Toshinori Tsuru

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6492434/publications.pdf

Version: 2024-02-01

337 papers 11,193 citations

28272 55 h-index 86 g-index

342 all docs 342 docs citations

times ranked

342

5473 citing authors

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Enhanced production of butyl acetate via methanol-extracting transesterification membrane reactors using organosilica membrane: Experiment and modeling. Chemical Engineering Journal, 2022, 429, 132188. | 12.7 | 11 |
| 2 | Structural two-phase evolution of aminosilica-based silver-coordinated membranes for increased hydrogen separation. Journal of Membrane Science, 2022, 642, 119962. | 8.2 | 11 |
| 3 | Enhancement of the H2-permselectivity of a silica-zirconia composite membrane enabled by ligand-ceramic to carbon-ceramic transformation. Journal of Membrane Science, 2022, 642, 119948. | 8.2 | 6 |
| 4 | Ultrahigh permeation of CO2 capture using composite organosilica membranes. Separation and Purification Technology, 2022, 282, 120061. | 7.9 | 11 |
| 5 | Effect of fluorine doping on the network pore structure of non-porous organosilica bis(triethoxysilyl)propane (BTESP) membranes for use in molecular separation. Journal of Membrane Science, 2022, 644, 120083. | 8.2 | 3 |
| 6 | Enhancing dehydration performance of isopropanol for flexible hybrid silica composite membranes with spray-coated active layer on polymers. Separation and Purification Technology, 2022, 283, 120230. | 7.9 | 4 |
| 7 | Development of PSQ-RO membranes with high water permeability by copolymerization of bis[3-(triethoxysilyl)propyl]amine and triethoxy(3-glycidyloxypropyl)silane. Journal of Membrane Science, 2022, 644, 120162. | 8.2 | 8 |
| 8 | Reverse osmosis and pervaporation of organic liquids using organosilica membranes: Performance analysis and predictions. AICHE Journal, 2022, 68, . | 3.6 | 12 |
| 9 | High-Resolution Numerical Simulation of Microfiltration of Oil-in-Water Emulsion Permeating through a Realistic Membrane Microporous Structure Generated by Focused Ion Beam Scanning Electron Microscopy Images. Langmuir, 2022, 38, 2094-2108. | 3.5 | 11 |
| 10 | Silicon-based subnanoporous membranes with amorphous structures., 2022,, 305-327. | | 1 |
| 11 | Network tailoring of organosilica membranes <i>via</i> aluminum doping to improve the humid-gas separation performance. RSC Advances, 2022, 12, 5834-5846. | 3.6 | 4 |
| 12 | Performance Evaluation and Simulation of a Dehumidifying Module using Perfluorosulfonic Acid Capillary Membranes. Kagaku Kogaku Ronbunshu, 2022, 48, 42-48. | 0.3 | 0 |
| 13 | Open-air plasma deposition of polymer-supported silica-based membranes for gas separation. Separation and Purification Technology, 2022, 291, 120908. | 7.9 | 5 |
| 14 | Microporous structure control of SiO2-ZrO2 composite membranes via Yttrium doping and an evaluation of thermal stability. Journal of Sol-Gel Science and Technology, 2022, 104, 566-579. | 2.4 | 6 |
| 15 | Development of Highly Water-Permeable Robust PSQ-Based RO Membranes by Introducing Hydroxyethylurea-Based Hydrophilic Water Channels. ACS Applied Materials & Samp; Interfaces, 2022, 14, 21426-21435. | 8.0 | 4 |
| 16 | Structural transformation of the nickel coordination-induced subnanoporosity of aminosilica membranes for methanol-selective, high-flux pervaporation. Journal of Membrane Science, 2022, 656, 120613. | 8.2 | 10 |
| 17 | Development of robust and high-performance polysilsesquioxane reverse osmosis membranes modified by SiO2 nanoparticles for water desalination. Separation and Purification Technology, 2022, 296, 121421. | 7.9 | 4 |
| 18 | Nanogradient Hydrophilic/Hydrophobic Organosilica Membranes Developed by Atmospheric-Pressure Plasma to Enhance Pervaporation Performance. ACS Nano, 2022, 16, 10302-10313. | 14.6 | 12 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Tailoring the structure of a sub-nano silica network via fluorine doping to enhance CO2 separation and evaluating CO2 separation performance under dry or wet conditions. Journal of Membrane Science, 2022, 658, 120735. | 8.2 | 4 |
| 20 | Ammonia permeation of fluorinated sulfonic acid polymer/ceramic composite membranes. Journal of Membrane Science, 2022, 658, 120718. | 8.2 | 8 |
| 21 | Hydrophilic behavior of methyl-terminated organosilica thin films modified by atmospheric-pressure water vapor plasma. Materials Letters, 2022, 325, 132841. | 2.6 | 2 |
| 22 | Transesterification membrane reactor with organosilica membrane in batch and continuous flow modes. Chemical Engineering Journal, 2022, 450, 137862. | 12.7 | 2 |
| 23 | Organic solvent reverse osmosis membranes for organic liquid mixture separation: A review. Journal of Membrane Science, 2021, 620, 118882. | 8.2 | 65 |
| 24 | Improved performance of organosilica membranes for steam recovery at moderate-to-high temperatures via the use of a hydrothermally stable intermediate layer. Journal of Membrane Science, 2021, 620, 118895. | 8.2 | 13 |
| 25 | Correlation Between Ammonia Selectivity and Temperature Dependent Functional Group Tuning of GO. IEEE Nanotechnology Magazine, 2021, 20, 129-136. | 2.0 | 5 |
| 26 | TiO ₂ Coatings Via Atmospheric-Pressure Plasma-Enhanced Chemical Vapor Deposition for Enhancing the UV-Resistant Properties of Transparent Plastics. ACS Omega, 2021, 6, 1370-1377. | 3.5 | 15 |
| 27 | Facile development of microstructure-engineered, ligand-chelated SiO2–ZrO2 composite membranes for molecular separations. Molecular Systems Design and Engineering, 2021, 6, 429-444. | 3.4 | 2 |
| 28 | Pervaporation via siliconâ€based membranes: Correlation and prediction of performance in pervaporation and gas permeation. AICHE Journal, 2021, 67, e17223. | 3.6 | 21 |
| 29 | Hydrocarbon permeation properties through microporous fluorine-doped organosilica membranes with controlled pore sizes. Journal of Membrane Science, 2021, 619, 118787. | 8.2 | 11 |
| 30 | Multiple Amine-Contained POSS-Functionalized Organosilica Membranes for Gas Separation. Membranes, 2021, 11, 194. | 3.0 | 6 |
| 31 | Hydrothermal stability of fluorineâ€induced microporous silica membranes: Effect of steam treatment conditions. AICHE Journal, 2021, 67, e17292. | 3.6 | 7 |
| 32 | Progress in pervaporation membranes for dehydration of acetic acid. Separation and Purification Technology, 2021, 262, 118338. | 7.9 | 56 |
| 33 | Microporous Nickel-Coordinated Aminosilica Membranes for Improved Pervaporation Performance of Methanol/Toluene Separation. ACS Applied Materials & Samp; Interfaces, 2021, 13, 23247-23259. | 8.0 | 23 |
| 34 | Design of a SiOC network structure with oxidation stability and application to hydrogen separation membranes at high temperatures. Journal of Membrane Science, 2021, 625, 119147. | 8.2 | 6 |
| 35 | Pore Structure Controllability and CO2 Permeation Properties of Silica-Derived Membranes with a Dual-Network Structure. Industrial & Engineering Chemistry Research, 2021, 60, 8527-8537. | 3.7 | 3 |
| 36 | Preparation of polysilsesquioxane reverse osmosis membranes for water desalination from tris[(ethoxysilyl)alkyl]amines by sol–gel process and interfacial polymerization. Applied Organometallic Chemistry, 2021, 35, e6374. | 3.5 | 5 |

| # | Article | IF | Citations |
|----|--|------|-----------|
| 37 | Performance evaluation of water vapor permeation through perfluorosulfonic acid capillary membranes. Separation and Purification Technology, 2021, 266, 118508. | 7.9 | 8 |
| 38 | Effect of the Ti/Zr ratio on the hydrothermal and chemical stability of TiO2-ZrO2 nanofiltration membranes. Separation and Purification Technology, 2021, 274, 119060. | 7.9 | 4 |
