Phosphorusâ€Doped Graphitic Carbon Nitrides Grown and Reversible Oxygen Electrodes

Angewandte Chemie - International Edition 54, 4646-4650 DOI: 10.1002/anie.201411125

Citation Report

#	Article	IF	CITATIONS
1	Electrospun interconnected Fe-N/C nanofiber networks as efficient electrocatalysts for oxygen reduction reaction in acidic media. Scientific Reports, 2015, 5, 17396.	1.6	65
3	Flexible, Stretchable, and Rechargeable Fiberâ€Shaped Zinc–Air Battery Based on Crossâ€Stacked Carbon Nanotube Sheets. Angewandte Chemie - International Edition, 2015, 54, 15390-15394.	7.2	291
4	Conjugated Microporous Polymers with Dimensionality ontrolled Heterostructures for Green Energy Devices. Advanced Materials, 2015, 27, 3789-3796.	11.1	210
5	Selfâ€Supported Cobalt Phosphide Mesoporous Nanorod Arrays: A Flexible and Bifunctional Electrode for Highly Active Electrocatalytic Water Reduction and Oxidation. Advanced Functional Materials, 2015, 25, 7337-7347.	7.8	688
6	A Flexible Electrode Based on Iron Phosphide Nanotubes for Overall Water Splitting. Chemistry - A European Journal, 2015, 21, 18062-18067.	1.7	228
7	Direct Synthesis of Phosphorusâ€Đoped Mesoporous Carbon Materials for Efficient Electrocatalytic Oxygen Reduction. ChemCatChem, 2015, 7, 2903-2909.	1.8	65
8	Metalâ€Free Carbonaceous Materials as Promising Heterogeneous Catalysts. ChemCatChem, 2015, 7, 2765-2787.	1.8	118
9	Engineering of Carbonâ€Based Electrocatalysts for Emerging Energy Conversion: From Fundamentality to Functionality. Advanced Materials, 2015, 27, 5372-5378.	11.1	246
10	Spatially Confined Hybridization of Nanometerâ€ s ized NiFe Hydroxides into Nitrogenâ€Doped Graphene Frameworks Leading to Superior Oxygen Evolution Reactivity. Advanced Materials, 2015, 27, 4516-4522.	11.1	612
11	Nitrogen and Phosphorus Dual-Doped Graphene/Carbon Nanosheets as Bifunctional Electrocatalysts for Oxygen Reduction and Evolution. ACS Catalysis, 2015, 5, 4133-4142.	5.5	620
12	Graphitic Carbon Nitride/Graphene Hybrids as New Active Materials for Energy Conversion and Storage. ChemNanoMat, 2015, 1, 298-318.	1.5	117
13	Ultrafine Metal Phosphide Nanocrystals <i>in Situ</i> Decorated on Highly Porous Heteroatom-Doped Carbons for Active Electrocatalytic Hydrogen Evolution. ACS Applied Materials & Interfaces, 2015, 7, 28369-28376.	4.0	72
14	Hydrothermal Continuous Flow Synthesis and Exfoliation of NiCo Layered Double Hydroxide Nanosheets for Enhanced Oxygen Evolution Catalysis. Nano Letters, 2015, 15, 1421-1427.	4.5	933
15	Synthesis of dendritic Pt–Ni–P alloy nanoparticles with enhanced electrocatalytic properties. Chemical Communications, 2015, 51, 12012-12015.	2.2	72
16	Two-dimensional covalent carbon nitride nanosheets: synthesis, functionalization, and applications. Energy and Environmental Science, 2015, 8, 3092-3108.	15.6	893
17	Porous Two-Dimensional Nanosheets Converted from Layered Double Hydroxides and Their Applications in Electrocatalytic Water Splitting. Chemistry of Materials, 2015, 27, 5702-5711.	3.2	291
18	Mesoporous Phosphorus-Doped g-C ₃ N ₄ Nanostructured Flowers with Superior Photocatalytic Hydrogen Evolution Performance. ACS Applied Materials & Interfaces, 2015, 7, 16850-16856.	4.0	635
19	A Co/metal–organic-framework bifunctional electrocatalyst: The effect of the surface cobalt oxidation state on oxygen evolution/reduction reactions in an alkaline electrolyte. International Journal of Hydrogen Energy, 2015, 40, 9713-9722.	3.8	109

		CITATION REPORT	
#	Article	IF	CITATIONS
20	A chromium nitride/carbon nitride containing graphitic carbon nanocapsule hybrid as a Pt-free electrocatalyst for oxygen reduction. Chemical Communications, 2015, 51, 12399-12402.	2.2	46
21	Delineating the roles of Co ₃ O ₄ and N-doped carbon nanoweb (CNW) in bifunctional Co ₃ O ₄ /CNW catalysts for oxygen reduction and oxygen evolution reactions. Journal of Materials Chemistry A, 2015, 3, 11615-11623.	5.2	91
22	Bifunctional catalysts of Co3O4@GCN tubular nanostructured (TNS) hybrids for oxygen and hydrogen evolution reactions. Nano Research, 2015, 8, 3725-3736.	5.8	117
23	Synthesis of highly fluorescent P,O-g-C ₃ N ₄ nanodots for the label-free detection of Cu ²⁺ and acetylcholinesterase activity. Journal of Materials Chemistry C, 2015, 3, 10916-10924.	2.7	79
24	Porous P-doped graphitic carbon nitride nanosheets for synergistically enhanced visible-light photocatalytic H ₂ production. Energy and Environmental Science, 2015, 8, 3708-3717.	15.6	1,146
25	Al-coordination polymer-derived nanoporous nitrogen-doped carbon microfibers as metal-free catalysts for oxygen electroreduction and acetalization reactions. Journal of Materials Chemistry A, 2015, 3, 23716-23724.	5.2	54
26	Hierarchical pore-in-pore and wire-in-wire catalysts for rechargeable Zn– and Li–air batteries with ultra-long cycle life and high cell efficiency. Energy and Environmental Science, 2015, 8, 3274-3282.	15.6	107
27	Photocatalytic water oxidation by layered Co/h-BCN hybrids. Science China Materials, 2015, 58, 867-876.	3.5	67
28	Higher Yield Urea-Derived Polymeric Graphitic Carbon Nitride with Mesoporous Structure and Superior Visible-Light-Responsive Activity. ACS Sustainable Chemistry and Engineering, 2015, 3, 3412-3419.	3.2	118
29	Study on the Ultrahigh Quantum Yield of Fluorescent P,Oâ€gâ€C ₃ N ₄ Nanodots and its Application in Cell Imaging. Chemistry - A European Journal, 2016, 22, 9387-9395.	1.7	55
30	FeNi Layered Double-Hydroxide Nanosheets on a 3D Carbon Network as an Efficient Electrocatalyst for the Oxygen Evolution Reaction. Particle and Particle Systems Characterization, 2016, 33, 158-166.	1.2	43
31	Advances in Hybrid Electrocatalysts for Oxygen Evolution Reactions: Rational Integration of NiFe Layered Double Hydroxides and Nanocarbon. Particle and Particle Systems Characterization, 2016, 33, 473-486.	1.2	106
32	Threeâ€Dimensional Electrocatalysts for Sustainable Water Splitting Reactions. European Journal of Inorganic Chemistry, 2016, 2016, 1916-1923.	1.0	44
33	Significant Enhancement of Water Splitting Activity of N arbon Electrocatalyst by Trace Level Co Doping. Small, 2016, 12, 3703-3711.	5.2	111
34	Phosphorusâ€Doped Carbon Nitride Tubes with a Layered Microâ€nanostructure for Enhanced Visibleâ€Light Photocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2016, 55, 1830-1834.	7.2	869
35	Design and Synthesis of FeOOH/CeO ₂ Heterolayered Nanotube Electrocatalysts for the Oxygen Evolution Reaction. Advanced Materials, 2016, 28, 4698-4703.	11.1	592
36	Topological Defects in Metalâ€Free Nanocarbon for Oxygen Electrocatalysis. Advanced Materials, 2016, 28, 6845-6851.	11.1	629
37	Platinfreie Nanomaterialien für die Sauerstoffreduktion. Angewandte Chemie, 2016, 128, 2698-2726.	1.6	87

#	Article	IF	CITATIONS
38	Phosphorusâ€Doped Carbon Nitride Tubes with a Layered Microâ€nanostructure for Enhanced Visibleâ€Light Photocatalytic Hydrogen Evolution. Angewandte Chemie, 2016, 128, 1862-1866.	1.6	173
39	Earthâ€Abundant Nanomaterials for Oxygen Reduction. Angewandte Chemie - International Edition, 2016, 55, 2650-2676.	7.2	926
40	A facile synthesis of Br-modified g-C3N4 semiconductors for photoredox water splitting. Applied Catalysis B: Environmental, 2016, 192, 116-125.	10.8	460
41	Recent progress and perspectives on bi-functional oxygen electrocatalysts for advanced rechargeable metal–air batteries. Journal of Materials Chemistry A, 2016, 4, 7107-7134.	5.2	408
42	Fiber-based multifunctional nickel phosphide electrodes for flexible energy conversion and storage. Journal of Materials Chemistry A, 2016, 4, 9691-9699.	5.2	136
43	Flexible molybdenum phosphide nanosheet array electrodes for hydrogen evolution reaction in a wide pH range. Applied Catalysis B: Environmental, 2016, 196, 193-198.	10.8	189
44	Graphitic Carbon Nitride (g-C ₃ N ₄)-Based Photocatalysts for Artificial Photosynthesis and Environmental Remediation: Are We a Step Closer To Achieving Sustainability?. Chemical Reviews, 2016, 116, 7159-7329.	23.0	5,505
45	Molten salt synthesis of water-dispersible polymeric carbon nitride nanoseaweeds and their application as luminescent probes. Carbon, 2016, 102, 477-486.	5.4	99
46	Co ₃ O ₄ nanosheets as a high-performance catalyst for oxygen evolution proceeding via a double two-electron process. Chemical Communications, 2016, 52, 6705-6708.	2.2	64
47	Nitrogen and sulfur co-doped graphene/carbon nanotube as metal-free electrocatalyst for oxygen evolution reaction: the enhanced performance by sulfur doping. Electrochimica Acta, 2016, 204, 169-175.	2.6	93
48	Improved reversibility of Zn anodes for rechargeable Zn-air batteries by using alkoxide and acetate ions. Electrochimica Acta, 2016, 199, 164-171.	2.6	54
49	Rational design of graphitic carbon based nanostructures for advanced electrocatalysis. Journal of Materials Chemistry A, 2016, 4, 8497-8511.	5.2	73
50	Metal-free carbonaceous electrocatalysts and photocatalysts for water splitting. Chemical Society Reviews, 2016, 45, 3039-3052.	18.7	499
51	Electrophoretic Deposition of Carbon Nitride Layers for Photoelectrochemical Applications. ACS Applied Materials & Interfaces, 2016, 8, 13058-13063.	4.0	74
52	Progress in development of flexible metal–air batteries. Functional Materials Letters, 2016, 09, 1630001.	0.7	41
53	In situ anchoring of Co9S8 nanoparticles on N and S co-doped porous carbon tube as bifunctional oxygen electrocatalysts. NPG Asia Materials, 2016, 8, e308-e308.	3.8	164
54	Novel Hydrogel-Derived Bifunctional Oxygen Electrocatalyst for Rechargeable Air Cathodes. Nano Letters, 2016, 16, 6516-6522.	4.5	241
55	Kohlenstoffbasierte Metallfreie Katalysatoren für die Elektrokatalyse jenseits der ORR. Angewandte Chemie, 2016, 128, 11910-11933.	1.6	58

ARTICLE IF CITATIONS Nanostructured Bifunctional Redox Electrocatalysts. Small, 2016, 12, 5656-5675. 5.2 174 56 Graphitic carbon nitride supported single-atom catalysts for efficient oxygen evolution reaction. 2.2 176 Chemical Communications, 2016, 52, 13233-13236. A Robust Versatile Hybrid Electrocatalyst for the Oxygen Reduction Reaction. ACS Applied Materials 58 4.0 36 & Interfaces, 2016, 8, 29356-29364. Highly active nickel–cobalt/nanocarbon thin films as efficient water splitting electrodes. Nanoscale, 59 2016, 8, <u>18507-18515.</u> Heteroatom-doped graphene â€Idli': A green and foody approach towards development of metal free 60 8.2 50 bifunctional catalyst for rechargeable zinc-air battery. Nano Energy, 2016, 30, 118-129. Edge-selectively phosphorus-doped few-layer graphene as an efficient metal-free electrocatalyst for the oxygen evolution reaction. Chemical Communications, 2016, 52, 13008-13011. 2.2 87 Transition metal (Fe, Co, Ni, and Mn) oxides for oxygen reduction and evolution bifunctional 62 6.2 738 catalysts in alkaline media. Nano Today, 2016, 11, 601-625. A post-grafting strategy to modify g-C₃N₄ with aromatic heterocycles for 5.2 enhanced photocatalytic activity. Journal of Materials Chemistry A, 2016, 4, 13814-13821. Co 3 O 4 supported on N, P-doped carbon as a bifunctional electrocatalyst for oxygen reduction and 6.9 29 64 evolution reactions. Chinese Journal of Catalysis, 2016, 37, 1249-1256. Facile synthesis of in situ phosphorus-doped g-C₃N₄ with enhanced visible 1.7 24 light photocatalytic property for NO purification. RSC Advances, 2016, 6, 88085-88089. A Metalâ€Amino Acid Complexâ€Derived Bifunctional Oxygen Electrocatalyst for Rechargeable Zinc–Air 5.2 66 48 Batteries. Small, 2016, 12, 5414-5421. A 3D bi-functional porous N-doped carbon microtube sponge electrocatalyst for oxygen reduction 15.6 260 and oxygen evolution reactions. Energy and Environmental Science, 2016, 9, 3079-3084. Porous nitrogen-rich carbon materials from carbon self-repairing g-C₃N₄ 68 assembled with graphene for high-performance supercapacitor. Journal of Materials Chemistry A, 5.2 93 2016, 4, 14307-14315. Graphitic Carbon Nitride Film: An Emerging Star for Catalytic and Optoelectronic Applications. ChemSusChem, 2016, 9, 2723-2735. 3.6 NiMnO₃/NiMn₂O₄ Oxides Synthesized via the Aid of Pollen: Ilmenite/Spinel Hybrid Nanoparticles for Highly Efficient Bifunctional Oxygen Electrocatalysis. ACS 70 4.0 88 Applied Materials & amp; Interfaces, 2016, 8, 26740-26757. A robust water oxidation electrocatalyst from amorphous cobalt–iron bimetallic phytate 34 nanostructures. Journal of Materials Ćhemistry A, 2016, 4, 15888-15895. Carbonâ€Based Metalâ€Free Catalysts for Electrocatalysis beyond the ORR. Angewandte Chemie -72 598 7.2 International Edition, 2016, 55, 11736-11758. In Situ Activating Ubiquitous Rust towards Lowâ€Cost, Efficient, Freeâ€Standing, and Recoverable Oxygen 173 Evolution Electrodes. Angewandte Chemie - International Edition, 2016, 55, 9937-9941.

ARTICLE IF CITATIONS In Situ Activating Ubiquitous Rust towards Lowâ€Cost, Efficient, Freeâ€Standing, and Recoverable Oxygen 1.6 50 74 Evolution Electrodes. Angewandte Chemie, 2016, 128, 10091-10095. A Porous Perchlorateâ€Doped Polypyrrole Nanocoating on Nickel Nanotube Arrays for Stable 11.1 180 Wideâ€Potentialâ€Window Supercapacitors. Advanced Materials, 2016, 28, 7680-7687. Efficient water oxidation through strongly coupled graphitic C₃N₄ coated 76 5.288 cobalt hydroxide nanowires. Journal of Materials Chemistry A, 2016, 4, 12940-12946. Homologous metal-free electrocatalysts grown on three-dimensional carbon networks for overall water splitting in acidic and alkaline media. Journal of Materials Chemistry A, 2016, 4, 12878-12883. Platanus hispanica-inspired design of Co–carbon nanotube frameworks through chemical vapor deposition: a highly integrated hierarchical electrocatalyst for oxygen reduction reactions. Chemical 78 2.2 13 Communications, 2016, 52, 12992-12995. An advanced electrocatalyst of Pt decorated SnO2/C nanofibers for oxygen reduction reaction. Journal of Electroanalytical Chemistry, 2016, 781, 198-203. 79 An aqueous preoxidation method for monolithic perovskite electrocatalysts with enhanced water 80 4.7 75 oxidation performance. Science Advances, 2016, 2, e1600495. Identification of catalytic sites for oxygen reduction and oxygen evolution in N-doped graphene materials: Development of highly efficient metal-free bifunctional electrocatalyst. Science Advances, 1,078 2016, 2, e1501122 Graphitic Carbon Nitride as a Catalyst Support in Fuel Cells and Electrolyzers. Electrochimica Acta, 82 2.6 97 2016, 222, 44-57. Three-Dimensional Phosphorus-Doped Graphitic-C₃N₄ Self-Assembly with NH₂-Functionalized Carbon Composite Materials for Enhanced Oxygen Reduction 1.6 Reaction. Langmuir, 2016, 32, 12569-12578. Surface engineering of carbon fiber paper for efficient capacitive energy storage. Journal of Materials 5.2 84 63 Chemistry Ă, 2016, 4, 18639-18645. One-step synthesis of nickel phosphide nanowire array supported on nickel foam with enhanced electrocatalytic water splitting performance. RSC Advances, 2016, 6, 107859-107864. 3D Binder-free MoSe2 Nanosheets/Carbon Cloth Electrodes for Efficient and Stable Hydrogen 86 1.6 75 Evolution Prepared by Simple Electrophoresis Deposition Strategy. Scientific Reports, 2016, 6, 22516. Nitrogen, phosphorus and sulfur co-doped ultrathin carbon nanosheets as a metal-free catalyst for selective oxidation of aromatic alkanes and the oxygen reduction reaction. Journal of Materials 87 5.2 Chemistry A, 2016, 4, 18470-18477. Interacting Carbon Nitride and Titanium Carbide Nanosheets for Highâ€Performance Oxygen Evolution. 88 1.6 96 Angewandte Chemie, 2016, 128, 1150-1154. Scalable Fabrication of Nanoporous Carbon Fiber Films as Bifunctional Catalytic Electrodes for 11.1 626 Flexible Znâ€Air Batteries. Advanced Materials, 2016, 28, 3000-3006. Interacting Carbon Nitride and Titanium Carbide Nanosheets for Highâ€Performance Oxygen Evolution. 90 597 7.2 Angewandte Chemie - International Edition, 2016, 55, 1138-1142. Trapping oxygen in hierarchically porous carbon nano-nets: graphitic nitrogen dopants boost the electrocatalytic activity. RSC Advances, 2016, 6, 56765-56771.

