

REFERENCES

- Anbia, M., Ahmadian, F., and Rezaie, M., 2018, Preparation of titanium dioxide nanostructure from ilmenite through sulfate-leaching process and solvent extraction by D2EHPA, *Journal of the Iranian Chemical Society*, 15, 2533–2540.
- Aristanti, Y., Supriyatna, Y.I., Masduki, N.P., and Soepriyanto, S., 2018, Decomposition of banten ilmenite by caustic fusion process for TiO₂ photocatalytic applications,. In, *IOP Conference Series: Materials Science and Engineering*. Institute of Physics Publishing.
- Choi, I.H., Moon, G., Lee, J.Y., and Jyothi, R.K., 2019, Alkali fusion using sodium carbonate for extraction of vanadium and tungsten for the preparation of synthetic sodium titanate from spent SCR catalyst, *Sci Rep*, 9(1).
- Daba, K., Ramakokovhu, M.M., Mojisola, T., Shongwe, M.B., and Ntholeng, N., 2022, Iron Extraction from South African Ilmenite Concentrate Leaching by Hydrochloric Acid (HCl) in the Presence of Reductant (Metallic Fe) and Additive (MgSO₄), *Minerals*, 12.
- Firdaus, I., Stevani, A., Handayani, Y.N., Febriyanti, N., Marjunus, R., and Manurung, P., 2021, Synthesis and characterization of TiO₂ from Lampung's Iron Sand using Leaching Method with Temperature Variation, *Jurnal Fisika dan Aplikasinya*, 17, 37.
- Free, M.L. and Moats, M., 2014, Hydrometallurgical Processing,. In, *Treatise on Process Metallurgy*. Elsevier Ltd., pp. 949–982.
- Ginting, L.I.B., Manaf, A., Astuti, W., Supriyatna, Y.I., and Bahfie, F., 2023, Study of Titanium Dioxide (TiO₂) Extraction Process from Ilmenite Banten,. In, *IOP Conference Series: Earth and Environmental Science*. Institute of Physics.
- Gunarathne, V., Rajapaksha, A.U., Vithanage, M., Alessi, D.S., Selvasembian, R., Naushad, M., You, S., Oleszczuk, P., and Ok, Y.S., 2022, Hydrometallurgical processes for heavy metals recovery from industrial sludges, *Crit Rev Environ Sci Technol*, 52, 1022–1062.
- Hafizah, N.N., Musa, M.Z., Mamat, M.H., and Rusop, M., 2013, Characterization of titanium dioxide nanopowder synthesized by sol gel grinding method,. In, *Advanced Materials Research*., pp. 425–429.
- Haider, A.J., Jameel, Z.N., and Al-Hussaini, I.H.M., 2019, Review on: Titanium dioxide applications,. In, *Energy Procedia*. Elsevier Ltd, pp. 17–29.
- Manzoli, M., Freyria, F.S., Blangetti, N., and Bonelli, B., 2022, Brookite, a sometimes under evaluated TiO₂ polymorph, *RSC Adv*, 12, 3322–3334.
- Marjunus, R., Handayani, Y.N., Stevani, A., Febriyanti, N., Firdaus, I., and Manurung, P., 2021, Synthesis and characterization of TiO₂ from Lampung's ilmenite using leaching method with variation of time duration,. In, *Journal of Physics: Conference Series*. IOP Publishing Ltd.

- Mehdilo, A., Irannajad, M., and Rezai, B., 2015, Chemical and mineralogical composition of ilmenite: Effects on physical and surface properties, *Miner Eng*, 70, 64–76.
- Mulyono, J.E. and Soepriyanto, S., 2017, Synthesis and characterization of TiO₂ from ilmenite by caustic fusion process for photocatalytic application. In, *AIP Conference Proceedings*. American Institute of Physics Inc.
- Nguyen, T.H. and Lee, M.S., 2019, A Review on the Recovery of Titanium Dioxide from Ilmenite Ores by Direct Leaching Technologies, *Mineral Processing and Extractive Metallurgy Review*, 40, 231–247.
- Nuridin, M., Zaeni, A., Maulidiyah, Natsir, M., Bampe, A., and Wibowo, D., 2016, Comparison of conventional and microwave-assisted extraction methods for TiO₂ recovery in mineral sands, *Oriental Journal of Chemistry*, 32, 2713–2721.
- Putri, R.A., Tursiloadi, S., Nurrahmah, E.F., Liandi, A.R., and Arutanti, O., 2023, Synthesis of TiO₂-Based Photocatalyst from Indonesia Ilmenite Ore for Photodegradation of Eriochrome Black-T Dye, *Water Air Soil Pollut*, 234, .
- Racovita, A.D., 2022, Titanium Dioxide: Structure, Impact, and Toxicity, *Int J Environ Res Public Health*, 19, .
- Rzaij, J.M. and Abass, A.M., 2020, Review on: TiO₂ Thin Film as a Metal Oxide Gas Sensor, *Journal of Chemical Reviews*, 2, 114–121.
- Sampath, A.H.J., Wickramasinghe, N.D., de Silva, K.M.N., and de Silva, R.M., 2023, Methods of Extracting TiO₂ and Other Related Compounds from Ilmenite, *Minerals*, 13, .
- Skocaj, M., Filipic, M., Petkovic, J., and Novak, S., 2011, Titanium dioxide in our everyday life; Is it safe?, *Radiol Oncol*, 45, 227–247.
- Sukmara, S., Suyanti, Adi, W.A., and Manaf, A., 2022, Mineral analysis and its extraction process of ilmenite rocks in titanium-rich cumulates from Pandeglang Banten Indonesia, *Journal of Materials Research and Technology*, 17, 3384–3393.
- Supriyatna, Y.I., Astuti, W., Sumardi, S., Sudibyo, Prasetya, A., Ginting, L.I.B., Irmawati, Y., Asri, N.S., and Petrus, H.T.B.M., 2021, Correlation of Nano Titanium Dioxide Synthesis and the Mineralogical Characterization of Ilmenite Ore as Raw Material, *International Journal of Technology*, 12, 749–759.
- Thambiliyagodage, C., Wijesekera, R., and Bakker, M.G., 2021, Leaching of ilmenite to produce titanium based materials: a review, *Discov Mater*, 1, .
- Wahyuningsih, S., Pramono, E., Firdiyono, F., Sulistiyono, E., Rahardjo, S.B., Hidayattullah, H., and Anatolia, F.A., 2013, Decomposition of ilmenite in hydrochloric acid to obtain high grade titanium dioxide, *Asian Journal of Chemistry*, 25, 6791–6794.
- Yu, S. and Myint Wai, A., 2020, Upgrading of Titanium Dioxide from Ilmenite Concentrate, *ETJSJ*, 2(2), 245-249.

Zhang, W., Zhu, Z., and Cheng, C.Y., 2011, A literature review of titanium metallurgical processes, *Hydrometallurgy*, 108, 177–188.