

DAFTAR PUSTAKA

- Abdou, S. M., & Moharam, H. (2019). Characterization of table salt samples from different origins and ESR detection of the induced effects due to gamma irradiation. *Journal of Physics: Conference Series*, 1253(1).
- Adiatama, A. R., Susanti, R. F., Astuti, W., Petrus, H. T. B. M., & Wanta, K. C. (2022). Synthesis and Characteristic of Nanosilica From Geothermal Sludge: Effect of Surfactant. *Metalurgi*, 37(2), 73–86.
- Akbar, R., & Khasani. (2017). Pemodelan Lapangan Panasbumi Dieng, Indonesia Dengan Software Petrasim. *Prosiding Seminar Nasional XII ReTII*, 398-401.
- Allendorf, M. D., & Spear, K. E. (2001). Thermodynamic Analysis of Silica Refractory Corrosion in Glass-Melting Furnaces. *Journal of The Electrochemical Society*, 148(2), B59.
- Askeland, D. R., & Fulay, P. P. (2009). *Essentials of Materials Science and Engineering* (2nd ed.). Cengage Learning. USA
- Barsoum, M. W. (2003). *Fundamentals of Ceramics*. IOP Publishing. Cornwall UK.
- Bulina, N. V., Avakyan, L. A., Makarova, S. V., Orehov, I. B., & Bystrov, V. S. (2023). Structural Features of Oxyapatite. *Minerals*, 13(1), 1–15.
- Callister, W. D., & Rethwisch, D. G. (2009). *Material Science and Engineering : An Introduction* (8th ed.). John Wiley & Sons. USA
- Carter, C. B., & Norton, M. G. (2013). *Ceramic Materials Science and Engineering* (2nd ed.). Springer. New York.
- Chun, K. J., Choi, H. H., & Lee, J. Y. (2014). Comparison of mechanical property and role between enamel and dentin in the human teeth. *Journal of Dental Biomechanics*, 5(1), 1–7.
- Faizal, F., Turnip, T. G., Mulyana, C., Joni, I. M., & Panatarani, C. (2020). Dispersion of Geothermal Silica Scaling by Beads Milling Method. *AIP Conference Proceedings*, 2219.
- Fajri, N. R., Rusiyanto, R., Widodo, R. D., Sumbodo, W., & Fitriyana, D. F. (2021). Pengaruh Thermal Shock dan Komposisi Evaporation Boats, Semen Tahan Api, dan Pasir Silika terhadap Kekuatan Impact dan Foto Makro Lining Refractory. *Jurnal Rekayasa Mesin*, 12(1), 11.
- Fatma, Desnelli, Riyanti, F., Kamal, M., Mannan, M. R. A., & Hariani, P. L. (2021). Effect of Silica Addition on Mechanical Properties of Eggshell-Derived Hydroxyapatite. *Aceh International Journal of Science and Technology*, 10(2), 129–138.

