

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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|--------------------|--------------------------|----------------|-----------------|
| 263<br>papers      | 16,656<br>citations      | 76<br>h-index  | 114<br>g-index  |
| 269<br>ext. papers | 18,720<br>ext. citations | 8.2<br>avg, IF | 7.51<br>L-index |

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 263 | Forward osmosis processes: Yesterday, today and tomorrow. <i>Desalination</i> , <b>2012</b> , 287, 78-81   | 10.3 | 470       |
| 262 | Treatment of highly concentrated wastewater containing multiple synthetic dyes by a combined process of coagulation/flocculation and nanofiltration. <i>Journal of Membrane Science</i> , <b>2014</b> , 469, 306-315                                   | 9.6  | 314       |
| 261 | Nanometric Graphene Oxide Framework Membranes with Enhanced Heavy Metal Removal via Nanofiltration. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 10235-42   | 10.3 | 309       |
| 260 | Well-constructed cellulose acetate membranes for forward osmosis: Minimized internal concentration polarization with an ultra-thin selective layer. <i>Journal of Membrane Science</i> , <b>2010</b> , 360, 522-535                                    | 9.6  | 298       |
| 259 | Evolution of polymeric hollow fibers as sustainable technologies: Past, present, and future. <i>Progress in Polymer Science</i> , <b>2012</b> , 37, 1401-1424  | 29.6 | 292       |
| 258 | Poly-/metal-benzimidazole nano-composite membranes for hydrogen purification. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 4171  | 35.4 | 260       |
| 257 | Double-Skinned Forward Osmosis Membranes for Reducing Internal Concentration Polarization within the Porous Sublayer. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 4824-4831   | 3.9  | 241       |
| 256 | Highly Water-Soluble Magnetic Nanoparticles as Novel Draw Solutes in Forward Osmosis for Water Reuse. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 5869-5876   | 3.9  | 236       |
| 255 | Hydrophobic PVDF hollow fiber membranes with narrow pore size distribution and ultra-thin skin for the fresh water production through membrane distillation. <i>Chemical Engineering Science</i> , <b>2008</b> , 63, 2587-2594                         | 4.4  | 222       |
| 254 | Sustainable water recovery from oily wastewater via forward osmosis-membrane distillation (FO-MD). <i>Water Research</i> , <b>2014</b> , 52, 112-21  | 12.5 | 209       |
| 253 | Polybenzimidazole (PBI) nanofiltration hollow fiber membranes applied in forward osmosis process. <i>Journal of Membrane Science</i> , <b>2007</b> , 300, 6-12   | 9.6  | 204       |
| 252 | Developing thin-film-composite forward osmosis membranes on the PES/SPSf substrate through interfacial polymerization. <i>AIChE Journal</i> , <b>2012</b> , 58, 770-781  | 3.6  | 200       |
| 251 | Dual-layer hollow fibers with enhanced flux as novel forward osmosis membranes for water production. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 2800-5  | 10.3 | 191       |
| 250 | Chelating polymer modified P84 nanofiltration (NF) hollow fiber membranes for high efficient heavy metal removal. <i>Water Research</i> , <b>2014</b> , 63, 252-61   | 12.5 | 190       |
| 249 | Thin-Film Composite Membranes and Formation Mechanism of Thin-Film Layers on Hydrophilic Cellulose Acetate Propionate Substrates for Forward Osmosis Processes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 10039-10050 | 3.9  | 186       |
| 248 | High-Performance Thermally Self-Cross-Linked Polymer of Intrinsic Microporosity (PIM-1) Membranes for Energy Development. <i>Macromolecules</i> , <b>2012</b> , 45, 1427-1437  | 5.5  | 186       |
| 247 | Gas transport properties of 6FDA-durene/1,4-phenylenediamine (pPDA) copolyimides. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2000</b> , 38, 2703-2713   | 2.6  | 182       |

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| 246 | Integrated forward osmosis-membrane distillation (FOMD) hybrid system for the concentration of protein solutions. <i>Chemical Engineering Science</i> , <b>2011</b> , 66, 2421-2430   | 4.4  | 180 |
| 245 | High performance membranes based on ionic liquid polymers for CO <sub>2</sub> separation from the flue gas. <i>Green Chemistry</i> , <b>2012</b> , 14, 1052   | 10   | 170 |
| 244 | The effects of flow angle and shear rate within the spinneret on the separation performance of poly(ethersulfone) (PES) ultrafiltration hollow fiber membranes. <i>Journal of Membrane Science</i> , <b>2004</b> , 240, 67-79 | 9.6  | 169 |
| 243 | Enhanced forward osmosis from chemically modified polybenzimidazole (PBI) nanofiltration hollow fiber membranes with a thin wall. <i>Chemical Engineering Science</i> , <b>2009</b> , 64, 1577-1584                           | 4.4  | 155 |
| 242 | Study of draw solutes using 2-methylimidazole-based compounds in forward osmosis. <i>Journal of Membrane Science</i> , <b>2010</b> , 364, 242-252   | 9.6  | 151 |
| 241 | Mixed Matrix PVDF Hollow Fiber Membranes with Nanoscale Pores for Desalination through Direct Contact Membrane Distillation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2009</b> , 48, 4474-4483             | 3.9  | 150 |
| 240 | Fabrication of polybenzimidazole (PBI) nanofiltration hollow fiber membranes for removal of chromate. <i>Journal of Membrane Science</i> , <b>2006</b> , 281, 307-315   | 9.6  | 147 |
| 239 | Advanced Porous Materials in Mixed Matrix Membranes. <i>Advanced Materials</i> , <b>2018</b> , 30, e1802401   | 24   | 141 |
| 238 | The characterization of flat composite nanofiltration membranes and their applications in the separation of Cephalexin. <i>Journal of Membrane Science</i> , <b>2005</b> , 247, 37-50   | 9.6  | 135 |
| 237 | Novel Ag <sup>+</sup> -zeolite/polymer mixed matrix membranes with a high CO <sub>2</sub> /CH <sub>4</sub> selectivity. <i>AIChE Journal</i> , <b>2007</b> , 53, 610-616  | 3.6  | 131 |
| 236 | Applications of carbon quantum dots (CQDs) in membrane technologies: A review. <i>Water Research</i> , <b>2018</b> , 147, 43-49   | 12.5 | 131 |
| 235 | UiO-66 incorporated thin-film nanocomposite membranes for efficient selenium and arsenic removal. <i>Journal of Membrane Science</i> , <b>2017</b> , 541, 262-270   | 9.6  | 130 |
| 234 | Effect of Mixed Solvents on Characteristics of Poly(N-isopropylacrylamide) Gels. <i>Langmuir</i> , <b>2002</b> , 18, 2538-2542  | 4    | 130 |
| 233 | Newly developed nanofiltration (NF) composite membranes by interfacial polymerization for Safranin O and Aniline blue removal. <i>Journal of Membrane Science</i> , <b>2013</b> , 430, 96-105                                 | 9.6  | 129 |
| 232 | Development of simultaneous membrane distillation-crystallization (SMDC) technology for treatment of saturated brine. <i>Chemical Engineering Science</i> , <b>2013</b> , 98, 160-172   | 4.4  | 126 |
| 231 | The ionic liquid [EMIM]OAc as a solvent to fabricate stable polybenzimidazole membranes for organic solvent nanofiltration. <i>Green Chemistry</i> , <b>2014</b> , 16, 1383-1392  | 10   | 123 |
| 230 | Effect of air-gap distance on the morphology and thermal properties of polyethersulfone hollow fibers. <i>Journal of Applied Polymer Science</i> , <b>1997</b> , 66, 1067-1077  | 2.9  | 122 |
| 229 | Symmetric and Asymmetric Zeolitic Imidazolate Frameworks (ZIFs)/Polybenzimidazole (PBI) Nanocomposite Membranes for Hydrogen Purification at High Temperatures. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 1358-1367 | 21.8 | 120 |

