Xianguo Li

List of Publications by Year in Descending Order

174 papers	9,007 citations	51 h-index	90 g-index
188 ext. papers	10,522 ext. citations	6.9 avg, IF	6.77 L-index

#	Paper	IF	Citations
174	Effect of Catalyst Ink and Formation Process on the Multiscale Structure of Catalyst Layers in PEM Fuel Cells. *Applied Sciences (Switzerland)*, **2022**, 12, 3776	2.6	0
173	The effect of non-spherical platinum nanoparticle sizes on the performance and durability of proton exchange membrane fuel cells. *Advances in Applied Energy*, **2021**, 4, 100071		1
172	Numerical simulation of particulate matter interaction with the gas diffusion layer of proton-exchange membrane fuel cells under various relative humidity conditions. *International Journal of Energy Research*, **2021**, 45, 11084-11097	4.5	1
171	Self-adjusting anode catalyst layer for smart water management in anion exchange membrane fuel cells. *Cell Reports Physical Science*, **2021**, 2, 100377	6.1	4
170	Numerical investigation of delamination onset and propagation in catalyst layers of PEM fuel cells under hygrothermal cycles. *International Journal of Hydrogen Energy*, **2021**, 46, 11071-11083	6.7	6
169	Synthesis and Ex-Situ characterizations of diamond-like carbon coatings for metallic bipolar plates in PEM fuel cells. *International Journal of Hydrogen Energy*, **2021**, 46, 11059-11070	6.7	7
168	Fractal structures arising from interfacial instabilities in bio-oil atomization. *Scientific Reports*, **2021**, 11, 411	4.9	2
167	A Review of physics-based and data-driven models for real-time control of polymer electrolyte membrane fuel cells. *Energy and AI*, **2021**, 6, 100114	12.6	14
166	Breakup mechanisms in air-assisted atomization of highly viscous pyrolysis oils. *Energy Conversion and Management*, **2020**, 220, 113122	10.6	4
165	A scaled-up proton exchange membrane fuel cell with enhanced performance and durability. *Applied Energy*, **2020**, 268, 114956	10.7	6
164	Power management optimization in plug-in hybrid electric vehicles subject to uncertain driving cycles. *ETransportation*, **2020**, 3, 100029	12.7	8
163	A modeling and experimental study of capacity fade for lithium-ion batteries. *Energy and AI*, **2020**, 2, 100032	12.6	17
162	Degradations in porous components of a proton exchange membrane fuel cell under freeze-thaw cycles: Morphology and microstructure effects. *International Journal of Hydrogen Energy*, **2020**, 45, 3618-3631	6.7	19
161	Modelling of mechanical microstructure changes in the catalyst layer of a polymer electrolyte membrane fuel cell. *International Journal of Hydrogen Energy*, **2020**, 45, 29904-29916	6.7	12
160	Degradations in the surface wettability and gas permeability characteristics of proton exchange membrane fuel cell electrodes under freeze-thaw cycles: Effects of ionomer type. *International Journal of Hydrogen Energy*, **2020**, 45, 29892-29903	6.7	5
159	Membrane and electrode engineering of high-performance lithium-sulfur batteries modified by stereotaxically-constructed graphene. *Journal of Alloys and Compounds*, **2020**, 834, 155096	5.7	14
158	A review of polymer electrolyte membrane fuel cell durability for vehicular applications: Degradation modes and experimental techniques. *Energy Conversion and Management*, **2019**, 199, 112022	10.6	122

157	Curvature-induced deformations of the vortex rings generated at the exit of a rectangular duct. *Journal of Fluid Mechanics*, **2019**, 864, 141-180	3.7	2
156	A review of gas diffusion layers for proton exchange membrane fuel cells With a focus on characteristics, characterization techniques, materials and designs. *Progress in Energy and Combustion Science*, **2019**, 74, 50-102	33.6	87
155	Inverse cascade of the vortical structures near the contact line of evaporating sessile droplets. *Scientific Reports*, **2019**, 9, 6784	4.9	1
154	Oxygen transport in polymer electrolyte membrane fuel cells based on measured electrode pore structure and mass transport properties. *Energy Conversion and Management*, **2019**, 186, 570-585	10.6	24
