Soosan Rowshanzamir

List of Publications by Year
in descending order

63 papers	4,331 citations	172207 29 h-index	118652 62 g-index
64 all docs	64 docs citations	64 times ranked	4941 citing authors

#	Article	IF	Citations
1	Review of the proton exchange membranes for fuel cell applications. International Journal of Hydrogen Energy, 2010, 35, 9349-9384.	3.8	1,696
2	Subcritical water extraction of essential oils from coriander seeds (Coriandrum sativum L.). Journal of Food Engineering, 2007, 80, 735-740.	2.7	190
3	Investigation of physical properties and cell performance of Nafion/TiO2 nanocomposite membranes for high temperature PEM fuel cells. International Journal of Hydrogen Energy, 2010, 35, 9252-9260.	3.8	151
4	Comprehensive investigation of physicochemical and electrochemical properties of sulfonated poly (ether ether ketone) membranes with different degrees of sulfonation for proton exchange membrane fuel cell applications. Energy, 2017, 125, 614-628.	4.5	122
5	Effects of operating parameters on performance of a proton exchange membrane fuel cell. Journal of Power Sources, 2006, 161, 872-875.	4.0	121
6	Castor oil transesterification reaction: A kinetic study and optimization of parameters. Energy, 2010, 35, 4142-4148.	4.5	121
7	CFD simulation of PEM fuel cell performance: Effect of straight and serpentine flow fields. Mathematical and Computer Modelling, 2012, 55, 1540-1557.	2.0	112
8	Modelling and simulation of the steady-state and dynamic behaviour of a PEM fuel cell. Energy, 2010, 35, 1633-1646.	4.5	110
9	High durability sulfonated poly (ether etherÂketone)-ceria nanocomposite membranes for proton exchange membrane fuel cell applications. Journal of Membrane Science, 2018, 556, 12-22.	4.1	108
10	Synthesis methods of low-Pt-loading electrocatalysts for proton exchange membrane fuel cell systems. Energy, 2010, 35, 3941-3957.	4.5	106
11	Autothermal reforming of methane to synthesis gas: Modeling and simulation. International Journal of Hydrogen Energy, 2009, 34, 1292-1300.	3.8	103
12	Hydrothermal Synthesis of Zirconia Nanoparticles from Commercial Zirconia. Procedia Engineering, 2012, 42, 908-917.	1.2	76
13	Nitrogen doped graphene supported palladium-cobalt as a promising catalyst for methanol oxidation reaction: Synthesis, characterization and electrocatalytic performance. Energy, 2016, 113, 1162-1173.	4.5	70
14	A new study on improving the physicochemical and electrochemical properties of SPEEK nanocomposite membranes for medium temperature proton exchange membrane fuel cells using different loading of zirconium oxide nanoparticles. International Journal of Hydrogen Energy, 2017, 42, 590-602.	3.8	68
15	Effect of ceria loading on performance and durability of sulfonated poly (ether etherÂketone) nanocomposite membranes for proton exchange membrane fuel cell applications. Journal of Membrane Science, 2018, 565, 342-357.	4.1	68
16	Investigation and optimization of physicochemical properties of sulfated zirconia/sulfonated poly (ether ether ketone) nanocomposite membranes for medium temperature proton exchange membrane fuel cells. International Journal of Hydrogen Energy, 2016, 41, 12293-12306.	3.8	67
17	Preparation, characterization and cell performance of durable nafion/SiO2 hybrid membrane for high-temperature polymeric fuel cells. Journal of Power Sources, 2012, 210, 350-357.	4.0	52
18	The effect of sulfonated poly (ether ether ketone) as the electrode ionomer for self-humidifying nanocomposite proton exchange membrane fuel cells. Energy, 2015, 82, 746-757.	4.5	51

