

Geoffrey M Geise

List of Publications by Year in descending order

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54
papers

4,719
citations

186265
28
h-index

197818
49
g-index

57
all docs

57
docs citations

57
times ranked

4421
citing authors

#	ARTICLE	IF	CITATIONS
1	Water purification by membranes: The role of polymer science. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2010, 48, 1685-1718.	2.1	798
2	Water permeability and water/salt selectivity tradeoff in polymers for desalination. <i>Journal of Membrane Science</i> , 2011, 369, 130-138.	8.2	641
3	Fundamental water and salt transport properties of polymeric materials. <i>Progress in Polymer Science</i> , 2014, 39, 1-42.	24.7	597
4	Polyamide interfacial composite membranes prepared from m-phenylene diamine, trimesoyl chloride and a new disulfonated diamine. <i>Journal of Membrane Science</i> , 2012, 403-404, 152-161.	8.2	321
5	Ionic Resistance and Permselectivity Tradeoffs in Anion Exchange Membranes. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 10294-10301.	8.0	232
6	Assembling a Natural Small Molecule into a Supramolecular Network with High Structural Order and Dynamic Functions. <i>Journal of the American Chemical Society</i> , 2019, 141, 12804-12814.	13.7	190
7	Characterization of a sulfonated pentablock copolymer for desalination applications. <i>Polymer</i> , 2010, 51, 5815-5822.	3.8	160
8	Specific ion effects on membrane potential and the permselectivity of ion exchange membranes. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 21673-21681.	2.8	160
9	Effect of Free Volume on Water and Salt Transport Properties in Directly Copolymerized Disulfonated Poly(arylene ether sulfone) Random Copolymers. <i>Macromolecules</i> , 2011, 44, 4428-4438.	4.8	133
10	Sodium chloride sorption in sulfonated polymers for membrane applications. <i>Journal of Membrane Science</i> , 2012, 423-424, 195-208.	8.2	128
11	Assessing the Utility of Bipolar Membranes for use in Photoelectrochemical Water-Splitting Cells. <i>ChemSusChem</i> , 2014, 7, 3017-3020.	6.8	104
12	Sodium chloride diffusion in sulfonated polymers for membrane applications. <i>Journal of Membrane Science</i> , 2013, 427, 186-196.	8.2	101
13	Modeling the water permeability and water/salt selectivity tradeoff in polymer membranes. <i>Journal of Membrane Science</i> , 2016, 520, 790-800.	8.2	93
14	Salt Concentration Differences Alter Membrane Resistance in Reverse Electrodialysis Stacks. <i>Environmental Science and Technology Letters</i> , 2014, 1, 36-39.	8.7	91
15	Patterned ion exchange membranes for improved power production in microbial reverse-electrodialysis cells. <i>Journal of Power Sources</i> , 2014, 271, 437-443.	7.8	58
16	Water and salt transport properties of zwitterionic polymers film. <i>Journal of Membrane Science</i> , 2015, 491, 73-81.	8.2	53
17	Specific co-ion sorption and diffusion properties influence membrane permselectivity. <i>Journal of Membrane Science</i> , 2018, 563, 492-504.	8.2	49
18	Characterization of Aluminum-Neutralized Sulfonated Styrenic Pentablock Copolymer Films. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 1056-1068.	3.7	47