153	Enhancing fuel cell durability for fuel cell plug-in hybrid electric vehicles through strategic power management. *Applied Energy*, **2019**, 241, 483-490	10.7	78
152	Effect of humidity and thermal cycling on the catalyst layer structural changes in polymer electrolyte membrane fuel cells. *Energy Conversion and Management*, **2019**, 189, 24-32	10.6	33
151	Investigation of the Effect of Inlet Turbulence and Reynolds Number on Developing Duct Flow. *Journal of Fluids Engineering, Transactions of the ASME*, **2019**, 141,	2.1	1
150	The effect of ink dilution and evaporation on the microstructures of catalyst layers in polymer electrolyte membrane fuel cells. *International Journal of Energy Research*, **2019**, 43, 6799	4.5	6
149	Effect of catalyst deposition on electrode structure, mass transport and performance of polymer electrolyte membrane fuel cells. *Applied Energy*, **2019**, 255, 113802	10.7	15
148	The impact of ionomer type on the morphological and microstructural degradations of proton exchange membrane fuel cell electrodes under freeze-thaw cycles. *Applied Energy*, **2019**, 238, 1048-1059	10.7	14
147	Cross-sectional reshaping of perturbed/unperturbed rectangular jets. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2019**, 29, 2206-2223	4.5	
146	A novel membrane electrode assembly design for proton exchange membrane fuel cells: Characterization and performance evaluation. *Electrochimica Acta*, **2019**, 299, 809-819	6.7	18
145	Geometric pore surface area and fractal dimension of catalyzed electrodes in polymer electrolyte membrane fuel cells. *International Journal of Energy Research*, **2019**, 43, 3011-3019	4.5	3
144	The impact of short side chain ionomer on polymer electrolyte membrane fuel cell performance and durability. *Applied Energy*, **2018**, 217, 295-302	10.7	32
143	Effect of Pt loading and catalyst type on the pore structure of porous electrodes in polymer electrolyte membrane (PEM) fuel cells. *Energy*, **2018**, 150, 69-76	7.9	33
142	Shear/rotation competition during the roll-up of acoustically excited shear layers. *Journal of Fluid Mechanics*, **2018**, 844, 831-854	3.7	5
141	Pore structure and effective diffusion coefficient of catalyzed electrodes in polymer electrolyte membrane fuel cells. *International Journal of Hydrogen Energy*, **2018**, 43, 3776-3785	6.7	30
140	Influence of Ionomer Structures and Ratios on Performance and Degradation of PEM Fuel Cells. *ECS Transactions*, **2018**, 83, 71-78	1	4

139	Assessment of graphene as an alternative microporous layer material for proton exchange membrane fuel cells. *Fuel*, **2018**, 215, 726-734	7.1	41
138	Modeling of liquid water transport in a proton exchange membrane fuel cell gas flow channel with dynamic wettability. *International Journal of Energy Research*, **2018**, 42, 3315-3327	4.5	17
137	Impact of ionomer in the catalyst layers on proton exchange membrane fuel cell performance under different reactant flows and pressures. *Fuel*, **2018**, 227, 35-41	7.1	20
136	A graphene-based microporous layer for proton exchange membrane fuel cells: Characterization and performance comparison. *Renewable Energy*, **2018**, 126, 485-494	8.1	29
135	Cathode catalyst layer design with gradients of ionomer distribution for proton exchange membrane fuel cells. *Energy Conversion and Management*, **2018**, 171, 1476-1486	10.6	33
134	Gas Diffusion Layers for PEM Fuel Cells **2018**, 695-727		3
133	Gas permeability of catalyzed electrodes in polymer electrolyte membrane fuel cells. *Applied Energy*, **2018**, 209, 203-210	10.7	43
132	Viscous diffusion effects on the self-induced distortions of rectangular vortex rings. *Physics of Fluids*, **2018**, 30, 124101	4.4	2
131	Dynamic characteristics of the local current density in proton exchange membrane fuel cells with different operating conditions. *International Journal of Energy Research*, **2018**, 42, 4610-4624	4.5	7
130	Microfluidic two-phase interactions under variable liquid to cross-flow gas momentum flux ratios. *Microfluidics and Nanofluidics*, **2018**, 22, 1	2.8	1
129	Humidification strategy for polymer electrolyte membrane fuel cells A review. *Applied Energy*, **2018**, 230, 643-662	10.7	93
