

Tomohisa Yoshioka

List of Publications by Year in Descending Order

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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.

182
papers

4,590
citations

38
h-index

59
g-index

188
ext. papers

5,233
ext. citations

6.4
avg, IF

5.65
L-index

#	Paper	IF	Citations
182	The underlying mechanism insights into support polydopamine decoration toward ultrathin polyamide membranes for high-performance reverse osmosis. <i>Journal of Membrane Science</i> , 2022 , 646, 120269	9.6	2
181	Molecular modelling and simulation of membrane formation 2022 , 463-497		0
180	Novel Tough Ion-Gel-Based CO ₂ Separation Membrane with Interpenetrating Polymer Network Composed of Semicrystalline and Cross-Linkable Polymers. <i>Industrial & Engineering Chemistry Research</i> , 2022 , 61, 4648-4658	3.9	1
179	HNb3O8/g-C ₃ N ₄ nanosheet composite membranes with two-dimensional heterostructured nanochannels achieve enhanced water permeance and photocatalytic activity. <i>Chemical Engineering Journal</i> , 2022 , 136254	14.7	1
178	Development of cellulose triacetate asymmetric hollow fiber membranes with highly enhanced compaction resistance for osmotically assisted reverse osmosis operation applicable to brine concentration. <i>Journal of Membrane Science</i> , 2022 , 653, 120508	9.6	2
177	CFD Model Development and Experimental Measurements for Ammonia/Water Separation Using a Vacuum Membrane Distillation Module. <i>Industrial & Engineering Chemistry Research</i> , 2022 , 61, 7381-7396	3.9	0
176	A zwitterionic copolymer-interlayered ultrathin nanofilm with ridge-shaped structure for ultrapermeable nanofiltration. <i>Journal of Membrane Science</i> , 2022 , 657, 120679	9.6	0
175	HNb3O8 Nanosheet/Graphene Oxide Composite Membranes for Molecular Separation. <i>ACS Applied Nano Materials</i> , 2021 , 4, 3455-3466	5.6	8
174	Molecular dynamics simulation of small gas molecule permeation through CAU-1 membrane. <i>Chinese Journal of Chemical Engineering</i> , 2021 , 33, 104-111	3.2	2
173	Molecular dynamics simulation for investigating and assessing reaction conditions between carboxylated polyethersulfone and polyethyleneimine. <i>Journal of Applied Polymer Science</i> , 2021 , 138, 51304	2.9	
172	Effect of graphene oxide quantum dots on the interfacial polymerization of a thin-film nanocomposite forward osmosis membrane: An experimental and molecular dynamics study. <i>Journal of Membrane Science</i> , 2021 , 630, 119309	9.6	2
171	Graphene quantum dots (GQDs)-assembled membranes with intrinsic functionalized nanochannels for high-performance nanofiltration. <i>Chemical Engineering Journal</i> , 2021 , 420, 127602	14.7	18
170	Development of a Micro-Double-Network Ion Gel-Based CO ₂ Separation Membrane from Nonvolatile Network Precursors. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 12640-12649	3.9	6
169	Inorganic/Organic Micro-Double-Network Ion Gel-Based Composite Membrane with Enhanced Mechanical Strength and CO ₂ Permeance. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 12698-12708	3.9	3
168	In situ nanoporous structural characterization of asymmetric hollow fiber membranes for desalination using Raman spectroscopy. <i>Journal of Membrane Science</i> , 2021 , 631, 119337	9.6	3
167	Thin-film composite hollow-fiber nanofiltration membranes prepared from benzonitrile containing disulfonated poly(arylene ether sulfone) random copolymers coated onto polyphenylene oxide support membranes. <i>Journal of Membrane Science</i> , 2021 , 631, 119336	9.6	1
166	Zwitterionic Copolymer-Regulated Interfacial Polymerization for Highly Permselective Nanofiltration Membrane. <i>Nano Letters</i> , 2021 , 21, 6525-6532	11.5	10

