Jianhuang Zeng

List of Publications by Year
in descending order

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65 papers	2,521 citations	236925 25 h-index	197818 49 g-index
65 all docs	65 docs citations	65 times ranked	3606 citing authors

#	Article	IF	Citations
1	Preparation of Carbon-Supported Coreâ˘'Shell Auâ˘'Pt Nanoparticles for Methanol Oxidation Reaction:Â The Promotional Effect of the Au Core. Journal of Physical Chemistry B, 2006, 110, 24606-24611.	2.6	267
2	A high-performance supercapacitor electrode based on N-doped porous graphene. Journal of Power Sources, 2018, 387, 43-48.	7.8	231
3	Limitations and Improvement Strategies for Early-Transition-Metal Nitrides as Competitive Catalysts toward the Oxygen Reduction Reaction. ACS Catalysis, 2016, 6, 6165-6174.	11.2	130
4	Effects of preparation conditions on performance of carbon-supported nanosize Pt-Co catalysts for methanol electro-oxidation under acidic conditions. Journal of Power Sources, 2005, 140, 268-273.	7.8	122
5	Binary transition metal nitrides with enhanced activity and durability for the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 16801-16809.	10.3	115
6	Two-Dimensional Bimetallic Zn/Fe-Metal-Organic Framework (MOF)-Derived Porous Carbon Nanosheets with a High Density of Single/Paired Fe Atoms as High-Performance Oxygen Reduction Catalysts. ACS Applied Materials & Interfaces, 2020, 12, 13878-13887.	8.0	100
7	A high-performance composite ORR catalyst based on the synergy between binary transition metal nitride and nitrogen-doped reduced graphene oxide. Journal of Materials Chemistry A, 2017, 5, 5829-5837.	10.3	93
8	Template synthesis of microporous carbon for direct methanol fuel cell application. Carbon, 2005, 43, 2366-2373.	10.3	87
9	High-Performance Coreâ€"Shell Catalyst with Nitride Nanoparticles as a Core: Well-Defined Titanium Copper Nitride Coated with an Atomic Pt Layer for the Oxygen Reduction Reaction. ACS Catalysis, 2017, 7, 3810-3817.	11.2	84
10	Ruthenium-free, carbon-supported cobalt and tungsten containing binary & ternary Pt catalysts for the anodes of direct methanol fuel cells. International Journal of Hydrogen Energy, 2007, 32, 4389-4396.	7.1	72
11	Effects of Pt/C, Pd/C and PdPt/C anode catalysts on the performance and stability of air breathing direct formic acid fuel cells. International Journal of Hydrogen Energy, 2011, 36, 8518-8524.	7.1	67
12	High-Performance, Ultralow Platinum Membrane Electrode Assembly Fabricated by In Situ Deposition of a Pt Shell Layer on Carbon-Supported Pd Nanoparticles in the Catalyst Layer Using a Facile Pulse Electrodeposition Approach. ACS Catalysis, 2015, 5, 4318-4324.	11.2	64
13	Conversion of polystyrene foam to a high-performance doped carbon catalyst with ultrahigh surface area and hierarchical porous structures for oxygen reduction. Journal of Materials Chemistry A, 2014, 2, 12240-12246.	10.3	52
14	A Co-doped porous niobium nitride nanogrid as an effective oxygen reduction catalyst. Journal of Materials Chemistry A, 2017, 5, 14278-14285.	10.3	51
15	In situ construction of Ir@Pt/C nanoparticles in the cathode layer of membrane electrode assemblies with ultra-low Pt loading and high Pt exposure. Journal of Power Sources, 2017, 355, 83-89.	7.8	45
16	Heteroatom Doped Carbon Nanofibers Synthesized by Chemical Vapor Deposition as Platinum Electrocatalyst Supports for Polymer Electrolyte Membrane Fuel Cells. Electrochimica Acta, 2015, 182, 351-360.	5.2	42
17	Design, fabrication and performance evaluation of a miniature air breathing direct formic acid fuel cell based on printed circuit board technology. Journal of Power Sources, 2010, 195, 7332-7337.	7.8	41
18	Preparation and characterization of coreâ€"shell structured catalysts using PtxPdy as active shell and nano-sized Ru as core for potential direct formic acid fuel cell application. Electrochimica Acta, 2011, 56, 2024-2030.	5.2	41