128	The role of flow-field layout on the conditioning of a proton exchange membrane fuel cell. *Fuel*, **2018**, 230, 98-103	7.1	14
127	Experimental Observations of Microstructure Changes in the Catalyst Layers of Proton Exchange Membrane Fuel Cells under Wet-Dry Cycles. *Journal of the Electrochemical Society*, **2018**, 165, F3337-F3345	3.9	29
126	Impact of manufacturing processes on proton exchange membrane fuel cell performance. *Applied Energy*, **2018**, 225, 1022-1032	10.7	40
125	Multi-plume sprays interacting with subsonic compressible gas jets. *Applied Energy*, **2017**, 190, 623-633	10.7	4
124	Development of a low temperature decal transfer method for the fabrication of proton exchange membrane fuel cells. *International Journal of Hydrogen Energy*, **2017**, 42, 11813-11822	6.7	29
123	A facile synthesis of high activity cube-like Pt/carbon composites for fuel cell application. *Frontiers in Energy*, **2017**, 11, 245-253	2.6	4
122	Investigation of catalytic vs reactant transport effect of catalyst layers on proton exchange membrane fuel cell performance. *Fuel*, **2017**, 208, 321-328	7.1	31

121	Large Eddy Simulation of Compressible Subsonic Turbulent Jet Starting From a Smooth Contraction Nozzle. *Flow, Turbulence and Combustion*, **2017**, 98, 83-108	2.5	11
120	Vortex break-down during the impact of a starting subsonic compressible gas jet on a multi-plume spray. *Journal of Visualization*, **2016**, 19, 679-689	1.6	1
119	Evolution of liquid and gas phases in multi-plume spray injection. *International Journal of Energy Research*, **2016**, 40, 1935-1950	4.5	1
118	Assessment and validation of liquid breakup models for high-pressure dense diesel sprays. *Frontiers in Energy*, **2016**, 10, 164-175	2.6	5
117	A performance assessment study on solid oxide fuel cells for reduced operating temperatures. *International Journal of Hydrogen Energy*, **2015**, 40, 7791-7797	6.7	25
116	Superhydrophobic flow channel surface and its impact on PEM fuel cell performance. *International Journal of Low-Carbon Technologies*, **2014**, 9, 225-236	2.8	10
115	Measurements of heat generation in prismatic Li-ion batteries. *Journal of Power Sources*, **2014**, 261, 28-38	8.9	67
114	Accurate determination of battery discharge characteristics □A comparison between two battery temperature control methods. *Journal of Power Sources*, **2014**, 247, 961-966	8.9	30
113	Effective removal and transport of water in a PEM fuel cell flow channel having a hydrophilic plate. *Applied Energy*, **2014**, 113, 116-126	10.7	92
112	Thermal management of lithium-ion batteries for electric vehicles. *International Journal of Energy Research*, **2013**, 37, 13-24	4.5	227
111	Gas diffusion layer deformation and its effect on the transport characteristics and performance of proton exchange membrane fuel cell. *International Journal of Hydrogen Energy*, **2013**, 38, 12891-12903	6.7	65
110	Numerical simulations of carbon monoxide poisoning in high temperature proton exchange membrane fuel cells with various flow channel designs. *Applied Energy*, **2013**, 104, 21-41	10.7	38
109	Numerical investigation of water dynamics in a novel proton exchange membrane fuel cell flow channel. *Journal of Power Sources*, **2013**, 222, 150-160	8.9	44
108	Effect of wettability on water removal from the gas diffusion layer surface in a novel proton exchange membrane fuel cell flow channel. *International Journal of Hydrogen Energy*, **2013**, 38, 12879-12885	6.7	27
107	Effective transport properties for polymer electrolyte membrane fuel cells □With a focus on the gas diffusion layer. *Progress in Energy and Combustion Science*, **2013**, 39, 111-146	33.6	131
106	Improved experimental method for measuring gas diffusivity through thin porous media. *AICHE Journal*, **2013**, 59, 1409-1419	3.6	21
105	Experimental measurement of effective diffusion coefficient of gas diffusion layer/microporous layer in PEM fuel cells. *Electrochimica Acta*, **2012**, 65, 13-21	6.7	107
