

Hiroki Nagasawa

List of Publications by Year in descending order

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145
papers

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citations

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146
docs citations

146
times ranked

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#	ARTICLE	IF	CITATIONS
1	Enhanced production of butyl acetate via methanol-extracting transesterification membrane reactors using organosilica membrane: Experiment and modeling. <i>Chemical Engineering Journal</i> , 2022, 429, 132188.	6.6	11
2	Structural two-phase evolution of aminosilica-based silver-coordinated membranes for increased hydrogen separation. <i>Journal of Membrane Science</i> , 2022, 642, 119962.	4.1	11
3	Enhancement of the H ₂ -permselectivity of a silica-zirconia composite membrane enabled by ligand-ceramic to carbon-ceramic transformation. <i>Journal of Membrane Science</i> , 2022, 642, 119948.	4.1	6
4	Effect of fluorine doping on the network pore structure of non-porous organosilica bis(triethoxysilyl)propane (BTESP) membranes for use in molecular separation. <i>Journal of Membrane Science</i> , 2022, 644, 120083.	4.1	3
5	Reverse osmosis and pervaporation of organic liquids using organosilica membranes: Performance analysis and predictions. <i>AIChE Journal</i> , 2022, 68, .	1.8	12
6	Network tailoring of organosilica membranes via aluminum doping to improve the humid-gas separation performance. <i>RSC Advances</i> , 2022, 12, 5834-5846.	1.7	4
7	Open-air plasma deposition of polymer-supported silica-based membranes for gas separation. <i>Separation and Purification Technology</i> , 2022, 291, 120908.	3.9	5
8	Microporous structure control of SiO ₂ -ZrO ₂ composite membranes via Yttrium doping and an evaluation of thermal stability. <i>Journal of Sol-Gel Science and Technology</i> , 2022, 104, 566-579.	1.1	6
9	Structural transformation of the nickel coordination-induced subnanoporosity of aminosilica membranes for methanol-selective, high-flux pervaporation. <i>Journal of Membrane Science</i> , 2022, 656, 120613.	4.1	10
10	Nanogradient Hydrophilic/Hydrophobic Organosilica Membranes Developed by Atmospheric-Pressure Plasma to Enhance Pervaporation Performance. <i>ACS Nano</i> , 2022, 16, 10302-10313.	7.3	12
11	Tailoring the structure of a sub-nano silica network via fluorine doping to enhance CO ₂ separation and evaluating CO ₂ separation performance under dry or wet conditions. <i>Journal of Membrane Science</i> , 2022, 658, 120735.	4.1	4
12	Ammonia permeation of fluorinated sulfonic acid polymer/ceramic composite membranes. <i>Journal of Membrane Science</i> , 2022, 658, 120718.	4.1	8
13	Hydrophilic behavior of methyl-terminated organosilica thin films modified by atmospheric-pressure water vapor plasma. <i>Materials Letters</i> , 2022, 325, 132841.	1.3	2
14	Transesterification membrane reactor with organosilica membrane in batch and continuous flow modes. <i>Chemical Engineering Journal</i> , 2022, 450, 137862.	6.6	2
15	Improved performance of organosilica membranes for steam recovery at moderate-to-high temperatures via the use of a hydrothermally stable intermediate layer. <i>Journal of Membrane Science</i> , 2021, 620, 118895.	4.1	13
16	Correlation Between Ammonia Selectivity and Temperature Dependent Functional Group Tuning of GO. <i>IEEE Nanotechnology Magazine</i> , 2021, 20, 129-136.	1.1	5
17	TiO ₂ Coatings Via Atmospheric-Pressure Plasma-Enhanced Chemical Vapor Deposition for Enhancing the UV-Resistant Properties of Transparent Plastics. <i>ACS Omega</i> , 2021, 6, 1370-1377.	1.6	15
18	Facile development of microstructure-engineered, ligand-chelated SiO ₂ -ZrO ₂ composite membranes for molecular separations. <i>Molecular Systems Design and Engineering</i> , 2021, 6, 429-444.	1.7	2

