

# Zipeng Zhao

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/7724630/zipeng-zhao-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

60  
papers

10,379  
citations

40  
h-index

61  
g-index

61  
ext. papers

12,563  
ext. citations

17.3  
avg, IF

6.19  
L-index

#	Paper	IF	Citations
60	ELECTROCHEMISTRY. High-performance transition metal-doped PtNi octahedra for oxygen reduction reaction. <i>Science</i> , <b>2015</b> , 348, 1230-4	33.3	1307
59	Ultrafine jagged platinum nanowires enable ultrahigh mass activity for the oxygen reduction reaction. <i>Science</i> , <b>2016</b> , 354, 1414-1419	33.3	986
58	General synthesis and definitive structural identification of MN <sub>4</sub> C <sub>4</sub> single-atom catalysts with tunable electrocatalytic activities. <i>Nature Catalysis</i> , <b>2018</b> , 1, 63-72	36.5	968
57	Three-dimensional holey-graphene/niobia composite architectures for ultrahigh-rate energy storage. <i>Science</i> , <b>2017</b> , 356, 599-604	33.3	965
56	Yolk-shell nanocrystal@ZIF-8 nanostructures for gas-phase heterogeneous catalysis with selectivity control. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 14345-8	16.4	528
55	Amine-assisted synthesis of concave polyhedral platinum nanocrystals having {411} high-index facets. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 4718-21	16.4	453
54	Interfacial electronic effects control the reaction selectivity of platinum catalysts. <i>Nature Materials</i> , <b>2016</b> , 15, 564-9	27	413
53	Solution Processable Holey Graphene Oxide and Its Derived Macrostructures for High-Performance Supercapacitors. <i>Nano Letters</i> , <b>2015</b> , 15, 4605-10	11.5	349
52	Nanoscale Structure Design for High-Performance Pt-Based ORR Catalysts. <i>Advanced Materials</i> , <b>2019</b> , 31, e1802234	24	286
51	Caffeine Improves the Performance and Thermal Stability of Perovskite Solar Cells. <i>Joule</i> , <b>2019</b> , 3, 1464-1487	14.87	266
50	Single-atom tailoring of platinum nanocatalysts for high-performance multifunctional electrocatalysis. <i>Nature Catalysis</i> , <b>2019</b> , 2, 495-503	36.5	258
49	Surface-Engineered PtNi-O Nanostructure with Record-High Performance for Electrocatalytic Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 9046-9050	16.4	258
48	Double-negative-index ceramic aerogels for thermal superinsulation. <i>Science</i> , <b>2019</b> , 363, 723-727	33.3	229
47	Wafer-scale growth of large arrays of perovskite microplate crystals for functional electronics and optoelectronics. <i>Science Advances</i> , <b>2015</b> , 1, e1500613	14.3	226
46	Microwave-Assisted Rapid Synthesis of Graphene-Supported Single Atomic Metals. <i>Advanced Materials</i> , <b>2018</b> , 30, e1802146	24	172
45	Tailored Phase Conversion under Conjugated Polymer Enables Thermally Stable Perovskite Solar Cells with Efficiency Exceeding 21. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 17255-17262	16.4	162
44	Pt-Based Nanocrystal for Electrocatalytic Oxygen Reduction. <i>Advanced Materials</i> , <b>2019</b> , 31, e1808115	24	160

43	Morphology and Phase Controlled Construction of Pt-Ni Nanostructures for Efficient Electrocatalysis. <i>Nano Letters</i> , <b>2016</b> , 16, 2762-7	11.5	150
42	A rational design of carbon-supported dispersive Pt-based octahedra as efficient oxygen reduction reaction catalysts. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 2957-2962	35.4	147
41	Layer-by-Layer Degradation of Methylammonium Lead Tri-iodide Perovskite Microplates. <i>Joule</i> , <b>2017</b> , 1, 548-562	27.8	142
40	Significantly Enhanced Visible Light Photoelectrochemical Activity in TiO <sub>2</sub> Nanowire Arrays by Nitrogen Implantation. <i>Nano Letters</i> , <b>2015</b> , 15, 4692-8	11.5	138
39	Unifying the Hydrogen Evolution and Oxidation Reactions Kinetics in Base by Identifying the Catalytic Roles of Hydroxyl-Water-Cation Adducts. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 3232-3239	16.4	119
38	Roles of Mo Surface Dopants in Enhancing the ORR Performance of Octahedral PtNi Nanoparticles. <i>Nano Letters</i> , <b>2018</b> , 18, 798-804	11.5	115
37	Ultrasmall Cu <sub>7</sub> S <sub>4</sub> @MoS <sub>2</sub> Hetero-Nanoframes with Abundant Active Edge Sites for Ultrahigh-Performance Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 6502-5 <sup>16.4</sup>	16.4	110
36	Evolution Pathway from Iron Compounds to Fe(II)-N Sites through Gas-Phase Iron during Pyrolysis. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 1417-1423	16.4	107
35	Chemical vapour deposition of Fe-N-C oxygen reduction catalysts with full utilization of dense Fe-N sites. <i>Nature Materials</i> , <b>2021</b> , 20, 1385-1391	27	96
34	High density catalytic hot spots in ultrafine wavy nanowires. <i>Nano Letters</i> , <b>2014</b> , 14, 3887-94	11.5	93
33	A Polymerization-Assisted Grain Growth Strategy for Efficient and Stable Perovskite Solar Cells. <i>Advanced Materials</i> , <b>2020</b> , 32, e1907769	24	87
32	The Effect of Thermal Annealing on Charge Transport in Organolead Halide Perovskite Microplate Field-Effect Transistors. <i>Advanced Materials</i> , <b>2017</b> , 29, 1601959	24	81
31	Synthesis of Stable Shape-Controlled Catalytically Active Palladium Hydride. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 15672-5	16.4	75
30	Few-Layer GeAs Field-Effect Transistors and Infrared Photodetectors. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705934	17.1	69
29	Hermetic seal for perovskite solar cells: An improved plasma enhanced atomic layer deposition encapsulation. <i>Nano Energy</i> , <b>2020</b> , 69, 104375	17.1	56
28	Tuning the Catalytic Activity of a Metal-Organic Framework Derived Copper and Nitrogen Co-Doped Carbon Composite for Oxygen Reduction Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 26769-26774	9.5	55
27	Metal-organic framework templated synthesis of ultrathin, well-aligned metallic nanowires. <i>ACS Nano</i> , <b>2015</b> , 9, 3044-9	16.7	54
26	A hyperaccumulation pathway to three-dimensional hierarchical porous nanocomposites for highly robust high-power electrodes. <i>Nature Communications</i> , <b>2016</b> , 7, 13432	17.4	54

