

Tai-Shung Chung

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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.

680
papers

44,313
citations

113
h-index

164
g-index

694
ext. papers

48,825
ext. citations

7.9
avg, IF

8.33
L-index

#	Paper	IF	Citations
680	Mixed matrix membranes (MMMs) comprising organic polymers with dispersed inorganic fillers for gas separation. <i>Progress in Polymer Science</i> , 2007 , 32, 483-507	29.6	1368
679	Recent advances in membrane distillation processes: Membrane development, configuration design and application exploring. <i>Journal of Membrane Science</i> , 2015 , 474, 39-56	9.6	587
678	Morphology, drug distribution, and in vitro release profiles of biodegradable polymeric microspheres containing protein fabricated by double-emulsion solvent extraction/evaporation method. <i>Biomaterials</i> , 2001 , 22, 231-41	15.6	563
677	Forward osmosis processes: Yesterday, today and tomorrow. <i>Desalination</i> , 2012 , 287, 78-81	10.3	470
676	Draw solutions for forward osmosis processes: Developments, challenges, and prospects for the future. <i>Journal of Membrane Science</i> , 2013 , 442, 225-237	9.6	340
675	Preparation and Characterization of Fast Response Macroporous Poly(N-isopropylacrylamide) Hydrogels. <i>Langmuir</i> , 2001 , 17, 6094-6099	4	335
674	Recent membrane development for pervaporation processes. <i>Progress in Polymer Science</i> , 2016 , 57, 1-31	29.6	318
673	Treatment of highly concentrated wastewater containing multiple synthetic dyes by a combined process of coagulation/flocculation and nanofiltration. <i>Journal of Membrane Science</i> , 2014 , 469, 306-315	9.6	314
672	Nanometric Graphene Oxide Framework Membranes with Enhanced Heavy Metal Removal via Nanofiltration. <i>Environmental Science & Technology</i> , 2015 , 49, 10235-42	10.3	309
671	Polyimides membranes for pervaporation and biofuels separation. <i>Progress in Polymer Science</i> , 2009 , 34, 1135-1160	29.6	308
670	Well-constructed cellulose acetate membranes for forward osmosis: Minimized internal concentration polarization with an ultra-thin selective layer. <i>Journal of Membrane Science</i> , 2010 , 360, 522-535	9.6	298
669	The effects of polymer chain rigidification, zeolite pore size and pore blockage on polyethersulfone (PES)-zeolite A mixed matrix membranes. <i>Journal of Membrane Science</i> , 2005 , 260, 45-55	9.6	296
668	Molecular elucidation of morphology and mechanical properties of PVDF hollow fiber membranes from aspects of phase inversion, crystallization and rheology. <i>Journal of Membrane Science</i> , 2009 , 340, 192-205	9.6	295
667	Evolution of polymeric hollow fibers as sustainable technologies: Past, present, and future. <i>Progress in Polymer Science</i> , 2012 , 37, 1401-1424	29.6	292
666	Thin film composite forward osmosis membranes based on polydopamine modified polysulfone substrates with enhancements in both water flux and salt rejection. <i>Chemical Engineering Science</i> , 2012 , 80, 219-231	4.4	287
665	Effects of novel silane modification of zeolite surface on polymer chain rigidification and partial pore blockage in polyethersulfone (PES)-zeolite A mixed matrix membranes. <i>Journal of Membrane Science</i> , 2006 , 275, 17-28	9.6	276
664	Emerging forward osmosis (FO) technologies and challenges ahead for clean water and clean energy applications. <i>Current Opinion in Chemical Engineering</i> , 2012 , 1, 246-257	5.4	271

663	Polymeric membranes for the hydrogen economy: Contemporary approaches and prospects for the future. <i>Journal of Membrane Science</i> , 2009 , 327, 18-31	9.6	270
662	Poly-/metal-benzimidazole nano-composite membranes for hydrogen purification. <i>Energy and Environmental Science</i> , 2011 , 4, 4171	35.4	260
661	Exploration of polyelectrolytes as draw solutes in forward osmosis processes. <i>Water Research</i> , 2012 , 46, 1318-26	12.5	258
660	The role of sulphonated polymer and macrovoid-free structure in the support layer for thin-film composite (TFC) forward osmosis (FO) membranes. <i>Journal of Membrane Science</i> , 2011 , 383, 214-223	9.6	256
659	Double-Skinned Forward Osmosis Membranes for Reducing Internal Concentration Polarization within the Porous Sublayer. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 4824-4831	3.9	241
658	Highly Water-Soluble Magnetic Nanoparticles as Novel Draw Solutes in Forward Osmosis for Water Reuse. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 5869-5876	3.9	236
657	Cellulose acetate nanofiltration hollow fiber membranes for forward osmosis processes. <i>Journal of Membrane Science</i> , 2010 , 355, 36-44	9.6	226
656	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> , 2008 , 63, 2587-2594	4.4	222
655	Effect of preparation conditions on morphology and release profiles of biodegradable polymeric microspheres containing protein fabricated by double-emulsion method. <i>Chemical Engineering Science</i> , 2000 , 55, 2223-2236	4.4	220
654	Sustainable water recovery from oily wastewater via forward osmosis-membrane distillation (FO-MD). <i>Water Research</i> , 2014 , 52, 112-21	12.5	209
653	Effect of preparation temperature on the characteristics and release profiles of PLGA microspheres containing protein fabricated by double-emulsion solvent extraction/evaporation method. <i>Journal of Controlled Release</i> , 2000 , 69, 81-96	11.7	208
652	Natural gas purification and olefin/paraffin separation using thermal cross-linkable co-polyimide/ZIF-8 mixed matrix membranes. <i>Journal of Membrane Science</i> , 2013 , 444, 173-183	9.6	205
651	Polybenzimidazole (PBI) nanofiltration hollow fiber membranes applied in forward osmosis process. <i>Journal of Membrane Science</i> , 2007 , 300, 6-12	9.6	204
650	Developing thin-film-composite forward osmosis membranes on the PES/SPSf substrate through interfacial polymerization. <i>AIChE Journal</i> , 2012 , 58, 770-781	3.6	200
649	Polyelectrolyte-promoted forward osmosis-membrane distillation (FO-MD) hybrid process for dye wastewater treatment. <i>Environmental Science & Technology</i> , 2012 , 46, 6236-43	10.3	200
648	High performance thin-film composite forward osmosis hollow fiber membranes with macrovoid-free and highly porous structure for sustainable water production. <i>Environmental Science & Technology</i> , 2012 , 46, 7358-65	10.3	198
647	Layer-by-layer construction of graphene oxide (GO) framework composite membranes for highly efficient heavy metal removal. <i>Journal of Membrane Science</i> , 2016 , 515, 230-237	9.6	192
646	Dual-layer hollow fibers with enhanced flux as novel forward osmosis membranes for water production. <i>Environmental Science & Technology</i> , 2009 , 43, 2800-5	10.3	191

645	Poly(amidoamine) dendrimer (PAMAM) grafted on thin film composite (TFC) nanofiltration (NF) hollow fiber membranes for heavy metal removal. <i>Journal of Membrane Science</i> , 2015 , 487, 117-126	9.6	190
644	Chelating polymer modified P84 nanofiltration (NF) hollow fiber membranes for high efficient heavy metal removal. <i>Water Research</i> , 2014 , 63, 252-61	12.5	190
643	Thin-film composite forward osmosis membranes with novel hydrophilic supports for desalination. <i>Journal of Membrane Science</i> , 2012 , 423-424, 543-555	9.6	189
642	Thin-Film Composite Membranes and Formation Mechanism of Thin-Film Layers on Hydrophilic Cellulose Acetate Propionate Substrates for Forward Osmosis Processes. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 10039-10050	3.9	186
641	High-Performance Thermally Self-Cross-Linked Polymer of Intrinsic Microporosity (PIM-1) Membranes for Energy Development. <i>Macromolecules</i> , 2012 , 45, 1427-1437	5.5	186
640	Membrane distillation with hydrophobic macrovoid-free PVDF/TFE hollow fiber membranes. <i>Separation and Purification Technology</i> , 2009 , 66, 229-236	8.3	184
639	Novel thin-film composite nanofiltration hollow fiber membranes with double repulsion for effective removal of emerging organic matters from water. <i>Journal of Membrane Science</i> , 2012 , 401-402, 152-162	9.6	182
638	Hyperbranched polyethyleneimine induced cross-linking of polyamide-imide nanofiltration hollow fiber membranes for effective removal of ciprofloxacin. <i>Environmental Science & Technology</i> , 2011 , 45, 4003-9	10.3	182
637	Gas transport properties of 6FDA-durene/1,4-phenylenediamine (pPDA) copolyimides. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000 , 38, 2703-2713	2.6	182
636	Integrated forward osmosis/membrane distillation (FOMD) hybrid system for the concentration of protein solutions. <i>Chemical Engineering Science</i> , 2011 , 66, 2421-2430	4.4	180
635	Dual-layer polybenzimidazole/polyethersulfone (PBI/PES) nanofiltration (NF) hollow fiber membranes for heavy metals removal from wastewater. <i>Journal of Membrane Science</i> , 2014 , 456, 117-127	9.6	177
634	High performance thin film composite pressure retarded osmosis (PRO) membranes for renewable salinity-gradient energy generation. <i>Journal of Membrane Science</i> , 2013 , 440, 108-121	9.6	175
633	Gas permeability, diffusivity, solubility, and aging characteristics of 6FDA-durene polyimide membranes. <i>Journal of Membrane Science</i> , 2001 , 186, 183-193	9.6	175
632	Positively charged nanofiltration (NF) membranes via UV grafting on sulfonated polyphenylenesulfone (sPPSU) for effective removal of textile dyes from wastewater. <i>Journal of Membrane Science</i> , 2012 , 417-418, 52-60	9.6	174
631	High performance membranes based on ionic liquid polymers for CO ₂ separation from the flue gas. <i>Green Chemistry</i> , 2012 , 14, 1052	10	170
630	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> , 2004 , 240, 67-79	9.6	169
629	Characterization of permeability and sorption in Matrimid/C60 mixed matrix membranes. <i>Journal of Membrane Science</i> , 2003 , 211, 91-99	9.6	167
628	A sulfonated polyphenylenesulfone (sPPSU) as the supporting substrate in thin film composite (TFC) membranes with enhanced performance for forward osmosis (FO). <i>Chemical Engineering Journal</i> , 2013 , 220, 15-23	14.7	165

627	The recent developments of thermotropic liquid crystalline polymers. <i>Polymer Engineering and Science</i> , 1986 , 26, 901-919	2.3	164
626	Hydrophilic Superparamagnetic Nanoparticles: Synthesis, Characterization, and Performance in Forward Osmosis Processes. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 382-388	3.9	161
625	Novel forward osmosis process to effectively remove heavy metal ions. <i>Journal of Membrane Science</i> , 2014 , 467, 188-194	9.6	160
624	Morphological architecture of dual-layer hollow fiber for membrane distillation with higher desalination performance. <i>Water Research</i> , 2011 , 45, 5489-500	12.5	160
623	Desalination process using super hydrophilic nanoparticles via forward osmosis integrated with ultrafiltration regeneration. <i>Desalination</i> , 2011 , 278, 194-202	10.3	156
622	Enhanced forward osmosis from chemically modified polybenzimidazole (PBI) nanofiltration hollow fiber membranes with a thin wall. <i>Chemical Engineering Science</i> , 2009 , 64, 1577-1584	4.4	155
621	Progress in pressure retarded osmosis (PRO) membranes for osmotic power generation. <i>Progress in Polymer Science</i> , 2015 , 51, 1-27	29.6	154
620	Polyethyleneimine (PEI) cross-linked P84 nanofiltration (NF) hollow fiber membranes for Pb ²⁺ removal. <i>Journal of Membrane Science</i> , 2014 , 452, 300-310	9.6	153
619	Study of draw solutes using 2-methylimidazole-based compounds in forward osmosis. <i>Journal of Membrane Science</i> , 2010 , 364, 242-252	9.6	151
618	Mixed Matrix PVDF Hollow Fiber Membranes with Nanoscale Pores for Desalination through Direct Contact Membrane Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 4474-4483	3.9	150
617	Pebax/POSS mixed matrix membranes for ethanol recovery from aqueous solutions via pervaporation. <i>Journal of Membrane Science</i> , 2011 , 379, 174-183	9.6	148
616	Fabrication of polybenzimidazole (PBI) nanofiltration hollow fiber membranes for removal of chromate. <i>Journal of Membrane Science</i> , 2006 , 281, 307-315	9.6	147
615	Room temperature ionic liquid/ZIF-8 mixed-matrix membranes for natural gas sweetening and post-combustion CO ₂ capture. <i>Journal of Membrane Science</i> , 2013 , 436, 221-231	9.6	146
614	Advanced Porous Materials in Mixed Matrix Membranes. <i>Advanced Materials</i> , 2018 , 30, e1802401	24	141
613	Nanofiltration hollow fiber membranes for textile wastewater treatment: Lab-scale and pilot-scale studies. <i>Chemical Engineering Science</i> , 2014 , 114, 51-57	4.4	140
612	Highly permeable and selective pore-spanning biomimetic membrane embedded with aquaporin Z. <i>Small</i> , 2012 , 8, 1185-90, 1125	11	140
611	Enhanced gas separation performance of nanocomposite membranes using MgO nanoparticles. <i>Journal of Membrane Science</i> , 2007 , 302, 207-217	9.6	140
610	Morphology and fracture behavior of intercalated epoxy/clay nanocomposites. <i>Journal of Applied Polymer Science</i> , 2004 , 94, 1236-1244	2.9	139

609	Highly porous and macrovoid-free PVDF hollow fiber membranes for membrane distillation by a solvent-dope solution co-extrusion approach. <i>Journal of Membrane Science</i> , 2009 , 331, 66-74	9.6	138
608	Reverse-selective polymeric membranes for gas separations. <i>Progress in Polymer Science</i> , 2013 , 38, 740-766	9.6	136
607	Macrovoid evolution and critical factors to form macrovoid-free hollow fiber membranes. <i>Journal of Membrane Science</i> , 2008 , 318, 363-372	9.6	135
606	The characterization of flat composite nanofiltration membranes and their applications in the separation of Cephalexin. <i>Journal of Membrane Science</i> , 2005 , 247, 37-50	9.6	135
605	Anti-fouling behavior of hyperbranched polyglycerol-grafted poly(ether sulfone) hollow fiber membranes for osmotic power generation. <i>Environmental Science & Technology</i> , 2014 , 48, 9898-907	10.3	134
604	Osmotic power generation by pressure retarded osmosis using seawater brine as the draw solution and wastewater retentate as the feed. <i>Journal of Membrane Science</i> , 2015 , 479, 148-158	9.6	133
603	Separation of CO ₂ /CH ₄ through carbon molecular sieve membranes derived from P84 polyimide. <i>Carbon</i> , 2004 , 42, 3123-3131	10.4	133
602	Pervaporation study on the dehydration of aqueous butanol solutions: a comparison of flux vs. permeance, separation factor vs. selectivity. <i>Journal of Membrane Science</i> , 2004 , 245, 199-210	9.6	133
601	Novel Ag ⁺ -zeolite/polymer mixed matrix membranes with a high CO ₂ /CH ₄ selectivity. <i>AIChE Journal</i> , 2007 , 53, 610-616	3.6	131
600	Applications of carbon quantum dots (CQDs) in membrane technologies: A review. <i>Water Research</i> , 2018 , 147, 43-49	12.5	131
599	UiO-66 incorporated thin-film nanocomposite membranes for efficient selenium and arsenic removal. <i>Journal of Membrane Science</i> , 2017 , 541, 262-270	9.6	130
598	Effect of Mixed Solvents on Characteristics of Poly(N-isopropylacrylamide) Gels. <i>Langmuir</i> , 2002 , 18, 2538-2542	4	130
597	Morphological aspects and structure control of dual-layer asymmetric hollow fiber membranes formed by a simultaneous co-extrusion approach. <i>Journal of Membrane Science</i> , 2004 , 243, 155-175	9.6	129
596	Highly permeable double-skinned forward osmosis membranes for anti-fouling in the emulsified oil-water separation process. <i>Environmental Science & Technology</i> , 2014 , 48, 4537-45	10.3	127
595	Development of simultaneous membrane distillation/crystallization (SMDC) technology for treatment of saturated brine. <i>Chemical Engineering Science</i> , 2013 , 98, 160-172	4.4	126
594	A novel dual-layer forward osmosis membrane for protein enrichment and concentration. <i>Separation and Purification Technology</i> , 2009 , 69, 269-274	8.3	124
593	The ionic liquid [EMIM]OAc as a solvent to fabricate stable polybenzimidazole membranes for organic solvent nanofiltration. <i>Green Chemistry</i> , 2014 , 16, 1383-1392	10	123
592	Aquaporin-embedded biomimetic membranes for nanofiltration. <i>Journal of Membrane Science</i> , 2012 , 407-408, 27-33	9.6	122

