

DAFTAR PUSTAKA

- Adegoke, K.A., Iqbal, M., Louis, H., Jan, S.U., Maten, A., Bello, O.S. 2018. Photocatalytic Conversion of CO₂ Using ZnO Semiconductor by Hydrothermal Method. *Pakistan Journal of Analytical & Environmental Chemistry*. Vol. 19, no. 1, p.1-27.
- Al Emam, A. dan Sricharoen, N. 2016. Left Main Coronary Spasm: an Extremely Rare Entity with Possible Life-Threatening Complications. *International Journal of Angiology*. Vol. 25, p. 149-152.
- Ali, A., Pull, A.R., dan Zia, M. 2018. Elemental Zinc to Zinc Nanoparticles: is ZnO NPs Crucial for Life? Synthesis, Toxicological, and Environmental Concerns. *Nanotechnology Rev*. Vol. 7, no. 5, p. 413-441.
- Alsaggaf, M.S., Diab, A.M., El Saied, B.E.F., Tayel, A.A., Moussa, S.H. 2021. Application of ZnO Nanoparticles Phycosynthesized with *Ulva fasciata* Extract for Preserving Peeled Shrimp Quality. *Nanomaterials*. Vol. 11, no.385, p.1-15.
- Anjum, S., Hashim, M., Malik, S.A., Khan, M, Lorenzo, J.M., Abbasi, B.H., Hano, C. 2021. Recent Advances in Zinc Oxide Nanoparticles (ZnO NPs) for Cancer Diagnosis, Target Drug Delivery, and Treatment. *Cancers*. Vol.13, p.1-31.
- Amalia. 2011. Studi Potensi Limbah Debu Pengolahan Baja (*Dry Dust Collector*) sebagai Bahan Tambah pada Beton. *Poli Teknologi*. Vol.10, no.1, p. 75-82.
- Amaral, D.C., Lopes, G., Guilherme, L.R., Seyfferth, A.L. 2017. A New Approach to Sampling Intact Fe Plaque Reveals Si-Induced Changes in Fe Mineral Composition and Shoot As in Rice. *Environmental Science & Technology*. Vol. 51, p. 38-45.
- Anisya, L.N., Ashari, M.L., dan Dermawan, D. 2017. Pemanfaatan Limbah Padat Debu EAF Pada Perusahaan Peleburan Baja sebagai Pengganti Semen pada Campuran Beton. *Proceeding 1st Conference on Safety Engineering and Its Application*. p. 367-372. ISSN No. 2581 – 1770.
- Ariyandi, N., Sudaryanto, Kuniati, M., Mujamilah dan H, Ari. 2007. Pembuatan Nanosfer Berbasis Biodegradabel Polilaktat (PLA) dengan Metode Ultrasonik. *Indonesian Journal of Material Science*. Vol.8, no. 2, p. 182-186.
- Astuti, Widi, Haerudin, Agus, Eskani, Istihanah Nurul, Yuda, Aulia Pertiwi Tri, Nurjaman, Fajar,Setiawan, Joni,Lestari Dwi Wiji, Petrus, Himawan Tri Bayu Murti. 2020. Pengaruh Reagen Pelindian pada Sintesis ZnO dari Debu Tungku Busur Listrik. *Jurnal Rekayasa Proses*. Vol.14, no.1, p 82-90.
- Aulton, M.E., 2002. *Pharmaceutics : The Science of Dosage Form Design*. Second Edition. New York : Churchill Livingstone, pp.239.
- Borysiewicz, Michal A. 2019. ZnO as a Functional Material, a Review. *Crystals*. Vol. 9. No. 505, p. 1-29.
- Candani, D., Ulfah, M., Noviana, W., dan Zainul, R. 2018. *Pemanfaatan Teknologi Sonikasi*. Sumatera Barat : Universitas Negeri Padang
- Ditjen POM. 1995. Farmakope Indonesia. Edisi IV. Jakarta: Depkes RI. Halaman: 1066, 1084-1085, 1143-1144.