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19	Pervaporation via silicon-based membranes: Correlation and prediction of performance in pervaporation and gas permeation. <i>AICHE Journal</i> , 2021, 67, e17223.	1.8	21
20	Hydrocarbon permeation properties through microporous fluorine-doped organosilica membranes with controlled pore sizes. <i>Journal of Membrane Science</i> , 2021, 619, 118787.	4.1	11
21	Hydrothermal stability of fluorine-induced microporous silica membranes: Effect of steam treatment conditions. <i>AICHE Journal</i> , 2021, 67, e17292.	1.8	7
22	Microporous Nickel-Coordinated Aminosilica Membranes for Improved Pervaporation Performance of Methanol/Toluene Separation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 23247-23259.	4.0	23
23	Design of a SiOC network structure with oxidation stability and application to hydrogen separation membranes at high temperatures. <i>Journal of Membrane Science</i> , 2021, 625, 119147.	4.1	6
24	Pore Structure Controllability and CO ₂ Permeation Properties of Silica-Derived Membranes with a Dual-Network Structure. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 8527-8537.	1.8	3
25	Effect of the Ti/Zr ratio on the hydrothermal and chemical stability of TiO ₂ -ZrO ₂ nanofiltration membranes. <i>Separation and Purification Technology</i> , 2021, 274, 119060.	3.9	4
26	Steam recovery via nanoporous and subnanoporous organosilica membranes: The effects of pore structure and operating conditions. <i>Separation and Purification Technology</i> , 2021, 275, 119191.	3.9	5
27	Facile low-temperature route toward the development of polymer-supported silica-based membranes for gas separation via atmospheric-pressure plasma-enhanced chemical vapor deposition. <i>Journal of Membrane Science</i> , 2021, 638, 119709.	4.1	7
28	Controlled organosilica networks via metal doping for improved dehydration membranes with layered hybrid structures. <i>Separation and Purification Technology</i> , 2021, 278, 119561.	3.9	5
29	Metal-induced microporous aminosilica creates a highly permeable gas-separation membrane. <i>Materials Chemistry Frontiers</i> , 2021, 5, 3029-3042.	3.2	16
30	Ultrafast Synthesis of Silica-Based Molecular Sieve Membranes in Dielectric Barrier Discharge at Low Temperature and Atmospheric Pressure. <i>Journal of the American Chemical Society</i> , 2021, 143, 35-40.	6.6	16
31	Atmospheric-pressure PECVD synthesis of polymer-supported molecular sieving silica membranes for gas separation: Effect of pore size of polymeric support. <i>Materials Letters</i> , 2021, , 131211.	1.3	2
32	Phase inversion/sintering-induced porous ceramic microsheet membranes for high-quality separation of oily wastewater. <i>Journal of Membrane Science</i> , 2020, 595, 117477.	4.1	59
33	Fine-tuned, molecular-composite, organosilica membranes for highly efficient propylene/propane separation via suitable pore size. <i>AICHE Journal</i> , 2020, 66, e16850.	1.8	14
34	Energy-efficient separation of organic liquids using organosilica membranes via a reverse osmosis route. <i>Journal of Membrane Science</i> , 2020, 597, 117758.	4.1	46
35	Development of high-performance sub-nanoporous SiC-based membranes derived from polytitanocarbosilane. <i>Journal of Membrane Science</i> , 2020, 598, 117688.	4.1	24
36	A carbon-silica-zirconia ceramic membrane with CO ₂ flow-switching behaviour promising versatile high-temperature H ₂ /CO ₂ separation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23563-23573.	5.2	15

