

- Abu-Zeid, M. A. E. R., Zhang, Y., Dong, H., Zhang, L., Chen, H. L., & Hou, L. (2015). A comprehensive review of vacuum membrane distillation technique. *Desalination*, 356, 1–14. <https://doi.org/10.1016/j.desal.2014.10.033>
- Ahmed, F. E., Lalia, B. S., Hashaikeh, R., & Hilal, N. (2020). Alternative heating techniques in membrane distillation: A review. *Desalination*, 496(September), 114713. <https://doi.org/10.1016/j.desal.2020.114713>
- Ali, A., Macedonio, F., Drioli, E., Aljlil, S., & Alharbi, O. A. (2013). Experimental and theoretical evaluation of temperature polarization phenomenon in direct contact membrane distillation. *Chemical Engineering Research and Design*, 91(10), 1966–1977. <https://doi.org/10.1016/j.cherd.2013.06.030>
- Ali, A., Quist-Jensen, C. A., Macedonio, F., & Drioli, E. (2016). Optimization of module length for continuous direct contact membrane distillation process. *Chemical Engineering and Processing: Process Intensification*, 110, 188–200. <https://doi.org/10.1016/j.cep.2016.10.014>
- Alkudhiri, A., Darwish, N., & Hilal, N. (2012). Membrane distillation: A comprehensive review. *Desalination*, 287, 2–18. <https://doi.org/10.1016/j.desal.2011.08.027>
- Ashoor, B. B., Mansour, S., Giwa, A., Dufour, V., & Hasan, S. W. (2016). Principles and applications of direct contact membrane distillation (DCMD): A comprehensive review. *Desalination*, 398, 222–246. <https://doi.org/10.1016/j.desal.2016.07.043>
- Baksir, A., Daud, K., Wibowo, E. S., Akbar, N., & Haji, I. (2019). *Halmahera , North Maluku Province*. 22.
- Duong, H. C., Cooper, P., Nelemans, B., Cath, T. Y., & Nghiem, L. D. (2015). Optimising thermal efficiency of direct contact membrane distillation by brine recycling for small-scale seawater desalination. *Desalination*, 374, 1–9. <https://doi.org/10.1016/j.desal.2015.07.009>
- Duong, H. C., Hai, F. I., Al-Jubainawi, A., Ma, Z., He, T., & Nghiem, L. D. (2017). Liquid desiccant lithium chloride regeneration by membrane distillation for air conditioning. *Separation and Purification Technology*, 177, 121–128.

Flexer, V., Baspineiro, C. F., & Galli, C. I. (2018). Lithium recovery from brines: A vital raw material for green energies with a potential environmental impact in its mining and processing. *Science of the Total Environment*, 639, 1188–1204.
<https://doi.org/10.1016/j.scitotenv.2018.05.223>

Fouillac, H. (1990). Lithium Recovery From Geothermal Waters of Cesano (Italy) and Cronembourg (Alsace, France). ... of the... *New Zealand Geothermal Workshop, January 1990*, 117–123.
<https://pangea.stanford.edu/ERE/pdf/IGAstandard/NZGW/1990/Pauwels.pdf>

Gleisberg, D. (1992). Phosphate. In *Handbook of Environmental Chemistry* (Vol. 3).
<https://doi.org/10.1007/978-3-540-47108-0-4>

Herdianita, N. R., Bagus, I. G., Sucipta, E., & Kencana, A. Y. (2019). Lithium Brine Waters from the Indonesian Geothermal system : Could it Meet the National Needs of Making Lithium Batteries.

Hoshino, T. (2013). Development of technology for recovering lithium from seawater by electro dialysis using ionic liquid membrane. *Fusion Engineering and Design*, 88(11), 2956–2959. <https://doi.org/10.1016/j.fusengdes.2013.06.009>

Jacob, P., Laborie, S., & Cabassud, C. (2018). Visualizing and evaluating wetting in membrane distillation: New methodology and indicators based on Detection of Dissolved Tracer Intrusion (DDTI). *Desalination*, 443(June), 307–322.
<https://doi.org/10.1016/j.desal.2018.06.006>

Khayet, M. (2011). Membranes and theoretical modeling of membrane distillation: A review. *Advances in Colloid and Interface Science*, 164(1–2), 56–88.
<https://doi.org/10.1016/j.cis.2010.09.005>

Kim, W. J., Campanella, O., & Heldman, D. R. (2020). Predicting the performance of direct contact membrane distillation (DCMD): Mathematical determination of appropriate tortuosity based on porosity. *Journal of Food Engineering*, October, 110400.
<https://doi.org/10.1016/j.jfoodeng.2020.110400>

Kuang, Z., Long, R., Liu, Z., & Liu, W. (2019). Analysis of temperature and concentration polarizations for performance improvement in direct contact membrane distillation.