165	Effect of temperature on the osmotic behavior of LCST type ionic liquid solutions as draw solutions in the forward osmosis process. <i>Separation and Purification Technology</i> , 2021 , 275, 119164	8.3	1
164	Laminar HNb3O8-based membranes supported on anodic aluminum oxide with enhanced anti-swelling property for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , 2021 , 640, 119799	8.6	1
163	Controlling interlayer spacing and organic solvent permeation in laminar graphene oxide membranes modified with crosslinker. <i>Separation and Purification Technology</i> , 2021 , 276, 119279	8.3	4
162	Molecular dynamics study on the elucidation of polyamide membrane fouling by nonionic surfactants and disaccharides. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 20313-20322	3.6	2
161	Preparation of polyamide/PVDF composite hollow fiber membranes with well-developed interconnected bicontinuous structure using high-temperature rapid NIPS for forward osmosis. <i>Journal of Membrane Science</i> , 2020 , 612, 118468	9.6	11
160	Fundamental investigation of the gas permeation mechanism of facilitated transport membranes with Co(salen)-containing ionic liquid as O ₂ carriers. <i>Separation and Purification Technology</i> , 2020 , 248, 117018	8.3	3
159	Hollow Fiber-Type Facilitated Transport Membrane Composed of a Polymerized Ionic Liquid-Based Gel Layer with Amino Acidate as the CO ₂ Carrier. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 2083-2092	3.9	8
158	Preparation of monoamine-incorporated polyamide nanofiltration membranes by interfacial polymerization for efficient separation of divalent anions from divalent cations. <i>Separation and Purification Technology</i> , 2020 , 239, 116530	8.3	11
157	Silica gel-coated silicon carbide layer deposited by atmospheric plasma spraying. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020 , 110, 173-181	5.3	1
156	Functions of Polymeric Additives in Thermally Induced Phase Separation Process of Poly(Vinylidene Difluoride). <i>Membrane</i> , 2020 , 45, 324-329	0	
155	NF/RO Separation of Organic Solvent using Organic and Inorganic Membranes. <i>Membrane</i> , 2020 , 45, 165-170	0	
154	Effect of mass transfer at the interface of the polymer solution and extruded solvent during the air gap on membrane structures and performances in TIPS process using triple-orifice spinneret. <i>Journal of Membrane Science</i> , 2020 , 595, 117513	9.6	17
153	Energy-efficient separation of organic liquids using organosilica membranes via a reverse osmosis route. <i>Journal of Membrane Science</i> , 2020 , 597, 117758	9.6	22
152	Fabrication of porous polyketone forward osmosis membranes modified with aromatic compounds: Improved pressure resistance and low structural parameter. <i>Separation and Purification Technology</i> , 2020 , 251, 117400	8.3	7
151	Custom-tailoring metal-organic framework in thin-film nanocomposite nanofiltration membrane with enhanced internal polarity and amplified surface crosslinking for elevated separation property. <i>Desalination</i> , 2020 , 493, 114649	10.3	18
150	Engineering Heterostructured Thin-Film Nanocomposite Membrane with Functionalized Graphene Oxide Quantum Dots (GOQD) for Highly Efficient Reverse Osmosis. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 38662-38673	9.5	27
149	Structure control of hydrophilized PVDF hollow-fiber membranes using amphiphilic copolymers: PMMA-co-P (HEMA-co-MEA). <i>Journal of Membrane Science</i> , 2020 , 612, 118421	9.6	5
148	Multistage osmotically assisted reverse osmosis process for concentrating solutions using hollow fiber membrane modules. <i>Chemical Engineering Research and Design</i> , 2020 , 162, 117-124	5.5	5

