

Tomohisa Yoshioka

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182
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188
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5,233
ext. citations

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L-index

#	Paper	IF	Citations
182	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
181	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
180	Permporometry characterization of microporous ceramic membranes. <i>Journal of Membrane Science</i> , 2001 , 186, 257-265	9.6	134
179	Methane steam reforming by microporous catalytic membrane reactors. <i>AIChE Journal</i> , 2004 , 50, 2794-2805	3.6	130
178	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
177	Temperature effect on transport performance by inorganic nanofiltration membranes. <i>AIChE Journal</i> , 2000 , 46, 565-574	3.6	106
176	Development of robust organosilica membranes for reverse osmosis. <i>Langmuir</i> , 2011 , 27, 13996-9	4	103
175	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
174	Experimental studies of gas permeation through microporous silica membranes. <i>AIChE Journal</i> , 2001 , 47, 2052-2063	3.6	93
173	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
172	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
171	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
170	Titania membranes for liquid phase separation: effect of surface charge on flux. <i>Separation and Purification Technology</i> , 2001 , 25, 307-314	8.3	74
169	Permeation of Liquids through Inorganic Nanofiltration Membranes. <i>Journal of Colloid and Interface Science</i> , 2000 , 228, 292-296	9.3	72
168	Modeling Capillary Condensation in Cylindrical Nanopores: A Molecular Dynamics Study. <i>Langmuir</i> , 2000 , 16, 4293-4299	4	71
167	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
166	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

165	Gas permeation properties of MFI zeolite membranes prepared by the secondary growth of colloidal silicalite and application to the methylation of toluene. <i>Microporous and Mesoporous Materials</i> , 2002 , 54, 257-268	5.3	67
164	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
163	A molecular dynamics simulation of a homogeneous organic-inorganic hybrid silica membrane. <i>Chemical Communications</i> , 2010 , 46, 9140-2	5.8	56
162	Characterization of sol-gel derived membranes and zeolite membranes by nanoporometry. <i>Separation and Purification Technology</i> , 2003 , 32, 23-27	8.3	53
161	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
160	Determination of adsorption equilibria in pores by molecular dynamics in a unit cell with imaginary gas phase. <i>Journal of Chemical Physics</i> , 1997 , 106, 8124-8134	3.9	52
159	Inorganic porous membranes for nanofiltration of nonaqueous solutions. <i>Separation and Purification Technology</i> , 2003 , 32, 105-109	8.3	51
158	Pervaporation characteristics of aqueous organic solutions with microporous SiO ₂ /rO ₂ membranes: Experimental study on separation mechanism. <i>Journal of Membrane Science</i> , 2006 , 284, 205-213	9.6	50
157	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
156	Permeation characteristics of electrolytes and neutral solutes through titania nanofiltration membranes at high temperatures. <i>Langmuir</i> , 2010 , 26, 10897-905	4	49
155	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
154	Effect of calcination temperature on the PV dehydration performance of alcohol aqueous solutions through BTESE-derived silica membranes. <i>Journal of Membrane Science</i> , 2012 , 415-416, 810-815	9.6	46
153	Pervaporation of acetic acid aqueous solutions by organosilica membranes. <i>Journal of Membrane Science</i> , 2012 , 421-422, 25-31	9.6	46
152	CATALYTIC MEMBRANE REACTION FOR METHANE STEAM REFORMING USING POROUS SILICA MEMBRANES. <i>Separation Science and Technology</i> , 2001 , 36, 3721-3736	2.5	45
151	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
150	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
149	Ammonia decomposition in catalytic membrane reactors: Simulation and experimental studies. <i>AIChE Journal</i> , 2013 , 59, 168-179	3.6	42
148	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

147	Tailoring the affinity of organosilica membranes by introducing polarizable ethenylene bridges and aqueous ozone modification. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 6147-54	9.5	40
146	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
145	Modified gas-translation model for prediction of gas permeation through microporous organosilica membranes. <i>AIChE Journal</i> , 2014 , 60, 4199-4210	3.6	38
144	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
143	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
142	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
141	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
140	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	13.3	38
139	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
138	A photocatalytic membrane reactor for VOC decomposition using Pt-modified titanium oxide porous membranes. <i>Journal of Membrane Science</i> , 2006 , 280, 156-162	9.6	37
137	A photocatalytic membrane reactor for gas-phase reactions using porous titanium oxide membranes. <i>Catalysis Today</i> , 2003 , 82, 41-48	5.3	37
136	Reverse osmosis of nonaqueous solutions through porous silica-zirconia membranes. <i>AIChE Journal</i> , 2006 , 52, 522-531	3.6	36
135	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
134	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
133	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
132	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
131	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
130	Methylcyclohexane dehydrogenation for hydrogen production via a bimodal catalytic membrane reactor. <i>AIChE Journal</i> , 2015 , 61, 1628-1638	3.6	31

129	Molecular dynamics studies on gas permeation properties through microporous silica membranes. <i>Separation and Purification Technology</i> , 2001 , 25, 441-449	8.3	31
128	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
127	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
126	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
125	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
124	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
123	Capillary condensation model within nano-scale pores studied with molecular dynamics simulation.. <i>Journal of Chemical Engineering of Japan</i> , 1997 , 30, 274-284	0.8	28
122	Verification of the Condensation Model for Cylindrical Nanopores. Analysis of the Nitrogen Isotherm for FSM-16. <i>Langmuir</i> , 2000 , 16, 6622-6627	4	28
121	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
120	Facile development of poly(tetrafluoride ethylene-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
119	Permeation of nonaqueous solution through organic/inorganic hybrid nanoporous membranes. <i>AIChE Journal</i> , 2004 , 50, 1080-1087	3.6	27
118	Molecular dynamics study of gas permeation through amorphous silica network and inter-particle pores on microporous silica membranes. <i>Molecular Physics</i> , 2004 , 102, 191-202	1.7	27
117	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
116	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
115	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
114	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
113	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
112	Development and gas permeation properties of microporous amorphous TiO ₂ /rGO organic composite membranes using chelating ligands. <i>Journal of Membrane Science</i> , 2014 , 461, 96-105	9.6	24

