Zhiqing Zou

List of Publications by Year
in descending order

74	3,769	34	60
papers	citations	h-index	g-index
		117619	128286

75	75	75	5028
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Single Cobalt Atom and N Codoped Carbon Nanofibers as Highly Durable Electrocatalyst for Oxygen Reduction Reaction. ACS Catalysis, 2017, 7, 6864-6871.	11.2	256
2	Co nanoparticle embedded in atomically-dispersed Co-N-C nanofibers for oxygen reduction with high activity and remarkable durability. Nano Energy, 2018, 52, 485-493.	16.0	188
3	Carbon-supported Pd-Co bimetallic nanoparticles as electrocatalysts for the oxygen reduction reaction. Journal of Power Sources, 2007, 167, 243-249.	7.8	184
4	Carbon-Defect-Driven Electroless Deposition of Pt Atomic Clusters for Highly Efficient Hydrogen Evolution. Journal of the American Chemical Society, 2020, 142, 5594-5601.	13.7	175
5	An efficient reduction route for the production of Pdâ€“Pt nanoparticles anchored on graphene nanosheets for use as durable oxygen reduction electrocatalysts. Carbon, 2012, 50, 265-274.	10.3	169
6	Conversion of PtNi alloy from disordered to ordered for enhanced activity and durability in methanol-tolerant oxygen reduction reactions. Nano Research, 2015, 8, 2777-2788.	10.4	124
7	Covalent Triazine Framework Confined Copper Catalysts for Selective Electrochemical CO₂ Reduction: Operando Diagnosis of Active Sites. ACS Catalysis, 2020, 10, 4534-4542.	11.2	112
8	BiVO4 nanocrystals with controllable oxygen vacancies induced by Zn-doping coupled with graphene quantum dots for enhanced photoelectrochemical water splitting. Chemical Engineering Journal, 2019, 372, 399-407.	12.7	102
9	Low temperature preparation of carbon-supported PdCo alloy electrocatalysts for methanol-tolerant oxygen reduction reaction. Electrochimica Acta, 2008, 53, 6662-6667.	5.2	100
10	One-step synthesis of carbon-supported Pdâ€“Pt alloy electrocatalysts for methanol tolerant oxygen reduction. Electrochemistry Communications, 2008, 10, 1396-1399.	4.7	99
11	Fe2N nanoparticles boosting FeNx moieties for highly efficient oxygen reduction reaction in Fe-N-C porous catalyst. Nano Research, 2019, 12, 1651-1657.	10.4	95
12	Simple preparation of Pdâ€“Pt nanoalloy catalysts for methanol-tolerant oxygen reduction. Journal of Power Sources, 2010, 195, 1046-1050.	7.8	92
13	A facile preparation of carbon-supported Pd nanoparticles for electrocatalytic oxidation of formic acid. Electrochemistry Communications, 2008, 10, 802-805.	4.7	86
14	Enhanced Durability of Au Cluster Decorated Pt Nanoparticles for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2010, 114, 6860-6868.	3.1	85
15	Encapsulation of Iron Nitride by Feâ€“Nâ€“C Shell Enabling Highly Efficient Electroreduction of CO₂ to CO. ACS Energy Letters, 2018, 3, 1205-1211.	17.4	84
16	High-loaded sub-6 nm Pt1Co1 intermetallic compounds with highly efficient performance expression in PEMFCs. Energy and Environmental Science, 2022, 15, 278-286.	30.8	81
17	Synthesis and Evaluation of Superparamagnetic Silica Particles for Extraction of Glycopeptides in the Microtiter Plate Format. Analytical Chemistry, 2008, 80, 1228-1234.	6.5	80
18	Boosting Charge Separation and Transfer by Plasmon-Enhanced MoS₂/BiVO₄ pâ€“n Heterojunction Composite for Efficient Photoelectrochemical Water Splitting. ACS Sustainable Chemistry and Engineering, 2018, 6, 6378-6387.	6.7	77