104	Through-plane thermal conductivity of the microporous layer in a polymer electrolyte membrane fuel cell. *International Journal of Hydrogen Energy*, **2012**, 37, 5161-5169	6.7	36

103	Multicomponent evaporation model for pure and blended biodiesel droplets in high temperature convective environment. *Applied Energy*, **2012**, 93, 71-79	10.7	36
102	Numerical estimation of the effective electrical conductivity in carbon paper diffusion media. *Applied Energy*, **2012**, 93, 39-44	10.7	50
101	The Influence of Channel Wettability on Two-Phase Flow and Polymer Electrolyte Membrane Fuel Cell Performance. *ECS Transactions*, **2012**, 42, 109-115	1	9
100	Numerical Simulation of the Soot and NOx Formations in a Biodiesel-Fuelled Engine **2011**,		8
99	Degradation of gas diffusion layers through repetitive freezing. *Applied Energy*, **2011**, 88, 5111-5119	10.7	35
98	Cold start characteristics of proton exchange membrane fuel cells. *International Journal of Hydrogen Energy*, **2011**, 36, 11832-11845	6.7	76
97	Measurement of the through-plane thermal conductivity of carbon paper diffusion media for the temperature range from −30 to +120°C. *International Journal of Hydrogen Energy*, **2011**, 36, 12618-12625	6.7	49
96	Effects of a microporous layer on the performance degradation of proton exchange membrane fuel cells through repetitive freezing. *Journal of Power Sources*, **2011**, 196, 1940-1947	8.9	39
95	Measurement of in-plane effective thermal conductivity in PEM fuel cell diffusion media. *Electrochimica Acta*, **2011**, 56, 1670-1675	6.7	39
94	Modeling the depleting mechanism of urea-water-solution droplet for automotive selective catalytic reduction systems. *AICHE Journal*, **2011**, 57, 3210-3225	3.6	32
93	An analytical analysis on the cross flow in a PEM fuel cell with serpentine flow channel. *International Journal of Energy Research*, **2011**, 35, 583-593	4.5	10
92	Numerical simulation of laminar flow development with heat and mass transfer in PEM fuel cell flow channels having oxygen and hydrogen suction at one channel wall. *International Journal of Energy Research*, **2011**, 35, 670-689	4.5	6
91	Three-dimensional simulation of water droplet movement in PEM fuel cell flow channels with hydrophilic surfaces. *International Journal of Energy Research*, **2011**, 35, 1200-1212	4.5	36
90	Effects of catalyst layer structure and wettability on liquid water transport in polymer electrolyte membrane fuel cell. *International Journal of Energy Research*, **2011**, 35, 1325-1339	4.5	32
89	Determination of the effective thermal conductivity of gas diffusion layers in polymer electrolyte membrane fuel cells: a comprehensive fractal approach. *International Journal of Energy Research*, **2011**, 35, 1351-1359	4.5	8
88	Development and impact of sandwich wettability structure for gas distribution media on PEM fuel cell performance. *Applied Energy*, **2011**, 88, 2168-2175	10.7	36
87	Measurement of in-plane thermal conductivity of carbon paper diffusion media in the temperature range of −20°C to +120°C. *Applied Energy*, **2011**, 88, 3042-3050	10.7	64
86	Experimental study on the effect of reactant flow arrangements on the current distribution in proton exchange membrane fuel cells. *Electrochimica Acta*, **2011**, 56, 2591-2598	6.7	32

85	Simultaneous measurement of current and temperature distributions in a proton exchange membrane fuel cell during cold start processes. *Electrochimica Acta*, **2011**, 56, 2967-2982	6.7	82
84	Three-dimensional non-isothermal modeling of carbon monoxide poisoning in high temperature proton exchange membrane fuel cells with phosphoric acid doped polybenzimidazole membranes. *Fuel*, **2011**, 90, 568-582	7.1	61
83	Effect of liquid water on transport properties of the gas diffusion layer of polymer electrolyte membrane fuel cells. *International Journal of Hydrogen Energy*, **2011**, 36, 5466-5478	6.7	56
82	Water transport in polymer electrolyte membrane fuel cells. *Progress in Energy and Combustion Science*, **2011**, 37, 221-291	33.6	505
81	Effect of contaminants on polymer electrolyte membrane fuel cells. *Progress in Energy and Combustion Science*, **2011**, 37, 292-329	33.6	126
