

# Michael A Hickner

## List of Publications by Year in descending order

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220  
papers

23,066  
citations

7568

77  
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8167

148  
g-index

228  
all docs

228  
docs citations

228  
times ranked

13733  
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-Monotonic Temperature Dependence of Hydroxide Ion Diffusion in Anion Exchange Membranes. Chemistry of Materials, 2022, 34, 2133-2145.	6.7	25
2	Improving the efficiency of CO <sub>2</sub> electrolysis by using a bipolar membrane with a weak-acid cation exchange layer. Nature Chemistry, 2021, 13, 33-40.	13.6	121
3	Designing anion exchange membranes for CO <sub>2</sub> electrolyzers. Nature Energy, 2021, 6, 339-348.	39.5	209
4	Enhanced performance of poly(olefin)-based anion exchange membranes cross-linked by triallylmethyl ammonium iodine and divinylbenzene. Journal of Membrane Science, 2021, 637, 119629.	8.2	23
5	Using a vapor-fed anode and saline catholyte to manage ion transport in a proton exchange membrane electrolyzer. Energy and Environmental Science, 2021, 14, 6041-6049.	30.8	22
6	Orientation of Thin Polyamide Layer-by-Layer Films on Non-Porous Substrates. Macromolecules, 2021, 54, 11296-11303.	4.8	2
7	Using reverse osmosis membranes to control ion transport during water electrolysis. Energy and Environmental Science, 2020, 13, 3138-3148.	30.8	49
8	Mesoscale Simulations of Quaternary Ammonium-Tethered Triblock Copolymers: Effects of the Degree of Functionalization and Styrene Content. Journal of Physical Chemistry C, 2020, 124, 16315-16323.	3.1	11
9	Fourier transform infrared spectroscopy investigation of water microenvironments in polyelectrolyte multilayers at varying temperatures. Soft Matter, 2020, 16, 2291-2300.	2.7	22
10	Resistance and Permselectivity of 3D-Printed Micropatterned Anion-Exchange Membranes. ACS Applied Materials & Interfaces, 2019, 11, 26298-26306.	8.0	20
11	Ion Transport in Pendant and Backbone Polymerized Ionic Liquids. Macromolecules, 2019, 52, 6438-6448.	4.8	30
12	Electrokinetic Streaming-Current Methods to Probe the Electrode-Electrolyte Interface under Applied Potentials. Journal of Physical Chemistry C, 2019, 123, 19493-19505.	3.1	14
13	Substrate-Dependent Molecular and Nanostructural Orientation of Nafion Thin Films. Advanced Functional Materials, 2019, 29, 1902699.	14.9	28
14	Hydroxide Ion Diffusion in Anion-Exchange Membranes at Low Hydration: Insights from Ab Initio Molecular Dynamics. Chemistry of Materials, 2019, 31, 5778-5787.	6.7	64
15	Biomimetic Separation of Transport and Matrix Functions in Lamellar Block Copolymer Channel-Based Membranes. ACS Nano, 2019, 13, 8292-8302.	14.6	37
16	Anion Exchange Membranes with Dynamic Redox-Responsive Properties. ACS Applied Materials & Interfaces, 2019, 11, 29187-29194.	8.0	4
17	Balancing Water Dissociation and Current Densities To Enable Sustainable Hydrogen Production with Bipolar Membranes in Microbial Electrolysis Cells. Environmental Science & Technology, 2019, 53, 14761-14768.	10.0	28
18	Solvent-non-solvent rapid-injection for preparing nanostructured materials from micelles to hydrogels. Nature Communications, 2019, 10, 3855.	12.8	30