591	Effect of air-gap distance on the morphology and thermal properties of polyethersulfone hollow fibers. <i>Journal of Applied Polymer Science</i> , 1997 , 66, 1067-1077	2.9	122
590	Symmetric and Asymmetric Zeolitic Imidazolate Frameworks (ZIFs)/Polybenzimidazole (PBI) Nanocomposite Membranes for Hydrogen Purification at High Temperatures. <i>Advanced Energy Materials</i> , 2012 , 2, 1358-1367	21.8	120
589	ZIF-90/P84 mixed matrix membranes for pervaporation dehydration of isopropanol. <i>Journal of Membrane Science</i> , 2014 , 453, 155-167	9.6	119
588	Diamine modification of P84 polyimide membranes for pervaporation dehydration of isopropanol. <i>AIChE Journal</i> , 2006 , 52, 3462-3472	3.6	119
587	A review of polymeric composite membranes for gas separation and energy production. <i>Progress in Polymer Science</i> , 2019 , 97, 101141	29.6	118
586	Effect of shear rate within the spinneret on morphology, separation performance and mechanical properties of ultrafiltration polyethersulfone hollow fiber membranes. <i>Chemical Engineering Science</i> , 2000 , 55, 1077-1091	4.4	118
585	Enhanced double-skinned FO membranes with inner dense layer for wastewater treatment and macromolecule recycle using Sucrose as draw solute. <i>Journal of Membrane Science</i> , 2012 , 396, 92-100	9.6	117
584	PVDF/ionic liquid polymer blends with superior separation performance for removing CO ₂ from hydrogen and flue gas. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 11796-11804	6.7	117
583	Effects of additives on dual-layer hydrophobic/hydrophilic PVDF hollow fiber membranes for membrane distillation and continuous performance. <i>Chemical Engineering Science</i> , 2012 , 68, 567-578	4.4	117
582	Room-temperature synthesis of ZIF-90 nanocrystals and the derived nano-composite membranes for hydrogen separation. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 6081	13	117
581	Poly(vinyl alcohol) multilayer mixed matrix membranes for the dehydration of ethanol/water mixture. <i>Journal of Membrane Science</i> , 2006 , 268, 113-122	9.6	117
580	Design of omniphobic interfaces for membrane distillation - A review. <i>Water Research</i> , 2019 , 162, 64-77	12.5	116
579	Precise Molecular Sieving Architectures with Janus Pathways for Both Polar and Nonpolar Molecules. <i>Advanced Materials</i> , 2018 , 30, 1705933	24	116
578	What is next for forward osmosis (FO) and pressure retarded osmosis (PRO). <i>Separation and Purification Technology</i> , 2015 , 156, 856-860	8.3	115
577	Chemically modified polybenzimidazole nanofiltration membrane for the separation of electrolytes and cephalixin. <i>Chemical Engineering Science</i> , 2006 , 61, 5807-5817	4.4	115
576	Fabrication of fluoropolyimide/polyethersulfone (PES) dual-layer asymmetric hollow fiber membranes for gas separation. <i>Journal of Membrane Science</i> , 2002 , 198, 211-223	9.6	115
575	Combination of forward osmosis (FO) process with coagulation/flocculation (CF) for potential treatment of textile wastewater. <i>Water Research</i> , 2016 , 91, 361-70	12.5	114
574	Deformation and reinforcement of thin-film composite (TFC) polyamide-imide (PAI) membranes for osmotic power generation. <i>Journal of Membrane Science</i> , 2013 , 434, 204-217	9.6	114

573	Grafting thermally labile molecules on cross-linkable polyimide to design membrane materials for natural gas purification and CO ₂ capture. <i>Energy and Environmental Science</i> , 2011 , 4, 201-208	35.4	114
572	Fabrication and characterization of BTDA-TDI/MDI (P84) co-polyimide membranes for the pervaporation dehydration of isopropanol. <i>Journal of Membrane Science</i> , 2005 , 264, 176-189	9.6	114
571	Novel cellulose ester substrates for high performance flat-sheet thin-film composite (TFC) forward osmosis (FO) membranes. <i>Journal of Membrane Science</i> , 2015 , 473, 63-71	9.6	113
570	Substrate modifications and alcohol treatment on thin film composite membranes for osmotic power. <i>Chemical Engineering Science</i> , 2013 , 87, 40-50	4.4	113
569	High performance ZIF-8/PBI nano-composite membranes for high temperature hydrogen separation consisting of carbon monoxide and water vapor. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 229-239	6.7	113
568	Thermosensitive Poly(N-isopropylacrylamide-co-acrylic acid) Hydrogels with Expanded Network Structures and Improved Oscillating Swelling/Deswelling Properties. <i>Langmuir</i> , 2002 , 18, 2013-2018	4	113
567	Design of robust hollow fiber membranes with high power density for osmotic energy production. <i>Chemical Engineering Journal</i> , 2014 , 241, 457-465	14.7	112
566	Highly robust thin-film composite pressure retarded osmosis (PRO) hollow fiber membranes with high power densities for renewable salinity-gradient energy generation. <i>Environmental Science & Technology</i> , 2013 , 47, 8070-7	10.3	111
565	Novel nanofiltration membranes consisting of a sulfonated pentablock copolymer rejection layer for heavy metal removal. <i>Environmental Science & Technology</i> , 2014 , 48, 13880-7	10.3	110
564	An aquaporin-based vesicle-embedded polymeric membrane for low energy water filtration. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 7592	13	110
563	Dual-layer PVDF/PTFE composite hollow fibers with a thin macrovoid-free selective layer for water production via membrane distillation. <i>Chemical Engineering Journal</i> , 2011 , 171, 684-691	14.7	110
562	Molecular-level mixed matrix membranes comprising Pebax [®] and POSS for hydrogen purification via preferential CO ₂ removal. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 10560-10568	6.7	110
561	Emerging thin-film nanocomposite (TFN) membranes for reverse osmosis: A review. <i>Water Research</i> , 2020 , 173, 115557	12.5	109
560	Exploring the potential of commercial polyethylene membranes for desalination by membrane distillation. <i>Journal of Membrane Science</i> , 2016 , 497, 239-247	9.6	109
559	Sublayer structure and reflection coefficient and their effects on concentration polarization and membrane performance in FO processes. <i>Journal of Membrane Science</i> , 2011 , 376, 214-224	9.6	108
558	Investigation of different hollow fiber module designs for flux enhancement in the membrane distillation process. <i>Journal of Membrane Science</i> , 2008 , 311, 371-379	9.6	108
557	Application of thin film composite membranes with forward osmosis technology for the separation of emulsified oil/water. <i>Journal of Membrane Science</i> , 2014 , 452, 117-126	9.6	107
556	CO ₂ Separation from Flue Gas Using Polyvinyl-(Room Temperature Ionic Liquid) Room Temperature Ionic Liquid Composite Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 9344-9353	3.9	106

555	Facile synthesis of thermosensitive magnetic nanoparticles as "smart" draw solutes in forward osmosis. <i>Chemical Communications</i> , 2011 , 47, 10788-90	5.8	106
554	The effects of substrate characteristics and pre-wetting agents on PAN/DMS composite hollow fiber membranes for CO ₂ /N ₂ and O ₂ /N ₂ separation. <i>Journal of Membrane Science</i> , 2013 , 434, 18-25	9.6	105
553	Enhancement of flux and solvent stability of Matrimid® thin-film composite membranes for organic solvent nanofiltration. <i>AIChE Journal</i> , 2014 , 60, 3623-3633	3.6	104
552	Thickness and Air Gap Dependence of Macrovoid Evolution in Phase-Inversion Asymmetric Hollow Fiber Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 7618-7626	3.9	104
551	Enhanced osmotic energy generation from salinity gradients by modifying thin film composite membranes. <i>Chemical Engineering Journal</i> , 2014 , 242, 195-203	14.7	103
550	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> , 1999 , 74, 2220-2233	2.9	102
549	Zwitterionic polymers grafted poly(ether sulfone) hollow fiber membranes and their antifouling behaviors for osmotic power generation. <i>Journal of Membrane Science</i> , 2016 , 497, 142-152	9.6	100
548	Novel polyamide-imide/cellulose acetate dual-layer hollow fiber membranes for nanofiltration. <i>Journal of Membrane Science</i> , 2010 , 363, 232-242	9.6	99
547	Dehydration of isopropanol and its comparison with dehydration of butanol isomers from thermodynamic and molecular aspects. <i>Journal of Membrane Science</i> , 2005 , 252, 37-49	9.6	99
546	UV-Rearranged PIM-1 Polymeric Membranes for Advanced Hydrogen Purification and Production. <i>Advanced Energy Materials</i> , 2012 , 2, 1456-1466	21.8	98
545	Minimizing the instant and accumulative effects of salt permeability to sustain ultrahigh osmotic power density. <i>Environmental Science & Technology</i> , 2013 , 47, 10085-92	10.3	98
544	The effects of spinning conditions on asymmetric 6FDA/6FDAM polyimide hollow fibers for air separation. <i>Journal of Applied Polymer Science</i> , 1997 , 65, 1555-1569	2.9	97
543	Dual-layer P84/polyethersulfone hollow fibers for pervaporation dehydration of isopropanol. <i>Journal of Membrane Science</i> , 2007 , 294, 103-114	9.6	97
542	Fabrication of dual-layer polyethersulfone (PES) hollow fiber membranes with an ultrathin dense-selective layer for gas separation. <i>Journal of Membrane Science</i> , 2004 , 245, 53-60	9.6	97
541	Casting solvent effects on morphologies, gas transport properties of a novel 6FDA/PMDA/TMDA copolyimide membrane and its derived carbon membranes. <i>Journal of Membrane Science</i> , 2004 , 244, 77-87	9.6	96
540	Thin film composite forward-osmosis membranes with enhanced internal osmotic pressure for internal concentration polarization reduction. <i>Chemical Engineering Journal</i> , 2014 , 249, 236-245	14.7	95
539	Development of hollow fiber membranes for water and salt recovery from highly concentrated brine via direct contact membrane distillation and crystallization. <i>Journal of Membrane Science</i> , 2012 , 421-422, 111-123	9.6	95
538	Molecular design of thin film composite (TFC) hollow fiber membranes for isopropanol dehydration via pervaporation. <i>Journal of Membrane Science</i> , 2012 , 405-406, 123-133	9.6	94

537	A conceptual demonstration of freeze desalination-membrane distillation (FD-MD) hybrid desalination process utilizing liquefied natural gas (LNG) cold energy. <i>Water Research</i> , 2012 , 46, 4037-52	12.5	94
536	Advanced Fabrication of Carbon Molecular Sieve Membranes by Nonsolvent Pretreatment of Precursor Polymers. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 6476-6483	3.9	94
535	Silver/PPEGylated dendrimer nanocomposite coating for anti-fouling thin film composite membranes for water treatment. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013 , 436, 207-214	5.1	93
534	Effect of wet and dry-jet wet spinning on the shear-induced orientation during the formation of ultrafiltration hollow fiber membranes. <i>Journal of Membrane Science</i> , 2001 , 182, 57-75	9.6	92
533	Suppression of aging and plasticization in highly permeable polymers. <i>Polymer</i> , 2015 , 77, 377-386	3.9	91
532	Development of thin-film composite forward osmosis hollow fiber membranes using direct sulfonated polyphenylenesulfone (sPPSU) as membrane substrates. <i>Environmental Science & Technology</i> , 2013 , 47, 7430-6	10.3	89
531	Molecular design of the cellulose ester-based forward osmosis membranes for desalination. <i>Chemical Engineering Science</i> , 2011 , 66, 2008-2018	4.4	89
530	The development of high performance P84 co-polyimide hollow fibers for pervaporation dehydration of isopropanol. <i>Chemical Engineering Science</i> , 2005 , 60, 6674-6686	4.4	89
529	Fundamental Characteristics of Sorption, Swelling, and Permeation of P84 Co-polyimide Membranes for Pervaporation Dehydration of Alcohols. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 8938-8943	3.9	88
528	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> , 2018 , 548, 319-331	9.6	88
527	Energy recovery by pressure retarded osmosis (PRO) in SWRO/PRO integrated processes. <i>Applied Energy</i> , 2016 , 162, 687-698	10.7	87
526	High performance composite hollow fiber membranes for CO ₂ /H ₂ and CO ₂ /N ₂ separation. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 5043-5053	6.7	87
525	POSS-containing delamination-free dual-layer hollow fiber membranes for forward osmosis and osmotic power generation. <i>Journal of Membrane Science</i> , 2013 , 443, 144-155	9.6	87
524	Water reclamation from emulsified oily wastewater via effective forward osmosis hollow fiber membranes under the PRO mode. <i>Water Research</i> , 2015 , 81, 54-63	12.5	87
523	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> , 2010 , 364, 278-289	9.6	87
522	The limitations of using Flory-Huggins equation for the states of solutions during asymmetric hollow-fiber formation. <i>Journal of Membrane Science</i> , 1997 , 126, 19-34	9.6	86
521	Surface Modification of Polyimide Membranes by Diamines for H ₂ and CO ₂ Separation. <i>Macromolecular Rapid Communications</i> , 2006 , 27, 998-1003	4.8	86
520	Outer-selective pressure-retarded osmosis hollow fiber membranes from vacuum-assisted interfacial polymerization for osmotic power generation. <i>Environmental Science & Technology</i> , 2013 , 47, 13167-74	10.3	85

