Mohamed Mamlouk

List of Publications by Year
in descending order

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66 papers	2,862 citations	126708 33 h-index	174990 52 g-index
66 all docs	66 docs citations	66 times ranked	2585 citing authors

#	Article	IF	Citations
1	A two-phase flow and non-isothermal agglomerate model for a proton exchange membrane (PEM) fuel cell. Energy, 2014, 73, 618-634.	4.5	194
2	Sulfonated polyether ether ketone â€“ sulfonated graphene oxide composite membranes for polymer electrolyte fuel cells. RSC Advances, 2014, 4, 617-623.	1.7	120
3	A review of proton exchange membranes based on protic ionic liquid/polymer blends for polymer electrolyte membrane fuel cells. Journal of Power Sources, 2021, 484, 229197.	4.0	117
4	Physical and electrochemical evaluation of ATO supported IrO2 catalyst for proton exchange membrane water electrolyser. Journal of Power Sources, 2014, 269, 451-460.	4.0	110
5	Numerical analysis of the optimum membrane/ionomer water content of PEMFCs: The interaction of NafionÂ® ionomer content and cathode relative humidity. Applied Energy, 2015, 138, 242-257.	5.1	109
6	An isothermal model of a laboratory intermediate temperature fuel cell using PBI doped phosphoric acid membranes. Chemical Engineering Science, 2010, 65, 2513-2530.	1.9	99
7	Radiation grafted membranes for superior anion exchange polymer membrane fuel cells performance. International Journal of Hydrogen Energy, 2012, 37, 11912-11920.	3.8	97
8	The effect of electrode parameters on performance of a phosphoric acid-doped PBI membrane fuel cell. International Journal of Hydrogen Energy, 2010, 35, 784-793.	3.8	96
9	Modelling and experimental validation of a high temperature polymer electrolyte fuel cell. Journal of Applied Electrochemistry, 2007, 37, 1245-1259.	1.5	93
10	Numerical investigation of the optimal NafionÂ® ionomer content in cathode catalyst layer: An agglomerate two-phase flow modelling. International Journal of Hydrogen Energy, 2014, 39, 9087-9104.	3.8	86
11	Electrochemical and fuel cell evaluation of Co based catalyst for oxygen reduction in anion exchange polymer membrane fuel cells. Journal of Power Sources, 2011, 196, 7594-7600.	4.0	85
12	Study on the effect of the degree of grafting on the performance of polyethylene-based anion exchange membrane for fuel cell application. International Journal of Hydrogen Energy, 2016, 41, 1120-1133.	3.8	79
13	Anode partial flooding modelling of proton exchange membrane fuel cells: Model development and validation. Energy, 2016, 96, 80-95.	4.5	75
14	Preparation and characterisation of carbon-supported palladium nanoparticles for oxygen reduction in low temperature PEM fuel cells. Journal of Applied Electrochemistry, 2011, 41, 925-937.	1.5	70
15	A two dimensional agglomerate model for a proton exchange membrane fuel cell. Energy, 2013, 61, 196-210.	4.5	70
16	Preparation of alkaline anion exchange polymer membrane from methylated melamine grafted poly(vinylbenzyl chloride) and its fuel cell performance. Journal of Materials Chemistry, 2011, 21, 12910.	6.7	64
17	The effect of electrode parameters on the performance of anion exchange polymer membrane fuel cells. International Journal of Hydrogen Energy, 2011, 36, 7191-7198.	3.8	64
18	Comparison of high-temperature and low-temperature polymer electrolyte membrane fuel cell systems with glycerol reforming process for stationary applications. Applied Energy, 2013, 109, 192-201.	5.1	64