147	Antifouling thin-film composite membranes with multi-defense properties by controllably constructing amphiphilic diblock copolymer brush layer. <i>Journal of Membrane Science</i> , 2020 , 614, 118515	9.6	14
146	A Numerical Simulation and Experimental Comparison of Atmospheric Thermal Plasma Spray Coatings Between Internal and External Powder Injection Processes. <i>IEEE Transactions on Plasma Science</i> , 2020 , 48, 2759-2767	1.3	0
145	2D Nanocomposite Membranes: Water Purification and Fouling Mitigation. <i>Membranes</i> , 2020 , 10,	3.8	6
144	Gas Permeation Characteristics of TiO-ZrO-Aromatic Organic Chelating Ligand (aOCL) Composite Membranes. <i>Membranes</i> , 2020 , 10,	3.8	2
143	Design of niobate nanosheet-graphene oxide composite nanofiltration membranes with improved permeability. <i>Journal of Membrane Science</i> , 2020 , 595, 117598	9.6	20
142	Antifouling Double-Skinned Forward Osmosis Membranes by Constructing Zwitterionic Brush-Decorated MWCNT Ultrathin Films. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 19462-19471	9.5	21
141	Facile development of poly(tetrafluoroethylene-r-vinylpyrrolidone) modified PVDF membrane with comprehensive antifouling property for highly-efficient challenging oil-in-water emulsions separation. <i>Journal of Membrane Science</i> , 2019 , 584, 161-172	9.6	27
140	Molecular simulation of a modified amphotericin B-Ergosterol artificial water channel to evaluate structure and water molecule transport performance. <i>Journal of Membrane Science</i> , 2019 , 583, 49-58	9.6	4
139	Development of an HKUST-1 Nanofiller-Templated Poly(ether sulfone) Mixed Matrix Membrane for a Highly Efficient Ultrafiltration Process. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 18782-18796	9.5	26
138	Molecular dynamics simulation study on the mechanisms of liquid-phase permeation in nanopores. <i>Separation and Purification Technology</i> , 2019 , 220, 259-267	8.3	4
137	Effect of polymer structure modified on RO membrane surfaces via surface-initiated ATRP on dynamic biofouling behavior. <i>Journal of Membrane Science</i> , 2019 , 582, 111-119	9.6	19
136	Osmotically Assisted Reverse Osmosis Utilizing Hollow Fiber Membrane Module for Concentration Process. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 6721-6729	3.9	14
135	Two-dimensional niobate nanosheet membranes for water treatment: Effect of nanosheet preparation method on membrane performance. <i>Separation and Purification Technology</i> , 2019 , 219, 222-229	8.3	11
134	Preparation and characterization of organic chelate ligand (OCL)-templated TiO ₂ /ZrO ₂ nanofiltration membranes. <i>Journal of Membrane Science</i> , 2019 , 591, 117304	9.6	12
133	Preparation of Polyamide Thin-Film Composite Membranes Using Hydrophilic Hollow Fiber PVDF via the TIPS Process Modified by PVA Diffusion. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 21691-21699	3.9	11
132	An ultrathin in situ silicification layer developed by an electrostatic attraction force strategy for ultrahigh-performance oil/water emulsion separation. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 24569-24582	13.2	38
131	Molecular Dynamics Simulation Study of Solid Vibration Permeation in Microporous Amorphous Silica Network Voids. <i>Membranes</i> , 2019 , 9,	3.8	1
130	Adsorption of Bovine Serum Albumin on Poly(vinylidene fluoride) Surfaces in the Presence of Ions: A Molecular Dynamics Simulation. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 1919-1928	3.4	19