- Fultz, B., & Howe, J. (2013). *Transmission Electron Microscopy and Diffractometry of Materials* (4th ed.). Springer Berlin Heidelberg.
- German, R. M. (1994). *Powder Metallurgy Science* (2nd ed.). Metal Powder Industries Federation.
- Greenwood, N.N., & Earnshaw A. (1997). *Chemistry of The Elements* (2nd ed.). Butterworth-Heinemann. Oxford.
- Groover, M. P. (2012). *Fundamentals of Modern Manufacturing Materials, Processes, and Systems* (5th ed.). John Wiley & Sons. USA.
- Gupta, A., Pandey, V., Yadav, M. K., Mohanta, K., & Majhi, M. R. (2022). A comparative study on physio-mechanical properties of silica compacts fabricated using rice husk ash derived amorphous and crystalline silica. *Ceramics International*, 48(23), 35750–35758.
- Hakim, A. F., Krismadiana, Sholihah, F., Ismawati, R., & Dewantari, N. (2022). Potensi dan Pemanfaatan Energi Panas Bumi di Indonesia Auzan. *Indonesian Journal of Conservation*, 11(2), 71–77.
- Hamzah, M. S., Wildan, M. W., Kusmono, K., & Suharyadi, E. (2022). Synthesis of Silica Nanoparticles from Silica Sand via Vibration Assisted Alkaline Solution Method. *International Journal of Engineering, Transactions A: Basics*, 35(7), 1300–1306.
- Hidayat, R., Indra, A., & Subardi, A. (2022). Peningkatan Kekuatan Sintered Body Hidroksiapatit (HA) dengan Penambahan Silika Sebagai Material Penguat. *ReTH*, 2022, 360–366.
- Hoepfner, T. P., & Case, E. D. (2003). The influence of the microstructure on the hardness of sintered hydroxyapatite. *Ceramics International*, 29(6), 699–706.
- Irwanda, G. F., Gusti, Y. R., & Arief, S. (2021). *Pemanfaatan Silica Scalling Energi Panas Bumi Menjadi Nanosilika Bernilai Jual Tinggi*. 4(1), 90–99.
- Jaafar, C. N. A., Zainol, I., & Aremu, O. O. (2018). Effect of Silica Fillers on Mechanical Properties of Epoxy/Kenaf Composites. *Journal of Physics: Conference Series*, 1082, 012006.
- Jenie, S. N. A., Ghaisani, A., Ningrum, Y. P., Kristiani, A., Aulia, F., & Petrus, H. T. M. B. (2018). Preparation of silica nanoparticles from geothermal sludge via sol-gel method. *AIP Conference Proceedings*, 2026, 1–6.
- Khonina, T. G., Chupakhin, O. N., Shur, V. Y., Turygin, A. P., Sadovsky, V. V., Mandra, Y. V., Sementsova, E. A., Kotikova, A. Y., Legkikh, A. V., Nikitina, E. Y., Bogdanova, E. A., & Sabirzyanov, N. A. (2020). Silicon-hydroxyapatite–glycerohydrogel as a promising biomaterial for dental applications. *Colloids and Surfaces B: Biointerfaces*, 189(February), 110851.
- Li, Y., Klein, C. P. A. T., Zhang, X., & de Groot, K. (1993). Relationship between

- the colour change of hydroxyapatite and the trace element manganese. *Biomaterials*, 14(13), 969–972.
- Madhukumar, K., Varma, H. K., Komath, M., Elias, T. S., Padmanabhan, V., & Nair, C. M. K. (2007). Photoluminescence and thermoluminescence properties of tricalcium phosphate phosphors doped with dysprosium and europium. *Bulletin of Materials Science*, 30(5), 527–534.
- Munasir, Triwikantoro, Zainuri, M., & Darminto. (2013). Perbandingan Massa Kalium Hidroksida Pada Ekstraksi SiO₂ Orde Nano Berbasis Bahan Alam Pasir Kuarsa. *Prosiding Seminar Nasional Sains Dan Pendidikan VII UKSW*.
- Muralithran, G., & Ramesh, S. (2000). The Effects of sintering temperature on the properties of hydroxyapatite. *Ceramics International*, 26(2), 221–230.
- Oktar, F. N., Agathopoulos, S., Ozyegin, L. S., Gunduz, O., Demirkol, N., Bozkurt, Y., & Salman, S. (2007). Mechanical properties of bovine hydroxyapatite (BHA) composites doped with SiO₂, MgO, Al₂O₃, and ZrO₂. *Journal of Materials Science: Materials in Medicine*, 18(11), 2137–2143.
- Pambudi, N. A., Itoi, R., Yamashiro, R., Alam, B. Y. C. S., Tusara, L., Jalilinasrabad, S., & Khasani, J. (2015). The behavior of silica in geothermal brine from Dieng geothermal power plant, Indonesia. *Geothermics*, 54, 109–114.
- Pazarlioglu, S. S. (2019). Hydroxyapatite/cerium oxide composites: Sintering, microstructural, mechanical and invitro bioactivity properties. *International Journal of Advances in Engineering and Pure Sciences*, 31(4), 295–304.
- Pazarlioglu, S., & Salman, S. (2017). Sintering effect on the microstructural, mechanical, and in vitro bioactivity properties of a commercially synthetic hydroxyapatite. *Journal of the Australian Ceramic Society*, 53(2), 391–401.
- Permana, M. A. I., Nandaliarsyad, N., Haq, A. Q. A., Nawansari, M., & Mulyana, C. (2017). Kajian Potensi Silica Scaling Pada Pipa Produksi Pembangkit Listrik Tenaga Panas Bumi (Geothermal). *Jurnal Material Dan Energi Indonesia*, 7(01), 38–43.
- Prabha, S., Durgalakshmi, D., Rajendran, S., & Lichtfouse, E. (2021). Plant-derived silica nanoparticles and composites for biosensors, bioimaging, drug delivery and supercapacitors: a review. *Environmental Chemistry Letters*, 19(2), 1667–1691.
- Pramanik, S., Agarwal, A. K., & Rai, K. N. (2005). Development of high strength hydroxyapatite for hard tissue replacement. *Trends in Biomaterials and Artificial Organs*, 19(1), 46–51.
- Richerson, D. W., & Lee, W. E. (2018). *Modern Ceramic Engineering Properties, Processing, and Use in Design* (4th ed.). CRC Press Taylor & Francis Group. Boca Raton, Florida.