| 39 | Steam recovery via nanoporous and subnanoporous organosilica membranes: The effects of pore structure and operating conditions. Separation and Purification Technology, 2021, 275, 119191. | 7.9 | 5 |
| 40 | Facile low-temperature route toward the development of polymer-supported silica-based membranes for gas separation via atmospheric-pressure plasma-enhanced chemical vapor deposition. Journal of Membrane Science, 2021, 638, 119709. | 8.2 | 7 |
| 41 | Analysis and prediction of water vapor permeation through perfluorosulfonic acid membranes via the solution-diffusion model in a single-membrane dehumidifier module. Separation and Purification Technology, 2021, 279, 119694. | 7.9 | 6 |
| 42 | Controlled organosilica networks via metal doping for improved dehydration membranes with layered hybrid structures. Separation and Purification Technology, 2021, 278, 119561. | 7.9 | 5 |
| 43 | Metal-induced microporous aminosilica creates a highly permeable gas-separation membrane. Materials Chemistry Frontiers, 2021, 5, 3029-3042. | 5.9 | 16 |
| 44 | Ultrafast Synthesis of Silica-Based Molecular Sieve Membranes in Dielectric Barrier Discharge at Low Temperature and Atmospheric Pressure. Journal of the American Chemical Society, 2021, 143, 35-40. | 13.7 | 16 |
| 45 | Atmospheric-pressure PECVD synthesis of polymer-supported molecular sieving silica membranes for gas separation: Effect of pore size of polymeric support. Materials Letters, 2021, , 131211. | 2.6 | 2 |
| 46 | Phase inversion/sintering-induced porous ceramic microsheet membranes for high-quality separation of oily wastewater. Journal of Membrane Science, 2020, 595, 117477. | 8.2 | 59 |
| 47 | Fineâ€tuned, molecularâ€composite, organosilica membranes for highly efficient propylene/propane separation via suitable pore size. AICHE Journal, 2020, 66, e16850. | 3.6 | 14 |
| 48 | Energy-efficient separation of organic liquids using organosilica membranes via a reverse osmosis route. Journal of Membrane Science, 2020, 597, 117758. | 8.2 | 46 |
| 49 | Development of high-performance sub-nanoporous SiC-based membranes derived from polytitanocarbosilane. Journal of Membrane Science, 2020, 598, 117688. | 8.2 | 24 |
| 50 | A carbon–silica–zirconia ceramic membrane with CO ₂ flow-switching behaviour promising versatile high-temperature H ₂ /CO ₂ separation. Journal of Materials Chemistry A, 2020, 8, 23563-23573. | 10.3 | 15 |
| 51 | Evaluation of experimentally obtained permeance based on module simulation: How should permeance be evaluated?. AICHE Journal, 2020, 66, e16250. | 3.6 | 11 |
| 52 | Filtration of surfactant-stabilized oil-in-water emulsions with porous ceramic membranes: Effects of membrane pore size and surface charge on fouling behavior. Journal of Membrane Science, 2020, 610, 118210. | 8.2 | 42 |
| 53 | Pervaporation removal of methanol from methanol/organic azeotropes using organosilica membranes: Experimental and modeling. Journal of Membrane Science, 2020, 610, 118284. | 8.2 | 43 |
| 54 | Experimental study and modeling of organic solvent reverse osmosis separations through organosilica membranes. AICHE Journal, 2020, 66, e16283. | 3.6 | 11 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Tuning the microstructure of polycarbosilane-derived SiC(O) separation membranes via thermal-oxidative cross-linking. Separation and Purification Technology, 2020, 248, 117067. | 7.9 | 15 |
| 56 | Amino-decorated organosilica membranes for highly permeable CO2 capture. Journal of Membrane Science, 2020, 611, 118328. | 8.2 | 24 |
| 57 | Highâ€performance molecularâ€separation ceramic membranes derived from oxidative crossâ€inked polytitanocarbosilane. Journal of the American Ceramic Society, 2020, 103, 4473-4488. | 3.8 | 19 |
| 58 | Pore subnano-environment engineering of organosilica membranes for highly selective propylene/propane separation. Journal of Membrane Science, 2020, 603, 117999. | 8.2 | 15 |
| 59 | Al2O3 nanofiltration membranes fabricated from nanofiber sols: Preparation, characterization, and performance. Journal of Membrane Science, 2020, 611, 118401. | 8.2 | 18 |
| 60 | Microstructure evolution and enhanced permeation of SiC membranes derived from allylhydridopolycarbosilane. Journal of Membrane Science, 2020, 612, 118392. | 8.2 | 18 |
| 61 | Chemical-free cleaning of fouled reverse osmosis (RO) membranes derived from bis(triethoxysilyl)ethane (BTESE). Journal of Membrane Science, 2020, 601, 117919. | 8.2 | 12 |
| 62 | 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. Separation and Purification Technology, 2020, 242, 116742. | 7.9 | 8 |
| 63 | Development of an acetylacetonate-modified silica-zirconia composite membrane applicable to gas separation. Journal of Membrane Science, 2020, 599, 117844. | 8.2 | 15 |
| 64 | Inorganic Porous Membranes for Separation in Organic Solvents. Membrane, 2020, 45, 171-176. | 0.0 | 0 |
| 65 | SiC mesoporous membranes for sulfuric acid decomposition at high temperatures in the iodine–sulfur process. RSC Advances, 2020, 10, 41883-41890. | 3.6 | 9 |
| 66 | TiO2-ZrO2 membranes of controlled pore sizes with different Ti/Zr ratios for nanofiltration. Journal of Sol-Gel Science and Technology, 2019, 92, 12-24. | 2.4 | 8 |
| 67 | Microporous Silica Membrane Reactors. , 2019, , 127-156. | | 0 |
| 68 | Gas Permeation Properties and Pore Size Evaluation of Microporous Silica Membranes., 2019, , 101-126. | | 0 |
| 69 | Selective water vapor permeation from steam/non-condensable gas mixtures via organosilica membranes at moderate-to-high temperatures. Journal of Membrane Science, 2019, 589, 117254. | 8.2 | 24 |
| 70 | Vapor-permeation dehydration of isopropanol using a flexible and thin organosilica membrane with high permeance. Journal of Membrane Science, 2019, 588, 117226. | 8.2 | 12 |
| 71 | Infrared-spectroscopic porosimetry: Development and application for characterization of hundred-nanometer-thick porous thin films. Thin Solid Films, 2019, 685, 299-305. | 1.8 | 0 |
| 72 | Ceramic-Supported Polyhedral Oligomeric Silsesquioxane–Organosilica Nanocomposite Membrane for Efficient Gas Separation. Industrial & Engineering Chemistry Research, 2019, 58, 21708-21716. | 3.7 | 11 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Effect of Sintering Temperature on Sol–Gel Synthesis of Porous Polymeric Membrane Supported Layered Hybrid Organosilica Membranes and Their Vapor Permeation Property. Kagaku Kogaku Ronbunshu, 2019, 45, 177-183. | 0.3 | 1 |
| 74 | Organosilica-Based Membranes in Gas and Liquid-Phase Separation. Membranes, 2019, 9, 107. | 3.0 | 32 |
| 75 | Evaluating the chemical stability of metal oxides in SO 3 and applications of SiO 2 â€based membranes to O 2 /SO 3 separation. Journal of the American Ceramic Society, 2019, 102, 6946-6956. | 3.8 | 6 |
| 76 | Tailoring Ultramicroporosity To Maximize CO ₂ Transport within Pyrimidine-Bridged Organosilica Membranes. ACS Applied Materials & Samp; Interfaces, 2019, 11, 7164-7173. | 8.0 | 28 |
| 77 | Tailoring the microstructure and permeation properties of bridged organosilica membranes via control of the bond angles. Journal of Membrane Science, 2019, 584, 56-65. | 8.2 | 35 |
| 78 | Free glycerol removal from monoglyceride using TiO2-ZrO2 nanofiltration membranes. Separation and Purification Technology, 2019, 224, 366-372. | 7.9 | 2 |
| 79 | Molecular dynamics simulation study on the mechanisms of liquid-phase permeation in nanopores. Separation and Purification Technology, 2019, 220, 259-267. | 7.9 | 6 |
| 80 | Tailoring the molecular sieving properties and thermal stability of carbonized membranes containing polyhedral oligomeric silsesquioxane (POSS)-polyimide via the introduction of norbornene. Journal of Membrane Science, 2019, 582, 59-69. | 8.2 | 14 |
