Ned Djilali

List of Publications by Year
in descending order

256 papers	12,491 citations	23500 58 h-index	30010 103 g-index
262 all docs	262 docs citations	262 times ranked	8084 citing authors

#	Article	IF	Citations
1	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.	2.5	13
2	Shared Automated Electric Vehicle Prospects for Low Carbon Road Transportation in British Columbia, Canada. Vehicles, 2022, 4, 102-123.	1.7	2
3	Transition of heavy-duty trucks from diesel to hydrogen fuel cells: Opportunities, challenges, and recommendations. International Journal of Energy Research, 2022, 46, 11718-11729.	2.2	13
4	Machine learning-assisted design of flow fields for redox flow batteries. Energy and Environmental Science, 2022, 15, 2874-2888.	15.6	23
5	Transboundary cooperation a potential route to sustainable development in the Indus basin. Nature Sustainability, 2021, 4, 331-339.	11.5	47
6	Electrode-Integrated Textile-Based Sensors for In Situ Temperature and Relative Humidity Monitoring in Electrochemical Cells. ACS Omega, 2021, 6, 9509-9519.	1.6	7
7	Climate-Land-Energy-Water Nexus Models Across Scales: Progress, Gaps and Best Accessibility Practices. Frontiers in Environmental Science, 2021, 9, .	1.5	19
8	A coupled machine learning and genetic algorithm approach to the design of porous electrodes for redox flow batteries. Applied Energy, 2021, 298, 117177.	5.1	35
9	Techno-economic feasibility of a photovoltaic-equipped plug-in electric vehicle public parking lot with coordinated charging. IET Energy Systems Integration, 2020, 2, 261-272.	1.1	11
10	Pore-scale modeling of oxygen transport in the catalyst layer of air-breathing cathode in membraneless microfluidic fuel cells. Applied Energy, 2020, 277, 115536.	5.1	23
11	Numerical simulation on mass transport in a passive vapor-fed direct methanol fuel cell operating with neat methanol. Journal of Power Sources, 2020, 477, 228541.	4.0	9
12	The NExus Solutions Tool (NEST) v1.0: an open platform for optimizing multi-scale energy–water–land system transformations. Geoscientific Model Development, 2020, 13, 1095-1121.	1.3	31
13	Measurements of flow velocity and scalar concentration in turbulent multi-component jets: asymmetry and buoyancy effects. Experiments in Fluids, 2020, 61, 1.	1.1	4
14	Predicting the interaction between nanoparticles in shear flow using lattice Boltzmann method and Derjaguin–Landau–Verwey–Overbeek (DLVO) theory. Physics of Fluids, 2020, 32, .	1.6	13
15	Effect of compression on pore size distribution and porosity of PEM fuel cell catalyst layers. International Journal of Hydrogen Energy, 2019, 44, 23396-23405.	3.8	33
16	Compressive behaviour of thin catalyst layers. Part II - Model development and validation. International Journal of Hydrogen Energy, 2019, 44, 18461-18471.	3.8	5
17	Investigation of Two-Phase Flow in a Hydrophobic Fuel-Cell Micro-Channel. Energies, 2019, 12, 2061.	1.6	11
18	Flow sharing and turbulence phenomena in proton exchange membrane fuel cell stack headers. International Journal of Hydrogen Energy, 2019, 44, 30306-30318.	3.8	15