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| 228 | Diamine modification of P84 polyimide membranes for pervaporation dehydration of isopropanol. <i>AIChE Journal</i> , <b>2006</b> , 52, 3462-3472   | 3.6  | 119 |
| 227 | A review of polymeric composite membranes for gas separation and energy production. <i>Progress in Polymer Science</i> , <b>2019</b> , 97, 101141  | 29.6 | 118 |
| 226 | Room-temperature synthesis of ZIF-90 nanocrystals and the derived nano-composite membranes for hydrogen separation. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 6081  | 13   | 117 |
| 225 | Design of omniphobic interfaces for membrane distillation - A review. <i>Water Research</i> , <b>2019</b> , 162, 64-77   | 12.5 | 116 |
| 224 | Precise Molecular Sieving Architectures with Janus Pathways for Both Polar and Nonpolar Molecules. <i>Advanced Materials</i> , <b>2018</b> , 30, 1705933   | 24   | 116 |
| 223 | Chemically modified polybenzimidazole nanofiltration membrane for the separation of electrolytes and cephalixin. <i>Chemical Engineering Science</i> , <b>2006</b> , 61, 5807-5817   | 4.4  | 115 |
| 222 | Combination of forward osmosis (FO) process with coagulation/flocculation (CF) for potential treatment of textile wastewater. <i>Water Research</i> , <b>2016</b> , 91, 361-70   | 12.5 | 114 |
| 221 | Grafting thermally labile molecules on cross-linkable polyimide to design membrane materials for natural gas purification and CO <sub>2</sub> capture. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 201-208                                      | 35.4 | 114 |
| 220 | Novel nanofiltration membranes consisting of a sulfonated pentablock copolymer rejection layer for heavy metal removal. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 13880-7  | 10.3 | 110 |
| 219 | An aquaporin-based vesicle-embedded polymeric membrane for low energy water filtration. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 7592  | 13   | 110 |
| 218 | Emerging thin-film nanocomposite (TFN) membranes for reverse osmosis: A review. <i>Water Research</i> , <b>2020</b> , 173, 115557  | 12.5 | 109 |
| 217 | Enhancement of flux and solvent stability of Matrimid® thin-film composite membranes for organic solvent nanofiltration. <i>AIChE Journal</i> , <b>2014</b> , 60, 3623-3633  | 3.6  | 104 |
| 216 | Thickness and Air Gap Dependence of Macrovoid Evolution in Phase-Inversion Asymmetric Hollow Fiber Membranes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 7618-7626   | 3.9  | 104 |
| 215 | Effect of polyvinylpyrrolidone molecular weights on morphology, oil/water separation, mechanical and thermal properties of polyetherimide/polyvinylpyrrolidone hollow fiber membranes. <i>Journal of Applied Polymer Science</i> , <b>1999</b> , 74, 2220-2233 | 2.9  | 102 |
| 214 | Zwitterionic polymers grafted poly(ether sulfone) hollow fiber membranes and their antifouling behaviors for osmotic power generation. <i>Journal of Membrane Science</i> , <b>2016</b> , 497, 142-152   | 9.6  | 100 |
| 213 | Novel polyamide-imide/cellulose acetate dual-layer hollow fiber membranes for nanofiltration. <i>Journal of Membrane Science</i> , <b>2010</b> , 363, 232-242  | 9.6  | 99  |
| 212 | UV-Rearranged PIM-1 Polymeric Membranes for Advanced Hydrogen Purification and Production. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 1456-1466   | 21.8 | 98  |
| 211 | The effects of spinning conditions on asymmetric 6FDA/6FDAM polyimide hollow fibers for air separation. <i>Journal of Applied Polymer Science</i> , <b>1997</b> , 65, 1555-1569  | 2.9  | 97  |

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| 210 | Silver-PEGylated dendrimer nanocomposite coating for anti-fouling thin film composite membranes for water treatment. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2013</b> , 436, 207-214                                  | 5.1  | 93 |
| 209 | Molecular design of the cellulose ester-based forward osmosis membranes for desalination. <i>Chemical Engineering Science</i> , <b>2011</b> , 66, 2008-2018  | 4.4  | 89 |
| 208 | Fundamental Characteristics of Sorption, Swelling, and Permeation of P84 Co-polyimide Membranes for Pervaporation Dehydration of Alcohols. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 8938-8943                            | 3.9  | 88 |
| 207 | Cross-linked mixed matrix membranes (MMMs) consisting of amine-functionalized multi-walled carbon nanotubes and P84 polyimide for organic solvent nanofiltration (OSN) with enhanced flux. <i>Journal of Membrane Science</i> , <b>2018</b> , 548, 319-331 | 9.6  | 88 |
| 206 | Energy recovery by pressure retarded osmosis (PRO) in SWRO-PRO integrated processes. <i>Applied Energy</i> , <b>2016</b> , 162, 687-698  | 10.7 | 87 |
| 205 | High performance composite hollow fiber membranes for CO <sub>2</sub> /H <sub>2</sub> and CO <sub>2</sub> /N <sub>2</sub> separation. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 5043-5053  | 6.7  | 87 |
| 204 | POSS-containing delamination-free dual-layer hollow fiber membranes for forward osmosis and osmotic power generation. <i>Journal of Membrane Science</i> , <b>2013</b> , 443, 144-155  | 9.6  | 87 |
| 203 | Water reclamation from emulsified oily wastewater via effective forward osmosis hollow fiber membranes under the PRO mode. <i>Water Research</i> , <b>2015</b> , 81, 54-63   | 12.5 | 87 |
| 202 | Effect of inner-layer thermal conductivity on flux enhancement of dual-layer hollow fiber membranes in direct contact membrane distillation. <i>Journal of Membrane Science</i> , <b>2010</b> , 364, 278-289   | 9.6  | 87 |
| 201 | The limitations of using Flory-Huggins equation for the states of solutions during asymmetric hollow-fiber formation. <i>Journal of Membrane Science</i> , <b>1997</b> , 126, 19-34  | 9.6  | 86 |
| 200 | Surface Modification of Polyimide Membranes by Diamines for H <sub>2</sub> and CO <sub>2</sub> Separation. <i>Macromolecular Rapid Communications</i> , <b>2006</b> , 27, 998-1003   | 4.8  | 86 |
| 199 | Low-Pressure Nanofiltration Hollow Fiber Membranes for Effective Fractionation of Dyes and Inorganic Salts in Textile Wastewater. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 3676-3684  | 10.3 | 84 |
| 198 | Omniphobic Hollow-Fiber Membranes for Vacuum Membrane Distillation. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 4472-4480  | 10.3 | 84 |
| 197 | Removal of organic micro-pollutants (phenol, aniline and nitrobenzene) via forward osmosis (FO) process: Evaluation of FO as an alternative method to reverse osmosis (RO). <i>Water Research</i> , <b>2016</b> , 91, 104-114                              | 12.5 | 84 |
| 196 | Thickness Dependence of Macrovoid Evolution in Wet Phase-Inversion Asymmetric Membranes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 1553-1556  | 3.9  | 84 |
| 195 | Facile Synthesis of Dual-Layer Organic Solvent Nanofiltration (OSN) Hollow Fiber Membranes. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2015</b> , 3, 3019-3023  | 8.3  | 82 |
| 194 | The effect of shear rates on gas separation performance of 6FDA-durene polyimide hollow fibers. <i>Journal of Membrane Science</i> , <b>2000</b> , 167, 55-66  | 9.6  | 82 |
| 193 | Photo-oxidative PIM-1 based mixed matrix membranes with superior gas separation performance. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 17273-17281  | 13   | 81 |

