

Kui Jiao

List of Publications by Citations

Source: <https://exaly.com/author-pdf/3015862/kui-jiao-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

291
papers

12,012
citations

55
h-index

99
g-index

315
ext. papers

15,691
ext. citations

7.5
avg, IF

7.29
L-index

#	Paper	IF	Citations
291	A review of polymer electrolyte membrane fuel cells: Technology, applications, and needs on fundamental research. <i>Applied Energy</i> , 2011 , 88, 981-1007	10.7	2192
290	Water transport in polymer electrolyte membrane fuel cells. <i>Progress in Energy and Combustion Science</i> , 2011 , 37, 221-291	33.6	505
289	Materials, technological status, and fundamentals of PEM fuel cells [A review]. <i>Materials Today</i> , 2020 , 32, 178-203	21.8	300
288	A Nonisothermal, Two-Phase Model for Polymer Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2006 , 153, A1193	3.9	221
287	Transient analysis of polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2005 , 50, 1307-1315	6.7	213
286	Multi-phase models for water and thermal management of proton exchange membrane fuel cell: A review. <i>Journal of Power Sources</i> , 2018 , 391, 120-133	8.9	157
285	Designing the next generation of proton-exchange membrane fuel cells. <i>Nature</i> , 2021 , 595, 361-369	50.4	152
284	Dynamics of polymer electrolyte fuel cells undergoing load changes. <i>Electrochimica Acta</i> , 2006 , 51, 3924-3933	6.7	139
283	Elucidating differences between carbon paper and carbon cloth in polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2007 , 52, 3965-3975	6.7	135
282	Modeling two-phase flow in PEM fuel cell channels. <i>Journal of Power Sources</i> , 2008 , 179, 603-617	8.9	135
281	Three-dimensional multiphase modeling of cold start processes in polymer electrolyte membrane fuel cells. <i>Electrochimica Acta</i> , 2009 , 54, 6876-6891	6.7	124
280	Cold start of proton exchange membrane fuel cell. <i>Progress in Energy and Combustion Science</i> , 2018 , 64, 29-61	33.6	122
279	Numerical and analytical modeling of lithium ion battery thermal behaviors with different cooling designs. <i>Journal of Power Sources</i> , 2013 , 233, 47-61	8.9	115
278	A 3D model of PEMFC considering detailed multiphase flow and anisotropic transport properties. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 115, 714-724	4.9	111
277	Liquid water transport in straight micro-parallel-channels with manifolds for PEM fuel cell cathode. <i>Journal of Power Sources</i> , 2006 , 157, 226-243	8.9	107
276	Experimental investigations on liquid water removal from the gas diffusion layer by reactant flow in a PEM fuel cell. <i>Applied Energy</i> , 2010 , 87, 2770-2777	10.7	101
275	Two-Phase Transients of Polymer Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2007 , 154, B636	3.9	100

274	Liquid water transport in parallel serpentine channels with manifolds on cathode side of a PEM fuel cell stack. <i>Journal of Power Sources</i> , 2006 , 154, 124-137	8.9	97
273	Droplet dynamics in a polymer electrolyte fuel cell gas flow channel: Forces, deformation, and detachment. I: Theoretical and numerical analyses. <i>Journal of Power Sources</i> , 2012 , 206, 119-128	8.9	96
272	Numerical investigation of thermal behaviors in lithium-ion battery stack discharge. <i>Applied Energy</i> , 2014 , 132, 288-297	10.7	95
271	Effective removal and transport of water in a PEM fuel cell flow channel having a hydrophilic plate. <i>Applied Energy</i> , 2014 , 113, 116-126	10.7	92
270	Fundamentals, materials, and machine learning of polymer electrolyte membrane fuel cell technology. <i>Energy and AI</i> , 2020 , 1, 100014	12.6	91
269	Multi-phase simulation of proton exchange membrane fuel cell with 3D fine mesh flow field. <i>International Journal of Energy Research</i> , 2018 , 42, 4697-4709	4.5	88
268	Life cycle analysis of internal combustion engine, electric and fuel cell vehicles for China. <i>Energy</i> , 2013 , 59, 402-412	7.9	86
267	Effects of various operating and initial conditions on cold start performance of polymer electrolyte membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 8171-8184	6.7	83
266	Simultaneous measurement of current and temperature distributions in a proton exchange membrane fuel cell during cold start processes. <i>Electrochimica Acta</i> , 2011 , 56, 2967-2982	6.7	82
265	Modeling of two-phase transport in the diffusion media of polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , 2008 , 185, 261-271	8.9	82
264	Ultra large-scale simulation of polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , 2006 , 153, 130-135	3.9	82
263	Modeling Polymer Electrolyte Fuel Cells with Large Density and Velocity Changes. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A445	3.9	81
262	Characteristics of PEMFC operating at high current density with low external humidification. <i>Energy Conversion and Management</i> , 2017 , 150, 763-774	10.6	80
261	Start-up modes of thermoelectric generator based on vehicle exhaust waste heat recovery. <i>Applied Energy</i> , 2015 , 138, 276-290	10.7	80
260	Investigation and design optimization of exhaust-based thermoelectric generator system for internal combustion engine. <i>Energy Conversion and Management</i> , 2014 , 85, 85-101	10.6	80
259	Cold start characteristics of proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 11832-11845	6.7	76
258	Three-dimensional multi-phase simulation of PEMFC at high current density utilizing Eulerian-Eulerian model and two-fluid model. <i>Energy Conversion and Management</i> , 2018 , 176, 409-421	10.6	76
257	Numerical investigations on liquid water removal from the porous gas diffusion layer by reactant flow. <i>Applied Energy</i> , 2010 , 87, 2180-2186	10.7	75

