

Solid polymer electrolyte membranes for fuel cell applications

Journal of Membrane Science

259, 10-26

DOI: [10.1016/j.memsci.2005.01.035](https://doi.org/10.1016/j.memsci.2005.01.035)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Characterization and Transport Properties of Nafion/Polyaniline Composite Membranes. Journal of Physical Chemistry B, 2005, 109, 23480-23490.	1.2	170
2	Coordinative Properties of Highly Fluorinated Solvents with Amino and Ether Groups. Journal of the American Chemical Society, 2005, 127, 16976-16984.	6.6	57
3	Measurement of Apparent Diffusion Coefficients within Ultrathin Nafion Langmuir-Schaefer Films: Comparison of a Novel Scanning Electrochemical Microscopy Approach with Cyclic Voltammetry. Langmuir, 2006, 22, 10380-10388.	1.6	56
4	Hydrated Arrays of Acidic Surface Groups as Model Systems for Interfacial Structure and Mechanisms in PEMs. Journal of Physical Chemistry B, 2006, 110, 20469-20477.	1.2	49
5	Preparation and characterization of SMA/S-POSS hybrid membranes for direct methanol fuel cell applications. Rare Metals, 2006, 25, 224-228.	3.6	2
6	Ab Initio Prediction of the Gas- and Solution-Phase Acidities of Strong Brønsted Acids: The Calculation of pKa Values Less Than 10. Journal of Physical Chemistry A, 2006, 110, 12044-12054.	1.1	101
7	Perfluorobutane Sulfonic Acid Hydration and Interactions with O ₂ Adsorbed on Pt ₃ . Journal of Physical Chemistry A, 2006, 110, 4574-4581.	1.1	12
8	Dependence of methanol permeability on the nature of water and the morphology of graft copolymer proton exchange membranes. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 2240-2252.	2.4	46
9	Effects of different acid functional groups on proton conductivity of polymer-1,2,4-triazole blends. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3315-3322.	2.4	65
10	Intermolecular interactions and formation of the hydration sphere in phosphonic acid model systems as an approach to the description of vinyl phosphonic acid based polymers. Polymer, 2006, 47, 1414-1422.	1.8	19
11	Proton conducting gel polyelectrolytes based on 2-acrylamido-2-methyl-1-propanesulfonic acid (AMPSA) copolymers. Journal of Power Sources, 2006, 159, 392-398.	4.0	26
12	Preparation and characterization of sulfonated PEEK-WC membranes for fuel cell applications. Journal of Power Sources, 2006, 160, 139-147.	4.0	56
13	Novel composite proton-exchange membrane based on silica-anchored sulfonic acid (SASA). Journal of Power Sources, 2006, 161, 1069-1075.	4.0	13
14	Direct measurement of through-plane thermal conductivity and contact resistance in fuel cell materials. Journal of Power Sources, 2006, 161, 1106-1115.	4.0	308
15	Preparation and characterization of high ionic conducting alkaline non-woven membranes by sulfonation. Journal of Membrane Science, 2006, 284, 120-127.	4.1	42
16	Poly(ethyleneglycol methacrylate phosphate) and heterocycle based proton conducting composite materials. Solid State Ionics, 2006, 177, 1003-1007.	1.3	31
17	Solvent Effects on Anionic and Acid Forms of Nafion Side Chain. Japanese Journal of Applied Physics, 2006, 45, 5121-5125.	0.8	3
18	Synthesis, Structure, and Ionic Conductivity of Self-Assembled Amphiphilic Poly(methacrylate) Comb Polymers. Macromolecules, 2006, 39, 4726-4734.	2.2	29

#	ARTICLE	IF	CITATIONS
19	CATION EXCHANGE POLYMERIC MEMBRANES FOR FUEL CELLS. Reviews in Chemical Engineering, 2006, 22, .	2.3	19
20	Sulphonated Poly(ether ether ketone) Proton Exchange Membranes for Fuel Cell Applications. International Journal of Polymeric Materials and Polymeric Biomaterials, 2007, 56, 535-548.	1.8	13
21	Polymer Electrolyte Membrane Fuel Cell. , 2007, , 40-115.		17
22	Development of Method for Synthesis of Ptâ€“Co Cathode Catalysts for PEM Fuel Cells. Electrochemical and Solid-State Letters, 2007, 10, B201.	2.2	35
24	Preparation of Highly Stable Ion Exchange Membranes by Radiation-Induced Graft Copolymerization of Styrene and Bis(vinyl phenyl)ethane Into Crosslinked Polytetrafluoroethylene Films. Journal of Fuel Cell Science and Technology, 2007, 4, 56-64.	0.8	24
25	Recent Patents on the Preparation and Application of Hybrid Materials and Membranes. Recent Patents on Engineering, 2007, 1, 214-227.	0.3	4
26	Properties of Poly(Vinyl Alcohol)â€“Based Composite Membranes for Direct Methanol Fuel Cell Applications. Journal of the Chinese Chemical Society, 2007, 54, 1485-1494.	0.8	6
27	Considerations of Macromolecular Structure in the Design of Proton Conducting Polymer Membranes:â€“ Graft versus Diblock Polyelectrolytes. Journal of the American Chemical Society, 2007, 129, 15106-15107.	6.6	223
28	Microfluidic Hydrogen Fuel Cell with a Liquid Electrolyte. Langmuir, 2007, 23, 6871-6874.	1.6	79
29	Formation and evaluation of electrochemically-active ultra-thin palladiumâ€“Nafion nanocomposite films. Chemical Communications, 2007, , 1597-1599.	2.2	24
30	Proton Activity in Nafion Films:â€“ Probing Exchangeable Protons with Methylene Blue. Langmuir, 2007, 23, 5471-5476.	1.6	55
31	Brennstoffe und Brennstoffzellen: Der â€“richtigeâ€“ Weg vom Brennstoff zum Brenngas. Chemie-Ingenieur-Technik, 2007, 79, 2029-2033.	0.4	0
32	Structure control of polyphenylene sulfide membrane prepared by thermally induced phase separation. Journal of Applied Polymer Science, 2007, 105, 3280-3286.	1.3	14
33	Hydrolytically Stable Phosphorylated Hybrid Silicas for Proton Conduction. Advanced Functional Materials, 2007, 17, 3304-3311.	7.8	109
34	Acidâ€“Functionalized Mesostructured Aluminosilica for Hydrophilic Proton Conduction Membranes. Advanced Materials, 2007, 19, 2580-2587.	11.1	66
35	Proton conductive composite membrane of phosphosilicate and polyvinyl alcohol. Solid State Ionics, 2007, 178, 937-942.	1.3	41
36	¹⁹ F NMR studies of Nafionâ„¢ ionomer adsorption on PEMFC catalysts and supporting carbons. Solid State Ionics, 2007, 178, 1568-1575.	1.3	67
37	Preparation of composite polymer electrolytes by electron beam-induced grafting: Proton- and lithium ion-conducting membranes. Nuclear Instruments & Methods in Physics Research B, 2007, 265, 168-172.	0.6	39

#	ARTICLE	IF	CITATIONS
38	Structural characterization of PVdF-HFP/PEG/Al ₂ O ₃ proton conducting membranes for fuel cells. <i>Journal of Membrane Science</i> , 2007, 303, 126-131.	4.1	53
39	Preparation of zirconium phosphate (ZrP)/Nafion1135 composite membrane and H ⁺ /VO ₂ ⁺ transfer property investigation. <i>Journal of Membrane Science</i> , 2007, 305, 118-124.	4.1	63
40	Water and proton transport properties of hexafluorinated sulfonated poly(arylenethioethersulfone) copolymers for applications to proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2007, 173, 853-859.	4.0	11
41	Study on polymer electrolyte membrane for fuel cells by using AMOC technique. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 3735-3738.	0.8	1
42	Polymeric materials for fuel cells: concise review of recent studies. <i>Polymers for Advanced Technologies</i> , 2007, 18, 785-799.	1.6	146
43	Multiblock copolymers of poly(2,5-benzophenone) and disulfonated poly(arylene ether sulfone) for proton-exchange membranes. I. Synthesis and characterization. <i>Journal of Polymer Science Part A</i> , 2007, 45, 284-294.	2.5	58
44	Synthesis and characterization of polyimide- <i>ε</i> -polysiloxane segmented copolymers for fuel cell applications. <i>Journal of Polymer Science Part A</i> , 2007, 45, 3747-3758.	2.5	31
45	Segmented sulfonated poly(arylene ether sulfone)- <i>ε</i> -polyimide copolymers for proton exchange membrane fuel cells. I. Copolymer synthesis and fundamental properties. <i>Journal of Polymer Science Part A</i> , 2007, 45, 4879-4890.	2.5	124
46	Spontaneous formation of hierarchical proton-conductive structures in sulfonated poly(p-phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tj 666-676.	2.4	14
47	Experimental analysis and management issues of a hydrogen fuel cell system for stationary and mobile application. <i>Energy Conversion and Management</i> , 2007, 48, 2365-2374.	4.4	78
48	Molecular dynamics studies of the Nafion [®] , Dow [®] and Aciplex [®] fuel-cell polymer membrane systems. <i>Journal of Molecular Modeling</i> , 2007, 13, 1039-1046.	0.8	113
49	The effect of ferric ions on the conductivity of various types of polymer cation exchange membranes. <i>Journal of Solid State Electrochemistry</i> , 2007, 11, 1429-1434.	1.2	21
50	Nafion [®] - <i>ε</i> -polybenzimidazole (PBI) composite membranes for DMFC applications. <i>Solid State Ionics</i> , 2007, 178, 581-585.	1.3	84
51	Influence of polyaniline intercalations on the conductivity and permselectivity of perfluorinated cation-exchange membranes. <i>Journal of Membrane Science</i> , 2008, 318, 255-263.	4.1	31
52	Proton and methanol transport behavior of SPEEK/TPA/MCM-41 composite membranes for fuel cell application. <i>Journal of Membrane Science</i> , 2008, 322, 218-224.	4.1	35
53	In situ polymerization: A novel route for thermally stable proton-conductive membranes. <i>Journal of Membrane Science</i> , 2008, 325, 209-216.	4.1	28
54	Ab initio study of interfacial correlations in polymer electrolyte membranes for fuel cells at low hydration. <i>Electrochimica Acta</i> , 2008, 53, 6920-6927.	2.6	19
55	Advances in the application of nanotechnology in enabling a "hydrogen economy". <i>Journal of Materials Science</i> , 2008, 43, 5395-5429.	1.7	221

#	ARTICLE	IF	CITATIONS
56	Synthesis and proton conductivity of poly(styrene sulfonic acid)/heterocycle-based membranes. <i>Polymer International</i> , 2008, 57, 133-138.	1.6	42
57	Ionomers for proton exchange membrane fuel cells with sulfonic acid groups on the end-groups: Novel branched poly(ether-etherone)s with 3,6-ditriptyl-carbazole end-groups. <i>Journal of Polymer Science Part A</i> , 2008, 46, 3860-3868.	2.5	61
58	Palladium-catalyzed phosphonation of SEBS block copolymer. <i>Journal of Polymer Science Part A</i> , 2008, 46, 5431-5441.	2.5	20
59	Synthesis, properties, and sulfonation of novel dendritic multiblock copoly(ether-sulfone). <i>Journal of Polymer Science Part A</i> , 2008, 46, 6365-6375.	2.5	30
60	Analysis of thermal degradation process of Nafion [®] 117 with age-momentum correlation method. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 1-7.	2.4	6
61	Proton conducting membranes based on poly(vinyl chloride) graft copolymer electrolytes. <i>Polymers for Advanced Technologies</i> , 2008, 19, 915-921.	1.6	22
62	Fuels and Fuel Cells: The "Right Way" from Fuels to Fuel Gas. <i>Chemical Engineering and Technology</i> , 2008, 31, 782-787.	0.9	1
63	Oriented Nanostructures for Energy Conversion and Storage. <i>ChemSusChem</i> , 2008, 1, 676-697.	3.6	367
64	Status and development of PEM fuel cell technology. <i>International Journal of Energy Research</i> , 2008, 32, 369-378.	2.2	125
65	Preparation and characterizations of direct methanol fuel cell membrane from sulfonated polystyrene/poly(vinylidene fluoride) blend compatibilized with poly(styrene)- <i>b</i> -poly(methyl methacrylate). <i>Journal of Membrane Science</i> , 2008, 326, 55-60.	5.0	23
66	Zeta potential of Nafion molecules in isopropanol-water mixture solvent. <i>Journal of Applied Polymer Science</i> , 2008, 107, 3306-3309.	1.3	35
67	Incorporation of Functionalized Palladium Nanoparticles within Ultrathin Nafion Films: A Nanostructured Composite for Electrolytic and Redox-Mediated Hydrogen Evolution. <i>Advanced Functional Materials</i> , 2008, 18, 1685-1693.	7.8	36
68	Highly Conductive, Methanol Resistant Polyelectrolyte Multilayers. <i>Advanced Materials</i> , 2008, 20, 1539-1543.	11.1	128
70	Self-assembly of Nafion molecules onto silica nanoparticles formed in situ through sol-gel process. <i>Journal of Colloid and Interface Science</i> , 2008, 326, 55-60.	5.0	23
71	Preparation of 4(5)-vinylimidazole-co-acrylic acid copolymer and thermal performances related to applicability as PEM fuel cells. <i>Polymer Degradation and Stability</i> , 2008, 93, 1389-1395.	2.7	20
72	The effect of spatial confinement of Nafion [®] in porous membranes on macroscopic properties of the membrane. <i>Journal of Membrane Science</i> , 2008, 321, 100-113.	4.1	42
73	Radiation-induced grafting of styrene onto ultra-high molecular weight polyethylene powder and subsequent film fabrication for application as polymer electrolyte membranes: I. Influence of grafting conditions. <i>Journal of Membrane Science</i> , 2008, 325, 964-972.	4.1	45
74	Novel proton-exchange membrane based on single-step preparation of functionalized ceramic powder containing surface-anchored sulfonic acid. <i>Journal of Power Sources</i> , 2008, 179, 520-531.	4.0	19

#	ARTICLE	IF	CITATIONS
75	Novel Nafion composite membranes with mesoporous silica nanospheres as inorganic fillers. <i>Journal of Power Sources</i> , 2008, 185, 664-669.	4.0	106
76	Poly(2,6-dimethyl-1,4-phenylene oxide) (PPO) – A versatile starting polymer for proton conductive membranes (PCMs). <i>Progress in Polymer Science</i> , 2008, 33, 894-915.	11.8	199
77	Design of a novel bifunctional catalyst IrFe/Al ₂ O ₃ for preferential CO oxidation. <i>Catalysis Today</i> , 2008, 131, 457-463.	2.2	29
78	Characterization of PVdF-HFP/Nafion/AlO[OH] _n composite membranes for direct methanol fuel cell (DMFC). <i>European Polymer Journal</i> , 2008, 44, 2225-2230.	2.6	46
79	Preparation and Proton Conductivity of Polymer Electrolytes Based on Alginic Acid and 1,2,4-Triazole. <i>Polymer Journal</i> , 2008, 40, 104-108.	1.3	14
80	Research and Development on Polymeric Membranes for Fuel Cells: An Overview. , 2008, , 1-20.		3
81	Research Trends in Polymer Electrolyte Membranes for PEMFC. , 2008, , 1-19.		14
82	Methanol Permeation Through Proton Exchange Membranes of DMFCs. , 2008, , 1-24.		1
83	Fluorinated proton-conduction nafion-type membranes, the past and the future. <i>Russian Journal of Applied Chemistry</i> , 2008, 81, 569-584.	0.1	30
84	Proton channels. <i>Nature Materials</i> , 2008, 7, 13-14.	13.3	169
85	Synthesis and characterization of sulfonated poly(ether imide) membranes using thermo-analysis and dialysis process. <i>Materials Letters</i> , 2008, 62, 3319-3321.	1.3	15
86	Radiation Grafted Membranes. , 2008, , 157-217.		21
87	Novel Pyridine-Based Poly(ether sulfones) and their Study in High Temperature PEM Fuel Cells. <i>Macromolecules</i> , 2008, 41, 9051-9056.	2.2	47
88	Electrochemical Materials for PEM Fuel Cells: Insights from Physical Theory and Simulation. <i>Modern Aspects of Electrochemistry</i> , 2008, , 1-79.	0.2	3
90	A conductivity study and calorimetric analysis of dried poly(sodium 4-styrene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 187 Td (sulfonate)/p <i>Physics</i> , 2008, 128, 134905.	1.2	37
91	Recent developments in proton exchange membranes for fuel cells. <i>Energy and Environmental Science</i> , 2008, 1, 101.	15.6	462
92	Structural and transport properties of porous PVdF-HFP electrolyte membranes modified with an inorganic filler. <i>Composite Interfaces</i> , 2008, 15, 731-746.	1.3	7
93	Poly(arylene ether sulfone)s with phosphonic acid and bis(phosphonic acid) on short alkyl side chains for proton-exchange membranes. <i>Journal of Materials Chemistry</i> , 2008, 18, 5547.	6.7	65

#	ARTICLE	IF	CITATIONS
94	Fuel Cells I. , 2008, , .		4
95	Chitosan-poly(acrylic acid) polyelectrolyte complex membranes: preparation, characterization and permeability studies. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 143-160.	1.9	29
96	Modeling the Catalyst Layers. , 2008, , 243-267.		0
97	Polyphosphazene Membranes for Fuel Cells. , 2008, , 157-183.		11
98	Modeling the Proton Exchange Structure. , 2008, , 167-195.		0
99	Fuel Cell Membranes by Radiation-Induced Graft Copolymerization: Current Status, Challenges, and Future Directions. , 2008, , 1-28.		1
100	Modeling the Gas Diffusion Layers. , 2008, , 197-241.		1
101	Structural and Morphological Features of Acid-Bearing Polymers for PEM Fuel Cells. , 2008, , 55-126.		15
102	Proton-Conducting Polymer Electrolyte Membranes: Water and Structure in Charge. , 2008, , 15-54.		17
103	Sulfonated Aromatic Polymers for Fuel Cell Membranes. , 2008, , 1-62.		21
104	New high charge density polymers for printable electronics, sensors, batteries, and fuel cells. , 2008, , .		4
105	Cellulose-Based Composites for Membranes by <i>In Situ</i> Radical Polymerization. Molecular Crystals and Liquid Crystals, 2008, 484, 71/[437]-85/[451].	0.4	1
106	Wetting and Absorption of Water Drops on Nafion Films. Langmuir, 2008, 24, 8627-8633.	1.6	134
107	Studies of Nafion [®] /RuO ₂ ·xH ₂ O Composite Membranes. Journal of the Electrochemical Society, 2008, 155, B70.	1.3	11
108	Physical Properties of Oriented Thin Films Formed by the Electrostatic Complexation of Sulfonated Polyaramid. Journal of Physical Chemistry B, 2008, 112, 16403-16408.	1.2	8
109	Deposition of Ultrathin Nafion Layers on Sol-Gel-Derived Phenylsilsesquioxane Particles via Layer-by-Layer Assembly. Journal of the Electrochemical Society, 2008, 155, B479.	1.3	16
110	Ionomers for Proton Exchange Membrane Fuel Cells with Sulfonic Acid Groups on the End Groups: Novel Branched Poly(ether ketone)s. Macromolecules, 2008, 41, 281-284.	2.2	148
111	Anhydrous proton-conducting properties of triazole-phosphonic acid copolymers: a combined study with MAS NMR. Physical Chemistry Chemical Physics, 2008, 10, 6058.	1.3	81

#	ARTICLE	IF	CITATIONS
112	Ionomers for Proton Exchange Membrane Fuel Cells with Sulfonic Acid Groups on the End Groups: Novel Linear Aromatic Poly(sulfide-ketone)s. <i>Macromolecules</i> , 2008, 41, 277-280.	2.2	93
113	Novel fuel cells and materials. , 2008, , 386-424.		1
114	Hydrogen-based Autonomous Power Systems. <i>Power Systems</i> , 2008, , .	0.3	24
117	Propriedades físico-químicas relacionadas ao desenvolvimento de membranas de Nafion® para aplicação em células a combustível do tipo PEMFC. <i>Polimeros</i> , 2008, 18, 281-288.	0.2	15
118	Proton Conducting Membrane Prepared by Cross-Linking Highly Sulfonated Peek for PEMFC Application. , 2009, , .		1
119	Hybrid polymer electrolyte membrane for silicon-based micro fuel cells integration. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 065006.	1.5	10
120	Structural, thermal and ion transport studies of different particle size nanocomposite fillers incorporated PVdF-HFP hybrid membranes. <i>Materials Chemistry and Physics</i> , 2009, 115, 40-46.	2.0	48
121	Nanoscale properties of polymer fuel cell materials-A selected review. <i>International Journal of Energy Research</i> , 2009, 34, n/a-n/a.	2.2	10
122	Proton Conducting Hybrid Membranes Based on Aromatic Polymers Blends for Direct Methanol Fuel Cell Applications. <i>Fuel Cells</i> , 2009, 9, 387-393.	1.5	17
123	Effect of a Proton Conducting Filler on the Physico-Chemical Properties of SPEEK-Based Membranes. <i>Fuel Cells</i> , 2009, 9, 372-380.	1.5	22
124	Characterization of nanohybrid membranes for direct methanol fuel cell applications. <i>Solid State Ionics</i> , 2009, 180, 1497-1504.	1.3	35
125	Preparation of new proton exchange membrane based on self-assembly of Poly(styrene-co-styrene) Tj ETQq1 1 0.784314 rgBT /Overl... 2009, 188, 127-131.	4.0	35
126	Implantation of Nafion® ionomer into polyvinyl alcohol/chitosan composites to form novel proton-conducting membranes for direct methanol fuel cells. <i>Journal of Power Sources</i> , 2009, 194, 730-736.	4.0	45
127	Conductive area ratio of multiblock copolymer electrolyte membranes evaluated by e-AFM and its impact on fuel cell performance. <i>Journal of Power Sources</i> , 2009, 194, 662-667.	4.0	25
128	Synthesis and characterizations of nano-sized Ni(OH) ₂ and Ni(OH) ₂ /poly(vinyl alcohol) nano composite. <i>Journal of Materials Science</i> , 2009, 44, 5852-5860.	1.7	27
129	Synthesis and characterization of poly(ether sulfone) grafted poly(styrene sulfonic acid) for proton conducting membranes. <i>Korean Journal of Chemical Engineering</i> , 2009, 26, 518-522.	1.2	24
130	Proton-conducting composite membranes from graft copolymer electrolytes and phosphotungstic acid for fuel cells. <i>Ionics</i> , 2009, 15, 439-444.	1.2	9
131	Preparation and characterization of crosslinked cellulose/sulfosuccinic acid membranes as proton conducting electrolytes. <i>Ionics</i> , 2009, 15, 555-560.	1.2	30

