Zhongbin Zhuang

List of Publications by Year
in descending order

105 papers	20,170 citations	16451 64 h-index	24982 109 g-index
113 all docs	113 docs citations	113 times ranked	18276 citing authors

#	Article	IF	Citations
1	Improving the water electrolysis performance by manipulating the generated nano/micro-bubbles using surfactants. Nano Research, 2023, 16, 420-426.	10.4	9
2	Ultrathin NiFeS nanosheets as highly active electrocatalysts for oxygen evolution reaction. Chinese Chemical Letters, 2022, 33, 3916-3920.	9.0	18
3	Nickel chalcogenides as selective ethanol oxidation electro-catalysts and their structureâ€“performance relationships. Chemical Communications, 2022, 58, 2496-2499.	4.1	9
4	Insights into the Effect of Precursors on the FeP-Catalyzed Hydrogen Evolution Reaction. Inorganic Chemistry, 2022, , .	4.0	8
5	Defective Ni3S2 nanowires as highly active electrocatalysts for ethanol oxidative upgrading. Nano Research, 2022, 15, 2987-2993.	10.4	11
6	Amorphous palladium-based alloy nanoparticles as highly active electrocatalysts for ethanol oxidation. Chemical Communications, 2022, 58, 4488-4491.	4.1	7
7	Defectâ€Rich, Highly Porous PtAg Nanoflowers with Superior Antiâ€Poisoning Ability for Efficient Methanol Oxidation Reaction. Small, 2022, 18, e2106643.	10.0	28
8	Silver based single atom catalyst with heteroatom coordination environment as high performance oxygen reduction reaction catalyst. Nano Research, 2022, 15, 7968-7975.	10.4	20
9	Design of Ru-Ni diatomic sites for efficient alkaline hydrogen oxidation. Science Advances, 2022, 8, .	10.3	89
10	IrCuNi Deeply Concave Nanocubes as Highly Active Oxygen Evolution Reaction Electrocatalyst in Acid Electrolyte. Nano Letters, 2021, 21, 2809-2816.	9.1	49
11	Engineering Agâ€“N<i>_x</i> Single-Atom Sites on Porous Concave N-Doped Carbon for Boosting CO₂ Electroreduction. ACS Applied Materials & Interfaces, 2021, 13, 17736-17744.	8.0	45
12	Synthesis of Agâ€“Niâ€“Feâ€“P Multielemental Nanoparticles as Bifunctional Oxygen Reduction/Evolution Reaction Electrocatalysts. ACS Nano, 2021, 15, 7131-7138.	14.6	45
13	Constructing FeN4/graphitic nitrogen atomic interface for high-efficiency electrochemical CO2 reduction over a broad potential window. CheM, 2021, 7, 1297-1307.	11.7	133
14	Atomic Co/Ni dual sites with N/P-coordination as bifunctional oxygen electrocatalyst for rechargeable zinc-air batteries. Nano Research, 2021, 14, 3482-3488.	10.4	113
15	Sulfateâ€Functionalized RuFeO<i>_x</i> as Highly Efficient Oxygen Evolution Reaction Electrocatalyst in Acid. Advanced Functional Materials, 2021, 31, 2101405.	14.9	67
16	Crâ€Doped CoP Nanorod Arrays as Highâ€Performance Hydrogen Evolution Reaction Catalysts at High Current Density. Small, 2021, 17, e2100832.	10.0	48
17	N-Bridged Coâ€“Nâ€“Ni: new bimetallic sites for promoting electrochemical CO₂ reduction. Energy and Environmental Science, 2021, 14, 3019-3028.	30.8	128
18	Single-Atom Ru on Al₂O₃ for Highly Active and Selective 1,2-Dichloroethane Catalytic Degradation. ACS Applied Materials & Interfaces, 2021, 13, 53683-53690.	8.0	16

#	Article	IF	Citations
19	Fe,Ni,S,N-doped carbon materials as highly active Bi-functional catalysts for rechargeable Zinc-Air battery. Materials Letters, 2020, 258, 126826.	2.6	6
20	A hierarchical hollow-on-hollow NiCoP electrocatalyst for efficient hydrogen evolution reaction. Chemical Communications, 2020, 56, 90-93.	4.1	34
21	Converting biomass into efficient oxygen reduction reaction catalysts for proton exchange membrane fuel cells. Science China Materials, 2020, 63, 524-532.	6.3	30