80	Numerical Study on the Effects of Biodiesel Fuel on Combustion and Emission Characteristics in a Direct Injection Diesel Engine **2010**,		3
79	Modeling of PEMFC Transients with Finite-Rate Phase-Transfer Processes. *Journal of the Electrochemical Society*, **2010**, 157, B1	3.9	42
78	Measurement of through-plane effective thermal conductivity and contact resistance in PEM fuel cell diffusion media. *Electrochimica Acta*, **2010**, 55, 1619-1625	6.7	83
77	Experimental investigations on liquid water removal from the gas diffusion layer by reactant flow in a PEM fuel cell. *Applied Energy*, **2010**, 87, 2770-2777	10.7	101
76	Numerical simulation of biodiesel fuel combustion and emission characteristics in a direct injection diesel engine. *Frontiers of Energy and Power Engineering in China*, **2010**, 4, 252-261		9
75	A Three-Dimensional Non-isothermal Model of High Temperature Proton Exchange Membrane Fuel Cells with Phosphoric Acid Doped Polybenzimidazole Membranes. *Fuel Cells*, **2010**, 10, 351-362	2.9	55
74	Steady and unsteady 3D non-isothermal modeling of PEM fuel cells with the effect of non-equilibrium phase transfer. *Applied Energy*, **2010**, 87, 2778-2784	10.7	48
73	Effect of volumetric radiation on natural convection in a square cavity using lattice Boltzmann method with non-uniform lattices. *International Journal of Heat and Mass Transfer*, **2010**, 53, 4935-4948	4.9	42
72	Cold start analysis of polymer electrolyte membrane fuel cells. *International Journal of Hydrogen Energy*, **2010**, 35, 5077-5094	6.7	69
71	Modeling of ion and water transport in the polymer electrolyte membrane of PEM fuel cells. *International Journal of Hydrogen Energy*, **2010**, 35, 5095-5103	6.7	19
70	Analysis of liquid water transport in cathode catalyst layer of PEM fuel cells. *International Journal of Hydrogen Energy*, **2010**, 35, 2403-2416	6.7	93
69	Effect of surface dynamic wettability in proton exchange membrane fuel cells. *International Journal of Hydrogen Energy*, **2010**, 35, 9095-9103	6.7	24
68	Effective transport coefficients in PEM fuel cell catalyst and gas diffusion layers: Beyond Bruggeman approximation. *Applied Energy*, **2010**, 87, 2785-2796	10.7	121

67	Numerical investigations on liquid water removal from the porous gas diffusion layer by reactant flow. *Applied Energy*, **2010**, 87, 2180-2186	10.7	75
66	Experimental measurements of effective diffusion coefficient of oxygen–nitrogen mixture in PEM fuel cell diffusion media. *Chemical Engineering Science*, **2010**, 65, 931-937	4.4	91
65	Estimating effective thermal conductivity in carbon paper diffusion media. *Chemical Engineering Science*, **2010**, 65, 3994-4006	4.4	77
64	Non-isothermal multi-phase modeling of PEM fuel cell cathode. *International Journal of Energy Research*, **2009**, 34, n/a-n/a	4.5	3
63	A comprehensive, consistent and systematic mathematical model of PEM fuel cells. *Applied Energy*, **2009**, 86, 181-193	10.7	50
62	On the modeling of water transport in polymer electrolyte membrane fuel cells. *Electrochimica Acta*, **2009**, 54, 6913-6927	6.7	136
61	Three-dimensional multiphase modeling of cold start processes in polymer electrolyte membrane fuel cells. *Electrochimica Acta*, **2009**, 54, 6876-6891	6.7	124
60	Effects of various operating and initial conditions on cold start performance of polymer electrolyte membrane fuel cells. *International Journal of Hydrogen Energy*, **2009**, 34, 8171-8184	6.7	83
59	A general electrolyte–electrode-assembly model for the performance characteristics of planar anode-supported solid oxide fuel cells. *Journal of Power Sources*, **2009**, 189, 916-928	8.9	52
58	Numerical simulation of air flow through turbocharger compressors with dual volute design. *Applied Energy*, **2009**, 86, 2494-2506	10.7	29
57	Correlation for the Effective Gas Diffusion Coefficient in Carbon Paper Diffusion Media. *Energy & Fuels*, **2009**, 23, 6070-6078	4.1	95
56	Experiments and modeling of heat transfer in oil transformer winding with zigzag cooling ducts. *Applied Thermal Engineering*, **2008**, 28, 36-48	5.8	28