#	ARTICLE	IF	CITATIONS
132	Microscopy studies on proton exchange membrane fuel cell electrodes with different ionomer contents. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 96, 581-589.	1.1	24
133	Fuel cell performance of polymer electrolyte membrane based on hexafluorinated sulfonated poly(ether sulfone). <i>Polymer Bulletin</i> , 2009, 62, 457-468.	1.7	15
134	The effect of copper(II) on the thermal and mechanical properties of poly(vinyl alcohol)/silica hybrid. <i>Polymer Engineering and Science</i> , 2009, 49, 1484-1490.	1.5	8
135	Proton conducting polymers containing 1,2,3-triazole moieties. <i>Journal of Polymer Science Part A</i> , 2009, 47, 188-196.	2.5	32
136	Phosphonic acid-based amphiphilic diblock copolymers derived from ROMP. <i>Journal of Polymer Science Part A</i> , 2009, 47, 3949-3956.	2.5	23
137	Ionomers for proton exchange membrane fuel cells by sulfonation of novel dendritic multiblock copoly(ether sulfone)s. <i>Journal of Polymer Science Part A</i> , 2009, 47, 5461-5473.	2.5	26
138	Proton conductivity survey of the acid doped copolymers based on 4-vinylbenzylboronic acid and 4(5)-vinylimidazole. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2009, 47, 1267-1274.	2.4	11
139	PEFC stacks as power sources for hybrid propulsion systems. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 4635-4644.	3.8	32
140	Proton conducting membranes based on Poly(2,5-benzimidazole) (ABPBI)-Poly(vinylphosphonic acid) blends for fuel cells. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 2724-2730.	3.8	75
141	Degradation mechanism of electrocatalyst during long-term operation of PEMFC. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 8974-8981.	3.8	102
142	Nafion membranes modified with silica sulfuric acid for the elevated temperature and lower humidity operation of PEMFC. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 9788-9794.	3.8	99
143	Preparation and characterization of proton conducting polysulfone grafted poly(styrene sulfonic) Tj ETQq1 1 0.784314 rgBT /Overloc	2.9	36
144	Formation and characterization of crosslinked membranes for alkaline fuel cells. <i>Journal of Membrane Science</i> , 2009, 335, 37-42.	4.1	59
145	Spectroscopic investigation of proton-conducting, cross-linked linear poly(ethylenimine) hydrochloride membranes. <i>Polymer</i> , 2009, 50, 171-176.	1.8	11
146	Nafion-clay nanocomposite membranes: Morphology and properties. <i>Polymer</i> , 2009, 50, 2402-2410.	1.8	96
147	Nafion-clay hybrids with a network structure. <i>Polymer</i> , 2009, 50, 2384-2392.	1.8	50
148	Novel hydrophilic-hydrophobic multiblock copolyimides as proton exchange membranes: Enhancing the proton conductivity. <i>Polymer</i> , 2009, 50, 4505-4511.	1.8	38
149	Low methanol-permeable polyaniline/Nafion composite membrane for direct methanol fuel cells. <i>Journal of Power Sources</i> , 2009, 190, 279-284.	4.0	91

#	ARTICLE	IF	CITATIONS
150	Novel sulfonated poly(ether ether ketone)s for direct methanol fuel cells usage: Synthesis, water uptake, methanol diffusion coefficient and proton conductivity. Journal of Power Sources, 2009, 189, 875-881.	4.0	38
151	Development and characterization of polymer electrolyte membranes based on ionic cross-linked poly(1-vinyl-1,2,4 triazole) and poly(vinylphosphonic acid). Journal of Power Sources, 2009, 191, 442-447.	4.0	63
152	Controllable sulfonation of aromatic poly(arylene ether ketone)s containing different pendant phenyl rings. Journal of Power Sources, 2009, 193, 477-482.	4.0	13
153	Uneven gas diffusion layer intrusion in gas channel arrays of proton exchange membrane fuel cell and its effects on flow distribution. Journal of Power Sources, 2009, 194, 328-337.	4.0	89
154	Novel sulfonated poly(ether ether ketone) with pendant benzimidazole groups as a proton exchange membrane for direct methanol fuel cells. Journal of Power Sources, 2009, 194, 175-181.	4.0	27
155	A proton-exchange membrane prepared by the radiation grafting of styrene and silica into polytetrafluoroethylene films. Radiation Physics and Chemistry, 2009, 78, 497-500.	1.4	11
156	Effects of process conditions on cell voltage, current efficiency and voltage balance of a chlor-alkali membrane cell. Desalination, 2009, 237, 126-139.	4.0	43
157	Synthesis and characterization of sulfonated naphthalenic polyimides based on 4,4'-diaminodiphenylether-2,2'-disulfonic acid and bis[4-(4-aminophenoxy)phenylhexafluoropropane] for fuel cell applications. European Polymer Journal, 2009, 45, 1467-1475.	2.6	24
158	FUEL CELLS – PROTON-EXCHANGE MEMBRANE FUEL CELLS High Temperature PEMFCs. , 2009, , 951-957.		5
159	Phase Behavior of Polystyrene- <i>block</i> -poly(2-vinylpyridine) Copolymers in a Selective Ionic Liquid Solvent. Macromolecules, 2009, 42, 4604-4613.	2.2	77
160	Highly Selective Polymer Electrolyte Membranes from Reactive Block Polymers. Macromolecules, 2009, 42, 6075-6085.	2.2	79
161	Recent Research Progress in the Synthesis of Polyphosphazene and Their Applications. Designed Monomers and Polymers, 2009, 12, 357-375.	0.7	29
162	Nanostructure, Morphology, and Properties of Fluorous Copolymers Bearing Ionic Grafts. Macromolecules, 2009, 42, 9467-9480.	2.2	116
163	Proton Mobilities in Phosphonic Acid-Based Proton Exchange Membranes Probed by ¹ H and ² H Solid-State NMR Spectroscopy. Journal of Physical Chemistry B, 2009, 113, 6674-6681.	1.2	42
164	Preparation, Properties, and Characterization of Polymer Electrolyte Membranes Based on Poly(1-vinyl-1,2,4 triazole) and Poly(styrene sulfonic acid). Journal of the Electrochemical Society, 2009, 156, B1112.	1.3	24
165	Surface engineering of macroporous polypropylene membranes. Soft Matter, 2009, 5, 1775.	1.2	72
166	FUEL CELLS – PROTON-EXCHANGE MEMBRANE FUEL CELLS Membranes: Elevated Temperature. , 2009, , 724-733.		4
167	Stress-Strain Behavior of Perfluorosulfonic Acid Membranes at Various Temperatures and Humidities: Experiments and Phenomenological Modeling. Journal of Fuel Cell Science and Technology, 2009, 6, .	0.8	39

#	ARTICLE	IF	CITATIONS
168	Synthesis and Characterization of a Composite Membrane for Polymer Electrolyte Fuel Cell. Journal of Fuel Cell Science and Technology, 2009, 6, .	0.8	0
169	Blends of Aromatic Polyethers Bearing Polar Pyridine Units and Their Evaluation as High Temperature Polymer Electrolytes. Macromolecular Symposia, 2009, 279, 183-190.	0.4	6
170	Free-volume structure of fluoropolymer-based radiation-grafted electrolyte membranes investigated by positron annihilation lifetime spectroscopy. Journal of Physics: Conference Series, 2010, 225, 012048.	0.3	6
171	Spinodal-type phase separation and proton conductivity of Al ₂ O ₃ -doped porous glasses. Journal of the Ceramic Society of Japan, 2010, 118, 1131-1134.	0.5	4
173	Nanohybrid Nafion Membranes for Fuel Cells. ACS Symposium Series, 2010, , 171-185.	0.5	5
174	Atomistic and mesoscale simulation of polymer electrolyte membranes based on sulfonated poly(ether ether ketone). Chemical Physics Letters, 2010, 487, 291-296.	1.2	56
175	Post-irradiation time effects on the graft of poly(ethylene-alt-tetrafluoroethylene) (ETFE) films for ion exchange membrane application. Radiation Physics and Chemistry, 2010, 79, 246-249.	1.4	12
176	TEMPO addition into pre-irradiated fluoropolymers and living-radical graft polymerization of styrene for preparation of polymer electrolyte membranes. Radiation Physics and Chemistry, 2010, 79, 471-478.	1.4	10
177	Stability of radicals in electron-irradiated fluoropolymer film for the preparation of graft copolymer fuel cell electrolyte membranes. Solid State Ionics, 2010, 181, 201-205.	1.3	14
178	Ion track grafting: A way of producing low-cost and highly proton conductive membranes for fuel cell applications. Journal of Power Sources, 2010, 195, 223-231.	4.0	43
179	Preparation and characterization of new non-fluorinated polymeric and composite membranes for PEMFCs. Journal of Membrane Science, 2010, 348, 326-336.	4.1	76
180	Acid-base hybrid polymer electrolyte membranes based on SPEEK. Journal of Membrane Science, 2010, 350, 148-153.	4.1	47
181	Radiation grafted poly(vinylidene fluoride)-graft-polystyrene sulfonic acid membranes for fuel cells: Structure-property relationships. Chinese Journal of Polymer Science (English Edition), 2010, 28, 761-770.	2.0	8
182	Power generation from concentration gradient by reverse electrodialysis in ion-selective nanochannels. Microfluidics and Nanofluidics, 2010, 9, 1215-1224.	1.0	317
183	Conductivity and thermal behavior of proton conductor based on poly(vinylpyrrolidone) complexed with ammonium perchlorate. Macromolecular Research, 2010, 18, 35-39.	1.0	4
184	Preparation and characterization of anhydrous polymer electrolyte membranes based on poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlo	1.2	6
185	Heterogeneous ion-selective membranes: the influence of the inert matrix polymer on the membrane properties. Journal of Applied Electrochemistry, 2010, 40, 1005-1018.	1.5	17
186	Blend membranes from poly(2,5-benzimidazole) and poly(styrene sulfonic acid) as proton-conducting polymer electrolytes for fuel cells. Journal of Materials Science, 2010, 45, 993-998.	1.7	23

#	ARTICLE	IF	CITATIONS
187	Influence of the radiation grafting conditions on the cross-sectional distribution of poly(vinylbenzyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6 Journal of Applied Polymer Science, 2010, 117, 2380-2385.	1.3	12
188	Synthesis and characterization of multiblock copolymer ionomers containing phthalazinone ether ketone and fluorene ether ketone moieties. Journal of Applied Polymer Science, 2010, 118, 1100-1110.	1.3	1
189	Synthesis and characterization of nano-sized NiO and its surface catalytic effect on poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	1.3	18
190	Preparation and characterization of sulfonated poly(arylene ether naphthalimide)s for use as proton exchange membranes. Journal of Applied Polymer Science, 2010, 118, 3187-3196.	1.3	9
191	Fluorinated high-performance polymers: Poly(arylene ether)s and aromatic polyimides containing trifluoromethyl groups. Progress in Polymer Science, 2010, 35, 1022-1077.	11.8	471
192	Novel high-performance nanocomposite proton exchange membranes based on poly (ether sulfone). Renewable Energy, 2010, 35, 226-231.	4.3	63
193	Formation of core (polystyrene) shell (polybenzimidazole) nanoparticles using sulfonated polystyrene as template. Journal of Colloid and Interface Science, 2010, 351, 374-383.	5.0	18
194	Cross-linked poly(ether ether ketone) membranes with pendant sulfonic acid groups for fuel cell applications. Journal of Membrane Science, 2010, 348, 319-325.	4.1	41
195	A new self-cross-linked, net-structured, proton conducting polymer membrane for high temperature proton exchange membrane fuel cells. Journal of Membrane Science, 2010, 349, 304-311.	4.1	67
196	High ionic exchange capacity polyphenylsulfone (SPPSU) and polyethersulfone (SPES) cross-linked by annealing treatment: Thermal stability, hydration level and mechanical properties. Journal of Membrane Science, 2010, 354, 134-141.	4.1	85
197	Temperature-dependent structure changes in Nafion ionomer studied by PCMW2D IR correlation spectroscopy. Journal of Molecular Structure, 2010, 974, 56-59.	1.8	31
198	Evaluation of hydrogen and methanol fuel cell performance of sulfonated diels alder poly(phenylene) membranes. Journal of Power Sources, 2010, 195, 104-110.	4.0	32
199	Membranes produced by plasma enhanced chemical vapor deposition technique for low temperature fuel cell applications. Journal of Power Sources, 2010, 195, 232-238.	4.0	34
200	High ion and lower molecular transportation of the poly vinylidene fluoride hexa fluoro propylene hybrid membranes for the high temperature and lower humidity direct methanol fuel cell applications. Journal of Power Sources, 2010, 195, 5922-5928.	4.0	48
201	Hyperbranched poly(benzimidazole-co-benzene) with honeycomb structure as a membrane for high-temperature proton-exchange membrane fuel cells. Journal of Power Sources, 2010, 195, 2470-2477.	4.0	39
202	Alkaline direct alcohol fuel cells. Journal of Power Sources, 2010, 195, 3431-3450.	4.0	806
203	Membrane degradation mitigation using zirconia as a hydrogen peroxide decomposition catalyst. Journal of Power Sources, 2010, 195, 8000-8005.	4.0	46
204	Study on gamma-ray-induced degradation of polymer electrolyte by pH titration and solution analysis. Polymer Degradation and Stability, 2010, 95, 1-5.	2.7	17

#	ARTICLE	IF	CITATIONS
205	Synthesis and characterization of fully disulfonated poly(arylenethioethersulfone)s containing hexafluoroisopropylidene moiety. <i>Polymer</i> , 2010, 51, 463-468.	1.8	8
206	The effects of anion structure of lithium salts on the properties of in-situ polymerized thermoplastic polyurethane electrolytes. <i>Polymer</i> , 2010, 51, 2864-2871.	1.8	33
207	Novel side-chain-type sulfonated hydroxynaphthalene-based Poly(aryl ether ketone) with H-bonded for proton exchange membranes. <i>Polymer</i> , 2010, 51, 3047-3053.	1.8	21
208	Molecular dynamics simulations of Krytox-Silicaâ€Nafion composite for high temperature fuel cell electrolyte membranes. <i>Polymer</i> , 2010, 51, 4632-4638.	1.8	19
209	Proton conductivity enhancement by nanostructural control of sulphonated poly (ether ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 582	3.8	12
210	Methanol crossover reduction by Nafion modification with palladium composite nanoparticles: Application to direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 11561-11567.	3.8	37
211	Review of the proton exchange membranes for fuel cell applications. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 9349-9384.	3.8	1,696
212	Proton exchange membranes prepared by radiation-induced graft copolymerization from binary monomer mixtures onto poly(tetrafluoroethylene-co-hexafluoropropylene) film. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2010, 268, 1588-1593.	0.6	5
213	Thickness dependences of proton conductivity for ultrathin Nafion multilayers prepared via layer-by-layer assembly. <i>Solid State Ionics</i> , 2010, 181, 197-200.	1.3	10
214	Hybrid inorganicâ€organic proton exchange membranes containing 1H-1,2,3-triazole moieties. <i>Solid State Ionics</i> , 2010, 181, 1183-1188.	1.3	25
215	Preparation and proton conductivity of composite SiO ₂ /Poly (2-hydroxyethyl methacrylate) gel membranes. <i>Solid State Ionics</i> , 2010, 181, 1403-1407.	1.3	7
216	Nafion/Analcime and Nafion/Faujasite composite membranes for polymer electrolyte membrane fuel cells. <i>Chemical Engineering Research and Design</i> , 2010, 88, 496-500.	2.7	40
217	Trends for fuel cell membrane development. <i>Desalination</i> , 2010, 250, 1034-1037.	4.0	51
218	Synthesis and characterization of poly(aryl ether ketone) ionomers with sulfonic acid groups on pendant aliphatic chains for proton-exchange membrane fuel cells. <i>European Polymer Journal</i> , 2010, 46, 81-91.	2.6	19
219	Sulfonated poly(ether sulfone)/sulfonated polybenzimidazole blend membrane for fuel cell applications. <i>European Polymer Journal</i> , 2010, 46, 1633-1641.	2.6	58
220	Fluorene-containing block sulfonated poly(ether ether ketone) as proton-exchange membrane for PEM fuel cell application. <i>European Polymer Journal</i> , 2010, 46, 1736-1744.	2.6	13
221	Synthesis of phenanthrolineâ€terminated polymers and their Fe(II)â€complexes. <i>Journal of Polymer Science Part A</i> , 2010, 48, 2709-2715.	2.5	5
222	Synthesis and characterization of grafted/crosslinked proton conducting membranes based on amphiphilic PVDF copolymer. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2010, 48, 1110-1117.	2.4	19

#	ARTICLE	IF	CITATIONS
223	Structural modification of chitosan biopolymer as a novel polyelectrolyte membrane for green power generation. <i>Polymers for Advanced Technologies</i> , 2010, 21, 726-734.	1.6	63
224	Firstâ€Principles Calculation and Proton Transfer in TiO ₂ â€Modified Porous Glass. <i>Journal of the American Ceramic Society</i> , 2010, 93, 127-131.	1.9	8
225	The State of the Art in Fuel Cell Condition Monitoring and Maintenance. <i>World Electric Vehicle Journal</i> , 2010, 4, 487-494.	1.6	9
226	Ionomers with Highly Fluorinated Side Chains for Use in Battery and Fuel Cell Applications. <i>ECS Transactions</i> , 2010, 33, 683-691.	0.3	2
227	Synthesis and Characterization of Proton Exchange Membrane Using Polystyrene-butadiene Rubber. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2010, 32, 591-606.	1.2	5
228	Hydrogen Economy and Polymer Membranes. <i>Macromolecular Symposia</i> , 2010, 295, 23-29.	0.4	1
229	Design and Development of Thermoplastic Polyurethane Based Composite Membranes. , 2010, , .		1
230	Mechanisms of Ion Conduction in Polyelectrolyte Multilayers and Complexes. <i>Zeitschrift Fur Physikalische Chemie</i> , 2010, 224, 1555-1589.	1.4	7
231	Humidity-Dependent DC Conductivity of Polyelectrolyte Multilayers: Protons or Other Small Ions as Charge Carriers?. <i>Macromolecules</i> , 2010, 43, 7282-7287.	2.2	33
232	Ab Initio Study of Hydration and Proton Dissociation in Ionomer Membranes. <i>Journal of Physical Chemistry A</i> , 2010, 114, 6904-6912.	1.1	33
233	Synthesis and Characterization of Phenolphthalein-based Poly(arylene ether sulfone) Hydrophilicâ~Hydrophobic Multiblock Copolymers for Proton Exchange Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 12125-12134.	1.8	36
234	On the Origin of Slow Changes in Ionic Conductivity of Model Block Copolymer Electrolyte Membranes in Contact with Humid Air. <i>Macromolecules</i> , 2010, 43, 5306-5314.	2.2	35
235	Chemical Degradation of Nafion Membranes under Mimic Fuel Cell Conditions as Investigated by Solid-State NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2010, 114, 14635-14645.	1.5	166
236	Multi-Length Scale Morphology of Poly(ethylene oxide)-Based Sulfonate Ionomers with Alkali Cations at Room Temperature. <i>Macromolecules</i> , 2010, 43, 4223-4229.	2.2	76
237	Fuel Cell Engineering: Toward the Design of Efficient Electrochemical Power Plants. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 10159-10182.	1.8	85
238	Mesoscale simulation of polymer electrolyte membranes based on sulfonated poly(ether ether ketone) and Nafion. <i>Soft Matter</i> , 2010, 6, 3939.	1.2	48
239	An Ab Initio Modeling Study on a Modeled Hydrated Polymer Electrolyte Membrane, Sulfonated Polyethersulfone (SPES). <i>Journal of Physical Chemistry B</i> , 2010, 114, 2411-2421.	1.2	38
240	Novel high proton conductive material from liquid crystalline 4-(octadecyloxy)phenylsulfonic acid. <i>Journal of Materials Chemistry</i> , 2010, 20, 6245.	6.7	27

#	ARTICLE	IF	CITATIONS
241	Advanced Membrane Materials for Fuel Cell Applications. Materials Science Forum, 2010, 657, 88-115.	0.3	2
242	Introduction to polymer electrolyte materials. , 2010, , 3-61.		8
243	Influence of binder properties on kinetic and transport processes in polymer electrolyte fuel cell electrodes. Physical Chemistry Chemical Physics, 2010, 12, 6140.	1.3	42
244	Proton transport in choline dihydrogen phosphate/H3PO4 mixtures. Physical Chemistry Chemical Physics, 2010, 12, 11291.	1.3	55
245	Crosslinked hybrid membranes based on sulfonated poly(ether ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 587 Td (ketone)/ĭ ³ -methacry direct methanol fuel cells. Journal of Materials Chemistry, 2010, 20, 6352.	6.7	14
246	Modeling Proton Transfer in Imidazole-like Dimers: A Density Functional Theory Study. Journal of Physical Chemistry A, 2011, 115, 2627-2634.	1.1	26
247	An organic ionic plastic crystal electrolyte based on the triflate anion exhibiting high proton transport. Chemical Communications, 2011, 47, 6401.	2.2	35
248	Characterization of Electrolyte Polyester Membranes for Application in PEM Fuel Cells. Macromolecular Symposia, 2011, 299-300, 234-240.	0.4	3
249	Ionic Purity and Connectivity of Proton-Conducting Channels in Fluorous-Ionic Diblock Copolymers. Macromolecules, 2011, 44, 8845-8857.	2.2	35
250	Nanotextured Metal Copper Substrates as Powerful and Long-Lasting Fuel Cell Anodes. Nano Letters, 2011, 11, 1727-1732.	4.5	18
251	Hydrogen bonding in narrow protonated polymer electrolyte pores. Journal of Electroanalytical Chemistry, 2011, 660, 347-351.	1.9	15
253	Nanomaterials for Proton Exchange Membrane Fuel Cells. Green Energy and Technology, 2011, , 393-424.	0.4	2
254	Ion exchange membranes for vanadium redox flow battery (VRB) applications. Energy and Environmental Science, 2011, 4, 1147.	15.6	856
255	Polyethylenimine Containing Benzimidazole Branching: A Model System Providing a Balance of Hydrogen Bond Network or Chain Mobility Enhances Proton Conductivity. Journal of Physical Chemistry B, 2011, 115, 11359-11367.	1.2	22
256	Direct Imaging of Nanoscale Acidic Clusters in a Polymer Electrolyte Membrane. Journal of the American Chemical Society, 2011, 133, 20700-20703.	6.6	15
257	Humidity Dependence of the Ionic Conductivity of Polyelectrolyte Complexes. Macromolecules, 2011, 44, 8936-8943.	2.2	43
258	Electrocatalysis of oxygen reduction reaction on Nafion/platinum/gas diffusion layer electrode for PEM fuel cell. Applied Surface Science, 2011, 257, 10408-10413.	3.1	16
259	Fluorinated Templates for Energy-Related Nanomaterials and Applications. ACS Symposium Series, 2011, , 103-125.	0.5	0

