

DAFTAR PUSTAKA

- [1] Luderer, G., Vrontisi, Z., Bertram, C., Edelenbosch, O.Y., Pietzcker, R.C., Rogelj, J., De Boer, H.S., Drouet, L., Emmerling, J., and Fricko, O. (2018). Residual fossil CO₂ emissions in 1.5–2 C pathways. *Nat. Clim. Chang.* 8, 626–633.
- [2] Cavicchioli, R., Ripple, W.J., Timmis, K.N., Azam, F., Bakken, L.R., Baylis, M., Behrenfeld, M.J., Boetius, A., Boyd, P.W., Classen, A.T., et al. (2019). Scientists' warning to humanity: microorganisms and climate change. *Nat. Rev. Microbiol.* 17, 569–586.
- [3] Rahimi, M. (2020). Public awareness: what climate change scientists should consider. *Sustainability* 12, 8369.
- [4] Bui, M., Adjiman, C.S., Bardow, A., Anthony, E.J., Boston, A., Brown, S., Fennell, P.S., Fuss, S., Galindo, A., and Hackett, L.A. (2018). Carbon capture and storage (CCS): the way forward. *Energy Environ. Sci.* 11, 1062–1176.
- [5] Keith, D.W., Holmes, G., Angelo, D.S., and Heidel, K. (2018). A process for capturing CO₂ from the atmosphere. *Joule* 2, 1573–1594.
- [6] Azarabadi, H., and Lackner, K.S. (2020). Postcombustion capture or direct air capture in decarbonizing US natural gas power? *Environ. Sci. Technol.* 54, 5102–5111.
- [7] Bushuyev, O.S., De Luna, P., Dinh, C.T., Tao, L., Saur, G., van de Lagemaat, J., Kelley, S.O., and Sargent, E.H. (2018). What should we make with CO₂ and how can we make it? *Joule* 2, 825–832.
- [8] Smit, B., Reimer, J.A., Oldenburg, C.M., and Bourg, I.C. (2014). Introduction to carbon capture and sequestration Volume 1 (World Scientific).
- [9] Hammond, G.P., Spargo, J., 2014. The prospects for coal-fired power plants with carbon capture and storage: a UK perspective. *Energy Convers. Manag.* 86, 476–489.
- [10] Abanades, J., Arias, B., Lyngfelt, A., Mattisson, T., Wiley, D., Li, H., Ho, M., Mangano, E., Brandani, S., 2015. Emerging CO₂ capture systems. *International Journal of Greenhouse Gas Control* 40, 126–166.
- [11] Boot-Handford, M.E., Abanades, J.C., Anthony, E.J., Blunt, M.J., Brandani, S., Dowell, N.M., Fndez, J.R., Ferrari, M.-C., Gross, R., Hallett, J.P., Haszeldine, R.S., Heptonstall, P., Lyngfelt, A., Makuch, Z., Mangano, E., Porter, R.T.J., 2014. Carbon capture and storage update. *Energy Environ. Sci.* 7, 130–189.

- [12] Chalmers, H., Lucquiaud, M., Gibbins, J., Leach, M., 2009. Flexible operation of coal fired power plants with postcombustion capture of carbon dioxide. *Journal of Environmental Engineering ASCE* 135 (6), 449–458.
- [13] Cohen, S.M., Rochelle, G.T., Webber, M.E., 2012. Optimizing post-combustion CO₂ capture in response to volatile electricity prices. *International Journal of Greenhouse Gas Control* 8, 180–195.
- [14] Santori, G., Charalambous, C., Ferrari, M.-C., Brandani, S., 2018. Adsorption artificial tree for atmospheric carbon dioxide capture, purification and compression. *Energy* 162, 1158–1168.
- [15] Jiang, Z., Xiao, T., Kuznetsov, V.L., Edwards, P.P., 2010. Turning carbon dioxide into fuel. *Philos. Trans. R. Soc. A Math. Phys. Eng. Sci.* 358 (1923), 3343–3364.
- [16] Machado, A.S.R., Nunes, A.V.M., Ponte, M.N., 2018. Carbon dioxide utilization—electrochemical reduction to fuels and synthesis of polycarbonates. *J. Supercrit. Fluids* 134, 150–156.
- [17] Kumar, M., Sundaram, S., Gnansounou, E., Larroche, C., Thakur, I.S., 2018. Carbon dioxide capture, storage and production of biofuel and biomaterials by bacteria: a review. *Bioresour. Technol.* 247, 1059–1068
- [18] Jin, L., Sorensen, J.A., Hawthorne, S.B., Smith, S.A., Pekot, L.J., Bosshart, N.W., Burton-Kelly, M.E., Miller, D.J., Grabanski, C.B., Gorecki, C.D., Steadman, E.N., Harju, J.A., 2017. Improving oil recovery by use of carbon dioxide in the Bakken unconventional system: a laboratory investigation. *SPE Reserv. Eval. Eng.* 20 (3), 11
- [19] Alami, A.H., Hawili, A.A., Hassan, R., Al-Hemyari, M., Aokal, K., 2019. Experimental study of carbon dioxide as working fluid in a closed-loop compressed gas energy storage system. *Renew. Energy* 134, 603–611.
- [20] Pérez-Fortes, M., Schöneberger, J.C., Boulamanti, A., Tzimas, E., 2016. Methanol synthesis using captured CO₂ as raw material: techno-economic and environmental assessment. *Appl. Energy* 161, 718–732.
- [21] Bae, H., Park, J.-S., Senthilkumar, S., Hwang, S.M., Kim, Y., 2019. Hybrid seawater desalination-carbon capture using modified seawater battery system. *J. Power Sources* 410–411, 99–105.
- [22] Kang, D., Lee, M.-G., Jo, H., Yoo, Y., Lee, S.-Y., Park, J., 2017. Carbon capture and utilization using industrial wastewater under ambient conditions. *Chem. Eng. J.* 308, 1073–1080.
- [23] Theo, W.L., Lim, J.S., Hashim, H., Mustaffa, A.A., Ho, W.S., 2016. Review of pre-combustion capture and ionic liquid in carbon capture and storage. *Appl. Energy* 183, 1633–1663

