion of monometallic iron- and nickel-based electrocatalysts for the alkaline oxygen evolution reaction: A review. <i>Journal of Power Sources</i> , 2021, 510, 230387.   | 4.0  | 21        |
| 1772 | 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        |
| 1773 | Design of bimetallic nickel-iron quantum dots with tunable compositions for enhanced electrochemical water splitting. <i>Electrochimica Acta</i> , 2021, 392, 139016.  | 2.6  | 8         |
| 1774 | Self-supporting NiFe LDH-MoS integrated electrode for highly efficient water splitting at the industrial electrolysis conditions. <i>Chinese Journal of Catalysis</i> , 2021, 42, 1732-1741.   | 6.9  | 50        |
| 1775 | Surface structure regulation and evaluation of FeNi-based nanoparticles for oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2021, 297, 120462.  | 10.8 | 95        |
| 1776 | Dual active site tandem catalysis of metal hydroxyl oxides and single atoms for boosting oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2021, 297, 120451.   | 10.8 | 44        |
| 1777 | In-situ growth of CoFeS <sub>2</sub> on metal-organic frameworks-derived Co-NC polyhedron enables high-performance oxygen electrocatalysis for rechargeable zinc-air batteries. <i>Journal of Power Sources</i> , 2021, 512, 230430. | 4.0  | 25        |
| 1778 | Designing a spontaneously deriving NiFe-LDH from bimetallic MOF-74 as an electrocatalyst for oxygen evolution reaction in alkaline solution. <i>Chemical Engineering Journal</i> , 2021, 423, 130204.                                | 6.6  | 50        |
| 1779 | Anion-cation-dual doped tremella-like nickel phosphides for electrocatalytic water oxidation. <i>Chemical Engineering Journal</i> , 2021, 426, 130718.   | 6.6  | 46        |
| 1780 | Cobalt doped iron phosphate thin film: An effective catalyst for electrochemical water splitting. <i>Journal of Alloys and Compounds</i> , 2021, 885, 160914.  | 2.8  | 27        |
| 1781 | Fully exposed edge/corner active sites in Fe substituted-Ni(OH) <sub>2</sub> tube-in-tube arrays for efficient electrocatalytic oxygen evolution. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120558.                     | 10.8 | 26        |
| 1782 | Stable and active NiFeW layered double hydroxide for enhanced electrocatalytic oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 426, 130768.   | 6.6  | 42        |
| 1783 | Hierarchical porous nickel supported NiFeOxHy nanosheets for efficient and robust oxygen evolution electrocatalyst under industrial condition. <i>Applied Catalysis B: Environmental</i> , 2021, 299, 120668.                        | 10.8 | 62        |
| 1784 | Facile coordination driven synthesis of metal-organic gels toward efficiently electrocatalytic overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2021, 299, 120641.   | 10.8 | 39        |
| 1785 | Incorporation of Fe in mixed CoCu-alkoxide hollow sphere for enhancing the electrochemical water oxidation performance. <i>Materials Today Chemistry</i> , 2021, 22, 100586.   | 1.7  | 8         |
| 1786 | Constructing accelerated charge transfer channels along V-Co-Fe via introduction of V into CoFe-layered double hydroxides for overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120587.                | 10.8 | 52        |
| 1787 | High-valence Ni and Fe sites on sulfated NiFe-LDH nanosheets to enhance O-O coupling for water oxidation. <i>Chemical Engineering Journal</i> , 2021, 426, 130873.   | 6.6  | 70        |
| 1788 | Highly efficient and stable bifunctional electrocatalysts with decoupled active sites for hydrogen evolution and oxygen reduction reactions. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120530.                          | 10.8 | 29        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1789 | Unexpected increasing Co valence state of an exsolved catalyst by Mo doping for enhanced oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 425, 130681.  | 6.6  | 11        |
| 1790 | In-situ synthesis of microflower composed of N-doped carbon films and Mo <sub>2</sub> C coupled with Ni or FeNi alloy for water splitting. <i>Chemical Engineering Journal</i> , 2022, 427, 131712.   | 6.6  | 18        |
| 1791 | Ultrafast, scalable and green synthesis of amorphous iron-nickel based durable water oxidation electrode with very high intrinsic activity via potential pulses. <i>Chemical Engineering Journal</i> , 2022, 428, 130688.                                 | 6.6  | 2         |
| 1792 | Electronic wastes: A near inexhaustible and an unimaginably wealthy resource for water splitting electrocatalysts. <i>Journal of Hazardous Materials</i> , 2022, 421, 126687.   | 6.5  | 18        |
| 1793 | Boosting oxygen evolution activity of nickel iron hydroxide by iron hydroxide colloidal particles. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 518-525.  | 5.0  | 12        |
| 1794 | Investigations of the stability of etched or platinized p-InP(100) photocathodes for solar-driven hydrogen evolution in acidic or alkaline aqueous electrolytes. <i>Energy and Environmental Science</i> , 2021, 14, 6007-6020.                           | 15.6 | 33        |
| 1795 | Solid-state redox couple mediated water splitting. <i>Dalton Transactions</i> , 2021, 50, 2722-2725.  | 1.6  | 5         |
| 1796 | Oxygen evolution reaction (OER) at nanostructured metal oxide electrocatalysts in water electrolyzers. , 2021, , 61-81.   |      | 2         |
| 1797 | Strain Controlling Catalytic Efficiency of Water Oxidation for Ni <sub>1-x</sub> Fe <sub>x</sub> OOH Alloy. <i>Molecular Modeling and Simulation</i> , 2021, , 1-23.  | 0.2  | 1         |
| 1798 | Nano-Confined Hybridization and Electrocatalytic Application Based on 3D Mesoporous Graphene Framework. <i>Springer Theses</i> , 2021, , 89-118.  | 0.0  | 0         |
| 1799 | Ethylene glycol-mediated one-pot synthesis of Fe incorporated Ni-Ni(OH) <sub>2</sub> 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        |
| 1800 | Nb-Doped nickel nitride-derived catalysts for electrochemical water splitting. <i>Catalysis Science and Technology</i> , 2021, 11, 6455-6461.   | 2.1  | 6         |
| 1801 | A self-supported FeNi layered double hydroxide anode with high activity and long-term stability for efficient oxygen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2021, 5, 3205-3212.  | 2.5  | 3         |
| 1802 | Ni on graphene oxide: a highly active and stable alkaline oxygen evolution catalyst. <i>Catalysis Science and Technology</i> , 2021, 11, 4026-4033.   | 2.1  | 9         |
| 1803 | Tip-Enhanced Electric Field: A New Mechanism Promoting Mass Transfer in Oxygen Evolution Reactions. <i>Advanced Materials</i> , 2021, 33, e2007377.   | 11.1 | 179       |
| 1804 | Electrochemically Activated NiFeO <sub>x</sub> H <sub>y</sub> for Enhanced Oxygen Evolution. <i>ACS Applied Energy Materials</i> , 2021, 4, 595-601.  | 2.5  | 10        |
| 1805 | Anodized Nickel Foam for Oxygen Evolution Reaction in Fe-Free and Unpurified Alkaline Electrolytes at High Current Densities. <i>ACS Nano</i> , 2021, 15, 3468-3480.  | 7.3  | 54        |
| 1806 | A New High Entropy Glycerate for High Performance Oxygen Evolution Reaction. <i>Advanced Science</i> , 2021, 8, 2002446.  | 5.6  | 95        |

| #    | ARTICLE  | IF  | CITATIONS |
|------|--|-----|-----------|
| 1807 | Water oxidation kinetics of nanoporous BiVO <sub>4</sub> photoanodes functionalised with nickel/iron oxyhydroxide electrocatalysts. <i>Chemical Science</i> , 2021, 12, 7442-7452.   | 3.7 | 32        |
| 1808 | Nickel Iron Diselenide for Highly Efficient and Selective Electrocatalytic Conversion of Methanol to Formate. <i>Small</i> , 2021, 17, e2006623.   | 5.2 | 29        |
| 1809 | Challenge in metal-air batteries: From the design to the performance of metal oxide-based electrocatalysts. , 2021, , 187-212.   |     | 0         |
| 1810 | Hierarchically porous FeNi <sub>3</sub> @FeNi layered double hydroxide nanostructures: one-step fast electrodeposition and highly efficient electrocatalytic performances for overall water splitting. <i>Dalton Transactions</i> , 2021, 50, 6306-6314. | 1.6 | 29        |
| 1811 | Simultaneous phase transformation and doping <i>via</i> a unique photochemical–electrochemical strategy to achieve a highly active Fe-doped Ni oxyhydroxide oxygen evolution catalyst. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4213-4220.     | 5.2 | 26        |
| 1812 | Electrodeposited Trimetallic NiFeW Hydroxide Electrocatalysts for Efficient Water Oxidation. <i>ChemSusChem</i> , 2021, 14, 1324-1335.   | 3.6 | 31        |
| 1813 | System Chemistry in Catalysis: Facing the Next Challenges in Production of Energy Vectors and Environmental Remediation. <i>Catalysts</i> , 2021, 11, 64.  | 1.6 | 5         |
| 1814 | Recent Advanced Study of Novel Electrode Materials. <i>Advances in Analytical Chemistry</i> , 2021, 11, 200-216.   | 0.1 | 1         |
| 1815 | Tuning the selectivity of biomass oxidation over oxygen evolution on NiO–OH electrodes. <i>Green Chemistry</i> , 2021, 23, 8061-8068.  | 4.6 | 20        |
| 1816 | Active Phase on SrCo <sub>1-x</sub> Fe <sub>x</sub> O <sub>3-δ</sub> (0 ≤ x ≤ 0.5) Perovskite for Water Oxidation: Reconstructed Surface versus Remaining Bulk. <i>Jacs Au</i> , 2021, 1, 108-115.   | 3.6 | 47        |
| 1817 | 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        |
| 1818 | Recent Advances in Non-Precious Metal-Based Electrodes for Alkaline Water Electrolysis. <i>ChemNanoMat</i> , 2020, 6, 336-355.   | 1.5 | 92        |
| 1819 | The Effect of Iron Impurities on Transition Metal Catalysts for the Oxygen Evolution Reaction in Alkaline Environment: Activity Mediators or Active Sites?. <i>Catalysis Letters</i> , 2021, 151, 1843-1856.   | 1.4 | 46        |
| 1820 | Common Pitfalls of Reporting Electrocatalysts for Water Splitting. <i>Chemical Research in Chinese Universities</i> , 2020, 36, 360-365.   | 1.3 | 12        |
| 1821 | Efficient optimization of nickel-cerium interface by constructing ethylene glycol ligand environment for fast water oxidation reaction kinetics. <i>Science China Materials</i> , 2020, 63, 1731-1740.   | 3.5 | 5         |
| 1822 | Controlled synthesis and fine-tuned interface of NiS nanoparticles/Bi <sub>2</sub> WO <sub>6</sub> nanosheets heterogeneous as electrocatalyst for oxygen evolution reaction. <i>Applied Surface Science</i> , 2020, 526, 146718.                        | 3.1 | 16        |
| 1823 | Iron doped Ni <sub>3</sub> S <sub>2</sub> nanorods directly grown on FeNi <sub>3</sub> foam as an efficient bifunctional catalyst for overall water splitting. <i>Chemical Engineering Journal</i> , 2020, 396, 125315.                                  | 6.6 | 97        |
| 1824 | The electrochemical overall water splitting promoted by MoS <sub>2</sub> in coupled nickel–iron (oxy)hydride/molybdenum sulfide/graphene composite. <i>Chemical Engineering Journal</i> , 2020, 397, 125454.   | 6.6 | 32        |

| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 1825 | Low loading platinum dispersed on Ni/C nanoparticles as high active catalysts for urea electrooxidation reaction. <i>Electrochimica Acta</i> , 2020, 355, 136752.   | 2.6 | 12        |
| 1826 | Nanoporous NiFeMoP alloy as a bifunctional catalyst for overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 16447-16457.   | 3.8 | 30        |
| 1827 | Active nickel derived from coordination complex with weak inter/intra-molecular interactions for efficient hydrogen evolution via a tandem mechanism. <i>Journal of Catalysis</i> , 2020, 389, 29-37.   | 3.1 | 7         |
| 1828 | Self-assembled 3D hierarchical MnCO <sub>3</sub> /NiFe layered double hydroxides as a superior electrocatalysts for the oxygen evolution reactions. <i>Journal of Colloid and Interface Science</i> , 2020, 566, 224-233.   | 5.0 | 32        |
| 1829 | Photochemically deposited Ir-doped NiCo oxyhydroxide nanosheets provide highly efficient and stable electrocatalysts for the oxygen evolution reaction. <i>Nano Energy</i> , 2020, 75, 104885.  | 8.2 | 30        |
| 1830 | Transformation of stainless steel 316 into a bifunctional water splitting electrocatalyst tolerant to polarity switching. <i>Sustainable Materials and Technologies</i> , 2020, 25, e00177.   | 1.7 | 9         |
| 1831 | Hybrid Catalytic-Protective Structure of CuInS <sub>2</sub> and B-N Doped Carbon as a Highly Efficient and Ultra-Stable Electrocatalyst for Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2021, 125, 546-557.   | 1.5 | 10        |
| 1832 | Gd-Doped Ni-Oxychloride Nanoclusters: New Nanoscale Electrocatalysts for High-Performance Water Oxidation through Surface and Structural Modification. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 468-479.   | 4.0 | 33        |
| 1833 | Chapter 11. Prototyping Development of Integrated Solar-driven Water-splitting Cells. <i>RSC Energy and Environment Series</i> , 2018, , 387-453.   | 0.2 | 2         |
| 1834 | Electro-deposition of nickel-iron nanoparticles on flower-like MnCo <sub>2</sub> O <sub>4</sub> nanowires as an efficient bifunctional electrocatalyst for overall water splitting. <i>CrystEngComm</i> , 2020, 22, 1425-1435.  | 1.3 | 22        |
| 1835 | Electrosynthesis of CuO nanocrystal array as a highly efficient and stable electrocatalyst for oxygen evolution reaction. <i>Chinese Journal of Chemical Physics</i> , 2018, 31, 806-812.   | 0.6 | 3         |
| 1836 | One-step synthesis of carbon nanospheres with an encapsulated iron-nickel nanoalloy and its potential use as an electrocatalyst. <i>Nanotechnology</i> , 2021, 32, 095706.  | 1.3 | 10        |
| 1837 | 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         |
| 1838 | Oxyanion induced variations in domain structure for amorphous cobalt oxide oxygen evolving catalysts, resolved by X-ray pair distribution function analysis. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2015, 71, 713-721.                    | 0.5 | 17        |
| 1839 | Inexpensive and Efficient Alkaline Water Electrolyzer with Robust Steel-Based Electrodes. <i>Journal of the Electrochemical Society</i> , 2020, 167, 114513.  | 1.3 | 20        |
| 1840 | Review—A Review on Electrodes Used in Electroorganic Synthesis and the Significance of Coupled Electrocatalytic Reactions. <i>Journal of the Electrochemical Society</i> , 2020, 167, 125503.   | 1.3 | 12        |
| 1841 | Sputtered Nickel Oxide Thin Films on n-Si(100)/SiO <sub>2</sub> Surfaces for Photo-Electrochemical Oxygen Evolution Reaction (OER): Impact of Deposition Temperature on OER Performance and on Composition before and after OER. <i>Journal of the Electrochemical Society</i> , 2020, 167, 136514. | 1.3 | 13        |
| 1842 | Three-Dimensional NiFe Layered Double Hydroxide Nanowire/Nanoporous Ni/Nickel Foam for Efficient Oxygen Evolution. <i>Journal of the Electrochemical Society</i> , 2020, 167, 146513.   | 1.3 | 13        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1843 | Gallium Phosphide photoanode coated with TiO <sub>2</sub> and CoO <sub>x</sub> for stable photoelectrochemical water oxidation. Optics Express, 2019, 27, A364.   | 1.7  | 18        |
