

Toshinori Tsuru

List of Publications by Year in descending order

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337
papers

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28274

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times ranked

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#	ARTICLE	IF	CITATIONS
1	The electrostatic and steric-hindrance model for the transport of charged solutes through nanofiltration membranes. <i>Journal of Membrane Science</i> , 1997, 135, 19-32.	8.2	310
2	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, 414-415.	13.7	222
3	Two-Dimensional Covalent Organic Framework (COF) Membranes Fabricated via the Assembly of Exfoliated COF Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 8433-8436.	8.0	222
4	Electrolyte transport through nanofiltration membranes by the space-charge model and the comparison with Teorell-Meyer-Sievers model. <i>Journal of Membrane Science</i> , 1995, 103, 117-133.	8.2	219
5	Calculation of ion rejection by extended Nernst-Planck equation with charged reverse osmosis membranes for single and mixed electrolyte solutions.. <i>Journal of Chemical Engineering of Japan</i> , 1991, 24, 511-517.	0.6	195
6	Evaluation of pore structure and electrical properties of nanofiltration membranes.. <i>Journal of Chemical Engineering of Japan</i> , 1995, 28, 186-192.	0.6	178
7	Controlled synthesis of high performance polyamide membrane with thin dense layer for water desalination. <i>Journal of Membrane Science</i> , 2010, 362, 76-80.	8.2	169
8	Characterization of Co ²⁺ -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	162
9	Separation of proteins by charged ultrafiltration membranes. <i>Desalination</i> , 1988, 70, 191-205.	8.2	159
10	Permporometry characterization of microporous ceramic membranes. <i>Journal of Membrane Science</i> , 2001, 186, 257-265.	8.2	151
11	Reverse osmosis of single and mixed electrolytes with charged membranes: Experiment and analysis.. <i>Journal of Chemical Engineering of Japan</i> , 1991, 24, 518-524.	0.6	149
12	Hydrothermal Stability and Performance of Silica-Zirconia Membranes for Hydrogen Separation in Hydrothermal Conditions.. <i>Journal of Chemical Engineering of Japan</i> , 2001, 34, 523-530.	0.6	148
13	Methane steam reforming by microporous catalytic membrane reactors. <i>AIChE Journal</i> , 2004, 50, 2794-2805.	3.6	143
14	Nano/subnano-tuning of porous ceramic membranes for molecular separation. <i>Journal of Sol-Gel Science and Technology</i> , 2008, 46, 349-361.	2.4	138
15	INORGANIC POROUS MEMBRANES FOR LIQUID PHASE SEPARATION. <i>Separation and Purification Reviews</i> , 2001, 30, 191-220.	0.8	137
16	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.	8.2	133
17	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	119
18	Development of Robust Organosilica Membranes for Reverse Osmosis. <i>Langmuir</i> , 2011, 27, 13996-13999.	3.5	118

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19	Temperature effect on transport performance by inorganic nanofiltration membranes. <i>AICHE Journal</i> , 2000, 46, 565-574.	3.6	116
20	Co-solvent-mediated synthesis of thin polyamide membranes. <i>Journal of Membrane Science</i> , 2011, 384, 10-16.	8.2	116
21	Peptide and Amino Acid Separation with Nanofiltration Membranes. <i>Separation Science and Technology</i> , 1994, 29, 971-984.	2.5	111
22	Experimental studies of gas permeation through microporous silica membranes. <i>AICHE Journal</i> , 2001, 47, 2052-2063.	3.6	105
23	Controlled surface morphology of polyamide membranes via the addition of co-solvent for improved permeate flux. <i>Journal of Membrane Science</i> , 2014, 467, 303-312.	8.2	105
24	Negative rejection of anions in the loose reverse osmosis separation of mono- and divalent ion mixtures. <i>Desalination</i> , 1991, 81, 219-227.	8.2	102
25	Silica/zirconia membranes for nanofiltration. <i>Journal of Membrane Science</i> , 1998, 149, 127-135.	8.2	97
26	Permeation properties of hydrogen and water vapor through porous silica membranes at high temperatures. <i>AICHE Journal</i> , 2011, 57, 618-629.	3.6	96
27	Preparation of BTESE-derived organosilica membranes for catalytic membrane reactors of methylcyclohexane dehydrogenation. <i>Journal of Membrane Science</i> , 2014, 455, 375-383.	8.2	96
28	Organic-Inorganic Hybrid Silica Membranes with Controlled Silica Network Size for Propylene/Propane Separation. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 944-953.	3.7	95
29	Gas transport properties of interfacially polymerized polyamide composite membranes under different pre-treatments and temperatures. <i>Journal of Membrane Science</i> , 2014, 449, 109-118.	8.2	95
30	Nanofiltration in non-aqueous solutions by porous silica/zirconia membranes. <i>Journal of Membrane Science</i> , 2001, 185, 253-261.	8.2	87
31	Titania membranes for liquid phase separation: effect of surface charge on flux. <i>Separation and Purification Technology</i> , 2001, 25, 307-314.	7.9	86
32	Permeation of Liquids through Inorganic Nanofiltration Membranes. <i>Journal of Colloid and Interface Science</i> , 2000, 228, 292-296.	9.4	85
33	Structural Characterization of Thin-Film Polyamide Reverse Osmosis Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 1442-1451.	3.7	83
34	Application of interfacially polymerized polyamide composite membranes to isopropanol dehydration: Effect of membrane pre-treatment and temperature. <i>Journal of Membrane Science</i> , 2014, 453, 384-393.	8.2	81
35	Optimizing the preparation of multi-layered polyamide membrane via the addition of a co-solvent. <i>Journal of Membrane Science</i> , 2014, 453, 489-497.	8.2	80
36	Preparation of microporous membranes by TEOS/O ₃ CVD in the opposing reactants geometry. <i>Microporous and Mesoporous Materials</i> , 2000, 37, 145-152.	4.4	78