22	Discovery of main group single Sbâ€“N₄ active sites for CO₂ electroreduction to formate with high efficiency. Energy and Environmental Science, 2020, 13, 2856-2863.	30.8	245
23	Design of a Singleâ€Atom Indium^{Î´+}â€“N₄Interface for Efficient Electroreduction of CO₂to Formate. Angewandte Chemie - International Edition, 2020, 59, 22465-22469.	13.8	232
24	Design of a Singleâ€Atom Indium Î´+ â€“N 4 Interface for Efficient Electroreduction of CO 2 to Formate. Angewandte Chemie, 2020, 132, 22651-22655.	2.0	29
25	A highly-active, stable and low-cost platinum-free anode catalyst based on RuNi for hydroxide exchange membrane fuel cells. Nature Communications, 2020, 11, 5651.	12.8	142
26	Iridium single-atom catalyst on nitrogen-doped carbon for formic acid oxidation synthesized using a general hostâ€“guest strategy. Nature Chemistry, 2020, 12, 764-772.	13.6	452
27	Engineering unsymmetrically coordinated Cu-S1N3 single atom sites with enhanced oxygen reduction activity. Nature Communications, 2020, 11, 3049.	12.8	537
28	A metal and nitrogen doped carbon composite with both oxygen reduction and evolution active sites for rechargeable zincâ€“air batteries. Journal of Materials Chemistry A, 2020, 8, 15752-15759.	10.3	28
29	Engineering Isolated Mnâ€“N₂C₂ Atomic Interface Sites for Efficient Bifunctional Oxygen Reduction and Evolution Reaction. Nano Letters, 2020, 20, 5443-5450.	9.1	249
30	Two-Dimensional Amorphous SnO_{<i>x</i>} from Liquid Metal: Mass Production, Phase Transfer, and Electrocatalytic CO₂ Reduction toward Formic Acid. Nano Letters, 2020, 20, 2916-2922.	9.1	97
31	Single-atom Rh/N-doped carbon electrocatalyst for formic acid oxidation. Nature Nanotechnology, 2020, 15, 390-397.	31.5	420
32	Exfoliated Mesoporous 2D Covalent Organic Frameworks for Highâ€Rate Electrochemical Doubleâ€Layer Capacitors. Advanced Materials, 2020, 32, e1907289.	21.0	136
33	In Situ Phosphatizing of Triphenylphosphine Encapsulated within Metalâ€“Organic Frameworks to Design Atomic Co₁â€“P₁N₃ Interfacial Structure for Promoting Catalytic Performance. Journal of the American Chemical Society, 2020, 142, 8431-8439.	13.7	259
34	Functionalization of Hollow Nanomaterials for Catalytic Applications: Nanoreactor Construction. Advanced Materials, 2019, 31, e1800426.	21.0	239
35	Strain Regulation to Optimize the Acidic Water Oxidation Performance of Atomicâ€Layer IrO<i>_x</i>. Advanced Materials, 2019, 31, e1903616.	21.0	121
36	Hollow bimetallic M-Fe-P (M=Mn, Co, Cu) nanoparticles as efficient electrocatalysts for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 22806-22815.	7.1	19

#	Article	IF	Citations
37	Three-dimensional open nano-netcage electrocatalysts for efficient pH-universal overall water splitting. Nature Communications, 2019, 10, 4875.	12.8	253
38	PdAg bimetallic electrocatalyst for highly selective reduction of CO2 with low COOH* formation energy and facile CO desorption. Nano Research, 2019, 12, 2866-2871.	10.4	61
39	Amorphous MoS2 confined in nitrogen-doped porous carbon for improved electrocatalytic stability toward hydrogen evolution reaction. Nano Research, 2019, 12, 3116-3122.	10.4	22
40	One-pot synthesis of IrNi@Ir core-shell nanoparticles as highly active hydrogen oxidation reaction electrocatalyst in alkaline electrolyte. Nano Energy, 2019, 59, 26-32.	16.0	72
41	High-Concentration Single Atomic Pt Sites on Hollow CuSx for Selective O2 Reduction to H2O2 in Acid Solution. CheM, 2019, 5, 2099-2110.	11.7	279