129	Preparation of Amphotericin B-Ergosterol structures and molecular simulation of water adsorption and diffusion. <i>Journal of Membrane Science</i> , 2018 , 545, 229-239	9.6	8
128	One-step fabrication of robust and anti-oil-fouling aliphatic polyketone composite membranes for sustainable and efficient filtration of oil-in-water emulsions. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 24641-24650	13	41
127	Fabrication of Stacked Graphene Oxide Nanosheet Membranes Using Triethanolamine as a Crosslinker and Mild Reducing Agent for Water Treatment. <i>Membranes</i> , 2018 , 8,	3.8	11
126	Molecular Dynamics Simulation Study of Polyamide Membrane Structures and RO/FO Water Permeation Properties. <i>Membranes</i> , 2018 , 8,	3.8	9
125	Improved permselectivity of forward osmosis membranes for efficient concentration of pretreated rice straw and bioethanol production. <i>Journal of Membrane Science</i> , 2018 , 566, 15-24	9.6	19
124	Photo-induced sol-gel synthesis of polymer-supported silsesquioxane membranes. <i>RSC Advances</i> , 2017 , 7, 7150-7157	3.7	5
123	New approach for the fabrication of double-network ion-gel membranes with high CO ₂ /N ₂ separation performance based on facilitated transport. <i>Journal of Membrane Science</i> , 2017 , 530, 166-175	9.6	52
122	Preparation of cyclic peptide nanotube structures and molecular simulation of water adsorption and diffusion. <i>Journal of Membrane Science</i> , 2017 , 537, 101-110	9.6	7
121	Water transport and ion rejection investigation for application of cyclic peptide nanotubes to forward osmosis process: A simulation study. <i>Desalination</i> , 2017 , 424, 85-94	10.3	13
120	Atmospheric-pressure plasma-enhanced chemical vapor deposition of microporous silica membranes for gas separation. <i>Journal of Membrane Science</i> , 2017 , 524, 644-651	9.6	28
119	Rapid communications? Applying Amphotericin B-Ergosterol in Forward Osmosis : a simulation study. <i>Membrane</i> , 2017 , 42, 250-254	0	1
118	Molecular Dynamic (MD) Simulation of Silica Membranes 2017 , 97-133		
117	Pervaporation and vapor permeation characteristics of BTESE-derived organosilica membranes and their long-term stability in a high-water-content IPA/water mixture. <i>Journal of Membrane Science</i> , 2016 , 498, 336-344	9.6	31
116	Network engineering of a BTESE membrane for improved gas performance via a novel pH-swing method. <i>Journal of Membrane Science</i> , 2016 , 511, 219-227	9.6	24
115	Tailoring the Subnano Silica Structure via Fluorine Doping for Development of Highly Permeable CO ₂ Separation Membranes. <i>ChemNanoMat</i> , 2016 , 2, 264-267	3.5	16
114	Plasma-enhanced chemical vapor deposition of amorphous carbon molecular sieve membranes for gas separation. <i>RSC Advances</i> , 2016 , 6, 59045-59049	3.7	1
113	Characterization of Microporous Structures by Multi-gas Diffusion Technique at Room Temperature. <i>Membrane</i> , 2016 , 41, 22-29	0	
112	Propylene/propane Permeation Properties of Metal-doped Organosilica Membranes with Controlled Network Sizes and Adsorptive Properties. <i>Journal of the Japan Petroleum Institute</i> , 2016 , 59, 140-148	1	7

111	Quantum Mechanical and Molecular Dynamics Simulations of Dual-Amino-Acid Ionic Liquids for CO ₂ Capture. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 27734-27745	3.8	28
110	Evaluating the gas permeation properties and hydrothermal stability of organosilica membranes under different hydrosilylation conditions. <i>Journal of Membrane Science</i> , 2015 , 493, 664-672	9.6	6
109	Microporous organosilica membranes for gas separation prepared via PECVD using different O/Si ratio precursors. <i>Journal of Membrane Science</i> , 2015 , 489, 11-19	9.6	25
108	Methylcyclohexane dehydrogenation for hydrogen production via a bimodal catalytic membrane reactor. <i>AIChE Journal</i> , 2015 , 61, 1628-1638	3.6	31
107	Pore-size evaluation and gas transport behaviors of microporous membranes: An experimental and theoretical study. <i>AIChE Journal</i> , 2015 , 61, 2268-2279	3.6	8
106	Photo-induced sol-gel processing for low-temperature fabrication of high-performance silsesquioxane membranes for use in molecular separation. <i>Chemical Communications</i> , 2015 , 51, 9932-5	5.8	10
105	Tuning the pore sizes of novel silica membranes for improved gas permeation properties via an in situ reaction between NH ₃ and Si-H groups. <i>Chemical Communications</i> , 2015 , 51, 2551-4	5.8	8
104	Fabrication of a layered hybrid membrane using an organosilica separation layer on a porous polysulfone support, and the application to vapor permeation. <i>Journal of Membrane Science</i> , 2014 , 464, 140-148	9.6	28
103	High-temperature stability of PECVD-derived organosilica membranes deposited on TiO ₂ and SiO ₂ /rO ₂ intermediate layers using HMDSO/Ar plasma. <i>Separation and Purification Technology</i> , 2014 , 121, 13-19	8.3	14
102	A closer look at the development and performance of organic/inorganic membranes using 2,4,6-tris[3(triethoxysilyl)-1-propoxy]-1,3,5-triazine (TTESPT). <i>RSC Advances</i> , 2014 , 4, 12404	3.7	11
101	Preparation and gas permeation properties of thermally stable organosilica membranes derived by hydrosilylation. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 672-680	13	17
100	Modified gas-translation model for prediction of gas permeation through microporous organosilica membranes. <i>AIChE Journal</i> , 2014 , 60, 4199-4210	3.6	38
99	Insight into the pore tuning of triazine-based nitrogen-rich organoalkoxysilane membranes for use in water desalination. <i>RSC Advances</i> , 2014 , 4, 23759-23769	3.7	25
98	Experimental and Theoretical Study on Small Gas Permeation Properties through Amorphous Silica Membranes Fabricated at Different Temperatures. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 20323-20331	3.8	33
97	Graphene nanosheets supporting Ru nanoparticles with controlled nanoarchitectures form a high-performance catalyst for CO _x -free hydrogen production from ammonia. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 9185-9192	13	37
96	New insights into the microstructure-separation properties of organosilica membranes with ethane, ethylene, and acetylene bridges. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 9357-64	9.5	57
95	Synthesis and characterization of a layered-hybrid membrane consisting of an organosilica separation layer on a polymeric nanofiltration membrane. <i>Journal of Membrane Science</i> , 2014 , 472, 19-28	9.6	19
94	CO ₂ Permeation through Hybrid Organosilica Membranes in the Presence of Water Vapor. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 6113-6120	3.9	38