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19	Degradation of radiation grafted hydroxide anion exchange membrane immersed in neutral pH: removal of vinylbenzyl trimethylammonium hydroxide due to oxidation. Journal of Materials Chemistry A, 2017, 5, 1248-1267.	5.2	60
20	Composite membranes of polybenzimidazole and caesium-salts-of-heteropolyacids for intermediate temperature fuel cells. Journal of Materials Chemistry, 2011, 21, 6014.	6.7	55
21	Preparation and characterization of polybenzimidzaole/diethylamine hydrogen sulphate for medium temperature proton exchange membrane fuel cells. Journal of Power Sources, 2014, 245, 915-926.	4.0	55
22	Phosphoric acid-doped electrodes for a PBI polymer membrane fuel cell. International Journal of Energy Research, 2011, 35, 507-519.	2.2	52
23	A dynamic non-isothermal model of a laboratory intermediate temperature fuel cell using PBI doped phosphoric acid membranes. International Journal of Hydrogen Energy, 2010, 35, 12065-12080.	3.8	48
24	Analysis of high temperature polymer electrolyte membrane fuel cell electrodes using electrochemical impedance spectroscopy. Electrochimica Acta, 2011, 56, 5493-5512.	2.6	44
25	Effect of anion functional groups on the conductivity and performance of anion exchange polymer membrane fuel cells. Journal of Power Sources, 2012, 211, 140-146.	4.0	44
26	Performance of polyethylene based radiation grafted anion exchange membrane with polystyrene-b-poly (ethylene/butylene)-b-polystyrene based ionomer using NiCo2O4 catalyst for water electrolysis. Journal of Power Sources, 2018, 375, 387-396.	4.0	42
27	Maximizing the efficiency of a HT-PEMFC system integrated with glycerol reformer. International Journal of Hydrogen Energy, 2012, 37, 6808-6817.	3.8	40
28	A High Temperature Polymer Electrolyte Membrane Fuel Cell Model for Reformate Gas. International Journal of Electrochemistry, 2011, 2011, 1-18.	2.4	39
29	Degradation of radiation grafted anion exchange membranes tethered with different amine functional groups via removal of vinylbenzyl trimethylammonium hydroxide. Journal of Power Sources, 2018, 375, 373-386.	4.0	39
30	Solution combustion synthesis of porous Co3O4 nanoparticles as oxygen evolution reaction (OER) electrocatalysts in alkaline medium. Journal of Alloys and Compounds, 2020, 836, 154919.	2.8	37
31	Applications of poly ionic liquids in proton exchange membrane fuel cells: A review. Journal of Power Sources, 2021, 510, 230371.	4.0	36
32	An investigation of Pt alloy oxygen reduction catalysts in phosphoric acid doped PBI fuel cells. Journal of Power Sources, 2011, 196, 1084-1089.	4.0	35
33	The effects of morphology, microstructure and mixed-valent states of MnO2 on the oxygen evolution reaction activity in alkaline anion exchange membrane water electrolysis. Journal of Power Sources, 2020, 461, 228131.	4.0	35
34	A boron phosphate-phosphoric acid composite membrane for medium temperature proton exchange membrane fuel cells. Journal of Power Sources, 2015, 286, 290-298.	4.0	34
35	A cell voltage equation for an intermediate temperature proton exchange membrane fuel cell. International Journal of Hydrogen Energy, 2009, 34, 9195-9202.	3.8	33
36	Characterization and application of anion exchange polymer membranes with non-platinum group metals for fuel cells. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2011, 225, 152-160.	0.8	32

