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Fe₃O₄-Decorated Co₉S₈ Nanoparticles In Situ Grown on Reduced Graphene Oxide: A New and Efficient Electrocatalyst for Oxygen Evolution Reaction

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325	In-situ Growth of Ultrathin ZIF-67 Nanosheets on Conductive Ti@TiO ₂ /CdS Substrate for High-efficient Electrochemical Catalysis. 2016 , 219, 623-629		47
324	Synthesis of Cobalt Sulfide/Sulfur Doped Carbon Nanocomposites with Efficient Catalytic Activity in the Oxygen Evolution Reaction. 2016 , 22, 18259-18264		39
323	One-step solid phase synthesis of a highly efficient and robust cobalt pentlandite electrocatalyst for the oxygen evolution reaction. 2016 , 4, 18314-18321		80
322	Electrocatalysis for the oxygen evolution reaction: recent development and future perspectives. <i>Chemical Society Reviews</i> , 2017 , 46, 337-365	58.5	3041
321	Facile fabrication of N-doped three-dimensional reduced graphene oxide as a superior electrocatalyst for oxygen reduction reaction. 2017 , 534, 30-39		32
320	Fe ₉ S ₁₀ -decorated N, S co-doped graphene as a new and efficient electrocatalyst for oxygen reduction and oxygen evolution reactions. 2017 , 7, 1181-1192		33
319	Iron incorporation affecting the structure and boosting catalytic activity of FeCo(OH) ₂ : exploring the reaction mechanism of ultrathin two-dimensional carbon-free Fe ₃ O ₄ -decorated FeCo(OH) ₂ nanosheets as efficient oxygen evolution electrocatalysts. 2017 , 5, 6849-6859		53
318	Hierarchical porous Fe ₃ O ₄ /Co ₃ S ₄ nanosheets as an efficient electrocatalyst for the oxygen evolution reaction. 2017 , 5, 9210-9216		112
317	Anionic Regulated NiFe (Oxy)Sulfide Electrocatalysts for Water Oxidation. 2017 , 13, 1700610		104
316	Tuning the electrocatalysts for oxygen evolution reaction. 2017 , 5, 37-57		68
315	Interdiffusion Reaction-Assisted Hybridization of Two-Dimensional Metal-Organic Frameworks and TiCT Nanosheets for Electrocatalytic Oxygen Evolution. 2017 , 11, 5800-5807		388
314	Amorphous Metallic NiFeP: A Conductive Bulk Material Achieving High Activity for Oxygen Evolution Reaction in Both Alkaline and Acidic Media. 2017 , 29, 1606570		320
313	Carbon-encapsulated heazlewoodite nanoparticles as highly efficient and durable electrocatalysts for oxygen evolution reactions. 2017 , 10, 3522-3533		23
312	Electronically tailoring 3D flower-like graphene via alumina doping and incorporating Co as an efficient oxygen electrode catalyst in both alkaline and acid media. 2017 , 353, 28-39		22
311	N-, O-, and S-Tridoped Carbon-Encapsulated Co ₉ S ₈ Nanomaterials: Efficient Bifunctional Electrocatalysts for Overall Water Splitting. <i>Advanced Functional Materials</i> , 2017 , 27, 1606585	15.6	286
310	3D Synergistically Active Carbon Nanofibers for Improved Oxygen Evolution. 2017 , 7, 1602928		111
309	Hybrids of Cobalt/Iron Phosphides Derived from Bimetal-Organic Frameworks as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. 2017 , 9, 362-370		171

308	Vertically Aligned Porous Nickel(II) Hydroxide Nanosheets Supported on Carbon Paper with Long-Term Oxygen Evolution Performance. 2017 , 12, 543-551	64
307	Assembling Co ₉ S ₈ nanoflakes on Co ₃ O ₄ nanowires as advanced core/shell electrocatalysts for oxygen evolution reaction. 2017 , 26, 1203-1209	38
306	Amorphous MoS _x developed on Co(OH) ₂ nanosheets generating efficient oxygen evolution catalysts. 2017 , 5, 23103-23114	48
305	Co ₉ S ₈ -Modified N, S, and P Ternary-Doped 3D Graphene Aerogels as a High-Performance Electrocatalyst for Both the Oxygen Reduction Reaction and Oxygen Evolution Reaction. 2017 , 5, 9848-9857	47
304	Metal-Organic Frameworks Derived Nanotube of Nickel-Cobalt Bimetal Phosphides as Highly Efficient Electrocatalysts for Overall Water Splitting. <i>Advanced Functional Materials</i> , 2017 , 27, 1703455	15.6 461
303	A review of nanocarbons in energy electrocatalysis: Multifunctional substrates and highly active sites. 2017 , 26, 1077-1093	220
302	Fe ₃ C@nitrogen doped CNT arrays aligned on nitrogen functionalized carbon nanofibers as highly efficient catalysts for the oxygen evolution reaction. 2017 , 5, 19672-19679	84
301	Facile Spray-Pyrolysis Synthesis of Yolk-Shell Earth-Abundant Elemental Nickel-Iron-Based Nanohybrid Electrocatalysts for Full Water Splitting. 2017 , 10, 4756-4763	26
300	One-pot synthesis of multicomponent (Mo, Co) metal sulfide/carbon nanoboxes as anode materials for improving Na-ion storage. 2017 , 53, 10820-10823	33
299	Bifunctional Transition Metal Hydroxysulfides: Room-Temperature Sulfurization and Their Applications in Zn-Air Batteries. 2017 , 29, 1702327	252
298	Graphene Composites with Cobalt Sulfide: Efficient Trifunctional Electrocatalysts for Oxygen Reversible Catalysis and Hydrogen Production in the Same Electrolyte. 2017 , 13, 1701025	83
297	A Facile Strategy to Synthesize Cobalt-Based Self-Supported Material for Electrocatalytic Water Splitting. 2017 , 34, 1700189	13
296	Anchoring CoFeO Nanoparticles on N-Doped Carbon Nanofibers for High-Performance Oxygen Evolution Reaction. 2017 , 4, 1700226	152
295	Interface-Engineered Ni(OH) ₂ /Like FeOOH Electrocatalysts for Highly Efficient and Stable Oxygen Evolution Reaction. 2017 , 12, 2720-2726	22
294	Bifunctional petaloid nickel manganese layered double hydroxides decorated on a freestanding carbon foam for flexible asymmetric supercapacitor and oxygen evolution. 2017 , 252, 275-285	24
293	Spinel: Controlled Preparation, Oxygen Reduction/Evolution Reaction Application, and Beyond. 2017 , 117, 10121-10211	789
292	Cobalt Nanoparticles Encapsulated in Porous Carbons Derived from Core-Shell ZIF67@ZIF8 as Efficient Electrocatalysts for Oxygen Evolution Reaction. 2017 , 9, 28685-28694	97
291	A review of transition metal chalcogenide/graphene nanocomposites for energy storage and conversion. 2017 , 28, 2180-2194	127