93	Gas permeation properties through Al-doped organosilica membranes with controlled network size. <i>Journal of Membrane Science</i> , 2014 , 466, 246-252	9.6	29
92	Preparation of BTESE-derived organosilica membranes for catalytic membrane reactors of methylcyclohexane dehydrogenation. <i>Journal of Membrane Science</i> , 2014 , 455, 375-383	9.6	80
91	Porous Al ₂ O ₃ /TiO ₂ tubes in combination with 1-ethyl-3-methylimidazolium acetate ionic liquid for CO ₂ /N ₂ separation. <i>Separation and Purification Technology</i> , 2014 , 122, 440-448	8.3	67
90	Development and gas permeation properties of microporous amorphous TiO ₂ /ZrO ₂ /organic composite membranes using chelating ligands. <i>Journal of Membrane Science</i> , 2014 , 461, 96-105	9.6	24
89	Molecular Simulation Assisted Characterization of Structures and Gas Permeation Properties of Microporous Inorganic Membranes. <i>Membrane</i> , 2014 , 39, 236-245	0	
88	Molecular Simulation for Microporous Inorganic Membranes and Application to Estimation of Gas Permeation Characteristics. <i>Membrane</i> , 2014 , 39, 357-365	0	
87	Ammonia decomposition in catalytic membrane reactors: Simulation and experimental studies. <i>AIChE Journal</i> , 2013 , 59, 168-179	3.6	42
86	Multilayered polyamide membranes by spray-assisted 2-step interfacial polymerization for increased performance of trimesoyl chloride (TMC)/m-phenylenediamine (MPD)-derived polyamide membranes. <i>Journal of Membrane Science</i> , 2013 , 446, 504-512	9.6	39
85	Sol-gel spin coating process to fabricate a new type of uniform and thin organosilica coating on polysulfone film. <i>Materials Letters</i> , 2013 , 109, 130-133	3.3	15
84	Reverse osmosis performance of organosilica membranes and comparison with the pervaporation and gas permeation properties. <i>AIChE Journal</i> , 2013 , 59, 1298-1307	3.6	46
83	Hydrogen Permeation Properties and Hydrothermal Stability of Sol-Gel-Derived Amorphous Silica Membranes Fabricated at High Temperatures. <i>Journal of the American Ceramic Society</i> , 2013 , 96, 2950-2957	3.8	30
82	Methylcyclohexane Dehydrogenation in Catalytic Membrane Reactors for Efficient Hydrogen Production. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 13325-13332	3.9	19
81	Micropore size estimation on gas separation membranes: A study in experimental and molecular dynamics. <i>AIChE Journal</i> , 2013 , 59, 2179-2194	3.6	38
80	Control of Pd dispersion in sol-gel-derived amorphous silica membranes for hydrogen separation at high temperatures. <i>Journal of Membrane Science</i> , 2013 , 439, 78-86	9.6	33
79	Pore size control of Al-doping into bis (triethoxysilyl) methane (BTESM)-derived membranes for improved gas permeation properties. <i>RSC Advances</i> , 2013 , 3, 12080	3.7	11
78	Molecular dynamics simulation study on characterization of bis(triethoxysilyl)-ethane and bis(triethoxysilyl)ethylene derived silica-based membranes. <i>Desalination and Water Treatment</i> , 2013 , 51, 5248-5253		9
77	Characterization and gas permeation properties of amorphous silica membranes prepared via plasma enhanced chemical vapor deposition. <i>Journal of Membrane Science</i> , 2013 , 441, 45-53	9.6	28
76	Equilibrium shift of methylcyclohexane dehydrogenation in a thermally stable organosilica membrane reactor for high-purity hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 15302-15306	6.7	33