#	Article	IF	CITATIONS
92	A reactive-template strategy for high yield synthesis of N-doped graphene and its modification by introduction of cobalt species for significantly enhanced oxygen reduction reaction. Electrochimica Acta, 2016, 210, 328-336.	2.6	32
93	Uniquely Monodispersing NiFe Alloyed Nanoparticles in Three-Dimensional Strongly Linked Sandwiched Graphitized Carbon Sheets for High-Efficiency Oxygen Evolution Reaction. ACS Catalysis, 2016, 6, 4477-4485.	5.5	112
94	The surface sulfur doping induced enhanced performance of cobalt catalysts in oxygen evolution reactions. Chemical Communications, 2016, 52, 9450-9453.	2.2	47
95	An Alkaline-Stable, Metal Hydroxide Mimicking Metal–Organic Framework for Efficient Electrocatalytic Oxygen Evolution. Journal of the American Chemical Society, 2016, 138, 8336-8339.	6.6	453
96	Graphitic Nanoshell/Mesoporous Carbon Nanohybrids as Highly Efficient and Stable Bifunctional Oxygen Electrocatalysts for Rechargeable Aqueous Na–Air Batteries. Advanced Energy Materials, 2016, 6, 1501794.	10.2	120
97	An Allâ€5olidâ€5tate Fiberâ€5haped Aluminum–Air Battery with Flexibility, Stretchability, and High Electrochemical Performance. Angewandte Chemie, 2016, 128, 8111-8114.	1.6	70
98	An Allâ€Solidâ€State Fiberâ€Shaped Aluminum–Air Battery with Flexibility, Stretchability, and High Electrochemical Performance. Angewandte Chemie - International Edition, 2016, 55, 7979-7982.	7.2	211
99	Nitrogenâ€Doped Graphene Quantum Dots Anchored on Thermally Reduced Graphene Oxide as an Electrocatalyst for the Oxygen Reduction Reaction. ChemElectroChem, 2016, 3, 864-870.	1.7	34
100	A highly active oxygen evolution electrocatalyst: Ultrathin CoNi double hydroxide/CoO nanosheets synthesized via interface-directed assembly. Nano Research, 2016, 9, 713-725.	5.8	171
101	A â€~point–line–point' hybrid electrocatalyst for bi-functional catalysis of oxygen evolution and reduction reactions. Journal of Materials Chemistry A, 2016, 4, 3379-3385.	5.2	56
102	Novel graphitic carbon nitride/graphite carbon/palladium nanocomposite as a high-performance electrocatalyst for the ethanol oxidation reaction. Electrochimica Acta, 2016, 191, 606-615.	2.6	46
103	Integrated Three-Dimensional Carbon Paper/Carbon Tubes/Cobalt-Sulfide Sheets as an Efficient Electrode for Overall Water Splitting. ACS Nano, 2016, 10, 2342-2348.	7.3	575
104	Unprecedented metal-free 3D porous carbonaceous electrodes for full water splitting. Energy and Environmental Science, 2016, 9, 1210-1214.	15.6	291
105	Ordered Mesoporous Nickel Sphere Arrays for Highly Efficient Electrocatalytic Water Oxidation. ACS Catalysis, 2016, 6, 1446-1450.	5.5	105
106	Surface activated carbon nitride nanosheets with optimized electro-optical properties for highly efficient photocatalytic hydrogen production. Journal of Materials Chemistry A, 2016, 4, 2445-2452.	5.2	121
107	Towards high-efficiency nanoelectrocatalysts for oxygen reduction through engineering advanced carbon nanomaterials. Chemical Society Reviews, 2016, 45, 1273-1307.	18.7	589
108	Graphene oxide-polydopamine derived N, S-codoped carbon nanosheets as superior bifunctional electrocatalysts for oxygen reduction and evolution. Nano Energy, 2016, 19, 373-381.	8.2	597
109	A facile approach to fabricate free-standing hydrogen evolution electrodes: riveting tungsten carbide nanocrystals to graphite felt fabrics by carbon nanosheets. Journal of Materials Chemistry A, 2016, 4, 5817-5822.	5.2	39

#	Article	IF	CITATIONS
110	Pt/C–LiCoO ₂ composites with ultralow Pt loadings as synergistic bifunctional electrocatalysts for oxygen reduction and evolution reactions. Journal of Materials Chemistry A, 2016, 4, 4516-4524.	5.2	65
111	Concave and duck web-like platinum nanopentagons with enhanced electrocatalytic properties for formic acid oxidation. Journal of Materials Chemistry A, 2016, 4, 807-812.	5.2	27
112	N-doped graphitic carbon-incorporated g-C3N4 for remarkably enhanced photocatalytic H2 evolution under visible light. Carbon, 2016, 99, 111-117.	5.4	343
113	Biochemistry-inspired direct synthesis of nitrogen and phosphorus dual-doped microporous carbon spheres for enhanced electrocatalysis. Chemical Communications, 2016, 52, 2118-2121.	2.2	58
114	Core–Shell Nanocomposites Based on Gold Nanoparticle@Zinc–Iron-Embedded Porous Carbons Derived from Metal–Organic Frameworks as Efficient Dual Catalysts for Oxygen Reduction and Hydrogen Evolution Reactions. ACS Catalysis, 2016, 6, 1045-1053.	5.5	151
115	Increased activity in hydrogen evolution electrocatalysis for partial anionic substitution in cobalt oxysulfide nanoparticles. Journal of Materials Chemistry A, 2016, 4, 2842-2848.	5.2	32
116	Phosphorous-modified bulk graphitic carbon nitride: Facile preparation and application as an acid-base bifunctional and efficient catalyst for CO2 cycloaddition with epoxides. Carbon, 2016, 100, 81-89.	5.4	191
117	Preparation of nitrogen- and phosphorous co-doped carbon microspheres and their superior performance as anode in sodium-ion batteries. Carbon, 2016, 99, 556-563.	5.4	218
118	Vertically oriented cobalt selenide/NiFe layered-double-hydroxide nanosheets supported on exfoliated graphene foil: an efficient 3D electrode for overall water splitting. Energy and Environmental Science, 2016, 9, 478-483.	15.6	774
119	Colloidally-synthesized cobalt molybdenum nanoparticles as active and stable electrocatalysts for the hydrogen evolution reaction under alkaline conditions. Journal of Materials Chemistry A, 2016, 4, 3077-3081.	5.2	40
120	Self-supported electrocatalysts for advanced energy conversion processes. Materials Today, 2016, 19, 265-273.	8.3	268
121	Catalytic Effects of B/N-co-Doped Porous Carbon Incorporated with Ketjenblack Nanoparticles for All-Vanadium Redox Flow Batteries. Journal of the Electrochemical Society, 2016, 163, A5144-A5149.	1.3	55
122	Condensed and low-defected graphitic carbon nitride with enhanced photocatalytic hydrogen evolution under visible light irradiation. Applied Catalysis B: Environmental, 2016, 181, 413-419.	10.8	217
123	N- and S-doped mesoporous carbon as metal-free cathode catalysts for direct biorenewable alcohol fuel cells. Journal of Materials Chemistry A, 2016, 4, 83-95.	5.2	101
124	Fabrication of Au/TiO 2 nanowires@carbon fiber paper ternary composite for visible-light photocatalytic degradation of gaseous styrene. Catalysis Today, 2017, 281, 621-629.	2.2	45
125	Fabrication of porous Pt-doping heterojunctions by using bimetallic MOF template for photocatalytic hydrogen generation. Nano Energy, 2017, 33, 238-246.	8.2	192
126	Metal-free hybrids of graphitic carbon nitride and nanodiamonds for photoelectrochemical and photocatalytic applications. Journal of Colloid and Interface Science, 2017, 493, 275-280.	5.0	31
127	Nanocarbon for Oxygen Reduction Electrocatalysis: Dopants, Edges, and Defects. Advanced Materials, 2017, 29, 1604103.	11.1	701

#	Article	IF	CITATIONS
128	A Twoâ€Ðimensional Lamellar Membrane: MXene Nanosheet Stacks. Angewandte Chemie - International Edition, 2017, 56, 1825-1829.	7.2	831
129	A Twoâ€Dimensional Lamellar Membrane: MXene Nanosheet Stacks. Angewandte Chemie, 2017, 129, 1851-1855.	1.6	95
130	Efficient water splitting catalyzed by flexible NiP ₂ nanosheet array electrodes under both neutral and alkaline solutions. New Journal of Chemistry, 2017, 41, 2154-2159.	1.4	77
131	MOF Templateâ€Directed Fabrication of Hierarchically Structured Electrocatalysts for Efficient Oxygen Evolution Reaction. Advanced Energy Materials, 2017, 7, 1602643.	10.2	281
132	An Efficient Bifunctional Electrocatalyst for a Zinc–Air Battery Derived from Fe/N/C and Bimetallic Metal–Organic Framework Composites. ACS Applied Materials & Interfaces, 2017, 9, 5213-5221.	4.0	113
133	Facile preparation of TiO2/C3N4 hybrid materials with enhanced capacitive properties for high performance supercapacitors. Journal of Alloys and Compounds, 2017, 702, 178-185.	2.8	66
134	Rational Design of Metalâ€Organic Framework Derived Hollow NiCo ₂ O ₄ Arrays for Flexible Supercapacitor and Electrocatalysis. Advanced Energy Materials, 2017, 7, 1602391.	10.2	874
135	Atomically Dispersed Fe/N-Doped Hierarchical Carbon Architectures Derived from a Metal–Organic Framework Composite for Extremely Efficient Electrocatalysis. ACS Energy Letters, 2017, 2, 504-511.	8.8	279
136	Cobalt nanoparticles encapsulated in carbon nanotube-grafted nitrogen and sulfur co-doped multichannel carbon fibers as efficient bifunctional oxygen electrocatalysts. Journal of Materials Chemistry A, 2017, 5, 4949-4961.	5.2	129
137	Surface and Interface Engineering of Noble-Metal-Free Electrocatalysts for Efficient Energy Conversion Processes. Accounts of Chemical Research, 2017, 50, 915-923.	7.6	824
138	Atomic Modulation of FeCo–Nitrogen–Carbon Bifunctional Oxygen Electrodes for Rechargeable and Flexible Allâ€Solidâ€State Zinc–Air Battery. Advanced Energy Materials, 2017, 7, 1602420.	10.2	692
139	Sulfur-Modified Graphitic Carbon Nitride Nanostructures as an Efficient Electrocatalyst for Water Oxidation. Small, 2017, 13, 1603893.	5.2	52
140	Graphitic carbon nitride with S and O codoping for enhanced visible light photocatalytic performance. RSC Advances, 2017, 7, 15842-15850.	1.7	107
141	Design and Application of Foams for Electrocatalysis. ChemCatChem, 2017, 9, 1721-1743.	1.8	245
142	Sandwich‣ike Nanocomposite of CoNiO <i>_x</i> /Reduced Graphene Oxide for Enhanced Electrocatalytic Water Oxidation. Advanced Functional Materials, 2017, 27, 1606325.	7.8	87
143	Graphene-Based Phosphorus-Doped Carbon as Anode Material for High-Performance Sodium-Ion Batteries. Particle and Particle Systems Characterization, 2017, 34, 1600315.	1.2	25
144	Amorphous Cobalt–Iron Hydroxide Nanosheet Electrocatalyst for Efficient Electrochemical and Photoâ€Electrochemical Oxygen Evolution. Advanced Functional Materials, 2017, 27, 1603904.	7.8	260
145	Facile surfactant assistant synthesis of porous oxygen-doped graphitic carbon nitride nanosheets with enhanced visible light photocatalytic activity. Materials Research Bulletin, 2017, 91, 42-48.	2.7	46

#	Article	IF	CITATIONS
146	A general approach for the direct fabrication of metal oxide-based electrocatalysts for efficient bifunctional oxygen electrodes. Sustainable Energy and Fuels, 2017, 1, 823-831.	2.5	24
147	Improving ORR activity of carbon nanotubes by hydrothermal carbon deposition method. Journal of Energy Chemistry, 2017, 26, 712-718.	7.1	74
148	Ternary graphitic carbon nitride/red phosphorus/molybdenum disulfide heterostructure: An efficient and low cost photocatalyst for visible-light-driven H2 evolution from water. Carbon, 2017, 119, 56-61.	5.4	60
149	Architecture of CoN _x single clusters on nanocarbon as excellent oxygen reduction catalysts with high-efficient atomic utilization. Nanoscale, 2017, 9, 8341-8348.	2.8	47
150	Tuning the electrocatalysts for oxygen evolution reaction. Materials Today Energy, 2017, 5, 37-57.	2.5	94
151	Directed synthesis of carbon nanotube arrays based on layered double hydroxides toward highly-efficient bifunctional oxygen electrocatalysis. Nano Energy, 2017, 37, 98-107.	8.2	129
152	Electrocatalytic oxygen evolution reaction for energy conversion and storage: A comprehensive review. Nano Energy, 2017, 37, 136-157.	8.2	1,257
153	Recent advances in metal–nitrogen–carbon catalysts for electrochemical water splitting. Materials Chemistry Frontiers, 2017, 1, 2155-2173.	3.2	109
154	Design of ultralong single-crystal nanowire-based bifunctional electrodes for efficient oxygen and hydrogen evolution in a mild alkaline electrolyte. Journal of Materials Chemistry A, 2017, 5, 10895-10901.	5.2	23
155	Freestanding carbon fiber cloth/sulfur composites for flexible room-temperature sodium-sulfur batteries. Energy Storage Materials, 2017, 8, 77-84.	9.5	175
156	Macroscopic urea-functionalized cadmium sulfide material with high visible-light photocatalytic activity for rewritable paper application. Journal of Colloid and Interface Science, 2017, 500, 202-211.	5.0	7
157	Counteracting Blueshift Optical Absorption and Maximizing Photon Harvest in Carbon Nitride Nanosheet Photocatalyst. Small, 2017, 13, 1700376.	5.2	41
158	Interlayer expanded lamellar CoSe 2 on carbon paper as highly efficient and stable overall water splitting electrodes. Electrochimica Acta, 2017, 241, 106-115.	2.6	48
159	CoO _x –carbon nanotubes hybrids integrated on carbon cloth as a new generation of 3D porous hydrogen evolution promoters. Journal of Materials Chemistry A, 2017, 5, 10510-10516.	5.2	45
160	From biomass chitin to mesoporous nanosheets assembled loofa sponge-like N-doped carbon/g-C 3 N 4 3D network architectures as ultralow-cost bifunctional oxygen catalysts. Microporous and Mesoporous Materials, 2017, 240, 216-226.	2.2	51
161	Phosphorus-doped pitch-derived soft carbon as an anode material for sodium ion batteries. Materials Letters, 2017, 188, 355-358.	1.3	36
162	High-performance oxygen reduction and evolution carbon catalysis: From mechanistic studies to device integration. Nano Research, 2017, 10, 1163-1177.	5.8	66
163	Hierarchical Porous Carbon Doped with Iron/Nitrogen/Sulfur for Efficient Oxygen Reduction Reaction. ACS Applied Materials & amp; Interfaces, 2017, 9, 20963-20973.	4.0	103