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19	Direct probe of the nuclear modes limiting charge mobility in molecular semiconductors. <i>Materials Horizons</i> , 2019, 6, 182-191.	12.2	53
20	Poly(olefin)-Based Anion Exchange Membranes Prepared Using Ziegler–Natta Polymerization. <i>Macromolecules</i> , 2019, 52, 4030-4041.	4.8	92
21	High Performance Anion Exchange Membrane Fuel Cells Enabled by Fluoropoly(olefin) Membranes. <i>Advanced Functional Materials</i> , 2019, 29, 1902059.	14.9	128
22	Ceramic–Salt Composite Electrolytes from Cold Sintering. <i>Advanced Functional Materials</i> , 2019, 29, 1807872.	14.9	72
23	Ab Initio Molecular Dynamics Study of Hydroxide Diffusion Mechanisms in Nanoconfined Structural Mimics of Anion Exchange Membranes. <i>Journal of Physical Chemistry C</i> , 2019, 123, 4638-4653.	3.1	43
24	Synthesis of Aromatic Anion Exchange Membranes by Friedel–Crafts Bromoalkylation and Cross-Linking of Polystyrene Block Copolymers. <i>Macromolecules</i> , 2019, 52, 2139-2147.	4.8	152
25	Multiscale Tortuous Diffusion in Anion and Cation Exchange Membranes. <i>Macromolecules</i> , 2019, 52, 24-35.	4.8	34
26	Creating cross-linked lamellar block copolymer supporting layers for biomimetic membranes. <i>Faraday Discussions</i> , 2018, 209, 179-191.	3.2	15
27	Modeling and Experimental Evaluation of Ni(II) and Pb(II) Sorption from Aqueous Solutions Using a Polyaniline/CoFeC <sub>6</sub> N <sub>6</sub> Nanocomposite. <i>Journal of Chemical &amp; Engineering Data</i> , 2018, 63, 741-750.	1.9	22
28	Substrate-Dependent Physical Aging of Confined Nafion Thin Films. <i>ACS Macro Letters</i> , 2018, 7, 223-227.	4.8	10
29	Unraveling the Complex Hydration Behavior of Ionomers under Thin Film Confinement. <i>Journal of Physical Chemistry C</i> , 2018, 122, 3471-3481.	3.1	15
30	Tuning the properties of poly(2,6-dimethyl-1,4-phenylene oxide) anion exchange membranes and their performance in H <sub>2</sub> /O <sub>2</sub> fuel cells. <i>Energy and Environmental Science</i> , 2018, 11, 435-446.	30.8	225
31	Exploring backbone-cation alkyl spacers for multi-cation side chain anion exchange membranes. <i>Journal of Power Sources</i> , 2018, 375, 433-441.	7.8	83
32	Electrolyte-resistant epoxy for bonding batteries based on sandwich structures. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46059.	2.6	6
33	Utilizing thiol–ene chemistry for crosslinked nickel cation-based anion exchange membranes. <i>Journal of Polymer Science Part A</i> , 2018, 56, 328-339.	2.3	20
34	Improved ATR-FTIR detection of hydrocarbons in water with semi-crystalline polyolefin coatings on ATR elements. <i>Analyst</i> , 2018, 143, 5589-5596.	3.5	7
35	Chemical and Thermal Stability of Poly(phenylene oxide)-Based Anion Exchange Membranes Containing Alkyl Side Chains. <i>Journal of the Electrochemical Society</i> , 2018, 165, F1133-F1138.	2.9	11
36	Solvent-cast 3D printing of polysulfone and polyaniline composites. <i>Polymer</i> , 2018, 152, 18-24.	3.8	29

