Wei Zhang

List of Publications by Citations

103 papers	5,779 citations	41 h-index	75 g-index
113 ext. papers	7,361 ext. citations	10.9 avg, IF	6.55 L-index

#	Paper	IF	Citations
103	Energy-Related Small Molecule Activation Reactions: Oxygen Reduction and Hydrogen and Oxygen Evolution Reactions Catalyzed by Porphyrin- and Corrole-Based Systems. *Chemical Reviews*, **2017**, 117, 3717-3797	68.1	775
102	Hollow spheres of iron carbide nanoparticles encased in graphitic layers as oxygen reduction catalysts. *Angewandte Chemie - International Edition*, **2014**, 53, 3675-9	16.4	719
101	Solar-to-Hydrogen Energy Conversion Based on Water Splitting. *Advanced Energy Materials*, **2018**, 8, 1701620	21.8	285
100	Fast and simple preparation of iron-based thin films as highly efficient water-oxidation catalysts in neutral aqueous solution. *Angewandte Chemie - International Edition*, **2015**, 54, 4870-5	16.4	233
99	Porous Nickel-Iron Oxide as a Highly Efficient Electrocatalyst for Oxygen Evolution Reaction. *Advanced Science*, **2015**, 2, 1500199	13.6	197
98	Hierarchical Co(OH)F Superstructure Built by Low-Dimensional Substructures for Electrocatalytic Water Oxidation. *Advanced Materials*, **2017**, 29, 1700286	24	167
97	A Thin NiFe Hydroxide Film Formed by Stepwise Electrodeposition Strategy with Significantly Improved Catalytic Water Oxidation Efficiency. *Advanced Energy Materials*, **2017**, 7, 1602547	21.8	154
96	An Iron-based Film for Highly Efficient Electrocatalytic Oxygen Evolution from Neutral Aqueous Solution. *ACS Applied Materials & Interfaces*, **2015**, 7, 21852-9	9.5	143
95	Noncovalent Immobilization of a Pyrene-Modified Cobalt Corrole on Carbon Supports for Enhanced Electrocatalytic Oxygen Reduction and Oxygen Evolution in Aqueous Solutions. *ACS Catalysis*, **2016**, 6, 6429-6437	13.1	132
94	A Nickel-Based Integrated Electrode from an Autologous Growth Strategy for Highly Efficient Water Oxidation. *Advanced Energy Materials*, **2016**, 6, 1502489	21.8	123
93	PVP-assisted transformation of a metal-organic framework into Co-embedded N-enriched meso/microporous carbon materials as bifunctional electrocatalysts. *Chemical Communications*, **2018**, 54, 7519-7522	5.8	112
92	An Electrodeposited NiSe for Electrocatalytic Hydrogen and Oxygen Evolution Reactions in Alkaline Solution. *Electrochimica Acta*, **2017**, 224, 412-418	6.7	111
91	Carbon Nanotubes with Cobalt Corroles for Hydrogen and Oxygen Evolution in pH 0-14 Solutions. *Angewandte Chemie - International Edition*, **2018**, 57, 15070-15075	16.4	111
90	Hollow Spheres of Iron Carbide Nanoparticles Encased in Graphitic Layers as Oxygen Reduction Catalysts. *Angewandte Chemie*, **2014**, 126, 3749-3753	3.6	106
89	Low overpotential water oxidation at neutral pH catalyzed by a copper(ii) porphyrin. *Chemical Science*, **2019**, 10, 2613-2622	9.4	100
88	Molecular Engineering of a 3D Self-Supported Electrode for Oxygen Electrocatalysis in Neutral Media. *Angewandte Chemie - International Edition*, **2019**, 58, 18883-18887	16.4	91
87	Porphyrin-based frameworks for oxygen electrocatalysis and catalytic reduction of carbon dioxide. *Chemical Society Reviews*, **2021**, 50, 2540-2581	58.5	85

86	Structure Effects of Metal Corroles on Energy-Related Small Molecule Activation Reactions. *ACS Catalysis*, **2019**, 9, 4320-4344	13.1	84
85	Cobalt-Nitrogen-Doped Helical Carbonaceous Nanotubes as a Class of Efficient Electrocatalysts for the Oxygen Reduction Reaction. *Angewandte Chemie - International Edition*, **2018**, 57, 13187-13191	16.4	84