| 1844 | Stabilizing oxygen intermediates on redox-flexible active sites in multimetallic Ni-Fe-Al-Co layered double hydroxide anodes for excellent alkaline and seawater electrolysis. Journal of Materials Chemistry A, 2021, 9, 27332-27346.          | 5.2  | 33        |
| 1845 | Deciphering the alternating synergy between interlayer Pt single-atom and NiFe layered double hydroxide for overall water splitting. Energy and Environmental Science, 2021, 14, 6428-6440.   | 15.6 | 164       |
| 1846 | Assessing nickel oxide electrocatalysts incorporating diamines and having improved oxygen evolution activity using <i>in operando</i> UV/visible and X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 23280-23287. | 1.3  | 6         |
| 1847 | A self-healing catalyst for electrocatalytic and photoelectrochemical oxygen evolution in highly alkaline conditions. Nature Communications, 2021, 12, 5980.  | 5.8  | 88        |
| 1848 | Evolution of Cationic Vacancy Defects: A Motif for Surface Restructuration of OER Precatalyst. Angewandte Chemie - International Edition, 2021, 60, 26829-26836.  | 7.2  | 210       |
| 1849 | Direct Probing of the Oxygen Evolution Reaction at Single NiFe <sub>2</sub> O <sub>4</sub> Nanocrystal Superparticles with Tunable Structures. Journal of the American Chemical Society, 2021, 143, 16925-16929.                                | 6.6  | 38        |
| 1850 | Gel-like State of Nickel Hydroxide Created by Electrochemical Aging under Alkaline Conditions. ACS Applied Energy Materials, 2021, 4, 10668-10681.  | 2.5  | 1         |
| 1851 | Single-Atom Catalysts: Advances and Challenges in Metal-Support Interactions for Enhanced Electrocatalysis. Electrochemical Energy Reviews, 2022, 5, 145-186.   | 13.1 | 86        |
| 1852 | Iron-doped nanoflakes of layered double hydroxide of nickel for high-performance hybrid zinc batteries. Materials Today Energy, 2021, 22, 100879.   | 2.5  | 6         |
| 1853 | Engineering Ultrafine NiFe-LDH into Self-Supporting Nanosheets: Separation and Reunion Strategy to Expose Additional Edge Sites for Oxygen Evolution. Small, 2021, 17, e2103785.  | 5.2  | 35        |
| 1854 | Amorphous FeNiNbPC nanoporous structure for efficient and stable electrochemical oxygen evolution. Journal of Colloid and Interface Science, 2022, 608, 1973-1982.  | 5.0  | 13        |
| 1855 | Porous Ni(OH) <sub>2</sub> permselective membrane to identify the mechanism of hydrogen evolution reaction in buffered solution. Electrochimica Acta, 2022, 401, 139444.  | 2.6  | 2         |
| 1856 | Ni(OH) <sub>2</sub> microspheres in situ self-grown on ultra-thin layered g-C <sub>3</sub> N <sub>4</sub> as a heterojunction electrocatalyst for oxygen evolution reaction. Electrochimica Acta, 2021, 400, 139473.                            | 2.6  | 31        |
| 1857 | Recent advances in Ni-Fe (Oxy)hydroxide electrocatalysts for the oxygen evolution reaction in alkaline electrolyte targeting industrial applications. Nano Select, 2022, 3, 766-791.  | 1.9  | 16        |
| 1858 | Ni-Fe layered double hydroxides for oxygen evolution Reaction: Impact of Ni/Fe ratio and crystallinity. Materials and Design, 2021, 212, 110188.  | 3.3  | 22        |
| 1859 | Efficient Alkaline Water Oxidation with a Regenerable Nickel Pseudo-Complex. ACS Applied Materials & Interfaces, 2021, 13, 48661-48668.   | 4.0  | 6         |
| 1860 | Evolution of Cationic Vacancy Defects: A Motif for Surface Restructuration of OER Precatalyst. Angewandte Chemie, 2021, 133, 27033-27040.   | 1.6  | 5         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1861 | Revealing the Dynamics and Roles of Iron Incorporation in Nickel Hydroxide Water Oxidation Catalysts. <i>Journal of the American Chemical Society</i> , 2021, 143, 18519-18526.   | 6.6  | 96        |
| 1862 | Solar-Driven Water Splitting at 13.8% Solar-to-Hydrogen Efficiency by an Earth-Abundant Electrolyzer. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 14070-14078.  | 3.2  | 15        |
| 1863 | Identification of the Active-Layer Structures for Acidic Oxygen Evolution from 9R-BaIrO <sub>3</sub> Electrocatalyst with Enhanced Iridium Mass Activity. <i>Journal of the American Chemical Society</i> , 2021, 143, 18001-18009.   | 6.6  | 73        |
| 1864 | Constructing spin pathways in LaCoO <sub>3</sub> by Mn substitution to promote oxygen evolution reaction. <i>Applied Physics Letters</i> , 2021, 119, .   | 1.5  | 12        |
| 1865 | Concurrent H <sub>2</sub> Generation and Formate Production Assisted by CO <sub>2</sub> Absorption in One Electrolyzer. <i>Small Methods</i> , 2021, 5, e2100871.   | 4.6  | 9         |
| 1866 | Ultrathin Cobalt Oxide Interlayer Facilitated Hole Storage for Sustained Water Oxidation over Composited Tantalum Nitride Photoanodes. <i>ACS Catalysis</i> , 2021, 11, 12736-12744.  | 5.5  | 35        |
| 1867 | Structure-Activity Relationships in Ni-Fe Oxyhydroxide Oxygen Evolution Electrocatalysts. <i>ECS Meeting Abstracts</i> , 2016, , .  | 0.0  | 0         |
| 1868 | Chapter 5. Evaluating Electrocatalysts for Solar Water-splitting Reactions. <i>RSC Energy and Environment Series</i> , 2018, , 154-181.   | 0.2  | 0         |
| 1869 | Atomic-resolution STEM Analysis of Nanoparticle During Electrocatalytic Reactions. <i>Microscopy and Microanalysis</i> , 2020, 26, 910-911.   | 0.2  | 0         |
| 1870 | In Situ Fabrication of Nickel-Iron Oxalate Catalysts for Electrochemical Water Oxidation at High Current Densities. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 52620-52628.  | 4.0  | 36        |
| 1871 | Quasi-Parallel NiFe Layered Double Hydroxide Nanosheet Arrays for Large-Current-Density Oxygen Evolution Electrocatalysis. <i>ChemSusChem</i> , 2022, 15, .   | 3.6  | 16        |
| 1872 | Enhancement of Catalytic Activity and Stability of La <sub>0.6</sub> Ca <sub>0.4</sub> Fe <sub>0.7</sub> Ni <sub>0.3</sub> O <sub>2.9</sub> Perovskite with ppm Concentration of Fe in the Electrolyte for the Oxygen Evolution Reaction. <i>Materials</i> , 2021, 14, 6403.              | 1.3  | 0         |
| 1874 | Double-atom catalysts as a molecular platform for heterogeneous oxygen evolution electrocatalysis. <i>Nature Energy</i> , 2021, 6, 1054-1066.   | 19.8 | 159       |
| 1875 | The evolution of bimetal hydroxide fragments from brucite to goethite in metal-organic frameworks for enhanced oxygen evolution reaction. <i>Journal of Solid State Chemistry</i> , 2020, 292, 121751.  | 1.4  | 0         |
| 1876 | Grass-like Ni <sub>x</sub> Se <sub>y</sub> nanowire arrays shelled with NiFe LDH nanosheets as a 3D hierarchical core-shell electrocatalyst for efficient upgrading of biomass-derived 5-hydroxymethylfurfural and furfural. <i>Catalysis Science and Technology</i> , 2022, 12, 201-211. | 2.1  | 24        |
| 1877 | Recent advances of anion regulated NiFe-based electrocatalysts for water oxidation. <i>Sustainable Energy and Fuels</i> , 2021, 5, 6298-6309.   | 2.5  | 7         |
| 1878 | Earth-abundant electrocatalysts for sustainable energy conversion. , 2022, , 131-168.   |      | 0         |
| 1879 | Core-shell trimetallic NiFeV disulfides and amorphous high-valance NiFe hydroxide nanosheets enhancing oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 430, 133047.  | 6.6  | 30        |



| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1880 | Role of Earth-Abundant/Carbonaceous Electrocatalysts as Cocatalyst for Solar Water Splitting. , 2020, , 201-220.   |      | 0         |
| 1881 | Highly Efficient Electrocatalytic Water Splitting. , 2020, , 1-33.   |      | 0         |
| 1882 | Dynamic Surface Reconstruction Unifies the Electrocatalytic Oxygen Evolution Performance of Nonstoichiometric Mixed Metal Oxides. Jacs Au, 2021, 1, 2224-2241.   | 3.6  | 23        |
| 1883 | Ce-Doped FeNi-Layered Double Hydroxide Nanosheets Grown on an Open-Framework Nickel Phosphate Nanorod Array for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2021, 4, 12836-12847.         | 2.5  | 13        |
| 1884 | Advances and Challenges in Industrial-Scale Water Oxidation on Layered Double Hydroxides. ACS Applied Energy Materials, 2021, 4, 12032-12055.  | 2.5  | 15        |
| 1885 | Recent advances in carbon substrate supported nonprecious nanoarrays for electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2021, 9, 25773-25795.                                    | 5.2  | 71        |
| 1886 | Rapid large-scale synthesis of ultrathin NiFe-layered double hydroxide nanosheets with tunable structures as robust oxygen evolution electrocatalysts. RSC Advances, 2021, 11, 37624-37630.            | 1.7  | 7         |
| 1887 | Modern applications of scanning electrochemical microscopy in the analysis of electrocatalytic surface reactions. Chinese Journal of Catalysis, 2022, 43, 59-70.                                       | 6.9  | 8         |
| 1888 | Epitaxial oxide thin films for oxygen electrocatalysis: A tutorial review. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 010801.                                   | 0.9  | 12        |
| 1889 | Efficient OER nanocomposite electrocatalysts based on Ni and/or Co supported on MoSe <sub>2</sub> nanoribbons and MoS <sub>2</sub> nanosheets. Chemical Engineering Journal Advances, 2022, 9, 100206. | 2.4  | 16        |
| 1890 | Surface-Engineered Cocatalyst Foils Unraveling a Pathway to High-Performance Solar Water Splitting. Advanced Energy Materials, 2022, 12, 2102752.  | 10.2 | 11        |
| 1891 | Unveiling the Impact of Fe Incorporation on Intrinsic Performance of Reconstructed Water Oxidation Electrocatalyst. ACS Energy Letters, 2021, 6, 4345-4354.  | 8.8  | 67        |
| 1892 | Recent Progress on Transition Metal Based Layered Double Hydroxides Tailored for Oxygen Electrode Reactions. Catalysts, 2021, 11, 1394.  | 1.6  | 8         |
| 1893 | Aerosol-assisted chemical vapor deposition of nickel sulfide nanowires for electrochemical water oxidation. International Journal of Hydrogen Energy, 2022, 47, 42001-42012.                           | 3.8  | 24        |
| 1894 | New insights into cations effect in oxygen evolution reaction. Chemical Engineering Journal, 2021, 433, 133518.  | 6.6  | 0         |
| 1895 | Heterointerface Engineering of Ni <sub>2</sub> -Co <sub>2</sub> P Nanoframes for Efficient Water Splitting. Chemistry of Materials, 2021, 33, 9165-9173.   | 3.2  | 53        |
| 1896 | Evaluating Properties of Carbon-Free Nano-NiCoFe-LDHs with Molybdate as Oxygen Evolution Catalysts and Their Applications in Rechargeable Air Electrodes. Energy & Fuels, 2021, 35, 20374-20385.       | 2.5  | 7         |
| 1897 | Fluoride etched Ni-based electrodes as economic oxygen evolution electrocatalysts. International Journal of Hydrogen Energy, 2022, 47, 1613-1623.  | 3.8  | 7         |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1898 | Boosting Surface Reconstruction for the Oxygen Evolution Reaction: A Combined Effect of Heteroatom Incorporation and Anion Etching in Cobalt Silicate Precatalyst. <i>ChemElectroChem</i> , 2022, 9, .   | 1.7  | 4         |
| 1899 | Ionomer-Free Nickel-Iron bimetallic electrodes for efficient anion exchange membrane water electrolysis. <i>Chemical Engineering Journal</i> , 2022, 433, 133774.  | 6.6  | 22        |
| 1900 | Unveiling the boosting of metal organic cage leaching substance on the electrocatalytic oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2022, 610, 1035-1042.   | 5.0  | 6         |
| 1901 | In situ activation of Br-confined Ni-based metal-organic framework hollow prisms toward efficient electrochemical oxygen evolution. <i>Science Advances</i> , 2021, 7, eabk0919.   | 4.7  | 87        |
| 1902 | K-Edge XANES Investigation of Fe-Based Oxides by Density Functional Theory Calculations. <i>Journal of Physical Chemistry C</i> , 2021, 125, 26229-26239.  | 1.5  | 11        |
| 1903 | Ultrathin NiFeS nanosheets as highly active electrocatalysts for oxygen evolution reaction. <i>Chinese Chemical Letters</i> , 2022, 33, 3916-3920.   | 4.8  | 18        |
| 1904 | Single-atom catalysis for zinc-air/O <sub>2</sub> batteries, water electrolyzers and fuel cells applications. <i>Energy Storage Materials</i> , 2022, 45, 504-540.   | 9.5  | 39        |
| 1905 | Green hydrogen production via electrochemical conversion of components from alkaline carbohydrate degradation. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 3644-3654.  | 3.8  | 9         |
| 1906 | Enhanced Electrocatalytic Activity by NiCu-LDH/CoS as Dual Co-Catalysts on G- <sub>3</sub> N <sub>4</sub> Nanosheets in NiCu-LDH@CoS/G-C <sub>3</sub> N <sub>4</sub> Nanostructure for Oxygen Evolution Reactions. <i>SSRN Electronic Journal</i> , 0, , . | 0.4  | 0         |
| 1907 | Recent advances in photo-assisted electrocatalysts for energy conversion. <i>Journal of Materials Chemistry A</i> , 2021, 9, 27193-27214.  | 5.2  | 19        |
| 1908 | Mixed metal-antimony oxide nanocomposites: low pH water oxidation electrocatalysts with outstanding durability at ambient and elevated temperatures. <i>Journal of Materials Chemistry A</i> , 2021, 9, 27468-27484.                                       | 5.2  | 19        |
| 1909 | Cobalt, iron co-incorporated Ni(OH) <sub>2</sub> multiphase for superior multifunctional electrocatalytic oxidation. <i>Chemical Communications</i> , 2021, 57, 13752-13755.   | 2.2  | 4         |
| 1910 | Metal Oxide Co-catalyst Nanolayers on Photoelectrodes. <i>RSC Energy and Environment Series</i> , 2022, , 135-166.   | 0.2  | 0         |
| 1911 | Shining Light on Anion-Mixed Nanocatalysts for Efficient Water Electrolysis: Fundamentals, Progress, and Perspectives. <i>Nano-Micro Letters</i> , 2022, 14, 43.   | 14.4 | 62        |
| 1912 | NiMoFe/Cu nanowire core-shell catalysts for high-performance overall water splitting in neutral electrolytes. <i>Chemical Communications</i> , 2022, 58, 1569-1572.  | 2.2  | 14        |
| 1913 | Unraveling the Reaction Interfaces and Intermediates of Ru-Catalyzed LiOH Decomposition in DMSO-Based Li <sub>2</sub> O Batteries. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 471-478.   | 2.1  | 9         |
| 1914 | Carbon-based iron-cobalt phosphate FeCoP/C as an effective ORR/OER/HER trifunctional electrocatalyst. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 635, 128118.   | 2.3  | 21        |
| 1915 | Fe-doping induced electronic structure reconstruction in Ni-based metal-organic framework for improved energy-saving hydrogen production via urea degradation. <i>Journal of Power Sources</i> , 2022, 520, 230882.  | 4.0  | 44        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1916 | Thermo-selenized stainless steel as an efficient oxygen evolution electrode for water splitting and CO <sub>2</sub> electrolysis in real water matrices. <i>Journal of Power Sources</i> , 2022, 521, 230953.  | 4.0  | 10        |
| 1917 | Directional regulating dynamic equilibrium to continuously update electrocatalytic interface for oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 431, 134040.   | 6.6  | 90        |
| 1918 | Heterostructure Ni(OH) <sub>2</sub> /ZrO <sub>2</sub> catalyst can achieve efficient oxygen reduction reaction. <i>Chemical Engineering Science</i> , 2022, 250, 117398.   | 1.9  | 4         |
| 1919 | Amorphous-crystalline heterostructure for simulated practical water splitting at high-current density. <i>Chemical Engineering Journal</i> , 2022, 431, 134247.  | 6.6  | 29        |