| 81 | Hydrothermal stability and permeation properties of TiO2-ZrO2 (5/5) nanofiltration membranes at high temperatures. Separation and Purification Technology, 2019, 212, 1001-1012. | 7.9 | 16 |
| 82 | Effects of Calcination Condition on the Network Structure of Triethoxysilane (TRIES) and How Si–H Groups Influence Hydrophobicity Under Hydrothermal Conditions. Industrial & Description (Section 2019), 58, 3867-3875. | 3.7 | 4 |
| 83 | Molecular Dynamics Simulation Study of Solid Vibration Permeation in Microporous Amorphous Silica Network Voids. Membranes, 2019, 9, 132. | 3.0 | 7 |
| 84 | Research and development on membrane IS process for hydrogen production using solar heat. International Journal of Hydrogen Energy, 2019, 44, 19141-19152. | 7.1 | 16 |
| 85 | Enhanced CO 2 separation performance for tertiary amineâ€silica membranes via thermally induced local liberation of CH 3 Cl. AlCHE Journal, 2018, 64, 1528-1539. | 3.6 | 22 |
| 86 | Facile and Scalable Flow-Induced Deposition of Organosilica on Porous Polymer Supports for Reverse Osmosis Desalination. ACS Applied Materials & Samp; Interfaces, 2018, 10, 14070-14078. | 8.0 | 17 |
| 87 | Acid post-treatment of sol-gel-derived ethylene-bridged organosilica membranes and their filtration performances. Journal of Membrane Science, 2018, 556, 196-202. | 8.2 | 9 |
| 88 | Bis(triethoxysilyl)ethane (BTESE)-derived silica membranes: pore formation mechanism and gas permeation properties. Journal of Sol-Gel Science and Technology, 2018, 86, 63-72. | 2.4 | 33 |
| 89 | Preparation of Amphotericin B-Ergosterol structures and molecular simulation of water adsorption and diffusion. Journal of Membrane Science, 2018, 545, 229-239. | 8.2 | 10 |
| 90 | Preparation of bridged silica RO membranes from copolymerization of bis(triethoxysilyl)ethene/(hydroxymethyl)triethoxysilane. Effects of ethenylene-bridge enhancing water permeability. Journal of Membrane Science, 2018, 546, 173-178. | 8.2 | 21 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | Fluorine-induced microporous silica membranes: Dramatic improvement in hydrothermal stability and pore size controllability for highly permeable propylene/propane separation. Journal of Membrane Science, 2018, 549, 111-119. | 8.2 | 31 |
| 92 | Atmospheric-Pressure Plasma-Enhanced Chemical Vapor Deposition of Hybrid Silica Membranes. Journal of Chemical Engineering of Japan, 2018, 51, 732-739. | 0.6 | 10 |
| 93 | Improved thermal and oxidation stability of bis(triethoxysilyl)ethane (BTESE)-derived membranes, and their gas-permeation properties. Journal of Materials Chemistry A, 2018, 6, 23378-23387. | 10.3 | 29 |
| 94 | UV-Protective TiO ₂ Thin Films with High Transparency in Visible Light Region Fabricated via Atmospheric-Pressure Plasma-Enhanced Chemical Vapor Deposition. ACS Applied Materials & lnterfaces, 2018, 10, 42657-42665. | 8.0 | 32 |
| 95 | Silica-Based Membranes with Molecular-Net-Sieving Properties: Development and Applications. Journal of Chemical Engineering of Japan, 2018, 51, 713-725. | 0.6 | 52 |
| 96 | Preparation of Hybrid Organosilica Reverse Osmosis Membranes by Interfacial Polymerization of Bis[(trialkoxysilyl)propyl]amine. Chemistry Letters, 2018, 47, 1210-1212. | 1.3 | 8 |
| 97 | Enhanced Permeation through CO ₂ -Stable Dual-Inorganic Composite Membranes with Tunable Nanoarchitectured Channels. ACS Sustainable Chemistry and Engineering, 2018, 6, 8515-8524. | 6.7 | 28 |
| 98 | Atmospheric-pressure plasma-enhanced chemical vapor deposition of UV-shielding TiO2 coatings on transparent plastics. Materials Letters, 2018, 228, 479-481. | 2.6 | 34 |
| 99 | Diethylenedioxane-bridged microporous organosilica membrane for gas and water separation. Separation and Purification Technology, 2018, 207, 370-376. | 7.9 | 13 |
| 100 | Fluorine Doping of Microporous Organosilica Membranes for Pore Size Control and Enhanced Hydrophobic Properties. ACS Omega, 2018, 3, 8612-8620. | 3.5 | 25 |
| 101 | Preparation, characterization, and evaluation of TiO2-ZrO2 nanofiltration membranes fired at different temperatures. Journal of Membrane Science, 2018, 564, 691-699. | 8.2 | 28 |
| 102 | Role of Amine Type in CO2 Separation Performance within Amine Functionalized Silica/Organosilica Membranes: A Review. Applied Sciences (Switzerland), 2018, 8, 1032. | 2.5 | 46 |
| 103 | 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. ACS Omega, 2018, 3, 6369-6377. | 3.5 | 12 |
| 104 | Pervaporation dehydration of aqueous solutions of various types of molecules via organosilica membranes: Effect of membrane pore sizes and molecular sizes. Separation and Purification Technology, 2018, 207, 108-115. | 7.9 | 47 |
| 105 | Nano/subnano-tuning of Porous Silica Membranes and Application to Hydrogen Separation. Membrane, 2018, 43, 180-187. | 0.0 | 0 |
| 106 | Preface to the special issue for the 5th Asian Conference on Innovative Energy & Environmental Chemical Engineering (ASCON-IEEChE) 2016. Journal of Chemical Engineering of Japan, 2018, 51, 711-711. | 0.6 | 0 |
| 107 | Pyrimidine-bridged organoalkoxysilane membrane for high-efficiency CO 2 transport via mild affinity. Separation and Purification Technology, 2017, 178, 232-241. | 7.9 | 34 |
| 108 | Photo-induced sol–gel synthesis of polymer-supported silsesquioxane membranes. RSC Advances, 2017, 7, 7150-7157. | 3.6 | 5 |

7

| # | Article | IF | Citations |
|-----|--|--------------|-----------|
| 109 | Fabrication and Microstructure Tuning of a Pyrimidine-Bridged Organoalkoxysilane Membrane for CO ₂ Separation. Industrial & Engineering Chemistry Research, 2017, 56, 1316-1326. | 3.7 | 24 |
| 110 | Two-Dimensional Covalent Organic Framework (COF) Membranes Fabricated via the Assembly of Exfoliated COF Nanosheets. ACS Applied Materials & Samp; Interfaces, 2017, 9, 8433-8436. | 8.0 | 222 |
| 111 | Preparation of bridged polysilsesquioxane-based membranes containing 1,2,3-triazole moieties for water desalination. Polymer Journal, 2017, 49, 401-406. | 2.7 | 13 |
| 112 | Development and permeation properties of SiO2-ZrO2 nanofiltration membranes with a MWCO of <200. Journal of Membrane Science, 2017, 535, 331-341. | 8.2 | 19 |
| 113 | Preparation of Bridged Polysilsesquioxane Membranes from Bis[3-(triethoxysilyl)propyl]amine for Water Desalination. Bulletin of the Chemical Society of Japan, 2017, 90, 1035-1040. | 3.2 | 23 |
| 114 | Preparation of cyclic peptide nanotube structures and molecular simulation of water adsorption and diffusion. Journal of Membrane Science, 2017, 537, 101-110. | 8.2 | 11 |
| 115 | Gas permeation properties for organosilica membranes with different Si/C ratios and evaluation of microporous structures. AICHE Journal, 2017, 63, 4491-4498. | 3 . 6 | 65 |
| 116 | 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. Journal of Membrane Science, 2017, 526, 242-251. | 8.2 | 15 |
| 117 | Preparation of POSS-derived robust RO membranes for water desalination. Desalination, 2017, 404, 322-327. | 8.2 | 20 |
| 118 | SiO2-ZrO2 nanofiltration membranes of different Si/Zr molar ratios: Stability in hot water and acid/alkaline solutions. Journal of Membrane Science, 2017, 524, 700-711. | 8.2 | 41 |
| 119 | Synthesis of a 12-membered cyclic siloxane possessing alkoxysilyl groups as a nanobuilding block and its use for preparation of gas permeable membranes. RSC Advances, 2017, 7, 48683-48691. | 3 . 6 | 11 |
| 120 | Simulation and design of catalytic membrane reactor for hydrogen production via methylcyclohexane dehydrogenation. International Journal of Hydrogen Energy, 2017, 42, 26296-26307. | 7.1 | 39 |