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37	The balance of electric field and interfacial catalysis in promoting water dissociation in bipolar membranes. <i>Energy and Environmental Science</i> , 2018, 11, 2235-2245.	30.8	100
38	Quantifying Carboxylic Acid Concentration in Model Polyamide Desalination Membranes via Fourier Transform Infrared Spectroscopy. <i>Macromolecules</i> , 2018, 51, 6623-6629.	4.8	26
39	Thermodynamics of Counterion Release Is Critical for Anion Exchange Membrane Conductivity. <i>Journal of the American Chemical Society</i> , 2018, 140, 7961-7969.	13.7	61
40	Electrocatalyst Design for Direct Borohydride Oxidation Guided by First Principles. <i>Journal of Physical Chemistry C</i> , 2017, 121, 2872-2881.	3.1	13
41	Improved electrical power production of thermally regenerative batteries using a poly(phenylene) Tj ETQq1 1 0.784314 rgBT /Overloc	7.8	60
42	Carbonate Dynamics and Opportunities With Low Temperature, Anion Exchange Membrane-Based Electrochemical Carbon Dioxide Separators. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2017, 14, .	2.1	25
43	Mechanically Robust Anion Exchange Membranes via Long Hydrophilic Cross-Linkers. <i>Macromolecules</i> , 2017, 50, 2329-2337.	4.8	103
44	Anion exchange membranes by bromination of tetramethylbiphenol-based poly(sulfone)s. <i>Polymer Chemistry</i> , 2017, 8, 2442-2449.	3.9	30
45	Multifunctional structural lithium-ion battery for electric vehicles. <i>Journal of Intelligent Material Systems and Structures</i> , 2017, 28, 1603-1613.	2.5	45
46	States of water in proton exchange membranes: Part A - Influence of chemical structure and composition. <i>Polymer</i> , 2017, 111, 297-306.	3.8	20
47	Cationic Side-Chain Attachment to Poly(Phenylene Oxide) Backbones for Chemically Stable and Conductive Anion Exchange Membranes. <i>Chemistry of Materials</i> , 2017, 29, 5321-5330.	6.7	133
48	Water Sorption in Electron-Beam Evaporated SiO <sub>2</sub> on QCM Crystals and Its Influence on Polymer Thin Film Hydration Measurements. <i>Langmuir</i> , 2017, 33, 5261-5268.	3.5	20
49	Comparison of cathode catalyst binders for the hydrogen evolution reaction in microbial electrolysis cells. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 15739-15744.	7.1	23
50	Elastic Long-Chain Multication Cross-Linked Anion Exchange Membranes. <i>Macromolecules</i> , 2017, 50, 3323-3332.	4.8	159
51	Insight into the Mechanism of Thermal Stability of $\pm$ -Diimine Nickel Complex in Catalyzing Ethylene Polymerization. <i>Organometallics</i> , 2017, 36, 1196-1203.	2.3	22
52	An Ionophore-Based Anion-Selective Optode Printed on Cellulose Paper. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11826-11830.	13.8	64
53	Investigation of polymer-solvent interactions in poly(styrene sulfonate) thin films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017, 55, 1365-1372.	2.1	22
54	Spectroscopic Characterization of Sulfonate Charge Density in Ion-Containing Polymers. <i>Journal of Physical Chemistry B</i> , 2017, 121, 11504-11510.	2.6	7

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55	Molecular Engineering Mechanically Programmable Hydrogels with Orthogonal Functionalization. Chemistry of Materials, 2017, 29, 9981-9989.	6.7	12
56	First-Principles Calculation of Pt Surface Energies in an Electrochemical Environment: Thermodynamic Driving Forces for Surface Faceting and Nanoparticle Reconstruction. Langmuir, 2017, 33, 7043-7052.	3.5	31
57	Flexible Ionic Diodes for Low-Frequency Mechanical Energy Harvesting. Advanced Energy Materials, 2017, 7, 1601983.	19.5	51
58	Multivariate analysis of attachment of biofouling organisms in response to material surface characteristics. Biointerphases, 2017, 12, 051003.	1.6	13
59	Mesoscale Simulations of Anion Exchange Membranes Based on Quaternary Ammonium Tethered Triblock Copolymers. Macromolecules, 2017, 50, 4397-4405.	4.8	62
60	3D Printing of Micropatterned Anion Exchange Membranes. ACS Applied Materials & Interfaces, 2016, 8, 16656-16663.	8.0	63
61	Increased Hydrogel Swelling Induced by Absorption of Small Molecules. ACS Applied Materials & Interfaces, 2016, 8, 14263-14270.	8.0	42
62	Investigation of intricate, amphiphilic crosslinked hyperbranched fluoropolymers as anti-icing coatings for extreme environments. Journal of Polymer Science Part A, 2016, 54, 238-244.	2.3	29
63	Specific ion effects on the permselectivity of sulfonated poly(ether sulfone) cation exchange membranes. Journal of Membrane Science, 2016, 508, 146-152.	8.2	100
64	Functionalization of Poly(2,6-dimethyl-1,4-phenylene oxide)s with Hindered Fluorene Side Chains for Anion Exchange Membranes. Macromolecules, 2016, 49, 3300-3309.	4.8	107
65	Highly conductive side chain block copolymer anion exchange membranes. Soft Matter, 2016, 12, 5359-5371.	2.7	42
66	Side Chain Influence on the Mechanical Properties and Water Uptake of Confined Comb-Shaped Cationic Polymer Thin Films. Macromolecular Chemistry and Physics, 2016, 217, 2442-2451.	2.2	13
67	Highly ordered ion-conducting block copolymers by hydrophobic block modification. Journal of Materials Chemistry A, 2016, 4, 15437-15449.	10.3	15
68	Click Cross-Linking-Improved Waterborne Polymers for Environment-Friendly Coatings and Adhesives. ACS Applied Materials & Interfaces, 2016, 8, 17499-17510.	8.0	79
69	Bicarbonate and chloride anion transport in anion exchange membranes. Journal of Membrane Science, 2016, 514, 125-134.	8.2	60
70	<i>N</i> -Alkyl Interstitial Spacers and Terminal Pendants Influence the Alkaline Stability of Tetraalkylammonium Cations for Anion Exchange Membrane Fuel Cells. Chemistry of Materials, 2016, 28, 2589-2598.	6.7	113
71	Crosslinking of comb-shaped polymer anion exchange membranes via thiol-ene click chemistry. Polymer Chemistry, 2016, 7, 2464-2475.	3.9	131
72	Varying the microphase separation patterns of alkaline polymer electrolytes. Journal of Materials Chemistry A, 2016, 4, 4071-4081.	10.3	61

