

Zhenming Cao

List of Publications by Year in descending order

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Version: 2024-02-01

34
papers

2,189
citations

257450

24
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377865

34
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docs citations

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times ranked

3177
citing authors

#	ARTICLE	IF	CITATIONS
1	Synchronous Manipulation of Ion and Electron Transfer in Wadsleyâ€“Roth Phase Tiâ€“Nb Oxides for Fastâ€“Charging Lithiumâ€“Ion Batteries. <i>Advanced Science</i> , 2022, 9, e2104530.	11.2	26
2	Ptâ€“Co@Pt Octahedral Nanocrystals: Enhancing Their Activity and Durability toward Oxygen Reduction with an Intermetallic Core and an Ultrathin Shell. <i>Journal of the American Chemical Society</i> , 2021, 143, 8509-8518.	13.7	128
3	Trimetallic PtNiCo branched nanocages as efficient and durable bifunctional electrocatalysts towards oxygen reduction and methanol oxidation reactions. <i>Journal of Materials Chemistry A</i> , 2021, 9, 23444-23450.	10.3	49
4	How to Remove the Capping Agent from Pd Nanocubes without Destructing Their Surface Structure for the Maximization of Catalytic Activity?. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19129-19135.	13.8	24
5	How to Remove the Capping Agent from Pd Nanocubes without Destructing Their Surface Structure for the Maximization of Catalytic Activity?. <i>Angewandte Chemie</i> , 2020, 132, 19291-19297.	2.0	2
6	PtCo-excavated rhombic dodecahedral nanocrystals for efficient electrocatalysis. <i>Nanoscale Advances</i> , 2020, 2, 4881-4886.	4.6	9
7	Facile Synthesis of Ag@Pd _{nL} Icosahedral Nanocrystals as a Class of Costâ€“Effective Electrocatalysts toward Formic Acid Oxidation. <i>ChemCatChem</i> , 2020, 12, 5156-5163.	3.7	8
8	A New Catalytic System with Balanced Activity and Durability toward Oxygen Reduction. <i>ChemCatChem</i> , 2020, 12, 4817-4824.	3.7	3
9	Pdâ€“Ru Alloy Nanocages with a Faceâ€“Centered Cubic Structure and Their Enhanced Activity toward the Oxidation of Ethylene Glycol and Glycerol. <i>Small Methods</i> , 2020, 4, 1900843.	8.6	46
10	Catalytic System Based on Sub-2 nm Pt Particles and Its Extraordinary Activity and Durability for Oxygen Reduction. <i>Nano Letters</i> , 2019, 19, 4997-5002.	9.1	68
11	Sierpinski gasket-like Ptâ€“Ag octahedral alloy nanocrystals with enhanced electrocatalytic activity and stability. <i>Nano Energy</i> , 2019, 61, 397-403.	16.0	29
12	Seed-Mediated Growth of Au Nanospheres into Hexagonal Stars and the Emergence of a Hexagonal Close-Packed Phase. <i>Nano Letters</i> , 2019, 19, 3115-3121.	9.1	44
13	Facile Synthesis of Pt Icosahedral Nanocrystals with Controllable Sizes for the Evaluation of Sizeâ€“Dependent Activity toward Oxygen Reduction. <i>ChemCatChem</i> , 2019, 11, 2458-2463.	3.7	11
14	Continuous and Scalable Synthesis of Pt Multipods with Enhanced Electrocatalytic Activity toward the Oxygen Reduction Reaction. <i>ChemNanoMat</i> , 2019, 5, 599-605.	2.8	8
15	Monocrystalline platinumâ€“nickel branched nanocages with enhanced catalytic performance towards the hydrogen evolution reaction. <i>Nanoscale</i> , 2018, 10, 5072-5077.	5.6	39
16	Tuning Electrochemical Properties of Li-Rich Layered Oxide Cathodes by Adjusting Co/Ni Ratios and Mechanism Investigation Using in situ X-ray Diffraction and Online Continuous Flow Differential Electrochemical Mass Spectrometry. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 12666-12677.	8.0	72
17	Synthesis of u-channelled spherical Fe _x (Co _y Ni _{1-y}) _{100x} Janus colloidal particles with excellent electromagnetic wave absorption performance. <i>Nanoscale</i> , 2018, 10, 1930-1938.	5.6	67
18	Stable palladium hydride as a superior anode electrocatalyst for direct formic acid fuel cells. <i>Nano Energy</i> , 2018, 44, 127-134.	16.0	131