| 121 | Water transport and ion rejection investigation for application of cyclic peptide nanotubes to forward osmosis process: A simulation study. Desalination, 2017, 424, 85-94. | 8.2 | 16 |
| 122 | Fabrication and CO2 permeation properties of amine-silica membranes using a variety of amine types. Journal of Membrane Science, 2017, 541, 447-456. | 8.2 | 36 |
| 123 | Preliminary techno-economic analysis of non-commercial ceramic and organosilica membranes for hydrogen peroxide ultrapurification. Chemical Engineering Research and Design, 2017, 125, 385-397. | 5 . 6 | 2 |
| 124 | Effect of heat treatment on the nanoporosity of silica PECVD films elucidated by low-energy positron annihilation and ellipsometric porosimetry. Journal of Applied Physics, 2017, 122, 185304. | 2.5 | 5 |
| 125 | Preparation and Gas Permeation Properties of Fluorine–Silica Membranes with Controlled Amorphous Silica Structures: Effect of Fluorine Source and Calcination Temperature on Network Size. ACS Applied Materials & Diterfaces, 2017, 9, 24625-24633. | 8.0 | 18 |
| 126 | Pore size tuning of sol-gel-derived triethoxysilane (TRIES) membranes for gas separation. Journal of Membrane Science, 2017, 524, 64-72. | 8.2 | 14 |

| # | Article | IF | CITATIONS |
|-----|--|-------------|-----------|
| 127 | Synthesis of organically bridged trialkoxysilanes bearing acetoxymethyl groups and applications to reverse osmosis membranes. Applied Organometallic Chemistry, 2017, 31, e3580. | 3.5 | 14 |
| 128 | Atmospheric-pressure plasma-enhanced chemical vapor deposition of microporous silica membranes for gas separation. Journal of Membrane Science, 2017, 524, 644-651. | 8.2 | 38 |
| 129 | ã€Rapid communications】 Applying Amphotericin B–Ergosterol in Forward Osmosis : a simulation study. Membrane, 2017, 42, 250-254. | 0.0 | 2 |
| 130 | Silica Membrane Application for Pervaporation Process., 2017,, 217-241. | | 4 |
| 131 | Catalytic Ammonia Decomposition over High-Performance Ru/Graphene Nanocomposites for Efficient COx-Free Hydrogen Production. Catalysts, 2017, 7, 23. | 3.5 | 32 |
| 132 | Propylene/propane Permeation Properties of Metal-doped Organosilica Membranes with Controlled Network Sizes and Adsorptive Properties. Journal of the Japan Petroleum Institute, 2016, 59, 140-148. | 0.6 | 7 |
| 133 | Nanofiltration performance of SiO2-ZrO2 membranes in aqueous solutions at high temperatures. Separation and Purification Technology, 2016, 168, 238-247. | 7.9 | 21 |
| 134 | Tailoring the Separation Behavior of Polymer-Supported Organosilica Layered-Hybrid Membranes via Facile Post-Treatment Using HCl and HN ₃ Vapors. ACS Applied Materials & mp; Interfaces, 2016, 8, 11060-11069. | 8.0 | 23 |
| 135 | Enhanced decomposition of sulfur trioxide in the water-splitting iodine–sulfur process via a catalytic membrane reactor. Journal of Materials Chemistry A, 2016, 4, 15316-15319. | 10.3 | 11 |
| 136 | Evaluation of non-commercial ceramic SiO2-ZrO2 and organosilica BTESE membranes in a highly oxidative medium: Performance in hydrogen peroxide. Journal of Membrane Science, 2016, 520, 740-748. | 8.2 | 6 |
| 137 | Network engineering of a BTESE membrane for improved gas performance via a novel pH-swing method. Journal of Membrane Science, 2016, 511, 219-227. | 8.2 | 31 |
| 138 | Hybrid membrane developed to tolerate harsh conditions inside desalination plant equipment. Membrane Technology, 2016, 2016, 7. | 0.1 | 5 |
| 139 | Tailoring the Subnano Silica Structure via Fluorine Doping for Development of Highly Permeable CO ₂ Separation Membranes. ChemNanoMat, 2016, 2, 264-267. | 2.8 | 24 |
| 140 | Plasma-enhanced chemical vapor deposition of amorphous carbon molecular sieve membranes for gas separation. RSC Advances, 2016, 6, 59045-59049. | 3. 6 | 4 |
| 141 | In Silico Evaluation of Ultrafiltration and Nanofiltration Membrane Cascades for Continuous Fractionation of Protein Hydrolysate from Tuna Processing Byproduct. Industrial & Engineering Chemistry Research, 2016, 55, 7493-7504. | 3.7 | 8 |
| 142 | Hydrogen production from energy carriers by silica-based catalytic membrane reactors. Catalysis Today, 2016, 268, 3-11. | 4.4 | 32 |
| 143 | Development of Ethenylene-Bridged Organosilica Membranes for Desalination Applications. Industrial & Lamp; Engineering Chemistry Research, 2016, 55, 2183-2190. | 3.7 | 32 |
| 144 | Pervaporation and vapor permeation characteristics of BTESE-derived organosilica membranes and their long-term stability in a high-water-content IPA/water mixture. Journal of Membrane Science, 2016, 498, 336-344. | 8.2 | 36 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 145 | Effect of firing temperature on the water permeability of SiO2–ZrO2 membranes for nanofiltration. Journal of Membrane Science, 2016, 497, 348-356. | 8.2 | 59 |
| 146 | Chemical Vapor Deposition. , 2016, , 395-397. | | 0 |
| 147 | Titania Membranes. , 2016, , 1906-1907. | | 0 |
| 148 | Hybrid Silica Membranes., 2016,, 974-975. | | 0 |
| 149 | Ammonia Decomposition in Catalytic Membrane Reactors. , 2016, , 62-64. | | 0 |
| 150 | Development of Membrane Separation Process for H2SO4 Decomposition. Membrane, 2016, 41, 102-107. | 0.0 | 0 |
| 151 | Poreâ€size evaluation and gas transport behaviors of microporous membranes: An experimental and theoretical study. AICHE Journal, 2015, 61, 2268-2279. | 3.6 | 10 |
| 152 | Photo-induced sol–gel processing for low-temperature fabrication of high-performance silsesquioxane membranes for use in molecular separation. Chemical Communications, 2015, 51, 9932-9935. | 4.1 | 10 |
| 153 | Catalytic membrane reactors for SO3 decomposition in Iodine–Sulfur thermochemical cycle: A simulation study. International Journal of Hydrogen Energy, 2015, 40, 12687-12696. | 7.1 | 18 |
| 154 | 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. Chemical Communications, 2015, 51, 2551-2554. | 4.1 | 9 |
| 155 | Preparation and separation properties of porous norbornane-bridged silica membrane. Journal of Sol-Gel Science and Technology, 2015, 73, 365-370. | 2.4 | 12 |
| 156 | Reverse osmosis performance of layered-hybrid membranes consisting of an organosilica separation layer on polymer supports. Journal of Membrane Science, 2015, 494, 104-112. | 8.2 | 19 |
| 157 | Efficient synthesis of SiOC glasses from ethane, ethylene, and acetylene-bridged polysilsesquioxanes. Journal of Non-Crystalline Solids, 2015, 408, 137-141. | 3.1 | 18 |
| 158 | Evaluating the gas permeation properties and hydrothermal stability of organosilica membranes under different hydrosilylation conditions. Journal of Membrane Science, 2015, 493, 664-672. | 8.2 | 8 |
| 159 | Plasma-assisted multi-layered coating towards improved gas permeation properties for organosilica membranes. RSC Advances, 2015, 5, 59837-59844. | 3.6 | 10 |
| 160 | Plasma treatment of hydrophobic sub-layers to prepare uniform multi-layered films and high-performance gas separation membranes. Applied Surface Science, 2015, 349, 415-419. | 6.1 | 9 |
| 161 | Preparation and separation properties of oxalylureaâ€bridged silica membranes. Applied Organometallic Chemistry, 2015, 29, 433-438. | 3.5 | 16 |
| 162 | Microporous organosilica membranes for gas separation prepared via PECVD using different O/Si ratio precursors. Journal of Membrane Science, 2015, 489, 11-19. | 8.2 | 37 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 163 | Microporous membrane reactors for hydrogen production. Current Opinion in Chemical Engineering, 2015, 8, 83-88. | 7.8 | 21 |
| 164 | Methylcyclohexane dehydrogenation for hydrogen production via a bimodal catalytic membrane reactor. AICHE Journal, 2015, 61, 1628-1638. | 3.6 | 44 |