290	Co9S8 activated N/S co-doped carbon tubes in situ grown on carbon nanofibers for efficient oxygen reduction. 2017 , 7, 34763-34769	9
289	Facile synthesis of binary NiCoS nanorods supported on nickel foam as efficient electrocatalysts for oxygen evolution reaction. 2017 , 42, 17129-17135	37
288	Use of Cobalt Polyphthalocyanine and Graphene as Precursors to Construct an Efficient Co9S8/N,S-G Electrocatalyst for the Oxygen Electrode Reaction in Harsh Media. 2017 , 9, 308-315	17
287	One-step synthesis of surface-enriched nickel cobalt sulfide nanoparticles on graphene for high-performance supercapacitors. 2017 , 6, 180-187	73
286	Fe3O4@NiSx/rGO composites with amounts of heterointerfaces and enhanced electrocatalytic properties for oxygen evolution. 2018 , 442, 256-263	40
285	Bifunctional bamboo-like CoSe arrays for high-performance asymmetric supercapacitor and electrocatalytic oxygen evolution. 2018 , 29, 205401	37
284	Earthworm-like N, S-Doped carbon tube-encapsulated Co9S8 nanocomposites derived from nanoscaled metal-organic frameworks for highly efficient bifunctional oxygen catalysis. 2018 , 6, 5935-5943	73
283	Vertically Aligned Oxygenated-CoS2/MoS2 Heteronanoshet Architecture from Polyoxometalate for Efficient and Stable Overall Water Splitting. 2018 , 8, 4612-4621	182
282	CoM(M=Fe,Cu,Ni)-embedded nitrogen-enriched porous carbon framework for efficient oxygen and hydrogen evolution reactions. 2018 , 389, 249-259	73
281	Co9S8-porous carbon spheres as bifunctional electrocatalysts with high activity and stability for oxygen reduction and evolution reactions. 2018 , 265, 32-40	42
280	Iron-Doped Nickel Phosphide Nanosheets In Situ Grown on Nickel Submicrowires as Efficient Electrocatalysts for Oxygen Evolution Reaction. 2018 , 10, 2248-2253	15
279	Hierarchical Fe-doped NiSe ultrathin nanosheets as an efficient electrocatalyst for oxygen evolution reaction. 2018 , 10, 5163-5170	111
278	A review of anion-regulated multi-anion transition metal compounds for oxygen evolution electrocatalysis. 2018 , 5, 521-534	76
277	Encapsulation of Ni/FeO heterostructures inside onion-like N-doped carbon nanorods enables synergistic electrocatalysis for water oxidation. 2018 , 10, 3997-4003	61
276	Water Splitting by Using Electrochemical Properties of Material. 2018 , 135-153	4
275	Hollow TiO@CoS Core-Branch Arrays as Bifunctional Electrocatalysts for Efficient Oxygen/Hydrogen Production. 2018 , 5, 1700772	145
274	Facile Synthesis of Co9S8 Hollow Spheres as a High-Performance Electrocatalyst for the Oxygen Evolution Reaction. 2018 , 6, 1863-1871	56
273	Three-Dimensional Macroporous Co-Embedded N-Doped Carbon Interweaving with Carbon Nanotubes as Excellent Bifunctional Catalysts for Zn-Air Batteries. <i>Langmuir</i> , 2018 , 34, 1992-1998	4 14

272	CoS@MoS Core-Shell Heterostructures as Trifunctional Electrocatalysts for Overall Water Splitting and Zn-Air Batteries. 2018 , 10, 1678-1689	159
271	Nickel metal-organic framework implanted on graphene and incubated to be ultrasmall nickel phosphide nanocrystals acts as a highly efficient water splitting electrocatalyst. 2018 , 6, 1682-1691	118
270	Selective reduction of nitrobenzene to aniline over electrocatalysts based on nitrogen-doped carbons containing non-noble metals. 2018 , 226, 509-522	52
269	Reduced Graphene Oxide-Wrapped Co Fe S /Co,Fe-N-C Composite as Bifunctional Electrocatalyst for Oxygen Reduction and Evolution. 2018 , 14, 1703748	98
268	Anion-Regulated Hydroxysulfide Monoliths as OER/ORR/HER Electrocatalysts and their Applications in Self-Powered Electrochemical Water Splitting. 2018 , 2, 1800055	63
267	Tunable electronic coupling of cobalt sulfide/carbon composites for optimizing oxygen evolution reaction activity. 2018 , 6, 10304-10312	68
266	Surface engineering of FeCo-based electrocatalysts supported on carbon paper by incorporating non-noble metals for water oxidation. 2018 , 42, 7254-7261	10
265	Amorphous CoFeBO nanoparticles as highly active electrocatalysts for efficient water oxidation reaction. 2018 , 43, 6138-6149	35
264	NiS nanowires grown on nickel foam as an efficient bifunctional electrocatalyst for water splitting with greatly practical prospects. 2018 , 29, 245402	29
263	Self-Supported Porous NiSe ₂ Nanowrinkles as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. 2018 , 6, 2231-2239	90
262	Defect-Rich Ni ₃ FeN Nanocrystals Anchored on N-Doped Graphene for Enhanced Electrocatalytic Oxygen Evolution. <i>Advanced Functional Materials</i> , 2018 , 28, 1706018	15.6 127
261	Bifunctional Electrocatalysts (Co ₉ S ₈ @NSC) Derived from a Polymer-metal Complex for the Oxygen Reduction and Oxygen Evolution Reactions. 2018 , 5, 355-361	21
260	Comparison of two water oxidation electrocatalysts by copper or zinc supermolecule complexes based on porphyrin ligand.. 2018 , 8, 40054-40059	6
259	Ultra-fast pyrolysis of ferrocene to form Fe/C heterostructures as robust oxygen evolution electrocatalysts. 2018 , 6, 21577-21584	31
258	Quaternary bimetallic phosphosulphide nanosheets derived from prussian blue analogues: Origin of the ultra-high activity for oxygen evolution. 2018 , 403, 90-96	73
257	Homogeneous core-shell NiCo ₂ S ₄ nanorods as flexible electrode for overall water splitting. 2018 , 43, 20627-20635	42
256	Direct chemical synthesis of ultrathin holey iron doped cobalt oxide nanosheets on nickel foam for oxygen evolution reaction. 2018 , 54, 238-250	85
255	Engineering Ni(OH) ₂ Nanosheet on CoMoO ₄ Nanoplate Array as Efficient Electrocatalyst for Oxygen Evolution Reaction. 2018 , 6, 16086-16095	42