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19	Coupled stress–strain and transport in proton exchange membrane fuel cell with metallic bipolar plates. Applied Energy, 2019, 251, 113316.	5.1	33
20	Compressive behaviour of thin catalyst layers. Part I - Experimental study. International Journal of Hydrogen Energy, 2019, 44, 18450-18460.	3.8	9
21	Modeling of PEM Fuel Cell Catalyst Layers: Status and Outlook. Electrochemical Energy Reviews, 2019, 2, 428-466.	13.1	60
22	Smart technologies for promotion of energy efficiency, utilization of sustainable resources and waste management. Journal of Cleaner Production, 2019, 231, 565-591.	4.6	282
23	Multi-component high aspect ratio turbulent jets issuing from non-planar nozzles. International Journal of Hydrogen Energy, 2019, 44, 15262-15277.	3.8	12
24	Two-phase computational modelling of a membraneless microfluidic fuel cell with a flow-through porous anode. Journal of Power Sources, 2019, 420, 88-98.	4.0	32
25	Effect of geometrical configurations on alkaline air-breathing membraneless microfluidic fuel cells with cylinder anodes. Science China Technological Sciences, 2019, 62, 388-396.	2.0	6
26	Balancing clean water-climate change mitigation trade-offs. Environmental Research Letters, 2019, 14, 014009.	2.2	48
27	Experimental and numerical investigation of turbulent jets issuing through a realistic pipeline geometry: Asymmetry effects for air, helium, and hydrogen. International Journal of Hydrogen Energy, 2018, 43, 9379-9398.	3.8	16
28	Optimal subhourly electricity resource dispatch under multiple price signals with high renewable generation availability. Applied Energy, 2018, 213, 262-271.	5.1	6
29	Numerical analysis of ice-induced stresses in the membrane electrode assembly of a PEM fuel cell under sub-freezing operating conditions. International Journal of Hydrogen Energy, 2018, 43, 4563-4582.	3.8	41
30	Lattice Boltzmann simulation of particles agglomeration and rheology in a particulate flow. Journal of Dispersion Science and Technology, 2018, 39, 777-791.	1.3	2
31	A multi-criteria model analysis framework for assessing integrated water-energy system transformation pathways. Applied Energy, 2018, 210, 477-486.	5.1	57
32	Transactive control of fast-acting demand response based on thermostatic loads in real-time retail electricity markets. Applied Energy, 2018, 210, 1310-1320.	5.1	89
33	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.	1.3	5
34	Woven gas diffusion layers for polymer electrolyte membrane fuel cells: Liquid water transport and conductivity trade-offs. Journal of Power Sources, 2018, 403, 192-198.	4.0	22
35	A Continental‐Scale Hydroeconomic Model for Integrating Water‐Energy‐Land Nexus Solutions. Water Resources Research, 2018, 54, 7511-7533.	1.7	57
36	A demand response system for wind power integration: greenhouse gas mitigation and reduction of generator cycling. CSEE Journal of Power and Energy Systems, 2018, 4, 121-129.	1.7	14

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37	Experimental study on different preheating methods for the cold-start of PEMFC stacks. Energy, 2018, 162, 1029-1040.	4.5	80
38	Modeling the Effect of Chemical Membrane Degradation on PEMFC Performance. Journal of the Electrochemical Society, 2018, 165, F3328-F3336.	1.3	59
39	Interconnection-wide hour-ahead scheduling in the presence of intermittent renewables and demand response: A surplus maximizing approach. Applied Energy, 2017, 189, 336-351.	5.1	17
40	Investigation of PEMFC under Static Magnetic Field: Temperature, Relative Humidity and Performance. Journal of the Electrochemical Society, 2017, 164, F1-F8.	1.3	19
41	$\mathcal{H}_2$ transactive control of electric power regulation from fast-acting demand response in the presence of high renewables. Applied Energy, 2017, 205, 304-315.	5.1	15
42	Lattice-Boltzmann simulation of multi-phase phenomena related to fuel cells. AIP Conference Proceedings, 2017, , .	0.3	3
43	Assessing the impact of an electric bus duty cycle on battery pack life span. , 2017, , .		2
44	Optimal Operation of a Self-regulating Smart Distribution System with Wind Energy Integration and Demand Response. Lecture Notes in Energy, 2017, , 707-734.	0.2	0
45	PV array power output maximization under partial shading using new shifted PV array arrangements. Applied Energy, 2017, 187, 326-337.	5.1	149
46	Coordinated charging of electric vehicles connected to a net-metered PV parking lot. , 2017, , .		14
47	Direct numerical simulations of agglomeration of circular colloidal particles in two-dimensional shear flow. Physics of Fluids, 2016, 28, .	1.6	9
48	Counter-intuitive reduction of thermal contact resistance with porosity: A case study of polymer electrolyte membrane fuel cells. International Journal of Hydrogen Energy, 2016, 41, 6833-6841.	3.8	18
49	Effect of Deposition Conditions on Stability of PB Films at PEMFC's Operating Temperatures and pH. Journal of the Electrochemical Society, 2016, 163, B185-B187.	1.3	1
50	Climate and human development impacts on municipal water demand: A spatially-explicit global modeling framework. Environmental Modelling and Software, 2016, 85, 266-278.	1.9	24
51	Experimental and numerical investigation of a solar eductor-assisted low-pressure water desalination system. Science Bulletin, 2016, 61, 959-973.	4.3	8
52	Integration of price-driven demand response using plug-in electric vehicles in smart grids. , 2016, , .		4
53	pH-Dependent response of a hydrogen peroxide sensing probe. Sensors and Actuators B: Chemical, 2016, 237, 113-119.	4.0	6
54	Materials for energy conversion. Science Bulletin, 2016, 61, 585-586.	4.3	6