519	Hydrophobic/hydrophilic PVDF/Ultem [®] dual-layer hollow fiber membranes with enhanced mechanical properties for vacuum membrane distillation. <i>Journal of Membrane Science</i> , 2017 , 523, 103-110	9.6	85
518	Tailoring pore size and pore size distribution of kidney dialysis hollow fiber membranes via dual-bath coagulation approach. <i>Journal of Membrane Science</i> , 2007 , 290, 153-163	9.6	85
517	Dehydration of alcohols by pervaporation through polyimide . <i>Chemical Engineering Science</i> , 2008 , 63, 204-216	4.4	85
516	Tri-bore PVDF hollow fibers with a super-hydrophobic coating for membrane distillation. <i>Journal of Membrane Science</i> , 2016 , 514, 165-175	9.6	85
515	Low-Pressure Nanofiltration Hollow Fiber Membranes for Effective Fractionation of Dyes and Inorganic Salts in Textile Wastewater. <i>Environmental Science & Technology</i> , 2018 , 52, 3676-3684	10.3	84
514	Omniphobic Hollow-Fiber Membranes for Vacuum Membrane Distillation. <i>Environmental Science & Technology</i> , 2018 , 52, 4472-4480	10.3	84
513	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> , 2016 , 91, 104-14	12.5	84
512	Facilitated transport by hybrid POSS [®] Matrimid [®] Zn ²⁺ nanocomposite membranes for the separation of natural gas. <i>Journal of Membrane Science</i> , 2010 , 356, 14-21	9.6	84
511	Thickness Dependence of Macrovoid Evolution in Wet Phase-Inversion Asymmetric Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 1553-1556	3.9	84
510	Planar biomimetic aquaporin-incorporated triblock copolymer membranes on porous alumina supports for nanofiltration. <i>Journal of Membrane Science</i> , 2012 , 409-410, 34-43	9.6	83
509	Enhanced Matrimid membranes for pervaporation by homogenous blends with polybenzimidazole (PBI). <i>Journal of Membrane Science</i> , 2006 , 271, 221-231	9.6	83
508	Facile Synthesis of Dual-Layer Organic Solvent Nanofiltration (OSN) Hollow Fiber Membranes. <i>ACS Sustainable Chemistry and Engineering</i> , 2015 , 3, 3019-3023	8.3	82
507	Zeolite filled P84 co-polyimide membranes for dehydration of isopropanol through pervaporation process. <i>Chemical Engineering Science</i> , 2006 , 61, 6816-6825	4.4	82
506	The effect of shear rates on gas separation performance of 6FDA-durene polyimide hollow fibers. <i>Journal of Membrane Science</i> , 2000 , 167, 55-66	9.6	82
505	Photo-oxidative PIM-1 based mixed matrix membranes with superior gas separation performance. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 17273-17281	13	81
504	A critical review on diffusivity and the characterization of diffusivity of 6FDA/FPDA polyimide membranes for gas separation. <i>Journal of Membrane Science</i> , 2002 , 198, 259-271	9.6	81
503	Design and fabrication of hollow fiber membrane modules. <i>Journal of Membrane Science</i> , 2017 , 538, 96-107	10.7	80
502	A novel strategy for surface modification of polyimide membranes by vapor-phase ethylenediamine (EDA) for hydrogen purification. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 8716-8722	6.7	80

- 501 Highly permeable chemically modified PIM-1/Matrimid membranes for green hydrogen purification. *Journal of Materials Chemistry A*, **2013**, 1, 13914 13 79
- 500 Mechanically robust and highly permeable AquaporinZ biomimetic membranes. *Journal of Membrane Science*, **2013**, 434, 130-136 9.6 79
- 499 Highly crosslinked layer-by-layer polyelectrolyte FO membranes: Understanding effects of salt concentration and deposition time on FO performance. *Journal of Membrane Science*, **2013**, 427, 411-421 9.6 79
- 498 Matrimid[®] /MgO mixed matrix membranes for pervaporation. *AIChE Journal*, **2007**, 53, 1745-1757 3.6 79
- 497 Molecularly Tuned Free Volume of Vapor Cross-Linked 6FDA-Durene/ZIF-71 MMMs for H₂/CO Separation at 150 °C. *Advanced Materials*, **2017**, 29, 1603833 24 78
- 496 Novel PVDF membranes comprising n-butylamine functionalized graphene oxide for direct contact membrane distillation. *Journal of Membrane Science*, **2017**, 539, 34-42 9.6 78
- 495 Thermal induced structural rearrangement of cardo-copolybenzoxazole membranes for enhanced gas transport properties. *Journal of Membrane Science*, **2012**, 397-398, 51-65 9.6 78
- 494 High-performance composite hollow fiber membrane for flue gas and air separations. *Journal of Membrane Science*, **2017**, 541, 367-377 9.6 78
- 493 Hydroxyl functionalized polytriazole-co-polyoxadiazole as substrates for forward osmosis membranes. *ACS Applied Materials & Interfaces*, **2015**, 7, 3960-73 9.5 78
- 492 Effect of polyimides with different ratios of para - to meta - analogous fluorinated diamines on relaxation process. *Polymer*, **2001**, 42, 6393-6401 3.9 78
- 491 In situ fabrication of cross-linked PEO/silica reverse-selective membranes for hydrogen purification. *International Journal of Hydrogen Energy*, **2009**, 34, 6492-6504 6.7 77
- 490 Miscibility study of Torlon[®] polyamide-imide with Matrimid[®] 5218 polyimide and polybenzimidazole. *Polymer*, **2007**, 48, 2901-2909 3.9 77
- 489 Stabilization and immobilization of aquaporin reconstituted lipid vesicles for water purification. *Colloids and Surfaces B: Biointerfaces*, **2013**, 102, 466-71 6 76
- 488 The evolution of physicochemical and transport properties of 6FDA-durene toward carbon membranes; from polymer, intermediate to carbon. *Microporous and Mesoporous Materials*, **2005**, 84, 59-68 5.3 76
- 487 Graphene oxide membranes for nanofiltration. *Current Opinion in Chemical Engineering*, **2017**, 16, 9-15 5.4 75
- 486 Green modification of outer selective P84 nanofiltration (NF) hollow fiber membranes for cadmium removal. *Journal of Membrane Science*, **2016**, 499, 361-369 9.6 75
- 485 Natural gas purification and olefin/paraffin separation using cross-linkable 6FDA-Durene/DABA co-polyimides grafted with β -CD and γ -cyclodextrin. *Journal of Membrane Science*, **2012**, 390-391, 141-151 9.6 74
- 484 From ultrafiltration to nanofiltration: Hydrazine cross-linked polyacrylonitrile hollow fiber membranes for organic solvent nanofiltration. *Journal of Membrane Science*, **2017**, 542, 289-299 9.6 74

483	Novel thin-film composite tri-bore hollow fiber membrane fabrication for forward osmosis. <i>Journal of Membrane Science</i> , 2014 , 461, 28-38	9.6	74
482	Chiral assembly of gold nanorods with collective plasmonic circular dichroism response. <i>Soft Matter</i> , 2011 , 7, 8370	3.6	74
481	Molecular design of the morphology and pore size of PVDF hollow fiber membranes for ethanol/water separation employing the modified pore-flow concept. <i>Journal of Membrane Science</i> , 2011 , 374, 67-82	9.6	74
480	Immobilized-Cell Membrane Bioreactor for High-Strength Phenol Wastewater. <i>Journal of Environmental Engineering, ASCE</i> , 2000 , 126, 75-79	2	74
479	Polymeric asymmetric membranes made from polyetherimide/polybenzimidazole/poly(ethylene glycol) (PEI/PBI/PEG) for oil/surfactant/water separation. <i>Journal of Membrane Science</i> , 1999 , 158, 41-53	9.6	74
478	Polyelectrolyte functionalized lamellar graphene oxide membranes on polypropylene support for organic solvent nanofiltration. <i>Carbon</i> , 2017 , 122, 604-613	10.4	73
477	A layer-by-layer self-assembly approach to developing an aquaporin-embedded mixed matrix membrane. <i>RSC Advances</i> , 2013 , 3, 473-481	3.7	72
476	Pharmaceutical concentration using organic solvent forward osmosis for solvent recovery. <i>Nature Communications</i> , 2018 , 9, 1426	17.4	71
475	Novel dual-stage FO system for sustainable protein enrichment using nanoparticles as intermediate draw solutes. <i>Journal of Membrane Science</i> , 2011 , 372, 201-209	9.6	71
474	Particle-Size Effects on Gas Transport Properties of 6FDA-Durene/ZIF-71 Mixed Matrix Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 9507-9517	3.9	70
473	Thin-film composite P84 co-polyimide hollow fiber membranes for osmotic power generation. <i>Applied Energy</i> , 2014 , 114, 600-610	10.7	70
472	Synthesis and characterization of poly (ethylene oxide) containing copolyimides for hydrogen purification. <i>Polymer</i> , 2010 , 51, 4077-4086	3.9	70
471	Effects of Brominating Matrimid Polyimide on the Physical and Gas Transport Properties of Derived Carbon Membranes. <i>Macromolecules</i> , 2005 , 38, 10042-10049	5.5	70
470	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> , 2004 , 59, 1053-1062	4.4	70
469	Design and fabrication of lotus-root-like multi-bore hollow fiber membrane for direct contact membrane distillation. <i>Journal of Membrane Science</i> , 2012 , 421-422, 361-374	9.6	69
468	Development of a defect-free 6FDA-durene asymmetric hollow fiber and its composite hollow fibers. <i>Journal of Membrane Science</i> , 1994 , 88, 21-36	9.6	69
467	Formation of Cellulose Acetate Membranes via Phase Inversion Using Ionic Liquid, [BMIM]SCN, As the Solvent. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 8761-8769	3.9	68
466	Polyamide-imide nanofiltration hollow fiber membranes with elongation-induced nano-pore evolution. <i>AIChE Journal</i> , 2010 , 56, 1481-1494	3.6	68

465	Dual-layer hollow carbon fiber membranes for gas separation consisting of carbon and mixed matrix layers. <i>Carbon</i> , 2007 , 45, 166-172	10.4	68
464	Concurrent Removal of Selenium and Arsenic from Water Using Polyhedral Oligomeric Silsesquioxane (POSS) Polyamide Thin-Film Nanocomposite Nanofiltration Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 12929-12938	3.9	68
463	Enhanced fouling by inorganic and organic foulants on pressure retarded osmosis (PRO) hollow fiber membranes under high pressures. <i>Journal of Membrane Science</i> , 2015 , 479, 190-203	9.6	67
462	The fabrication of hollow fiber membranes with double-layer mixed-matrix materials for gas separation. <i>Journal of Membrane Science</i> , 2008 , 325, 326-335	9.6	66
461	Self-standing and flexible covalent organic framework (COF) membranes for molecular separation. <i>Science Advances</i> , 2020 , 6,	14.3	66
460	A processing-induced clay dispersion and its effect on the structure and properties of polyamide 6. <i>Polymer International</i> , 2004 , 53, 392-399	3.3	65
459	Freeze desalination of seawater using LNG cold energy. <i>Water Research</i> , 2016 , 102, 282-293	12.5	65
458	Synthesis, cross-linking modifications of 6FDA-NDA/DABA polyimide membranes for ethanol dehydration via pervaporation. <i>Journal of Membrane Science</i> , 2012 , 415-416, 109-121	9.6	64
457	Preparation and characterization of pore-suspending biomimetic membranes embedded with Aquaporin Z on carboxylated polyethylene glycol polymer cushion. <i>Soft Matter</i> , 2011 , 7, 7274	3.6	64
456	Microscopic behavior of polyvinylpyrrolidone hydrophilizing agents on phase inversion polyethersulfone hollow fiber membranes for hemofiltration. <i>Journal of Membrane Science</i> , 2009 , 326, 322-331	9.6	64
455	Investigation of unique interactions between cellulose acetate and ionic liquid [EMIM]SCN, and their influences on hollow fiber ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2011 , 380, 87-97	9.6	64
454	Evolution of nano-particle distribution during the fabrication of mixed matrix TiO ₂ -polyimide hollow fiber membranes. <i>Chemical Engineering Science</i> , 2006 , 61, 6228-6233	4.4	64
453	Fabrication of lab-scale hollow fiber membrane modules with high packing density. <i>Separation and Purification Technology</i> , 2004 , 40, 15-30	8.3	64
452	Development of asymmetric 6FDA-2,6 DAT hollow fiber membranes for CO ₂ /CH ₄ separation: 1. The influence of dope composition and rheology on membrane morphology and separation performance. <i>Journal of Membrane Science</i> , 2002 , 207, 227-240	9.6	64
451	Facile synthesis of hyperbranched polyimides from A ₂ + B _B ? ₂ monomers. <i>Journal of Polymer Science Part A</i> , 2002 , 40, 4563-4569	2.5	64
450	Chemical Cross-Linking Modification of Polyimide/Poly(ether sulfone) Dual-Layer Hollow-Fiber Membranes for Gas Separation. <i>Industrial & Engineering Chemistry Research</i> , 2003 , 42, 1190-1195	3.9	64
449	Fundamental understanding of the effect of air-gap distance on the fabrication of hollow fiber membranes. <i>Journal of Applied Polymer Science</i> , 1999 , 72, 379-395	2.9	64
448	High-performance UiO-66/polyimide mixed matrix membranes for ethanol, isopropanol and n-butanol dehydration via pervaporation. <i>Journal of Membrane Science</i> , 2017 , 531, 16-26	9.6	63

447	Oil/water separation via ultrafiltration by novel triangle-shape tri-bore hollow fiber membranes from sulfonated polyphenylenesulfone. <i>Journal of Membrane Science</i> , 2015 , 476, 162-170	9.6	63
446	A prospective study on the application of thermally rearranged acetate-containing polyimide membranes in dehydration of biofuels via pervaporation. <i>Chemical Engineering Science</i> , 2012 , 79, 41-53	4.4	63
445	Surface energy of thermotropic liquid crystalline polyesters and polyesteramide. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1998 , 36, 2327-2337	2.6	63
444	High-performance multiple-layer PIM composite hollow fiber membranes for gas separation. <i>Journal of Membrane Science</i> , 2018 , 563, 93-106	9.6	63
443	Using green solvent, triethyl phosphate (TEP), to fabricate highly porous PVDF hollow fiber membranes for membrane distillation. <i>Journal of Membrane Science</i> , 2017 , 539, 295-304	9.6	62
442	Thin-film nanocomposite membranes incorporated with UiO-66-NH ₂ nanoparticles for brackish water and seawater desalination. <i>Journal of Membrane Science</i> , 2020 , 604, 118039	9.6	62
441	Graphene oxide (GO) laminar membranes for concentrating pharmaceuticals and food additives in organic solvents. <i>Carbon</i> , 2018 , 130, 503-514	10.4	62
440	Novel thin-film composite nanofiltration membranes consisting of a zwitterionic co-polymer for selenium and arsenic removal. <i>Journal of Membrane Science</i> , 2018 , 555, 299-306	9.6	62
439	Na ⁺ functionalized carbon quantum dot incorporated thin-film nanocomposite membranes for selenium and arsenic removal. <i>Journal of Membrane Science</i> , 2018 , 564, 483-491	9.6	62
438	A novel crosslinking technique towards the fabrication of high-flux polybenzimidazole (PBI) membranes for organic solvent nanofiltration (OSN). <i>Separation and Purification Technology</i> , 2019 , 209, 182-192	8.3	62
437	Hydroacid complexes: a new class of draw solutes to promote forward osmosis (FO) processes. <i>Chemical Communications</i> , 2013 , 49, 8471-3	5.8	62
436	Design of zero liquid discharge desalination (ZLDD) systems consisting of freeze desalination, membrane distillation, and crystallization powered by green energies. <i>Desalination</i> , 2019 , 458, 66-75	10.3	61
435	Techno-economic evaluation of various RO+PRO and RO+FO integrated processes. <i>Applied Energy</i> , 2018 , 212, 1038-1050	10.7	61
434	Asymmetric hollow fiber membranes prepared from miscible polybenzimidazole and polyetherimide blends. <i>Journal of Membrane Science</i> , 1998 , 147, 35-47	9.6	61
433	Exploration of highly sulfonated polyethersulfone (SPES) as a membrane material with the aid of dual-layer hollow fiber fabrication technology for protein separation. <i>Journal of Membrane Science</i> , 2008 , 309, 45-55	9.6	61
432	Polybenzimidazole nanofiltration hollow fiber for cephalexin separation. <i>AIChE Journal</i> , 2006 , 52, 1363-1377	9.6	61
431	Structure and properties relationships for aromatic polyimides and their derived carbon membranes: experimental and simulation approaches. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 18741-8	8.4	61
430	The effects of 1,3-cyclohexanebis(methylamine) modification on gas transport and plasticization resistance of polyimide membranes. <i>Journal of Membrane Science</i> , 2005 , 267, 78-89	9.6	61