254	Synergetic enhancement of oxygen evolution reaction by Ti ₃ C ₂ T _x nanosheets supported amorphous FeOOH quantum dots. 2018 , 290, 364-368	20
253	Multifunctional catalysts with high catalytic activities: Flower-like Co ₉ S ₈ microballs assembled with weak crystalline pea pod-shaped nanowires. 2018 , 43, 18832-18842	15
252	N,S-Atom-coordinated CoS trinary dopants within a porous graphene framework as efficient catalysts for oxygen reduction/evolution reactions. 2018 , 47, 14992-15001	27
251	A Facile Strategy to Construct Amorphous Spinel-Based Electrocatalysts with Massive Oxygen Vacancies Using Ionic Liquid Dopant. 2018 , 8, 1800980	105
250	Solid solution nitride/carbon nanotube hybrids enhance electrocatalysis of oxygen in zinc-air batteries. 2018 , 15, 380-387	20
249	In situ growth of well-ordered NiFe-MOF-74 on Ni foam by Fe induction as an efficient and stable electrocatalyst for water oxidation. 2018 , 54, 7046-7049	119
248	Tuning Spin State of Rock-Salt-Based Oxides by Manipulation of Crystallinity for Efficient Oxygen Electrocatalysis. 2018 , 8, 1703469	30
247	Phase-pure pentlandite NiCoS binary sulfide as an efficient bifunctional electrocatalyst for oxygen evolution and hydrogen evolution. 2018 , 10, 10459-10466	62
246	Co ₉ S ₈ @N,S-codoped carbon core-shell structured nanowires: constructing a fluffy surface for high-density active sites. 2018 , 6, 14752-14760	15
245	Improving Electrocatalysts for Oxygen Evolution Using Ni ₃ Fe ₃ O ₄ /Ni Hybrid Nanostructures Formed by Solvothermal Synthesis. 2018 , 3, 1698-1707	91
244	Facile synthesis of silver nanowire-zeolitic imidazolate framework 67 composites as high-performance bifunctional oxygen catalysts. 2018 , 10, 15755-15762	32
243	Flexible, self-supported hexagonal [Co(OH) ₂] nanosheet arrays as integrated electrode catalyzing oxygen evolution reaction. 2018 , 284, 495-503	19
242	Component-Tunable Rutile-Anatase TiO ₂ /Reduced Graphene Oxide Nanocomposites for Enhancement of Electrocatalytic Oxygen Evolution. 2018 , 4, 1133-1139	9
241	Co ₉ S ₈ -CuS-FeS trimetal sulfides for excellent oxygen evolution reaction electrocatalysis. 2018 , 283, 1695-1701	29
240	Quantum Effects Allow the Construction of Two-Dimensional Co O -Embedded Nitrogen-Doped Porous Carbon Nanosheet Arrays from Bimetallic MOFs as Bifunctional Oxygen Electrocatalysts. 2018 , 24, 14522-14530	16
239	Three-dimensional lily-like CoNi ₂ S ₄ as an advanced bifunctional electrocatalyst for hydrogen and oxygen evolution reaction. 2018 , 39, 1403-1410	45
238	Magnetically Recyclable FeO@Zn CdS Core-Shell Microspheres for Visible Light-Mediated Photocatalysis. <i>Langmuir</i> , 2018 , 34, 9264-9271	4 19
237	Monolithic electrochemical cells for overall water splitting. 2018 , 397, 37-43	12

236	Encapsulation of CoS Nanocrystals into N/S Co-Doped Honeycomb-Like 3D Porous Carbon for High-Performance Lithium Storage. 2018 , 5, 1800829	121
235	Nanocomposites Based on CoSe-Decorated FeSe Nanoparticles Supported on Reduced Graphene Oxide as High-Performance Electrocatalysts toward Oxygen Evolution Reaction. 2018 , 10, 19258-19270	96
234	Bi@C Nanoplates Derived from (BiO) ₂ CO ₃ as an Enhanced Electrode Material for Lithium/Sodium-Ion Batteries. 2018 , 3, 8973-8979	14
233	Graphite-graphene architecture stabilizing ultrafine Co ₃ O ₄ nanoparticles for superior oxygen evolution. 2018 , 140, 17-23	16
232	One-Pot Synthesis of NiCoS Hollow Spheres via Sequential Ion-Exchange as an Enhanced Oxygen Bifunctional Electrocatalyst in Alkaline Solution. 2018 , 10, 29521-29531	74
231	HMTA-assisted formation of hierarchical Co-based materials built by low-dimensional substructures as water oxidation electrocatalysts. 2018 , 20, 5249-5255	9
230	Electrocatalysts based on metal@carbon core@shell nanocomposites: An overview. 2018 , 3, 335-351	52
229	Recent progress on earth abundant electrocatalysts for oxygen evolution reaction (OER) in alkaline medium to achieve efficient water splitting A review. 2018 , 400, 31-68	279
228	One step fabrication of carbon supported cobalt pentlandite (Co ₉ S ₈) via the thermolysis of lignin and Co ₃ O ₄ . 2018 , 27, 196-203	13
227	Controllable synthesis of ultrathin Co ₉ S ₈ nanosheets as a highly efficient electrocatalyst for overall water splitting. 2018 , 281, 198-207	20
226	Large-scale synthesis of Fe ₃ Se ₄ /C composites assembled by aligned nanorods as advanced anode material for lithium storage. 2018 , 228, 235-238	12
225	Porous CoS/Nitrogen, Sulfur-Doped Carbon@MoC Dual Catalyst for Efficient Water Splitting. 2018 , 10, 22291-22302	66
224	Hierarchical cobalt sulfide with vertical in-plane edge structure for enhanced electrocatalytic oxygen evolution reaction. 2018 , 281, 348-356	17
223	Cluster Beam Deposition of Ultrafine Cobalt and Ruthenium Clusters for Efficient and Stable Oxygen Evolution Reaction. 2018 , 1, 3013-3018	20
222	Silica-Free Synthesis of Mesoporous Co ₃ O ₄ /CoOxPy as a Highly Active Oxygen Evolution Reaction Catalyst. 2019 , 5, 1390-1397	7
221	Ni _{1-x} CoxOy, Ni _{1-x} CoxSy and Ni _{1-x} CoxPy Catalysts Prepared from Ni _{1-x} Cox-ZIF-67 for Hydrogen Production by Electrolysis in Alkaline Media. 2019 , 11, 5131-5138	3
220	Electroactive Materials. 2019 , 31-67	
219	Submicron Co ₉ S ₈ /CoS/Carbon Spheres Derived from Bacteria for the Electrocatalytic Oxygen Reduction Reaction. 2019 , 6, 4571-4575	13

218	Construction of CoO/Co-Cu-S Hierarchical Tubular Heterostructures for Hybrid Supercapacitors. 2019 , 131, 15587-15593	25
217	Construction of CoO/Co-Cu-S Hierarchical Tubular Heterostructures for Hybrid Supercapacitors. 2019 , 58, 15441-15447	217
216	Preparation of Yolk-Shell-Structured Co Fe P with Enhanced OER Performance. 2019 , 12, 4461-4470	36
215	A hierarchically-assembled Fe-MoS/NiS/nickel foam electrocatalyst for efficient water splitting. 2019 , 48, 12186-12192	20
214	Reduced graphene oxide supported nitrogen-doped porous carbon-coated NiFe alloy composite with excellent electrocatalytic activity for oxygen evolution reaction. 2019 , 493, 963-974	22
213	Controlled self-assembly synthesis of CuCo ₂ O ₄ /rGO for improving the morphology-dependent electrochemical oxygen evolution performance. 2019 , 493, 710-718	12
212	Template assisted hydrothermal synthesis of CoSnO ₃ hollow microspheres for electrocatalytic oxygen evolution reaction. 2019 , 44, 21623-21636	4
211	Modified bluing treatment to produce nickel-cobalt-iron spinel oxide with promoted oxygen-evolving performance. 2019 , 55, 9841-9844	11
210	Fe-boosting Sn-based dual-shell nanostructures from new covalent porphyrin frameworks as efficient electrocatalysts for oxygen reduction and zinc-air batteries. 2019 , 320, 134593	13
209	Ultrathin amorphous CoFeP nanosheets derived from CoFe LDHs by partial phosphating as excellent bifunctional catalysts for overall water splitting. 2019 , 323, 134595	31
208	Porous TiO ₂ /CoS core-branch nanosheet arrays with high electrocatalytic activity for a hydrogen evolution reaction. 2019 , 30, 404001	11
207	Molybdenum, Cobalt Sulfide-Modified N-, S-Doped Graphene from Low-Temperature Molecular Pyrolysis: Mutual Activation Effect for Hydrogen Evolution. 2019 , 7, 19442-19452	7
206	ZIF-67-derived Co, Ni and S co-doped N-enriched porous carbon polyhedron as an efficient electrocatalyst for oxygen evolution reaction (OER). 2019 , 44, 27465-27471	29
205	In situ coupled amorphous cobalt nitride with nitrogen-doped graphene aerogel as a trifunctional electrocatalyst towards Zn-air battery driven full water splitting. 2019 , 259, 118100	76
204	Coupling Enhanced Oxygen Reduction Reaction Activity from Ag Nanorods-rGO Hybrids. 2019 , 166, H587-H591	11
203	Hetero-coupling of a carbonate hydroxide and sulfide for efficient and robust water oxidation. 2019 , 7, 21959-21965	11
202	Interfacial Electronic Structure Modulation of Hierarchical Co(OH)F/CuCoS Nanocatalyst for Enhanced Electrocatalysis and Zn-Air Batteries Performances. 2019 , 11, 37531-37540	23
201	Ultrafine monodisperse NiS/NiS ₂ heteronanoparticles in situ grown on N-doped graphene nanosheets with enhanced electrocatalytic activity for hydrogen evolution reaction. 2019 , 44, 26338-26346	19