84	Attaching Cobalt Corroles onto Carbon Nanotubes: Verification of Four-Electron Oxygen Reduction by Mononuclear Cobalt Complexes with Significantly Improved Efficiency. *ACS Catalysis*, **2019**, 9, 4551-4560	13.1	71
83	Synthesis of a conjugated porous Co(II) porphyrinylene□ethynylene framework through alkyne metathesis and its catalytic activity study. *Journal of Materials Chemistry A*, **2015**, 3, 4954-4959	13	71
82	Electrocatalytic Water Oxidation by a Water-Soluble Copper(II) Complex with a Copper-Bound Carbonate Group Acting as a Potential Proton Shuttle. *Inorganic Chemistry*, **2017**, 56, 13368-13375	5.1	67
81	Electrosynthesis of NiP nanospheres for electrocatalytic hydrogen evolution from a neutral aqueous solution. *Chemical Communications*, **2017**, 53, 5507-5510	5.8	65
80	Enzyme-Inspired Iron Porphyrins for Improved Electrocatalytic Oxygen Reduction and Evolution Reactions. *Angewandte Chemie - International Edition*, **2021**, 60, 7576-7581	16.4	61
79	Graphene-Supported Pyrene-Modified Cobalt Corrole with Axial Triphenylphosphine for Enhanced Hydrogen Evolution in pH 0-14 Aqueous Solutions. *ChemSusChem*, **2017**, 10, 4632-4641	8.3	59
78	Karst landform-featured monolithic electrode for water electrolysis in neutral media. *Energy and Environmental Science*, **2020**, 13, 174-182	35.4	59
77	Surface Electrochemical Modification of a Nickel Substrate to Prepare a NiFe-based Electrode for Water Oxidation. *ChemSusChem*, **2017**, 10, 394-400	8.3	58
76	Conductive Molybdenum Sulfide for Efficient Electrocatalytic Hydrogen Evolution. *Small*, **2018**, 14, e1803361	13	56
75	Porous Materials as Highly Efficient Electrocatalysts for the Oxygen Evolution Reaction. *ChemCatChem*, **2018**, 10, 1206-1220	5.2	51
74	Mononuclear first-row transition-metal complexes as molecular catalysts for water oxidation. *Chinese Journal of Catalysis*, **2018**, 39, 228-244	11.3	50
73	Aligned cobalt-based Co@CoO nanostructures for efficient electrocatalytic water oxidation. *Chemical Communications*, **2017**, 53, 9277-9280	5.8	50
72	Facile synthesis of sponge-like NiN/NC for electrocatalytic water oxidation. *Chemical Communications*, **2017**, 53, 9566-9569	5.8	49
71	Convenient Immobilization of Cobalt Corroles on Carbon Nanotubes through Covalent Bonds for Electrocatalytic Hydrogen and Oxygen Evolution Reactions. *ChemSusChem*, **2019**, 12, 801-806	8.3	49
70	Phase-transfer synthesis of □Co(OH) 2 and its conversion to CoO for efficient electrocatalytic water oxidation. *Science Bulletin*, **2017**, 62, 626-632	10.6	48
69	Quasi-single-crystalline CoO hexagrams with abundant defects for highly efficient electrocatalytic water oxidation. *Chemical Science*, **2018**, 9, 6961-6968	9.4	46

68	Cobalt porphyrins supported on carbon nanotubes as model catalysts of metal-N4/C sites for oxygen electrocatalysis. *Journal of Energy Chemistry*, **2021**, 53, 77-81	12	46
67	A yolk–shell structured metal–organic framework with encapsulated iron-porphyrin and its derived bimetallic nitrogen-doped porous carbon for an efficient oxygen reduction reaction. *Journal of Materials Chemistry A*, **2020**, 8, 9536-9544	13	45
66	Electrocatalytic hydrogen evolution with gallium hydride and ligand-centered reduction. *Chemical Science*, **2019**, 10, 2308-2314	9.4	44
65	Homolytic versus Heterolytic Hydrogen Evolution Reaction Steered by a Steric Effect. *Angewandte Chemie - International Edition*, **2020**, 59, 8941-8946	16.4	43
64	Highly Curved Nanostructure-Coated Co, N-Doped Carbon Materials for Oxygen Electrocatalysis. *Angewandte Chemie - International Edition*, **2021**, 60, 12759-12764	16.4	42
