Nancy N Kariuki

List of Publications by Year
in descending order

24 papers	1,106 citations	471509 17 h-index	642732 23 g-index
24 all docs	24 docs citations	24 times ranked	1087 citing authors

#	Article	IF	Citations
1	Best Practices and Testing Protocols for Benchmarking ORR Activities of Fuel Cell Electrocatalysts Using Rotating Disk Electrode. Electrocatalysis, 2017, 8, 366-374.	3.0	121
2	Impact of Catalyst Ink Dispersing Methodology on Fuel Cell Performance Using in-Situ X-ray Scattering. ACS Applied Energy Materials, 2019, 2, 6417-6427.	5.1	104
3	Rheological Investigation on the Microstructure of Fuel Cell Catalyst Inks. ACS Applied Materials & Interfaces, 2018, 10, 43610-43622.	8.0	96
4	Elucidating the Dynamic Nature of Fuel Cell Electrodes as a Function of Conditioning: An ex Situ Material Characterization and in Situ Electrochemical Diagnostic Study. ACS Applied Materials & Interfaces, 2019, 11, 45016-45030.	8.0	96
5	Dynamics of Particle Growth and Electrochemical Surface Area Loss due to Platinum Dissolution. Journal of the Electrochemical Society, 2014, 161, F291-F304.	2.9	90
6	Dictating Pt-Based Electrocatalyst Performance in Polymer Electrolyte Fuel Cells, from Formulation to Application. ACS Applied Materials & Interfaces, 2019, 11, 46953-46964.	8.0	80
7	In Situ Anomalous Small-Angle X-ray Scattering Studies of Platinum Nanoparticle Fuel Cell Electrocatalyst Degradation. Journal of the American Chemical Society, 2012, 134, 14823-14833.	13.7	75
8	Potential Dependence of Pt and Co Dissolution from Platinum-Cobalt Alloy PEFC Catalysts Using Time-Resolved Measurements. Journal of the Electrochemical Society, 2018, 165, F3024-F3035.	2.9	65
9	Pt Catalyst Degradation in Aqueous and Fuel Cell Environments studied via In-Operando Anomalous Small-Angle X-ray Scattering. Electrochimica Acta, 2015, 173, 223-234.	5.2	57
10	Hierarchical electrode design of highly efficient and stable unitized regenerative fuel cells (URFCs) for long-term energy storage. Energy and Environmental Science, 2020, 13, 4872-4881.	30.8	43
11	Tailoring electrode microstructure via ink content to enable improved rated power performance for platinum cobalt/high surface area carbon based polymer electrolyte fuel cells. Journal of Power Sources, 2021, 482, 228889.	7.8	40
12	Nanoporous Iridium Nanosheets for Polymer Electrolyte Membrane Electrolysis. Advanced Energy Materials, 2021, 11, 2101438.	19.5	40
13	Investigation of the Microstructure and Rheology of Iridium Oxide Catalyst Inks for Low-Temperature Polymer Electrolyte Membrane Water Electrolyzers. ACS Applied Materials & Interfaces, 2019, 11, 45068-45079.	8.0	34
14	Coupling High-Throughput Experiments and Regression Algorithms to Optimize PGM-Free ORR Electrocatalyst Synthesis. ACS Applied Energy Materials, 2020, 3, 9083-9088.	5.1	30
15	In-Operando Anomalous Small-Angle X-Ray Scattering Investigation of Pt₃Co Catalyst Degradation in Aqueous and Fuel Cell Environments. Journal of the Electrochemical Society, 2015, 162, F1487-F1497.	2.9	27
16	Electrochemical Degradation of Ptâ€“Ni Nanocatalysts: An Identical Location Aberration-Corrected Scanning Transmission Electron Microscopy Study. Nano Letters, 2019, 19, 46-53.	9.1	25
17	Editorsâ€™ Choiceâ€”Ionomer Side Chain Length and Equivalent Weight Impact on High Current Density Transport Resistances in PEMFC Cathodes. Journal of the Electrochemical Society, 2021, 168, 024518.	2.9	23
18	Integration of a high oxygen permeability ionomer into polymer electrolyte membrane fuel cell cathodes for high efficiency and power density. Journal of Power Sources, 2022, 522, 230821.	7.8	15

#	Article	IF	Citations
19	Recreating Fuel Cell Catalyst Degradation in Aqueous Environments for Identical-Location Scanning Transmission Electron Microscopy Studies. ACS Applied Materials & Interfaces, 2022, 14, 20418-20429.	8.0	15
20	Electrolyzer Performance Loss from Accelerated Stress Tests and Corresponding Changes to Catalyst Layers and Interfaces. Journal of the Electrochemical Society, 2022, 169, 054517.	2.9	14
21	Degradation of Platinum-Cobalt Alloy PEMFC Cathode Catalysts in Catalyst-Ionomer Inks. Journal of the Electrochemical Society, 2021, 168, 044510.	2.9	11
22	Effect of Particle Size on the Dissolution of Pt₃Co/C and Pt/C PEMFC Electrocatalysts. Journal of the Electrochemical Society, 2021, 168, 054516.	2.9	4
23	Impact of Nickel Ions on the Oxygen Reduction Reaction Kinetics of Pt and on Oxygen Diffusion through Ionomer Thin Films. Journal of the Electrochemical Society, 2021, 168, 064505.	2.9	1
24	Glancing Angle Deposited Platinum Nanorod Arrays for Oxygen Reduction Reaction. Materials Research Society Symposia Proceedings, 2011, 1311, 26201.	0.1	0