

#### 1. Refreed Journal Articles

1. W. Puthai, M. Kanezashi, H. Nagasawa, K. Wakamura, H. Ohnishi, T. Tsuru, Effect of firing temperature on the water permeability of SiO<sub>2</sub>-ZrO<sub>2</sub> membranes for nanofiltration, *Journal of Membrane Science* **497** (2016) 348-356. [doi:10.1016/j.memsci.2015.09.040](https://doi.org/10.1016/j.memsci.2015.09.040)
2. H. Nagasawa, N. Matsuda, M. Kanezashi, T. Yoshioka, T. Tsuru, 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* **498** (2016) 336-344. [doi:10.1016/j.memsci.2015.10.002](https://doi.org/10.1016/j.memsci.2015.10.002)
3. M. Kanezashi, T. Matsutani, T. Wakihara, H. Tawarayama, H. Nagasawa, T. Yoshioka, T. Okubo, T. Tsuru, Tailoring the subnano silica structure via fluorine doping for development of highly permeable CO<sub>2</sub> separation membranes, *ChemNanoMat* **2** (2016) 264-267. [DOI:10.1002/cnma.201600045](https://doi.org/10.1002/cnma.201600045)
4. M. Kanezashi, S. Miyauchi, S. Hayakawa, H. Nagasawa, T. Yoshioka, T. Tsuru, C<sub>3</sub>H<sub>6</sub>/C<sub>3</sub>H<sub>8</sub> permeation properties of metal doped organosilica membranes with controlled network size and adsorption property, *Journal of the Japan Petroleum Institute* **59** (2016) 140-148.
5. X. Yu, L. Meng, T. Niimi, H. Nagasawa, M. Kanezashi, T. Yoshioka, T. Tsuru, Network engineering of a BTESE membrane for improved gas performance via a novel pH-swing method, *Journal of Membrane Science* **511** (2016) 219-227. [doi:10.1016/j.memsci.2016.03.060](https://doi.org/10.1016/j.memsci.2016.03.060)
6. G. Gong, H. Nagasawa, M. Kanezashi, T. Tsuru, Tailoring the separation behavior of polymer-supported organosilica layered-hybrid membrane via facile post-treatment using HCl and NH<sub>3</sub> vapors, *ACS Applied Materials & Interfaces* **8** (2016) 11060-11069. [DOI:10.1021/acsami.6b01986](https://doi.org/10.1021/acsami.6b01986)
7. W. Puthai, M. Kanezashi, H. Nagasawa, T. Tsuru, Nanofiltration performance of SiO<sub>2</sub>-ZrO<sub>2</sub> membranes in aqueous solutions at high temperatures, *Separation and Purification Technology* **168** (2016) 238-247. [doi:10.1016/j.seppur.2016.05.028](https://doi.org/10.1016/j.seppur.2016.05.028)
8. H. Nagasawa, M. Kanezashi, T. Yoshioka, T. Tsuru, Plasma-enhanced chemical vapor deposition of amorphous carbon molecular sieve membranes for gas separation, *RSC Advances* **6** (2016) 59045-59049. [DOI:10.1039/C6RA0381G](https://doi.org/10.1039/C6RA0381G)
9. R. Abejón, A. Abejón, A. Garea, T. Tsuru, A. Irabien, M.P. Belleville, J. Sanchez-Marcano, In Silico Evaluation of Ultrafiltration and Nanofiltration Membrane Cascades for Continuous Fractionation of Protein Hydrolysate from Tuna Processing Byproduct, *Industrial & Engineering Chemistry Research*, in press, [DOI:10.1021/acs.iecr.6b01495](https://doi.org/10.1021/acs.iecr.6b01495)
10. Xu, Rong; Lin, Peng; Zhang, Qi; Zhong, Jing; Tsuru, Toshinori, Development of ethylene-bridged organosilica membranes for desalination applications, *Industrial & Engineering Chemistry Research* **55** (2016) 2183-2190. [DOI:10.1021/acs.iecr.5b04439](https://doi.org/10.1021/acs.iecr.5b04439)
11. Lie Meng, Toshinori Tsuru, Hydrogen Production from Energy Carriers by Silica-Based Catalytic Membrane Reactors, *Catalysis Today*, **268** (2016) 3-11. [doi:10.1016/j.cattod.2015.11.006](https://doi.org/10.1016/j.cattod.2015.11.006)

#### 2. Books, Chapters

1. X. Ren, M. Kanezashi, T. Tsuru, "Chapter 7: Hybrid organosilica membranes for CO<sub>2</sub> separation under wet conditions," *Carbon Dioxide Capture: Processes, Technology and Environmental Implications*, Nova Science Publishers, Inc. (2016)

#### 3. Review Articles

1. 金指正言, Normalized Knudsen-based Permeance (NKP) 法によるアモルファスシリカ膜の細孔径評価, 膜 (MEMBRANE), **41** (2016) 36-43.
2. 金指正言, 無機分離膜開発の研究動向, 化学工学, **80** (2016) 307.
3. 金指正言, 都留稔了, 硫酸分解のための膜分離プロセスの開発, 膜 (MEMBRANE), **41** (2016) 102-107.

#### 4. Invited, keynote lecture

1. T. Tsuru, Nanopermporometry (NPP) and Normalized Knudsen-based permeance (NKP) for pore-size evaluation of nano/subnano-porous membranes, International Zeolite Membrane Meeting (IZMM), August 20-23, 2016, Dalian, China (Plenary)
2. L. Meng, X. Yu, M. Kanezashi, and T. Tsuru, Enhanced SO<sub>3</sub> Decomposition in A Highly Stable Catalytic Membrane Reactor for Iodine–Sulfur Thermochemical Cycle, The 10th Conference of Aseanian Membrane Society (AMS10), 2015.7.28, Nara, Japan (Keynote.)
3. T. Tsuru, ICIM-14 (International Conference on Inorganic Membranes), Robust reverse osmosis and nanofiltration membranes for expanding applications, 2016.07. (Keynote)
4. 都留稔了, 金指正言, 硫酸分解のための膜分離プロセスの開発, 日本膜学会年会, 2016.5.11
5. 都留稔了, 多孔性膜の細孔径制御と各種分離プロセスへの応用, 先進センターシンポジウム, 2016年5月7日
6. 都留稔了, 分離工学そして膜分離のすすめ: セラミック分離膜を中心として, 第63回中国四国産学連携化学フォーラム, 2016年4月8日
7. T. Tsuru, Nano/subnano-porous membranes for expanding applications: design and evaluation of porous structures, International Symposium -Recent developments of micro-porous membranes--, SCEJ 81st Annual Meeting, 2016.3.15 (Requested)
8. 都留稔了, 長澤寛規, プラズマ CVD 法を用いた多孔質分離膜の研究開発の現状と今後の展望, 日本学術振興会第 153 委員会, 2016Feb9

#### 5. Others

1. 都留 稔了, 持続可能社会の具現化のための分離工学, 膜工学のすすめ, 高分子, 素描(巻頭言), 65 (2016) 162
2. 都留 稔了, 膜分離と分析技術, 膜, 巻頭言, 41(2016)