William J Koros

List of Publications by Year in Descending Order

281 papers	23,330 citations	82 h-index	143 g-index
287 ext. papers	25,734 ext. citations	7.3 avg, IF	7.39 L-index

#	Paper	IF	Citations
281	Carbon molecular sieve hollow fiber membranes derived from dip-coated precursor hollow fibers comprising nanoparticles. *Journal of Membrane Science*, **2022**, 649, 120279	9.6	1
280	How to Get the Best Gas Separation Membranes from State-of-the-Art Glassy Polymers. *Macromolecules*, **2022**, 55, 1457-1473	5.5	1
279	Penetrant competition and plasticization in membranes: How negatives can be positives in natural gas sweetening. *Journal of Membrane Science*, **2021**, 627, 119201	9.6	10
278	Surprising olefin/paraffin separation performance recovery of highly aged carbon molecular sieve hollow fiber membranes by a super-hyperaging treatment. *Journal of Membrane Science*, **2021**, 620, 118701	9.6	10
277	CO2 Capture Using PIM-1 Hollow Fiber Sorbents with Enhanced Performance by PEI Infusion. *Industrial & Engineering Chemistry Research*, **2021**, 60, 12709-12718	3.9	0
276	Natural gas sweetening using TEGMC polyimide hollow fiber membranes. *Journal of Membrane Science*, **2021**, 632, 119361	9.6	3
275	Key Features of Polyimide-Derived Carbon Molecular Sieves. *Angewandte Chemie*, **2021**, 133, 22496-22505	3.6	
274	Key Features of Polyimide-Derived Carbon Molecular Sieves. *Angewandte Chemie - International Edition*, **2021**, 60, 22322-22331	16.4	7
273	Subtle penetrant size effects on separation of carbon molecular sieve membranes derived from 6FDA:BPDA-DAM polyimide. *Carbon*, **2021**, 184, 214-222	10.4	0
272	Fine-tuned thermally cross-linkable 6FDA-based polyimide membranes for aggressive natural gas separation. *Journal of Membrane Science*, **2021**, 635, 119474	9.6	4
271	Molecularly Engineered 6FDA-Based Polyimide Membranes for Sour Natural Gas Separation. *Angewandte Chemie - International Edition*, **2020**, 59, 14877-14883	16.4	22
270	Molecularly Engineered 6FDA-Based Polyimide Membranes for Sour Natural Gas Separation. *Angewandte Chemie*, **2020**, 132, 14987-14993	3.6	3
269	A Self-Consistent Model for Sorption and Transport in Polyimide-Derived Carbon Molecular Sieve Gas Separation Membranes. *Angewandte Chemie - International Edition*, **2020**, 59, 20343-20347	16.4	11
268	A Self-Consistent Model for Sorption and Transport in Polyimide-Derived Carbon Molecular Sieve Gas Separation Membranes. *Angewandte Chemie*, **2020**, 132, 20523-20527	3.6	2
267	Pyrolysis End-Doping to Optimize Transport Properties of Carbon Molecular Sieve Hollow Fiber Membranes. *Industrial & Engineering Chemistry Research*, **2020**, 59, 13755-13761	3.9	0
266	Cross-Linkable Semi-Rigid 6FDA-Based Polyimide Hollow Fiber Membranes for Sour Natural Gas Purification. *Industrial & Engineering Chemistry Research*, **2020**, 59, 5333-5339	3.9	11
265	Envisioned role of slit bypass pores in physical aging of carbon molecular sieve membranes. *Carbon*, **2020**, 157, 385-394	10.4	18

264	Flux Equations for Osmotically Moderated Sorption-Diffusion Transport in Rigid Microporous Membranes. *Industrial & Engineering Chemistry Research*, **2020**, 59, 5412-5423	3.9	9
263	Natural gas sweetening using a cellulose triacetate hollow fiber membrane illustrating controlled plasticization benefits. *Journal of Membrane Science*, **2020**, 601, 117910	9.6	27
262	Isomer-Tailored Carbon Molecular Sieve Membranes with High Gas Separation Performance. *ChemSusChem*, **2020**, 13, 5318-5328	8.3	6
261	Surprising plasticization benefits in natural gas upgrading using polyimide membranes. *Journal of Membrane Science*, **2020**, 593, 117430	9.6	26
260	Ultraselective glassy polymer membranes with unprecedented performance for energy-efficient sour gas separation. *Science Advances*, **2019**, 5, eaaw5459	14.3	57
259	Carbon Molecular Sieve Membrane Preparation by Economical Coating and Pyrolysis of Porous Polymer Hollow Fibers. *Angewandte Chemie - International Edition*, **2019**, 58, 12149-12153	16.4	20
258	Hyperaging Tuning of a Carbon Molecular-Sieve Hollow Fiber Membrane with Extraordinary Gas-Separation Performance and Stability. *Angewandte Chemie - International Edition*, **2019**, 58, 11700-11703	16.4	26
257	Ultra-thin skin carbon hollow fiber membranes for sustainable molecular separations. *AICHE Journal*, **2019**, 65, e16611	3.6	19
256	110th Anniversary: High Performance Carbon Molecular Sieve Membrane Resistance to Aggressive Feed Stream Contaminants. *Industrial & Engineering Chemistry Research*, **2019**, 58, 6740-6746	3.9	4
255	Conformation-Controlled Molecular Sieving Effects for Membrane-Based Propylene/Propane Separation. *Advanced Materials*, **2019**, 31, e1807513	24	83
254	Fabrication of Solution-Cast Polyacrylonitrile Barriers for Hollow Fiber Sorbents Used in CO2 Removal from Flue Gas. *Industrial & Engineering Chemistry Research*, **2019**, 58, 22561-22568	3.9	3
253	Hyperaging Tuning of a Carbon Molecular-Sieve Hollow Fiber Membrane with Extraordinary Gas-Separation Performance and Stability. *Angewandte Chemie*, **2019**, 131, 11826-11829	3.6	6
252	Carbon Molecular Sieve Membrane Preparation by Economical Coating and Pyrolysis of Porous Polymer Hollow Fibers. *Angewandte Chemie*, **2019**, 131, 12277-12281	3.6	1
251	New insights into structural evolution in carbon molecular sieve membranes during pyrolysis. *Carbon*, **2019**, 141, 238-246	10.4	60
250	Simultaneously tuning dense skin and porous substrate of asymmetric hollow fiber membranes for efficient purification of aggressive natural gas. *AICHE Journal*, **2019**, 65, 1269-1280	3.6	12
249	Carbon molecular sieve membranes for CO2/N2 separations: Evaluating subambient temperature performance. *Journal of Membrane Science*, **2019**, 569, 1-6	9.6	20
248	The role of polyvinylpyrrolidone in forming open-porous, macrovoid-free mixed matrix sorbents from Torlon® , a polyamide-imide polymer. *Polymer Engineering and Science*, **2018**, 58, 2106-2114	2.3	5
247	Crosslinkable TEGMC asymmetric hollow fiber membranes for aggressive sour gas separations. *Journal of Membrane Science*, **2018**, 558, 94-105	9.6	25

