

## DAFTAR PUSTAKA

- Araújo Costa, M., Luan Sehn Canevesi, R., Cesar Palmieiri, M., Antonio Da Silva, E. and Bevilaqua, D. 2018. UV-Irradiated Strain of Acidithiobacillus ferrooxidans Improved Copper Bioleaching in Chalcopyrite. *Journal of Environmental Engineering (United States)*, 144(8).
- Bal, B., Ghosh, S. and Das, A.P. 2019. Microbial recovery and recycling of manganese waste and their future application: a review. *Geomicrobiology Journal*, 36(1), pp.85–96.
- Barboza, N.R., Guerra-Sá, R. and Leão, V.A. 2016. Mechanisms of manganese bioremediation by microbes: an overview. *Journal of Chemical Technology & Biotechnology*, 91(11), pp.2733–2739.
- Bose, J.L. 2016. Chemical and UV mutagenesis. *Methods in Molecular Biology*, 1373, pp.111–115.
- Buvelot, H., Roth, M., Jaquet, V., Lozkhin, A., Renzoni, A., Bonetti, E.J., Gaia, N., Laumay, F., Mollin, M., Stasia, M.J., Schrenzel, J., François, P. and Krause, K.H. 2021. Hydrogen Peroxide Affects Growth of *S. aureus* Through Downregulation of Genes Involved in Pyrimidine Biosynthesis. *Frontiers in Immunology*, 12(September), pp.1–13.
- Cárdenas, J.P., Moya, F., Covarrubias, P., Shmaryahu, A., Levicán, G., Holmes, D.S. and Quatrini, R. 2012. Comparative genomics of the oxidative stress response in bioleaching microorganisms. *Hydrometallurgy*, 127–128, pp.162–167.
- Das, A.P., Sukla, L.B. and Pradhan, N. 2012. Microbial Recovery of Manganese using *Staphylococcus Epidermidis*. *International Journal of Nonferrous Metallurgy*, 01(02), pp.9–12.
- Dong, Y., Lin, H., Wang, H., Mo, X., Fu, K. and Wen, H. 2011. Effects of ultraviolet irradiation on bacteria mutation and bioleaching of low-grade copper tailings. *Minerals Engineering*, 24(8), pp.870–875.
- Ghosh, S., Mohanty, S., Akcil, A., Sukla, L.B. and Das, A.P. 2016. A greener approach for resource recycling: Manganese bioleaching. *Chemosphere*, 154(July), pp.628–639.
- Ghosh, S. and Das, A.P. 2017. Bioleaching of manganese from mining waste residues using *Acinetobacter* sp. *Geology, Ecology, and Landscapes*, 1(2), pp.77–83.

- Ghosh, S. and Das, A.P. 2018. Metagenomic insights into the microbial diversity in manganese-contaminated mine tailings and their role in biogeochemical cycling of manganese. *Scientific Reports*, 8(1), pp.1–12.
- Guezennec, A., Jouliau, C., Jacob, J., Archane, A., Ibarra, D., Gregory, R., Bodéan, F., Hugues, P., Guezennec, A., Jouliau, C., Jacob, J., Archane, A. and Ibarra, D. 2017. Influence of dissolved oxygen on the bioleaching efficiency under oxygen enriched atmosphere. *Minerals Engineering*, 106, pp.64–70.
- Han, Y., Ma, X., Zhao, W., Chang, Y., Zhang, X., Wang, X., Wang, J. and Huang, Z. 2013. Sulfur-oxidizing bacteria dominate the microbial diversity shift during the pyrite and low-grade pyrolusite bioleaching process. *Journal of Bioscience and Bioengineering*, 116(4), pp.465–471.
- Jia, Y., Tan, Q., Sun, H., Zhang, Y., Gao, H. and Ruan, R. 2019. Sulfide mineral dissolution microbes: Community structure and function in industrial bioleaching heaps. *Green Energy and Environment*, 4(1), pp.29–37.
- Kang, J., Qiu, G., Gao, J., Wang, H., Wu, X. and Ding, J. 2009. Bioleaching of chalcocite by mixed microorganisms subjected to mutation. *Journal of Central South University of Technology*, 16(2), pp.218–222.
- Lokesh, G. and Ananthanarayana, S.R. 2008. Mutagenic Effect of Diethyl Sulphate ( DES ) on the Chromosomes of Silkworm Bombyx mori L ( Lepidoptera : Bombycidae ). *Journal of Applied Sciences and Environmental Management*, 12(3), pp.45–50.
- Lovley, D.R., Holmes, D.E. and Nevin, K.P. 2004. Dissimilatory Fe(III) and Mn(IV) reduction. *Advances in Microbial Physiology*, 49(2), pp.219–286.
- Marinho, H.S., Real, C., Cyrne, L., Soares, H. and Antunes, F. 2014. Hydrogen peroxide sensing, signaling and regulation of transcription factors. *Redox Biology*, 2(1), pp.535–562.
- Mohanty, S., Ghosh, S., Bal, B. and Das, A.P. 2018. A review of biotechnology processes applied for manganese recovery from wastes. *Reviews in Environmental Science and Bio/Technology*, 17(4), pp.791–811.
- Nastain, M. 2021. *Keragaman Bakteri Pengoksidasi Sulfur Secara Culturable dan Unculturable dari Sumber Air Panas Candi Gedong Songo*. Universitas Gadjah Mada.
- Nealson, K.H. 2006. The Manganese-Oxidizing Bacteria. *The Prokaryotes*, pp.222–231.

