DAFTAR PUSTAKA

Ali, R. and Siew, 2006, Photodegradation of New Methylen Blue N in Aqueous Solution Using Zinc Oxide and Titanium Dioxide as Catalyst, *Jurnal Teknologi*, 45, 31–42.

Alsaad, A., 2014, Structural, Electronic and Magnetic Properties of Fe, Co, Mn-doped GaN and ZnO Diluted Magnetic Semiconductors, *Phys. B Condens. Matter*, 440, 1–9.

Ajmal, M., Adeel, S., Azeem, M., Zuber, M., Akhtar, N., and Iqbal, N., 2014, Modulation of Pomegranate Peel Colourant Characteristics for Textile Dyeing Using High Energy Radiations, *Ind. Crops Prod.*, 58, 188–193.

Bharat, T.C., Shubham, Mondal, S., Gupta, H.S., Singh, P.K., and Das, A.K., 2019, Synthesis of Doped Zinc Oxide Nanoparticles: A Review, *Mater. Today Proc.*, 11, 767–775.

Bhuiyan, M.R.A. and Rahman, M.K., 2014, Synthesis and Characterization of Ni Doped ZnO Nanoparticles, *Int. J. Eng. Manuf.*, 4, 10–17.

Budi, 2019, Sintesis Nanokomposit Fe_3O_4/TiO_2-PANI dan Aplikasinya untuk Reduksi Fotokatalitik Ion Pb(II), *Tesis*, Pascasarjana Kimia Universitas Gadjah Mada, Yogyakarta.

Cai, X., Y. Cai, Y. Liu, H. Li, F. Zhang, Y. Wang, 2013, Structural and Photocatalytic Properties of Nickel-Doped Zinc Oxide Powders with Variable Dopant Contents, *J. Phy. Chem. Sol.*, 74, 1196-1203.

Ciciliati, M.A., Silva, M.F., Fernandes, D.M., De Melo, M.A.C., Hechenleitner, A.A.W., and Pineda, E.A.G., 2015, Fe-doped ZnO Nanoparticles: Synthesis by A Modified Sol-Gel Method and Characterization, *Mater. Lett.*, 159, 84–86.

Cornell, RM., 2003, *The Iron Oxides: Structure, Properties, Reactions, Occurrences and Uses*, Wiley VCH, Germany.

Daoush, W. M., 2017, Co-Precipitation and Magnetic Properties of Magnetite Nanoparticles for Potential Biomedical Applications, *Int J Nanomedicine***,** 5(3), 3–8.

Diantariani, N.P., Iryanti, E.S., Widihati, I.A.G., 2013, Minimalisasi Limbah Tekstil Metylene Blue dan Congo Red melalui Fotodegradasi Menggunakan Komposit ZnO-Arang Aktif, *Laporan Hibah Bersaing*, Universitas Udayana, Denpasar.

Długosz, O., Szostak, K., Krupiński, M., and Banach, M., 2020, Synthesis of Fe_3O_4/ZnO Nanoparticles and Their Application for the Photodegradation of

Anionic and Cationic Dyes, *Int. J. Environ. Sci. Technol.*, 9, 170-174.

Fan, J.C., Ling, C.C., and Xie, Z., 2011, Fabrication and Characterization of As Doped p-Type ZnO Films Grown by Magnetron Sputtering, *Optoelectron. - Mater. Tech.*, 16, 393–420.

Ha, N. T., Nguyen, H. H., Nguyen, C., and Huynh, D. C., 2008, Effects of the Conditions of the Microemulsion Preparation on the Properties of Fe_3O_4 Nanoparticles, *J. Nat. Sci.*, 24, 9–15.

Hanafi, M.F. and Sapawe, N., 2020, Materials Today : Proceedings Influence of pH on the Photocatalytic Degradation of Methyl Orange Using Nickel Catalyst, *Mater. Today Proc.*, 31, 339–341.

Hasanpour, A., Niyaifar, M., Asan, M., and Amighian, J., 2013, Synthesis and Characterization of Fe_3O_4 and ZnO Nanocomposites by the Sol-gel Method, *J. Magn. Magn. Mater.*, 334, 41–44.

Haq, B.U., Ahmed, R., Shaari, A., Afaq, A., Tahir, B.A., and Khenata, R., 2015, First-principles Investigations of Mn Doped Zinc-blende ZnO Based Magnetic Semiconductors: Materials for Spintronic Applications, *Mater. Sci. Semicond. Process.*, 29, 256–261.

Kazeminezhad, I. and Sadollahkhani, A., 2016, Influence of pH on the Photocatalytic Activity of ZnO Nanoparticles, *J. Mater. Sci. Mater. Electron.*, 27, 4206–4215.

Khan, R., Shamshi Hassan, M., Uthirakumar, P., Yun, J.H., Khil, M.S., and Lee, I.H., 2015, Facile Synthesis of ZnO Nanoglobules and its Photocatalytic Activity in the Degradation of Methyl Orange Dye Under UV Irradiation, *Mater. Lett.*, 152, 163–165.

Kolodziejczak-Radzimska, A. and Jesionowski, T., 2014, Zinc Oxide-From Synthesis to Application: A Review, *Materials (Basel).*, 7, 2833–2881.

Kuriakose, S., Satpati, B., and Mohapatra, S., 2014, Enhanced Photocatalytic Activity of Co Doped ZnO Nanodisks and Nanorods Prepared by A Facile Wet Chemical Method, *Phys. Chem. Chem. Phys.*, 16, 12741–12749.