#	ARTICLE	IF	CITATIONS
260	Nanocomposite Electrolyte for PEMFC Application. , 0, , .		2
261	Synthesis and Characterization of Polyurethanic Proton Exchange Membranes. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	4
262	Improvement of homogeneity and interfacial properties of radiation grafted membranes for fuel cells using diisopropenylbenzene crosslinker. Journal of Membrane Science, 2011, 381, 102-109.	4.1	11
263	Solvent processible, high-performance partially fluorinated copoly(arylene ether) alkaline ionomers for alkaline electrodes. Journal of Power Sources, 2011, 196, 7924-7930.	4.0	23
264	High performance polymer electrolytes based on main and side chain pyridine aromatic polyethers for high and medium temperature proton exchange membrane fuel cells. Journal of Power Sources, 2011, 196, 9382-9390.	4.0	45
265	A poly (ethylene oxide)/graphene oxide electrolyte membrane for low temperature polymer fuel cells. Journal of Power Sources, 2011, 196, 8377-8382.	4.0	168
266	Characterization and PEMFC application of a mesoporous sulfonated silica prepared from two precursors, tetraethoxysilane and phenyltriethoxysilane. International Journal of Hydrogen Energy, 2011, 36, 9831-9841.	3.8	29
267	Comparison of the Permeation of MgCl ₂ versus NaCl in Highly Charged Sulfonated Polymer Membranes. ACS Symposium Series, 2011, , 239-245.	0.5	2
268	Proton conducting properties of ionically cross-linked poly(1-vinyl-1,2,4 triazole) and poly(2-acrylamido-2-methyl-1-propanesulfonic acid) electrolytes. Polymer Bulletin, 2011, 66, 1099-1110.	1.7	12
269	Performance of composite Nafion/PVA membranes for direct methanol fuel cells. Journal of Power Sources, 2011, 196, 2699-2708.	4.0	82
270	(Semi-)Interpenetrating polymer networks as fuel cell membranes. Journal of Membrane Science, 2011, 368, 1-17.	4.1	161
271	Mineral nanofibre reinforced composite polymer electrolyte membranes with enhanced water retention capability in PEM fuel cells. Journal of Membrane Science, 2011, 377, 134-140.	4.1	23
272	Polyelectrolyte complex membranes for pervaporation, nanofiltration and fuel cell applications. Journal of Membrane Science, 2011, 379, 19-45.	4.1	217
273	Effect of filler-polymer interactions on the crystalline morphology of PEO-based solid polymer electrolytes by Y ₂ O ₃ nano-fillers. Polymer Composites, 2011, 32, 511-518.	2.3	27
274	Novel sulfonated block copolymer containing pendant alkylsulfonic acids: Syntheses, unique morphologies, and applications in proton exchange membrane. Journal of Polymer Science Part A, 2011, 49, 2325-2338.	2.5	13
275	Comparative investigations of radiation-grafted proton-exchange membranes prepared using single-step and conventional two-step radiation-induced grafting methods. Polymer International, 2011, 60, 186-193.	1.6	14
276	Research with Neutron and Synchrotron Radiation on Aerospace and Automotive Materials and Components. Advanced Engineering Materials, 2011, 13, 637-657.	1.6	5
277	Assessment of PEFC performance by applying harmonized testing procedure. International Journal of Energy Research, 2011, 35, 1075-1089.	2.2	5

#	ARTICLE	IF	CITATIONS
278	Durability of Sulfonated Aromatic Polymers for Proton Exchange Membrane Fuel Cells. <i>ChemSusChem</i> , 2011, 4, 1526-1536.	3.6	81
279	Styrene/phosphonic acid copolymers: Synthesis and thermal, mechanical, and electrochemical characterization. <i>Journal of Applied Polymer Science</i> , 2011, 119, 460-471.	1.3	2
280	Proton conducting polymer blends from poly(2,5-benzimidazole) and poly(2-acrylamido-2-methyl-1-propanesulfonic acid). <i>Journal of Applied Polymer Science</i> , 2011, 120, 1193-1198.	1.3	20
281	Proton Conducting Composite Membranes for Future Perspective Applications in Fuel Cells, Desalination Facilities and Photocatalysis. <i>Chemie-Ingenieur-Technik</i> , 2011, 83, 2177-2187.	0.4	3
282	Enhanced performance of CO poisoned proton exchange membrane fuel cells via triode operation. <i>Electrochimica Acta</i> , 2011, 56, 6966-6975.	2.6	9
283	Studies of a high temperature proton exchange membrane based on incorporating an ionic liquid cation 1-butyl-3-methylimidazolium into a Nafion matrix. <i>Electrochimica Acta</i> , 2011, 56, 5940-5946.	2.6	77
284	Overview on nanostructured membrane in fuel cell applications. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 3187-3205.	3.8	129
285	Hybrid composite membranes based on SPEEK and functionalized PPSU for PEM fuel cells. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 8063-8069.	3.8	39
286	Synthesis and properties of side-chain-type sulfonated poly(phenylene oxide) for proton exchange membranes. <i>Journal of Membrane Science</i> , 2011, 373, 160-166.	4.1	38
287	A review of polymer electrolyte membrane fuel cells: Technology, applications, and needs on fundamental research. <i>Applied Energy</i> , 2011, 88, 981-1007.	5.1	2,692
288	A review of polymer electrolyte membrane fuel cell stack testing. <i>Journal of Power Sources</i> , 2011, 196, 601-613.	4.0	165
289	Design of a stable and methanol resistant membrane with cross-linked multilayered polyelectrolyte complexes for direct methanol fuel cells. <i>Journal of Power Sources</i> , 2011, 196, 5432-5437.	4.0	27
290	Ion-conductive polymer membranes containing 1-butyl-3-methylimidazolium trifluoromethanesulfonate and 1-ethylimidazolium trifluoromethanesulfonate. <i>Journal of Membrane Science</i> , 2011, 367, 332-339.	4.1	48
291	Radiation-induced crosslinking of Nafion® N117CS membranes. <i>Journal of Membrane Science</i> , 2011, 369, 397-403.	4.1	16
292	Water transport in polymer electrolyte membrane fuel cells. <i>Progress in Energy and Combustion Science</i> , 2011, 37, 221-291.	15.8	730
293	Proton exchange membranes for fuel cells operated at medium temperatures: Materials and experimental techniques. <i>Progress in Materials Science</i> , 2011, 56, 289-327.	16.0	174
294	Synthesis of high proton conducting nanoparticles by emulsion polymerization. <i>Polymer</i> , 2011, 52, 297-306.	1.8	6
295	Sulfonated poly(ether ether ketone) electrolyte membranes cross-linked with 4,4'-diaminodiphenyl ether. <i>Solid State Ionics</i> , 2011, 187, 78-84.	1.3	22

#	ARTICLE	IF	CITATIONS
296	Molecular structure and transport dynamics in perfluoro sulfonyl imide membranes. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 234106.	0.7	8
297	² H double- and zero-quantum filtered NMR spectroscopy for probing the environments of water in Nafion. <i>Canadian Journal of Chemistry</i> , 2011, 89, 1095-1104.	0.6	6
298	<i>Ab initio</i> molecular dynamics of proton networks in narrow polymer electrolyte pores. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 234104.	0.7	5
299	Preparation and Fuel Cell Property of a Phosphosilicate Glass with Proton Transport Number $t_{H^+} \approx 1$ at 400–500°C. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, B63.	2.2	6
300	Modified-Pore-Filled-PVDF-Membrane Electrolytes for Direct Methanol Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2011, 158, B91.	1.3	24
301	Water Activity Coefficient and Proton Mobility in Hydrated Acidic Polymers. <i>Journal of the Electrochemical Society</i> , 2011, 158, B159.	1.3	38
302	Membranes for Redox Flow Battery Applications. <i>Membranes</i> , 2012, 2, 275-306.	1.4	342
303	Anion- or Cation-Exchange Membranes for NaBH ₄ /H ₂ O ₂ Fuel Cells?. <i>Membranes</i> , 2012, 2, 478-492.	1.4	26
304	Microscopic Analysis of Current and Mechanical Properties of Nafion® Studied by Atomic Force Microscopy. <i>Membranes</i> , 2012, 2, 783-803.	1.4	47
305	Plasma Membranes Modified by Plasma Treatment or Deposition as Solid Electrolytes for Potential Application in Solid Alkaline Fuel Cells. <i>Membranes</i> , 2012, 2, 529-552.	1.4	14
306	Nanocomposite polymer electrolyte membranes based on poly(vinylphosphonic acid)/TiO ₂ nanoparticles. <i>Journal of Materials Research</i> , 2012, 27, 3090-3095.	1.2	8
307	Sulfonated Poly(Ether Ether Ketone) (SPEEK): A Promising Membrane Material for Polymer Electrolyte Fuel Cell. , 2012, , 437-451.		3
308	Molecular modeling of the morphology and transport properties of two direct methanol fuel cell membranes: Phenylated sulfonated poly(ether ether ketone) versus Nafion. <i>Journal of Materials Research</i> , 2012, 27, 1927-1938.	1.2	6
309	Hybrid SPEEK/Phosphonated silsesquioxanes membranes for PEMFC. <i>Nanomaterials and Energy</i> , 2012, 1, 67-76.	0.1	4
310	Preparation of Nafion-Ru(bpy) ₃ ²⁺ -Chitosan/Gold Nanoparticles Composite Film and Its Electrochemiluminescence Application. <i>Analytical Sciences</i> , 2012, 28, 571-576.	0.8	10
311	Fuel Cell Perfluorinated Sulfonic Acid Membrane Degradation Correlating Accelerated Stress Testing and Lifetime. <i>Chemical Reviews</i> , 2012, 112, 6075-6103.	23.0	270
312	Polystyrenes containing flexible alkylsulfonated side chains as a proton exchange membrane for fuel cell application. <i>Polymer Chemistry</i> , 2012, 3, 3289.	1.9	34
313	Ultrathin TiO ₂ -coated MWCNTs with excellent conductivity and SMSI nature as Pt catalyst support for oxygen reduction reaction in PEMFCs. <i>Journal of Materials Chemistry</i> , 2012, 22, 20977.	6.7	114

#	ARTICLE	IF	CITATIONS
314	Current Advances in Polymer Electrolyte Fuel Cells Based on the Promotional Role of Underâ€rib Convection. <i>Fuel Cells</i> , 2012, 12, 908-938.	1.5	25
315	Alternatives toward proton conductive anhydrous membranes for fuel cells: Heterocyclic protogenic solvents comprising polymer electrolytes. <i>Progress in Polymer Science</i> , 2012, 37, 1265-1291.	11.8	155
316	Membrane electrode assemblies for polymer electrolyte membrane fuel cells. , 2012, , 279-311.		4
317	Charge transport in poly-imidazole membranes: a fresh appraisal of the Grotthuss mechanism. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 10910.	1.3	29
318	Electrochemical systems with a solid polymer electrolyte. Part I. General information about electrochemical systems with an SPE. <i>Chemical and Petroleum Engineering (English Translation of) Tj ETQq0 0 0 rgBTi/Overlook 10 Tf 50</i>		
319	Triple-layer proton exchange membranes based on chitosan biopolymer with reduced methanol crossover for high-performance direct methanol fuel cells application. <i>Polymer</i> , 2012, 53, 2643-2651.	1.8	54
320	Role of Nanostructures in Polymer Electrolytes for Energy Storage and Delivery. <i>ACS Symposium Series</i> , 2012, , 129-146.	0.5	1
321	An Overview of Polymer Electrolyte Membranes for Fuel Cell Applications. <i>ACS Symposium Series</i> , 2012, , 147-164.	0.5	18
322	Short side chain perfluorosulfonic acid membranes and their composites with nanosized zirconium phosphate: hydration, mechanical properties and proton conductivity. <i>Journal of Materials Chemistry</i> , 2012, 22, 24902.	6.7	29
323	Hydration structure of trifluoromethanesulfonate studied by quantum chemical calculations. <i>Computational and Theoretical Chemistry</i> , 2012, 982, 30-33.	1.1	5
324	Recent advances in proton exchange membranes for fuel cell applications. <i>Chemical Engineering Journal</i> , 2012, 204-206, 87-97.	6.6	149
325	Cost effective cation exchange membranes: A review. <i>Chemical Engineering Research and Design</i> , 2012, 90, 950-959.	2.7	129
326	Metal organic frameworks for electrochemical applications. <i>Energy and Environmental Science</i> , 2012, 5, 9269.	15.6	767
328	Hydrogen Production Using a Molybdenum Sulfide Catalyst on a Titaniumâ€Protected n⁺pâ€Silicon Photocathode. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9128-9131.	7.2	289
329	Neutrons for fuel cell membranes: Structure, sorption and transport properties. <i>European Physical Journal: Special Topics</i> , 2012, 213, 195-211.	1.2	16
331	Alternative Proton Exchange Membranes by Chain-Growth Polymerization. , 2012, , 651-689.		2
332	Improvement of PEMFC performance with Nafion/inorganic nanocomposite membrane electrode assembly prepared by ultrasonic coating technique. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 16748-16758.	3.8	84
333	Role of the glass transition temperature of Nafion 117 membrane in the preparation of the membrane electrode assembly in a direct methanol fuel cell (DMFC). <i>International Journal of Hydrogen Energy</i> , 2012, 37, 12580-12585.	3.8	113

#	ARTICLE	IF	CITATIONS
334	Development of non-perfluorinated hybrid materials for single-cell proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 17180-17190.	3.8	11
335	Preparation and characterization of block copolymers containing multi-sulfonated unit for proton exchange membrane fuel cell. <i>Electrochimica Acta</i> , 2012, 86, 352-359.	2.6	46
336	Sulfonated aromatic ionomers: Analysis of proton conductivity and proton mobility. <i>Solid State Ionics</i> , 2012, 225, 255-259.	1.3	33
337	Crosslinked organic/inorganic proton exchange membranes with multilayer structure. <i>Solid State Ionics</i> , 2012, 227, 91-95.	1.3	10
338	Synthesis and Characterization of Polyelectrolyte Complex N-Succinylchitosan-chitosan for Proton Exchange Membranes. <i>Procedia Chemistry</i> , 2012, 4, 114-122.	0.7	10
339	Imparting High Proton Conductivity to a Metal-Organic Framework Material by Controlled Acid Impregnation. <i>Journal of the American Chemical Society</i> , 2012, 134, 15640-15643.	6.6	438
340	Structure and Properties of Polymer Electrolyte Membranes Containing Phosphonic Acids for Anhydrous Fuel Cells. <i>Chemistry of Materials</i> , 2012, 24, 115-122.	3.2	71
341	Ion Exchange Technology I. , 2012, , .		13
342	Synthesis of Polyethylene-Based Proton Exchange Membranes Containing PE Backbone and Sulfonated Poly(arylene ether sulfone) Side Chains for Fuel Cell Applications. <i>Macromolecules</i> , 2012, 45, 2460-2470.	2.2	31
343	A direct borohydride fuel cell with a polymer fiber membrane and non-noble metal catalysts. <i>Scientific Reports</i> , 2012, 2, 567.	1.6	49
344	Sulfonated Poly(ether ether ketone) and Poly(ethylene glycol) Diacrylate Based Semi-Interpenetrating Network Membranes for Fuel Cells. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2012, 49, 191-200.	1.2	23
345	Nanostructure and properties of proton-conducting sulfonated poly(ether ether ketone) (SPEEK) and zirconia-SPEEK hybrid membranes for direct alcohol fuel cells: effect of the nature of swelling solvent and incorporation of heteropolyacid. <i>Polymer International</i> , 2012, 61, 82-92.	1.6	25
346	Cross-linked Poly(arylene ether ketone) Proton Exchange Membranes with High Ion Exchange Capacity for Fuel Cells. <i>Fuel Cells</i> , 2012, 12, 589-598.	1.5	24
347	Membrane Materials for Addressing Energy and Environmental Challenges. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2012, 3, 395-420.	3.3	25
348	Thermal, mechanical and electrical properties of the PEO-based solid polymer electrolytes filled by yttrium oxide nanoparticles. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2012, 27, 495-500.	0.4	4
349	Natural and synthetic solid polymer hybrid dual network membranes as electrolytes for direct methanol fuel cells. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 1709-1721.	1.2	30
350	Process intensification and fuel cells using a Multi-Source Multi-Product approach. <i>Chemical Engineering and Processing: Process Intensification</i> , 2012, 51, 88-108.	1.8	7
351	Partly fluorinated poly(arylene ether ketone sulfone) hydrophilic-hydrophobic multiblock copolymers for fuel cell membranes. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 6132-6139.	3.8	60

#	ARTICLE	IF	CITATIONS
352	Hybrid membranes of PVA for direct ethanol fuel cells (DEFCs) applications. International Journal of Hydrogen Energy, 2012, 37, 6246-6252.	3.8	52
353	Solid acids as electrolyte materials for proton exchange membrane (PEM) electrolysis: Review. International Journal of Hydrogen Energy, 2012, 37, 3358-3372.	3.8	150
354	Sulfonated poly(ether ether ketone)/ethylene glycol/polyhedral oligosilsesquioxane hybrid membranes for fuel cell applications. International Journal of Hydrogen Energy, 2012, 37, 5979-5991.	3.8	26
356	Microwave-assisted synthesis of silica aerogel supported pt nanoparticles for self-humidifying proton exchange membrane fuel cell. International Journal of Hydrogen Energy, 2012, 37, 7669-7676.	3.8	20
357	High performance sulfonated aromatic ionomers by solvothermal macromolecular synthesis. International Journal of Hydrogen Energy, 2012, 37, 8672-8680.	3.8	41
358	Sulfonated poly(arylene ether)/heteropolyacids nanocomposite membranes for proton exchange membrane fuel cells. Electrochimica Acta, 2012, 62, 227-233.	2.6	26
359	Synthesis of organic/inorganic hybrid composite membranes and their structural and conductivity properties. Materials Letters, 2012, 72, 81-87.	1.3	16
360	Preparation of proton-conducting hybrid materials by reacting zinc phosphate glass with benzimidazole. Materials Letters, 2012, 79, 109-111.	1.3	10
361	Hydrazine/air direct-liquid fuel cell based on nanostructured copper anodes. Journal of Power Sources, 2012, 204, 116-121.	4.0	67
362	Highly active non-precious metal catalyst based on poly(vinylpyrrolidone)-wrapped carbon nanotubes complexed with iron-cobalt metal ions for oxygen reduction reaction. Journal of Power Sources, 2012, 214, 15-20.	4.0	37
363	Asymmetric membranes with interpenetrating proton-conducting morphology made by a combination of immersion precipitation and photopolymerization. Journal of Membrane Science, 2012, 401-402, 254-261.	4.1	11
364	Synthesis and characterization of sulfonated copolyimides via thermal imidization for polymer electrolyte membrane application. Solid State Ionics, 2012, 216, 95-99.	1.3	8
365	Computational and experimental study of low energy Ar ⁺ bombardment on Nafion. Surface and Coatings Technology, 2012, 206, 3607-3613.	2.2	2
366	Structure of the ion-rich phase in DVB cross-linked graft-copolymer proton-exchange membranes. Polymer, 2012, 53, 175-182.	1.8	18
367	Degree of sulfonation and microstructure of post-sulfonated polyethersulfone studied by NMR spectroscopy. Polymer, 2012, 53, 1624-1631.	1.8	17
368	Silicate-based polymer-nanocomposite membranes for polymer electrolyte membrane fuel cells. Progress in Polymer Science, 2012, 37, 842-869.	11.8	186
369	Free-standing hybrid anion-exchange membranes for application in fuel cells. Journal of Applied Polymer Science, 2012, 123, 3644-3651.	1.3	13
370	Proton conductive reinforced poly(ethylene-co-styrene) membranes. Journal of Applied Polymer Science, 2012, 124, 1511-1519.	1.3	9

#	ARTICLE	IF	CITATIONS
371	Development of sulfonated poly(ether ether ketone)/zirconium titanium phosphate composite membranes for direct methanol fuel cell. <i>Journal of Applied Polymer Science</i> , 2012, 124, E45.	1.3	19
372	Proton exchange composite membranes from blends of brominated and sulfonated poly(2,6-dimethyl-1,4-phenylene oxide). <i>Journal of Applied Polymer Science</i> , 2012, 124, 3511-3519.	1.3	16
373	Preparation and characterization of phosphoric acid composite membrane by radiation induced grafting of 4-vinylpyridine onto poly(ethylene-co-tetrafluoroethylene) followed by phosphoric acid doping. <i>Journal of Applied Polymer Science</i> , 2013, 128, 549-557.	1.3	23
374	Improving the direct methanol fuel cell performance with poly(vinyl alcohol)/titanium dioxide nanocomposites as a novel electrolyte additive. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 12418-12426.	3.8	26
375	MP2 study of the proton-donating power of 100% fluorosulfonic and chlorosulfonic acids. <i>Kinetics and Catalysis</i> , 2013, 54, 284-289.	0.3	2
376	Cross-linked high conductive membranes based on water soluble ionomer for high performance proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2013, 241, 529-535.	4.0	12
377	Location and size of nanoscale free-volume holes in crosslinked- polytetrafluoroethylene-based graft-type polymer electrolyte membranes determined by positron annihilation lifetime spectroscopy. <i>Radiation Physics and Chemistry</i> , 2013, 87, 46-52.	1.4	7
378	Enhanced chemical durability of perfluorosulfonic acid membranes through incorporation of terephthalic acid as radical scavenger. <i>Journal of Membrane Science</i> , 2013, 432, 66-72.	4.1	44
379	Hydroxyl anion conducting membranes poly(vinyl alcohol)/poly(diallyldimethylammonium chloride) for alkaline fuel cell applications: Effect of molecular weight. <i>Electrochimica Acta</i> , 2013, 111, 351-358.	2.6	35
380	SiO ₂ /sulfonated poly ether ether ketone (SPEEK) composite nanofiber mat supported proton exchange membranes for fuel cells. <i>Journal of Materials Science</i> , 2013, 48, 3665-3671.	1.7	87
381	Poly(ethylene-co-tetrafluoroethylene) (ETFE)-based graft-type polymer electrolyte membranes with different ion exchange capacities: Relative humidity dependence for fuel cell applications. <i>Journal of Membrane Science</i> , 2013, 447, 19-25.	4.1	39
382	Backbone effects on the charge transport in poly-imidazole membranes: a theoretical study. <i>Journal of Materials Chemistry A</i> , 2013, 1, 7751.	5.2	11
383	A novel environment-friendly route to prepare proton exchange membranes for direct methanol fuel cells. <i>Polymer</i> , 2013, 54, 1243-1250.	1.8	14
384	Solution casting Nafion/polytetrafluoroethylene membrane for vanadium redox flow battery application. <i>Electrochimica Acta</i> , 2013, 88, 725-734.	2.6	83
385	Density functional molecular dynamics simulations investigation of proton transfer and inter-molecular reorientation under external electrostatic field perturbation: Case studies for water and imidazole systems. <i>Journal of Power Sources</i> , 2013, 229, 141-148.	4.0	4
386	Decreasing contact resistance in proton-exchange membrane fuel cells with metal bipolar plates. <i>Journal of Power Sources</i> , 2013, 227, 137-144.	4.0	87
387	Uniaxial deformation and orientation of ethylene-tetrafluoroethylene films. <i>Polymer Testing</i> , 2013, 32, 1423-1435.	2.3	33
388	Water sorption in Nafion® membranes analyzed with an improved dual-mode sorption model—Structure/property relationships. <i>Journal of Membrane Science</i> , 2013, 439, 1-11.	4.1	28