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| 192 | Highly permeable chemically modified PIM-1/Matrimid membranes for green hydrogen purification. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 13914   | 13   | 79 |
| 191 | Matrimid <sup>®</sup> /MgO mixed matrix membranes for pervaporation. <i>AIChE Journal</i> , <b>2007</b> , 53, 1745-1757   | 3.6  | 79 |
| 190 | Molecularly Tuned Free Volume of Vapor Cross-Linked 6FDA-Durene/ZIF-71 MMMs for H <sub>2</sub> /CO Separation at 150 °C. <i>Advanced Materials</i> , <b>2017</b> , 29, 1603833  | 24   | 78 |
| 189 | Novel PVDF membranes comprising n-butylamine functionalized graphene oxide for direct contact membrane distillation. <i>Journal of Membrane Science</i> , <b>2017</b> , 539, 34-42  | 9.6  | 78 |
| 188 | High-performance composite hollow fiber membrane for flue gas and air separations. <i>Journal of Membrane Science</i> , <b>2017</b> , 541, 367-377  | 9.6  | 78 |
| 187 | From ultrafiltration to nanofiltration: Hydrazine cross-linked polyacrylonitrile hollow fiber membranes for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , <b>2017</b> , 542, 289-299                     | 9.6  | 74 |
| 186 | Chiral assembly of gold nanorods with collective plasmonic circular dichroism response. <i>Soft Matter</i> , <b>2011</b> , 7, 8370  | 3.6  | 74 |
| 185 | Pharmaceutical concentration using organic solvent forward osmosis for solvent recovery. <i>Nature Communications</i> , <b>2018</b> , 9, 1426   | 17.4 | 71 |
| 184 | Particle-Size Effects on Gas Transport Properties of 6FDA-Durene/ZIF-71 Mixed Matrix Membranes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 9507-9517  | 3.9  | 70 |
| 183 | The study of elongation and shear rates in spinning process and its effect on gas separation performance of Poly(ether sulfone) (PES) hollow fiber membranes. <i>Chemical Engineering Science</i> , <b>2004</b> , 59, 1053-1062 | 4.4  | 70 |
| 182 | Formation of Cellulose Acetate Membranes via Phase Inversion Using Ionic Liquid, [BMIM]SCN, As the Solvent. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 8761-8769                                | 3.9  | 68 |
| 181 | Polyamide-imide nanofiltration hollow fiber membranes with elongation-induced nano-pore evolution. <i>AIChE Journal</i> , <b>2010</b> , 56, 1481-1494   | 3.6  | 68 |
| 180 | Self-standing and flexible covalent organic framework (COF) membranes for molecular separation. <i>Science Advances</i> , <b>2020</b> , 6,  | 14.3 | 66 |
| 179 | Freeze desalination of seawater using LNG cold energy. <i>Water Research</i> , <b>2016</b> , 102, 282-293   | 12.5 | 65 |
| 178 | Preparation and characterization of pore-suspending biomimetic membranes embedded with Aquaporin Z on carboxylated polyethylene glycol polymer cushion. <i>Soft Matter</i> , <b>2011</b> , 7, 7274                              | 3.6  | 64 |
| 177 | Evolution of nano-particle distribution during the fabrication of mixed matrix TiO <sub>2</sub> -polyimide hollow fiber membranes. <i>Chemical Engineering Science</i> , <b>2006</b> , 61, 6228-6233                            | 4.4  | 64 |
| 176 | Fundamental understanding of the effect of air-gap distance on the fabrication of hollow fiber membranes. <i>Journal of Applied Polymer Science</i> , <b>1999</b> , 72, 379-395   | 2.9  | 64 |
| 175 | High-performance UiO-66/polyimide mixed matrix membranes for ethanol, isopropanol and n-butanol dehydration via pervaporation. <i>Journal of Membrane Science</i> , <b>2017</b> , 531, 16-26                                    | 9.6  | 63 |



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|-----|---|------|----|
| 174 | Surface energy of thermotropic liquid crystalline polyesters and polyesteramide. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1998</b> , 36, 2327-2337   | 2.6  | 63 |
| 173 | Graphene oxide (GO) laminar membranes for concentrating pharmaceuticals and food additives in organic solvents. <i>Carbon</i> , <b>2018</b> , 130, 503-514  | 10.4 | 62 |
| 172 | Na <sup>+</sup> functionalized carbon quantum dot incorporated thin-film nanocomposite membranes for selenium and arsenic removal. <i>Journal of Membrane Science</i> , <b>2018</b> , 564, 483-491  | 9.6  | 62 |
| 171 | A novel crosslinking technique towards the fabrication of high-flux polybenzimidazole (PBI) membranes for organic solvent nanofiltration (OSN). <i>Separation and Purification Technology</i> , <b>2019</b> , 209, 182-192                                      | 8.3  | 62 |
| 170 | Design of zero liquid discharge desalination (ZLDD) systems consisting of freeze desalination, membrane distillation, and crystallization powered by green energies. <i>Desalination</i> , <b>2019</b> , 458, 66-75   | 10.3 | 61 |
| 169 | Polybenzimidazole nanofiltration hollow fiber for cephalexin separation. <i>AIChE Journal</i> , <b>2006</b> , 52, 1363-1377   | 13.7 | 61 |
| 168 | Robust and high performance pressure retarded osmosis hollow fiber membranes for osmotic power generation. <i>AIChE Journal</i> , <b>2014</b> , 60, 1107-1119   | 3.6  | 60 |
| 167 | Blends of a Polymer of Intrinsic Microporosity and Partially Sulfonated Polyphenylenesulfone for Gas Separation. <i>ChemSusChem</i> , <b>2016</b> , 9, 1953-62  | 8.3  | 60 |
| 166 | Thin film nanocomposite hollow fiber membranes comprising Na-functionalized carbon quantum dots for brackish water desalination. <i>Water Research</i> , <b>2019</b> , 154, 54-61   | 12.5 | 58 |
| 165 | A slow/fast phase separation (SFPS) process to fabricate dual-layer hollow fiber substrates for thin-film composite (TFC) organic solvent nanofiltration (OSN) membranes. <i>Chemical Engineering Science</i> , <b>2015</b> , 129, 232-242                      | 4.4  | 58 |
| 164 | PIM-1 as an organic filler to enhance the gas separation performance of Ultem polyetherimide. <i>Journal of Membrane Science</i> , <b>2014</b> , 453, 614-623   | 9.6  | 58 |
| 163 | Physical aging and plasticization of thick and thin films of the thermally rearranged ortho-functional polyimide 6FDA-BIAB. <i>Journal of Membrane Science</i> , <b>2014</b> , 458, 27-35   | 9.6  | 58 |
| 162 | PAMAM dendrimer-induced cross-linking modification of polyimide membranes. <i>Langmuir</i> , <b>2004</b> , 20, 2966-9   | 4    | 58 |
| 161 | Thermal Imidization of the Precursor of a Liquid Crystalline Polyimide. <i>Macromolecular Materials and Engineering</i> , <b>2002</b> , 287, 931-937  | 3.9  | 58 |
| 160 | Investigation of shear stress effect within a spinneret on flux, separation and thermomechanical properties of hollow fiber ultrafiltration membranes. <i>Journal of Membrane Science</i> , <b>2000</b> , 175, 197-213  | 9.6  | 58 |
| 159 | Flexible Hybrid Membranes of NiCo <sub>2</sub> O <sub>4</sub> -Doped Carbon [email protected]2 Core/Shell Nanostructures for High-Performance Supercapacitors. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 13442-13450                          | 3.8  | 57 |
| 158 | Effect of Shear Stress within the Spinneret on Hollow Fiber Membrane Morphology and Separation Performance. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1998</b> , 37, 3930-3938  | 3.9  | 57 |
| 157 | Solvent resistant hollow fiber membranes comprising P84 polyimide and amine-functionalized carbon nanotubes with potential applications in pharmaceutical, food, and petrochemical industries. <i>Chemical Engineering Journal</i> , <b>2018</b> , 345, 174-185 | 14.7 | 56 |