246	Mixed matrix formulations with MOF molecular sieving for key energy-intensive separations. *Nature Materials*, **2018**, 17, 283-289	27	298
245	Cause and effects of hyperskin features on carbon molecular sieve (CMS) membranes. *Journal of Membrane Science*, **2018**, 551, 113-122	9.6	29
244	Physical aging of ester-cross-linked hollow fiber membranes for natural gas separations and mitigation thereof. *Journal of Membrane Science*, **2018**, 551, 214-221	9.6	15
243	6FDA-DETDA: DABE polyimide-derived carbon molecular sieve hollow fiber membranes: Circumventing unusual aging phenomena. *Journal of Membrane Science*, **2018**, 546, 197-205	9.6	29
242	Enhanced CO/CH Separation Performance of a Mixed Matrix Membrane Based on Tailored MOF-Polymer Formulations. *Advanced Science*, **2018**, 5, 1800982	13.6	67
241	High-Temperature Activation of Zeolite-Loaded Fiber Sorbents. *Industrial & Engineering Chemistry Research*, **2018**, 57, 11757-11766	3.9	11
240	Zeolite-like MOF nanocrystals incorporated 6FDA-polyimide mixed-matrix membranes for CO2/CH4 separation. *Journal of Membrane Science*, **2018**, 565, 186-193	9.6	44
239	Iron-containing carbon molecular sieve membranes for advanced olefin/paraffin separations. *Journal of Membrane Science*, **2018**, 548, 609-620	9.6	36
238	Next generation membranes □sing tailored carbon. *Carbon*, **2018**, 127, 688-698	10.4	52
237	Natural gas upgrading using a fluorinated MOF with tuned H2S and CO2 adsorption selectivity. *Nature Energy*, **2018**, 3, 1059-1066	62.3	123
236	Enabling Fluorinated MOF-Based Membranes for Simultaneous Removal of H S and CO from Natural Gas. *Angewandte Chemie - International Edition*, **2018**, 57, 14811-14816	16.4	111
235	Enabling Fluorinated MOF-Based Membranes for Simultaneous Removal of H2S and CO2 from Natural Gas. *Angewandte Chemie*, **2018**, 130, 15027-15032	3.6	10
234	Composite Carbon Molecular Sieve Hollow Fiber Membranes: Resisting Support Densification via Silica Particle Stabilization. *Industrial & Engineering Chemistry Research*, **2018**, 57, 16051-16058	3.9	10
233	Materials for next-generation molecularly selective synthetic membranes. *Nature Materials*, **2017**, 16, 289-297	27	561
232	Carbon molecular sieve structure development and membrane performance relationships. *Carbon*, **2017**, 115, 237-248	10.4	119
231	Effect of block versus random copolyimide structure on hollow fiber membrane spinnability. *Journal of Membrane Science*, **2017**, 529, 150-158	9.6	11
230	The significance of entropic selectivity in carbon molecular sieve membranes derived from 6FDA/DETDA:DABA(3:2) polyimide. *Journal of Membrane Science*, **2017**, 539, 329-343	9.6	21
229	Purification of Aggressive Supercritical Natural Gas Using Carbon Molecular Sieve Hollow Fiber Membranes. *Industrial & Engineering Chemistry Research*, **2017**, 56, 10482-10490	3.9	22

228	Ultraselective Carbon Molecular Sieve Membranes with Tailored Synergistic Sorption Selective Properties. *Advanced Materials*, **2017**, 29, 1701631	24	83
227	Effect of Post-Functionalization Conditions on the Carbon Dioxide Adsorption Properties of Aminosilane-Grafted Zirconia/Titania/Silica-Poly(amide-imide) Composite Hollow Fiber Sorbents. *Energy Technology*, **2017**, 5, 327-337	3.5	19
226	Tuning carbon molecular sieves for natural gas separations: A diamine molecular approach. *AICHE Journal*, **2017**, 63, 751-760	3.6	28
225	Pore morphology and temperature dependence of gas transport properties of silica membranes derived from oxidative thermolysis of polydimethylsiloxane. *Journal of Membrane Science*, **2017**, 524, 585-595	9.6	13
224	Penetrant transport in semicrystalline poly(ethylene furanoate). *Polymer*, **2016**, 98, 305-310	3.9	33
223	Effects of pyrolysis conditions on gas separation properties of 6FDA/DETDA:DABA(3:2) derived carbon molecular sieve membranes. *Journal of Membrane Science*, **2016**, 520, 699-711	9.6	58
222	Aminosilane-Grafted Zirconia-Titiania-Silica Nanoparticles/Torlon Hollow Fiber Composites for CO2 Capture. *ChemSusChem*, **2016**, 9, 1166-77	8.3	32
221	Hybrid Polymer/UiO-66(Zr) and Polymer/NaY Fiber Sorbents for Mercaptan Removal from Natural Gas. *ACS Applied Materials & Interfaces*, **2016**, 8, 9700-9	9.5	39
220	Post-combustion carbon dioxide capture via 6FDA/BPDA-DAM hollow fiber membranes at sub-ambient temperatures. *Journal of Membrane Science*, **2016**, 510, 447-454	9.6	36
219	Molecularly Designed Stabilized Asymmetric Hollow Fiber Membranes for Aggressive Natural Gas Separation. *Angewandte Chemie - International Edition*, **2016**, 55, 13754-13758	16.4	22
218	Molecularly Designed Stabilized Asymmetric Hollow Fiber Membranes for Aggressive Natural Gas Separation. *Angewandte Chemie*, **2016**, 128, 13958-13962	3.6	7
217	Stability of amine-based hollow fiber CO2 adsorbents in the presence of NO and SO2. *Fuel*, **2015**, 160, 153-164	7.1	35
216	Thin-skinned intrinsically defect-free asymmetric mono-esterified hollow fiber precursors for crosslinkable polyimide gas separation membranes. *Journal of Membrane Science*, **2015**, 493, 252-262	9.6	29
215	Metal Organic Frameworks for Selective Adsorption of t-Butyl Mercaptan from Natural Gas. *Energy & Fuels*, **2015**, 29, 3312-3321	4.1	35
214	Carbon Dioxide Sorption and Transport in Amorphous Poly(ethylene furanoate). *Macromolecules*, **2015**, 48, 2184-2193	5.5	188
213	Carbon molecular sieve membrane structure–property relationships for four novel 6FDA based polyimide precursors. *Journal of Membrane Science*, **2015**, 487, 60-73	9.6	84
212	Composite polymer/oxide hollow fiber contactors: versatile and scalable flow reactors for heterogeneous catalytic reactions in organic synthesis. *Angewandte Chemie - International Edition*, **2015**, 54, 6470-4	16.4	47
211	A high-performance hydroxyl-functionalized polymer of intrinsic microporosity for an environmentally attractive membrane-based approach to decontamination of sour natural gas. *Journal of Materials Chemistry A*, **2015**, 3, 22794-22806	13	68

