

Douglas Aaron

List of Publications by Year in descending order

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886
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516710

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docs citations

29
times ranked

979
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigation of microscopic mechanisms for water-ice phase change propagation control. International Journal of Heat and Mass Transfer, 2022, 184, 122357.	4.8	5
2	A Robust and Quantified Analysis of Mass Transport and Its Application in Designing Next Generation Architecture for Polymer Electrolyte Water Electrolysis Cells. ECS Meeting Abstracts, 2022, MA2022-01, 1761-1761.	0.0	0
3	(Digital Presentation) High-Temperature Ammonia Treatment for Carbon Felt Electrodes in All-Vanadium Redox Flow Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 2027-2027.	0.0	0
4	Understanding the Transport Phenomena in Solid State Battery (SSB). ECS Meeting Abstracts, 2022, MA2022-01, 45-45.	0.0	0
5	Mass transport limitations in polymer electrolyte water electrolyzers using spatially-resolved current measurement. Journal of Power Sources, 2022, 542, 231749.	7.8	7
6	Effects of mass and interaction mismatches on in-plane and cross-plane thermal transport of Si-doped graphene. International Journal of Heat and Mass Transfer, 2021, 169, 120979.	4.8	13
7	In-Plane Liquid Electrolyte Permeability of Porous Electrode in Vanadium Redox Flow Battery. ECS Meeting Abstracts, 2021, MA2021-01, 216-216.	0.0	0
8	Local Two-Phase Flow and Performance in Polymer Electrolyte Water Electrolysis Cells. ECS Meeting Abstracts, 2021, MA2021-01, 1190-1190.	0.0	0
9	Computational and Experimental Study of Convection in a Vanadium Redox Flow Battery Strip Cell Architecture. Energies, 2020, 13, 4767.	3.1	2
10	Architecture-Based Control of Temperature Gradient-Driven Water Transport in Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 2020, 167, 104504.	2.9	5
11	In-situ current distribution and mass transport analysis via strip cell architecture for a vanadium redox flow battery. Journal of Power Sources, 2019, 437, 226920.	7.8	17
12	Isolation of Mass Transport and Current Distribution in Vanadium Flow Batteries Via Segmented Strip Cell. ECS Meeting Abstracts, 2019, , .	0.0	1
13	Understanding the Interplay between Electrolyte Velocity Distribution and Current Distribution in Vanadium Flow Battery Electrode. ECS Meeting Abstracts, 2019, , .	0.0	1
14	Critical Reviewâ€™Experimental Diagnostics and Material Characterization Techniques Used on Redox Flow Batteries. Journal of the Electrochemical Society, 2018, 165, A970-A1010.	2.9	87
15	Elucidating effects of cell architecture, electrode material, and solution composition on overpotentials in redox flow batteries. Electrochimica Acta, 2017, 229, 261-270.	5.2	85
16	Full cell simulation and the evaluation of the buffer system on air-cathode microbial fuel cell. Journal of Power Sources, 2017, 347, 159-169.	7.8	26
17	Architecture for improved mass transport and system performance in redox flow batteries. Journal of Power Sources, 2017, 351, 96-105.	7.8	118
18	The role of water management on the oxygen transport resistance in polymer electrolyte fuel cell with ultra-low precious metal loading. Journal of Power Sources, 2017, 364, 92-100.	7.8	19

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19	Modeling and validation of single-chamber microbial fuel cell cathode biofilm growth and response to oxidant gas composition. <i>Journal of Power Sources</i> , 2016, 328, 385-396.	7.8	34
20	In Situ Localized Current Distribution Measurements in All-Vanadium Redox Flow Batteries. <i>Journal of the Electrochemical Society</i> , 2016, 163, A5220-A5228.	2.9	52
21	Multi-variable mathematical models for the air-cathode microbial fuel cell system. <i>Journal of Power Sources</i> , 2016, 314, 49-57.	7.8	35
22	Resolving Losses at the Negative Electrode in All-Vanadium Redox Flow Batteries Using Electrochemical Impedance Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2014, 161, A981-A988.	2.9	82
23	Qualitative behavior of vanadium ions in Nafion membranes using electron spin resonance. <i>Journal of Membrane Science</i> , 2013, 428, 38-45.	8.2	37
24	In Situ Kinetics Studies in All-Vanadium Redox Flow Batteries. <i>ECS Electrochemistry Letters</i> , 2013, 2, A29-A31.	1.9	145
25	Proton Exchange Membrane Performance Characterization in VRFB. <i>ECS Transactions</i> , 2012, 41, 25-34.	0.5	44
26	In Situ Single Electrode Studies of an All-Vanadium Redox Flow Battery. <i>ECS Transactions</i> , 2012, 41, 43-51.	0.5	14
27	Is Carbon Capture and Storage Really Needed?. <i>Environmental Science & Technology</i> , 2010, 44, 4042-4045.	10.0	24
28	Investigating microbial fuel cell bioanode performance under different cathode conditions. <i>Biotechnology Progress</i> , 2009, 25, 1630-1636.	2.6	16
29	Scale-up of a continuous-jet hydrate reactor for CO ₂ ocean sequestration. <i>AIChE Journal</i> , 2007, 53, 1017-1027.	3.6	17