Jianglan Shui

List of Publications by Year in descending order

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73 papers	9,960 citations	66234 42 h-index	79541 73 g-index
74 all docs	74 docs citations	74 times ranked	9502 citing authors

#	Article	IF	Citations
1	Feâ€“Nâ€“C electrocatalyst with dense active sites and efficient mass transport for high-performance proton exchange membrane fuel cells. Nature Catalysis, 2019, 2, 259-268.	16.1	958
2	Carbonâ€Based Metalâ€Free ORR Electrocatalysts for Fuel Cells: Past, Present, and Future. Advanced Materials, 2019, 31, e1804799.	11.1	649
3	N-doped carbon nanomaterials are durable catalysts for oxygen reduction reaction in acidic fuel cells. Science Advances, 2015, 1, e1400129.	4.7	583
4	Unveiling the high-activity origin of single-atom iron catalysts for oxygen reduction reaction. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6626-6631.	3.3	500
5	Multifunctional Organicâ€“Inorganic Hybrid Aerogel for Selfâ€Cleaning, Heatâ€Insulating, and Highly Efficient Microwave Absorbing Material. Advanced Functional Materials, 2019, 29, 1807624.	7.8	458
6	Porous CNTs/Co Composite Derived from Zeolitic Imidazolate Framework: A Lightweight, Ultrathin, and Highly Efficient Electromagnetic Wave Absorber. ACS Applied Materials & Interfaces, 2016, 8, 34686-34698.	4.0	427
7	Singleâ€Atom to Singleâ€Atom Grafting of Pt₁ onto Feï¿¿N₄ Center: Pt₁@Feï¿¿Nï¿¿C Multifunctional Electrocatalyst with Significantly Enhanced Properties. Advanced Energy Materials, 2018, 8, 1701345.	10.2	371
8	Highly efficient nonprecious metal catalyst prepared with metalâ€“organic framework in a continuous carbon nanofibrous network. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10629-10634.	3.3	359
9	Sulfur-anchoring synthesis of platinum intermetallic nanoparticle catalysts for fuel cells. Science, 2021, 374, 459-464.	6.0	343
10	Nanocasting SiO2 into metalâ€“organic frameworks imparts dual protection to high-loading Fe single-atom electrocatalysts. Nature Communications, 2020, 11, 2831.	5.8	321
11	The Solidâ€Phase Synthesis of an Feâ€Nâ€C Electrocatalyst for Highâ€Power Protonâ€Exchange Membrane Fuel Cells. Angewandte Chemie - International Edition, 2018, 57, 1204-1208.	7.2	293
12	Nitrogenâ€Doped Holey Graphitic Carbon from 2D Covalent Organic Polymers for Oxygen Reduction. Advanced Materials, 2014, 26, 3315-3320.	11.1	292
13	Magnetically Aligned Coâ€“C/MWCNTs Composite Derived from MWCNT-Interconnected Zeolitic Imidazolate Frameworks for a Lightweight and Highly Efficient Electromagnetic Wave Absorber. ACS Applied Materials & Interfaces, 2017, 9, 30850-30861.	4.0	282
14	Vertically Aligned N-Doped Coral-like Carbon Fiber Arrays as Efficient Air Electrodes for High-Performance Nonaqueous Liâ€“O₂ Batteries. ACS Nano, 2014, 8, 3015-3022.	7.3	242
15	Sulfurâ€“Graphene Nanostructured Cathodes via Ball-Milling for High-Performance Lithiumâ€“Sulfur Batteries. ACS Nano, 2014, 8, 10920-10930.	7.3	213
16	Zigzag carbon as efficient and stable oxygen reduction electrocatalyst for proton exchange membrane fuel cells. Nature Communications, 2018, 9, 3819.	5.8	202
17	Rare Earth Single-Atom Catalysts for Nitrogen and Carbon Dioxide Reduction. ACS Nano, 2020, 14, 1093-1101.	7.3	198
18	Maximizing ion accessibility in MXene-knotted carbon nanotube composite electrodes for high-rate electrochemical energy storage. Nature Communications, 2020, 11, 6160.	5.8	183