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73	Multication Side Chain Anion Exchange Membranes. <i>Macromolecules</i> , 2016, 49, 815-824.	4.8	303
74	Signal Enhanced FTIR Analysis of Alignment in NAFION Thin Films at SiO <sub>2</sub> and Au Interfaces. <i>ACS Macro Letters</i> , 2016, 5, 83-87.	4.8	42
75	Imidazolium-based organic-inorganic hybrid anion exchange membranes for fuel cell applications. <i>Journal of Membrane Science</i> , 2016, 508, 7-14.	8.2	69
76	Sulfonated polymers containing polyhedral oligomeric silsesquioxane (POSS) core for high performance proton exchange membranes. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 7135-7143.	7.1	14
77	Controlling crystallization to improve charge mobilities in transistors based on 2,7-dioctyl[1]benzothieno[3,2-b][1]benzothiophene. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8799-8803.	5.5	9
78	Miscibility and Acid Strength Govern Contact Doping of Organic Photovoltaics with Strong Polyelectrolytes. <i>Macromolecules</i> , 2015, 48, 5162-5171.	4.8	13
79	Design, manufacture and test of a novel structural battery based on sandwich construction. <i>Journal of Sandwich Structures and Materials</i> , 2015, 17, 666-690.	3.5	22
80	Measuring water hydrogen bonding distributions in proton exchange membranes using linear Fourier Transform Infrared spectroscopy. <i>Solid State Ionics</i> , 2015, 275, 66-70.	2.7	14
81	Effect of Superacidic Side Chain Structures on High Conductivity Aromatic Polymer Fuel Cell Membranes. <i>Macromolecules</i> , 2015, 48, 7117-7126.	4.8	57
82	Mechanically Tough and Chemically Stable Anion Exchange Membranes from Rigid-Flexible Semi-Interpenetrating Networks. <i>Chemistry of Materials</i> , 2015, 27, 6689-6698.	6.7	149
83	Characterization and Chemical Stability of Anion Exchange Membranes Cross-Linked with Polar Electron-Donating Linkers. <i>Journal of the Electrochemical Society</i> , 2015, 162, F1047-F1055.	2.9	50
84	Reducing nitrogen crossover in microbial reverse-electrodialysis cells by using adjacent anion exchange membranes and anion exchange resin. <i>Environmental Science: Water Research and Technology</i> , 2015, 1, 865-873.	2.4	3
85	New Polymer Structures for Anion Exchange Membranes. <i>ECS Transactions</i> , 2015, 69, 403-406.	0.5	3
86	Alkaline membrane fuel cells with in-situ cross-linked ionomers. <i>Electrochimica Acta</i> , 2015, 152, 93-100.	5.2	29
87	Polymer Physics: Impact of Substrate and Processing on Confinement of Nafion Thin Films (Adv. Funct. Mater.)	10.784314	14,900
88	Probing microphase separation and proton transport cooperativity in polymer-ethered tetrazoles. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2014, 52, 1375-1387.	2.1	1
89	Cross-Linked Anion Exchange Membranes for AEMFC. <i>ECS Transactions</i> , 2014, 64, 1229-1232.	0.5	1
90	Solution Synthesis of Cu <sub>3</sub> PdN Nanocrystals as Ternary Metal Nitride Electrocatalysts for the Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , 2014, 26, 6226-6232.	6.7	82

