

# Tai-Shung Chung

## List of Publications by Year in descending order

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681  
papers

53,904  
citations

699

121  
h-index

3563

181  
g-index

694  
all docs

694  
docs citations

694  
times ranked

20845  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mixed matrix membranes (MMMs) comprising organic polymers with dispersed inorganic fillers for gas separation. <i>Progress in Polymer Science</i> , 2007, 32, 483-507.	11.8	1,570
2	Recent advances in membrane distillation processes: Membrane development, configuration design and application exploring. <i>Journal of Membrane Science</i> , 2015, 474, 39-56.	4.1	740
3	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, 231-241.	5.7	622
4	Forward osmosis processes: Yesterday, today and tomorrow. <i>Desalination</i> , 2012, 287, 78-81.	4.0	528
5	Recent membrane development for pervaporation processes. <i>Progress in Polymer Science</i> , 2016, 57, 1-31.	11.8	440
6	Nanometric Graphene Oxide Framework Membranes with Enhanced Heavy Metal Removal via Nanofiltration. <i>Environmental Science &amp; Technology</i> , 2015, 49, 10235-10242.	4.6	414
7	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.	4.1	407
8	Draw solutions for forward osmosis processes: Developments, challenges, and prospects for the future. <i>Journal of Membrane Science</i> , 2013, 442, 225-237.	4.1	400
9	Evolution of polymeric hollow fibers as sustainable technologies: Past, present, and future. <i>Progress in Polymer Science</i> , 2012, 37, 1401-1424.	11.8	375
10	Preparation and Characterization of Fast Response Macroporous Poly(N-isopropylacrylamide) Hydrogels. <i>Langmuir</i> , 2001, 17, 6094-6099.	1.6	368
11	Polyimides membranes for pervaporation and biofuels separation. <i>Progress in Polymer Science</i> , 2009, 34, 1135-1160.	11.8	367
12	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.	4.1	339
13	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.	4.1	332
14	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.	1.9	325
15	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.	4.1	324
16	Polymeric membranes for the hydrogen economy: Contemporary approaches and prospects for the future. <i>Journal of Membrane Science</i> , 2009, 327, 18-31.	4.1	313
17	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.	4.1	312
18	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.	3.8	303

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19	Exploration of polyelectrolytes as draw solutes in forward osmosis processes. <i>Water Research</i> , 2012, 46, 1318-1326.	5.3	292
20	Poly-/metal-benzimidazole nano-composite membranes for hydrogen purification. <i>Energy and Environmental Science</i> , 2011, 4, 4171.	15.6	290
21	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.	4.1	281
22	Highly Water-Soluble Magnetic Nanoparticles as Novel Draw Solute in Forward Osmosis for Water Reuse. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 5869-5876.	1.8	266
23	Cellulose acetate nanofiltration hollow fiber membranes for forward osmosis processes. <i>Journal of Membrane Science</i> , 2010, 355, 36-44.	4.1	258
24	Double-Skinned Forward Osmosis Membranes for Reducing Internal Concentration Polarization within the Porous Sublayer. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 4824-4831.	1.8	256
25	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.	1.9	254
26	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.	1.9	250
27	Sustainable water recovery from oily wastewater via forward osmosis-membrane distillation (FO-MD). <i>Water Research</i> , 2014, 52, 112-121.	5.3	247
28	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.	4.1	245
29	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.	4.8	244
30	High-Performance Thermally Self-Cross-Linked Polymer of Intrinsic Microporosity (PIM-1) Membranes for Energy Development. <i>Macromolecules</i> , 2012, 45, 1427-1437.	2.2	241
31	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.	4.1	233
32	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.	4.1	233
33	Chelating polymer modified P84 nanofiltration (NF) hollow fiber membranes for high efficient heavy metal removal. <i>Water Research</i> , 2014, 63, 252-261.	5.3	231
34	Emerging thin-film nanocomposite (TFN) membranes for reverse osmosis: A review. <i>Water Research</i> , 2020, 173, 115557.	5.3	230
35	Advanced Porous Materials in Mixed Matrix Membranes. <i>Advanced Materials</i> , 2018, 30, e1802401.	11.1	229
36	Polybenzimidazole (PBI) nanofiltration hollow fiber membranes applied in forward osmosis process. <i>Journal of Membrane Science</i> , 2007, 300, 6-12.	4.1	226