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| 156 | Design of high efficiency PVDF-PEG hollow fibers for air filtration of ultrafine particles. <i>Journal of Membrane Science</i> , <b>2017</b> , 535, 342-349   | 9.6  | 55 |
| 155 | Fabrication of loose inner-selective polyethersulfone (PES) hollow fibers by one-step spinning process for nanofiltration (NF) of textile dyes. <i>Journal of Membrane Science</i> , <b>2017</b> , 541, 413-424 | 9.6  | 55 |
| 154 | A novel primer to prevent nanoparticle agglomeration in mixed matrix membranes. <i>AIChE Journal</i> , <b>2007</b> , 53, 2470-2475  | 3.6  | 55 |
| 153 | Fluorographite modified PVDF membranes for seawater desalination via direct contact membrane distillation. <i>Desalination</i> , <b>2017</b> , 413, 119-126   | 10.3 | 54 |
| 152 | Design and synthesis of a fluoro-silane amine monomer for novel thin film composite membranes to dehydrate ethanol via pervaporation. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 9814           | 13   | 54 |
| 151 | Investigation of amphoteric polybenzimidazole (PBI) nanofiltration hollow fiber membrane for both cation and anions removal. <i>Journal of Membrane Science</i> , <b>2008</b> , 310, 557-566                    | 9.6  | 54 |
| 150 | Membrane fouling and anti-fouling strategies using RO retentate from a municipal water recycling plant as the feed for osmotic power generation. <i>Water Research</i> , <b>2016</b> , 88, 144-155              | 12.5 | 53 |
| 149 | Ferric and cobaltous hydroacid complexes for forward osmosis (FO) processes. <i>Water Research</i> , <b>2014</b> , 58, 230-8  | 12.5 | 53 |
| 148 | Physical aging and carbon dioxide plasticization of thin polyimide films in mixed gas permeation. <i>Journal of Membrane Science</i> , <b>2014</b> , 450, 457-468   | 9.6  | 52 |
| 147 | Silica Nanohybrid Membranes with High CO <sub>2</sub> Affinity for Green Hydrogen Purification. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 634-642   | 21.8 | 52 |
| 146 | The observation of elongation dependent macrovoid evolution in single- and dual-layer asymmetric hollow fiber membranes. <i>Chemical Engineering Science</i> , <b>2004</b> , 59, 4657-4660                      | 4.4  | 52 |
| 145 | Thermally treated ammonia functionalized graphene oxide/polyimide membranes for pervaporation dehydration of isopropanol. <i>Journal of Membrane Science</i> , <b>2017</b> , 528, 231-242                       | 9.6  | 51 |
| 144 | Zwitterions coated hollow fiber membranes with enhanced antifouling properties for osmotic power generation from municipal wastewater. <i>Water Research</i> , <b>2016</b> , 104, 389-396                       | 12.5 | 51 |
| 143 | Hollow Fiber Membrane Dehumidification Device for Air Conditioning System. <i>Membranes</i> , <b>2015</b> , 5, 722-738  | 3.8  | 51 |
| 142 | Synthesis and properties of fluoro-polyetherimides. <i>Polymer Engineering and Science</i> , <b>2000</b> , 40, 1318-1329  | 2.3  | 51 |
| 141 | Novel Hollow Fiber Air Filters for the Removal of Ultrafine Particles in PM with Repetitive Usage Capability. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 10041-10049                     | 10.3 | 50 |
| 140 | Highly permeable aquaporin-embedded biomimetic membranes featuring a magnetic-aided approach. <i>RSC Advances</i> , <b>2013</b> , 3, 9178   | 3.7  | 49 |
| 139 | Phase Inversion Directly Induced Tight Ultrafiltration (UF) Hollow Fiber Membranes for Effective Removal of Textile Dyes. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 14254-14261         | 10.3 | 49 |



