

DAFTAR PUSTAKA

- Adi, B.W., 2011, *Penyisihan Zat Organik Pada Air Limbah Industri Batik dengan Fotokatalis TiO₂*, Jurusan Teknik Lingkungan, FTSP-ITS.
- Alaerts, G., dan Sumestri, S., 1987. *Metode Penelitian Air*. Usaha Nasional Surabaya.
- Alsofi, L. R. M., 2013, The Effect of DC Sputtering Parameters and Al Doping on Conductivity and Transparency of TiO₂ Thin Films, *Disertasi*, FMIPA UGM.
- Aprilita, N.H., Kartini, I., and Ratnanigtyas, S.H., 2008, Self –cleaning Glass Based on Acid-Treated TiO₂ Films with Palmitic Acid as Model Polutan. *Indo. J. Chem*, 8(2), 200-206.
- Bahnemann, D.W., Kholuiskaya, S.N., Dillert, R., Kulak, A.I., and Kokorin, A.I., 2002, Photodesruction of Dichloroacetic Acid Catalyzed by Nanosized TiO₂ Particles, *Appl Catal B: Environ*, 36, 161-169.
- B. Barrocas, O.C. Monteiro, M.E. Melo Jorge, and S. Serio., 2013, Photocatalytic activity and reusability study of nanocrystalline TiO₂ films prepared by sputtering technique, *Appl.Surf.Sci*, 264, 111-116.
- Carliell, C.M., Barclay, S.J., Naidoo, No, Buckley, C.A., Mulholland, D.A., and Senior, E., 1995, Microbial Decolorization of reactive Red Dye Under Anaerobic Condition, *Water SA*, 21 (1), 61-69.
- Chang, H.T., Wu, N.M., Zhu, F., 2000, A Kinetic Model For Photocatalytic Degradation of Organic Contaminants in A Thin-Film TiO₂ Catalys, *Water Res.*, 34(2), 407-416.
- Cotton, F. A., Wilkinson, G., Murillo, C. A., and Bochmann, M., 1999, *Advanced Inorganic Chemistry*, 6th ed., John Willey & Sons Inc., VanCouver.
- Djarwanti, Cholid, S., and Yuniati, A., 2009, Degradasi Fotokatalitik Polutan Organik Dalam Air Limbah Menggunakan TiO₂ Nano Partikel Sistem Lapisan Tipis-Alir, *Jurnal Riset Industri*, Vol. III, No. 2, 109-117.
- Fatimah, I and Wijaya, K., 2005, *Sintesis TiO₂/Zeolit Sebagai Fotokatalis Pada Pengolahan Limbah Cair Industri Tapioka Secara Adsorpsi-Fotodegradasi*, Yogyakarta: TEKNOIN, Vol. 10, No. 4, Desember 2005, 257-267.
- Fujishima, A., and K. Honda., 1972, Electrochemical Photolysis of Water at a Semiconductor Electrode, *Nature*, 238, 37-38.

- Getoff, N, 1996, *Radiation Phys. & Chem.* 47
- Gunlazuardi, J., and Tjahjanto, R.T., 2001, Preparasi Lapisan TiO₂ Sebagai Fotokatalis: Keterkaitan Antara Ketebalan dan Aktivitas Fotokatalis *J. Penelitian*, UI, 5, 2, 81-91.
- Haza, S.K., 2004, Development of sputtering method for fabrication of gas sensors, (Unpublished doctoral dissertation), UGM, Yogyakarta, Indonesia.
- Hoffman, M.R., Martin, S.M., Choi, W., and D.W. Bahnemann., 1995, Environmental application of semiconductor photocatalysis, *Chem. Rev.*, 95, 69-96.
- J. Zheng, S.Bao, Y.Guo, P. Jin., 2014, TiO₂ films prepared by DC reactive magnetron sputtering at room temperature: Phase control and photocatalytic properties, *Surf.Coat.Technol.*, 240, 293-300.
- Krisnasiwi, I.F., 2013, Penurunan Nilai COD Limbah Cair Industri Obat Berbahan Hebal dengan Metode Fotodegradasi Terkatalisis TiO₂ dan Oksidasi Oleh Kaporit, *Tesis*, FMIPA UGM.
- Linsebigler, A, L., L. Guanguan, J. T. Yates., 1995, Photocatalysis on TiO₂ surface : principles, mechanism and selected results, *Chem. Rev*, 95, 735-758.
- Li, Y., Liu, J., and Jia, Z., 2006, Morphological Control and Photodegradation Behaviour of Rutile TiO₂ Prepared by A Low Temperature Process, *Mater. Lett*, 60, 13-14, 1753-1757, ISSN: 0167-577x
- Manurung, R., Hasibuan, R., Irvan., 2004, Perombakan Zat Warna Azo Reaktif Secara Anaerob-Aerob. Fak.Teknik, Jurusan Teknik Kimia, Universitas Sumatera Utara.
- Maissel, Leon, I, and Reinhard Glang, 1970, *Handbook of Thin Film Technology*, New York McGraw-Hill, Inc.
- Mondal, S., 2008, Methods of Dye Removal from Dye House Effluent: An overview, *Environ.Eng.Sci.*, 25 (3): 383-396, ISSN: 1092-8758
- Samet, L., Ben, J.B., Chtouroub, R., Marchc, K., and Stephanc, O., 2013, Heat Treatment Effect on the Physical Properties of Cobalt Doped TiO₂, Sol-gel Mater. *Mater. Charact*, 85, 1-12.
- Selcuk, H., Sene, J., J.Zanoni, M. V. B., Sarikaya, H. Z., and Anderson, M.A., 2004, Behaviour of Bromide in the Photoelectrocatalytic Process and Bromine Generation Using Nanoporous Titanium Dioxide Thin-Film Electrodes, *Chemosphere*, 54: 969-974.

