Shangqian Zhu

List of Publications by Year
in descending order

53 papers	4,742 citations	159358 30 h-index	205818 48 g-index
54 all docs	54 docs citations	54 times ranked	4697 citing authors

#	ARTICLE	IF	CITATIONS
1	Advanced Electrocatalysts with Single-Metal-Atom Active Sites. Chemical Reviews, 2020, 120, 12217-12314.	23.0	563
2	A Spectroscopic Study on the Nitrogen Electrochemical Reduction Reaction on Gold and Platinum Surfaces. Journal of the American Chemical Society, 2018, 140, 1496-1501.	6.6	496
3	Direct Observation on Reaction Intermediates and the Role of Bicarbonate Anions in CO₂ Electrochemical Reduction Reaction on Cu Surfaces. Journal of the American Chemical Society, 2017, 139, 15664-15667.	6.6	468
4	Recent Advances in Electrocatalysts for Proton Exchange Membrane Fuel Cells and Alkaline Membrane Fuel Cells. Advanced Materials, 2021, 33, e2006292.	11.1	300
5	CO₂ Electrochemical Reduction As Probed through Infrared Spectroscopy. ACS Energy Letters, 2019, 4, 682-689.	8.8	250
6	Nitrogen-coordinated single iron atom catalysts derived from metal organic frameworks for oxygen reduction reaction. Nano Energy, 2019, 61, 60-68.	8.2	192
7	The role of ruthenium in improving the kinetics of hydrogen oxidation and evolution reactions of platinum. Nature Catalysis, 2021, 4, 711-718.	16.1	182
8	Active Sites on Heterogeneous Single-Iron-Atom Electrocatalysts in CO₂ Reduction Reaction. ACS Energy Letters, 2019, 4, 1778-1783.	8.8	158
9	Atomically dispersed Pt and Fe sites and Ptâ€"Fe nanoparticles for durable proton exchange membrane fuel cells. Nature Catalysis, 2022, 5, 503-512.	16.1	155
10	Ptâ€"Ni Octahedra as Electrocatalysts for the Ethanol Electro-Oxidation Reaction. ACS Catalysis, 2017, 7, 5134-5141.	5.5	148
11	A Spectroscopic Study of Electrochemical Nitrogen and Nitrate Reduction on Rhodium Surfaces. Angewandte Chemie - International Edition, 2020, 59, 10479-10483.	7.2	135
12	Tuning Structural and Compositional Effects in Pdâ€"Au Nanowires for Highly Selective and Active CO₂ Electrochemical Reduction Reaction. Advanced Energy Materials, 2018, 8, 1802238.	10.2	132
13	pH-Dependent Hydrogen and Water Binding Energies on Platinum Surfaces as Directly Probed through Surface-Enhanced Infrared Absorption Spectroscopy. Journal of the American Chemical Society, 2020, 142, 8748-8754.	6.6	130
14	Controlling the Surface Oxidation of Cu Nanowires Improves Their Catalytic Selectivity and Stability toward C₂₊ Products in CO₂ Reduction. Angewandte Chemie - International Edition, 2021, 60, 1909-1915.	7.2	122
15	The Role of Ru in Improving the Activity of Pd toward Hydrogen Evolution and Oxidation Reactions in Alkaline Solutions. ACS Catalysis, 2019, 9, 9614-9621.	5.5	112
16	A Spectroscopic Study of Electrochemical Nitrogen and Nitrate Reduction on Rhodium Surfaces. Angewandte Chemie, 2020, 132, 10565-10569.	1.6	104
17	Recent Advances in Catalyst Structure and Composition Engineering Strategies for Regulating CO₂ Electrochemical Reduction. Advanced Materials, 2021, 33, e2005484.	11.1	100
18	Highly Dispersive Cerium Atoms on Carbon Nanowires as Oxygen Reduction Reaction Electrocatalysts for Znâ€"Air Batteries. Nano Letters, 2021, 21, 4508-4515.	4.5	89