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55	Impacts of Groundwater Constraints on Saudi Arabiaâ€™s Low-Carbon Electricity Supply Strategy. Environmental Science & Technology, 2016, 50, 1653-1662.	4.6	23
56	Electric Vehicle Participation in Transactive Power Systems Using Real-Time Retail Prices. , 2016, , .		24
57	Theoretical design strategies of bipolar membrane fuel cell with enhanced self-humidification behavior. Journal of Power Sources, 2016, 307, 358-367.	4.0	22
58	A compact closed-form Nusselt formula for laminar longitudinal flow between rectangular/square arrays of parallel cylinders with unequal row temperatures. International Journal of Thermal Sciences, 2016, 100, 248-254.	2.6	12
59	Renewable resources portfolio optimization in the presence of demand response. Applied Energy, 2016, 162, 139-148.	5.1	88
60	Agent-Based Simulation for Interconnection-Scale Renewable Integration and Demand Response Studies. Engineering, 2015, 1, 422-435.	3.2	8
61	Computational Science in Smart Grids and Energy Systems. Journal of Applied Mathematics, 2015, 2015, 1-2.	0.4	1
62	Stability of Prussian Blue Films for Sensing H_2O_2 in a PEM-fuel Cell Environment. ECS Transactions, 2015, 66, 35-42.	0.3	0
63	Micro-porous layer stochastic reconstruction and transport parameter determination. Journal of Power Sources, 2015, 282, 58-64.	4.0	34
64	Aggregation and Bidirectional Charging Power Control of Plug-in Hybrid Electric Vehicles: Generation System Adequacy Analysis. IEEE Transactions on Sustainable Energy, 2015, 6, 325-335.	5.9	67
65	Computational modeling of alkaline air-breathing microfluidic fuel cells with an array of cylinder anodes. Journal of Power Sources, 2015, 288, 150-159.	4.0	33
66	Long-term energy planning with uncertain environmental performance metrics. Applied Energy, 2015, 147, 402-412.	5.1	19
67	Robust response to hydro-climatic change in electricity generation planning. Climatic Change, 2015, 130, 475-489.	1.7	32
68	An adaptive extended finite element method for the analysis of agglomeration of colloidal particles in a flowing fluid. AIP Conference Proceedings, 2015, , .	0.3	0
69	A new thermostat for real-time price demand response: Cost, comfort and energy impacts of discrete-time control without deadband. Applied Energy, 2015, 155, 816-825.	5.1	65
70	A self-humidifying acidicâ€“alkaline bipolar membrane fuel cell. Journal of Power Sources, 2015, 299, 273-279.	4.0	43
71	Thermal conductivity of a graphite bipolar plate (BPP) and its thermal contact resistance with fuel cell gas diffusion layers: Effect of compression, PTFE, micro porous layer (MPL), BPP out-of-flatness and cyclic load. Journal of Power Sources, 2015, 273, 96-104.	4.0	42
72	Dual-Beam FIB/SEM Characterization, Statistical Reconstruction, and Pore Scale Modeling of a PEMFC Catalyst Layer. Journal of the Electrochemical Society, 2014, 161, F415-F424.	1.3	44

