Meiling Xiao

List of Publications by Year
in descending order

53 papers	5,599 citations	117625 34 h-index	168389 53 g-index
54 all docs	54 docs citations	54 times ranked	6653 citing authors

#	Article	IF	Citations
1	Meso/Macroporous Nitrogenâ€Doped Carbon Architectures with Iron Carbide Encapsulated in Graphitic Layers as an Efficient and Robust Catalyst for the Oxygen Reduction Reaction in Both Acidic and Alkaline Solutions. Advanced Materials, 2015, 27, 2521-2527.	21.0	521
2	Chemically activating MoS2 via spontaneous atomic palladium interfacial doping towards efficient hydrogen evolution. Nature Communications, 2018, 9, 2120.	12.8	461
3	Surface Oxidized Cobalt-Phosphide Nanorods As an Advanced Oxygen Evolution Catalyst in Alkaline Solution. ACS Catalysis, 2015, 5, 6874-6878.	11.2	441
4	Climbing the Apex of the ORR Volcano Plot via Binuclear Site Construction: Electronic and Geometric Engineering. Journal of the American Chemical Society, 2019, 141, 17763-17770.	13.7	436
5	Microporous Framework Induced Synthesis of Single-Atom Dispersed Fe-N-C Acidic ORR Catalyst and Its in Situ Reduced Fe-N₄ Active Site Identification Revealed by X-ray Absorption Spectroscopy. ACS Catalysis, 2018, 8, 2824-2832.	11.2	433
6	Identification of binuclear Co2N5 active sites for oxygen reduction reaction with more than one magnitude higher activity than single atom CoN4 site. Nano Energy, 2018, 46, 396-403.	16.0	319
7	A Singleâ€Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2019, 58, 9640-9645.	13.8	312
8	Engineering Energy Level of Metal Center: Ru Single-Atom Site for Efficient and Durable Oxygen Reduction Catalysis. Journal of the American Chemical Society, 2019, 141, 19800-19806.	13.7	288
9	Preferentially Engineering FeN₄ Edge Sites onto Graphitic Nanosheets for Highly Active and Durable Oxygen Electrocatalysis in Rechargeable Znâ€"Air Batteries. Advanced Materials, 2020, 32, e2004900.	21.0	235
10	Metalâ€"Organic Framework-Induced Synthesis of Ultrasmall Encased NiFe Nanoparticles Coupling with Graphene as an Efficient Oxygen Electrode for a Rechargeable Znâ€"Air Battery. ACS Catalysis, 2016, 6, 6335-6342.	11.2	210
11	Quasi-Covalently Coupled Niâ€"Cu Atomic Pair for Synergistic Electroreduction of CO₂. Journal of the American Chemical Society, 2022, 144, 9661-9671.	13.7	134
12	3d-Orbital Occupancy Regulated Ir-Co Atomic Pair Toward Superior Bifunctional Oxygen Electrocatalysis. ACS Catalysis, 2021, 11, 8837-8846.	11.2	110
13	Graphene Quantum Dotsâ€Based Advanced Electrode Materials: Design, Synthesis and Their Applications in Electrochemical Energy Storage and Electrocatalysis. Advanced Energy Materials, 2020, 10, 2001275.	19.5	109
14	Hierarchically Porous Multimetalâ€Based Carbon Nanorod Hybrid as an Efficient Oxygen Catalyst for Rechargeable Zincâ€"Air Batteries. Advanced Functional Materials, 2020, 30, 1908167.	14.9	105
15	Correlating Fe source with Fe-N-C active site construction: Guidance for rational design of high-performance ORR catalyst. Journal of Energy Chemistry, 2018, 27, 1668-1673.	12.9	104
16	Highly polarized carbon nano-architecture as robust metal-free catalyst for oxygen reduction in polymer electrolyte membrane fuel cells. Nano Energy, 2018, 49, 23-30.	16.0	90
17	Defectâ€Enriched Nitrogen Dopedâ€"Graphene Quantum Dots Engineered NiCo₂S₄ Nanoarray as Highâ€Efficiency Bifunctional Catalyst for Flexible Znâ€Air Battery. Small, 2019, 15, e1903610.	10.0	84
18	Selectively doping pyridinic and pyrrolic nitrogen into a 3D porous carbon matrix through template-induced edge engineering: enhanced catalytic activity towards the oxygen reduction reaction. Journal of Materials Chemistry A, 2017, 5, 21709-21714.	10.3	76