| 1920 | Dispersed FeO nanoparticles decorated with Co <sub>2</sub> SiO <sub>4</sub> hollow spheres for enhanced oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2022, 611, 235-245.   | 5.0  | 19        |
| 1921 | Sulfur-doping/leaching induced structural transformation toward boosting electrocatalytic water splitting. <i>Applied Catalysis B: Environmental</i> , 2022, 305, 121030.  | 10.8 | 40        |
| 1922 | Metal/antiperovskite metal nitride composites Ag/AgNNi <sub>3</sub> as novel efficient electrocatalysts for hydrogen evolution reaction in alkaline media. <i>Journal of Materials Science and Technology</i> , 2022, 112, 222-229.                              | 5.6  | 8         |
| 1923 | Boosting oxygen evolution over inverse spinel Fe-Co-Mn oxide nanocubes through electronic structure engineering. <i>Chemical Engineering Journal</i> , 2022, 433, 134446.  | 6.6  | 16        |
| 1924 | Fe-Doped (Ni,Mn)Co <sub>2</sub> O <sub>4</sub> Nanorod Arrays on Ni Foam as Highly Efficient Electrocatalyst for Oxygen Evolution Reaction in Alkaline and Neutral Conditions with Superb Long-Term Stability. <i>SSRN Electronic Journal</i> , 0, , .           | 0.4  | 0         |
| 1925 | Study on Mechanism of the Low-Temperature Catalytic Reaction of Holes in 2D Ultrathin Nanosheets and the Catalyst Deactivation. <i>SSRN Electronic Journal</i> , 0, , .  | 0.4  | 0         |
| 1926 | Enhanced Electrocatalytic Activity by NiCu-LDH/CoS as Dual Co-Catalysts on G-C <sub>3</sub> N <sub>4</sub> Nanosheets in NiCu-LDH@CoS/G-C <sub>3</sub> N <sub>4</sub> Nanostructure for Oxygen Evolution Reactions. <i>SSRN Electronic Journal</i> , 0, , .      | 0.4  | 0         |
| 1927 | Layered Double Hydroxide Catalysts Preparation, Characterization and Applications for Process Development: An Environmentally Green Approach. <i>Bulletin of Chemical Reaction Engineering and Catalysis</i> , 2022, 17, 163-193.                                | 0.5  | 2         |
| 1928 | Boosting the OER Performance of Nitrogen-Doped Ni Nanoclusters Confined in an Amorphous Carbon Matrix. <i>Inorganic Chemistry</i> , 2022, 61, 2360-2367.   | 1.9  | 11        |
| 1929 | Mechanistic Aspects of Cobalt Oxo Cubane Clusters in Oxidation Chemistry. <i>Journal of the American Chemical Society</i> , 2022, 144, 1475-1492.  | 6.6  | 15        |
| 1930 | Overcoming Hurdles in Oxygen Evolution Catalyst Discovery via Codesign. <i>Chemistry of Materials</i> , 2022, 34, 899-910.   | 3.2  | 17        |
| 1931 | In Situ Grown Cuboidal MnCo <sub>2</sub> O <sub>4</sub> /h Boron Nitride Heterojunction: A Noble Metal-Free Approach Based on Efficient Hole Extraction for Electrochemical Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2022, 5, 1551-1559. | 2.5  | 9         |
| 1932 | Ultra-small Ru nanoparticles embedded on Fe-Ni(OH) <sub>2</sub> nanosheets for efficient water splitting at a large current density with long-term stability of 680 hours. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4817-4824.                        | 5.2  | 46        |
| 1933 | Surface Tailored Medium Entropy Alloys as Radically Low Overpotential Oxygen Evolution Electrocatalysts. <i>Small</i> , 2022, 18, e2105611.  | 5.2  | 36        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1934 | Surprisingly Low Reactivity of Layered Manganese Oxide toward Water Oxidation in Fe/Ni-Free Electrolyte under Alkaline Conditions. <i>Inorganic Chemistry</i> , 2022, 61, 2292-2306.  | 1.9  | 21        |
| 1935 | Catalytic open-circuit passivation by thin metal oxide films of p-Si anodes in aqueous alkaline electrolytes. <i>Energy and Environmental Science</i> , 2022, 15, 334-345.  | 15.6 | 8         |
| 1936 | Converting silicon nanoparticles into nickel iron silicide nanocrystals within molten salts for water oxidation electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1350-1358.  | 5.2  | 17        |
| 1938 | Crystal Structures of Iron-Based Oxides and Their Catalytic Efficiencies for the Oxygen Evolution Reaction: A Trend in Alkaline Media. <i>ChemElectroChem</i> , 2022, 9, .  | 1.7  | 3         |
| 1939 | Charge transfer processes via tandem modification of efficient non-fullerene acceptors for organic solar cells. <i>Solar Energy</i> , 2022, 231, 503-515.   | 2.9  | 12        |
| 1940 | Fe doped NiS nanosheet arrays grown on carbon fiber paper for a highly efficient electrocatalytic oxygen evolution reaction. <i>Nanoscale Advances</i> , 2022, 4, 1220-1226.  | 2.2  | 19        |
| 1941 | Structure-Performance Relationship of LaFe <sub>1-x</sub> Co <sub>x</sub> O <sub>3</sub> Electrocatalysts for Oxygen Evolution, Isopropanol Oxidation, and Glycerol Oxidation. <i>ChemElectroChem</i> , 2022, 9, .  | 1.7  | 10        |
| 1942 | Comparison of Fe-enhanced oxygen evolution electrocatalysis in amorphous and crystalline nickel oxides to evaluate the structural contribution. <i>Energy and Environmental Science</i> , 2022, 15, 610-620.  | 15.6 | 37        |
| 1943 | Heterostructured nickel, iron sulfide@nitrogen, sulfur co-doped carbon hybrid with efficient interfacial charge redistribution as bifunctional catalyst for water electrolysis. <i>Applied Catalysis A: General</i> , 2022, 630, 118459.                              | 2.2  | 14        |
| 1944 | Recent progress in water-splitting and supercapacitor electrode materials based on MOF-derived sulfides. <i>Journal of Materials Chemistry A</i> , 2022, 10, 430-474.   | 5.2  | 54        |
| 1945 | Incorporation of Cu/Ni in Ordered Mesoporous Co-Based Spinel to Facilitate Oxygen Evolution and Reduction Reactions in Alkaline Media and Aprotic Li <sup>+</sup> O <sub>2</sub> Batteries. <i>ChemSusChem</i> , 2021, , .  | 3.6  | 9         |
| 1946 | Fe Coordination Environment, Fe-Incorporated Ni(OH) <sub>2</sub> Phase, and Metallic Core Are Key Structural Components to Active and Stable Nanoparticle Catalysts for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2022, 12, 1992-2008.                    | 5.5  | 27        |
| 1947 | Formation of Highly Active NiO(OH) Thin Films from Electrochemically Deposited Ni(OH) <sub>2</sub> by a Simple Thermal Treatment at a Moderate Temperature: A Combined Electrochemical and Surface Science Investigation. <i>ACS Catalysis</i> , 2022, 12, 1508-1519. | 5.5  | 34        |
| 1948 | Deciphering the Exceptional Performance of NiFe Hydroxide for the Oxygen Evolution Reaction in an Anion Exchange Membrane Electrolyzer. <i>ACS Applied Energy Materials</i> , 2022, 5, 2221-2230.   | 2.5  | 22        |
| 1949 | Nickel-Rich Ni <sub>3</sub> N Particles Stimulated by Defective Graphitic Carbon Nitrides for the Effective Oxygen Evolution Reaction. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 2081-2090.  | 1.8  | 21        |
| 1950 | Fe-atom-implantation induced regional phase reconstruction for high-entropy Ni <sub>x</sub> Sy construction with diversified crystallographic orientations towards accelerated water splitting. <i>Journal of Power Sources</i> , 2022, 522, 231004.                  | 4.0  | 15        |
| 1951 | Water dissociation on Mixed Co-Fe oxide bilayer nanoislands on Au(111). <i>Journal of Physics Condensed Matter</i> , 2022, , .  | 0.7  | 2         |
| 1952 | 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        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1953 | NiCo <sub>2</sub> O <sub>4</sub> nanostructures loaded onto pencil graphite rod: An advanced composite material for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 6650-6665.   | 3.8  | 30        |
| 1954 | Fe <sub>x</sub> Ni <sub>(1-x)</sub> coatings electrodeposited from choline chloride-urea mixture: Magnetic and electrocatalytic properties for water electrolysis. <i>Materials Chemistry and Physics</i> , 2022, 279, 125738.  | 2.0  | 7         |
| 1955 | Metal substrates activate NiFe(oxy)hydroxide catalysts for efficient oxygen evolution reaction in alkaline media. <i>Journal of Alloys and Compounds</i> , 2022, 901, 163689.   | 2.8  | 16        |
| 1956 | Zn constructs micro/nano porous structure to boost efficient oxygen evolution reaction for bulk NiFe alloy. <i>Journal of Alloys and Compounds</i> , 2022, 903, 164004.   | 2.8  | 7         |
| 1957 | Trimetallic nanoplate arrays of Ni-Fe-Mo sulfide on FeNi <sub>3</sub> foam: A highly efficient and bifunctional electrocatalyst for overall water splitting. <i>Journal of Alloys and Compounds</i> , 2022, 902, 163670.  | 2.8  | 26        |
| 1958 | Dynamic dissolution and re-adsorption of molybdate ion in iron incorporated nickel-molybdenum oxyhydroxide for promoting oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2022, 307, 121150.  | 10.8 | 88        |
| 1959 | Crystalline-amorphous interface of mesoporous Ni <sub>2</sub> P@FePO <sub>x</sub> Hy for oxygen evolution at high current density in alkaline-anion-exchange-membrane water-electrolyzer. <i>Applied Catalysis B: Environmental</i> , 2022, 306, 121127.                | 10.8 | 90        |
| 1960 | Oxygen Vacancies and Interface Engineering on Amorphous/Crystalline CrO <sub>x</sub> @Ni <sub>3</sub> N Heterostructures toward High Durability and Kinetically Accelerated Water Splitting. <i>Small</i> , 2022, 18, e2106554.   | 5.2  | 71        |
| 1961 | Iron-Doped Ni <sup>3+</sup> Al Layered Double Hydroxide as an Efficient Oxygen Evolution Reaction Electrocatalyst. <i>ChemNanoMat</i> , 2022, 8, .  | 1.5  | 4         |
| 1962 | Towards the Rational Design of Stable Electrocatalysts for Green Hydrogen Production. <i>Catalysts</i> , 2022, 12, 204.   | 1.6  | 1         |
| 1963 | Trimetallic oxide-hydroxide porous nanosheets for efficient water oxidation. <i>Chemical Engineering Journal</i> , 2022, 435, 135019.   | 6.6  | 13        |
| 1964 | Simultaneous integration of low-level rhenium (Re) doping and nitrogen-functionalized 3D carbon backbone into nickel-iron hydroxide (NiFeOH) to amplify alkaline water electrolysis at high current densities. <i>Chemical Engineering Journal</i> , 2022, 435, 135184. | 6.6  | 13        |
| 1965 | Heat 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         |
| 1966 | Layered double (Ni, Fe) hydroxide grown on nickel foam and modified by nickel carbonyl powder and carbon black as an efficient electrode for water splitting. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 19609-19618.                                  | 3.8  | 14        |
| 1967 | Simultaneous Integration of Low-Level Rhenium (Re) Doping and Nitrogen-Functionalized 3d Carbon Backbone into Nickel-Iron Hydroxide (NiFeoh) to Amplify Alkaline Water Electrolysis at High Current Densities. <i>SSRN Electronic Journal</i> , 0, , .                  | 0.4  | 0         |
| 1968 | Janus Hollow Nanofiber with Bi-Functional Oxygen Electrocatalyst for Rechargeable Zn-Air Battery. <i>SSRN Electronic Journal</i> , 0, , .   | 0.4  | 0         |
| 1969 | Metal-Organic Frameworks-Derived Nickel-Iron Oxyhydroxide with Highly Active Edge Sites For Electrochemical Oxygen Evolution. <i>SSRN Electronic Journal</i> , 0, , .   | 0.4  | 0         |
| 1970 | Enhanced oxygen evolution performance by the partial phase transformation of cobalt/nickel carbonate hydroxide nanosheet arrays in an Fe-containing alkaline electrolyte. <i>Inorganic Chemistry Frontiers</i> , 0, , .   | 3.0  | 11        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 1971 | Dynamic coordination transformation of active sites in single-atom MoS <sub>2</sub> catalysts for boosted oxygen evolution catalysis. <i>Energy and Environmental Science</i> , 2022, 15, 2071-2083.                                     | 15.6 | 33        |
| 1972 | Influence of Fe-clustering on the water oxidation performance of two-dimensional layered double hydroxides. <i>Dalton Transactions</i> , 2022, 51, 4675-4684.  | 1.6  | 7         |
| 1973 | Ultra-small-sized multi-element metal oxide nanofibers: an efficient electrocatalyst for hydrogen evolution. <i>Nanoscale Advances</i> , 2022, 4, 1758-1769.   | 2.2  | 3         |
| 1974 | Preparation of layered double hydroxide films using an electrodeposition and subsequent crystal growth method. <i>Clay Minerals</i> , 2021, 56, 284-291.   | 0.2  | 1         |
| 1975 | Boosting the Electrocatalytic Activity of Nickel-Iron Layered Double Hydroxide for the Oxygen Evolution Reaction by Terephthalic Acid. <i>Catalysts</i> , 2022, 12, 258.   | 1.6  | 7         |
| 1976 | Nickel-Based Electrocatalysts for Water Electrolysis. <i>Energies</i> , 2022, 15, 1609.  | 1.6  | 21        |
| 1977 | Finding the True Catalyst for Water Oxidation at Low Overpotential in the Presence of a Metal Complex. <i>Inorganic Chemistry</i> , 2022, 61, 3801-3810.   | 1.9  | 18        |
| 1978 | A Dual Functional Polymer Interlayer Enables Near-Infrared Absorbing Organic Photoanodes for Solar Water Oxidation. <i>Advanced Energy Materials</i> , 2022, 12, .   | 10.2 | 10        |
| 1979 | High-Valence Transition Metal Modified FeNi Oxides Anchored on Carbon Fiber Cloth for Efficient Oxygen Evolution Catalysis. <i>Advanced Fiber Materials</i> , 2022, 4, 774-785.  | 7.9  | 24        |
| 1980 | Strategies To Construct n-Type Si-Based Heterojunctions for Photoelectrochemical Water Oxidation. , 2022, 4, 779-804.  |      | 10        |
| 1981 | What is Next in Anion-Exchange Membrane Water Electrolyzers? Bottlenecks, Benefits, and Future. <i>ChemSusChem</i> , 2022, 15, .   | 3.6  | 77        |
| 1982 | A high-performance capillary-fed electrolysis cell promises more cost-competitive renewable hydrogen. <i>Nature Communications</i> , 2022, 13, 1304.   | 5.8  | 111       |
| 1983 | Engineering the Electronic Structures of Metal-Organic Framework Nanosheets via Synergistic Doping of Metal Ions and Counteranions for Efficient Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 15133-15140. | 4.0  | 23        |
| 1984 | Catalysis of the Water Oxidation Reaction in the Presence of Iron and a Copper Foil. <i>Inorganic Chemistry</i> , 2022, 61, 5653-5664.   | 1.9  | 9         |
| 1985 | Janus Hollow Nanofiber with Bifunctional Oxygen Electrocatalyst for Rechargeable Zn-Air Battery. <i>Small</i> , 2022, 18, e2200578.  | 5.2  | 48        |
| 1986 | Facile in-situ electrochemical fabrication of highly efficient nickel hydroxide-iron hydroxide/graphene hybrid for oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 12547-12558.                   | 3.8  | 12        |
| 1987 | Intrinsic defects of nonprecious metal electrocatalysts for energy conversion: Synthesis, advanced characterization, and fundamentals. <i>ChemPhysMater</i> , 2022, 1, 155-182.  | 1.4  | 6         |
| 1988 | Synthesis of hierarchical transition metal oxyhydroxides in aqueous solution at ambient temperature and their application as OER electrocatalysts. <i>Journal of Energy Chemistry</i> , 2022, 71, 89-97.                                 | 7.1  | 18        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 1989 | Self-healing oxygen evolution catalysts. <i>Nature Communications</i> , 2022, 13, 1243.   | 5.8  | 46        |
| 1990 | Co <sub>x</sub> (VO) <sub>y</sub> O <sub>z</sub> Nanocrystal-Integrated Covalent Organic Polymers as a Highly Active and Durable Catalyst for Electrochemical Water Oxidation: An Untold Role of the VO <sup>2+</sup> /VO <sub>2</sub> <sup>+</sup> Redox Couple. <i>ACS Applied Energy Materials</i> , 2022, 5, 2805-2816. | 2.5  | 10        |
