

DAFTAR PUSTAKA

- Alfarisa, S., Rifai, D. A., & Toruan, P. L. (2018). Studi difraksi sinar-x struktur nano seng oksida (zno). *Risalah Fisika*, 2(2), 53-57.
- Al-Harbi, L. M., Al-Shehri, S. M., & Khan, M. (2017). Influence of molybdenum doping on structural, optical and antibacterial properties of ZnO nanoparticles. *Materials Research Express*, 4(9), 095015.
- Ayeshamariam, A., Bououdina, M., Thirunavukkarasu, P., & Kennedy, L. J. (2015). Structural, optical and magnetic properties of transition metal (Mn, Co, Ni and Cu) doped ZnO nanoparticles – A comparative study. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 137, 1003–1012.
- Byrappa, K., Ohara, S., & Adschiri, T. (2007). Nanoparticles synthesis using supercritical fluid technology – towards biomedical applications [Review of Nanoparticles synthesis using supercritical fluid technology – towards biomedical applications]. *Advanced Drug Delivery Reviews*, 60(3), 299.
- Driss, D. B. T. A., & Bassou, djillali. (2015). Removal of Cationic Dye Methylene Blue from Aqueous Solution by Adsorption on Algerian Clay. *International Journal of Waste Resources*, 5(1)
- El Faham, Mohamed M., Ayman M. Mostafa, and Arafat Toghan, (2021). Facile synthesis of Cu₂O nanoparticles using pulsed laser ablation method for optoelectronic applications. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 630, 127562.
- Gupta, R. K., Behera, A., Farhad, S., & Nguyen, T. A. (2023). *Advanced flexible ceramics: Design, Properties, Manufacturing, and Emerging Applications*. Elsevier.
- Hasan, H. A., Alshekhli, A. F., Muhamad, M. H., & Abdullah, S. R. S. (2020). Development of Adsorbent from Phytoremediation Plant Waste for Methylene Blue Removal. *Journal of Ecological Engineering*, 21(8), 207.
- Hikmantiyah, N., Shalichah, C., & Khumaeni, A. (2019, March). Synthesis of colloidal zinc nanoparticles by pulse laser ablation technique using fundamental Nd: YAG laser 1064 nm. In *Journal of Physics: Conference Series*, 1170(1), 012063.
- Ismail, R. A., Ali, A. K., Ismail, M. M., & Hassoon, K. I. (2011). Preparation and characterization of colloidal ZnO nanoparticles using nanosecond laser ablation in water. *Applied Nanoscience*, 1, 45-49.
- Jaji, N.-D., Othman, M. B. H., Lee, H. L., Hussin, M. H., & Hui, D. (2021). One-pot solvothermal synthesis and characterization of highly stable nickel nanoparticles. *Nanotechnology Reviews*, 10(1), 318.

- Jia, X., Lin, Z., Yang, T. C.-J., Puthen-Veetil, B., Wu, L., Conibeer, G., & Perez-Wurfl, I. (2018). Post-Sputtering Heat Treatments of Molybdenum on Silicon Wafer. *Applied Sciences*, 8(9), 1692.
- Jung, I., Dikin, D. A., Piner, R. D., & Ruoff, R. S. (2008). Tunable Electrical Conductivity of Individual Graphene Oxide Sheets Reduced at “Low” Temperatures. *Nano Letters* 8(12), 4283
- Kahouli, M., Barhoumi, A., Bouzid, A., Al-Hajry, A. dan Guermazi, S. (2015). Structural and Optical Properties of ZnO Nanoparticles Prepared by Direct Precipitation Method. *Superlattices Microstructure*, 85, 7-23.
- Kakame, D. Y. N., Wuntu, A. D., & Koleangan, H. (2018). Degradasi dan adsorpsi zat warna methylene blue menggunakan komposit Ag-tulang ikan terkalsinasi. *Chemical Progress*, 11(2)
- Khatamian, M., Khandar, A.A., Divband, B., Haghghi, M. dan Ebrahimiasl, S. (2012). Heterogeneous Photocatalytic Degradation of in Aqueous Suspension by Ln (La^{3+} , Nd^{3+} or Sm^{3+}) doped ZnO Nanoparticles. *Journal of Molecular Catalysis A: Chemical*, 365, 120-127
- Khan, M. F., & Khan, M. A. (2023). Plant-Derived Metal Nanoparticles (PDMNPs): Synthesis, Characterization, and Oxidative Stress-Mediated Therapeutic Actions. *Future Pharmacology*, 3(1), 252.
- Khumaeni, A., Istanti, T., Hidayanto, E., & Nurhasanah, I. (2022). Characteristics of tin oxide nanoparticles produced by pulsed laser ablation technique in various concentrations of chitosan liquid and their potential application as an antibacterial agent. *Results in Engineering*, 100742.
- Kim, M., Osone, S., Kim, T., Higashi, H., & Seto, T. (2017). Synthesis of nanoparticles by laser ablation: A review. *KONA Powder and Particle Journal*, 2017009.
- Krishna, R., Agarwal, D. C., & Avasthi, D. K. (2021). Synthesis and modification of ZnO thin films by energetic ion beams. *Radiation effects and defects in solids*, 176(1), 145.
- Kumagai, H., Tamaki, Y., & Ishitani, O. (2022). Photocatalytic systems for CO₂ reduction: metal-complex photocatalysts and their hybrids with photofunctional solid materials. *Accounts of Chemical Research*, 55(7), 978-990.
- Kumar, R., Umar, A., Kumar, G., Akhtar, M.S., Wang, Y. dan Kim, S.H., 2015, Ce-Doped ZnO Nanoparticles for Efficient Photocatalytic Degradation of Direct Red-23 Dye, *Ceramics International*, 41,7773-7782.
- Kupracz, P., Coy, E., Grochowska, K., Karczewski, J., Rysz, J., & Siuzdak, K. (2020). The pulsed laser ablation synthesis of colloidal iron oxide nanoparticles for the enhancement of TiO₂ nanotubes photo-activity. *Applied Surface Science*, 530, 147097.