| 165 | Robust organosilica membranes for high temperature reverse osmosis (RO) application: Membrane preparation, separation characteristics of solutes and membrane regeneration. Journal of Membrane Science, 2015, 493, 515-523. | 8.2 | 29 |
| 166 | Permeation properties of BTESE–TEOS organosilica membranes and application to O2/SO2 gas separation. Journal of Membrane Science, 2015, 496, 211-218. | 8.2 | 30 |
| 167 | Preparation of hydroxyl group containing bridged organosilica membranes for water desalination. Separation and Purification Technology, 2015, 156, 396-402. | 7.9 | 20 |
| 168 | Preparation of organosilica membranes on hydrophobic intermediate layers and evaluation of gas permeation in the presence of water vapor. Journal of Membrane Science, 2015, 496, 156-164. | 8.2 | 24 |
| 169 | Recent Progresses in Inorganic Reverse Osmosis/nanofiltration Membranes. Membrane, 2015, 40, 191-196. | 0.0 | 0 |
| 170 | Gas permeability of thin dense films from polymer blend of thermoplastic elastomer and polyolefin. Journal of Applied Polymer Science, 2014, 131, . | 2.6 | 3 |
| 171 | Porous Al2O3/TiO2 tubes in combination with 1-ethyl-3-methylimidazolium acetate ionic liquid for CO2/N2 separation. Separation and Purification Technology, 2014, 122, 440-448. | 7.9 | 78 |
| 172 | Development and gas permeation properties of microporous amorphous TiO2–ZrO2–organic composite membranes using chelating ligands. Journal of Membrane Science, 2014, 461, 96-105. | 8.2 | 29 |
| 173 | Fabrication of a layered hybrid membrane using an organosilica separation layer on a porous polysulfone support, and the application to vapor permeation. Journal of Membrane Science, 2014, 464, 140-148. | 8.2 | 31 |
| 174 | Polymerization behavior and gel properties of ethane, ethylene and acetylene-bridged polysilsesquioxanes. Journal of Sol-Gel Science and Technology, 2014, 71, 24-30. | 2.4 | 16 |
| 175 | Application of interfacially polymerized polyamide composite membranes to isopropanol dehydration: Effect of membrane pre-treatment and temperature. Journal of Membrane Science, 2014, 453, 384-393. | 8.2 | 81 |
| 176 | High-temperature stability of PECVD-derived organosilica membranes deposited on TiO2 and SiO2–ZrO2 intermediate layers using HMDSO/Ar plasma. Separation and Purification Technology, 2014, 121, 13-19. | 7.9 | 16 |
| 177 | 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). RSC Advances, 2014, 4, 12404. | 3.6 | 12 |
| 178 | Preparation and gas permeation properties of thermally stable organosilica membranes derived by hydrosilylation. Journal of Materials Chemistry A, 2014, 2, 672-680. | 10.3 | 21 |
| 179 | Modified gasâ€translation model for prediction of gas permeation through microporous organosilica membranes. AICHE Journal, 2014, 60, 4199-4210. | 3.6 | 52 |
| 180 | Insight into the pore tuning of triazine-based nitrogen-rich organoalkoxysilane membranes for use in water desalination. RSC Advances, 2014, 4, 23759-23769. | 3.6 | 25 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 181 | Experimental and Theoretical Study on Small Gas Permeation Properties through Amorphous Silica Membranes Fabricated at Different Temperatures. Journal of Physical Chemistry C, 2014, 118, 20323-20331. | 3.1 | 36 |
| 182 | Graphene nanosheets supporting Ru nanoparticles with controlled nanoarchitectures form a high-performance catalyst for CO _x -free hydrogen production from ammonia. Journal of Materials Chemistry A, 2014, 2, 9185-9192. | 10.3 | 47 |
| 183 | Structural Characterization of Thin-Film Polyamide Reverse Osmosis Membranes. Industrial & Engineering Chemistry Research, 2014, 53, 1442-1451. | 3.7 | 83 |
| 184 | New Insights into the Microstructure-Separation Properties of Organosilica Membranes with Ethane, Ethylene, and Acetylene Bridges. ACS Applied Materials & Interfaces, 2014, 6, 9357-9364. | 8.0 | 69 |
| 185 | Synthesis and characterization of a layered-hybrid membrane consisting of an organosilica separation layer on a polymeric nanofiltration membrane. Journal of Membrane Science, 2014, 472, 19-28. | 8.2 | 24 |
| 186 | CO ₂ Permeation through Hybrid Organosilica Membranes in the Presence of Water Vapor. Industrial & Description of Chemistry Research, 2014, 53, 6113-6120. | 3.7 | 43 |
| 187 | Controlled surface morphology of polyamide membranes via the addition of co-solvent for improved permeate flux. Journal of Membrane Science, 2014, 467, 303-312. | 8.2 | 105 |
| 188 | Gas transport properties of interfacially polymerized polyamide composite membranes under different pre-treatments and temperatures. Journal of Membrane Science, 2014, 449, 109-118. | 8.2 | 95 |
| 189 | Gas permeation properties through Al-doped organosilica membranes with controlled network size. Journal of Membrane Science, 2014, 466, 246-252. | 8.2 | 34 |
| 190 | Preparation of BTESE-derived organosilica membranes for catalytic membrane reactors of methylcyclohexane dehydrogenation. Journal of Membrane Science, 2014, 455, 375-383. | 8.2 | 96 |
| 191 | Optimizing the preparation of multi-layered polyamide membrane via the addition of a co-solvent. Journal of Membrane Science, 2014, 453, 489-497. | 8.2 | 80 |
| 192 | Gas-permeable composite hollow-fiber membrane with a three-layered structure. Journal of Membrane Science, 2014, 467, 175-187. | 8.2 | 6 |
| 193 | Thin Ionic Liquid Membranes Based on Inorganic Supports with Different Pore Sizes. Industrial & Engineering Chemistry Research, 2014, 53, 8045-8056. | 3.7 | 65 |
| 194 | Supercritical water gasification of ethanol fermentation residue of seaweed: effect of sodium chloride salt. International Journal of Nano and Biomaterials, 2014, 5, 3. | 0.1 | 0 |
| 195 | Ammonia Decomposition in Catalytic Membrane Reactors. , 2014, , 1-3. | | 0 |
| 196 | Ammonia decomposition in catalytic membrane reactors: Simulation and experimental studies. AICHE Journal, 2013, 59, 168-179. | 3.6 | 63 |
| 197 | Multilayered polyamide membranes by spray-assisted 2-step interfacial polymerization for increased performance of trimesoyl chloride (TMC)/m-phenylenediamine (MPD)-derived polyamide membranes. Journal of Membrane Science, 2013, 446, 504-512. | 8.2 | 48 |
| 198 | Sol–gel spin coating process to fabricate a new type of uniform and thin organosilica coating on polysulfone film. Materials Letters, 2013, 109, 130-133. | 2.6 | 15 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Reverse osmosis performance of organosilica membranes and comparison with the pervaporation and gas permeation properties. AICHE Journal, 2013, 59, 1298-1307. | 3.6 | 53 |
| 200 | Hydrogen Permeation Properties and Hydrothermal Stability of Sol–Gelâ€Derived Amorphous Silica Membranes Fabricated at High Temperatures. Journal of the American Ceramic Society, 2013, 96, 2950-2957. | 3.8 | 35 |
| 201 | Methylcyclohexane Dehydrogenation in Catalytic Membrane Reactors for Efficient Hydrogen Production. Industrial & Engineering Chemistry Research, 2013, 52, 13325-13332. | 3.7 | 26 |
| 202 | Micropore size estimation on gas separation membranes: A study in experimental and molecular dynamics. AICHE Journal, 2013, 59, 2179-2194. | 3.6 | 47 |
| 203 | Control of Pd dispersion in sol–gel-derived amorphous silica membranes for hydrogen separation at high temperatures. Journal of Membrane Science, 2013, 439, 78-86. | 8.2 | 39 |
| 204 | Pore size control of Al-doping into bis (triethoxysilyl) methane (BTESM)-derived membranes for improved gas permeation properties. RSC Advances, 2013, 3, 12080. | 3.6 | 11 |