| 1991 | Mesoporous Single Crystals with Fe-Rich Skin for Ultralow Overpotential in Oxygen Evolution Catalysis. <i>Advanced Materials</i> , 2022, 34, e2200088.  | 11.1 | 33        |
| 1992 | From Nickel Foam to Highly Active NiFe-based Oxygen Evolution Catalysts. <i>ChemElectroChem</i> , 2022, 9, .  | 1.7  | 3         |
| 1993 | Effect of Plating Variables on Oxygen Evolution Reaction of Ni-Zn-Fe Electrodes for Alkaline Water Electrolysis. <i>Catalysts</i> , 2022, 12, 346.  | 1.6  | 2         |
| 1994 | Three-Dimensional Flower-Like Bimetallic Nickel-Iron Selenide for Efficient Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2022, 126, 5131-5137.   | 1.5  | 13        |
| 1995 | Nanostructuring Matters: Stabilization of Electrocatalytic Oxygen Evolution Reaction Activity of ZnCo <sub>2</sub> O <sub>4</sub> by Zinc Leaching. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 15165-15175.  | 4.0  | 22        |
| 1997 | To Err is Human; To Reproduce Takes Time. <i>ACS Catalysis</i> , 2022, 12, 3644-3650.   | 5.5  | 16        |
| 1998 | Metal-Organic-Framework-Based Photo-electrochemical Cells for Solar Fuel Generation. <i>Journal of Physical Chemistry C</i> , 2022, 126, 5079-5091.   | 1.5  | 11        |
| 1999 | 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        |
| 2000 | 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         |
| 2001 | Self-supported metal (Fe, Co, Ni)-embedded nitrogen-doping carbon nanorod framework as trifunctional electrode for flexible Zn-air batteries and switchable water electrolysis. <i>Green Energy and Environment</i> , 2023, 8, 1644-1653.   | 4.7  | 9         |
| 2002 | Combinatorial Synthesis and Screening of a Ternary NiFeCoO <sub>x</sub> Library for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2022, 5, 4017-4024.  | 2.5  | 5         |
| 2003 | Oxygen vacancy-rich amorphous FeNi hydroxide nanoclusters as an efficient electrocatalyst for water oxidation. <i>Journal of Energy Chemistry</i> , 2022, 71, 167-173.  | 7.1  | 42        |
| 2004 | Ni-Fe Cathode Catalyst in Zero-Gap Alkaline Water Electrolysis. <i>Electrocatalysis</i> , 2022, 13, 447-456.  | 1.5  | 3         |
| 2005 | Active Microstructure Transformation and Enhanced Stability of Iron Foam Derived from Industrial Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 17229-17239.  | 4.0  | 0         |
| 2006 | Operando High-Valence Cr-Modified NiFe Hydroxides for Water Oxidation. <i>Small</i> , 2022, 18, e2200303.   | 5.2  | 44        |
| 2007 | Elucidating electrocatalytic mechanism for large-scale cycloalkanol oxidation integrated with hydrogen evolution. <i>Chemical Engineering Journal</i> , 2022, 442, 136264.  | 6.6  | 16        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 2008 | Regulating the transformation behavior of nickel iron metal-organic frameworks through a dual-ligand strategy for enhanced oxygen evolution reaction performance. <i>Applied Surface Science</i> , 2022, 592, 153252.  | 3.1  | 18        |
| 2009 | Electrodeposition of Mo-doped NiFe nanospheres on 3D graphene fibers for efficient overall alkaline water splitting. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 13850-13861.  | 3.8  | 9         |
| 2010 | Pre-intercalation of phosphate into Ni(OH) <sub>2</sub> /NiOOH for efficient and stable electrocatalytic oxygen evolution reaction. <i>Journal of Catalysis</i> , 2022, 410, 22-30.  | 3.1  | 26        |
| 2011 | High throughput preparation of Ni-Mo alloy thin films as efficient bifunctional electrocatalysts for water splitting. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 15764-15774.   | 3.8  | 25        |
| 2012 | Effect of different alkali metal cations on the oxygen evolution activity and battery capacity of nickel electrodes in concentrated hydroxide electrolytes. <i>Electrochimica Acta</i> , 2022, 415, 140255.  | 2.6  | 6         |
| 2013 | Modulating electronic structure of Ni <sub>2</sub> P pre-catalyst by doping trace iron for enhanced oxygen evolution reaction in alkaline. <i>Journal of Alloys and Compounds</i> , 2022, 908, 164603.   | 2.8  | 12        |
| 2014 | La-doped NiFe-LDH coupled with hierarchical vertically aligned MXene frameworks for efficient overall water splitting. <i>Journal of Energy Chemistry</i> , 2022, 70, 472-479.   | 7.1  | 90        |
| 2015 | A promising Ni-Fe double hydroxide fiber electrode for application of flexible woven-supercapacitor and wastewater decolorization. <i>Journal of Alloys and Compounds</i> , 2022, 908, 164616.   | 2.8  | 3         |
| 2016 | 3D core-shell structured NiFe layered double hydroxide with NiCo <sub>2</sub> O <sub>4</sub> as an efficient electrocatalysts for oxygen evolution reaction. <i>Journal of Physics and Chemistry of Solids</i> , 2022, 166, 110730.  | 1.9  | 5         |
| 2017 | Evaluation of iron-based alloy nanocatalysts for the electrooxidation of ethylene glycol in membraneless fuel cells. <i>Fuel</i> , 2022, 321, 124059.  | 3.4  | 7         |
| 2018 | Rapid screening of Ni <sub>x</sub> Fe <sub>1-x</sub> /Fe <sub>2</sub> O <sub>3</sub> /Ni(OH) <sub>2</sub> complexes with excellent oxygen evolution reaction activity and durability by a two-step electrodeposition method. <i>Applied Surface Science</i> , 2022, 592, 153251. | 3.1  | 9         |
| 2019 | Ni <sub>3</sub> S <sub>2</sub> -embedded NiFe LDH porous nanosheets with abundant heterointerfaces for high-current water electrolysis. <i>Chemical Engineering Journal</i> , 2022, 442, 136105.   | 6.6  | 44        |
| 2020 | A dynamic Ni(OH) <sub>2</sub> -NiOOH/NiFeP heterojunction enabling high-performance E-upgrading of hydroxymethylfurfural. <i>Applied Catalysis B: Environmental</i> , 2022, 311, 121357.   | 10.8 | 75        |
| 2021 | Insights into Electrocatalytic Oxygen Evolution over Hierarchical FeCo <sub>2</sub> S <sub>4</sub> Nanospheres. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 431-440.  | 3.2  | 10        |
| 2022 | Realizing High and Stable Electrocatalytic Oxygen Evolution for Iron-Based Perovskites by Co-Doping-Induced Structural and Electronic Modulation. <i>Advanced Functional Materials</i> , 2022, 32, .   | 7.8  | 28        |
| 2023 | From Theory to Experiment: Cascading of Thermocatalysis and Electrolysis in Oxygen Evolution Reactions. <i>ACS Energy Letters</i> , 2022, 7, 343-348.  | 8.8  | 21        |
| 2024 | Sodium Cobalticborane: A Promising Precatalyst for Oxygen Evolution Reaction. <i>Inorganic Chemistry</i> , 2022, 61, 464-473.  | 1.9  | 3         |
| 2025 | Effects of Metallic Impurities in Alkaline Electrolytes on Electro-Oxidation of Water and Alcohol Molecules. <i>Journal of the Electrochemical Society</i> , 2021, 168, 124516.  | 1.3  | 4         |



| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 2026 | Structure and Oxygen Evolution Activity of $\text{Ni}^{2+}$ -NiOOH: Where Are the Protons?. ACS Catalysis, 2022, 12, 295-304.   | 5.5  | 28        |
| 2027 | W Doping in $\text{Ni}_{12}\text{P}_5$ as a Platform to Enhance Overall Electrochemical Water Splitting. ACS Applied Materials & Interfaces, 2022, 14, 581-589.   | 4.0  | 29        |
| 2028 | Fe-doped and sulfur-enriched $\text{Ni}_3\text{S}_2$ nanowires with enhanced reaction kinetics for boosting water oxidation. Green Chemical Engineering, 2022, 3, 367-373.  | 3.3  | 14        |
| 2029 | Lattice site-dependent metal leaching in perovskites toward a honeycomb-like water oxidation catalyst. Science Advances, 2021, 7, eabk1788.   | 4.7  | 41        |
| 2030 | Emerging Surface, Bulk, and Interface Engineering Strategies on $\text{BiVO}_4$ for Photoelectrochemical Water Splitting. Small, 2022, 18, e2105084.  | 5.2  | 78        |
| 2031 | High-performance Te-doped $\text{Co}_3\text{O}_4$ nanocatalysts for oxygen evolution reaction. International Journal of Energy Research, 2022, 46, 5963-5972.   | 2.2  | 10        |
| 2032 | Three-Dimensional Unified Electrode Design Using a NiFeOOH Catalyst for Superior Performance and Durable Anion-Exchange Membrane Water Electrolyzers. ACS Catalysis, 2022, 12, 135-145.   | 5.5  | 38        |
| 2033 | Structure and Catalysis of NiOOH: Recent Advances on Atomic Simulation. Journal of Physical Chemistry C, 2021, 125, 27033-27045.  | 1.5  | 23        |
| 2034 | Amorphous FeOOH nanoparticles decorated on defect-rich porous Ni MOF nanosheet based hierarchical architectures toward superior OER performance. New Journal of Chemistry, 2022, 46, 9650-9657.   | 1.4  | 8         |
| 2035 | Enhanced electrocatalytic activity by NiCu-LDH/CoS as dual co-catalysts on g-C <sub>3</sub> N <sub>4</sub> nanosheets in NiCu-LDH@CoS/g-C <sub>3</sub> N <sub>4</sub> nanostructure for oxygen evolution reactions. Applied Surface Science, 2022, 593, 153453. | 3.1  | 16        |
| 2036 | State of the Active Site in $\text{LaSrCoO}_3$ Under Oxygen Evolution Reaction Investigated by Total-Reflection Fluorescence X-Ray Absorption Spectroscopy. ACS Applied Energy Materials, 2022, 5, 4108-4116.   | 2.5  | 4         |
| 2037 | Metal-organic aerogel derived hierarchical porous metal-carbon nanocomposites as efficient bifunctional electrocatalysts for overall water splitting. Journal of Colloid and Interface Science, 2022, 621, 398-405.   | 5.0  | 6         |
| 2038 | Spectroelectrochemical Analysis of the Water Oxidation Mechanism on Doped Nickel Oxides. Journal of the American Chemical Society, 2022, 144, 7622-7633.  | 6.6  | 66        |
| 2039 | Anion-Exchange Membrane Water Electrolyzers. Chemical Reviews, 2022, 122, 11830-11895.  | 23.0 | 177       |
| 2040 | High-entropy FeCoNiMn (oxy)hydroxide as high-performance electrocatalyst for OER and boosting clean carrier production under quasi-industrial condition. Journal of Cleaner Production, 2022, 356, 131680.  | 4.6  | 22        |
| 2041 | Multijunction Photoanode of $\text{Mo:BiVO}_4$ Layered with $\text{TiO}_2$ Inverse Opal and $\text{NiBi}$ Oxygen Evolution Catalyst to Trap Light and Enhance Water Splitting. Journal of Physical Chemistry C, 2022, 126, 6960-6972.                           | 1.5  | 4         |
| 2042 | Controlled Atmosphere Corrosion Engineering toward Inhomogeneous NiFe-LDH for Energetic Oxygen Evolution. ACS Nano, 2022, 16, 7794-7803.  | 7.3  | 51        |
| 2043 | Nanostructured Metallic Glass in a Highly Upgraded Energy State Contributing to Efficient Catalytic Performance. Advanced Materials, 2022, 34, e2200850.  | 11.1 | 34        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 2044 | Self-supported electrode Fe <sub>35</sub> Co <sub>20</sub> Ni <sub>20</sub> Mo <sub>20</sub> Si <sub>5</sub> alloy ribbon: Electronic structure modulating oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2022, 911, 164993.  | 2.8  | 3         |
| 2046 | Reinforced Layered Double Hydroxide Oxygen Evolution Electrocatalysts: A Polyoxometallic Acid Wet Etching Approach and Synergistic Mechanism. <i>Advanced Materials</i> , 2022, 34, e2110696.  | 11.1 | 57        |
| 2047 | Why Did Nature Choose Manganese over Cobalt to Make Oxygen Photosynthetically on the Earth?. <i>Journal of Physical Chemistry B</i> , 2022, 126, 3257-3268.  | 1.2  | 7         |
| 2048 | Ultrafast Carbothermal Shock Constructing Ni <sub>3</sub> Fe <sub>1</sub> Cr Intermetallic Integrated Electrodes for Efficient and Durable Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 19524-19533.   | 4.0  | 10        |
| 2050 | Hybrid-metal hydroxyl fluoride nanosheet arrays as a bifunctional electrocatalyst for efficient overall water splitting. <i>Journal of Materials Chemistry A</i> , 2022, 10, 11774-11783.  | 5.2  | 11        |
| 2051 | <i>In situ</i> Raman spectroscopy reveals the structure evolution and lattice oxygen reaction pathway induced by the crystalline/amorphous heterojunction for water oxidation. <i>Chemical Science</i> , 2022, 13, 5639-5649.  | 3.7  | 14        |
| 2052 | Introducing oxygen vacancies to NiFe LDH through electrochemical reduction to promote the oxygen evolution reaction. <i>Dalton Transactions</i> , 2022, 51, 13970-13977.   | 1.6  | 13        |
| 2053 | Electrocatalytic OER Performance of Nickel-Iron Hydroxide Hollow Nanotubes. <i>Material Sciences</i> , 2022, 12, 396-408.  | 0.0  | 0         |
| 2054 | Electrochemically Robust Ferberite (FeWO <sub>4</sub> ) Nanostructure as an Anode Material for Alkaline Water- and Alcohol-Oxidation Reaction. <i>ACS Applied Energy Materials</i> , 2022, 5, 5652-5665.   | 2.5  | 12        |
| 2055 | Self-supporting and hierarchically porous Ni <sub>x</sub> Fe <sub>1-x</sub> /NiFe <sub>2</sub> O <sub>4</sub> heterostructure as a bifunctional electrocatalyst for fluctuating overall water splitting. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2022, 29, 1120-1131. | 2.4  | 7         |
| 2056 | Activated Ni-OH Bonds in a Catalyst Facilitates the Nucleophile Oxidation Reaction. <i>Advanced Materials</i> , 2022, 34, e2105320.  | 11.1 | 47        |
| 2057 | One-Step Synthesis of Highly Active NiFe Electrocatalysts for the Oxygen Evolution Reaction. <i>Langmuir</i> , 2022, 38, 5525-5531.  | 1.6  | 8         |
| 2058 | The potential of MXene materials as a component in the catalyst layer for the Oxygen Evolution Reaction. <i>Current Opinion in Electrochemistry</i> , 2022, 34, 101021.  | 2.5  | 5         |
| 2059 | In situ confined vertical growth of Co <sub>2.5</sub> Ni <sub>0.5</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub> nanoarrays on rGO for an efficient oxygen evolution reaction. <i>Nano Materials Science</i> , 2023, 5, 351-360.   | 3.9  | 7         |
| 2060 | Direct and indirect role of Fe doping in NiOOH monolayer for water oxidation catalysis**. <i>ChemPhysChem</i> , 2022, 23, .  | 1.0  | 3         |
| 2061 | Comprehension of the Route for the Synthesis of Co/Fe LDHs via the Method of Coprecipitation with Varying pH. <i>Nanomaterials</i> , 2022, 12, 1570.   | 1.9  | 4         |
| 2062 | Modeling Operando Electrochemical CO <sub>2</sub> Reduction. <i>Chemical Reviews</i> , 2022, 122, 11085-11130.   | 23.0 | 66        |
| 2063 | MoSe <sub>2</sub> regulates Ce-doped NiFe layered double hydroxide for efficient oxygen evolution reaction: The increase of active sites. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 18688-18699.   | 3.8  | 11        |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 2064 | Ionomer Optimization for Hydroxide-Exchange-Membrane Water Electrolyzers Operated with Distilled Water: A Modeling Study. <i>Journal of the Electrochemical Society</i> , 2022, 169, 054506.  | 1.3  | 5         |
| 2065 | 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        |
| 2066 | Dynamic active sites in NiFe oxyhydroxide upon Au nanoparticles decoration for highly efficient electrochemical water oxidation. <i>Nano Energy</i> , 2022, 98, 107328.   | 8.2  | 20        |
| 2067 | Constructing hierarchical structure electrocatalyst for efficient hydrogen evolution and selective oxidation of benzylamine. <i>Journal of Alloys and Compounds</i> , 2022, 912, 165259.  | 2.8  | 8         |
| 2068 | Activation of Water Splitting Alloy Electrodes by Anodizing. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2021, 72, 593-598.   | 0.1  | 0         |
| 2069 | 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       |