- Prasidya, D.A., Wilopo, W., Warmada, I.W. and Retnaningrum, E. 2019. Optimization of manganese bioleaching activity and molecular characterization of indigenous heterotrophic bacteria isolated from the sulfuric area. *Biodiversitas*, 20(7), pp.1904–1909.
- Retnaningrum, E. and Wilopo, W. 2019. Pyrolusite Bioleaching by an Indigenous *Acidithiobacillus* sp KL3 Isolated from an Indonesian Sulfurous River Sediment. *Indonesian Journal of Chemistry*, 19(3), p.712.
- Schippers, A., Hedrich, S., Vasters, J., Drobe, M., Sand, W. and Willscher, S. 2013. Biomining: Metal Recovery from Ores with Microorganisms. In: *Advances in biochemical engineering/biotechnology*. Springer-Verlag Berlin Heidelberg, Heidelberg, pp. 1–47.
- Schleifer, K.-H. 2009. Phylum XIII. Firmicutes Gibbons and Murray 1978, 5 (Firmacutes [sic] Gibbons and Murray 1978, 5). In: *Systematic Bacteriology*. Springer New York, New York, NY, pp. 19–1317.
- Sharma, N. and Eisele, T.C. 2021. Anaerobic reductive bioleaching of manganese ores. *Minerals Engineering*, 173, p.107152.
- Siezen, R.J. and Wilson, G. 2009. Bioleaching genomics. *Microbial Biotechnology*, 2(3), pp.297–303.
- Srichandan, H., Mohapatra, R.K., Parhi, P.K. and Mishra, S. 2019. Bioleaching approach for extraction of metal values from secondary solid wastes: A critical review. *Hydrometallurgy*, 189(July), p.105122.
- Tebo, B.M., Jhonson, H.A., McCarthy, J.K. and Templeton, A.S. 2005. Geomicrobiology of manganese (II) oxidation. *Trends Microbiology*, 13, pp.421–428.
- Touati, D. 2000. Iron and Oxidative Stress in Bacteria. *Archives of Biochemistry and Biophysics*, 373(1), pp.1–6.
- Travisany, D., Cortés, M.P., Latorre, M., Di Genova, A., Budinich, M., Bobadilla-Fazzini, R.A., Parada, P., González, M. and Maass, A. 2014. A new genome of *Acidithiobacillus thiooxidans* provides insights into adaptation to a bioleaching environment. *Research in Microbiology*, 165(9), pp.743–752.
- Urry, L.A., Cain, M.L., Wasserman, S.A., Minorsky, P.V. and Reece, J.B. 2017. *Campbell Biology* 11th ed., Pearson Higher Education, Inc., United State of America.
- Vera, M., Schippers, A. and Sand, W. 2013. Progress in bioleaching: Fundamentals and mechanisms of bacterial metal sulfide oxidation-part A. *Applied Microbiology and Biotechnology*, 97(17), pp.7529–7541.



- Wu, W., Li, X., Zhang, X., Gu, T., Qiu, Y., Zhu, M. and Tan, W. 2020. Characteristics of oxidative stress and antioxidant defenses by a mixed culture of acidophilic bacteria in response to  $\text{Co}^{2+}$  exposure. *Extremophiles*.
- Yuan, X., Xie, X., Fan, F., Zhu, W., Liu, N. and Liu, J. 2013. Effects of mutation on a new strain *Leptospirillum ferriphilum* YXW and bioleaching of gold ore. *Transactions of Nonferrous Metals Society of China*, 23(9), pp.2751–2758.