

DAFTAR PUSTAKA

- Abdullah, M., 2009, *Pengantar Nanosains*. ITB, Bandung.
- Adziimaa, A., Doty, D. dan Lizda, J., 2013, Sintesis natrium silikat dari lumpur lapindo sebagai inhibitor korosi, *Jurnal Teknik Pomits*, 2.
- Askeland, D.R. dan Pule, P.P., 2001. *The Science and Engineering of Materials*, PWS Publisher, USA.
- Baykal, A., Güner, S., Demir, A., Esir, S., dan Genc, F., 2014, Effect of zinc substitution on magneto-optical properties of Mn_{1-x}Zn_xFe₂O₄/SiO₂ nanocomposites, *Ceramics International*, 40, 13401-13408.
- Botez, C.E., Chattrakun, K., Metta-Magana, A.J., Pannell, K.H., dan Mattutes-Aquino, J.A., 2012, Magnetic property enhancement and crystal structures in bulk and nanosized Zn_xNi_{1-x}Fe₂O₄ (0 ≤ x ≤ 1), *Physics letters A*, 376, 2730-2734.
- Callister Jr., W.D., 2007, *Materials Science and Engineering*, 7th edition, John Wiley & Sons, Inc, Untied State of America.
- Cullity, B.D., dan Graham, C.D., 2009, *Introduction to Magnetic Materials*, 2nd edition, John Wiley & Sons, Inc, Hoboken, New Jersey, Canada.
- Dahotre, S.G., dan Singh, L.N., 2013, Synthesis and Characterization of Nanoferrite, *Journal of Pure Applied & Indian Physics*, 3, 199-204.
- Eisberg, R., dan Resnick, R., 1985, *Quantum Physics of Atoms, Molecules, Solids, Nuclei, and Particles*, 2nd edition, John Wiley & Sons, Inc, Canada.
- Ghasemi, A., Mousavinia, M., 2014, Structural and magnetic evaluation of substituted NiZnFe₂O₄ particles synthesized by convetional sol-gel method, *Ceramics international*, 40, 2825-2834.
- Goldman, A., 2006, *Modern Ferrite Technology*, Springer, United State of America.
- Gubin, S.P., 2009, *Magnetic nanoparticles*, Wiley-VCH Verlag GmbH & Co KGaA, Weinhein, Germany.
- Halliday, D., Resnick, R., dan Walker, J., 1989, *Fundamental of Physics*, John Wiley & Sons, Inc, Canada.
- Harris, L.A., 2002, Polymer Stabilized Magnetic Nanoparticles Poly(Propylene Oxide) Modified Styrene-Dimethacrylate Networks, *Doctoral Thesis*, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

