

DAFTAR PUSTAKA

- Abdullah, M., & Khairurrijal. (2009). Karakterisasi Nanomaterial. *Jurnal Nanosains & Nanoteknologi*, 2, 33-57.
- Adziimaa, A., Doty, D., & Lizda, J. (2013). Sintesis Natrium Silikat dari Lumpur Lapindo sebagai Inhibitor Korosi. *Jurnal Teknik Pomits*, 2, 384-389.
- Ahmed, M. A., Okasha, N., & El-Dek, S. I. (2008). Preparation and Characterization of Nanometric Mn Ferrite via Different Methodes. *Nanotechnology*, 19, 1-6.
- Aijun, H., Juanjuan, L., Mingquan, Y., Yan, L., & Xinhua, P. (2011). Preparation of Nano- $MnFe_2O_4$ and Its Catalytic Performance of Thermal Decomposition of Ammonium Perchlorate. *Chinese Journal of Chemical Engineering*, 19, 1047-1051.
- Alvarez, G. S. (2004). Synthesis, Characterisation, and Applications of Iron Oxide Nanoparticles. Dalam *Doctoral Thesis*. Sweden: Universitas Stokholm.
- Andrade, A. L., Souze, D. M., Fabris, J. D., Pereira, M. C., & Domingues, R. Z. (2009). Synthesis and Characterization of Magnetic Nanoparticles Coated With Silica Through a Sol-gel Approach. *Ceramica*, 55, 420-424.
- Anonim.(2012).*Electromagnetism*.<http://hrsbstaff.ednet.ca/jenninj2/Physics2012/electromagnetism.htm>. Diakses pada 10 Juni 2016.
- Askeland, D. R., Fulay, P. P., & Wright, W. J. (2011). *The Science and Engineering of Material* (6th ed.). USA: Global Engineering.
- Aslibeiki, B., Kameli, P., & Ehsani, M. H. (2016). $MnFe_2O_4$ Bulk, Nanoparticles and Film: A Comparative Study of Structural and Magnetic Properties. *Ceramics International*, 42, 12789–12795.
- Callister, W. (2007). *Fundamentals of Materials Sciences and Engineering*. Canada: John Willey & Sons.
- Cheon, J., Kang, N. J., Lee, S. M., Yoon, J. H., & Oh, S. J. (2004). Shape evolution of Single crystalline Iron Oxide Nanocrystals. *J. Am. Chem. Soc*, 126, 1950-1951.
- Coey, J. M. (2010). *Magnetism and Magnetic Materials*. United States of America: Cambridge University Press.
- Ghatreh-Samani, R., & Mostafaei, A. (2014). Chemical Co-precipitation Synthesis of Spinel Manganese Ferrite Nanoparticles ($MnFe_2O_4$): Morphological Characterizations and Magnetic Properties. *Journal of Magnetism and Magnetic Materials*, 409, 90-99.

