Pang-Chieh Sui

List of Publications by Year
in descending order

51	1,388	361413	345221
papers	citations	20 h-index	36 g-index

51	51	51	861
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Integration of Direct-Contact Membrane Distillation with Flat-Plate Solar Collector versus Proton-Exchange Membrane Fuel Cell: Dynamic Simulations and Comparative Analysis. Journal of Energy Engineering - ASCE, 2022, 148, .	1.9	7
2	Pore-scale modeling of mass transport in the air-breathing cathode of membraneless microfluidic fuel cells. International Journal of Heat and Mass Transfer, 2022, 188, 122590.	4.8	13
3	Microstructure reconstruction using fiber tracking technique and pore-scale simulations of heterogeneous gas diffusion layer. International Journal of Hydrogen Energy, 2022, 47, 20218-20231.	7.1	7
4	Transition of heavyâ€duty trucks from diesel to hydrogen fuel cells: Opportunities, challenges, and recommendations. International Journal of Energy Research, 2022, 46, 11718-11729.	4.5	13
5	Experimental validation of pore-scale models for gas diffusion layers. Journal of Power Sources, 2022, 536, 231515.	7.8	10
6	Electrodialysis of Lithium Sulphate Solution: Model Development and Validation. Journal of the Electrochemical Society, 2022, 169, 053508.	2.9	8
7	High-density and low-density gas diffusion layers for proton exchange membrane fuel cells: Comparison of mechanical and transport properties. International Journal of Hydrogen Energy, 2022, 47, 22532-22544.	7.1	5
8	Electrodialysis of a Lithium Sulphate Solution: An Experimental Investigation. Journal of the Electrochemical Society, 2022, 169, 063515.	2.9	4
9	A multiscale study on the effect of compression on lithium-ion battery separators. Journal of Energy Storage, 2022, 54, 105255.	8.1	7
10	Stochastically Modeled Gas Diffusion Layers: Effects of Binder and Polytetrafluoroethylene on Effective Gas Diffusivity. Journal of the Electrochemical Society, 2021, 168, 014514.	2.9	19
11	Numerical Investigations on the Ultrasonic Atomization of Catalyst Inks for Proton Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2021, 168, 034502.	2.9	5
12	A review of recycling spent lithium-ion battery cathode materials using hydrometallurgical treatments. Journal of Energy Storage, 2021, 35, 102217.	8.1	167
13	Multiphase and Pore Scale Modeling on Catalyst Layer of High-Temperature Polymer Electrolyte Membrane Fuel Cell. Journal of the Electrochemical Society, 2021, 168, 054521.	2.9	8
14	Multiscale modeling of an angled gas diffusion layer for polymer electrolyte membrane fuel cells: Performance enhancing for aviation applications. International Journal of Hydrogen Energy, 2021, 46, 20702-20714.	7.1	17
15	Modeling and multi-objective optimization of integrated MEDâ€“TVC desalination system and gas power plant for waste heat harvesting. Computers and Chemical Engineering, 2021, 149, 107294.	3.8	23
16	Pore-scale modeling of gas diffusion layers: Effects of compression on transport properties. Journal of Power Sources, 2021, 496, 229822.	7.8	44
17	Microstructure reconstruction of the gas diffusion layer and analyses of the anisotropic transport properties. Energy Conversion and Management, 2021, 241, 114293.	9.2	45
18	Combined macroscopic and pore scale modeling of direct contact membrane distillation with micro-porous hydrophobic membranes. Desalination, 2021, 514, 115171.	8.2	15