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19	Cobalt/zinc dual-sites coordinated with nitrogen in nanofibers enabling efficient and durable oxygen reduction reaction in acidic fuel cells. Journal of Materials Chemistry A, 2020, 8, 3686-3691.	10.3	76
20	Origin of performance degradation of palladium-based direct formic acid fuel cells. Applied Catalysis B: Environmental, 2011, 104, 49-53.	20.2	67
21	Methanol oxidation on carbon-supported Ptâ€“Ruâ€“Ni ternary nanoparticle electrocatalysts. Journal of Power Sources, 2008, 175, 159-165.	7.8	61
22	Double microporous layer cathode for membrane electrode assembly of passive direct methanol fuel cells. International Journal of Hydrogen Energy, 2010, 35, 4622-4629.	7.1	57
23	Controllable Modification of the Electronic Structure of Carbon-Supported Coreâ€“Shell Cu@Pd Catalysts for Formic Acid Oxidation. Journal of Physical Chemistry C, 2014, 118, 12669-12675.	3.1	57
24	Multidimensional nanostructured membrane electrode assemblies for proton exchange membrane fuel cell applications. Journal of Materials Chemistry A, 2019, 7, 9447-9477.	10.3	56
25	New anodic diffusive layer for passive micro-direct methanol fuel cell. Journal of Power Sources, 2009, 192, 423-428.	7.8	54
26	Fe and N Co-Doped Porous Carbon Nanospheres with High Density of Active Sites for Efficient CO₂ Electroreduction. Journal of Physical Chemistry C, 2019, 123, 16651-16659.	3.1	54
27	Highly stable ionic-covalent cross-linked sulfonated poly(ether ether ketone) for direct methanol fuel cells. Journal of Power Sources, 2017, 350, 41-48.	7.8	51
28	Polyvinyl alcohol-modified gold nanoparticles with record-high activity for electrochemical reduction of CO2 to CO. Journal of CO2 Utilization, 2019, 34, 108-114.	6.8	46
29	One-step Synthesis of Pt Nanoparticles Highly Loaded on Graphene Aerogel as Durable Oxygen Reduction Electrocatalyst. Electrochimica Acta, 2015, 152, 140-145.	5.2	44
30	Planar air-breathing micro-direct methanol fuel cell stacks based on micro-electronicâ€“mechanical-system technology. Journal of Power Sources, 2008, 185, 433-438.	7.8	41
31	Lattice contracted Pd-hollow nanocrystals: Synthesis, structure and electrocatalysis for formic acid oxidation. Journal of Power Sources, 2014, 246, 32-38.	7.8	41
32	Surface and structure characteristics of carbon-supported Pd3Pt1 bimetallic nanoparticles for methanol-tolerant oxygen reduction reaction. Journal of Catalysis, 2009, 266, 156-163.	6.2	39
33	Palladium nanoparticles â€œbreatheâ€•hydrogen; a surgical view with X-ray diffraction. International Journal of Hydrogen Energy, 2010, 35, 8609-8620.	7.1	39
34	Facile Steam-Etching Approach to Increase the Active Site Density of an Ordered Porous Feâ€“Nâ€“C Catalyst to Boost Oxygen Reduction Reaction. ACS Catalysis, 2022, 12, 4517-4525.	11.2	37
35	Electronspun nanofiber network anode for a passive direct methanol fuel cell. Journal of Power Sources, 2014, 255, 70-75.	7.8	35
36	Cross-linked sulfonated poly(ether ether ketone) electrolytes bearing pendent imidazole groups for high temperature proton exchange membrane fuel cells. Sustainable Energy and Fuels, 2019, 3, 2426-2434.	4.9	34

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37	Covalent Triazine-Based Polymers with Controllable Band Alignment Matched with BiVO₄ To Boost Photogeneration of Holes for Water Splitting. Chemistry of Materials, 2019, 31, 8062-8068.	6.7	33
38	Construction of porous anode by sacrificial template for a passive direct methanol fuel cell. Journal of Power Sources, 2014, 262, 213-218.	7.8	30
39	Highly alloyed PtRu black electrocatalysts for methanol oxidation prepared using magnesia nanoparticles as sacrificial templates. Journal of Power Sources, 2014, 248, 356-362.	7.8	30
40	Plasmonic Pd Nanoparticle- and Plasmonic Pd Nanorod-Decorated BiVO4 Electrodes with Enhanced Photoelectrochemical Water Splitting Efficiency Across Visible-NIR Region. Nanoscale Research Letters, 2016, 11, 283.	5.7	30
41	Oxygen reduction on Pd3Pt1 bimetallic nanoparticles highly loaded on different carbon supports. Applied Catalysis B: Environmental, 2010, 97, 347-353.	20.2	29
42	Cathode Catalyst Layer with Stepwise Hydrophobicity Distribution for a Passive Direct Methanol Fuel Cell. Energy & Fuels, 2012, 26, 1178-1184.	5.1	29
43	Polypyrrole nanowire networks as anodic micro-porous layer for passive direct methanol fuel cells. Electrochimica Acta, 2014, 141, 1-5.	5.2	29
44	Lattice Contracted Ordered Intermetallic Core-Shell PtCo@Pt Nanoparticles: Synthesis, Structure and Origin for Enhanced Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2017, 164, H331-H337.	2.9	27
45	3D carbon aerogel-supported PtNi intermetallic nanoparticles with high metal loading as a durable oxygen reduction electrocatalyst. International Journal of Hydrogen Energy, 2017, 42, 26695-26703.	7.1	26
46	Effect of Nafion aggregation in the anode catalytic layer on the performance of a direct formic acid fuel cell. Journal of Power Sources, 2010, 195, 2649-2652.	7.8	24
47	High performance platinum nanorod assemblies based double-layered cathode for passive direct methanol fuel cells. Journal of Power Sources, 2015, 276, 95-101.	7.8	24
48	An ordered structured cathode based on vertically aligned Pt nanotubes for ultra-low Pt loading passive direct methanol fuel cells. Electrochimica Acta, 2017, 252, 541-548.	5.2	24
49	Performance improvement of passive direct methanol fuel cells with surface-patterned NafionÂ® membranes. Applied Surface Science, 2015, 327, 205-212.	6.1	22
50	Regulation of oxygen vacancy within oxide pyrochlores by F-doping to boost oxygen-evolution activity. Journal of Power Sources, 2021, 502, 229903.	7.8	22
51	Simple Complexingâ€"Reduction Synthesis of Pdâ€"Pt/C Alloy Electrocatalysts for the Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2009, 156, B1107.	2.9	19
52	Enhanced catalytic hydrogen release of LiBH4 by carbon-supported Pt nanoparticles. Journal of Alloys and Compounds, 2010, 490, 88-92.	5.5	19
53	Novel palladium flower-like nanostructured networks for electrocatalytic oxidation of formic acid. Journal of Power Sources, 2014, 267, 527-532.	7.8	19
54	Shape-controlled porous heterogeneous PtRu/C/Nafion microspheres enabling high performance direct methanol fuel cells. Journal of Materials Chemistry A, 2015, 3, 15177-15183.	10.3	19