<https://doi.org/10.1016/j.ijheatmasstransfer.2019.118724>

Lalasari, L. H., Andriyah, L., Arini, T., Sulistiyono, E., Prasetyo, A. B., Firdiyono, F., & Natasha, N. C. (2020). Lithium extraction from brine water Tirtasanita Bogor, Indonesia by evaporation method. *Journal of Physics: Conference Series*, 1450(1).
<https://doi.org/10.1088/1742-6596/1450/1/012013>

Li, Q., Omar, A., Cha-Umping, W., Liu, Q., Li, X., Wen, J., Wang, Y., Razmjou, A., Guan, J., & Taylor, R. A. (2020). The potential of hollow fiber vacuum multi-effect membrane distillation for brine treatment. *Applied Energy*, 276(June), 115437.
<https://doi.org/10.1016/j.apenergy.2020.115437>

Li, X., Mo, Y., Qing, W., Shao, S., Tang, C. Y., & Li, J. (2019). Membrane-based technologies for lithium recovery from water lithium resources: A review. *Journal of Membrane Science*, 591(January), 117317.
<https://doi.org/10.1016/j.memsci.2019.117317>

Meshram, P., Pandey, B. D., & Mankhand, T. R. (2014). Extraction of lithium from primary and secondary sources by pre-treatment, leaching and separation: A comprehensive review. *Hydrometallurgy*, 150, 192–208.
<https://doi.org/10.1016/j.hydromet.2014.10.012>

Mroczek, E., Dedual, G., Graham, D., & Bacon, L. (2015). Lithium Extraction from Wairakei Geothermal Fluid using Electrodialysis. *Proceedings of the World Geothermal Congress 2015, April*, 6.

Mulder, M. (1991). *Basic principles of membrane technology*.
https://doi.org/10.1524/zpch.1998.203.part_1_2.263

Nasruddin, N., Dwi Saputra, I., Mentari, T., Bardow, A., Marcelina, O., & Berlin, S. (2020). Exergy, exergoeconomic, and exergoenvironmental optimization of the geothermal binary cycle power plant at Ampallas, West Sulawesi, Indonesia. *Thermal Science and Engineering Progress*, 19(June), 100625.
<https://doi.org/10.1016/j.tsep.2020.100625>

Natasha, N. C., Lalasari, L. H., Miftakhur, R., & Sudarsono, J. W. (2018). Ekstraksi Litium dari β – Spodumen Hasil Dekomposisi Batuan Sekismika Indonesia Menggunakan

Aditif Natrium Sulfat. In *Metalurgi* (Nomor Vol 33, No 2 (2018): *Metalurgi* Vol. 33 No.

2 Agustus 2018, hal. 69–78).

<http://ejournalmaterialmetalurgi.com/index.php/metalurgi/article/view/429>

Noerochim, L., Satriawangsa, G. A., & Widodo, A. (2016). Recovery of lithium from geothermal fluid at lumpur sidoarjo by adsorption method. *Journal of Engineering and Technological Sciences*, 48(2), 1–8. <https://doi.org/10.5614/j.eng.technol.sci.2016.48.2.6>

Park, S. H., Kim, J. H., Moon, S. J., Jung, J. T., Wang, H. H., Ali, A., Quist-Jensen, C. A., Macedonio, F., Drioli, E., & Lee, Y. M. (2020). Lithium recovery from artificial brine using energy-efficient membrane distillation and nanofiltration. *Journal of Membrane Science*, 598, 117683. <https://doi.org/10.1016/j.memsci.2019.117683>

Pramanik, B. K., Asif, M. B., Kentish, S., Nghiem, L. D., & Hai, F. I. (2019). Lithium enrichment from a simulated salt lake brine using an integrated nanofiltration-membrane distillation process. *Journal of Environmental Chemical Engineering*, 7(5), 103395. <https://doi.org/10.1016/j.jece.2019.103395>

Prawira, J. (2017). Karakteristik Membran dan Pengaruhnya Terhadap Kinerja Proses Distilasi Membran. *Delft University of Technology*, 3(1), 0–11. <https://doi.org/10.5281/zenodo.1134034>

Purnomo, B. J., & Pichler, T. (2014). Geothermal systems on the island of Java, Indonesia. *Journal of Volcanology and Geothermal Research*, 285, 47–59. <https://doi.org/10.1016/j.jvolgeores.2014.08.004>

Quist-Jensen, C. A., Ali, A., Mondal, S., Macedonio, F., & Drioli, E. (2016). A study of membrane distillation and crystallization for lithium recovery from high-concentrated aqueous solutions. *Journal of Membrane Science*, 505, 167–173. <https://doi.org/10.1016/j.memsci.2016.01.033>

Ravindra Babu, B., Rastogi, N. K., & Raghavarao, K. S. M. S. (2008). Concentration and temperature polarization effects during osmotic membrane distillation. *Journal of Membrane Science*, 322(1), 146–153. <https://doi.org/10.1016/j.memsci.2008.05.041>

Roobavannan, S., Vigneswaran, S., & Naidu, G. (2020). Enhancing the performance of membrane distillation and ion-exchange manganese oxide for recovery of water and lithium from seawater. *Chemical Engineering Journal*, 396(May), 125386.