#	Article	IF	Citations
19	Effects of hot pressing conditions on the performance of Nafion membranes coated by ink-jet printing of Pt/MWCNTs electrocatalyst for PEMFCs. International Journal of Hydrogen Energy, 2012, 37, 11290-11298.	3.8	49
20	Recovery of water-soluble constituents of rose oil using simultaneous distillation-extraction. Flavour and Fragrance Journal, 2005, 20, 555-558.	1.2	47
21	Non-precious metal nanoparticles supported on nitrogen-doped graphene as a promising catalyst for oxygen reduction reaction: Synthesis, characterization and electrocatalytic performance. Journal of Power Sources, 2015, 273, 981-989.	4.0	46
22	Study of hydrogen crossover and proton conductivity of self-humidifying nanocomposite proton exchange membrane basedÂon sulfonated poly (ether ether ketone). Energy, 2016, 94, 292-303.	4.5	42
23	A comprehensive study on the stability and ion transport in cross-linked anion exchange membranes based on polysulfone for solid alkaline fuel cells. International Journal of Hydrogen Energy, 2017, 42, 17229-17241.	3.8	40
24	Water transport through a PEM (proton exchange membrane) fuel cell in a seven-layer model. Energy, 2013, 50, 220-231.	4.5	39
25	Self-humidifying nanocomposite membranes based on sulfonated poly(ether ether ketone) and heteropolyacid supported Pt catalyst for fuel cells. International Journal of Hydrogen Energy, 2011, 36, 10940-10957.	3.8	37
26	Effect of Pt-Cs 2.5 H 0.5 PW 12 O 40 catalyst addition on durability of self-humidifying nanocomposite membranes based on sulfonated poly (ether ether ketone) for proton exchange membrane fuel cell applications. International Journal of Hydrogen Energy, 2015, 40, 549-560.	3.8	36
27	Modeling and simulation of a proton exchange membrane fuel cell using computational fluid dynamics. International Journal of Hydrogen Energy, 2017, 42, 21944-21954.	3.8	36
28	Comparison of nitrogen-doped graphene and carbon nanotubes as supporting material for iron and cobalt nanoparticle electrocatalysts toward oxygen reduction reaction in alkaline media for fuel cell applications. International Journal of Hydrogen Energy, 2016, 41, 14665-14675.	3.8	32
29	EXTRACTION OF VOLATILE OIL FROM CUMIN (CUMINUM CYMINUM L.) WITH SUPERHEATED WATER. Journal of Food Process Engineering, 2007, 30, 255-266.	1.5	30
30	Investigation of NaOH concentration effect in injected fuel on the performance of passive direct methanol alkaline fuel cell with modified cation exchange membrane. Energy, 2016, 94, 589-599.	4.5	30
31	Investigation of physicochemical and electrochemical properties of recast Nafion nanocomposite membranes using different loading of zirconia nanoparticles for proton exchange membrane fuel cell applications. Materials Science for Energy Technologies, 2018, 1, 146-154.	1.0	30
32	Optimal thermal treatment conditions for durability improvement of highly sulfonated poly(ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Hydrogen Energy, 2020, 45, 13441-13458.	3.8	27
33	Preparation, characterization, and electrochemical properties investigation of recycled proton exchange membrane for fuel cell applications. Energy, 2018, 161, 699-709.	4.5	26
34	Durability investigation and performance study of hydrothermal synthesized platinum-multi walled carbon nanotube nanocomposite catalyst for proton exchange membrane fuel cell. Energy, 2017, 138, 696-705.	4.5	25
35	Investigation of the effect of carbonaceous supports on the activity and stability of supported palladium catalysts for methanol electro-oxidation reaction. International Journal of Hydrogen Energy, 2017, 42, 23070-23084.	3.8	24
36	Simultaneous improvement of ionic conductivity and oxidative stability of sulfonated poly(ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6 Journal of Energy Research, 2020, 44, 2783-2800.	2.2	24