| 2070 | Submerged-Plant-Inspired Five-Level-Synergetic hierarchical Single-Fe-Atom-Doped Micro-Electrodes for High-Performance multifunctional electrocatalysis. <i>Chemical Engineering Journal</i> , 2022, 446, 136804.                               | 6.6  | 3         |
| 2071 | 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       |
| 2072 | Tailoring the oxide surface composition of stainless steel for improved OER performance in alkaline water electrolysis. <i>Electrochimica Acta</i> , 2022, 424, 140561.   | 2.6  | 16        |
| 2073 | Heterojunction between bimetallic metal-organic framework and TiO <sub>2</sub> : Band-structure engineering for effective photoelectrochemical water splitting. <i>Nano Research</i> , 2022, 15, 8502-8509.                                     | 5.8  | 15        |
| 2074 | Highly exposed NiFeOx nanoclusters supported on boron doped carbon nanotubes for electrocatalytic oxygen evolution reaction. <i>Chinese Chemical Letters</i> , 2023, 34, 107524.  | 4.8  | 5         |
| 2075 | Three-Dimensional Coral-Like NiFe-Layered Double Hydroxides on Biomass-Derived Nitrogen-Doped Carbonized Wood as a Sensitive Probe for Nonenzymatic Urea Determination. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 6952-6962. | 3.2  | 7         |
| 2076 | Effect of phosphoric acid purity on the electrochemically active surface area of Pt-based electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2022, 918, 116450.  | 1.9  | 3         |
| 2077 | Anodic deposition of highly efficient nickel iron oxide electrocatalysts for water oxidation and role of anions in catalyst deposition. <i>Electrochimica Acta</i> , 2022, 424, 140607.   | 2.6  | 2         |
| 2078 | First-row transition metal-based materials derived from bimetallic metal-organic frameworks as highly efficient electrocatalysts for electrochemical water splitting. <i>Energy and Environmental Science</i> , 2022, 15, 3119-3151.            | 15.6 | 125       |
| 2079 | Nanostructured Intermetallic Nickel Silicide (Pre)Catalyst for Anodic Oxygen Evolution Reaction and Selective Dehydrogenation of Primary Amines. <i>Advanced Energy Materials</i> , 2022, 12, .   | 10.2 | 42        |
| 2080 | Water Oxidation in the Presence of a Nickel Coordination Compound: Decomposition Products, Fe Impurity in the Electrolyte, and a Candidate as a Catalyst. <i>Journal of Physical Chemistry C</i> , 2022, 126, 9753-9761.                        | 1.5  | 10        |
| 2081 | Normalization of the EOR catalytic efficiency measurements based on RRDE study for simply fabricated cost-effective Co/graphite electrode for DAEFCs. <i>Journal of Electroanalytical Chemistry</i> , 2022, 918, 116488.                        | 1.9  | 1         |

| #    | ARTICLE  | IF  | CITATIONS |
|------|--|-----|-----------|
| 2082 | Hierarchically hollow interconnected rings of nickel substituted cobalt carbonate hydroxide hydrate as promising oxygen evolution electrocatalyst. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 22430-22441.  | 3.8 | 8         |
| 2083 | Precious-metal-free catalyst could afford cost-effective green hydrogen. <i>CheM</i> , 2022, 8, 1539-1540.   | 5.8 | 4         |
| 2084 | Fabrication of Cocatalyst NiO-Modified BiVO <sub>4</sub> Composites for Enhanced Photoelectrochemical Performances. <i>Frontiers in Chemistry</i> , 2022, 10, .  | 1.8 | 2         |
| 2085 | Durability of the FeNi <sub>3</sub> @Ni Material Designed for Water Electrolysis Enhanced by High Frequency Alternating Magnetic Field. <i>ACS Applied Energy Materials</i> , 2022, 5, 7034-7048.  | 2.5 | 5         |
| 2086 | Challenges in determining the electrochemically active surface area of Ni-oxides in the oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2022, 918, 116479.  | 1.9 | 14        |
| 2087 | Rapid "self-healing" behavior induced by chloride anions to renew the Fe-Ni(oxy)hydroxide surface for long-term alkaline seawater electrolysis. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 4216-4224.   | 3.0 | 8         |
| 2089 | Size Effects of Electrocatalysts: More Than a Variation of Surface Area. <i>ACS Nano</i> , 2022, 16, 8531-8539.  | 7.3 | 42        |
| 2090 | Activation Energy Assessing Potential-Dependent Activities and Site Reconstruction for Oxygen Evolution. <i>ACS Energy Letters</i> , 2022, 7, 2236-2243.   | 8.8 | 14        |
| 2091 | Ternary NiCoFe nanosheets for oxygen evolution in anion exchange membrane water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 23483-23497.   | 3.8 | 13        |
| 2092 | Metal-Organic Frameworks-Derived Nickel-Iron Oxyhydroxide with Highly Active Edge Sites for Electrochemical Oxygen Evolution. <i>Small Structures</i> , 2022, 3, .   | 6.9 | 3         |
| 2093 | Surface Design Strategy of Catalysts for Water Electrolysis. <i>Small</i> , 2022, 18, .  | 5.2 | 138       |
| 2095 | Surface Activation and Ni-S Stabilization in NiO/NiS <sub>2</sub> for Efficient Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .  | 7.2 | 105       |
| 2096 | Surface Activation and Ni-S Stabilization in NiO/NiS <sub>2</sub> for Efficient Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2022, 134, .   | 1.6 | 1         |
| 2097 | Effect of Experimental Parameters on the Electrocatalytic Performance in Rotating Disc Electrode Measurements: Case Study of Oxygen Evolution on Ni <sup>2+</sup> Co <sup>2+</sup> Oxide in Alkaline Media. <i>ChemElectroChem</i> , 2022, 9, .                                      | 1.7 | 4         |
| 2098 | Purification of Residual Ni and Co Hydroxides from Fe-Free Alkaline Electrolyte for Electrocatalysis Studies. <i>ChemElectroChem</i> , 2022, 9, .  | 1.7 | 9         |
| 2099 | Single Entity Electrochemistry and Its Application to Nanomaterial Synthesis. <i>Israel Journal of Chemistry</i> , 2023, 63, .   | 1.0 | 0         |
| 2100 | Serpentine Ni <sub>3</sub> Ge <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub> Nanosheets Grow on Porous Mo <sub>2</sub> N for an Efficient Oxygen Evolution Reaction. <i>Energy &amp; Fuels</i> , 2022, 36, 11467-11476.   | 2.5 | 4         |
| 2101 | Highly Durable and Efficient Ni-FeO <sub>x</sub> /FeNi <sub>3</sub> Electrocatalysts Synthesized by a Facile <i>In Situ</i> Combustion-Based Method for Overall Water Splitting with Large Current Densities. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 27842-27853. | 4.0 | 34        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 2102 | Reactive Sputtered Ir <sub>1-x</sub> Ni <sub>x</sub> O <sub>x</sub> Electrocatalysts For The Oxygen Evolution Reaction in Alkaline Media. <i>Journal of the Electrochemical Society</i> , 2022, 169, 076501.                                 | 1.3  | 1         |
| 2103 | Enhancement of electrocatalytic oxygen evolution by chiral molecular functionalization of hybrid 2D electrodes. <i>Nature Communications</i> , 2022, 13, .   | 5.8  | 48        |
| 2104 | Low dimensional transition metal oxide towards advanced electrochromic devices. <i>Nano Energy</i> , 2022, 100, 107479.  | 8.2  | 24        |
| 2105 | Catalytic and pseudocapacitive energy storage performance of metal (Co, Ni, Cu and Mn) ferrite nanostructures and nanocomposites. <i>Progress in Materials Science</i> , 2022, 130, 100995.  | 16.0 | 25        |
| 2106 | Deep reconstruction of transition metal molybdate@hydroxide heterostructure triggered by anion-exchange reaction as high efficiency water oxidation electrocatalyst. <i>Chemical Engineering Journal</i> , 2022, 447, 137540.                | 6.6  | 25        |
| 2107 | Operando deciphering the activity origins for potential-induced reconstructed oxygen-evolving catalyts. <i>Applied Catalysis B: Environmental</i> , 2022, 316, 121602.   | 10.8 | 10        |
| 2108 | Room temperature, fast fabrication of square meter-sized oxygen evolution electrode toward industrial alkaline electrolyzer. <i>Applied Catalysis B: Environmental</i> , 2022, 316, 121605.  | 10.8 | 17        |
| 2109 | An In-Situ Raman Spectroscopic Study of the Effect of Electrolytic Fe on Ni Electrocatalysts Towards the Oxygen Evolution Reaction (Oer). <i>SSRN Electronic Journal</i> , 0, , .  | 0.4  | 0         |
| 2110 | Non-noble electrocatalysts discovered by scaling relations of Gibbs-free energies of key oxygen adsorbates in water oxidation. <i>Journal of Materials Chemistry A</i> , 0, , .  | 5.2  | 4         |
| 2111 | High performance transition metal-based electrocatalysts for green hydrogen production. <i>Chemical Communications</i> , 2022, 58, 7874-7889.  | 2.2  | 14        |
| 2112 | Synthesis of NiFeOx nanocatalysts from metal-organic precursors for the oxygen evolution reaction. <i>Dalton Transactions</i> , 2022, 51, 11457-11466.   | 1.6  | 3         |
| 2113 | Hierarchical NiFeV hydroxide nanotubes: synthesis, topotactic transformation and electrocatalysis towards the oxygen evolution reaction. <i>Dalton Transactions</i> , 2022, 51, 11098-11107.   | 1.6  | 3         |
| 2114 | A Heterostructured FeNi Hydroxide for Effective Electrocatalytic Oxygen Evolution. <i>Chemical Science</i> , 0, , .  | 3.7  | 2         |
| 2115 | High Current Density Oxygen Evolution in Carbonate Buffered Solution Achieved by Active Site Densification and Electrolyte Engineering. <i>SSRN Electronic Journal</i> , 0, , .  | 0.4  | 0         |
| 2116 | A carbonization/interfacial assembly-driven electroplating approach for water-splitting textile electrodes with remarkably low overpotentials and high operational stability. <i>Energy and Environmental Science</i> , 2022, 15, 3815-3829. | 15.6 | 23        |
| 2117 | Ambient Fast Synthesis of Superaerophobic/Superhydrophilic Electrode for Superior Electrocatalytic Water Oxidation. <i>Energy and Environmental Materials</i> , 2023, 6, .   | 7.3  | 4         |
| 2118 | Surface modulated Fe doping of Ir <sub>2</sub> Ni(OH) <sub>2</sub> nanosheets for highly promoted oxygen evolution electrocatalysis. <i>EcoMat</i> , 2022, 4, .  | 6.8  | 19        |
| 2119 | NiFe Layered Double Hydroxide Electrocatalysts for an Efficient Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2022, 5, 8592-8600.   | 2.5  | 23        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 2120 | Anion Exchange Membrane Water Electrolysis from Catalyst Design to the Membrane Electrode Assembly. <i>Energy Technology</i> , 2022, 10, .   | 1.8  | 11        |
| 2121 | Spin-state regulating of cobalt assisted by iron doping and coordination for enhanced oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 27508-27515.  | 3.8  | 3         |
| 2122 | Composition-Dependent Morphology, Structure, and Catalytical Performance of Nickel-Iron Layered Double Hydroxide as Highly-Efficient and Stable Anode Catalyst in Anion Exchange Membrane Water Electrolysis. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8  | 34        |
| 2123 | Surface Reconstruction of Water Splitting Electrocatalysts. <i>Advanced Energy Materials</i> , 2022, 12, .   | 10.2 | 111       |
| 2124 | Anode Catalysts in Anion-Exchange-Membrane Electrolysis without Supporting Electrolyte: Conductivity, Dynamics, and Ionomer Degradation. <i>Advanced Materials</i> , 2022, 34, .   | 11.1 | 42        |
| 2125 | Metal Hydroxide Salt Monolayer Nanoparticles: Synthesis, Redox Characterization, and Electrochemical Catalytic Performance. , 2022, 4, 1430-1435.  |      | 8         |
| 2126 | Ni-modified carbon nanotube macrofilms supporting NiFe with stable structure for efficient oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2022, 920, 116591.   | 1.9  | 0         |
| 2127 | Construction of metal (oxy) hydroxides surface on high entropy alloy as lattice-oxygen-participated electrocatalyst for oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2022, 920, 116574.  | 1.9  | 0         |
| 2128 | 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         |
| 2129 | Robust NiFe foam-supported hureaulite sheet-like microstructures as highly-effective electrocatalyst for water oxidation with ultralong durability. <i>Journal of Alloys and Compounds</i> , 2022, 921, 166052.  | 2.8  | 1         |
| 2130 | Oxygen vacancies and surface reconstruction on NiFe LDH@Ni(OH) <sub>2</sub> heterojunction synergistically triggering oxygen evolution and urea oxidation reaction. <i>Journal of Alloys and Compounds</i> , 2022, 921, 166145.                                  | 2.8  | 27        |
| 2131 | Electrochemical trapping of meta-stable NiO consolidated ZnO/PdO by biomimetic provenance for the employment of clean energy generation. <i>Materials Science in Semiconductor Processing</i> , 2022, 150, 106867.   | 1.9  | 10        |
| 2132 | Soft Template-Based Synthesis of Mesoporous Phosphorus- and Boron-Codoped NiFe-Based Alloys for Efficient Oxygen Evolution Reaction. <i>Small</i> , 2022, 18, .  | 5.2  | 43        |
| 2133 | Electrochemically prepared Fe: NiO thin film catalysis for oxygen evolution reaction. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 18180-18186.   | 1.1  | 2         |
| 2134 | The effect of anodizing temperature on the oxygen evolution reaction activity of anodized FeNiCo alloy in alkaline electrolyte. <i>Electrochimica Acta</i> , 2022, 427, 140875.  | 2.6  | 3         |
| 2135 | Understanding of Oxygen Redox in the Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2022, 34, .  | 11.1 | 109       |
| 2136 | Mechanistic study on electro-oxidation of 5-hydroxymethylfurfural and water molecules via operando surface-enhanced Raman spectroscopy coupled with an Fe <sup>3+</sup> probe. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121776.                    | 10.8 | 11        |
| 2137 | Metallic inverse opal frameworks as catalyst supports for high-performance water electrooxidation. <i>ChemSusChem</i> , 0, , .   | 3.6  | 3         |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 2138 | Heterogenization of Molecular Electrocatalytic Active Sites through Reticular Chemistry. <i>Advanced Materials</i> , 2023, 35, .   | 11.1 | 11        |
| 2139 | Enhanced degradation of carbamazepine in water over SC-modified NiFe <sub>2</sub> S <sub>4</sub> nanocomposites by peroxydisulfate activation. <i>Chemical Engineering Journal</i> , 2022, 450, 138190.    | 6.6  | 14        |
| 2140 | Topologic Transition-Induced Abundant Undercoordinated Fe Active Sites in Nifeooh for Superior Oxygen Evolution. <i>SSRN Electronic Journal</i> , 0, , .   | 0.4  | 0         |
| 2141 | <sup>57</sup> FeO(OH) with multiple surface terminations: Intrinsically active for the electrocatalytic oxygen evolution reaction. <i>Dalton Transactions</i> , 2022, 51, 15094-15110.                     | 1.6  | 9         |
| 2142 | Bimetallic Ni-Mo nitride@C <sub>3</sub> N <sub>4</sub> for highly active and stable water catalysis. <i>Frontiers of Materials Science</i> , 2022, 16, .   | 1.1  | 4         |
| 2143 | Boosting the Oxygen Evolution Reaction by Controllably Constructing FeNi <sub>3</sub> /C Nanorods. <i>Nanomaterials</i> , 2022, 12, 2525.  | 1.9  | 3         |
| 2144 | Electrochemically Activated Ni-Fe Oxyhydroxide for Mimic Saline Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 11232-11241.   | 3.2  | 10        |
| 2145 | Electrocatalyst with Dynamic Formation of the Dual-Active Site from the Dual Pathway Observed by <i>in Situ</i> Raman Spectroscopy. <i>ACS Catalysis</i> , 2022, 12, 10276-10284.                          | 5.5  | 40        |