42	Impacts of anions on the electrochemical oxygen reduction reaction activity and stability of Pt/C in alkaline electrolyte. International Journal of Hydrogen Energy, 2019, 44, 13373-13382.	7.1	17
43	Direct synthesis of parallel doped N-MoP/N-CNT as highly active hydrogen evolution reaction catalyst. Science China Materials, 2019, 62, 690-698.	6.3	21
44	Multishelled FeCo@FeCoP@C Hollow Spheres as Highly Efficient Hydrogen Evolution Catalysts. ACS Applied Materials & Interfaces, 2019, 11, 1267-1273.	8.0	53
45	CoFeW ternary oxides nanoparticles for oxygen evolution reaction. Materials Letters, 2018, 223, 246-249.	2.6	17
46	Ultrathin Palladium Nanomesh for Electrocatalysis. Angewandte Chemie - International Edition, 2018, 57, 3435-3438.	13.8	98
47	Photocatalytic hydrogenation of nitroarenes using Cu1.94S-Zn0.23Cd0.77S heteronanorods. Nano Research, 2018, 11, 3730-3738.	10.4	28
48	Fe Isolated Single Atoms on S, N Codoped Carbon by Copolymer Pyrolysis Strategy for Highly Efficient Oxygen Reduction Reaction. Advanced Materials, 2018, 30, e1800588.	21.0	511
49	Promoting the methanol oxidation catalytic activity by introducing surface nickel on platinum nanoparticles. Nano Research, 2018, 11, 2058-2068.	10.4	93
50	Ultrathin Ptâ€"Zn Nanowires: High-Performance Catalysts for Electrooxidation of Methanol and Formic Acid. ACS Sustainable Chemistry and Engineering, 2018, 6, 77-81.	6.7	52
51	Accelerating water dissociation kinetics by isolating cobalt atoms into ruthenium lattice. Nature Communications, 2018, 9, 4958.	12.8	264
52	Enhanced oxygen reduction with single-atomic-site iron catalysts for a zinc-air battery and hydrogen-air fuel cell. Nature Communications, 2018, 9, 5422.	12.8	696
53	Porous platinumâ€"silver bimetallic alloys: surface composition and strain tunability toward enhanced electrocatalysis. Nanoscale, 2018, 10, 21703-21711.	5.6	20
54	Direct transformation of bulk copper into copper single sites via emitting and trapping of atoms. Nature Catalysis, 2018, 1, 781-786.	34.4	746

#	Article	IF	Citations
55	Mesoporous S doped Feâ€“Nâ€“C materials as highly active oxygen reduction reaction catalyst. Chemical Communications, 2018, 54, 12073-12076.	4.1	44
56	Self-Assembly Precursor-Derived MoP Supported on N,P-Codoped Reduced Graphene Oxides as Efficient Catalysts for Hydrogen Evolution Reaction. Inorganic Chemistry, 2018, 57, 13859-13865.	4.0	21
57	Mesoporous Pd@Ru Coreâ€“Shell Nanorods for Hydrogen Evolution Reaction in Alkaline Solution. ACS Applied Materials & Interfaces, 2018, 10, 34147-34152.	8.0	64
58	ZIF-67 as Continuous Self-Sacrifice Template Derived NiCo₂O₄/Co,N-CNTs Nanocages as Efficient Bifunctional Electrocatalysts for Rechargeable Znâ€“Air Batteries. ACS Sustainable Chemistry and Engineering, 2018, 6, 10021-10029.	6.7	90
59	Relating alkaline stability to the structure of quaternary phosphonium cations. RSC Advances, 2018, 8, 26640-26645.	3.6	12
60	Phaseâ€Controlled Synthesis of Nickel Phosphide Nanocrystals and Their Electrocatalytic Performance for the Hydrogen Evolution Reaction. Chemistry - A European Journal, 2018, 24, 11748-11754.	3.3	55
61	Single Tungsten Atoms Supported on MOFâ€Derived Nâ€Doped Carbon for Robust Electrochemical Hydrogen Evolution. Advanced Materials, 2018, 30, e1800396.	21.0	427
62	Isolated Single Iron Atoms Anchored on Nâ€Doped Porous Carbon as an Efficient Electrocatalyst for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2017, 56, 6937-6941.	13.8	1,542