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19	Influence of processing history on water and salt transport properties of disulfonated polysulfone random copolymers. <i>Polymer</i> , 2012, 53, 1581-1592.	3.8	46
20	Free volume characterization of sulfonated styrenic pentablock copolymers using positron annihilation lifetime spectroscopy. <i>Journal of Membrane Science</i> , 2014, 453, 425-434.	8.2	45
21	Water and Salt Transport Properties of Triptycene-Containing Sulfonated Polysulfone Materials for Desalination Membrane Applications. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 4102-4112.	8.0	45
22	Increased Hydrogel Swelling Induced by Absorption of Small Molecules. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 14263-14270.	8.0	42
23	Why polyamide reverse-osmosis membranes work so well. <i>Science</i> , 2021, 371, 31-32.	12.6	42
24	Stable and Highly Conductive Polycationic Polybenzimidazole Membrane Blends for Intermediate Temperature Polymer Electrolyte Membrane Fuel Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 573-585.	5.1	41
25	Disulfonated Poly(arylene ether sulfone) Random Copolymer Blends Tuned for Rapid Water Permeation via Cation Complexation with Poly(ethylene glycol) Oligomers. <i>Chemistry of Materials</i> , 2011, 23, 1039-1049.	6.7	39
26	A critical review and commentary on recent progress of additive manufacturing and its impact on membrane technology. <i>Journal of Membrane Science</i> , 2022, 645, 120041.	8.2	38
27	Enhanced desalination performance of polyamide bi-layer membranes prepared by sequential interfacial polymerization. <i>Journal of Membrane Science</i> , 2013, 437, 33-39.	8.2	37
28	Water content, relative permittivity, and ion sorption properties of polymers for membrane desalination. <i>Journal of Membrane Science</i> , 2019, 574, 24-32.	8.2	37
29	Ammonium Bicarbonate Transport in Anion Exchange Membranes for Salinity Gradient Energy. <i>ACS Macro Letters</i> , 2013, 2, 814-817.	4.8	29
30	Connecting the Ion Separation Factor to the Sorption and Diffusion Selectivity of Ion Exchange Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 14189-14206.	3.7	28
31	The Role of Experimental Factors in Membrane Permselectivity Measurements. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 7559-7566.	3.7	27
32	Generalized Approach for Rapid Aqueous MOF Synthesis by Controlling Solution pH. <i>Crystal Growth and Design</i> , 2020, 20, 6787-6795.	3.0	26
33	Increasing salt size selectivity in low water content polymers via polymer backbone dynamics. <i>Journal of Membrane Science</i> , 2018, 552, 43-50.	8.2	24
34	Dielectric Permittivity Properties of Hydrated Polymers: Measurement and Connection to Ion Transport Properties. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 5205-5217.	3.7	24
35	Counterion Mobility in Ion-Exchange Membranes: Spatial Effect and Valency-Dependent Electrostatic Interaction. <i>ACS ES&T Engineering</i> , 2022, 2, 1274-1286.	7.6	24
36	Influence of Rubbery versus Glassy Backbone Dynamics on Multiscale Transport in Polymer Membranes. <i>Macromolecules</i> , 2018, 51, 9222-9233.	4.8	22

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37	Engineering Selective Desalination Membranes via Molecular Control of Polymer Functional Groups. Environmental Science and Technology Letters, 2019, 6, 462-466.	8.7	22
38	Experimental characterization of polymeric membranes for selective ion transport. Current Opinion in Chemical Engineering, 2020, 28, 36-42.	7.8	22
39	Effects of fixed charge group physicochemistry on anion exchange membrane permselectivity and ion transport. Physical Chemistry Chemical Physics, 2020, 22, 7283-7293.	2.8	20
40	Conductivity, permeability, and stability properties of chemically tailored poly(phenylene oxide) membranes for Li ⁺ conductive non-aqueous redox flow battery separators. Journal of Power Sources, 2020, 460, 228107.	7.8	18
41	Functional group configuration influences salt transport in desalination membrane materials. Journal of Membrane Science, 2019, 590, 117295.	8.2	17
42	Influence of Salt Concentration on Hydrated Polymer Relative Permittivity and State of Water Properties. Macromolecules, 2021, 54, 637-646.	4.8	14
43	Methoxy groups increase water and decrease salt permeability properties of sulfonated polysulfone desalination membranes. Journal of Membrane Science, 2021, 630, 119298.	8.2	10
44	Thermodynamic Interactions as a Descriptor of Cross-Over in Nonaqueous Redox Flow Battery Membranes. ACS Applied Materials & Interfaces, 2021, 13, 49331-49339.	8.0	6
45	Local Water Transport in Rubbery versus Glassy Separation Membranes and Analogous Solutions. Macromolecules, 2021, 54, 11187-11197.	4.8	6
46	Anion Exchange Membranes with Dynamic Redox-Responsive Properties. ACS Applied Materials & Interfaces, 2019, 11, 29187-29194.	8.0	4
47	Reducing nitrogen crossover in microbial reverse-electrodialysis cells by using adjacent anion exchange membranes and anion exchange resin. Environmental Science: Water Research and Technology, 2015, 1, 865-873.	2.4	3
48	Comparison of the Permeation of MgCl ₂ versus NaCl in Highly Charged Sulfonated Polymer Membranes. ACS Symposium Series, 2011, , 239-245.	0.5	2
49	Characterization of a Centrifugal Microfluidic Orthogonal Flow Platform. Micromachines, 2022, 13, 487.	2.9	2
50	Layer-by-layer approach to enable polyamide formation on microporous supports for thin-film composite membranes. Journal of Applied Polymer Science, 2021, 138, 51201.	2.6	0
51	The impact of cation and anion pairing in ionic salts on surface defect passivation in cesium lead bromide nanocrystals. Journal of Materials Chemistry C, 2021, 9, 991-999.	5.5	0
52	Polymeric Membrane Characterization by PALS. , 2014, , 1-2.		0
53	Positron Annihilation Lifetime Spectroscopy (PALS). , 2014, , 1-2.		0
54	Bridging membrane transport models. Science, 2022, 377, 152-152.	12.6	0