- Giwangkara, S., & E, G. (2006). *Aplikasi Logika Syaraf Fuzzy Pada Analisis Sidik Jari Minyak Bumi Menggunakan Spektrofotometer Infra Merah – Transformasi Fourier (FT-IR)*. Cepu: Sekolah Tinggi Energi dan Mineral.
- Goswami, P. P., Choudhury, H. A., Chakma, S., & Moholkar, V. S. (2013). Sonochemical Synthesis and Characterization of Manganese Ferrite Nanoparticles. *Industrial & Engineering Chemistry Research*, 52, 17848–17855.
- Griffiths, D. J., & College, R. (1999). *Introduction to Electrodynamics*. Upper Saddle River: Prentice-Hall.
- Halliday, D., Resnick, R., & Walker, J. (1989). *Fundamental of Physics*. Canada: John Wiley & Sons.
- Iqbal, Y., Bae, H., Rhee, I., & Hong, S. (2016). Magnetic Heating of Silica-Coated Manganese Ferrite Nanoparticles. *Journal of Magnetism and Magnetic Materials*, 409, 80-86.
- Kaim, W., & Schwederski, B. (1994). *Bioinorganic Chemistry: Inorganic Elements in the Chemistry of Life*. Chichester: John Wiley & Sons Ltd.
- Kim, D.-H., Nikles, D. E., & Brazel, C. S. (2010). Synthesis and Characterization of Multifunctional Chitosan- $MnFe_2O_4$ Nanoparticles for Magnetic Hyperthermia and Drug Delivery. *Materials*, 3, 4051-4065.
- Kim, K. D. (2005). Formation and Characterization of Silica-Coated Magnetic Nanoparticles by Sol Gel. *J. Ind. Eng. Chem.*, 4, 584-589.
- Kittel, C. (2005). *Introduction to Solid State Physics*. United State of America: John Wiley & Sons.
- Kooti, M., & Afshari, M. (2012). Molybdenum Schiff Base Complex Covalently Anchored to Silica-Coated Cobalt Ferrite Nanoparticles as a Novel Heterogeneous Catalyst for the Oxidation of Alkenes. *Catal Lett*, 142, 319-325.
- Kooti, M., & Sedeh, A. N. (2012). Glycine-assisted Fabrication of Zinc and Manganese Ferrite Nanoparticles. *Scientia Iranica, Transactions F: Nanotechnology*, 19, 930-933.
- Labs, P. T. (2012). *Vibrations in Infra Red Rays*. <http://pharmatutor.org/pharma-analysis/analytical-aspects-of-infra-red-spectroscopy-ir/types-of-vibrations>: Diakses pada 10 Juni 2016.
- Liang, H. F., & Wang, Z. C. (2010). Adsorption of Bovine Serum Albumin on Functionalized Silica-coated Magnetic $MnFe_2O_4$ Nanoparticles. *Materials Chemistry and Physics*, 124, 964-969.
- Martinez-Guerrero, A., Juste-Perez, J., & Marzan-Liz, M. (2010). Recent Progress on Silica Coating of Nanoparticles and Related Nanomaterials. *Advanced Materials*, 22, 1182-1195.

- Merdekani, S. (2013). Sintesis Partikel Nanokomposit Fe₃O₄/ SiO₂ dengan Metode Kopresipitasi. *Prosiding Seminar Nasional Sains dan Teknologi Nuklir*, 472-477.
- Nadeem, K., Shahid, M., & Mumtaz, M. (2014). Competing Crystallite Size and Zinc Concentration in Silica Coated Cobalt Ferrite Nanoparticles. *Progress in Natural Science: Materials International*, 24, 199–204.
- Naseri, M. G., Saion, E. B., Ahangar, H. A., Hashim, M., & Shaari, A. H. (2011). Synthesis and Characterization of Manganese Ferrite Nanoparticles by Thermal Treatment Method. *Journal of Magnetism and Magnetic Materials*, 323, 1745-1749.
- Naseri, M., & Saion, E. (2012). *Advances in Crystallization Processes*. Europe: In Tech.
- O'Handley, R. C. (2000). *Modern Magnetic Materials: Principles and Applications*. (J. W. Sons, Penyunt.) New York: John Wiley & Sons.
- Pourbafarani, S. (2014). The Effect of Alkali Concentration on the Structural and Magnetic Properties of Mn-Ferrite Nanoparticles Prepared via the Coprecipitation Method. *The Minerals, Metals & Materials Society and ASM International*, 45A, 4535-4537.
- Puri, R., & Babbar, V. (1997). *Solid State Physics*. New Delhi: S.Chand & Company.
- Ritter, J. A., Ebner, A. D., Daniel, K. D., & Stewart, K. L. (2004). Application of High Gradient Magnetic Separation Principles to Magnetic Drug Targeting. *J. Magn. Mater*, 280, 184-201.
- Riyanto, A. (2012). Sintesis Nanopartikel Fe₃O₄ dan Potensinya sebagai Material Aktif pada Permukaan Sensing Biosensor Berbasis SPR. Dalam *Thesis*. Yogyakarta: Program Pascasarjana, Universitas Gadjah Mada.
- Sam, S., & Nesaraj, A. S. (2011). Preparation of MnFe₂O₄ Nanoceramic Particles by Soft Chemical Routes. *International Journal of Applied Science and Engineering*, 9, 223-239.
- Sastrohamidjojo, H. (2001). *Spektroskopi*. Yogyakarta: Liberty.
- Setyawan, H., Fajaroh, F., Widiyastuti, W., Winardi, S., Lenggoro, I., & Nandang, M. (2012). One-step Synthesis of Silica-coated Magnetite Nanoparticles by Electrooxidation of Iron in Sodium Silicate Solution. *Journal Nanoparticles Research*, 14:807.
- Shanmugavel, T., Raj, S. G., Kumar, G. R., & Rajarajan, G. (2014). Synthesis and Structural Analysis of Nanocrystalline MnFe₂O₄. *Physics Procedia*, 54, 159 – 163.
- Shen, Y., Wang, L., Wu, Y., Li, X., Zhao, Q., Hou, Y., & Teng, W. (2015). Facile Solvothermal Synthesis of MnFe₂O₄ Hollow Nanospheres and Their