#	Article	IF	Citations
19	Preparation of Au@Pd Coreâ€“Shell Nanorods with <i>fcc</i>-2H-<i>fcc</i> Heterophase for Highly Efficient Electrocatalytic Alcohol Oxidation. Journal of the American Chemical Society, 2022, 144, 547-555.	6.6	88
20	Kinetically Controlled Synthesis of Pdâ€“Cu Janus Nanocrystals with Enriched Surface Structures and Enhanced Catalytic Activities toward CO₂ Reduction. Journal of the American Chemical Society, 2021, 143, 149-162.	6.6	77
21	Insight into the synergistic effect between nickel and tungsten carbide for catalyzing urea electrooxidation in alkaline electrolyte. Applied Catalysis B: Environmental, 2018, 232, 365-370.	10.8	68
22	Surface engineering in improving activity of Pt nanocubes for ammonia electrooxidation reaction. Applied Catalysis B: Environmental, 2020, 269, 118821.	10.8	58
23	Composition-dependent CO₂ electrochemical reduction activity and selectivity on Auâ€“Pd coreâ€“shell nanoparticles. Journal of Materials Chemistry A, 2019, 7, 16954-16961.	5.2	56
24	Palladiumâ€“Platinum Coreâ€“Shell Electrocatalysts for Oxygen Reduction Reaction Prepared with the Assistance of Citric Acid. ACS Catalysis, 2016, 6, 3428-3432.	5.5	52
25	Maximizing the Catalytic Performance of Pd@Au_xPd_{1âˆ’<i>x</i>} Nanocubes in H₂O₂ Production by Reducing Shell Thickness to Increase Compositional Stability. Angewandte Chemie - International Edition, 2021, 60, 19643-19647.	7.2	44
26	Solution-Phase Synthesis of PdH_{0.706} Nanocubes with Enhanced Stability and Activity toward Formic Acid Oxidation. Journal of the American Chemical Society, 2022, 144, 2556-2568.	6.6	42
27	Chromium Oxynitride Electrocatalysts for Electrochemical Synthesis of Ammonia Under Ambient Conditions. Small Methods, 2019, 3, 1800324.	4.6	41
28	Organic frameworks confined Cu single atoms and nanoclusters for tandem electrocatalytic CO₂ reduction to methane. SmartMat, 2022, 3, 183-193.	6.4	35
29	Surface structure and composition effects on electrochemical reduction of carbon dioxide. Journal of Solid State Electrochemistry, 2016, 20, 861-873.	1.2	34
30	Solid-State Synthesis of Highly Dispersed Nitrogen-Coordinated Single Iron Atom Electrocatalysts for Proton Exchange Membrane Fuel Cells. Nano Letters, 2021, 21, 3633-3639.	4.5	32
31	Palladium modified gold nanoparticles as electrocatalysts for ethanol electrooxidation. Journal of Power Sources, 2016, 321, 264-269.	4.0	31
32	Impact of Heat Treatment on the Electrochemical Properties of Carbon-Supported Octahedral Ptâ€“Ni Nanoparticles. ACS Catalysis, 2019, 9, 11189-11198.	5.5	31
33	Co Nanoparticles Encapsulated in Porous N-Doped Carbon Nanofibers as an Efficient Electrocatalyst for Hydrogen Evolution Reaction. Journal of the Electrochemical Society, 2018, 165, J3271-J3275.	1.3	26
34	Impacts of Perchloric Acid, Nafion, and Alkali Metal Ions on Oxygen Reduction Reaction Kinetics in Acidic and Alkaline Solutions. Journal of Physical Chemistry C, 2016, 120, 27452-27461.	1.5	25
35	Tungsten Carbide and Cobalt Modified Nickel Nanoparticles Supported on Multiwall Carbon Nanotubes as Highly Efficient Electrocatalysts for Urea Oxidation in Alkaline Electrolyte. ACS Applied Materials & Interfaces, 2018, 10, 41338-41343.	4.0	25
36	Impacts of anions on the oxygen reduction reaction kinetics on platinum and palladium surfaces in alkaline solutions. Physical Chemistry Chemical Physics, 2017, 19, 7631-7641.	1.3	23

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37	Defect Engineering of Molybdenum-Based Materials for Electrocatalysis. Catalysts, 2020, 10, 1301.	1.6	21
38	The Role of Citric Acid in Perfecting Platinum Monolayer on Palladium Nanoparticles during the Surface Limited Redox Replacement Reaction. Journal of the Electrochemical Society, 2016, 163, D3040-D3046.	1.3	16
39	Metal organic framework-ionic liquid hybrid catalysts for the selective electrochemical reduction of CO2 to CH4. Chinese Journal of Catalysis, 2022, 43, 1687-1696.	6.9	14
40	Controlling the Surface Oxidation of Cu Nanowires Improves Their Catalytic Selectivity and Stability toward C 2+ Products in CO 2 Reduction. Angewandte Chemie, 2021, 133, 1937-1943.	1.6	13
41	Pt-Ni nanourchins as electrocatalysts for oxygen reduction reaction. Frontiers in Energy, 2017, 11, 254-259.	1.2	11
42	Maximizing the Catalytic Performance of Pd@Au_xPd_{1âˆ’<i>x</i>} Nanocubes in H₂O₂ Production by Reducing Shell Thickness to Increase Compositional Stability. Angewandte Chemie, 2021, 133, 19795-19799.	1.6	11
43	Electrolyte pH-dependent hydrogen binding energies and coverages on platinum, iridium, rhodium, and ruthenium surfaces. Catalysis Science and Technology, 2022, 12, 3228-3233.	2.1	10
44	Full atomistic mechanism study of hydrogen evolution reaction on Pt surfaces at universal pHs: Ab initio simulations at electrochemical interfaces. Electrochimica Acta, 2022, 425, 140709.	2.6	9
45	Cu3PdxN nanocrystals for efficient CO2 electrochemical reduction to methane. Electrochimica Acta, 2021, 371, 137793.	2.6	6
46	Interatomic diffusion in Pd-Pt core-shell nanoparticles. Chinese Journal of Catalysis, 2020, 41, 807-812.	6.9	4
47	Synthesis and Evaluation of Core-Shell Electrocatalysts for Oxygen Reduction Reaction. ECS Transactions, 2016, 75, 731-740.	0.3	1
48	(Invited) Impacts of Ions on Oxygen Reduction Reaction Kinetics on Platinum and Palladium Surfaces. ECS Transactions, 2018, 85, 15-24.	0.3	1
49	Au Nanoparticles Modified with Pt, Ru and SnO₂ as Electrocatalysts for Ethanol Oxidation Reaction in Acids. Chemistry - an Asian Journal, 2020, 15, 2174-2180.	1.7	1
50	Twisty Pd-Au Nanowires for Highly Selective and Active CO2 electrochemical Reduction. ECS Meeting Abstracts, 2018, , .	0.0	0
51	Chromium Oxynitride Electrocatalysts for Electrochemical Synthesis of Ammonia Under Ambient Conditions. ECS Meeting Abstracts, 2018, , .	0.0	0
52	(Invited) Composition Dependent Performance of Au-Pd Core-Shell Nanocatalysts for CO2 Electrochemical Reduction. ECS Meeting Abstracts, 2019, , .	0.0	0
53	Attenuated total reflection infrared spectroscopy in nano-electrocatalysis. , 2021, , .		0