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37	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.	7.9	78
38	Enhanced performance of inorganic-polyamide nanocomposite membranes prepared by metal-alkoxide-assisted interfacial polymerization. <i>Journal of Membrane Science</i> , 2011, 366, 382-388.	8.2	77
39	Preparation of organic-inorganic hybrid silica membranes using organoalkoxysilanes: The effect of pendant groups. <i>Journal of Membrane Science</i> , 2011, 379, 287-295.	8.2	77
40	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.	4.4	73
41	New Insights into the Microstructure-Separation Properties of Organosilica Membranes with Ethane, Ethylene, and Acetylene Bridges. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 9357-9364.	8.0	69
42	Permeation equations developed for prediction of membrane performance in pervaporation, vapor permeation and reverse osmosis based on the solution-diffusion model. <i>Journal of Chemical Engineering of Japan</i> , 1991, 24, 326-333.	0.6	67
43	Membrane reactor performance of steam reforming of methane using hydrogen-permselective catalytic SiO ₂ membranes. <i>Journal of Membrane Science</i> , 2008, 316, 53-62.	8.2	67
44	Thin Ionic Liquid Membranes Based on Inorganic Supports with Different Pore Sizes. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 8045-8056.	3.7	65
45	Gas permeation properties for organosilica membranes with different Si/C ratios and evaluation of microporous structures. <i>AIChE Journal</i> , 2017, 63, 4491-4498.	3.6	65
46	Organic solvent reverse osmosis membranes for organic liquid mixture separation: A review. <i>Journal of Membrane Science</i> , 2021, 620, 118882.	8.2	65
47	Transport of organic electrolytes with electrostatic and steric-hindrance effects through nanofiltration membranes. <i>Journal of Chemical Engineering of Japan</i> , 1995, 28, 372-380.	0.6	64
48	A molecular dynamics simulation of a homogeneous organic-inorganic hybrid silica membrane. <i>Chemical Communications</i> , 2010, 46, 9140.	4.1	63
49	Ammonia decomposition in catalytic membrane reactors: Simulation and experimental studies. <i>AIChE Journal</i> , 2013, 59, 168-179.	3.6	63
50	Effect of firing temperature on the water permeability of SiO ₂ -ZrO ₂ membranes for nanofiltration. <i>Journal of Membrane Science</i> , 2016, 497, 348-356.	8.2	59
51	Phase inversion/sintering-induced porous ceramic microsheet membranes for high-quality separation of oily wastewater. <i>Journal of Membrane Science</i> , 2020, 595, 117477.	8.2	59
52	Inorganic porous membranes for nanofiltration of nonaqueous solutions. <i>Separation and Purification Technology</i> , 2003, 32, 105-109.	7.9	58
53	Recovery of spent electroless nickel plating bath by electrodialysis. <i>Journal of Membrane Science</i> , 1999, 157, 241-249.	8.2	57
54	Characterization of sol-gel derived membranes and zeolite membranes by nanoporometry. <i>Separation and Purification Technology</i> , 2003, 32, 23-27.	7.9	57

