

# Maoyu Wang

## List of Publications by Year in descending order

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Version: 2024-02-01

59  
papers

9,889  
citations

76326

40  
h-index

138484

58  
g-index

59  
all docs

59  
docs citations

59  
times ranked

8879  
citing authors

#	ARTICLE	IF	CITATIONS
1	Revealing the Fast and Durable Na <sup>+</sup> Insertion Reactions in a Layered Na <sub>3</sub> Fe <sub>3</sub> (PO <sub>4</sub> ) <sub>4</sub> Anode for Aqueous Na-Ion Batteries. ACS Materials Au, 2022, 2, 63-71.	6.0	7
2	Atomically dispersed single Ni site catalysts for high-efficiency CO <sub>2</sub> electroreduction at industrial-level current densities. Energy and Environmental Science, 2022, 15, 2108-2119.	30.8	99
3	Surface oxygenation induced strong interaction between Pd catalyst and functional support for zinc-air batteries. Energy and Environmental Science, 2022, 15, 1573-1584.	30.8	49
4	Controlled Synthesis of Perforated Oxide Nanosheets with High Density Nanopores Showing Superior Water Purification Performance. ACS Applied Materials & Interfaces, 2022, 14, 18513-18524.	8.0	7
5	Atomically Dispersed Dual-Metal Site Catalysts for Enhanced CO <sub>2</sub> Reduction: Mechanistic Insight into Active Site Structures. Angewandte Chemie - International Edition, 2022, 61, .	13.8	83
6	Atomically Dispersed Dual-Metal Site Catalysts for Enhanced CO <sub>2</sub> Reduction: Mechanistic Insight into Active Site Structures. Angewandte Chemie, 2022, 134, .	2.0	6
7	Atomically dispersed iron sites with a nitrogen-carbon coating as highly active and durable oxygen reduction catalysts for fuel cells. Nature Energy, 2022, 7, 652-663.	39.5	258
8	Partial-Single-Atom, Partial-Nanoparticle Composites Enhance Water Dissociation for Hydrogen Evolution. Advanced Science, 2021, 8, 2001881.	11.2	85
9	Porous FeCo Glassy Alloy as Bifunctional Support for High-Performance Zn-Air Battery. Advanced Energy Materials, 2021, 11, 2002204.	19.5	55
10	Ultrahigh Oxygen Evolution Reaction Activity Achieved Using Ir Single Atoms on Amorphous CoO Nanosheets. ACS Catalysis, 2021, 11, 123-130.	11.2	138
11	Promoting Atomically Dispersed MnN <sub>4</sub> Sites via Sulfur Doping for Oxygen Reduction: Unveiling Intrinsic Activity and Degradation in Fuel Cells. ACS Nano, 2021, 15, 6886-6899.	14.6	119
12	Bioinspired Activation of N <sub>2</sub> on Asymmetrical Coordinated Fe Grafted 1T MoS <sub>2</sub> at Room Temperature. Chinese Journal of Chemistry, 2021, 39, 1898-1904.	4.9	7
13	Iron-Imprinted Single-Atomic Site Catalyst-Based Nanoprobe for Detection of Hydrogen Peroxide in Living Cells. Nano-Micro Letters, 2021, 13, 146.	27.0	30
14	Single Iridium Atom Doped Ni <sub>2</sub> P Catalyst for Optimal Oxygen Evolution. Journal of the American Chemical Society, 2021, 143, 13605-13615.	13.7	162
15	Binary Atomically Dispersed Metal-Site Catalysts with Core-Shell Nanostructures for O <sub>2</sub> and CO <sub>2</sub> Reduction Reactions. Small Science, 2021, 1, 2100046.	9.9	29
16	Pitfalls in X-ray absorption spectroscopy analysis and interpretation: A practical guide for general users. Current Opinion in Electrochemistry, 2021, 30, 100803.	4.8	34
17	Doping-modulated strain control of bifunctional electrocatalysis for rechargeable zinc-air batteries. Energy and Environmental Science, 2021, 14, 5035-5043.	30.8	39
18	Interfacial processes in electrochemical energy systems. Chemical Communications, 2021, 57, 10453-10468.	4.1	28