210	Physical aging in amorphous poly(ethylene furanoate): Enthalpic recovery, density, and oxygen transport considerations. *Journal of Polymer Science, Part B: Polymer Physics*, **2015**, 53, 389-399	2.6	30
209	Tailoring the Transport Properties of Zeolitic Imidazolate Frameworks by Post-Synthetic Thermal Modification. *ACS Applied Materials & Interfaces*, **2015**, 7, 23407-11	9.5	22
208	Temperature dependence of gas transport and sorption in carbon molecular sieve membranes derived from four 6FDA based polyimides: Entropic selectivity evaluation. *Carbon*, **2015**, 95, 995-1006	10.4	61
207	Zeolitic Imidazolate Framework-Enabled Membranes: Challenges and Opportunities. *Journal of Physical Chemistry Letters*, **2015**, 6, 3841-9	6.4	101
206	Modeling and experimental validation of carbon dioxide sorption on hollow fibers loaded with silica-supported poly(ethylenimine). *Chemical Engineering Journal*, **2015**, 259, 737-751	14.7	26
205	Direct dual layer spinning of aminosilica/Torlon hollow fiber sorbents with a lumen layer for CO2 separation by rapid temperature swing adsorption. *Journal of Applied Polymer Science*, **2015**, 132,	2.9	15
204	Mixed matrix membranes based on 6FDA polyimide with silica and zeolite microsphere dispersed phases. *AICHE Journal*, **2015**, 61, 4481-4490	3.6	47
203	Polymer Transport Properties **2015**, 1-96		8
202	Composite Polymer/Oxide Hollow Fiber Contactors: Versatile and Scalable Flow Reactors for Heterogeneous Catalytic Reactions in Organic Synthesis. *Angewandte Chemie*, **2015**, 127, 6570-6574	3.6	18
201	In situ Formation of a Monodispersed Spherical Mesoporous Nanosilica-Torlon Hollow-Fiber Composite for Carbon Dioxide Capture. *ChemSusChem*, **2015**, 8, 3439-50	8.3	22
200	Structure performance characterization for carbon molecular sieve membranes using molecular scale gas probes. *Carbon*, **2015**, 85, 429-442	10.4	45
199	CO2 Sorption Performance of Composite Polymer/Aminosilica Hollow Fiber Sorbents: An Experimental and Modeling Study. *Industrial & Engineering Chemistry Research*, **2015**, 54, 1783-1795	3.9	22
198	Chemically cross-linkable polyimide membranes for improved transport plasticization resistance for natural gas separation. *Polymer*, **2015**, 58, 121-129	3.9	44
197	Formation of defect-free 6FDA-DAM asymmetric hollow fiber membranes for gas separations. *Journal of Membrane Science*, **2014**, 459, 223-232	9.6	49
196	Poly(ethyleneimine) infused and functionalized Torlon -silica hollow fiber sorbents for post-combustion CO2 capture. *Polymer*, **2014**, 55, 1341-1346	3.9	19
195	Analysis of feed stream acid gas concentration effects on the transport properties and separation performance of polymeric membranes for natural gas sweetening: A comparison between a glassy and rubbery polymer. *Journal of Membrane Science*, **2014**, 465, 107-116	9.6	56
194	Chain Mobility, Thermal, and Mechanical Properties of Poly(ethylene furanoate) Compared to Poly(ethylene terephthalate). *Macromolecules*, **2014**, 47, 1383-1391	5.5	345
193	Poly(amide-imide)/silica supported PEI hollow fiber sorbents for postcombustion CO(2) capture by RTSA. *ACS Applied Materials & Interfaces*, **2014**, 6, 19336-46	9.5	45

192	Gas separation performance of carbon molecular sieve membranes based on 6FDA-mPDA/DABA (3:2) polyimide. *ChemSusChem*, **2014**, 7, 1186-94	8.3	74
191	Highly scalable ZIF-based mixed-matrix hollow fiber membranes for advanced hydrocarbon separations. *AICHE Journal*, **2014**, 60, 2625-2635	3.6	108
190	Oxygen sorption and transport in amorphous poly(ethylene furanoate). *Polymer*, **2014**, 55, 4748-4756	3.9	184
189	Physical aging in carbon molecular sieve membranes. *Carbon*, **2014**, 80, 155-166	10.4	78
188	Evaluation of CO2 adsorption dynamics of polymer/silica supported poly(ethylenimine) hollow fiber sorbents in rapid temperature swing adsorption. *International Journal of Greenhouse Gas Control*, **2014**, 21, 61-71	4.2	58
187	Separation membranes. Interfacial microfluidic processing of metal-organic framework hollow fiber membranes. *Science*, **2014**, 345, 72-5	33.3	492
186	Carbon molecular sieve membranes derived from Matrimid® polyimide for nitrogen/methane separation. *Carbon*, **2014**, 66, 511-522	10.4	135
185	Sub-ambient temperature flue gas carbon dioxide capture via Matrimid® hollow fiber membranes. *Journal of Membrane Science*, **2014**, 465, 49-55	9.6	33
184	Effects of hydrocarbon and water impurities on CO2/CH4 separation performance of ester-crosslinked hollow fiber membranes. *Journal of Membrane Science*, **2014**, 451, 1-9	9.6	19
183	Water sorption in poly(ethylene furanoate) compared to poly(ethylene terephthalate). Part 2: Kinetic sorption. *Polymer*, **2014**, 55, 6870-6882	3.9	111
182	Water sorption in poly(ethylene furanoate) compared to poly(ethylene terephthalate). Part 1: Equilibrium sorption. *Polymer*, **2014**, 55, 6861-6869	3.9	73
181	Dynamic CO2 adsorption performance of internally cooled silica-supported poly(ethylenimine) hollow fiber sorbents. *AICHE Journal*, **2014**, 60, 3878-3887	3.6	50
180	Engineering substructure morphology of asymmetric carbon molecular sieve hollow fiber membranes. *Carbon*, **2014**, 76, 417-434	10.4	60
179	Mixed-linker zeolitic imidazolate framework mixed-matrix membranes for aggressive CO2 separation from natural gas. *Microporous and Mesoporous Materials*, **2014**, 192, 43-51	5.3	82
178	Silane Modification of Cellulose Acetate Dense Films as Materials for Acid Gas Removal. *Macromolecules*, **2013**, 46, 5584-5594	5.5	74
177	Cross-Linkable Polyimide Membranes for Improved Plasticization Resistance and Permselectivity in Sour Gas Separations. *Macromolecules*, **2013**, 46, 6908-6921	5.5	60
176	Mixed-Matrix Membranes **2013**, 1		0
175	Investigating the Intrinsic Ethanol/Water Separation Capability of ZIF-8: An Adsorption and Diffusion Study. *Journal of Physical Chemistry C*, **2013**, 117, 7214-7225	3.8	127