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| 138 | Flexible thermally treated 3D PIM-CD molecular sieve membranes exceeding the upper bound line for propylene/propane separation. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 4583-4595  | 13   | 48 |
| 137 | Pervaporation dehydration of acetone using P84 co-polyimide flat sheet membranes modified by vapor phase crosslinking. <i>Journal of Membrane Science</i> , <b>2014</b> , 458, 76-85  | 9.6  | 48 |
| 136 | Dual-layer PBI/P84 hollow fibers for pervaporation dehydration of acetone. <i>AIChE Journal</i> , <b>2012</b> , 58, 1133-1145   | 3.6  | 48 |
| 135 | Negatively charged hyperbranched polyglycerol grafted membranes for osmotic power generation from municipal wastewater. <i>Water Research</i> , <b>2016</b> , 89, 50-8  | 12.5 | 47 |
| 134 | Miscible blends of carboxylated polymers of intrinsic microporosity (cPIM-1) and Matrimid. <i>Polymer</i> , <b>2015</b> , 59, 290-297   | 3.9  | 46 |
| 133 | Robust thin film composite PDMS/PAN hollow fiber membranes for water vapor removal from humid air and gases. <i>Separation and Purification Technology</i> , <b>2018</b> , 202, 345-356   | 8.3  | 46 |
| 132 | Carbon Quantum Dots Grafted Antifouling Membranes for Osmotic Power Generation via Pressure-Retarded Osmosis Process. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 14016-14023   | 10.3 | 46 |
| 131 | Robust polybenzimidazole (PBI) hollow fiber membranes for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , <b>2019</b> , 572, 580-587   | 9.6  | 46 |
| 130 | Thin-film composite hollow fiber membrane with inorganic salt additives for high mechanical strength and high power density for pressure-retarded osmosis. <i>Journal of Membrane Science</i> , <b>2018</b> , 555, 388-397                                | 9.6  | 45 |
| 129 | Forward osmosis: an emerging technology for sustainable supply of clean water. <i>Clean Technologies and Environmental Policy</i> , <b>2012</b> , 14, 507-511   | 4.3  | 45 |
| 128 | Ultrathin polymeric interpenetration network with separation performance approaching ceramic membranes for biofuel. <i>AIChE Journal</i> , <b>2009</b> , 55, 75-86  | 3.6  | 45 |
| 127 | Facile fabrication of sulfonated polyphenylenesulfone (sPPSU) membranes with high separation performance for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , <b>2018</b> , 549, 550-558  | 9.6  | 44 |
| 126 | Thin-film composite membranes with modified polyvinylidene fluoride substrate for ethanol dehydration via pervaporation. <i>Chemical Engineering Science</i> , <b>2014</b> , 118, 173-183   | 4.4  | 43 |
| 125 | Micro-morphology and formation of layer-by-layer membranes and their performance in osmotically driven processes. <i>Chemical Engineering Science</i> , <b>2013</b> , 101, 13-26  | 4.4  | 43 |
| 124 | Hybrid pressure retarded osmosis-membrane distillation (PROMD) process for osmotic power and clean water generation. <i>Environmental Science: Water Research and Technology</i> , <b>2015</b> , 1, 507-515   | 4.2  | 43 |
| 123 | Facile fabrication of solvent resistant thin film composite membranes by interfacial crosslinking reaction between polyethylenimine and dibromo-p-xylene on polybenzimidazole substrates. <i>Journal of Membrane Science</i> , <b>2018</b> , 560, 115-124 | 9.6  | 43 |
| 122 | Forward osmosis for oily wastewater reclamation: Multi-charged oxalic acid complexes as draw solutes. <i>Water Research</i> , <b>2017</b> , 122, 580-590  | 12.5 | 42 |
| 121 | The forward osmosis-pressure retarded osmosis (FO-PRO) hybrid system: A new process to mitigate membrane fouling for sustainable osmotic power generation. <i>Journal of Membrane Science</i> , <b>2018</b> , 559, 63-74                                  | 9.6  | 42 |

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| 120 | Investigations of inorganic and organic fouling behaviors, antifouling and cleaning strategies for pressure retarded osmosis (PRO) membrane using seawater desalination brine and wastewater. <i>Water Research</i> , <b>2016</b> , 103, 264-275 | 12.5 | 42 |
| 119 | Effects of free volume in thin-film composite membranes on osmotic power generation. <i>AIChE Journal</i> , <b>2013</b> , 59, 4749-4761  | 3.6  | 42 |
| 118 | Advanced FO membranes from newly synthesized CAP polymer for wastewater reclamation through an integrated FO-MD hybrid system. <i>AIChE Journal</i> , <b>2013</b> , 59, 1245-1254  | 3.6  | 42 |
| 117 | Mixed matrix membranes with nano-sized functional UiO-66-type MOFs embedded in 6FDA-HAB/DABA polyimide for dehydration of C1-C3 alcohols via pervaporation. <i>Journal of Membrane Science</i> , <b>2018</b> , 549, 217-226                      | 9.6  | 41 |
| 116 | Development of high performance carboxylated PIM-1/P84 blend membranes for pervaporation dehydration of isopropanol and CO <sub>2</sub> /CH <sub>4</sub> separation. <i>Journal of Membrane Science</i> , <b>2016</b> , 518, 110-119             | 9.6  | 40 |
| 115 | Outer-selective thin film composite (TFC) hollow fiber membranes for osmotic power generation. <i>Journal of Membrane Science</i> , <b>2016</b> , 505, 157-166   | 9.6  | 39 |
| 114 | Formation of defect-free polyetherimide/PIM-1 hollow fiber membranes for gas separation. <i>AIChE Journal</i> , <b>2014</b> , 60, 3848-3858  | 3.6  | 39 |
| 113 | Tuning water content in polymer dopes to boost the performance of outer-selective thin-film composite (TFC) hollow fiber membranes for osmotic power generation. <i>Journal of Membrane Science</i> , <b>2017</b> , 524, 97-107                  | 9.6  | 39 |
| 112 | Design and fabrication of inner-selective thin-film composite (TFC) hollow fiber modules for pressure retarded osmosis (PRO). <i>Separation and Purification Technology</i> , <b>2017</b> , 172, 32-42   | 8.3  | 39 |
| 111 | Fabrication and use of hollow fiber thin film composite membranes for ethanol dehydration. <i>Journal of Membrane Science</i> , <b>2014</b> , 450, 124-137   | 9.6  | 39 |
| 110 | Liquidlike Poly(ethylene glycol) Supported in the Organic-Inorganic Matrix for CO <sub>2</sub> Removal. <i>Macromolecules</i> , <b>2011</b> , 44, 5268-5280  | 5.5  | 39 |
| 109 | The development of high-performance 6FDA-NDA/DABA/POSS/Ultem® dual-layer hollow fibers for ethanol dehydration via pervaporation. <i>Journal of Membrane Science</i> , <b>2013</b> , 447, 163-176  | 9.6  | 38 |
| 108 | Effective As(III) Removal by A Multi-Charged Hydroacid Complex Draw Solute Facilitated Forward Osmosis-Membrane Distillation (FO-MD) Processes. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 2363-70                        | 10.3 | 37 |
| 107 | Cleaning strategies and membrane flux recovery on anti-fouling membranes for pressure retarded osmosis. <i>Journal of Membrane Science</i> , <b>2017</b> , 522, 116-123  | 9.6  | 36 |
| 106 | Gas transport properties of 6FDA-durene/1,3-phenylenediamine (mPDA) copolyimides. <i>Journal of Applied Polymer Science</i> , <b>2001</b> , 81, 3552-3564  | 2.9  | 36 |
| 105 | 110th Anniversary: Selection of Cross-Linkers and Cross-Linking Procedures for the Fabrication of Solvent-Resistant Nanofiltration Membranes: A Review. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 10678-10691   | 3.9  | 35 |
| 104 | Molecularly tunable thin-film nanocomposite membranes with enhanced molecular sieving for organic solvent forward osmosis. <i>Nature Communications</i> , <b>2020</b> , 11, 1198   | 17.4 | 34 |
| 103 | Advanced Anti-Fouling Membranes for Osmotic Power Generation from Wastewater via Pressure Retarded Osmosis (PRO). <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 6686-6694  | 10.3 | 34 |