256	Simulation of flow and transport phenomena in a polymer electrolyte fuel cell under low-humidity operation. <i>Journal of Power Sources</i> , 2005 , 147, 148-161	8.9	74
255	Optimization design of the cathode flow channel for proton exchange membrane fuel cells. <i>Energy Conversion and Management</i> , 2018 , 171, 1813-1821	10.6	72
254	Analysis of the Key Parameters in the Cold Start of Polymer Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2007 , 154, B1041	3.9	71
253	Magnetic field alignment of stable proton-conducting channels in an electrolyte membrane. <i>Nature Communications</i> , 2019 , 10, 842	17.4	70
252	Cold start analysis of polymer electrolyte membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 5077-5094	6.7	69
251	Stochastic modeling and direct simulation of the diffusion media for polymer electrolyte fuel cells. <i>International Journal of Heat and Mass Transfer</i> , 2010 , 53, 1128-1138	4.9	67
250	Gas diffusion layer deformation and its effect on the transport characteristics and performance of proton exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 12891-12903	6.7	65
249	Cold start of polymer electrolyte fuel cells: Three-stage startup characterization. <i>Electrochimica Acta</i> , 2010 , 55, 2636-2644	6.7	65
248	On the water transport behavior and phase transition mechanisms in cold start operation of PEM fuel cell. <i>Applied Energy</i> , 2019 , 233-234, 776-788	10.7	62
247	Multi-physics-resolved digital twin of proton exchange membrane fuel cells with a data-driven surrogate model. <i>Energy and AI</i> , 2020 , 1, 100004	12.6	61
246	Three-dimensional non-isothermal modeling of carbon monoxide poisoning in high temperature proton exchange membrane fuel cells with phosphoric acid doped polybenzimidazole membranes. <i>Fuel</i> , 2011 , 90, 568-582	7.1	61
245	Modeling of assisted cold start processes with anode catalytic hydrogen-oxygen reaction in proton exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 1004-1015	6.7	60
244	Effects of electrode wettabilities on liquid water behaviours in PEM fuel cell cathode. <i>Journal of Power Sources</i> , 2008 , 175, 106-119	8.9	59
243	De Novo Design of Covalent Organic Framework Membranes toward Ultrafast Anion Transport. <i>Advanced Materials</i> , 2020 , 32, e2001284	24	59
242	Analysis of cold start processes in proton exchange membrane fuel cell stacks. <i>Journal of Power Sources</i> , 2013 , 224, 99-114	8.9	58
241	Modeling discharge deposit formation and its effect on lithium-air battery performance. <i>Electrochimica Acta</i> , 2012 , 75, 239-246	6.7	57
240	Droplet dynamics in a polymer electrolyte fuel cell gas flow channel: Forces, Deformation and detachment. II: Comparisons of analytical solution with numerical and experimental results. <i>Journal of Power Sources</i> , 2012 , 210, 191-197	8.9	57
239	Measurement of current distribution in a proton exchange membrane fuel cell with various flow arrangements [A parametric study]. <i>Applied Energy</i> , 2012 , 93, 80-89	10.7	57

238	Three-dimensional modeling of hydrogen sorption in metal hydride hydrogen storage beds. <i>Journal of Power Sources</i> , 2009 , 194, 997-1006	8.9	57
237	Innovative gas diffusion layers and their water removal characteristics in PEM fuel cell cathode. <i>Journal of Power Sources</i> , 2007 , 169, 296-314	8.9	56
236	Experimental investigation on PEM fuel cell cold start behavior containing porous metal foam as cathode flow distributor. <i>Applied Energy</i> , 2017 , 203, 101-114	10.7	55
235	A comprehensive design method for segmented thermoelectric generator. <i>Energy Conversion and Management</i> , 2015 , 106, 510-519	10.6	55
234	AI-based optimization of PEM fuel cell catalyst layers for maximum power density via data-driven surrogate modeling. <i>Energy Conversion and Management</i> , 2020 , 205, 112460	10.6	55
233	Numerical investigation of innovative 3D cathode flow channel in proton exchange membrane fuel cell. <i>International Journal of Energy Research</i> , 2018 , 42, 3328-3338	4.5	55
232	Three-dimensional multiphase modeling of alkaline anion exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 5981-5995	6.7	55
231	A Three-Dimensional Non-isothermal Model of High Temperature Proton Exchange Membrane Fuel Cells with Phosphoric Acid Doped Polybenzimidazole Membranes. <i>Fuel Cells</i> , 2010 , 10, 351-362	2.9	55
230	Effect of vehicle driving conditions on the performance of thermoelectric generator. <i>Energy Conversion and Management</i> , 2015 , 96, 363-376	10.6	54
229	Maximum power cold start mode of proton exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 8390-8400	6.7	54
228	Subfreezing operation of polymer electrolyte fuel cells: Ice formation and cell performance loss. <i>Electrochimica Acta</i> , 2012 , 65, 127-133	6.7	54
227	Porous-Media Flow Fields for Polymer Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2009 , 156, B1134	3.9	54
226	Effects of operating conditions on water and heat management by a transient multi-dimensional PEMFC system model. <i>Energy</i> , 2019 , 183, 462-476	7.9	53
225	Modeling of hydrogen alkaline membrane fuel cell with interfacial effect and water management optimization. <i>Renewable Energy</i> , 2016 , 91, 166-177	8.1	52
224	Purge strategy optimization of proton exchange membrane fuel cell with anode recirculation. <i>Applied Energy</i> , 2018 , 225, 1-13	10.7	51
223	Modeling of cold start processes and performance optimization for proton exchange membrane fuel cell stacks. <i>Journal of Power Sources</i> , 2014 , 247, 738-748	8.9	49
222	Effects of various operating conditions on the hydrogen absorption processes in a metal hydride tank. <i>Applied Energy</i> , 2012 , 94, 257-269	10.7	49
221	Large-scale multi-phase simulation of proton exchange membrane fuel cell. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 130, 555-563	4.9	49