Lahmar, H., Benamira, M., Douafer, S., Messaadia, L., Boudjerda, A., and Trari, M., 2020, Photocatalytic Degradation of Methyl Orange on the Novel Hetero-System La_2NiO_4/ZnO Under Solar Light, *Chem. Phys. Lett.*, 742, 137132.

Li, G. and Liu, Y., 2013, Photocatalytic Degradation of Methyl Orange and Gas-Sensing Performance of Nanosized ZnO, *Mater. Sci. Semicond. Process.*, 16, 792–796.

Mena, A.C., Rtimi, S., Pulgarin, C., Lavanchy, J.C., and Kiwi, J., 2017, Grafted

Semiconductors on PE-Films Leading to Bacterial Inactivation: Synthesis, Characterization and Mechanism, *Colloids Surfaces A Physicochem. Eng. Asp.*, 519, 231–237.

Morais, A., Torquato, R.A., Silva, U.C., Salvador, C., and Chesman, C., 2018, Effect of Doping and Sintering in Structure and Magnetic Properties of the Diluted Magnetic Semiconductor ZnO:Ni, *Ceramica*, 64, 627–631.

Moskowitz, Bruce M., 1991, *Classes of Magnetic Materials*, USA.

Ohno, H., 1998, Making Nonmagnetic Semiconductors Ferromagnetic, *Science (80).*, 281, 951–956.

Pan, C., Yu, R., Niu, S., Zhu, G., and Wang, Z.L., 2013, Piezotronic Effect on the Sensitivity and Signal Level of Schottky Contacted Proactive Micro/Nanowire Nanosensors, *ACS Nano*, 7, 1803–1810.

Pascariu, P., Tudose, I.V., Suchea, M., Koudoumas, E., Fifere, N., and Airinei, A., 2018, Preparation and Characterization of Ni, Co Doped ZnO Nanoparticles for Photocatalytic Applications, *Appl. Surf. Sci.*, 448, 481–488.

Rame, R., Agus, P., Agung, B., dkk., 2017, Pengolahan Air Limbah Tekstil Berbasis Ozonisasi Katalitik Dengan Katalis Besi(III) Oksida (Fe_2O_3) dan Aluminium Oksida (Al_2O_3) Menggunakan Difuser Mikro, *J. Ind. Pollut.*, 8, 2.

Rana, A.K., Bankar, P., Kumar, Y., More, M.A., Late, D.J., and Shirage, P.M., 2016, Synthesis of Ni-doped ZnO Nanostructures by Low-Temperature Wet Chemical Method and their Enhanced Field Emission Properties, *RSC Adv.*, 6, 1–20.

Saffari, J., Mir, N., Ghanbari, D., Khandan-Barani, K., Hassanabadi, A., and Hosseini-Tabatabaei, M.R., 2015, Sonochemical Synthesis of Fe_3O_4/ZnO Magnetic Nanocomposites and their Application in Photo-Catalytic Degradation of Various Organic Dyes, *J. Mater. Sci. Mater. Electron.*, 26, 9591–9599.

Shaker, S., Zafarian, S., and Rao, K.V., 2013, Preparation and Characterization of Magnetite Nanoparticles by Sol-Gel Method for Water Treatment, *J. Inniv.*, 2(7), 2969–2973.

Sheng-Nan, S., Chao, W., and Zan-Zan, Z, 2014, Magnetic Iron Oxide Nanoparticles: Synthesis and Surface Coating Techniques for Biomedical Applications, *Chin. Phys. B*, 23(3), 1–19.

Shinde, D.R., Tambade, P.S., Chaskar, M.G., and Gadave, K.M., 2017, Photocatalytic degradation of Dyes in Water by Analytical Reagent Grade Photocatalysts – A comparative study, *Drink. Water Eng. Sci. Discuss.*, 10, 109–117.

Singh, S., Barick, K.C., and Bahadur, D., 2013, Fe_3O_4 Embedded ZnO Nanocomposites for the Removal of Toxic Metal Ions, Organic Dyes and Bacterial Pathogens, *J. Mater. Chem. A*, 1, 3325–3333.

Taufik, A. and Saleh, R., 2014, Sintesis, Karakterisasi Dan Aktivitas Fotokatalitik Nanopartikel Hybrid Oksida Besi-Oksida Tembaga-Oksida Seng, *Skripsi*, Fakultas MIPA Universitas Syiah Kuala, Lhokseumawe.

Torquato, R.A., Shirsath, S.E., Kiminami, R.H.G.A., and Costa, A.C.F.M., 2014, Synthesis and Structural, Magnetic Characterization Of Nanocrystalline Zn1-xMn_xO Diluted Magnetic Semiconductors (DMSs) Synthesized by Combustion Reaction, *Ceram. Int.*, 40, 6553–6559.

Tripathy, N., Ahmad, R., Eun Song, J., Ah Ko, H., Hahn, Y.B., and Khang, G., 2014, Photocatalytic Degradation of Methyl Orange Dye by ZnO Nanoneedle Under UV Irradiation, *Mater. Lett.*, 136, 171–174.

Witjaksono, A., 2011, Karakterisasi Nanokristalin ZnO Hasil Presipitasi dengan Perlakuan Pengeringan, Anil dan Pasca-Hidrotermal, *Tesis*, Fakultas Teknik Universitas Indonesia, Depok.

Yu, J. xia, Zhu, J., Feng, L. yuan, Cai, X. li, Zhang, Y. fei, and Chi, R. an, 2019, Removal of Cationic Dyes by Modified Waste Biosorbent Under Continuous Model: Competitive Adsorption and Kinetics, *Arab. J. Chem.*, 12, 2044–2051.