- Dhivya, R., Ranjani, J., Bowen, P.K. Rajendhran, J. Mayandi, J., Annaraj J. 2017. Biocompatible Curcumin Loaded PMMA-PEG/ZnO nanocomposite Induce Apoptosis and Cytotoxicity in Human Gastric Cancer Cells. *Materials Science & Engineering*.
- Eskani, I.N., Haerudin, A., Setiawan, J., Lestari, D.W., Isnaini., Astuti, W. 2020. Modification of Cotton Fabric by ZnO Nanoparticles for Producing an Antibacterial Natural Dyed Batik. *Earth and Environmental Science*. Vol.462.012031, p 1-8.
- Faisal, S., Jan, H., Shah, S.A., Shah, S., Khan, A., Akbar, M.T., Rizwan, M., Jan, F., Wajidullah, Akhtar, N., Khattak, A., Syed, S. 2021. Green Synthesis of Zinc Oxide (ZnO) Nanoparticles Using Aqueous Fruit Extracts of *Myristica fragrans*: Their Characterizations and Biological and Environmental Applications. *ACS Omega*. Vol. 6, p.9709-9722.
- Firdaus, Dzikri Anfasa. 2021. Biosintesis dan Karakterisasi Nanopartikel ZnO Menggunakan Ekstrak Kulit Labu Kuning (*Cucurbita moschata*) dan Aplikasi pada Dye Sensitized Solar Cell (DSSC). *Skripsi*. Jakarta : UIN Syarif Hidayatullah.
- Fujimoto, Romchat Chairaksa, Maruyama, Katsuya, Miki, Takahiro, Nagasaka. 2016. The selective alkaline leaching of zinc oxide from Electric Arc Furnace dust pre-treated with calcium oxide. *Hydrometallurgy*. Vol.159, p. 120-125.
- Garcia-Vaquero, M., Rajauria, G., O'Doherty, J.V., Sweeney, T. 2017. Polysaccharides from Macroalgae: Recent Advances, Innovative Technologies and Challenges in Extraction and Purification. *Food Research International*. Vol. 99, p.1011-1020.
- George, D., Maheswari, P.U., Begum, K.M.M.S. 2020. Chitosan-Cellulose Hydrogel Conjugated with L-Histidine and Zinc Oxide Nanoparticles for Sustained Drug Delivery: Kinetics and In-Vitro Biological Studies. *Carbohydrate Polymers*. Vol. 236.116101, p. 1-11.
- Ghaffari, S.B., Sarrafzadeh, M.H., Salami, M., Khorramizadeh., M.R. 2020. A pH-Sensitive Delivery System Based on N-succinyl Chitosan-ZnO Nanoparticles for Improving Antibacterial and Anticancer Activities of Curcumin. *International Journal of Biological Macromolecules*. Vol. 151, p.428-440.
- Ghaffari, S.B., Sarrafzadeh, M.H., Fakhroueian, Z., Khorramizadeh., M.R. 2019. Flower-like curcumin-loaded folic acid-conjugated ZnO-MPA- β -cyclodextrin nanostructures enhanced anticancer activity and cellular uptake of curcumin in breast cancer cells. *Materials Science & Engineering C*. Vol. 103, p. 1-15.
- Golmohamadi, A., Möller, G., Powers, J., Nindo, C. 2013. Effect of Ultrasound Frequency on Antioxidant Activity, Total Phenolic and Anthocyanin Content of Red Raspberry Puree. *Ultrasonics Sonochemistry*. Vol. 20, p.1316-1323.
- Hapsari, T.D. dan Puspitasari, I.M. 2018. Potensi Kitosan dalam Sistem Penghantaran Obat Tertarget pada Organ Paru Hati Ginjal dan Kolon. *Farmaka*. Vol.16, no.2, p.54-63.
- Hu, R.W., Carey, Elizabeth J., Lindor, Keith D., Tabibian, James H. 2017. Curcumin in Hepatobiliary Disease : Pharmacotherapeutic Properties and Emerging Potential Clinical Applications. *Annals of Hepatology*. Vol. 16, no. 6, p. 835-841.