25	Beyond Extended Surfaces: Understanding the Oxygen Reduction Reaction on Nanocatalysts. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 17812-17827	16.4	54
24	Differential Surface Elemental Distribution Leads to Significantly Enhanced Stability of PtNi-Based ORR Catalysts. <i>Matter</i> , <b>2019</b> , 1, 1567-1580	12.7	53
23	In situ development of highly concave and composition-confined PtNi octahedra with high oxygen reduction reaction activity and durability. <i>Nano Research</i> , <b>2016</b> , 9, 149-157	10	52
22	Ultrathin wavy Rh nanowires as highly effective electrocatalysts for methanol oxidation reaction with ultrahigh ECSA. <i>Nano Research</i> , <b>2019</b> , 12, 211-215	10	50
21	Quantum interference mediated vertical molecular tunneling transistors. <i>Science Advances</i> , <b>2018</b> , 4, eaat8237	12.7	43
20	Synergistically Enhanced Oxygen Reduction Electrocatalysis by Subsurface Atoms in Ternary PdCuNi Alloy Catalysts. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1707219	15.6	39
19	Silver nanoparticles boost charge-extraction efficiency in microbial fuel cells. <i>Science</i> , <b>2021</b> , 373, 1336-1340	3.5	38
18	Composition tunable ternary Pt-Ni-Co octahedra for optimized oxygen reduction activity. <i>Chemical Communications</i> , <b>2016</b> , 52, 11215-11218	5.8	33
17	Tungsten as Adhesive In Pt <sub>2</sub> CuW <sub>0.25</sub> Ternary Alloy for Highly Durable Oxygen Reduction Electrocatalysis. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1908230	15.6	32
16	Tailoring a Three-Phase Microenvironment for High-Performance Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cells. <i>Matter</i> , <b>2020</b> , 3, 1774-1790	12.7	30
15	Self-Assembled Molecular-Electronic Films Controlled by Room Temperature Quantum Interference. <i>CheM</i> , <b>2019</b> , 5, 474-484	16.2	28
14	Ultra-high Areal Capacity Realized in Three-Dimensional Holey Graphene/SnO Composite Anodes. <i>Science</i> , <b>2019</b> , 19, 728-736	6.1	25
13	Pt <sub>3</sub> Ag alloy wavy nanowires as highly effective electrocatalysts for ethanol oxidation reaction. <i>Nano Research</i> , <b>2020</b> , 13, 1472-1478	10	25
12	Highly Reliable Low-Voltage Memristive Switching and Artificial Synapse Enabled by van der Waals Integration. <i>Matter</i> , <b>2020</b> , 2, 965-976	12.7	22
11	On-Chip in Situ Monitoring of Competitive Interfacial Anionic Chemisorption as a Descriptor for Oxygen Reduction Kinetics. <i>ACS Central Science</i> , <b>2018</b> , 4, 590-599	16.8	19
10	Compressed Intermetallic PdCu for Enhanced Electrocatalysis. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 3672-3680	20.1	19
9	Molecular ligand modulation of palladium nanocatalysts for highly efficient and robust heterogeneous oxidation of cyclohexenone to phenol. <i>Science Advances</i> , <b>2017</b> , 3, e1600615	14.3	18
8	Redox Control of Charge Transport in Vertical Ferrocene Molecular Tunnel Junctions. <i>CheM</i> , <b>2020</b> , 6, 1172-1182	16.2	18

7	Synthesis of surface controlled nickel/palladium hydride nanodendrites with high performance in benzyl alcohol oxidation. <i>Nano Research</i> , <b>2019</b> , 12, 1467-1472	10	15
6	Highly Sensitive Chemical Detection with Tunable Sensitivity and Selectivity from Ultrathin Platinum Nanowires. <i>Small</i> , <b>2017</b> , 13, 1602969	11	14
5	Ultrasmall Cu <sub>7</sub> S <sub>4</sub> @MoS <sub>2</sub> Hetero-Nanoframes with Abundant Active Edge Sites for Ultrahigh-Performance Hydrogen Evolution. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 6612-6615	3.6	14
4	Optimized MoP with Pseudo-Single-Atom Tungsten for Efficient Hydrogen Electrocatalysis. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 3639-3649	9.6	4
3	1D PtCo nanowires as catalysts for PEMFCs with low Pt loading. <i>Science China Materials</i> , 1	7.1	0
2	3D Structure Determination of Pt-based Nanocatalysts at Atomic Resolution. <i>Microscopy and Microanalysis</i> , <b>2019</b> , 25, 398-399	0.5	
1	3D Imaging of Nanoalloy Catalysts at Atomic Resolution. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 2032-2033	0.3	