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19	Stable, high-performance, dendrite-free, seawater-based aqueous batteries. <i>Nature Communications</i> , 2021, 12, 237.	12.8	174
20	The Restructuring-Induced CoO Catalyst for Electrochemical Water Splitting. <i>Jacs Au</i> , 2021, 1, 2216-2223.	7.9	32
21	Improving Pd–N–C fuel cell electrocatalysts through fluorination-driven rearrangements of local coordination environment. <i>Nature Energy</i> , 2021, 6, 1144-1153.	39.5	108
22	Lattice site-dependent metal leaching in perovskites toward a honeycomb-like water oxidation catalyst. <i>Science Advances</i> , 2021, 7, eabr1788.	10.3	41
23	Stabilizing atomic Pt with trapped interstitial F in alloyed PtCo nanosheets for high-performance zinc-air batteries. <i>Energy and Environmental Science</i> , 2020, 13, 884-895.	30.8	99
24	Tailoring magnetic order via atomically stacking 3d/5d electrons to achieve high-performance spintronic devices. <i>Applied Physics Reviews</i> , 2020, 7, .	11.3	18
25	Single Cobalt Sites Dispersed in Hierarchically Porous Nanofiber Networks for Durable and High-Power PGM-Free Cathodes in Fuel Cells. <i>Advanced Materials</i> , 2020, 32, e2003577.	21.0	262
26	Molecular engineering of dispersed nickel phthalocyanines on carbon nanotubes for selective CO <sub>2</sub> reduction. <i>Nature Energy</i> , 2020, 5, 684-692.	39.5	365
27	Boosting alkaline hydrogen evolution: the dominating role of interior modification in surface electrocatalysis. <i>Energy and Environmental Science</i> , 2020, 13, 3110-3118.	30.8	87
28	Single-Iron Site Catalysts with Self-Assembled Dual-size Architecture and Hierarchical Porosity for Proton-Exchange Membrane Fuel Cells. <i>Applied Catalysis B: Environmental</i> , 2020, 279, 119400.	20.2	94
29	Chemical Vapor Deposition for Atomically Dispersed and Nitrogen Coordinated Single Metal Site Catalysts. <i>Angewandte Chemie</i> , 2020, 132, 21882-21889.	2.0	10
30	Chemical Vapor Deposition for Atomically Dispersed and Nitrogen Coordinated Single Metal Site Catalysts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21698-21705.	13.8	128
31	Ultrahigh-Loading of Ir Single Atoms on NiO Matrix to Dramatically Enhance Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2020, 142, 7425-7433.	13.7	430
32	Metal Organic Framework Derivative Improving Lithium Metal Anode Cycling. <i>Advanced Functional Materials</i> , 2020, 30, 1907579.	14.9	49
33	Oxygen Reduction Electrocatalysis on Ordered Intermetallic Pd–Bi Electrodes Is Enhanced by a Low Coverage of Spectator Species. <i>Journal of Physical Chemistry C</i> , 2020, 124, 5220-5224.	3.1	25
34	Atomically Dispersed Single Ni Site Catalysts for Nitrogen Reduction toward Electrochemical Ammonia Synthesis Using N <sub>2</sub> and H <sub>2</sub> O. <i>Small Methods</i> , 2020, 4, 1900821.	8.6	148
35	Significantly Improved Cyclability of Conversion-type Transition Metal Oxyfluoride Cathodes by Homologous Passivation Layer Reconstruction. <i>Advanced Energy Materials</i> , 2020, 10, 1903333.	19.5	33
36	Methanol tolerance of atomically dispersed single metal site catalysts: mechanistic understanding and high-performance direct methanol fuel cells. <i>Energy and Environmental Science</i> , 2020, 13, 3544-3555.	30.8	129