- IISIA, 2021, *Produksi Baja Nasional Tahun 2020 Meningkat /Update Konsumsi Baja Tahun 2020 dan Outlook 2021*, Indonesian Iron & Steel Industry Association, dilihat 13 Juni 2021, <<https://iisia.or.id/post/view/id/produksi-baja-nasional-tahun-2020-meningkat-di-tengah-penurunan-konsumsi-baja-selama-pandemi-covid19>>.
- IISIA, 2021, *Pengelolaan Limbah Industri Besi dan Baja setelah Penerbitan PP No 22 Tahun 2021 UU Cipta Kerja*, Indonesian Iron & Steel Industry Association, dilihat 19 Juli 2021, < <https://www.iisia.or.id/post/view/id/pengelolaan-limbah-industri-besi-dan-baja-setelah-penerbitan-pp-no-22-tahun-2021-uu-cipta-kerja>>.
- Junaidi, A.B., Wahyudi, A., dan Umaningrum, D. 2015. Sintesis AgNPs secara Reduksi Kimia Menggunakan Capping Agent Kitosan dan Pereduksi Glukosa. *Sains dan Terapan Kimia*. Vol. 9, no 2, p. 70-80.
- Kalender, M., Tasar, M., Karaca, O.G., Ecevit, A.N., Darcin, O.T. 2016. Carotid patch and cerebrovascular event relation after carotid endarterectomy procedure. *The Journal of Cardiovascular Surgery*. Vol. 57, p.888-892.
- Karakus, Selcan. 2019. A Novel ZnO Nanoparticle as Drug Nanocarrier in Therapeutic Applications: Kinetic Models and Error Analysis. *Journal of The Turkish Chemical Society*. Vol.6, no.2, p.119-132.
- Kaviya, L., Roy, Anitha., Somasundaram, Jayalakshmi. 2020. Novel Trends in Drug Delivery and Application of Curcumin in Dentistry. *Indian Journal of Forensic Medicine & Toxicology*. Vol. 14, no. 4, p.4866-4872.
- Kundu, M., Sadhukan, P., Ghosh, N., Chatterjee, S., Manna, P., Das, J., Sil, P.C. 2019. pH-responsive and targeted delivery of curcumin via phenylboronic acid-functionalized ZnO nanoparticles for breast cancer therapy. *Journal of Advanced Research*. Vol.18, p.161-172.
- Liptai, Pavol, Dolnik, Bystryk, Briancin, Jaroslav, Havlik, Tomas. 2019. Hydrometallurgical Recycling of Electric Arc Furnace Dust. *Waste and Biomass Valorization*.
- Martien, R., Adhyatmika, Irianto, I.D.K., Farida, V., Sari, D.P. 2021. Perkembangan Teknologi Nanopartikel sebagai Sistem Penghantaran Obat. *Majalah Farmaseutik*. Vol.8, no. 1, p. 133-144.
- Metal Radar, 2022, *LME-PRICES*, dilihat 14 Januari 2022, <<https://www.metalradar.com/lme-prices/>>.
- Nestor G.G dan Borja G.E.V. 2003. The Situation of EAF Dust in Europe and The Upgrading of The Waelz Process. *Waste Treatment and Clean Technology*. Vol.2, no.99, p.1511–1520, ISSN: 0210-5621.
- Peshkovsky, A.S., Peshkovsky, S.L., Bystryak, S. 2013. Scalable High-Power Ultrasonic Technology for The Production of Translucent Nanoemulsions. *Chemical Engineering Process*. Vol. 69, p.77-82.
- POM. 2016. *Ibuprofen*. Pengawas Obat dan Makanan. dilihat 20 Juli 2021, <<http://ik.pom.go.id/v2016/katalog/05-Ibuprofen.pdf>>.
- Pratiwi, Rianta. 2014. Manfaat Kitin dan Kitosan bagi Kehidupan Manusia. *Oseana*. Vol.39, no.1, p.35-43.

