

DAFTAR PUSTAKA

- Beh, J.J., Lim, J.K., Ng, E.P., dan Ooi, B.S., 2018, Synthesis and Size Control of Zeolitic Imidazolate Framework-8 (ZIF-8): From the Perspective of Reaction Kinetics and Thermodynamics of Nucleation, *Mater. Chem. Phys.*, 216 (2018), 393–401.
- Berens, S., Hillman, F., Abdul Hamid, M.R., Jeong, H.K., dan Vasenkov, S., 2021, Influence of 2-Ethylimidazole Linker-Doping in ZIF-8 Crystals On Intracrystalline Self-Diffusion of Gas Molecules by High Field Diffusion NMR, *Microporous Mesoporous Mater.*, 315 (September 2020), 110897.
- Bose, R., Ethiraj, J., Sridhar, P., Varghese, J.J., Kaisare, N.S., dan Selvam, P., 2020, Adsorption of Hydrogen and Carbon Dioxide in Zeolitic Imidazolate Framework Structure with SOD Topology: Experimental and Modelling Studies, *Adsorption*, 26 (7), 1027–1038.
- Chen, B., Yang, Z., Zhu, Y., dan Xia, Y., 2014, Zeolitic Imidazolate Framework Materials: Recent Progress in Synthesis and Applications, *J. Mater. Chem. A*, 2 (40), 16811–16831.
- Elfianuari, P., 2018, Sintesis Komposit MCM-41/ZIF-67 serta Kinerjanya sebagai Adsorben Methyl Orange dalam Air, *Skripsi*, Fakultas Ilmu Alam, Institut Teknologi Sepuluh Nopember, Surabaya.
- Fang, Z., Bueken, B., De Vos, D.E., dan Fischer, R.A., 2015, Defect-Engineered Metal-Organic Frameworks, *Angew. Chemie - Int. Ed.*, 54 (25), 7234–7254.
- Fischer, M., and Bell, R.G., 2014, Interaction of Hydrogen and Carbon Dioxide with Sod-Type Zeolitic Imidazolate Frameworks: A Periodic DFT-D Study, *CrystEngComm*, 16 (10), 1934–1949.
- García-Palacín, M., Martínez, J.I., Paseta, L., Deacon, A., Johnson, T., Malankowska, M., Téllez, C., dan Coronas, J., 2020, Sized-Controlled ZIF-8 Nanoparticle Synthesis from Recycled Mother Liquors: Environmental Impact Assessment, *ACS Sustain. Chem. Eng.*, 8 (7), 2973–2980.
- Garcia, H., and Navalon, S., 2018, *Metal-Organic Frameworks Applications in Separations and Catalysis*, Wiley-VCH, New York.
- Hanif, Q.A., Nugraha, R.E., dan Lestari, W.W., 2018, Kajian Metal–Organic Frameworks (MOFs) sebagai Material Baru Pengantar Obat, *ALCHEMY J. Penelit. Kim.*, 14 (1), 16-36.
- Hu, Y., Liu, Z., Xu, J., Huang, Y., dan Song, Y., 2013, Evidence of Pressure Enhanced CO₂ Storage in ZIF-8 Probed by FTIR Spectroscopy, *J. Am. Chem. Soc.*, 135 (25), 9287–9290.
- Imaninsa, N., 2016, Sintesis ZIF-8 dengan Penambahan Al₂O₃ serta Aktivitasnya sebagai Katalis pada Reaksi Esterifikasi PFAD (Palm Fatty Acid Distillate), *Skripsi*, FMIPA, Institut Teknologi Sepuluh Nopember, Surabaya.
- Jian, M., Liu, B., Liu, R., dan Qu, J., 2015, Water-Based Synthesis of Zeolitic Imidazolate Framework-8 with High Morphology Level at Room Temperature, *RSC Adv.*, 5 48433–48441.
- Jian, M., Liu, B., Liu, R., Qu, J., Wang, H., dan Zhang, X., 2015, Water-Based Synthesis of Zeolitic Imidazolate Framework-8 with High Morphology Level at Room Temperature, *RSC Adv.*, 5 (60), 48433–48441.