63	Light-Promoted Nickel Catalysis: Etherification of Aryl Electrophiles with Alcohols Catalyzed by a Ni -Aryl Complex. *Angewandte Chemie - International Edition*, **2020**, 59, 12714-12719	16.4	41
62	Water-Soluble Polymers with Appending Porphyrins as Bioinspired Catalysts for the Hydrogen Evolution Reaction. *Angewandte Chemie - International Edition*, **2020**, 59, 15844-15848	16.4	37
61	Water-soluble MoS3 nanoparticles for photocatalytic H2 evolution. *ChemSusChem*, **2015**, 8, 1464-71	8.3	35
60	Autologous Cobalt Phosphates with Modulated Coordination Sites for Electrocatalytic Water Oxidation. *Angewandte Chemie - International Edition*, **2020**, 59, 8917-8921	16.4	35
59	Ni2P hollow microspheres for electrocatalytic oxygen evolution and reduction reactions. *Catalysis Science and Technology*, **2018**, 8, 2289-2293	5.5	35
58	Dual Tuning of Ultrathin α-Co(OH)2 Nanosheets by Solvent Engineering and Coordination Competition for Efficient Oxygen Evolution. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 3527-3535	8.4	34
57	Boosting hydrogen evolution by using covalent frameworks of fluorinated cobalt porphyrins supported on carbon nanotubes. *Chemical Communications*, **2019**, 55, 12647-12650	5.8	33
56	O–O bond formation mechanisms during the oxygen evolution reaction over synthetic molecular catalysts. *Chinese Journal of Catalysis*, **2021**, 42, 1253-1268	11.3	30
55	Novel insight into the epitaxial growth mechanism of six-fold symmetrical α-Co(OH)2/Co(OH)F hierarchical hexagrams and their water oxidation activity. *Electrochimica Acta*, **2018**, 271, 526-536	6.7	29
54	2D Metal-Organic Framework Derived CuCo Alloy Nanoparticles Encapsulated by Nitrogen-Doped Carbonaceous Nanoleaves for Efficient Bifunctional Oxygen Electrocatalyst and Zinc-Air Batteries. *Chemistry - A European Journal*, **2019**, 25, 12780-12788	4.8	27
53	Manganese(ii) phosphate nanosheet assembly with native out-of-plane Mn centres for electrocatalytic water oxidation. *Chemical Science*, **2019**, 10, 191-197	9.4	27
52	Selective visible-light-driven oxygen reduction to hydrogen peroxide using BODIPY photosensitizers. *Chemical Communications*, **2018**, 54, 845-848	5.8	24
51	NiFe Oxalate Nanomesh Array with Homogenous Doping of Fe for Electrocatalytic Water Oxidation. *Small*, **2019**, 15, e1904579	11	24

50	Controlling Oxygen Reduction Selectivity through Steric Effects: Electrocatalytic Two-Electron and Four-Electron Oxygen Reduction with Cobalt Porphyrin Atropisomers. *Angewandte Chemie - International Edition*, **2021**, 60, 12742-12746	16.4	24
49	A two-dimensional multi-shelled metal-organic framework and its derived bimetallic N-doped porous carbon for electrocatalytic oxygen reduction. *Chemical Communications*, **2019**, 55, 14805-14808	5.8	23
48	Light-Promoted C-N Coupling of Aryl Halides with Nitroarenes. *Angewandte Chemie - International Edition*, **2021**, 60, 5230-5234	16.4	23
47	Underevaluated Solvent Effects in Electrocatalytic CO Reduction by Fe Chloride Tetrakis(pentafluorophenyl)porphyrin. *Chemistry - A European Journal*, **2019**, 26, 4007	4.8	21
46	The Trans Axial Ligand Effect on Oxygen Reduction. Immobilization Method May Weaken Catalyst Design for Electrocatalytic Performance. *Journal of Physical Chemistry C*, **2020**, 124, 16324-16331	3.8	18
45	PVP-assisted synthesis of porous CoO prisms with enhanced electrocatalytic oxygen evolution properties. *Journal of Energy Chemistry*, **2017**, 26, 1210-1216	12	17