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73	GridLAB-D: An Agent-Based Simulation Framework for Smart Grids. Journal of Applied Mathematics, 2014, 2014, 1-12.	0.4	133
74	Spectroscopic detection of Hydrogen peroxide with an optical fiber probe using chemically deposited Prussian blue. Electrochimica Acta, 2014, 115, 416-424.	2.6	22
75	Modeling framework and validation of a smart grid and demand response system for wind power integration. Applied Energy, 2014, 113, 199-207.	5.1	113
76	Effect of Polytetrafluoroethylene (PTFE) and micro porous layer (MPL) on thermal conductivity of fuel cell gas diffusion layers: Modeling and experiments. Journal of Power Sources, 2014, 248, 632-641.	4.0	135
77	Power system operation risk analysis considering charging load self-management of plug-in hybrid electric vehicles. Applied Energy, 2014, 136, 662-670.	5.1	22
78	In situ measurement of relative humidity in a PEM fuel cell using fibre Bragg grating sensors. International Journal of Hydrogen Energy, 2014, 39, 17638-17644.	3.8	21
79	Temperature response and durability characterization of an optical fiber sensor for the detection of hydrogen peroxide. Electrochimica Acta, 2014, 129, 416-424.	2.6	7
80	A new model for thermal contact resistance between fuel cell gas diffusion layers and bipolar plates. Journal of Power Sources, 2014, 266, 51-59.	4.0	33
81	Computational modeling of air-breathing microfluidic fuel cells with flow-over and flow-through anodes. Journal of Power Sources, 2014, 259, 15-24.	4.0	62
82	Numerical investigation of subsonic hydrogen jet release. International Journal of Hydrogen Energy, 2014, 39, 6242-6251.	3.8	7
83	An h-Adaptive Operator Splitting Method for Two-Phase Flow in 3D Heterogeneous Porous Media. SIAM Journal of Scientific Computing, 2013, 35, B149-B175.	1.3	10
84	Integrating renewable energy using a smart distribution system: Potential of self-regulating demand response. Renewable Energy, 2013, 52, 46-56.	4.3	35
85	A statistically-based thermal conductivity model for fuel cell Gas Diffusion Layers. Journal of Power Sources, 2013, 233, 369-379.	4.0	45
86	Detection of hydrogen peroxide using an optical fiber-based sensing probe. Sensors and Actuators B: Chemical, 2013, 185, 166-173.	4.0	18
87	Hierarchical market integration of responsive loads as spinning reserve. Applied Energy, 2013, 104, 229-238.	5.1	77
88	Using an ILU/Deflation Preconditioner for Simulation of a PEM Fuel Cell Cathode Catalyst Layer. Communications in Computational Physics, 2013, 14, 537-573.	0.7	11
89	Effect of PTFE on Thermal Conductivity of Gas Diffusion Layers of PEM Fuel Cells. , 2013, , .		2
90	A Statistically Based Thermal Conductivity Model for PEMFC Gas Diffusion Layers. , 2012, , .		0

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91	Wind integration in self-regulating electric load distributions. Energy Systems, 2012, 3, 341-377.	1.8	24
92	Online voltage security assessment considering comfort-constrained demand response control of distributed heat pump systems. Applied Energy, 2012, 96, 104-114.	5.1	108
93	Numerical Investigation of Flowfield in PEM Fuel Cell Stack Headers. Energy Procedia, 2012, 29, 102-111.	1.8	6
94	PEM fuel cell CL characterization using a standalone FIB and SEM: Experiments and simulation. Electrochimica Acta, 2012, 85, 322-331.	2.6	24
95	Parametric study of a polymer-coated fibre-optic humidity sensor. Measurement Science and Technology, 2012, 23, 035103.	1.4	43
96	A test bed for self-regulating distribution systems: Modeling integrated renewable energy and demand response in the GridLAB-D/MATLAB environment. , 2012, , .		23
97	Toward low carbon energy systems: The convergence of wind power, demand response, and the electricity grid. , 2012, , .		14
98	Active power regulation of wind power systems through demand response. Science China Technological Sciences, 2012, 55, 1667-1676.	2.0	26
99	Fiber Bragg grating sensor for two-phase flow in microchannels. Microfluidics and Nanofluidics, 2012, 13, 99-106.	1.0	11
100	Determination of effective transport properties in a PEMFC catalyst layer using different reconstruction algorithms. Journal of Power Sources, 2012, 208, 354-365.	4.0	63
101	Experimental investigation of water droplet emergence in a model polymer electrolyte membrane fuel cell microchannel. Journal of Power Sources, 2012, 208, 248-256.	4.0	64
102	Comfort-Constrained Distributed Heat Pump Management. Energy Procedia, 2011, 12, 849-855.	1.8	49
103	In-Plane Thermal Conductivity of PEM Fuel Cell Gas Diffusion Layers. , 2011, , .		0
104	A novel approach to determine the in-plane thermal conductivity of gas diffusion layers in proton exchange membrane fuel cells. Journal of Power Sources, 2011, 196, 3565-3571.	4.0	74
105	Dynamics of Emerging Water Droplet Subjected to Sidewall with Different Wettabilities in a Fuel Cell Cathode Channel. Fuel Cells, 2011, 11, 404-412.	1.5	9
106	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.	3.4	12
107	Numerical and experimental investigation of buoyant gas release: Application to hydrogen jets. International Journal of Hydrogen Energy, 2011, 36, 2645-2655.	3.8	12
108	Turbulent flow in the distribution header of a PEM fuel cell stack. International Journal of Hydrogen Energy, 2011, 36, 7136-7151.	3.8	17