220	Two-phase flow in the mixed-wettability gas diffusion layer of proton exchange membrane fuel cells. <i>Applied Energy</i> , 2018 , 232, 443-450	10.7	49
219	A quasi-2D transient model of proton exchange membrane fuel cell with anode recirculation. <i>Energy Conversion and Management</i> , 2018 , 171, 1463-1475	10.6	49
218	Investigation of the effect of micro-porous layer on PEM fuel cell cold start operation. <i>Renewable Energy</i> , 2018 , 117, 125-134	8.1	48
217	Water management in alkaline anion exchange membrane fuel cell anode. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 18389-18402	6.7	48
216	Numerical investigation of an ejector for anode recirculation in proton exchange membrane fuel cell system. <i>Energy Conversion and Management</i> , 2016 , 126, 1106-1117	10.6	47
215	Analysis of single- and two-phase flow characteristics of 3-D fine mesh flow field of proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2019 , 438, 226995	8.9	46
214	Porous-Media Flow Fields for Polymer Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2009 , 156, B1124	3.9	46
213	Numerical simulation for metal foam two-phase flow field of proton exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 6229-6244	6.7	44
212	Effect of cooling design on the characteristics and performance of thermoelectric generator used for internal combustion engine. <i>Energy Conversion and Management</i> , 2015 , 101, 9-18	10.6	44
211	Numerical investigation of water dynamics in a novel proton exchange membrane fuel cell flow channel. <i>Journal of Power Sources</i> , 2013 , 222, 150-160	8.9	44
210	Life cycle assessment of fuel cell, electric and internal combustion engine vehicles under different fuel scenarios and driving mileages in China. <i>Energy</i> , 2020 , 198, 117365	7.9	43
209	Effect of Spatially-Varying GDL Properties and Land Compression on Water Distribution in PEM Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2011 , 158, B1292	3.9	43
208	Analysis of Reaction Rates in the Cathode Electrode of Polymer Electrolyte Fuel Cell I. Single-Layer Electrodes. <i>Journal of the Electrochemical Society</i> , 2008 , 155, B1289	3.9	42
207	Sensitivity analysis of uncertain parameters based on an improved proton exchange membrane fuel cell analytical model. <i>Energy Conversion and Management</i> , 2018 , 164, 639-654	10.6	41
206	Analysis of Air Cathode Performance for Lithium-Air Batteries. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1847-A1855	3.9	40
205	Numerical simulation of gas liquid two-phase flow in anode channel of low-temperature fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 3250-3258	6.7	40
204	Comparative analysis of two-phase flow in sinusoidal channel of different geometric configurations with application to PEMFC. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 13807-13819	6.7	39
203	Numerical simulation of two-phase cross flow in the gas diffusion layer microstructure of proton exchange membrane fuel cells. <i>International Journal of Energy Research</i> , 2018 , 42, 802-816	4.5	39

202	Two-Phase Flow Dynamics in the Gas Diffusion Layer of Proton Exchange Membrane Fuel Cells: Volume of Fluid Modeling and Comparison with Experiment. <i>Journal of the Electrochemical Society</i> , 2018 , 165, F613-F620	3.9	39
201	Enhancing Hydroxide Conductivity and Stability of Anion Exchange Membrane by Blending Quaternary Ammonium Functionalized Polymers. <i>Electrochimica Acta</i> , 2017 , 240, 486-494	6.7	38
200	Experimental and theoretical analysis of ionomer/carbon ratio effect on PEM fuel cell cold start operation. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 12521-12530	6.7	38
199	Numerical simulations of carbon monoxide poisoning in high temperature proton exchange membrane fuel cells with various flow channel designs. <i>Applied Energy</i> , 2013 , 104, 21-41	10.7	38
198	Three-dimensional simulation of a new cooling strategy for proton exchange membrane fuel cell stack using a non-isothermal multiphase model. <i>Applied Energy</i> , 2019 , 255, 113865	10.7	37
197	Elucidating the constant power, current and voltage cold start modes of proton exchange membrane fuel cell. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 77, 489-500	4.9	37
196	Measurement of thermal conductivity and heat pipe effect in hydrophilic and hydrophobic carbon papers. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 60, 134-142	4.9	37
195	Elucidating modeling aspects of thermoelectric generator. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 85, 12-32	4.9	37
194	Multi-functional anodes boost the transient power and durability of proton exchange membrane fuel cells. <i>Nature Communications</i> , 2020 , 11, 1191	17.4	36
193	A comprehensive and time-efficient model for determination of thermoelectric generator length and cross-section area. <i>Energy Conversion and Management</i> , 2016 , 122, 85-94	10.6	36
192	Three-dimensional simulation of water droplet movement in PEM fuel cell flow channels with hydrophilic surfaces. <i>International Journal of Energy Research</i> , 2011 , 35, 1200-1212	4.5	36
191	Through-Plane Water Distribution in a Polymer Electrolyte Fuel Cell: Comparison of Numerical Prediction with Neutron Radiography Data. <i>Journal of the Electrochemical Society</i> , 2010 , 157, B1878	3.9	36
190	Additive manufacturing for energy: A review. <i>Applied Energy</i> , 2021 , 282, 116041	10.7	36
189	Counter-flow formic acid microfluidic fuel cell with high fuel utilization exceeding 90%. <i>Applied Energy</i> , 2015 , 160, 930-936	10.7	35
188	Numerical simulation of two-phase cross flow in microstructure of gas diffusion layer with variable contact angle. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 15772-15785	6.7	35
187	Challenges and opportunities in modelling of proton exchange membrane fuel cells (PEMFC). <i>International Journal of Energy Research</i> , 2017 , 41, 1793-1797	4.5	35
186	An analytical model for hydrogen alkaline anion exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 3300-3312	6.7	35
185	Transient analysis of alkaline anion exchange membrane fuel cell anode. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 6509-6525	6.7	34

