

William A Phillip

List of Publications by Year in descending order

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citations

126907

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68
docs citations

68
times ranked

9341
citing authors

#	ARTICLE	IF	CITATIONS
1	DATA: Diafiltration Apparatus for high-Throughput Analysis. Journal of Membrane Science, 2022, 641, 119743.	8.2	5
2	Design Considerations for Next-Generation Polymer Sorbents: From Polymer Chemistry to Device Configurations. Macromolecular Chemistry and Physics, 2022, 223, .	2.2	6
3	Material Property Targets to Enable Adsorptive Water Treatment and Resource Recovery Systems. ACS ES&T Engineering, 2021, 1, 1171-1182.	7.6	5
4	Maximizing selectivity: An analysis of isoporous membranes. Journal of Membrane Science, 2021, 633, 119389.	8.2	29
5	Water and salt transport properties of pentiptycene-containing sulfonated polysulfones for desalination membrane applications. Journal of Membrane Science, 2021, 640, 119806.	8.2	9
6	Staged Diafiltration Cascades Provide Opportunities to Execute Highly Selective Separations. Industrial & Engineering Chemistry Research, 2021, 60, 15706-15719.	3.7	5
7	100th Anniversary of Macromolecular Science Viewpoint: Integrated Membrane Systems. ACS Macro Letters, 2020, 9, 1267-1279.	4.8	19
8	Resilient hollow fiber nanofiltration membranes fabricated from crosslinkable phase-separated copolymers. Molecular Systems Design and Engineering, 2020, 5, 943-953.	3.4	8
9	Rapid fabrication of precise high-throughput filters from membrane protein nanosheets. Nature Materials, 2020, 19, 347-354.	27.5	59
10	Dual-Functional Nanofiltration Membranes Exhibit Multifaceted Ion Rejection and Antifouling Performance. ACS Applied Materials & Interfaces, 2020, 12, 19944-19954.	8.0	16
11	Controlled Postassembly Functionalization of Mesoporous Copolymer Membranes Informed by Fourier Transform Infrared Spectroscopy. ACS Applied Polymer Materials, 2019, 1, 2120-2130.	4.4	3
12	Data science-enabled molecular-to-systems engineering for sustainable water treatment. Current Opinion in Chemical Engineering, 2019, 26, 122-130.	7.8	22
13	Interfacial Junctions Control Electrolyte Transport through Charge-Patterned Membranes. ACS Nano, 2019, 13, 7655-7664.	14.6	13
14	Material Property Goals to Enable Continuous Diafiltration Membrane Cascades for Lithium-ion Battery Recycling. Computer Aided Chemical Engineering, 2019, 47, 469-474.	0.5	3
15	A rheometry method to assess the evaporation-induced mechanical strength development of polymer solutions used for membrane applications. Journal of Applied Polymer Science, 2019, 136, 47038.	2.6	9
16	Facile Synthesis of a Pentiptycene-Based Highly Microporous Organic Polymer for Gas Storage and Water Treatment. ACS Applied Materials & Interfaces, 2018, 10, 15174-15182.	8.0	57
17	Biocatalytic membranes prepared by inkjet printing functionalized yeast cells onto microfiltration substrates. Journal of Membrane Science, 2018, 550, 91-100.	8.2	14
18	Fit-for-purpose block polymer membranes molecularly engineered for water treatment. Npj Clean Water, 2018, 1, .	8.0	72