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109	Effective thermal conductivity and thermal contact resistance of gas diffusion layers in proton exchange membrane fuel cells. Part 1: Effect of compressive load. Journal of Power Sources, 2011, 196, 246-254.	4.0	116
110	Analysis of liquid water transport in fuel cell gas diffusion media using two-mobile phase pore network simulations. Journal of Power Sources, 2011, 196, 2725-2734.	4.0	16
111	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.	4.0	86
112	DEPENDENCE OF SINGLE-PHASE AND MULTIPHASE PERMEABILITY ON CAPILLARY PRESSURE: A UNIFIED APPROACH. Journal of Porous Media, 2011, 14, 1077-1086.	1.0	0
113	Effect of Compression on the Effective Thermal Conductivity and Thermal Contact Resistance in PEM Fuel Cell Gas Diffusion Layers. , 2010, , .		1
114	Optimization of a proton exchange membrane fuel cell membrane electrode assembly. Structural and Multidisciplinary Optimization, 2010, 40, 563-583.	1.7	29
115	Effective thermal conductivity and thermal contact resistance of gas diffusion layers in proton exchange membrane fuel cells. Part 2: Hysteresis effect under cyclic compressive load. Journal of Power Sources, 2010, 195, 8104-8109.	4.0	62
116	Thermal Spreading Resistance of Arbitrary-Shape Heat Sources on a Half-Space: A Unified Approach. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 267-277.	1.4	18
117	Numerical investigation of water droplet dynamics in a low-temperature fuel cell microchannel: Effect of channel geometry. Journal of Power Sources, 2010, 195, 801-812.	4.0	108
118	Structure of porous electrodes in polymer electrolyte membrane fuel cells: An optical reconstruction technique. Journal of Power Sources, 2010, 195, 1936-1939.	4.0	10
119	Improved modelling of the fuel cell power module within a system-level model for solid-oxide fuel cell cogeneration systems. Journal of Power Sources, 2010, 195, 2283-2290.	4.0	6
120	Reduced-dimensional models for straight-channel proton exchange membrane fuel cells. Journal of Power Sources, 2010, 195, 3240-3249.	4.0	32
121	On the effects of non-uniform property distribution due to compression in the gas diffusion layer of a PEMFC. International Journal of Hydrogen Energy, 2010, 35, 2936-2948.	3.8	59
122	Multi-level adaptive simulation of transient two-phase flow in heterogeneous porous media. Computers and Fluids, 2010, 39, 1585-1596.	1.3	32
123	Simultaneous In Situ Measurement of Temperature and Relative Humidity in a PEMFC Using Optical Fiber Sensors. Journal of the Electrochemical Society, 2010, 157, B1173.	1.3	37
124	Pore Scale Simulation of Transport and Electrochemical Reactions in Reconstructed PEMFC Catalyst Layers. Journal of the Electrochemical Society, 2010, 157, B1434.	1.3	157
125	Fractal Flow Patterns in Hydrophobic Microfluidic Pore Networks: Experimental Modeling of Two-Phase Flow in Porous Electrodes. Journal of the Electrochemical Society, 2010, 157, B760.	1.3	19
126	Estimation of Nusselt Number in Microchannels of Arbitrary Cross Section with Constant Axial Heat Flux. Heat Transfer Engineering, 2010, 31, 666-674.	1.2	16