184	Effect of membrane electrode assembly design on the cold start process of proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 25372-25387	6.7	34
183	Analysis of the Reaction Rates in the Cathode Electrode of Polymer Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2009 , 156, B403	3.9	34
182	A dot matrix and sloping baffle cathode flow field of proton exchange membrane fuel cell. <i>Journal of Power Sources</i> , 2019 , 434, 226741	8.9	33
181	Lattice Boltzmann simulation of liquid water transport inside and at interface of gas diffusion and micro-porous layers of PEM fuel cells. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 140, 1074-1090	4.9	33
180	Numerical analysis of operating conditions effects on PEMFC with anode recirculation. <i>Energy</i> , 2019 , 173, 844-856	7.9	32
179	Two-phase flow dynamics in a micro channel with heterogeneous surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 71, 349-360	4.9	32
178	Experimental study on the effect of reactant flow arrangements on the current distribution in proton exchange membrane fuel cells. <i>Electrochimica Acta</i> , 2011 , 56, 2591-2598	6.7	32
177	Ex situ and modeling study of two-phase flow in a single channel of polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , 2011 , 196, 9544-9551	8.9	31
176	Mechanism of signal uncertainty generation for laser-induced breakdown spectroscopy. <i>Frontiers of Physics</i> , 2021 , 16, 1	3.7	31
175	Three-dimensional multi-phase model of PEM fuel cell coupled with improved agglomerate sub-model of catalyst layer. <i>Energy Conversion and Management</i> , 2019 , 199, 112051	10.6	30
174	Oriented proton-conductive nano-sponge-facilitated polymer electrolyte membranes. <i>Energy and Environmental Science</i> , 2020 , 13, 297-309	35.4	30
173	Two-phase flow and oxygen transport in the perforated gas diffusion layer of proton exchange membrane fuel cell. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 139, 58-68	4.9	29
172	Multi-component multi-phase lattice Boltzmann modeling of droplet coalescence in flow channel of fuel cell. <i>Journal of Power Sources</i> , 2018 , 393, 83-91	8.9	29
171	Effects of needle orientation and gas velocity on water transport and removal in a modified PEMFC gas flow channel having a hydrophilic needle. <i>International Journal of Energy Research</i> , 2019 , 43, 2538-2545	4.5	29
170	Analytical modeling of liquid saturation jump effect for hydrogen alkaline anion exchange membrane fuel cell. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 112, 891-902	4.9	29
169	Numerical simulation of air flow through turbocharger compressors with dual volute design. <i>Applied Energy</i> , 2009 , 86, 2494-2506	10.7	29
168	Three-dimensional multi-phase simulation of PEM fuel cell considering the full morphology of metal foam flow field. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 2978-2989	6.7	29
167	Power and efficiency factors for comprehensive evaluation of thermoelectric generator materials. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 93, 1034-1037	4.9	28

166	Investigation of current density spatial distribution in PEM fuel cells using a comprehensively validated multi-phase non-isothermal model. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 150, 119294	4.9	28
165	Thermal management of polymer electrolyte membrane fuel cells: A review of cooling methods, material properties, and durability. <i>Applied Energy</i> , 2021 , 286, 116496	10.7	28
164	Two-phase flow in compressed gas diffusion layer: Finite element and volume of fluid modeling. <i>Journal of Power Sources</i> , 2019 , 437, 226933	8.9	27
163	Effect of wettability on water removal from the gas diffusion layer surface in a novel proton exchange membrane fuel cell flow channel. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 12879-12885	6.7	27
162	Effect of electrode design and operating condition on performance of hydrogen alkaline membrane fuel cell. <i>Applied Energy</i> , 2016 , 183, 1272-1278	10.7	26
161	Modeling of high temperature proton exchange membrane fuel cells with novel sulfonated polybenzimidazole membranes. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 13671-13680	6.7	25
160	Probing the water content in polymer electrolyte fuel cells using neutron radiography. <i>Electrochimica Acta</i> , 2012 , 75, 1-10	6.7	25
159	Effect of surface dynamic wettability in proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 9095-9103	6.7	24
158	Investigation of two-phase flow in the compressed gas diffusion layer microstructures. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 26498-26516	6.7	23
157	An analytical model for alkaline membrane direct methanol fuel cell. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 74, 376-390	4.9	23
156	Polymer electrolyte membrane fuel cell and hydrogen station networks for automobiles: Status, technology, and perspectives. <i>Advances in Applied Energy</i> , 2021 , 2, 100011		23
155	Direct numerical simulation of low Reynolds number turbulent air-water transport in fuel cell flow channel. <i>Science Bulletin</i> , 2017 , 62, 31-39	10.6	22
154	3D lattice Boltzmann modeling of droplet motion in PEM fuel cell channel with realistic GDL microstructure and fluid properties. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 12476-12488	6.7	22
153	Pore-scale investigation of catalyst layer ingredient and structure effect in proton exchange membrane fuel cell. <i>Applied Energy</i> , 2019 , 253, 113561	10.7	22
152	Modeling of passive alkaline membrane direct methanol fuel cell. <i>Electrochimica Acta</i> , 2015 , 154, 430-446.7		22
151	Direct numerical simulation of two-phase turbulent flow in fuel cell flow channel. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 3147-3152	6.7	21
150	An experimental study on the atomization characteristics of impinging jets of power law fluid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2015 , 217, 49-57	2.7	20
149	A three-dimensional multi-phase numerical model of DMFC utilizing Eulerian-Eulerian model. <i>Applied Thermal Engineering</i> , 2018 , 132, 140-153	5.8	19