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19	Polymeric Ion Pumps: Using an Oscillating Stimulus To Drive Solute Transport in Reactive Membranes. <i>Langmuir</i> , 2018, 34, 4503-4514.	3.5	8
20	Solution self-assembly behavior of A-B-C triblock polymers and the implications for nanoporous membrane fabrication. <i>Journal of Applied Polymer Science</i> , 2018, 135, 45531.	2.6	4
21	Salt permeation mechanisms in charge-patterned mosaic membranes. <i>Molecular Systems Design and Engineering</i> , 2018, 3, 959-969.	3.4	9
22	High-Affinity Detection and Capture of Heavy Metal Contaminants using Block Polymer Composite Membranes. <i>ACS Central Science</i> , 2018, 4, 1697-1707.	11.3	56
23	Tunable mesoporous films from copolymers with degradable side chains as membrane precursors. <i>Journal of Membrane Science</i> , 2018, 567, 104-114.	8.2	6
24	Achieving high permeability and enhanced selectivity for Angstrom-scale separations using artificial water channel membranes. <i>Nature Communications</i> , 2018, 9, 2294.	12.8	95
25	Nanomanufacturing of high-performance hollow fiber nanofiltration membranes by coating uniform block polymer films from solution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 3358-3370.	10.3	27
26	Nanoporous Block Polymer Thin Films Functionalized with Bio-Inspired Ligands for the Efficient Capture of Heavy Metal Ions from Water. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 19152-19160.	8.0	48
27	Copolymer Nanofilters with Charge-Patterned Domains for Enhanced Electrolyte Transport. <i>Chemistry of Materials</i> , 2017, 29, 762-772.	6.7	15
28	Block Polymer Membranes Functionalized with Nanoconfined Polyelectrolyte Brushes Achieve Sub-Nanometer Selectivity. <i>ACS Macro Letters</i> , 2017, 6, 726-732.	4.8	63
29	Processing used nuclear fuel with nanoscale control of uranium and ultrafiltration. <i>Journal of Nuclear Materials</i> , 2016, 473, 125-130.	2.7	30
30	Unusually Stable Hysteresis in the pH-Response of Poly(Acrylic Acid) Brushes Confined within Nanoporous Block Polymer Thin Films. <i>Journal of the American Chemical Society</i> , 2016, 138, 7030-7039.	13.7	70
31	A coarse-grained thermodynamic model for the predictive engineering of valence-selective membranes. <i>Molecular Systems Design and Engineering</i> , 2016, 1, 301-312.	3.4	16
32	A Method for the Efficient Fabrication of Multifunctional Mosaic Membranes by Inkjet Printing. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 19772-19779.	8.0	35
33	Thermal-energy conversion: Under pressure. <i>Nature Energy</i> , 2016, 1, .	39.5	25
34	Water recovery and solute rejection in forward osmosis modules: Modeling and bench-scale experiments. <i>Journal of Membrane Science</i> , 2016, 505, 26-35.	8.2	12
35	Template Synthesis of Nanostructured Polymeric Membranes by Inkjet Printing. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 3386-3395.	8.0	25
36	Polymerization Rate Considerations for High Molecular Weight Polyisoprene- <i>b</i> -Polystyrene- <i>b</i> -Poly(<i>N</i> , <i>N</i> -dimethylacrylamide) Triblock Polymers Synthesized Via Sequential Reversible Addition-Fragmentation Chain Transfer (RAFT) Reactions. <i>Macromolecular Chemistry and Physics</i> , 2015, 216, 1831-1840.	2.2	10