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55	Composition- and shape-controlled synthesis of the PtNi alloy nanotubes with enhanced activity and durability toward oxygen reduction reaction. Journal of Power Sources, 2019, 429, 1-8.	7.8	19
56	CO induced phase-segregation to construct robust and efficient IrRux@Ir core-shell electrocatalyst towards acidic oxygen evolution. Journal of Power Sources, 2022, 528, 231189.	7.8	19
57	An Atomically Dispersed Pt Catalyst Anchored on an Fe/N/C Support for Enhanced Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2020, 124, 11760-11766.	3.1	18
58	Switching the Oxygen Reduction Reaction Pathway via Tailoring the Electronic Structure of FeN₄/C Catalysts. ACS Catalysis, 2021, 11, 13020-13027.	11.2	17
59	Fabrication of nano-network structure anode by zinc oxide nanorods template for passive direct methanol fuel cells. International Journal of Hydrogen Energy, 2015, 40, 6647-6654.	7.1	16
60	Enhanced performance of a passive direct methanol fuel cell with decreased Nafion aggregate size within the anode catalytic layer. International Journal of Hydrogen Energy, 2011, 36, 10000-10005.	7.1	14
61	Boosting electrocatalytic activities of plasmonic metallic nanostructures by tuning the kinetic pre-exponential factor. Journal of Catalysis, 2017, 354, 160-168.	6.2	14
62	High performance MWCNTâ€“Pt nanocomposite-based cathode for passive direct methanol fuel cells. RSC Advances, 2017, 7, 12329-12335.	3.6	12
63	Electrochemical Reduction of CO₂ to HCOOH over Copper Catalysts. ACS Applied Materials & Interfaces, 2021, 13, 57462-57469.	8.0	12
64	Fluorination of Vulcan XC-72R for cathodic microporous layer of passive micro direct methanol fuel cell. Journal of Applied Electrochemistry, 2010, 40, 2117-2124.	2.9	11
65	Improved electrocatalytic performance of Pd nanoparticles with size-controlled Nafion aggregates for formic acid oxidation. Electrochimica Acta, 2010, 55, 5274-5280.	5.2	11
66	Controllable fabrication of ordered Pt nanorod array as catalytic electrode for passive direct methanol fuel cells. Chinese Journal of Catalysis, 2016, 37, 1089-1095.	14.0	11
67	Photo-electro synergistic catalysis: Can Pd be active for methanol electrooxidation in acidic medium?. Electrochimica Acta, 2018, 278, 210-218.	5.2	11
68	A Study of the Effect of Heat-Treatment on the Morphology of Nafion Ionomer Dispersion for Use in the Passive Direct Methanol Fuel Cell (DMFC). Membranes, 2012, 2, 841-854.	3.0	10
69	Rapid, simple and low cost fabrication of a microfluidic direct methanol fuel cell based on polydimethylsiloxane. Microsystem Technologies, 2014, 20, 493-498.	2.0	9
70	Binary Nitrogen Precursor-Derived Porous Fe-N-S/C Catalyst for Efficient Oxygen Reduction Reaction in a Zn-Air Battery. Catalysts, 2018, 8, 158.	3.5	9
71	Interconnected nanoparticle-stacked platinum-based nanosheets as active cathode electrocatalysts for passive direct methanol fuel cells. Journal of Electroanalytical Chemistry, 2018, 828, 50-58.	3.8	8
72	A silicon-based micro direct methanol fuel cell stack with a serial flow path design. International Journal of Energy Research, 2013, 37, 370-376.	4.5	5

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73	Fe and N co-doped carbon with High doping content of sulfur and nitrogen for efficient CO2 electro-reduction. Journal of CO2 Utilization, 2020, 42, 101316.	6.8	5
74	A sensor of liquid methanol for direct methanol fuel cells. Analytica Chimica Acta, 2021, 1177, 338785.	5.4	5