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91	Amphoteric ion exchange membrane synthesized by direct polymerization for vanadium redox flow battery application. International Journal of Hydrogen Energy, 2014, 39, 16123-16131.	7.1	51
92	Influence of Sulfone Linkage on the Stability of Aromatic Quaternary Ammonium Polymers for Alkaline Fuel Cells. Journal of the Electrochemical Society, 2014, 161, F615-F621.	2.9	69
93	Impact of Substrate and Processing on Confinement of Nafion Thin Films. Advanced Functional Materials, 2014, 24, 4763-4774.	14.9	167
94	Contact Doping with Sub-Å Monolayers of Strong Polyelectrolytes for Organic Photovoltaics. Advanced Energy Materials, 2014, 4, 1400439.	19.5	25
95	Metal-Ligand Based Anion Exchange Membranes. ACS Symposium Series, 2014, , 127-146.	0.5	6
96	Cross-linked comb-shaped anion exchange membranes with high base stability. Chemical Communications, 2014, 50, 4092.	4.1	148
97	Specific ion effects on membrane potential and the permselectivity of ion exchange membranes. Physical Chemistry Chemical Physics, 2014, 16, 21673-21681.	2.8	160
98	Anion-exchange membranes in electrochemical energy systems. Energy and Environmental Science, 2014, 7, 3135-3191.	30.8	1,617
99	Patterned ion exchange membranes for improved power production in microbial reverse-electrodialysis cells. Journal of Power Sources, 2014, 271, 437-443.	7.8	58
100	Salt Concentration Differences Alter Membrane Resistance in Reverse Electrodialysis Stacks. Environmental Science and Technology Letters, 2014, 1, 36-39.	8.7	91
101	Poly(vinylidene fluoride-co-hexafluoropropylene) phase inversion coating as a diffusion layer to enhance the cathode performance in microbial fuel cells. Journal of Power Sources, 2014, 269, 379-384.	7.8	29
102	Single-Step Fabrication Using a Phase Inversion Method of Poly(vinylidene fluoride) (PVDF) Activated Carbon Air Cathodes for Microbial Fuel Cells. Environmental Science and Technology Letters, 2014, 1, 416-420.	8.7	145
103	Low-temperature crosslinking of anion exchange membranes. Polymer Chemistry, 2014, 5, 2928-2935.	3.9	70
104	Assessing the Utility of Bipolar Membranes for use in Photoelectrochemical Water-Splitting Cells. ChemSusChem, 2014, 7, 3017-3020.	6.8	104
105	Spray-on polyvinyl alcohol separators and impact on power production in air-cathode microbial fuel cells with different solution conductivities. Bioresource Technology, 2014, 172, 156-161.	9.6	17
106	Reducing capacity fade in vanadium redox flow batteries by altering charging and discharging currents. Journal of Power Sources, 2014, 246, 767-774.	7.8	83
107	Anion Exchange Fuel Cell Membranes Prepared from C-H Borylation and Suzuki Coupling Reactions. Macromolecules, 2014, 47, 1973-1980.	4.8	86
108	Tetrazolation of Side Chains and Anhydrous Conductivity in a Hydrophobic Polymer. Macromolecules, 2014, 47, 4243-4250.	4.8	5