75	Pervaporation performance and characterization of organosilica membranes with a tuned pore size by solid-phase HCl post-treatment. <i>Journal of Membrane Science</i> , 2013 , 441, 120-128	9.6	20
74	Tailoring the affinity of organosilica membranes by introducing polarizable ethylene bridges and aqueous ozone modification. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 6147-54	9.5	40
73	Preparation and characterization of amorphous carbon (a-C) membranes by molecular dynamics simulation. <i>Desalination and Water Treatment</i> , 2013 , 51, 5231-5236		2
72	Preparation and characterization of methyl-modified hybrid silica membranes for gas separation. <i>Desalination and Water Treatment</i> , 2013 , 51, 5149-5154		6
71	Micropore Filling Phase Permeation of a Condensable Vapor in Silica Membranes: A Molecular Dynamics Study. <i>Journal of Chemical Engineering of Japan</i> , 2013 , 46, 659-671	0.8	7
70	Pore-size Tuning of Highly Selective Organic/Inorganic Hybrid Silica Membranes by Solid-phase Post-treatment at Low Temperature. <i>Chemistry Letters</i> , 2012 , 41, 1663-1665	1.7	7
69	Separation of propylene/propane binary mixtures by bis(triethoxysilyl) methane (BTESM)-derived silica membranes fabricated at different calcination temperatures. <i>Journal of Membrane Science</i> , 2012 , 415-416, 478-485	9.6	44
68	Effect of calcination temperature on the PV dehydration performance of alcohol aqueous solutions through BTESM-derived silica membranes. <i>Journal of Membrane Science</i> , 2012 , 415-416, 810-815	9.6	46
67	Preparation of a novel bimodal catalytic membrane reactor and its application to ammonia decomposition for CO _x -free hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 12105-12113	6.7	44
66	Pervaporation of acetic acid aqueous solutions by organosilica membranes. <i>Journal of Membrane Science</i> , 2012 , 421-422, 25-31	9.6	46
65	Organic/Inorganic Hybrid Silica Membranes with Controlled Silica Network Size for Propylene/Propane Separation. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 944-953	3.9	91
64	Development of robust organosilica membranes for reverse osmosis. <i>Langmuir</i> , 2011 , 27, 13996-9	4	103
63	Evaluation and fabrication of pore-size-tuned silica membranes with tetraethoxydimethyl disiloxane for gas separation. <i>AIChE Journal</i> , 2011 , 57, 2755-2765	3.6	102
62	Molecular simulation of micro-structures and gas diffusion behavior of organic/inorganic hybrid amorphous silica membranes. <i>Journal of Membrane Science</i> , 2011 , 381, 90-101	9.6	38
61	Preparation of hydrophobic nanoporous methylated SiO ₂ membranes and application to nanofiltration of hexane solutions. <i>Journal of Membrane Science</i> , 2011 , 384, 149-156	9.6	34
60	Enhanced performance of inorganic-polyamide nanocomposite membranes prepared by metal-alkoxide-assisted interfacial polymerization. <i>Journal of Membrane Science</i> , 2011 , 366, 382-388	9.6	70
59	Permeation properties of hydrogen and water vapor through porous silica membranes at high temperatures. <i>AIChE Journal</i> , 2011 , 57, 618-629	3.6	83
58	Pervaporation of methanol/dimethyl carbonate using SiO ₂ membranes with nano-tuned pore sizes and surface chemistry. <i>AIChE Journal</i> , 2011 , 57, 2079-2089	3.6	23