200	Bimetallic Iron-Cobalt Catalysts and Their Applications in Energy-Related Electrochemical Reactions. 2019 , 9, 762	8
199	Zeolitic-imidazolate-framework-derived Co@Co ₃ O ₄ embedded into iron, nitrogen, sulfur Co-doped reduced graphene oxide as efficient electrocatalysts for overall water splitting and zinc-air batteries. 2019 , 323, 134821	22
198	Metal-organic frameworks-based catalysts for electrochemical oxygen evolution. 2019 , 6, 684-702	104
197	Activating CoFe ₂ O ₄ electrocatalysts by trace Au for enhanced oxygen evolution activity. 2019 , 478, 206-212	26
196	Bifunctional iron disulfide nanoellipsoids for high energy density supercapacitor and electrocatalytic oxygen evolution applications. 2019 , 6, 659-670	20
195	Organic-Inorganic hybrids of Fe-Copolyphenolic network wrapped Fe ₃ O ₄ nanocatalysts for significantly enhanced oxygen evolution. 2019 , 7, 14302-14308	27
194	An efficient bifunctional electrocatalyst derived from layer-by-layer self-assembly of a three-dimensional porous Co-N-C@graphene. 2019 , 64, 968-975	20
193	Morphological and electronic modification of 3D porous nickel microsphere arrays by cobalt and sulfur dual synergistic modulation for overall water splitting electrolysis and supercapacitors. 2019 , 491, 570-578	7
192	Heterogeneous CoFe ₂ O ₄ /FeS ₈ nanoparticles embedded in CNT networks as highly efficient and stable electrocatalysts for oxygen evolution reaction. 2019 , 433, 126688	61
191	Small sized Fe-Copoly sulfide nanoclusters anchored on carbon for oxygen evolution. 2019 , 7, 15851-15861	57
190	Thermal Synthesis of [email-protected] Graphene Dispersed on Nitrogen-Doped Carbon Matrix as an Excellent Electrocatalyst for Oxygen Evolution Reaction. 2019 , 2, 4075-4083	21
189	Recent progress in Co ₉ S ₈ -based materials for hydrogen and oxygen electrocatalysis. 2019 , 7, 16068-16088	66
188	Heterostructure engineering of Co-doped MoS ₂ coupled with MoCT MXene for enhanced hydrogen evolution in alkaline media. 2019 , 11, 10992-11000	67
187	Engineering Ternary Copper-Cobalt Sulfide Nanosheets as High-performance Electrocatalysts toward Oxygen Evolution Reaction. 2019 , 9, 459	12
186	Gel-assisted synthesis of Cu Co S nanosheets for lithium-ion batteries. 2019 , 488, 537-545	5
185	Efficient electrocatalytic oxygen evolution by Fe ₃ C nanosheets perpendicularly grown on 3D Ni foams. 2019 , 44, 16507-16515	12
184	Synthesis from a layered double hydroxide precursor for a highly efficient oxygen evolution reaction. 2019 , 6, 1793-1798	11
183	In situ Surface Chemistry Engineering of Cobalt-Sulfide Nanosheets for Improved Oxygen Evolution Activity. 2019 , 2, 4439-4449	26

182	Trimetallic Metal-Organic Framework Derived Carbon-Based Nanoflower Electrocatalysts for Efficient Overall Water Splitting. 2019 , 6, 1900290	55
181	Mesoporous Ultrathin Cobalt Oxides Nanosheets Grown on Carbon Cloth as a High-Performance Electrode for Oxygen Evolution Reaction. 2019 , 2, 1977-1987	16
180	Tuning Interfacial Structures for Better Catalysis of Water Electrolysis. 2019 , 25, 9799-9815	23
179	Boosting Stability and Activity of Oxygen Evolution Catalyst in Acidic Medium: Bimetallic Ir/Fe Oxides on Reduced Graphene Oxide Prepared through Ultrasonic Spray Pyrolysis. 2019 , 11, 2615-2623	10
178	The Energy Level Regulation of CoMo Carbonate Hydroxide for the Enhanced Oxygen Evolution Reaction Activity. 2019 , 7, 6161-6169	17
177	Nanoarchitectonics for Transition-Metal-Sulfide-Based Electrocatalysts for Water Splitting. 2019 , 31, e1807134	613
176	Alcohol-solvothermal syntheses, crystal structures and photocatalytic properties of tin selenides with polyselenide ligands. 2019 , 21, 1642-1652	5
175	Ultrathin CoS nanosheets vertically aligned on N,S/rGO for low voltage electrolytic water in alkaline media. 2019 , 9, 1951	25
174	MnO ₂ nanowires/CNTs composites as efficient non-precious metal catalyst for oxygen reduction reaction. 2019 , 837, 55-59	13
173	Water Oxidation Catalysts: The Quest for New Oxide-Based Materials. 2019 , 7, 29	13
172	Interfacial anchoring effect for enhanced lithium storage performance of sesame balls-like Fe ₃ O ₄ /C hollow nanospheres. 2019 , 855, 113626	1
171	Alveolate porous carbon aerogels supported Co ₉ S ₈ derived from a novel hybrid hydrogel for bifunctional oxygen electrocatalysis. 2019 , 144, 557-566	109
170	Core-branch CoNi hydroxysulfides with versatilely regulated electronic and surface structures for superior oxygen evolution electrocatalysis. 2019 , 38, 8-14	48
169	Iron oxide and phosphide encapsulated within N,P-doped microporous carbon nanofibers as advanced tri-functional electrocatalyst toward oxygen reduction/evolution and hydrogen evolution reactions and zinc-air batteries. 2019 , 413, 367-375	81
168	Nanoporous ruthenium and manganese oxide nanoparticles/reduced graphene oxide for high-energy symmetric supercapacitors. 2019 , 144, 185-192	34
167	A Supramolecular Coordination-Polymer-Derived Electrocatalyst for the Oxygen Evolution Reaction. 2019 , 25, 4036-4039	19
166	Coordination-assisted synthesis of iron-incorporated cobalt oxide nanoplates for enhanced oxygen evolution. 2019 , 11, 112-118	28
165	Noble-Metal-Free Electrocatalysts for Oxygen Evolution. 2019 , 15, e1804201	262