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37	Polyelectrolyte-Promoted Forward Osmosis–Membrane Distillation (FO–MD) Hybrid Process for Dye Wastewater Treatment. <i>Environmental Science &amp; Technology</i> , 2012, 46, 6236-6243.	4.6	224
38	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.	4.1	222
39	Thin-Film Composite Membranes and Formation Mechanism of Thin-Film Layers on Hydrophilic Cellulose Acetate Propionate Substrates for Forward Osmosis Processes. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 10039-10050.	1.8	220
40	Applications of carbon quantum dots (CQDs) in membrane technologies: A review. <i>Water Research</i> , 2018, 147, 43-49.	5.3	220
41	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.	2.4	219
42	A review of polymeric composite membranes for gas separation and energy production. <i>Progress in Polymer Science</i> , 2019, 97, 101141.	11.8	219
43	Developing thin-film composite forward osmosis membranes on the PES/SPSf substrate through interfacial polymerization. <i>AIChE Journal</i> , 2012, 58, 770-781.	1.8	213
44	Gas permeability, diffusivity, solubility, and aging characteristics of 6FDA-durene polyimide membranes. <i>Journal of Membrane Science</i> , 2001, 186, 183-193.	4.1	212
45	Thin-film composite forward osmosis membranes with novel hydrophilic supports for desalination. <i>Journal of Membrane Science</i> , 2012, 423-424, 543-555.	4.1	212
46	Hyperbranched Polyethyleneimine Induced Cross-Linking of Polyamide-imide Nanofiltration Hollow Fiber Membranes for Effective Removal of Ciprofloxacin. <i>Environmental Science &amp; Technology</i> , 2011, 45, 4003-4009.	4.6	210
47	High Performance Thin-Film Composite Forward Osmosis Hollow Fiber Membranes with Macrovoid-Free and Highly Porous Structure for Sustainable Water Production. <i>Environmental Science &amp; Technology</i> , 2012, 46, 7358-7365.	4.6	210
48	The recent developments of thermotropic liquid crystalline polymers. <i>Polymer Engineering and Science</i> , 1986, 26, 901-919.	1.5	207
49	Membrane distillation with hydrophobic macrovoid-free PVDF–PTFE hollow fiber membranes. <i>Separation and Purification Technology</i> , 2009, 66, 229-236.	3.9	206
50	Design of omniphobic interfaces for membrane distillation – A review. <i>Water Research</i> , 2019, 162, 64-77.	5.3	204
51	Dual-Layer Hollow Fibers with Enhanced Flux As Novel Forward Osmosis Membranes for Water Production. <i>Environmental Science &amp; Technology</i> , 2009, 43, 2800-2805.	4.6	203
52	Integrated forward osmosis–membrane distillation (FO–MD) hybrid system for the concentration of protein solutions. <i>Chemical Engineering Science</i> , 2011, 66, 2421-2430.	1.9	201
53	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.	4.1	200
54	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.	4.1	199

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55	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.	4.1	199
56	Novel forward osmosis process to effectively remove heavy metal ions. <i>Journal of Membrane Science</i> , 2014, 467, 188-194.	4.1	192
57	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.	6.6	190
58	Precise Molecular Sieving Architectures with Janus Pathways for Both Polar and Nonpolar Molecules. <i>Advanced Materials</i> , 2018, 30, 1705933.	11.1	190
59	High performance membranes based on ionic liquid polymers for CO <sub>2</sub> separation from the flue gas. <i>Green Chemistry</i> , 2012, 14, 1052.	4.6	189
60	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.	4.1	189
61	Characterization of permeability and sorption in Matrimid/C60 mixed matrix membranes. <i>Journal of Membrane Science</i> , 2003, 211, 91-99.	4.1	185
62	Hydrophilic Superparamagnetic Nanoparticles: Synthesis, Characterization, and Performance in Forward Osmosis Processes. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 382-388.	1.8	182
63	Polyethyleneimine (PEI) cross-linked P84 nanofiltration (NF) hollow fiber membranes for Pb <sup>2+</sup> removal. <i>Journal of Membrane Science</i> , 2014, 452, 300-310.	4.1	182
64	UiO-66 incorporated thin-film nanocomposite membranes for efficient selenium and arsenic removal. <i>Journal of Membrane Science</i> , 2017, 541, 262-270.	4.1	182
65	Desalination process using super hydrophilic nanoparticles via forward osmosis integrated with ultrafiltration regeneration. <i>Desalination</i> , 2011, 278, 194-202.	4.0	178
66	Pebax/POSS mixed matrix membranes for ethanol recovery from aqueous solutions via pervaporation. <i>Journal of Membrane Science</i> , 2011, 379, 174-183.	4.1	178
67	Room temperature ionic liquid/ZIF-8 mixed-matrix membranes for natural gas sweetening and post-combustion CO <sub>2</sub> capture. <i>Journal of Membrane Science</i> , 2013, 436, 221-231.	4.1	174
68	Morphological architecture of dual-layer hollow fiber for membrane distillation with higher desalination performance. <i>Water Research</i> , 2011, 45, 5489-5500.	5.3	171
69	Progress in pressure retarded osmosis (PRO) membranes for osmotic power generation. <i>Progress in Polymer Science</i> , 2015, 51, 1-27.	11.8	171
70	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.	1.9	169
71	Separation of CO <sub>2</sub> /CH <sub>4</sub> through carbon molecular sieve membranes derived from P84 polyimide. <i>Carbon</i> , 2004, 42, 3123-3131.	5.4	168
72	Self-standing and flexible covalent organic framework (COF) membranes for molecular separation. <i>Science Advances</i> , 2020, 6, .	4.7	168