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127	Effect of Pt nano-particle size on the microstructure of PEM fuel cell catalyst layers: Insights from molecular dynamics simulations. Electrochimica Acta, 2010, 55, 1588-1597.	2.6	38
128	Advances in Microfluidic Fuel Cells. , 2009, , 99-139.		6
129	Molecular Level Investigation of PBI Based High Temperature Fuel Cells. ECS Transactions, 2009, 25, 1135-1140.	0.3	1
130	Flow within a water droplet subjected to an air stream in a hydrophobic microchannel. Fluid Dynamics Research, 2009, 41, 045506.	0.6	13
131	The Effect of Pt Cluster Size on Micro-Morphology of PEMFC Catalyst Layers- A Molecular Dynamics Simulation. ECS Transactions, 2009, 16, 1405-1411.	0.3	2
132	Thermal Conductivity and Thermal Contact Resistance of Metal Foams. , 2009, , .		3
133	Modelling and Simulations on Mitigation Techniques for Carbon Oxidation Reaction Caused by Local Fuel Starvation in a PEMFC. ECS Transactions, 2009, 16, 1313-1322.	0.3	6
134	Three-dimensional modelling of catalyst layers in PEM fuel cells: Effects of non-uniform catalyst loading. International Journal of Energy Research, 2009, 33, 631-644.	2.2	19
135	Modelling and simulations of carbon corrosion during operation of a Polymer Electrolyte Membrane fuel cell. Electrochimica Acta, 2009, 54, 5583-5592.	2.6	48
136	Transient electrolyser response in a renewable-regenerative energy system. International Journal of Hydrogen Energy, 2009, 34, 64-70.	3.8	53
137	Transient supersonic release of hydrogen from a high pressure vessel: A computational analysis. International Journal of Hydrogen Energy, 2009, 34, 5817-5827.	3.8	22
138	Experimental assessment of a residential scale renewable–regenerative energy system. Journal of Power Sources, 2009, 186, 158-166.	4.0	16
139	Microfluidic fuel cells: A review. Journal of Power Sources, 2009, 186, 353-369.	4.0	507
140	In-fibre Bragg grating sensors for distributed temperature measurement in a polymer electrolyte membrane fuel cell. Journal of Power Sources, 2009, 192, 376-380.	4.0	50
141	FUEL CELLS â€" PROTON-EXCHANGE MEMBRANE FUEL CELLS	Modeling. , 2009, , 868-878.		1
142	Reactor Dynamics of PEM Fuel Cells. Topics in Applied Physics, 2009, , 91-122.	0.4	1
143	Coupled Proton and Water Transport in Polymer Electrolyte Membranes. Topics in Applied Physics, 2009, , 123-155.	0.4	4
144	Numerical and microfluidic pore networks: Towards designs for directed water transport in GDLs. Electrochimica Acta, 2008, 53, 7630-7637.	2.6	76

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145	Determination of the effective diffusion coefficient in porous media including Knudsen effects. Microfluidics and Nanofluidics, 2008, 4, 257-260.	1.0	92
146	Numerical simulation of emergence of a water droplet from a pore into a microchannel gas stream. Microfluidics and Nanofluidics, 2008, 4, 543-555.	1.0	57
147	Dynamic water transport and droplet emergence in PEMFC gas diffusion layers. Journal of Power Sources, 2008, 176, 240-246.	4.0	178
148	Analytic determination of the effective thermal conductivity of PEM fuel cell gas diffusion layers. Journal of Power Sources, 2008, 179, 200-208.	4.0	72
149	Advanced computational tools for PEM fuel cell design. Journal of Power Sources, 2008, 180, 410-422.	4.0	47
150	Advanced computational tools for PEM fuel cell design. Journal of Power Sources, 2008, 180, 423-432.	4.0	22
151	Three-dimensional numerical simulations of water droplet dynamics in a PEMFC gas channel. Journal of Power Sources, 2008, 181, 101-115.	4.0	137
152	Liquid water transport between graphite paper and a solid surface. Journal of Power Sources, 2008, 185, 1147-1153.	4.0	31
153	An alkaline microfluidic fuel cell based on formate and hypochlorite bleach. Electrochimica Acta, 2008, 54, 698-705.	2.6	108
154	A Microfluidic Fuel Cell with Flow-Through Porous Electrodes. Journal of the American Chemical Society, 2008, 130, 4000-4006.	6.6	301
155	Multi-objective optimization of a polymer electrolyte fuel cell membrane electrode assembly. Energy and Environmental Science, 2008, 1, 378.	15.6	39
156	Optimization of Membrane Electrode Assemblies for PEMFC. , 2008, , .		0
157	Design of a Polymer Electrolyte Fuel Cell Membrane Electrode Assembly for Maximum Performance under Different Operating Conditions. , 2008, , .		0
158	Lab-on-chip methodologies for the study of transport in porous media: energy applications. Lab on A Chip, 2008, 8, 689.	3.1	90
159	Transport phenomena in fuel cells: from microscale to macroscale. International Journal of Computational Fluid Dynamics, 2008, 22, 115-133.	0.5	31
160	Water Transport Dynamics in Fuel Cell Micro-Channels. NATO Science for Peace and Security Series C: Environmental Security, 2008, , 153-170.	0.1	3
161	Analytic Solution of Thermal Spreading Resistance: Generalization to Arbitrary-Shape Heat Sources on a Half-Space. , 2008, , .		1
162	Development of a Rapid Simulation Tool for PEM Fuel Cell Stacks. , 2008, , .		0