164	CoFe Bimetal Phosphate Composite Loaded on Reduced Graphene Oxide for Oxygen Evolution. 2019 , 14, 1950003	5
163	Three-Dimensional Graphene-Supported NiFe/CoS Composites: Rational Design and Active for Oxygen Reversible Electrocatalysis. 2019 , 11, 4028-4036	60
162	Co ₉ S ₈ /Ni ₃ S ₂ heterointerfaced nanotubes on Ni foam as highly efficient and flexible bifunctional electrodes for water splitting. 2019 , 299, 152-162	55
161	Phytic acid-derived Co ₂ -xNi _x P ₂ O ₇ -C/RGO and its superior OER electrocatalytic performance. 2019 , 44, 844-852	19
160	Spinel CoFe ₂ O ₄ supported by three dimensional graphene as high-performance bi-functional electrocatalysts for oxygen reduction and evolution reaction. 2019 , 44, 1610-1619	43
159	A Nanosized CoNi Hydroxide@Hydroxysulfide Core-Shell Heterostructure for Enhanced Oxygen Evolution. 2019 , 31, e1805658	144
158	Facile synthesis of NiSe ₂ particles with highly efficient electrocatalytic oxygen evolution reaction. 2019 , 235, 53-56	9
157	Three dimensional flower like cobalt sulfide (CoS)/functionalized MWCNT composite catalyst for efficient oxygen evolution reactions. 2019 , 466, 830-836	37
156	Co _{1-x} S embedded in porous carbon derived from metal organic framework as a highly efficient electrocatalyst for oxygen evolution reaction. 2019 , 30, 229-233	26
155	Co-Fe binary metal oxide electrocatalyst with synergistic interface structures for efficient overall water splitting. 2020 , 351, 44-49	25
154	A modulated electronic state strategy designed to integrate active HER and OER components as hybrid heterostructures for efficient overall water splitting. 2020 , 260, 118197	80
153	MOF-derived Co ₉ S ₈ /MoS ₂ embedded in tri-doped carbon hybrids for efficient electrocatalytic hydrogen evolution. 2020 , 44, 90-96	15
152	Graphene oxide mediated self-sacrificial synthesis of LaCO ₃ OH-Ni(OH) ₂ @graphene hierarchical composite for photocatalytic H ₂ evolution and supercapacitor. 2020 , 382, 123021	16
151	A review on non-noble metal based electrocatalysis for the oxygen evolution reaction. 2020 , 13, 4294-4309	75
150	A novel core-double shell heterostructure derived from a metal-organic framework for efficient HER, OER and ORR electrocatalysis. 2020 , 7, 191-197	22
149	CoFe-based electrocatalysts for oxygen evolution and reduction reaction. 2020 , 265-293	
148	Transition metal chalcogenides for energy storage and conversion. 2020 , 355-391	6
147	Fe _{0.96} S/Co ₈ FeS ₈ nanoparticles co-embedded in porous N, S codoped carbon with enhanced bifunctional electrocatalytic activities for all-solid-state Zn-air batteries. 2020 , 505, 144212	14

146	Novel Co _{1-x} S/C-3 supported on N-doped ketjen black as an efficient electrocatalyst for oxygen reduction reaction in alkaline media. 2020 , 106, 215-226	1
145	High-performance hybrid supercapacitor realized by nitrogen-doped carbon dots modified cobalt sulfide and reduced graphene oxide. 2020 , 334, 135632	34
144	Fe-Doped Co-Mo-S microtube: a highly efficient bifunctional electrocatalyst for overall water splitting in alkaline solution. 2020 , 49, 15009-15022	7
143	Synthesis of Co ₉ S ₈ @N, S Co-Doped Porous Carbon Core-Shell Nanocomposite with Highly Coulombic Efficiency in Electrochemical Hydrogen Storage Application. 2020 , 167, 110539	4
142	Porous NiCo ₂ S ₄ /FeOOH nanowire arrays with rich sulfide/hydroxide interfaces enable high OER activity. 2020 , 78, 105230	60
141	Phase Engineering of Iron-Cobalt Sulfides for Zn-Air and Na-Ion Batteries. 2020 , 14, 10438-10451	20
140	Highly surface electron-deficient Co ₉ S ₈ nanoarrays for enhanced oxygen evolution. 2020 , 5, 492-498	20
139	Heteroatom Ni alloyed pyrite-phase FeS ₂ as a pre-catalyst for enhanced oxygen evolution reaction. 2020 , 355, 136821	13
138	Porphyrin coordination polymer/Co _{1-x} S composite electrocatalyst for efficient oxygen evolution reaction. 2020 , 400, 125975	26
137	Crystal phase determined Fe active sites on Fe ₂ O ₃ (□ and □Fe ₂ O ₃) yolk-shell microspheres and their phase dependent electrocatalytic oxygen evolution reaction. 2020 , 533, 147368	10
136	Three-dimensional Co ₃ O ₄ @NiCo ₂ O ₄ nanoarrays with different morphologies as electrocatalysts for oxygen evolution reaction. 2020 , 45, 28598-28606	6
135	Single-atom implanted two-dimensional MOFs as efficient electrocatalysts for the oxygen evolution reaction. 2020 , 7, 4661-4668	12
134	WN/C@Co ₉ S ₈ @WS ₂ -hollow carbon nanocage as multifunctional electrocatalysts for DSSCs, ORR and OER. 2020 , 351, 136249	14
133	Metal-organic framework-derived sulfur and nitrogen dual-doped bimetallic carbon nanotubes as electrocatalysts for oxygen evolution reaction. 2020 , 288, 121421	8
132	Cavity containing core-shell Bi@C nanowires toward high performance lithium ion batteries. 2020 , 842, 155796	7
131	Template-Assisted Fabrication of ZnO/Co ₃ O ₄ One-Dimensional Metal-Organic Framework Array Decorated with Amorphous Iron Oxide/Hydroxide Nanoparticles as an Efficient Electrocatalyst for the Oxygen Evolution Reaction. 2020 , 34, 7716-7725	18
130	Improving catalysis for electrochemical water splitting using a phosphosulphide surface. 2020 , 7, 2388-2395	9
129	Studies on anion-induced structural transformations of iron(III) (Hydr)oxide micro-nanostructures and their oxygen evolution reaction performance. 2020 , 106, 106314	7