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73	Reverse-selective polymeric membranes for gas separations. <i>Progress in Polymer Science</i> , 2013, 38, 740-766.	11.8	166
74	Study of draw solutes using 2-methylimidazole-based compounds in forward osmosis. <i>Journal of Membrane Science</i> , 2010, 364, 242-252.	4.1	165
75	Mixed Matrix PVDF Hollow Fiber Membranes with Nanoscale Pores for Desalination through Direct Contact Membrane Distillation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2009, 48, 4474-4483.	1.8	164
76	Fabrication of polybenzimidazole (PBI) nanofiltration hollow fiber membranes for removal of chromate. <i>Journal of Membrane Science</i> , 2006, 281, 307-315.	4.1	163
77	Morphology and fracture behavior of intercalated epoxy/clay nanocomposites. <i>Journal of Applied Polymer Science</i> , 2004, 94, 1236-1244.	1.3	162
78	Enhanced gas separation performance of nanocomposite membranes using MgO nanoparticles. <i>Journal of Membrane Science</i> , 2007, 302, 207-217.	4.1	162
79	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.	4.1	160
80	Nanofiltration hollow fiber membranes for textile wastewater treatment: Lab-scale and pilot-scale studies. <i>Chemical Engineering Science</i> , 2014, 114, 51-57.	1.9	160
81	Highly Permeable and Selective Pore-Spanning Biomimetic Membrane Embedded with Aquaporin Z. <i>Small</i> , 2012, 8, 1185-1190.	5.2	158
82	Development of simultaneous membrane distillation-crystallization (SMDC) technology for treatment of saturated brine. <i>Chemical Engineering Science</i> , 2013, 98, 160-172.	1.9	156
83	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.	4.6	154
84	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.	4.1	152
85	Macrovoid evolution and critical factors to form macrovoid-free hollow fiber membranes. <i>Journal of Membrane Science</i> , 2008, 318, 363-372.	4.1	148
86	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.	4.1	148
87	Anti-Fouling Behavior of Hyperbranched Polyglycerol-Grafted Poly(ether sulfone) Hollow Fiber Membranes for Osmotic Power Generation. <i>Environmental Science &amp; Technology</i> , 2014, 48, 9898-9907.	4.6	148
88	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.	4.1	148
89	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.	1.3	147
90	Combination of forward osmosis (FO) process with coagulation/flocculation (CF) for potential treatment of textile wastewater. <i>Water Research</i> , 2016, 91, 361-370.	5.3	146

