DAFTAR PUSTAKA

Alfanaar, R., 2014, Studi Adsorpsi dan Desorpsi Reduktif pada Pembentukan Nanopartikel Emas dari Printed Circuit Boards, *Tesis*, FMIPA, Universitas Gajah Mada, Yogyakarta.

Andreani, A. S., 2015, Adsorpsi Reduktif $[AuCl_4]^-$ oleh Asam Askorbat Terimobilisasi pada Mg-Al Ht dan Recovery Emas Hasil Reduksunya Menggunakan Natrium Sitrat. *Skripsi*. FMIPA, Universitas Gajah Mada, Yogyakarta.

Atkins, P. W., 1999, Kimia Fisika, (diterjemahkan oleh : Kartahadiprojo Irma I), edisi ke-2 *Erlangga*, Jakarta.

Awaludin, R., 2009, Pembuatan Nanopartikel Emas Radioaktif dengan Aktivasi Neutron, *Makara, Teknologi, Vol 13, No 1*, 42-46.

Behnamfard, A., Salarirad, M., M., dan Veglio, F., 2013, Process Development for Recovery of Copper and Precius Metals from Waste Printed Circuit Boards with Emphasize on Palladium and Gold Leaching and Precipitation, *Waste Manag.*, 33, 104-112.

Benito, P., Guinea, I., Labajos, F., M., Rocha, J. dan Rives, V., 2008, Microwave Hydrothermally Aged Zn Al Hydrotalcite-like Compounds: Influence of the Composition and the Irradiation Conditions, *Micropor Mesopor Mat*., 110, 292-302.

Berber, M., R., Hafez., I. H., Minagawa, K., Katoh, M., Mori, T. dan Tanaka, M., 2013, Uniform Nanoparticles of Hydrotalcite-like Mater and their Textural Properties at Optimized Conditions of Urea Hydrotermal Treatment. *J. Mol. Struct*., 1033, 104-112.

Cabrera, L.,Gutierrez., S.,Herrasti, P., dan Reyman,D., 2010, Sonoelectrochemical Synthesis of Magnetite, *Physics Procedia*, 3, 89-94.

Chang, Q, Zhu, L., Luo, Z., Lei, M., Zhang, S., dan Tang, H., 2011, Sono-assisted Preparation of Magnetic Magnesium-Aluminium Layer Double Hydroxides and Their Aplication for Removing Fluoride, *Ultrason. Sonochem*., 18, 553-561.

Cotton, F.A., Wilkison, G., Murillo,C., dan Bacmann, M., 1999, Advance Inorganik Chemistry 6th ed., John Wiley & Sons. Inc., New York.

Dang.F., Enomoto.N., Hojo.J., Enpuku.K., 2009, Sonochemical synthesis of monodispersed magnetite nanoparticles by using an ethanol-water mixed solvent, *Ultrason.Sonochem*. 16, 649-654.

Dang.F., Enomoto.N., Hojo.J., Enpuku.K., 2010, Synthesis of monodispersed cubic magnetite particles through the addition of small amount of Fe^{3+} into $Fe(OH)_2$ suspension, *J. Cryst. Growth*, 312, 1736-1740.

El-kharrag, R., Amin, A., dan Greish, Y.E., 2011, Low Temperatur Synthesis of Monolithic Mesoporous Magnetite Nanoparticels, *Ceram. Int*., 38, 627-634

Fajaro, F., Setyawan, H., Winardi, S., Widyastuti, Raharjo, W., dan Santosa, E.,2009, Sintesis Nanopartikel Magnetit dengan Metode Elektrokimia Sederhana, *Jurnal Nanosains & Teknologi,* Edisi Khusus, Agustus 2009.

Geng, C., Xu, T., Li Y., Chang, Z., Sun, X. dan Lei, X.,2013, Effect of Synthesis Method on Selective Adsorbtion of Thiosulfate by Calcined MgAl-Layer Double Hydroxides. *J. Chem. Eng*., 232,510-518.

Ho, Y.S., 2006, Review of Second-Orde Models for Adsorpsi System, *J. Hazard. Mater.*, 36, 681-689.

Huang, K., Guo, J. dan Xu, Z., 2009, Recycing of waste printed circuit board : a review of corrent technologies and treatment status in China., *J. Hazard, Mater.*, 164, 399-408.