111	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
110	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
109	Effect of divalent cations on permeate volume flux through porous titania membranes. <i>Desalination</i> , 2002 , 147, 213-216	10.3	23
108	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
107	Photocatalytic Reactions in a Filtration System through Porous Titanium Dioxide Membranes.. <i>Journal of Chemical Engineering of Japan</i> , 2001 , 34, 844-847	0.8	22
106	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
105	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
104	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
103	Design of niobate nanosheet-graphene oxide composite nanofiltration membranes with improved permeability. <i>Journal of Membrane Science</i> , 2020 , 595, 117598	9.6	20
102	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
101	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
100	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
99	Methylcyclohexane Dehydrogenation in Catalytic Membrane Reactors for Efficient Hydrogen Production. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 13325-13332	3.9	19
98	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
97	Condensable vapor permeation through microporous silica membranes studied with molecular dynamics simulation. <i>Separation and Purification Technology</i> , 2003 , 32, 231-237	8.3	18
96	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
95	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
94	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

93	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
92	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
91	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
90	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
89	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
88	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
87	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
86	Preparation and characterization of organic chelate ligand (OCL)-templated TiO ₂ /rO ₂ nanofiltration membranes. <i>Journal of Membrane Science</i> , 2019 , 591, 117304	9.6	12
85	Simple Evaluation Scheme of Adsorbate-Solid Interaction for Nano-Pore Characterization Studied with Monte Carlo Simulation.. <i>Journal of Chemical Engineering of Japan</i> , 2000 , 33, 103-112	0.8	12
84	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
83	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
82	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
81	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
80	A closer look at the development and performance of organic/inorganic membranes using 2,4,6-tris[3(triethoxysilyl)-1-propoxyl]-1,3,5-triazine (TTESPT). <i>RSC Advances</i> , 2014 , 4, 12404	3.7	11
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	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
77	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
76	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

75	Zwitterionic Copolymer-Regulated Interfacial Polymerization for Highly Permselective Nanofiltration Membrane. <i>Nano Letters</i> , 2021 , 21, 6525-6532	11.5	10
74	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
73	Molecular Dynamics Simulation Study of Polyamide Membrane Structures and RO/FO Water Permeation Properties. <i>Membranes</i> , 2018 , 8,	3.8	9
72	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
71	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
70	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
69	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
68	Mechanism insights into the role of the support mineralization layer toward ultrathin polyamide nanofilms for ultrafast molecular separation. <i>Journal of Materials Chemistry A</i> ,	13	8
67	HNb3O8 Nanosheet/Graphene Oxide Composite Membranes for Molecular Separation. <i>ACS Applied Nano Materials</i> , 2021 , 4, 3455-3466	5.6	8
66	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
65	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
64	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
63	Characteristics of ammonia permeation through porous silica membranes. <i>AIChE Journal</i> , 2009 , 56, NA-NA6	9.6	7
62	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
61	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
60	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
59	Preparation and characterization of methyl-modified hybrid silica membranes for gas separation. <i>Desalination and Water Treatment</i> , 2013 , 51, 5149-5154		6
58	2D Nanocomposite Membranes: Water Purification and Fouling Mitigation. <i>Membranes</i> , 2020 , 10,	3.8	6

57	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
56	Photo-induced sol-gel synthesis of polymer-supported silsesquioxane membranes. <i>RSC Advances</i> , 2017 , 7, 7150-7157	3.7	5
55	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
54	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
53	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
52	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
51	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
50	Preparation of hydrogen separation membranes using disiloxane compounds. <i>Desalination and Water Treatment</i> , 2010 , 17, 120-126		4
49	Photocatalytic Membrane Reactor Using Porous Titanium Oxide Membranes. <i>Journal of Chemical Engineering of Japan</i> , 2003 , 36, 1063-1069	0.8	4
48	Photocatalytic Membrane Reaction of Methylene Blue on Nanoporous Titania Membranes. <i>Kagaku Kogaku Ronbunshu</i> , 2005 , 31, 108-114	0.4	4
47	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
46	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
45	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
44	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
43	Preparation and characterization of amorphous carbon (a-C) membranes by molecular dynamics simulation. <i>Desalination and Water Treatment</i> , 2013 , 51, 5231-5236		2
42	Prediction of pervaporation performance of aqueous ethanol solutions based on single gas permeation. <i>Desalination and Water Treatment</i> , 2010 , 17, 106-112		2
41	Gas Permeation Characteristics and Stability of Composite Silica-Metal Oxide Membranes. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 752, 1		2
40	Organic solvent mixture separation using fluorine-incorporated thin film composite reverse osmosis membrane. <i>Journal of Materials Chemistry A</i> ,	13	2

39	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
38	Simulation of Catalytic Membrane Reaction for Methane Reforming Using a Microporous Hydrogen Separation Membrane. <i>Kagaku Kogaku Ronbunshu</i> , 2004 , 30, 346-352	0.4	2
37	Transport Properties of Condensable and Non-condensable Gas Mixtures through Microporous Silica Membranes Studied with Molecular Dynamics Simulation. <i>Kagaku Kogaku Ronbunshu</i> , 2006 , 32, 11-17	0.4	2
36	Gas Permeation Characteristics of TiO-ZrO-Aromatic Organic Chelating Ligand (aOCL) Composite Membranes. <i>Membranes</i> , 2020 , 10,	3.8	2
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