- Kuriakose, S., Sahu, K., Khan, S., Tripathi, A., Avasthi, D. K., & Mohapatra, S. (2016). Facile synthesis of Au-ZnO plasmonic nanohybrids for highly efficient photocatalytic degradation of methylene blue. *Optical Materials*, *64*, 47.
- Liu, M., Feng, S., Hou, Y., Zhao, S., Tang, L., Liu, J., Wang, F., & Liu, B. (2020). High yield growth and doping of black phosphorus with tunable electronic properties. *Materials Today*, *36*, 91.
- Mahardika, A. A. (2024). Sintesis dan karakterisasi komposit TiO₂/g-C₃N₄ berpori/ZSM-5 hierarki sebagai fotokatalis untuk meningkatkan fotodegradasi metilen biru (Tesis Magister, Institut Teknologi Sepuluh Nopember).
- Matos, R. S., Attah-Baah, J. M., Monteiro, M. D. S., Costa, B. F. O., Macêdo, M. A., Paz, S. da, Angélica, R. S., Souza, T. M. de, Țălu, Ș., Oliveira, R. M. P. B., & Ferreira, N. S. (2022). Evaluation of the Photocatalytic Activity of Distinctive-Shaped ZnO Nanocrystals Synthesized Using Latex of Different Plants Native to the Amazon Rainforest. *Nanomaterials*, *12*(16), 2889.
- Mydeen, S. S., Kumar, R. R., Kottaisamy, M., & Vasantha, V. S. (2020). Biosynthesis of ZnO Nanoparticles Through Extract from *Prosopis juliflora* Plant Leaf: Antibacterial Activities and A New Approach by Rust-Induced Photocatalysis. *Journal of Saudi Chemical Society*, *24*(5), 393–406.
- Nestor, J. A. (2020). Semiconductors and Society: A First-year Seminar. 2020 ASEE Virtual Annual Conference Content Access Proceedings.
- Padwal, Y., Chauhan, R., Panchang, R., Fouad, H., & Gosavi, S. W. (2024). Exploring Mo-ZnO@ NF for hydrogen generation and methylene blue remediation: sunlight-driven catalysis. *Frontiers in Physics*, *12*, 1416563.
- Rani, S., Sharma, M., & Umar, A. (2018). Structural and optical properties of Mo-doped ZnO nanoparticles. *Journal of Materials Science: Materials in Electronics*, *29*(18), 15745–15754.
- Ren, G., Han, H., Wang, Y., Liu, S., Zhao, J., Meng, X., & Li, Z. (2021). Recent Advances of Photocatalytic Application in Water Treatment: A Review [Review of Recent Advances of Photocatalytic Application in Water Treatment: A Review]. *Nanomaterials*, *11*(7), 1804
- Roco, M. C., Mirkin, C. A., & Hersam, M. C. (2011). Nanotechnology research directions for societal needs in 2020: summary of international study. *Journal of Nanoparticle Research*, *13*(3), 897
- Sener, E., Bayram, Ö., Hasar, U. C., & Şimşek, Ö. (2020). Structural and optical properties of RF sputtered ZnO thin films: Annealing effect. *Physica B Condensed Matter*, *605*, 412-421
- Singh, A., Singh, N. Á., Afzal, S., Singh, T., & Hussain, I. (2018). Zinc oxide nanoparticles: a review of their biological synthesis, antimicrobial activity,