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55	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.	8.2	57
56	Permeation Characteristics of Electrolytes and Neutral Solutes through Titania Nanofiltration Membranes at High Temperatures. <i>Langmuir</i> , 2010, 26, 10897-10905.	3.5	57
57	Highly enhanced ammonia decomposition in a bimodal catalytic membrane reactor for CO-free hydrogen production. <i>Catalysis Communications</i> , 2011, 15, 60-63.	3.3	57
58	Progress in pervaporation membranes for dehydration of acetic acid. <i>Separation and Purification Technology</i> , 2021, 262, 118338.	7.9	56
59	CATALYTIC MEMBRANE REACTION FOR METHANE STEAM REFORMING USING POROUS SILICA MEMBRANES. <i>Separation Science and Technology</i> , 2001, 36, 3721-3736.	2.5	55
60	Pre-seeding-assisted synthesis of a high performance polyamide-zeolite nanocomposite membrane for water purification. <i>New Journal of Chemistry</i> , 2010, 34, 2101.	2.8	55
61	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.	7.1	54
62	Pervaporation of acetic acid aqueous solutions by organosilica membranes. <i>Journal of Membrane Science</i> , 2012, 421-422, 25-31.	8.2	54
63	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	53
64	Ion separation by porous silica-zirconia nanofiltration membranes. <i>AIChE Journal</i> , 1998, 44, 765-768.	3.6	52
65	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.	4.3	52
66	Cobalt-doped silica membranes for pervaporation dehydration of ethanol/water solutions. <i>Journal of Membrane Science</i> , 2011, 369, 13-19.	8.2	52
67	Modified gas-translation model for prediction of gas permeation through microporous organosilica membranes. <i>AIChE Journal</i> , 2014, 60, 4199-4210.	3.6	52
68	Silica-Based Membranes with Molecular-Net-Sieving Properties: Development and Applications. <i>Journal of Chemical Engineering of Japan</i> , 2018, 51, 713-725.	0.6	52
69	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.	8.2	50
70	Membrane transport properties of pervaporation and vapor permeation in ethanol-water system using polyacrylonitrile and cellulose acetate membranes. <i>Journal of Chemical Engineering of Japan</i> , 1991, 24, 334-339.	0.6	48
71	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.	8.2	48
72	Nanoporous titania membranes for permeation and filtration of organic solutions. <i>Desalination</i> , 2008, 233, 1-9.	8.2	47

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73	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.	8.2	47
74	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.	8.2	47
75	Micropore size estimation on gas separation membranes: A study in experimental and molecular dynamics. <i>AIChE Journal</i> , 2013, 59, 2179-2194.	3.6	47
76	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.	10.3	47
77	Pervaporation dehydration of aqueous solutions of various types of molecules via organosilica membranes: Effect of membrane pore sizes and molecular sizes. <i>Separation and Purification Technology</i> , 2018, 207, 108-115.	7.9	47
78	Bipolar reverse osmosis membrane for separating mono-and divalent ions. <i>Journal of Membrane Science</i> , 1992, 70, 153-162.	8.2	46
79	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.	8.2	46
80	Tailoring the Affinity of Organosilica Membranes by Introducing Polarizable Ethenylene Bridges and Aqueous Ozone Modification. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 6147-6154.	8.0	46
81	Role of Amine Type in CO ₂ Separation Performance within Amine Functionalized Silica/Organosilica Membranes: A Review. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1032.	2.5	46
82	Energy-efficient separation of organic liquids using organosilica membranes via a reverse osmosis route. <i>Journal of Membrane Science</i> , 2020, 597, 117758.	8.2	46
83	Effective charge density and pore structure of charged ultrafiltration membranes.. <i>Journal of Chemical Engineering of Japan</i> , 1990, 23, 604-610.	0.6	45
84	Gas permeation properties of silica membranes with uniform pore sizes derived from polyhedral oligomeric silsesquioxane. <i>AIChE Journal</i> , 2012, 58, 1733-1743.	3.6	45
85	Pervaporation of water/ethanol mixtures through microporous silica membranes. <i>Separation and Purification Technology</i> , 2009, 66, 479-485.	7.9	44
86	Methylcyclohexane dehydrogenation for hydrogen production via a bimodal catalytic membrane reactor. <i>AIChE Journal</i> , 2015, 61, 1628-1638.	3.6	44
87	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.	8.2	43
88	CO ₂ Permeation through Hybrid Organosilica Membranes in the Presence of Water Vapor. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 6113-6120.	3.7	43
89	Pervaporation removal of methanol from methanol/organic azeotropes using organosilica membranes: Experimental and modeling. <i>Journal of Membrane Science</i> , 2020, 610, 118284.	8.2	43
90	A photocatalytic membrane reactor for gas-phase reactions using porous titanium oxide membranes. <i>Catalysis Today</i> , 2003, 82, 41-48.	4.4	42