ARTICLE IF CITATIONS In-situ Electrodeposition of Highly Active Silver Catalyst on Carbon Fiber Papers as Binder Free 39 164 1.6 Cathodes for Aluminum-air Battery. Scientific Reports, 2017, 7, 3378. Promotion of Electrocatalytic Hydrogen Evolution Reaction on Nitrogen-Doped Carbon Nanosheets with Secondary Heteroatóms. ÁCS Nano, 2017, 11, 7293-7300. Highly active and durable carbon nitride fibers as metal-free bifunctional oxygen electrodes for 166 4.1 73 flexible Zn–air batteries. Nanoscale Horizons, 2017, 2, 333-341. Crosslinked Carbon Nanotube Aerogel Films Decorated with Cobalt Oxides for Flexible Rechargeable 99 Zn–Air Batteries. Small, 2017, 13, 1700518. Integrated Hierarchical Cobalt Sulfide/Nickel Selenide Hybrid Nanosheets as an Efficient Three-dimensional Electrode for Electrochemical and Photoelectrochemical Water Splitting. Nano 168 4.5 263 Letters, 2017, 17, 4202-4209. Advancing the n → $i \in *$ electron transition of carbon nitride nanotubes for 5.2 224 H₂photosynthesis. Journal of Materials Chemistry A, 2017, 5, 12723-12728. In Situ Coupling FeM (M = Ni, Co) with Nitrogenâ€Doped Porous Carbon toward Highly Efficient Trifunctional Electrocatalyst for Óverall Water Splitting and Rechargeable Zn–Air Battery. Advanced 170 2.7 122 Sustainable Systems, 2017, 1, 1700020. Phosphorous doped graphitic-C3N4 hierarchical architecture for hydrogen production from water 171 2.5 under visible light. Materials Today Energy, 2017, 5, 91-98. Enhancing Photocatalytic Activity of Graphitic Carbon Nitride by Codoping with P and C for Efficient 172 4.0 130 Hydrogen Generation. ACS Applied Materials & amp; Interfaces, 2017, 9, 21730-21737. Silicon anodes protected by a nitrogen-doped porous carbon shell for high-performance lithium-ion 2.8 batteries. Nanoscale, 2017, 9, 8871-8878. Doping of graphitic carbon nitride for photocatalysis: A review. Applied Catalysis B: Environmental, 174 10.8 1.194 2017, 217, 388-406. Component Matters: Paving the Roadmap toward Enhanced Electrocatalytic Performance of Graphitic 7.3 144 C₃N₄-Based Catalysts <i>via</i> Atomic Tuning. ACS Nano, 2017, 11, 6004-6014. MOâ€Co@Nâ€Doped Carbon (M = Zn or Co): Vital Roles of Inactive Zn and Highly Efficient Activity toward Oxygen Reduction/Evolution Reactions for Rechargeable Zn–Air Battery. Advanced Functional 176 7.8 224 Materials, 2017, 27, 1700795. Deposition of fan-shaped ZnMoO4 on ZnCo2O4 nanowire arrays for high electrochemical performance. Applied Physics A: Materials Science and Processing, 2017, 123, 1. 1.1 From Millimeter to Subnanometer: Vaporâ€"Solid Deposition of Carbon Nitride Hierarchical 178 1.6 16 Nanostructures Directed by Supramolecular Assembly. Angewandte Chemie, 2017, 129, 8546-8550. Cobalt carbonate hydroxide hydrate nanowires array: a threeâ€dimensional catalyst electrode for 179 effective water oxidation. Micro and Nano Letters, 2017, 12, 264-266. 2D Layered Graphitic Carbon Nitride Sandwiched with Reduced Graphene Oxide as Nanoarchitectured 180 2.6 51 Anodé for Highly Stable Lithium-ion Battery. Electrochimica Acta, 2017, 237, 69-77. A metal–organic-framework/carbon composite with enhanced bifunctional electrocatalytic activities 181 towards oxygen reduction/evolution reactions. International Journal of Hydrogen Energy, 2017, 42, 3.8 17376-17385

#	Article	IF	CITATIONS
182	Design and synthesis of porous channel-rich carbon nanofibers for self-standing oxygen reduction reaction and hydrogen evolution reaction bifunctional catalysts in alkaline medium. Journal of Materials Chemistry A, 2017, 5, 7507-7515.	5.2	69
183	From Millimeter to Subnanometer: Vapor–Solid Deposition of Carbon Nitride Hierarchical Nanostructures Directed by Supramolecular Assembly. Angewandte Chemie - International Edition, 2017, 56, 8426-8430.	7.2	90
184	Solution-processed relatively pure MoS2 nanoparticles in-situ grown on graphite paper as an efficient FTO-free counter electrode for dye-sensitized solar cells. Electrochimica Acta, 2017, 235, 182-190.	2.6	33
185	NiCo 2 S 4 nanocrystals anchored on nitrogen-doped carbon nanotubes as a highly efficient bifunctional electrocatalyst for rechargeable zinc-air batteries. Nano Energy, 2017, 31, 541-550.	8.2	365
186	High Temperature Carbonized Grass as a High Performance Sodium Ion Battery Anode. ACS Applied Materials & Interfaces, 2017, 9, 391-397.	4.0	136
188	Multifunctional Carbonâ€Based Metalâ€Free Electrocatalysts for Simultaneous Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution. Advanced Materials, 2017, 29, 1604942.	11.1	606
189	Polydopamineâ€Inspired, Dual Heteroatomâ€Doped Carbon Nanotubes for Highly Efficient Overall Water Splitting. Advanced Energy Materials, 2017, 7, 1602068.	10.2	319
190	Facile approach for synthesis of doped carbon electrocatalyst from cellulose nanofibrils toward high-performance metal-free oxygen reduction and hydrogen evolution. Nano Energy, 2017, 32, 336-346.	8.2	132
191	Nitrogen, sulfur and phosphorus-codoped carbon with a tunable nanostructure as an efficient electrocatalyst for the oxygen reduction reaction. RSC Advances, 2017, 7, 5782-5789.	1.7	16
192	Facile fabrication of high-yield graphitic carbon nitride with a large surface area using bifunctional urea for enhanced photocatalytic performance. Applied Catalysis B: Environmental, 2017, 205, 624-630.	10.8	58
193	P and S dual-doped graphitic porous carbon for aerobic oxidation reactions: Enhanced catalytic activity and catalytic sites. Carbon, 2017, 114, 383-392.	5.4	65
194	Scalable 3-D Carbon Nitride Sponge as an Efficient Metal-Free Bifunctional Oxygen Electrocatalyst for Rechargeable Zn–Air Batteries. ACS Nano, 2017, 11, 347-357.	7.3	369
195	A high-performance supercapacitor based on activated carbon fibers with an optimized pore structure and oxygen-containing functional groups. Materials Chemistry Frontiers, 2017, 1, 958-966.	3.2	57
196	Electropolymerization Fabrication of Co Phosphate Nanoparticles Encapsulated in N,P-Codoped Mesoporous Carbon Networks as a 3D Integrated Electrode for Full Water Splitting. ACS Sustainable Chemistry and Engineering, 2017, 5, 571-579.	3.2	34
197	Highly Efficient Dual Active Palladium Nanonetwork Electrocatalyst for Ethanol Oxidation and Hydrogen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 39303-39311.	4.0	71
198	Conformal Carbon Nitride Coating as an Efficient Hole Extraction Layer for ZnO Nanowiresâ€Based Photoelectrochemical Cells. Advanced Materials Interfaces, 2017, 4, 1700924.	1.9	26
199	Sensitive electrochemical detection of tetrabromobisphenol A based on poly(diallyldimethylammonium chloride) modified graphitic carbon nitride-ionic liquid doped carbon paste electrode. Electrochimica Acta, 2017, 254, 214-222.	2.6	20
200	Iron phosphide/N, P-doped carbon nanosheets as highly efficient electrocatalysts for oxygen reduction reaction over the whole pH range. Electrochimica Acta, 2017, 254, 280-286.	2.6	52

#	Article	IF	CITATIONS
201	Carbon-Based Electrocatalysts for Hydrogen and Oxygen Evolution Reactions. ACS Catalysis, 2017, 7, 7855-7865.	5.5	406
202	Mass production of porous biocarbon self-doped by phosphorus and nitrogen for cost-effective zinc–air batteries. Electrochimica Acta, 2017, 257, 250-258.	2.6	39
203	Oxygen electrode reactions of doped BiFeO ₃ materials for low and elevated temperature fuel cell applications. RSC Advances, 2017, 7, 47643-47653.	1.7	17
204	Optimizing Optical Absorption, Exciton Dissociation, and Charge Transfer of a Polymeric Carbon Nitride with Ultrahigh Solar Hydrogen Production Activity. Angewandte Chemie - International Edition, 2017, 56, 13445-13449.	7.2	536
205	A review of nanocarbons in energy electrocatalysis: Multifunctional substrates and highly active sites. Journal of Energy Chemistry, 2017, 26, 1077-1093.	7.1	287
206	Surface Amorphization: A Simple and Effective Strategy toward Boosting the Electrocatalytic Activity for Alkaline Water Oxidation. ACS Sustainable Chemistry and Engineering, 2017, 5, 8518-8522.	3.2	51
207	From <i>Chlorella</i> to Nestlike Framework Constructed with Doped Carbon Nanotubes: A Biomass-Derived, High-Performance, Bifunctional Oxygen Reduction/Evolution Catalyst. ACS Applied Materials & Interfaces, 2017, 9, 32168-32178.	4.0	63
208	Optimizing Optical Absorption, Exciton Dissociation, and Charge Transfer of a Polymeric Carbon Nitride with Ultrahigh Solar Hydrogen Production Activity. Angewandte Chemie, 2017, 129, 13630-13634.	1.6	135
209	Maximizing the utilization of Fe–N _x C/CN _x centres for an air-cathode material and practical demonstration of metal–air batteries. Journal of Materials Chemistry A, 2017, 5, 20252-20262.	5.2	46
210	The solution-phase process of a g-C ₃ N ₄ /BiVO ₄ dyad to a large-area photoanode: interfacial synergy for highly efficient water oxidation. Chemical Communications, 2017, 53, 10544-10547.	2.2	19
211	In Situ Derived Ni _{<i>x</i>} Fe _{1–<i>x</i>} OOH/NiFe/Ni _{<i>x</i>} Fe _{1–<i>x</i>Nanotube Arrays from NiFe Alloys as Efficient Electrocatalysts for Oxygen Evolution. ACS Applied Materials & amp; Interfaces, 2017, 9, 34954-34960.}	> 4 .9H	61
212	Atomicâ€Level Coupled Interfaces and Lattice Distortion on CuS/NiS ₂ Nanocrystals Boost Oxygen Catalysis for Flexible Znâ€Air Batteries. Advanced Functional Materials, 2017, 27, 1703779.	7.8	200
213	Flexible Zn– and Li–air batteries: recent advances, challenges, and future perspectives. Energy and Environmental Science, 2017, 10, 2056-2080.	15.6	477
214	Co ₃ O ₄ @Co/NCNT Nanostructure Derived from a Dicyanamideâ€Based Metalâ€Organic Framework as an Efficient Biâ€functional Electrocatalyst for Oxygen Reduction and Evolution Reactions. Chemistry - A European Journal, 2017, 23, 18049-18056.	1.7	74
215	One-Pot Synthesis of Nickel-Modified Carbon Nitride Layers Toward Efficient Photoelectrochemical Cells. ACS Applied Materials & Interfaces, 2017, 9, 32667-32677.	4.0	66
216	Straightforward synthesis of nitrogen-doped carbon nanotubes as highly active bifunctional electrocatalysts for full water splitting. Journal of Catalysis, 2017, 353, 19-27.	3.1	105
217	Recent advances in air electrodes for Zn–air batteries: electrocatalysis and structural design. Materials Horizons, 2017, 4, 945-976.	6.4	263
218	Metal–organic framework-induced construction of actiniae-like carbon nanotube assembly as advanced multifunctional electrocatalysts for overall water splitting and Zn-air batteries. Nano Energy, 2017, 39, 626-638.	8.2	263

#	Article	IF	CITATIONS
219	Hydrogen evolution reaction catalyzed by ruthenium ion-complexed graphitic carbon nitride nanosheets. Journal of Materials Chemistry A, 2017, 5, 18261-18269.	5.2	136
220	Self-Reduction Synthesis of Silver Nanoparticles/Carbon Fiber Paper Air Cathodes for Improving Al-Air Battery Performance. Journal of the Electrochemical Society, 2017, 164, A1425-A1430.	1.3	11
221	Noble-Metal-Free Iron Phosphide Cocatalyst Loaded Graphitic Carbon Nitride as an Efficient and Robust Photocatalyst for Hydrogen Evolution under Visible Light Irradiation. ACS Sustainable Chemistry and Engineering, 2017, 5, 8053-8060.	3.2	100
222	N, P dual-doped hollow carbon spheres for high-performance supercapacitors. Journal of Solid State Electrochemistry, 2017, 21, 3631-3640.	1.2	15
223	Amorphous Bimetallic Oxide–Graphene Hybrids as Bifunctional Oxygen Electrocatalysts for Rechargeable Zn–Air Batteries. Advanced Materials, 2017, 29, 1701410.	11.1	243
224	Simultaneous Doping of Nitrogen and Fluorine into Carbon (NFC) as Metal-Free Oxygen Reduction Electrocatalysts. Journal of the Electrochemical Society, 2017, 164, H1081-H1085.	1.3	21
225	Structural and electrochemical studies of tungsten carbide/carbon composites for hydrogen evolution. International Journal of Hydrogen Energy, 2017, 42, 29781-29790.	3.8	31
226	Scalable Self-Supported Graphene Foam for High-Performance Electrocatalytic Oxygen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 41980-41987.	4.0	22
227	N,B-codoped defect-rich graphitic carbon nanocages as high performance multifunctional electrocatalysts. Nano Energy, 2017, 42, 334-340.	8.2	238
228	Designing N-doped carbon nanotubes and Fe–Fe ₃ C nanostructures co-embedded in B-doped mesoporous carbon as an enduring cathode electrocatalyst for metal–air batteries. Journal of Materials Chemistry A, 2017, 5, 16843-16853.	5.2	83
229	Metal-organic-frameworks derived cobalt embedded in various carbon structures as bifunctional electrocatalysts for oxygen reduction and evolution reactions. Scientific Reports, 2017, 7, 5266.	1.6	68
230	Cu nanowires shelled with NiFe layered double hydroxide nanosheets as bifunctional electrocatalysts for overall water splitting. Energy and Environmental Science, 2017, 10, 1820-1827.	15.6	1,002
231	Ni nanoparticles embedded in N doped carbon nanotubes derived from a metal organic framework with improved performance for oxygen evolution reaction. International Journal of Hydrogen Energy, 2017, 42, 16149-16156.	3.8	49
232	Facile Synthesis of Heterostructured Nickel/Nickel Oxide Wrapped Carbon Fiber: Flexible Bifunctional Gas-Evolving Electrode for Highly Efficient Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2017, 5, 529-536.	3.2	63
233	Substrate-Induced Synthesis of Nitrogen-Doped Holey Graphene Nanocapsules for Advanced Metal-Free Bifunctional Electrocatalysts. Particle and Particle Systems Characterization, 2017, 34, 1600207.	1.2	15
234	Ni ₃ Feâ€N Doped Carbon Sheets as a Bifunctional Electrocatalyst for Air Cathodes. Advanced Energy Materials, 2017, 7, 1601172.	10.2	369
235	Highly efficient hydrogen generation from hydrous hydrazine using a reduced graphene oxide-supported NiPtP nanoparticle catalyst. Journal of Alloys and Compounds, 2017, 690, 783-790.	2.8	24
236	Electrically Rechargeable Zinc–Air Batteries: Progress, Challenges, and Perspectives. Advanced Materials, 2017, 29, 1604685.	11.1	1,143

#	Article	IF	Citations
237	Two-dimensional carbon-based nanocomposites for photocatalytic energy generation and environmental remediation applications. Beilstein Journal of Nanotechnology, 2017, 8, 1571-1600.	1.5	119
238	Synergistic effect of metal ion additives on graphitic carbon nitride nanosheet-templated electrodeposition of Cu@CuO for enzyme-free glucose detection. Journal of Alloys and Compounds, 2018, 745, 155-163.	2.8	22
239	Traditional NiCo ₂ S ₄ Phase with Porous Nanosheets Array Topology on Carbon Cloth: A Flexible, Versatile and Fabulous Electrocatalyst for Overall Water and Urea Electrolysis. ACS Sustainable Chemistry and Engineering, 2018, 6, 5011-5020.	3.2	164
240	Nanocarbonâ€Based Electrocatalysts for Rechargeable Aqueous Li/Znâ€Air Batteries. ChemElectroChem, 2018, 5, 1745-1763.	1.7	34
241	Density functional theory study on the stability, electronic structure and absorption spectrum of small size g-C3N4 quantum dots. Computational Materials Science, 2018, 148, 149-156.	1.4	14
242	Efficient unitary oxygen electrode for air-based flow batteries. Nano Energy, 2018, 47, 361-367.	8.2	39
243	Molecular engineering of polymeric carbon nitride: advancing applications from photocatalysis to biosensing and more. Chemical Society Reviews, 2018, 47, 2298-2321.	18.7	488
244	Microwave Reaction: A Facile Economic and Green Method to Synthesize Oxygenâ€Decorated Graphene from Carbon Cloth for Oxygen Electrocatalysis. ChemCatChem, 2018, 10, 2305-2310.	1.8	7
245	A Review of Carbon-Composited Materials as Air-Electrode Bifunctional Electrocatalysts for Metal–Air Batteries. Electrochemical Energy Reviews, 2018, 1, 1-34.	13.1	163
246	Template Conversion of Covalent Organic Frameworks into 2D Conducting Nanocarbons for Catalyzing Oxygen Reduction Reaction. Advanced Materials, 2018, 30, e1706330.	11.1	151
247	Metal–organic framework-derived integrated nanoarrays for overall water splitting. Journal of Materials Chemistry A, 2018, 6, 9009-9018.	5.2	74
248	Freestanding Nonâ€Precious Metal Electrocatalysts for Oxygen Evolution and Reduction Reactions. ChemElectroChem, 2018, 5, 1786-1804.	1.7	32
249	Recent Advances in Carbonâ€Based Bifunctional Oxygen Electrocatalysts for Znâ^'Air Batteries. ChemElectroChem, 2018, 5, 1424-1434.	1.7	129
250	Advantage of semi-ionic bonding in fluorine-doped carbon materials for the oxygen evolution reaction in alkaline media. RSC Advances, 2018, 8, 14152-14156.	1.7	44
251	Visible-Light-Driven Photoreduction of CO ₂ to CH ₄ over N,O,P-Containing Covalent Organic Polymer Submicrospheres. ACS Catalysis, 2018, 8, 4576-4581.	5.5	99
252	Electrically Conductive Graphene-Based Biodegradable Polymer Composite Films with High Thermal Stability and Flexibility. Nano, 2018, 13, 1850033.	0.5	9
253	A comprehensive analysis and rational designing of efficient Fe-based oxygen electrocatalysts for metal–air batteries. Journal of Materials Chemistry A, 2018, 6, 8537-8548.	5.2	39
254	Nitrogen Vacancy Structure Driven Photoeletrocatalytic Degradation of 4-Chlorophenol Using Porous Graphitic Carbon Nitride Nanosheets. ACS Sustainable Chemistry and Engineering, 2018, 6, 6497-6506.	3.2	65