- uptake, translocation and biotransformation in plants. *Journal of materials science*, 53(1), 185-201.
- Singh, M., Sinha, R., & Mehta, B. R. (2019). Structural, optical and photocatalytic properties of Mo-doped ZnO nanoparticles synthesized via sol-gel method. *Journal of Materials Science: Materials in Electronics*, 30(9), 8573–8583.
- Singh, R., & Soni, R. K. (2019). Laser-induced heating synthesis of hybrid nanoparticles. *Noble Metal-Metal Oxide Hybrid Nanoparticles*, pp. 195-238.
- Sochi, T. (2010). High throughput software for powder diffraction and its application to heterogeneous catalysis. *arXiv preprint arXiv:1012.4506*.
- Soussi, A., Haounati, R., Ait hssi, A., Taoufiq, M., Asbayou, A., Elfanaoui, A., & Ihlal, A. (2023). First Principle Study of Structural, Electronic, Optical Properties of Co-Doped ZnO. *Journal of Composites Science*, 7(12), 511.
- Sutanto, H., & Wibowo, S. (2015). *Semikonduktor Fotokatalis Seng Oksida dan Titania (Sintesis, Deposisi, dan Aplikasi)*. Semarang. Penerbit Telescope.
- Tan, C. Y., Wen, C., & Ang, H. Q. (2024). Influence of laser parameters on the microstructures and surface properties in laser surface modification of biomedical magnesium alloys. *Journal of Magnesium and Alloys*, 12(1), 72–97.
- Tehubijuluw, H., Subagyo, R., Yulita, M.F. *et al.* (2021). Utilization of red mud waste into mesoporous ZSM-5 for methylene blue adsorption-desorption studies. *Environ Sci Pollut Res*, 28, 37354–37370
- Thapa, S. (2016). *Defects and Ferromagnetism in Transition Metal Doped Zinc Oxide* (Master's thesis, Bowling Green State University).
- Thi, V.H. dan Lee, B. (2017). Effective Photocatalytic Degradation of Paracetamol Using La-Doped ZnO Photocatalyst Under Visible Light Irradiation, *Materials Research Bulletin*, 96, 171-182.
- Walle, C. G. V. de. (2001). Defect analysis and engineering in ZnO. *Physica B Condensed Matter*, 308, 899.
- Wen, J.Q., Zhang, J.M., Qiu, Z.G., Yang, X. dan Li, Z.Q. (2018). The Investigation of Ce doped ZnO Crystal: The Electronic, Optical and Magnetic Properties. *Physica B Condensed Matter*, 534, 44-50.
- Wong, V.-L., Tay, S. Y., & Lim, S. S. (2020). Enhanced removal of Methyl Orange from aqueous solution by Chitosan-CaCl₂ beads. *IOP Conference Series Materials Science and Engineering*, 736(2), 22049.
- Xiao, J., Liu, P., Wang, C. X., & Yang, G. W. (2017). External field-assisted laser ablation in liquid: An efficient strategy for nanocrystal synthesis and nanostructure assembly. *Progress in Materials Science*, 87, 140-220.
- Xu, Q., Zhang, L., Yu, J., Wageh, S., Al-Ghamdi, A. A., & Jaroniec, M. (2018). Direct Z-scheme photocatalysts: Principles, synthesis, and applications. *Materials Today*, 21(10), 1042.

- Yimin, D., Zou, J., Liu, D., Lanli, N., Li-ling, Z., Yi, Z., & Zhang, X. (2018). Preparation of Congo red functionalized Fe₃O₄@SiO₂ nanoparticle and its application for the removal of methylene blue. *Colloids and Surfaces A Physicochemical and Engineering Aspects*, 550, 90.
- Yogesh, G. K., Shukla, S., Sastikumar, D., & Koinkar, P. (2021). Progress in pulsed laser ablation in liquid (PLAL) technique for the synthesis of carbon nanomaterials: a review. *Applied Physics A*, 127(11), 1-40.
- Yu, C., Yang, K., Shu, Q. *et al.* (2012). Preparation, characterization and photocatalytic performance of Mo-doped ZnO photocatalysts. *Sci. China Chem.* 55, 1802–1810.
- Zhang, Z., Huang, J., Fang, Y., Zhang, M., Liu, K., & Dong, B. (2017). A Nonmetal Plasmonic Z-Scheme Photocatalyst with UV- to NIR-Driven Photocatalytic Protons Reduction. *Advanced Materials* (Vol. 29, Issue 18).