#	ARTICLE	IF	CITATIONS
389	An investigation of proton conductivity of nanocomposite membranes based on sulfated nano-titania and polymer. <i>Solid State Ionics</i> , 2013, 239, 21-27.	1.3	7
390	Anhydrous Proton Conducting Materials Based on Sulfonated Dimethylphenethylchlorosilane Grafted Mesoporous Silica/Ionic Liquid Composite. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 11535-11543.	4.0	22
391	Characterisation of PAMPSâ€“PSS pore-filling membrane for direct methanol fuel cell. <i>Journal of Membrane Science</i> , 2013, 446, 92-98.	4.1	20
392	Cross-Linked Block Copolymer/Ionic Liquid Self-Assembled Blends for Polymer Gel Electrolytes with High Ionic Conductivity and Mechanical Strength. <i>Macromolecules</i> , 2013, 46, 9313-9323.	2.2	86
393	Nanoscale structures of radiation-grafted polymer electrolyte membranes investigated via a small-angle neutron scattering technique. <i>Polymer Journal</i> , 2013, 45, 797-801.	1.3	11
394	Ion Correlation-Induced Phase Separation in Polyelectrolyte Blends. <i>ACS Macro Letters</i> , 2013, 2, 1042-1046.	2.3	47
395	Performance-determining membrane properties in reverse electrodialysis. <i>Journal of Membrane Science</i> , 2013, 446, 266-276.	4.1	226
396	Proton transport in acid containing choline dihydrogen phosphate membranes for fuel cell. <i>Electrochimica Acta</i> , 2013, 111, 41-48.	2.6	7
397	Synthesis of poly (methyl methacrylate)-b-polystyrene with high molecular weight by DPE seeded emulsion polymerization and its application in proton exchange membrane. <i>Journal of Colloid and Interface Science</i> , 2013, 406, 154-164.	5.0	23
398	Macromolecular cross-linked polybenzimidazole based on bromomethylated poly (aryl ether ketone) with enhanced stability for high temperature fuel cell applications. <i>Journal of Power Sources</i> , 2013, 243, 102-109.	4.0	46
399	Side Chain Flexibility in Perfluorosulfonic Acid Ionomers: An ab Initio Study. <i>Journal of Physical Chemistry A</i> , 2013, 117, 10534-10543.	1.1	13
400	Crossâ€“Linking of Sulfonated Poly(ether ether ketone) by Thermal Treatment: How Does the Reaction Occur?. <i>Fuel Cells</i> , 2013, 13, 107-117.	1.5	56
401	Sulfonated hydrocarbon graft architectures for cation exchange membranes. <i>European Polymer Journal</i> , 2013, 49, 3601-3609.	2.6	8
402	Microstructure, state of water and proton conductivity of sulfonated poly(ether ether ketone). <i>Solid State Ionics</i> , 2013, 252, 62-67.	1.3	13
403	Preparation of proton exchange membranes by radiation-induced grafting of alpha methyl styreneâ€“butyl acrylate mixture onto polyetheretherketone (PEEK) films. <i>Polymer Bulletin</i> , 2013, 70, 2691-2708.	1.7	4
404	Synthesis of solvent stable polymeric membranes via UV depth-curing. <i>Chemical Communications</i> , 2013, 49, 11494.	2.2	46
405	An effect of stereoregularity on the structure of poly(methyl methacrylate) at air and water interfaces. <i>RSC Advances</i> , 2013, 3, 9446.	1.7	25
406	Intrinsic electrochemical activity of single walled carbon nanotubeâ€“Nafion assemblies. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 5030.	1.3	14

#	ARTICLE	IF	CITATIONS
407	Cross-linked poly(arylene ether ketone) membranes sulfonated on both backbone and pendant position for high proton conduction and low water uptake. <i>Journal of Power Sources</i> , 2013, 222, 103-111.	4.0	31
408	A modified silicic acid (Si) and sulphuric acid (S)â€“ZrP/PTFE/glycerol composite membrane for high temperature direct hydrocarbon fuel cells. <i>Journal of Power Sources</i> , 2013, 224, 158-167.	4.0	27
409	Concentrated sulfonated poly (ether sulfone)s as proton exchange membranes. <i>Journal of Power Sources</i> , 2013, 224, 42-49.	4.0	68
410	Silane-cross-linked polybenzimidazole with improved conductivity for high temperature proton exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 621-629.	5.2	93
411	Hydration and Proton Transfer in Highly Sulfonated Poly(phenylene sulfone) Ionomers: An Ab Initio Study. <i>Journal of Physical Chemistry A</i> , 2013, 117, 650-660.	1.1	28
412	Temperature Dependence of Gramicidin Channel Transport and Structure. <i>Journal of Physical Chemistry C</i> , 2013, 117, 3701-3712.	1.5	8
413	The states of methanol within Nafion and sulfonated poly(phenylene ether ether sulfone) membranes. <i>Journal of Membrane Science</i> , 2013, 428, 212-217.	4.1	13
414	Structures of crystalline and amorphous phases of the poly(ethylene oxide)/lithium trifluoromethanesulfonate complexes as studied by solid-state high-resolution ¹³ C nuclear magnetic resonance. <i>Polymer</i> , 2013, 54, 1184-1189.	1.8	8
415	Polymer-supported 1-butyl-3-methylimidazolium trifluoromethanesulfonate and 1-ethylimidazolium trifluoromethanesulfonate as electrolytes for the high temperature PEM-type fuel cell. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 4697-4704.	3.8	30
416	Aquivion® PerfluoroSulfonic Acid ionomer membranes: A micro-Raman spectroscopic study of ageing. <i>Polymer Degradation and Stability</i> , 2013, 98, 1138-1143.	2.7	12
417	Studies of a plasticized PEO + NH ₄ PF ₆ proton-conducting polymer electrolyte system and its application in a proton battery. <i>Journal of the Korean Physical Society</i> , 2013, 62, 311-319.	0.3	17
418	High temperature (HT) polymer electrolyte membrane fuel cells (PEMFC) â€“ A review. <i>Journal of Power Sources</i> , 2013, 231, 264-278.	4.0	756
419	Structural, conductivity, and dielectric characterization of PEOâ€“PEG blend composite polymer electrolyte dispersed with TiO ₂ nanoparticles. <i>Ionics</i> , 2013, 19, 1115-1123.	1.2	27
420	Densely sulfonated block copolymer composite membranes containing phosphotungstic acid for fuel cell membranes. <i>Journal of Membrane Science</i> , 2013, 434, 35-43.	4.1	46
421	Influence of Hydrogen Bonding Effects on Methanol and Water Diffusivities in Acidâ€“Base Polymer Blend Membranes of Sulfonated Poly(ether ether ketone) and Base Tethered Polysulfone. <i>Journal of Physical Chemistry B</i> , 2013, 117, 5315-5329.	1.2	17
422	Ion transport behavior in polymerized imidazolium ionic liquids incorporating flexible pendant groups. <i>European Polymer Journal</i> , 2013, 49, 1017-1022.	2.6	22
423	Probing the Structures of Hydrated Nafion in Different Morphologies Using Temperature-Accelerated Molecular Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2013, 117, 774-782.	1.5	17
424	Imaging Individual Proton-Conducting Spots on Sulfonated Multiblock-Copolymer Membrane under Controlled Hydrogen Atmosphere by Current-Sensing Atomic Force Microscopy. <i>Journal of Physical Chemistry B</i> , 2013, 117, 3892-3899.	1.2	13

#	ARTICLE	IF	CITATIONS
425	Intrinsic relationships between proton conductivity and nanopore size and functionalization. <i>Microporous and Mesoporous Materials</i> , 2013, 177, 17-24.	2.2	7
426	Enhancing the phase segregation and connectivity of hydrophilic channels by blending highly sulfonated graft copolymers with fluorinated homopolymers. <i>Journal of Materials Chemistry A</i> , 2013, 1, 8118.	5.2	15
427	Sulfonated Aromatic Polymers as Proton-Conducting Solid Electrolytes for Fuel Cells: a Short Review. <i>Zeitschrift Fur Physikalische Chemie</i> , 2013, 227, 595-614.	1.4	17
428	Non-fluorinated hybrid composite membranes based on polyethylene glycol functionalized polyhedral oligomeric silsesquioxane [PPOSS] and sulfonated poly(ether ether ketone) [SPEEK] for fuel cell applications. <i>Reactive and Functional Polymers</i> , 2013, 73, 1268-1280.	2.0	28
429	Cross-linked sulfonated aromatic ionomers via SO ₂ bridges: Conductivity properties. <i>Journal of Power Sources</i> , 2013, 243, 488-493.	4.0	32
430	A critical investigation of the effect of hygrothermal cycling on hydration and in-plane/through-plane proton conductivity of Nafion 117 at medium temperature (70–130°C). <i>Journal of Power Sources</i> , 2013, 235, 129-134.	4.0	23
431	A convenient, efficient and green route for preparing anion exchange membranes for potential application in alkaline fuel cells. <i>Journal of Membrane Science</i> , 2013, 425-426, 190-199.	4.1	27
432	Mechanism of Proton Transport in Ionic-Liquid-Doped Perfluorosulfonic Acid Membranes. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14449-14456.	1.2	23
433	Composition and Conductivity of Membranes Equilibrated with Solutions of Sulfuric Acid and Vanadyl Sulfate. <i>Journal of the Electrochemical Society</i> , 2013, 160, F1040-F1047.	1.3	79
434	Alternative Energies. <i>Advanced Structured Materials</i> , 2013, , .	0.3	2
435	Copolymeric Short-Long Side Chain PFSA/PTFE Membranes with High Ion Exchange Capacities for Fuel Cell Applications. <i>ECS Transactions</i> , 2013, 50, 945-949.	0.3	1
436	Properties of grafted polymer metal complexes as ion exchangers and its electrical conductivity. <i>Polymer Engineering and Science</i> , 2013, 53, 792-799.	1.5	6
437	Synthesis and characterization of perfluoro quaternary ammonium anion exchange membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013, 51, 1761-1769.	2.4	27
438	Preliminary Results of Experiments on a Single Cell Polymer Electrolyte Fuel Cell Fueled With Carbon Monoxide. , 2013, , .		0
439	Synthesis and Characterization of Sulfonated Polyimide Based Membranes for Proton Exchange Membrane Fuel Cells. <i>Journal of Fuel Cell Science and Technology</i> , 2013, 10, .	0.8	15
440	Anhydrous Novel Acid-Base Binary and Ternary Systems for Fuel Cell Applications. <i>ECS Transactions</i> , 2013, 50, 1199-1211.	0.3	3
441	Synthesis and Characterization of Perfluoro Quaternary Ammonium Ion Exchange Membranes for Fuel Cell Applications. <i>ECS Transactions</i> , 2013, 50, 2119-2127.	0.3	4
442	Effect of SiO ₂ on Silicotungstic Acid-H ₃ PO ₄ -poly(vinyl alcohol) Electrolyte for Electrochemical Supercapacitors. <i>Journal of the Electrochemical Society</i> , 2013, 160, A505-A510.	1.3	33

#	ARTICLE	IF	CITATIONS
443	Fuel Cell Membranes Based on Grafted and Post-Sulfonated Glycidyl Methacrylate (GMA). Fuel Cells, 2013, 13, 1177-1185.	1.5	13
444	Progress in membrane gas-liquid reactors. Journal of Chemical Technology and Biotechnology, 2013, 88, 340-345.	1.6	7
445	Proton Mobility in Sulfonated PolyEtherEtherKetone (SPEEK): Influence of Thermal Crosslinking and Annealing. Fuel Cells, 2013, 13, 79-85.	1.5	27
446	Stabilization of Sulfonated Aromatic Polymer (SAP) Membranes Based on SPEEK-WC for PEMFCs. Fuel Cells, 2013, 13, 86-97.	1.5	9
447	Preparation of phosphorylated nata-de-coco for polymer electrolyte membrane applications. Journal of Applied Polymer Science, 2013, 130, 399-405.	1.3	11
448	Proton conduction in glasses prepared via sol-gel and melting techniques. Journal of the Ceramic Society of Japan, 2013, 121, 539-543.	0.5	5
449	Synthesis and Properties of Partially Fluorinated Poly(arylene ether) Block Copolymers Containing Ammonium Groups as Anion Conductive Membranes. Bulletin of the Chemical Society of Japan, 2013, 86, 663-670.	2.0	12
450	Organic-inorganic hybrid membranes in separation processes: a 10-year review. Brazilian Journal of Chemical Engineering, 2013, 30, 683-700.	0.7	78
451	Nanomaterials for Improving the Properties of Polymeric Electrolyte Membranes in Energy Managing Devices. Nanoscience and Nanotechnology - Asia, 2013, 3, 45-59.	0.3	0
452	FUEL CELLS - PROTON-EXCHANGE MEMBRANE FUEL CELLS High-Temperature PEMFCs, 2014, , .		0
453	Hydration and Proton Conductivity of Ionomers: The Model Case of Sulfonated Aromatic Polymers. Frontiers in Energy Research, 2014, 2, .	1.2	7
455	Preparation and characterization of crosslinked sulfonated poly(ether ether ketone) membranes using 4-vinylbenzyl chloride via electron beam irradiation and subsequent Friedel-Craft reaction. Macromolecular Research, 2014, 22, 1090-1095.	1.0	7
457	Analysis of pyrolysis products of poly(vinylidene fluoride-co-hexafluoropropylene) by pyrolysis-gas chromatography/mass spectrometry. Journal of Fluorine Chemistry, 2014, 165, 33-38.	0.9	9
458	Ion exchange membranes based on vinylphosphonic acid-co-acrylonitrile copolymers for fuel cells. Desalination and Water Treatment, 0, , 1-7.	1.0	0
459	Mechanical Characterization of Anion Exchange Membranes by Extensional Rheology under Controlled Hydration. Journal of the Electrochemical Society, 2014, 161, H677-H683.	1.3	41
460	Celerity and thickness measurements by ultrasound in protons exchange membranes. , 2014, , .		3
461	An introduction to the utilization of membrane technology in the production of clean and renewable power. , 2014, , 3-43.		2
462	Molecule motion at polymer brush interfaces from single-molecule experimental perspectives. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 85-103.	2.4	15

#	ARTICLE	IF	CITATIONS
463	A physical interpretation of impedance at conducting polymer/electrolyte junctions. AIP Advances, 2014, 4, .	0.6	43
464	Rigid-Flexible Hybrid Proton-Exchange Membranes with Improved Water-Retention Properties and High Stability for Fuel Cells. Energy Technology, 2014, 2, 685-691.	1.8	16
465	Radiation-Grafted Membranes for Polymer Electrolyte Fuel Cells: Current Trends and Future Directions. Chemical Reviews, 2014, 114, 12278-12329.	23.0	164
466	PEDOT:PSS self-assembled films to methanol crossover reduction in Nafion [®] membranes. Applied Surface Science, 2014, 323, 7-12.	3.1	11
467	Electrochemical Properties of the Oxo-Manganese-Phenanthroline Complex Immobilized on Ion-Exchange Polymeric Film and Its Application as Biomimetic Sensor for Sulfite Ions. Electroanalysis, 2014, 26, 2182-2190.	1.5	12
468	Composite Proton Exchange Membranes of Sulfonated Poly(ether ketone ether sulfone) (S-PEKES) and Molecular Sieve With High Mechanical Strength for Direct Methanol Fuel Cell. International Journal of Polymeric Materials and Polymeric Biomaterials, 2014, 63, 315-322.	1.8	7
469	Effects of hot liquid-water treatment on local proton conductivity at surfaces of sulfonated poly(arylene ketone) block copolymer membrane for fuel cells studied by current-sensing atomic force microscopy. Electrochimica Acta, 2014, 143, 383-389.	2.6	13
470	The solvation and ion condensation properties for sulfonated polyelectrolytes in different solvents-a computational study. New Journal of Physics, 2014, 16, 025001.	1.2	40
471	High efficiency of proton transport by clustering nanochannels in multi-sulfonated propeller-like nonplanar hexaphenylbenzene poly(ether sulfone)s. International Journal of Hydrogen Energy, 2014, 39, 2756-2766.	3.8	11
472	Synthesis and properties of densely sulfonated polyketones (sPKs) with rigid backbone structure for PEM fuel cell application. Journal of Industrial and Engineering Chemistry, 2014, 20, 2310-2316.	2.9	20
473	Characterisation of a Nafion film by optical fibre Fabry-Perot interferometry for humidity sensing. Sensors and Actuators B: Chemical, 2014, 196, 99-105.	4.0	88
474	Synthesis of the diazonium (perfluoroalkyl) benzenesulfonimide monomer from Nafion monomer for proton exchange membrane fuel cells. Journal of Power Sources, 2014, 248, 1177-1180.	4.0	7
475	Recent progress in fluoropolymers for membranes. Progress in Polymer Science, 2014, 39, 164-198.	11.8	402
476	Preparation and characterization of polybenzimidazole/diethylamine hydrogen sulphate for medium temperature proton exchange membrane fuel cells. Journal of Power Sources, 2014, 245, 915-926.	4.0	55
477	Sulfonation of PIM-1 towards highly oxygen permeable binders for fuel cell application. Macromolecular Research, 2014, 22, 92-98.	1.0	31
478	Fabrication of a proton exchange membrane via blended sulfonimide functionalized polyamide. Journal of Materials Science, 2014, 49, 3442-3450.	1.7	38
479	Prediction of proton conductivity of graphene oxide-containing polymeric membranes. International Journal of Hydrogen Energy, 2014, 39, 1760-1768.	3.8	11
480	Immobilization of N-(3-aminopropyl)-imidazole through MOFs in proton conductive membrane for elevated temperature anhydrous applications. Journal of Membrane Science, 2014, 458, 86-95.	4.1	34

#	ARTICLE	IF	CITATIONS
481	Plasma-polymerized phosphonic acid-based membranes for fuel cell. <i>Journal of Membrane Science</i> , 2014, 461, 1-9.	4.1	10
482	Composite proton conductive membranes composed of sulfonated poly(ether ether ketone) and phosphotungstic acid-loaded imidazole microcapsules as acid reservoirs. <i>Journal of Membrane Science</i> , 2014, 451, 74-84.	4.1	84
483	Synthesis of silica immobilized phosphotungstic acid (Si-PWA)-poly(vinyl alcohol) (PVA) composite ion-exchange membrane for direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 9473-9481.	3.8	42
484	1,6-Bis(4-vinylphenyl)hexane as a crosslinking agent for the preparation of crosslinked sulfonated poly(ether ether ketone) membranes by EB irradiation. <i>Radiation Physics and Chemistry</i> , 2014, 97, 313-318.	1.4	16
485	Poly(ether ketone)s bearing pendent sulfonate groups via copolyacylation of a sulfonated monomer and isomeric AB ₂ -type comonomers. <i>Journal of Polymer Science Part A</i> , 2014, 52, 200-207.	2.5	11
486	Conductivity and dielectric relaxation in various polyvinyl alcohol/ammonium salt composites. <i>Polymer Science - Series A</i> , 2014, 56, 907-916.	0.4	7
487	Improvement of proton conductivity in nanocomposite polyvinyl alcohol (PVA)/chitosan (CS) blend membranes. <i>RSC Advances</i> , 2014, 4, 61781-61789.	1.7	38
488	Polymer-bound antioxidants in grafted membranes for fuel cells. <i>Journal of Materials Chemistry A</i> , 2014, 2, 5870-5882.	5.2	31
489	Enhanced Durability of Polymer Electrolyte Membrane Fuel Cells by Functionalized 2D Boron Nitride Nanoflakes. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 7751-7758.	4.0	106
490	Radically Coarse-Grained Approach to the Modeling of Chemical Degradation in Fuel Cell Ionomers. <i>Journal of Physical Chemistry B</i> , 2014, 118, 11375-11386.	1.2	23
491	Review of Advanced Materials for Proton Exchange Membrane Fuel Cells. <i>Energy & Fuels</i> , 2014, 28, 7303-7330.	2.5	559
492	Mesoscale modeling of hydrated morphologies of sulfonated polysulfone ionomers. <i>Soft Matter</i> , 2014, 10, 819-830.	1.2	42
493	Ab initio molecular dynamics simulations of aqueous triflic acid confined in carbon nanotubes. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 16465-16479.	1.3	20
494	Hydrogen fuel cell technology. , 2014, , 451-498.		15
495	Hierarchical Structure-Property Relationships in Graft-Type Fluorinated Polymer Electrolyte Membranes Using Small- and Ultrasmall-Angle X-ray Scattering Analysis. <i>Macromolecules</i> , 2014, 47, 2373-2383.	2.2	32
496	Water Sorption Behavior in Different Aromatic Ionomer Composites Analyzed with a New Dual-Mode Sorption Model. <i>Macromolecules</i> , 2014, 47, 6331-6342.	2.2	10
497	Proton dynamics in sulfonated ionic salt composites: Alternative membrane materials for proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2014, 268, 853-860.	4.0	12
498	Progress in the use of ionic liquids as electrolyte membranes in fuel cells. <i>Journal of Membrane Science</i> , 2014, 469, 379-396.	4.1	244

#	ARTICLE	IF	CITATIONS
499	A facile synthesis of proton-conducting organic-inorganic membranes. <i>Journal of Membrane Science</i> , 2014, 470, 189-196.	4.1	8
501	Preparation of new self-humidifying composite membrane by incorporating graphene and phosphotungstic acid into sulfonated poly(ether ether ketone) film. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 17162-17177.	3.8	24
502	Fabrication and Performance Evaluation of Hybrid Membrane based on a Sulfonated Polyphenyl Sulfone/Phosphotungstic acid/Silica for Proton Exchange Membrane Fuel Cell at Low Humidity Conditions. <i>Electrochimica Acta</i> , 2014, 146, 741-751.	2.6	36
503	Lithium-ion Battery Materials and Engineering. <i>Green Energy and Technology</i> , 2014, , .	0.4	24
504	Fabrication of chitosan/zwitterion functionalized titania-silica hybrid membranes with improved proton conductivity. <i>Journal of Membrane Science</i> , 2014, 469, 355-363.	4.1	52
505	Thermal Stability and Ionic Conductivity of High-Temperature Proton Conducting Ionic Liquid-Polymer Composite Electrolyte Membranes for Fuel Cell Applications. <i>ACS Symposium Series</i> , 2014, , 111-126.	0.5	4
506	High proton conductivity ZSM-5/sulfonated poly(ether ketone ether sulfone) (S-PEKES) composite proton exchange membrane for using in direct methanol fuel cell. <i>Solid State Ionics</i> , 2014, 263, 161-166.	1.3	16
507	Performance of PVDF supported silica immobilized phosphotungstic acid membrane (Si-PWA/PVDF) in direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 17306-17313.	3.8	30
508	Microbial fuel cells: transformation of wastes into clean energy. , 2014, , 266-300.		4
509	Theoretical and experimental infrared spectra of hydrated and dehydrated sulfonated poly(ether) Tj ETQq1 1 0.784314 rgBT /Overlock 17	1.8	17
510	Comparative Study of Proton Conducting Ionic Liquid Doped Nafion Membranes Elaborated by Swelling and Casting Methods: Processing Conditions, Morphology, and Functional Properties. <i>Journal of Physical Chemistry C</i> , 2014, 118, 14157-14168.	1.5	31
511	Preparation and characterization of poly(vinyl alcohol)/sodium alginate blended membrane for alkaline solid polymer electrolytes membrane. <i>Journal of Membrane Science</i> , 2014, 457, 139-148.	4.1	102
512	Molecular mobility of imidazoles in molten state as a key factor to enhance proton conductivity. <i>Journal of Power Sources</i> , 2014, 249, 185-192.	4.0	17
513	Zirconium phosphate reinforced short side chain perfluorosulfonic acid membranes for medium temperature proton exchange membrane fuel cell application. <i>Journal of Power Sources</i> , 2014, 262, 407-413.	4.0	20
514	Reversible/irreversible increase in proton-conductive areas on proton-exchange-membrane surface by applying voltage using current-sensing atomic force microscope. <i>Journal of Electroanalytical Chemistry</i> , 2014, 716, 158-163.	1.9	13
515	Synthesis and characterisation of a new sulphonated hydrocarbon polymer for application as a solid proton-conducting electrolyte. <i>Solid State Ionics</i> , 2014, 263, 62-70.	1.3	6
516	Nafion®/ODF-silica composite membranes for medium temperature proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2014, 246, 950-959.	4.0	32
517	Proton Conductive Areas on Sulfonated Poly(Arylene Ketone) Multiblock Copolymer Electrolyte Membrane Studied by Current-Sensing Atomic Force Microscopy. <i>Electrochemistry</i> , 2014, 82, 369-375.	0.6	8