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109	Poly(vinyl alcohol) separators improve the coulombic efficiency of activated carbon cathodes in microbial fuel cells. <i>Electrochemistry Communications</i> , 2013, 34, 150-152.	4.7	31
110	Optimized Anion Exchange Membranes for Vanadium Redox Flow Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 7559-7566.	8.0	136
111	Composite blend polymer membranes with increased proton selectivity and lifetime for vanadium redox flow batteries. <i>Journal of Power Sources</i> , 2013, 231, 301-306.	7.8	36
112	Ammonium Bicarbonate Transport in Anion Exchange Membranes for Salinity Gradient Energy. <i>ACS Macro Letters</i> , 2013, 2, 814-817.	4.8	29
113	Species transport mechanisms governing capacity loss in vanadium flow batteries: Comparing Nafion® and sulfonated Radel membranes. <i>Electrochimica Acta</i> , 2013, 98, 66-74.	5.2	108
114	Optimizing membrane thickness for vanadium redox flow batteries. <i>Journal of Membrane Science</i> , 2013, 437, 108-113.	8.2	81
115	Synthesis and structure-property relationships of poly(sulfone)s for anion exchange membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013, 51, 1790-1798.	2.1	25
116	Layer-by-layer self-assembly of PDDA/PSS-SPFEK composite membrane with low vanadium permeability for vanadium redox flow battery. <i>RSC Advances</i> , 2013, 3, 15467.	3.6	54
117	Ionic Resistance and Permselectivity Tradeoffs in Anion Exchange Membranes. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 10294-10301.	8.0	232
118	FTIR Characterization of Water-Polymer Interactions in Superacid Polymers. <i>Journal of Physical Chemistry B</i> , 2013, 117, 16266-16274.	2.6	20
119	Water Uptake and Ion Mobility in Cross-Linked Bis(terpyridine)ruthenium-Based Anion Exchange Membranes. <i>Macromolecules</i> , 2013, 46, 9279-9287.	4.8	72
120	Self-Assembly and Transport Limitations in Confined Nafion Films. <i>Macromolecules</i> , 2013, 46, 867-873.	4.8	192
121	V5+ degradation of sulfonated Radel membranes for vanadium redox flow batteries. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 11299.	2.8	134
122	Ion Motion in Anion and Proton-Conducting Triblock Copolymers. <i>Macromolecules</i> , 2013, 46, 949-956.	4.8	63
123	Quantitative <sup>1</sup> H NMR Analysis of Chemical Stabilities in Anion-Exchange Membranes. <i>ACS Macro Letters</i> , 2013, 2, 49-52.	4.8	158
124	Selective anion exchange membranes for high coulombic efficiency vanadium redox flow batteries. <i>Electrochemistry Communications</i> , 2013, 26, 37-40.	4.7	191
125	Layered zirconium phosphate sulfophenylphosphonates reinforced sulfonated poly (fluorenyl ether) Tj ETQq1 1 0.784314 rgBT /Overl	8.2	42
126	Highly Stable, Anion Conductive, Comb-Shaped Copolymers for Alkaline Fuel Cells. <i>Journal of the American Chemical Society</i> , 2013, 135, 10124-10133.	13.7	471