| 205 | Molecular dynamics simulation study on characterization of bis(triethoxysilyl)-ethane and bis(triethoxysilyl)ethylene derived silica-based membranes. Desalination and Water Treatment, 2013, 51, 5248-5253. | 1.0 | 9 |
| 206 | Characterization and gas permeation properties of amorphous silica membranes prepared via plasma enhanced chemical vapor deposition. Journal of Membrane Science, 2013, 441, 45-53. | 8.2 | 46 |
| 207 | Equilibrium shift of methylcyclohexane dehydrogenation in a thermally stable organosilica membrane reactor for high-purity hydrogen production. International Journal of Hydrogen Energy, 2013, 38, 15302-15306. | 7.1 | 35 |
| 208 | Pervaporation performance and characterization of organosilica membranes with a tuned pore size by solid-phase HCl post-treatment. Journal of Membrane Science, 2013, 441, 120-128. | 8.2 | 24 |
| 209 | Tailoring the Affinity of Organosilica Membranes by Introducing Polarizable Ethenylene Bridges and Aqueous Ozone Modification. ACS Applied Materials & Interfaces, 2013, 5, 6147-6154. | 8.0 | 46 |
| 210 | Preparation and characterization of methyl-modified hybrid silica membranes for gas separation. Desalination and Water Treatment, 2013, 51, 5149-5154. | 1.0 | 8 |
| 211 | Thin dense films from polymer blend of thermoplastic elastomer and polyolefin by uniaxial stretching. Journal of Applied Polymer Science, 2013, 128, 2447-2457. | 2.6 | 2 |
| 212 | Micropore Filling Phase Permeation of a Condensable Vapor in Silica Membranes: A Molecular Dynamics Study. Journal of Chemical Engineering of Japan, 2013, 46, 659-671. | 0.6 | 9 |
| 213 | Permeation Model through Subnanoporous Membranes and Pore Size Evaluation based on Normalized Knudsen-based Permeance (NKP). Membrane, 2013, 38, 2-8. | 0.0 | 1 |
| 214 | Titania Membranes., 2013,, 1-2. | | 0 |
| 215 | Pore-size Tuning of Highly Selective Organic–Inorganic Hybrid Silica Membranes by Solid-phase Post-treatment at Low Temperature. Chemistry Letters, 2012, 41, 1663-1665. | 1.3 | 7 |
| 216 | Separation of propylene/propane binary mixtures by bis(triethoxysilyl) methane (BTESM)-derived silica membranes fabricated at different calcination temperatures. Journal of Membrane Science, 2012, 415-416, 478-485. | 8.2 | 47 |

| # | Article | lF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Effect of calcination temperature on the PV dehydration performance of alcohol aqueous solutions through BTESE-derived silica membranes. Journal of Membrane Science, 2012, 415-416, 810-815. | 8.2 | 50 |
| 218 | Preparation of a novel bimodal catalytic membrane reactor and its application to ammonia decomposition for COx-free hydrogen production. International Journal of Hydrogen Energy, 2012, 37, 12105-12113. | 7.1 | 54 |
| 219 | Pervaporation of acetic acid aqueous solutions by organosilica membranes. Journal of Membrane Science, 2012, 421-422, 25-31. | 8.2 | 54 |
| 220 | Organic–Inorganic Hybrid Silica Membranes with Controlled Silica Network Size for Propylene/Propane Separation. Industrial & Engineering Chemistry Research, 2012, 51, 944-953. | 3.7 | 95 |
| 221 | Gas permeation properties of silica membranes with uniform pore sizes derived from polyhedral oligomeric silsesquioxane. AICHE Journal, 2012, 58, 1733-1743. | 3.6 | 45 |
| 222 | Synthesis and Characterization of Microporous ZrO ₂ Membranes for Gas Permeation at 200°C. Separation Science and Technology, 2011, 46, 1224-1230. | 2.5 | 26 |
| 223 | 2-Step plasma-enhanced CVD for low-temperature fabrication of silica membranes with high gas-separation performance. Chemical Communications, 2011, 47, 8070. | 4.1 | 39 |
| 224 | Gas Permeation Properties of Helium, Hydrogen, and Polar Molecules Through Microporous Silica Membranes at High Temperatures. Membrane Science and Technology, 2011, 14, 117-136. | 0.5 | 3 |
| 225 | Development of Robust Organosilica Membranes for Reverse Osmosis. Langmuir, 2011, 27, 13996-13999. | 3.5 | 118 |
| 226 | Highly enhanced ammonia decomposition in a bimodal catalytic membrane reactor for CO -free hydrogen production. Catalysis Communications, 2011, 15, 60-63. | 3.3 | 57 |
| 227 | Evaluation and fabrication of poreâ€sizeâ€tuned silica membranes with tetraethoxydimethyl disiloxane for gas separation. AICHE Journal, 2011, 57, 2755-2765. | 3.6 | 119 |
| 228 | Development of Metal-doped Silica Membranes for Increased Hydrothermal Stability and Their Applications to Membrane Reactors for Steam Reforming of Methane. Journal of the Japan Petroleum Institute, 2011, 54, 277-286. | 0.6 | 23 |
| 229 | Molecular simulation of micro-structures and gas diffusion behavior of organic–inorganic hybrid amorphous silica membranes. Journal of Membrane Science, 2011, 381, 90-101. | 8.2 | 47 |
| 230 | Pore-size-controlled silica membranes with disiloxane alkoxides for gas separation. Journal of Membrane Science, 2011, 383, 152-158. | 8.2 | 36 |
| 231 | Co-solvent-mediated synthesis of thin polyamide membranes. Journal of Membrane Science, 2011, 384, 10-16. | 8.2 | 116 |
| 232 | Preparation of hydrophobic nanoporous methylated SiO2 membranes and application to nanofiltration of hexane solutions. Journal of Membrane Science, 2011, 384, 149-156. | 8.2 | 43 |
| 233 | Enhanced performance of inorganic-polyamide nanocomposite membranes prepared by metal-alkoxide-assisted interfacial polymerization. Journal of Membrane Science, 2011, 366, 382-388. | 8.2 | 77 |
| 234 | Cobalt-doped silica membranes for pervaporation dehydration of ethanol/water solutions. Journal of Membrane Science, 2011, 369, 13-19. | 8.2 | 52 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 235 | Permeation properties of hydrogen and water vapor through porous silica membranes at high temperatures. AICHE Journal, 2011, 57, 618-629. | 3.6 | 96 |
| 236 | Pervaporation of methanol/dimethyl carbonate using SiO ₂ membranes with nanoâ€tuned pore sizes and surface chemistry. AICHE Journal, 2011, 57, 2079-2089. | 3.6 | 33 |
| 237 | Preparation of organic–inorganic hybrid silica membranes using organoalkoxysilanes: The effect of pendant groups. Journal of Membrane Science, 2011, 379, 287-295. | 8.2 | 77 |
| 238 | Membranes for Separation: Recent Progresses. Journal of Fiber Science and Technology, 2011, 67, P.75-P.80. | 0.0 | 0 |
| 239 | Characteristics of ammonia permeation through porous silica membranes. AICHE Journal, 2010, 56, 1204-1212. | 3.6 | 41 |
| 240 | Future Prospect of Inorganic Membranes for Water Treatment. Membrane, 2010, 35, 175-181. | 0.0 | 0 |
| 241 | "Pre-seeding―assisted synthesis of a high performance polyamide-zeolite nanocomposite membrane for water purification. New Journal of Chemistry, 2010, 34, 2101. | 2.8 | 55 |
| 242 | Prediction of pervaporation performance of aqueous ethanol solutions by nanopermporometry characterization. Separation and Purification Technology, 2010, 74, 310-317. | 7.9 | 4 |
| 243 | Organic–inorganic hybrid silica membranes with controlled silica network size: Preparation and gas permeation characteristics. Journal of Membrane Science, 2010, 348, 310-318. | 8.2 | 133 |
| 244 | Preparation of organic/inorganic hybrid silica using methyltriethoxysilane and tetraethoxysilane as co-precursors. Journal of Sol-Gel Science and Technology, 2010, 53, 93-99. | 2.4 | 28 |
| 245 | Controlled synthesis of high performance polyamide membrane with thin dense layer for water desalination. Journal of Membrane Science, 2010, 362, 76-80. | 8.2 | 169 |
| 246 | Zeolite nanocrystals prepared from zeolite microparticles by a centrifugation-assisted grinding method. Chemical Engineering and Processing: Process Intensification, 2010, 49, 809-814. | 3.6 | 29 |
| 247 | Preparation of hydrogen separation membranes using disiloxane compounds. Desalination and Water Treatment, 2010, 17, 120-126. | 1.0 | 5 |