429	Robust and high performance pressure retarded osmosis hollow fiber membranes for osmotic power generation. <i>AIChE Journal</i> , 2014 , 60, 1107-1119	3.6	60
428	Development of flat-sheet membranes for C1-C4 alcohols dehydration via pervaporation from sulfonated polyphenylsulfone (sPPSU). <i>Journal of Membrane Science</i> , 2012 , 415-416, 686-695	9.6	60
427	Polyetheramine-polyhedral oligomeric silsesquioxane organic-inorganic hybrid membranes for CO ₂ /H ₂ and CO ₂ /N ₂ separation. <i>Journal of Membrane Science</i> , 2011 , 385-386, 40-48	9.6	60
426	Evolution of ultra-thin dense-selective layer from single-layer to dual-layer hollow fibers using novel Extrem [®] polyetherimide for gas separation. <i>Journal of Membrane Science</i> , 2010 , 360, 48-57	9.6	60
425	Visualization of the effect of die shear rate on the outer surface morphology of ultrafiltration membranes by AFM. <i>Journal of Membrane Science</i> , 2002 , 196, 251-266	9.6	60
424	Development of asymmetric hollow fibers from polyimides for air separation. <i>Journal of Membrane Science</i> , 1992 , 75, 181-195	9.6	60
423	Blends of a Polymer of Intrinsic Microporosity and Partially Sulfonated Polyphenylenesulfone for Gas Separation. <i>ChemSusChem</i> , 2016 , 9, 1953-62	8.3	60
422	Carbon-zeolite composite membranes for gas separation. <i>Carbon</i> , 2005 , 43, 2025-2027	10.4	59
421	Thin film nanocomposite hollow fiber membranes comprising Na-functionalized carbon quantum dots for brackish water desalination. <i>Water Research</i> , 2019 , 154, 54-61	12.5	58
420	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> , 2015 , 129, 232-242	4.4	58
419	PIM-1 as an organic filler to enhance the gas separation performance of Ultem polyetherimide. <i>Journal of Membrane Science</i> , 2014 , 453, 614-623	9.6	58
418	Physical aging and plasticization of thick and thin films of the thermally rearranged ortho-functional polyimide 6FDA-BIAB. <i>Journal of Membrane Science</i> , 2014 , 458, 27-35	9.6	58
417	PAMAM dendrimer-induced cross-linking modification of polyimide membranes. <i>Langmuir</i> , 2004 , 20, 2966-9	4	58
416	Thermal Imidization of the Precursor of a Liquid Crystalline Polyimide. <i>Macromolecular Materials and Engineering</i> , 2002 , 287, 931-937	3.9	58
415	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> , 2000 , 175, 197-213	9.6	58
414	Thin-film composite (TFC) hollow fiber membrane with double-polyamide active layers for internal concentration polarization and fouling mitigation in osmotic processes. <i>Journal of Membrane Science</i> , 2017 , 523, 497-504	9.6	57
413	Flexible Hybrid Membranes of NiCo ₂ O ₄ -Doped Carbon ₂ Core-Shell Nanostructures for High-Performance Supercapacitors. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 13442-13450	2.8	57
412	Investigation of surface energy for organic light emitting polymers and indium tin oxide. <i>Thin Solid Films</i> , 2000 , 371, 140-147	2.2	57

411	Effect of Shear Stress within the Spinneret on Hollow Fiber Membrane Morphology and Separation Performance. <i>Industrial & Engineering Chemistry Research</i> , 1998 , 37, 3930-3938	3.9	57
410	An omniphobic slippery membrane with simultaneous anti-wetting and anti-scaling properties for robust membrane distillation. <i>Journal of Membrane Science</i> , 2020 , 595, 117572	9.6	57
409	Aldehyde functionalized graphene oxide frameworks as robust membrane materials for pervaporative alcohol dehydration. <i>Chemical Engineering Science</i> , 2017 , 161, 341-349	4.4	56
408	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> , 2018 , 345, 174-185	14.7	56
407	Effects of Thermal Treatments and Dendrimers Chemical Structures on the Properties of Highly Surface Cross-Linked Polyimide Films. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 3059-3067	3.9	56
406	The accelerated CO ₂ plasticization of ultra-thin polyimide films and the effect of surface chemical cross-linking on plasticization and physical aging. <i>Journal of Membrane Science</i> , 2003 , 225, 125-134	9.6	56
405	Design of high efficiency PVDF-PEG hollow fibers for air filtration of ultrafine particles. <i>Journal of Membrane Science</i> , 2017 , 535, 342-349	9.6	55
404	A novel ionically cross-linked sulfonated polyphenylsulfone (sPPSU) membrane for organic solvent nanofiltration (OSN). <i>Journal of Membrane Science</i> , 2018 , 545, 221-228	9.6	55
403	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> , 2017 , 541, 413-424	9.6	55
402	A novel primer to prevent nanoparticle agglomeration in mixed matrix membranes. <i>AIChE Journal</i> , 2007 , 53, 2470-2475	3.6	55
401	Fluorographite modified PVDF membranes for seawater desalination via direct contact membrane distillation. <i>Desalination</i> , 2017 , 413, 119-126	10.3	54
400	Organic solvent nanofiltration (OSN) membranes made from plasma grafting of polyethylene glycol on cross-linked polyimide ultrafiltration substrates. <i>Journal of Membrane Science</i> , 2018 , 565, 169-178	9.6	54
399	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> , 2013 , 1, 9814	13	54
398	The evolution of physicochemical and gas transport properties of thermally rearranged polyhydroxyamide (PHA). <i>Journal of Membrane Science</i> , 2011 , 385-386, 86-95	9.6	54
397	Structural Determination of Extem XH 1015 and Its Gas Permeability Comparison with Polysulfone and Ultem via Molecular Simulation. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 12014-12021	3.9	54
396	Enhanced propylene/propane separation by carbonaceous membrane derived from poly (aryl ether ketone)/2,6-bis(4-azidobenzylidene)-4-methyl-cyclohexanone interpenetrating network. <i>Carbon</i> , 2009 , 47, 1857-1866	10.4	54
395	Mechanistic understanding of CO ₂ -induced plasticization of a polyimide membrane: A combination of experiment and simulation study. <i>Polymer</i> , 2010 , 51, 4439-4447	3.9	54
394	Functionalization of cellulose dialysis membranes for chiral separation using beta-cyclodextrin immobilization. <i>Journal of Membrane Science</i> , 2007 , 290, 78-85	9.6	54

393	Investigation of amphoteric polybenzimidazole (PBI) nanofiltration hollow fiber membrane for both cation and anions removal. <i>Journal of Membrane Science</i> , 2008 , 310, 557-566	9.6	54
392	Aromatic polyimide and crosslinked thermally rearranged poly(benzoxazole-co-imide) membranes for isopropanol dehydration via pervaporation. <i>Journal of Membrane Science</i> , 2016 , 499, 317-325	9.6	53
391	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> , 2016 , 88, 144-155	12.5	53
390	Ferric and cobaltous hydroacid complexes for forward osmosis (FO) processes. <i>Water Research</i> , 2014 , 58, 230-8	12.5	53
389	Fabrication and positron annihilation spectroscopy (PAS) characterization of cellulose triacetate membranes for forward osmosis. <i>Journal of Membrane Science</i> , 2012 , 394-395, 230-240	9.6	53
388	A new-generation asymmetric multi-bore hollow fiber membrane for sustainable water production via vacuum membrane distillation. <i>Environmental Science & Technology</i> , 2013 , 47, 6272-8	10.3	53
387	Physical aging and carbon dioxide plasticization of thin polyimide films in mixed gas permeation. <i>Journal of Membrane Science</i> , 2014 , 450, 457-468	9.6	52
386	Silica Nanohybrid Membranes with High CO ₂ Affinity for Green Hydrogen Purification. <i>Advanced Energy Materials</i> , 2011 , 1, 634-642	21.8	52
385	Functionalization of polybenzimidazole membranes to impart negative charge and hydrophilicity. <i>Journal of Membrane Science</i> , 2010 , 363, 195-203	9.6	52
384	The observation of elongation dependent macrovoid evolution in single- and dual-layer asymmetric hollow fiber membranes. <i>Chemical Engineering Science</i> , 2004 , 59, 4657-4660	4.4	52
383	The influence of cold treatment on properties of temperature-sensitive poly(N-isopropylacrylamide) hydrogels. <i>Journal of Colloid and Interface Science</i> , 2002 , 246, 105-11	9.3	52
382	Thermally treated ammonia functionalized graphene oxide/polyimide membranes for pervaporation dehydration of isopropanol. <i>Journal of Membrane Science</i> , 2017 , 528, 231-242	9.6	51
381	Zwitterions coated hollow fiber membranes with enhanced antifouling properties for osmotic power generation from municipal wastewater. <i>Water Research</i> , 2016 , 104, 389-396	12.5	51
380	Metal ion modified PIM-1 and its application for propylene/propane separation. <i>Journal of Membrane Science</i> , 2016 , 515, 36-44	9.6	51
379	Hollow Fiber Membrane Dehumidification Device for Air Conditioning System. <i>Membranes</i> , 2015 , 5, 722-388	3.8	51
378	Surface characterization, modification chemistry, and separation performance of polyimide and polyamidoamine dendrimer composite films. <i>Langmuir</i> , 2004 , 20, 8230-8	4	51
377	Synthesis and properties of fluoro-polyetherimides. <i>Polymer Engineering and Science</i> , 2000 , 40, 1318-1329	3.3	51
376	Performance enhancement in organic solvent nanofiltration by double crosslinking technique using sulfonated polyphenylsulfone (sPPSU) and polybenzimidazole (PBI). <i>Journal of Membrane Science</i> , 2018 , 551, 204-213	9.6	50

375	Novel organic/inorganic thin film composite membranes with separation performance surpassing ceramic membranes for isopropanol dehydration. <i>Journal of Membrane Science</i> , 2013 , 433, 60-71	9.6	50
374	Novel Hollow Fiber Air Filters for the Removal of Ultrafine Particles in PM with Repetitive Usage Capability. <i>Environmental Science & Technology</i> , 2017 , 51, 10041-10049	10.3	50
373	Pressure retarded osmosis dual-layer hollow fiber membranes developed by co-casting method and ammonium persulfate (APS) treatment. <i>Journal of Membrane Science</i> , 2014 , 469, 488-498	9.6	50
372	POE-PEG-POE triblock copolymeric microspheres containing protein. I. Preparation and characterization. <i>Journal of Controlled Release</i> , 2001 , 75, 115-28	11.7	50
371	High-performance sulfonated polyimide/polyimide/polyhedral oligosilsesquioxane hybrid membranes for ethanol dehydration applications. <i>Journal of Membrane Science</i> , 2014 , 454, 62-73	9.6	49
370	Highly permeable aquaporin-embedded biomimetic membranes featuring a magnetic-aided approach. <i>RSC Advances</i> , 2013 , 3, 9178	3.7	49
369	Phase Inversion Directly Induced Tight Ultrafiltration (UF) Hollow Fiber Membranes for Effective Removal of Textile Dyes. <i>Environmental Science & Technology</i> , 2017 , 51, 14254-14261	10.3	49
368	Surface-Dissociated Nanoparticle Draw Solutions in Forward Osmosis and the Regeneration in an Integrated Electric Field and Nanofiltration System. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 15463-15471	3.9	49
367	Modified pore-flow model for pervaporation mass transport in PVDF hollow fiber membranes for ethanol/water separation. <i>Journal of Membrane Science</i> , 2010 , 362, 393-406	9.6	49
366	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> , 2017 , 5, 4583-4595	13	48
365	Pervaporation dehydration of acetone using P84 co-polyimide flat sheet membranes modified by vapor phase crosslinking. <i>Journal of Membrane Science</i> , 2014 , 458, 76-85	9.6	48
364	Thin film composite membranes on ceramic for pervaporation dehydration of isopropanol. <i>Journal of Membrane Science</i> , 2013 , 448, 34-43	9.6	48
363	Surface modification of polyimide membranes by diethylenetriamine (DETA) vapor for H ₂ purification and moisture effect on gas permeation. <i>Journal of Membrane Science</i> , 2013 , 430, 223-233	9.6	48
362	Dual-layer PBI/P84 hollow fibers for pervaporation dehydration of acetone. <i>AIChE Journal</i> , 2012 , 58, 1133-1145	3.6	48
361	Exploring Torlon/P84 co-polyamide-imide blended hollow fibers and their chemical cross-linking modifications for pervaporation dehydration of isopropanol. <i>Separation and Purification Technology</i> , 2008 , 61, 404-413	8.3	48
360	Vapor-phase crosslinked mixed matrix membranes with UiO-66-NH ₂ for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , 2019 , 574, 124-135	9.6	48
359	Negatively charged hyperbranched polyglycerol grafted membranes for osmotic power generation from municipal wastewater. <i>Water Research</i> , 2016 , 89, 50-8	12.5	47
358	The evolution of poly(hydroxyamide amic acid) to poly(benzoxazole) via stepwise thermal cyclization: Structural changes and gas transport properties. <i>Polymer</i> , 2011 , 52, 5127-5138	3.9	47