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|-----|---|------|----|
| 102 | Effects of Different Ionic Liquids as Green Solvents on the Formation and Ultrafiltration Performance of CA Hollow Fiber Membranes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 7505-7513                                  | 3.9  | 33 |
| 101 | Facile Preparation of Antifouling Hollow Fiber Membranes for Sustainable Osmotic Power Generation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 1154-1160  | 8.3  | 33 |
| 100 | Separation of vegetable oil compounds and solvent recovery using commercial organic solvent nanofiltration membranes. <i>Journal of Membrane Science</i> , <b>2019</b> , 588, 117202  | 9.6  | 32 |
| 99  | Evolution of micro-deformation in inner-selective thin film composite hollow fiber membranes and its implications for osmotic power generation. <i>Journal of Membrane Science</i> , <b>2016</b> , 516, 104-112   | 9.6  | 32 |
| 98  | PVDF hollow fibers with novel sandwich structure and superior wetting resistance for vacuum membrane distillation. <i>Desalination</i> , <b>2017</b> , 417, 94-101  | 10.3 | 31 |
| 97  | Design of nanofiltration (NF) hollow fiber membranes made from functionalized bore fluids containing polyethyleneimine (PEI) for heavy metal removal. <i>Journal of Membrane Science</i> , <b>2020</b> , 603, 118022                                      | 9.6  | 31 |
| 96  | New polyethersulfone (PESU) hollow fiber membranes for CO <sub>2</sub> capture. <i>Journal of Membrane Science</i> , <b>2018</b> , 552, 305-314   | 9.6  | 31 |
| 95  | Molecular Design of Nanofiltration Membranes for the Recovery of Phosphorus from Sewage Sludge. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 5570-5577   | 8.3  | 31 |
| 94  | In-situ synthesis and cross-linking of polyamide thin film composite (TFC) membranes for bioethanol applications. <i>Journal of Membrane Science</i> , <b>2014</b> , 458, 47-57   | 9.6  | 30 |
| 93  | Membrane development and energy analysis of freeze desalination-vacuum membrane distillation hybrid systems powered by LNG regasification and solar energy. <i>Desalination</i> , <b>2019</b> , 449, 16-25  | 10.3 | 30 |
| 92  | Activated carbon-filled cellulose acetate hollow-fiber membrane for cell immobilization and phenol degradation. <i>Journal of Applied Polymer Science</i> , <b>2000</b> , 76, 695-707   | 2.9  | 29 |
| 91  | Can Composite Janus Membranes with an Ultrathin Dense Hydrophilic Layer Resist Wetting in Membrane Distillation?. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 12713-12722   | 10.3 | 29 |
| 90  | Polyarylether membranes for dehydration of ethanol and methanol via pervaporation. <i>Separation and Purification Technology</i> , <b>2018</b> , 193, 165-174   | 8.3  | 29 |
| 89  | Structural Tuning of Polymers of Intrinsic Microporosity via the Copolymerization with Macrocyclic 4-tert-butylcalix[4]arene for Enhanced Gas Separation Performance. <i>Advanced Sustainable Systems</i> , <b>2018</b> , 2, 1800044                      | 5.9  | 28 |
| 88  | Novel Polybenzimidazole (PBI) Nanofiltration Membranes for the Separation of Sulfate and Chromate from High Alkalinity Brine To Facilitate the Chlor-Alkali Process. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2007</b> , 46, 1572-1577 | 3.9  | 28 |
| 87  | Rheology, morphology and properties of LCP/Nylon 66 composite fibers. <i>Polymer Composites</i> , <b>2000</b> , 21, 114-123   | 3    | 28 |
| 86  | Green Design of Poly(m-Phenylene Isophthalamide)-Based Thin-Film Composite Membranes for Organic Solvent Nanofiltration and Concentrating Lecithin in Hexane. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 10696-10705             | 8.3  | 27 |
| 85  | Molecular interactions between polybenzimidazole and [EMIM]OAc, and derived ultrafiltration membranes for protein separation. <i>Green Chemistry</i> , <b>2012</b> , 14, 1405   | 10   | 27 |

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|----|--|------|----|
| 84 | Infiltrating molecular gatekeepers with coexisting molecular solubility and 3D-intrinsic porosity into a microporous polymer scaffold for gas separation. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 6196-6209 | 13   | 27 |
| 83 | Pre-treatment of wastewater retentate to mitigate fouling on the pressure retarded osmosis (PRO) process. <i>Separation and Purification Technology</i> , <b>2019</b> , 215, 390-397   | 8.3  | 26 |
| 82 | Sulfonated hyperbranched polyglycerol grafted membranes with antifouling properties for sustainable osmotic power generation using municipal wastewater. <i>Journal of Membrane Science</i> , <b>2018</b> , 563, 521-530       | 9.6  | 26 |
| 81 | Developing ultra-high gas permeance PVDF hollow fibers for air filtration applications. <i>Separation and Purification Technology</i> , <b>2018</b> , 205, 184-195   | 8.3  | 26 |
| 80 | Nanoparticles Embedded in Amphiphilic Membranes for Carbon Dioxide Separation and Dehumidification. <i>ChemSusChem</i> , <b>2017</b> , 10, 4046-4055   | 8.3  | 25 |
| 79 | The development of chemically modified P84 Co-polyimide membranes as supported liquid membrane matrix for Cu(II) removal with prolonged stability. <i>Chemical Engineering Science</i> , <b>2007</b> , 62, 1721-1729           | 4.4  | 25 |
| 78 | Aging phenomenon of 6FDA-polyimide/polyacrylonitrile composite hollow fibers. <i>Journal of Applied Polymer Science</i> , <b>1996</b> , 59, 77-82  | 2.9  | 25 |
| 77 | Mechanically Strong and Flexible Hydrolyzed Polymers of Intrinsic Microporosity (PIM-1) Membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2017</b> , 55, 344-354                                      | 2.6  | 23 |
| 76 | Nanoclays-Incorporated Thin-Film Nanocomposite Membranes for Reverse Osmosis Desalination. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 1902108   | 4.6  | 23 |
| 75 | Development of Novel Multichannel Rectangular Membranes with Grooved Outer Selective Surface for Membrane Distillation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 14046-14054                 | 3.9  | 23 |
| 74 | Determination of pore sizes and surface porosity and the effect of shear stress within a spinneret on asymmetric hollow fiber membranes. <i>Journal of Membrane Science</i> , <b>2001</b> , 188, 29-37                         | 9.6  | 23 |
| 73 | Exploring the spinning and operations of multibore hollow fiber membranes for vacuum membrane distillation. <i>AIChE Journal</i> , <b>2014</b> , 60, 1078-1090   | 3.6  | 22 |
| 72 | Pushing the limits of high performance dual-layer hollow fiber fabricated via I2PS process in dehydration of ethanol. <i>AIChE Journal</i> , <b>2013</b> , 59, 3006-3018   | 3.6  | 22 |
| 71 | A pilot study on pressure retarded osmosis operation and effective cleaning strategies. <i>Desalination</i> , <b>2017</b> , 420, 273-282   | 10.3 | 22 |
| 70 | The physical aging phenomenon of 6FDA-durene polyimide hollow fiber membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2000</b> , 38, 765-775  | 2.6  | 22 |
| 69 | Thermal decomposition behavior of main-chain thermotropic liquid crystalline polymers, Vectra A-950, B-950, and Xydar SRT-900. <i>Journal of Applied Polymer Science</i> , <b>1999</b> , 73, 2195-2207                         | 2.9  | 22 |
| 68 | In-situ cross-linked PVDF membranes with enhanced mechanical durability for vacuum membrane distillation. <i>AIChE Journal</i> , <b>2016</b> , 62, 4013-4022   | 3.6  | 21 |
| 67 | Experimental and computational studies of membrane extraction of Cu(II). <i>AIChE Journal</i> , <b>2006</b> , 52, 3266-3277  | 3.2  | 21 |

