Sen Zhang

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Tuning Nanoparticle Catalysis for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2013, 52, 8526-8544.	7.2	902
2	Monodisperse M_{<i>x</i>}Fe_{3â€“<i>x</i>}O₄(M = Fe, Cu, Co, Mn) Nanoparticles and Their Electrocatalysis for Oxygen Reduction Reaction. Nano Letters, 2013, 13, 2947-2951.	4.5	421
3	Co/CoO Nanoparticles Assembled on Graphene for Electrochemical Reduction of Oxygen. Angewandte Chemie - International Edition, 2012, 51, 11770-11773.	7.2	391
4	FePt and CoPt Nanowires as Efficient Catalysts for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2013, 52, 3465-3468.	7.2	389
5	New Approach to Fully Ordered fct-FePt Nanoparticles for Much Enhanced Electrocatalysis in Acid. Nano Letters, 2015, 15, 2468-2473.	4.5	385
6	Tuning Nanoparticle Structure and Surface Strain for Catalysis Optimization. Journal of the American Chemical Society, 2014, 136, 7734-7739.	6.6	349
7	Monodisperse AgPd Alloy Nanoparticles and Their Superior Catalysis for the Dehydrogenation of Formic Acid. Angewandte Chemie - International Edition, 2013, 52, 3681-3684.	7.2	348
8	Synthesis of Ultrathin FePtPd Nanowires and Their Use as Catalysts for Methanol Oxidation Reaction. Journal of the American Chemical Society, 2011, 133, 15354-15357.	6.6	309
9	Seed-Mediated Synthesis of Core/Shell FePtM/FePt (M = Pd, Au) Nanowires and Their Electrocatalysis for Oxygen Reduction Reaction. Journal of the American Chemical Society, 2013, 135, 13879-13884.	6.6	269
10	Heterostructure-Promoted Oxygen Electrocatalysis Enables Rechargeable Zincâ€“Air Battery with Neutral Aqueous Electrolyte. Journal of the American Chemical Society, 2018, 140, 17624-17631.	6.6	258
11	Synthetic Control of FePtM Nanorods (M = Cu, Ni) To Enhance the Oxygen Reduction Reaction. Journal of the American Chemical Society, 2013, 135, 7130-7133.	6.6	250
12	Identification of Active Hydrogen Species on Palladium Nanoparticles for an Enhanced Electrocatalytic Hydrodechlorination of 2,4-Dichlorophenol in Water. Environmental Science & Technology, 2017, 51, 7599-7605.	4.6	249
13	Ru/CeO₂ Catalyst with Optimized CeO₂ Support Morphology and Surface Facets for Propane Combustion. Environmental Science & Technology, 2019, 53, 5349-5358.	4.6	228
14	The Spatially Oriented Charge Flow and Photocatalysis Mechanism on Internal van der Waals Heterostructures Enhanced g-C₃N₄. ACS Catalysis, 2018, 8, 8376-8385.	5.5	219
15	Bimetallic synergy in cobaltâ€“palladium nanocatalysts for CO oxidation. Nature Catalysis, 2019, 2, 78-85.	16.1	195
16	Oxygen evolution reaction over catalytic single-site Co in a well-defined brookite TiO2 nanorod surface. Nature Catalysis, 2021, 4, 36-45.	16.1	189
17	Structure-Induced Enhancement in Electrooxidation of Trimetallic FePtAu Nanoparticles. Journal of the American Chemical Society, 2012, 134, 5060-5063.	6.6	185
18	Monodisperse Core/Shell Ni/FePt Nanoparticles and Their Conversion to Ni/Pt to Catalyze Oxygen Reduction. Journal of the American Chemical Society, 2014, 136, 15921-15924.	6.6	165

#	ARTICLE	IF	CITATIONS
19	Core/Shell Face-Centered Tetragonal FePd/Pd Nanoparticles as an Efficient Non-Pt Catalyst for the Oxygen Reduction Reaction. ACS Nano, 2015, 9, 11014-11022.	7.3	165
20	High Yield Synthesis of Bracelet-like Hydrophilic Niâˆ’Co Magnetic Alloy Flux-Closure Nanorings. Journal of the American Chemical Society, 2008, 130, 11606-11607.	6.6	164
21	Visualizing non-equilibrium lithiation of spinel oxide via in situ transmission electron microscopy. Nature Communications, 2016, 7, 11441.	5.8	162
22	Monodisperse bismuth nanoparticles decorated graphitic carbon nitride: Enhanced visible-light-response photocatalytic NO removal and reaction pathway. Applied Catalysis B: Environmental, 2017, 205, 532-540.	10.8	162
23	Photocatalytic Hydrogen Evolution from Substoichiometric Colloidal WO_{3â€“<i>x</i>} Nanowires. ACS Energy Letters, 2018, 3, 1904-1910.	8.8	145