174	Exploring the Framework Hydrophobicity and Flexibility of ZIF-8: From Biofuel Recovery to Hydrocarbon Separations. *Journal of Physical Chemistry Letters*, **2013**, 4, 3618-3622	6.4	242
173	Gas separation performance of 6FDA-based polyimides with different chemical structures. *Polymer*, **2013**, 54, 6226-6235	3.9	110
172	Dual layer hollow fiber sorbents: Concept, fabrication and characterization. *Separation and Purification Technology*, **2013**, 104, 68-80	8.3	21
171	Dual layer hollow fiber sorbents for trace H2S removal from gas streams. *Chemical Engineering Science*, **2013**, 94, 256-264	4.4	7
170	Characterization of Thermally Cross-Linkable Hollow Fiber Membranes for Natural Gas Separation. *Industrial & Engineering Chemistry Research*, **2013**, 52, 1015-1022	3.9	17
169	High-performance ester-crosslinked hollow fiber membranes for natural gas separations. *Journal of Membrane Science*, **2013**, 428, 251-259	9.6	47
168	Diffusion of ethane and ethylene in carbon molecular sieve membranes by pulsed field gradient NMR. *Microporous and Mesoporous Materials*, **2013**, 181, 228-232	5.3	7
167	Aminosilane-Functionalized Hollow Fiber Sorbents for Post-Combustion CO2 Capture. *Industrial & Engineering Chemistry Research*, **2013**, 52, 8928-8935	3.9	12
166	Post-spinning infusion of poly(ethyleneimine) into polymer/silica hollow fiber sorbents for carbon dioxide capture. *Chemical Engineering Journal*, **2013**, 221, 166-175	14.7	71
165	Membrane-based ethylene/ethane separation: The upper bound and beyond. *AICHE Journal*, **2013**, 59, 3475-3489	3.6	122
164	Aminosilane-grafted polymer/silica hollow fiber adsorbents for CO2 capture from flue gas. *ACS Applied Materials & Interfaces*, **2013**, 5, 3921-31	9.5	115
163	Nanoporous layered silicate AMH-3/cellulose acetate nanocomposite membranes for gas separations. *Journal of Membrane Science*, **2013**, 441, 129-136	9.6	72
162	Influence of membrane skin morphology on CO2/N2 separation at sub-ambient temperatures. *Journal of Membrane Science*, **2013**, 446, 433-439	9.6	24
161	Polyethyleneimine-functionalized polyamide imide (Torlon) hollow-fiber sorbents for post-combustion CO2 capture. *ChemSusChem*, **2013**, 6, 1216-23	8.3	37
160	Ester-Cross-linkable Composite Hollow Fiber Membranes for CO2 Removal from Natural Gas. *Industrial & Engineering Chemistry Research*, **2013**, 52, 10495-10505	3.9	21
159	Dense film polyimide membranes for aggressive sour gas feed separations. *Journal of Membrane Science*, **2013**, 428, 608-619	9.6	97
158	Carbon molecular sieve membrane performance tuning by dual temperature secondary oxygen doping (DTSOD). *Journal of Membrane Science*, **2013**, 427, 472-478	9.6	37
157	High performance ZIF-8/6FDA-DAM mixed matrix membrane for propylene/propane separations. *Journal of Membrane Science*, **2012**, 389, 34-42	9.6	349

156	Effect of thermal annealing on a novel polyamide-imide polymer membrane for aggressive acid gas separations. *Journal of Membrane Science*, **2012**, 401-402, 163-174	9.6	68
155	Sonication-induced Ostwald ripening of ZIF-8 nanoparticles and formation of ZIF-8/polymer composite membranes. *Microporous and Mesoporous Materials*, **2012**, 158, 292-299	5.3	153
154	Antiplasticization-based enhancement of poly(ethylene terephthalate) barrier properties. *Polymer*, **2012**, 53, 213-222	3.9	48
153	Continuous Polycrystalline Zeolitic Imidazolate Framework-90 Membranes on Polymeric Hollow Fibers. *Angewandte Chemie*, **2012**, 124, 10767-10770	3.6	28
152	Aminosilane-Functionalized Cellulosic Polymer for Increased Carbon Dioxide Sorption. *Industrial & Engineering Chemistry Research*, **2012**, 51, 503-514	3.9	31
151	Diffusion of methane and carbon dioxide in carbon molecular sieve membranes by multinuclear pulsed field gradient NMR. *Langmuir*, **2012**, 28, 10296-303	4	26
150	Sorbate Transport in Carbon Molecular Sieve Membranes and FAU/EMT Intergrowth by Diffusion NMR. *Materials*, **2012**, 5, 302-316	3.5	3
149	CO2 sorption and desorption performance of thermally cycled hollow fiber sorbents. *International Journal of Greenhouse Gas Control*, **2012**, 10, 285-294	4.2	40
148	Thermally moderated hollow fiber sorbent modules in rapidly cycled pressure swing adsorption mode for hydrogen purification. *International Journal of Hydrogen Energy*, **2012**, 37, 15227-15240	6.7	29
147	Hollow fiber-supported designer ionic liquid sponges for post-combustion CO2 scrubbing. *Polymer*, **2012**, 53, 5806-5815	3.9	13
146	A high-flux polyimide hollow fiber membrane to minimize footprint and energy penalty for CO2 recovery from flue gas. *Journal of Membrane Science*, **2012**, 423-424, 302-313	9.6	52
145	Olefins-selective asymmetric carbon molecular sieve hollow fiber membranes for hybrid membrane-distillation processes for olefin/paraffin separations. *Journal of Membrane Science*, **2012** , 423-424, 314-323	9.6	88
144	Unexpected Molecular Sieving Properties of Zeolitic Imidazolate Framework-8. *Journal of Physical Chemistry Letters*, **2012**, 3, 2130-4	6.4	419
143	An advanced gas/vapor permeation system for barrier materials: Design and applications to poly(ethylene terephthalate). *Journal of Polymer Science, Part B: Polymer Physics*, **2012**, 50, 1262-1270	2.6	15
142	Adsorption of water and ethanol in MFI-type zeolites. *Langmuir*, **2012**, 28, 8664-73	4	140
141	Water and beyond: Expanding the spectrum of large-scale energy efficient separation processes. *AICHE Journal*, **2012**, 58, 2624-2633	3.6	116
140	Carbon molecular sieve dense film membranes derived from Matrimid® for ethylene/ethane separation. *Carbon*, **2012**, 50, 1488-1502	10.4	112
139	Modified Mesoporous Silica Gas Separation Membranes on Polymeric Hollow Fibers. *Chemistry of Materials*, **2011**, 23, 3025-3028	9.6	75

