

DAFTAR PUSTAKA

- [1] Kusnaedi, *Mengolah Air Gambut dan Kotor untuk Air Minum*. Jakarta: Swadaya, 2006.
- [2] A. Rusmarkam, *Ilmu Kesuburan Tanah. Jurusan Ilmu Tanah*. Yogyakarta: UGM, 1998.
- [3] R. L. Kabra, K., Chaudhary, R. and Sawhney, “Treatment of Hazardous Organic and Inorganic Compounds through Aqueous-Phase Photocatalysis,” *Ind. Eng. Chem. Res.*, vol. 43, pp. 7683–7696, 2004.
- [4] J. Slamet, Nasution, H.W., Purnama, E., Kosela, S., gunlazuardi, “Photocatalytic reduction CO₂ on copper-doped Titania catalysts prepared by improved-impregnation method,” *Catal Comm*, vol. 6, pp. 313–9, 2005.
- [5] K. Fujishima, A., Honda, “Electrochemical photolysis of water at a semiconductor electrode. Nature,” vol. 238, pp. 37–8, 1972.
- [6] V. Sakthivel, S., Neppolian., B., Shankar, M. V, Arabindoo, B., Palanichamy, M., dan Murugesan, “Solar Photocatalytic Degradation of Azo Dye:Comparasion of Photocatalytic Effeciency of ZnO anf TiO₂,” *Sol. Energy Mater. Sol. Cell*, vol. 77, no. 1, pp. 65–82, 2003.
- [7] S. Mondal, S. R. Bhattacharyya, P. Mitra, “Effect of Al doping on microstructure and optical band gap of ZnO thin film synthesized by successive ion layer adsorption and reaction,” vol. 80, no. 2, pp. 315–326, 2003, [Online]. Available: <http://dx.doi.org/10.1007/s12043-012-0463-6>.
- [8] F. Juhra and S. Notodarmojo, “DEGRADASI ZAT WARNA PADA AIR GAMBUT MENGGUNAKAN METODE FOTOKATALITIK ZnO DEGRADATION COLOR SUBSTANCES IN PEAT WATER USING PHOTOCATALYTIC ZnO,” *Jukung (Jurnal Tek. Lingkungan)*, vol. 2, no. 2, pp. 42–51, 2016, doi: 10.20527/jukung.v2i2.2308.
- [9] D. G. Asteti, S. F., & Syarif, “PEMBUATAN FILM TIPIS TiO₂ FOTOKATALIS PADA KACA DAN APLIKASINYA UNTUK

DEGRADASI METIL BIRU.”

- [10] C. J. Brinker, “Dip coating. In Chemical solution deposition of functional oxide thin films,” pp. 233–261, 2013.
- [11] C. S. Brinker, C. J., Frye, G. C., Hurd, A. J., & Ashley, “Fundamentals of sol-gel dip coating,” *Thin Solid Films*, vol. 201, no. 1, pp. 97–108, 1991.
- [12] F. J. Stevenson, *Extraction, Fractionation and General Chemical Composition of Soil Organic Matter*. New York: John Wiley and Sons, 1982.
- [13] J. K. Behera, “Synthesis and Characterizations of ZnO Nanoparticles (Doctoral dissertation),” 2009.
- [14] J. Gunlazuardi, “Fotokatalis pada permukaan TiO₂ : Aspek dan Fundamentalnya,” *Semin. Nas. Kim. Fis. II*, pp. 14–15, 2001.
- [15] W. Andari, “Fotokatalis TiO₂-Zeolit Untuk Degradasi Metilen Biru,” Universitas Brawijaya, 2014.
- [16] K. Maeda, K., Teramura, K., Lu, D., Takata, T., Saito, N., Inoue, Y., & Domen, “Photocatalyst releasing hydrogen from water,” *Water*, vol. 440, no. 7082, pp. 295–296, 2006.
- [17] J. G. Fan, Z., & Lu, “Zinc oxide nanostructures: synthesis and properties.,” *J. Nanosci. Nanotechnol.*, vol. 5, no. 10, pp. 1561–1573, 2005.
- [18] Ü. Özgür *et al.*, “A comprehensive review of ZnO materials and devices,” *J. Appl. Phys.*, vol. 98, no. 4, pp. 1–103, 2005, doi: 10.1063/1.1992666.
- [19] H. B. A. Hamid, “Fabrication, structural and electrical characteristics of zinc oxide (ZnO) thin films by direct current sputtering,” *USM Thesis*, 2009.
- [20] A. Kolodziejczak-Radzimska and T. Jasionowski, “Zinc oxide-from synthesis to application: A review,” *Materials (Basel)*., vol. 7, no. 4, pp. 2833–2881, 2014, doi: 10.3390/ma7042833.
- [21] P. Campet, G., Jakani, M., Doumerc, J. P., Claverie, J., & Hagenmuller,

