Sen Zhang

List of Publications by Year
in descending order

71 papers	8,938 citations	66315 42 h-index	66879 78 g-index
84 all docs	84 docs citations	84 times ranked	11577 citing authors

#	Article	IF	Citations
1	Electrocatalytic nitrate reduction on bimetallic Palladium-Copper Nanowires: Key surface structure for selective dinitrogen formation. Chemical Engineering Journal, 2022, 435, 134969.	6.6	20
2	General Synthetic Strategy to Ordered Mesoporous Carbon Catalysts with Singleâ€Atom Metal Sites for Electrochemical CO₂ Reduction. Small, 2022, 18, e2107799.	5.2	13
3	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
4	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
5	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
6	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
7	Electrocatalytic reduction of furfural with high selectivity to furfuryl alcohol using AgPd alloy nanoparticles. Nanoscale, 2021, 13, 2312-2316.	2.8	17
8	Surface Ligand Environment Boosts the Electrocatalytic Hydrodechlorination Reaction on Palladium Nanoparticles. ACS Applied Materials & Interfaces, 2021, 13, 4072-4083.	4.0	38
9	Surfactant Removal for Colloidal Nanocrystal Catalysts Mediated by N-Heterocyclic Carbenes. Journal of the American Chemical Society, 2021, 143, 2644-2648.	6.6	25
10	Electrocatalytic Water Oxidation by a Trinuclear Copper(II) Complex. ACS Catalysis, 2021, 11, 7223-7240.	5.5	35
11	Noncovalent Immobilization of Pentamethylcyclopentadienyl Iridium Complexes on Ordered Mesoporous Carbon for Electrocatalytic Water Oxidation. Small Science, 2021, 1, 2100037.	5.8	7
12	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
13	Reversing sintering effect of Ni particles on Î³-Mo2N via strong metal support interaction. Nature Communications, 2021, 12, 6978.	5.8	58
14	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
15	Monodisperse PdSn/SnO_xcore/shell nanoparticles with superior electrocatalytic ethanol oxidation performance. Journal of Materials Chemistry A, 2020, 8, 20931-20938.	5.2	33
16	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
17	Two-Dimensional Metal Organic Framework Nanosheets as Bifunctional Catalyst for Electrochemical and Photoelectrochemical Water Oxidation. Frontiers in Chemistry, 2020, 8, 604239.	1.8	12
18	AgPd nanoparticles for electrocatalytic CO₂ reduction: bimetallic composition-dependent ligand and ensemble effects. Nanoscale, 2020, 12, 14068-14075.	2.8	36

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19	22% Efficiency Inverted Perovskite Photovoltaic Cell Using Cationâ€Doped Brookite TiO₂ Top Buffer. Advanced Science, 2020, 7, 2001285.	5.6	43
20	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
21	(Invited) Controlling Multi-Component Colloidal Nanocrystal Surface and Interface for Enhanced Electrocatalysis. ECS Meeting Abstracts, 2020, MA2020-01, 1143-1143.	0.0	0
22	Ultrathin two-dimensional metallic nanocrystals for renewable energy electrocatalysis. Materials Today, 2019, 23, 45-56.	8.3	64
23	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
24	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
25	Generalized Synthetic Strategy for Transition-Metal-Doped Brookite-Phase TiO₂ Nanorods. Journal of the American Chemical Society, 2019, 141, 16548-16552.	6.6	78
26	Bimetallic Composition-Promoted Electrocatalytic Hydrodechlorination Reaction on Silverâ€“Palladium Alloy Nanoparticles. ACS Catalysis, 2019, 9, 10803-10811.	5.5	115
27	Revealing structural evolution of PbS nanocrystal catalysts in electrochemical CO₂ reduction using in situ synchrotron radiation X-ray diffraction. Journal of Materials Chemistry A, 2019, 7, 23775-23780.	5.2	24
28	Ru/CeO₂ Catalyst with Optimized CeO₂ Support Morphology and Surface Facets for Propane Combustion. Environmental Science & Technology, 2019, 53, 5349-5358.	4.6	228
29	Editorial: Photocatalysis for Environmental Applications. Frontiers in Chemistry, 2019, 7, 303.	1.8	7
30	In Situ Transmission Electron Microscopy for Energy Applications. Joule, 2019, 3, 4-8.	11.7	69
31	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
32	Bimetallic synergy in cobaltâ€“palladium nanocatalysts for CO oxidation. Nature Catalysis, 2019, 2, 78-85.	16.1	195
33	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
34	Favorable Core/Shell Interface within Co₂P/Pt Nanorods for Oxygen Reduction Electrocatalysis. Nano Letters, 2018, 18, 7870-7875.	4.5	68
35	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
36	Phosphate-Functionalized CeO₂ Nanosheets for Efficient Catalytic Oxidation of Dichloromethane. Environmental Science & Technology, 2018, 52, 13430-13437.	4.6	128