148	A comprehensive proton exchange membrane fuel cell system model integrating various auxiliary subsystems. <i>Applied Energy</i> , 2019 , 256, 113959	10.7	19
147	Elucidating two-phase transport in a polymer electrolyte fuel cell, Part 1: Characterizing flow regimes with a dimensionless group. <i>Chemical Engineering Science</i> , 2011 , 66, 3557-3567	4.4	19
146	Accelerated Numerical Test of Liquid Behavior Across Gas Diffusion Layer in Proton Exchange Membrane Fuel Cell Cathode. <i>Journal of Fuel Cell Science and Technology</i> , 2008 , 5,		19
145	Design of Pt-C/Fe-N-S-C cathode dual catalyst layers for proton exchange membrane fuel cells under low humidity. <i>Electrochimica Acta</i> , 2019 , 296, 450-457	6.7	19
144	Recent progress of gas diffusion layer in proton exchange membrane fuel cell: Two-phase flow and material properties. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 8640-8671	6.7	19
143	Three-dimensional modeling of pressure effect on operating characteristics and performance of solid oxide fuel cell. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 20059-20076	6.7	19
142	Catalytic hydrogen-oxygen reaction in anode and cathode for cold start of proton exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 10293-10307	6.7	18
141	Effect of induced cross flow on flow pattern and performance of proton exchange membrane fuel cell. <i>Applied Energy</i> , 2014 , 115, 75-82	10.7	18
140	Instability analysis of a power law liquid jet. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2013 , 198, 10-17	2.7	18
139	An Experimental Study of Polymer Electrolyte Fuel Cell Operation at Sub-Freezing Temperatures. <i>Journal of the Electrochemical Society</i> , 2013 , 160, F514-F521	3.9	18
138	Experimental investigation of the effect of membrane water content on PEM fuel cell cold start. <i>Energy Procedia</i> , 2019 , 158, 1724-1729	2.3	17
137	Direct numerical simulation of droplet deformation in turbulent flows with different velocity profiles. <i>Fuel</i> , 2019 , 247, 302-314	7.1	17
136	Exergy Analysis of High-Temperature Proton Exchange Membrane Fuel Cell Systems. <i>International Journal of Green Energy</i> , 2015 , 12, 917-929	3	17
135	Effects of surface wettability on two-phase flow in the compressed gas diffusion layer microstructures. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 151, 119370	4.9	17
134	Three-dimensional modeling of flow field optimization for co-electrolysis solid oxide electrolysis cell. <i>Applied Thermal Engineering</i> , 2020 , 172, 114959	5.8	16
133	Multi-layer configuration for the cathode electrode of polymer electrolyte fuel cell. <i>Electrochimica Acta</i> , 2010 , 55, 4579-4586	6.7	16
132	Liquid droplet detachment and dispersion in metal foam flow field of polymer electrolyte membrane fuel cell. <i>Journal of Power Sources</i> , 2020 , 480, 229150	8.9	16
131	Effects of Side Chain Length on the Structure, Oxygen Transport and Thermal Conductivity for Perfluorosulfonic Acid Membrane: Molecular Dynamics Simulation. <i>Journal of the Electrochemical Society</i> , 2019 , 166, F511-F518	3.9	15

130	Two-dimensional multi-physics modeling of porous transport layer in polymer electrolyte membrane electrolyzer for water splitting. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 32984-32994	6.7	15
129	Investigation of performance heterogeneity of PEMFC stack based on 1+1D and flow distribution models. <i>Energy Conversion and Management</i> , 2020 , 207, 112502	10.6	14
128	Experimental and analytical analysis of polarization and water transport behaviors of hydrogen alkaline membrane fuel cell. <i>Journal of Power Sources</i> , 2018 , 382, 1-12	8.9	14
127	A lattice Boltzmann model for multi-component two-phase gas-liquid flow with realistic fluid properties. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 128, 536-549	4.9	14
126	Direct numerical simulation of near nozzle diesel jet evolution with full temporal-spatial turbulence inlet profile. <i>Fuel</i> , 2017 , 207, 22-32	7.1	13
125	Investigating the In-/Through-Plane Effective Diffusivities of Dry and Partially-Saturated Gas Diffusion Layers. <i>Journal of the Electrochemical Society</i> , 2018 , 165, F986-F993	3.9	13
124	Comfort index evaluating the water and thermal characteristics of proton exchange membrane fuel cell. <i>Energy Conversion and Management</i> , 2019 , 185, 496-507	10.6	12
123	Water transport in the gas diffusion layer of proton exchange membrane fuel cell under vibration conditions. <i>International Journal of Energy Research</i> , 2020 , 44, 4438-4448	4.5	12
122	Transient investigation of passive alkaline membrane direct methanol fuel cell. <i>Applied Thermal Engineering</i> , 2016 , 100, 1245-1258	5.8	12
121	Modeling and optimization of electrode structure design for solid oxide fuel cell. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 14648-14664	6.7	12
120	Two-dimensional simulation of cold start processes for proton exchange membrane fuel cell with different hydrogen flow arrangements. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 17795-17812	6.7	11
119	Three-dimensional simulation of solid oxide fuel cell with metal foam as cathode flow distributor. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 6897-6911	6.7	11
118	Advanced control of liquid water region in diffusion media of polymer electrolyte fuel cells through a dimensionless number. <i>Journal of Power Sources</i> , 2016 , 315, 224-235	8.9	11
117	Modeling of high temperature proton exchange membrane fuel cell start-up processes. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 3113-3127	6.7	11
116	Three-Dimensional Simulation of Water Management for High-Performance Proton Exchange Membrane Fuel Cell. <i>SAE International Journal of Alternative Powertrains</i> , 2018 , 7, 233-247	2	11
115	Transient analysis of passive vapor-feed DMFC fed with neat methanol. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 3222-3239	6.7	11
114	Transient analysis of passive direct methanol fuel cells with different operation and design parameters. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 14978-14995	6.7	11
113	Effect of Gas Diffusion Layer Deformation on Liquid Water Transport in Proton Exchange Membrane Fuel Cell. <i>Engineering Applications of Computational Fluid Mechanics</i> , 2014 , 8, 26-43	4.5	11