Rudiyanto, B., Illah, I., Pambudi, N. A., Cheng, C. C., Adiprana, R., Imran, M., Huat Saw, L., & Handogo, R. (2017). Preliminary analysis of dry-steam geothermal power plant by employing exergy assessment: Case study in Kamojang geothermal power plant, Indonesia. *Case Studies in Thermal Engineering*, 10(May), 292–301. <https://doi.org/10.1016/j.csite.2017.07.006>

Sabtanto J. (2020). *Makalah ilmiah*. 15, 89–100.

Setiawan, F. A., Rahayuningsih, E., Petrus, H. T. B. M., Nurpratama, M. I., & Perdana, I. (2019). Kinetics of silica precipitation in geothermal brine with seeds addition: minimizing silica scaling in a cold re-injection system. In *Geothermal Energy* (Vol. 7, Nomor 1). <https://doi.org/10.1186/s40517-019-0138-3>

Siekierka, A., Tomaszewska, B., & Bryjak, M. (2018). Lithium capturing from geothermal water by hybrid capacitive deionization. *Desalination*, 436(February 2018), 8–14. <https://doi.org/10.1016/j.desal.2018.02.003>

Smolinska, K., Bryjak, M., Wolska, J., & Kujawski, W. (2014). PH-sensitive membranes for lithium separation. *Materials Chemistry and Physics*, 148(3), 548–553. <https://doi.org/10.1016/j.matchemphys.2014.08.003>

Somrani, A., Hamzaoui, A. H., & Pontie, M. (2013). Study on lithium separation from salt lake brines by nanofiltration (NF) and low pressure reverse osmosis (LPRO). *Desalination*, 317, 184–192. <https://doi.org/10.1016/j.desal.2013.03.009>

Sujoto, V. S. H., Sutijan, Astuti, W., Sumardi, S., Louis, I. S. Y., & Petrus, H. T. B. M. (2022). Effect of Operating Conditions on Lithium Recovery from Synthetic Geothermal Brine Using Electrodialysis Method. *Journal of Sustainable Metallurgy*. <https://doi.org/10.1007/s40831-021-00488-3>

Sumarno, Ratnawati, & Nugroho, A. (2012). Recovery Garam Lithium dari Air Asin (Brine) dengan Metoda Presipitasi Sumarno, Ratnawati, A. Nugroho *). *Teknik*, 33(2), 66–70.

Sun, S. Y., Cai, L. J., Nie, X. Y., Song, X., & Yu, J. G. (2015). Separation of magnesium and lithium from brine using a Desal nanofiltration membrane. *Journal of Water Process Engineering*, 7, 210–217. <https://doi.org/10.1016/j.jwpe.2015.06.012>

Sun, S., Yu, X., Li, M., Duo, J., Guo, Y., & Deng, T. (2020). Green recovery of lithium from geothermal water based on a novel lithium iron phosphate electrochemical technique. *Journal of Cleaner Production*, 247, 119178. <https://doi.org/10.1016/j.jclepro.2019.119178>

Wang, H., Cui, J., Li, M., Guo, Y., Deng, T., & Yu, X. (2020). Selective recovery of lithium from geothermal water by EGDE cross-linked spherical CTS/LMO. *Chemical Engineering Journal*, 389(November 2019), 124410. <https://doi.org/10.1016/j.cej.2020.124410>

Wang, P., & Chung, T. S. (2015). Recent advances in membrane distillation processes: Membrane development, configuration design and application exploring. *Journal of Membrane Science*, 474, 39–56. <https://doi.org/10.1016/j.memsci.2014.09.016>

Zhang, Y., Peng, Y., Ji, S., Li, Z., & Chen, P. (2015). Review of thermal efficiency and heat recycling in membrane distillation processes. *Desalination*, 367, 223–239. <https://doi.org/10.1016/j.desal.2015.04.013>

Zhao, K., Heinzl, W., Wenzel, M., Büttner, S., Bollen, F., Lange, G., Heinzl, S., & Sarda, N. (2013). Experimental study of the memsys vacuum-multi-effect-membrane-distillation (V-MEMD) module. *Desalination*, 323, 150–160. <https://doi.org/10.1016/j.desal.2012.12.003>

Zhao, L. M., Chen, Q. B., Ji, Z. Y., Liu, J., Zhao, Y. Y., Guo, X. F., & Yuan, J. S. (2018). Separating and recovering lithium from brines using selective-electrodialysis: Sensitivity to temperature. *Chemical Engineering Research and Design*, 140(8), 116–127. <https://doi.org/10.1016/j.cherd.2018.10.009>