138	Sub-TgCross-Linking of a Polyimide Membrane for Enhanced CO2Plasticization Resistance for Natural Gas Separation. *Macromolecules*, **2011**, 44, 6046-6056	5.5	194
137	Formation of defect-free latex films on porous fiber supports. *ACS Applied Materials & Interfaces*, **2011**, 3, 3568-82	9.5	25
136	Removal of the Fermentation Inhibitor, Furfural, Using Activated Carbon in Cellulosic-Ethanol Production. *Industrial & Engineering Chemistry Research*, **2011**, 50, 14055-14060	3.9	55
135	Correlation Between Pyrolysis Atmosphere and Carbon Molecular Sieve Membrane Performance Properties. *Membrane Science and Technology*, **2011**, 137-173		3
134	Plasticization-resistant hollow fiber membranes for CO2/CH4 separation based on a thermally crosslinkable polyimide. *Journal of Membrane Science*, **2011**, 382, 212-221	9.6	46
133	Thermal analysis and its application in evaluation of fluorinated polyimide membranes for gas separation. *Polymer*, **2011**, 52, 4073-4082	3.9	23
132	Formation of Mg(OH)2 nanowhiskers on LTA zeolite surfaces using a sol□gel method. *Journal of Sol-Gel Science and Technology*, **2011**, 60, 189-197	2.3	6
131	Toluene impurity effects on CO2 separation using a hollow fiber membrane for natural gas. *Journal of Membrane Science*, **2011**, 369, 490-498	9.6	29
130	Crosslinkable mixed matrix membranes with surface modified molecular sieves for natural gas purification: I. Preparation and experimental results. *Journal of Membrane Science*, **2011**, 377, 75-81	9.6	45
129	Hollow fiber adsorbents for CO2 capture: Kinetic sorption performance. *Chemical Engineering Journal*, **2011**, 171, 801-810	14.7	48
128	Permeation of butane isomers through 6FDA-DAM dense films. *Journal of Polymer Science, Part B: Polymer Physics*, **2011**, 49, 1605-1620	2.6	10
127	CO2□CH4 permeation in high zeolite 4A loading mixed matrix membranes. *Journal of Membrane Science*, **2011**, 367, 197-203	9.6	140
126	Crosslinkable mixed matrix membranes with surface modified molecular sieves for natural gas purification: II. Performance characterization under contaminated feed conditions. *Journal of Membrane Science*, **2011**, 377, 82-88	9.6	18
125	Matrimid□ derived carbon molecular sieve hollow fiber membranes for ethylene/ethane separation. *Journal of Membrane Science*, **2011**, 380, 138-147	9.6	122
124	Solvothermal deposition and characterization of magnesium hydroxide nanostructures on zeolite crystals. *Microporous and Mesoporous Materials*, **2011**, 139, 120-129	5.3	43
123	Hollow silicalite-1 sphere-polymer mixed matrix membranes for gas separation. *Separation and Purification Technology*, **2011**, 77, 137-145	8.3	89
122	Gas-Transport-Property Performance of Hybrid Carbon Molecular Sieve□Polymer Materials. *Industrial & Engineering Chemistry Research*, **2010**, 49, 9310-9321	3.9	41
121	Effects of Supercritical CO2 Conditioning on Cross-Linked Polyimide Membranes. *Macromolecules*, **2010**, 43, 4679-4687	5.5	26

120	Enabling Low-Cost CO2 Capture via Heat Integration. *Industrial & Engineering Chemistry Research*, **2010**, 49, 7550-7562	3.9	85
119	Hollow Fiber Sorbents for Desulfurization of Natural Gas. *Industrial & Engineering Chemistry Research*, **2010**, 49, 12038-12050	3.9	36
118	Effects of CO2 on a High Performance Hollow-Fiber Membrane for Natural Gas Purification. *Industrial & Engineering Chemistry Research*, **2010**, 49, 4887-4896	3.9	59
117	Effect of pyrolysis atmosphere on separation performance of carbon molecular sieve membranes. *Journal of Membrane Science*, **2010**, 359, 2-10	9.6	146
116	Antiplasticization and plasticization of Matrimid asymmetric hollow fiber membranes. Part B. Modeling. *Journal of Membrane Science*, **2010**, 350, 242-251	9.6	24
115	A High-Performance Gas-Separation Membrane Containing Submicrometer-Sized Metal Organic Framework Crystals. *Angewandte Chemie*, **2010**, 122, 10059-10062	3.6	79
114	A high-performance gas-separation membrane containing submicrometer-sized metal-organic framework crystals. *Angewandte Chemie - International Edition*, **2010**, 49, 9863-6	16.4	558
113	Antiplasticization and plasticization of Matrimid asymmetric hollow fiber membranes Part A. Experimental. *Journal of Membrane Science*, **2010**, 350, 232-241	9.6	39
112	Performance of 6FDA 3FpDA polyimide for propylene/propane separations. *Journal of Membrane Science*, **2010**, 365, 399-408	9.6	80
111	Macroporous polymeric sorbents with high selectivity for separation of phenols. *Polymer*, **2010**, 51, 3793-3800	3.9	6
110	Metal organic framework mixed matrix membranes for gas separations. *Microporous and Mesoporous Materials*, **2010**, 131, 13-20	5.3	282
109	Effect of processing on carbon molecular sieve structure and performance. *Carbon*, **2010**, 48, 3737-3749	10.4	14
108	Effect of polymer precursors on carbon molecular sieve structure and separation performance properties. *Carbon*, **2010**, 48, 4432-4441	10.4	87
107	Generalization of effect of oxygen exposure on formation and performance of carbon molecular sieve membranes. *Carbon*, **2010**, 48, 4442-4449	10.4	29
106	Synthesis Structure Property Relationships for Hyperbranched Aminosilica CO2 Adsorbents. *Advanced Functional Materials*, **2009**, 19, 3821-3832	15.6	249
105	Sorption and transport of methanol in poly(ethylene terephthalate). *Polymer*, **2009**, 50, 236-244	3.9	33
104	Butane isomer transport properties of 6FDA DAM and MFI 6FDA DAM mixed matrix membranes. *Journal of Membrane Science*, **2009**, 343, 157-163	9.6	50
103	Porous layered oxide/Nafion nanocomposite membranes for direct methanol fuel cell applications. *Microporous and Mesoporous Materials*, **2009**, 118, 427-434	5.3	58