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37	Photocatalytic Hydrogen Evolution from Substoichiometric Colloidal WO_{3â€“x} Nanowires. ACS Energy Letters, 2018, 3, 1904-1910.	8.8	145
38	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
39	Enhanced photocatalytic performance of carbon quantum dots/BiOBr composite and mechanism investigation. Chinese Chemical Letters, 2018, 29, 805-810.	4.8	80
40	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
41	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
42	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
43	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
44	Visualizing non-equilibrium lithiation of spinel oxide via in situ transmission electron microscopy. Nature Communications, 2016, 7, 11441.	5.8	162
45	Controlled synthesis of Auâ€“Fe heterodimer nanoparticles and their conversion into Auâ€“Fe₃O₄heterostructured nanoparticles. Nanoscale, 2016, 8, 17947-17952.	2.8	44
46	New Approach to Fully Ordered fct-FePt Nanoparticles for Much Enhanced Electrocatalysis in Acid. Nano Letters, 2015, 15, 2468-2473.	4.5	385
47	Synthesis and X-ray Characterization of Cobalt Phosphide (Co₂P) Nanorods for the Oxygen Reduction Reaction. ACS Nano, 2015, 9, 8108-8115.	7.3	132
48	Surface Profile Control of FeNiPt/Pt Core/Shell Nanowires for Oxygen Reduction Reaction. Small, 2015, 11, 3545-3549.	5.2	61
49	Tailoring Nanoparticle Electrocatalysts for Proton Exchange Membrane Fuel Cells. , 2015, , 275-300.		1
50	Controlled synthesis of monodisperse Î±-calcium sulfate hemihydrate nanoellipsoids with a porous structure. Physical Chemistry Chemical Physics, 2015, 17, 11509-11515.	1.3	19
51	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
52	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
53	Halide ion-mediated growth of single crystalline Fe nanoparticles. Nanoscale, 2014, 6, 4852-4856.	2.8	41
54	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

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55	Tuning Nanoparticle Structure and Surface Strain for Catalysis Optimization. Journal of the American Chemical Society, 2014, 136, 7734-7739.	6.6	349
56	Monolayer Assembly of Ferrimagnetic Co_xFe_{3â€“x}O₄ Nanocubes for Magnetic Recording. Nano Letters, 2014, 14, 3395-3399.	4.5	117
57	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
58	FePt and CoPt Nanowires as Efficient Catalysts for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2013, 52, 3465-3468.	7.2	389
59	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
60	High-Temperature Solution-Phase Syntheses of Metal-Oxide Nanocrystals. Chemistry of Materials, 2013, 25, 1293-1304.	3.2	97
61	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
62	Tuning Nanoparticle Catalysis for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2013, 52, 8526-8544.	7.2	902
63	Monodisperse M_xFe_{3â€“x}O₄ (M = Fe, Cu, Co, Mn) Nanoparticles and Their Electrocatalysis for Oxygen Reduction Reaction. Nano Letters, 2013, 13, 2947-2951.	4.5	421
64	Co/CoO Nanoparticles Assembled on Graphene for Electrochemical Reduction of Oxygen. Angewandte Chemie - International Edition, 2012, 51, 11770-11773.	7.2	391
65	Structure-Induced Enhancement in Electrooxidation of Trimetallic FePtAu Nanoparticles. Journal of the American Chemical Society, 2012, 134, 5060-5063.	6.6	185
66	Controlled Synthesis of Monodisperse Magnetic Nanoparticles in Solution Phase. The Open Surface Science Journal, 2012, 4, 26-34.	2.0	15
67	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
68	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
69	High Yield Synthesis of Bracelet-like Hydrophilic Niâ”Co Magnetic Alloy Flux-Closure Nanorings. Journal of the American Chemical Society, 2008, 130, 11606-11607.	6.6	164
70	Template-Free Hydrothermal Synthesis and Formation Mechanism of Hematite Microrings. Journal of Physical Chemistry C, 2008, 112, 19916-19921.	1.5	42
71	Preparation of Monodisperse Polystyrene Particles from Emulsifier-free Miniemulsion Polymerization. Chemistry Letters, 2008, 37, 1158-1159.	0.7	5