55	Transient analysis of carbon monoxide poisoning and oxygen bleeding in a PEM fuel cell anode catalyst layer. *International Journal of Hydrogen Energy*, **2008**, 33, 1335-1344	6.7	51
54	A parametric study of multi-phase and multi-species transport in the cathode of PEM fuel cells. *International Journal of Energy Research*, **2008**, 32, 698-721	4.5	44
53	Multi-phase micro-scale flow simulation in the electrodes of a PEM fuel cell by lattice Boltzmann method. *Journal of Power Sources*, **2008**, 178, 248-257	8.9	85
52	A three-dimensional agglomerate model for the cathode catalyst layer of PEM fuel cells. *Journal of Power Sources*, **2008**, 179, 186-199	8.9	48
51	Numerical analysis of dynamic processes in fully humidified PEM fuel cells. *International Journal of Hydrogen Energy*, **2007**, 32, 2022-2031	6.7	51
50	An experimental and numerical investigation on the cross flow through gas diffusion layer in a PEM fuel cell with a serpentine flow channel. *Journal of Power Sources*, **2007**, 163, 853-863	8.9	99

49	Analytical approach to polymer electrolyte membrane fuel cell performance and optimization. *Journal of Electroanalytical Chemistry*, **2007**, 604, 72-90	4.1	66
48	A flow channel design procedure for PEM fuel cells with effective water removal. *Journal of Power Sources*, **2007**, 163, 933-942	8.9	143
47	Non-isothermal transient modeling of water transport in PEM fuel cells. *Journal of Power Sources*, **2007**, 165, 232-243	8.9	80
46	Application of lattice Boltzmann method to a micro-scale flow simulation in the porous electrode of a PEM fuel cell. *Journal of Power Sources*, **2007**, 173, 404-414	8.9	82
45	Analysis for Oil Thermosyphon Circulation and Winding Temperature in ON Transformers. *IEEE Power Engineering Society General Meeting*, **2007**,		1
44	Thermodynamic Performance of Fuel Cells and Comparison with Heat Engines **2007**, 1, 1-46		12
43	Oil cooling for disk-type transformer windings-part II: parametric studies of design parameters. *IEEE Transactions on Power Delivery*, **2006**, 21, 1326-1332	4.3	15
42	Oil cooling for disk-type transformer windings-part 1: theory and model development. *IEEE Transactions on Power Delivery*, **2006**, 21, 1318-1325	4.3	29
41	Experimental diagnostics of PEM fuel cells. *International Journal of Environmental Studies*, **2006**, 63, 377-389	1.8	23
40	Flow uniformity in and its effect on the performance of polymer electrolyte membrane fuel cell stacks. *International Journal of Environmental Studies*, **2006**, 63, 391-419	1.8	2
39	Analysis and modeling of PEM fuel cell stack performance: Effect of in situ reverse water gas shift reaction and oxygen bleeding. *Journal of Power Sources*, **2006**, 159, 943-950	8.9	21
38	Cross-leakage flow between adjacent flow channels in PEM fuel cells. *Journal of Power Sources*, **2006**, 162, 415-425	8.9	67
37	Effect of flow and temperature distribution on the performance of a PEM fuel cell stack. *Journal of Power Sources*, **2006**, 162, 444-459	8.9	80
36	Lattice Boltzmann simulation on the liquid junction potential in a microchannel. *Journal of Electroanalytical Chemistry*, **2006**, 591, 141-148	4.1	6
35	A general formulation for a mathematical PEM fuel cell model. *Journal of Power Sources*, **2005**, 142, 134-153	8.9	66
34	Performance analysis and optimization of PEM fuel cell stacks using flow network approach. *Journal of Power Sources*, **2005**, 147, 162-177	8.9	72
33	Diversification and localization of energy systems for sustainable development and energy security. *Energy Policy*, **2005**, 33, 2237-2243	7.2	111
32	Multi-component mathematical model of solid oxide fuel cell anode. *International Journal of Energy Research*, **2005**, 29, 1083-1101	4.5	46

31	Review of bipolar plates in PEM fuel cells: Flow-field designs. *International Journal of Hydrogen Energy*, **2005**, 30, 359-371	6.7	589
30	Effect of gas stream swirls on the instability of viscous annular liquid jets. *Acta Mechanica*, **2005**, 176, 61-81	2.1	21
29	Coolant flow distribution and pressure loss in ONAN transformer windings $Part I: Theory and model development. *IEEE Transactions on Power Delivery*, **2004**, 19, 186-193	4.3	25