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37	Effect of different chemical modification of carbon nanotubes for the oxygen reduction reaction in alkaline media. Electrochimica Acta, 2014, 135, 428-438.	2.6	32
38	Direct Glycerol Fuel Cells: Comparison with Direct Methanol and Ethanol Fuel Cells. ChemElectroChem, 2019, 6, 2578-2585.	1.7	31
39	Gelâ€“Polymer Electrolytes Based on Poly(Ionic Liquid)/Ionic Liquid Networks. ACS Applied Polymer Materials, 2021, 3, 200-208.	2.0	30
40	Three Dimensional Model of a High Temperature PEMFC. Study of the Flow Field Effect on Performance. Fuel Cells, 2012, 12, 566-576.	1.5	26
41	Soluble Polystyreneâ€bâ€poly (ethylene/butylene)â€bâ€polystyrene Based Ionomer for Anion Exchange Membrane Fuel Cells Operating at 70â€‰Â°C. Fuel Cells, 2018, 18, 137-147.	1.5	26
42	Longâ€Lived Liquid Marbles for Green Applications. Advanced Functional Materials, 2021, 31, 2011198.	7.8	26
43	A Nonâ€isothermal Model of a Laboratory Intermediate Temperature Fuel Cell Using PBI Doped Phosphoric Acid Membranes. Fuel Cells, 2010, 10, 993-1012.	1.5	25
44	An Investigation of Palladium Oxygen Reduction Catalysts for the Direct Methanol Fuel Cell. International Journal of Electrochemistry, 2011, 2011, 1-12.	2.4	23
45	A PBIâ€Sb_{0.2}Sn_{0.8}P₂O₇â€H₃PO₄ Composite Membrane for Intermediate Temperature Fuel Cells. Fuel Cells, 2011, 11, 620-625.	1.5	16
46	Highly conductive partially cross-linked poly(2,6-dimethyl-1,4-phenylene oxide) as anion exchange membrane and ionomer for water electrolysis. International Journal of Hydrogen Energy, 2021, 46, 37137-37151.	3.8	16
47	Intermediate Temperature Fuel Cell and Oxygen Reduction Studies With Carbon-Supported Platinum Alloy Catalysts in Phosphoric Acid Based Systems. Journal of Fuel Cell Science and Technology, 2012, 9, .	0.8	14
48	A Three-Dimensional Agglomerate Model of an Anion Exchange Membrane Fuel Cell. Journal of Electrochemical Energy Conversion and Storage, 2018, 15, .	1.1	14
49	Three-dimensional agglomerate model of an anion exchange membrane fuel cell using air at the cathode â€“ A parametric study. Journal of Power Sources, 2019, 412, 105-117.	4.0	14
50	Boosting the oxygen evolution activity in non-stoichiometric praseodymium ferrite-based perovskites by A site substitution for alkaline electrolyser anodes. Sustainable Energy and Fuels, 2021, 5, 154-165.	2.5	14
51	The Role of Tungsten Oxide in Enhancing the Carbon Monoxide Tolerance of Platinum-Based Hydrogen Oxidation Catalysts. ACS Applied Materials & Interfaces, 2020, 12, 37079-37091.	4.0	13
52	High Temperature Direct Methanol Fuel Cell Based on Phosphoric Acid PBI Membrane. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	12
53	Porous titania photoelectrodes built on a Ti-web of microfibers for polymeric electrolyte membrane photoelectrochemical (PEM-PEC) cell applications. Solar Energy Materials and Solar Cells, 2018, 180, 184-195.	3.0	11
54	Diethylmethylammonium trifluoromethanesulfonate protic ionic liquid electrolytes for water electrolysis. Journal of Power Sources, 2020, 449, 227602.	4.0	11

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55	Probing mass transport processes in Li-ion batteries using electrochemical impedance spectroscopy. Journal of Power Sources, 2021, 514, 230577.	4.0	10
56	Hydrogen generation by alcohol reforming in a tandem cell consisting of a coupled fuel cell and electrolyser. International Journal of Hydrogen Energy, 2020, 45, 8107-8117.	3.8	9
57	Progress in Alkaline Membrane Fuel Cells and Regenerative Fuel Cells. ECS Transactions, 2013, 58, 1903-1906.	0.3	8
58	A study of oxygen reduction on carbon-supported platinum fuel cell electrocatalysts in polybenzimidazole/phosphoric acid. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2011, 225, 161-174.	0.8	6
59	A diethyl methyl ammonium triflate based protic ionic liquid polymer membrane for intermediate temperature water electrolysis. International Journal of Hydrogen Energy, 2020, 45, 28303-28312.	3.8	5
60	Fabrication and Characterization of Tuneable Flow-Channel/Gas-Diffusion-Layer Interface for Polymer Electrolyte Fuel Cells. Journal of Electrochemical Energy Conversion and Storage, 2020, 17, .	1.1	5
61	A Model of a High-Temperature Direct Methanol Fuel Cell. Journal of Fuel Cell Science and Technology, 2013, 10, .	0.8	3
62	Entropy generation analysis based on a three-dimensional agglomerate model of an anion exchange membrane fuel cell. Energy, 2020, 193, 116667.	4.5	3
63	Mass Transport Characteristics of Cathodes in a Phosphoric Acid Polybenzimidazole Membrane Fuel Cell. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	2
64	Alkaline Anion Exchange Membrane (AEM) Water Electrolysersâ€"Current/Future Perspectives in Electrolysers for Hydrogen. , 2022, , 473-504.		2
65	Chapter 6. Alkaline Anionic Exchange Membrane Water Electrolysers. RSC Energy and Environment Series, 2019, , 180-252.	0.2	2
66	Design and Analysis of HT-PEMFC Systems with Different Fuel Processors for Stationary Applications. Renewable Energy and Power Quality Journal, 0, , 1353-1357.	0.2	1