- Indrayana, I.P.T., 2015, Pengaruh Konsentrasi Zn dan Suhu Sintering Terhadap Struktur Kristal, Sifat Magnetik, dan Energi Gap Nanopartikel Mn_{1-x}Zn_xFe₂O₄, *Thesis*, Universitas Gadjah Mada, Yogyakarta.
- John, R., 2014, *Solid State Physics*, McGraw Hill Education, New Delhi.
- Joseph, J., Tangsali, R.B., Choudhary, R.J., Phase, D.M., dan Ganeshan, V., 2014, Magnetic Properties of Textured Nanocrystalline Mn-Zn Ferrite Thin Films Fabricated by Pulsed Laser Deposition, *International Journal of Thin Film Science Technology*, 3, 81-87.
- Kareem, S.H., Ati, A.A., Shamsuddin, M., dan Lee, S.L., 2015, Nanostructural, Morphological and Magnetic Studies of PEG/Mn_{1-x}Zn_xFe₂O₄ Nanoparticles Synthesized by Coprecipitation, *Ceramic International*, 41, 11702-11709.
- Kareem, S.H., Ooia, Y.K., Abdulnoor, S.S., Shamsuddin, M., dan Lee, S.L., 2014, Influence of Zinc on the structure and Morphology of Manganese Ferrite Nanoparticles, *Journal Teknologi UTM*, 69, 103-106.
- Kharisov, B.I., Dias, H.V.R., dan Kharissova, O.V., 2014, Mini-Review Ferrite Nanoparticles in Catalysis, *Arabian Journal of Chemistry*, 10, 1-13.
- Kim, K.D., 2005, Formation and Characterization of Silica-Coated Magnetic Nanoparticle by Sol Gel. *J. Ind. Eng. Chem.*, 4, 584-589.
- Kingery, W.D., Bowen, H.K., dan Uhlmann, D.R., 1976, *Introduction to Ceramics*, 2nd edition, John Wiley & Sons, Inc, New York.
- Kittel, C., 1996, *Introduction to Solid State Physics*, 8th edition, John Wiley & Sons, Inc, Untied State of America.
- Krishna, K.R., Kumar, K.V., Ravinder, D., 2012, Structural and Electrical Conductivity Studies in Nickel-Zinc Ferrite, *Advances in Material Physics and Chemistry*, 2, 185-191.
- Leng, Y., 2008, *Materials Characterization*, John Wiley & Sons Pte, Ltd, Singapore.
- Liu, R., Shen, X., Jiang, C., Song, F., dan Li, H., 2012, Preparation of Zn_{0,5}Ni_{0,5}Fe₂O₄/SiO₂ nanocomposites and their adsorption of bovine serum albumin, *Journal of Alloys and Compounds*, 511, 163-168.
- López, G.P., Silvetti, S.P., C. Aguirre, M.del., Condó, A.M., 2009, Synthesis and characterization of (NiZnFe₂O₄)_{0,5}/(SiO₂)_{0,5} granular nanocomposites, *Journal of Alloys and Compounds*, 487, 646-652.
- Lu, A.H., Salabas, E.L., Schüth, F., 2007, Magnetic Nanoparticles; Synthesis, Protection, Functionalization and Application, *Angewandte Chemie International Edition*, 46, 1222-1244.

- Maaz, K., Karim, S., Mumtaz, A., Hasanain, SK., Liu, J., Duan, JI., 2009, Synthesis and magnetic characterization of nickel ferrite nanoparticles prepared by co-precipitation route, *Journal of Magnetism and Magnetic Materials*, 32, 1838-1842
- Mathew, D. dan Juang, R., 2007, An Overview of The Structure and Magnetism of Spinel Ferrite Nanoparticles and Their Synthesis in Microemulsions, *Chemical Engineering Journal*, 129, 51-65.
- Merdekani, S., 2013. Sintesis Partikel Nanokomposit Fe₃O₄/ SiO₂ dengan metode kopresipitasi. *Prosiding Seminar Nasional Sains dan Teknologi Nuklir*, 472-477
- Mijarsh, M.J.A., Johari, M.A.M., dan Ahmad, Z.A., 2015, Effect of delay time and Na₂SiO₃ concentration on compressive strength development of geopolymer mortar synthesized from TPOFA, *Construction and Building Materials*, 86, 64-74.
- Mohseni, H., Shokrollahi, H., Sharifi, I., dan Gheisari, K., 2012, Magnetic and Structural Studies of the Mn-doped Mg – Zn Ferrite Nanoparticles Synthesized by the Glycine Nitrate Process, *Journal of Magnetism and Magnetic Materials*, 324, 3741 – 3747. Nakhjavan Bahar., 2011, Designer Synthesis of Monodisperse Heterodimer and Ferrite Nanoparticles, *Dissertation*, Johannes Gutenberg-Universität, Germany
- Naik, P.P., Tangsali, R.B., Sonaye, B., dan Sugur, S., 2015, Radiation Induced Structural and Magnetic Transformations in Nanoparticle Mn_xZn_(1-x)Fe₂O₄ ferrites, *Journal of Magnetism and Magnetic Materials*, 385, 377–385.
- Nuryono., Rosiati, N.M., Rusdiarso, B., Sakti, S.C., dan Tanaka, S., 2014, Coating of Magnetic with Mercapto Modified Rice Hull Ash Silica in a One-pot Process, *a SpringerOpen Journal*, 3, 515.
- Pavia, D.L., Lampman, G.M., Kriz, G.S., dan Vyvyan, J.R., 2009, *Introduction to Spectroscopy*, Western Washington University, Washington.
- Punkhurst, Q.A., Connolly, J., Jones, S.K., dan Dobson, J., 2003, Application of Magnetic Nanoparticle in Biomedicine, *Journal of Physics D: Applied Physics*, 36, 167-181.
- Puri, R.K., dan Babbar, V. K., 1997, *Solid State Physics*, S. Chand & Company Ltd, New Delhi.
- Sari, R.S., 2015, Analisa Gugus Fungsi pada Magnetic Nanoparticles (MNPs) Zinc Ferrite (ZnFe₂O₄) yang dienkapsulasi dengan Silika (SiO₂), *Thesis*, Universitas Gadjah Mada, Yogyakarta.
- Sau, T K., Rogach, A L., 2012, *Complex-shaped Metal Nanoparticles: Bottom-Up Syntheses and Application*, Wiley-VCH Verlag & Co KgaA. Weinheim: Germany.