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127	Confinement and Proton Transfer in NAFION Thin Films. <i>Macromolecules</i> , 2013, 46, 413-421.	4.8	48
128	Ion Clustering in Quaternary Ammonium Functionalized Benzylmethyl Containing Poly(arylene ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	4.8	134
129	Polymer electrolyte membranes based on poly(arylene ether sulfone) with pendant perfluorosulfonic acid. <i>Polymer Chemistry</i> , 2013, 4, 272-281.	3.9	61
130	Poly(Arylene Ether Sulfone) Ionomers with Different Acidity Strengths and Fuel Cell Membrane Properties. <i>ECS Transactions</i> , 2013, 50, 1031-1035.	0.5	1
131	Lowâ€Cost, Damageâ€Free Patterning of Lead Zirconate Titanate Films. <i>Journal of the American Ceramic Society</i> , 2013, 96, 2799-2805.	3.8	9
132	Anion exchange membranes: Current status and moving forward. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013, 51, 1727-1735.	2.1	367
133	Characterization of Anion Exchange Membrane Technology for Low Cost Electrolysis. <i>ECS Transactions</i> , 2013, 45, 121-130.	0.5	49
134	Anion Exchange Membranes for Vanadium Redox Flow Batteries. <i>ECS Transactions</i> , 2013, 53, 83-89.	0.5	7
135	Stable fluorinated sulfonated poly(arylene ether) membranes for vanadium redox flow batteries. <i>RSC Advances</i> , 2012, 2, 8087.	3.6	68
136	Solid-State Water Electrolysis with an Alkaline Membrane. <i>Journal of the American Chemical Society</i> , 2012, 134, 9054-9057.	13.7	424
137	Cationic fluorinated polymer binders for microbial fuel cell cathodes. <i>RSC Advances</i> , 2012, 2, 5856.	3.6	18
138	Antiplasticization and Water Uptake of Nafion Thin Films. <i>ACS Macro Letters</i> , 2012, 1, 291-295.	4.8	72
139	Directly fluorinated polyaromatic composite membranes for vanadium redox flow batteries. <i>Journal of Membrane Science</i> , 2012, 415-416, 139-144.	8.2	22
140	Novel anti-flooding poly(dimethylsiloxane) (PDMS) catalyst binder for microbial fuel cell cathodes. <i>Journal of Power Sources</i> , 2012, 218, 100-105.	7.8	70
141	Polymers in Energy Applications. , 2012, , 597-600.		1
142	Synthesis and characterization of quaternary ammonium functionalized fluorene-containing cardo polymers for potential anion exchange membrane water electrolyzer applications. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 16168-16176.	7.1	21
143	Metal-Cation-Based Anion Exchange Membranes. <i>Journal of the American Chemical Society</i> , 2012, 134, 4493-4496.	13.7	295
144	Development and evaluation of carbon and binder loading in low-cost activated carbon cathodes for air-cathode microbial fuel cells. <i>RSC Advances</i> , 2012, 2, 12751-12758.	3.6	87

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145	Degradation of Imidazolium- and Quaternary Ammonium-Functionalized Poly(fluorenyl ether ketone) Tj ETQq1 1 0.784314 rgBT/Ove	8.0	220
146	Polymer Separators for High-Power, High-Efficiency Microbial Fuel Cells. ACS Applied Materials & Interfaces, 2012, 4, 6454-6457.	8.0	43
147	Poly(Arylene Ether Sulfone) Ionomers with Different Acidity Strengths and Fuel Cell Membrane Properties. ECS Meeting Abstracts, 2012, , .	0.0	0
148	Water-mediated transport in ion-containing polymers. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 9-20.	2.1	85
149	Transport properties and fuel cell performance of sulfonated poly(imide) proton exchange membranes. International Journal of Hydrogen Energy, 2012, 37, 6153-6160.	7.1	36
150	Chemical mapping and electrical conductivity of carbon nanotube patterned arrays. Journal of Materials Chemistry, 2011, 21, 14259.	6.7	1
151	Neutral hydrophilic cathode catalyst binders for microbial fuel cells. Energy and Environmental Science, 2011, 4, 928-934.	30.8	50
152	Zeta Potential of Ion-Conductive Membranes by Streaming Current Measurements. Langmuir, 2011, 27, 4721-4727.	3.5	86
153	Highly Conductive Aromatic Ionomers with Perfluorosulfonic Acid Side Chains for Elevated Temperature Fuel Cells. Macromolecules, 2011, 44, 4605-4609.	4.8	50
154	Block Copolymers for Fuel Cells. Macromolecules, 2011, 44, 1-11.	4.8	465
155	Characterization of Water in Proton-Conducting Membranes by Deuterium NMR $T_1$ Relaxation. Journal of Physical Chemistry B, 2011, 115, 776-783.	2.6	34
156	Aromatic Ionomers with Highly Acidic Sulfonate Groups: Acidity, Hydration, and Proton Conductivity. Macromolecules, 2011, 44, 8458-8469.	4.8	90
157	Ion Conduction in Poly(ethylene oxide) Ionically Assembled Complexes. Macromolecules, 2011, 44, 9723-9730.	4.8	15
158	First-principles based microkinetic modeling of borohydride oxidation on a Au(111) electrode. Journal of Power Sources, 2011, 196, 9228-9237.	7.8	95
159	Chemical and mechanical degradation of sulfonated poly(sulfone) membranes in vanadium redox flow batteries. Journal of Applied Electrochemistry, 2011, 41, 1201-1213.	2.9	150
160	Electro-optical properties of electropolymerized poly(3-hexylthiophene)/carbon nanotube composite thin films. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1269-1275.	2.1	17
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