Yunfeng Zhai

List of Publications by Year in descending order

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41 papers	1,698 citations	394421 19 h-index	276875 41 g-index
42 all docs	42 docs citations	42 times ranked	1510 citing authors

#	Article	IF	Citations
1	Modification of Nafion membrane using interfacial polymerization for vanadium redox flow battery applications. Journal of Membrane Science, 2008, 311, 98-103.	8.2	238
2	Preparation and characterization of sulfated zirconia (SO42â˜'/ZrO2)/Nafion composite membranes for PEMFC operation at high temperature/low humidity. Journal of Membrane Science, 2006, 280, 148-155.	8.2	151
3	The stability of Pt/C catalyst in H3PO4/PBI PEMFC during high temperature life test. Journal of Power Sources, 2007, 164, 126-133.	7.8	147
4	Studies of performance degradation of a high temperature PEMFC based on H3PO4-doped PBI. Journal of Power Sources, 2006, 162, 547-552.	7.8	141
5	A novel H3PO4/Nafionâ€“PBI composite membrane for enhanced durability of high temperature PEM fuel cells. Journal of Power Sources, 2007, 169, 259-264.	7.8	119
6	Degradation Study on MEA in H[sub 3]PO[sub 4]â•PBI High-Temperature PEMFC Life Test. Journal of the Electrochemical Society, 2007, 154, B72.	2.9	100
7	500h Continuous aging life test on PBI/H3PO4 high-temperature PEMFC. International Journal of Hydrogen Energy, 2006, 31, 1855-1862.	7.1	95
8	Pt/SiO2 catalyst as an addition to Nafion/PTFE self-humidifying composite membrane. Journal of Power Sources, 2006, 161, 61-67.	7.8	71
9	Performance degradation studies on PBI/H3PO4 high temperature PEMFC and one-dimensional numerical analysis. Electrochimica Acta, 2006, 52, 394-401.	5.2	64
10	Pt4ZrO2/C cathode catalyst for improved durability in high temperature PEMFC based on H3PO4 doped PBI. Electrochemistry Communications, 2007, 9, 135-141.	4.7	55
11	The Multiprocess Degradation of PEMFC Performance Due to Sulfur Dioxide Contamination and Its Recovery. Journal of the Electrochemical Society, 2010, 157, B20.	2.9	49
12	Effect of Selected Airborne Contaminants on PEMFC Performance. Journal of the Electrochemical Society, 2014, 161, F280-F290.	2.9	47
13	Analysis of the SO₂Contamination Effect on the Oxygen Reduction Reaction in PEMFCs by Electrochemical Impedance Spectroscopy. Journal of the Electrochemical Society, 2012, 159, B524-B530.	2.9	46
14	Investigation of self-humidifying membranes based on sulfonated poly(ether ether ketone) hybrid with sulfated zirconia supported Pt catalyst for fuel cell applications. Journal of Power Sources, 2007, 168, 323-329.	7.8	43
15	Quantitative ranking criteria for PEMFC contaminants. International Journal of Hydrogen Energy, 2012, 37, 6784-6789.	7.1	34
16	Two dimensional modeling study of PBI/H3PO4 high temperature PEMFCs based on electrochemical methods. Journal of Power Sources, 2006, 160, 1026-1034.	7.8	27
17	PEMFC cathode catalyst contamination evaluation with a RRDE-Acetonitrile. Electrochimica Acta, 2014, 134, 272-280.	5.2	26
18	Investigation of the Ag-SiO2/sulfonated poly(biphenyl ether sulfone) composite membranes for fuel cell. Journal of Membrane Science, 2007, 296, 9-14.	8.2	25

#	Article	IF	Citations
19	Effect of contaminant mixtures in air on proton exchange membrane fuel cell performance. Journal of Power Sources, 2019, 413, 86-97.	7.8	21
20	Influence of cell temperature on sulfur dioxide contamination in proton exchange membrane fuel cells. Journal of Power Sources, 2014, 247, 40-48.	7.8	17
21	Focusing Research by Developing Performance Related Selection Criteria for PEMFC Contaminants. ECS Transactions, 2011, 41, 279-286.	0.5	16
22	Evaluation of cathode contamination with Ca2+ in proton exchange membrane fuel cells. Electrochimica Acta, 2018, 259, 510-516.	5.2	15
23	Liquid Water Scavenging of PEMFC Contaminants. Journal of the Electrochemical Society, 2014, 161, E3357-E3364.	2.9	14
24	Chlorobenzene Poisoning and Recovery of Platinum-Based Cathodes in Proton Exchange Membrane Fuel Cells. Journal of Physical Chemistry C, 2015, 119, 20328-20338.	3.1	14
25	Effect of Acetonitrile Contamination on Long-Term Degradation of Proton Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2018, 165, F3191-F3199.	2.9	13
26	PEMFC Cathode Catalyst Contamination Evaluation with a RRDE- Propene and Naphthalene. Electrochimica Acta, 2014, 138, 437-446.	5.2	12
27	PEMFC Cathode Catalyst Contamination Evaluation with a RRDE- Acetylene. Electrochimica Acta, 2014, 133, 65-72.	5.2	12
28	PEMFC cathode catalyst contamination evaluation with a RRDE-methyl methacrylate. International Journal of Hydrogen Energy, 2014, 39, 18351-18361.	7.1	11
29	Relationships between PEMFC Cathode Kinetic Losses and Contaminantsâ€™ Dipole Moment and Adsorption Energy on Pt. Journal of the Electrochemical Society, 2016, 163, F247-F254.	2.9	11
30	The Impact of SO₂ on the Degradation of MEA Components in PEMFCs. ECS Transactions, 2010, 28, 183-191.	0.5	9
31	Acetonitrile contamination in the cathode of proton exchange membrane fuel cells and cell performance recovery. Applied Energy, 2019, 242, 239-247.	10.1	9
32	The ionic conductivity and catalyst activity effects of acetonitrile on proton exchange membrane fuel cells. Electrochemistry Communications, 2016, 66, 49-52.	4.7	8
33	Impact of operating conditions on the acetylene contamination in the cathode of proton exchange membrane fuel cells. Journal of Power Sources, 2017, 372, 134-144.	7.8	7
34	Sulfur Dioxide Contamination in PEMFCs: Degradation and Recovery of Performance. ECS Transactions, 2008, 16, 873-880.	0.5	5
35	Electrochemical Impedance Spectroscopy Analysis on SO2 Contamination in PEMFCs. ECS Transactions, 2010, 28, 313-323.	0.5	5
36	Bromomethane Contamination in the Cathode of Proton Exchange Membrane Fuel Cells. Electrochimica Acta, 2016, 213, 482-489.	5.2	5

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37	Acetylene Contamination Mechanisms in the Cathode of Proton Exchange Membrane Fuel Cells. ChemElectroChem, 2017, 4, 655-670.	3.4	4
38	Effects of Ethylene Glycol and Caprolactam on the ORR and HOR Performances of Pt/C Catalysts. Journal of the Electrochemical Society, 2016, 163, F1618-F1626.	2.9	3
39	Tolerance and mitigation strategies of proton exchange membrane fuel cells subject to acetylene contamination. International Journal of Hydrogen Energy, 2018, 43, 17475-17479.	7.1	3
40	Impact of the Cathode Pt Loading on PEMFC Contamination by Several Airborne Contaminants. Molecules, 2020, 25, 1060.	3.8	3
41	Effect of Potential on SO2 Adsorption onto Pt/C Catalyst for PEMFCs. ECS Transactions, 2011, 35, 157-166.	0.5	1