#	Article	IF	CITATIONS
255	Promoted Photocatalytic Hydrogen Evolution by Molecular Ringâ€Substituting Doping and Regulation of Charge Carrier Migration in Graphitic Carbon Nitride. Solar Rrl, 2018, 2, 1800058.	3.1	33
256	Enhancement of Oxygen Transfer by Design Nickel Foam Electrode for Zincâ^'Air Battery. Journal of the Electrochemical Society, 2018, 165, A809-A818.	1.3	41
257	Utilizing egg lecithin coating to improve the electrochemical performance of regenerated lithium iron phosphate. Journal of Alloys and Compounds, 2018, 745, 164-171.	2.8	23
258	Biomass-derived FeNi alloy and nitrogen-codoped porous carbons as highly efficient oxygen reduction and evolution bifunctional electrocatalysts for rechargeable Zn-air battery. Energy Storage Materials, 2018, 12, 277-283.	9.5	176
259	Photocatalytic cyanation of carbon nitride scaffolds: Tuning band structure and enhancing the performance in green light driven C S bond formation. Applied Catalysis B: Environmental, 2018, 229, 249-253.	10.8	48
260	Two-Dimensional Phosphorus-Doped Carbon Nanosheets with Tunable Porosity for Oxygen Reactions in Zinc-Air Batteries. ACS Catalysis, 2018, 8, 2464-2472.	5.5	175
261	Fabrication and photocatalytic properties of flexible g-C3N4/SiO2 composite membrane by electrospinning method. Journal of Materials Science: Materials in Electronics, 2018, 29, 6771-6778.	1.1	30
262	Phosphorus-doped 3D carbon nanofiber aerogels derived from bacterial-cellulose for highly-efficient capacitive deionization. Carbon, 2018, 130, 377-383.	5.4	224
263	A novel strategy for preparing layered double hydroxide/exfoliated carbon nanostructures composites as superior electrochemical catalysts with respect to oxygen evolution and methanol oxidation. Journal of Alloys and Compounds, 2018, 744, 347-356.	2.8	13
264	Enhancing Electron Transfer and Electrocatalytic Activity on Crystalline Carbon-Conjugated g-C ₃ N ₄ . ACS Catalysis, 2018, 8, 1926-1931.	5.5	172
265	Nonmetal element doped g-C ₃ N ₄ with enhanced H ₂ evolution under visible light irradiation. Journal of Materials Research, 2018, 33, 1268-1278.	1.2	35
266	High-rate oxygen electroreduction over metal-free graphene foams embedding P–N coupled moieties in acidic media. Journal of Materials Chemistry A, 2018, 6, 4145-4151.	5.2	29
267	Fabrication of carbon bridged g-C3N4 through supramolecular self-assembly for enhanced photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2018, 229, 114-120.	10.8	128
268	Advanced Architectures and Relatives of Air Electrodes in Zn–Air Batteries. Advanced Science, 2018, 5, 1700691.	5.6	645
269	Biomass-based carbon beads with a tailored hierarchical structure and surface chemistry for efficient batch and column uptake of methylene blue. Research on Chemical Intermediates, 2018, 44, 2867-2887.	1.3	9
270	Forest-like NiCoP@Cu ₃ P supported on copper foam as a bifunctional catalyst for efficient water splitting. Journal of Materials Chemistry A, 2018, 6, 2100-2106.	5.2	128
271	Carbon, nitrogen and phosphorus containing metal-free photocatalysts for hydrogen production: progress and challenges. Journal of Materials Chemistry A, 2018, 6, 1305-1322.	5.2	144
272	Threeâ€Dimensional Graphene Networks with Abundant Sharp Edge Sites for Efficient Electrocatalytic Hydrogen Evolution. Angewandte Chemie, 2018, 130, 198-203.	1.6	41

#	Article	IF	CITATIONS
273	Phosphorus-Doped Graphitic Carbon Nitride Nanotubes with Amino-rich Surface for Efficient CO ₂ Capture, Enhanced Photocatalytic Activity, and Product Selectivity. ACS Applied Materials & Interfaces, 2018, 10, 4001-4009.	4.0	311
274	Hierarchically Designed 3D Holey C ₂ N Aerogels as Bifunctional Oxygen Electrodes for Flexible and Rechargeable Zn-Air Batteries. ACS Nano, 2018, 12, 596-608.	7.3	159
275	Three-Dimensional Macroporous Co-Embedded N-Doped Carbon Interweaving with Carbon Nanotubes as Excellent Bifunctional Catalysts for Zn–Air Batteries. Langmuir, 2018, 34, 1992-1998.	1.6	21
276	CoP nanoparticles anchored on N,P-dual-doped graphene-like carbon as a catalyst for water splitting in non-acidic media. Nanoscale, 2018, 10, 2603-2612.	2.8	96
277	Anionâ€Regulated Hydroxysulfide Monoliths as OER/ORR/HER Electrocatalysts and their Applications in Selfâ€Powered Electrochemical Water Splitting. Small Methods, 2018, 2, 1800055.	4.6	91
278	ZIF-67 derived P/Ni/Co/NC nanoparticles as highly efficient electrocatalyst for oxygen reduction reaction (ORR). Journal of Solid State Chemistry, 2018, 264, 1-5.	1.4	41
279	N-doped and N/Fe-codoped porous carbon spheres derived from tetrazine-based polypyrrole as efficient electrocatalysts for the oxygen reduction reaction. Applied Catalysis A: General, 2018, 559, 102-111.	2.2	18
280	Defect-rich carbon fiber electrocatalysts with porous graphene skin for flexible solid-state zinc–air batteries. Energy Storage Materials, 2018, 15, 124-130.	9.5	162
281	Assembly of 2D MXene nanosheets and TiO2 nanoparticles for fabricating mesoporous TiO2-MXene membranes. Journal of Membrane Science, 2018, 564, 35-43.	4.1	57
282	A transition metal oxysulfide cathode for the proton exchange membrane water electrolyzer. Applied Catalysis B: Environmental, 2018, 232, 93-100.	10.8	40
283	Emerging Two-Dimensional Nanomaterials for Electrocatalysis. Chemical Reviews, 2018, 118, 6337-6408.	23.0	1,552
284	Cactusâ€Like NiCoP/NiCoâ€OH 3D Architecture with Tunable Composition for Highâ€Performance Electrochemical Capacitors. Advanced Functional Materials, 2018, 28, 1800036.	7.8	274
285	Carbon nitride modified nanocarbon materials as efficient non-metallic catalysts for alkane dehydrogenation. Catalysis Today, 2018, 301, 48-54.	2.2	19
286	Increasing the resistivity and IFSS of unsized carbon fibre by covalent surface modification. Reactive and Functional Polymers, 2018, 129, 123-128.	2.0	20
287	Production of P, N Coâ€doped Grapheneâ€Based Materials by a Solution Process and Their Electrocatalytic Performance for Oxygen Reduction Reaction. ChemNanoMat, 2018, 4, 118-123.	1.5	28
288	3D Porous Carbonaceous Electrodes for Electrocatalytic Applications. Joule, 2018, 2, 76-93.	11.7	92
289	Two dimensional N-doped ZnO-graphitic carbon nitride nanosheets heterojunctions with enhanced photocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2018, 43, 3988-4002.	3.8	123
290	Surfaceâ€Modified Porous Carbon Nitride Composites as Highly Efficient Electrocatalyst for Znâ€Air Batteries. Advanced Energy Materials, 2018, 8, 1701642.	10.2	129

#	Article	IF	CITATIONS
291	Rationally Designed Co ₃ O ₄ –C Nanowire Arrays on Ni Foam Derived From Metal Organic Framework as Reversible Oxygen Evolution Electrodes with Enhanced Performance for Zn–Air Batteries. ACS Sustainable Chemistry and Engineering, 2018, 6, 707-718.	3.2	92
292	Fragmented phosphorus-doped graphitic carbon nitride nanoflakes with broad sub-bandgap absorption for highly efficient visible-light photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2018, 225, 397-405.	10.8	154
293	Metal-free bifunctional carbon electrocatalysts derived from zeolitic imidazolate frameworks for efficient water splitting. Materials Chemistry Frontiers, 2018, 2, 102-111.	3.2	57
294	Bifunctional electrocatalysts for Zn–air batteries. Sustainable Energy and Fuels, 2018, 2, 39-67.	2.5	179
295	A photo-responsive bifunctional electrocatalyst for oxygen reduction and evolution reactions. Nano Energy, 2018, 43, 130-137.	8.2	105
296	Threeâ€Dimensional Graphene Networks with Abundant Sharp Edge Sites for Efficient Electrocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2018, 57, 192-197.	7.2	106
297	Iron Oxide Nanoclusters Incorporated into Iron Phthalocyanine as Highly Active Electrocatalysts for the Oxygen Reduction Reaction. ChemCatChem, 2018, 10, 475-483.	1.8	18
298	From metal to metal-free catalysts: Routes to sustainable chemistry. Advances in Catalysis, 2018, 63, 1-73.	0.1	16
299	Heterostructure-Promoted Oxygen Electrocatalysis Enables Rechargeable Zinc–Air Battery with Neutral Aqueous Electrolyte. Journal of the American Chemical Society, 2018, 140, 17624-17631.	6.6	258
300	A Confinement Strategy for Stabilizing ZIFâ€Derived Bifunctional Catalysts as a Benchmark Cathode of Flexible Allâ€Solidâ€State Zinc–Air Batteries. Advanced Materials, 2018, 30, e1805268.	11.1	147
301	Enhancement of Oxygen Reduction Performance of Biomass-Derived Carbon through Co-Doping with Early Transition Metal. Journal of the Electrochemical Society, 2018, 165, J3148-J3156.	1.3	11
302	Editable asymmetric all-solid-state supercapacitors based on high-strength, flexible, and programmable 2D-metal–organic framework/reduced graphene oxide self-assembled papers. Journal of Materials Chemistry A, 2018, 6, 20254-20266.	5.2	110
303	Two-dimensional layered nanomaterials for visible-light-driven photocatalytic water splitting. Materials Today Energy, 2018, 10, 352-367.	2.5	73
305	Graphitic Carbon Nitride for Electrochemical Energy Conversion and Storage. ACS Energy Letters, 2018, 3, 2796-2815.	8.8	149
306	Restricting Growth of Ni ₃ Fe Nanoparticles on Heteroatom-Doped Carbon Nanotube/Graphene Nanosheets as Air-Electrode Electrocatalyst for Zn–Air Battery. ACS Applied Materials & Interfaces, 2018, 10, 38093-38100.	4.0	74
307	In Situ Activating Strategy to Significantly Boost Oxygen Electrocatalysis of Commercial Carbon Cloth for Flexible and Rechargeable Znâ€Air Batteries. Advanced Science, 2018, 5, 1800760.	5.6	91
308	Twoâ€Dimensional Layered Hydroxide Nanoporous Nanohybrids Pillared with Zeroâ€Dimensional Polyoxovanadate Nanoclusters for Enhanced Water Oxidation Catalysis. Small, 2018, 14, e1703481.	5.2	33
309	Non-precious nanostructured materials by electrospinning and their applications for oxygen reduction in polymer electrolyte membrane fuel cells. Journal of Power Sources, 2018, 408, 17-27.	4.0	45

#	Article	IF	CITATIONS
310	In-situ reduction synthesis of La2O3/NiM-NCNTs (MÂ= Fe, Co) as efficient bifunctional electrocatalysts for oxygen reduction and evolutionÂreactions. International Journal of Hydrogen Energy, 2018, 43, 21959-21968.	3.8	12
311	Ni nanoparticle-decorated-MnO ₂ nanodendrites as highly selective and efficient catalysts for CO ₂ electroreduction. Journal of Materials Chemistry A, 2018, 6, 19438-19444.	5.2	27
314	Emerging Materials in Heterogeneous Electrocatalysis Involving Oxygen for Energy Harvesting. ACS Applied Materials & Interfaces, 2018, 10, 33737-33767.	4.0	52
315	<i>Anthocephalus cadamba</i> shaped FeNi encapsulated carbon nanostructures for metal–air batteries as a resilient bifunctional oxygen electrocatalyst. Journal of Materials Chemistry A, 2018, 6, 20411-20420.	5.2	67
316	Molecule-Assisted Synthesis of Highly Dispersed Ultrasmall RuO ₂ Nanoparticles on Nitrogen-Doped Carbon Matrix as Ultraefficient Bifunctional Electrocatalysts for Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2018, 6, 11529-11535.	3.2	58
317	Recent Advances in Materials and Design of Electrochemically Rechargeable Zinc–Air Batteries. Small, 2018, 14, e1801929.	5.2	192
318	Synthesis of Carbon–Nitrogen–Phosphorous Materials with an Unprecedented High Amount of Phosphorous toward an Efficient Fireâ€Retardant Material. Angewandte Chemie - International Edition, 2018, 57, 9764-9769.	7.2	28
319	Synthesis of Carbon–Nitrogen–Phosphorous Materials with an Unprecedented High Amount of Phosphorous toward an Efficient Fireâ€Retardant Material. Angewandte Chemie, 2018, 130, 9912-9917.	1.6	1
320	Stable and Efficient Nitrogenâ€Containing Carbonâ€Based Electrocatalysts for Reactions in Energyâ€Conversion Systems. ChemSusChem, 2018, 11, 2267-2295.	3.6	19
321	Enhanced capacitive deionization by nitrogen-doped porous carbon nanofiber aerogel derived from bacterial-cellulose. Journal of Electroanalytical Chemistry, 2018, 822, 81-88.	1.9	52
322	Biomimetic Donor–Acceptor Motifs in Conjugated Polymers for Promoting Exciton Splitting and Charge Separation. Angewandte Chemie - International Edition, 2018, 57, 8729-8733.	7.2	190
323	lonothermal Synthesis of Triazine–Heptazineâ€Based Copolymers with Apparent Quantum Yields of 60 % at 420â€nm for Solar Hydrogen Production from "Sea Waterâ€. Angewandte Chemie - International Edition, 2018, 57, 9372-9376.	7.2	369
324	Phosphorus Doped Multiâ€Walled Carbon Nanotubes: An Excellent Electrocatalyst for the VO ²⁺ /VO ₂ ⁺ Redox Reaction. ChemElectroChem, 2018, 5, 2464-2474.	1.7	18
325	Manipulation structure of carbon nitride via trace level iron with improved interfacial redox activity and charge separation for synthetic enhancing photocatalytic hydrogen evolution. Applied Surface Science, 2018, 456, 609-614.	3.1	13
326	3D nitrogen-doped graphene aerogels as efficient electrocatalyst for the oxygen reduction reaction. Carbon, 2018, 139, 137-144.	5.4	75
327	Organophosphoric acid-derived CoP quantum dots@S,N-codoped graphite carbon as a trifunctional electrocatalyst for overall water splitting and Zn–air batteries. Nanoscale, 2018, 10, 14613-14626.	2.8	74
328	Visible Light-Responsive Photocatalysts—From TiO2 to Carbon Nitrides and Boron Carbon Nitride. Advances in Inorganic Chemistry, 2018, 72, 49-92.	0.4	9
329	Defect-rich MoS2 nanosheets vertically grown on graphene-protected Ni foams for high efficient electrocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2018, 43, 14087-14095.	3.8	25

#	Article	IF	CITATIONS
330	Derivatives of coordination compounds for rechargeable batteries. Journal of Materials Chemistry A, 2018, 6, 13999-14024.	5.2	58
331	Hierarchical NiCo layered double hydroxides nanosheets on carbonized CNT/cotton as a high-performance flexible supercapacitor. Journal of Materials Science, 2018, 53, 14485-14494.	1.7	18
332	Metal-doped graphitic carbon nitride (g-C3N4) as selective NO2 sensors: A first-principles study. Applied Surface Science, 2018, 455, 1116-1122.	3.1	71
333	Three-dimensional flower-like phosphorus-doped g-C ₃ N ₄ with a high surface area for visible-light photocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 16485-16494.	5.2	148
334	A metallic MoS ₂ nanosheet array on graphene-protected Ni foam as a highly efficient electrocatalytic hydrogen evolution cathode. Journal of Materials Chemistry A, 2018, 6, 16458-16464.	5.2	33
335	Hybridization of Binary Nonâ€Preciousâ€Metal Nanoparticles with dâ€Ti ₃ C ₂ MXene for Catalyzing the Oxygen Reduction Reaction. ChemElectroChem, 2018, 5, 3307-3314.	1.7	32
336	Template-free synthesis of bubble-like phosphorus-doped carbon nitride with enhanced visible-light photocatalytic activity. Journal of Alloys and Compounds, 2018, 769, 503-511.	2.8	32
337	Monodisperse Co9S8 nanoparticles in situ embedded within N, S-codoped honeycomb-structured porous carbon for bifunctional oxygen electrocatalyst in a rechargeable Zn–air battery. NPG Asia Materials, 2018, 10, 670-684.	3.8	97
338	Recent Advances toward the Rational Design of Efficient Bifunctional Air Electrodes for Rechargeable Zn–Air Batteries. Small, 2018, 14, e1703843.	5.2	163
339	Fe ₂ O ₃ /C–C ₃ N ₄ -Based Tight Heterojunction for Boosting Visible-Light-Driven Photocatalytic Water Oxidation. ACS Sustainable Chemistry and Engineering, 2018, 6, 10436-10444.	3.2	61
340	Solidâ€State Rechargeable Zinc–Air Battery with Long Shelf Life Based on Nanoengineered Polymer Electrolyte. ChemSusChem, 2018, 11, 3215-3224.	3.6	55
341	Hollow Ag44Pt56 nanotube bundles with high electrocatalytic performances for hydrogen evolution and ethylene glycol oxidation reactions. Journal of Colloid and Interface Science, 2018, 532, 571-578.	5.0	19
342	Monodisperse and Tiny Co ₂ N _{0.67} Nanocrystals Uniformly Embedded over Two Curving Surfaces of Hollow Carbon Microfibers as Efficient Electrocatalyst for Oxygen Evolution Reaction. ACS Applied Nano Materials, 2018, 1, 4461-4473.	2.4	23
343	Enhanced charge separation ability and visible light photocatalytic performance of graphitic carbon nitride by binary S, B co-doping. Materials Research Bulletin, 2018, 107, 477-483.	2.7	39
344	B-site doping effects of NdBa _{0.75} Ca _{0.25} Co ₂ O _{5+δ} double perovskite catalysts for oxygen evolution and reduction reactions. Journal of Materials Chemistry A, 2018, 6, 17807-17818.	5.2	50
345	Preparation of oxygen-doped graphitic carbon nitride and its visible-light photocatalytic performance on bisphenol A degradation. Water Science and Technology, 2018, 78, 1023-1033.	1.2	30
346	Iron-decorated nitrogen-rich carbons as efficient oxygen reduction electrocatalysts for Zn–air batteries. Nanoscale, 2018, 10, 16996-17001.	2.8	25
347	A Review of Preciousâ€Metalâ€Free Bifunctional Oxygen Electrocatalysts: Rational Design and Applications in Znâ^'Air Batteries. Advanced Functional Materials, 2018, 28, 1803329.	7.8	524