128	Mesoporous anion-cation-codoped CoS nanorings for enhanced electrocatalytic oxygen evolution reactions. 2020 , 31, 334001	2
127	Facile one-pot synthesis of binder-free nano/micro structured dendritic cobalt activated nickel sulfide: a highly efficient electrocatalyst for oxygen evolution reaction. 2020 , 45, 19304-19312	7
126	Metal-Organic Framework-Derived NiS/FeO Heterostructure-Decorated Carbon Nanotubes as Highly Efficient and Durable Electrocatalysts for Oxygen Evolution Reaction. 2020 , 12, 31552-31563	42
125	Green preparation of Fe ₃ O ₄ coral-like nanomaterials with outstanding magnetic and OER properties. 2020 , 831, 154702	16
124	1T/2H MoS ₂ nanoflowers decorated amorphous Mo-CoS _x skeleton: A ZIF-based composite electrocatalyst for the hydrogen evolution reaction. 2020 , 515, 145842	15
123	A molten-salt protected pyrolysis approach for fabricating a ternary nickel-cobalt-iron oxide nanomesh catalyst with promoted oxygen-evolving performance. 2020 , 56, 4579-4582	14
122	One step in-situ synthesis of Ni ₃ S ₂ /Fe ₂ O ₃ /N-doped carbon composites on Ni foam as an efficient electrocatalyst for overall water splitting. 2020 , 527, 146918	13
121	Waste cotton fabric derived porous carbon containing Fe ₃ O ₄ /NiS nanoparticles for electrocatalytic oxygen evolution. 2020 , 59, 92-99	10
120	Reactive species in advanced oxidation processes: Formation, identification and reaction mechanism. 2020 , 401, 126158	254
119	Spinel-type ternary multimetal hybrid oxides with porous hierarchical structure grown on Ni foam as large-current-density water oxidation electrocatalyst. 2020 , 838, 155662	5
118	Electrochemical hydrogen and oxygen evolution reactions from a cobalt-porphyrin-based covalent organic polymer. 2020 , 579, 598-606	22
117	Electrospun CNF Supported Ceramics as Electrochemical Catalysts for Water Splitting and Fuel Cell: A Review. 2020 , 12,	18
116	Fe-Based Electrocatalysts for Oxygen Evolution Reaction: Progress and Perspectives. 2020 , 10, 4019-4047	196
115	Hollow FeP/FeO Hybrid Nanoparticles on Carbon Nanotubes as Efficient Electrocatalysts for the Oxygen Evolution Reaction. 2020 , 12, 12783-12792	15
114	Mo-Doped Zn, Co Zeolitic Imidazolate Framework-Derived CoS Quantum Dots and MoS Embedded in Three-Dimensional Nitrogen-Doped Carbon Nanoflake Arrays as an Efficient Trifunctional Electrocatalysts for the Oxygen Reduction Reaction, Oxygen Evolution Reaction, and Hydrogen Evolution Reaction. 2020 , 12, 10280-10290	33
113	FeNi ₃ Fe ₃ O ₄ Heterogeneous Nanoparticles Anchored on 2D MOF Nanosheets/1D CNT Matrix as Highly Efficient Bifunctional Electrocatalysts for Water Splitting. 2020 , 8, 3820-3831	43
112	Highly Interconnected Nanorods and Nanosheets Based on a Hierarchically Layered Metal-Organic Framework for a Flexible, High-Performance Energy Storage Device. 2020 , 8, 3773-3785	23
111	Porous amorphous FeCo alloys as pre-catalysts for promoting the oxygen evolution reaction. 2020 , 828, 154465	26

110	A microwave-assisted bubble bursting strategy to grow Co ₈ FeS ₈ /CoS heterostructure on rearranged carbon nanotubes as efficient electrocatalyst for oxygen evolution reaction. 2020 , 449, 227561	28
109	MOF-derived electrocatalysts for oxygen reduction, oxygen evolution and hydrogen evolution reactions. <i>Chemical Society Reviews</i> , 2020 , 49, 1414-1448	58.5 587
108	Facile in situ fabrication of biomorphic CoP-CoO/rGO/C as an efficient electrocatalyst for the oxygen reduction reaction. 2020 , 12, 4374-4382	58
107	Hierarchical 3D Architected Ag Nanowires Shelled with NiMn-Layered Double Hydroxide as an Efficient Bifunctional Oxygen Electrocatalyst. 2020 , 14, 1770-1782	68
106	Water splitting mediated by an electrocatalytically driven cyclic process involving iron oxide species. 2020 , 8, 9896-9910	6
105	Self-Templating Synthesis of Hollow CoO Nanoparticles Embedded in N,S-Dual-Doped Reduced Graphene Oxide for Lithium Ion Batteries. 2020 , 14, 5780-5787	82
104	CoS nanowires mediated by superionic conductor Ag ₂ S for boosted oxygen evolution. 2020 , 518, 146106	13
103	FeCo-based hybrid MOF derived active species for effective oxygen evolution. 2020 , 30, 185-191	9
102	Tailored Crafting of Core-Shell Nanostructures with Strongly Coupled Interfaces and Improved Hydrophilicity to Enable Efficient Oxygen Evolution. 2020 , 8, 6127-6133	7
101	Vertically aligned FeOOH nanosheet arrays on alkali-treated nickel foam as highly efficient electrocatalyst for oxygen evolution reaction. 2020 , 574, 241-250	19
100	Ni/Fe based bimetallic coordination complexes with rich active sites for efficient oxygen evolution reaction. 2021 , 405, 126959	18
99	Operando X-ray spectroscopy visualizing the chameleon-like structural reconstruction on an oxygen evolution electrocatalyst. 2021 , 14, 906-915	37
98	Bimetal-organic framework derived CoFe/NC porous hybrid nanorods as high-performance persulfate activators for bisphenol a degradation. 2021 , 421, 127800	10
97	Elevating the d-Band Center of Six-Coordinated Octahedrons in Co ₉ S ₈ through Fe-Incorporated Topochemical Deintercalation. 2021 , 11, 2003023	74
96	Optimized performance of nickel in crystal-layered arrangement of NiFe ₂ O ₄ /rGO hybrid for high-performance oxygen evolution reaction. 2021 , 46, 2617-2629	19
95	FeOOH derived urchin-like Fe ₂ O ₃ @C as superior anode for sodium ion storage. 2021 , 858, 157714	3
94	Synthesis of Au/Co ₉ S ₈ composite aerogels by one-step sol-gel method as hydrogen evolution reaction electrocatalysts. 2021 , 28, 99-108	1
93	Performance and application of carbon-based electrocatalysts in direct methanol fuel cell. 2021 , 2, 5344-5364	7