#	ARTICLE	IF	CITATIONS
519	Water Management in Fuel Cell Stack by Using Microcontroller. , 2014, , .		0
520	Synthesis and characterization of sulfonated poly(ether imide) with higher thermal stability and effect on CO ₂ , N ₂ , and O ₂ permeabilities. Materials Research, 2014, 17, 714-719.	0.6	7
521	Introduction to Electrochemical Energy Storage and Conversion. Electrochemical Energy Storage and Conversion, 2015, , 3-32.	0.0	1
522	Kinetics of hydrogen release from dissolutions of ammonia borane in different ionic liquids. Energy, 2015, 91, 742-750.	4.5	14
523	Theoretical Modeling of Polymer Electrolyte Membranes. Electrochemical Energy Storage and Conversion, 2015, , 539-621.	0.0	1
524	Perfluorinated Polymer Electrolyte Membranes. Electrochemical Energy Storage and Conversion, 2015, , 61-107.	0.0	0
525	Novel reversible and switchable electrolytes based on magneto-rheology. Scientific Reports, 2015, 5, 15663.	1.6	9
526	DFT Study of Proton Transfer in Methyl Urocanate and Butyl Urocanate. Macromolecular Symposia, 2015, 354, 99-103.	0.4	0
527	Synthesis of 4,4'-Diacryloylphenyl Ether to Conveniently Crosslink Sulfonated Poly(ether ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 2944-2947.	1.0	1
528	On the Role of Metals in Nitrogen-doped Carbon Electrocatalysts for Oxygen Reduction. Angewandte Chemie - International Edition, 2015, 54, 10102-10120.	7.2	583
529	The Effect of Platinum Electrocatalyst on Membrane Degradation in Polymer Electrolyte Fuel Cells. Membranes, 2015, 5, 888-902.	1.4	16
530	Morphology of Hydrated As-Cast Nafion Revealed through Cryo Electron Tomography. ACS Macro Letters, 2015, 4, 1-5.	2.3	182
531	Construction and performance evaluation of a highly efficient mixed foaming system. RSC Advances, 2015, 5, 27978-27985.	1.7	9
532	Effect of residual casting solvent content on the structure and properties of sulfonated poly(ether) Tj ETQq1 1 0.784314 rgBT /Overlock 23	4.1	23
533	Mechanical Performance of Polyisoprene Copolymer Anion Exchange Membranes by Varying Crosslinking Methods. Journal of the Electrochemical Society, 2015, 162, H206-H212.	1.3	9
534	Electrochemical Characterization of a High-Temperature Proton Exchange Membrane Fuel Cell Using Doped-Poly Benzimidazole as Solid Polymer Electrolyte. Journal of Fuel Cell Science and Technology, 2015, 12, .	0.8	10
535	3D-Branched Rigid-Flexible Hybrid Sulfonated Polyamide for Proton Exchange Membranes (PEMs) in Fuel Cell Applications. Energy Technology, 2015, 3, 155-161.	1.8	14
536	Advances in membrane and stack design of redox flow batteries (RFBs) for medium- and large-scale energy storage. , 2015, , 477-507.		15

#	ARTICLE	IF	CITATIONS
537	Porous membrane based on chitosan-SiO ₂ for coin cell proton battery. <i>Ceramics International</i> , 2015, 41, 5484-5491.	2.3	21
538	Quantum Chemistry Study of Proton Transport in Imidazole Chains. <i>Journal of Physical Chemistry B</i> , 2015, 119, 3213-3222.	1.2	24
539	Polymer Electrolyte Membrane Fuel Cells: Role of Carbon Nanotubes/Graphene in Cathode Catalysis. , 2015, , 361-390.		4
540	Grafting distance and molecular weight dependent proton conduction of polymer electrolyte brushes. <i>European Polymer Journal</i> , 2015, 64, 93-100.	2.6	6
541	Durability and performance of polystyrene- <i>b</i> -poly(vinylbenzyl trimethylammonium) diblock copolymer and equivalent blend anion exchange membranes. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	1.3	26
542	Imidazole/(HPO ₃) ₃ -doped sulfonated poly (ether ether ketone) composite membrane for fuel cells. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	1.3	2
543	Layer-by-layer self-assembly of CHI/PVS-Nafion composite membrane for reduced methanol crossover and enhanced DMFC performance. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 1877-1885.	3.8	30
544	Dissipative particle dynamics approach for nano-scale membrane structure reconstruction and water diffusion coefficient estimation. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 1800-1808.	3.8	23
545	Dual electro-spray-assisted forced blending of thermodynamically immiscible polyelectrolyte mixtures. <i>Journal of Membrane Science</i> , 2015, 481, 28-35.	4.1	12
546	Properties and fuel cell applications of polybenzimidazole and ethyl phosphoric acid grafted polybenzimidazole blend membranes. <i>Journal of Membrane Science</i> , 2015, 491, 10-21.	4.1	43
547	Electrochemical comparison of two sulfonated styrene PEM membranes synthesized by different methods. <i>Journal of Applied Electrochemistry</i> , 2015, 45, 1211-1215.	1.5	3
548	Proton transfer mechanism of 1,3,5-tri(2-benzimidazolyl) benzene with a unique triple-stranded hydrogen bond network as studied by DFT-MD simulations. <i>Chemical Engineering Science</i> , 2015, 137, 404-411.	1.9	7
549	Sulfonated poly (arylene ether sulfone) proton exchange membranes for fuel cell applications. <i>Green Processing and Synthesis</i> , 2015, 4, .	1.3	5
550	Polyphosphazene-based copolymers containing pendant alkylsulfonic acid groups as proton exchange membranes. <i>Solid State Ionics</i> , 2015, 278, 58-64.	1.3	13
551	Symmetry-based IR group modes as dynamic probes of Nafion ion exchange site structure. <i>Polymer</i> , 2015, 73, 34-41.	1.8	14
552	Hydrophobic networks for advanced proton conducting membrane: Synthesis, transport properties and chemical stability. <i>Journal of Membrane Science</i> , 2015, 494, 161-173.	4.1	10
553	Parasitic Currents Caused by Different Ionic and Electronic Conductivities in Fuel Cell Anodes. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 15746-15751.	4.0	5
554	A Thermodynamic Approach to Model Proton Conductivity of Nafion-117 Membranes: Temperature and Water Content Effects. <i>Journal of the Electrochemical Society</i> , 2015, 162, F1096-F1100.	1.3	9

#	ARTICLE	IF	CITATIONS
555	A review of radiation-grafted polymer electrolyte membranes for alkaline polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , 2015, 293, 946-975.	4.0	80
556	New Polymer Assembles with Potential Use as Solid Electrolytes Type Membranes. <i>Applied Mechanics and Materials</i> , 0, 760, 245-250.	0.2	1
557	Recent Advances on Quasianhydrous Fuel Cell Membranes. , 2015, , 289-323.		0
558	Water and sodium transport and liquid crystalline alignment in a sulfonated aramid membrane. <i>Journal of Membrane Science</i> , 2015, 489, 194-203.	4.1	29
559	Parametric Analysis of a Single Alkaline Membrane Fuel Cell. <i>Heat Transfer Engineering</i> , 2015, 36, 963-973.	1.2	1
560	Design of polyphosphazene-based graft copolystyrenes with alkylsulfonate branch chains for proton exchange membranes. <i>Journal of Membrane Science</i> , 2015, 489, 119-128.	4.1	28
561	Multi-block copolymers based on poly(p-phenylene)s with excellent durability and fuel cell performance. <i>Journal of Membrane Science</i> , 2015, 492, 209-219.	4.1	50
562	Effect of Nanoparticles on Ion Transport in Polymer Electrolytes. <i>Macromolecules</i> , 2015, 48, 2773-2786.	2.2	78
563	32.Sulfonic acid functionalization of 2-aminoterephthalate metal-organic framework and silica nanoparticles by surface initiated radical polymerization: as proton-conducting solid electrolytes. <i>Journal of Polymer Research</i> , 2015, 22, 1.	1.2	17
564	A life-cycle perspective on automotive fuel cells. <i>Applied Energy</i> , 2015, 157, 884-896.	5.1	99
565	Surface engineering of polymer membranes via mussel-inspired chemistry. <i>Journal of Membrane Science</i> , 2015, 483, 42-59.	4.1	358
566	High Proton Conductivity in the Molecular Interlayer of a Polymer Nanosheet Multilayer Film. <i>Langmuir</i> , 2015, 31, 5174-5180.	1.6	38
567	Strong anionic polyelectrolyte microgels. <i>Polymer Chemistry</i> , 2015, 6, 5550-5554.	1.9	15
568	Green Processes for Nanotechnology. , 2015, , .		34
569	Graphene-based Materials Used as the Catalyst Support for PEMFC Applications. <i>Materials Today: Proceedings</i> , 2015, 2, 3797-3805.	0.9	18
571	Investigation of Humidity Dependent Surface Morphology and Proton Conduction in Multi-Acid Side Chain Membranes by Conductive Probe Atomic Force Microscopy. <i>Journal of Physical Chemistry B</i> , 2015, 119, 14280-14287.	1.2	24
572	Molecular dynamics simulation study of carboxylated and sulfonated poly(arylene ether sulfone) membranes for fuel cell applications. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 15690-15703.	3.8	30
573	Gas Permeation through Nafion. Part 1: Measurements. <i>Journal of Physical Chemistry C</i> , 2015, 119, 25145-25155.	1.5	144

#	ARTICLE	IF	CITATIONS
574	Behavior of ionic species in sulfonated PEI using DFT simulations: A study to determine ionic conductivity. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 17332-17337.	3.8	4
575	Conductivity Modulation in Polymer Electrolytes and their Composites due to Ion-Beam Irradiation. <i>Solid State Phenomena</i> , 2015, 239, 110-148.	0.3	2
576	High performance blend membranes based on sulfonated poly(arylene ether sulfone) and poly(p-benzimidazole) for PEMFC applications. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 29, 104-111.	2.9	28
577	Poly(ether ether ketone) (PEEK)-based graft-type polymer electrolyte membranes having high crystallinity for high conducting and mechanical properties under various humidified conditions. <i>Journal of Materials Chemistry A</i> , 2015, 3, 20983-20991.	5.2	35
578	Characterization of chain conformations in perfluorosulfonic acid membranes using electron energy loss spectroscopy. <i>RSC Advances</i> , 2015, 5, 2368-2373.	1.7	15
579	Phosphoric acid functional UV-cured proton conducting polymer membranes for fuel cells. <i>Ionics</i> , 2015, 21, 3097-3107.	1.2	4
580	PVDF-HFP/silica-SH nanocomposite synthesis for PEMFC membranes through simultaneous one-step sol-gel reaction and reactive extrusion. <i>Materials Chemistry and Physics</i> , 2015, 163, 54-62.	2.0	17
581	Nafion-microporous organic polymer networks composite membranes. <i>Journal of Membrane Science</i> , 2015, 476, 571-579.	4.1	46
582	Oxygen reduction reaction on electrodeposited PtAu alloy catalysts in the presence of phosphoric acid. <i>Applied Catalysis B: Environmental</i> , 2015, 165, 495-502.	10.8	26
583	Novel sulfonated poly(arylene ether sulfone) containing hydroxyl groups for enhanced proton exchange membrane properties. <i>Polymer Chemistry</i> , 2015, 6, 233-239.	1.9	25
584	Functionalization of polymeric materials as a high performance membrane for direct methanol fuel cell: A review. <i>Reactive and Functional Polymers</i> , 2015, 86, 248-258.	2.0	113
585	Synthesis of Highly Sulfonated Poly(arylene ether) Containing Multiphenyl for Proton Exchange Membrane Materials. <i>International Journal of Polymer Science</i> , 2016, 2016, 1-8.	1.2	3
586	DMFC Performance of Polymer Electrolyte Membranes Prepared from a Graft-Copolymer Consisting of a Polysulfone Main Chain and Styrene Sulfonic Acid Side Chains. <i>Energies</i> , 2016, 9, 658.	1.6	6
587	Cost Analysis of Direct Methanol Fuel Cell Stacks for Mass Production. <i>Energies</i> , 2016, 9, 1008.	1.6	54
589	Plasma-treated phosphonic acid-based membranes for fuel cell. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 15593-15604.	3.8	4
591	Polymerized Paired Ions as Polymeric Ionic Liquid-Proton Conductivity. <i>Macromolecular Rapid Communications</i> , 2016, 37, 1218-1225.	2.0	17
592	A completely spray-coated membrane electrode assembly. <i>Electrochemistry Communications</i> , 2016, 70, 65-68.	2.3	39
593	Biocomposite proton-exchange membrane electrolytes for direct methanol fuel cells. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	1.3	12

#	ARTICLE	IF	CITATIONS
594	Fe-carbon nitride "Core-shell" electrocatalysts for the oxygen reduction reaction. <i>Electrochimica Acta</i> , 2016, 222, 1778-1791.	2.6	60
595	Influence of nanoparticle-ion and nanoparticle-polymer interactions on ion transport and viscoelastic properties of polymer electrolytes. <i>Journal of Chemical Physics</i> , 2016, 144, 154905.	1.2	20
596	Statistical field theory description of inhomogeneous polarizable soft matter. <i>Journal of Chemical Physics</i> , 2016, 145, 154104.	1.2	53
597	Polyvinyl Chloride Composite Membranes Made with Nafion and Polysiloxanes for Use in Electrochemical Breath Alcohol Sensors. <i>Journal of the Electrochemical Society</i> , 2016, 163, B644-B651.	1.3	7
598	A review of shape memory polymers bearing reversible binding groups. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 1340-1364.	2.4	130
599	Stability and Degradation Mechanisms of Radiation-Grafted Polymer Electrolyte Membranes for Water Electrolysis. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15297-15306.	4.0	40
600	A facile method for the preparation of poly(vinylidene fluoride) membranes filled with cross-linked sulfonated polystyrene. <i>Reactive and Functional Polymers</i> , 2016, 99, 42-48.	2.0	12
601	Effect of TiO ₂ nanoparticles on structural, thermal, mechanical and ionic conductivity studies of PEO 12 "LiTDI solid polymer electrolyte. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 37, 347-353.	2.9	100
602	Sulfonated poly(ether ether) ketone/polyurethane composites doped with phosphoric acids for proton exchange membranes. <i>Solid State Ionics</i> , 2016, 289, 199-206.	1.3	31
603	Computer Simulations of Ion Transport in Polymer Electrolyte Membranes. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2016, 7, 349-371.	3.3	84
604	New approaches towards novel composite and multilayer membranes for intermediate temperature-polymer electrolyte fuel cells and direct methanol fuel cells. <i>Journal of Power Sources</i> , 2016, 316, 139-159.	4.0	110
605	Mechanisms of reverse current and mitigation strategies in proton exchange membrane fuel cells during startups. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 6469-6475.	3.8	14
606	Engineering the proton conductivity of metal-organic hybrid materials by varying the coordination mode of the ligand. <i>CrystEngComm</i> , 2016, 18, 3300-3305.	1.3	11
607	Effect of polyethylene glycol on sulfonated polyether imide (SPEI) for fuel cell applications. <i>Polymer Science - Series B</i> , 2016, 58, 205-213.	0.3	1
608	Anodic Electropolymerization of Sulfonated Poly(phenyl ether): Study of Precursor Isomers and Polymer Growth. <i>ChemistrySelect</i> , 2016, 1, 3114-3119.	0.7	7
609	Fluorine-Free Pt Nanocomposites for Three-Phase Interfaces in Fuel Cell Electrodes. <i>ACS Catalysis</i> , 2016, 6, 6993-7001.	5.5	18
610	Graft-type polymer electrolyte membranes based on poly(ether ether ketone)/nanosilica hybrid films for fuel cell applications. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 18621-18630.	3.8	16
611	The influence of water channel geometry and proton mobility on the conductivity of Nafion®. <i>Electrochimica Acta</i> , 2016, 214, 362-369.	2.6	28

#	ARTICLE	IF	CITATIONS
612	Anion exchange polymer coated graphite granule electrodes for improving the performance of anodes in unbuffered microbial fuel cells. <i>Journal of Power Sources</i> , 2016, 330, 211-218.	4.0	10
613	Recent Advancements in All-Vanadium Redox Flow Batteries. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500309.	1.9	351
614	Sulfosuccinic acid-sulfonated polyether ether ketone/organo functionalized microporous zeolite-13X membrane electrolyte for direct methanol fuel cells. <i>Microporous and Mesoporous Materials</i> , 2016, 236, 38-47.	2.2	19
615	Sulfonated poly(arylene thioether sulfone) cation exchange membranes with improved permselectivity/ion conductivity trade-off. <i>Journal of Membrane Science</i> , 2016, 520, 731-739.	4.1	22
616	High performance tetra-sulfonated poly(p-phenylene-co-aryl ether ketone) membranes with microblock moieties for passive direct methanol fuel cells. <i>Journal of Membrane Science</i> , 2016, 517, 47-56.	4.1	31
617	Nanoconfined Zeolitic Imidazolate Framework Membranes with Composite Layers of Nearly Zero Thickness. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 21979-21983.	4.0	62
618	Membranes and separators for microbial fuel cells. , 2016, , 153-178.		8
620	Effect of gas diffusion layer properties on water distribution across air-cooled, open-cathode polymer electrolyte fuel cells: A combined ex-situ X-ray tomography and in-operando neutron imaging study. <i>Electrochimica Acta</i> , 2016, 211, 478-487.	2.6	78
621	Advances in the design of self-supported ion-conducting membranes – New family of columnar liquid crystalline polyamines. Part 2: Ion transport characterisation and comparison to hybrid membranes. <i>Polymer</i> , 2016, 105, 234-242.	1.8	10
622	Sensor systems based on ion exchange membranes for analysis of multicomponent solutions. <i>Petroleum Chemistry</i> , 2016, 56, 987-1005.	0.4	3
623	Surface modification of Nafion membranes by ion implantation to reduce methanol crossover in direct methanol fuel cells. <i>RSC Advances</i> , 2016, 6, 62467-62470.	1.7	19
624	Electrospun nanofibre composite polymer electrolyte fuel cell and electrolysis membranes. <i>Nano Energy</i> , 2016, 26, 729-745.	8.2	128
625	Conductivity of composite membrane-based poly(ether-ether-ketone) sulfonated (SPEEK) nanofiber mats of varying thickness. <i>RSC Advances</i> , 2016, 6, 56986-56999.	1.7	18
626	Synthesis and investigation of random-structured ionomers with highly sulfonated multi-phenyl pendants for electrochemical applications. <i>Journal of Membrane Science</i> , 2016, 510, 326-337.	4.1	29
627	Influence of nanoparticle surface chemistry on ion transport in polymer nanocomposite electrolytes. <i>Solid State Ionics</i> , 2016, 286, 57-65.	1.3	24
628	Crosslinked ethyl phosphoric acid grafted polybenzimidazole and polybenzimidazole blend membranes for high-temperature proton exchange membrane fuel cells. <i>Journal of Polymer Research</i> , 2016, 23, 1.	1.2	28
629	SPPO pore-filled composite membranes with electrically aligned ion channels via a lab-scale continuous caster for fuel cells: An optimal DC electric field strength-IEC relationship. <i>Journal of Membrane Science</i> , 2016, 501, 15-23.	4.1	18
630	Solid polymer electrolytes based on chitosan and europium triflate. <i>Journal of Non-Crystalline Solids</i> , 2016, 432, 307-312.	1.5	40

#	ARTICLE	IF	CITATIONS
631	Immobilized transition metal-based radical scavengers and their effect on durability of Aquivion [®] perfluorosulfonic acid membranes. <i>Journal of Power Sources</i> , 2016, 301, 317-325.	4.0	44
632	The application of power-generating fuel cell electrode materials and monitoring methods to breath alcohol sensors. <i>Sensors and Actuators B: Chemical</i> , 2016, 228, 448-457.	4.0	36
633	12HPW/meso-SiO ₂ nanocomposite CSPEEK membranes for proton exchange membrane fuel cells. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 36, 132-138.	2.9	26
634	New siloxane-based copolymers for use in anion exchange membrane fuel cells. <i>Journal of Membrane Science</i> , 2016, 508, 1-6.	4.1	7
635	Signal Enhanced FTIR Analysis of Alignment in NAFION Thin Films at SiO ₂ and Au Interfaces. <i>ACS Macro Letters</i> , 2016, 5, 83-87.	2.3	42
636	Mimicking nature: Biomimetic ionic channels. <i>Journal of Membrane Science</i> , 2016, 509, 10-18.	4.1	13
637	Directly deposited Nafion/TiO ₂ composite membranes for high power medium temperature fuel cells. <i>RSC Advances</i> , 2016, 6, 24261-24266.	1.7	39
638	Materials and membrane technologies for water and energy sustainability. <i>Sustainable Materials and Technologies</i> , 2016, 7, 1-28.	1.7	279
639	Mixed matrix proton exchange membranes for fuel cells: State of the art and perspectives. <i>Progress in Polymer Science</i> , 2016, 57, 103-152.	11.8	262
640	Study of hydrogen crossover and proton conductivity of self-humidifying nanocomposite proton exchange membrane based on sulfonated poly (ether ether ketone). <i>Energy</i> , 2016, 94, 292-303.	4.5	42
641	Preparation, characterization and properties of PVDF-g-PAMPS/PMMA-co-PAMPS/silica nanoparticle as a new proton exchange nanocomposite membrane. <i>Chemical Engineering Journal</i> , 2016, 284, 1035-1048.	6.6	48
642	Improving the Signal Propagation at 2.4 GHz Using Conductive Membranes. <i>IEEE Systems Journal</i> , 2017, 11, 2315-2324.	2.9	2
645	Micro-porous patterning of the surface of a polymer electrolyte membrane by an accelerated plasma and its performance for direct methanol fuel cells. <i>Macromolecular Research</i> , 2017, 25, 1-4.	1.0	24
646	Improvement in the solid-state alkaline fuel cell performance through efficient water management strategies. <i>Journal of Power Sources</i> , 2017, 345, 221-226.	4.0	45
647	Sharp rise in resistance of ion exchange membranes in low concentration NaCl solution. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 72, 134-141.	2.7	8
648	Hydrocarbon-Based Polymer Electrolyte Membranes: Importance of Morphology on Ion Transport and Membrane Stability. <i>Chemical Reviews</i> , 2017, 117, 4759-4805.	23.0	732
649	High power generation and COD removal in a microbial fuel cell operated by a novel sulfonated PES/PES blend proton exchange membrane. <i>Energy</i> , 2017, 125, 427-438.	4.5	86
650	Simultaneous wastewater treatment and bioelectricity production in microbial fuel cells using cross-linked chitosan-graphene oxide mixed-matrix membranes. <i>Environmental Science and Pollution Research</i> , 2017, 24, 13782-13796.	2.7	40

