

Maoyu Wang

List of Publications by Year in descending order

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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	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
2	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
3	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
4	Active sites of copper-complex catalytic materials for electrochemical carbon dioxide reduction. <i>Nature Communications</i> , 2018, 9, 415.	12.8	527
5	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
6	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
7	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
8	Unveiling Active Sites of CO ₂ Reduction on Nitrogen-Coordinated and Atomically Dispersed Iron and Cobalt Catalysts. <i>ACS Catalysis</i> , 2018, 8, 3116-3122.	11.2	405
9	Molecular engineering of dispersed nickel phthalocyanines on carbon nanotubes for selective CO ₂ reduction. <i>Nature Energy</i> , 2020, 5, 684-692.	39.5	365
10	Introducing Fe ²⁺ 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
11	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
12	Atomically dispersed iron sites with a nitrogen-carbon coating as highly active and durable oxygen reduction catalysts for fuel cells. <i>Nature Energy</i> , 2022, 7, 652-663.	39.5	258
13	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
14	In Situ X-ray Absorption Spectroscopy Studies of Nanoscale Electrocatalysts. <i>Nano-Micro Letters</i> , 2019, 11, 47.	27.0	181
15	Stable, high-performance, dendrite-free, seawater-based aqueous batteries. <i>Nature Communications</i> , 2021, 12, 237.	12.8	174
16	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
17	Electroreduction of CO ₂ 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
18	Single Iridium Atom Doped Ni ₂ P Catalyst for Optimal Oxygen Evolution. <i>Journal of the American Chemical Society</i> , 2021, 143, 13605-13615.	13.7	162

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19	Atomically Dispersed Single Ni Site Catalysts for Nitrogen Reduction toward Electrochemical Ammonia Synthesis Using N_2 and H_2O . <i>Small Methods</i> , 2020, 4, 1900821.	8.6	148
20	Ultrahigh Oxygen Evolution Reaction Activity Achieved Using Ir Single Atoms on Amorphous CoO_x Nanosheets. <i>ACS Catalysis</i> , 2021, 11, 123-130.	11.2	138
21	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
22	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
23	Promoting Atomically Dispersed MnN_4 Sites via Sulfur Doping for Oxygen Reduction: Unveiling Intrinsic Activity and Degradation in Fuel Cells. <i>ACS Nano</i> , 2021, 15, 6886-6899.	14.6	119
24	Improving Pd-Ni-C fuel cell electrocatalysts through fluorination-driven rearrangements of local coordination environment. <i>Nature Energy</i> , 2021, 6, 1144-1153.	39.5	108
25	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
26	Atomically dispersed single Ni site catalysts for high-efficiency CO_2 electroreduction at industrial-level current densities. <i>Energy and Environmental Science</i> , 2022, 15, 2108-2119.	30.8	99
27	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
28	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
29	Introducing Fe^{2+} into Nickel-Iron Layered Double Hydroxide: Local Structure Modulated Water Oxidation Activity. <i>Angewandte Chemie</i> , 2018, 130, 9536-9540.	2.0	86
30	Partial Single-Atom, Partial Nanoparticle Composites Enhance Water Dissociation for Hydrogen Evolution. <i>Advanced Science</i> , 2021, 8, 2001881.	11.2	85
31	NASICON-type $Na_3Fe_2(PO_4)_3$ as a low-cost and high-rate anode material for aqueous sodium-ion batteries. <i>Nano Energy</i> , 2019, 64, 103941.	16.0	83
32	Atomically Dispersed Dual-Metal Site Catalysts for Enhanced CO_2 Reduction: Mechanistic Insight into Active Site Structures. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	83
33	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
34	Phthalocyanine Precursors To Construct Atomically Dispersed Iron Electrocatalysts. <i>ACS Catalysis</i> , 2019, 9, 6252-6261.	11.2	61
35	Porous FeCo Glassy Alloy as Bifunctional Support for High-Performance Zn-Air Battery. <i>Advanced Energy Materials</i> , 2021, 11, 2002204.	19.5	55
36	Influence of Fe Substitution into $LaCoO_3$ Electrocatalysts on Oxygen-Reduction Activity. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 5682-5686.	8.0	54

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37	Single-Atom Nanozymes Linked Immunosorbent Assay for Sensitive Detection of A β 1-40: A Biomarker of Alzheimer's Disease. <i>Research</i> , 2020, 2020, 4724505.	5.7	52
38	Metal Organic Framework Derivative Improving Lithium Metal Anode Cycling. <i>Advanced Functional Materials</i> , 2020, 30, 1907579.	14.9	49
39	Surface oxygenation induced strong interaction between Pd catalyst and functional support for zinc-air batteries. <i>Energy and Environmental Science</i> , 2022, 15, 1573-1584.	30.8	49
40	Sr_3CrN_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
41	Lattice site-dependent metal leaching in perovskites toward a honeycomb-like water oxidation catalyst. <i>Science Advances</i> , 2021, 7, eabk1788.	10.3	41
42	Doping-modulated strain control of bifunctional electrocatalysis for rechargeable zinc-air batteries. <i>Energy and Environmental Science</i> , 2021, 14, 5035-5043.	30.8	39
43	Pitfalls in X-ray absorption spectroscopy analysis and interpretation: A practical guide for general users. <i>Current Opinion in Electrochemistry</i> , 2021, 30, 100803.	4.8	34
44	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
45	The Restructuring-Induced CoO_x Catalyst for Electrochemical Water Splitting. <i>Jacs Au</i> , 2021, 1, 2216-2223.	7.9	32
46	Iron-Imprinted Single-Atomic Site Catalyst-Based Nanoprobe for Detection of Hydrogen Peroxide in Living Cells. <i>Nano-Micro Letters</i> , 2021, 13, 146.	27.0	30
47	Binary Atomically Dispersed Metal-Site Catalysts with Core-Shell Nanostructures for O_2 and CO_2 Reduction Reactions. <i>Small Science</i> , 2021, 1, 2100046.	9.9	29
48	Interfacial processes in electrochemical energy systems. <i>Chemical Communications</i> , 2021, 57, 10453-10468.	4.1	28
49	Al_2O_3 coated 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
50	Oxygen Reduction Electrocatalysis on Ordered Intermetallic Pd_3Bi Electrodes Is Enhanced by a Low Coverage of Spectator Species. <i>Journal of Physical Chemistry C</i> , 2020, 124, 5220-5224.	3.1	25
51	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
52	The role of titanium-oxo clusters in the sulfate process for TiO_2 production. <i>Dalton Transactions</i> , 2019, 48, 11086-11093.	3.3	14
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	Chemical Vapor Deposition for Atomically Dispersed and Nitrogen Coordinated Single Metal Site Catalysts. <i>Angewandte Chemie</i> , 2020, 132, 21882-21889.	2.0	10

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55	Bioinspired Activation of N_2 on Asymmetrical Coordinated Fe Grafted 1T MoS_2 at Room Temperature. Chinese Journal of Chemistry, 2021, 39, 1898-1904.	4.9	7
56	Revealing the Fast and Durable Na^+ Insertion Reactions in a Layered $Na_3Fe_3(PO_4)_4$ Anode for Aqueous Na-Ion Batteries. ACS Materials Au, 2022, 2, 63-71.	6.0	7
57	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
58	Atomically Dispersed Dual-Metal Site Catalysts for Enhanced CO_2 Reduction: Mechanistic Insight into Active Site Structures. Angewandte Chemie, 2022, 134, .	2.0	6
59	On the unusual amber coloration of nanoporous sol-gel processed Al-doped silica glass: An experimental study. Scientific Reports, 2019, 9, 12474.	3.3	0