102	Dehydration of ethanol–water mixtures using asymmetric hollow fiber membranes from commercial polyimides. *Journal of Membrane Science*, **2009**, 327, 96-103	9.6	43
101	Macrovoids in Hybrid Organic/Inorganic Hollow Fiber Membranes. *Industrial & Engineering Chemistry Research*, **2009**, 48, 2372-2379	3.9	42
100	Facile high-yield solvothermal deposition of inorganic nanostructures on zeolite crystals for mixed matrix membrane fabrication. *Journal of the American Chemical Society*, **2009**, 131, 14662-3	16.4	101
99	Asymmetric Hollow Fiber Membranes for Separation of CO2 from Hydrocarbons and Fluorocarbons at High-Pressure Conditions Relevant to C2F4 Polymerization. *Industrial & Engineering Chemistry Research*, **2009**, 48, 10577-10583	3.9	10
98	Hollow Fiber Adsorbents for CO2 Removal from Flue Gas. *Industrial & Engineering Chemistry Research*, **2009**, 48, 7314-7324	3.9	153
97	CO2/N2 Reverse Selective Gas Separation Membranes: Technological Opportunities and Scientific Challenges. *Industrial & Engineering Chemistry Research*, **2009**, 48, 3700-3701	3.9	17
96	Sorption in Zeolites Modified for Use in Organic–Inorganic Hybrid Membranes. *Industrial & Engineering Chemistry Research*, **2008**, 47, 591-598	3.9	16
95	Decarboxylation-Induced Cross-Linking of a Polyimide for Enhanced CO2 Plasticization Resistance. *Macromolecules*, **2008**, 41, 7920-7927	5.5	123
94	Increased Molecular Weight of a Cross-Linkable Polyimide for Spinning Plasticization Resistant Hollow Fiber Membranes. *Macromolecules*, **2008**, 41, 6367-6375	5.5	50
93	Defect-free asymmetric hollow fiber membranes from Torlon® , a polyamide–imide polymer, for high-pressure CO2 separations. *Journal of Membrane Science*, **2008**, 320, 65-72	9.6	129
92	Crosslinked mixed matrix membranes for the purification of natural gas: Effects of sieve surface modification. *Journal of Membrane Science*, **2008**, 314, 193-199	9.6	174
91	Sonication-Assisted Dealumination of Zeolite A with Thionyl Chloride. *Industrial & Engineering Chemistry Research*, **2007**, 46, 767-772	3.9	16
90	Formation of Nanostructured Zeolite Particle Surfaces via a Halide/Grignard Route. *Chemistry of Materials*, **2007**, 19, 4000-4006	9.6	27
89	A General Strategy for Adhesion Enhancement in Polymeric Composites by Formation of Nanostructured Particle Surfaces. *Journal of Physical Chemistry C*, **2007**, 111, 652-657	3.8	105
88	Cross-Linkable Polyimide Membrane for Natural Gas Purification and Carbon Dioxide Plasticization Reduction. *Macromolecules*, **2007**, 40, 583-587	5.5	152
87	Gas sorption in polymers, molecular sieves, and mixed matrix membranes. *Journal of Applied Polymer Science*, **2007**, 104, 4053-4059	2.9	79
86	Mixed matrix hollow fiber membranes made with modified HSSZ-13 zeolite in polyetherimide polymer matrix for gas separation. *Journal of Membrane Science*, **2007**, 288, 195-207	9.6	271
85	Polymer Membranes for Hydrogen Separations. *MRS Bulletin*, **2006**, 31, 745-749	3.2	78

84	A More Aggressive Approach is Needed for Gas Separation Membrane Development. *Membrane*, **2006**, 31, 157-160	0	2
83	Study of thermal annealing on Matrimid® fiber performance in pervaporation of acetic acid and water mixtures. *Polymer*, **2006**, 47, 280-288	3.9	60
82	Characterization of crosslinked hollow fiber membranes. *Polymer*, **2006**, 47, 1207-1216	3.9	32
81	Efficient development of effective hollow fiber membranes for gas separations from novel polymers. *Journal of Membrane Science*, **2006**, 278, 92-104	9.6	61
80	Non-ideal effects in organic–inorganic materials for gas separation membranes. *Journal of Molecular Structure*, **2005**, 739, 87-98	3.4	481
79	An investigation of the effects of pyrolysis parameters on gas separation properties of carbon materials. *Carbon*, **2005**, 43, 1843-1856	10.4	163
78	Thickness-dependent sorption and effects of physical aging in a polyimide sample. *Journal of Applied Polymer Science*, **2005**, 96, 1115-1121	2.9	30
77	Hybrid membrane materials comprising organic polymers with rigid dispersed phases. *AICHE Journal*, **2004**, 50, 311-321	3.6	289
76	Evolving beyond the thermal age of separation processes: Membranes can lead the way. *AICHE Journal*, **2004**, 50, 2326-2334	3.6	163
75	Characterization of low permeability gas separation membranes and barrier materials; design and operation considerations. *Journal of Membrane Science*, **2004**, 245, 227-231	9.6	56
74	Natural gas permeation in polyimide membranes. *Journal of Membrane Science*, **2004**, 228, 227-236	9.6	291
73	Morphology of integral-skin layers in hollow-fiber gas-separation membranes. *Journal of Applied Polymer Science*, **2003**, 90, 399-411	2.9	34
72	Effect of humidified feeds on oxygen permeability of mixed matrix membranes. *Journal of Applied Polymer Science*, **2003**, 90, 1574-1580	2.9	31
71	Investigation of porosity of carbon materials and related effects on gas separation properties. *Carbon*, **2003**, 41, 253-266	10.4	195
70	Mixed matrix membranes using carbon molecular sieves. *Journal of Membrane Science*, **2003**, 211, 335-348	9.6	255
69	Mixed matrix membranes using carbon molecular sieves. *Journal of Membrane Science*, **2003**, 211, 311-334	9.6	589
68	Defining the challenges for C3H6/C3H8 separation using polymeric membranes. *Journal of Membrane Science*, **2003**, 211, 299-309	9.6	253
67	Carboxylic acid containing polyimides for pervaporation separations of toluene/iso-octane mixtures. *Journal of Membrane Science*, **2003**, 219, 89-102	9.6	103