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19	A Triphasic Bifunctional Oxygen Electrocatalyst with Tunable and Synergetic Interfacial Structure for Rechargeable Znâ€Air Batteries. Advanced Energy Materials, 2020, 10, 1903003.	19.5	74
20	A "trimurti" heterostructured hybrid with an intimate CoO/Co_xP interface as a robust bifunctional air electrode for rechargeable Znâ€“air batteries. Journal of Materials Chemistry A, 2020, 8, 9177-9184.	10.3	72
21	Rapid synthesis of a PtRu nano-sponge with different surface compositions and performance evaluation for methanol electrooxidation. Nanoscale, 2015, 7, 9467-9471.	5.6	71
22	Significantly enhanced oxygen reduction reaction performance of N-doped carbon by heterogeneous sulfur incorporation: synergistic effect between the two dopants in metal-free catalysts. Journal of Materials Chemistry A, 2016, 4, 7422-7429.	10.3	71
23	Nanoporous IrO₂ catalyst with enhanced activity and durability for water oxidation owing to its micro/mesoporous structure. Nanoscale, 2017, 9, 9291-9298.	5.6	66
24	Growth mechanism and active site probing of Fe₃C@N-doped carbon nanotubes/C catalysts: guidance for building highly efficient oxygen reduction electrocatalysts. Journal of Materials Chemistry A, 2015, 3, 21451-21459.	10.3	65
25	Materials Engineering toward Durable Electrocatalysts for Proton Exchange Membrane Fuel Cells. Advanced Energy Materials, 2022, 12, .	19.5	61
26	A Singleâ€Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. Angewandte Chemie, 2019, 131, 9742-9747.	2.0	59
27	The construction of nitrogen-doped graphitized carbonâ€“TiO2 composite to improve the electrocatalyst for methanol oxidation. Carbon, 2014, 72, 114-124.	10.3	58
28	Enhanced Catalytic Performance of Compositionâ€Tunable PtCu Nanowire Networks for Methanol Electrooxidation. ChemCatChem, 2014, 6, 2825-2831.	3.7	54
29	Hydrogen etching induced hierarchical meso/micro-pore structure with increased active density to boost ORR performance of Fe-N-C catalyst. Journal of Energy Chemistry, 2019, 35, 17-23.	12.9	53
30	Recent developments of iridium-based catalysts for the oxygen evolution reaction in acidic water electrolysis. Journal of Materials Chemistry A, 2022, 10, 13170-13189.	10.3	47
31	Tensile-strained ruthenium phosphide by anion substitution for highly active and durable hydrogen evolution. Nano Energy, 2020, 77, 105212.	16.0	39
32	Nitrogen-doped carbonâ€“graphene composites enhance the electrocatalytic performance of the supported Pt catalysts for methanol oxidation. Chemical Communications, 2014, 50, 12201-12203.	4.1	37
33	Advanced Electrode Materials Comprising of Structureâ€Engineered Quantum Dots for Highâ€Performance Asymmetric Microâ€Supercapacitors. Advanced Energy Materials, 2020, 10, 1903724.	19.5	36
34	The enhanced electrocatalytic activity and stability of supported Pt nanopartciles for methanol electro-oxidation through the optimized oxidation degree of carbon nanotubes. Journal of Power Sources, 2015, 281, 34-43.	7.8	35
35	Low-temperature synthesis of nitrogen doped carbon nanotubes as promising catalyst support for methanol oxidation. Journal of Energy Chemistry, 2019, 28, 118-122.	12.9	28
36	Evidence for interfacial geometric interactions at metalâ€“support interfaces and their influence on the electroactivity and stability of Pt nanoparticles. Journal of Materials Chemistry A, 2020, 8, 1368-1377.	10.3	25