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37	Single-Atom Nanozymes Linked Immunosorbent Assay for Sensitive Detection of A $\beta$ 1-40: A Biomarker of Alzheimer's Disease. <i>Research</i> , 2020, 2020, 4724505.	5.7	52
38	NASICON-type $\text{Na}_3\text{Fe}_2(\text{PO}_4)_3$ as a low-cost and high-rate anode material for aqueous sodium-ion batteries. <i>Nano Energy</i> , 2019, 64, 103941.	16.0	83
39	3D porous graphitic nanocarbon for enhancing the performance and durability of Pt catalysts: a balance between graphitization and hierarchical porosity. <i>Energy and Environmental Science</i> , 2019, 12, 2830-2841.	30.8	219
40	The Velociprobe: An ultrafast hard X-ray nanoprobe for high-resolution ptychographic imaging. <i>Review of Scientific Instruments</i> , 2019, 90, 083701.	1.3	61
41	On the unusual amber coloration of nanoporous sol-gel processed Al-doped silica glass: An experimental study. <i>Scientific Reports</i> , 2019, 9, 12474.	3.3	0
42	Influence of Fe Substitution into $\text{LaCoO}_3$ Electrocatalysts on Oxygen-Reduction Activity. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 5682-5686.	8.0	54
43	$\text{Sr}_3\text{Cr}_3$ : A New Electride with a Partially Filled $d$ -Shell Transition Metal. <i>Journal of the American Chemical Society</i> , 2019, 141, 10595-10598.	13.7	43
44	The role of titanium-oxo clusters in the sulfate process for $\text{TiO}_2$ production. <i>Dalton Transactions</i> , 2019, 48, 11086-11093.	3.3	14
45	Structural defects on converted bismuth oxide nanotubes enable highly active electrocatalysis of carbon dioxide reduction. <i>Nature Communications</i> , 2019, 10, 2807.	12.8	456
46	Phthalocyanine Precursors To Construct Atomically Dispersed Iron Electrocatalysts. <i>ACS Catalysis</i> , 2019, 9, 6252-6261.	11.2	61
47	In Situ X-ray Absorption Spectroscopy Studies of Nanoscale Electrocatalysts. <i>Nano-Micro Letters</i> , 2019, 11, 47.	27.0	181
48	Boosting oxygen evolution of single-atomic ruthenium through electronic coupling with cobalt-iron layered double hydroxides. <i>Nature Communications</i> , 2019, 10, 1711.	12.8	446
49	S-Doped MoP Nanoporous Layer Toward High-Efficiency Hydrogen Evolution in pH-Universal Electrolyte. <i>ACS Catalysis</i> , 2019, 9, 651-659.	11.2	167
50	Unveiling Active Sites of $\text{CO}_2$ Reduction on Nitrogen-Coordinated and Atomically Dispersed Iron and Cobalt Catalysts. <i>ACS Catalysis</i> , 2018, 8, 3116-3122.	11.2	405
51	Active sites of copper-complex catalytic materials for electrochemical carbon dioxide reduction. <i>Nature Communications</i> , 2018, 9, 415.	12.8	527
52	Nitrogen-Coordinated Single Cobalt Atom Catalysts for Oxygen Reduction in Proton Exchange Membrane Fuel Cells. <i>Advanced Materials</i> , 2018, 30, 1706758.	21.0	788
53	Performance and Ongoing Development of the Velociprobe, a Fast Hard X-ray Nanoprobe for High-Resolution Ptychographic Imaging. <i>Microscopy and Microanalysis</i> , 2018, 24, 54-55.	0.4	13
54	$\text{Al}_2\text{O}_3$ coated $\text{LiCoO}_2$ as cathode for high-capacity and long-cycling Li-ion batteries. <i>Chinese Chemical Letters</i> , 2018, 29, 1768-1772.	9.0	27

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55	Atomically dispersed manganese catalysts for oxygen reduction in proton-exchange membrane fuel cells. <i>Nature Catalysis</i> , 2018, 1, 935-945.	34.4	1,075
56	Introducing Fe <sup>2+</sup> into Nickel-Iron Layered Double Hydroxide: Local Structure Modulated Water Oxidation Activity. <i>Angewandte Chemie</i> , 2018, 130, 9536-9540.	2.0	86
57	Introducing Fe <sup>2+</sup> into Nickel-Iron Layered Double Hydroxide: Local Structure Modulated Water Oxidation Activity. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9392-9396.	13.8	284
58	Single Atomic Iron Catalysts for Oxygen Reduction in Acidic Media: Particle Size Control and Thermal Activation. <i>Journal of the American Chemical Society</i> , 2017, 139, 14143-14149.	13.7	1,215
59	Electroreduction of CO <sub>2</sub> Catalyzed by a Heterogenized Zn-Porphyrin Complex with a Redox-Innocent Metal Center. <i>ACS Central Science</i> , 2017, 3, 847-852.	11.3	165