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91	Filtration of surfactant-stabilized oil-in-water emulsions with porous ceramic membranes: Effects of membrane pore size and surface charge on fouling behavior. <i>Journal of Membrane Science</i> , 2020, 610, 118210.	8.2	42
92	A photocatalytic membrane reactor for VOC decomposition using Pt-modified titanium oxide porous membranes. <i>Journal of Membrane Science</i> , 2006, 280, 156-162.	8.2	41
93	Characteristics of ammonia permeation through porous silica membranes. <i>AIChE Journal</i> , 2010, 56, 1204-1212.	3.6	41
94	Extremely thin Pd-silica mixed-matrix membranes with nano-dispersion for improved hydrogen permeability. <i>Chemical Communications</i> , 2010, 46, 6171.	4.1	41
95	SiO ₂ -ZrO ₂ nanofiltration membranes of different Si/Zr molar ratios: Stability in hot water and acid/alkaline solutions. <i>Journal of Membrane Science</i> , 2017, 524, 700-711.	8.2	41
96	2-Step plasma-enhanced CVD for low-temperature fabrication of silica membranes with high gas-separation performance. <i>Chemical Communications</i> , 2011, 47, 8070.	4.1	39
97	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.	8.2	39
98	Simulation and design of catalytic membrane reactor for hydrogen production via methylcyclohexane dehydrogenation. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 26296-26307.	7.1	39
99	Reverse osmosis of nonaqueous solutions through porous silica-zirconia membranes. <i>AIChE Journal</i> , 2006, 52, 522-531.	3.6	38
100	Atmospheric-pressure plasma-enhanced chemical vapor deposition of microporous silica membranes for gas separation. <i>Journal of Membrane Science</i> , 2017, 524, 644-651.	8.2	38
101	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.	8.2	37
102	Pore-size-controlled silica membranes with disiloxane alkoxides for gas separation. <i>Journal of Membrane Science</i> , 2011, 383, 152-158.	8.2	36
103	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.	3.1	36
104	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.	8.2	36
105	Fabrication and CO ₂ permeation properties of amine-silica membranes using a variety of amine types. <i>Journal of Membrane Science</i> , 2017, 541, 447-456.	8.2	36
106	Ion separation by bipolar membranes in reverse osmosis. <i>Journal of Membrane Science</i> , 1995, 108, 269-278.	8.2	35
107	Membrane Design for Pervaporation or Vapor Permeation Separation Using a Filling-Type Membrane Concept. <i>Industrial & Engineering Chemistry Research</i> , 1998, 37, 177-184.	3.7	35
108	A molecular dynamics simulation of pressure-driven gas permeation in a micropore potential field on silica membranes. <i>Journal of Membrane Science</i> , 2007, 293, 81-93.	8.2	35

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109	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	35
110	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.	7.1	35
111	Tailoring the microstructure and permeation properties of bridged organosilica membranes via control of the bond angles. <i>Journal of Membrane Science</i> , 2019, 584, 56-65.	8.2	35
112	Molecular dynamics studies on gas permeation properties through microporous silica membranes. <i>Separation and Purification Technology</i> , 2001, 25, 441-449.	7.9	34
113	Gas permeation properties through Al-doped organosilica membranes with controlled network size. <i>Journal of Membrane Science</i> , 2014, 466, 246-252.	8.2	34
114	Pyrimidine-bridged organoalkoxysilane membrane for high-efficiency CO ₂ transport via mild affinity. <i>Separation and Purification Technology</i> , 2017, 178, 232-241.	7.9	34
115	Atmospheric-pressure plasma-enhanced chemical vapor deposition of UV-shielding TiO ₂ coatings on transparent plastics. <i>Materials Letters</i> , 2018, 228, 479-481.	2.6	34
116	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	33
117	Bis(triethoxysilyl)ethane (BTESE)-derived silica membranes: pore formation mechanism and gas permeation properties. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 86, 63-72.	2.4	33
118	Hydrogen production from energy carriers by silica-based catalytic membrane reactors. <i>Catalysis Today</i> , 2016, 268, 3-11.	4.4	32
119	Development of Ethenylene-Bridged Organosilica Membranes for Desalination Applications. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 2183-2190.	3.7	32
120	Catalytic Ammonia Decomposition over High-Performance Ru/Graphene Nanocomposites for Efficient CO _x -Free Hydrogen Production. <i>Catalysts</i> , 2017, 7, 23.	3.5	32
121	UV-Protective TiO ₂ Thin Films with High Transparency in Visible Light Region Fabricated via Atmospheric-Pressure Plasma-Enhanced Chemical Vapor Deposition. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 42657-42665.	8.0	32
122	Organosilica-Based Membranes in Gas and Liquid-Phase Separation. <i>Membranes</i> , 2019, 9, 107.	3.0	32
123	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.	8.2	31
124	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.	8.2	31
125	Fluorine-induced microporous silica membranes: Dramatic improvement in hydrothermal stability and pore size controllability for highly permeable propylene/propane separation. <i>Journal of Membrane Science</i> , 2018, 549, 111-119.	8.2	31
126	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	30