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163	Optimal Design of Ultralow-Platinum PEMFC Anode Electrodes. Journal of the Electrochemical Society, 2008, 155, B125.	1.3	29
164	Theoretical Performance Analysis of Microstructured Air-Breathing Fuel Cells. Electrochemical and Solid-State Letters, 2008, 11, B1.	2.2	3
165	Cell Interaction Phenomena in Polymer Electrolyte Fuel Cell Stacks. Journal of the Electrochemical Society, 2008, 155, B704.	1.3	32
166	A Microfluidic Pore Network Approach to Investigate Water Transport in Fuel Cell Porous Transport Layers. , 2008, , .		1
167	Numerical Investigation on the Transport in a PEMFC using a Microstructure Reconstruction Technique. ECS Transactions, 2008, 16, 2133-2144.	0.3	1
168	A Compact Thermal Resistance Model for Determining Effective Thermal Conductivity in the Fibrous Gas Diffusion Layers of Fuel Cells. , 2008, , .		1
169	Estimation of Nusselt Number in Microchannels of Arbitrary Cross-Section With Constant Axial Heat Flux. , 2008, , .		3
170	Performance Analysis of Microstructured Fuel Cells for Portable Applications. NATO Science for Peace and Security Series C: Environmental Security, 2008, , 47-74.	0.1	2
171	A Pore Scale Model for the Transport Phenomena in the Catalyst Layer of a PEM Fuel Cell. , 2008, , .		1
172	Effect of Channel Geometry on the Dynamics of a Water Droplet in a Microchannel. , 2008, , .		0
173	Microfluidic Fuel Cells. , 2008, , 1169-1177.		0
174	Planar and Three-Dimensional Microfluidic Fuel Cell Architectures. , 2007, , 941.		0
175	Modelling of Carbon Corrosion in a PEMFC caused by Local Fuel Starvation. ECS Transactions, 2007, 11, 1031-1039.	0.3	8
176	Hydrogen Peroxide as an Oxidant for Microfluidic Fuel Cells. Journal of the Electrochemical Society, 2007, 154, B1220.	1.3	115
177	Optical distortion correction for liquid droplet visualization using the ray tracing method: further considerations. Measurement Science and Technology, 2007, 18, L23-L28.	1.4	36
178	3D Modeling of Catalyst Layers in PEM Fuel Cells. Journal of the Electrochemical Society, 2007, 154, B1167.	1.3	51
179	Mathematical modelling of ambient air-breathing fuel cells for portable devices. Electrochimica Acta, 2007, 52, 3849-3862.	2.6	56
180	High-performance microfluidic vanadium redox fuel cell. Electrochimica Acta, 2007, 52, 4942-4946.	2.6	127

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181	Numerical optimization of proton exchange membrane fuel cell cathodes. Electrochimica Acta, 2007, 52, 2668-2682.	2.6	74
182	Multi-variable optimization of PEMFC cathodes using an agglomerate model. Electrochimica Acta, 2007, 52, 6318-6337.	2.6	167
183	Computational modelling of polymer electrolyte membrane (PEM) fuel cells: Challenges and opportunities. Energy, 2007, 32, 269-280.	4.5	209
184	Effect of compression on liquid water transport and microstructure of PEMFC gas diffusion layers. Journal of Power Sources, 2007, 163, 784-792.	4.0	281
185	Planar and three-dimensional microfluidic fuel cell architectures based on graphite rod electrodes. Journal of Power Sources, 2007, 168, 379-390.	4.0	123
186	Determination of transport parameters for multiphase flow in porous gas diffusion electrodes using a capillary network model. Journal of Power Sources, 2007, 171, 706-717.	4.0	98
187	Dynamic behaviour of liquid water emerging from a GDL pore into a PEMFC gas flow channel. Journal of Power Sources, 2007, 172, 287-295.	4.0	141
188	Prediction of the effective diffusion coefficient in random porous media using the finite element method. Journal of Porous Materials, 2007, 14, 49-54.	1.3	47
189	Integrated electrochemical velocimetry for microfluidic devices. Microfluidics and Nanofluidics, 2007, 3, 403-416.	1.0	36
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