#	Article	IF	CITATIONS
348	Phosphorus-doped carbon nitride as powerful electrocatalyst for high-power vanadium flow battery. Electrochimica Acta, 2018, 286, 22-28.	2.6	24
349	Ionothermal Synthesis of Triazine–Heptazineâ€Based Copolymers with Apparent Quantum Yields of 60 % at 420â€nm for Solar Hydrogen Production from "Sea Water― Angewandte Chemie, 2018, 130, 9516-9520	0 <mark>1.6</mark>	73
350	Biomimetic Donor–Acceptor Motifs in Conjugated Polymers for Promoting Exciton Splitting and Charge Separation. Angewandte Chemie, 2018, 130, 8865-8869.	1.6	26
351	Flexible/Rechargeable Zn–Air Batteries Based on Multifunctional Heteronanomat Architecture. ACS Applied Materials & Interfaces, 2018, 10, 22210-22217.	4.0	51
352	Carbon nanotube encapsulated in nitrogen and phosphorus co-doped carbon as a bifunctional electrocatalyst for oxygen reduction and evolution reactions. Carbon, 2018, 139, 156-163.	5.4	97
353	Ultrathin, highly branched carbon nanotube cluster with outstanding oxygen electrocatalytic performance. Electrochimica Acta, 2018, 282, 224-232.	2.6	30
354	Graphitic Nitrogen Is Responsible for Oxygen Electroreduction on Nitrogen-Doped Carbons in Alkaline Electrolytes: Insights from Activity Attenuation Studies and Theoretical Calculations. ACS Catalysis, 2018, 8, 6827-6836.	5.5	188
355	Nanocarbons and Their Composite Materials as Electrocatalyst for Metal–Air Battery and Water Splitting. Nanostructure Science and Technology, 2019, , 455-496.	0.1	0
356	Kohlenstoffnitridmaterialien für photochemische Zellen zur Wasserspaltung. Angewandte Chemie, 2019, 131, 6198-6211.	1.6	19
357	Carbon Nitride Materials for Water Splitting Photoelectrochemical Cells. Angewandte Chemie - International Edition, 2019, 58, 6138-6151.	7.2	205
358	Electrodeposited Rhodium Phosphide with High Activity for Hydrogen Evolution Reaction in Acidic Medium. ACS Sustainable Chemistry and Engineering, 2019, 7, 14041-14050.	3.2	29
359	Electroactive Materials. SpringerBriefs in Materials, 2019, , 31-67.	0.1	0
360	Fullâ€Color Chemically Modulated gâ€C ₃ N ₄ for Whiteâ€Lightâ€Emitting Device. Advanced Optical Materials, 2019, 7, 1900775.	3.6	33
361	Carbon nanomaterials for metal–air batteries. , 2019, , 311-333.		Ο
362	Mesoporous Hollow Nested Nanospheres of Ni, Cu, Co-Based Mixed Sulfides for Electrocatalytic Oxygen Reduction and Evolution. ACS Applied Nano Materials, 2019, 2, 4921-4932.	2.4	30
363	Boosting Photocatalytic Hydrogen Evolution Achieved by NiSx Coupled with g-C ₃ N ₄ @ZIF-67 Heterojunction. Journal of Physical Chemistry C, 2019, 123, 18248-18263.	1.5	80
364	NiFe Layered Double Hydroxide on Nitrogen Doped TiO ₂ Nanotube Arrays toward Efficient Oxygen Evolution. ACS Applied Energy Materials, 2019, 2, 5960-5967.	2.5	37
365	A novel and ultrasensitive nonenzymatic glucose sensor based on pulsed laser scribed carbon paper decorated with nanoporous nickel network. Analytica Chimica Acta, 2019, 1082, 165 <u>-</u> 175.	2.6	28

#	Article	IF	CITATIONS
366	Carbon nanotubes-based PdM bimetallic catalysts through N4-system for efficient ethanol oxidation and hydrogen evolution reaction. Scientific Reports, 2019, 9, 11051.	1.6	28
367	Zinc antimonate nanorods integrated porous graphitic carbon nitride nanosheets as hybrid electrode materials for supercapacitors. Diamond and Related Materials, 2019, 97, 107460.	1.8	2
368	General and Scalable Fabrication of Core–Shell Metal Sulfides@C Anchored on 3D Nâ€Doped Foam toward Flexible Sodium Ion Batteries. Small, 2019, 15, e1903259.	5.2	62
369	Defectâ€Enriched Nitrogen Doped–Graphene Quantum Dots Engineered NiCo ₂ S ₄ Nanoarray as Highâ€Efficiency Bifunctional Catalyst for Flexible Znâ€Air Battery. Small, 2019, 15, e1903610.	5.2	84
370	Ion Immobilized Bifunctional Electrocatalyst for Oxygen Reduction and Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 7811-7822.	2.5	9
371	Nanostructured Carbon Based Heterogeneous Electrocatalysts for Oxygen Evolution Reaction in Alkaline Media. ChemCatChem, 2019, 11, 5855-5874.	1.8	70
372	Ultrathin nickel boride nanosheets anchored on functionalized carbon nanotubes as bifunctional electrocatalysts for overall water splitting. Journal of Materials Chemistry A, 2019, 7, 764-774.	5.2	123
373	Electrochemical Fixation of Nitrogen and Its Coupling with Biomass Valorization with a Strongly Adsorbing and Defect Optimized Boron–Carbon–Nitrogen Catalyst. ACS Applied Energy Materials, 2019, 2, 8359-8365.	2.5	43
374	Merging Singleâ€Atomâ€Dispersed Iron and Graphitic Carbon Nitride to a Joint Electronic System for Highâ€Efficiency Photocatalytic Hydrogen Evolution. Small, 2019, 15, e1905166.	5.2	80
375	Molecular Trapping Strategy To Stabilize Subnanometric Pt Clusters for Highly Active Electrocatalysis. ACS Catalysis, 2019, 9, 11603-11613.	5.5	43
376	Pristineâ€Grapheneâ€Supported Nitrogenâ€Doped Carbon Selfâ€Assembled from Glucaminiumâ€Based Ionic Liquids as Metalâ€Free Catalyst for Oxygen Evolution. ChemSusChem, 2019, 12, 5041-5050.	3.6	25
377	Recent progress in two-dimensional nanomaterials: Synthesis, engineering, and applications. FlatChem, 2019, 18, 100133.	2.8	52
378	Bifunctional electrocatalysts for rechargeable Zn-air batteries. Chinese Journal of Catalysis, 2019, 40, 1298-1310.	6.9	111
379	Platinum Electrocatalysts Deposited onto Composite Carbon Black–Metal Oxide Support. Russian Journal of Electrochemistry, 2019, 55, 690-700.	0.3	8
380	Enhanced Photocatalytic Activity of Aerogel Composed of Crooked Carbon Nitride Nanolayers with Nitrogen Vacancies. ACS Applied Materials & amp; Interfaces, 2019, 11, 34922-34929.	4.0	30
381	Hierarchical porous carbon foam supported on carbon cloth as high-performance anodes for aqueous supercapacitors. Journal of Power Sources, 2019, 439, 227066.	4.0	21
382	Multi-heteroatom doped graphene-like carbon nanospheres with 3D inverse opal structure: a promising bisphenol-A remediation material. Environmental Science: Nano, 2019, 6, 809-819.	2.2	36
383	Durable Freestanding Hierarchical Porous Electrode for Rechargeable Zinc–Air Batteries. ACS Applied Energy Materials, 2019, 2, 1505-1516.	2.5	18

#	Article	IF	CITATIONS
384	Advances in constructing polymeric carbon-nitride-based nanocomposites and their applications in energy chemistry. Sustainable Energy and Fuels, 2019, 3, 611-655.	2.5	47
385	Tunability and Scalability of Single-Atom Catalysts Based on Carbon Nitride. ACS Sustainable Chemistry and Engineering, 2019, 7, 5223-5230.	3.2	31
386	Flexible carbonic pen ink/carbon fiber paper composites for multifunctional switch-type sensors. Composites Part A: Applied Science and Manufacturing, 2019, 124, 105452.	3.8	9
387	Recent Advances in Carbonâ€Based Bifunctional Oxygen Catalysts for Zincâ€Air Batteries. Batteries and Supercaps, 2019, 2, 743-765.	2.4	119
388	Nitrogen and phosphorus dual-doping carbon shells encapsulating ultrafine Mo2C particles as electrocatalyst for hydrogen evolution. Journal of Colloid and Interface Science, 2019, 553, 148-155.	5.0	15
389	Zn-doped tri-s-triazine crystalline carbon nitrides for efficient hydrogen evolution photocatalysis. Applied Catalysis A: General, 2019, 582, 117118.	2.2	38
390	A facile method to conduct 3D self-supporting Co-FeCo/N-doped graphene-like carbon bifunctional electrocatalysts for flexible solid-state zinc air battery. Applied Catalysis B: Environmental, 2019, 256, 117887.	10.8	81
391	C ₆₀ -Adsorbed Single-Walled Carbon Nanotubes as Metal-Free, pH-Universal, and Multifunctional Catalysts for Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution. Journal of the American Chemical Society, 2019, 141, 11658-11666.	6.6	220
392	Bifunctional Cu2S–Co(OH)2 nanotube array/Cu foam electrocatalyst for overall water splitting. Electrochimica Acta, 2019, 316, 8-18.	2.6	56
393	Rational design of multifunctional air electrodes for rechargeable Zn–Air batteries: Recent progress and future perspectives. Energy Storage Materials, 2019, 21, 253-286.	9.5	171
394	Ultrafine MnO particles embedded in three-dimensional porous g-C3N4/C spheres synthesized through aerosol-pyrolysis route for high energy-density lithium-ion batteries. Ionics, 2019, 25, 4727-4737.	1.2	4
395	High-Adhesion Stretchable Electrode via Cross-Linking Intensified Electroless Deposition on a Biomimetic Elastomeric Micropore Film. ACS Applied Materials & Interfaces, 2019, 11, 20535-20544.	4.0	33
396	Highly Efficient g ₃ N ₄ Nanorods with Dual Active Sites as an Electrocatalyst for the Oxygen Evolution Reaction. ChemCatChem, 2019, 11, 2870-2878.	1.8	29
397	Nitrogenâ€Ðoped Carbon Nanosheets Encapsulating Cobalt Nanoparticle Hybrids as Highâ€Performance Bifunctional Electrocatalysts. ChemElectroChem, 2019, 6, 2683-2688.	1.7	17
398	Synthesis of novel C-doped g-C ₃ N ₄ nanosheets coupled with CdIn ₂ S ₄ for enhanced photocatalytic hydrogen evolution. Beilstein Journal of Nanotechnology, 2019, 10, 912-921.	1.5	12
399	Internal electric field construction on dual oxygen group-doped carbon nitride for enhanced photodegradation of pollutants under visible light irradiation. Applied Catalysis B: Environmental, 2019, 256, 117705.	10.8	74
400	Three-Dimensional CdS@Carbon Fiber Networks: Innovative Synthesis and Application as a General Platform for Photoelectrochemical Bioanalysis. Analytical Chemistry, 2019, 91, 6419-6423.	3.2	29
401	Enhancement of visible-light-driven photocatalytic activity of carbon plane/g-C3N4/TiO2 nanocomposite by improving heterojunction contact. Chemical Engineering Journal, 2019, 371, 706-718.	6.6	100

#	Article	IF	CITATIONS
402	Nitrogen, phosphorus co-doped mesoporous carbon materials as efficient catalysts for oxygen reduction reaction. Ionics, 2019, 25, 4295-4303.	1.2	13
403	Controlling the synthesis of uniform electron-deficient Pd clusters for superior hydrogen production from formic acid. Journal of Materials Chemistry A, 2019, 7, 10363-10371.	5.2	38
404	Metal–organic framework derived hierarchical copper cobalt sulfide nanosheet arrays for high-performance solid-state asymmetric supercapacitors. Journal of Materials Chemistry A, 2019, 7, 8620-8632.	5.2	129
405	Crystallization, cyanamide defect and ion induction of carbon nitride: Exciton polarization dissociation, charge transfer and surface electron density for enhanced hydrogen evolution. Applied Catalysis B: Environmental, 2019, 251, 206-212.	10.8	76
406	Recent advances in hybrid sodium–air batteries. Materials Horizons, 2019, 6, 1306-1335.	6.4	55
407	Carbonâ€Based Substrates for Highly Dispersed Nanoparticle and Even Singleâ€Atom Electrocatalysts. Small Methods, 2019, 3, 1900050.	4.6	87
408	The doping of phosphorus atoms into graphitic carbon nitride for highly enhanced photocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 11506-11512.	5.2	68
409	Doping-Induced Hydrogen-Bond Engineering in Polymeric Carbon Nitride To Significantly Boost the Photocatalytic H ₂ Evolution Performance. ACS Applied Materials & Interfaces, 2019, 11, 17341-17349.	4.0	71
410	One Simple Strategy towards Nitrogen and Oxygen Codoped Carbon Nanotube for Efficient Electrocatalytic Oxygen Reduction and Evolution. Catalysts, 2019, 9, 159.	1.6	9
411	Phosphorus-doped hierarchical porous carbon as efficient metal-free electrocatalysts for oxygen reduction reaction. International Journal of Hydrogen Energy, 2019, 44, 12941-12951.	3.8	26
412	Three-dimensional N-doped graphene aerogel-supported Pd nanoparticles as efficient catalysts for solvent-free oxidation of benzyl alcohol. RSC Advances, 2019, 9, 9620-9628.	1.7	18
413	3D Heteroatomâ€Doped Carbon Nanomaterials as Multifunctional Metalâ€Free Catalysts for Integrated Energy Devices. Advanced Materials, 2019, 31, e1805598.	11.1	194
414	ZIF-67/PAN-800 bifunctional electrocatalyst derived from electrospun fibers for efficient oxygen reduction and oxygen evolution reaction. Journal of Colloid and Interface Science, 2019, 544, 112-120.	5.0	80
415	Carbon Nanomaterials for Energy and Biorelated Catalysis: Recent Advances and Looking Forward. ACS Central Science, 2019, 5, 389-408.	5.3	67
416	Recent advances in precious metal-free bifunctional catalysts for electrochemical conversion systems. Journal of Materials Chemistry A, 2019, 7, 8006-8029.	5.2	221
417	Alkaline Polymer Membraneâ€Based Ultrathin, Flexible, and Highâ€Performance Solidâ€State Znâ€Air Battery. Advanced Energy Materials, 2019, 9, 1803628.	10.2	57
418	Defect chemistry in 2D materials for electrocatalysis. Materials Today Energy, 2019, 12, 215-238.	2.5	110
419	Bottom-up fabrication of graphitic carbon nitride nanosheets modified with porphyrin via covalent bonding for photocatalytic H2 evolution. Nano Research, 2019, 12, 3109-3115.	5.8	44