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91	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.	4.1	145
92	Highly Permeable Double-Skinned Forward Osmosis Membranes for Anti-Fouling in the Emulsified Oil-Water Separation Process. <i>Environmental Science &amp; Technology</i> , 2014, 48, 4537-4545.	4.6	144
93	Novel Ag <sup>+</sup> -zeolite/polymer mixed matrix membranes with a high CO <sub>2</sub> /CH <sub>4</sub> selectivity. <i>AIChE Journal</i> , 2007, 53, 610-616.	1.8	143
94	ZIF-90/P84 mixed matrix membranes for pervaporation dehydration of isopropanol. <i>Journal of Membrane Science</i> , 2014, 453, 155-167.	4.1	142
95	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.	5.2	141
96	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.	1.9	140
97	Effect of Mixed Solvents on Characteristics of Poly(N-isopropylacrylamide) Gels. <i>Langmuir</i> , 2002, 18, 2538-2542.	1.6	139
98	Aquaporin-embedded biomimetic membranes for nanofiltration. <i>Journal of Membrane Science</i> , 2012, 407-408, 27-33.	4.1	139
99	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.	10.2	138
100	Exploring the potential of commercial polyethylene membranes for desalination by membrane distillation. <i>Journal of Membrane Science</i> , 2016, 497, 239-247.	4.1	136
101	PVDF/ionic liquid polymer blends with superior separation performance for removing CO <sub>2</sub> from hydrogen and flue gas. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 11796-11804.	3.8	135
102	Substrate modifications and alcohol treatment on thin film composite membranes for osmotic power. <i>Chemical Engineering Science</i> , 2013, 87, 40-50.	1.9	135
103	Novel Nanofiltration Membranes Consisting of a Sulfonated Pentablock Copolymer Rejection Layer for Heavy Metal Removal. <i>Environmental Science &amp; Technology</i> , 2014, 48, 13880-13887.	4.6	135
104	Diamine modification of P84 polyimide membranes for pervaporation dehydration of isopropanol. <i>AIChE Journal</i> , 2006, 52, 3462-3472.	1.8	134
105	A novel dual-layer forward osmosis membrane for protein enrichment and concentration. <i>Separation and Purification Technology</i> , 2009, 69, 269-274.	3.9	134
106	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.	1.9	134
107	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.	4.1	134
108	Chemically modified polybenzimidazole nanofiltration membrane for the separation of electrolytes and cephalixin. <i>Chemical Engineering Science</i> , 2006, 61, 5807-5817.	1.9	132



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109	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.	4.1	131
110	What is next for forward osmosis (FO) and pressure retarded osmosis (PRO). <i>Separation and Purification Technology</i> , 2015, 156, 856-860.	3.9	131
111	The effects of substrate characteristics and pre-wetting agents on PAN/PDMS composite hollow fiber membranes for CO <sub>2</sub> /N <sub>2</sub> and O <sub>2</sub> /N <sub>2</sub> separation. <i>Journal of Membrane Science</i> , 2013, 434, 18-25.	4.1	130
112	Grafting thermally labile molecules on cross-linkable polyimide to design membrane materials for natural gas purification and CO <sub>2</sub> capture. <i>Energy and Environmental Science</i> , 2011, 4, 201-208.	15.6	129
113	Low-Pressure Nanofiltration Hollow Fiber Membranes for Effective Fractionation of Dyes and Inorganic Salts in Textile Wastewater. <i>Environmental Science &amp; Technology</i> , 2018, 52, 3676-3684.	4.6	129
114	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.	4.1	127
115	Poly(vinyl alcohol) multilayer mixed matrix membranes for the dehydration of ethanol/water mixture. <i>Journal of Membrane Science</i> , 2006, 268, 113-122.	4.1	126
116	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.	4.1	126
117	Fabrication of fluoropolyimide/polyethersulfone (PES) dual-layer asymmetric hollow fiber membranes for gas separation. <i>Journal of Membrane Science</i> , 2002, 198, 211-223.	4.1	125
118	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.	4.1	125
119	An aquaporin-based vesicle-embedded polymeric membrane for low energy water filtration. <i>Journal of Materials Chemistry A</i> , 2013, 1, 7592.	5.2	125
120	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.	3.8	125
121	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.	1.6	124
122	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 &amp; Technology</i> , 2013, 47, 8070-8077.	4.6	124
123	Facile synthesis of thermosensitive magnetic nanoparticles as "smart" draw solutes in forward osmosis. <i>Chemical Communications</i> , 2011, 47, 10788.	2.2	123
124	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.	6.6	123
125	Design of robust hollow fiber membranes with high power density for osmotic energy production. <i>Chemical Engineering Journal</i> , 2014, 241, 457-465.	6.6	123
126	Molecular-level mixed matrix membranes comprising Pebax® and POSS for hydrogen purification via preferential CO <sub>2</sub> removal. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 10560-10568.	3.8	122