63	Isolated Single Iron Atoms Anchored on Nâ€Doped Porous Carbon as an Efficient Electrocatalyst for the Oxygen Reduction Reaction. Angewandte Chemie, 2017, 129, 7041-7045.	2.0	306
64	CoP nanotubes formed by Kirkendall effect as efficient hydrogen evolution reaction electrocatalysts. Materials Letters, 2017, 202, 146-149.	2.6	26
65	InnenrÃ¼cktitelbild: Isolated Single Iron Atoms Anchored on Nâ€Doped Porous Carbon as an Efficient Electrocatalyst for the Oxygen Reduction Reaction (Angew. Chem. 24/2017). Angewandte Chemie, 2017, 129, 7107-7107.	2.0	6
66	MOF-Derived Formation of Ni₂Pâ€“CoP Bimetallic Phosphides with Strong Interfacial Effect toward Electrocatalytic Water Splitting. ACS Applied Materials & Interfaces, 2017, 9, 23222-23229.	8.0	276
67	Hierarchical Fe-doped NiO x nanotubes assembled from ultrathin nanosheets containing trivalent nickel for oxygen evolution reaction. Nano Energy, 2017, 38, 167-174.	16.0	160
68	Investigating the Influences of the Adsorbed Species on Catalytic Activity for Hydrogen Oxidation Reaction in Alkaline Electrolyte. Journal of the American Chemical Society, 2017, 139, 5156-5163.	13.7	243
69	Rational Design of Single Molybdenum Atoms Anchored on Nâ€Doped Carbon for Effective Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2017, 56, 16086-16090.	13.8	431
70	Rational Design of Single Molybdenum Atoms Anchored on Nâ€Doped Carbon for Effective Hydrogen Evolution Reaction. Angewandte Chemie, 2017, 129, 16302-16306.	2.0	82
71	Atomically Dispersed Copperâ€“Platinum Dual Sites Alloyed with Palladium Nanorings Catalyze the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2017, 56, 16047-16051.	13.8	231
72	Design of ultrathin Pt-Mo-Ni nanowire catalysts for ethanol electrooxidation. Science Advances, 2017, 3, e1603068.	10.3	224

#	Article	IF	Citations
73	Ultrasmall Cu₇S₄@MoS₂ Heteroâ€Nanoframes with Abundant Active Edge Sites for Ultrahighâ€Performance Hydrogen Evolution. Angewandte Chemie, 2016, 128, 6612-6615.	2.0	14
74	Activity targets for nanostructured platinum-group-metal-free catalysts in hydroxide exchange membrane fuel cells. Nature Nanotechnology, 2016, 11, 1020-1025.	31.5	282
75	Electrocatalysts for hydrogen oxidation and evolution reactions. Science China Materials, 2016, 59, 217-238.	6.3	142
76	Ternary Pdâ€“Niâ€“P hybrid electrocatalysts derived from Pdâ€“Ni coreâ€“shell nanoparticles with enhanced formic acid oxidation activity. Chemical Communications, 2016, 52, 11143-11146.	4.1	65
77	A New Alkaliâ€Stable Phosphonium Cation Based on Fundamental Understanding of Degradation Mechanisms. ChemSusChem, 2016, 9, 2374-2379.	6.8	45
78	Universal dependence of hydrogen oxidation and evolution reaction activity of platinum-group metals on pH and hydrogen binding energy. Science Advances, 2016, 2, e1501602.	10.3	573
79	Ultrasmall Cu₇S₄@MoS₂ Heteroâ€Nanoframes with Abundant Active Edge Sites for Ultrahighâ€Performance Hydrogen Evolution. Angewandte Chemie - International Edition, 2016, 55, 6502-6505.	13.8	128
80	Nickel supported on nitrogen-doped carbon nanotubes as hydrogen oxidation reaction catalyst in alkaline electrolyte. Nature Communications, 2016, 7, 10141.	12.8	368
81	Correlating hydrogen oxidation and evolution activity on platinum at different pH with measured hydrogen binding energy. Nature Communications, 2015, 6, 5848.	12.8	784
82	Platinumâ€“Ruthenium Nanotubes and Platinumâ€“Ruthenium Coated Copper Nanowires As Efficient Catalysts for Electro-Oxidation of Methanol. ACS Catalysis, 2015, 5, 1468-1474.	11.2	155