- Ryan, E., & Yin, S. (2022). Compressive strength of β -TCP scaffolds fabricated via lithography-based manufacturing for bone tissue engineering. *Ceramics International*, 48(11), 15516–15524.
- Silviana, Hasbi, R. M., Sagita, C. P., Nurhayati, O. D., Fauzan, A., Suhartana, & Hatmoko, J. U. D. (2017). Silika Alam dari Limbah Padata Pengeboran Geotermal di Dieng Sebagai Silika Gel Melalui Proses Ramah Lingkungan. *Seminar Nasional Teknologi Industri Hijau 2*, 341–346.
- Singh, P., Srivastava, S., & Singh, S. K. (2019). Nanosilica: Recent Progress in Synthesis, Functionalization, Biocompatibility, and Biomedical Applications [Review-article]. *ACS Biomaterials Science and Engineering*, 5(10), 4882–4898.
- Smallman, R. E., & Bishop, R. J. (1999). *Modern Physical Metallurgy and Materials Engineering* (6th ed.). Butterworth-Heinemann. Oxford.
- Subekti, R. A., & Harmoko, U. (2020). Overview dan Analisis Potensi Pemanfaatan Langsung (Direct Use) Panas Bumi pada Wilayah Kerja Panas Bumi Dieng Jawa Tengah. *Jurnal Energi Baru Dan Terbarukan*, 1(3), 133–141.
- Suchanek, W., & Yoshimura, M. (1998). Processing and properties of hydroxyapatite-based biomaterials for use as hard tissue replacement implants. *Journal of Material Research*, 13(No.1), 94–117.
- Sugimoto, K., Zhou, Y., Galindo, T. G. P., Kimura, R., & Tagaya, M. (2023). Investigation of Surface Layers on Biological and Synthetic Hydroxyapatites Based on Bone Mineralization Process. *Biomimetics*, 8(2).
- Taha, M. A., Youness, R. A., & Ibrahim, M. (2020). Biocompatibility, physico-chemical and mechanical properties of hydroxyapatite-based silicon dioxide nanocomposites for biomedical applications. *Ceramics International*, 46(15), 23599–23610.
- Trzaskowska, M., Vivcharenko, V., & Przekora, A. (2023). The Impact of Hydroxyapatite Sintering Temperature on Its Microstructural, Mechanical, and Biological Properties. *International Journal of Molecular Sciences*, 24(6).
- Upadhyaya, G. S. (2002). *Powder Metallurgy Technology* (1st ed.). Cambridge International Science Publishing.
- Utami, W. S., Herdianita, N., & Atmaja, R. (2014). *The Effect of Temperature and pH on the Formation of Silica Scaling of Dieng Geothermal Field , Central Java , Indonesia*.
- Vollath, D. (2013). *Nanomaterials An Introduction to Synthesis, Properties, and Applications* (2nd ed.). Wiley-VCH.
- Wahyudi, A., Dessy, A., & Sariman. (2013). Preparation of Nano Silica from Silica Sand Through Alkali Fusion. *Indonesian Mining Journal*, 16(3), 149–153.

- Wang, J., & Shaw, L. L. (2009). Nanocrystalline hydroxyapatite with simultaneous enhancements in hardness and toughness. *Biomaterials*, 30(34), 6565–6572.
- Wildan, M. W., & Herliansyah, M. K. (2010). the Effect of Adding Small Amounts of Zno in Compacted Bovine Hydroxyapatite for Biomedical Applications. *Prosiding SNTTM IX*.
- Xu, J. L., & Khor, K. A. (2007). Chemical analysis of silica doped hydroxyapatite biomaterials consolidated by a spark plasma sintering method. *Journal of Inorganic Biochemistry*, 101(2), 187–195.
- Yudyanto, Y., Sugara, Y. D., & Hartatiek, H. (2016). Pengaruh Nanosilika terhadap Kekerasan dan Porositas Nanokomposit HA-SiO₂ Berbasis Batuan Onyx Bojonegoro. *JPSE (Journal of Physical Science and Engineering)*, 1(1), 13–18.