| 248 | Aseania 2009 Recent Progresses in Membrane Science and Technology Fifth Conference of the Aseanian Membrane Society 12–14 July 2009, Kobe, Japan. Desalination and Water Treatment, 2010, 17, 1-1. | 1.0 | 1 |
| 249 | Preparation of nanoporous inorganic membrane on supports with graded structure. Desalination and Water Treatment, 2010, 17, 99-105. | 1.0 | 5 |
| 250 | Extremely thin Pd–silica mixed-matrix membranes with nano-dispersion for improved hydrogen permeability. Chemical Communications, 2010, 46, 6171. | 4.1 | 41 |
| 251 | A molecular dynamics simulation of a homogeneous organic–inorganic hybrid silica membrane. Chemical Communications, 2010, 46, 9140. | 4.1 | 63 |
| 252 | Prediction of pervaporation performance of aqueous ethanol solutions based on single gas permeation. Desalination and Water Treatment, 2010, 17, 106-112. | 1.0 | 3 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 253 | Permeation Characteristics of Electrolytes and Neutral Solutes through Titania Nanofiltration Membranes at High Temperatures. Langmuir, 2010, 26, 10897-10905. | 3.5 | 57 |
| 254 | Molecular Dynamics Simulation Study of Bimodal Porous Structure and Gas Permeation Properties of Microporous Silica Membranes. Kagaku Kogaku Ronbunshu, 2010, 36, 174-180. | 0.3 | 1 |
| 255 | Hydrogen Permeation Performance and Hydrothermal Stability for Sol-gel Derived Pd-doped Silica Membranes. Kagaku Kogaku Ronbunshu, 2010, 36, 472-479. | 0.3 | 5 |
| 256 | Model Analysis of Separation Performance of Commercial Nanofiltration Membranes Improved by Tannic Acid. Journal of Chemical Engineering of Japan, 2009, 42, 95-106. | 0.6 | 4 |
| 257 | Pervaporation of water/ethanol mixtures through microporous silica membranes. Separation and Purification Technology, 2009, 66, 479-485. | 7.9 | 44 |
| 258 | Design of Silica Networks for Development of Highly Permeable Hydrogen Separation Membranes with Hydrothermal Stability. Journal of the American Chemical Society, 2009, 131, 414-415. | 13.7 | 222 |
| 259 | Preparation of Palladium Membrane for Hydrogen Separation by Self-Tuning Photocatalytic Deposition. Kagaku Kogaku Ronbunshu, 2009, 35, 232-238. | 0.3 | 1 |
| 260 | Membrane reactor performance of steam reforming of methane using hydrogen-permselective catalytic SiO2 membranes. Journal of Membrane Science, 2008, 316, 53-62. | 8.2 | 67 |
| 261 | Nano/subnano-tuning of porous ceramic membranes for molecular separation. Journal of Sol-Gel Science and Technology, 2008, 46, 349-361. | 2.4 | 138 |
| 262 | Nanoporous titania membranes for permeation and filtration of organic solutions. Desalination, 2008, 233, 1-9. | 8.2 | 47 |
| 263 | MD simulation studies for effect of membrane structures and dynamics on gas permeation properties through microporous amorphous silica membranes. Desalination, 2008, 233, 333-341. | 8.2 | 11 |
| 264 | Characterization of Coâ€Doped Silica for Improved Hydrothermal Stability and Application to Hydrogen Separation Membranes at High Temperatures. Journal of the American Ceramic Society, 2008, 91, 2975-2981. | 3.8 | 162 |
| 265 | Gas Permeation Characteristics of Metal Doped Microporous Silica Membranes for CO2 Separation Prepared by Metal Salt-added Sol-gel Processing. Membrane, 2007, 32, 45-53. | 0.0 | 1 |
| 266 | A molecular dynamics simulation of pressure-driven gas permeation in a micropore potential field on silica membranes. Journal of Membrane Science, 2007, 293, 81-93. | 8.2 | 35 |
| 267 | Recent Development of Hydrogen Separation Membranes Prepared by Sol-Gel Processing. Membrane, 2006, 31, 258-262. | 0.0 | 1 |
| 268 | Photocatalytic Membrane Reactor for Enhanced Performance. Membrane, 2006, 31, 32-33. | 0.0 | 0 |
| 269 | A bimodal catalytic membrane having a hydrogen-permselective silica layer on a bimodal catalytic support: Preparation and application to the steam reforming of methane. Applied Catalysis A: General, 2006, 302, 78-85. | 4.3 | 52 |
| 270 | A photocatalytic membrane reactor for VOC decomposition using Pt-modified titanium oxide porous membranes. Journal of Membrane Science, 2006, 280, 156-162. | 8.2 | 41 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 271 | Pervaporation characteristics of aqueous–organic solutions with microporous SiO2–ZrO2 membranes: Experimental study on separation mechanism. Journal of Membrane Science, 2006, 284, 205-213. | 8.2 | 57 |
| 272 | Reverse osmosis of nonaqueous solutions through porous silica-zirconia membranes. AICHE Journal, 2006, 52, 522-531. | 3.6 | 38 |
| 273 | Transport Properties of Condensable and Non-condensable Gas Mixtures through Microporous Silica Membranes Studied with Molecular Dynamics Simulation. Kagaku Kogaku Ronbunshu, 2006, 32, 11-17. | 0.3 | 2 |
| 274 | Preparation of porous Carbon Membranes from Phenolic resin. Membrane, 2005, 30, 339-343. | 0.0 | 0 |
| 275 | Photocatalytic Membrane Reaction of Methylene Blue on Nanoporous Titania Membranes. Kagaku Kogaku Ronbunshu, 2005, 31, 108-114. | 0.3 | 4 |
| 276 | Zeolites: Separation Science. , 2004, , 1617-1622. | | 1 |
| 277 | Permeation of nonaqueous solution through organic/inorganic hybrid nanoporous membranes. AICHE Journal, 2004, 50, 1080-1087. | 3.6 | 29 |
| 278 | Methane steam reforming by microporous catalytic membrane reactors. AICHE Journal, 2004, 50, 2794-2805. | 3.6 | 143 |
| 279 | Molecular dynamics study of gas permeation through amorphous silica network and inter-particle pores on microporous silica membranes. Molecular Physics, 2004, 102, 191-202. | 1.7 | 30 |
| 280 | Simulation of Catalytic Membrane Reaction for Methane Reforming Using a Microporous Hydrogen Separation Membrane. Kagaku Kogaku Ronbunshu, 2004, 30, 346-352. | 0.3 | 2 |
| 281 | Characterization of sol–gel derived membranes and zeolite membranes by nanopermporometry. Separation and Purification Technology, 2003, 32, 23-27. | 7.9 | 57 |
| 282 | Condensable vapor permeation through miroporous silica membranes studied with molecular dynamics simulation. Separation and Purification Technology, 2003, 32, 231-237. | 7.9 | 18 |
| 283 | A photocatalytic membrane reactor for gas-phase reactions using porous titanium oxide membranes. Catalysis Today, 2003, 82, 41-48. | 4.4 | 42 |
| 284 | Titanium phosphorus oxide membranes for proton conduction at intermediate temperatures. Solid State Ionics, 2003, 158, 343-350. | 2.7 | 23 |
| 285 | Inorganic porous membranes for nanofiltration of nonaqueous solutions. Separation and Purification Technology, 2003, 32, 105-109. | 7.9 | 58 |
| 286 | Photocatalytic Membrane Reactor Using Porous Titanium Oxide Membranes. Journal of Chemical Engineering of Japan, 2003, 36, 1063-1069. | 0.6 | 5 |
| 287 | Gas Permeation Properties and Methylation of Toluene by MFI Zeolite Membranes with Different Si/Al Rations. Kagaku Kogaku Ronbunshu, 2003, 29, 427-431. | 0.3 | 1 |
| 288 | Gas Permeation Characteristics and Stability of Composite Silica-Metal Oxide Membranes. Materials Research Society Symposia Proceedings, 2002, 752, 1. | 0.1 | 7 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 289 | Structurally Composite Membranes of Titanium Oxide and Titanium Phosphorus Oxide for Proton Conduction at Intermediate Temperatures. Materials Research Society Symposia Proceedings, 2002, 752, 1. | 0.1 | 0 |
| 290 | Organic/inorganic Nanohybrid Membranes for Nanofiltration of Nonaqueous Solutions. Materials Research Society Symposia Proceedings, 2002, 752, 1. | 0.1 | 1 |
| 291 | Gas permeation properties of MFI zeolite membranes prepared by the secondary growth of colloidal silicalite and application to the methylation of toluene. Microporous and Mesoporous Materials, 2002, 54, 257-268. | 4.4 | 73 |