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19	Preparation of Feâ€“Nâ€“C catalysts with FeN_x (x = 1, 3, 4) active sites and comparison of their activities for the oxygen reduction reaction and performances in proton exchange membrane fuel cells. Journal of Materials Chemistry A, 2019, 7, 26147-26153.	5.2	172
20	Phosphated IrMo bimetallic cluster for efficient hydrogen evolution reaction. EScience, 2022, 2, 304-310.	25.0	171
21	Alginate-templated synthesis of CoFe/carbon fiber composite and theÂeffect of hierarchically porous structure on electromagnetic waveÂabsorption performance. Carbon, 2019, 151, 36-45.	5.4	161
22	Iron atomâ€“cluster interactions increase activity and improve durability in Feâ€“Nâ€“C fuel cells. Nature Communications, 2022, 13, .	5.8	159
23	Hydrogen storage in incompletely etched multilayer Ti2CTx at room temperature. Nature Nanotechnology, 2021, 16, 331-336.	15.6	145
24	Nitrogen-Doped Holey Graphene for High-Performance Rechargeable Liâ€“O₂ Batteries. ACS Energy Letters, 2016, 1, 260-265.	8.8	116
25	Off/on switchable smart electromagnetic interference shielding aerogel. Matter, 2021, 4, 1735-1747.	5.0	114
26	Platinum Nanowires Produced by Electrospinning. Nano Letters, 2009, 9, 1307-1314.	4.5	112
27	Anisotropic magnetic liquid metal film for wearable wireless electromagnetic sensing and smart electromagnetic interference shielding. Nano Energy, 2022, 92, 106700.	8.2	108
28	Insights into the role of active site density in the fuel cell performance of Co-N-C catalysts. Applied Catalysis B: Environmental, 2019, 256, 117849.	10.8	104
29	Sequential Synthesis and Activeâ€Site Coordination Principle of Precious Metal Singleâ€Atom Catalysts for Oxygen Reduction Reaction and PEM Fuel Cells. Advanced Energy Materials, 2020, 10, 2000689.	10.2	92
30	Environmentally Tough and Stretchable MXene Organohydrogel with Exceptionally Enhanced Electromagnetic Interference Shielding Performances. Nano-Micro Letters, 2022, 14, 77.	14.4	91
31	Fe-N-C catalysts for PEMFC: Progress towards the commercial application under DOE reference. Journal of Energy Chemistry, 2019, 39, 77-87.	7.1	83
32	Hydrogen Passivation of Mâ€“Nâ€“C (M = Fe, Co) Catalysts for Storage Stability and ORR Activity Improvements. Advanced Materials, 2021, 33, e2103600.	11.1	81
33	Boosting electrocatalytic water splitting via metal-metalloid combined modulation in quaternary Ni-Fe-P-B amorphous compound. Nano Research, 2020, 13, 447-454.	5.8	77
34	Highly Accessible Atomically Dispersed Feâ€N_x Sites Electrocatalyst for Protonâ€Exchange Membrane Fuel Cell. Advanced Science, 2021, 8, 2002249.	5.6	67
35	Synthesis and Active Site Identification of Feâ^'Nâ^'C Singleâ€Atom Catalysts for the Oxygen Reduction Reaction. ChemElectroChem, 2019, 6, 304-315.	1.7	65
36	Ancient Chemistry â€œPharaohâ€™s Snakesâ€•for Efficient Fe-/N-Doped Carbon Electrocatalysts. ACS Applied Materials & Interfaces, 2018, 10, 10778-10785.	4.0	64

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37	Synergy between metallic components of MoNi alloy for catalyzing highly efficient hydrogen storage of MgH2. Nano Research, 2020, 13, 2063-2071.	5.8	64
38	0D-1D-2D multidimensionally assembled Co9S8/CNTs/MoS2 composites for ultralight and broadband electromagnetic wave absorption. Chemical Engineering Journal, 2021, 423, 130132.	6.6	64
39	Performance improvement of lithium-ion battery by pulse current. Journal of Energy Chemistry, 2020, 46, 208-214.	7.1	59
40	The Solidâ€Phase Synthesis of an Feâ€Nâ€C Electrocatalyst for Highâ€Power Protonâ€Exchange Membrane Fuel Cells. Angewandte Chemie, 2018, 130, 1218-1222.	1.6	57
41	Electrocatalytic performances of g-C3N4-LaNiO3 composite as bi-functional catalysts for lithium-oxygen batteries. Scientific Reports, 2016, 6, 24314.	1.6	56
42	Effect of Zn atom in Fe-N-C catalysts for electro-catalytic reactions: theoretical considerations. Nano Research, 2021, 14, 611-619.	5.8	52
43	Exploring Durable Single-Atom Catalysts for Proton Exchange Membrane Fuel Cells. ACS Energy Letters, 2022, 7, 1696-1705.	8.8	50
44	A layered double hydroxide-derived exchange spring magnet array grown on graphene and its application as an ultrathin electromagnetic wave absorbing material. Journal of Materials Chemistry C, 2019, 7, 12270-12277.	2.7	42
45	MOF-Derived Carbon Networks with Atomically Dispersed Feâ€“N_x Sites for Oxygen Reduction Reaction Catalysis in Acidic Media. , 2019, 1, 37-43.		40
46	Molecule template method for precise synthesis of Mo-based alloy clusters and electrocatalytic nitrogen reduction on partially reduced PtMo alloy oxide cluster. Nano Energy, 2020, 78, 105211.	8.2	38
47	Stability of PGM-free fuel cell catalysts: Degradation mechanisms and mitigation strategies. Progress in Natural Science: Materials International, 2020, 30, 721-731.	1.8	34
48	High-throughput screening of carbon-supported single metal atom catalysts for oxygen reduction reaction. Nano Research, 2022, 15, 1054-1060.	5.8	34
49	Iodine cation bridged graphene sheets with strengthened interface combination for electromagnetic wave absorption. Carbon, 2021, 183, 100-107.	5.4	34
50	High-capacity K-storage operational to â˜'40â€¯Â°C by using RGO as a model anode material. Nano Energy, 2020, 67, 104248.	8.2	33
51	Selfâ€Adaptive Electrode with SWCNT Bundles as Elastic Substrate for Highâ€Rate and Longâ€Cycleâ€Life Lithium/Sodium Ion Batteries. Small, 2018, 14, e1802913.	5.2	32
52	Temperature Impacts on Oxygen Reduction Reaction Measured by the Rotating Disk Electrode Technique. Journal of Physical Chemistry C, 2020, 124, 3069-3079.	1.5	32
53	Hollow double-shell structured Void@SiO2@Co-C composite for broadband electromagnetic wave absorption. Chemical Engineering Journal, 2021, 417, 128093.	6.6	31
54	Catalysis stability enhancement of Fe/Co dual-atom site via phosphorus coordination for proton exchange membrane fuel cell. Nano Research, 2022, 15, 3082-3089.	5.8	31