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37	Evaluation of experimentally obtained permeance based on module simulation: How should permeance be evaluated?. <i>AICHE Journal</i> , 2020, 66, e16250.	1.8	11
38	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.	4.1	42
39	Pervaporation removal of methanol from methanol/organic azeotropes using organosilica membranes: Experimental and modeling. <i>Journal of Membrane Science</i> , 2020, 610, 118284.	4.1	43
40	Experimental study and modeling of organic solvent reverse osmosis separations through organosilica membranes. <i>AICHE Journal</i> , 2020, 66, e16283.	1.8	11
41	Tuning the microstructure of polycarbosilane-derived SiC(O) separation membranes via thermal-oxidative cross-linking. <i>Separation and Purification Technology</i> , 2020, 248, 117067.	3.9	15
42	Amino-decorated organosilica membranes for highly permeable CO ₂ capture. <i>Journal of Membrane Science</i> , 2020, 611, 118328.	4.1	24
43	High-performance molecular separation ceramic membranes derived from oxidative cross-linked polytitanocarbosilane. <i>Journal of the American Ceramic Society</i> , 2020, 103, 4473-4488.	1.9	19
44	Pore subnano-environment engineering of organosilica membranes for highly selective propylene/propane separation. <i>Journal of Membrane Science</i> , 2020, 603, 117999.	4.1	15
45	Al ₂ O ₃ nanofiltration membranes fabricated from nanofiber sols: Preparation, characterization, and performance. <i>Journal of Membrane Science</i> , 2020, 611, 118401.	4.1	18
46	Microstructure evolution and enhanced permeation of SiC membranes derived from allylhydridopolycarbosilane. <i>Journal of Membrane Science</i> , 2020, 612, 118392.	4.1	18
47	Chemical-free cleaning of fouled reverse osmosis (RO) membranes derived from bis(triethoxysilyl)ethane (BTESE). <i>Journal of Membrane Science</i> , 2020, 601, 117919.	4.1	12
48	Pore size tuning of bis(triethoxysilyl)propane (BTESP)-derived membrane for gas separation: Effects of the acid molar ratio in the sol and of the calcination temperature. <i>Separation and Purification Technology</i> , 2020, 242, 116742.	3.9	8
49	Development of an acetylacetonate-modified silica-zirconia composite membrane applicable to gas separation. <i>Journal of Membrane Science</i> , 2020, 599, 117844.	4.1	15
50	Treatment of Oily Wastewater by Ceramic Membranes. <i>Membrane</i> , 2020, 45, 35-40.	0.0	1
51	SiC mesoporous membranes for sulfuric acid decomposition at high temperatures in the iodine-sulfur process. <i>RSC Advances</i> , 2020, 10, 41883-41890.	1.7	9
52	TiO ₂ -ZrO ₂ membranes of controlled pore sizes with different Ti/Zr ratios for nanofiltration. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 92, 12-24.	1.1	8
53	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.	4.1	24
54	Vapor-permeation dehydration of isopropanol using a flexible and thin organosilica membrane with high permeance. <i>Journal of Membrane Science</i> , 2019, 588, 117226.	4.1	12

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55	Infrared-spectroscopic porosimetry: Development and application for characterization of hundred-nanometer-thick porous thin films. <i>Thin Solid Films</i> , 2019, 685, 299-305.	0.8	0
56	Ceramic-Supported Polyhedral Oligomeric Silsesquioxane-Organosilica Nanocomposite Membrane for Efficient Gas Separation. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 21708-21716.	1.8	11
57	Effect of Sintering Temperature on Sol-Gel Synthesis of Porous Polymeric Membrane Supported Layered Hybrid Organosilica Membranes and Their Vapor Permeation Property. <i>Kagaku Kogaku Ronbunshu</i> , 2019, 45, 177-183.	0.1	1
58	Evaluating the chemical stability of metal oxides in SO ₃ and applications of SiO ₂ -based membranes to O ₂ /SO ₃ separation. <i>Journal of the American Ceramic Society</i> , 2019, 102, 6946-6956.	1.9	6
59	Tailoring Ultramicroporosity To Maximize CO ₂ Transport within Pyrimidine-Bridged Organosilica Membranes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 7164-7173.	4.0	28
60	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.	4.1	35
61	Free glycerol removal from monoglyceride using TiO ₂ -ZrO ₂ nanofiltration membranes. <i>Separation and Purification Technology</i> , 2019, 224, 366-372.	3.9	2
62	Molecular dynamics simulation study on the mechanisms of liquid-phase permeation in nanopores. <i>Separation and Purification Technology</i> , 2019, 220, 259-267.	3.9	6
63	Tailoring the molecular sieving properties and thermal stability of carbonized membranes containing polyhedral oligomeric silsesquioxane (POSS)-polyimide via the introduction of norbornene. <i>Journal of Membrane Science</i> , 2019, 582, 59-69.	4.1	14
64	Hydrothermal stability and permeation properties of TiO ₂ -ZrO ₂ (5/5) nanofiltration membranes at high temperatures. <i>Separation and Purification Technology</i> , 2019, 212, 1001-1012.	3.9	16
65	Effects of Calcination Condition on the Network Structure of Triethoxysilane (TRIES) and How H Groups Influence Hydrophobicity Under Hydrothermal Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 3867-3875.	1.8	4
66	Atmospheric-pressure Plasma-enhanced CVD of Hybrid Silica Membranes at Ambient Temperature and Pressure. <i>Membrane</i> , 2019, 44, 10-15.	0.0	0
67	Enhanced CO ₂ separation performance for tertiary amine-silica membranes via thermally induced local liberation of CH ₃ Cl. <i>AIChE Journal</i> , 2018, 64, 1528-1539.	1.8	22
68	Facile and Scalable Flow-Induced Deposition of Organosilica on Porous Polymer Supports for Reverse Osmosis Desalination. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 14070-14078.	4.0	17
69	Acid post-treatment of sol-gel-derived ethylene-bridged organosilica membranes and their filtration performances. <i>Journal of Membrane Science</i> , 2018, 556, 196-202.	4.1	9
70	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.	1.1	33
71	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.	4.1	31
72	Atmospheric-Pressure Plasma-Enhanced Chemical Vapor Deposition of Hybrid Silica Membranes. <i>Journal of Chemical Engineering of Japan</i> , 2018, 51, 732-739.	0.3	10