- [24] Fogarasi, S., Cormos, C.-C., 2017. Assessment of coal and sawdust co-firing power generation under oxy-combustion conditions with carbon capture and storage. *J. Clean. Prod.* 142 (4), 3527–3535.
- [25] Lee, Z.H., Lee, K.T., Bhatia, S., Mohamed, A.R., 2012. Post-combustion carbon dioxide capture: evolution towards utilization of nanomaterials. *Renew. Sust. Energ. Rev.* 16 (5), 2599–2609.
- [26] Machado, A.S.R., Nunes, A.V.M., Ponte, M.N., 2018. Carbon dioxide utilization—electrochemical reduction to fuels and synthesis of polycarbonates. *J. Supercrit. Fluids* 134, 150–156.
- [27] Computational Chemistry Comparison and Benchmark DataBase, National Institute of Standards and Technology (Release 21 (August 2020), Standard Reference Database 101), <https://cccbdb.nist.gov/quadlistx.asp> (accessed Jan. 4, 2021).
- [28] Database of Zeolite Structures, Structure Commission of the International Zeolite Association (IZA-SC), <http://www.iza-structure.org/databases/> (accessed Jan. 5, 2021)
- [29] Ding, M., Flaig, R.W., Jiang, H.-L., and Yaghi, O.M. (2019). Carbon capture and conversion using metal-organic frameworks and MOFbased materials. *Chem. Soc. Rev.* 48, 2783– 2828.
- [30] Moghadam, P.Z., Li, A., Wiggin, S.B., Tao, A., Maloney, A.G.P., Wood, P.A., Ward, S.C., and Fairen-Jimenez, D. (2017). Development of a Cambridge Structural Database Subset: A Collection of Metal–Organic Frameworks for Past, Present, and Future. *Chem. Mater.* 29, 2618–2625.
- [31] Moghadam, P.Z., Li, A., Liu, X.-W., BuenoPerez, R., Wang, S.-D., Wiggin, S.B., Wood, P.A., and Fairen-Jimenez, D. (2020). Targeted classification of metal–organic frameworks in the Cambridge structural database (CSD). *Chem. Sci. (Camb.)* 11, 8373–8387.
- [32] Chung, Y.G., Haldoupis, E., Bucior, B.J., Haranczyk, M., Lee, S., Zhang, H., Vogiatzis, K.D., Milisavljevic, M., Ling, S., and Camp, J.S. (2019). Advances, Updates, and Analytics for the Computation-Ready, Experimental Metal–Organic Framework Database: CoRE MOF 2019. *J. Chem. Eng. Data* 64, 5985–5998.
- [33] Yang, X., Rees, R.J., Conway, W., Puxty, G., Yang, Q., and Winkler, D.A. (2017). Computational modeling and simulation of CO₂ capture by aqueous amines. *Chem. Rev.* 117, 9524–9593.
- [34] Lei, Z., Dai, C., and Chen, B. (2014). Gas solubility in ionic liquids. *Chem. Rev.* 114, 1289–1326.