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127	Enhanced osmotic energy generation from salinity gradients by modifying thin film composite membranes. <i>Chemical Engineering Journal</i> , 2014, 242, 195-203.	6.6	122
128	Design and fabrication of hollow fiber membrane modules. <i>Journal of Membrane Science</i> , 2017, 538, 96-107.	4.1	122
129	Thickness and Air Gap Dependence of Macrovoid Evolution in Phase-Inversion Asymmetric Hollow Fiber Membranes. <i>Industrial &amp; Engineering Chemistry Research</i> , 2006, 45, 7618-7626.	1.8	119
130	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.	4.1	119
131	Enhancement of flux and solvent stability of Matrimid <sup>®</sup> thin-film composite membranes for organic solvent nanofiltration. <i>AIChE Journal</i> , 2014, 60, 3623-3633.	1.8	119
132	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.	1.3	118
133	UV <sup>®</sup> Rearranged PIM <sup>®</sup> 1 Polymeric Membranes for Advanced Hydrogen Purification and Production. <i>Advanced Energy Materials</i> , 2012, 2, 1456-1466.	10.2	118
134	Photo-oxidative PIM-1 based mixed matrix membranes with superior gas separation performance. <i>Journal of Materials Chemistry A</i> , 2015, 3, 17273-17281.	5.2	118
135	High-performance composite hollow fiber membrane for flue gas and air separations. <i>Journal of Membrane Science</i> , 2017, 541, 367-377.	4.1	118
136	Omniphobic Hollow-Fiber Membranes for Vacuum Membrane Distillation. <i>Environmental Science &amp; Technology</i> , 2018, 52, 4472-4480.	4.6	118
137	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.	4.1	117
138	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.	1.3	116
139	CO <sub>2</sub> Separation from Flue Gas Using Polyvinyl-(Room Temperature Ionic Liquid) <sup>®</sup> Room Temperature Ionic Liquid Composite Membranes. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 9344-9353.	1.8	116
140	A conceptual demonstration of freeze desalination <sup>®</sup> membrane distillation (FD <sup>®</sup> MD) hybrid desalination process utilizing liquefied natural gas (LNG) cold energy. <i>Water Research</i> , 2012, 46, 4037-4052.	5.3	116
141	High performance composite hollow fiber membranes for CO <sub>2</sub> /H <sub>2</sub> and CO <sub>2</sub> /N <sub>2</sub> separation. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 5043-5053.	3.8	116
142	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.	4.1	116
143	Thin-film nanocomposite membranes incorporated with UiO-66-NH <sub>2</sub> nanoparticles for brackish water and seawater desalination. <i>Journal of Membrane Science</i> , 2020, 604, 118039.	4.1	116
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148	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.	6.6	112
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150	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.	4.1	111
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170	High-performance multiple-layer PIM composite hollow fiber membranes for gas separation. <i>Journal of Membrane Science</i> , 2018, 563, 93-106.	4.1	102
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278	Asymmetric hollow fibers by polyimide and polybenzimidazole blends for toluene/iso-octane separation. <i>Journal of Membrane Science</i> , 2010, 360, 303-314.	4.1	68
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280	Rheology and phase inversion behavior of polyphenylenesulfone (PPSU) and sulfonated PPSU for membrane formation. <i>Polymer</i> , 2016, 99, 72-82.	1.8	68
281	Fluorographite modified PVDF membranes for seawater desalination via direct contact membrane distillation. <i>Desalination</i> , 2017, 413, 119-126.	4.0	68
282	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.	3.9	68
283	A novel ionically cross-linked sulfonated polyphenylsulfone (sPPSU) membrane for organic solvent nanofiltration (OSN). <i>Journal of Membrane Science</i> , 2018, 545, 221-228.	4.1	68
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285	Polybenzimidazole nanofiltration hollow fiber for cephalexin separation. <i>AIChE Journal</i> , 2006, 52, 1363-1377.	1.8	67
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290	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.	4.1	67
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301	Functionalization of cellulose dialysis membranes for chiral separation using beta-cyclodextrin immobilization. <i>Journal of Membrane Science</i> , 2007, 290, 78-85.	4.1	63
302	Thin film composite membranes on ceramic for pervaporation dehydration of isopropanol. <i>Journal of Membrane Science</i> , 2013, 448, 34-43.	4.1	63
303	Flexible Hybrid Membranes of NiCo <sub>2</sub> O <sub>4</sub> -Doped Carbon Nanofiber@MnO <sub>2</sub> Core-Shell Nanostructures for High-Performance Supercapacitors. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13442-13450.	1.5	63
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306	Carbon-zeolite composite membranes for gas separation. <i>Carbon</i> , 2005, 43, 2025-2027.	5.4	62

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338	Ferric and cobaltous hydroacid complexes for forward osmosis (FO) processes. <i>Water Research</i> , 2014, 58, 230-238.	5.3	56
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363	High performance carbon molecular sieve membranes derived from hyperbranched polyimide precursors for improved gas separation applications. <i>Carbon</i> , 2013, 53, 101-111.	5.4	49
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401	Cleaning strategies and membrane flux recovery on anti-fouling membranes for pressure retarded osmosis. <i>Journal of Membrane Science</i> , 2017, 522, 116-123.	4.1	44
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407	Outer-selective thin film composite (TFC) hollow fiber membranes for osmotic power generation. <i>Journal of Membrane Science</i> , 2016, 505, 157-166.	4.1	43
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