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|----|--|------|----|
| 66 | Thin-film nanocomposite membranes incorporated with defective ZIF-8 nanoparticles for brackish water and seawater desalination. <i>Journal of Membrane Science</i> , <b>2021</b> , 625, 119158               | 9.6  | 21 |
| 65 | Ultrahigh Flux Composite Hollow Fiber Membrane via Highly Crosslinked PDMS for Recovery of Hydrocarbons: Propane and Propene. <i>Macromolecular Rapid Communications</i> , <b>2018</b> , 39, 1700535         | 4.8  | 20 |
| 64 | One-step cross-linking and tannic acid modification of polyacrylonitrile hollow fibers for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , <b>2020</b> , 610, 118294                    | 9.6  | 19 |
| 63 | Gypsum (CaSO <sub>4</sub> ·2H <sub>2</sub> O) Scaling on Polybenzimidazole and Cellulose Acetate Hollow Fiber Membranes under Forward Osmosis. <i>Membranes</i> , <b>2013</b> , 3, 354-74                    | 3.8  | 19 |
| 62 | Thermal analysis of vectra B950 liquid crystal polymer. <i>Polymer Engineering and Science</i> , <b>1999</b> , 39, 953-962   | 9.3  | 19 |
| 61 | Teflon AF2400/Ultem composite hollow fiber membranes for alcohol dehydration by high-temperature vapor permeation. <i>AIChE Journal</i> , <b>2016</b> , 62, 1747-1757  | 3.6  | 19 |
| 60 | Schiff base reaction assisted one-step self-assembly method for efficient gravity-driven oil-water emulsion separation. <i>Separation and Purification Technology</i> , <b>2019</b> , 213, 437-446           | 8.3  | 19 |
| 59 | Mitigation of inorganic fouling on pressure retarded osmosis (PRO) membranes by coagulation pretreatment of the wastewater concentrate feed. <i>Journal of Membrane Science</i> , <b>2019</b> , 572, 658-667 | 9.6  | 19 |
| 58 | Rheologically controlled design of nature-inspired superhydrophobic and self-cleaning membranes for clean water production. <i>Npj Clean Water</i> , <b>2020</b> , 3,  | 11.2 | 18 |
| 57 | Effect of polymer compositions on the fabrication of poly(ortho-ester) microspheres for controlled release of protein. <i>Journal of Applied Polymer Science</i> , <b>2001</b> , 80, 1630-1642               | 2.9  | 18 |
| 56 | Dual-skinned polyamide/poly(vinylidene fluoride)/cellulose acetate membranes with embedded woven. <i>Journal of Membrane Science</i> , <b>2016</b> , 520, 840-849  | 9.6  | 18 |
| 55 | Mass transport of various membrane configurations in pressure retarded osmosis (PRO). <i>Journal of Membrane Science</i> , <b>2017</b> , 537, 160-176  | 9.6  | 17 |
| 54 | Green Layer-by-Layer Method for the Preparation of Polyacrylonitrile-Supported Zinc Benzene-1,4-dicarboxylic Acid Membranes. <i>ChemSusChem</i> , <b>2018</b> , 11, 2612-2619                                | 8.3  | 17 |
| 53 | Thickness dependent thermal rearrangement of an ortho-functional polyimide. <i>Journal of Membrane Science</i> , <b>2014</b> , 450, 308-312  | 9.6  | 17 |
| 52 | Thermally evolved and boron bridged graphene oxide (GO) frameworks constructed on microporous hollow fiber substrates for water and organic matters separation. <i>Carbon</i> , <b>2017</b> , 123, 193-204   | 10.4 | 17 |
| 51 | Synthesis and structure of wholly aromatic liquid-crystalline polyesters containing meta- and ortholinkages. <i>Journal of Polymer Science Part A</i> , <b>2001</b> , 39, 1242-1248                          | 2.5  | 17 |
| 50 | Selection of crosslinkers and control of microstructure of vapor-phase crosslinked composite membranes for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , <b>2020</b> , 616, 118582    | 9.6  | 17 |
| 49 | Experiments and Modeling of Boric Acid Permeation through Double-Skinned Forward Osmosis Membranes. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 7696-705                               | 10.3 | 16 |



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| 48 | Cooling Crystallization of Sodium Chloride via Hollow Fiber Devices to Convert Waste Concentrated Brines to Useful Products. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 10183-10192                  | 3.9  | 16 |
| 47 | Two-dimensional (2D) particle coating on membranes for pervaporation dehydration of isopropanol: A new approach to seal defects and enhance separation performance. <i>Journal of Membrane Science</i> , <b>2017</b> , 544, 378-387  | 9.6  | 16 |
| 46 | Engineering design of outer-selective tribore hollow fiber membranes for forward osmosis and oil-water separation. <i>AIChE Journal</i> , <b>2015</b> , 61, 4491-4501  | 3.6  | 15 |
| 45 | A Critical Review of Polybenzimidazoles. <i>Polymer Reviews</i> , <b>1997</b> , 37, 277-301  | 14   | 15 |
| 44 | Nanofiltration-Inspired Janus Membranes with Simultaneous Wetting and Fouling Resistance for Membrane Distillation. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 7654-7664                                      | 10.3 | 15 |
| 43 | Hydrophobic Perfluoropolyether-Coated Thin-Film Composite Membranes for Organic Solvent Nanofiltration. <i>ACS Applied Polymer Materials</i> , <b>2019</b> , 1, 472-481  | 4.3  | 15 |
| 42 | Dehydration of industrial isopropanol (IPA) waste by pervaporation and vapor permeation membranes. <i>Journal of Applied Polymer Science</i> , <b>2018</b> , 135, 45086  | 2.9  | 13 |
| 41 | Exploration of ionic modification in dual-layer hollow fiber membranes for long-term high-performance protein separation. <i>AIChE Journal</i> , <b>2009</b> , 55, 321-330   | 3.6  | 13 |
| 40 | A fine match between the stereoselective ligands and membrane pore size for enhanced chiral separation. <i>AIChE Journal</i> , <b>2009</b> , 55, 2284-2291   | 3.6  | 13 |
| 39 | UiO-66-NH <sub>2</sub> incorporated dual-layer hollow fibers made by immiscibility induced phase separation (I2PS) process for ethanol dehydration via pervaporation. <i>Journal of Membrane Science</i> , <b>2020</b> , 595, 117571 | 9.6  | 13 |
| 38 | Effect of catalysts on thin-film polymerization of thermotropic liquid crystalline copolyester. <i>Journal of Polymer Science Part A</i> , <b>2000</b> , 38, 1257-1269   | 2.5  | 11 |
| 37 | Effects of monomer structures on the evolution of liquid crystal texture and crystallization during thin-film polymerization. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1999</b> , 37, 3084-3096               | 2.6  | 11 |
| 36 | Solvent Recovery via Organic Solvent Pressure Assisted Osmosis. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 4970-4978   | 3.9  | 10 |
| 35 | Membrane Pervaporation <b>2013</b> , 259-299   |      | 10 |
| 34 | Bulk Viscosity and Its Unstable Behavior upon Storage in Polyimide Precursor Solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 4266-4272   | 3.9  | 10 |
| 33 | Configuration effects of ortho, meta, and para linkages on liquid crystallinity during thin-film polymerization of poly(ester-amide)s. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2000</b> , 38, 2221-2231      | 2.6  | 10 |
| 32 | Rheological behavior and prediction for blending conditions of a thermotropic liquid crystalline polyester with nylon. <i>Polymers for Advanced Technologies</i> , <b>2000</b> , 11, 153-158   | 3.2  | 10 |
| 31 | Optimization of TFC-PES hollow fiber membranes for reverse osmosis (RO) and osmotically assisted reverse osmosis (OARO) applications. <i>Journal of Membrane Science</i> , <b>2021</b> , 625, 119156                                 | 9.6  | 10 |