112	PEM Fuel Cells: Thermal and Water Management Fundamentals 2013 ,		11
111	BD+1D modeling approach toward large-scale PEM fuel cell simulation and partitioned optimization study on flow field. <i>ETransportation</i> , 2020 , 6, 100090	12.7	11
110	Optimization of porous media flow field for proton exchange membrane fuel cell using a data-driven surrogate model. <i>Energy Conversion and Management</i> , 2020 , 226, 113513	10.6	11
109	Deep learning from three-dimensional multiphysics simulation in operational optimization and control of polymer electrolyte membrane fuel cell for maximum power. <i>Applied Energy</i> , 2021 , 288, 116632	10.7	11
108	Experimental investigation and optimization of proton exchange membrane fuel cell using different flow fields. <i>Energy</i> , 2021 , 217, 119313	7.9	11
107	pH-differential design and operation of electrochemical and photoelectrochemical systems with bipolar membrane. <i>Applied Energy</i> , 2020 , 268, 115053	10.7	10
106	Investigation of cell orientation effect on transient operation of passive direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 6493-6507	6.7	10
105	Two-phase frictional pressure drop and water film thickness in a thin hydrophilic microchannel. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 127, 813-828	4.9	10
104	Investigating the pressure loss associated with two-phase flow in a rectangular microchannel suddenly expanding into a manifold. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 17444-17460	6.7	10
103	Towards the digitalisation of porous energy materials: evolution of digital approaches for microstructural design. <i>Energy and Environmental Science</i> , 2021 , 14, 2549-2576	35.4	10
102	Numerical investigation of ejector transient characteristics for a 130-kW PEMFC system. <i>International Journal of Energy Research</i> , 2020 , 44, 3697-3710	4.5	10
101	Lattice Boltzmann simulation of oxygen diffusion and electrochemical reaction inside catalyst layer of PEM fuel cells. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 143, 118538	4.9	9
100	Mechanism of Water Content on the Electrochemical Surface Area of the Catalyst Layer in the Proton Exchange Membrane Fuel Cell. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 6409-6413	6.4	9
99	Pore-Scale Investigation of the Effect of Micro-Porous Layer on Water Transport in Proton Exchange Membrane Fuel Cell. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 144504	3.9	9
98	A comprehensive three-dimensional model coupling channel multi-phase flow and electrochemical reactions in proton exchange membrane fuel cell. <i>Advances in Applied Energy</i> , 2021 , 2, 100033		9
97	Two-phase frictional pressure drop in a thin mixed-wettability microchannel. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 128, 649-667	4.9	9
96	Three-dimension simulation of two-phase flows in a thin gas flow channel of PEM fuel cell using a volume of fluid method. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 29730-29737	6.7	9
95	Effect of electrode variable contact angle on the performance and transport characteristics of passive direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 10568-10587	6.7	8

94	Two-Phase Flow in Porous Electrodes of Proton Exchange Membrane Fuel Cell. <i>Transactions of Tianjin University</i> , 2020 , 26, 197-207	2.9	8
93	Modeling of passive vapor feed alkaline membrane direct methanol fuel cell. <i>Applied Thermal Engineering</i> , 2018 , 131, 920-932	5.8	8
92	Experimental investigation on the performance and durability of hydrogen AEMFC with electrochemical impedance spectroscopy. <i>International Journal of Energy Research</i> , 2019 , 43, 8522-8535	4.5	8
91	Numerical Investigation of Liquid Water Transport Dynamics in Novel Hybrid Sinusoidal Flow Channel Designs for PEMFC. <i>Energies</i> , 2019 , 12, 4030	3.1	8
90	Numerical simulation of transport characteristics of Li-ion battery in different discharging modes. <i>Applied Thermal Engineering</i> , 2017 , 126, 70-80	5.8	8
89	Numerical investigation of the influence of variable diffuser vane angles on the performance of a centrifugal compressor. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2009 , 223, 1061-1070	1.4	8
88	Numerical investigations of assisted heating cold start strategies for proton exchange membrane fuel cell systems. <i>Energy</i> , 2021 , 222, 119910	7.9	8
87	Liquid Water Transport Behavior at GDL-Channel Interface of a Wave-Like Channel. <i>Energies</i> , 2020 , 13, 2726	3.1	7
86	An Intelligent Approach for Contact Pressure Optimization of PEM Fuel Cell Gas Diffusion Layers. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 4194	2.6	7
85	Photo-driven growth of a monolayer of platinum spherical-nanocrowns uniformly coated on a membrane toward fuel cell applications. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 23284-23292	13	7
84	Evolution of Microstructure, Residual Stress, and Tensile Properties of Additively Manufactured Stainless Steel Under Heat Treatments. <i>Jom</i> , 2020 , 72, 4167-4177	2.1	7
83	Transport properties of gas diffusion layer of proton exchange membrane fuel cells: Effects of compression. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 178, 121608	4.9	7
82	Current density and temperature distribution measurement and homogeneity analysis for a large-area proton exchange membrane fuel cell. <i>Energy</i> , 2022 , 239, 121922	7.9	7
81	Effect of operating conditions on performance of proton exchange membrane fuel cell with anode recirculation. <i>Energy Procedia</i> , 2019 , 158, 1829-1834	2.3	6
80	Oxygen Transport Routes in Ionomer Film on Polyhedral Platinum Nanoparticles. <i>ACS Nano</i> , 2020 ,	16.7	6
79	Discharge Precipitate's Impact in Li-Air Battery: Comparison of Experiment and Model Predictions. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A2283-A2289	3.9	6
78	Investigation of mechanical vibration effect on proton exchange membrane fuel cell cold start. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 14528-14538	6.7	6
77	Gas distribution and droplet removal of metal foam flow field for proton exchange membrane fuel cells. <i>Applied Energy</i> , 2020 , 280, 116011	10.7	6