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127	Permeation properties of BTESE-TEOS organosilica membranes and application to O ₂ /SO ₂ gas separation. <i>Journal of Membrane Science</i> , 2015, 496, 211-218.	8.2	30
128	Permeation of nonaqueous solution through organic/inorganic hybrid nanoporous membranes. <i>AIChE Journal</i> , 2004, 50, 1080-1087.	3.6	29
129	Zeolite nanocrystals prepared from zeolite microparticles by a centrifugation-assisted grinding method. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010, 49, 809-814.	3.6	29
130	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.	8.2	29
131	Robust organosilica membranes for high temperature reverse osmosis (RO) application: Membrane preparation, separation characteristics of solutes and membrane regeneration. <i>Journal of Membrane Science</i> , 2015, 493, 515-523.	8.2	29
132	Improved thermal and oxidation stability of bis(triethoxysilyl)ethane (BTESE)-derived membranes, and their gas-permeation properties. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23378-23387.	10.3	29
133	Preparation of organic/inorganic hybrid silica using methyltriethoxysilane and tetraethoxysilane as co-precursors. <i>Journal of Sol-Gel Science and Technology</i> , 2010, 53, 93-99.	2.4	28
134	Enhanced Permeation through CO ₂ -Stable Dual-Inorganic Composite Membranes with Tunable Nanoarchitected Channels. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 8515-8524.	6.7	28
135	Preparation, characterization, and evaluation of TiO ₂ -ZrO ₂ nanofiltration membranes fired at different temperatures. <i>Journal of Membrane Science</i> , 2018, 564, 691-699.	8.2	28
136	Tailoring Ultramicroporosity To Maximize CO ₂ Transport within Pyrimidine-Bridged Organosilica Membranes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 7164-7173.	8.0	28
137	Synthesis and Characterization of Microporous ZrO ₂ Membranes for Gas Permeation at 200Å°C. <i>Separation Science and Technology</i> , 2011, 46, 1224-1230.	2.5	26
138	Methylcyclohexane Dehydrogenation in Catalytic Membrane Reactors for Efficient Hydrogen Production. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 13325-13332.	3.7	26
139	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.	3.6	25
140	Fluorine Doping of Microporous Organosilica Membranes for Pore Size Control and Enhanced Hydrophobic Properties. <i>ACS Omega</i> , 2018, 3, 8612-8620.	3.5	25
141	Photocatalytic Reactions in a Filtration System through Porous Titanium Dioxide Membranes.. <i>Journal of Chemical Engineering of Japan</i> , 2001, 34, 844-847.	0.6	24
142	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.	8.2	24
143	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.	8.2	24
144	Preparation of organosilica membranes on hydrophobic intermediate layers and evaluation of gas permeation in the presence of water vapor. <i>Journal of Membrane Science</i> , 2015, 496, 156-164.	8.2	24

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145	Tailoring the Subnano Silica Structure via Fluorine Doping for Development of Highly Permeable CO ₂ Separation Membranes. <i>ChemNanoMat</i> , 2016, 2, 264-267.	2.8	24
146	Fabrication and Microstructure Tuning of a Pyrimidine-Bridged Organoalkoxysilane Membrane for CO ₂ Separation. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 1316-1326.	3.7	24
147	Selective water vapor permeation from steam/non-condensable gas mixtures via organosilica membranes at moderate-to-high temperatures. <i>Journal of Membrane Science</i> , 2019, 589, 117254.	8.2	24
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