92	NiRu _{0.3} Se Nanoparticles In Situ Grown on Reduced Graphene: Synthesis and Electrocatalytic Activity in the Oxygen Evolution Reaction. 2021 , 6, 502-510	3
91	High energy density hybrid supercapacitor based on cobalt-doped nickel sulfide flower-like architectures deposited with nitrogen-doped carbon dots. 2021 , 13, 1689-1695	20
90	Surface reconstruction induced in situ phosphorus doping in nickel oxides for an enhanced oxygen evolution reaction. 2021 , 9, 6432-6441	13
89	Solid-state synthesis of single-phase nickel monophosphosulfide for the oxygen evolution reaction. 2021 , 50, 12870-12878	1
88	Boosting the electrocatalytic hydrogen evolution and sodium-storage properties of Co ₉ S ₈ nanoparticles via encapsulation with nitrogen-doped few-layer graphene networks. 2021 , 5, 4618-4627	1
87	Electrochemical Water Splitting. 2021 , 533-555	1
86	Deconvoluting Reversible and Irreversible Degradation Phenomena in OER Catalyst Coated Membranes Using a Modified RDE Technique. 2021 , 168, 026507	2
85	Hollow Co ₉ S ₈ /CdS Nanocages as Efficient Photocatalysts for Hydrogen Evolution. 2021 , 4, 2743-2751	9
84	Shungite-derived graphene as a carbon support for bifunctional oxygen electrocatalysts. 2021 , 395, 178-187	6
83	A Convenient Method for Synthesis of Fe ₃ O ₄ /FeS ₂ as High-Performance Electrocatalysts for Oxygen Evolution Reaction and Zinc-Air Batteries. 2021 , 168, 030517	2
82	Phase evolution of vulcanized Co ₃ O ₄ catalysts during oxygen evolution reaction. 2021 , 546, 148819	13
81	Microwave-Assisted Facile Hydrothermal Synthesis of Fe ₃ O ₄ @O Nanocomposites for the Efficient Bifunctional Electrocatalytic Activity of OER/ORR. 2021 , 35, 8263-8274	7
80	Dithiocarbamate Complexes as Single Source Precursors to Nanoscale Binary, Ternary and Quaternary Metal Sulfides. 2021 , 121, 6057-6123	30
79	MXene-based accordion 2D hybrid structure with Co ₉ S ₈ /C/Ti ₃ C ₂ T _x as efficient electromagnetic wave absorber. 2021 , 414, 128875	79
78	Ultrathin One-Dimensional Ni-MIL-77 Nanobelts for High-Performance Electrocatalytic Urea Evolution. 2021 , 21, 3639-3644	1
77	Multi-scale regulation in S, N co-incorporated carbon encapsulated Fe-doped Co ₉ S ₈ achieving efficient water oxidation with low overpotential. 1	7
76	Interfacial Engineering of the Co _x P@Fe ₂ P Heterostructure for Efficient and Robust Electrochemical Overall Water Splitting. 2021 , 9, 7737-7748	11
75	Recent progress in cobalt-based carbon materials as oxygen electrocatalysts for zinc-air battery applications. 2021 , 20, 100659	16

74	Noble-Metal-Free Multicomponent Nanointegration for Sustainable Energy Conversion. 2021 , 121, 10271-10366	4
73	Wood-Derived Bimetallic and Heteroatomic Hierarchically Porous Carbon Aerogel for Rechargeable Flow Zn-Air Batteries. 2021 , 13, 39458-39469	1
72	Metal-Organic Frameworks-Derived Self-Supported Carbon-Based Composites for Electrocatalytic Water Splitting. 2021 , 27, 15866-15888	5
71	FeOOH@CoS composite catalyst with high catalytic performances for oxygen evolution reaction at high current density. 2021 ,	3
70	Metal oxides supported cobalt nanoparticles: Active electrocatalysts for oxygen evolution reaction. 2021 , 393, 139053	6
69	In-situ grown Co ₃ O ₄ nanoparticles on wood-derived carbon with natural ordered pore structure for efficient removal of Hg ⁰ from flue gas. 2021 , 98, 206-215	3
68	Study of carbon dioxide sequestration and electricity generation by a new hybrid bioenergy system with the novelty catalyst. 2021 , 197, 117366	
67	A surface configuration strategy to hierarchical Fe-Co-S/Cu ₂ O/Cu electrodes for oxygen evolution in water/seawater splitting. 2021 , 567, 150757	4
66	Ni ²⁺ /Co ²⁺ doped Au-Fe ₇ S ₈ nanoplatelets with exceptionally high oxygen evolution reaction activity. 2021 , 89, 106463	9
65	In-situ growth of CoFeS ₂ on metal-organic frameworks-derived Co-NC polyhedron enables high-performance oxygen electrocatalysis for rechargeable zinc-air batteries. 2021 , 512, 230430	7
64	Highly electrocatalytic performance of bimetallic CoFe sulfide nanoparticles encapsulated in N-doped carbon nanotubes on reduced graphene oxide for oxygen evolution. 2021 , 881, 160667	6
63	Improved electrocatalytic activity of hexagonal prisms Fe ₃ O ₄ derived from metal-organic framework by covering dendritic-shaped carbon layer in LiO ₂ battery. 2021 , 226, 109354	2
62	Synergistic regulation of nickel doping/hierarchical structure in cobalt sulfide for high performance zinc-air battery. 2021 , 298, 120539	12
61	Ternary duplex FeCoNi alloy prepared by cathode plasma electrolytic deposition as a high-efficient electrocatalyst for oxygen evolution reaction. 2022 , 891, 161934	3
60	ZIF-derived "senbei"-like CoS/CeO/Co heterostructural nitrogen-doped carbon nanosheets as bifunctional oxygen electrocatalysts for Zn-air batteries. 2021 , 13, 3227-3236	10
59	Transition metal-based bimetallic MOFs and MOF-derived catalysts for electrochemical oxygen evolution reaction. 2021 , 14, 1897-1927	105
58	Template-Assisted Synthesis of Accordion-Like CoFe(OH)X Nanosheet Clusters on GO Sheets for Electrocatalytic Water Oxidation.	
57	A Cr-FeOOH@Ni-P/NF binder-free electrode as an excellent oxygen evolution reaction electrocatalyst. 2021 , 13, 17003-17010	6

56	Catalyst Engineering for Electrochemical Energy Conversion from Water to Water: Water Electrolysis and the Hydrogen Fuel Cell. 2020 , 6, 653-679	30
55	Construction of mesoporous Cu-doped Co ₉ S ₈ rectangular nanotube arrays for high energy density all-solid-state asymmetric supercapacitors. 2019 , 7, 5333-5343	97
54	(Fe, Ni, Co) ₉ S ₈ @CS catalyst decorated on N-doped carbon as an efficient electrocatalyst for oxygen evolution reaction.	1
53	Optimizing Fe ₂ O ₃ -based supercapacitor cathode with tunable surface pseudocapacitance via facile in situ vulcanization process. 2021 , 901, 115785	2
52	Noble-metal-free FeO/CoS nanosheets with oxygen vacancies as an efficient electrocatalyst for highly sensitive electrochemical detection of As(III). 2022 , 1189, 339208	1
51	A channel-confined strategy for synthesizing CoN-CoO _x /C as efficient oxygen reduction electrocatalyst for advanced zinc-air batteries. 1	6
50	Optimized Nanopores Opened on N-Doped Carbon Nanohorns Filled with Fe/FeO Nanoparticles as Advanced Electrocatalysts for the Oxygen Evolution Reaction. 2021 , 60, 16529-16537	2
49	A Wet Impregnation Strategy for Advanced FeNi-Based Electrocatalysts towards Oxygen Evolution. 2021 , 2021, 139-146	0
48	Hierarchical Fe-Mn binary metal oxide core-shell nano-polyhedron as a bifunctional electrocatalyst for efficient water splitting. 2021 , 50, 17265-17274	4
47	Recent advances in carbon substrate supported nonprecious nanoarrays for electrocatalytic oxygen evolution. 2021 , 9, 25773-25795	10
46	Enhanced peroxymonosulfate activation by hierarchical porous FeO/CoS nanosheets for efficient elimination of rhodamine B: Mechanisms, degradation pathways and toxicological analysis. 2021 , 610, 751-751	2
45	Graphene-based materials as electrocatalysts for the oxygen evolution reaction: a review.	1
44	Template-assisted synthesis of accordion-like CoFe(OH) nanosheet clusters on GO sheets for electrocatalytic water oxidation. 2022 , 905, 115957	2
43	Construction of NiCo ₂ S ₄ /Fe ₂ O ₃ hybrid nanostructure as a highly efficient electrocatalyst for the oxygen evolution reaction. 2022 , 405, 139793	3
42	Co-Mn-S nanosheets decorated with CeO ₂ : A highly active electrocatalyst toward oxygen evolution reaction. 2022 , 901, 163621	1
41	Highly Active and Durable Single-Atom Tungsten-Doped NiS Se Nanosheet@NiS Se Nanorod Heterostructures for Water Splitting.. 2022 , e2107053	18
40	Competitive Coordination-Oriented Monodispersed Ruthenium Sites in Conductive MOF/LDH Heteronanotree Catalysts for Efficient Overall Water Splitting in Alkaline Media.. 2022 , e2107488	13
39	Electrocatalytic Oxygen Evolution Reaction. 2022 , 35-85	