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19	Solvent-dependent evolution of cyclic penta-twinned rhodium icosahedral nanocrystals and their enhanced catalytic properties. <i>Nano Research</i> , 2018, 11, 656-664.	10.4	19
20	The physical chemistry and materials science behind sinter-resistant catalysts. <i>Chemical Society Reviews</i> , 2018, 47, 4314-4331.	38.1	236
21	Cyclic Penta-Twinned Rhodium Nanobranches as Superior Catalysts for Ethanol Electro-oxidation. <i>Journal of the American Chemical Society</i> , 2018, 140, 11232-11240.	13.7	133
22	Platinum-nickel alloy excavated nano-multipods with hexagonal close-packed structure and superior activity towards hydrogen evolution reaction. <i>Nature Communications</i> , 2017, 8, 15131.	12.8	364
23	Inflating hollow nanocrystals through a repeated Kirkendall cavitation process. <i>Nature Communications</i> , 2017, 8, 1261.	12.8	135
24	Excavated octahedral Pt-Co alloy nanocrystals built with ultrathin nanosheets as superior multifunctional electrocatalysts for energy conversion applications. <i>Nano Energy</i> , 2017, 39, 582-589.	16.0	130
25	Synthesis and enhanced electromagnetic wave absorption performance of amorphous $\text{Co}_x\text{Fe}_{10-x}$ alloys. <i>Journal of Alloys and Compounds</i> , 2017, 726, 1255-1261.	5.5	35
26	Ligand-Assisted, One-Pot Synthesis of Rh-on-Cu Nanoscale Sea Urchins with High-Density Interfaces for Boosting CO Oxidation. <i>Nano Letters</i> , 2017, 17, 7613-7619.	9.1	32
27	Excavated Cubic Platinum-Tin Alloy Nanocrystals Constructed from Ultrathin Nanosheets with Enhanced Electrocatalytic Activity. <i>Angewandte Chemie</i> , 2016, 128, 9167-9171.	2.0	20
28	Excavated Cubic Platinum-Tin Alloy Nanocrystals Constructed from Ultrathin Nanosheets with Enhanced Electrocatalytic Activity. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9021-9025.	13.8	111
29	Coordination effect assisted synthesis of ultrathin Pt layers on second metal nanocrystals as efficient oxygen reduction electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2016, 4, 13033-13039.	10.3	31
30	Controlled Encapsulation of Flower-like Rh-Ni Alloys with MOFs via Tunable Template Dealloying for Enhanced Selective Hydrogenation of Alkyne. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 31059-31066.	8.0	52
31	Size controllable redispersion of sintered Au nanoparticles by using iodohydrocarbon and its implications. <i>Chemical Science</i> , 2016, 7, 3181-3187.	7.4	46
32	One-pot synthesis of single-crystalline PtPb nanodendrites with enhanced activity for electrooxidation of formic acid. <i>Chemical Communications</i> , 2016, 52, 4493-4496.	4.1	25
33	Composition-tunable synthesis of Pt-Cu octahedral alloy nanocrystals from PtCu to PtCu ₃ via underpotential-deposition-like process and their electro-catalytic properties. <i>RSC Advances</i> , 2015, 5, 18153-18158.	3.6	30
34	Synthesis of composition-tunable octahedral Pt-Cu alloy nanocrystals by controlling reduction kinetics of metal precursors. <i>Science Bulletin</i> , 2015, 60, 1002-1008.	9.0	26