- “No Photoconduction mechanisms in titanium and rare earth n-type semiconducting electrodes with pyrochlore and perovskite structures.,” *Solid State Commun.*, vol. 42, no. 2, pp. 93–96, 1982.
- [22] M. R. Choi, W., Termin, A., & Hoffmann, “The role of metal ion dopants in quantum-sized TiO₂: correlation between photoreactivity and charge carrier recombination dynamics,” *J. Phys. Chem.*, vol. 98, no. 51, pp. 13669–13679, 2002.
- [23] S. Wang, X., Li, S., Yu, H., Yu, J., & Liu, “Ag₂O as a new visible-light photocatalyst: self-stability and high photocatalytic activity.,” *Chem. Eur. J.*, vol. 17, no. 28, pp. 7777–77780, 2011.
- [24] R. Nurul, “APLIKASI FOTOKATALIS NANOKOMPOSIT ZnO/MFe₂O₄ (M= Co, Ni, Mn, Zn) UNTUK DEGRADASI ASAM HUMAT DAN AIR RAWA GAMBUT DI BAWAH SINAR MATAHARI,” Universitas Andalas, 2016.
- [25] A. Hakim, A. R., & Haris, “Sintesis Fotokatalis ZnO-Al dan Aplikasinya pada Degradasi Fenol dan Reduksi Cd (II) secara Simultan,” *J. Kim. Sains dan Apl.*, vol. 19, no. 1, pp. 7–10, 2016.
- [26] A. R. Hakim and A. Haris, “Sintesis Fotokatalis ZnO-Al dan Aplikasinya pada Degradasi Fenol dan Reduksi Cd(II) secara Simultan,” *J. Kim. Sains dan Apl.*, vol. 19, no. 1, p. 7, 2016, doi: 10.14710/jksa.19.1.7-10.
- [27] “No Title.” <https://www.sciencedirect.com/topics/materials-science/thin-film-property> diakses 2 Februari 2020 pukul 19.32.
- [28] “No Title.” https://www.susumu.co.jp/germany/tech/know_how_02.php diakses 2 Februari 2020 pukul 20.01.
- [29] H. Palma, S., & Lhuissier, “Dip-coating with a particulate suspension,” *J. Fluid Mech.*, p. 869, 2019.
- [30] M. dan S. 1995 Mulja, “Analisis Instrumental,” Universitas Airlangga, 1995.

- [31] S. . Khopkar, *Konsep Dasar Kimia Analitik*. Jakarta: UI-Press, 1984.
- [32] D. Harvey, *Chemistry: Modern Analytical Chemistry First Edition*. The Mc, 2000.
- [33] H. Sastrohamidjojo, *Spektroskopi Inframerah*. Yogyakarta: Penerbit Liberty, 1992.
- [34] S. Giwangkara, *Spektrofotometer Infra Merah Transformasi Fourier (FTIR)*. EG, 2008.
- [35] K. Spectrometers, *FTIR Spectroscopy*. 2018.
- [36] S. Bunaciu, A. A., Aboul-Enein, H. Y., & Fleschin, “FTIR spectrophotometric methods used for antioxidant activity assay in medicinal plants,” *Appl. Spectrosc. Rev.*, vol. 47, no. 4, pp. 245–255, 2012.
- [37] D. Wulandari, “Instrumentasi Alat Laboratorium “Turbidimeter & Densitometer,” Politeknik Kesehatan Banjarmasin, 2014.
- [38] H. S. D. Anggoro, R. Syarifah, “Karakterisasi Pengaruh Temperatur Kalsinasi pada Intensitas Emisi Material Luminisensi ZnO:Zn,” *J. Fis. dan Apl.*, vol. 14, no. 3, 2018.
- [39] Suyanta, “Jurnal Managemen Operasional Laboratorium,” Yogyakarta, 2010.
- [40] I. Wiyono, N., Faturrahman, A., & Syauqiah, “Sistem pengolahan air minum sederhana (portable water treatment).,” *J. Konversi UNLAM*, vol. 6, no. 1, pp. 27–36, 2017.
- [41] Mustofa, “EFEK SPEKTRUM CAHAYA TERHADAP PERTUMBUHAN *Gracilaria verrucosa*,” pp. 1–79, 2013.