#	ARTICLE	IF	CITATIONS
651	Electrochemical Promotional Role of Under-Rib Convection-Based Flow-Field in Polymer Electrolyte Membrane Fuel Cells. , 2017, , 241-310.		1
652	An Overview of Chemical and Mechanical Stabilities of Polymer Electrolytes Membrane. , 2017, , 327-340.		1
653	Chitosan-Based Polymer Electrolyte Membranes for Fuel Cell Applications. , 2017, , 381-398.		6
654	Organic-Inorganic Composite Polymer Electrolyte Membranes. , 2017, , .		10
655	Cerium Oxide Decorated Polymer Nanofibers as Effective Membrane Reinforcement for Durable, High-Performance Fuel Cells. Advanced Energy Materials, 2017, 7, 1602100.	10.2	56
656	Impedance study of PVA/PEG/LiClO ₄ /TiO ₂ nanocomposite solid polymer blend electrolyte. Journal of Materials Science: Materials in Electronics, 2017, 28, 4586-4592.	1.1	29
657	Novel Slightly Reduced Graphene Oxide Based Proton Exchange Membrane with Constructed Long-Range Ionic Nanochannels via Self-Assembling of Nafion. ACS Applied Materials & Interfaces, 2017, 9, 22620-22627.	4.0	35
658	A Basic Overview of Fuel Cells: Thermodynamics and Cell Efficiency. , 2017, , 193-217.		0
660	Modified nanocrystal cellulose/fluorene-containing sulfonated poly(ether ether ketone) composites for proton exchange membranes. Applied Surface Science, 2017, 416, 996-1006.	3.1	47
661	Preparation and Nc/T plots of un-crystallized Nafion 1100 and semi-crystalline Nafion 1000. International Journal of Hydrogen Energy, 2017, 42, 15908-15912.	3.8	6
662	Polymer Electrolytes: Ionic Liquid Modified Phenolphthalein Based Hybrid Multiblock Poly(Arylene) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50	1.3	8
663	NH ₄ NO ₃ as charge carrier contributor in glycerolized potato starch-methyl cellulose blend-based polymer electrolyte and the application in electrochemical double-layer capacitor. Ionics, 2017, 23, 3429-3453.	1.2	114
664	Morphology-induced percolation in crosslinked AMPS/Fluorolink for fuel cell membrane application. Journal of Membrane Science, 2017, 534, 59-67.	4.1	1
665	Primary hydration and proton transfer of electrolyte acids: An ab initio study. Solid State Ionics, 2017, 306, 2-12.	1.3	16
666	Block-type proton exchange membranes prepared by a combination of radiation-induced grafting and atom-transfer radical polymerization. Journal of Membrane Science, 2017, 532, 105-114.	4.1	17
667	Comparative study of the cation permeability of protonic, anionic and ampholytic membranes. Solid State Ionics, 2017, 300, 97-105.	1.3	11
668	A robust pendant-type cross-linked anion exchange membrane (AEM) with high hydroxide conductivity at a moderate IEC value. Journal of Materials Science, 2017, 52, 3946-3958.	1.7	10
669	Thermo-mechanically stable sustainable polymer based solid electrolyte membranes for direct methanol fuel cell applications. Journal of Membrane Science, 2017, 526, 348-354.	4.1	32

#	ARTICLE	IF	CITATIONS
670	Development of hydrophilicity on the proton exchange using sulfonic acid on PEEK in the presence of water: a density functional theory study. <i>Theoretical Chemistry Accounts</i> , 2017, 136, 1.	0.5	4
671	Humid permeation of CO ₂ and hydrocarbons in Aquivion® perfluorosulfonic acid ionomer membranes, experimental and modeling. <i>Journal of Membrane Science</i> , 2017, 542, 367-377.	4.1	26
672	Water sub-diffusion in membranes for fuel cells. <i>Scientific Reports</i> , 2017, 7, 8326.	1.6	54
673	Microscopic muon dynamics in the polymer electrolyte poly(ethylene oxide). <i>Physical Review E</i> , 2017, 96, 012502.	0.8	1
675	Asymmetric silica composite polymer electrolyte membrane for water management of fuel cells. <i>Journal of Membrane Science</i> , 2017, 542, 52-59.	4.1	15
676	Polymers application in proton exchange membranes for fuel cells (PEMFCs). <i>Physical Sciences Reviews</i> , 2017, 2, .	0.8	31
677	Dynamic modeling of a hybrid electric system based on an anion exchange membrane fuel cell. <i>Cogent Engineering</i> , 2017, 4, 1357891.	1.1	14
678	Charge transport in graphene oxide. <i>Nano Today</i> , 2017, 17, 38-53.	6.2	31
679	Control of Radiation/Living Graft Polymerization in the Solid State. <i>Macromolecular Chemistry and Physics</i> , 2017, 218, 1700346.	1.1	4
680	High performance blend membranes based on densely sulfonated poly(fluorenyl ether sulfone) block copolymer and imidazolium-functionalized poly(ether sulfone). <i>International Journal of Hydrogen Energy</i> , 2017, 42, 20176-20186.	3.8	22
681	A convenient miniature test platform for polyelectrolyte membrane fuel-cell research. <i>Journal of Electroanalytical Chemistry</i> , 2017, 797, 8-15.	1.9	14
682	Conductometric titration as a technique to determine variation in conductivity in perfluorosulfonic acid materials for fuel cells and electrolyzers. <i>International Journal of Energy and Environmental Engineering</i> , 2017, 8, 123-134.	1.3	1
683	The role of ion-exchange membrane in energy conversion. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	17
684	Development of proton conducting biopolymer membrane based on agarâ€“agar for fuel cell. <i>Ionics</i> , 2017, 23, 2781-2790.	1.2	55
685	One-pot synthesis of a high performance chitosan-nickel oxyhydroxide nanocomposite for glucose fuel cell and electro-sensing applications. <i>Applied Catalysis B: Environmental</i> , 2017, 204, 185-199.	10.8	33
686	Enhanced proton conductivity at low humidity of proton exchange membranes with triazole moieties in the side chains. <i>Journal of Membrane Science</i> , 2017, 523, 480-486.	4.1	43
687	Simple fabrication of 12Âµm thin nanocomposite fuel cell membranes by direct electrospinning and printing. <i>Journal of Power Sources</i> , 2017, 337, 137-144.	4.0	53
688	The influence of relative humidity on the performance of fuel cell catalyst layers in ethanol sensors. <i>Sensors and Actuators B: Chemical</i> , 2017, 239, 120-130.	4.0	14

#	ARTICLE	IF	CITATIONS
689	Polymer Electrolyte Composite Membrane Based on Molecular Sieve 13X Mixed with Sulfonated Poly(ether ketone ether sulfone)/Poly(phenylene ether ether sulfone) Blended Membrane for Use in Direct Methanol Fuel Cell. <i>Advances in Polymer Technology</i> , 2017, 36, 385-391.	0.8	5
690	Effect of pendant group containing fluorine on the properties of sulfonated poly(arylene ether) Tj ETQq1 1 0.784314rgBT /Oyrglock 10	1.7	18
691	Pervaporation performance comparison of hybrid membranes filled with two-dimensional ZIF-L nanosheets and zero-dimensional ZIF-8 nanoparticles. <i>Journal of Membrane Science</i> , 2017, 523, 185-196.	4.1	176
695	Preparation and characterization of cross-linked polyphosphazene-crown ether membranes for alkaline fuel cells. <i>Electrochimica Acta</i> , 2017, 258, 311-321.	2.6	33
696	10. Polymers application in proton exchange membranes for fuel cells (PEMFCs). , 2017, , 293-348.		4
697	Biopolymer Composites in Fuel Cells. , 2017, , 185-217.		13
698	Ionic Liquid Enhancement of Polymer Electrolyte Conductivity and their Effects on the Performance of Electrochemical Devices. , 2017, , .		7
699	Ion Transport in Cyclopropenium-Based Polymerized Ionic Liquids. <i>Macromolecules</i> , 2018, 51, 1681-1687.	2.2	45
700	Preparation and characterization of chitosan-based nanocomposite hybrid polymer electrolyte membranes for fuel cell application. <i>Ionics</i> , 2018, 24, 3555-3571.	1.2	27
701	Design of Heterogeneities and Interfaces with Nanofibers in Fuel Cell Membranes. , 2018, , 1-37.		0
702	Soldering a gas diffusion layer to a stainless steel bipolar plate using metallic tin. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 9006-9014.	3.8	8
703	Structure and morphology of model polymer electrolyte membranes based on sulfonated syndiotactic-polystyrene in the γ co-crystalline phase resolved by small-angle neutron scattering. <i>Solid State Ionics</i> , 2018, 320, 392-406.	1.3	10
704	Application of graft-type poly(ether ether ketone)-based polymer electrolyte membranes to electrochemical devices " Fuel cells and electrolytic enrichment of tritium. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 8927-8935.	3.8	11
705	Synthesis and properties of ABPPQ for high-temperature proton exchange membrane fuel cells. <i>Polymer Bulletin</i> , 2018, 75, 5321-5331.	1.7	4
706	Comparative analysis of a hybrid propulsion using LNG-LH2 complying with regulations on emissions. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 3809-3821.	3.8	25
707	Ion transport studies in nanocomposite polymer electrolyte membrane of PVA" [C4C1Im][HSO4]"SiO2. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 1801-1815.	1.2	11
708	High performance polyvinyl alcohol/calcium titanate nanocomposite anion-exchange membranes as separators in redox flow batteries. <i>Polymer Bulletin</i> , 2018, 75, 4409-4428.	1.7	7
709	Graphene oxide-anchored reactive sulfonated copolymer via simple one pot condensation polymerization: proton-conducting solid electrolytes. <i>Journal of Polymer Research</i> , 2018, 25, 1.	1.2	6

#	ARTICLE	IF	CITATIONS
710	UV irradiation induced microstructural changes in CdCl ₂ doped PVA/PVP blend. Journal of Materials Science: Materials in Electronics, 2018, 29, 4106-4121.	1.1	10
711	Computational Study of Microhydration in Sulfonated Diels-Alder Poly(phenylene) Polymers. Journal of Physical Chemistry A, 2018, 122, 3927-3938.	1.1	6
712	Electrolytic CO ₂ Reduction in a Flow Cell. Accounts of Chemical Research, 2018, 51, 910-918.	7.6	735
713	Anion exchange membrane fuel cell modelling. International Journal of Sustainable Energy, 2018, 37, 340-353.	1.3	5
714	Electrical conductivity and dielectric relaxation behaviour of PEO/PVdF-based solid polymer blend electrolytes for zinc battery applications. Ionics, 2018, 24, 243-255.	1.2	53
715	Investigation the Effect of TiO ₂ Nanoparticles on Proton Exchange Membrane of sPEEK Used as a Fuel Cell Electrolyte Based on Phase Diagram. Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 63-72.	1.9	9
716	Mechanically stable nanofibrous sPEEK/Aquivion® composite membranes for fuel cell applications. Journal of Membrane Science, 2018, 545, 66-74.	4.1	81
717	Salt-leaching technique for the synthesis of porous poly(2,5-benzimidazole) (ABPBI) membranes for fuel cell application. Journal of Applied Polymer Science, 2018, 135, 45773.	1.3	15
718	Graphene oxide: A promising membrane material for fuel cells. Renewable and Sustainable Energy Reviews, 2018, 82, 714-733.	8.2	197
719	Understanding methods of preparation and characterization of pore-filling polymer composites for proton exchange membranes: a beginner's guide. Reviews in Chemical Engineering, 2018, 34, 455-479.	2.3	29
720	Styrene grafted ethylene chlorotrifluoroethylene (ECTFE-g-PSSA) protonic membranes: preparation, characterization, and transport mechanism. Polymers for Advanced Technologies, 2018, 29, 658-667.	1.6	13
721	A DNA-threaded ZIF-8 Membrane with High Proton Conductivity and Low Methanol Permeability. Advanced Materials, 2018, 30, 1705155.	11.1	142
722	Formation of defects and their effects on hydride ion transport properties in a series of K ₂ NiF ₄ -type oxyhydrides. Journal of Materials Chemistry A, 2018, 6, 1454-1461.	5.2	19
723	Development of polymer-polymer type charge-transfer blend membranes for fuel cell application. Journal of Membrane Science, 2018, 548, 223-231.	4.1	11
724	Nafion-assisted exfoliation of MoS ₂ in water phase and the application in quick-response NIR light controllable multi-shape memory membrane. Nano Research, 2018, 11, 542-553.	5.8	23
725	Boundary Homogenization and Capture Time Distributions of Semipermeable Membranes with Periodic Patterns of Reactive Sites. Multiscale Modeling and Simulation, 2018, 16, 1411-1447.	0.6	30
726	Effects of Gas Channel Design on Water Management and on the Performance of Polymer Electrolyte Membrane Fuel Cells: A Review. International Journal of Electrochemical Science, 2018, , 10480-10495.	0.5	16
727	The Hafnium-Selective Extraction From a Zirconium(Hafnium) Heptafluoride Ammonium Solution Using Organophosphorus-Based Extractants. Solvent Extraction and Ion Exchange, 2018, 36, 658-673.	0.8	11

#	ARTICLE	IF	CITATIONS
728	Development of Electrical Energy Storage Device Using Direct-Acting Fuel Cells Based on Methanol. , 2018, , .		1
729	Synthesis and Characterization by Ellipsometry of Cationic Membranes for Fuel Cells. Materials Science Forum, 0, 930, 625-630.	0.3	2
730	Proton Conductions. Polymers and Polymeric Composites, 2018, , 1-34.	0.6	0
731	A Perspective on Low-Temperature Water Electrolysis â€“ Challenges in Alkaline and Acidic Technology. International Journal of Electrochemical Science, 2018, 13, 1173-1226.	0.5	197
732	A 4 V Cathode Compatible, Superionic Conductive Solid Polymer Electrolyte for Solid Lithium Metal Batteries with Long Cycle Life. ACS Applied Energy Materials, 2018, 1, 6064-6071.	2.5	58
733	Hybrid Solid Polymer Electrolytes with Twoâ€“Dimensional Inorganic Nanofillers. Chemistry - A European Journal, 2018, 24, 18180-18203.	1.7	41
734	Ion movement in thin Nafion films under an applied electric field. Applied Physics Letters, 2018, 113, 113105.	1.5	2
735	An alternative to hydrogenation processes. Electrocatalytic hydrogenation of benzophenone. Beilstein Journal of Organic Chemistry, 2018, 14, 537-546.	1.3	5
736	Zwitterion threaded metalâ€“organic framework membranes for direct methanol fuel cells. Journal of Materials Chemistry A, 2018, 6, 19547-19554.	5.2	32
737	Negatively Charged Porous Thin Film from ABA Triblock Copolymer Assembly. Polymers, 2018, 10, 733.	2.0	7
738	Effect of Salt Concentration on Ion Clustering and Transport in Polymer Solid Electrolytes: A Molecular Dynamics Study of PEOâ€“LiTFSI. Chemistry of Materials, 2018, 30, 6298-6306.	3.2	190
739	Synthesis, characterization and comparison of polythiopheneâ€“carbon nanocomposite materials as Pt electrocatalyst supports for fuel cell applications. Bulletin of Materials Science, 2018, 41, 1.	0.8	11
740	Thin pore-filling membrane with highly packed-acid structure for high temperature and low humidity operating polymer electrolyte fuel cells. Journal of Power Sources, 2018, 394, 67-73.	4.0	35
741	Proton conducting composite membranes from crosslinked poly(vinyl alcohol) and poly(styrene) Tj ETQq1 1 0.784314 rgBT /Overlock 111190-11201.	3.8	18
742	Progress and prospects in reverse electrodialysis for salinity gradient energy conversion and storage. Applied Energy, 2018, 225, 290-331.	5.1	214
743	Kupfervermittelte radikalische Polymerisation mit reversibler Deaktivierung in wÃ¤ssrigen Medien. Angewandte Chemie, 2018, 130, 10628-10643.	1.6	16
744	A rejuvenation process to enhance the durability of low Pt loaded polymer electrolyte membrane fuel cells. Journal of Power Sources, 2018, 396, 345-354.	4.0	18
745	Blocky Ionomers via Sulfonation of Poly(ether ether ketone) in the Semicrystalline Gel State. Macromolecules, 2018, 51, 6226-6237.	2.2	27

#	ARTICLE	IF	CITATIONS
746	Polymer nanocomposite materials in energy storage: Properties and applications. , 2018, , 239-282.		7
747	PVDF-g-poly (styrene-co-vinylbenzyl chloride) based anion exchange membrane: High salt removal efficiency and stability. Desalination, 2018, 444, 35-43.	4.0	23
748	Copper-mediated Reversible Deactivation Radical Polymerization in Aqueous Media. Angewandte Chemie - International Edition, 2018, 57, 10468-10482.	7.2	70
749	Biopolymer Electrolytes for Fuel Cell Applications. , 2018, , 151-166.		22
750	Experimental and modeling study of blended membranes for direct methanol fuel cells. Journal of Membrane Science, 2018, 564, 308-316.	4.1	8
751	Effect of ceria loading on performance and durability of sulfonated poly (ether ether ketone) nanocomposite membranes for proton exchange membrane fuel cell applications. Journal of Membrane Science, 2018, 565, 342-357.	4.1	68
752	Advanced Supporting Materials for Polymer Electrolyte Membrane Fuel Cells. , 0, , .		2
753	Solid-phase microextraction of heavy metals in natural water with a polypyrrole/carbon nanotube/1,10-phenanthroline composite sorbent material. Talanta, 2018, 188, 570-577.	2.9	71
754	Synthesis and characterization of block copolymer and comparative study with random copolymer via superacid-catalyzed reaction. International Journal of Hydrogen Energy, 2018, 43, 11862-11871.	3.8	12
755	Composite Membranes for High Temperature PEM Fuel Cells and Electrolysers: A Critical Review. Membranes, 2019, 9, 83.	1.4	114
756	Highly Conductive and Water-Swelling Resistant Anion Exchange Membrane for Alkaline Fuel Cells. International Journal of Molecular Sciences, 2019, 20, 3470.	1.8	11
757	Non-fluorinated Polymer Composite Proton Exchange Membranes for Fuel Cell Applications – A Review. ChemPhysChem, 2019, 20, 2016-2053.	1.0	89
758	Benzimidazole as Solid Electrolyte Material for Fuel Cells. , 0, , .		0
759	3D porous network gel polymer electrolyte with high transference number for dendrite-free Li O ₂ batteries. Solid State Ionics, 2019, 343, 115088.	1.3	8
760	Soluble Telechelic Polycondensation Poly(ether ketones): Synthesis and Characterization. Macromolecular Chemistry and Physics, 2019, 220, 1900234.	1.1	0
761	Nanocomposite membrane electrolyte of polyaminobenzene sulfonic acid grafted single walled carbon nanotubes with sulfonated polyether ether ketone for direct methanol fuel cell. International Journal of Hydrogen Energy, 2019, 44, 27564-27574.	3.8	19
762	Structural Effect of the Hydrophobic Block on the Chemical Stability of Ion-Conducting Multiblock Copolymers for Flow Battery. ACS Sustainable Chemistry and Engineering, 2019, 7, 17088-17099.	3.2	18
763	Dendrite-Free Solid-State Li ⁺ Batteries Enabled by Organic-Inorganic Interaction Reinforced Gel Polymer Electrolyte. ACS Sustainable Chemistry and Engineering, 2019, 7, 17362-17371.	3.2	19

#	ARTICLE	IF	CITATIONS
764	Bisphenol A based carbon-carbon coupled poly(arylene)s from dibenzoyl-dichlorobenzene via Ni(II) catalyzed and condensation polymerization for PEMFC. International Journal of Hydrogen Energy, 2019, 44, 21090-21100.	3.8	3
765	Recent development of membrane for vanadium redox flow battery applications: A review. Applied Energy, 2019, 238, 202-224.	5.1	295
766	Effect of hygral swelling and shrinkage on mechanical durability of fuel cell membranes. Journal of Power Sources, 2019, 427, 207-214.	4.0	29
767	A New Approach to Stereoselective Electrocatalytic Semihydrogenation of Alkynes to <i>Z</i> -Alkenes using a Proton-Exchange Membrane Reactor. ACS Sustainable Chemistry and Engineering, 2019, 7, 11050-11055.	3.2	45
768	Arc-bridge polydimethylsiloxane grafted graphene incorporation into quaternized poly(styrene- <i>b</i> -isobutylene- <i>b</i> -styrene) for construction of anion exchange membranes. Polymer, 2019, 177, 290-297.	1.8	3
769	Introduction to Electrochemical Energy Storage. , 2019, , 1-28.		0
770	Blend membranes of sulfonated poly (ether ether ketone) and thermoplastic poly (urethane) for fuel cells. Journal of Polymer Research, 2019, 26, 1.	1.2	12
771	Improved bladder smooth muscle cell differentiation of the mesenchymal stem cells when grown on electrospun polyacrylonitrile/polyethylene oxide nanofibrous scaffold. Journal of Cellular Biochemistry, 2019, 120, 15814-15822.	1.2	8
772	Self Formed Anisotropic Proton Conductive Polymer Film by Nanophase Separation. Journal of the Electrochemical Society, 2019, 166, B3218-B3222.	1.3	8
773	Evaluation of fluorine and sulfonic acid co-functionalized graphene oxide membranes under hydrogen proton exchange membrane fuel cell conditions. Sustainable Energy and Fuels, 2019, 3, 1790-1798.	2.5	13
774	Analysis of the Concept of Energy in the Spanish Curriculum of Secondary Education and Baccalaureate: A Sustainable Perspective. Sustainability, 2019, 11, 2528.	1.6	6
775	Tris(2,4,6-trimethoxyphenyl)polysulfone-methylene quaternary phosphonium chloride (TPQPCI) ionomer chemically modified electrodes: An electroanalytical study towards sensing applications. Electrochimica Acta, 2019, 311, 160-169.	2.6	7
776	Experimental investigation on DMFCs using reduced noble metal loading with NiTiO ₃ as supportive material to enhance cell performances. International Journal of Hydrogen Energy, 2019, 44, 13415-13423.	3.8	19
777	Nafion-sulfonated silica composite membrane for proton exchange membrane fuel cells under operating low humidity condition. Journal of Membrane Science, 2019, 583, 103-109.	4.1	100
778	Fabrication of a low-cost functionalized poly(vinylidene fluoride) nanohybrid membrane for superior fuel cells. Sustainable Energy and Fuels, 2019, 3, 1269-1282.	2.5	13
779	Housing Sulfur in Polymer Composite Frameworks for Li-S Batteries. Nano-Micro Letters, 2019, 11, 17.	14.4	102
780	Recent advances in anion-doped metal oxides for catalytic applications. Journal of Materials Chemistry A, 2019, 7, 7280-7300.	5.2	133
781	Synthesis of nickel catalyzed sulfonated poly (phenylenebenzophenone)s from primarily sulfonated monomer for proton exchange membranes. International Journal of Hydrogen Energy, 2019, 44, 11311-11320.	3.8	10