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19	Effect of Dispersion Method and Catalyst on the Crack Morphology and Performance of Catalyst Layer of PEMFC. Journal of the Electrochemical Society, 2021, 168, 114506.	2.9	18
20	Effects of ionomer and dispersion methods on rheological behavior of proton exchange membrane fuel cell catalyst layer ink. International Journal of Hydrogen Energy, 2020, 45, 29430-29441.	7.1	49
21	Mesoscopic modeling and characterization of the porous electrodes for vanadium redox flow batteries. Journal of Energy Storage, 2020, 32, 101782.	8.1	15
22	Pore-scale modeling of oxygen transport in the catalyst layer of air-breathing cathode in membraneless microfluidic fuel cells. Applied Energy, 2020, 277, 115536.	10.1	23
23	Predicting the interaction between nanoparticles in shear flow using lattice Boltzmann method and Derjaguinâ€“Landauâ€“Verweyâ€“Overbeek (DLVO) theory. Physics of Fluids, 2020, 32, .	4.0	13
24	Synchrotron Xâ€ray Radiography and Tomography of Vanadium Redox Flow Batteriesâ€”Cell Design, Electrolyte Flow Geometry, and Gas Bubble Formation. ChemSusChem, 2020, 13, 3154-3165.	6.8	24
25	Pore-Scale Characterization and Simulation of Porous Electrode Material for Vanadium Redox Flow Battery: Effects of Compression on Transport Properties. Journal of the Electrochemical Society, 2020, 167, 110545.	2.9	13
26	Addition of hydrogen refueling for fuel cell bus fleet to existing natural gas stations: A case study in Wuhan, China. International Journal of Energy Research, 2019, 43, 7557.	4.5	2
27	Flow sharing and turbulence phenomena in proton exchange membrane fuel cell stack headers. International Journal of Hydrogen Energy, 2019, 44, 30306-30318.	7.1	15
28	Coupled stressâ€“strain and transport in proton exchange membrane fuel cell with metallic bipolar plates. Applied Energy, 2019, 251, 113316.	10.1	33
29	Modeling of PEM Fuel Cell Catalyst Layers: Status and Outlook. Electrochemical Energy Reviews, 2019, 2, 428-466.	25.5	60
30	Two-phase computational modelling of a membraneless microfluidic fuel cell with a flow-through porous anode. Journal of Power Sources, 2019, 420, 88-98.	7.8	32
31	Solid Mechanics Simulation of Reconstructed Gas Diffusion Layers for PEMFCs. Journal of the Electrochemical Society, 2019, 166, F377-F385.	2.9	24
32	Numerical and Experimental Investigations of Bipolar Membrane Fuel Cells: 3D Model Development and Effect of Gas Channel Width. Journal of the Electrochemical Society, 2018, 165, F994-F1001.	2.9	5
33	Decision-making of compressed natural gas station siting for public transportation: Integration of multi-objective optimization, fuzzy evaluating, and radar charting. Energy, 2017, 140, 11-17.	8.8	25
34	Online survey data of public subjective well-being on high occupancy vehicle lane in China. Data in Brief, 2017, 15, 862-867.	1.0	1
35	Performance Evaluation of a Hydrogen-Based Clean Energy Hub with Electrolyzers as a Self-Regulating Demand Response Management Mechanism. Energies, 2017, 10, 1211.	3.1	8
36	A numerical investigation on the effects of water inlet location and channel surface properties on water transport in PEMFC cathode channels. International Journal of Hydrogen Energy, 2016, 41, 16220-16229.	7.1	14

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37	Theoretical design strategies of bipolar membrane fuel cell with enhanced self-humidification behavior. Journal of Power Sources, 2016, 307, 358-367.	7.8	22
38	Computational modeling of alkaline air-breathing microfluidic fuel cells with an array of cylinder anodes. Journal of Power Sources, 2015, 288, 150-159.	7.8	33
39	Numerical and Experimental Analyses on Deviated Concentration Loss with Alkaline Anion-Exchange Membrane Fuel Cells. Journal of Physical Chemistry C, 2015, 119, 24276-24281.	3.1	22
40	A self-humidifying acidicâ€“alkaline bipolar membrane fuel cell. Journal of Power Sources, 2015, 299, 273-279.	7.8	43
41	Computational modeling of air-breathing microfluidic fuel cells with flow-over and flow-through anodes. Journal of Power Sources, 2014, 259, 15-24.	7.8	62
42	Evaluating the interfacial reaction kinetics of the bipolar membrane interface in the bipolar membrane fuel cell. Physical Chemistry Chemical Physics, 2013, 15, 11217.	2.8	15
43	Using an ILU/Deflation Preconditioner for Simulation of a PEM Fuel Cell Cathode Catalyst Layer. Communications in Computational Physics, 2013, 14, 537-573.	1.7	11
44	Numerical Investigation of Flowfield in PEM Fuel Cell Stack Headers. Energy Procedia, 2012, 29, 102-111.	1.8	6
45	PEM fuel cell CL characterization using a standalone FIB and SEM: Experiments and simulation. Electrochimica Acta, 2012, 85, 322-331.	5.2	24
46	Determination of effective transport properties in a PEMFC catalyst layer using different reconstruction algorithms. Journal of Power Sources, 2012, 208, 354-365.	7.8	63
47	A numerical study on preconditioning and partitioning schemes for reactive transport in a PEMFC catalyst layer. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 905-916.	6.6	12
48	Pore scale modeling of a proton exchange membrane fuel cell catalyst layer: Effects of water vapor and temperature. Journal of Power Sources, 2011, 196, 3195-3203.	7.8	86
49	Pore Scale Simulation of Transport and Electrochemical Reactions in Reconstructed PEMFC Catalyst Layers. Journal of the Electrochemical Society, 2010, 157, B1434.	2.9	157
50	Cell Interaction Phenomena in Polymer Electrolyte Fuel Cell Stacks. Journal of the Electrochemical Society, 2008, 155, B704.	2.9	32
51	Modeling of heat and mass transfer in direct contact membrane distillation: effect of counter diffusion velocity. , 0, 216, 71-82.		9