#	Article	IF	CITATIONS
420	Spinel oxide nanoparticles embedded in nitrogen-doped carbon nanofibers as a robust and self-standing bifunctional oxygen cathode for Zn–air batteries. Journal of Materials Chemistry A, 2019, 7, 24868-24876.	5.2	76
421	Constructing Conductive Bridge Arrays between Ti ₃ C ₂ T _{<i>x</i>} MXene Nanosheets for High-Performance Lithium-Ion Batteries and Highly Efficient Hydrogen Evolution. Inorganic Chemistry, 2019, 58, 16524-16536.	1.9	39
422	Noble metal-free two dimensional carbon-based electrocatalysts for water splitting. BMC Materials, 2019, 1, .	6.8	21
423	Paper-based microfluidic aluminum–air batteries: toward next-generation miniaturized power supply. Lab on A Chip, 2019, 19, 3438-3447.	3.1	55
424	Phytic acid-guided ultra-thin N,P co-doped carbon coated carbon nanotubes for efficient all-pH electrocatalytic hydrogen evolution. Nanoscale, 2019, 11, 23027-23034.	2.8	32
425	Kinetic study of Z-scheme C3N4/CuWO4 photocatalyst towards solar light inactivation of mixed populated bacteria. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 372, 108-121.	2.0	54
426	Coupling FeNi alloys and hollow nitrogen-enriched carbon frameworks leads to high-performance oxygen electrocatalysts for rechargeable zinc–air batteries. Sustainable Energy and Fuels, 2019, 3, 136-141.	2.5	34
427	In-situ construction of coral-like porous P-doped g-C3N4 tubes with hybrid 1D/2D architecture and high efficient photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2019, 241, 159-166.	10.8	231
428	Synthesis of Bifunctional Catalysts for Metalâ€Air Batteries Through Direct Deposition Methods. Batteries and Supercaps, 2019, 2, 326-335.	2.4	16
429	An Isolated Zinc–Cobalt Atomic Pair for Highly Active and Durable Oxygen Reduction. Angewandte Chemie, 2019, 131, 2648-2652.	1.6	116
430	An Isolated Zinc–Cobalt Atomic Pair for Highly Active and Durable Oxygen Reduction. Angewandte Chemie - International Edition, 2019, 58, 2622-2626.	7.2	494
431	Localized micro-deflagration induced defect-rich N-doped nanocarbon shells for highly efficient oxygen reduction reaction. Carbon, 2019, 145, 411-418.	5.4	20
432	Designed synthesis of cobalt nanoparticles embedded carbon nanocages as bifunctional electrocatalysts for oxygen evolution and reduction. Carbon, 2019, 144, 492-499.	5.4	31
433	Silk-Derived Highly Active Oxygen Electrocatalysts for Flexible and Rechargeable Zn–Air Batteries. Chemistry of Materials, 2019, 31, 1023-1029.	3.2	84
434	Distinguished Zn,Co-Nx-C-Sy active sites confined in dentric carbon for highly efficient oxygen reduction reaction and flexible Zn-air Batteries. Nano Energy, 2019, 58, 277-283.	8.2	204
435	Bimetallic PdCu Nanocrystals Immobilized by Nitrogen-Containing Ordered Mesoporous Carbon for Electrocatalytic Denitrification. ACS Applied Materials & amp; Interfaces, 2019, 11, 3861-3868.	4.0	57
436	Co-CoO-Co3O4/N-doped carbon derived from metal-organic framework: The addition of carbon black for boosting oxygen electrocatalysis and Zn-Air battery. Electrochimica Acta, 2019, 295, 966-977.	2.6	72
437	Ultrafine 1D graphene interlayer in g-C3N4/graphene/recycled carbon fiber heterostructure for enhanced photocatalytic hydrogen generation. Chemical Engineering Journal, 2019, 359, 1352-1359.	6.6	46

# 438	ARTICLE Synergistic effects of phosphorous/sulfur co-doping and morphological regulation for enhanced photocatalytic performance of graphitic carbon nitride nanosheets. Journal of Materials Science,	IF 1.7	CITATIONS
439	2019, 54, 1593-1605. Polyoxometalates/TiO2 Fenton-like photocatalysts with rearranged oxygen vacancies for enhanced synergetic degradation. Applied Catalysis B: Environmental, 2019, 244, 407-413.	10.8	92
440	Enhanced electron separation on in-plane benzene-ring doped g-C3N4 nanosheets for visible light photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2019, 244, 459-464.	10.8	99
441	Well-dispersed Pt nanoparticles on borane-modified graphene oxide and their electrocatalytic performance for oxygen reduction reaction. Journal of Solid State Chemistry, 2019, 271, 168-174.	1.4	5
442	Visible light photocatalytic mineralization of bisphenol A by carbon and oxygen dual-doped graphitic carbon nitride. Journal of Colloid and Interface Science, 2019, 540, 97-106.	5.0	32
443	Polymerâ€Based Synthetic Routes to Carbonâ€Based Metalâ€Free Catalysts. Advanced Materials, 2019, 31, e1804626.	11.1	41
444	Recent Progress in Electrically Rechargeable Zinc–Air Batteries. Advanced Materials, 2019, 31, e1805230.	11.1	398
445	Twoâ€&tep Activated Carbon Cloth with Oxygenâ€Rich Functional Groups as a Highâ€Performance Additiveâ€Free Air Electrode for Flexible Zinc〓Air Batteries. Advanced Energy Materials, 2019, 9, 1802936.	10.2	170
446	Hierarchical sulfur and nitrogen co-doped carbon nanocages as efficient bifunctional oxygen electrocatalysts for rechargeable Zn-air battery. Journal of Energy Chemistry, 2019, 34, 64-71.	7.1	69
447	Atomic Modulation and Structure Design of Carbons for Bifunctional Electrocatalysis in Metal–Air Batteries. Advanced Materials, 2019, 31, e1803800.	11.1	208
448	Facile synthesis of mesoporous WS2 for water oxidation. Applied Surface Science, 2019, 465, 351-356.	3.1	28
449	Electronic and Structural Engineering of Carbonâ€Based Metalâ€Free Electrocatalysts for Water Splitting. Advanced Materials, 2019, 31, e1803625.	11.1	229
450	Modulierung der elektronischen Strukturen anorganischer Nanomaterialien für eine effiziente elektrokatalytische Wasserspaltung. Angewandte Chemie, 2019, 131, 4532-4551.	1.6	34
451	Modulating Electronic Structures of Inorganic Nanomaterials for Efficient Electrocatalytic Water Splitting. Angewandte Chemie - International Edition, 2019, 58, 4484-4502.	7.2	340
452	Scalable preparation and stabilization of atomic-thick CoNi layered double hydroxide nanosheets for bifunctional oxygen electrocatalysis and rechargeable zinc-air batteries. Energy Storage Materials, 2019, 16, 24-30.	9.5	52
453	Co-Fe binary metal oxide electrocatalyst with synergistic interface structures for efficient overall water splitting. Catalysis Today, 2020, 351, 44-49.	2.2	52
454	In situ extract nucleate sites for the growth of free-standing carbon nitride films on various substrates. Catalysis Today, 2020, 340, 92-96.	2.2	6
455	A Facile Synthesis of FeCo Nanoparticles Encapsulated in Hierarchical Nâ€Doped Carbon Nanotube/Nanofiber Hybrids for Overall Water Splitting. ChemCatChem, 2020, 12, 932-943.	1.8	39

#	Article	IF	CITATIONS
456	Co nanoparticles supported on three-dimensionally N-doped holey graphene aerogels for electrocatalytic oxygen reduction. Journal of Colloid and Interface Science, 2020, 559, 143-151.	5.0	21
457	Charge Transfer Modulated Activity of Carbonâ€Based Electrocatalysts. Advanced Energy Materials, 2020, 10, 1901227.	10.2	156
458	Highly efficient Ni nanotube arrays and Ni nanotube arrays coupled with NiFe layered-double-hydroxide electrocatalysts for overall water splitting. Journal of Power Sources, 2020, 448, 227434.	4.0	41
459	Metal-organic framework-derived nanocomposites for electrocatalytic hydrogen evolution reaction. Progress in Materials Science, 2020, 108, 100618.	16.0	220
460	Boosting the activity of Fe-Nx moieties in Fe-N-C electrocatalysts via phosphorus doping for oxygen reduction reaction. Science China Materials, 2020, 63, 965-971.	3.5	71
461	Tailored architectures of FeNi alloy embedded in N-doped carbon as bifunctional oxygen electrocatalyst for rechargeable Zinc-air battery. Journal of Colloid and Interface Science, 2020, 561, 585-592.	5.0	59
462	Molybdenum-based nanoparticles (Mo2C, MoP and MoS2) coupled heteroatoms-doped carbon nanosheets for efficient hydrogen evolution reaction. Applied Catalysis B: Environmental, 2020, 263, 118352.	10.8	124
463	Development and application of carbon fiber in batteries. Chemical Engineering Journal, 2020, 384, 123294.	6.6	141
464	Synthesis of Fe ₃ C@porous carbon nanorods <i>via</i> carbonizing Fe complexes for oxygen reduction reaction and Zn–air battery. Inorganic Chemistry Frontiers, 2020, 7, 889-896.	3.0	9
465	Nanoconfined Synthesis of Nitrogen-Rich Metal-Free Mesoporous Carbon Nitride Electrocatalyst for the Oxygen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 1439-1447.	2.5	29
466	Phosphorus-doped porous carbon nitride for efficient sole production of hydrogen peroxide <i>via</i> photocatalytic water splitting with a two-channel pathway. Journal of Materials Chemistry A, 2020, 8, 3701-3707.	5.2	89
467	Pyridinic and graphitic nitrogen-enriched carbon paper as a highly active bifunctional catalyst for Zn-air batteries. Electrochimica Acta, 2020, 334, 135562.	2.6	45
468	Nitrogen-deficient modified P–Cl co-doped graphitic carbon nitride with enhanced photocatalytic performance. Journal of Alloys and Compounds, 2020, 821, 153439.	2.8	47
469	3Dâ€Graphene Decorated with g ₃ N ₄ /Cu ₃ P Composite: A Noble Metalâ€free Bifunctional Electrocatalyst for Overall Water Splitting. ChemCatChem, 2020, 12, 1394-1402.	1.8	71
470	Colorimetric Assay Using Mesoporous Fe-Doped Graphitic Carbon Nitride as a Peroxidase Mimetic for the Determination of Hydrogen Peroxide and Glucose. ACS Applied Bio Materials, 2020, 3, 59-67.	2.3	25
471	Metal-free, active nitrogen-enriched, efficient bifunctional oxygen electrocatalyst for ultrastable zinc-air batteries. Energy Storage Materials, 2020, 27, 514-521.	9.5	84
472	Toward Promising Cathode Catalysts for Nonlithium Metal–Oxygen Batteries. Advanced Energy Materials, 2020, 10, 1901997.	10.2	102
473	MgO-Co/N-doped carbon with inactive MgO enhancing electrocatalytic activity toward oxygen evolution and reduction reactions. Applied Surface Science, 2020, 508, 144758.	3.1	8

#	Article	IF	CITATIONS
474	3D Carbon Materials for Efficient Oxygen and Hydrogen Electrocatalysis. Advanced Energy Materials, 2020, 10, 1902494.	10.2	97
475	Phosphorus-doped carbon fibers as an efficient metal-free bifunctional catalyst for removing sulfamethoxazole and chromium (VI). Chemosphere, 2020, 246, 125783.	4.2	17
476	Co-doped carbon materials synthesized with polymeric precursors as bifunctional electrocatalysts. RSC Advances, 2020, 10, 35966-35978.	1.7	6
477	Recent Advances in Transition Metal Carbide Electrocatalysts for Oxygen Evolution Reaction. Catalysts, 2020, 10, 1164.	1.6	43
478	A ternary B, N, P-Doped carbon material with suppressed water splitting activity for high-energy aqueous supercapacitors. Carbon, 2020, 170, 127-136.	5.4	62
479	Comparative study of metal (Al, Mg, Ni, Cu and Ag) doped ZnO/g-C3N4 composites: Efficient photocatalysts for the degradation of organic pollutants. Separation and Purification Technology, 2020, 251, 117372.	3.9	79
480	A rational synthesis of single-atom iron–nitrogen electrocatalysts for highly efficient oxygen reduction reaction. Journal of Materials Chemistry A, 2020, 8, 16271-16282.	5.2	52
481	Increasing the active sites and intrinsic activity of transition metal chalcogenide electrocatalysts for enhanced water splitting. Journal of Materials Chemistry A, 2020, 8, 25465-25498.	5.2	112
482	Core–Shell TiO ₂ @Au ₂₅ /TiO ₂ Nanowire Arrays Photoanode for Efficient Photoelectrochemical Full Water Splitting. Industrial & Engineering Chemistry Research, 2020, 59, 14224-14233.	1.8	30
483	Metalâ€Free Multiâ€Heteroatomâ€Doped Carbon Bifunctional Electrocatalysts Derived from a Covalent Triazine Polymer. Small, 2020, 16, e2004342.	5.2	117
484	Cobalt Metal–Organic Framework Based on Layered Double Nanosheets for Enhanced Electrocatalytic Water Oxidation in Neutral Media. Journal of the American Chemical Society, 2020, 142, 19198-19208.	6.6	64
485	Cu ₂ O@Fe–Ni ₃ S ₂ nanoflower <i>in situ</i> grown on copper foam at room temperature as an excellent oxygen evolution electrocatalyst. Chemical Communications, 2020, 56, 12339-12342.	2.2	8
486	Solar-driven integrated energy systems: State of the art and challenges. Journal of Power Sources, 2020, 478, 228762.	4.0	42
487	Transitionâ€Metal Phosphides: Activity Origin, Energyâ€Related Electrocatalysis Applications, and Synthetic Strategies. Advanced Functional Materials, 2020, 30, 2004009.	7.8	309
488	Anion-Modulated Platinum for High-Performance Multifunctional Electrocatalysis toward HER, HOR, and ORR. IScience, 2020, 23, 101793.	1.9	45
489	A sugar derived carbon-red phosphorus composite for oxygen evolution reaction and supercapacitor activities. Materials Science for Energy Technologies, 2020, 3, 508-514.	1.0	6
490	Plasma-Treated Ultrathin Ternary FePSe ₃ Nanosheets as a Bifunctional Electrocatalyst for Efficient Zinc–Air Batteries. ACS Applied Materials & Interfaces, 2020, 12, 29393-29403.	4.0	10
491	Nitrogen-doped phosphorene for electrocatalytic ammonia synthesis. Journal of Materials Chemistry A, 2020, 8, 15875-15883.	5.2	88

#	ARTICLE	IF	Citations
492	Single-layer carbon-coated FeCo alloy nanoparticles embedded in single-walled carbon nanotubes for high oxygen electrocatalysis. Chemical Communications, 2020, 56, 6842-6845.	2.2	36
493	Highly durable carbon supported <scp>FeN</scp> nanocrystals feature as efficient biâ€functional oxygen electrocatalyst. International Journal of Energy Research, 2020, 44, 8413-8426.	2.2	15
494	Photocatalytic H2 evolution and CO2 reduction over phosphorus-doped g-C3N4 nanostructures: Electronic, Optical, and Surface properties. Renewable and Sustainable Energy Reviews, 2020, 130, 109957.	8.2	59
495	Cu Nanoclusters/FeN ₄ Amorphous Composites with Dual Active Sites in N-Doped Graphene for High-Performance Zn–Air Batteries. ACS Applied Materials & Interfaces, 2020, 12, 31340-31350.	4.0	71
496	Rapid conjunction of 1D carbon nanotubes and 2D graphitic carbon nitride with ZnO for improved optoelectronic properties. Applied Nanoscience (Switzerland), 2020, 10, 3805-3817.	1.6	8
497	Magnetic Fe ₃ O ₄ -encapsulated VAN@MIL-101(Fe) with mixed-valence sites and mesoporous structures as efficient bifunctional water splitting photocatalysts. Nanoscale, 2020, 12, 12551-12560.	2.8	32
498	Soft Materials for Wearable/Flexible Electrochemical Energy Conversion, Storage, and Biosensor Devices. Materials, 2020, 13, 2733.	1.3	29
499	Controllable Synthesis of Carbon Nitride Films with Type-II Heterojunction for Efficient Photoelectrochemical Cells. Chemistry of Materials, 2020, 32, 5845-5853.	3.2	39
501	Revealing the effect of phosphorus doping on Co@carbon in boosting oxygen evolution catalytic activity. Journal of Alloys and Compounds, 2020, 843, 156001.	2.8	8
502	Self-supported materials for battery technology-A review. Journal of Alloys and Compounds, 2020, 831, 154844.	2.8	10
503	Organic template-based ZnO embedded Mn ₃ O ₄ nanoparticles: synthesis and evaluation of their electrochemical properties towards clean energy generation. RSC Advances, 2020, 10, 9854-9867.	1.7	21
504	Supramolecular preorganization effect to access single cobalt sites for enhanced photocatalytic hydrogen evolution and nitrogen fixation. Chemical Engineering Journal, 2020, 394, 124822.	6.6	27
505	In-situ grafting of N-doped carbon nanotubes with Ni encapsulation onto MOF-derived hierarchical hybrids for efficient electrocatalytic hydrogen evolution. Carbon, 2020, 163, 178-185.	5.4	56
506	Floating Networks of Alga-like Photoelectrodes for Highly Efficient Photoelectrochemical H ₂ Production. ACS Sustainable Chemistry and Engineering, 2020, 8, 10564-10571.	3.2	6
507	Microwave synthesis of phosphorus-doped graphitic carbon nitride nanosheets with enhanced electrochemiluminescence signals. Journal of Materials Science, 2020, 55, 13618-13633.	1.7	30
508	Efficient Bifunctional Catalytic Electrodes with Uniformly Distributed NiN ₂ Active Sites and Channels for Long‣asting Rechargeable Zinc–Air Batteries. Small, 2020, 16, e2002518.	5.2	20
509	Recent Advances on Selfâ€Supported Arrayed Bifunctional Oxygen Electrocatalysts for Flexible Solidâ€State Zn–Air Batteries. Small, 2020, 16, e2002902.	5.2	95
510	Dendritic Cellâ€Inspired Designed Architectures toward Highly Efficient Electrocatalysts for Nitrate Reduction Reaction. Small, 2020, 16, e2001775.	5.2	74