#	ARTICLE	IF	CITATIONS
782	Virtual cathode induced in Rb ₂ Ti ₂ O ₅ solid electrolyte. <i>Solid State Ionics</i> , 2019, 333, 72-75.	1.3	4
783	Biodegradation of Yerba Mate Waste Based Fertilizer Capsules. Effect of Temperature. <i>Journal of Polymers and the Environment</i> , 2019, 27, 1302-1316.	2.4	6
784	Thermally and chemically stable poly(phenylenebenzophenone) membranes for proton exchange membrane fuel cells by Ni (0) catalyst. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 76, 233-239.	2.9	10
785	Nanomaterial-incorporated sulfonated poly(ether ether ketone) (SPEEK) based proton-conducting membranes: properties and applications. , 2019, , 227-252.		2
786	Quaternized chitosan-based anion exchange membrane for alkaline direct methanol fuel cells. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 73, 254-259.	2.9	36
787	Additives in proton exchange membranes for low- and high-temperature fuel cell applications: A review. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 6116-6135.	3.8	207
788	Surface modification of polyvinyl chloride by polyacrylic acid grafts a polyelectrolyte membrane using Ar plasma. <i>Turkish Journal of Chemistry</i> , 2019, 43, 1686-1696.	0.5	12
789	The Multilevel Structure of Sulfonated Syndiotactic-Polystyrene Model Polyelectrolyte Membranes Resolved by Extended Q-Range Contrast Variation SANS. <i>Membranes</i> , 2019, 9, 136.	1.4	3
790	Highly proton conductive membranes based on carboxylated cellulose nanofibres and their performance in proton exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25032-25039.	5.2	46
791	Recent Progresses of Ultrafiltration (UF) Membranes and Processes in Water Treatment. , 2019, , 85-110.		13
792	Modification of Nafion membrane by polyaniline providing uniform polymer distribution throughout the membrane. <i>Colloid and Polymer Science</i> , 2019, 297, 423-432.	1.0	9
793	Sulfonated Poly(ether ether ketone) Doped with Ammonium Ionic Liquids and Nano-Silicon Dioxide for Polymer Electrolyte Membranes. <i>Polymers</i> , 2019, 11, 7.	2.0	21
794	Fuel cell membranes – Pros and cons. <i>Energy</i> , 2019, 172, 155-172.	4.5	163
795	A facile synthesis of graphene nanoribbon-quantum dot hybrids and their application for composite electrolyte membrane in direct methanol fuel cells. <i>Electrochimica Acta</i> , 2019, 297, 267-280.	2.6	50
796	Clean Energy Technologies: Hydrogen Power and Fuel Cells. , 2020, , 366-371.		1
797	Covalent grafting of polystyrene sulfonic acid on graphene oxide nanoplatelets to form a composite membrane electrolyte with sulfonated poly(ether ether ketone) for direct methanol fuel cells. <i>Journal of Membrane Science</i> , 2020, 595, 117484.	4.1	31
798	Sodium doping of Pt/m-ZrO ₂ promotes C–C scission and decarboxylation during ethanol steam reforming. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 18490-18501.	3.8	25
799	Graphene based polymer electrolyte membranes for electro-chemical energy applications. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 17029-17056.	3.8	37

#	ARTICLE	IF	CITATIONS
800	SPVdF-HFP/SGO nanohybrid proton exchange membrane for the applications of direct methanol fuel cells. <i>Journal of Dispersion Science and Technology</i> , 2020, 42, 33-45.	1.3	40
803	Thermal stability and dynamics of soft nanoparticle membranes: role of entropy, enthalpy and membrane compressibility. <i>Soft Matter</i> , 2020, 16, 1117-1124.	1.2	8
804	Cost-effective porous-organic-polymer-based electrolyte membranes with superprotonic conductivity and low activation energy. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1147-1153.	5.2	28
805	Novel proton exchange membranes based on sulfonated poly (ether-ether-ketone)/phosphonic acid-functionalized siloxane. <i>Chemical Physics</i> , 2020, 532, 110594.	0.9	6
806	SAXS Investigation on Morphological Change in Lamellar Structures During Propagation Steps of Graft-type Polymer Electrolyte Membranes for Fuel Cell Applications. <i>Macromolecular Chemistry and Physics</i> , 2020, 221, 1900325.	1.1	8
808	Detrimental effect of Ce ⁴⁺ ion on the Pt/C catalyst in polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , 2020, 448, 227447.	4.0	16
809	Enhanced electrocatalytic performance of Mo-Ni encapsulated in onion-like carbon nano-capsules. <i>Journal of Applied Electrochemistry</i> , 2020, 50, 207-216.	1.5	6
810	Membrane Electrolyzers for Impure-Water Splitting. <i>Joule</i> , 2020, 4, 2549-2561.	11.7	102
811	Prospection of recent chitosan biomedical trends: Evidence from patent analysis (2009-2020). <i>International Journal of Biological Macromolecules</i> , 2020, 165, 1924-1938.	3.6	52
812	Ionomers for electrochemical energy conversion & storage technologies. <i>Polymer</i> , 2020, 211, 123080.	1.8	53
813	Membrane technology for photoelectrochemical hydrogen production. , 2020, , 291-306.		1
814	Thermal transitions and mechanical relaxations in perfluorinated ionomers. , 2020, , 205-225.		0
815	Diesel generator and SOFC fuel cell based hybrid energy system. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0
816	Catalyst-electrolyte interface chemistry for electrochemical CO ₂ reduction. <i>Chemical Society Reviews</i> , 2020, 49, 6632-6665.	18.7	234
817	Synthetic Approaches for Poly(Phenylene) Block Copolymers via Nickel Coupling Reaction for Fuel Cell Applications. <i>Polymers</i> , 2020, 12, 1614.	2.0	3
818	Disulfonated Poly(arylene ether sulfone) Random Copolymers Containing Hierarchical Iptycene Units for Proton Exchange Membranes. <i>Frontiers in Chemistry</i> , 2020, 8, 674.	1.8	4
819	Recent Progress in Conducting Polymers for Hydrogen Storage and Fuel Cell Applications. <i>Polymers</i> , 2020, 12, 2480.	2.0	34
820	The Effects of Temperature and Humidity on the Microstructure of Sulfonated Syndiotactic polystyrene Ionic Membranes. <i>Membranes</i> , 2020, 10, 187.	1.4	9

#	ARTICLE	IF	CITATIONS
821	Polyarylene polyimides with hydrocarbon and semi-fluorinated backbones: synthesis, characterization, and properties. <i>Polymer Chemistry</i> , 2020, 11, 6273-6280.	1.9	6
822	Crystalline Porous Organic Salts: From Micropore to Hierarchical Pores. <i>Advanced Materials</i> , 2020, 32, e2003270.	11.1	52
823	Polyethylene: graphene's a magnetic tunable metamaterial. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 18344-18359.	1.1	0
824	Structural Electrolytes Based on Epoxy Resins and Ionic Liquids: A Molecular-Level Investigation. <i>Macromolecules</i> , 2020, 53, 7635-7649.	2.2	19
825	ab-Initio Study of Hydrogen Bond Networks in 1,2,3-Triazole Phases. <i>Molecules</i> , 2020, 25, 5722.	1.7	3
826	Modelling the Proton-Conductive Membrane in Practical Polymer Electrolyte Membrane Fuel Cell (PEMFC) Simulation: A Review. <i>Membranes</i> , 2020, 10, 310.	1.4	46
827	Chemically Durable Poly(phenylene-co-arylene ether) Multiblock Copolymer-Based Anion Exchange Membranes with Different Hydrophobic Moieties for Application in Fuel Cells. <i>Macromolecules</i> , 2020, 53, 10538-10547.	2.2	17
828	Optimization of anionic conductivity through the coexistence of ionomer cluster and backbone morphologies in anion exchange membranes. <i>Journal of Polymer Science</i> , 2020, 58, 3446-3455.	2.0	3
829	Preparation and characterization of polyaniline/sodium alginate-doped TiO ₂ nanoparticles with promising mechanical and electrical properties and antimicrobial activity for food packaging applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 9430-9442.	1.1	80
830	A Predictive Thermodynamic-Based Model for Proton Conductivity of Proton Exchange Membranes Based on Poly(Benzimidazole)/Poly(Acrylic Acid) Blend. <i>Journal of the Electrochemical Society</i> , 2020, 167, 104503.	1.3	2
831	Sulfonated Poly (Ether Ether Ketone) / Barium Strontium Titanium Oxide Polymer Nanocomposite Membranes for Fuel Cell Applications. <i>Polymer-Plastics Technology and Materials</i> , 2020, 59, 1791-1800.	0.6	3
832	Electrochemical synthesis of ion exchange polymers: Comparison between hydroxide and proton conductors. <i>Solid State Ionics</i> , 2020, 352, 115370.	1.3	4
833	Crosslinked carbon nanodots with highly sulfonated polyphenylsulfone as proton exchange membrane for fuel cell applications. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 9979-9988.	3.8	29
834	Hybrid organic-inorganic materials on the basis of acrylic monomers and TEOS prepared by simultaneous UV-curing and sol-gel process. <i>Journal of Polymer Research</i> , 2020, 27, 1.	1.2	4
835	Post-synthetic modification of porous materials: superprotonic conductivities and membrane applications in fuel cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 7474-7494.	5.2	122
836	Fabricating a MOF Material with Polybenzimidazole into an Efficient Proton Exchange Membrane. <i>ACS Applied Energy Materials</i> , 2020, 3, 7964-7977.	2.5	98
837	How risky is the introduction of fuel cell electric vehicles in a Mediterranean town?. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 18075-18088.	3.8	8
838	Effect of the Side-Chain Length in Perfluorinated Sulfonic and Phosphoric Acid-Based Membranes on Nanophase Segregation and Transport: A Molecular Dynamics Simulation Approach. <i>Journal of Physical Chemistry B</i> , 2020, 124, 1571-1580.	1.2	18

#	ARTICLE	IF	CITATIONS
839	Carbon-based electrodes for direct methanol fuel cells. , 2020, , 135-176.		4
840	Poly (1-vinylpyrrolidone-co-vinyl acetate) (PVP-co-VAc) based gel polymer electrolytes for electric double layer capacitors (EDLC). Journal of Polymer Research, 2020, 27, 1.	1.2	31
841	Voltammetry at Hexamethyl-P-Terphenyl Poly(Benzimidazolium) (HMT-PMBI)-Coated Glassy Carbon Electrodes: Charge Transport Properties and Detection of Uric and Ascorbic Acid. Sensors, 2020, 20, 443.	2.1	9
842	Aquivion Ionomer in Mixed Alcohol-Water Solution: Insights from Multiscale Molecular Modeling. Journal of Physical Chemistry C, 2020, 124, 3429-3438.	1.5	11
843	Low temperature water-gas shift: Optimization of K loading on Pt/m-ZrO ₂ for enhancing CO conversion. Applied Catalysis A: General, 2020, 598, 117572.	2.2	15
844	Ionic Association-Assisted Viscoelastic Nylon Electrolytes Enable Synchronously Coupled Interface for Solid Batteries. Advanced Functional Materials, 2020, 30, 2000347.	7.8	44
845	Bio-inspired proton conducting phytigel derived zwitterionic complex membranes for fuel cells. International Journal of Energy Research, 2020, 45, 17120.	2.2	1
846	Non-destructive fabrication of Nafion/silica composite membrane via swelling-filling modification strategy for high temperature and low humidity PEM fuel cell. Renewable Energy, 2020, 153, 935-939.	4.3	48
847	Composite Sulfonated Polyether-Ether Ketone Membranes with SBA-15 for Electrochemical Energy Systems. Materials, 2020, 13, 1570.	1.3	4
848	Cellulose-based polymer electrolyte derived from waste coconut husk: residual lignin as a natural plasticizer. Journal of Polymer Research, 2020, 27, 1.	1.2	16
849	New fluorinated polymer-based nanocomposites via combination of sol-gel chemistry and reactive extrusion for polymer electrolyte membranes fuel cells (PEMFCs). Materials Chemistry and Physics, 2020, 252, 123004.	2.0	6
850	A critical review on recent proton exchange membranes applied in microbial fuel cells for renewable energy recovery. Journal of Cleaner Production, 2020, 264, 121446.	4.6	113
851	Formulation and characterization of crosslinked polyvinyl alcohol (PVA) membranes: effects of the crosslinking agents. Polymer Bulletin, 2021, 78, 917-929.	1.7	33
852	Production of poly(vinyl alcohol)/Nafion® nanofibers and their stability assessment for the use in direct methanol fuel cells. Journal of Industrial Textiles, 2021, 50, 773-793.	1.1	7
853	Stabilizing phosphotungstic acid in Nafion membrane via targeted silica fixation for high-temperature fuel cell application. International Journal of Hydrogen Energy, 2021, 46, 4301-4308.	3.8	15
854	Progress in hybrid composite Nafion®-based membranes for proton exchange fuel cell application. Chemical Engineering Journal, 2021, 409, 127329.	6.6	125
855	Effective ion mobility in anion exchange ionomers: Relations with hydration, porosity, tortuosity, and percolation. Journal of Membrane Science, 2021, 617, 118622.	4.1	33
856	Recent progress of the gas diffusion layer in proton exchange membrane fuel cells: Material and structure designs of microporous layer. International Journal of Hydrogen Energy, 2021, 46, 4259-4282.	3.8	65

#	ARTICLE	IF	CITATIONS
857	Comparative study of chemically different structured sulfonic acid and sulfonimide acid of Poly(isatine-phenylene) electrolyte for PEMFC. International Journal of Hydrogen Energy, 2021, 46, 6762-6774.	3.8	5
858	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
859	Effect of Polyhedral Silsesquioxane Functionalized Sulfonic Acid Groups Incorporated Into Highly Sulfonated Polyphenylsulfone as Proton-Conducting Membrane. Arabian Journal for Science and Engineering, 2021, 46, 6399-6407.	1.7	2
860	Photothermal responsive ultrathin Cu-TCPP nanosheets/sulfonated polystyrene nanocomposite photo-switch proton conducting membranes. Journal of Membrane Science, 2021, 620, 118888.	4.1	20
861	High performance compatible thiazole-based polymeric blend cellulose acetate membrane as selective CO ₂ absorbent and molecular sieve. Carbohydrate Polymers, 2021, 252, 117215.	5.1	23
862	Electrochemically active site-rich nanocomposites of two-dimensional materials as anode catalysts for direct oxidation fuel cells: new age beyond graphene. Nanoscale Advances, 2021, 3, 3681-3707.	2.2	13
863	Metal, Metal Oxides, and Metal Sulfide Roles in Fuel Cell. Environmental Chemistry for A Sustainable World, 2021, , 115-145.	0.3	0
864	Potential carbon nanomaterials as additives for state-of-the-art Nafion electrolyte in proton-exchange membrane fuel cells: a concise review. RSC Advances, 2021, 11, 18351-18370.	1.7	69
865	Catalysts for high-temperature fuel cells operated by alcohol fuels. , 2021, , 173-186.		3
866	Recent Trends in Science and Technology of Hydrogen and Polymer Electrolyte Membrane Fuel Cells. , 2021, 6, 189-218.		4
867	Thermal stability and gas absorption characteristics of ionic liquid-based solid polymer electrolytes. Journal of Chemical Physics, 2021, 154, 054902.	1.2	3
868	Enhancing Proton Conduction of Poly(benzimidazole) with Sulfonated Titania Nano Composite Membrane for PEM Fuel Cell Applications. Macromolecular Research, 2021, 29, 111-119.	1.0	10
869	Protic ionic liquids/poly(vinylidene fluoride) composite membranes for fuel cell application. Journal of Energy Chemistry, 2021, 53, 197-207.	7.1	40
870	Enhanced self-humidification and proton conductivity in magnetically aligned NiO-Co ₃ O ₄ /chitosan nanocomposite membranes for high-temperature PEMFCs. Polymer Journal, 2021, 53, 679-693.	1.3	7
871	Polybenzimidazole and ionic liquid composite membranes for high temperature polymer electrolyte fuel cells. Solid State Ionics, 2021, 361, 115569.	1.3	20
872	Penetration of Hydrogen into Polymer Electrolyte Membrane for Fuel Cells by Quantum and Molecular Dynamics Simulations. Polymers, 2021, 13, 947.	2.0	2
873	Assessment of the environmental impact of polymeric membrane production. Journal of Membrane Science, 2021, 622, 118987.	4.1	92
874	Radiation-Induced Asymmetric Grafting of Different Monomers into Base Films to Prepare Novel Bipolar Membranes. Molecules, 2021, 26, 2028.	1.7	3

#	ARTICLE	IF	CITATIONS
875	Molecular dynamics simulation study on the effect of perfluorosulfonic acid side chains on oxygen permeation in hydrated ionomers of PEMFCs. Scientific Reports, 2021, 11, 8702.	1.6	19
876	A review of functions, attributes, properties and measurements for the quality control of proton exchange membrane fuel cell components. Journal of Power Sources, 2021, 491, 229540.	4.0	42
877	Polypyrrole/Organic Sulfonic Acid Coated Activated Carbon Fiber Felt as Flexible Supercapacitor with High-performance. Fibers and Polymers, 2021, 22, 2119-2126.	1.1	7
878	Crucial role of side-chain functionality in anion exchange membranes: Properties and alkaline fuel cell performance. Journal of Membrane Science, 2021, 625, 119172.	4.1	48
879	Poly(Vinyl Alcohol)/ N-Methylene Phosphonic Chitosan/ 2-Hydroxyethylammonium Formate (PVA/NMPC/2-HEAF) Membrane for Fuel Cell Application. Solid State Phenomena, 0, 317, 440-446.	0.3	0
880	Biphenol based membranes with ionic channels for fuel cell application. Iranian Polymer Journal (English Edition), 2021, 30, 855-872.	1.3	2
881	Structural Transitions During Formation and Rehydration of Proton Conducting Polymeric Membranes. Macromolecular Rapid Communications, 2021, 42, 2000717.	2.0	0
882	Neutron imaging of operando proton exchange membrane fuel cell with novel membrane. Journal of Power Sources, 2021, 496, 229836.	4.0	7
883	Energy related ion transports in coordination polymers. Nano Select, 0, , .	1.9	6
884	An overview on the development of <scp>nanofiberâ€based</scp> as polymer electrolyte membrane and electrocatalyst in fuel cell application. International Journal of Energy Research, 2021, 45, 18441-18472.	2.2	21
885	Highâ€temperature operation of <scp>PEMFC</scp> using poreâ€filling <scp>PTFE</scp> /Nafion composite membrane treated with electric field. International Journal of Energy Research, 2021, 45, 19136-19146.	2.2	15
886	Designing the next generation of proton-exchange membrane fuel cells. Nature, 2021, 595, 361-369.	13.7	1,012
887	Analyses and insights into 2D crystallite architected membrane electrode assemblies for polymer electrolyte fuel cells. Chemical Engineering Journal, 2021, 417, 129280.	6.6	6
888	Unprecedented sulphonated poly(ether ether ketone)â€bismuth cobalt zinc oxide composites: physicochemical and electrochemical performance in fuel cell. Journal of Materials Science: Materials in Electronics, 2022, 33, 8626-8634.	1.1	4
889	Sulfonated pentablock terpolymers as membranes and ionomers in hydrogen fuel cells. Journal of Membrane Science, 2021, 633, 119330.	4.1	15
890	Constructing High-Performance Proton Transport Channels in High-Temperature Proton Exchange Membranes by Introducing Triazole Groups. ACS Applied Energy Materials, 2021, 4, 10263-10272.	2.5	22
891	Fabrication of water-insoluble phosphotungstic acid-carbon nitride nanohybrids for promoting proton transport of nanocomposite proton exchange membranes. Journal of Power Sources, 2021, 506, 230195.	4.0	29
892	Synthesis of Tailored Perfluoro Unsaturated Monomers for Potential Applications in Proton Exchange Membrane Preparation. Molecules, 2021, 26, 5592.	1.7	2

#	ARTICLE	IF	CITATIONS
893	Applications of poly ionic liquids in proton exchange membrane fuel cells: A review. Journal of Power Sources, 2021, 510, 230371.	4.0	36
894	States of water in recast Nafion [®] films. Journal of Membrane Science, 2021, 637, 119645.	4.1	10
895	Polymers for Electrolyte Membrane Fuel Cells. , 2021, , .		0
897	Chemical Degradation: Correlations Between Electrolyzer and Fuel Cell Findings. , 2009, , 71-118.		19
898	Integration of Hydrogen Energy Technologies in Autonomous Power Systems. Power Systems, 2008, , 23-81.	0.3	5
899	Structure and Transport Properties of Polymer Electrolyte Membranes Probed at Microscopic Scales. Advanced Structured Materials, 2013, , 163-193.	0.3	2
900	Non-fluorinated Membranes: Fuel Cell Applications. , 2014, , 1-2.		1
901	Catalytic Membranes Embedding Selective Catalysts: Preparation and Applications. Catalysis By Metal Complexes, 2010, , 203-229.	0.6	4
902	Materials for Fuel Cell Membranes. , 2022, , 267-272.		5
903	Electrocatalytic asymmetric hydrogenation of $\hat{1},\hat{2}$ -unsaturated acids in a PEM reactor with cinchona-modified palladium catalysts. Electrochemistry Communications, 2020, 115, 106734.	2.3	22
904	Hybrid perfluorocarbon/carboxylic acid thin films via plasma deposition of hexafluoropropene and acrylic acid mixtures. Vacuum, 2021, 184, 109933.	1.6	5
905	Morphological effect of side chain on H ₃ O ⁺ transfer inside polymer electrolyte membranes across polymeric chain via molecular dynamics simulation. Scientific Reports, 2020, 10, 22014.	1.6	8
906	Production Methods of Stacks and Hydrogen with Associated Costs. Engineering & Technology Reference, 2015, , .	0.1	1
907	Sulfonated Polyimide-Silica Composite Membranes: Preparation, Morphology and Proton Conductivity. Nanotechnologies in Russia, 2020, 15, 778-784.	0.7	2
908	Sodium p-Styrene Sulfonate-1-Vinylimidazole Copolymers for Acid-Base Proton-Exchange Membranes. Membranes and Membrane Technologies, 2020, 2, 76-84.	0.6	4
909	Effect of Modified Nanoclay Composite on Blended PVDF/PEG Electrolyte Membranes for Fuel Cell Applications. International Journal of Nanoscience, 2018, 17, 1760042.	0.4	4
910	Highly Selective and Efficient Electrocatalytic Semihydrogenation of Diphenylacetylene in a PEM Reactor with Pt-Pd Alloy Cathode Catalysts. Journal of the Electrochemical Society, 2020, 167, 155506.	1.3	17
912	Estudo das propriedades t [®] rmicas de filmes polim [®] ricos compostos de Speek, derivados do benzoimidazol e [®] cido fosfo [®] ngstico. Polimeros, 2008, 18, 178-186.	0.2	5