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19	A coreâ€“shell Pd₁Ru₁Ni₂@Pt/C catalyst with a ternary alloy core and Pt monolayer: enhanced activity and stability towards the oxygen reduction reaction by the addition of Ni. Journal of Materials Chemistry A, 2016, 4, 847-855.	10.3	40
20	A mesoporous hollow silica sphere (MHSS): Synthesis through a facile emulsion approach and application of support for high performance Pd/MHSS catalyst for phenol hydrogenation. Applied Surface Science, 2011, 257, 4472-4477.	6.1	39
21	A simple eco-friendly solution phase reduction method for the synthesis of polyhedra platinum nanoparticles with high catalytic activity for methanol electrooxidation. Journal of Materials Chemistry, 2012, 22, 3170.	6.7	37
22	Hybrid PdAg alloy-Au nanorods: Controlled growth, optical properties and electrochemical catalysis. Nano Research, 2013, 6, 571-580.	10.4	37
23	Cu@Pt catalysts prepared by galvanic replacement of polyhedral copper nanoparticles for polymer electrolyte membrane fuel cells. Electrochimica Acta, 2019, 306, 167-174.	5.2	30
24	Enhancing membrane electrode assembly performance by improving the porous structure and hydrophobicity of the cathode catalyst layer. Journal of Power Sources, 2019, 443, 227284.	7.8	29
25	De-alloyed PtCu/C catalysts with enhanced electrocatalytic performance for the oxygen reduction reaction. Nanoscale, 2021, 13, 13896-13904.	5.6	27
26	A more active Pt/carbon DMFC catalyst by simple reversal of the mixing sequence in preparation. Journal of Power Sources, 2006, 159, 509-513.	7.8	26
27	Preparation and characterizations of platinum electrocatalysts supported on thermally treated CeO2â€“C composite support for polymer electrolyte membrane fuel cells. Electrochimica Acta, 2014, 139, 308-314.	5.2	25
28	Platinum decorated Ru/C: Effects of decorated platinum on catalyst structure and performance for the methanol oxidation reaction. Journal of Power Sources, 2011, 196, 54-61.	7.8	24
29	Preparation and characterizations of highly dispersed carbon supported PdxPty/C catalysts by a modified citrate reduction method for formic acid electrooxidation. Journal of Power Sources, 2014, 254, 183-189.	7.8	24
30	Pt/graphene with intercalated carbon nanotube spacers introduced by electrostatic self-assembly for fuel cells. Materials Chemistry and Physics, 2019, 225, 371-378.	4.0	23
31	Method for preparing highly dispersed Pt catalysts on mesoporous carbon support. Journal of Materials Science, 2007, 42, 7191-7197.	3.7	22
32	Platinum nanoparticles on carbon-nanotube support prepared by room-temperature reduction with H2 in ethylene glycol/water mixed solvent as catalysts for polymer electrolyte membrane fuel cells. Journal of Power Sources, 2016, 306, 448-453.	7.8	22
33	De-alloyed ternary electrocatalysts with high activity and stability for oxygen reduction reaction. Journal of Alloys and Compounds, 2021, 877, 160221.	5.5	22
34	A 4-cell miniature direct formic acid fuel cell stack with independent fuel reservoir: Design and performance investigation. Journal of Power Sources, 2011, 196, 5913-5917.	7.8	21
35	Electrostatic interaction based hollow Pt and Ru assemblies toward methanol oxidation. RSC Advances, 2012, 2, 7479.	3.6	21
36	Nitrogen self-doped carbon nanoparticles derived from spiral seaweeds for oxygen reduction reaction. RSC Advances, 2016, 6, 27535-27541.	3.6	21