#	Article	IF	CITATIONS
511	Hollow FeP/Fe ₃ O ₄ Hybrid Nanoparticles on Carbon Nanotubes as Efficient Electrocatalysts for the Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2020, 12, 12783-12792.	4.0	41
512	Turning Cotton to Self-Supported Electrocatalytic Carbon Electrode for Highly Efficient Oxygen Reduction. Electrocatalysis, 2020, 11, 317-328.	1.5	3
513	Ultrafast Activating Strategy to Significantly Enhance the Electrocatalysis of Commercial Carbon Cloth for Oxygen Evolution Reaction and Overall Water Splitting. ChemNanoMat, 2020, 6, 542-549.	1.5	7
514	Functional carbon nitride materials for water oxidation: from heteroatom doping to interface engineering. Nanoscale, 2020, 12, 6937-6952.	2.8	34
515	Novel bi-functional electrocatalysts based on the electrochemical synthesized bimetallicmetal organic frameworks: Towards high energy advanced reversible zinc–air batteries. Journal of Power Sources, 2020, 451, 227768.	4.0	68
516	Bifunctional Catalysts for Reversible Oxygen Evolution Reaction and Oxygen Reduction Reaction. Chemistry - A European Journal, 2020, 26, 3906-3929.	1.7	90
517	Atomic heterojunction-induced electron interaction in P-doped g-C3N4 nanosheets supported V-based nanocomposites for enhanced oxidative desulfurization. Chemical Engineering Journal, 2020, 387, 124164.	6.6	56
518	Developing Indium-based Ternary Spinel Selenides for Efficient Solid Flexible Zn-Air Batteries and Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 8115-8123.	4.0	38
519	Gallic acid-assisted synthesis of nitrogen-doped carbon microspheres as efficient bifunctional materials for oxygen reduction and volumetric lithium storage. Materials Chemistry Frontiers, 2020, 4, 881-890.	3.2	3
520	Defect-Rich, Graphenelike Carbon Sheets Derived from Biomass as Efficient Electrocatalysts for Rechargeable Zinc–Air Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 2981-2989.	3.2	65
521	Phosphorousâ€Doped Graphite Layers with Outstanding Electrocatalytic Activities for the Oxygen and Hydrogen Evolution Reactions in Water Electrolysis. Advanced Functional Materials, 2020, 30, 1910741.	7.8	48
522	Flexible self-supported bi-metal electrode as a highly stable carbon- and binder-free cathode for large-scale solid-state zinc-air batteries. Applied Catalysis B: Environmental, 2020, 272, 118953.	10.8	62
523	Directly ball milling red phosphorus and expended graphite for oxygen evolution reaction. Journal of Power Sources, 2020, 456, 228003.	4.0	36
524	Nitrogen and sulfur co-doped fibrous-like carbon electrocatalyst derived from conductive polymers for highly active oxygen reduction catalysis. Synthetic Metals, 2020, 264, 116383.	2.1	5
525	Atomically dispersed metal–nitrogen–carbon catalysts for fuel cells: advances in catalyst design, electrode performance, and durability improvement. Chemical Society Reviews, 2020, 49, 3484-3524.	18.7	453
526	Mesoporous Bi2MoO6 quasi-nanospheres anchored on activated carbon cloth for flexible all-solid-state supercapacitors with enhanced energy density. Journal of Power Sources, 2020, 463, 228202.	4.0	24
527	Ni-Fe bimetallic core-shell structured catalysts supported on biomass longan aril derived nitrogen doped carbon for efficient oxygen reduction and evolution performance. Materials Today Communications, 2020, 24, 101127.	0.9	6
528	Phosphorus- and Nitrogen-Doped Carbon Nanosheets Constructed with Monolayered Mesoporous Architectures. Chemistry of Materials, 2020, 32, 4248-4256.	3.2	41

#	Article	IF	CITATIONS
529	Cobalt-Based Multicomponent Oxygen Reduction Reaction Electrocatalysts Generated by Melamine Thermal Pyrolysis with High Performance in an Alkaline Hydrogen/Oxygen Microfuel Cell. ACS Applied Materials & Interfaces, 2020, 12, 21605-21615.	4.0	40
530	Bimetallic oxide coupled with B-doped graphene as highly efficient electrocatalyst for oxygen evolution reaction. Science China Materials, 2020, 63, 1247-1256.	3.5	14
531	Surface/interface engineering of high-efficiency noble metal-free electrocatalysts for energy-related electrochemical reactions. Journal of Energy Chemistry, 2021, 54, 89-104.	7.1	65
532	Fullerenes as Key Components for Lowâ€Dimensional (Photo)electrocatalytic Nanohybrid Materials. Angewandte Chemie - International Edition, 2021, 60, 122-141.	7.2	64
533	Enhanced photoelectrochemical water-splitting performance with a hierarchical heterostructure: Co3O4 nanodots anchored TiO2@P-C3N4 core-shell nanorod arrays. Chemical Engineering Journal, 2021, 404, 126458.	6.6	56
534	Graphitic carbon nitride (g-C3N4)-based nanostructured materials for photodynamic inactivation: Synthesis, efficacy and mechanism. Chemical Engineering Journal, 2021, 404, 126528.	6.6	61
535	New insights of metal free 2D graphitic carbon nitride for photocatalytic degradation of bisphenol A. Journal of Hazardous Materials, 2021, 402, 123509.	6.5	72
536	Carbon-based electrocatalysts for sustainable energy applications. Progress in Materials Science, 2021, 116, 100717.	16.0	216
537	Spinel CoFe2O4 /carbon nanotube composites as efficient bifunctional electrocatalysts for oxygen reduction and oxygen evolution reaction. Ceramics International, 2021, 47, 1602-1608.	2.3	19
538	Boosting photocatalytic degradation of antibiotic wastewater by synergy effect of heterojunction and phosphorus doping. Journal of Colloid and Interface Science, 2021, 582, 961-968.	5.0	50
539	MOF-derived Co-MOF,O-doped carbon as trifunctional electrocatalysts to enable highly efficient Zn–air batteries and water-splitting. Journal of Energy Chemistry, 2021, 56, 290-298.	7.1	117
540	Stable confinement of Fe/Fe3C in Fe, N-codoped carbon nanotube towards robust zinc-air batteries. Chinese Chemical Letters, 2021, 32, 1121-1126.	4.8	45
541	Bifunctional air electrodes for flexible rechargeable Zn-air batteries. Chinese Chemical Letters, 2021, 32, 999-1009.	4.8	23
542	Nanocarbon-based metal-free and non-precious metal bifunctional electrocatalysts for oxygen reduction and oxygen evolution reactions. Journal of Energy Chemistry, 2021, 58, 610-628.	7.1	30
543	Recent Advances in Electrocatalysis of Oxygen Evolution Reaction using Nobleâ€Metal, Transitionâ€Metal, and Carbonâ€Based Materials. ChemElectroChem, 2021, 8, 447-483.	1.7	68
544	Improved photocatalyst: Elimination of triazine herbicides by novel phosphorus and boron co-doping graphite carbon nitride. Science of the Total Environment, 2021, 757, 143810.	3.9	17
545	Multiatom Catalysts for Energyâ€Related Electrocatalysis. Advanced Sustainable Systems, 2021, 5, 2000213.	2.7	13
546	Fullerenes as Key Components for Lowâ€Dimensional (Photo)electrocatalytic Nanohybrid Materials. Angewandte Chemie, 2021, 133, 124-143.	1.6	11

#	Article	IF	CITATIONS
547	Atomic―and Molecularâ€Level Functionalizations of Polymeric Carbon Nitride for Solar Fuel Production. Solar Rrl, 2021, 5, 2000440.	3.1	15
548	Applications of Atomically Dispersed Oxygen Reduction Catalysts in Fuel Cells and Zinc–Air Batteries. Energy and Environmental Materials, 2021, 4, 307-335.	7.3	58
549	Activating Co nanoparticles on graphitic carbon nitride by tuning the Schottky barrier <i>via</i> P doping for the efficient dehydrogenation of ammonia-borane. Inorganic Chemistry Frontiers, 2021, 8, 48-58.	3.0	15
550	Fibrousâ€ S tructured Freestanding Electrodes for Oxygen Electrocatalysis. Small, 2021, 17, e1903760.	5.2	28
551	Construction of polymeric carbon nitride and dibenzothiophene dioxide-based intramolecular donor–acceptor conjugated copolymers for photocatalytic H ₂ evolution. Nanoscale Advances, 2021, 3, 1699-1707.	2.2	22
552	One-Dimensional van der Waals Heterostructures as Efficient Metal-Free Oxygen Electrocatalysts. ACS Nano, 2021, 15, 3309-3319.	7.3	79
553	Insight into the Active Contribution of N-Coordinated Cobalt Phosphate Nanocrystals Coupled with Carbon Nanotubes for Oxygen Electrochemistry. ACS Sustainable Chemistry and Engineering, 2021, 9, 1856-1866.	3.2	21
554	Combination of Carbon Nitride and Semiconductors for the Enhancement of the Photocatalytic Degradation of Organic Pollutants and Hydrogen Production. RSC Nanoscience and Nanotechnology, 2021, , 318-370.	0.2	0
555	Electrochemical oxidation of biomass derived 5-hydroxymethylfurfural (HMF): pathway, mechanism, catalysts and coupling reactions. Green Chemistry, 2021, 23, 4228-4254.	4.6	191
556	Phosphorus modification of cobalt–iron nanoparticles embedded in a nitrogen-doped carbon network for oxygen reduction reaction. RSC Advances, 2021, 11, 9450-9458.	1.7	5
557	Graphene-Based Dual-Metal Sites for Oxygen Reduction Reaction: A Theoretical Study. Journal of Physical Chemistry C, 2021, 125, 2334-2344.	1.5	32
558	Fine tuning of phosphorus active sites on g-C ₃ N ₄ nanosheets for enhanced photocatalytic decontamination. Journal of Materials Chemistry A, 2021, 9, 10933-10944.	5.2	26
559	Solid-state synthesis of single-phase nickel monophosphosulfide for the oxygen evolution reaction. Dalton Transactions, 2021, 50, 12870-12878.	1.6	4
560	The cooperation of Fe ₃ C nanoparticles with isolated single iron atoms to boost the oxygen reduction reaction for Zn–air batteries. Journal of Materials Chemistry A, 2021, 9, 6831-6840.	5.2	59
561	Element-doped graphitic carbon nitride: confirmation of doped elements and applications. Nanoscale Advances, 2021, 3, 4370-4387.	2.2	27
562	One-step synthesis of carbon-encapsulated nickel phosphide nanoparticles with efficient bifunctional catalysis on oxygen evolution and reduction. International Journal of Hydrogen Energy, 2021, 46, 8519-8530.	3.8	21
564	An overview of non-noble metal electrocatalysts and their associated air cathodes for Mg-air batteries. Materials Reports Energy, 2021, 1, 100002.	1.7	12
565	Porous Carbon Nitride Thin Strip: Precise Carbon Doping Regulating Delocalized ï€â€Electron Induces Elevated Photocatalytic Hydrogen Evolution. Small, 2021, 17, e2006622.	5.2	73

#	Article	IF	CITATIONS
566	3D Ordered Co@NC Skeleton for Bifunctional Oxygen Reduction and Oxygen Evolution Reaction Electrocatalysts. Advanced Materials Interfaces, 2021, 8, 2001922.	1.9	10
567	Electrodeposited rhenium–cobalt alloy with high activity for acidic hydrogen evolution reaction. Journal of Industrial and Engineering Chemistry, 2021, 95, 357-366.	2.9	14
568	3D Hierarchical Carbon-Rich Micro-/Nanomaterials for Energy Storage and Catalysis. Electrochemical Energy Reviews, 2021, 4, 269-335.	13.1	108
569	Rational construction of novel strontium hexaferrite decorated graphitic carbon nitrides for highly sensitive detection of neurotoxic organophosphate pesticide in fruits. Electrochimica Acta, 2021, 371, 137756.	2.6	32
570	Advancing Graphitic Carbon Nitride-Based Photocatalysts toward Broadband Solar Energy Harvesting. , 2021, 3, 663-697.		63
571	Progress in energy recovery and graphene usage in capacitive deionization. Critical Reviews in Environmental Science and Technology, 2022, 52, 3080-3136.	6.6	15
572	Recent advances in MXene-based nanoarchitectures as electrode materials for future energy generation and conversion applications. Coordination Chemistry Reviews, 2021, 435, 213806.	9.5	97
573	Carbonaceous Oxygen Evolution Reaction Catalysts: From Defect and Dopingâ€Induced Activity over Hybrid Compounds to Ordered Framework Structures. Small, 2021, 17, e2007484.	5.2	25
574	Composite of Cobalt ₃ N ₄ on TiO ₂ Nanorod Arrays as Co atalyst for Enhanced Photoelectrochemical Water Splitting. ChemistrySelect, 2021, 6, 4319-4329.	0.7	9
575	Progress of carbon-based electrocatalysts for flexible zinc-air batteries in the past 5Âyears: recent strategies for design, synthesis and performance optimization. Nanoscale Research Letters, 2021, 16, 92.	3.1	21
576	2D Metalâ€Free Nanomaterials Beyond Graphene and Its Analogues toward Electrocatalysis Applications. Advanced Energy Materials, 2021, 11, 2101202.	10.2	24
577	2D Graphitic Carbon Nitride for Energy Conversion and Storage. Advanced Functional Materials, 2021, 31, 2102540.	7.8	190
578	Advances in Zeolite Imidazolate Frameworks (ZIFs) Derived Bifunctional Oxygen Electrocatalysts and Their Application in Zinc–Air Batteries. Advanced Energy Materials, 2021, 11, 2100514.	10.2	132
579	Two-dimensional triazine-based porous framework as a novel metal-free bifunctional electrocatalyst for zinc-air batty. Journal of Colloid and Interface Science, 2021, 591, 253-263.	5.0	17
580	Carboxyl groups on g-C3N4 for boosting the photocatalytic U(VI) reduction in the presence of carbonates. Chemical Engineering Journal, 2021, 414, 128810.	6.6	81
581	Rare-Earth Doping Graphitic Carbon Nitride Endows Distinctive Multiple Emissions with Large Stokes Shifts. CCS Chemistry, 2022, 4, 1990-1999.	4.6	7
582	Rationally Designed Zn-Anode and Co ₃ O ₄ -Cathode Nanoelectrocatalysts for an Efficient Zn–Air Battery. Energy & Fuels, 2021, 35, 12588-12598.	2.5	9
583	<i>In Situ</i> Coupling of MnO and Co@N-Doped Graphite Carbon Derived from Prussian Blue Analogous Achieves High-Performance Reversible Oxygen Electrocatalysis for Zn–Air Batteries. Inorganic Chemistry, 2021, 60, 10340-10349.	1.9	16

#	Article	IF	CITATIONS
584	Carbon-Based Composites as Electrocatalysts for Oxygen Evolution Reaction in Alkaline Media. Materials, 2021, 14, 4984.	1.3	23
585	Surface microenvironment optimization―induced robust oxygen reduction for neutral zincâ€air batteries. Natural Sciences, 2021, 1, e20210005.	1.0	6
586	Developing Nâ€Rich Carbon from C ₃ N ₄ â€Polydopamine Composites for Efficient Oxygen Reduction Reaction. ChemElectroChem, 2021, 8, 3954-3961.	1.7	4
587	Deactivation study of the BICOVOX catalysts used in low temperature steam reforming of ethanol for H2 production. Journal of Physics and Chemistry of Solids, 2021, 156, 110138.	1.9	7
588	Computational Studies on Carbon Dots Electrocatalysis: A Review. Advanced Functional Materials, 2021, 31, 2107196.	7.8	46
589	Depolymerized phosphorus-doped polymeric carbon nitride: A mercury (II) ion fluorescent probe. Ceramics International, 2021, 47, 24115-24120.	2.3	3
590	Electronic modification in graphdiyne for future electrocatalytic applications. 2D Materials, 2021, 8, 044009.	2.0	6
591	Research progress of carbon nanofiber-based precious-metal-free oxygen reaction catalysts synthesized by electrospinning for Zn-Air batteries. Journal of Power Sources, 2021, 507, 230280.	4.0	24
592	Binder-free metal-organic frameworks-derived CoP/Mo-doped NiCoP nanoplates for high-performance quasi-solid-state supercapacitors. Electrochimica Acta, 2021, 390, 138840.	2.6	17
593	Van der Waals enhanced interfacial interaction in cellulose/zinc oxide nanocomposite coupled by graphitic carbon nitride. Carbohydrate Polymers, 2021, 268, 118235.	5.1	17
594	Boron nanosheets induced microstructure and charge transfer tailoring in carbon nanofibrous mats towards highly efficient water splitting. Nano Energy, 2021, 88, 106246.	8.2	15
595	"Environmental phosphorylation―boosting photocatalytic CO2 reduction over polymeric carbon nitride grown on carbon paper at air-liquid-solid joint interfaces. Chinese Journal of Catalysis, 2021, 42, 1667-1676.	6.9	33
596	In-situ grown Co3O4 nanoparticles on wood-derived carbon with natural ordered pore structure for efficient removal of Hg0 from flue gas. Journal of the Energy Institute, 2021, 98, 206-215.	2.7	15
597	Fluorination-assisted preparation of self-supporting single-atom Fe-N-doped single-wall carbon nanotube film as bifunctional oxygen electrode for rechargeable Zn-Air batteries. Applied Catalysis B: Environmental, 2021, 294, 120239.	10.8	70
598	Phosphorus vapor assisted preparation of P-doped ultrathin hollow g-C3N4 sphere for efficient solar-to-hydrogen conversion. Applied Catalysis B: Environmental, 2021, 297, 120438.	10.8	47
599	Promoted photocatalytic degradation and detoxication performance for norfloxacin on Z-scheme phosphate-doped BiVO4/graphene quantum dots/P-doped g-C3N4. Separation and Purification Technology, 2021, 274, 118692.	3.9	38
600	Interfacial interaction between molybdenum phosphide and N, P co-doped hollow carbon fibers boosting the oxygen electrode reactions in zinc-air batteries. Electrochimica Acta, 2021, 395, 139211.	2.6	8
601	Advanced opportunities and insights on the influence of nitrogen incorporation on the physico-/electro-chemical properties of robust electrocatalysts for electrocatalytic energy conversion. Coordination Chemistry Reviews, 2021, 449, 214209.	9.5	28

