Shanna Knights

List of Publications by Citations

25 papers	3,407 citations	21 h-index	25 g-index
25 ext. papers	3,706 ext. citations	9.4 avg, IF	4.74 L-index

#	Paper	IF	Citations
25	High oxygen-reduction activity and durability of nitrogen-doped graphene. *Energy and Environmental Science*, **2011**, 4, 760	35.4	1073
24	Single-atom Catalysis Using Pt/Graphene Achieved through Atomic Layer Deposition. *Scientific Reports*, **2013**, 3,	4.9	589
23	Nitrogen doping effects on the structure of graphene. *Applied Surface Science*, **2011**, 257, 9193-9198	6.7	400
22	Nitrogen Doping Effects on Carbon Nanotubes and the Origin of the Enhanced Electrocatalytic Activity of Supported Pt for Proton-Exchange Membrane Fuel Cells. *Journal of Physical Chemistry C*, **2011**, 115, 3769-3776	3.8	211
21	Extremely stable platinum nanoparticles encapsulated in a zirconia nanocage by area-selective atomic layer deposition for the oxygen reduction reaction. *Advanced Materials*, **2015**, 27, 277-81	24	206
20	Enhanced stability of Pt electrocatalysts by nitrogen doping in CNTs for PEM fuel cells. *Electrochemistry Communications*, **2009**, 11, 2071-2076	5.1	176
19	Multigrain platinum nanowires consisting of oriented nanoparticles anchored on sulfur-doped graphene as a highly active and durable oxygen reduction electrocatalyst. *Advanced Materials*, **2015**, 27, 1229-34	24	106
18	Non-noble metal oxygen reduction electrocatalysts based on carbon nanotubes with controlled nitrogen contents. *Journal of Power Sources*, **2011**, 196, 1795-1801	8.9	102
17	Accelerated Membrane Durability Testing of Heavy Duty Fuel Cells. *Journal of the Electrochemical Society*, **2015**, 162, F98-F107	3.9	60
16	Membrane Accelerated Stress Test Development for Polymer Electrolyte Fuel Cell Durability Validated Using Field and Drive Cycle Testing. *Journal of the Electrochemical Society*, **2018**, 165, F3085-F3093	3.9	59
15	Atomic layer deposition assisted Pt-SnO2 hybrid catalysts on nitrogen-doped CNTs with enhanced electrocatalytic activities for low temperature fuel cells. *International Journal of Hydrogen Energy*, **2011**, 36, 11085-11092	6.7	53
14	Optimization of sulfur-doped graphene as an emerging platinum nanowires support for oxygen reduction reaction. *Nano Energy*, **2016**, 19, 27-38	17.1	46
13	High stability and activity of Pt electrocatalyst on atomic layer deposited metal oxide/nitrogen-doped graphene hybrid support. *International Journal of Hydrogen Energy*, **2014**, 39, 15967-15974	6.7	43
12	Pt/SnO2/nitrogen-doped CNT hybrid catalysts for proton-exchange membrane fuel cells (PEMFC): Effects of crystalline and amorphous SnO2 by atomic layer deposition. *Journal of Power Sources*, **2013**, 238, 144-149	8.9	37
11	3D boron doped carbon nanorods/carbon-microfiber hybrid composites: synthesis and applications in a highly stable proton exchange membrane fuel cell. *Journal of Materials Chemistry*, **2011**, 21, 18195		36
10	Web-like 3D Architecture of Pt Nanowires and Sulfur-Doped Carbon Nanotube with Superior Electrocatalytic Performance. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 93-98	8.3	36
9	Effect of catalyst layer defects on local membrane degradation in polymer electrolyte fuel cells. *Journal of Power Sources*, **2016**, 322, 17-25	8.9	31

List of Publications

8	Effect of CeOx Crystallite Size on the Chemical Stability of CeOx Nanoparticles. *Journal of the Electrochemical Society*, **2014**, 161, F1075-F1080	3.9	27
7	Highly Durable Platinum-Cobalt Nanowires by Microwave Irradiation as Oxygen Reduction Catalyst for PEM Fuel Cell. *Electrochemical and Solid-State Letters*, **2012**, 15, B83		24
6	Empirical membrane lifetime model for heavy duty fuel cell systems. *Journal of Power Sources*, **2016**, 336, 240-250	8.9	22
5	Ultralow Loading and High-Performing Pt Catalyst for a Polymer Electrolyte Membrane Fuel Cell Anode Achieved by Atomic Layer Deposition. *ACS Catalysis*, **2019**, 9, 5365-5374	13.1	21
4	Interactive Effects of Membrane Additives on PEMFC Catalyst Layer Degradation. *Journal of the Electrochemical Society*, **2013**, 160, F27-F33	3.9	19
3	UV□isible spectroscopy method for screening the chemical stability of potential antioxidants for proton exchange membrane fuel cells. *Journal of Power Sources*, **2015**, 281, 238-242	8.9	15
2	Predicting Membrane Lifetime with Cerium Oxide in Heavy Duty Fuel Cell Systems. *Journal of the Electrochemical Society*, **2018**, 165, F780-F785	3.9	8
1	Relative Humidity Effect on Anode Durability in PEMFC Startup/Shutdown Processes. *ECS Transactions*, **2010**, 33, 1273-1279	1	7