- SNI 6989.2:2009. Air dan Air Limbah Bagian 2 : Cara Uji Kebutuhan Oksigen Kimiawi (*Chemical Oxygen Demand/COD*) dengan Refluks Tertutup secara Spektrofotometri.
- Spadaro, J.T., Isabelle, L and Renganathan, V., 1994, *Environ. Sci. & Techno.*, 28, 1389-1393.
- S. Serio, M.E. Melo Jorge, M. J. P. Maneira, Y. Nunes., 2011, Influence of O₂ partial pressure on the growth of nanostructured anatase phase TiO₂ thin films prepared by DC reactive magnetron sputtering, *Materials Chem. Phys.*, 126, 73-81.
- Sudjatmoko, 2003, *Teknologi Sputtering* (Diktat Kuliah Workshop Sputtering Untuk Rekayasa Permukaan Bahan). Yogyakarta: Penerbit BATAN.
- Sumarni, 2012, Adsorpsi Zat Warna dan Zat Padat Tersuspensi Dalam Limbah Cair Industri Batik, Prosiding Seminar Nasional *Aplikasi Sains & Teknologi* (SNAST), Periode III, ISSN: 1979-911X
- Surat Keputusan Menteri Negara Lingkungan Hidup No 51/MenLH/10/1995 tentang Baku Mutu Limbah Cair Bagi Kegiatan Industri.
- Syah, Y., Hamami, R. K. Lina., 2007, Degradasi Zat Warna Tekstil Congo Red Secara Fotokatalitik Menggunakan Lapis Tipis TiO₂ Pada Kolom Gelas, *J. Kimia Lingkungan*, Vol. 9, No.1.
- Utami, C., 2014, Pengaruh Konsentrasi Co, suhu kalsinasi dan pH pada Sintesis Co-TiO₂ dengan metode sol gel, *Tesis*, FMIPA UGM.
- Vijayalaksmi, R., and Rajendran, V., 2012, Synthesis and characterization of nano-TiO₂ via different methods, *Arch.Appl.Sci, Res*, 4 (2): 1183-1190
- Wasa, K and Hayakawa, S., 1992, *Handbook of sputter deposition technology principles, technology and application*, Noyes Publications, USA.
- Ye Q, Liu P. Y, Tang Z. F, Zhail, 2007, Hydrophilic properties of nano-TiO₂ thin films deposited by RF magnetron sputtering, *Vacuum*, 81, 5, 627-31.
- Yulianto, A., Hakim, L., Purwaningsih, I., Pravitasari, V. A., 2009, Pengolahan Limbah Cair Industri Batik Pada Skala Laboratorium dengan Menggunakan Metode Elektrokoagulasi, *J. Teknologi Lingkungan.*, Vol. 5, No. 1.
- Zaoyan, Y., Ke, S., Guangliang, S., Fan, Y” Jinshan, D, and Haunian, M., 1992, Anaerobic-aerobic Treatment of a Dye Wastewater by Combination of RBC with Activated Sludge, *Wat. Sci. Tech.*, 26 (9-11), 2093-2096.