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37	Forward Osmosis Processes in the Limit of Osmotic Equilibrium. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 480-490.	3.7	13
38	Nanostructured Membranes from Triblock Polymer Precursors as High Capacity Copper Adsorbents. <i>Langmuir</i> , 2015, 31, 11113-11123.	3.5	41
39	Preparation of Chemically-Tailored Copolymer Membranes with Tunable Ion Transport Properties. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 19746-19754.	8.0	44
40	Nanoporous membranes generated from self-assembled block polymer precursors: QV . <i>Journal of Applied Polymer Science</i> , 2015, 132, .	2.6	72
41	Synthesis of degradable molecular brushes via a combination of ring-opening polymerization and click chemistry. <i>Journal of Polymer Science Part A</i> , 2015, 53, 239-248.	2.3	36
42	Mixed Mosaic Membranes Prepared by Layer-by-Layer Assembly for Ionic Separations. <i>ACS Nano</i> , 2014, 8, 12338-12345.	14.6	56
43	Designing block copolymer architectures for targeted membrane performance. <i>Polymer</i> , 2014, 55, 347-353.	3.8	103
44	Ultrafiltration of Uranyl Peroxide Nanoclusters for the Separation of Uranium from Aqueous Solution. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 473-479.	8.0	49
45	Tunable nanoporous membranes with chemically-tailored pore walls from triblock polymer templates. <i>Journal of Membrane Science</i> , 2014, 470, 246-256.	8.2	88
46	Understanding the structure and performance of self-assembled triblock terpolymer membranes. <i>Journal of Membrane Science</i> , 2013, 444, 461-468.	8.2	59
47	Ion Selective Permeation Through Cellulose Acetate Membranes in Forward Osmosis. <i>Environmental Science & Technology</i> , 2013, 47, 13745-13753.	10.0	58
48	Reverse Permeation of Weak Electrolyte Draw Solute in Forward Osmosis. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 13463-13472.	3.7	23
49	Solution Small-Angle X-ray Scattering as a Screening and Predictive Tool in the Fabrication of Asymmetric Block Copolymer Membranes. <i>ACS Macro Letters</i> , 2012, 1, 614-617.	4.8	100
50	Tuning Structure and Properties of Graded Triblock Terpolymer-Based Mesoporous and Hybrid Films. <i>Nano Letters</i> , 2011, 11, 2892-2900.	9.1	220
51	Bidirectional Permeation of Electrolytes in Osmotically Driven Membrane Processes. <i>Environmental Science & Technology</i> , 2011, 45, 10642-10651.	10.0	94
52	Thin-Film Composite Pressure Retarded Osmosis Membranes for Sustainable Power Generation from Salinity Gradients. <i>Environmental Science & Technology</i> , 2011, 45, 4360-4369.	10.0	479
53	The Future of Seawater Desalination: Energy, Technology, and the Environment. <i>Science</i> , 2011, 333, 712-717.	12.6	4,908
54	Functionalized Nanoporous Membranes from Reactive Triblock Polymers. <i>Australian Journal of Chemistry</i> , 2011, 64, 1074.	0.9	14

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55	Forward with Osmosis: Emerging Applications for Greater Sustainability. Environmental Science & Technology, 2011, 45, 9824-9830.	10.0	230
56	Relating performance of thin-film composite forward osmosis membranes to support layer formation and structure. Journal of Membrane Science, 2011, 367, 340-352.	8.2	535
57	Reverse Draw Solute Permeation in Forward Osmosis: Modeling and Experiments. Environmental Science & Technology, 2010, 44, 5170-5176.	10.0	576
58	High Performance Thin-Film Composite Forward Osmosis Membrane. Environmental Science & Technology, 2010, 44, 3812-3818.	10.0	814
59	Cylinder Orientation Mechanism in Block Copolymer Thin Films Upon Solvent Evaporation. Macromolecules, 2010, 43, 7763-7770.	4.8	193
60	Self-Assembled Block Copolymer Thin Films as Water Filtration Membranes. ACS Applied Materials & Interfaces, 2010, 2, 847-853.	8.0	366
61	Seeking an ammonia selective membrane based on nanostructured sulfonated block copolymers. Journal of Membrane Science, 2009, 337, 39-46.	8.2	35
62	Diffusion and Flow Across Nanoporous Polydicyclopentadiene-Based Membranes. ACS Applied Materials & Interfaces, 2009, 1, 472-480.	8.0	83
63	Robust Nanoporous Membranes Templated by a Doubly Reactive Block Copolymer. Journal of the American Chemical Society, 2007, 129, 13786-13787.	13.7	111
64	Gas and water liquid transport through nanoporous block copolymer membranes. Journal of Membrane Science, 2006, 286, 144-152.	8.2	119
65	Device for the Acquisition of Dynamic Data Enables the Rapid Characterization of Polymer Membranes. ACS Applied Polymer Materials, 0, , .	4.4	2