Hu, D., Wang, Y., dan Song, Qi., 2009, Weakly Magnetic Field-assited Synthesis of magnetite nano-particles in oxidative co-precipitation, *Particology* 7, 363-367.

Ikhsan, N.A., 2011, Kajian Adsorpsi-Desorpsi $[AuCl_4]^-$ pada Mg/Al HT, *Tesis*, FMIPA Universitas Gajah Mada, Yogyakarta.

Iwasaki, T., Kosaka, K., Yabuuchi, T., Watano, S., Yanagida, T. dan Kawai T., 2009, Novel mechanochemical process for synthesis of magnetite nanoparticles using coprecipitation method, *Adv. Power, Technol.*, 20, 521-528.

Jin, X., Bailey, Y.S., dan Lynch, A.T., 1996, Kinetics of Single and Multiple Metal Ion Sorption Processeson Humic Substances, *Soil Sci*., 8, 161-509.

Khollam.,Y.B., Dhage.S.R., Potdar.H.S., Deshpande.S.B., Bakare.P.P., Kulkarni.S.D. dan Date.S.K., 2002, Microwave hydrothermal preparation of submicron-sized spherical magnetite (Fe_3O_4) powders, *Mater. Lett.*, *56*, 571-577.

Kimling , J., Maier, M., Okenve, B., Kotaidis ,V., Ballot ,H., dan Plech, A., 2006, Turkevich Method for Gold Nanoparticle Synthesis Revisited, *J. Phys. Chem..*, B.110,15700-15707.

Kloprogge J.T., Weler, M., Crespo, I., Ulibarri M.A., Barriga C., Rives V., Wartens, W.M. dan Frost, R.L., 2004., *J.Solid State Chem*., 177, 1382-1387.

Kovanda, F., Kolousek, D., Cilova, Z., dan Hulinsky, V., 2005, Crystallization of Synthetic Hydrotalcite Under Hydrothermal Condition, *Appl. Clay Sci.*, 28, 101-109.

Li, J.H., Hong, R.Y., Li, H.Z., Ding, J., Zheng, Y., dan Wei, D.G., 2009, Simpel Synthesis and magnetic properties of Fe_3O_4/$BaSO_4$ Multi-core/ Shell Particle, *J. Mater. Chem*., 113, 40-144.

Mejewski, P. dan Thierry., 2007, Functionalized Magnetite Nanoparticles Synthesis, Properties, and Bio Applications 32 (3-4), 203-215.

Meng, J., Yang, G., Yan, L.M., dan Wang, X., 2005, Synthesis and Characterization of Magnetic Nanometer Pigmen Fe_3O_2, *Dyes and Pigments*, 66,109-133.

Ogata, T., dan Nakato, Y., 2005, Mechanisms of Gold Recovery from Aqueous Solutions using a Novel Tinnin Gel Adsorbent Synthezised from Natural Condensed Tinnin, *Water Res.*, 39, 4281-4286.

Oscik J., 1982, Adsorption, Jonh Willey and Sons. *Inc.*, New York.

Othman, M. R., Rasid, N. M. dan Fernando, W. J. N., 2006, Effects of Thermal Treatment on the Micro-structures of co-precipitated and Sol-gel Synthesized (Mg-Al) Hydrotalcites. *Microporous Mesoporous Mat.*, 93, 23-28.

Paclawski, K., dan Fitzner, K., 2004, Kinetic of Gold (III) Chloride Complex Reduction Using Sulfur (IV), *Metall. Trans. B*, 35 B, 1071-1085.

Patungwasa, W., dan Hodak, J. H., 2007, pH tunable morphology of the gold nanoparticles produced by citrate reduction. *Mater. Chem. Phys.*, 108, 45–54.

Pavlovic, I., Barringa, C., Hermosin, M.C., Cornejo, J., dan Ulibari, M.A., 2005, Adsorption of acidic pesticides 2,4-D, Clopyratid and Picloran on calcined hydrotalcite, *Apply Clay Sci.*, 30, 125-133.

Petchroen, K. dan Sirivat, A., 2012, Synthesis and Characterization of Magnetic Nanoparticles via the Chemical Co-preparation Method, *Mat. Sci. Eng.*, B 177, 421-427.

Philip, D., 2008, Synthesis and Spectroscopic Characterization of Gold Nanoparticles. *Spectrochim. ACTA Mol Biomol Spectrose*, 71, 80-5.