| 2146 | Ternary layered double hydroxide oxygen evolution reaction electrocatalyst for anion exchange membrane alkaline seawater electrolysis. <i>Journal of Energy Chemistry</i> , 2022, 75, 127-134.             | 7.1  | 31        |
| 2147 | Cathodic Protection System against a Reverse-Current after Shut-Down in Zero-Gap Alkaline Water Electrolysis. <i>Jacs Au</i> , 2022, 2, 2491-2500.   | 3.6  | 14        |
| 2148 | Excess Activity Tuned by Distorted Tetrahedron in <i>CoMoO</i> <sub>4</sub> for Oxygen Evolution. <i>Energy and Environmental Materials</i> , 2024, 7, .   | 7.3  | 12        |
| 2149 | Self-template synthesis of lychee like Mn-doped Co <sub>2</sub> P yolk-shell spheres for enhanced hydrogen evolution reaction activity. <i>International Journal of Hydrogen Energy</i> , 2022, , .        | 3.8  | 4         |
| 2150 | Synergistic effect of V and Fe in Ni/Fe/V ternary layered double hydroxides for efficient and durable oxygen evolution reaction. <i>Frontiers of Chemical Science and Engineering</i> , 2023, 17, 102-115. | 2.3  | 6         |
| 2151 | Plasmon-enhanced electrochemical oxidation of 4-(hydroxymethyl)benzoic acid. <i>Journal of Chemical Physics</i> , 2022, 157, 081101.   | 1.2  | 2         |
| 2152 | Effects of Electrochemical Conditioning on Nickel-Based Oxygen Evolution Electrocatalysts. <i>ACS Catalysis</i> , 2022, 12, 10384-10399.   | 5.5  | 38        |
| 2153 | Highly Conductive and Mechanically Robust NiFe Alloy Aerogels: An Exceptionally Active and Durable Water Oxidation Catalyst. <i>Small</i> , 2022, 18, .  | 5.2  | 9         |
| 2154 | Function of Internal and External Fe in a Ni-Based Precatalyst System Toward Oxygen Evolution Reaction. <i>Inorganic Chemistry</i> , 2022, 61, 12772-12780.  | 1.9  | 6         |
| 2155 | Multiple carbon interface engineering to boost oxygen evolution of NiFe nanocomposite electrocatalyst. <i>Chinese Journal of Catalysis</i> , 2022, 43, 2354-2362.  | 6.9  | 5         |

| #    | ARTICLE  | IF  | CITATIONS |
|------|--|-----|-----------|
| 2156 | Electron spin polarization-mediated charge separation in Pd/CoP@CoNiP superstructures toward optimized photocatalytic performance. <i>Nano Energy</i> , 2022, 101, 107616.   | 8.2 | 46        |
| 2157 | Heterostructure engineering of the Fe-doped Ni phosphides/Ni sulfide p-p junction for high-efficiency oxygen evolution. <i>Journal of Alloys and Compounds</i> , 2022, 924, 166613.  | 2.8 | 8         |
| 2158 | Recent advancements in bismuth vanadate photoanodes for photoelectrochemical water splitting. <i>Materials Today Chemistry</i> , 2022, 26, 101060.   | 1.7 | 11        |
| 2159 | Synthesis, crystal structures and electrocatalytic water oxidation by Mn(II), Co(II) and Ni(II) complexes of thiophene-2-carbohydrazide. <i>Journal of Molecular Structure</i> , 2022, 1270, 133886.   | 1.8 | 1         |
| 2160 | Multimetallic electrocatalysts of FeCoNi nanoalloy embedded in multilayered carbon nanotubes for oxygen reduction reaction and flexible Zn-air battery. <i>Applied Surface Science</i> , 2022, 604, 154590.  | 3.1 | 10        |
| 2161 | The critical role of A, B-site cations and oxygen vacancies on the OER electrocatalytic performances of Bi <sub>0.15</sub> Sr <sub>0.85</sub> Co <sub>1-x</sub> Fe <sub>x</sub> O <sub>3-<math>\delta</math></sub> (0.2 $\leq$ x $\leq$ 1) perovskites in alkaline media. <i>Chemical Engineering Journal</i> , 2023, 451, 138646. |     | 16        |
| 2162 | Variable nanosheets for highly efficient oxygen evolution reaction. <i>CheM</i> , 2022, 8, 3241-3251.  | 5.8 | 21        |
| 2163 | Insight toward the role of Fe in layered Ni(OH) <sub>2</sub> for electrochemical oxidations of water and 5-hydroxymethylfurfural. <i>Catalysis Communications</i> , 2022, 170, 106501.   | 1.6 | 6         |
| 2164 | Ni <sup>3+</sup> -enriched nickel-based electrocatalysts for superior electrocatalytic water oxidation. <i>Applied Surface Science</i> , 2022, 605, 154743.  | 3.1 | 15        |
| 2165 | Precipitation/dissolution equilibrium to achieve trace iron doping on the surface of $\gamma$ -Ni(OH) <sub>2</sub> for electrocatalytic oxygen evolution. <i>Fuel</i> , 2023, 332, 125780.   | 3.4 | 9         |
| 2166 | 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         |
| 2167 | Benchmarking in electrocatalysis. , 2023, , 492-550.   |     | 2         |
| 2168 | Homoleptic Ni(II) dithiocarbamate complexes as pre-catalysts for the electrocatalytic oxygen evolution reaction. <i>Dalton Transactions</i> , 2022, 51, 13003-13014.   | 1.6 | 10        |
| 2169 | Electronic structure engineering for electrochemical water oxidation. <i>Journal of Materials Chemistry A</i> , 2022, 10, 20218-20241.   | 5.2 | 75        |
| 2170 | The role of crystal facets and disorder on photo-electrosynthesis. <i>Nanoscale</i> , 2022, 14, 15596-15606.   | 2.8 | 4         |
| 2171 | Amorphous FeNiCu-MOFs as highly efficient electrocatalysts for the oxygen evolution reaction in an alkaline medium. <i>Dalton Transactions</i> , 2022, 51, 14306-14316.  | 1.6 | 11        |
| 2172 | Binary Layered Double Hydroxide Electrode Array Synthesized via Metal Alloy Corrosion for Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2022, 5, 10883-10890.   | 2.5 | 3         |
| 2173 | Tailoring 3D-Printed Electrodes for Enhanced Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 42153-42170.   | 4.0 | 22        |



| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 2174 | Highly-stable, bifunctional, binder-free & stand-alone photoelectrode (Fe <sub>x</sub> Ni <sub>1-x</sub> O@a-CC) for natural waters splitting into hydrogen. International Journal of Hydrogen Energy, 2022, 47, 36032-36045. | 3.8  | 9         |
| 2175 | Mixed-Metal Nickel-iron Oxide Aerogels for Oxygen Evolution Reaction. ACS Catalysis, 2022, 12, 12162-12169.   | 5.5  | 16        |
| 2176 | Layered Double Hydroxides for Oxygen Evolution Reaction towards Efficient Hydrogen Generation. Energy Material Advances, 2022, 2022, .  | 4.7  | 16        |
| 2177 | A hierarchical nickel-iron hydroxide nanosheet from the high voltage cathodic polarization for alkaline water splitting. International Journal of Hydrogen Energy, 2022, 47, 34421-34429.                                     | 3.8  | 10        |
| 2178 | Vertically aligned Ni/NiO nanocomposites with abundant oxygen deficient hetero-interfaces for enhanced overall water splitting. Science China Chemistry, 2022, 65, 1885-1894.   | 4.2  | 6         |
| 2179 | Anodization of a NiFe Foam: An Efficient and Stable Electrode for Oxygen-Evolution Reaction. ACS Applied Energy Materials, 2022, 5, 11098-11112.  | 2.5  | 19        |
| 2180 | Anion-Tuned Layered Double Hydroxide Anodes for Anion Exchange Membrane Water Electrolyzers: From Catalyst Screening to Single-Cell Performance. ACS Energy Letters, 2022, 7, 3415-3422.                                      | 8.8  | 19        |
| 2181 | Linking Lattice Strain and Electron Transfer Kinetics in Crystalline Layered Double Hydroxides. ACS Catalysis, 2022, 12, 12419-12431.   | 5.5  | 1         |
| 2182 | Kinetics of Active Oxide Species Derived from a Metallic Nickel Surface for Efficient Electrocatalytic Water Oxidation. ACS Energy Letters, 2022, 7, 3276-3285.   | 8.8  | 6         |
| 2183 | Forming O-O bonds. Joule, 2022, , .   | 11.7 | 2         |
| 2184 | In situ generation of Ni/Fe hydroxide layers by anodic etching of a Ni/Fe film for efficient oxygen evolution reaction. New Journal of Chemistry, 2022, 46, 20490-20496.  | 1.4  | 0         |
| 2185 | 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         |
| 2186 | Ni-Fe nanoframes via a unique structural formation induced by sonochemical etching. Chemical Communications, 0, , .   | 2.2  | 0         |
| 2187 | Ni-Fe synergic effect in Fe-Ni(OH) <sub>x</sub> 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         |
| 2188 | 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         |
| 2189 | Studies on oxygen evolution reaction performance of porous Co <sub>3</sub> O <sub>4</sub> -NiO-B <sub>2</sub> O <sub>3</sub> composites. Chemical Papers, 0, , .  | 1.0  | 1         |
| 2190 | Constructing Air-Stable and Reconstruction-Inhibited Transition Metal Sulfide Catalysts via Tailoring Electron-Deficient Distribution for Water Oxidation. ACS Catalysis, 2022, 12, 13234-13246.                              | 5.5  | 37        |
| 2191 | On the Mechanism of Heterogeneous Water Oxidation Catalysis: A Theoretical Perspective. Inorganics, 2022, 10, 182.  | 1.2  | 3         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 2192 | Stepwise dispersion of nickel species for efficient coupling of electrocatalytic redox reactions. <i>Chemical Engineering Journal</i> , 2023, 454, 140062.  | 6.6  | 3         |
| 2193 | Advances in nonprecious metal catalysts for efficient water oxidation in alkaline media. <i>Ionics</i> , 2023, 29, 9-32.  | 1.2  | 3         |
| 2194 | Durable Nickel-Iron (Oxy)hydroxide Oxygen Evolution Electrocatalysts through Surface Functionalization with Tetraphenylporphyrin. <i>Angewandte Chemie</i> , 0, .   | 1.6  | 0         |
| 2195 | Ferrocene Formic Acid Surface Modified Ni(OH) <sub>2</sub> for Highly Efficient Alkaline Oxygen Evolution. <i>Crystals</i> , 2022, 12, 1404.  | 1.0  | 1         |
| 2196 | Porosification and Fe <sup>3+</sup> Intercalation of Spent LiCoO <sub>2</sub> as an Efficient Oxygen Evolution Electrocatalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 16453-16460.                                       | 1.8  | 3         |
| 2197 | Promoting nickel oxidation state transitions in single-layer NiFeB hydroxide nanosheets for efficient oxygen evolution. <i>Nature Communications</i> , 2022, 13, .  | 5.8  | 101       |
| 2198 | Tailoring cation vacancies in Co, Ni phosphides for efficient overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 39731-39742.   | 3.8  | 4         |
| 2199 | A Universal Saline-Alkaline Etching Procedure to Enhance the Activity of Oxygen Evolution Catalysts. <i>ACS Energy Letters</i> , 2022, 7, 3910-3916.  | 8.8  | 6         |
| 2200 | Active Motif Change of Ni-Fe Spinel Oxide by Ir Doping for Highly Durable and Facile Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , 2023, 33, .  | 7.8  | 17        |
| 2201 | 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        |
| 2202 | Water electrolysis. <i>Nature Reviews Methods Primers</i> , 2022, 2, .  | 11.8 | 70        |
| 2203 | Rational Design and Engineering of Metal-Organic Framework-Derived Trimetallic NiCoFe-Layered Double Hydroxides as Efficient Electrocatalysts for Water Oxidation Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 14693-14704. | 3.2  | 6         |
| 2204 | Durable Nickel-Iron (Oxy)hydroxide Oxygen Evolution Electrocatalysts through Surface Functionalization with Tetraphenylporphyrin. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .  | 7.2  | 10        |
| 2205 | Automated high-throughput activity and stability screening of electrocatalysts. <i>Chem Catalysis</i> , 2022, 2, 2778-2794.   | 2.9  | 11        |
| 2206 | Enhancing OER Activity of Ni/Co Oxides via Fe/Mn Substitution within Tailored Mesoporous Frameworks. <i>ACS Applied Energy Materials</i> , 2022, 5, 13385-13397.  | 2.5  | 13        |
| 2207 | Iron phthalocyanine as electron pool for boosted electrocatalytic activity of nickel oxide nanoclusters. <i>Materials Today Sustainability</i> , 2022, 20, 100249.  | 1.9  | 2         |
| 2208 | An overview of solid-state electron paramagnetic resonance spectroscopy for artificial fuel reactions. <i>IScience</i> , 2022, 25, 105360.  | 1.9  | 1         |
| 2209 | Dual-purpose nickel-iron layered double hydroxides by controlled lanthanide and phosphide incorporation for promoting overall water splitting efficiency. <i>Journal of Alloys and Compounds</i> , 2023, 933, 167743.                                 | 2.8  | 7         |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 2210 | A dealloyed bulk FeNi pattern with exposed highly active facets for cost-effective oxygen evolution. Applied Catalysis B: Environmental, 2023, 323, 122171.  | 10.8 | 15        |
| 2211 | Steam-driven crystalline-amorphous coupling design of homogenous metal hydroxides for oxygen evolution reaction. Applied Catalysis B: Environmental, 2023, 323, 122165.  | 10.8 | 4         |
| 2212 | Quantum Dots, Passivation Layer and Cocatalysts for Enhanced Photoelectrochemical Hydrogen Production. ChemSusChem, 2023, 16, .  | 3.6  | 6         |
| 2213 | Tuning the d-Band States of Ni-Based Serpentine Materials via Fe <sup>3+</sup> Doping for Efficient Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2022, 14, 52857-52867.  | 4.0  | 11        |
| 2214 | Temperature Dependence of Oxygen Evolution Reaction Activity in Alkaline Solution at Ni-Co Oxide Catalysts with Amorphous/Crystalline Surfaces. ACS Catalysis, 2022, 12, 14209-14219.  | 5.5  | 20        |
| 2215 | High Current Density Oxygen Evolution in Carbonate Buffered Solution Achieved by Active Site Densification and Electrolyte Engineering. ChemSusChem, 2023, 16, .   | 3.6  | 6         |
| 2216 | Effective regulation mechanisms of Fe-Ni(oxy)hydroxide: Ni-rich heteroatomic bonding (Ni-O-Fe-O-Ni) is essential. Nano Research, 2023, 16, 12026-12034.  | 5.8  | 6         |
| 2217 | Tailoring electronic structure of Ni-Fe oxide by V incorporation for effective electrocatalytic water oxidation. Applied Surface Science, 2023, 611, 155732.   | 3.1  | 6         |
| 2218 | Reconstructed Electrocatalysts during Oxygen Evolution Reaction under Alkaline Electrolytes. Chemistry - A European Journal, 2023, 29, .   | 1.7  | 4         |
| 2219 | Modulation to favorable surface adsorption energy for oxygen evolution reaction intermediates over carbon-tunable alloys towards sustainable hydrogen production. Materials for Renewable and Sustainable Energy, 2022, 11, 169-213.   | 1.5  | 3         |
| 2220 | Active straining engineering on self-assembled stacked Ni-based hybrid electrode for ultra-low overpotential. Journal of Energy Chemistry, 2023, 77, 217-226.  | 7.1  | 3         |
| 2221 | In Situ Quantification of the Active Sites, Turnover Frequency, and Stability of Ni-Co (Oxy)hydroxides for the Oxygen Evolution Reaction. ACS Catalysis, 2022, 12, 14280-14289.  | 5.5  | 16        |
| 2222 | Nanoscale Measurements of Charge Transfer at Cocatalyst/Semiconductor Interfaces in BiVO <sub>4</sub> Particle Photocatalysts. Nano Letters, 2022, 22, 9493-9499.  | 4.5  | 6         |
| 2223 | Fe-Incorporated Ni/MoO <sub>2</sub> Hollow Heterostructure Nanorod Arrays for High-Efficiency Overall Water Splitting in Alkaline and Seawater Media. Small, 2022, 18, .   | 5.2  | 38        |
| 2224 | Highly Durable Bifunctional Gas Diffusion Electrodes Fabricated with Melilite-Type Fe/Co/Ni-Mixed Oxide Electrocatalysts. ACS Applied Energy Materials, 2022, 5, 15502-15509.  | 2.5  | 1         |
| 2225 | High-performing catalysts for energy-efficient commercial alkaline water electrolysis. Sustainable Energy and Fuels, 2022, 7, 31-60.   | 2.5  | 18        |
| 2226 | Tuning electrocatalytic water oxidation by MnO <sub>x</sub> through the incorporation of abundant metal cations. Sustainable Energy and Fuels, 2022, 7, 92-105.  | 2.5  | 3         |