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73	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.	5.2	29
74	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.	4.0	32
75	Atmospheric-pressure plasma-enhanced chemical vapor deposition of UV-shielding TiO ₂ coatings on transparent plastics. <i>Materials Letters</i> , 2018, 228, 479-481.	1.3	34
76	Fluorine Doping of Microporous Organosilica Membranes for Pore Size Control and Enhanced Hydrophobic Properties. <i>ACS Omega</i> , 2018, 3, 8612-8620.	1.6	25
77	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.	4.1	28
78	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.	1.3	46
79	Tailoring a Thermally Stable Amorphous SiOC Structure for the Separation of Large Molecules: The Effect of Calcination Temperature on SiOC Structures and Gas Permeation Properties. <i>ACS Omega</i> , 2018, 3, 6369-6377.	1.6	12
80	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.	3.9	47
81	Nano/subnano-tuning of Porous Silica Membranes and Application to Hydrogen Separation. <i>Membrane</i> , 2018, 43, 180-187.	0.0	0
82	Pyrimidine-bridged organoalkoxysilane membrane for high-efficiency CO ₂ transport via mild affinity. <i>Separation and Purification Technology</i> , 2017, 178, 232-241.	3.9	34
83	Photo-induced sol-gel synthesis of polymer-supported silsesquioxane membranes. <i>RSC Advances</i> , 2017, 7, 7150-7157.	1.7	5
84	Fabrication and Microstructure Tuning of a Pyrimidine-Bridged Organoalkoxysilane Membrane for CO ₂ Separation. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 1316-1326.	1.8	24
85	Development and permeation properties of SiO ₂ -ZrO ₂ nanofiltration membranes with a MWCO of ≤ 200. <i>Journal of Membrane Science</i> , 2017, 535, 331-341.	4.1	19
86	Preparation of cyclic peptide nanotube structures and molecular simulation of water adsorption and diffusion. <i>Journal of Membrane Science</i> , 2017, 537, 101-110.	4.1	11
87	Gas permeation properties for organosilica membranes with different Si/C ratios and evaluation of microporous structures. <i>AIChE Journal</i> , 2017, 63, 4491-4498.	1.8	65
88	Organosilica bis(triethoxysilyl)ethane (BTESE) membranes for gas permeation (GS) and reverse osmosis (RO): The effect of preparation conditions on structure, and the correlation between gas and liquid permeation properties. <i>Journal of Membrane Science</i> , 2017, 526, 242-251.	4.1	15
89	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.	4.1	41
90	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.	4.1	36