24	Synthesis and X-ray Characterization of Cobalt Phosphide (Co₂P) Nanorods for the Oxygen Reduction Reaction. ACS Nano, 2015, 9, 8108-8115.	7.3	132
25	Phosphate-Functionalized CeO₂ Nanosheets for Efficient Catalytic Oxidation of Dichloromethane. Environmental Science & Technology, 2018, 52, 13430-13437.	4.6	128
26	Monolayer Assembly of Ferrimagnetic Co_{<i>x</i>}Fe_{3â€“<i>x</i>}O₄ Nanocubes for Magnetic Recording. Nano Letters, 2014, 14, 3395-3399.	4.5	117
27	Bimetallic Composition-Promoted Electrocatalytic Hydrodechlorination Reaction on Silverâ€“Palladium Alloy Nanoparticles. ACS Catalysis, 2019, 9, 10803-10811.	5.5	115
28	Electrocatalytic hydrodechlorination of 2,4-dichlorophenol over palladium nanoparticles and its pH-mediated tug-of-war with hydrogen evolution. Chemical Engineering Journal, 2018, 348, 26-34.	6.6	104
29	High-Temperature Solution-Phase Syntheses of Metal-Oxide Nanocrystals. Chemistry of Materials, 2013, 25, 1293-1304.	3.2	97
30	Core/Shell Au/MnO Nanoparticles Prepared Through Controlled Oxidation of AuMn as an Electrocatalyst for Sensitive H₂O₂ Detection. Angewandte Chemie - International Edition, 2014, 53, 12508-12512.	7.2	84
31	Enhanced photocatalytic performance of carbon quantum dots/BiOBr composite and mechanism investigation. Chinese Chemical Letters, 2018, 29, 805-810.	4.8	80
32	Generalized Synthetic Strategy for Transition-Metal-Doped Brookite-Phase TiO₂ Nanorods. Journal of the American Chemical Society, 2019, 141, 16548-16552.	6.6	78
33	In Situ Transmission Electron Microscopy for Energy Applications. Joule, 2019, 3, 4-8.	11.7	69
34	Favorable Core/Shell Interface within Co₂P/Pt Nanorods for Oxygen Reduction Electrocatalysis. Nano Letters, 2018, 18, 7870-7875.	4.5	68
35	Programmable Synthesis of Multimetallic Phosphide Nanorods Mediated by Core/Shell Structure Formation and Conversion. Journal of the American Chemical Society, 2020, 142, 8490-8497.	6.6	65
36	Ultrathin two-dimensional metallic nanocrystals for renewable energy electrocatalysis. Materials Today, 2019, 23, 45-56.	8.3	64

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37	Surface Profile Control of FeNiPt/Pt Core/Shell Nanowires for Oxygen Reduction Reaction. Small, 2015, 11, 3545-3549.	5.2	61
38	Reversing sintering effect of Ni particles on Î³-Mo2N via strong metal support interaction. Nature Communications, 2021, 12, 6978.	5.8	58
39	Effect of Ni particle size on the production of renewable methane from CO2 over Ni/CeO2 catalyst. Journal of Energy Chemistry, 2021, 61, 602-611.	7.1	51
40	Immobilizing Water into Crystal Lattice of Calcium Sulfate for its Separation from Water-in-Oil Emulsion. Environmental Science & Technology, 2016, 50, 7650-7657.	4.6	45
41	Controlled synthesis of Auâ€"Fe heterodimer nanoparticles and their conversion into Auâ€"Fe₃O₄heterostructured nanoparticles. Nanoscale, 2016, 8, 17947-17952.	2.8	44
42	22% Efficiency Inverted Perovskite Photovoltaic Cell Using Cationâ€Doped Brookite TiO₂ Top Buffer. Advanced Science, 2020, 7, 2001285.	5.6	43
43	Template-Free Hydrothermal Synthesis and Formation Mechanism of Hematite Microrings. Journal of Physical Chemistry C, 2008, 112, 19916-19921.	1.5	42
44	Halide ion-mediated growth of single crystalline Fe nanoparticles. Nanoscale, 2014, 6, 4852-4856.	2.8	41
45	Surface Ligand Environment Boosts the Electrocatalytic Hydrodechlorination Reaction on Palladium Nanoparticles. ACS Applied Materials & Interfaces, 2021, 13, 4072-4083.	4.0	38
46	Calcium Sulfate Hemihydrate Nanowires: One Robust Material in Separation of Water from Water-in-Oil Emulsion. Environmental Science & Technology, 2017, 51, 10519-10525.	4.6	37
47	AgPd nanoparticles for electrocatalytic CO₂ reduction: bimetallic composition-dependent ligand and ensemble effects. Nanoscale, 2020, 12, 14068-14075.	2.8	36
48	Electrocatalytic Water Oxidation by a Trinuclear Copper(II) Complex. ACS Catalysis, 2021, 11, 7223-7240.	5.5	35