- Puspawati, N, M., dan Simpen, I, N. 2010. Optimasi Deasetilasi Khitin dari Kulit Udang dan Cangkang Kepiting Limbah Restoran Seafood menjadi Khitosan melalui Variasi NaOH. *Jurnal Kimia*. Vol. 4, no. 1, p. 79-90.
- Rabima, R. dan Sari, M.P. 2019. Entrapment efficiency and drug loading of curcumin nanostructured lipid carrier (NLC) formula. *Pharmaciana*. Vol.9, no.2, p.299-306.
- Sar, S., Oqvist, L.S., Sparrman, T., Engstrom, F., Samuelsson, C. 2019. Characterization of Double Leached Waelz Oxide for Identification of Fluoride Mineral. *Metals*. Vol.9, no.361, p.1-10.
- Setha, B., Rumata, F., dan Silaban, B.Br. 2019. Karakteristik Kitosan dari Kulit Udang Vaname dengan Menggunakan Suhu dan Waktu yang Berbeda dalam Proses Deasetilasi. *Jurnal Pengolahan Hasil Perikanan Indonesia*. Vol.22, no.3, p.498-507.
- Shen, S., Wu, Y., Liu, Y. dan Wu, D., 2017. High Drug-Loading Nanomedicines: Progress, Current Status, and Prospects. *International Journal of Nanomedicine*, 12, p. 4085-4109.
- Singh, Th Abhishek, Das, Joydeep, dan Sil, Parames C. 2020. Zinc Oxide Nanoparticles: A Comprehensive Review on Its Synthesis, Anticancer and Drug Delivery Applications as Well as Health Risks. *Advances in Colloid and Interface Science*. Vol 286,102317, p. 1-20.
- Siswandono dan B. Soekardjo. 1998. *Kimia Medisinal 2*. Surabaya: Airlangga University Press.
- Sofilic, T, Rastovcan - Mioc, A, Cerjan - Stefanovic, S, Novosel - Radovic, V, Jenko M. 2004. Characterization of Steel Mill Electric Arc Furnace Dust. *Journal of Hazardous Materials*. B109, p. 59–70, ISSN: 0304-3894.
- Suprianto. 2015. Model Pelepasan Obat dari Matriks. *Bahan Ajar*. Medan : Stikes Helvetia.
- Thariq, M.R.A., Fadli, A., Rahmat, A., Handayani, R. 2016. Pengembangan Kitosan Terkini pada Berbagai Aplikasi Kehidupan: Review. Riau: Universitas Riau.
- Tonnesen, H.H. dan Karlsen, J. 1985. Studies on Curcumin and Curcuminoids;V. Alkaline Degradation of Curcumin, *Z. Lebens Unters Forsch*. Vol.180, p.132-134.
- Upadhyaya, L., Singh, J., Agarwal, V. 2014. In situ grafted nanostructured ZnO/carboxymethyl cellulose nanocomposites for efficient delivery of curcumin to cancer. *Journal of Polymer Research*. Vol.21, no.550, p.1-9.
- Wang, Y.J., Pan, M.H., Cheng, A.L., Lin, L.I., Ho, Y.S., Hsieh, C.Y. 1997. Stability of Curcumin in Buffer Solution and Characterization of Its Degradation Products. *J.Pharm. Biomed. Anal*. Vol. 15, no.12, p.1867-1876.
- Yunita, Nurlina, N., Syahbanu, I. 2020. Sintesis Nanopartikel Zink Oksida (ZnO) dengan Penambahan Ekstrak Klorofil dari Daun Suji sebagai Sumber Capping Agent. *Positron*. Vol. 10, no. 2, p.123-130.
- Yusof, N.A.A., Zain, N.M., dan Pauzi, N. 2019. Synthesis of Chitosan/Zinc Oxide Nanoparticles Stabilized by Chitosan via Microwave Heating. *Bulletin of Chemical Reaction Engineering & Catalysis*. Vol.14, no.2, p. 450-458.

Zainul, R. 2018. Determination of the half-life and the quantum yield of ZnO semiconductor photocatalyst in humic acid.