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37	Ptâˆ§Ru/C catalysts synthesized by a two-stage polyol reduction process for methanol oxidation reaction. Journal of Power Sources, 2011, 196, 10570-10575.	7.8	20
38	Highly effective and stable doped carbon catalyst with three-dimensional porous structure and well-covered Fe3C nanoparticles prepared with C3N4 and tannic acid as template/precursors. Journal of Power Sources, 2019, 417, 117-124.	7.8	19
39	Highly stable and active Pt electrocatalysts on TiO 2 -Co 3 O 4 -C composite support for polymer exchange membrane fuel cells. Electrochimica Acta, 2015, 154, 266-272.	5.2	18
40	Surfactant-free room temperature synthesis of PdxPty/C assisted by ultra-sonication as highly active and stable catalysts for formic acid oxidation. International Journal of Hydrogen Energy, 2019, 44, 11655-11663.	7.1	17
41	Facile Room-Temperature Synthesis of a Highly Active and Robust Single-Crystal Pt Multipod Catalyst for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2020, 12, 49510-49518.	8.0	17
42	Aqueous phase synthesis and characterizations of Pt nanoparticles by a modified citrate reduction method assisted by inorganic salt stabilization for PEMFCs. Electrochimica Acta, 2014, 134, 187-192.	5.2	16
43	Uniformly dispersed carbon-supported bimetallic rutheniumâ€"platinum electrocatalysts for the methanol oxidation reaction. Journal of Materials Science, 2017, 52, 3457-3466.	3.7	16
44	A Facile and Environmentally Friendly One-Pot Synthesis of Pt Surface-Enriched Pt-Pd(x)/C Catalyst for Oxygen Reduction. Electrocatalysis, 2018, 9, 495-504.	3.0	16
45	Preparation and characterization of carbon-supported PtOs electrocatalysts via polyol reduction method for methanol oxidation reaction. Journal of Power Sources, 2014, 268, 824-830.	7.8	15
46	Preparation and characterization of bimetallic Pt^Ni-P/CNT catalysts via galvanic displacement reaction on electrolessly-plated Ni-P/CNT. Green Energy and Environment, 2018, 3, 360-367.	8.7	13
47	Ultrasonic-assisted ac etching of aluminum foils for electrolytic capacitor electrodes with enhanced capacitance. Materials Chemistry and Physics, 2010, 123, 625-628.	4.0	12
48	Binary oxide-doped Pt/RuO2â€"SiOx/C catalyst with high performance and self-humidification capability: The promotion of ruthenium oxide. Journal of Power Sources, 2012, 205, 201-206.	7.8	12
49	Highly ordered and surfactant-free PtxRuy bimetallic nanocomposites synthesized by electrostatic self assembly for methanol oxidation reaction. Electrochimica Acta, 2013, 112, 431-438.	5.2	12
50	Highly active carbon supported palladium catalysts decorated by a trace amount of platinum by an in-situ galvanic displacement reaction for formic acid oxidation. Journal of Power Sources, 2015, 278, 332-339.	7.8	12
51	Enhancing the cycling stability of a carbonate-based electrolyte for high-voltage lithium batteries by adding succinic anhydride. Ionics, 2015, 21, 2535-2542.	2.4	12
52	Randomly oriented Niâ€"P/nanofiber/nanotube composite prepared by electrolessly plated nickelâ€"phosphorus alloys for fuel cell applications. Journal of Materials Science, 2017, 52, 8432-8443.	3.7	12
53	Enhancement of Oxygen Reduction Performance of Biomass-Derived Carbon through Co-Doping with Early Transition Metal. Journal of the Electrochemical Society, 2018, 165, J3148-J3156.	2.9	11
54	Mono-disperse PdO nanoparticles prepared via microwave-assisted thermo-hydrolyzation with unexpectedly high activity for formic acid oxidation. Electrochimica Acta, 2020, 329, 135166.	5.2	11

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55	Robust and Efficient Pdâ€“Cu Bimetallic Catalysts with Porous Structure for Formic Acid Oxidation and a Mechanistic Study of Electrochemical Dealloying. Electrocatalysis, 2021, 12, 117-126.	3.0	10
56	More active PtRu/C catalyst for methanol electrooxidation by reversal of mixing sequence in catalyst preparation. Materials Chemistry and Physics, 2007, 104, 336-341.	4.0	8
57	Synthesis and characterizations of palladium catalysts with high activity and stability for formic acid oxidation by hydrogen reduction in ethylene glycol at room temperature. Journal of Power Sources, 2015, 294, 556-561.	7.8	8
58	Enhanced Pt utilization in electrocatalysts by covering of colloidal silica nanoparticles. Journal of Power Sources, 2008, 184, 344-347.	7.8	7
59	Highly stable and efficient platinum nanoparticles supported on TiO 2 @Ru-C: investigations on the promoting effects of the interpenetrated TiO 2. Electrochimica Acta, 2016, 216, 8-15.	5.2	7
60	Platinum Nanoparticles on Interconnected Ni₃P/Carbon Nanotubeâ€“Carbon Nanofiber Hybrid Supports with Enhanced Catalytic Activity for Fuel Cells. ChemElectroChem, 2017, 4, 109-114.	3.4	7
61	Effect of thermal treatment on structural change of anode electrocatalysts for direct methanol fuel cells. Particuology, 2014, 15, 45-50.	3.6	6
62	Controlled Hydrolysis of a Nickelâ€“Ammonia Complex on Pt Nanoparticles for the Preparation of Highly Active and Stable PtNi/C Catalysts. Industrial & Engineering Chemistry Research, 2022, 61, 7504-7512.	3.7	6
63	Stable and active Pt colloid preparation by modified citrate reduction and a mechanism analysis of inorganic additives. Journal of Colloid and Interface Science, 2020, 572, 74-82.	9.4	3
64	Controlled synthesis of carbon nanofibers over electrolessly plated metal foam catalysts on polyurethane for fuel cell applications. Journal of Materials Science, 2018, 53, 479-491.	3.7	2
65	Controlled synthesis of uniform cup-stacked carbon nanotubes for energy applications. Journal of Alloys and Compounds, 2021, 865, 158912.	5.5	2