49	Monodisperse PdSn/SnO_xcore/shell nanoparticles with superior electrocatalytic ethanol oxidation performance. Journal of Materials Chemistry A, 2020, 8, 20931-20938.	5.2	33
50	MgAl layered double oxide: One powerful sweeper of emulsified water and acid for oil purification. Journal of Hazardous Materials, 2019, 367, 658-667.	6.5	28
51	Surfactant Removal for Colloidal Nanocrystal Catalysts Mediated by N-Heterocyclic Carbenes. Journal of the American Chemical Society, 2021, 143, 2644-2648.	6.6	25
52	Revealing structural evolution of PbS nanocrystal catalysts in electrochemical CO₂ reduction using <i>in situ</i> synchrotron radiation X-ray diffraction. Journal of Materials Chemistry A, 2019, 7, 23775-23780.	5.2	24
53	Mechanistic Studies of Single-Step Styrene Production Catalyzed by Rh Complexes with Diimine Ligands: An Evaluation of the Role of Ligands and Induction Period. ACS Catalysis, 2019, 9, 7457-7475.	5.5	23
54	Electrocatalytic nitrate reduction on bimetallic Palladium-Copper Nanowires: Key surface structure for selective dinitrogen formation. Chemical Engineering Journal, 2022, 435, 134969.	6.6	20

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55	Controlled synthesis of monodisperse Î±-calcium sulfate hemihydrate nanoellipsoids with a porous structure. Physical Chemistry Chemical Physics, 2015, 17, 11509-11515.	1.3	19
56	Engineering the defects of Co3O4- bubbles in lotus root-like multichannel nanofibers to realize superior performance and high durability for fiber-shaped hybrid Zn battery. Chemical Engineering Journal, 2021, 407, 127043.	6.6	18
57	Electrocatalytic reduction of furfural with high selectivity to furfuryl alcohol using AgPd alloy nanoparticles. Nanoscale, 2021, 13, 2312-2316.	2.8	17
58	Styrene Production from Benzene and Ethylene Catalyzed by Palladium(II): Enhancement of Selectivity toward Styrene via Temperature-dependent Vinyl Ester Consumption. Organometallics, 2019, 38, 3532-3541.	1.1	15
59	Controlled Synthesis of Monodisperse Magnetic Nanoparticles in Solution Phase. The Open Surface Science Journal, 2012, 4, 26-34.	2.0	15
60	General Synthetic Strategy to Ordered Mesoporous Carbon Catalysts with Singleâ€Atom Metal Sites for Electrochemical CO₂ Reduction. Small, 2022, 18, e2107799.	5.2	13
61	Two-Dimensional Metal Organic Framework Nanosheets as Bifunctional Catalyst for Electrochemical and Photoelectrochemical Water Oxidation. Frontiers in Chemistry, 2020, 8, 604239.	1.8	12
62	Oxidative Alkenylation of Arenes Using Supported Rh Materials: Evidence that Active Catalysts are Formed by Rh Leaching. ChemCatChem, 2021, 13, 260-270.	1.8	9
63	Multifunctional necklace-like Cu@cross-linked poly(vinyl alcohol) microcables with fluorescent property and their manipulation by an external magnet. Chemical Communications, 2009, , 2326.	2.2	8
64	Immobilization of â€œCapping Areneâ€•Cobalt(II) Complexes on Ordered Mesoporous Carbon for Electrocatalytic Water Oxidation. ACS Catalysis, 2021, 11, 15068-15082.	5.5	8
65	Editorial: Photocatalysis for Environmental Applications. Frontiers in Chemistry, 2019, 7, 303.	1.8	7
66	Noncovalent Immobilization of Pentamethylcyclopentadienyl Iridium Complexes on Ordered Mesoporous Carbon for Electrocatalytic Water Oxidation. Small Science, 2021, 1, 2100037.	5.8	7
67	Preparation of Monodisperse Polystyrene Particles from Emulsifier-free Miniemulsion Polymerization. Chemistry Letters, 2008, 37, 1158-1159.	0.7	5
68	Effects of Additives on Catalytic Arene Câ€"H Activation: Study of Rh Catalysts Supported by Bis-phosphine Pincer Ligands. Organometallics, 2020, 39, 3918-3935.	1.1	4
69	General Synthetic Strategy to Ordered Mesoporous Carbon Catalysts with Singleâ€Atom Metal Sites for Electrochemical CO₂ Reduction (Small 16/2022). Small, 2022, 18, .	5.2	3
70	Tailoring Nanoparticle Electrocatalysts for Proton Exchange Membrane Fuel Cells. , 2015, , 275-300.		1
71	(Invited) Controlling Multi-Component Colloidal Nanocrystal Surface and Interface for Enhanced Electrocatalysis. ECS Meeting Abstracts, 2020, MA2020-01, 1143-1143.	0.0	0