44	Identifying Intermediates in Electrocatalytic Water Oxidation with a Manganese Corrole Complex. *Journal of the American Chemical Society*, **2021**, 143, 14613-14621	16.4	16
43	Cobalt□Nitrogen-Doped Helical Carbonaceous Nanotubes as a Class of Efficient Electrocatalysts for the Oxygen Reduction Reaction. *Angewandte Chemie*, **2018**, 130, 13371-13375	3.6	15
42	Bioinspired N4-metallomacrocycles for electrocatalytic oxygen reduction reaction. *Coordination Chemistry Reviews*, **2021**, 442, 213996	23.2	15
41	Homolytic versus Heterolytic Hydrogen Evolution Reaction Steered by a Steric Effect. *Angewandte Chemie*, **2020**, 132, 9026-9031	3.6	14
40	Unexpected Effect of Intramolecular Phenolic Group on Electrocatalytic CO2 Reduction. *ChemCatChem*, **2020**, 12, 1591-1595	5.2	14
39	Ultra-thin Co-Fe Layered Double Hydroxide Hollow Nanocubes for Efficient Electrocatalytic Water Oxidation. *ChemPhysChem*, **2019**, 20, 2964-2967	3.2	13
38	Light-Promoted Nickel Catalysis: Etherification of Aryl Electrophiles with Alcohols Catalyzed by a NiII-Aryl Complex. *Angewandte Chemie*, **2020**, 132, 12814-12819	3.6	11
37	Co(OH)2 hollow nanoflowers as highly efficient electrocatalysts for oxygen evolution reaction. *Journal of Materials Research*, **2018**, 33, 568-580	2.5	11
36	Nickel selenide from single-molecule electrodeposition for efficient electrocatalytic overall water splitting. *New Journal of Chemistry*, **2021**, 45, 351-357	3.6	11
35	Water-Soluble Polymers with Appending Porphyrins as Bioinspired Catalysts for the Hydrogen Evolution Reaction. *Angewandte Chemie*, **2020**, 132, 15978-15982	3.6	10
34	Autologous Cobalt Phosphates with Modulated Coordination Sites for Electrocatalytic Water Oxidation. *Angewandte Chemie*, **2020**, 132, 9002-9006	3.6	10
33	Alkali metal cation effects on electrocatalytic CO2 reduction with iron porphyrins. *Chinese Journal of Catalysis*, **2021**, 42, 1439-1444	11.3	10

32	Metalloporphyrins as Catalytic Models for Studying Hydrogen and Oxygen Evolution and Oxygen Reduction Reactions.. *Accounts of Chemical Research*, **2022**,	24.3	10
31	Preparation of Cobalt-Based Electrodes by Physical Vapor Deposition on Various Nonconductive Substrates for Electrocatalytic Water Oxidation. *ChemSusChem*, **2017**, 10, 4699-4703	8.3	9
30	Introducing Water-Network-Assisted Proton Transfer for Boosted Electrocatalytic Hydrogen Evolution with Cobalt Corrole.. *Angewandte Chemie - International Edition*, **2021**, e202114310	16.4	9
29	Jahn-Teller Disproportionation Induced Exfoliation of Unit-Cell Scale ?-MnO. *Angewandte Chemie - International Edition*, **2020**, 59, 22659-22666	16.4	9
28	Hollow Bimetallic Zinc Cobalt Phosphosulfides for Efficient Overall Water Splitting. *Chemistry - A European Journal*, **2019**, 25, 621-626	4.8	9
27	A New Strategy for Solar-to-Hydrogen Energy Conversion: Photothermal-Promoted Electrocatalytic Water Splitting. *ChemElectroChem*, **2019**, 6, 2762-2765	4.3	8
26	Hierarchical-dimensional Material: A Co(OH)2 Superstructure with Hybrid Dimensions for Enhanced Water Oxidation. *ChemCatChem*, **2019**, 11, 5969-5975	5.2	8
25	Highly Curved Nanostructure-Coated Co, N-Doped Carbon Materials for Oxygen Electrocatalysis. *Angewandte Chemie*, **2021**, 133, 12869-12874	3.6	8
24	Substituent position effect of Co porphyrin on oxygen electrocatalysis. *Chinese Chemical Letters*, **2021**, 32, 2841-2841	8.1	8
23	A channel-confined strategy for synthesizing CoN-CoOx/C as efficient oxygen reduction electrocatalyst for advanced zinc-air batteries. *Nano Research*,1	10	6