- 38 Efficient Bifunctional Oxygen Electrocatalysts for Rechargeable Zinc-Air Battery: Fe₃O₄/Ni Nanoflowers Derived from Aromatic Polyamide. 1
- 37 Porous metal oxide electrocatalytic nanomaterials for energy conversion: Oxygen defects and selection techniques. **2022**, 457, 214389 3
- 36 Copper Doped CoS_x@Co(OH)₂ Hierarchical Mesoporous Nanosheet Arrays as Binder-Free Electrodes for Superior Supercapacitors.
- 35 NiSe Nanoparticles Encapsulated in N-Doped Carbon Matrix Derived from a One-Dimensional Ni-MOF: An Efficient and Sustained Electrocatalyst for Hydrogen Evolution Reaction.. **2022**, 61, 2835-2845 2
- 34 Hybridized Heterostructure of CoS and MoS₂ Nanoparticles for Highly-Efficient and Robust Bifunctional Water Electrolysis.
- 33 Synthesis and excellent performance of porous Ni₂P@C/ CNTs nanocomposite derived from Ni-MOFs as an anode for lithium-ion batteries.
- 32 Operando Identification of Active Species and Intermediates on Sulfide Interfaced by Fe₃O₄ for Ultrastable Alkaline Oxygen Evolution at Large Current Density. 4318-4326 7
- 31 Three-Dimensional Flower-Like Bimetallic Nickel-Iron Selenide for Efficient Oxygen Evolution Reaction. **2022**, 126, 5131-5137 2
- 30 Boosting Electrocatalytic Oxygen Evolution over Ce-Co₉S₈ Core-shell Nanoneedle Arrays via Electronic and Architectural Dual Engineering.. **2022**, 1
- 29 Co₈Fe₈S₈/Fe₇S₈@N-doped porous carbons as highly efficient and stable electrocatalysts for oxygen evolution reaction. **2022**, 310, 123033 0
- 28 Heterostructured Co/Mo-sulfide catalyst enables unbiased solar water splitting by integration with perovskite solar cells. **2022**, 309, 121272 3
- 27 Hybridized heterostructure of CoS and MoS₂ nanoparticles for highly-efficient and robust bifunctional water electrolysis. **2022**, 592, 153196 2
- 26 Improved performance of cobalt hydroxychloride nanoparticles on poly (3-bromo thiophene) template for electrochemical oxygen evolution reaction. **2022**, 916, 116365
- 25 Water electrolysis: from textbook knowledge to the latest scientific strategies and industrial developments.. *Chemical Society Reviews*, **2022**, 58.5 21
- 24 Porous Ni₃S₂@Co₉S₈ Carbon Aerogels Derived from Carrageenan/NiCo-MOF Hydrogels as an Efficient Electrocatalyst for Oxygen Evolution in Rechargeable Zn-Air Batteries. *Langmuir*, 4 2
- 23 Ceria Boosting on In Situ Nitrogen-Doped Graphene Oxide for Efficient Bifunctional ORR/OER Activity. *Frontiers in Chemistry*, 10, 5 1
- 22 Fabrication of CoS/CdS heterojunctions for enhanced photocatalytic hydrogen production. *Inorganica Chimica Acta*, **2022**, 541, 121085 2.7
- 21 Diaryl dithiocarbamates: synthesis, oxidation to thiuram disulfides, Co(III) complexes [Co(S₂CNAr₂)₃] and their use as single source precursors to CoS₂.

- 20 Boosting the Oxygen Evolution Reaction by Controllably Constructing FeNi₃/C Nanorods. **2022**, 12, 2525
- 19 Efficient activation of peroxydisulfate by a novel magnetic nanocomposite lignin hydrogel for contaminant degradation: Radical and nonradical pathways. **2023**, 451, 138504 1
- 18 High-entropy oxides for catalysis: A diamond in the rough. **2023**, 451, 138659 2
- 17 Supercapacitor and oxygen evolution reaction performances based on rGO and Mn₂V₂O₇ nanomaterials. **2022**, 430, 141106 0
- 16 Utilizing the cross-linked effect and reconstruction strategy of phytic acid to build Fe-Co-Ni trimetallic amorphous carbon-matrix compounds as efficient oxygen evolution catalyst. **2023**, 629, 1003-1014 0
- 15 Single-atom Fe Embedded CO₃S₄ for Efficient Electrocatalytic Oxygen Evolution Reaction. 1
- 14 Greigite Fe₃S₄-Derived FeO(OH) Promotes Slow O-O Bond Formation in the Second-Order Oxygen Evolution Reaction Kinetics. **2022**, 126, 16172-16186 3
- 13 Boosting photocatalytic hydrogen evolution of g-C₃N₄ via enhancing its interfacial redox activity and charge separation with Mo-doped CoS_x. **2022**, 0
- 12 Fe₇Se₈@Fe₂O₃ heterostructure nanosheets as bifunctional electrocatalyst for urea electrolysis. **2022**, 0
- 11 O-D Schottky heterostructure coupling of FeS nanosheets and Co₉S₈ nanoparticles for long-term industrial-level water oxidation. 1
- 10 Elevating IrO_x acidic oxygen evolution activity using SnO₂-rGO hybrid support. **2022**, 116992 0
- 9 Nickel-iron bimetallic sulfides nanosheets anchored on bacterial cellulose based carbon nanofiber for enhanced electrocatalytic oxygen evolution reaction. **2022**, 168573 0
- 8 Monodispersed Pt Sites Supported on NiFe-LDH from Synchronous Anchoring and Reduction for High Efficiency Overall Water Splitting. 2207044 0
- 7 Synthesis of heteroatom incorporated porous carbon encapsulated Fe-doped Co₉S₈ as an efficient bifunctional electrocatalyst for overall water splitting. **2023**, 175, 111220 0
- 6 A review on electrocatalysis for alkaline oxygen evolution reaction (OER) by Fe-based catalysts. 0
- 5 Three-Dimensional Cadmium-Organic Framework with Dual Functions of Oxygen Evolution in Water Splitting and Fenton-like Photocatalytic Removal of Organic Pollutants. 0
- 4 Phosphorus doping and Sulfur vacancies defect engineering for efficient electrocatalytic water-splitting by modulating the electronic structure of the Cobalt sulfide with synergy effect. **2023**, 947, 169625 0
- 3 Synthesis of Co₉S₈ nanoflakes by a one-step solvent-free solid-state method for multiple electrocatalytic reactions. 0

- 2 Interface engineering and heterometal doping CoMo/FeS for oxygen evolution reaction. **2023**, 
- 1 Dynamically Stabilized Electronic Regulation and Electrochemical Reconstruction in Co and S Atomic Pair Doped Fe₃O₄ for Water Oxidation. 