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55	Molybdenum-based materials for electrocatalytic nitrogen reduction reaction. Cell Reports Physical Science, 2021, 2, 100447.	2.8	30
56	Enhanced rate performance of LiNi0.5Mn1.5O4 fibers synthesized by electrospinning. Nano Energy, 2015, 15, 616-624.	8.2	27
57	Oneâ€Pot Synthesis of Functionalized Holey Graphene/Sulfur Composite for Lithiumâ€“Sulfur Batteries. Advanced Materials Interfaces, 2017, 4, 1700783.	1.9	27
58	Carbon black-supported FMâ€“Nâ€“C (FM = Fe, Co, and Ni) single-atom catalysts synthesized by the self-catalysis of oxygen-coordinated ferrous metal atoms. Journal of Materials Chemistry A, 2020, 8, 13166-13172.	5.2	27
59	Dealloyed PtCo hollow nanowires with ultrathin wall thicknesses and their catalytic durability for the oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 16175-16180.	5.2	26
60	Carbon Fibers Embedded with Aligned Magnetic Particles for Efficient Electromagnetic Energy Absorption and Conversion. ACS Applied Materials & Interfaces, 2021, 13, 5266-5274.	4.0	21
61	A rationally assembled graphene nanoribbon/graphene framework for high volumetric energy and power density Li-ion batteries. Nanoscale, 2018, 10, 7676-7684.	2.8	18
62	Hydrogen Passivation of Mâ€“Nâ€“C (M = Fe, Co) Catalysts for Storage Stability and ORR Activity Improvements (Adv. Mater. 38/2021). Advanced Materials, 2021, 33, 2170300.	11.1	17
63	Non-classical hydrogen storage mechanisms other than chemisorption and physisorption. Applied Physics Reviews, 2022, 9, .	5.5	16
64	Recent Advances in Phosphorusâ€Coordinated Transition Metal Singleâ€Atom Catalysts for Oxygen Reduction Reaction. ChemNanoMat, 2020, 6, 1601-1610.	1.5	14
65	Effect of Catalyst Layer Hydrophobicity on Feâˆ’Nâˆ’C Proton Exchange Membrane Fuel Cells. ChemElectroChem, 2020, 7, 1775-1780.	1.7	12
66	Nanoscale Pt₅Ni₃₆ design and synthesis for efficient oxygen reduction reaction in proton exchange membrane fuel cells. Journal of Materials Chemistry A, 2021, 9, 21051-21056.	5.2	12
67	Density Functional Theory Calculation of Zn and N Codoped Graphene for Oxygen Reduction and Evolution Reactions. Advanced Theory and Simulations, 2020, 3, 2000054.	1.3	11
68	Spatial porosity design of Feâ€“Nâ€“C catalysts for high power density PEM fuel cells and detection of water saturation of the catalyst layer by a microwave method. Journal of Materials Chemistry A, 2022, 10, 7764-7772.	5.2	11
69	Electrocatalytically Active Hollow Carbon Nanospheres Derived from PSâ€bâ€P4VP Micelles. Particle and Particle Systems Characterization, 2018, 35, 1700404.	1.2	9
70	Cathode Local Curvature Affects Lithium Peroxide Growth in Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2019, 11, 35264-35269.	4.0	9
71	Necklaceâ€Like Sn@C Fiber Selfâ€Supporting Electrode for Highâ€Performance Sodiumâ€Ion Battery. Energy Technology, 2022, 10, .	1.8	7
72	New Approaches to Non-PGM Catalysts through Rational Design. ECS Transactions, 2011, 30, 97-104.	0.3	6

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73	Oxygen Reduction: Nitrogenâ€Doped Holey Graphitic Carbon from 2D Covalent Organic Polymers for Oxygen Reduction (Adv. Mater. 20/2014). Advanced Materials, 2014, 26, 3356-3356.	11.1	6