22	Light-Promoted C□N Coupling of Aryl Halides with Nitroarenes. *Angewandte Chemie*, **2021**, 133, 5290-5294	3.6	6
21	Improving Electrocatalytic Oxygen Reduction Activity and Selectivity with a Cobalt Corrole Appended with Multiple Positively Charged Proton Relay Sites. *Journal of Physical Chemistry C*,	3.8	5
20	Engineering Hierarchical-Dimensional Co(OH)F into CoP Superstructure for Electrocatalytic Water Splitting. *ChemCatChem*, **2020**, 12, 4770-4774	5.2	4
19	Space-confined construction of two-dimensional nitrogen-doped carbon with encapsulated bimetallic nanoparticles as oxygen electrocatalysts. *Chemical Communications*, **2021**, 57, 8190-8193	5.8	4
18	Photochemically Enabled, Ni-Catalyzed Cyanation of Aryl Halides.. *Organic Letters*, **2022**, 24, 2271-2275	6.2	4
17	Controlled synthesis of hexagonal annular Mn(OH)F for water oxidation. *Chinese Journal of Catalysis*, **2019**, 40, 1860-1866	11.3	3
16	Significantly boosted oxygen electrocatalysis with cooperation between cobalt and iron porphyrins. *Dalton Transactions*, **2021**, 50, 5120-5123	4.3	3
15	Chiral Arylated Amines via C-N Coupling of Chiral Amines with Aryl Bromides Promoted by Light. *Angewandte Chemie - International Edition*, **2021**, 60, 21536-21542	16.4	3

14	Comparing electrocatalytic hydrogen and oxygen evolution activities of first-row transition metal complexes with similar coordination environments. *Journal of Energy Chemistry*, **2021**, 63, 659-659	12	3
13	Autologous manganese phosphates with different Mn sites for electrocatalytic water oxidation. *Chemical Communications*, **2021**, 57, 6165-6168	5.8	3
12	Co3O4 on Fe, N Doped Bio-Carbon Substrate for Electrocatalysis of Oxygen Reduction. *European Journal of Inorganic Chemistry*, **2020**, 2020, 3869-3876	2.3	2
11	Controlling Oxygen Reduction Selectivity through Steric Effects: Electrocatalytic Two-Electron and Four-Electron Oxygen Reduction with Cobalt Porphyrin Atropisomers. *Angewandte Chemie*, **2021**, 133, 12852-12856	3.6	2
10	Inherent mass transfer engineering of a Co, N co-doped carbon material towards oxygen reduction reaction. *Journal of Energy Chemistry*, **2021**, 58, 391-396	12	2
9	Enzyme-Inspired Iron Porphyrins for Improved Electrocatalytic Oxygen Reduction and Evolution Reactions. *Angewandte Chemie*, **2021**, 133, 7654-7659	3.6	2
8	An unusual network of □MnO2 nanowires with structure-induced hydrophilicity and conductivity for improved electrocatalysis. *Chinese Journal of Catalysis*, **2021**, 42, 1724-1731	11.3	2
7	Chiral Arylated Amines via C□N Coupling of Chiral Amines with Aryl Bromides Promoted by Light. *Angewandte Chemie*, **2021**, 133, 21706-21712	3.6	1
6	Through-Space Electrostatic Effects of Positively Charged Substituents on the Hydrogen Evolution Reaction.. *ChemSusChem*, **2022**,	8.3	1
5	Cu, Fe Dual□hodified Ni3S2 Nanosheets on Nickel Foam for Bifunctional Electrocatalytic Water Spitting. *FlatChem*, **2022**, 100368	5.1	1
4	Ammonium cobalt phosphate with asymmetric coordination sites for enhanced electrocatalytic water oxidation. *Chinese Journal of Catalysis*, **2022**, 43, 1955-1962	11.3	1
3	Anion engineering of hierarchical Co-A (A□□O, Se, P) hexagrams for efficient electrocatalytic oxygen evolution reaction. *Chinese Chemical Letters*, **2021**, 32, 3241-3241	8.1	0
2	Black phosphorus incorporated cobalt oxide: Biomimetic channels for electrocatalytic water oxidation. *Chinese Journal of Catalysis*, **2022**, 43, 1123-1130	11.3	0
1	Introducing Water-Network-Assisted Proton Transfer for Boosted Electrocatalytic Hydrogen Evolution with Cobalt Corrole. *Angewandte Chemie*,e202114310	3.6	