- Jofrishal dan Fajri, R., 2018, Metal Organic Framework (MOF): Sintesis Zeolitic Imidazolate Framework-8 (ZIF-8), *Chem. J. Pendidik. Kim. dan Ilmu Kim.*, 1 (2), 1–11.
- Lee, Y.R., Jang, M.S., Cho, H.Y., Kwon, H.J., Kim, S., dan Ahn, W.S., 2015, ZIF-8: A Comparison of Synthesis Methods, *Chem. Eng. J.*, 271 276–280.
- Liao, Y., Te, Dutta, S., Chien, C.H., Hu, C.C., Shieh, F.K., Lin, C.H., dan Wu, K.C.W., 2015, Synthesis of Mixed-Ligand Zeolitic Imidazolate Framework (ZIF-8-90) for CO₂ Adsorption, *J. Inorg. Organomet. Polym. Mater.*, 25 (2), 251–258.
- Linder-Patton, O.M., De Prinse, T.J., Furukawa, S., Bell, S.G., Sumida, K., Doonan, C.J., dan Sumby, C.J., 2018, Influence of Nanoscale Structuralisation on The Catalytic Performance of ZIF-8: A Cautionary Surface Catalysis Study, *CrystEngComm*, 20 (34), 4926–4934.
- Liu, H., Zhao, Y., Zhou, C., Mu, B., dan Chen, L., 2021, Microwave-Assisted Synthesis of Zr-Based Metal–Organic Framework (Zr-fum-fcu-MOF) for Gas Adsorption Separation, *Chem. Phys. Lett.*, 780 (2021), 138906.
- Malekmohammadi, M., Fatemi, S., Razavian, M., dan Nouralishahi, A., 2019, A Comparative Study on ZIF-8 Synthesis in Aqueous and Methanolic Solutions: Effect of Temperature and Ligand Content, *Solid State Sci.*, 91 (March), 108–112.
- McEwen, J., Hayman, J.D., dan Ozgur Yazaydin, A., 2013, A Comparative Study of CO₂, CH₄ and N₂ Adsorption in ZIF-8, Zeolite-13X and BPL Activated Carbon, *Chem. Phys.*, 412 72–76.
- Mote, V., Purushotham, Y., dan Dole, B., 2012, Williamson-Hall Analysis in Estimation of Lattice Strain in Nanometer-Sized Zno Particles, *J. Theor. Appl. Phys.*, 6 (1), 2–9.
- Nadjib, M., Ediati, R., Sulitiyo, Y.A., dan Nadifah, L., 2016, Sintesis Zeolitic Imidazolate Framework-8 (Zif-8) secara Solvothermal : Pengaruh Perbandingan Logam-Ligan Synthesis Zeolitic Imidazolate Framework-8 (Zif-8) in Solvothermal : The Effect Comparison of Metal-Ligand, *J. ILMU DASAR*, 17 (1), 53–57.
- Odoh, S.O., Cramer, C.J., Truhlar, D.G., dan Gagliardi, L., 2015, Quantum-Chemical Characterization of the Properties and Reactivities of Metal-Organic Frameworks, *Chem. Rev.*, 115 (12), 6051–6111.
- Pambudi, F.I., dan Prasetyo, N., 2022, Theoretical Investigation on The Structure of Mixed-Metal Zeolitic Imidazolate Framework and Its Interaction with CO₂, *Comput. Mater. Sci.*, 210 (111033), 1–8.
- Pangastuti, P., Mudjahid, M.N., dan Ediati, R., 2015, Sintesis Zif-8 dengan Metode Solvothermal dalam Pelarut Etanol dan Dimetilformamida, *J. Sains dan Seni ITS*, 4 (1), 13–16.
- Park, K.S., Ni, Z., Cote, A.P., Choi, J.Y., Huang, R., Uribe-Romo, F.J., Chae, H.K., O'Keeffe, M., dan Yaghi, O.M., 2006, ZIFs - First Synthesis, *Proc. Natl. Acad. Sci.*, 103 (27), 10186–10191.