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91	Preliminary techno-economic analysis of non-commercial ceramic and organosilica membranes for hydrogen peroxide ultrapurification. <i>Chemical Engineering Research and Design</i> , 2017, 125, 385-397.	2.7	2
92	Preparation and Gas Permeation Properties of Fluorine- α -Silica Membranes with Controlled Amorphous Silica Structures: Effect of Fluorine Source and Calcination Temperature on Network Size. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 24625-24633.	4.0	18
93	Pore size tuning of sol-gel-derived triethoxysilane (TRIES) membranes for gas separation. <i>Journal of Membrane Science</i> , 2017, 524, 64-72.	4.1	14
94	Atmospheric-pressure plasma-enhanced chemical vapor deposition of microporous silica membranes for gas separation. <i>Journal of Membrane Science</i> , 2017, 524, 644-651.	4.1	38
95	Silica Membrane Application for Pervaporation Process. , 2017, , 217-241.		4
96	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.	0.4	7
97	Nanofiltration performance of SiO ₂ -ZrO ₂ membranes in aqueous solutions at high temperatures. <i>Separation and Purification Technology</i> , 2016, 168, 238-247.	3.9	21
98	Tailoring the Separation Behavior of Polymer-Supported Organosilica Layered-Hybrid Membranes via Facile Post-Treatment Using HCl and NH ₃ Vapors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 11060-11069.	4.0	23
99	Evaluation of non-commercial ceramic SiO ₂ -ZrO ₂ and organosilica BTESE membranes in a highly oxidative medium: Performance in hydrogen peroxide. <i>Journal of Membrane Science</i> , 2016, 520, 740-748.	4.1	6
100	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.	4.1	31
101	Tailoring the Subnano Silica Structure via Fluorine Doping for Development of Highly Permeable CO ₂ Separation Membranes. <i>ChemNanoMat</i> , 2016, 2, 264-267.	1.5	24
102	Plasma-enhanced chemical vapor deposition of amorphous carbon molecular sieve membranes for gas separation. <i>RSC Advances</i> , 2016, 6, 59045-59049.	1.7	4
103	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.	4.1	36
104	Effect of firing temperature on the water permeability of SiO ₂ - α -ZrO ₂ membranes for nanofiltration. <i>Journal of Membrane Science</i> , 2016, 497, 348-356.	4.1	59
105	Chemical Vapor Deposition. , 2016, , 395-397.		0
106	Pore-size evaluation and gas transport behaviors of microporous membranes: An experimental and theoretical study. <i>AIChE Journal</i> , 2015, 61, 2268-2279.	1.8	10
107	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, 9932-9935.	2.2	10
108	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, 2551-2554.	2.2	9

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109	Reverse osmosis performance of layered-hybrid membranes consisting of an organosilica separation layer on polymer supports. <i>Journal of Membrane Science</i> , 2015, 494, 104-112.	4.1	19
110	CO ₂ Fixation Process with Waste Cement Powder via Regeneration of Alkali and Acid by Electrodialysis: Effect of Operation Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 6569-6577.	1.8	31
111	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.	4.1	8
112	Plasma-assisted multi-layered coating towards improved gas permeation properties for organosilica membranes. <i>RSC Advances</i> , 2015, 5, 59837-59844.	1.7	10
113	Plasma treatment of hydrophobic sub-layers to prepare uniform multi-layered films and high-performance gas separation membranes. <i>Applied Surface Science</i> , 2015, 349, 415-419.	3.1	9
114	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.	4.1	37
115	Methylcyclohexane dehydrogenation for hydrogen production via a bimodal catalytic membrane reactor. <i>AIChE Journal</i> , 2015, 61, 1628-1638.	1.8	44
116	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.	4.1	29
117	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.	4.1	24
118	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.	4.1	29
119	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.	4.1	31
120	High-temperature stability of PECVD-derived organosilica membranes deposited on TiO ₂ and SiO ₂ -ZrO ₂ intermediate layers using HMDSO/Ar plasma. <i>Separation and Purification Technology</i> , 2014, 121, 13-19.	3.9	16
121	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.	1.7	12
122	A CO ₂ fixation process with waste cement powder via regeneration of alkali and acid by electrodialysis. <i>RSC Advances</i> , 2014, 4, 19778-19788.	1.7	28
123	Preparation and gas permeation properties of thermally stable organosilica membranes derived by hydrosilylation. <i>Journal of Materials Chemistry A</i> , 2014, 2, 672-680.	5.2	21
124	Modified gas-translation model for prediction of gas permeation through microporous organosilica membranes. <i>AIChE Journal</i> , 2014, 60, 4199-4210.	1.8	52
125	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.	1.7	25
126	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.	1.5	36

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127	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.	5.2	47
128	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.	4.1	24
129	CO ₂ Permeation through Hybrid Organosilica Membranes in the Presence of Water Vapor. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 6113-6120.	1.8	43
130	Gas permeation properties through Al-doped organosilica membranes with controlled network size. <i>Journal of Membrane Science</i> , 2014, 466, 246-252.	4.1	34
131	Preparation of BTESE-derived organosilica membranes for catalytic membrane reactors of methylcyclohexane dehydrogenation. <i>Journal of Membrane Science</i> , 2014, 455, 375-383.	4.1	96
132	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.	4.1	48
133	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.	1.3	15
134	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.	1.7	11
135	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.	1.0	9
136	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.	4.1	46
137	Dissolution rates of alkaline rocks by carbonic acid: Influence of solid/liquid ratio, temperature, and CO ₂ pressure. <i>Chemical Engineering Research and Design</i> , 2013, 91, 933-941.	2.7	20
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