76	Modelling of effect of pressure on co-electrolysis of water and carbon dioxide in solid oxide electrolysis cell. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 3456-3469	6.7	6
75	Enabling real-time optimization of dynamic processes of proton exchange membrane fuel cell: Data-driven approach with semi-recurrent sliding window method. <i>Applied Energy</i> , 2021 , 303, 117659	10.7	6
74	Elucidating the operating behavior of PEM fuel cell with nickel foam as cathode flow field. <i>Science China Technological Sciences</i> , 2021 , 64, 1041-1056	3.5	5
73	Liquid blockage and flow maldistribution of two-phase flow in two parallel thin micro-channels. <i>Applied Thermal Engineering</i> , 2021 , 182, 116127	5.8	5
72	Vapor condensation in reconstructed gas diffusion layers of proton exchange membrane fuel cell. <i>International Journal of Energy Research</i> , 2021 , 45, 4466-4478	4.5	5
71	PEM Fuel Cell and Electrolysis Cell Technologies and Hydrogen Infrastructure Development: A Review. <i>Energy and Environmental Science</i> ,	35.4	5
70	Rapid Analysis of Platinum and Nafion Loadings Using Laser Induced Breakdown Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2017 , 164, F1294-F1300	3.9	4
69	Three-dimensional Modeling and Performance Optimization of Proton Conducting Solid Oxide Electrolysis Cell?. <i>Fuel Cells</i> , 2020 , 20, 701-711	2.9	4
68	Ni migration of Ni-YSZ electrode in solid oxide electrolysis cell: An integrated model study. <i>Journal of Power Sources</i> , 2021 , 516, 230660	8.9	4
67	Effect of anisotropy in cathode diffusion layers on direct methanol fuel cell. <i>Applied Thermal Engineering</i> , 2020 , 165, 114589	5.8	4
66	Characteristics of Cold Start Behavior of PEM Fuel Cell with Metal Foam as Cathode Flow Field under Subfreezing Temperature. <i>International Journal of Green Energy</i> , 2021 , 18, 1129-1146	3	4
65	Capacity loss of non-aqueous Li-Air battery due to insoluble product formation: Approximate solution and experimental validation. <i>Materials Today Energy</i> , 2019 , 14, 100360	7	4
64	Morphology and performance evolution of anode microstructure in solid oxide fuel cell: A model-based quantitative analysis. <i>Applications in Energy and Combustion Science</i> , 2021 , 5, 100016	0.8	4
63	Modeling the membrane/CL delamination with the existence of CL crack under RH cycling conditions of PEM fuel cell. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 8722-8735	6.7	4
62	Investigation of metal foam porosity and wettability on fuel cell water management by Electrochemical Impedance Spectroscopy. <i>International Journal of Green Energy</i> , 2021 , 18, 708-719	3	4
61	Numerical study on the performance of the H-shaped air-breathing microfluidic fuel cell stack. <i>Electrochimica Acta</i> , 2021 , 392, 139024	6.7	4
60	Numerical investigation on the feasibility of metal foam as flow field in alkaline anion exchange membrane fuel cell. <i>Applied Energy</i> , 2021 , 302, 117555	10.7	4
59	Combining proton and anion exchange membrane fuel cells for enhancing the overall performance and self-humidification. <i>Chemical Engineering Journal</i> , 2022 , 428, 131969	14.7	4

58	Oxygen Permeation Resistances and Routes in Nanoscale Ionomer Thin Film on Platinum Surface. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 014511	3.9	4
57	Analysis of compression in uniform and non-uniform GDL microstructures on water transport. <i>International Journal of Green Energy</i> , 1-15	3	3
56	Validated ensemble variable selection of laser-induced breakdown spectroscopy data for coal property analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 2021 , 36, 111-119	3.7	3
55	Investigation of a cost-effective strategy for polymer electrolyte membrane fuel cells: High power density operation. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 35448-35458	6.7	3
54	Experimental investigation on the spray characteristics of power-law fluid in a swirl injector. <i>Fluid Dynamics Research</i> , 2017 , 49, 035508	1.2	2
53	Primary breakup of power-law biofuel sprays in pressurized gaseous crossflow. <i>Fuel</i> , 2019 , 258, 116061	7.1	2
52	Mathematical Modeling of Alkaline Anion Exchange Membrane Fuel Cells. <i>Lecture Notes in Energy</i> , 2018 , 169-215	0.4	2
51	Modeling of Polymer Electrolyte Membrane Fuel-Cell Components 2012 , 839-878		2
50	The Effect of the Air Stoichiometry on Dynamic Behavior of Local Current Density in Proton Exchange Membrane Fuel Cell. <i>ECS Transactions</i> , 2012 , 42, 131-142	1	2
49	Open-Source CFD Elucidating Mechanism of 3D Pillar Electrode in Improving All-Solid-State Battery Performance.. <i>Advanced Science</i> , 2022 , e2105454	13.6	2
48	Effects of U-type and Z-type configurations on proton exchange membrane fuel cell stack performances considering non-uniform flow distribution phenomena. <i>International Journal of Green Energy</i> , 1-10	3	2
47	Large-Scale Simulation of PEM Fuel Cell Using a BD+1D Model		2
46	Modeling of Proton Exchange Membrane Fuel Cell System Considering Various Auxiliary Subsystems. <i>Springer Proceedings in Energy</i> , 2019 , 18-33	0.2	2
45	Charging Infrastructure Intellectualization and Future of Different Automotive Powertrains. <i>Joule</i> , 2020 , 4, 1634-1636	27.8	2
44	Multi-objective optimization of the centrifugal compressor impeller in 130 kW PEMFC through coupling SVM with NSGA-III algorithms. <i>International Journal of Green Energy</i> , 2021 , 18, 1383-1395	3	2
43	Development of catalytic combustion and CO ₂ capture and conversion technology. <i>International Journal of Coal Science and Technology</i> , 2021 , 8, 377-382	4.5	2
42	A 1+1 D Multiphase Proton Exchange Membrane Fuel Cell Model for Real-Time Simulation. <i>IEEE Transactions on Transportation Electrification</i> , 2021 , 1-1	7.6	2
41	Integration of the detailed channel two-phase flow into three-dimensional multi-phase simulation of proton exchange membrane electrolyzer cell. <i>International Journal of Green Energy</i> , 2021 , 18, 541-555 ³		2