| 2227 | Low temperature <i>in situ</i> immobilization of nanoscale fcc and hcp polymorphic nickel particles in polymer-derived Si-Co-N(H) to promote electrocatalytic water oxidation in alkaline media. Nanoscale Advances, 2023, 5, 701-710. | 2.2  | 4         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 2228 | Activation of stainless steel 316L anode for anion exchange membrane water electrolysis. <i>Electrochemistry Communications</i> , 2023, 146, 107418.  | 2.3  | 6         |
| 2229 | Correlation between oxygen evolution reaction activity and surface compositional evolution in epitaxial $\text{La}_{0.5}\text{Sr}_{0.5}\text{Ni}_{1-x}\text{Fe}_x\text{O}_{3-\delta}$ thin films. <i>Nanoscale</i> , 2023, 15, 1119-1127. | 2.8  | 6         |
| 2230 | Topologic transition-induced abundant undercoordinated Fe active sites in NiFeOOH for superior oxygen evolution. <i>Nano Energy</i> , 2023, 106, 108044.  | 8.2  | 10        |
| 2231 | The influence of MOF modification on oxygen evolution and reduction reaction of Fe-doped $\text{GdBaCo}_2\text{O}_{5+\delta}$ perovskite. <i>Catalysis Communications</i> , 2023, 174, 106584.  | 1.6  | 1         |
| 2232 | Investigation of nickel iron layered double hydroxide for water oxidation in different pH electrolytes. <i>Chinese Journal of Catalysis</i> , 2023, 44, 127-138.  | 6.9  | 14        |
| 2233 | $\text{LaSrCo}$ oxide catalysts for oxygen evolution reaction in anion exchange membrane water electrolyzer: The role of electrode fabrication on performance and durability. <i>Journal of Power Sources</i> , 2023, 556, 232484.        | 4.0  | 9         |
| 2234 | Insights into enhanced activity and durability of hierarchical Fe-doped Ni(OH) <sub>2</sub> /Ni catalysts for alkaline oxygen evolution reaction: In situ XANES studies. <i>Applied Catalysis B: Environmental</i> , 2023, 324, 122269.   | 10.8 | 12        |
| 2235 | Activation of nickel foam through in-liquid plasma-induced phosphorus incorporation for efficient quasi-industrial water oxidation and selective oxygenation of organics. <i>Applied Catalysis B: Environmental</i> , 2023, 324, 122249.  | 10.8 | 10        |
| 2236 | NiFe-mixed metal porphyrin aerogels as oxygen evolution reaction catalysts in alkaline electrolyzers. <i>Nanoscale</i> , 2022, 14, 18033-18040.   | 2.8  | 0         |
| 2237 | Improving the Oxygen Evolution Activity of Layered Double Hydroxide via Erbium-Induced Electronic Engineering. <i>Small</i> , 2023, 19, .   | 5.2  | 53        |
| 2238 | Account of Ni/NiO Nanoparticle-Supported N-Doped Graphitic Carbon Derived from Sugarcane Waste as a Sustainable Electrocatalyst for Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2022, 5, 14945-14956.                | 2.5  | 4         |
| 2239 | Cobalt-Doped Iron Phosphate Crystal on Stainless Steel Mesh for Corrosion-Resistant Oxygen Evolution Catalyst. <i>Catalysts</i> , 2022, 12, 1521.   | 1.6  | 1         |
| 2240 | Fundamentals and future applications of electrochemical energy conversion in space. <i>Npj Microgravity</i> , 2022, 8, .  | 1.9  | 4         |
| 2241 | Catalyst Stability in Aqueous Electrochemistry. <i>Chemistry of Materials</i> , 2022, 34, 10223-10236.  | 3.2  | 8         |
| 2242 | Minireview: Ni-Fe and Ni-Co Metal-Organic Frameworks for Electrocatalytic Water-Splitting Reactions. <i>Small Structures</i> , 2023, 4, .   | 6.9  | 17        |
| 2243 | Enabling Lattice Oxygen Participation in a Triple Perovskite Oxide Electrocatalyst for the Oxygen Evolution Reaction. <i>ACS Energy Letters</i> , 2023, 8, 565-573.   | 8.8  | 23        |
| 2244 | Non-Kinetic Effects Convolute Activity and Tafel Analysis for the Alkaline Oxygen Evolution Reaction on NiFeOOH Electrocatalysts. <i>Angewandte Chemie</i> , 2023, 135, .   | 1.6  | 11        |
| 2245 | Non-Kinetic Effects Convolute Activity and Tafel Analysis for the Alkaline Oxygen Evolution Reaction on NiFeOOH Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .  | 7.2  | 27        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 2246 | High-Performance Oxygen Evolution Reaction Electrocatalysts Discovered via High-Throughput Aerogel Synthesis. <i>ACS Catalysis</i> , 2023, 13, 601-611.  | 5.5  | 5         |
| 2247 | Electrodeposition of nickel-iron on stainless steel as an efficient electrocatalyst coating for the oxygen evolution reaction in alkaline conditions. <i>Journal of Applied Electrochemistry</i> , 0, , .  | 1.5  | 2         |
| 2248 | 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        |
| 2249 | A Novel Electrode for Value-Generating Anode Reactions in Water Electrolyzers at Industrial Current Densities. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .  | 7.2  | 26        |
| 2250 | NiFeOx and NiFeCoOx Catalysts for Anion Exchange Membrane Water Electrolysis. <i>Electrochem</i> , 2022, 3, 843-861.   | 1.7  | 6         |
| 2251 | Defect-Induced Atomic Arrangement in CoFe Bimetallic Heterostructures with Boosted Oxygen Evolution Activity. <i>Small</i> , 2023, 19, .   | 5.2  | 11        |
| 2252 | Selective Hydroxylation of Carbon Fiber Paper for Long-Lasting Hydrophilicity by a Green Chemistry Process. <i>Advanced Materials Interfaces</i> , 2023, 10, .   | 1.9  | 3         |
| 2253 | Advances in Selective Electrochemical Oxidation of 5-Hydroxymethylfurfural to Produce High-Value Chemicals. <i>Advanced Science</i> , 2023, 10, .  | 5.6  | 26        |
| 2254 | Nanopore-rich NiFe LDH targets the formation of the high-valent nickel for enhanced oxygen evolution reaction. <i>Nano Research</i> , 2023, 16, 2286-2293.   | 5.8  | 13        |
| 2255 | Partially crystallized Ni-Fe oxyhydroxides promotes oxygen evolution. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 5774-5782.   | 3.8  | 5         |
| 2256 | Scalable Alkaline Zinc-Iron/Nickel Hybrid Flow Battery with Energy Density up to 200 Wh L <sup>-1</sup> . <i>Advanced Materials</i> , 2023, 35, .  | 11.1 | 6         |
| 2257 | Recent progress in noble-metal-free electrocatalysts for alkaline oxygen evolution reaction. <i>Frontiers in Chemistry</i> , 0, 10, .  | 1.8  | 7         |
| 2258 | A Novel Electrode for Value-Generating Anode Reactions in Water Electrolyzers at Industrial Current Densities. <i>Angewandte Chemie</i> , 2023, 135, .   | 1.6  | 4         |
| 2259 | Anodization of NiFe Foam for Water-Oxidation Reaction under Neutral Conditions. <i>ACS Applied Energy Materials</i> , 2023, 6, 233-244.  | 2.5  | 9         |
| 2260 | Electronic structure regulation of nickel-iron layered double hydroxides by tuning ternary component for overall water splitting. <i>Materials Today Sustainability</i> , 2023, 21, 100295.  | 1.9  | 4         |
| 2261 | Engineering Active Iron Sites on Nanoporous Bimetal Phosphide/Nitride Heterostructure Array Enabling Robust Overall Water Splitting. <i>Advanced Functional Materials</i> , 2023, 33, .  | 7.8  | 38        |
| 2262 | Immobilizing Low-Cost Metal Nitrides in Electrochemically Reconstructed Platinum Group Metal (PGM)-Free Oxy(Hydroxides) Surface for Exceptional OER Kinetics in Anion Exchange Membrane Water Electrolysis. <i>Advanced Energy Materials</i> , 2023, 13, . | 10.2 | 15        |
| 2263 | Fe-Alloyed MoNi Nanohybrids as Oxygen Evolution Reaction/Oxygen Reduction Reaction Bifunctional Electrocatalyst for Rechargeable Zinc-Air Batteries. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 0, , 2200581.                   | 0.8  | 0         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 2264 | Active Surface Area and Intrinsic Catalytic Oxygen Evolution Reactivity of NiFe LDH at Reactive Electrode Potentials Using Capacitances. <i>ACS Catalysis</i> , 2023, 13, 1186-1196.  | 5.5  | 36        |
| 2265 | Structure and Magnetism of Iron-Substituted Nickel Hydroxide Nanosheets. <i>Magnetochemistry</i> , 2023, 9, 25.   | 1.0  | 0         |
| 2266 | Constructing LaNiO <sub>3</sub> /NiO heterostructure via selective dissolution of A-site cations from La <sub>1-x</sub> Sr <sub>x</sub> NiO <sub>3</sub> for promoting oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2023, 941, 168908. | 2.8  | 6         |
| 2267 | Reversible and Irreversible Cation Intercalation in NiFeO <sub>x</sub> Oxygen Evolution Catalysts in Alkaline Media. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 545-551.  | 2.1  | 8         |
| 2268 | Introducing High-Valence Iridium Single Atoms into Bimetal Phosphides toward High-Efficiency Oxygen Evolution and Overall Water Splitting. <i>Small</i> , 2023, 19, .   | 5.2  | 10        |
| 2269 | Lattice-Strain Engineering for Heterogenous Electrocatalytic Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2023, 35, .   | 11.1 | 34        |
| 2270 | Slow O-H Dissociation in the First-Order Oxygen Evolution Reaction Kinetics on Polycrystalline $\beta$ -FeO(OH). <i>Journal of Physical Chemistry C</i> , 2023, 127, 154-168.   | 1.5  | 11        |
| 2271 | Role of Ir Decoration in Activating a Multiscale Fractal Surface in Porous Ni for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2023, 13, 1726-1739.  | 5.5  | 2         |
| 2272 | The adjacent Fe oxidation greatly enhancing OER activity on the Ni active site: S plays the role in optimizing local coordination and electronic structure. <i>Materials Today Chemistry</i> , 2023, 27, 101330.  | 1.7  | 2         |
| 2273 | Synthesis of hierarchical metal nanostructures with high electrocatalytic surface areas. <i>Science Advances</i> , 2023, 9, .   | 4.7  | 7         |
| 2274 | Controllable synthetic strategy of the coordinatively unsaturated metal sites on Ni-BTC for highly efficient oxygen evolution. <i>Catalysis Today</i> , 2023, 423, 114000.  | 2.2  | 1         |
| 2275 | Template-assisted synthesis of ultrathin graphene aerogels as bifunctional oxygen electrocatalysts for water splitting and alkaline/neutral zinc-air batteries. <i>Chemical Engineering Journal</i> , 2023, 458, 141492.                                      | 6.6  | 9         |
| 2276 | Evolution of Carbonate-Intercalated $\beta$ -NiOOH from a Molecularly Derived Nickel Sulfide (Pre)Catalyst for Efficient Water and Selective Organic Oxidation. <i>Small</i> , 2023, 19, .  | 5.2  | 13        |
| 2277 | Demonstrating the source of inherent instability in NiFe LDH-based OER electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2023, 11, 4067-4077.   | 5.2  | 34        |
| 2278 | Facial synthesis of p-p heterojunction composites: Evaluation of their electrochemical properties with photovoltaics-electrolyzer water splitting using two-electrode system. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 13814-13826.        | 3.8  | 10        |
| 2279 | Engineering Multilevel Collaborative Catalytic Interfaces with Multifunctional Iron Sites Enabling High-Performance Real Seawater Splitting. <i>ACS Nano</i> , 2023, 17, 1681-1692.   | 7.3  | 62        |
| 2280 | In Situ Surface Reconstruction of Catalysts for Enhanced Hydrogen Evolution. <i>Catalysts</i> , 2023, 13, 120.  | 1.6  | 3         |
| 2281 | Tuning OER Electrocatalysts toward LOM Pathway through the Lens of Multi-Descriptor Feature Selection by Artificial Intelligence-Based Approach. , 2023, 5, 299-320.  |      | 10        |

| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 2282 | A quinary high entropy metal oxide exhibiting robust and efficient bidirectional O <sub>2</sub> reduction and water oxidation. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 10521-10531.   | 3.8 | 3         |
| 2283 | Effects of phosphate precursors on morphology and oxygen evolution reaction activity of NiFe (oxy)hydroxide on nickel foams. <i>Transactions of Nonferrous Metals Society of China</i> , 2022, 32, 4050-4061.   | 1.7 | 1         |
| 2284 | A self-supported bifunctional MoNi <sub>4</sub> framework with iron doping for ultra-efficient water splitting. <i>Journal of Materials Chemistry A</i> , 2023, 11, 3408-3417.  | 5.2 | 6         |
| 2285 | Controllable synthesis of MOFs-derived porous and tubular bimetallic Fe-Ni phosphides for efficient electrocatalytic water splitting. <i>Catalysis Science and Technology</i> , 2023, 13, 1512-1517.  | 2.1 | 8         |
| 2286 | Synthesis of amorphous trimetallic PdCuNiP nanoparticles for enhanced OER. <i>Frontiers in Chemistry</i> , 0, 11, .   | 1.8 | 2         |
| 2287 | Dumbbell Defect Containing Chromium-Rich Lithium-Vacant Layered Li <sub>y</sub> Cr <sub>1-x</sub> Fe <sub>x</sub> O <sub>2</sub> (0 ≤ x ≤ 1, 0 ≤ y ≤ 1) Tj ETQg1 1 0.784314 rg BT Reaction. <i>ACS Applied Energy Materials</i> , 2023, 6, 1308-1320. | 2.3 | 2         |
| 2288 | Amorphous NiO <sub>n</sub> coupled with trace PtO <sub>x</sub> toward superior electrocatalytic overall water splitting in alkaline seawater media. <i>Nano Research</i> , 2023, 16, 6517-6530.   | 5.8 | 11        |
| 2289 | Heteroatom-doped transition metal hydroxides in energy storage and conversion: a review. <i>Materials Advances</i> , 2023, 4, 1226-1248.  | 2.6 | 7         |
| 2290 | Structure, materials, and preparation of photoelectrodes. , 2023, , 83-174.   |     | 1         |
| 2291 | Deep Reconstruction of Fe-NiMoO <sub>4</sub> ·nH <sub>2</sub> O@NiOOH as Efficient Oxygen Evolution Electrocatalysts. <i>Energy &amp; Fuels</i> , 2023, 37, 3023-3030.  | 2.5 | 7         |
| 2292 | Three-Dimensional Strawlike MoSe <sub>2</sub> -Ni(Fe)Se Electrocatalysts for Overall Water Splitting. <i>Inorganic Chemistry</i> , 2023, 62, 2894-2904.   | 1.9 | 5         |
| 2293 | Growth of carbon nanotubes over carbon nanofibers catalyzed by bimetallic alloy nanoparticles as a bifunctional electrode for Zn-air batteries. <i>RSC Advances</i> , 2023, 13, 11591-11599.  | 1.7 | 1         |
| 2294 | 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         |
| 2295 | Effect of Fe on Calcined Ni(OH) <sub>2</sub> Anode in Alkaline Water Electrolysis. <i>Catalysts</i> , 2023, 13, 496.  | 1.6 | 3         |
| 2296 | Monolayer Iron and Iron-Rich Hydroxide Nanosheets Exfoliated from High-Quality Green Rust for Enhanced Electrocatalytic Oxygen Evolution Reaction. <i>Chemistry of Materials</i> , 2023, 35, 1769-1779.   | 3.2 | 1         |
| 2297 | Unusual double ligand holes as catalytic active sites in LiNiO <sub>2</sub> . <i>Nature Communications</i> , 2023, 14, .  | 5.8 | 16        |
| 2298 | Synergistic effect of trimetallic doping and ĩĳ conjugation in NiZnCo-ZIF@HHTP for efficient oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2023, 937, 117410.  | 1.9 | 1         |
| 2299 | Facile synthesis of a NiMnFeCrCu high entropy alloy for electrocatalytic oxygen evolution reactions. <i>Materials Today Sustainability</i> , 2023, 22, 100360.  | 1.9 | 2         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 2300 | Unraveling the Fe-interaction of NiFe-based metal-organic frameworks with enhanced oxygen evolution: Optimizing electronic structure and facilitating electron transfer modulation. <i>Journal of Colloid and Interface Science</i> , 2023, 640, 1-14.            | 5.0  | 6         |
| 2301 | Critical aspects in the reliable assessment of the activity data for electrocatalytic materials. <i>Current Opinion in Electrochemistry</i> , 2023, 39, 101266.   | 2.5  | 3         |