28	Coolant flow distribution and pressure loss in ONAN transformer windings. Part II: Optimization of design parameters. *IEEE Transactions on Power Delivery*, **2004**, 19, 194-199	4.3	16
27	Experimental investigation on cellular breakup of a planar liquid sheet from an air-blast nozzle. *Physics of Fluids*, **2004**, 16, 625-632	4.4	38
26	Two-dimensional analysis of PEM fuel cells. *Journal of Applied Electrochemistry*, **2004**, 34, 205-215	2.6	20
25	Modelling of polymer electrolyte membrane fuel cell stacks based on a hydraulic network approach. *International Journal of Energy Research*, **2004**, 28, 697-724	4.5	30
24	Modeling and Simulation of PEM Fuel Cells With CO Poisoning. *Journal of Energy Resources Technology, Transactions of the ASME*, **2003**, 125, 94-100	2.6	19
23	Mathematical model of a PEM fuel cell incorporating CO poisoning and O2 (air) bleeding. *International Journal of Global Energy Issues*, **2003**, 20, 245	0.3	29
22	Droplet Size Distribution in Sprays Based on Maximization of Entropy Generation. *Entropy*, **2003**, 5, 417-431	2.1	3
21	Modelling CO poisoning and O2 bleeding in a PEM fuel cell anode. *International Journal of Energy Research*, **2003**, 27, 1095-1116	4.5	91
20	A Predictive Model for the Initial Droplet Size and Velocity Distributions in Sprays and Comparison with Experiments. *Particle and Particle Systems Characterization*, **2003**, 20, 135-149	3.1	25
19	Mathematical modeling of proton exchange membrane fuel cells. *Journal of Power Sources*, **2001**, 102, 82-96	8.9	378
18	Carbon monoxide poisoning of proton exchange membrane fuel cells. *International Journal of Energy Research*, **2001**, 25, 695-713	4.5	403
17	Interaction of a Particle-Laden Gaseous Jet with a Confined Annular Turbulent Flow. *Particle and Particle Systems Characterization*, **2001**, 18, 120	3.1	2
16	On the Breakup of Viscous Liquid Sheets by Dual-Mode Linear Analysis. *Journal of Propulsion and Power*, **2001**, 17, 728-735	1.8	12
15	Structure of Liquid-Sheet Sprays. *Particle and Particle Systems Characterization*, **2000**, 17, 56-65	3.1	5
14	Modelling of polymer electrolyte membrane fuel cells with variable degrees of water flooding. *Journal of Power Sources*, **2000**, 86, 181-196	8.9	297

13	Nonlinear instability of plane liquid sheets. *Journal of Fluid Mechanics*, **2000**, 406, 281-308	3.7	59
12	Experimental Study of Sprays from Annular Liquid Jet Breakup. *Journal of Propulsion and Power*, **1999**, 15, 103-110	1.8	15
11	Composition and performance modelling of catalyst layer in a proton exchange membrane fuel cell. *Journal of Power Sources*, **1999**, 77, 17-27	8.9	237
10	A PREDICTIVE MODEL FOR DROPLET SIZE DISTRIBUTION IN SPRAYS. *Atomization and Sprays*, **1999**, 9, 29-50	1.2	17
9	Energy Reality and Future Projections for Canada. *Energy Sources Part A Recovery, Utilization, and Environmental Effects*, **1997**, 19, 233-243		11
8	Performance analyses of sensible heat storage systems for thermal applications. *International Journal of Energy Research*, **1997**, 21, 1157-1171	4.5	120
7	Temporal instability of plane gas sheets in a viscous liquid medium. *Physics of Fluids*, **1996**, 8, 103-111	4.4	13
6	Breakup of annular viscous liquid jets in two gas streams. *Journal of Propulsion and Power*, **1996**, 12, 752-759	1.8	29
5	Natural convection in vertical slots with wall temperature oscillation. *Experiments in Fluids*, **1994**, 16, 308-315	2.5	1
4	A Droplet Vaporization Model for Spray Calculations. *Particle and Particle Systems Characterization*, **1992**, 9, 59-65	3.1	27
3	On the Prediction of Droplet Size and Velocity distributions in sprays through maximum entropy principle. *Particle and Particle Systems Characterization*, **1992**, 9, 195-201	3.1	13
2	On the temporal instability of a two-dimensional viscous liquid sheet. *Journal of Fluid Mechanics*, **1991**, 226, 425-443	3.7	151
1	Calculated Characteristics of Droplet Size and Velocity Distributions in liquid sprays. *Particle and Particle Systems Characterization*, **1990**, 7, 54-59	3.1	17