57	Synthesis and Characterization of Microporous ZrO ₂ Membranes for Gas Permeation at 200°C. <i>Separation Science and Technology</i> , 2011 , 46, 1224-1230	2.5	22
56	2-step plasma-enhanced CVD for low-temperature fabrication of silica membranes with high gas-separation performance. <i>Chemical Communications</i> , 2011 , 47, 8070-2	5.8	24
55	Preparation of hydrogen separation membranes using disiloxane compounds. <i>Desalination and Water Treatment</i> , 2010 , 17, 120-126		4
54	Aseania 2009 Recent Progresses in Membrane Science and Technology Fifth Conference of the Aseanian Membrane Society 12-14 July 2009, Kobe, Japan. <i>Desalination and Water Treatment</i> , 2010 , 17, 1-1		1
53	Extremely thin Pd-silica mixed-matrix membranes with nano-dispersion for improved hydrogen permeability. <i>Chemical Communications</i> , 2010 , 46, 6171-3	5.8	38
52	A molecular dynamics simulation of a homogeneous organic-inorganic hybrid silica membrane. <i>Chemical Communications</i> , 2010 , 46, 9140-2	5.8	56
51	Prediction of pervaporation performance of aqueous ethanol solutions based on single gas permeation. <i>Desalination and Water Treatment</i> , 2010 , 17, 106-112		2
50	Permeation characteristics of electrolytes and neutral solutes through titania nanofiltration membranes at high temperatures. <i>Langmuir</i> , 2010 , 26, 10897-905	4	49
49	Organic/inorganic hybrid silica membranes with controlled silica network size: Preparation and gas permeation characteristics. <i>Journal of Membrane Science</i> , 2010 , 348, 310-318	9.6	125
48	Molecular Dynamics Simulation Study of Bimodal Porous Structure and Gas Permeation Properties of Microporous Silica Membranes. <i>Kagaku Kogaku Ronbunshu</i> , 2010 , 36, 174-180	0.4	1
47	Hydrogen Permeation Performance and Hydrothermal Stability for Sol-gel Derived Pd-doped Silica Membranes. <i>Kagaku Kogaku Ronbunshu</i> , 2010 , 36, 472-479	0.4	5
46	Characteristics of ammonia permeation through porous silica membranes. <i>AIChE Journal</i> , 2009 , 56, NA-NA6	9.6	7
45	Design of silica networks for development of highly permeable hydrogen separation membranes with hydrothermal stability. <i>Journal of the American Chemical Society</i> , 2009 , 131, 414-5	16.4	194
44	MD simulation studies for effect of membrane structures and dynamics on gas permeation properties through microporous amorphous silica membranes. <i>Desalination</i> , 2008 , 233, 333-341	10.3	10
43	Characterization of Co-Doped Silica for Improved Hydrothermal Stability and Application to Hydrogen Separation Membranes at High Temperatures. <i>Journal of the American Ceramic Society</i> , 2008 , 91, 2975-2981	3.8	143
42	Gas Permeation Characteristics of Metal Doped Microporous Silica Membranes for CO ₂ Separation Prepared by Metal Salt-added Sol-gel Processing. <i>Membrane</i> , 2007 , 32, 45-53	0	
41	Gas Permeation and Separation Mechanisms through Microporous Inorganic Membranes studied with Molecular Simulations. <i>Membrane</i> , 2007 , 32, 71-79	0	1
40	Pervaporation characteristics of aqueous/organic solutions with microporous SiO ₂ /ZrO ₂ membranes: Experimental study on separation mechanism. <i>Journal of Membrane Science</i> , 2006 , 284, 205-213	9.6	50

39	Reverse osmosis of nonaqueous solutions through porous silica-zirconia membranes. <i>AIChE Journal</i> , 2006 , 52, 522-531	3.6	36
38	A bimodal catalytic membrane having a hydrogen-permselective silica layer on a bimodal catalytic support: Preparation and application to the steam reforming of methane. <i>Applied Catalysis A: General</i> , 2006 , 302, 78-85	5.1	50
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