- Photocatalytic Degradation of Benzene Investigated by in Situ FTIR. *Catalysis Communications*, 68, 11-14.
- Sinko, K. (2010). Influence of Chemical Conditions on The Nanoporous Structure of Silicate Aerogels. *Material*, 3, 704-740.
- Smalman, R. E., & Bishop, R. J. (1999). *Modern Physical Metallurgy and Materials Engineering* (6th ed.). Great Britain: Bath Press, Avon.
- Soderberg, T. (2010). *Organic Chemistry with A Biological Emphasis*, <http://chemwiki.ucdavis.edu>. Diakses tanggal 11 Maret 2016.
- Taib, S. (2015). Sintesis Nanopartikel Magnetite (Fe₃O₄) Coated Silika dan Karakterisasi Sifat Kemagnetan. Dalam *Thesis*. Yogyakarta: Universitas Gadjah Mada.
- Tawainella, R. D., Riana, Y., Fatayati, R., Amelliya, Kato, T., Iwata, S., & Suharyadi, E. (2014). Sintesis Nanopartikel Manganese Ferrite (MnFe₂O₄) dengan Metode Kopresipitasi dan Karakterisasi Sifat Kemagnetannya. *Jurnal Fisika Indonesia*, XVIII.
- Tomsdorf, Bigall, U. I., Kaul, N. C., Bruns, M. G., Nikolic, O. T., Mollwitz, M. S., & Weller, G. (2007). Size and Surface Effects on The MRI Relaxivity of Manganese Ferrite Nanoparticle Contrast Agents. *Nano Lett*, 7, 2422-2427.
- Vamvakidis, K., Sakellari, D., Angelakeris, M., & Dendrinou-Samara, C. (2013). Size and Compositionally Controlled Manganese Ferrite Nanoparticles with Enhanced Magnetization. *J Nanopart Res*, 15, 1-13.
- Wu, A., Ou, P., & Zeng, L. (2010). Biomedical Applications of Magnetic Nanoparticles. *NANO: Brief Reports and Reviews*, 5, 254-270.
- Xu, C. (2009). Modification of Superparamagnetic Nanoparticles of Biomedical Applications. Dalam *Dissertation*. Brown University, Rhode Island, United States.
- Zeb, F., Qureshi, A. R., Nadeem, K., Mumtaz, M., & Krenn, H. (2016). Surface Effects in Uncoated and Amorphous SiO₂ Coated Cobalt Ferrite Nanoparticles. *Journal of Non-Crystalline Solids*, 435, 69-75.
- Zhao, L., Yang, H., Cui, Y., & Zhao, X. (2007). Study of Preparation and Magnetic Properties of Silica-coated Cobalt Ferrite Nanocomposites. *Springer*, 42, 4110-4114.
- Zuo, X., Yang, A., Yoon, S., Christodoulides, J., Harris, V. G., & Vittoria. (2005). Large Induced Magnetic Anisotropy in Manganese Spinel Ferrite Films. *Applied Physics Letters*, 87, 2505-2507.