83	A durability study of carbon nanotube fiber based stretchable electronic devices under cyclic deformation. Carbon, 2015, 94, 352-361.	10.3	17
84	Correlating Hydrogen Oxidation/Evolution Reaction Activity with the Minority Weak Hydrogen-Binding Sites on Ir/C Catalysts. ACS Catalysis, 2015, 5, 4449-4455.	11.2	114
85	3D Porous Crystalline Polyimide Covalent Organic Frameworks for Drug Delivery. Journal of the American Chemical Society, 2015, 137, 8352-8355.	13.7	838
86	Oxygen Reduction at Very Low Overpotential on Nanoporous Ag Catalysts. Advanced Energy Materials, 2015, 5, 1500149.	19.5	68
87	3D Microporous Baseâ€Functionalized Covalent Organic Frameworks for Sizeâ€Selective Catalysis. Angewandte Chemie - International Edition, 2014, 53, 2878-2882.	13.8	554
88	Synthesis of Monodispere Au@Co₃O₄ Coreâ€Shell Nanocrystals and Their Enhanced Catalytic Activity for Oxygen Evolution Reaction. Advanced Materials, 2014, 26, 3950-3955.	21.0	418
89	Efficient Water Oxidation Using Nanostructured Î±-Nickel-Hydroxide as an Electrocatalyst. Journal of the American Chemical Society, 2014, 136, 7077-7084.	13.7	1,202
90	Non-precious metal electrocatalysts with high activity for hydrogen oxidation reaction in alkaline electrolytes. Energy and Environmental Science, 2014, 7, 1719-1724.	30.8	276

#	Article	IF	Citations
91	Designed synthesis of large-pore crystalline polyimide covalent organic frameworks. Nature Communications, 2014, 5, 4503.	12.8	535
92	Evidence of an Oxidativeâ€Additionâ€Promoted Pdâ€Leaching Mechanism in the Suzuki Reaction by Using a Pdâ€Nanostructure Design. Chemistry - A European Journal, 2012, 18, 9813-9817.	3.3	82
93	Wurtzite Cu2ZnSnS4 nanocrystals: a novel quaternary semiconductor. Chemical Communications, 2011, 47, 3141.	4.1	321
94	Controlled synthesis of wurtzite CuInS2 nanocrystals and their side-by-side nanorod assemblies. CrystEngComm, 2011, 13, 4039.	2.6	98
95	Controlled synthesis of semiconductor nanostructures in the liquid phase. Chemical Society Reviews, 2011, 40, 5492.	38.1	199
96	Enhanced Photocatalytic Properties of SnO₂ Nanocrystals with Decreased Size for ppbâ€level Acetaldehyde Decomposition. ChemCatChem, 2011, 3, 371-377.	3.7	41
97	A Facile â€œDispersionâ€“Decompositionâ€• Route to Metal Sulfide Nanocrystals. Chemistry - A European Journal, 2011, 17, 10445-10452.	3.3	74
98	Direct Synthesis of Water-Soluble Ultrathin CdS Nanorods and Reversible Tuning of the Solubility by Alkalinity. Journal of the American Chemical Society, 2010, 132, 1819-1821.	13.7	78
99	Shape Control of CdSe Nanocrystals with Zinc Blende Structure. Journal of the American Chemical Society, 2009, 131, 16423-16429.	13.7	168
100	Controllable Synthesis of Cu₂S Nanocrystals and Their Assembly into a Superlattice. Journal of the American Chemical Society, 2008, 130, 10482-10483.	13.7	214
101	Room-Temperature Soft Magnetic Iron Oxide Nanocrystals: Synthesis, Characterization, and Size-Dependent Magnetic Properties. Chemistry of Materials, 2008, 20, 5029-5034.	6.7	82
102	Indium Hydroxides, Oxyhydroxides, and Oxides Nanocrystals Series. Inorganic Chemistry, 2007, 46, 5179-5187.	4.0	131
103	Tetrahedral Colloidal Crystals of Ag₂S Nanocrystals. Angewandte Chemie - International Edition, 2007, 46, 8174-8177.	13.8	57
104	Controlled Hydrothermal Synthesis and Structural Characterization of a Nickel Selenide Series. Chemistry - A European Journal, 2006, 12, 211-217.	3.3	149
105	A General Chemical Conversion Method to Various Semiconductor Hollow Structures. Small, 2005, 1, 216-221.	10.0	79