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| 30 | Osmotic power production from seawater brine by hollow fiber membrane modules: Net power output and optimum operating conditions. <i>AIChE Journal</i> , <b>2016</b> , 62, 1216-1225   | 3.6  | 10 |
| 29 | Investigation of novel molecularly tunable thin-film nanocomposite nanofiltration hollow fiber membranes for boron removal. <i>Journal of Membrane Science</i> , <b>2021</b> , 620, 118887   | 9.6  | 10 |
| 28 | The Role of Fluorinated Aryl Ether Moiety in Polyimide-co-etherimide on Gas Transport Properties. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 5315-5323   | 3.9  | 9  |
| 27 | Sol-gel Synthesis and Characterization of SrFeCo <sub>0.5</sub> O <sub>3.25</sub> -Powder. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 5432-5435  | 3.9  | 8  |
| 26 | Studies on the phase transition and thermal stability of Xydar and Zenite series liquid crystalline polymers. <i>Polymer Engineering and Science</i> , <b>2000</b> , 40, 841-856   | 2.3  | 8  |
| 25 | Halo formation in asymmetric polyetherimide and polybenzimidazole blend hollow fiber membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1999</b> , 37, 1575-1585   | 2.6  | 8  |
| 24 | Novel membrane processes for the enantiomeric resolution of tryptophan by selective permeation enhancements. <i>AIChE Journal</i> , <b>2011</b> , 57, 1154-1162  | 3.6  | 7  |
| 23 | Anisotropic dielectric properties of polyimides consisting of various molar ratios of meta to para diamine with trifluoromethyl group. <i>Polymer Engineering and Science</i> , <b>2001</b> , 41, 1783-1793  | 2.3  | 7  |
| 22 | 3D-macrocycles impregnated polybenzimidazole hollow fiber membranes with excellent organic solvent resistance for industrial solvent recovery. <i>Journal of Membrane Science</i> , <b>2021</b> , 638, 119678  | 9.6  | 6  |
| 21 | Optimization of interfacial polymerization to fabricate thin-film composite hollow fiber membranes in modules for brackish water reverse osmosis. <i>Journal of Membrane Science</i> , <b>2021</b> , 626, 119187                                     | 9.6  | 5  |
| 20 | Synthesis and characterization of a metal chelate-bridged quasi-ladder main chain discotic liquid crystal polymer. <i>Liquid Crystals</i> , <b>2001</b> , 28, 477-481  | 2.3  | 4  |
| 19 | Membrane Technology: Advanced Porous Materials in Mixed Matrix Membranes (Adv. Mater. 47/2018). <i>Advanced Materials</i> , <b>2018</b> , 30, 1870355  | 24   | 4  |
| 18 | Revitalize integrally skinned hollow fiber membranes with spatially impregnated 3D-macrocycles for organic solvent nanofiltration. <i>Chemical Engineering Journal</i> , <b>2021</b> , 422, 130015   | 14.7 | 4  |
| 17 | Ternary fluoro-containing polyimide blends and fluoro-containing polyimide/polyester blends. <i>Polymers for Advanced Technologies</i> , <b>1997</b> , 8, 537-544  | 3.2  | 3  |
| 16 | Experimental and theoretical estimations of surface tensions for commercial liquid crystalline polymers, Vectra <sup>®</sup> A-950, B-950 and Xydar <sup>®</sup> BRT-900. <i>Macromolecular Chemistry and Physics</i> , <b>1998</b> , 199, 1013-1017 | 2.6  | 3  |
| 15 | Supramolecular Polymer Network Membranes with Molecular-Sieving Nanocavities for Efficient Pre-Combustion CO Capture.. <i>Small Methods</i> , <b>2022</b> , 6, e2101288  | 12.8 | 3  |
| 14 | Novel Cellulose Triacetate (CTA)/Cellulose Diacetate (CDA) Blend Membranes Enhanced by Amine Functionalized ZIF-8 for CO Separation. <i>Polymers</i> , <b>2021</b> , 13,   | 4.5  | 3  |
| 13 | Polybenzimidazoles (PBIs) and state-of-the-art PBI hollow fiber membranes for water, organic solvent and gas separations: a review. <i>Journal of Materials Chemistry A</i> ,  | 13   | 3  |

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| 12 | Plasticization-enhanced trimethylbenzene functionalized polyethersulfone hollow fiber membranes for propylene and propane separation. <i>Journal of Membrane Science</i> , <b>2022</b> , 647, 120293  | 9.6 | 2 |
| 11 | Tunable Supramolecular Cavities Molecularly Homogenized in Polymer Membranes for Ultraefficient Precombustion CO Capture. <i>Advanced Materials</i> , <b>2021</b> , e2105156  | 24  | 2 |
| 10 | Fabrication of thin-film composite hollow fiber membranes in modules for concentrating pharmaceuticals and separating sulphate from high salinity brine in the chlor-alkali process. <i>Journal of Membrane Science</i> , <b>2021</b> , 640, 119822 | 9.6 | 2 |
| 9  | Gas transport properties of 6FDA-durene/1,4-phenylenediamine (pPDA) copolyimides <b>2000</b> , 38, 2703   |     | 2 |
| 8  | Hydrogen Purification: UV-Rearranged PIM-1 Polymeric Membranes for Advanced Hydrogen Purification and Production (Adv. Energy Mater. 12/2012). <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 1414-1414 <sup>21.8</sup>                        |     | 1 |
| 7  | Evolution of surface chemistry and physical properties during thin film polymerization of thermotropic liquid crystalline polymers. <i>Journal of Adhesion Science and Technology</i> , <b>1999</b> , 13, 1193-1203 <sup>2</sup>                    |     | 1 |
| 6  | Tunable Supramolecular Cavities Molecularly Homogenized in Polymer Membranes for Ultraefficient Precombustion CO <sub>2</sub> Capture (Adv. Mater. 3/2022). <i>Advanced Materials</i> , <b>2022</b> , 34, 2270023 <sup>24</sup>                     |     | 1 |
| 5  | The effects of spinning conditions on asymmetric 6FDA/6FDAM polyimide hollow fibers for air separation <b>1997</b> , 65, 1555   |     | 1 |
| 4  | Novel Sandwich-Structured Hollow Fiber Membrane for High-Efficiency Membrane Distillation and Scale-Up for Pilot Validation.. <i>Membranes</i> , <b>2022</b> , 12,  | 3.8 | 1 |
| 3  | High recovery, point-of-collection plasma separation from blood using electrospun polyacrylonitrile membranes. <i>AIChE Journal</i> , <b>2021</b> , 67, e17088  | 3.6 | 0 |
| 2  | Materials for Water Remediation (Membranes) <b>2016</b> , 37-74   |     |   |
| 1  | Scale Up and Validation of Novel Tri-Bore PVDF Hollow Fiber Membranes for Membrane Distillation Application in Desalination and Industrial Wastewater Recycling. <i>Membranes</i> , <b>2022</b> , 12, 573   | 3.8 |   |