40	Global sensitivity analysis of uncertain parameters based on 2D modeling of solid oxide fuel cell. <i>International Journal of Energy Research</i> , 2019 , 43, 8697-8715	4.5	1
39	Modeling of Polymer Electrolyte Membrane Fuel Cells and Stacks 2012 , 879-916		1
38	3D Multiphase Modeling of PEMFC with Uneven Compression of GDL. <i>ECS Transactions</i> , 2010 , 28, 259-271		1
37	Modeling and Analysis of Polymer Electrolyte Fuel Cell Cold-Start 2010 ,		1
36	Water Sorption and Percolation for Proton-Conducting Electrolyte Membranes for PEM Fuel Cells. <i>Advanced Materials Research</i> , 2012 , 578, 54-57	0.5	1
35	Liquid transport in gas diffusion layer of proton exchange membrane fuel cells: Effects of micro-porous layer cracks. <i>International Journal of Hydrogen Energy</i> , 2022 , 47, 6247-6258	6.7	1
34	Novel structural designs of fin-tube heat exchanger for PEMFC systems based on wavy-louvered fin and vortex generator by a 3D model in OpenFOAM. <i>International Journal of Hydrogen Energy</i> , 2022 , 47, 1820-1832	6.7	1
33	Ex-situ measurement of thermal conductivity and swelling of nanostructured fibrous electrodes in electrochemical energy devices. <i>Thermal Science and Engineering Progress</i> , 2021 , 21, 100805	3.6	1
32	Polarization analysis of a micro direct methanol fuel cell stack based on Debye-Hückel ionic atmosphere theory. <i>Energy</i> , 2021 , 222, 119907	7.9	1
31	Ultrahigh fuel utilization in polymer electrolyte fuel cells [Part II: A modeling study. <i>International Journal of Green Energy</i> , 1-9	3	1
30	Stack-level modeling of proton exchange membrane fuel cells 2021 , 237-263		1
29	An Artificial Intelligence Solution for Predicting Short-Term Degradation Behaviors of Proton Exchange Membrane Fuel Cell. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 6348	2.6	1
28	Evaluation of femtosecond laser-induced breakdown spectroscopy system as an offline coal analyzer. <i>Scientific Reports</i> , 2021 , 11, 15968	4.9	1
27	Reconstruction and optimization of LSCF cathode microstructure based on Kinetic Monte Carlo method and Lattice Boltzmann method. <i>Chemical Engineering Journal</i> , 2021 , 132144	14.7	1
26	Numerical investigations of vapor condensation and water transport in gas diffusion layers of PEMFC. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 177, 121543	4.9	1
25	Material distortion in laser-based additive manufacturing of fuel cell component: Three-dimensional numerical analysis. <i>Additive Manufacturing</i> , 2021 , 46, 102188	6.1	1
24	Transport phenomena in proton exchange membrane fuel cell 2021 , 25-65		1
23	Validation methodology for PEM fuel cell three-dimensional simulation. <i>International Journal of Heat and Mass Transfer</i> , 2022 , 189, 122705	4.9	1

22	Investigations on heat and mass transfer in gas diffusion layers of PEMFC with a gas-liquid-solid coupled model. <i>Applied Energy</i> , 2022 , 316, 118996	10.7	1
21	Data-driven Fault Diagnosis for PEM Fuel Cell System Using Sensor Pre-Selection Method and Artificial Neural Network Model. <i>IEEE Transactions on Energy Conversion</i> , 2022 , 1-1	5.4	0
20	A 3-D multiphase model of proton exchange membrane electrolyzer based on open-source CFD. <i>Digital Chemical Engineering</i> , 2021 , 100004		0
19	Porous media flow field for proton exchange membrane fuel cells 2022 , 315-345		0
18	Correlating electrochemical active surface area with humidity and its application in proton exchange membrane fuel cell modeling. <i>Energy Conversion and Management</i> , 2021 , 251, 114982	10.6	0
17	Operation characteristics of open-cathode proton exchange membrane fuel cell with different cathode flow fields. <i>Sustainable Energy Technologies and Assessments</i> , 2022 , 49, 101681	4.7	0
16	Molecular Dynamics Simulation of Diffusion and O ₂ Dissolution in Water Using Four Water Molecular Models. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 034520	3.9	0
15	Pore-Scale Modeling of Anode Catalyst Layer Tolerance upon Hydrogen Sulfide Exposure in PEMFC. <i>Electrocatalysis</i> , 2021 , 12, 403-414	2.7	0
14	Experimental investigation of liquid water in flow field of proton exchange membrane fuel cell by combining X-ray with EIS technologies. <i>Science China Technological Sciences</i> , 2021 , 64, 2153	3.5	0
13	Two-Dimensional simulation of purge processes for dead-ended H ₂ /O ₂ proton exchange membrane fuel cell. <i>International Journal of Green Energy</i> , 1-18	3	0
12	Coupling deep learning and multi-objective genetic algorithms to achieve high performance and durability of direct internal reforming solid oxide fuel cell. <i>Applied Energy</i> , 2022 , 315, 119046	10.7	0
11	Research on the effect of catalyst structure on an air-breathing microfluidic fuel cell with crevice. <i>International Journal of Green Energy</i> , 1-9	3	0
10	Convolutional neural network analysis of radiography images for rapid water quantification in PEM fuel cell. <i>Applied Energy</i> , 2022 , 321, 119352	10.7	0
9	Numerical investigations of the flow distributions with a transient three-dimensional multi-component ejector model. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020 , 721, 012012	0.4	
8	Numerical investigation of design and operating parameter effects on permeability-differentiated alkaline fuel cell with metal foam flow field. <i>Applied Thermal Engineering</i> , 2022 , 207, 118183	5.8	
7	Pore-Scale Investigation of Coupled Two-Phase and Reactive Transport in the Cathode Electrode of Proton Exchange Membrane Fuel Cells. <i>Transactions of Tianjin University</i> , 1	2.9	
6	Structure optimization and thermal field analysis of biogas derived methane fueled Solid Oxide Fuel Cell. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020 , 721, 012022	0.4	
5	Cell-level modeling of proton exchange membrane fuel cell 2021 , 181-235		

4 System-level modeling of proton exchange membrane fuel cell **2021**, 265-314

3 Multiphase transport modeling **2021**, 121-180

2 Experimental characterization and diagnostics **2021**, 67-120

1 Study on Anode Catalyst Layer Configuration for Proton Exchange Membrane Fuel Cell with Enhanced Reversal Tolerance and Polarization Performance. *Energies*, **2022**, 15, 2732

3.1