| 2302 | Nanostructured NiFe (oxy)hydroxide fabricated on nickel foams by laser-induced water plasma for enhanced alkaline oxygen evolution reaction. <i>Applied Surface Science</i> , 2023, 622, 156934.  | 3.1  | 4         |
| 2303 | Stainless steel supported NiCo <sub>2</sub> O <sub>4</sub> active layer for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2023, 453, 142295.  | 2.6  | 3         |
| 2304 | Interplay of surface and subsurface contributions in electrocatalysis. <i>Current Opinion in Electrochemistry</i> , 2023, 39, 101252.   | 2.5  | 2         |
| 2305 | Synergetic regulation of CeO <sub>2</sub> modification and (W <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> - intercalation on NiFe-LDH for high-performance large-current seawater electrooxidation. <i>Applied Catalysis B: Environmental</i> , 2023, 330, 122612. | 10.8 | 18        |
| 2306 | Trojan strategy assisted phase-pure Fe-NiCo <sub>2</sub> S <sub>4</sub> for industrial anion-exchange membrane water electrolyzer. <i>Applied Catalysis B: Environmental</i> , 2023, 331, 122660.   | 10.8 | 9         |
| 2307 | Unveiling the in-situ hydrogen intercalation in Mo <sub>2</sub> CO <sub>x</sub> for promoting the alkaline hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2023, 332, 122739.  | 10.8 | 9         |
| 2308 | One-step growth of Ni <sub>3</sub> Fe-Fe <sub>3</sub> C heterostructures well encapsulated in NCNTs as superior self-supported bifunctional electrocatalysts for overall water splitting. <i>Journal of Alloys and Compounds</i> , 2023, 949, 169825.             | 2.8  | 2         |
| 2309 | Unveiling anion induced surface reconstruction of perovskite oxide for efficient water oxidation. <i>Applied Catalysis B: Environmental</i> , 2023, 330, 122661.  | 10.8 | 10        |
| 2310 | Origin of Surface Reconstruction in Lattice Oxygen Oxidation Mechanism Based Transition Metal Oxides: A Spontaneous Chemical Process. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .  | 7.2  | 10        |
| 2311 | Critical parameters and essential strategies in designing photoanodes to overcome the sluggish water oxidation reaction. <i>Journal of Environmental Chemical Engineering</i> , 2023, 11, 109356.   | 3.3  | 5         |
| 2312 | Impact of power supply fluctuation and part load operation on the efficiency of alkaline water electrolysis. <i>Journal of Power Sources</i> , 2023, 560, 232629.   | 4.0  | 8         |
| 2313 | Getting the Basics Right: Preparing Alkaline Electrolytes for Electrochemical Applications. <i>ACS Energy Letters</i> , 2023, 8, 1141-1146.   | 8.8  | 21        |
| 2314 | NiFe-based tungstate@layered double hydroxide heterostructure supported on graphene as efficient oxygen evolution reaction catalyst. <i>Materials Today Chemistry</i> , 2023, 28, 101369.   | 1.7  | 2         |
| 2315 | Synergistically boosting the oxygen evolution reaction activity of NiOOH nanosheets by Fe doping. <i>Results in Chemistry</i> , 2023, 5, 100808.  | 0.9  | 1         |
| 2316 | Energy-efficient ultrafast microwave crystalline phase evolution for designing highly efficient oxygen evolution catalysts. <i>Applied Surface Science</i> , 2023, 617, 156622.   | 3.1  | 3         |
| 2317 | Unraveling Sequential Oxidation Kinetics and Determining Roles of Multi-Cobalt Active Sites on Co <sub>3</sub> O <sub>4</sub> Catalyst for Water Oxidation. <i>Journal of the American Chemical Society</i> , 2023, 145, 3470-3477.                               | 6.6  | 38        |



| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 2318 | In Situ Detection of Iron in Oxidation States $\text{Fe}^{0-IV}$ in Cobalt-Iron Oxyhydroxide Reconstructed during Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2023, 13, .   | 10.2 | 16        |
| 2319 | Activated $\text{FeS}_2$ @ $\text{NiS}_2$ Core-Shell Structure Boosting Cascade Reaction for Superior Electrocatalytic Oxygen Evolution. <i>Small</i> , 2023, 19, .   | 5.2  | 11        |
| 2320 | Reversible and irreversible transformations of Ni-based electrocatalysts during the oxygen evolution reaction. <i>Current Opinion in Electrochemistry</i> , 2023, 38, 101231.   | 2.5  | 5         |
| 2321 | Simultaneous Improvement in Hole Storage and Interfacial Catalysis over Ni-Fe Oxyhydroxide-Modified Tantalum Nitride Photoanodes. <i>ACS Catalysis</i> , 2023, 13, 2647-2656.   | 5.5  | 5         |
| 2322 | Handily etching nickel foams into catalyst-substrate fusion self-stabilized electrodes toward industrial-level water electrolysis. , 2023, 5, .   |      | 9         |
| 2323 | Roll-to-Roll Production of Electrocatalysts Achieving High-Current Alkaline Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 0, , .   | 4.0  | 0         |
| 2324 | Iron-Cobalt-Cerium Multimetallic Oxides Derived from Prussian Blue Precursors: Enhanced Oxygen Evolution Electrocatalysis. <i>ChemPlusChem</i> , 2023, 88, .  | 1.3  | 2         |
| 2325 | Construction of 2D C,N-co-doped $\text{ZnO/Co}_3\text{O}_4$ over $\text{Ni(OH)}_2$ mesoporous ultrathin nanosheets on Ni foam as high-performance electrocatalysts for benzyl-alcohol oxidation and accelerating hydrogen evolution. <i>New Journal of Chemistry</i> , 2023, 47, 5970-5976. | 1.4  | 0         |
| 2326 | Composition-controlled chemical bath deposition of Fe-doped NiO microflowers for boosting oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 18291-18300.   | 3.8  | 7         |
| 2327 | Surface synergistic effect of sub-20 nm NiFeCr hydroxide nanodots yielding high oxygen evolution mass activities. <i>Chemical Engineering Journal</i> , 2023, 461, 141917.  | 6.6  | 3         |
| 2328 | Assessing recent progress in MXene-based nanomaterials for oxygen evolution reactions. <i>International Journal of Hydrogen Energy</i> , 2024, 52, 293-301.   | 3.8  | 3         |
| 2329 | Enhancing the oxygen evolution reaction of cobalt hydroxide by fabricating nanocomposites with fluorine-doped graphene oxide. <i>Dalton Transactions</i> , 2023, 52, 3877-3883.   | 1.6  | 3         |
| 2330 | Evaluating Fe-Site and Vacancy Dependent Intrinsic Activity of NiFe Layered Double Hydroxides through Cavity Microelectrodes. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 2148-2154.   | 2.1  | 3         |
| 2331 | Key components and design strategy of the membrane electrode assembly for alkaline water electrolysis. <i>Energy and Environmental Science</i> , 2023, 16, 1384-1430.   | 15.6 | 49        |
| 2332 | In Situ Fabrication of Mn-Doped $\text{NiMoO}_4$ Rod-like Arrays as High Performance OER Electrocatalyst. <i>Nanomaterials</i> , 2023, 13, 827.   | 1.9  | 1         |
| 2333 | Electrochemical Conditioning of Metallurgically Prepared $\text{NiFe}_3$ Binary Alloy for Facile Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2023, 15, .  | 1.8  | 2         |
| 2334 | F and rare $\text{V}^{4+}$ -doped cobalt hydroxide hybrid nanostructures: excellent OER activity with ultralow overpotential. <i>Dalton Transactions</i> , 2023, 52, 4606-4615.   | 1.6  | 3         |
| 2335 | Affordable Green Hydrogen from Alkaline Water Electrolysis: Key Research Needs from an Industrial Perspective. <i>ACS Energy Letters</i> , 2023, 8, 1502-1509.  | 8.8  | 40        |

| #    | ARTICLE  | IF   | CITATIONS |
|------|--|------|-----------|
| 2336 | Mo <sub>2</sub> CT <sub>x</sub> MXene supported nickel-iron alloy: an efficient and stable heterostructure to boost oxygen evolution reaction. 2D Materials, 2023, 10, 024005.   | 2.0  | 2         |
| 2337 | Conducting Polymers for Water Splitting Applications. , 2022, , 1-30.  |      | 0         |
| 2338 | Heterobimetallic NiFe Cooperative Molecular Water Oxidation Catalyst. Angewandte Chemie - International Edition, 2023, 62, .   | 7.2  | 20        |
| 2339 | Heterobimetallic NiFe Cooperative Molecular Water Oxidation Catalyst. Angewandte Chemie, 2023, 135, .  | 1.6  | 3         |
| 2340 | Recent advances and future prospects on Ni <sub>3</sub> S <sub>2</sub> -Based electrocatalysts for efficient alkaline water electrolysis. Green Energy and Environment, 2024, 9, 659-683.                                      | 4.7  | 1         |
| 2341 | Oxanion Engineering Suppressed Iron Segregation in Nickel-Iron Catalysts Toward Stable Water Oxidation. Advanced Materials, 2023, 35, .  | 11.1 | 28        |
| 2342 | Insights into the electronic structure of Fe-Ni thin-film catalysts during the oxygen evolution reaction using <i>operando</i> resonant photoelectron spectroscopy. Journal of Materials Chemistry A, 2023, 11, 8066-8080.     | 5.2  | 2         |
| 2343 | Copper doping-induced high-valence nickel-iron-based electrocatalyst toward enhanced and durable oxygen evolution reaction. Chem Catalysis, 2023, 3, 100552.   | 2.9  | 4         |
| 2344 | Molecular Engineering of Metal-Organic Frameworks as Efficient Electrochemical Catalysts for Water Oxidation. Advanced Materials, 2023, 35, .  | 11.1 | 27        |
| 2346 | Impact of impurities on water electrolysis: a review. Sustainable Energy and Fuels, 2023, 7, 1565-1603.  | 2.5  | 21        |
| 2347 | Insights into Active Sites and Mechanisms of Benzyl Alcohol Oxidation on Nickel-Iron Oxyhydroxide Electrodes. ACS Catalysis, 2023, 13, 4272-4282.  | 5.5  | 4         |
| 2348 | Band Gap Narrowing in a High-Entropy Spinel Oxide Semiconductor for Enhanced Oxygen Evolution Catalysis. Journal of the American Chemical Society, 2023, 145, 6753-6761.   | 6.6  | 28        |
| 2349 | Origin of Surface Reconstruction in Lattice Oxygen Oxidation Mechanism Based Transition Metal Oxides: A Spontaneous Chemical Process. Angewandte Chemie, 2023, 135, .  | 1.6  | 0         |
| 2350 | Hydrogen-Rich Pyrolysis from Ni-Fe Heterometallic Schiff Base Centrosymmetric Cluster Facilitates NiFe Alloy for Efficient OER Electrocatalysts. Small, 2023, 19, .  | 5.2  | 9         |
| 2351 | Impact of Highly Concentrated Alkaline Treatment on Mesoporous Cobalt Oxide for the Oxygen Evolution Reaction. Advanced Sustainable Systems, 2023, 7, .  | 2.7  | 3         |
| 2352 | Understanding the Role of (W, Mo, Sb) Dopants in the Catalyst Evolution and Activity Enhancement of Co <sub>3</sub> O <sub>4</sub> during Water Electrolysis via In Situ Spectroelectrochemical Techniques. Small, 2023, 19, . | 5.2  | 7         |
| 2353 | Oxygen Evolution/Reduction Reaction Catalysts: From <i>In Situ</i> Monitoring and Reaction Mechanisms to Rational Design. Chemical Reviews, 2023, 123, 6257-6358.  | 23.0 | 81        |
| 2354 | Nanostructured Ternary Nickel-Based Mixed Anionic (Telluro)-Selenide as a Superior Catalyst for Oxygen Evolution Reaction. Energy Technology, 2023, 11, .  | 1.8  | 0         |

| #    | ARTICLE   | IF   | CITATIONS |
|------|---|------|-----------|
| 2355 | One-step gas phase sulfided NiFe coating as self-supporting electrode for high efficiency oxygen evolution reaction. International Journal of Hydrogen Energy, 2023, , .  | 3.8  | 0         |
| 2356 | Ni <sup>2+</sup> /Fe Oxides/TiO <sub>2</sub> Heterojunction Anodes for Reactive Chlorine Generation and Mediated Water Treatment. ACS Applied Materials & Interfaces, 2023, 15, 17867-17878.  | 4.0  | 1         |
| 2357 | EPDM rubber-based membranes for electrochemical water splitting and carbon dioxide reduction reactions. Journal of Solid State Electrochemistry, 0, , .   | 1.2  | 0         |
| 2358 | Electronic structure tuning for enhanced oxygen evolution performance of a NiMnFeCr medium entropy alloy. International Journal of Hydrogen Energy, 2023, 48, 25755-25769.  | 3.8  | 0         |
| 2359 | Iron-Locked Hydr(oxy)oxide Catalysts via Ion-Compensatory Reconstruction Boost Large-Current-Density Water Oxidation. Advanced Science, 2023, 10, .   | 5.6  | 8         |
| 2360 | Nanorod Array-Based Hierarchical NiO Microspheres as a Bifunctional Electrocatalyst for a Selective and Corrosion-Resistance Seawater Photo/Electrolysis System. ACS Catalysis, 2023, 13, 5516-5528.  | 5.5  | 18        |
| 2361 | Water splitting over an ultrasonically synthesized NiFe/MoO <sub>3</sub> @CFP electrocatalyst. International Journal of Hydrogen Energy, 2023, 48, 26032-26045.   | 3.8  | 5         |
| 2362 | In Situ Transition of a Nickel Metal-Organic Framework on TiO <sub>2</sub> Photoanode towards Urea Photoelectrolysis. Catalysts, 2023, 13, 727.   | 1.6  | 0         |
| 2363 | Oxygen Vacancies Unfold the Catalytic Potential of NiFe-Layered Double Hydroxides by Promoting Their Electronic Transport for Oxygen Evolution Reaction. ACS Catalysis, 2023, 13, 6000-6012.  | 5.5  | 26        |
| 2364 | Dual enzyme-like Co <sup>2+</sup> /FeSe <sub>2</sub> nanoflowers with GSH degradation capability for NIR II-enhanced catalytic tumor therapy. Journal of Materials Chemistry B, 2023, 11, 4274-4286.  | 2.9  | 6         |
| 2365 | Assembling Amorphous Metal-Organic Frameworks onto Heteroatom-Doped Carbon Spheres for Remarkable Bifunctional Oxygen Electrocatalysis. Advanced Functional Materials, 2023, 33, .  | 7.8  | 12        |
| 2366 | The Readiness of Water Molecules to Split into Hydrogen + Oxygen: A Proposed New Aspect of Water Splitting. Advanced Materials, 2023, 35, .   | 11.1 | 1         |
| 2367 | A Facile Molecular Approach to Amorphous Nickel Pnictides and Their Reconstruction to Crystalline Potassium-Intercalated $\beta$ -NiOOH Enabling High-Performance Electrocatalytic Water Oxidation and Selective Oxidation of 5-Hydroxymethylfurfural. Small, 2023, 19, . | 5.2  | 7         |
| 2387 | Recent progress in the synthesis of transition metal nitride catalysts and their applications in electrocatalysis. Nanoscale, 2023, 15, 11777-11800.  | 2.8  | 21        |
| 2390 | Nickel Based Metal Oxide Electrocatalysts: From Model to Operando Conditions Studied by XPS and Vibrational Spectroscopy. , 2023, , .   |      | 0         |
| 2419 | The materials experiment knowledge graph. , 2023, 2, 909-914.   |      | 3         |
| 2426 | Urea electrooxidation: Research progress and application of supported nickel-based catalysts. Ionics, 2023, 29, 2969-2987.  | 1.2  | 0         |
| 2455 | Precise Control of Catalyst Interface at Atomic-level. Materials Chemistry Frontiers, 0, , .  | 3.2  | 0         |

| #    | ARTICLE   | IF  | CITATIONS |
|------|---|-----|-----------|
| 2467 | Recent advances in the rational design of alkaline OER catalysts: from electronic structures to industrial applications. <i>Materials Chemistry Frontiers</i> , 2023, 7, 5187-5214.       | 3.2 | 4         |
| 2472 | Unveiling the anode reaction environment in a CO <sub>2</sub> electrolyzer to provide a guideline for anode development. <i>Journal of Materials Chemistry A</i> , 2023, 11, 19312-19320. | 5.2 | 0         |
| 2474 | Critical challenges and opportunities for the commercialization of alkaline electrolysis: high current density, stability, and safety. <i>Materials Chemistry Frontiers</i> , 0, , .      | 3.2 | 0         |
| 2478 | Designing active oxides for a durable oxygen evolution reaction. , 2023, 2, 817-827.  |     | 6         |
| 2510 | Photoelectrocatalysis. , 2023, , .  |     | 0         |
| 2535 | Recent progress in understanding the catalyst layer in anion exchange membrane electrolyzers “ durability, utilization, and integration. , 0, , .   |     | 1         |
| 2642 | Best Practices for Accurately Reporting Electrocatalytic Performance of Nanomaterials. <i>Materials Horizons</i> , 2024, , 95-117.  | 0.3 | 0         |