357	Cellulose acetate membranes for transdermal delivery of scopolamine base. <i>Materials Science and Engineering C</i> , 2002 , 20, 93-100	8.3	47
356	Miscible blends of carboxylated polymers of intrinsic microporosity (cPIM-1) and Matrimid. <i>Polymer</i> , 2015 , 59, 290-297	3.9	46
355	Robust thin film composite PDMS/PAN hollow fiber membranes for water vapor removal from humid air and gases. <i>Separation and Purification Technology</i> , 2018 , 202, 345-356	8.3	46
354	Carbon Quantum Dots Grafted Antifouling Membranes for Osmotic Power Generation via Pressure-Retarded Osmosis Process. <i>Environmental Science & Technology</i> , 2017 , 51, 14016-14023	10.3	46
353	Multi-layer composite hollow fiber membranes derived from poly(ethylene glycol) (PEG) containing hybrid materials for CO ₂ /N ₂ separation. <i>Journal of Membrane Science</i> , 2011 , 381, 211-220	9.6	46
352	Development and positron annihilation spectroscopy (PAS) characterization of polyamide imide (PAI)/polyethersulfone (PES) based defect-free dual-layer hollow fiber membranes with an ultrathin dense-selective layer for gas separation. <i>Journal of Membrane Science</i> , 2011 , 378, 541-550	9.6	46
351	Asymmetric hollow fibers by polyimide and polybenzimidazole blends for toluene/iso-octane separation. <i>Journal of Membrane Science</i> , 2010 , 360, 303-314	9.6	46
350	Effects of annealing on the microstructure and performance of cellulose acetate membranes for pressure-retarded osmosis processes. <i>Journal of Membrane Science</i> , 2010 , 364, 344-353	9.6	46
349	Robust polybenzimidazole (PBI) hollow fiber membranes for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , 2019 , 572, 580-587	9.6	46
348	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> , 2018 , 555, 388-397	9.6	45
347	Forward osmosis: an emerging technology for sustainable supply of clean water. <i>Clean Technologies and Environmental Policy</i> , 2012 , 14, 507-511	4.3	45
346	Ultrathin polymeric interpenetration network with separation performance approaching ceramic membranes for biofuel. <i>AIChE Journal</i> , 2009 , 55, 75-86	3.6	45
345	Pervaporation dehydration of C ₂ -C ₄ alcohols by 6FDA-ODA-NDA/Ultem dual-layer hollow fiber membranes with enhanced separation performance and swelling resistance. <i>Chemical Engineering Journal</i> , 2009 , 155, 736-743	14.7	45
344	Novel approaches to fabricate carbon molecular sieve membranes based on chemical modified and solvent treated polyimides. <i>Microporous and Mesoporous Materials</i> , 2004 , 73, 151-160	5.3	45
343	Cross-linked mixed matrix membranes consisting of carboxyl-functionalized multi-walled carbon nanotubes and P84 polyimide for organic solvent nanofiltration (OSN). <i>Separation and Purification Technology</i> , 2017 , 186, 243-254	8.3	44
342	Facile fabrication of sulfonated polyphenylenesulfone (sPPSU) membranes with high separation performance for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , 2018 , 549, 550-558	9.6	44
341	Molecular interaction between acidic sPPSU and basic HPEI polymers and its effects on membrane formation for ultrafiltration. <i>Journal of Membrane Science</i> , 2017 , 524, 33-42	9.6	44
340	Carbon molecular sieve membranes for biofuel separation. <i>Carbon</i> , 2011 , 49, 369-375	10.4	44

339	Fundamentals of semi-crystalline poly(vinylidene fluoride) membrane formation and its prospects for biofuel (ethanol and acetone) separation via pervaporation. <i>Journal of Membrane Science</i> , 2011 , 378, 149-162	9.6	44
338	Rheology and phase inversion behavior of polyphenylenesulfone (PPSU) and sulfonated PPSU for membrane formation. <i>Polymer</i> , 2016 , 99, 72-82	3.9	44
337	Fabrication of loose outer-selective nanofiltration (NF) polyethersulfone (PES) hollow fibers via single-step spinning process for dye removal. <i>Separation and Purification Technology</i> , 2018 , 192, 483-490	8.3	43
336	Organic solvent resistant membranes made from a cross-linked functionalized polymer with intrinsic microporosity (PIM) containing thioamide groups. <i>Chemical Engineering Journal</i> , 2018 , 353, 689-698	14.7	43
335	Thin-film composite membranes with modified polyvinylidene fluoride substrate for ethanol dehydration via pervaporation. <i>Chemical Engineering Science</i> , 2014 , 118, 173-183	4.4	43
334	Micro-morphology and formation of layer-by-layer membranes and their performance in osmotically driven processes. <i>Chemical Engineering Science</i> , 2013 , 101, 13-26	4.4	43
333	Highly permeable and aging resistant 3D architecture from polymers of intrinsic microporosity incorporated with beta-cyclodextrin. <i>Journal of Membrane Science</i> , 2017 , 523, 92-102	9.6	43
332	Hybrid pressure retarded osmosis-membrane distillation (PROMD) process for osmotic power and clean water generation. <i>Environmental Science: Water Research and Technology</i> , 2015 , 1, 507-515	4.2	43
331	Asymmetric structure and enhanced gas separation performance induced by in situ growth of silver nanoparticles in carbon membranes. <i>Carbon</i> , 2010 , 48, 408-416	10.4	43
330	Superior gas separation performance of dual-layer hollow fiber membranes with an ultrathin dense-selective layer. <i>Journal of Membrane Science</i> , 2008 , 325, 23-27	9.6	43
329	Gas and hydrocarbon (C2 and C3) transport properties of co-polyimides synthesized from 6FDA and 1,5-NDA (naphthalene)/Durene diamines. <i>Journal of Membrane Science</i> , 2003 , 218, 235-245	9.6	43
328	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> , 2018 , 560, 115-124	9.6	43
327	Forward osmosis for oily wastewater reclamation: Multi-charged oxalic acid complexes as draw solutes. <i>Water Research</i> , 2017 , 122, 580-590	12.5	42
326	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> , 2018 , 559, 63-74	9.6	42
325	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> , 2016 , 103, 264-275	12.5	42
324	High performance thin-film composite membranes with mesh-reinforced hydrophilic sulfonated polyphenylenesulfone (sPPSU) substrates for osmotically driven processes. <i>Journal of Membrane Science</i> , 2016 , 502, 84-93	9.6	42
323	Effects of free volume in thin-film composite membranes on osmotic power generation. <i>AIChE Journal</i> , 2013 , 59, 4749-4761	3.6	42
322	Advanced FO membranes from newly synthesized CAP polymer for wastewater reclamation through an integrated FO-MD hybrid system. <i>AIChE Journal</i> , 2013 , 59, 1245-1254	3.6	42

321	Fabrication of multi-layer composite hollow fiber membranes for gas separation. <i>Journal of Membrane Science</i> , 1999 , 152, 211-225	9.6	42
320	Effects of polyethylene glycol on membrane formation and properties of hydrophilic sulfonated polyphenylenesulfone (sPPSU) membranes. <i>Journal of Membrane Science</i> , 2017 , 531, 27-35	9.6	41
319	Oxalic acid complexes: promising draw solutes for forward osmosis (FO) in protein enrichment. <i>Chemical Communications</i> , 2015 , 51, 4854-7	5.8	41
318	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> , 2018 , 549, 217-226	9.6	41
317	Robust outer-selective thin-film composite polyethersulfone hollow fiber membranes with low reverse salt flux for renewable salinity-gradient energy generation. <i>Journal of Membrane Science</i> , 2016 , 506, 119-129	9.6	41
316	Integration of Nanofiltration Hollow Fiber Membranes with Coagulation/Blocculation to Treat Colored Wastewater from a Dyestuff Manufacturer: A Pilot-Scale Study. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 11159-11166	3.9	41
315	PVDF/Nanosilica Dual-Layer Hollow Fibers with Enhanced Selectivity and Flux as Novel Membranes for Ethanol Recovery. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 978-993	3.9	41
314	Novel thin film composite hollow fiber membranes incorporated with carbon quantum dots for osmotic power generation. <i>Journal of Membrane Science</i> , 2018 , 551, 94-102	9.6	40
313	Development of high performance carboxylated PIM-1/P84 blend membranes for pervaporation dehydration of isopropanol and CO ₂ /CH ₄ separation. <i>Journal of Membrane Science</i> , 2016 , 518, 110-119	9.6	40
312	Effects of thermally labile saccharide units on the gas separation performance of highly permeable polyimide membranes. <i>Journal of Membrane Science</i> , 2012 , 415-416, 375-382	9.6	40
311	The role of additives on dope rheology and membrane formation of defect-free Torlon hollow fibers for gas separation. <i>Journal of Membrane Science</i> , 2009 , 343, 62-72	9.6	40
310	Pervaporation study of water and tert-butanol mixtures. <i>Journal of Applied Polymer Science</i> , 2004 , 91, 4082-4090	2.9	40
309	Thin Film Interfacial Cross-Linking Approach To Fabricate a Chitosan Rejecting Layer over Poly(ether sulfone) Support for Heavy Metal Removal. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 472-479	3.9	39
308	Outer-selective thin film composite (TFC) hollow fiber membranes for osmotic power generation. <i>Journal of Membrane Science</i> , 2016 , 505, 157-166	9.6	39
307	Conceptual demonstration of novel closed-loop pressure retarded osmosis process for sustainable osmotic energy generation. <i>Applied Energy</i> , 2014 , 132, 383-393	10.7	39
306	Formation of defect-free polyetherimide/PIM-1 hollow fiber membranes for gas separation. <i>AICHE Journal</i> , 2014 , 60, 3848-3858	3.6	39
305	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> , 2017 , 524, 97-107	9.6	39
304	Design and fabrication of inner-selective thin-film composite (TFC) hollow fiber modules for pressure retarded osmosis (PRO). <i>Separation and Purification Technology</i> , 2017 , 172, 32-42	8.3	39

303	Fabrication and use of hollow fiber thin film composite membranes for ethanol dehydration. <i>Journal of Membrane Science</i> , 2014 , 450, 124-137	9.6	39
302	Effect of End Groups and Grafting on the CO ₂ Separation Performance of Poly(ethylene glycol) Based Membranes. <i>Macromolecules</i> , 2011 , 44, 7727-7736	5.5	39
301	Liquidlike Poly(ethylene glycol) Supported in the Organic-Inorganic Matrix for CO ₂ Removal. <i>Macromolecules</i> , 2011 , 44, 5268-5280	5.5	39
300	Exploratory development of dual-layer carbon-zeolite nanocomposite hollow fiber membranes with high performance for oxygen enrichment and natural gas separation. <i>Microporous and Mesoporous Materials</i> , 2008 , 113, 315-324	5.3	39
299	Effects of orientation relaxation and bore fluid chemistry on morphology and performance of polyethersulfone hollow fibers for gas separation. <i>Journal of Membrane Science</i> , 2004 , 229, 1-9	9.6	39
298	The effects of chemical modifications on morphology and performance of 6FDA-ODA/NDA hollow fiber membranes for CO ₂ /CH ₄ separation. <i>Journal of Membrane Science</i> , 2003 , 222, 133-147	9.6	39
297	The ageing phenomenon of polyethersulphone hollow fibre membranes for gas separation and their characteristics. <i>Journal of Membrane Science</i> , 1999 , 152, 175-188	9.6	39
296	Ultrathin Polyamide Membranes Fabricated from Free-Standing Interfacial Polymerization: Synthesis, Modifications, and Post-treatment. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 513-523	3.9	38
295	Enhancement of molecular-sieving properties by constructing surface nano-metric layer via vapor cross-linking. <i>Journal of Membrane Science</i> , 2016 , 497, 248-258	9.6	38
294	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> , 2013 , 447, 163-176	9.6	38
293	Natural gas purification and olefin/paraffin separation using cross-linkable dual-layer hollow fiber membranes comprising β-Cyclodextrin. <i>Journal of Membrane Science</i> , 2012 , 423-424, 392-403	9.6	38
292	C ₂ and C ₃ hydrocarbon separations in poly(1,5-naphthalene-2,2'-bis(3,4-phthalic) hexafluoropropane) diimide (6FDA-1,5-NDA) dense membranes. <i>Journal of Membrane Science</i> , 2002 , 210, 55-64	9.6	38
291	Effective As(III) Removal by A Multi-Charged Hydroacid Complex Draw Solute Facilitated Forward Osmosis-Membrane Distillation (FO-MD) Processes. <i>Environmental Science & Technology</i> , 2016 , 50, 2363-70	10.3	37
290	Aging and carbon dioxide plasticization of thin polyetherimide films. <i>Polymer</i> , 2012 , 53, 2099-2108	3.9	37
289	Transmission Electron Microscopy Observations on Lamellar Melting of Cold-Crystallized Isotactic Polystyrene. <i>Macromolecules</i> , 2001 , 34, 4305-4307	5.5	37
288	Evaluation of hydroacid complex in the forward osmosis-membrane distillation (FOMD) system for desalination. <i>Journal of Membrane Science</i> , 2015 , 494, 1-7	9.6	36
287	Cleaning strategies and membrane flux recovery on anti-fouling membranes for pressure retarded osmosis. <i>Journal of Membrane Science</i> , 2017 , 522, 116-123	9.6	36
286	Gas transport properties of 6FDA-durene/1,3-phenylenediamine (mPDA) copolyimides. <i>Journal of Applied Polymer Science</i> , 2001 , 81, 3552-3564	2.9	36

285	Fabrication of composite hollow fibers for air separation. <i>Journal of Applied Polymer Science</i> , 1994 , 53, 701-708	2.9	36
284	Fluoro-containing polyimide blends: Prediction and experiments. <i>Journal of Polymer Science Part A</i> , 1991 , 29, 1207-1212	2.5	36
283	110th Anniversary: Selection of Cross-Linkers and Cross-Linking Procedures for the Fabrication of Solvent-Resistant Nanofiltration Membranes: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 10678-10691	3.9	35
282	Molecular design of Tröger base-based polymers with intrinsic microporosity for gas separation. <i>Journal of Membrane Science</i> , 2017 , 521, 65-72	9.6	35
281	Hollow fiber membrane lumen modified by polyzwitterionic grafting. <i>Journal of Membrane Science</i> , 2017 , 522, 1-11	9.6	35
280	A vapor-phase surface modification method to enhance different types of hollow fiber membranes for industrial scale hydrogen separation. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 8970-8982	6.7	35
279	Study on multi-layer composite hollow fiber membranes for gas separation. <i>Chemical Engineering Science</i> , 1999 , 54, 675-684	4.4	35
278	Molecularly tunable thin-film nanocomposite membranes with enhanced molecular sieving for organic solvent forward osmosis. <i>Nature Communications</i> , 2020 , 11, 1198	17.4	34
277	Advanced Anti-Fouling Membranes for Osmotic Power Generation from Wastewater via Pressure Retarded Osmosis (PRO). <i>Environmental Science & Technology</i> , 2018 , 52, 6686-6694	10.3	34
276	Tri-bore ultra-filtration hollow fiber membranes with a novel triangle-shape outer geometry. <i>Journal of Membrane Science</i> , 2014 , 452, 212-218	9.6	34
275	The effect of purge environment on thermal rearrangement of ortho-functional polyamide and polyimide. <i>Polymer</i> , 2013 , 54, 2324-2334	3.9	34
274	Pressure and temperature dependence of the gas-transport properties of dense poly[2,6-toluene-2,2-bis(3,4-dicarboxylphenyl)hexafluoropropane diimide] membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2004 , 42, 354-364	2.6	34
273	Effects of Different Ionic Liquids as Green Solvents on the Formation and Ultrafiltration Performance of CA Hollow Fiber Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 7505-7513	3.9	33
272	Facile Preparation of Antifouling Hollow Fiber Membranes for Sustainable Osmotic Power Generation. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 1154-1160	8.3	33
271	High performance carbon molecular sieve membranes derived from hyperbranched polyimide precursors for improved gas separation applications. <i>Carbon</i> , 2013 , 53, 101-111	10.4	33
270	Novel Cellulose Esters for Forward Osmosis Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 16135-16145	3.9	33
269	Pioneering explorations of rooting causes for morphology and performance differences in hollow fiber kidney dialysis membranes spun from linear and hyperbranched polyethersulfone. <i>Journal of Membrane Science</i> , 2008 , 313, 190-198	9.6	33
268	Separation of vegetable oil compounds and solvent recovery using commercial organic solvent nanofiltration membranes. <i>Journal of Membrane Science</i> , 2019 , 588, 117202	9.6	32