66	Effect of condensable impurity in CO2/CH4 gas feeds on performance of mixed matrix membranes using carbon molecular sieves. *Journal of Membrane Science*, **2003**, 221, 233-239	9.6	106
65	Solid-State Covalent Cross-Linking of Polyimide Membranes for Carbon Dioxide Plasticization Reduction. *Macromolecules*, **2003**, 36, 1882-1888	5.5	161
64	Carbon Dioxide-Induced Plasticization of Polyimide Membranes: Pseudo-Equilibrium Relationships of Diffusion, Sorption, and Swelling. *Macromolecules*, **2003**, 36, 6433-6441	5.5	156
63	Effect of Condensable Impurities in CO2/CH4 Gas Feeds on Carbon Molecular Sieve Hollow-Fiber Membranes. *Industrial & Engineering Chemistry Research*, **2003**, 42, 1064-1075	3.9	50
62	StructureProperty Relationships for Poly(pyrrolone-imide) Gas Separation Membranes. *Macromolecules*, **2003**, 36, 2374-2381	5.5	66
61	Relaxation Dynamics of CO2 Diffusion, Sorption, and Polymer Swelling for Plasticized Polyimide Membranes. *Macromolecules*, **2003**, 36, 6442-6448	5.5	74
60	Permeation Equipment for High-Pressure Gas Separation Membranes. *Industrial & Engineering Chemistry Research*, **2003**, 42, 6389-6395	3.9	28
59	Challenges in forming successful mixed matrix membranes with rigid polymeric materials. *Journal of Applied Polymer Science*, **2002**, 86, 881-890	2.9	283
58	Mixed matrix membrane materials with glassy polymers. Part 1. *Polymer Engineering and Science*, **2002**, 42, 1420-1431	2.3	320
57	Mixed matrix membrane materials with glassy polymers. Part 2. *Polymer Engineering and Science*, **2002**, 42, 1432-1441	2.3	177
56	The Effects of Crosslinking Chemistry on CO2 Plasticization of Polyimide Gas Separation Membranes. *Industrial & Engineering Chemistry Research*, **2002**, 41, 6139-6148	3.9	227
55	High Pressure CO2/CH4 Separation Using Carbon Molecular Sieve Hollow Fiber Membranes. *Industrial & Engineering Chemistry Research*, **2002**, 41, 367-380	3.9	250
54	Gas separation membranes: needs for combined materials science and processing approaches. *Macromolecular Symposia*, **2002**, 188, 13-22	0.8	65
53	Pervaporative introduction of organic vapors into high-pressure gas feeds. *Journal of Applied Polymer Science*, **2001**, 80, 311-315	2.9	5
52	Sorption of methanol/MTBE and diffusion of methanol in 6FDADDA polyimide. *Journal of Polymer Science, Part B: Polymer Physics*, **2000**, 38, 2254-2267	2.6	8
51	Experimental procedure utilizing extraction and head-space analytical method for obtaining methanol/MTBE mixed-liquid sorption isotherms in a glassy polymer. *Journal of Polymer Science, Part B: Polymer Physics*, **2000**, 38, 2268-2271	2.6	4
50	Pushing the limits on possibilities for large scale gas separation: which strategies?. *Journal of Membrane Science*, **2000**, 175, 181-196	9.6	655
49	Formation of defect-free polyimide hollow fiber membranes for gas separations. *Journal of Membrane Science*, **2000**, 167, 79-89	9.6	208

48	Olefin/paraffin gas separations with 6FDA-based polyimide membranes. *Journal of Membrane Science*, **2000**, 170, 205-214	9.6	196
47	Factors Controlling Successful Formation of Mixed-Matrix Gas Separation Materials. *Industrial & Engineering Chemistry Research*, **2000**, 39, 2692-2696	3.9	419
46	Comparison of gas transport and sorption in the ladder polymer BBL and some semi-ladder polymers. *Polymer*, **1999**, 40, 5655-5664	3.9	39
45	Effect of permeate pressure on the mixed gas permeation of carbon dioxide and methane in a glassy polyimide. *Journal of Membrane Science*, **1999**, 152, 29-40	9.6	44
44	Improvement of CO2/CH4 separation characteristics of polyimides by chemical crosslinking. *Journal of Membrane Science*, **1999**, 155, 145-154	9.6	316
43	Characterization of substructure resistance in asymmetric gas separation membranes. *Journal of Membrane Science*, **1999**, 160, 51-64	9.6	24
42	Fundamental and Practical Aspects of Mixed Matrix Gas Separation Membranes. *ACS Symposium Series*, **1999**, 277-286	0.4	31
41	Polypyrrolones for membrane gas separations. I. Structural comparison of gas transport and sorption properties. *Journal of Polymer Science, Part B: Polymer Physics*, **1999**, 37, 1235-1249	2.6	82
40	Polypyrrolones for membrane gas separations. II. Activation energies and heats of sorption. *Journal of Polymer Science, Part B: Polymer Physics*, **1999**, 37, 1251-1265	2.6	42
39	Entropic Selectivity Analysis of a Series of Polypyrrolones for Gas Separation Membranes. *Macromolecules*, **1999**, 32, 3341-3346	5.5	32
38	Diffusion in gas separation membrane materials: A comparison and analysis of experimental characterization techniques. *Journal of Polymer Science, Part B: Polymer Physics*, **1998**, 36, 1747-1755	2.6	15
37	A guide to establishing hollow fiber macroscopic properties for membrane applications. *Journal of Membrane Science*, **1997**, 124, 223-232	9.6	104
36	Gas transport properties of thin polymeric membranes in the presence of silicon dioxide particles. *Journal of Membrane Science*, **1997**, 125, 143-163	9.6	193
35	Tailoring mixed matrix composite membranes for gas separations. *Journal of Membrane Science*, **1997**, 137, 145-154	9.6	470
34	Gas permeation and sorption studies on stereoregular polynorbornene. *Journal of Polymer Science, Part B: Polymer Physics*, **1997**, 35, 91-99	2.6	19
33	An Emerging Class of Volatile Organic Compound Sorbents: Friedel□rafts Modified Polystyrenes. 2. Performance Comparison with Commercially-Available Sorbents and Isotherm Analysis□ *Industrial & Engineering Chemistry Research*, **1996**, 35, 4635-4645	3.9	23
32	Effects of Polyimide Pyrolysis Conditions on Carbon Molecular Sieve Membrane Properties. *Industrial & Engineering Chemistry Research*, **1996**, 35, 2999-3003	3.9	186
31	An Emerging Class of Volatile Organic Compound Sorbents: Friedel□rafts Modified Polystyrenes. 1. Synthesis, Characterization, and Performance in Aqueous- and Vapor-Phase Applications. *Industrial & Engineering Chemistry Research*, **1996**, 35, 1195-1205	3.9	17