ARTICLE IF CITATIONS Topological tuning of Two-Dimensional polytriazine imides by halide anions for selective lead removal 602 3.9 5 from wastewater. Separation and Purification Technology, 2021, 278, 119595. Electrode materials for vanadium redox flow batteries: Intrinsic treatment and introducing catalyst. 6.6 Chemical Engineering Journal, 2022, 427, 131680. Copper phosphide as a promising anode material for potassium-ion batteries. Journal of Materials 604 5.216 Chemistry A, 2021, 9, 8378-8385. Sacrificial ZnO nanorods drive N and O dual-doped carbon towards trifunctional electrocatalysts for Zn–air batteries and self-powered water splitting devices. Catalysis Science and Technology, 2021, 11, 4149-4161. CHAPTER 3. Template-based Fabrication of Porous Carbon Nitride Nanostructures for Electrochemical 606 0.2 1 Energy Conversion. RSC Nanoscience and Nanotechnology, 2021, , 80-126. Atomically Thin Mesoporous Co₃O₄ Layers Strongly Coupled with Nâ€rGO Nanosheéts as Highâ€Performance Bifunctional Catalysts for 1D Knittable Zinc–Air Batteries. Advanced 11.1 Materials, 2018, 30, 1703657. Facilitated Oxygen Chemisorption in Heteroatomâ€Doped Carbon for Improved Oxygen Reaction Activity 608 11.1 135 in Allâ€SolidâÉState Zinc–Àir Batteries. Advanced Materials, 2018, 30, 1704898. Carbon Nanotubes Loaded on Graphene Microfolds as Efficient Bifunctional Electrocatalysts for the 609 1.8 9 Oxygen Reduction and Oxygen Evolution Reactions. ChemCatChem, 2017, 9, 4520-4528. 3D Co-N-doped hollow carbon spheres as excellent bifunctional electrocatalysts for oxygen 610 reduction reaction and oxygen evolution reaction. Applied Catalysis B: Environmental, 2017, 217, 10.8 212 477-484. Nanoarchitectured reduced graphene oxide composite C2N materials as flow electrodes to optimize 2.2 desalination performance. Environmental Science: Nano, 2020, 7, 1980-1989. Nanoengineered electrospun fibers and their biomedical applications: a review. Nanocomposites, 2021, 612 2.2 35 7, 1-34. Reviewâ€"Recent Advance in Self-Supported Electrocatalysts for Rechargeable Zinc-Air Batteries. 1.3 Journal of the Electrochemical Society, 2020, 167, 110564. Facile Route to Synthesize Cu, S, N-Doped Carbon as Highly Efficient and Durable Electrocatalyst 614 1.4 1 Towards Oxygen Reduction Reaction. Catalysis Letters, 0, , 1. Organic/Inorganic Hybrid Fibers: Controllable Architectures for Electrochemical Energy 5.6 Applications. Advanced Science, 2021, 8, e2102859. Gradient Zn-Doped Poly Heptazine Imides Integrated with a van der Waals Homojunction Boosting 616 5.554 Visible Light-Driven Water Oxidation Activities. ACS Catalysis, 2021, 11, 13463-13471. First principle study of electronic structures and optical absorption properties of O and S doped graphite phase carbon nitride (g-C3N4)6 quantum dots. Wuli Xuebao/Acta Physica Sinica, 2017, 66, 187102 Research Progress on Improving the Photocatalysis of Graphite-C₃N₄ via O, S 618 0.12 and P Doping. Journal of Advances in Physical Chemistry, 2017, 06, 84-96. Band structure-controlled P-C3N4 for photocatalytic water splitting via appropriately decreasing 2.8 oxidation capacity. Journal of Alloys and Compounds, 2021, 895, 162513.

#	ARTICLE Hollow-structured CoP nanotubes wrapped by N-doped carbon layer with interfacial charges	IF	Citations
620	polarization for efficiently boosting oxygen réduction/evolution réactions. Chemical Engineering Journal, 2022, 431, 133238.	6.6	15
621	3D-Ni-foam/graphene heterostructure decorated with g-C3N4composite: A noble-metal free electrocatalyst for hydrogen evolution reaction. AIP Conference Proceedings, 2020, , .	0.3	0
623	Electronic Structure Regulations of Polymeric Carbon Nitride via Molecular Engineering for Enhanced Photocatalytic Activity. Solar Rrl, 2021, 5, 2100569.	3.1	1
624	Nickel Integrated Carbon Electrodes for Improved Stability. Journal of the Electrochemical Society, 2020, 167, 130510.	1.3	1
625	Preparation and photocatalytic performance of metallic Nb0.9Ta0.1S2/2D-C3N4 composite. Oxford Open Materials Science, 2020, 1, .	0.5	1
626	Synergism of 1D/2D boride/MXene nanosheet heterojunctions for boosted overall water splitting. New Journal of Chemistry, 2021, 45, 21905-21911.	1.4	6
627	Surface modulation and structural engineering of graphitic carbon nitride for electrochemical sensing applications. Journal of Nanostructure in Chemistry, 2022, 12, 765-807.	5.3	32
628	Fungal hypha-derived freestanding porous carbon pad as a high-capacity electrode for water desalination in membrane capacitive deionization. Chemical Engineering Journal, 2022, 433, 133781.	6.6	30
629	Facile fabrication of P-doped g-C3N4 particles with nitrogen vacancies for efficient dehydrogenation of sodium borohydride methanolysis. Fuel, 2022, 313, 122688.	3.4	22
630	A broom-like tube-in-tube bundle O-doped graphitic carbon nitride nanoreactor that promotes photocatalytic hydrogen evolution. Chemical Engineering Journal, 2022, 431, 133898.	6.6	30
631	Ultrafine VN nanodots induced generation of abundant cobalt single-atom active sites on nitrogen-doped carbon nanotube for efficient hydrogen evolution. Journal of Energy Chemistry, 2022, 68, 646-657.	7.1	15
632	Multi-walled carbon nanotubes encapsulated by graphitic carbon nitride with simultaneously co-doping of B and P and ammonium polyphosphate to improve flame retardancy of unsaturated polyester resins. Materials Chemistry and Physics, 2022, 277, 125594.	2.0	9
633	Aminated lignin chelated metal derived bifunctional electrocatalyst with high catalytic performance. Applied Surface Science, 2022, 580, 152205.	3.1	20
634	Unraveling CoNiP‒CoP ₂ 3Dâ€onâ€1D Hybrid Nanoarchitecture for Longâ€Lasting Electrochemical Hybrid Cells and Oxygen Evolution Reaction. Advanced Science, 2022, 9, e2104877.	5.6	26
635	Heteroatom-doped graphene-based electrocatalysts for ORR, OER, and HER. , 2022, , 145-168.		1
636	Bifunctional rare metal-free electrocatalysts synthesized entirely from biomass resources. Science and Technology of Advanced Materials, 2022, 23, 31-40.	2.8	8
637	Preparation of ultrahigh thermally conductive materials of graphene composites by electrophoresis on carbon fiber. Journal of Materials Science, 2022, 57, 4210-4220.	1.7	4
638	The Pt/g-C ₃ N ₄ -CNS catalyst <i>via in situ</i> synthesis process with excellent performance for methanol electrocatalytic oxidation reaction. New Journal of Chemistry, 2022, 46, 3121-3129.	1.4	5

#	Article	IF	Citations
639	Recent Advances in ZIFâ€Đerived Atomic Metal–N–C Electrocatalysts for Oxygen Reduction Reaction: Synthetic Strategies, Active Centers, and Stabilities. Small, 2022, 18, e2105409.	5.2	50
640	Semiconducting Polymers for Oxygen Evolution Reaction under Light Illumination. Chemical Reviews, 2022, 122, 4204-4256.	23.0	180
641	Advances of the functionalized carbon nitrides for electrocatalysis. , 2022, 4, 211-236.		33
642	The biopolymer-assisted synthesis of assembled g-C ₃ N ₄ open frameworks with electron delocalization channels for prompt H ₂ production. Catalysis Science and Technology, 2022, 12, 1368-1377.	2.1	13
643	Recent advances in solid–liquid–gas threeâ€phase interfaces in electrocatalysis for energy conversion and storage. EcoMat, 2022, 4, .	6.8	25
644	Liquid-solid phase separation-generated multifunctional light-weight modification layer of g-C3N4/carbon endowing 5ÂV cathode material graphite flakes with high capacity and cyclicability simultaneously. Journal of Alloys and Compounds, 2022, 911, 164871.	2.8	1
645	A facile method combined with electroless nickel plating and carbonization to fabricate textured Ni-coated carbon tube for flexible strain sensor. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 643, 128729.	2.3	6
646	Hollow polymeric ionic liquid spheres with hierarchical electron distribution: A novel composite of g-C3N4 for visible light photocatalytic water splitting enhancement. Chemical Engineering Journal, 2022, 440, 135625.	6.6	20
647	Electricâ€Field Assisted Hydrolysisâ€Oxidation of MOFs: Hierarchical Ternary (Oxy)hydroxide Microâ€Flowers for Efficient Electrocatalytic Oxygen Evolution. Small, 2022, 18, e2104863.	5.2	9
649	Highâ€Performance Zincâ€Air Batteries Based on Bifunctional Hierarchically Porous Nitrogenâ€Đoped Carbon. Small, 2022, 18, e2105928.	5.2	23
650	Rechargeable Batteries: Regulating Electronic and Ionic Transports for High Electrochemical Performance. Advanced Materials Technologies, 2022, 7, .	3.0	8
651	Uncovering the multifaceted roles of nitrogen defects in graphitic carbon nitride for selective photocatalytic carbon dioxide reduction: a density functional theory study. Physical Chemistry Chemical Physics, 2022, 24, 11124-11130.	1.3	4
652	The influence of heteroatom doping on the performance of carbon-based electrocatalysts for oxygen evolution reactions. New Carbon Materials, 2022, 37, 321-336.	2.9	16
653	Cu doped graphitic C3N4 for p-nitrophenol reduction and sensing applications. Inorganic Chemistry Communication, 2022, 142, 109598.	1.8	12
654	Integrating trifunctional Co@NC-CNTs@NiFe-LDH electrocatalysts with arrays of porous triangle carbon plates for high-power-density rechargeable Zn-air batteries and self-powered water splitting. Chemical Engineering Journal, 2022, 446, 137049.	6.6	46
655	Recent advances in visible-light graphitic carbon nitride (g-C ₃ N ₄) photocatalysts for chemical transformations. RSC Advances, 2022, 12, 18245-18265.	1.7	37
656	Self-Templating Synthesis of N/P/Fe Co-Doped 3D Porous Carbon for Oxygen Reduction Reaction Electrocatalysts in Alkaline Media. Nanomaterials, 2022, 12, 2106.	1.9	6
657	Electronic structure modulation of molybdenum-iron double-atom catalyst for bifunctional oxygen electrochemistry. Chemical Engineering Journal, 2022, 449, 137705.	6.6	14

#	Article	IF	CITATIONS
658	Carbon nitrides as catalyst support in fuel cells: Current scenario and future recommendation. , 2022, , 39-62.		0
659	Phosphorus Tailors the <i>d</i> â€Band Center of Copper Atomic Sites for Efficient CO ₂ Photoreduction under Visibleâ€Light Irradiation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	73
660	Phosphorus Tailors the dâ€Band Center of Copper Atomic Sites for Efficient CO2 Photoreduction under Visibleâ€Light Irradiation. Angewandte Chemie, 0, , .	1.6	0
661	Crystalline and amorphous phases: NiFeCo tri-metal phosphide as an efficient electrocatalyst to accelerate oxygen evolution reaction kinetics. Electrochimica Acta, 2022, 426, 140788.	2.6	11
662	Bacterial cellulose-based dual chemical reaction coupled hydrogel thermocells for efficient heat harvesting. Carbohydrate Polymers, 2022, 294, 119789.	5.1	11
663	Ball mill-assisted synthesis of NiFeCo-NC as bifunctional oxygen electrocatalysts for rechargeable zinc-air batteries. Journal of Alloys and Compounds, 2022, 922, 166287.	2.8	14
664	Molybdenum Oxynitride Atomic Nanoclusters Bonded in Nanosheets of N-Doped Carbon Hierarchical Microspheres for Efficient Sodium Storage. Nano-Micro Letters, 2022, 14, .	14.4	26
665	Ultrafast Electron Transfer from Crystalline g-C ₃ N ₄ to Pt Revealed by Femtosecond Transient Absorption Spectroscopy. Energy & Fuels, 2022, 36, 11532-11541.	2.5	13
666	Multiple carbon interface engineering to boost oxygen evolution of NiFe nanocomposite electrocatalyst. Chinese Journal of Catalysis, 2022, 43, 2354-2362.	6.9	5
667	Photocatalytic degradation of COVID-19 related drug arbidol hydrochloride by Ti3C2 MXene/supramolecular g-C3N4 Schottky junction photocatalyst. Chemosphere, 2022, 308, 136461.	4.2	7
668	Doping engineering: modulating the intrinsic activity of bifunctional carbon-based oxygen electrocatalysts for high-performance zinc–air batteries. Journal of Materials Chemistry A, 2022, 10, 21797-21815.	5.2	28
669	Enhanced photocatalytic performance of carbon fiber paper supported TiO ₂ under the ultrasonic synergy effect. RSC Advances, 2022, 12, 22922-22930.	1.7	3
670	g-C ₃ N ₅ -dots as fluorescence probes prepared by an alkali-assisted hydrothermal method for cell imaging. RSC Advances, 2022, 12, 26476-26484.	1.7	4
671	Non-noble metal nanocatalysts for oxygen evolution reaction. , 2022, , .		1
672	Mechanosynthesis of a Structurally Characterized, Wellâ€Defined Graphitic Phosphorusâ€Linked Carbon Nitride (gâ€PCN) with Water Splitting Activity. Advanced Materials Interfaces, 2022, 9, .	1.9	1
673	Two-dimensional carbon-based heterostructures as bifunctional electrocatalysts for water splitting and metal–air batteries. Nano Materials Science, 2022, , .	3.9	12
674	Self-supported electrocatalysts for the hydrogen evolution reaction. Materials Chemistry Frontiers, 2023, 7, 567-606.	3.2	33
675	Higher-than-common temperature short-time processed polymeric carbon nitride nanosheets as an efficient photocatalyst for H2 production. Journal of Alloys and Compounds, 2023, 938, 168386.	2.8	2

#	Article	IF	CITATIONS
676	Alkali Metal Cations as Chargeâ€Transfer Bridge for Polarization Promoted Solarâ€ŧoâ€H ₂ Conversion. Advanced Functional Materials, 2023, 33, .	7.8	9
677	Metal-air batteries: progress and perspective. Science Bulletin, 2022, 67, 2449-2486.	4.3	61
678	Integrated Gas Diffusion Electrode with High Conductivity Obtained by Skin Electroplating for High Specific Power Density Fuel Cell. Small Methods, 2023, 7, .	4.6	4
679	Enhancing Visible-Light Photodegradation of TC-HCl by Doping Phosphorus into Self-Sensitized Carbon Nitride Microspheres. Processes, 2023, 11, 298.	1.3	0
680	Extended Ï€â€conjugated system in carbon nitride by incorporating pyridine rings and N vacancies for photocatalytic H2 evolution and H2O2 production. Carbon, 2023, 204, 465-474.	5.4	10
681	Dual P-doped-site modified porous g-C3N4 achieves high dissociation and mobility efficiency for photocatalytic H2O2 production. Chemical Engineering Journal, 2023, 461, 142140.	6.6	14
682	Meticulous integration of N and C active sites in Ni2P electrocatalyst for sustainable ammonia oxidation and efficient hydrogen production. Chemical Engineering Journal, 2023, 463, 142314.	6.6	17
683	Surface tuning of nanostructured graphitic carbon nitrides for enhanced electrocatalytic applications: a review. Materials Today Chemistry, 2023, 30, 101523.	1.7	8
684	Long-term photochemical stability of heteroaromatic dye-functionalised g-C3N4 via covalent linkage for efficient photocatalytic hydrogen evolution. Dyes and Pigments, 2023, 212, 111128.	2.0	3
685	Lignin-derived dual-doped carbon nanocomposites as low-cost electrocatalysts. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 663, 131105.	2.3	0
686	A Review of Phosphorus Structures as CO ₂ Reduction Photocatalysts. Small, 2023, 19, .	5.2	22
687	Porphyrin-Conjugated Microporous Polymer Nanospheres as Electrocatalysts for Nitrobenzene Detection and Oxygen Evolution Reaction. ACS Applied Nano Materials, 2023, 6, 3226-3235.	2.4	2
688	The Precision Defect Engineering with Nonmetallic Element Refilling Strategy in g ₃ N ₄ for Enhanced Photocatalytic Hydrogen Production. Small, 2023, 19, .	5.2	24
689	Removing unreacted amino groups in graphitic carbon nitride through residual heating to improve the photocatalytic performance. RSC Advances, 2023, 13, 6688-6698.	1.7	1
690	Organocatalysis with carbon nitrides. Science and Technology of Advanced Materials, 2023, 24, .	2.8	10
691	Different Dimensionalities, Morphological Advancements and Engineering of gâ€C ₃ N ₄ â€Based Nanomaterials for Energy Conversion and Storage. Chemical Record, 2023, 23, .	2.9	12
692	Tandem internal electric fields in intralayer/interlayer carbon nitride homojunction with a directed flow of photo-excited electrons for photocatalysis. Applied Catalysis B: Environmental, 2023, 333, 122781.	10.8	8
693	Non-noble metals as activity sites for ORR catalysts in proton exchange membrane fuel cells (PEMFCs). , 2023, 1, 388-409.		6

#	Article	IF	CITATIONS
694	Advances in organic semiconductors for photocatalytic hydrogen evolution reaction. , 2023, 1, 333-352.		10
700	Rational design of bifunctional catalysts for zinc-air batteries with high performance and high durability: from materials to reconstruction. Nanoscale Advances, 0, , .	2.2	1
701	Recent progress of graphitic carbon nitride films and their application in photoelectrochemical water splitting. Sustainable Energy and Fuels, 0, , .	2.5	0
713	Carbon-based electrocatalysts for rechargeable Zn–air batteries: design concepts, recent progress and future perspectives. Energy and Environmental Science, 0, , .	15.6	2