267	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> , 2016 , 516, 104-112	9.6	32
266	Effects of hydrolyzed PIM-1 in polyimide-based membranes on C2-C4 alcohols dehydration via pervaporation. <i>Journal of Membrane Science</i> , 2017 , 523, 430-438	9.6	32
265	Fouling behaviors of polybenzimidazole (PBI)/polyhedral oligomeric silsesquioxane (POSS)/polyacrylonitrile (PAN) hollow fiber membranes for engineering osmosis processes. <i>Desalination</i> , 2014 , 335, 17-26	10.3	32
264	The rheology of Torlon solutions and its role in the formation of ultra-thin defect-free Torlon hollow fiber membranes for gas separation. <i>Journal of Membrane Science</i> , 2009 , 326, 608-617	9.6	32
263	Thermotropic Liquid Crystal Polymers 2001 ,		32
262	PVDF hollow fibers with novel sandwich structure and superior wetting resistance for vacuum membrane distillation. <i>Desalination</i> , 2017 , 417, 94-101	10.3	31
261	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> , 2020 , 603, 118022	9.6	31
260	New polyethersulfone (PESU) hollow fiber membranes for CO ₂ capture. <i>Journal of Membrane Science</i> , 2018 , 552, 305-314	9.6	31
259	Molecular Design of Nanofiltration Membranes for the Recovery of Phosphorus from Sewage Sludge. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 5570-5577	8.3	31
258	Cellulose esters for forward osmosis: Characterization of water and salt transport properties and free volume. <i>Polymer</i> , 2012 , 53, 2664-2672	3.9	31
257	High performance dual-layer hollow fiber fabricated via novel immiscibility induced phase separation (I2PS) process for dehydration of ethanol. <i>Journal of Membrane Science</i> , 2012 , 421-422, 271-282	9.6	31
256	CO ₂ -selective membranes for hydrogen purification and the effect of carbon monoxide (CO) on its gas separation performance. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 6001-6011	6.7	31
255	Silver ionic modification in dual-layer hollow fiber membranes with significant enhancement in CO ₂ /CH ₄ and O ₂ /N ₂ separation. <i>Journal of Membrane Science</i> , 2010 , 350, 226-231	9.6	31
254	Boron-embedded hydrolyzed PIM-1 carbon membranes for synergistic ethylene/ethane purification. <i>Journal of Membrane Science</i> , 2017 , 534, 92-99	9.6	30
253	Universal surface modification by aldehydes on polymeric membranes for isopropanol dehydration via pervaporation. <i>Journal of Membrane Science</i> , 2015 , 492, 197-208	9.6	30
252	Janus membranes with asymmetric wettability via a layer-by-layer coating strategy for robust membrane distillation. <i>Journal of Membrane Science</i> , 2020 , 603, 118031	9.6	30
251	In-situ synthesis and cross-linking of polyamide thin film composite (TFC) membranes for bioethanol applications. <i>Journal of Membrane Science</i> , 2014 , 458, 47-57	9.6	30
250	The development of novel Nexar block copolymer/Ultem composite membranes for C ₂ -C ₄ alcohols dehydration via pervaporation. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 13874-83	9.5	30

249	Production of ultrahigh-modulus liquid-crystal polymer rods. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1988 , 26, 1549-1552	2.6	30
248	Membrane development and energy analysis of freeze desalination-vacuum membrane distillation hybrid systems powered by LNG regasification and solar energy. <i>Desalination</i> , 2019 , 449, 16-25	10.3	30
247	Fabrication of porous and interconnected PBI/P84 ultrafiltration membranes using [EMIM]OAc as the green solvent. <i>Chemical Engineering Science</i> , 2013 , 87, 194-203	4.4	29
246	Novel rectangular membranes with multiple hollow holes for ultrafiltration. <i>Journal of Membrane Science</i> , 2011 , 372, 20-28	9.6	29
245	A governing equation for physical aging of thick and thin fluoropolyimide films. <i>Journal of Applied Polymer Science</i> , 2004 , 92, 1758-1764	2.9	29
244	Gas-sorption properties of 6FDA/urene/1,4-phenylenediamine (pPDA) and 6FDA/urene/1,3-phenylenediamine (mPDA) copolyimides. <i>Journal of Applied Polymer Science</i> , 2003 , 90, 2187-2193	2.9	29
243	Study and characterization of the hysteresis behavior of polyimide membranes in the thermal cycle process of pervaporation separation. <i>Journal of Membrane Science</i> , 2005 , 253, 13-22	9.6	29
242	Activated carbon-filled cellulose acetate hollow-fiber membrane for cell immobilization and phenol degradation. <i>Journal of Applied Polymer Science</i> , 2000 , 76, 695-707	2.9	29
241	Can Composite Janus Membranes with an Ultrathin Dense Hydrophilic Layer Resist Wetting in Membrane Distillation?. <i>Environmental Science & Technology</i> , 2020 , 54, 12713-12722	10.3	29
240	Metal-Organic Framework-Functionalized Alumina Membranes for Vacuum Membrane Distillation. <i>Water (Switzerland)</i> , 2016 , 8, 586	3	29
239	Polyarylether membranes for dehydration of ethanol and methanol via pervaporation. <i>Separation and Purification Technology</i> , 2018 , 193, 165-174	8.3	29
238	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> , 2018 , 2, 1800044	5.9	28
237	Thin-film composite tri-bore hollow fiber (TFC TbHF) membranes for isopropanol dehydration by pervaporation. <i>Journal of Membrane Science</i> , 2014 , 471, 155-167	9.6	28
236	A novel method of AquaporinZ incorporation via binary-lipid Langmuir monolayers. <i>Colloids and Surfaces B: Biointerfaces</i> , 2012 , 89, 283-8	6	28
235	Novel Polybenzimidazole (PBI) Nanofiltration Membranes for the Separation of Sulfate and Chromate from High Alkalinity Brine To Facilitate the Chlor-Alkali Process. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 1572-1577	3.9	28
234	A study on pilot-scale degassing by polypropylene (PP) hollow fiber membrane contactors. <i>Desalination</i> , 2008 , 234, 316-322	10.3	28
233	Rheology, morphology and properties of LCP/Nylon 66 composite fibers. <i>Polymer Composites</i> , 2000 , 21, 114-123	3	28
232	High performance polymer blends 1994 , 297-327		28

231	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> , 2018 , 6, 10696-10705	8.3	27
230	Modifying the molecular structure and gas separation performance of thermally labile polyimide-based membranes for enhanced natural gas purification. <i>Chemical Engineering Science</i> , 2013 , 104, 1056-1064	4.4	27
229	Molecular interactions between polybenzimidazole and [EMIM]OAc, and derived ultrafiltration membranes for protein separation. <i>Green Chemistry</i> , 2012 , 14, 1405	10	27
228	Kinetics of thermal degradation of 6FDA based copolyimides] <i>Polymer Degradation and Stability</i> , 2002 , 75, 273-285	4.7	27
227	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> , 2020 , 8, 6196-6209	13	27
226	H ₂ /CO ₂ separation enhancement via chemical modification of polybenzimidazole nanostructure. <i>Journal of Membrane Science</i> , 2019 , 572, 343-349	9.6	27
225	Molecular design of double crosslinked sulfonated polyphenylsulfone /polybenzimidazole blend membranes for an efficient hydrogen purification. <i>Journal of Membrane Science</i> , 2018 , 563, 726-733	9.6	27
224	Pre-treatment of wastewater retentate to mitigate fouling on the pressure retarded osmosis (PRO) process. <i>Separation and Purification Technology</i> , 2019 , 215, 390-397	8.3	26
223	Highly permeable forward osmosis (FO) membranes for high osmotic pressure but viscous draw solutes. <i>Journal of Membrane Science</i> , 2015 , 496, 132-141	9.6	26
222	Sulfonated hyperbranched polyglycerol grafted membranes with antifouling properties for sustainable osmotic power generation using municipal wastewater. <i>Journal of Membrane Science</i> , 2018 , 563, 521-530	9.6	26
221	Mitigating the hydraulic compression of nanofiltration hollow fiber membranes through a single-step direct spinning technique. <i>Environmental Science & Technology</i> , 2014 , 48, 13933-40	10.3	26
220	Exploration of heavy metal ions transmembrane flux enhancement across a supported liquid membrane by appropriate carrier selection. <i>Chemical Engineering Science</i> , 2007 , 62, 6032-6039	4.4	26
219	Auto-catalyzed poly(ortho ester) microspheres: a study of their erosion and drug release mechanism. <i>Journal of Controlled Release</i> , 2001 , 75, 11-25	11.7	26
218	Developing ultra-high gas permeance PVDF hollow fibers for air filtration applications. <i>Separation and Purification Technology</i> , 2018 , 205, 184-195	8.3	26
217	Film and membrane properties of polybenzimidazole (PBI) and polyarylate alloys. <i>Polymer Engineering and Science</i> , 1990 , 30, 1-6	2.3	26
216	Forward Osmosis (FO) for Water Reclamation from Emulsified Oil/Water Solutions: Effects of Membrane and Emulsion Characteristics. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 5021-5032	8.3	25
215	High performance dual-layer hollow fiber membrane of sulfonated polyphenylsulfone/Polybenzimidazole for hydrogen purification. <i>Journal of Membrane Science</i> , 2019 , 591, 117292	9.6	25
214	Nanoparticles Embedded in Amphiphilic Membranes for Carbon Dioxide Separation and Dehumidification. <i>ChemSusChem</i> , 2017 , 10, 4046-4055	8.3	25

213	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> , 2007 , 62, 1721-1729	4.4	25
212	Aging phenomenon of 6FDA-polyimide/polyacrylonitrile composite hollow fibers. <i>Journal of Applied Polymer Science</i> , 1996 , 59, 77-82	2.9	25
211	Fabrication of organic solvent nanofiltration membranes via facile bioinspired one-step modification. <i>Chemical Engineering Science</i> , 2019 , 198, 74-84	4.4	24
210	Effect of $\Gamma(\text{CF}_3)_2\text{I}$ on the Surface Energy of Main-Chain Liquid Crystalline and Crystalline Polymers. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 4145-4150	3.4	24
209	Macromolecular composites of extruded thermotropic polymer sheets. <i>Journal of Macromolecular Science - Physics</i> , 1984 , 23, 497-509	1.4	24
208	Effects of chemical structure on gas transport properties of polyethersulfone polymers. <i>Polymer</i> , 2018 , 135, 76-84	3.9	24
207	Mechanically Strong and Flexible Hydrolyzed Polymers of Intrinsic Microporosity (PIM-1) Membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017 , 55, 344-354	2.6	23
206	Enhanced membrane systems to harvest water and provide comfortable air via dehumidification & moisture condensation. <i>Separation and Purification Technology</i> , 2019 , 220, 136-144	8.3	23
205	Nanoclays-Incorporated Thin-Film Nanocomposite Membranes for Reverse Osmosis Desalination. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1902108	4.6	23
204	Development of Novel Multichannel Rectangular Membranes with Grooved Outer Selective Surface for Membrane Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 14046-14054	3.9	23
203	Rheological investigations of linear and hyperbranched polyethersulfone towards their as-spun phase inversion membranes' differences. <i>Polymer</i> , 2009 , 50, 524-533	3.9	23
202	Novel microencapsulated curing accelerator for prolonging shelf life of epoxy resin composition. <i>Journal of Applied Polymer Science</i> , 2002 , 85, 873-878	2.9	23
201	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> , 2001 , 188, 29-37	9.6	23
200	Effects of Pluronic F127 on phase inversion and membrane formation of PAN hollow fibers for air filtration. <i>Journal of Membrane Science</i> , 2019 , 584, 137-147	9.6	22
199	Exploring the spinning and operations of multibore hollow fiber membranes for vacuum membrane distillation. <i>AIChE Journal</i> , 2014 , 60, 1078-1090	3.6	22
198	Pushing the limits of high performance dual-layer hollow fiber fabricated via I2PS process in dehydration of ethanol. <i>AIChE Journal</i> , 2013 , 59, 3006-3018	3.6	22
197	A pilot study on pressure retarded osmosis operation and effective cleaning strategies. <i>Desalination</i> , 2017 , 420, 273-282	10.3	22
196	Preparation and Characterization of 4,4'-Bis(4-aminophenoxy)diphenyl Sulfone Based Fluoropoly(ether-imide)/Organo-Modified Clay Nanocomposites. <i>Macromolecular Materials and Engineering</i> , 2003 , 288, 337-356	3.9	22

195	The physical aging phenomenon of 6FDA-durene polyimide hollow fiber membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000 , 38, 765-775	2.6	22
194	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> , 1999 , 73, 2195-2207	2.9	22
193	Pressure build-up during the packing stage of injection molding. <i>Polymer Engineering and Science</i> , 1985 , 25, 772-777	2.3	22
192	In-situ cross-linked PVDF membranes with enhanced mechanical durability for vacuum membrane distillation. <i>AIChE Journal</i> , 2016 , 62, 4013-4022	3.6	21
191	Analysis of flux reduction behaviors of PRO hollow fiber membranes: Experiments, mechanisms, and implications. <i>Journal of Membrane Science</i> , 2016 , 505, 1-14	9.6	21
190	Physical aging, high temperature and water vapor permeation studies of UV-rearranged PIM-1 membranes for advanced hydrogen purification and production. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 9786-9793	6.7	21
189	Experimental and computational studies of membrane extraction of Cu(II). <i>AIChE Journal</i> , 2006 , 52, 3266-3277	5.2	21
188	Thin-film nanocomposite membranes incorporated with defective ZIF-8 nanoparticles for brackish water and seawater desalination. <i>Journal of Membrane Science</i> , 2021 , 625, 119158	9.6	21
187	WS2 deposition on cross-linked polyacrylonitrile with synergistic transformation to yield organic solvent nanofiltration membranes. <i>Journal of Membrane Science</i> , 2019 , 588, 117219	9.6	20
186	Characteristics of water and salt transport, free volume and their relationship with the functional groups of novel cellulose esters. <i>Polymer</i> , 2013 , 54, 4560-4569	3.9	20
185	Effects of SiO ₂ /Si Agglomerations on CO ₂ Transport and Separation Properties of Sol-Derived Nanohybrid Membranes. <i>Macromolecules</i> , 2011 , 44, 6057-6066	5.5	20
184	Effects of spacer arm length and benzoation on enantioseparation performance of β -cyclodextrin functionalized cellulose membranes. <i>Journal of Membrane Science</i> , 2009 , 339, 21-27	9.6	20
183	Ultrahigh Flux Composite Hollow Fiber Membrane via Highly Crosslinked PDMS for Recovery of Hydrocarbons: Propane and Propene. <i>Macromolecular Rapid Communications</i> , 2018 , 39, 1700535	4.8	20
182	In situ regulation of micro-pore to design high performance polyimide membranes for pervaporation dehydration of isopropanol. <i>Journal of Membrane Science</i> , 2015 , 493, 299-310	9.6	19
181	One-step cross-linking and tannic acid modification of polyacrylonitrile hollow fibers for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , 2020 , 610, 118294	9.6	19
180	Food sustainability by designing and modelling a membrane controlled atmosphere storage system. <i>Journal of Food Engineering</i> , 2013 , 114, 361-374	6	19
179	Gypsum (CaSO ₄ ·2H ₂ O) Scaling on Polybenzimidazole and Cellulose Acetate Hollow Fiber Membranes under Forward Osmosis. <i>Membranes</i> , 2013 , 3, 354-74	3.8	19
178	Elimination of die swell and instability in hollow fiber spinning process of hyperbranched polyethersulfone (HPES) via novel spinneret designs and precise spinning conditions. <i>Chemical Engineering Journal</i> , 2010 , 163, 143-153	14.7	19