| 292 | Effect of divalent cations on permeate volume flux through porous titania membranes. Desalination, 2002, 147, 213-216. | 8.2 | 23 |
| 293 | INORGANIC POROUS MEMBRANES FOR LIQUID PHASE SEPARATION. Separation and Purification Reviews, 2001, 30, 191-220. | 0.8 | 137 |
| 294 | Photocatalytic Reactions in a Filtration System through Porous Titanium Dioxide Membranes Journal of Chemical Engineering of Japan, 2001, 34, 844-847. | 0.6 | 24 |
| 295 | Hydrothermal Stability and Performance of Silica-Zirconia Membranes for Hydrogen Separation in Hydrothermal Conditions Journal of Chemical Engineering of Japan, 2001, 34, 523-530. | 0.6 | 148 |
| 296 | Nanofiltration in non-aqueous solutions by porous silica–zirconia membranes. Journal of Membrane Science, 2001, 185, 253-261. | 8.2 | 87 |
| 297 | Permporometry characterization of microporous ceramic membranes. Journal of Membrane Science, 2001, 186, 257-265. | 8.2 | 151 |
| 298 | Experimental studies of gas permeation through microporous silica membranes. AICHE Journal, 2001, 47, 2052-2063. | 3.6 | 105 |
| 299 | CATALYTIC MEMBRANE REACTION FOR METHANE STEAM REFORMING USING POROUS SILICA MEMBRANES. Separation Science and Technology, 2001, 36, 3721-3736. | 2.5 | 55 |
| 300 | Titania membranes for liquid phase separation: effect of surface charge on flux. Separation and Purification Technology, 2001, 25, 307-314. | 7.9 | 86 |
| 301 | Molecular dynamics studies on gas permeation properties through microporous silica membranes. Separation and Purification Technology, 2001, 25, 441-449. | 7.9 | 34 |
| 302 | Development of Silica-Zirconia Membrane for Hydrogen Separation at High Temperature and Effect of Zirconia Content on Hydrogen Permeation Kagaku Kogaku Ronbunshu, 2001, 27, 106-112. | 0.3 | 5 |
| 303 | An Application of Silica-Zirconia Membrane for Hydrogen Separation to Membrane Reactor Kagaku Kogaku Ronbunshu, 2001, 27, 657-660. | 0.3 | 6 |
| 304 | Permeation of Liquids through Inorganic Nanofiltration Membranes. Journal of Colloid and Interface Science, 2000, 228, 292-296. | 9.4 | 85 |
| 305 | Temperature effect on transport performance by inorganic nanofiltration membranes. AICHE Journal, 2000, 46, 565-574. | 3.6 | 116 |
| 306 | Preparation of microporous membranes by TEOS/O3 CVD in the opposing reactants geometry. Microporous and Mesoporous Materials, 2000, 37, 145-152. | 4.4 | 78 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 307 | Preparation of hollow-fiber membranes by plasma-graft filling polymerization for organic-liquid separation. Journal of Membrane Science, 2000, 170, 61-70. | 8.2 | 23 |
| 308 | Analysis of Linear Macromolecule Transport through Aluminum Anodic Oxide Membranes by Pore Model Journal of Chemical Engineering of Japan, 2000, 33, 141-151. | 0.6 | 7 |
| 309 | Reverse Osmosis Performance at High Pressure with High Water Recovery Journal of Chemical Engineering of Japan, 2000, 33, 414-419. | 0.6 | 3 |
| 310 | Recovery of spent electroless nickel plating bath by electrodialysis. Journal of Membrane Science, 1999, 157, 241-249. | 8.2 | 57 |
| 311 | lon separation by porous silica-zirconia nanofiltration membranes. AICHE Journal, 1998, 44, 765-768. | 3.6 | 52 |
| 312 | Silica–zirconia membranes for nanofiltration. Journal of Membrane Science, 1998, 149, 127-135. | 8.2 | 97 |
| 313 | Membrane Design for Pervaporation or Vapor Permeation Separation Using a Filling-Type Membrane Concept. Industrial & Engineering Chemistry Research, 1998, 37, 177-184. | 3.7 | 35 |
| 314 | The electrostatic and steric-hindrance model for the transport of charged solutes through nanofiltration membranes. Journal of Membrane Science, 1997, 135, 19-32. | 8.2 | 310 |
| 315 | Transport of organic electrolytes with electrostatic and steric-hindrance effects through nanofiltration membranes Journal of Chemical Engineering of Japan, 1995, 28, 372-380. | 0.6 | 64 |
| 316 | Evaluation of pore structure and electrical properties of nanofiltration membranes Journal of Chemical Engineering of Japan, 1995, 28, 186-192. | 0.6 | 178 |
| 317 | Permeators and continuous membrane columns with retentate recycle. Journal of Membrane Science, 1995, 98, 57-67. | 8.2 | 20 |
| 318 | Electrolyte transport through nanofiltration membranes by the space-charge model and the comparison with Teorell-Meyer-Sievers model. Journal of Membrane Science, 1995, 103, 117-133. | 8.2 | 219 |
| 319 | lon separation by bipolar membranes in reverse osmosis. Journal of Membrane Science, 1995, 108, 269-278. | 8.2 | 35 |
| 320 | Evaluation of retentate recycle effect on enrichment of less permeable gas component in a membrane permeator. Journal of Membrane Science, 1994, 94, 213-224. | 8.2 | 7 |
| 321 | Production of high-purity oxygen by continuous membrane column combined with PSA oxygen generator. Industrial & Engineering Chemistry Research, 1994, 33, 311-316. | 3.7 | 13 |
| 322 | Peptide and Amino Acid Separation with Nanofiltration Membranes. Separation Science and Technology, 1994, 29, 971-984. | 2.5 | 111 |
| 323 | Bipolar reverse osmosis membrane for separating mono-and divalent ions. Journal of Membrane Science, 1992, 70, 153-162. | 8.2 | 46 |
| 324 | Calculation of ion rejection by extended Nernst-Planck equation with charged reverse osmosis membranes for single and mixed electrolyte solutions Journal of Chemical Engineering of Japan, 1991, 24, 511-517. | 0.6 | 195 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 325 | Reverse osmosis of single and mixed electrolytes with charged membranes: Experiment and analysis Journal of Chemical Engineering of Japan, 1991, 24, 518-524. | 0.6 | 149 |
| 326 | Permeation equations developed for prediction of membrane performance in pervaporation, vapor permeation and reverse osmosis based on the solution-diffusion model Journal of Chemical Engineering of Japan, 1991, 24, 326-333. | 0.6 | 67 |
| 327 | Membrane transport properties of pervaporation and vapor permeation in ethanol-water system using polyacrylonitrile and cellulose acetate membranes Journal of Chemical Engineering of Japan, 1991, 24, 334-339. | 0.6 | 48 |
| 328 | Negative rejection of anions in the loose reverse osmosis separation of mono- and divalent ion mixtures. Desalination, 1991, 81, 219-227. | 8.2 | 102 |
| 329 | Effective charge density and pore structure of charged ultrafiltration membranes Journal of Chemical Engineering of Japan, 1990, 23, 604-610. | 0.6 | 45 |
| 330 | Separation of proteins by charged ultrafiltration membranes. Desalination, 1988, 70, 191-205. | 8.2 | 159 |
| 331 | Separation of amino acids and proteins by electrically enhanced membrane filtrations Membrane, 1988, 13, 350-358. | 0.0 | 3 |
| 332 | Flow transition in a bubble column Kagaku Kogaku Ronbunshu, 1987, 13, 474-480. | 0.3 | 7 |
| 333 | Study on Preparation and Hydrophobicity of MTES Derived Silica Sol and Gel. Advanced Materials Research, 0, 535-537, 2563-2566. | 0.3 | 3 |
| 334 | Aseania 2009 - Recent Progresses in Membrane Science and Technology Fifth Conference of the Aseanian Membrane Society, 12–14 July 2009, Kobe, Japan. , 0, , 1-1. | | 0 |
| 335 | Subnanopore structural change of time-elapsed silica PECVD films elucidated by slow positron annihilation and ellipsometric porosimetry. , 0, , . | | 0 |
| 336 | Preparation of amine- and ammonium-containing polysilsesquioxane membranes for CO2 separation. Polymer Journal, 0, , . | 2.7 | 1 |
| 337 | Design of carbon–ceramic composite membranes with tunable molecular cut-offs from a carboxylic benzoxazine ligand chelated to silica–zirconia. Molecular Systems Design and Engineering, 0, , . | 3.4 | 2 |