Roto, Tahir, I., Solikhah, U.N., 2008, Sintesis HT Zn-Al-SO_4 sebagai Agen Pertukaran Anion untuk Aplikasi Pengolahan Polutan Heksacyanoferrat (II). *Indo. J. Chem.*, 8 (3), 307-313.

Santosa, S.J., Siswanta, D., Sudiono, S., dan Sehol, 2007, Synthesis and Utilization of Chitin-humic Acid Hybrid as adsorbent for Cr(III). *Surf. Sci.*, 601, 5148-5154.

Silalahi, D.S.V., 2013, Sintesis Magnetit Mg/Al-NO_3 HT (MHT) dengan Metode Kopresipitasi dan Aplikasi sebagai Adsorben $[AuCl_4]^-$, *Skripsi*, FMIPA, Universitas Gajah Mada. Yogyakarta.

Stum W., dan Morgan J.J., 1996, Aquatic Chemistry, pp 727-759, A Willey Inter Sceince Publication, John Willey and Sons, INC, New York.

Teja, A.S. dan Koh, Pei-Yoong., 2009, Syntehesis, Properties, and Applcations of Magnetic Iron Oxide Nanoparticles, *Prog. Cryst. Growth CH.*, 55, 22-45.

Wang, J., Zhou, J., Li, Z., Liu Qi., dan Yang, P., 2010, Design of Magnetic and Flourescent Mg-Al Layered Double Hydroxides by Introducing Fe_3O_4 Nanoparticles and Eu^{3+} Ions for Intercalation of Glycine, *Material Reserch Bulletin*, 45, 640-645.

Wang, S., Qian, K., Bi., dan Huang, W., 2009. Influence of Speciatio of Aqueous $HAuCl_4$ on the Synthesis, Structure, and Property of Au Colloids, *J. Phys. Chem.*, C.133,6505-6510.

Wang.N., Zhu, L., Wang D., Wang.M., Lin.Z., Tang.H., 2010, Sono-assisted preparation of highly-efficient peroxidise-like Fe_3O_4 magnetic nanoparticles for catalytic removal of organik pollutants with H_2O_2, *Ultrason.Sonochem*.17, 526-533.

Wihadi, M., N., K., 2014, HT Mg-Al-NO_3 Sebagai Adsorben untuk Pungut Ulang Logam Emas dari Larutan [AuCl4]-, *Tesis*. FMIPA, Universitas Gajah Mada. Yogyakarta.

Wojnicki, M., Rudnik, E., Luty-Błocho, M., Pacławski, K., dan Fitzner, K., 2012, Kinetic Studies of Gold(III) Chloride Complex Reduction and Solid Phase Precipitation In Acidic Aqueous System using Dimethylamine Borane as Reducing Agent. Hydrometalugry, 127-128 43-53.

Wypych, F., dan Satyanarayana, K.G., 2004, Clay Surfaces: Fundamental and Aplication, *Elsevier Academic Press*, Amsterdam.

Xianmei, X., An, X., Wang, X., and Wang , Z., 2003, Preparation, Characterization and Aplicatoin of Zn/Al Hydrotalcite-Like Compound, *J. Chem. Nat. Gas*, Vol. 12, No. 4, pp. 259-263.

Yan, H., Zhang, J., You, C., Song, Z., Yu, B., dan Shen, Y., 2009, Influences of Different Synthesis Condition on Popertiesof Fe_3O_4 Nanoparticles, *J. Mater. Chem.*, 113, 46-52.

Yap, C.Y., dan Mohammed, N., 2008, Elektrogenerative Gold Recovery from Cyanide Solution Using a Flow-Through Cell with Activated Reticulate Vitreus Carbon, *Chemosphere*, 73, 685-69.

Zhao, P., Li, Na., dan Astruc, D., 2013. Review : State of the Art in Gold Nanoparticle Synthesis. *Coord. Chem. Rev*., 257, 638-665.

Zhao, S., Yi, H., Tang, X., Kang, Dang., Wang., Li, Kai., dan Duan, K., 2012, Characterization of Zn-Ni-Fe Hydrotalcite-derived Oxides and Their Aplication in the Hydrolysis of Carbonyl Sulphide, *Appl. Clay Sci.*, 56, 84-89.