- 177 Thermal analysis of vectra B950 liquid crystal polymer. *Polymer Engineering and Science*, **1999**, 39, 953-962 3 19
- 176 Teflon AF2400/Ultem composite hollow fiber membranes for alcohol dehydration by high-temperature vapor permeation. *AIChE Journal*, **2016**, 62, 1747-1757 3.6 19
- 175 Schiff base reaction assisted one-step self-assembly method for efficient gravity-driven oil-water emulsion separation. *Separation and Purification Technology*, **2019**, 213, 437-446 8.3 19
- 174 Mitigation of inorganic fouling on pressure retarded osmosis (PRO) membranes by coagulation pretreatment of the wastewater concentrate feed. *Journal of Membrane Science*, **2019**, 572, 658-667 9.6 19
- 173 Reduced thermal rearrangement temperature via formation of zeolitic imidazolate framework (ZIF)-8-based nanocomposites for hydrogen purification. *Separation and Purification Technology*, **2019**, 212, 965-973 8.3 19
- 172 Emerging R&D on membranes and systems for water reuse and desalination. *Chinese Journal of Chemical Engineering*, **2019**, 27, 1578-1585 3.2 18
- 171 Rheologically controlled design of nature-inspired superhydrophobic and self-cleaning membranes for clean water production. *Npj Clean Water*, **2020**, 3, 11.2 18
- 170 Study on water transport through a mechanically robust Aquaporin Z biomimetic membrane. *Journal of Membrane Science*, **2013**, 445, 47-52 9.6 18
- 169 Effect of polymer compositions on the fabrication of poly(ortho-ester) microspheres for controlled release of protein. *Journal of Applied Polymer Science*, **2001**, 80, 1630-1642 2.9 18
- 168 POE-PEG-POE triblock copolymeric microspheres containing protein. II. Polymer erosion and protein release mechanism. *Journal of Controlled Release*, **2001**, 75, 129-41 11.7 18
- 167 Dual-skinned polyamide/poly(vinylidene fluoride)/cellulose acetate membranes with embedded woven. *Journal of Membrane Science*, **2016**, 520, 840-849 9.6 18
- 166 Mass transport of various membrane configurations in pressure retarded osmosis (PRO). *Journal of Membrane Science*, **2017**, 537, 160-176 9.6 17
- 165 Teflon AF2400/polyethylene membranes for organic solvent nanofiltration (OSN). *Journal of Membrane Science*, **2020**, 602, 117972 9.6 17
- 164 Green Layer-by-Layer Method for the Preparation of Polyacrylonitrile-Supported Zinc Benzene-1,4-dicarboxylic Acid Membranes. *ChemSusChem*, **2018**, 11, 2612-2619 8.3 17
- 163 Permeability, Solubility, Diffusivity, and PALS Data of Cross-linkable 6FDA-based Copolyimides. *Industrial & Engineering Chemistry Research*, **2014**, 53, 2449-2460 3.9 17
- 162 Thickness dependent thermal rearrangement of an ortho-functional polyimide. *Journal of Membrane Science*, **2014**, 450, 308-312 9.6 17
- 161 Thermally evolved and boron bridged graphene oxide (GO) frameworks constructed on microporous hollow fiber substrates for water and organic matters separation. *Carbon*, **2017**, 123, 193-204 10.4 17
- 160 Synthesis and structure of wholly aromatic liquid-crystalline polyesters containing meta- and ortholinkages. *Journal of Polymer Science Part A*, **2001**, 39, 1242-1248 2.5 17

159	Selection of crosslinkers and control of microstructure of vapor-phase crosslinked composite membranes for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , 2020 , 616, 118582	9.6	17
158	Experiments and Modeling of Boric Acid Permeation through Double-Skinned Forward Osmosis Membranes. <i>Environmental Science & Technology</i> , 2016 , 50, 7696-705	10.3	16
157	The exploration of the reversed enantioselectivity of a chitosan functionalized cellulose acetate membranes in an electric field driven process. <i>Journal of Membrane Science</i> , 2012 , 389, 372-379	9.6	16
156	Understanding of low osmotic efficiency in forward osmosis: Experiments and modeling. <i>Desalination</i> , 2013 , 313, 156-165	10.3	16
155	Cooling Crystallization of Sodium Chloride via Hollow Fiber Devices to Convert Waste Concentrated Brines to Useful Products. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 10183-10192	3.9	16
154	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> , 2017 , 544, 378-387	9.6	16
153	Micelle-like macrovoids in mixed matrix PVDF-PTFE hollow fiber membranes. <i>Journal of Membrane Science</i> , 2009 , 338, 5-10	9.6	16
152	Effects of relative humidity, particle hygroscopicity, and filter hydrophilicity on filtration performance of hollow fiber air filters. <i>Journal of Membrane Science</i> , 2020 , 595, 117561	9.6	16
151	Sandwich-structured hollow fiber membranes for osmotic power generation. <i>Desalination</i> , 2015 , 376, 73-81	10.3	15
150	Engineering design of outer-selective tribore hollow fiber membranes for forward osmosis and oil-water separation. <i>AIChE Journal</i> , 2015 , 61, 4491-4501	3.6	15
149	A Critical Review of Polybenzimidazoles. <i>Polymer Reviews</i> , 1997 , 37, 277-301	14	15
148	High-affinity sulfonated materials with transition metal counterions for enhanced protein separation in dual-layer hollow fiber membrane chromatography. <i>Journal of Chromatography A</i> , 2008 , 1187, 285-8	4.5	15
147	Revisit the crystallization mechanism of vectra, a liquid crystal polymer. <i>Journal of Applied Polymer Science</i> , 1999 , 72, 1139-1150	2.9	15
146	Nanofiltration-Inspired Janus Membranes with Simultaneous Wetting and Fouling Resistance for Membrane Distillation. <i>Environmental Science & Technology</i> , 2021 , 55, 7654-7664	10.3	15
145	Hydrophobic Perfluoropolyether-Coated Thin-Film Composite Membranes for Organic Solvent Nanofiltration. <i>ACS Applied Polymer Materials</i> , 2019 , 1, 472-481	4.3	15
144	Osmotic power generation by inner selective hollow fiber membranes: An investigation of thermodynamics, mass transfer, and module scale modelling. <i>Journal of Membrane Science</i> , 2017 , 526, 417-428	9.6	14
143	Using iron (III) acetylacetonate as both a cross-linker and micropore former to develop polyimide membranes with enhanced gas separation performance. <i>Separation and Purification Technology</i> , 2014 , 133, 120-128	8.3	14
142	Modification of the commercial carrier in supported liquid membrane system to enhance lactic acid flux and to separate l,d-lactic acid enantiomers. <i>Journal of Membrane Science</i> , 2007 , 294, 127-131	9.6	14

141	Preferential solvation stabilization for hydrophobic polymeric nanoparticle fabrication. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 13877-82	3.4	14
140	Novel thin-film polymerization and time evolution of liquid crystal texture during polymerization. <i>Chemical Engineering Science</i> , 1999 , 54, 663-674	4.4	14
139	Miscibility of fluoro-containing polyimide blends. <i>Polymer</i> , 1996 , 37, 1635-1640	3.9	14
138	Polybenzimidazole and polysulfone blends. <i>Polymer Engineering and Science</i> , 1993 , 33, 1042-1048	2.3	14
137	Fluid behavior and orientation developments during extrusion of liquid-crystal polymeric rods. <i>Journal of Polymer Science, Part C: Polymer Letters</i> , 1986 , 24, 299-303		14
136	Analysis of the packing stage in injection molding of disk cavities. <i>Journal of Applied Polymer Science</i> , 1983 , 28, 2999-3002	2.9	14
135	Novel reverse osmosis membranes incorporated with Co-Al layered double hydroxide (LDH) with enhanced performance for brackish water desalination. <i>Desalination</i> , 2021 , 498, 114740	10.3	14
134	Dehydration of industrial isopropanol (IPA) waste by pervaporation and vapor permeation membranes. <i>Journal of Applied Polymer Science</i> , 2018 , 135, 45086	2.9	13
133	Integration of membrane distillation (MD) and solid hollow fiber cooling crystallization (SHFCC) systems for simultaneous production of water and salt crystals. <i>Journal of Membrane Science</i> , 2018 , 564, 905-915	9.6	13
132	Exploration of ionic modification in dual-layer hollow fiber membranes for long-term high-performance protein separation. <i>AIChE Journal</i> , 2009 , 55, 321-330	3.6	13
131	A fine match between the stereoselective ligands and membrane pore size for enhanced chiral separation. <i>AIChE Journal</i> , 2009 , 55, 2284-2291	3.6	13
130	Development of high-performance polysulfone/poly(4-vinylpyridine) composite hollow fibers for CO ₂ /CH ₄ separation. <i>Desalination</i> , 2006 , 192, 112-116	10.3	13
129	Morphology Control and Mechanical Properties of Liquid Crystalline Polymer-Polyamide Composite Fibers. <i>Polymer Journal</i> , 2002 , 34, 575-583	2.7	13
128	Phase-Inversion Poly(ether imide) Membranes Prepared from Water-Miscible/Immiscible Mixture Solvents. <i>Industrial & Engineering Chemistry Research</i> , 1999 , 38, 2650-2658	3.9	13
127	Thermotropic polyester amide-carbon fiber composites. <i>Journal of Applied Polymer Science</i> , 1986 , 31, 965-977	2.9	13
126	Cure mechanism of a modified nitrile epoxy adhesive. <i>Journal of Applied Polymer Science</i> , 1984 , 29, 4403-4406	4.06	13
125	UiO-66-NH ₂ incorporated dual-layer hollow fibers made by immiscibility induced phase separation (I2PS) process for ethanol dehydration via pervaporation. <i>Journal of Membrane Science</i> , 2020 , 595, 117571	9.6	13
124	Highly permeable thin film composite hollow fiber membranes for brackish water desalination by incorporating amino functionalized carbon quantum dots and hypochlorite treatment. <i>Journal of Membrane Science</i> , 2021 , 620, 118952	9.6	13

123	Hydroxyl-terminated poly(ethyleneimine) polymer enhanced ultrafiltration for boron removal. <i>Separation and Purification Technology</i> , 2019 , 222, 214-220	8.3	12
122	Exploration of regeneration and reusability of human serum albumin as a stereoselective ligand for chiral separation in affinity ultrafiltration. <i>Journal of Membrane Science</i> , 2010 , 362, 501-508	9.6	12
121	Novel Approach to Fabricate Carbon Molecular-Sieve Membranes Based on Consideration of Interpenetrating Networks. <i>Macromolecular Rapid Communications</i> , 2004 , 25, 1247-1250	4.8	12
120	The facile synthesis of an aldehyde-containing graft copolymer membrane for covalent protein capture with retention of protein functionality. <i>Journal of Chromatography A</i> , 2010 , 1217, 1904-11	4.5	11
119	Effect of catalysts on thin-film polymerization of thermotropic liquid crystalline copolyester. <i>Journal of Polymer Science Part A</i> , 2000 , 38, 1257-1269	2.5	11
118	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> , 1999 , 37, 3084-3096	2.6	11
117	Maximize the operating profit of a SWRO-PRO integrated process for optimal water production and energy recovery. <i>Renewable Energy</i> , 2016 , 94, 304-313	8.1	11
116	Employing a green cross-linking method to fabricate polybenzimidazole (PBI) hollow fiber membranes for organic solvent nanofiltration (OSN). <i>Separation and Purification Technology</i> , 2021 , 255, 117702	8.3	11
115	Solvent Recovery via Organic Solvent Pressure Assisted Osmosis. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 4970-4978	3.9	10
114	Membrane Pervaporation 2013 , 259-299		10
113	Bulk Viscosity and Its Unstable Behavior upon Storage in Polyimide Precursor Solutions. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 4266-4272	3.9	10
112	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> , 2000 , 38, 2221-2231	2.6	10
111	Rheological behavior and prediction for blending conditions of a thermotropic liquid crystalline polyester with nylon. <i>Polymers for Advanced Technologies</i> , 2000 , 11, 153-158	3.2	10
110	Optimization of TFC-PES hollow fiber membranes for reverse osmosis (RO) and osmotically assisted reverse osmosis (OARO) applications. <i>Journal of Membrane Science</i> , 2021 , 625, 119156	9.6	10
109	Osmotic power production from seawater brine by hollow fiber membrane modules: Net power output and optimum operating conditions. <i>AIChE Journal</i> , 2016 , 62, 1216-1225	3.6	10
108	Investigation of novel molecularly tunable thin-film nanocomposite nanofiltration hollow fiber membranes for boron removal. <i>Journal of Membrane Science</i> , 2021 , 620, 118887	9.6	10
107	Fabrication of defect-free thin-film nanocomposite (TFN) membranes for reverse osmosis desalination. <i>Desalination</i> , 2021 , 516, 115230	10.3	10
106	Enantiomeric resolution of tryptophan via stereoselective binding in an ion-exchange membrane partitioned free flow isoelectric focusing system. <i>Chemical Engineering Journal</i> , 2011 , 174, 522-529	14.7	9

105	Phase Separation and Coalescence, Annihilation of Liquid Crystal Textures during Polymerization of Main-Chain Liquid Crystalline Polyesters. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 4923-4932	3.4	9
104	Recent progress of organic solvent nanofiltration membranes. <i>Progress in Polymer Science</i> , 2021 , 123, 101470	29.6	9
103	Ultra-strong polymeric hollow fiber membranes for saline dewatering and desalination. <i>Nature Communications</i> , 2021 , 12, 2338	17.4	9
102	The Role of Fluorinated Aryl Ether Moiety in Polyimide-co-etherimide on Gas Transport Properties. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 5315-5323	3.9	9
101	Haze particles removal and thermally induced membrane dehumidification system. <i>Separation and Purification Technology</i> , 2017 , 185, 24-32	8.3	8
100	A Conceptual Demonstration of Decaffeination via Nanofiltration. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 7737-7742	3.9	8
99	Novel hollow fiber membranes with defined unit-step morphological change. <i>Journal of Membrane Science</i> , 2001 , 193, 123-128	9.6	8
98	Sol-Gel Synthesis and Characterization of SrFeCo _{0.5} O _{3.25} -Powder. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 5432-5435	3.9	8
97	Studies on the phase transition and thermal stability of Xydar and Zenite series liquid crystalline polymers. <i>Polymer Engineering and Science</i> , 2000 , 40, 841-856	2.3	8
96	Improvement of LPS-based command surfaces: effect of inserting a flexible disiloxane segment into the azo side chain on photo-driven response. <i>Liquid Crystals</i> , 2000 , 27, 1683-1689	2.3	8
95	Halo formation in asymmetric polyetherimide and polybenzimidazole blend hollow fiber membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1999 , 37, 1575-1585	2.6	8
94	Influence of contaminants in glycerol/water mixtures during post-treatment on physicochemical properties and separation performance of air-dried membranes. <i>Journal of Membrane Science</i> , 2019 , 572, 223-229	9.6	8
93	Surface Functionalization of Polybenzimidazole Membranes To Increase Hydrophilicity and Charge. <i>ACS Symposium Series</i> , 2011 , 303-321	0.4	7
92	Novel membrane processes for the enantiomeric resolution of tryptophan by selective permeation enhancements. <i>AIChE Journal</i> , 2011 , 57, 1154-1162	3.6	7
91	Thin-film polymerization and BSI-Metropolis Monte Carlo simulation of fluorinated aromatic copoly(esterimide)s. <i>Polymer</i> , 2005 , 46, 3914-3926	3.9	7
90	Anisotropic dielectric properties of polyimides consisting of various molar ratios of meta to para diamine with trifluoromethyl group. <i>Polymer Engineering and Science</i> , 2001 , 41, 1783-1793	2.3	7
89	The Effect of (C ₆ F ₄) _n on the Surface Free Energy of Main-Chain Liquid Crystalline and Crystalline Polymers. <i>Macromolecular Rapid Communications</i> , 2001 , 22, 835-841	4.8	7
88	Nanovoid-Enhanced Thin-Film Composite Reverse Osmosis Membranes Using ZIF-67 Nanoparticles as a Sacrificial Template. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 33024-33033	9.5	7