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37	Highly Active PtAu Nanowire Networks for Formic Acid Oxidation. ChemPlusChem, 2014, 79, 1123-1128.	2.8	24
38	Titanium dioxide encapsulated in nitrogen-doped carbon enhances the activity and durability of platinum catalyst for Methanol electro-oxidation reaction. Journal of Power Sources, 2015, 292, 78-86.	7.8	24
39	Active Pt₃Ni (111) Surface of Pt₃Ni Icosahedron for Oxygen Reduction. ACS Applied Materials & Interfaces, 2016, 8, 30066-30071.	8.0	21
40	Ptâ€“Pb hollow sphere networks: self-sacrifice-templating method and enhanced activity for formic acid electrooxidation. RSC Advances, 2013, 3, 1763.	3.6	15
41	Manipulating Auâ"CeO₂ Interfacial Structure Toward Ultrahigh Mass Activity and Selectivity for CO₂ Reduction. ChemSusChem, 2020, 13, 6621-6628.	6.8	15
42	Colloidal silica assisted fabrication of N,O,S-tridoped porous carbon nanosheets with excellent oxygen reduction performance. Chemical Communications, 2018, 54, 4017-4020.	4.1	14
43	Structural Advantage Induced by Sulfur to Boost the Catalytic Performance of FeNC Catalyst towards the Oxygen Reduction Reaction. ChemCatChem, 2018, 10, 3653-3658.	3.7	13
44	Nitrogen, Iron-codoped Mesoporous Carbon with bimodal-pores as an Efficient Catalyst for the Oxygen Reduction Reaction. Electrochimica Acta, 2016, 209, 551-556.	5.2	11
45	Advanced architecture carbon with in-situ embedded ultrafine titanium dioxide as outstanding support material for platinum catalysts towards methanol electrooxidation. Electrochimica Acta, 2017, 235, 508-518.	5.2	11
46	Highly Stable Low-Cost Electrochemical Gas Sensor with an Alcohol-Tolerant N,S-Codoped Non-Precious Metal Catalyst Air Cathode. ACS Sensors, 2021, 6, 752-763.	7.8	7
47	Promotion of Mesoporous Vanadium Carbide Incorporated on Resorcinolâ€“Formaldehyde Resin Carbon Composites with Highâ€Surfaceâ€Areas on Platinum Catalysts for Methanol Electrooxidation. ChemCatChem, 2014, 6, 3387-3395.	3.7	6
48	Oxygen-vacancy-rich TiO2 enables highly active and durable water electrolysis of urchin-like RuO2 catalyst. Science China Technological Sciences, 2022, 65, 2317-2324.	4.0	6
49	Interfacial Proton Transfer for Hydrogen Evolution at the Sub-Nanometric Platinum/Electrolyte Interface. ACS Applied Materials & Interfaces, 2021, 13, 47252-47261.	8.0	4
50	Preparation Strategy Using Pre-Nucleation Coupled with In Situ Reduction for a High-Performance Catalyst towards Selective Hydrogen Production from Formic Acid. Catalysts, 2022, 12, 325.	3.5	3
51	Polymer-chelation approach to high-performance Fe-Nx-C catalyst towards oxygen reduction reaction. Chinese Chemical Letters, 2023, 34, 107455.	9.0	3
52	RÃ¼cktitelbild: A Singleâ€Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction (Angew.) Tj ETQq0 0 0 rgBT /Overlock 10	2.0	1
53	Pd@Pt/C catalysts fabricated using chemisorbed CO as in situ reductant: advanced catalytic behaviour for formic acid oxidation. RSC Advances, 2014, 4, 57819-57822.	3.6	0