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37	Hydrothermal synthesis of Pt/MWCNTs nanocomposite electrocatalysts for proton exchange membrane fuel cell systems. International Journal of Hydrogen Energy, 2011, 36, 5500-5511.	3.8	23
38	Effect of sulfated metal oxides on the performance and stability of sulfonated poly (ether ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 70 Polymers, 2020, 156, 104732.	2.0	23
39	Effect of the Sulfated Zirconia Nanostructure Characteristics on Physicochemical and Electrochemical Properties of SPEEK Nanocomposite Membranes for PEM Fuel Cell Applications. Macromolecular Materials and Engineering, 2018, 303, 1700570.	1.7	20
40	Investigation, modeling, and optimization of parameters affecting sulfonated polyether ether ketone membrane-electrode assembly. International Journal of Hydrogen Energy, 2019, 44, 1096-1109.	3.8	19
41	Preparation of low-platinum-loading electrocatalysts using electroless deposition method for proton exchange membrane fuel cell systems. Electrochimica Acta, 2010, 56, 271-277.	2.6	18
42	Electrooxidative Desulfurization of a Thiophene-Containing Model Fuel Using a Square Wave Potentiometry Technique. Energy & Fuels, 2015, 29, 3292-3301.	2.5	17
43	Electrochemical performance and enhanced nitrate removal of homogeneous polysulfone-based anion exchange membrane applied in membrane capacitive deionization cell. Desalination, 2020, 496, 114696.	4.0	15
44	Desulfurization of benzothiophene from model diesel fuel using experimental (dynamic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td (e 212, 505-514.	3.9	14
45	Self-Humidifying Proton Exchange Membranes for Fuel Cell Applications: Advances and Challenges. Processes, 2020, 8, 1069.	1.3	14
46	Study of mechanical degradation of sulfonated poly (ether ether ketone) membrane using ex-situ hygrothermal cycles for polymer electrolyte fuel cell application. Journal of Power Sources, 2018, 401, 73-84.	4.0	13
47	Experimental Evaluation of Effective Parameters for the Synthesis of Polysulfone‐Based Anion Exchange Membrane. Fuel Cells, 2016, 16, 135-149.	1.5	12
48	Synergistically enhanced nitrate removal by capacitive deionization with activated carbon/PVDF/polyaniline/ZrO2 composite electrode. Separation and Purification Technology, 2021, 274, 119108.	3.9	12
49	Remediation of polycyclic aromatic hydrocarbons from soil using superheated water extraction. Journal of Supercritical Fluids, 2016, 111, 129-134.	1.6	11
50	Nitrogen doped graphene/cobalt-based catalyst layers of a PEM fuel cell: Performance evaluation and multi-objective optimization. Korean Journal of Chemical Engineering, 2017, 34, 2978-2983.	1.2	11
51	Mass balance and water management for hydrogen-air fuel cells of the alkaline matrix type. International Journal of Hydrogen Energy, 1998, 23, 499-506.	3.8	10
52	A CFD Model for Methane Autothermal Reforming on Ru/Î³-Al2O3 Catalyst. Procedia Engineering, 2012, 42, 2-24.	1.2	10
53	Study of physicochemical characterization of potassium-doped Nafion117 membrane and performance evaluation of air-breathing fuel cell in different alkali-methanol solutions. Energy, 2016, 113, 1090-1098.	4.5	10
54	Mechanical stress and strain investigation of sulfonated Poly(ether ether ketone) proton exchange membrane in fuel cells: A numerical study. Renewable Energy, 2022, 184, 182-200.	4.3	10

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55	Application of a square wave potentiometry technique for electroreductive sulfur removal from a thiophenic model fuel. International Journal of Environmental Science and Technology, 2016, 13, 2883-2892.	1.8	9
56	Vicious cycle during chemical degradation of sulfonated aromatic proton exchange membranes in the fuel cell application. International Journal of Energy Research, 2020, 44, 8877-8891.	2.2	9
57	Experimental and theoretical investigation of the removal organic pollutants from contaminated soils using superheated water. Journal of Supercritical Fluids, 2015, 103, 55-60.	1.6	8
58	Possibilities and Constraints of the Electrochemical Treatment of Thiophene on Low and High Oxidation Power Electrodes. Energy & Fuels, 2019, 33, 1901-1909.	2.5	8
59	A new immobilized-alkali H2/O2 fuel cell. Journal of Power Sources, 2000, 88, 262-268.	4.0	6
60	Evaluation of the membrane efficiency of both Nafion and sulfonated poly (ether ether ketone) using electrochemical membrane reactor toward desulfurization of a model diesel fuel. Chemical Engineering Research and Design, 2020, 153, 517-527.	2.7	6
61	Current status of cross-linking and blending approaches for durability improvement of hydrocarbon-based fuel cell membranes. International Journal of Hydrogen Energy, 2022, 47, 13460-13489.	3.8	6
62	Superheated Water Extraction ofLavandula LatifoliaMedik Volatiles: Comparison with Conventional Techniques. Journal of Essential Oil Research, 2008, 20, 482-487.	1.3	5
63	Electrochemical investigation of different electrodes toward the removal of non-basic nitrogen compound from model diesel fuel. Journal of Electroanalytical Chemistry, 2021, 894, 115358.	1.9	0