87	Hydrogen storage in molecular clathrate cages under conditions of moderate pressure and ambient temperature. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 19998-20003	6.7	7
86	Highly Permeable and Selective Pore-Spanning Biomimetic Membrane Embedded with Aquaporin Z. <i>Small</i> , 2012 , 8, 1969-1969	11	6
85	Self-sharpening phenomenon arisen by ion-exchange membranes in multi-compartment free-flow isoelectric focusing (IEM-FFIEF). <i>Chemical Engineering Science</i> , 2009 , 64, 5222-5230	4.4	6
84	A New Testing System To Determine the O ₂ /N ₂ Mixed-Gas Permeation through Hollow-Fiber Membranes with an Oxygen Analyzer. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 871-874	2.9	6
83	Molecular mass determination of polyamic acid ionic salt by size-exclusion chromatography. <i>Journal of Chromatography A</i> , 2002 , 977, 207-12	4.5	6
82	Emerging membrane technologies developed in NUS for water reuse and desalination applications: membrane distillation and forward osmosis. <i>Membrane Water Treatment</i> , 2011 , 2, 1-24		6
81	3D-macrocycles impregnated polybenzimidazole hollow fiber membranes with excellent organic solvent resistance for industrial solvent recovery. <i>Journal of Membrane Science</i> , 2021 , 638, 119678	9.6	6
80	Surface microcracks decoration and disclination defects of wholly aromatic liquid crystalline copolyesters. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 5889-96	3.4	5
79	Effect of a fluorine lateral moiety on the liquid crystallinity of wholly aromatic polyester-amides. <i>Polymer</i> , 2002 , 43, 7433-7441	3.9	5
78	Studies on ionic salt of polyamic acid and related compounds. <i>Journal of Polymer Research</i> , 2005 , 11, 299-308	2.7	5
77	Synthesis and mesomorphic properties of a novel ladder-like 1,4-phenylene-bridged liquid crystalline polysiloxane containing ester-based mesogenic side groups. <i>Liquid Crystals</i> , 2001 , 28, 35-43	2.3	5
76	A simple approach to estimate gas permeability and selectivity of extremely thin and brittle materials. <i>Chemical Engineering Science</i> , 2000 , 55, 1093-1099	4.4	5
75	Evolution of Surface Free Energy during Thin-Film Polymerization of Main-Chain Liquid Crystalline Polymers. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 108-114	3.4	5
74	The effect of melt compressibility on a high-speed wire-coating process. <i>Polymer Engineering and Science</i> , 1986 , 26, 410-414	2.3	5
73	Laser-induced fluid motion on a dye/polymer layer for optical data storage. <i>AIChE Journal</i> , 1987 , 33, 1041-1044	3.6	5
72	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> , 2021 , 626, 119187	9.6	5
71	Particle grouping and agglomeration assisted by damper oscillation systems. <i>Separation and Purification Technology</i> , 2018 , 207, 12-19	8.3	4
70	Characterizing free volumes and layer structures in polymeric membranes using slow positron annihilation spectroscopy. <i>Journal of Physics: Conference Series</i> , 2011 , 262, 012027	0.3	4

69	Synthesis of mosaic membranes and application for egg white protein fractionation by partitioned free-flow isoelectric focusing (FFIEF). <i>Journal of Membrane Science</i> , 2010 , 353, 94-102	9.6	4
68	Solvent selection for manufacture of fluorinated polyimide composite membranes. <i>Desalination</i> , 2006 , 193, 8-13	10.3	4
67	Aromatic liquid-crystalline polyesters comprising a 2,5-thiophene unit synthesized and studied by the thin-film polymerization method. <i>Journal of Materials Research</i> , 2003 , 18, 1509-1521	2.5	4
66	Synthesis and characterization of a metal chelate-bridged quasi-ladder main chain discotic liquid crystal polymer. <i>Liquid Crystals</i> , 2001 , 28, 477-481	2.3	4
65	The effect of lithium chloride on polybenzimidazole and polysulfone blend fibers. <i>Polymer Engineering and Science</i> , 1994 , 34, 428-433	2.3	4
64	Analysis of the calendaring of compressible fluids. <i>Journal of Applied Polymer Science</i> , 1983 , 28, 2119-2124	4	4
63	Isothermal steady spinning of an oldroyd fluid B. <i>AIChE Journal</i> , 1985 , 31, 857-859	3.6	4
62	Experimental and theoretical estimations of surface tensions for commercial liquid crystalline polymers, Vectra [®] A-950, B-950 and Xydar [®] BRT-900. <i>Macromolecular Chemistry and Physics</i> , 1998 , 199, 1013-1017	2.6	4
61	Nanostructured Membranes for Enhanced Forward Osmosis and Pressure-Retarded Osmosis 2020 , 373-394	4	4
60	Membranes made from nonsolvent-thermally induced phase separation (N-TIPS) for decellularization of blood in dry plasma spot (DPS) applications. <i>Chemical Engineering Science</i> , 2021 , 229, 116010	4.4	4
59	Revitalize integrally skinned hollow fiber membranes with spatially impregnated 3D-macrocycles for organic solvent nanofiltration. <i>Chemical Engineering Journal</i> , 2021 , 422, 130015	14.7	4
58	Ternary fluoro-containing polyimide blends and fluoro-containing polyimide/polyester blends. <i>Polymers for Advanced Technologies</i> , 1997 , 8, 537-544	3.2	3
57	Experimental and theoretical estimations of surface tensions for commercial liquid crystalline polymers, Vectra [®] A-950, B-950 and Xydar [®] BRT-900. <i>Macromolecular Chemistry and Physics</i> , 1998 , 199, 1013-1017	2.6	3
56	Molecular design of liquid crystalline poly(ester-amide)s with perfluoroalkyl spacers. <i>Liquid Crystals</i> , 2004 , 31, 871-881	2.3	3
55	Mathematical Modeling of Air-Drag Spinning for Nonwoven Fabrics. <i>Polymer-Plastics Technology and Engineering</i> , 1985 , 24, 117-127		3
54	Thin-film nanocomposite reverse osmosis membranes incorporated with citrate-modified layered double hydroxides (LDHs) for brackish water desalination and boron removal. <i>Desalination</i> , 2022 , 527, 115583	10.3	3
53	Unlock the secret of air blowing in developing high strength and superhydrophobic membranes for membrane distillation. <i>Desalination</i> , 2022 , 527, 115579	10.3	3
52	Crystallization of Main Chain Liquid Crystalline Polymers 2001 ,		3

51	Supramolecular Polymer Network Membranes with Molecular-Sieving Nanocavities for Efficient Pre-Combustion CO Capture.. <i>Small Methods</i> , 2022 , 6, e2101288	12.8	3
50	Novel Cellulose Triacetate (CTA)/Cellulose Diacetate (CDA) Blend Membranes Enhanced by Amine Functionalized ZIF-8 for CO Separation. <i>Polymers</i> , 2021 , 13,	4.5	3
49	Mechanically strong Janus tri-bore hollow fiber membranes with asymmetric pores for anti-wetting and anti-fouling membrane distillation. <i>Chemical Engineering Journal</i> , 2022 , 429, 132455	14.7	3
48	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
47	Thin-film polymerization and characterization of Sumitomo's Sumikasuper□ -type liquid crystalline polymers. <i>Liquid Crystals</i> , 2003 , 30, 753-764	2.3	2
46	Thin-film polymerization and Metropolis Monte Carlo simulation of thermotropic liquid crystalline poly(ester-amide)s. <i>Synthetic Metals</i> , 2004 , 147, 191-197	3.6	2
45	AN UNDERSTANDING OF THE FLUID MOTION AND PRESSURE BUILD-UP IN A NON-ISOTHERMAL INJECTION MOLD PACKING STAGE. <i>Journal of Polymer Engineering</i> , 1988 , 8,	1.4	2
44	Principles of Preform Design for Stretch Blow Molding Process. <i>Polymer-Plastics Technology and Engineering</i> , 1983 , 20, 147-160		2
43	Plasticization-enhanced trimethylbenzene functionalized polyethersulfone hollow fiber membranes for propylene and propane separation. <i>Journal of Membrane Science</i> , 2022 , 647, 120293	9.6	2
42	Tunable Supramolecular Cavities Molecularly Homogenized in Polymer Membranes for Ultraefficient Precombustion CO Capture. <i>Advanced Materials</i> , 2021 , e2105156	24	2
41	Advanced multiple-layer composite CTA/CDA hollow fiber membranes for CO2 separations. <i>Journal of Membrane Science</i> , 2021 , 625, 119124	9.6	2
40	Design and fabrication of hollow fiber membrane modules 2021 , 225-252		2
39	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> , 2021 , 640, 119822	9.6	2
38	Pressure-assisted polydopamine modification of thin-film composite reverse osmosis membranes for enhanced desalination and antifouling performance. <i>Desalination</i> , 2022 , 530, 115671	10.3	2
37	Forward Osmosis Membranes: Synthesis and Characterization 2015 , 151-180		1
36	Polymeric Membranes for Energy Applications 2013 , 1		1
35	Polymeric Membranes for Energy Applications 2010 ,		1
34	Dynamics of Defect Annihilations in Polymerization of Aromatic Liquid Crystalline Polyesters. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 1596-1603	3.4	1

33	Investigation of the Effect of an Ether Moiety on the Liquid Crystallinity by Thin Film Polymerization. <i>Macromolecular Chemistry and Physics</i> , 2002 , 203, 122-128	2.6	1
32	Micro- and nanomorphologies of isotactic polystyrene revealed by PLM, AFM, and TEM. <i>Journal of Applied Polymer Science</i> , 2002 , 86, 422-427	2.9	1
31	Synthesis and characterization of a novel polyorganosiloxane having a bigger sized tubular structure and its supramolecular clathrate. <i>Polymers for Advanced Technologies</i> , 2002 , 13, 188-195	3.2	1
30	Calorimetry as a tool for predicting bulk viscosity drift of polyamic acid ionic salt solutions. <i>Analytical Sciences</i> , 2002 , 18, 211-4	1.7	1
29	Dynamic Responses of a Thermotropic Main-Chain Liquid Crystalline Polyester during Polymerization under Electric Fields. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 10506-10512	3.4	1
28	Evolution of surface chemistry and physical properties during thin film polymerization of thermotropic liquid crystalline polymers. <i>Journal of Adhesion Science and Technology</i> , 1999 , 13, 1193-1203	3	1
27	Effect of Polymer Material Behavior on a Tubular Membrane Deformation. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 1984 , 10, 249-257	3	1
26	Delamination of single layer hollow fiber membranes induced by bi-directional phase separation. <i>Journal of Membrane Science</i> , 2021 , 622, 118992	9.6	1
25	The effects of spinneret dimension and hollow fiber dimension on gas separation performance of ultra-thin defect-free Torlon hollow fiber membranes 2021 , 187-205		1
24	The investigation of irregular inner skin morphology of hollow fiber membranes at high-speed spinning and the solutions to overcome it 2021 , 105-122		1
23	The thickness and air gap dependence of macrovoid evolution in phase-inversion asymmetric hollow fiber membranes 2021 , 123-140		1
22	Membrane Distillation, Forward Osmosis, and Pressure-Retarded Osmosis Through Polymer Membranes 2018 , 323-346		1
21	Molecular elucidation of morphology and mechanical properties of PVDF hollow fiber membranes from aspects of phase inversion, crystallization, and rheology 2021 , 333-360		1
20	Braid-reinforced polybenzimidazole (PBI) hollow fiber membranes for organic solvent nanofiltration (OSN). <i>Separation and Purification Technology</i> , 2022 , 290, 120811	8.3	1
19	Novel Sandwich-Structured Hollow Fiber Membrane for High-Efficiency Membrane Distillation and Scale-Up for Pilot Validation.. <i>Membranes</i> , 2022 , 12,	3.8	1
18	High recovery, point-of-collection plasma separation from blood using electrospun polyacrylonitrile membranes. <i>AIChE Journal</i> , 2021 , 67, e17088	3.6	0
17	Polyimide hollow fiber membranes and their applications 2021 , 361-383		0
16	Macrovoid evolution and critical factors to form macrovoid-free hollow fiber membranes 2021 , 141-161		0

- 15 Materials for Water Remediation (Membranes) **2016**, 37-74
- 14 Hollow-Fiber Membranes for Salinity Gradient Processes **2018**, 175-200
- 13 Thermotropic Liquid Crystalline Polymers **2018**, 1-24
- 12 Reply to comment on Exploration of heavy metal ions transmembrane flux enhancement across a supported liquid membrane by appropriate carrier selection[Chemical Science Engineering 62 (2007) 6032-6039]. *Chemical Engineering Science*, **2009**, 64, 613 4.4
- 11 Reply to the Rebuttal Rebuttal to the Reply to comment on Exploration of heavy metal ions transmembrane flux enhancement across a supported liquid membrane by appropriate carrier selection[Chem. Eng. Sci. 62 (2007) 6032-6039]. *Chemical Engineering Science*, **2009**, 64, 616 4.4
- 10 A note on the role of diffusion during the inflation of a tubular viscoelastic film. *Polymer Engineering and Science*, **1984**, 24, 1249-1252 2.3
- 9 The effect of diffusion on the inflation of a spherical viscoelastic film. *Chemical Engineering Science*, **1985**, 40, 1608-1610 4.4
- 8 Investigation of corrugation phenomenon in the inner contour of hollow fibers during the nonsolvent-induced phase-separation process **2021**, 85-104
- 7 Hollow fiber membranes for membrane distillation applications **2021**, 495-521
- 6 High performance dual-layer hollow fiber fabricated via novel immiscibility-induced phase separation (I2PS) process for dehydration of ethanol **2021**, 407-430
- 5 Design and fabrication of lotus root-like multibore hollow fiber membrane for direct contact membrane distillation **2021**, 291-314
- 4 Rheology and phase inversion behavior of polyphenylenesulfone (PPSU) and sulfonated PPSU for membrane formation **2021**, 163-185
- 3 Solvent transport properties of POSS nanocomposites **2021**, 405-419
- 2 Fabrication and applications of polyethersulfone hollow fiber membranes **2021**, 315-332
- 1 Scale Up and Validation of Novel Tri-Bore PVDF Hollow Fiber Membranes for Membrane Distillation Application in Desalination and Industrial Wastewater Recycling. *Membranes*, **2022**, 12, 573 3.8