- Paudel, H.P., Shi, W., Hopkinson, D., Steckel, J.A., dan Duan, Y., 2021, Computational Modelling of Adsorption and Diffusion Properties of CO₂ and CH₄ in ZIF-8 for Gas Separation Applications: A Density Functional Theory



- Approach, *React. Chem. Eng.*, 6 (6), 990–1001.
- Schott, J.A., Do-Thanh, C.L., Shan, W., Puskar, N.G., Dai, S., dan Mahurin, S.M., 2021, FTIR Investigation of the Interfacial Properties and Mechanisms of CO₂ Sorption in Porous Ionic Liquids, *Green Chem. Eng.*, 2 (4), 392–401.
- Stock, N., dan Biswas, S., 2012, Synthesis of Metal-Organic Frameworks (Mofs): Routes to Various MOF Topologies, Morphologies, and Composites, *Chem. Rev.*, 112 (2), 933–969.
- Sulistyo, Y.A., Ediati, R., Nadjib, M., dan Prasetyoko, D., 2015, Pola Pertumbuhan Kristal ZIF-8 Hasil Sintesis secara Solvotermal pada Suhu Rendah, *Prosiding*, FMIPA, Universitas Jember, Surabaya.
- Sumadiyasa, M., dan Manuaba, I.B.S., 2018, Penentuan Ukuran Kristal Menggunakan Formula Scherrer , Williamson-Hull Plot, dan Ukuran Partikel dengan SEM Determining Crystallite Size Using Scherrer Formula , Williamson-Hull Plot , and Particle Size with SEM, *Bul. Fis.*, 19 (1), 28–35.
- Suratman, A., Kunarti, E.S., Aprilita, N.H., dan Pamurtya, I.C., 2017, Adsorption of CO₂ by Alginate Immobilized Zeolite Beads,. In, *AIP Conference Proceedings*. FMIPA, Universitas Gadjah Mada, Yogyakarta.
- Svane, K.L., Bristow, J.K., Gale, J.D., dan Walsh, A., 2018, Vacancy Defect Configurations in the Metal-Organic Framework UiO-66: Energetics and Electronic Structure, *J. Mater. Chem. A*, 6 (18), 8507–8513.
- Tezerjani Akhundzabeh, A., Halladj, R., dan Askari, S., 2021, Different View of Solvent Effect on the Synthesis Methods of Zeolitic Imidazolate Framework-8 to Tuning the Crystal Structure and Properties, *RSC Adv.*, 11 (32), 19914–19923.
- Thomas, A., Maiyelvaganan, K.R., Kamalakkannan, S., dan Prakash, M., 2019, Density Functional Theory Studies on Zeolitic Imidazolate Framework-8 and Ionic Liquid-Based Composite Materials, *ACS Omega*, 4 (27), 22655–22666.
- Wibowo, A.H., Lestari, W.W., Teteki, F.J., Krisnandi, Y.K., dan Suratman, A., 2016, A Preliminary Study of Functional Coating Material of Polypropylene Itaconate Incorporated with [Cu₃(BTC)₂] MOF as CO₂ Adsorbent, *Prog. Org. Coatings*, 101, 537–542.
- Yudianto, D., Yudianto, D., dan Ediati, R., 2014, Sintesis dan Karakterisasi Ni-ZIF-8, *J. Sains dan Seni ITS*, 3 (2), C21–C24.
- Zhang, H., Liu, D., Yao, Y., Zhang, B., dan Lin, Y.S., 2015, Stability of ZIF-8 Membranes and Crystalline Powders in Water at Room Temperature, *J. Memb. Sci.*, 485 103–111.
- Zheng, W., Ding, R., Yang, K., Dai, Y., Yan, X., dan He, G., 2019, ZIF-8 Nanoparticles with Tunable Size for Enhanced CO₂ Capture of Pebax Based MMMs, *Sep. Purif. Technol.*, 111–119.