#	ARTICLE	IF	CITATIONS
913	Advances in Materials for Fuel Cell Technologies- A Review. International Journal for Research in Applied Science and Engineering Technology, 2017, V, 1672-1682.	0.1	8
914	Electrospun fibres from polyvinyl alcohol, poly(styrene sulphonic acid-co-maleic acid), and imidazole for proton exchange membranes. ScienceAsia, 2014, 40, 232.	0.2	12
915	Numerical Simulation of Concentration Over-voltage in a Polymer Electrolyte Fuel Cell under Low-Hydrogen Conditions. International Journal of Integrated Engineering, 2018, 10, .	0.2	1
916	Hydroquinone based sulfonated poly (arylene ether sulfone) copolymer as proton exchange membrane for fuel cell applications. EXPRESS Polymer Letters, 2015, 9, 1053-1067.	1.1	14
917	Synthesis and Characterization of Partially Renewable Oleic Acid-Based Ionomers for Proton Exchange Membranes. Polymers, 2021, 13, 130.	2.0	3
918	PREPARATION OF SPEEK AND SPEEK/CHITOSAN COMPOSITE PROTON-EXCHANGE MEMBRANES FOR APPLICATION IN DIRECT METHANOL FUEL CELLS. Acta Polymerica Sinica, 2010, 010, 285-291.	0.0	5
919	SYNTHESIS OF HBPS-PEO MULTI-ARM STAR POLYMER ELECTROLYTES AND THEIR IONIC CONDUCTIVITY. Acta Polymerica Sinica, 2013, 013, 1064-1071.	0.0	1
920	Recent Progresses in Membranes for Proton Exchange Membrane Fuel Cell (PEMFC) for Clean and Environmentally Friendly Applications. Advances in Environmental Engineering and Green Technologies Book Series, 2019, , 308-343.	0.3	3
921	Synthesis, and Structural and Thermal Characterizations of Tetrasulfonated Poly(arylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 427 Td (Society, 2011, 32, 4041-4048.	1.0	8
922	The Electrochemical Properties of the Porous Nafion Membrane for Proton Exchange Membrane Fuel Cells (PEMFCs). Bulletin of the Korean Chemical Society, 2012, 33, 1788-1790.	1.0	13
923	Ab initio calculation of hydration and proton transfer on sulfonated nata de coco. European Journal of Chemistry, 2016, 7, 442-447.	0.3	1
924	Synthesis and Characterization of Di and Triblock Copolymers Containing a Naphthalene Unit for Polymer Electrolyte Membranes. Transactions of the Korean Hydrogen and New Energy Society, 2016, 27, 660-669.	0.1	2
925	Study on Control of Polymeric Architecture of Sulfonated Hydrocarbon-Based Polymers for High-Performance Polymer Electrolyte Membranes in Fuel Cell Applications. Polymers, 2021, 13, 3520.	2.0	17
926	Ionic liquidâ€modified materials as polymer electrolyte membrane and electrocatalyst in fuel cell application: An update. International Journal of Energy Research, 2022, 46, 2166-2211.	2.2	10
927	Assessing Silver Palladium Alloys for Electrochemical CO ₂ Reduction in Membrane Electrode Assemblies. ChemElectroChem, 2021, 8, 4515-4521.	1.7	4
928	Semi-interpenetrating polymer networks of poly (vinyl alcohol)-functionalized nanocrystals/sulfonated poly (ether ether ketone) (PVA-FNCs/SPEEK) as fuel cell membrane. Materials Today Communications, 2021, 29, 102897.	0.9	9
929	Study on hydrocarbon based electrolyte membrane by using positron annihilation spectroscopy. Transactions of the Materials Research Society of Japan, 2008, 33, 283-285.	0.2	0
930	Preparation and Characteristic Studies of Sulfonated Poly (vinyl alcohol) Composite Membranes Containing Aluminum Silicate for PEMFC. Journal of Energy Engineering, 2011, 20, 171-177.	0.2	0

#	ARTICLE	IF	CITATIONS
932	A Study on the Electrochemical Properties of SPEEK/PWA/Silica Composite Membranes. Journal of the Korea Academia-Industrial Cooperation Society, 2013, 14, 2529-2535.	0.0	1
934	- Polymer Electrolyte Membranes. , 2014, , 100-195.		0
936	Oxygen Reduction Reaction (ORR) on Platinum Coated Nafion Membrane: Effects of Synthesis Conditions. Open Access Library Journal (oalib), 2016, 03, 1-10.	0.1	0
937	A Study on the Properties of sPEEK Electrolytic Membranes using Physical Crosslinking. Journal of the Korea Academia-Industrial Cooperation Society, 2016, 17, 433-440.	0.0	0
938	Effect of Operating Variables on DMFC Performance for the Synthesized Si-PWA/PVA Nanocomposite Membrane. Journal of Membrane and Separation Technology, 2016, 4, 171-177.	0.4	0
939	Electrospun Poly(Ether Sulfone) Membranes Impregnated with Nafion for High-Temperature Polymer Electrolyte Membrane Fuel Cells. Journal of the Korean Electrochemical Society, 2016, 19, 9-13.	0.1	0
940	Polymeric and composite materials for proton conductive membranes of fuel cells. Polymer Journal, 2016, 38, 107-114.	0.3	0
941	Comparative Studies on MG49-LiClO4 and MG49-TiO2-SiO2- LiClO4 Polymer Electrolytes. International Journal of Electrochemical Science, 0, , 4310-4322.	0.5	1
942	Improvement of Proton-Exchange Membranes Based on(1x)(H3PO2/PVA)-xTiO2. IngenierÃa Y Ciencia, 2017, 13, 153-166.	0.3	1
943	AnÃlisis tÃ©rmico y espectrometrÃa de masas en conductores protÃ³nicos (PVDF/H3PO2) para implementaciÃ³n en celdas de combustible. DYNA (Colombia), 2018, 85, 143-149.	0.2	1
944	Design of Heterogeneities and Interfaces with Nanofibers in Fuel Cell Membranes. , 2019, , 979-1015.		0
945	Proton Conductions. Polymers and Polymeric Composites, 2019, , 977-1010.	0.6	0
946	UV-curable hybrid organic-inorganic membranes for the use as PEM in fuel cell. French-Ukrainian Journal of Chemistry, 2019, 7, 81-89.	0.1	0
947	POLYVINYL CHLORIDE MEMBRANES GRAFTING WITH POLYACRYLIC ACID VIA AR-PLASMA TREATMENT. Al-Azhar Bulletin of Science, 2019, 30, 81-89.	0.0	4
948	Polymer Electrolyte Using Interlayer of Polymer Nanosheet Multilayer Film. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2019, 70, 349-354.	0.1	0
949	Water-gas shift: effect of Na loading on Pt/m-zirconia catalysts for low-temperature shift for the production and purification of hydrogen. , 2020, , 143-160.		1
950	Effect of Doping Nano Samarium(III) Oxide in PVA+Na3C6H5O7 Films for Battery Applications. Asian Journal of Chemistry, 2020, 32, 1947-1954.	0.1	0
951	Preparation and Properties of Novel Sulfonated Pentablock Copolymer (sPBC) Membrane for PEM Fuel Cell. Smart Innovation, Systems and Technologies, 2020, , 613-621.	0.5	1

#	ARTICLE	IF	CITATIONS
952	Enhanced Proton Conductivity of (3-mercaptopropyl)trimethoxysilane Grafted Graphene Oxide Membranes for Hydrogen Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2021, 168, 124502.	1.3	5
953	Conductivity and dielectric relaxation of cross-linked PVA/montmorillonite electrolyte films. <i>Ionics</i> , 2022, 28, 733-745.	1.2	1
954	Radiation-Grafted Polymer Electrolyte Membranes for Fuel Cells. <i>Hacettepe Journal of Biology and Chemistry</i> , 0, , .	0.3	2
955	Controlling hydrophilic channel alignment of perfluorinated sulfonic acid membranes via biaxial drawing for high performance and durable polymer electrolyte membrane water electrolysis. <i>Journal of Power Sources</i> , 2022, 518, 230772.	4.0	11
956	Highly conductive and alkaline stable partially fluorinated anion exchange membranes for alkaline fuel cells: Effect of ammonium head groups. <i>Journal of Membrane Science</i> , 2022, 643, 120072.	4.1	33
957	Computer-Aided Design of a Perfluorinated Sulfonic Acid Proton Exchange Membrane Using Stochastic Optimization and Molecular Dynamic Method. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 18045-18057.	1.8	5
958	Novel heterogeneous cellulose-based ion-exchange membranes for electrodialysis. <i>Polymer Bulletin</i> , 0, , 1.	1.7	6
959	Composite proton conducting membranes from crosslinked poly(vinyl alcohol)/chitosan and silica particles containing poly(2-acrylamido-2-methyl-1-propanesulfonic acid). <i>Journal of Applied Polymer Science</i> , 2022, 139, .	1.3	5
960	The degradation effect on proton dissociation and transfer in perfluorosulfonic acid membranes. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 3007-3016.	1.3	3
961	Direct epoxidation of propylene with water at a PtO ₂ anode using a solid-polymer-electrolyte electrolysis cell. <i>Catalysis Science and Technology</i> , 2022, 12, 469-473.	2.1	12
962	Transport phenomena in polymer electrolyte membrane fuel cells. , 2022, , 341-368.		0
963	On the Proton Conduction Pathways in Polyelectrolyte Membranes Based on Syndiotactic-Polystyrene. <i>Membranes</i> , 2022, 12, 143.	1.4	5
964	Investigation of Parameter Control for Electrocatalytic Semihydrogenation in a Proton-Exchange Membrane Reactor Utilizing Bayesian Optimization. <i>Frontiers in Chemical Engineering</i> , 2022, 3, .	1.3	7
965	Synthesis and Characterization of Poly(methylolxy-4-pyridinoxy phosphazene)s and their Application as Proton Exchange Membranes. <i>ChemistrySelect</i> , 2022, 7, .	0.7	3
966	Protic ionic liquids as next-generation proton exchange membrane materials: Current status & future perspectives. <i>Reactive and Functional Polymers</i> , 2022, 171, 105160.	2.0	24
967	Colored electrolytes for electrochromic devices. <i>Solar Energy Materials and Solar Cells</i> , 2022, 238, 111626.	3.0	10
968	Performances Review of PEMFC Proton Exchange Membranes and Challenges Related to Their Improvement. <i>Advances in Intelligent Systems and Computing</i> , 2022, , 1178-1188.	0.5	1
969	Multicolored Electrolytes for Electrochromic Devices. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0

#	ARTICLE	IF	CITATIONS
970	Suppression of Radical Attack in Polymer Electrolyte Membranes Using a Vinyl Polymer Blend Interlayer with Low Oxygen Permeability. SSRN Electronic Journal, 0, , .	0.4	0
971	Effect of Bipolar Plate Material on Proton Exchange Membrane Fuel Cell Performance. Energies, 2022, 15, 1886.	1.6	9
972	Anion Exchange Membranes for Fuel Cell Application: A Review. Polymers, 2022, 14, 1197.	2.0	55
973	A Ceramicâ€Electrolyte Glucose Fuel Cell for Implantable Electronics. Advanced Materials, 2022, 34, e2109075.	11.1	25
974	Enhancing the properties of water and gas management for proton exchange membrane fuel cells via tailored intersected cracks in a microporous layer. Journal of Power Sources, 2022, 533, 231402.	4.0	16
975	Proton exchange membranes for high temperature proton exchange membrane fuel cells: Challenges and perspectives. Journal of Power Sources, 2022, 533, 231386.	4.0	99
976	A Review on Promising Membrane Technology Approaches for Heavy Metal Removal from Water and Wastewater to Solve Water Crisis. Water (Switzerland), 2021, 13, 3241.	1.2	28
977	Future prospects of sustainable membranes. , 2022, , 389-417.		0
978	An overview on properties and applications of magnetorheological fluids: Dampers, batteries, valves and brakes. Journal of Energy Storage, 2022, 50, 104648.	3.9	32
982	Process and challenges of stainless steel based bipolar plates for proton exchange membrane fuel cells. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1099-1119.	2.4	20
983	Aligned Proton Transport Highway of Hierarchically Structured Proton-Exchange Membranes Constructed via Capillary Force Lithography. ACS Applied Energy Materials, 2022, 5, 6256-6264.	2.5	5
984	Completely eliminating the metal barrier cracks on Nafion for suppressing methanol crossover with anodic aluminum oxide substrates. International Journal of Hydrogen Energy, 2022, 47, 18496-18503.	3.8	2
985	Soft elastomer coatings for ionogels. Extreme Mechanics Letters, 2022, 54, 101761.	2.0	3
986	Phosphorylated nata de banana as polymer electrolyte membrane in fuel cells. International Journal of Materials Research, 2022, .	0.1	0
987	Chemical stability of proton exchange membranes synergistically promoted by organic antioxidant and inorganic radical scavengers. Journal of Membrane Science, 2022, 655, 120594.	4.1	16
988	Para ÂFluoro-Thiol Clicked Diblock-Copolymer Self-Assembly: Towards a New Paradigm for Highly Proton-Conductive Membranes. SSRN Electronic Journal, 0, , .	0.4	0
991	Copper Metal Organic Framework-Encapsulated Ionic Liquid-Decorated Sulfonated Polystyrene- <i>block</i> -poly(ethylene-ranbutylene)- <i>block</i> -polystyrene Membranes for Fuel Cells. Industrial & Engineering Chemistry Research, 2022, 61, 8081-8090.	1.8	5
992	Investigating the performance of functionalized and pristine graphene oxide impregnated Nexarâ„¢ nanocomposite membranes for PEM fuel cell. Chemical Engineering Journal Advances, 2022, 11, 100346.	2.4	3

#	ARTICLE	IF	CITATIONS
993	Suppression of radical attack in polymer electrolyte membranes using a vinyl polymer blend interlayer with low oxygen permeability. <i>Journal of Membrane Science</i> , 2022, 658, 120734.	4.1	2
994	Mechanistically Novel $\text{Frontal}^{\text{inspired}}$ In Situ Photopolymerization: An Efficient Electrode Electrolyte Interface Engineering Method for High Energy Lithium Metal Polymer Batteries. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	1
995	Antioxidant technology for durability enhancement in polymer electrolyte membranes for fuel cell applications. <i>Materials Today</i> , 2022, 58, 135-163.	8.3	18
996	Advances in polybenzimidazole based membranes for fuel cell applications that overcome Nafion membranes constraints. <i>Polymer</i> , 2022, 255, 125151.	1.8	29
997	Multiple ionic conduction highways and good interfacial stability of ionic liquid-encapsulated cross-linked polymer electrolytes for lithium metal batteries. <i>Journal of Power Sources</i> , 2022, 543, 231848.	4.0	12
998	para fluoro-thiol clicked diblock-copolymer self-assembly: Towards a new paradigm for highly proton-conductive membranes. <i>Journal of Membrane Science</i> , 2022, 659, 120796.	4.1	5
999	Advances in perfluorosulfonic acid-based proton exchange membranes for fuel cell applications: A review. <i>Chemical Engineering Journal Advances</i> , 2022, 12, 100372.	2.4	20
1000	Proton conduction and electrochemical enzyme-free glucose sensitive sensing based on a newly constructed Co-MOF and its composite with hydroxyl carbon nanotubes. <i>Polyhedron</i> , 2022, 226, 116095.	1.0	8
1001	Cobalt (iron), nitrogen and carbon doped mushroom biochar for high-efficiency oxygen reduction in microbial fuel cell and Zn-air battery. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108474.	3.3	8
1002	Addressing the detrimental effect of CeO ₂ radical scavenger on the durability of polymer electrolyte membrane fuel cells. <i>Chemical Engineering Journal</i> , 2023, 452, 139061.	6.6	6
1003	Recent advances in novel graphene: new horizons in renewable energy storage technologies. <i>Journal of Materials Chemistry C</i> , 2022, 10, 11472-11531.	2.7	18
1004	Sulfonated Poly(arylene ether sulfone) Multi-Block Copolymers with Selectively Cross-Linked Domains for Proton Exchange Membranes. <i>ACS Applied Polymer Materials</i> , 2022, 4, 7476-7486.	2.0	2
1005	Recent major advances and challenges in the emerging graphene-based nanomaterials in electrocatalytic fuel cell technology. <i>Journal of Materials Chemistry C</i> , 2022, 10, 17812-17873.	2.7	3
1006	Proton-conducting <i>Moringa oleifera</i> seed-based biomaterial electrolyte for electrochemical applications. <i>Ionics</i> , 2023, 29, 331-344.	1.2	4
1007	Composite Membranes Based on Functionalized Mesostructured Cellular Foam Particles and Sulfonated Poly(Ether Ether Sulfone) with Potential Application in Fuel Cells. <i>Membranes</i> , 2022, 12, 1075.	1.4	0
1008	Li^{+} Transport in Ethylene Carbonate Based Comb-Branched Solid Polymer Electrolyte: A Molecular Dynamics Simulation Study. <i>ACS Applied Polymer Materials</i> , 2022, 4, 8496-8507.	2.0	4
1009	Tailor-designed Pd-Cu-Ni/rGO nanocomposite for efficient glucose electro-oxidation. <i>Journal of Electroanalytical Chemistry</i> , 2022, 925, 116917.	1.9	5
1010	Effect of membrane mechanics on AEM fuel cell performance. <i>Energy Advances</i> , 2023, 2, 113-122.	1.4	2

#	ARTICLE	IF	CITATIONS
1011	Ce (III)-terephthalic acid metal-organic frameworks as highly efficient $\cdot\text{OH}$ radical scavengers for fuel cells and investigation of its antioxidation mechanism. <i>Materials Today Energy</i> , 2023, 31, 101195.	2.5	3
1012	Proton conduction and electrochemical glucose sensing property of a newly constructed Cu(II) coordination polymer. <i>Journal of Molecular Structure</i> , 2023, 1274, 134550.	1.8	2
1013	Structure, Thermal Properties and Proton Conductivity of the Sulfonated Polyphenylquinoxalines. <i>Membranes</i> , 2022, 12, 1095.	1.4	0
1014	Pd H Species on Electrode Stabilized by Solvent Co-Adsorption: Observation by Operando IR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2022, 126, 19376-19385.	1.5	8
1015	Electrochemical energy storage and conversion: An overview. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2023, 12, .	1.9	6
1016	Research Progress in Energy Based on Polyphosphazene Materials in the Past Ten Years. <i>Polymers</i> , 2023, 15, 15.	2.0	2
1017	Review on Chitosan and Two-Dimensional MoS_2 -Based Proton Exchange Membrane for Fuel Cell Application: Advances and Perspectives. <i>Energy & Fuels</i> , 2023, 37, 1699-1730.	2.5	8
1018	Synthesis of hydrazine N -fumaryl chloride N -based polyamide and its electrical conductivity studies. <i>Polymer Engineering and Science</i> , 2023, 63, 584-592.	1.5	5
1019	Applications of ionic liquids in fuel cells and supercapacitors. , 2023, , 353-364.		0
1020	Ionic liquids: environmentally sustainable materials for energy conversion and storage applications. <i>Environmental Science and Pollution Research</i> , 2024, 31, 10296-10316.	2.7	6
1022	Synthesis of Proton Conducting and Highly Stable PWA-ZRP-Doped Composite Membrane for Proton Exchange Membrane Fuel Cell. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2023, 20, .	1.1	1
1023	Cloisite- and bentonite-based stable nanocomposite membranes for enhancement of direct methanol fuel cell applications. <i>Polymer Bulletin</i> , 0, , .	1.7	0
1024	Electrolytes in Organic Batteries. <i>Chemical Reviews</i> , 2023, 123, 1712-1773.	23.0	57
1025	Comprehensive Review of Fuel-Cell-Type Sensors for Gas Detection. <i>Industrial & Engineering Chemistry Research</i> , 2023, 62, 2387-2409.	1.8	7
1028	Synthesis and characterization of sulfonated polytriazoles utilizing 1,4-bis(4-azido-2-(trifluoromethyl)phenoxy)benzene for the proton exchange membrane applications. <i>Journal of Polymer Science</i> , 2023, 61, 1792-1806.	2.0	0
1029	Electrical Properties of Polyvinylidene fluoride H PO_2 Protonic Conductor; a Novel Electrolyte for Use in Fuel Cells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 0, , .	0.8	0
1030	Revisiting Electrocatalytic CO_2 Reduction in Nonaqueous Media: Promoting CO_2 Recycling in Organic Molecules by Controlling H_2 Evolution. <i>Energy Technology</i> , 2023, 11, .	1.8	2
1031	Artificial Intelligence/Machine Learning in Energy Management Systems, Control, and Optimization of Hydrogen Fuel Cell Vehicles. <i>Sustainability</i> , 2023, 15, 5249.	1.6	13

#	ARTICLE	IF	CITATIONS
1032	Investigating Membrane Degradation in Low-Temperature Proton Exchange Membrane Fuel Cell (PEMFC). Lecture Notes in Mechanical Engineering, 2023, , 475-481.	0.3	1
1033	Fabrication of highly selective SPVDF-co-HFP/APTES-SiO ₂ /Nafion nanocomposite membranes for PEM fuel cells. Journal of Polymer Research, 2023, 30, .	1.2	2
1034	The effect of ZIF-8 nanoparticle concentration on microwave-assisted synthesis of poly (vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 667 Materials, 0, , .	3.2	0
1035	Nanocomposite membrane for direct methanol fuel cell. , 2023, , 125-142.		0
1036	Preparation of hybrid nanotube proton exchange membrane for microbial fuel cell applications. , 2023, , 157-177.		0
1037	CeO ₂ stabilized by tourmaline as a novel inorganic filler to simultaneously increase the conductivity and durability of proton exchange membranes. Inorganic Chemistry Frontiers, 2023, 10, 3335-3344.	3.0	1
1040	A Critical Review of Electrolytes for Advanced Low- and High-Temperature Polymer Electrolyte Membrane Fuel Cells. ACS Applied Materials & Interfaces, 2023, 15, 29674-29699.	4.0	10
1049	Polymer Composite Membrane for Microbial Fuel Cell Application. , 2023, , 123-145.		0
1055	Materials and wetting issues in molten carbonate fuel cell technology: a review. Journal of Materials Science, 2023, 58, 15936-15972.	1.7	0
1059	Fabrication of Sulphonated Poly(Ether Ether Ketone) (SPEEK)â€“Calcium Oxide (CaO) Multilayer Membrane for Fuel Cell Application. Lecture Notes in Electrical Engineering, 2023, , 137-147.	0.3	0
1062	A hybrid FLC-SMC system manages energy of battery-fuel cells in households. AIP Conference Proceedings, 2023, , .	0.3	0
1064	Organic ion exchange membranes. , 2024, , 21-68.		0
1065	Ion-exchange membranes in microbial fuel cell systems. , 2024, , 229-263.		0
1066	Electrospun sulfonated polyimide nanofibers for polymer electrolyte composite membranes. , 2024, , 325-351.		0
1069	Ion-exchange membranes in non-microbial fuel cell systems. , 2024, , 191-227.		0
1070	Smart electrolytes: materials, durability, and degradation issues. , 2024, , 91-141.		0
1071	Formability of low-molecular weight polyethylene oxide reinforced by tempo-oxidized nanocellulose for lithium-ion battery solid polymer electrolyte. MRS Communications, 0, , .	0.8	0
1072	Nanoceramics in advanced materials industry for renewable energy and storage. , 2024, , 293-319.		0

#	ARTICLE	IF	CITATIONS
1078	Mixed matrix and nanocomposite membranes. , 2024, , 225-266.		0