30	Phase separation, vitrification, and the manifestation of macrovoids in polymeric asymmetric membranes. *Journal of Membrane Science*, **1996**, 112, 29-39	9.6	177
29	Effects of colloidal silica incorporation on oxygen/nitrogen separation properties of ceramic-supported 6FDA-IPDA thin films. *Journal of Membrane Science*, **1996**, 111, 283-290	9.6	34
28	Thermomechanical Stability of Polymer□eramic Composite Membranes. *Separation Science and Technology*, **1995**, 30, 2159-2171	2.5	4
27	Carbon Composite Membranes: A Solution to Adverse Humidity Effects. *Industrial & Engineering Chemistry Research*, **1995**, 34, 164-167	3.9	62
26	Solubilization of Aromatic Solutes in Block Copolymers. *Macromolecules*, **1995**, 28, 4883-4892	5.5	124
25	Characterization of Ultramicroporous Carbon Membranes with Humidified Feeds. *Industrial & Engineering Chemistry Research*, **1995**, 34, 158-163	3.9	86
24	Chemical stability of polyimide membranes at temperatures near Tg. *Journal of Applied Polymer Science*, **1995**, 58, 165-170	2.9	4
23	Solubilization Isotherms of Aromatic Solutes in Surfactant Aggregates. *Journal of Colloid and Interface Science*, **1995**, 170, 57-64	9.3	53
22	Effect of structure on the temperature dependence of gas transport and sorption in a series of polycarbonates. *Journal of Polymer Science, Part B: Polymer Physics*, **1994**, 32, 701-713	2.6	98
21	Carbon molecular sieve gas separation membranes-I. Preparation and characterization based on polyimide precursors. *Carbon*, **1994**, 32, 1419-1425	10.4	271
20	Carbon molecular sieve gas separation membranes-II. Regeneration following organic exposure. *Carbon*, **1994**, 32, 1427-1432	10.4	70
19	Analysis of a thermally stable polypyrrolone for high temperature membrane-based gas separations. *Journal of Membrane Science*, **1994**, 90, 117-130	9.6	27
18	Effect of mild solvent post-treatments on the gas transport properties of glassy polymer membranes. *Journal of Membrane Science*, **1994**, 90, 213-229	9.6	29
17	Gas permeation and selectivity of poly(organophosphazene) membranes. *Macromolecules*, **1993**, 26, 1493-1502	5.5	49
16	A qualitative skin layer formation mechanism for membranes made by dry/wet phase inversion. *Journal of Polymer Science, Part B: Polymer Physics*, **1993**, 31, 419-427	2.6	111
15	Aging of thin polyimide-ceramic and polycarbonate-ceramic composite membranes. *Industrial & Engineering Chemistry Research*, **1993**, 32, 1921-1926	3.9	44
14	Temperature dependence of gas sorption and transport properties in polymers: measurement and applications. *Industrial & Engineering Chemistry Research*, **1992**, 31, 2708-2714	3.9	81
13	Influence of quench medium on the structures and gas permeation properties of polysulfone membranes made by wet and dry/wet phase inversion. *Journal of Membrane Science*, **1992**, 71, 81-96	9.6	57

12	Gas-permeation properties of asymmetric polycarbonate, polyestercarbonate, and fluorinated polyimide membranes prepared by the generalized dry□wet phase inversion process. *Journal of Applied Polymer Science*, **1992**, 46, 1195-1204	2.9	25
11	Structures and gas separation properties of asymmetric polysulfone membranes made by dry, wet, and dry/wet phase inversion. *Journal of Applied Polymer Science*, **1991**, 43, 1491-1502	2.9	174
10	Transport characterization of a polypyrrolone for gas separations. *Journal of Membrane Science*, **1991**, 55, 99-117	9.6	63
9	Relationship between substructure resistance and gas separation properties of defect-free integrally skinned asymmetric membranes. *Industrial & Engineering Chemistry Research*, **1991**, 30, 1837-1840	3.9	66
8	The Formation of Chemically Modified □Alumina Microporous Membranes. *Separation Science and Technology*, **1990**, 25, 1257-1280	2.5	35
7	Barrier Polymers and Structures: Overview. *ACS Symposium Series*, **1990**, 1-21	0.4	26
6	Temperature effects on gas permselection properties in hexafluoro aromatic polyimides. *Journal of Membrane Science*, **1989**, 46, 43-56	9.6	60
5	Advanced Gas Separation Membrane Materials: Rigid Aromatic Polyimides. *Separation Science and Technology*, **1988**, 23, 1611-1626	2.5	67
4	Simplified analysis of gas/polymer selective solubility behavior. *Journal of Polymer Science, Polymer Physics Edition*, **1985**, 23, 1611-1628		97
3	Energy and Environmental Issues and Impacts of Membranes in Industry139-165		6
2	Recent Progress in Mixed-Matrix Membranes787-819		6
1	Gas Separation by Carbon Membranes599-631		12