- Sertkol, M., Köseoglu, Y., Baykal, A., Kavas, H., dan Toprak, M.S., 2010, Synthesis and magnetic characterization of Zn_{0,7}Ni_{0,3}Fe₂O₄ nanoparticles via microwave-assisted combustion route, *Journal of Magnetism and Magnetic Materials*, 322, 866-871.
- Shahane, G.S., Kumar, A., Arora, M., Pant, R.P., dan Lal, K., 2009, Synthesis and Characterization of Ni-Zn ferrite nanoparticles, *Journal of Magnetism and Magnetic Material*, 322, 1015-1019.
- Shen, T., 1994, Superparamagnetic Contrast Agents for Magnetic Resonance Imaging, *Doctoral Thesis*, Massachusetts Institute of Technology, USA.
- Shofiah, S., 2015, Kajian Kemagnetan pada Nanopartikel Nickel Ferrite (NiFe₂O₄) yang dienkapsulasi dengan Polyethylene Glycol (PEG-4000) dan Silika, *Thesis*, Universitas Gadjah Mada, Yogyakarta.
- Sinko, K., 2010, Influence of chemical conditions on the nanoporous structure of silicate aerogels, *Journal of Materials*, 3, 704-740.
- Smallman, R.E., dan Bishop, R.J., 1999, *Modern Physics Metallurgy and Materials Engineering*, Great Britain, Bath Press.
- Speakman, S.A., 2012, *Basic of X-Ray Powder Diffraction*, Massachusetts Institute of Technology, Cambridge.
- Suharyadi, E., 2012, *Bahan Ajar Mata Kuliah Fisika Zat Padat*, Lab. Fisika Material & Instrumentasi, FMIPA, UGM, Yogyakarta.
- Taib, S., 2015, Sintesis Nanopartikel Magnetite (Fe₃O₄) Coated Silika dan Karakterisasi Sifat Kemagnetan, *Thesis*, Universitas Gadjah Mada, Yogyakarta.
- Umut, E., 2013, *Modern Surface Engineering Treatments*, Hacettepe, University, License Intech.
- Velmurugan, K., Venkatachalapathy, V.S., dan Sendhilnathan, S., 2010, Synthesis of Nickel Zinc Iron Nanoparticles by Coprecipitation Technique, *Material Research*, 299-303.
- Wibowo, D., Yaunita, I., Anggrowati, A. dan Ismadji, S., 2004. Sintesa Nanoporus Material MCM-41. *Jurnal Teknik Kimia*, 3, 105-110.
- Wikipedia., 2016, Sodium silicate, https://en.wikipedia.org/wiki/Sodium_silicate, diakses pada 30 Desember 2016.
- Wu, K.H., Huang, W.C., Yang, C.C., dan Hsu, J.S., 2005, Sol-gel auto-combustion synthesis of Zn_{0,5}Ni_{0,5}Fe₂O₄/(SiO₂)_x (x= 10, 20, 30 wt.%) nanocomposites and their characterizations, *Materials Research Bulletin*, 40, 239-248.
- Xu, C., 2009. *Modification of superparamagnetic nanoparticles of biomedical applications*, Dissertation, Brown University, Rhode Island, United States.



- Yan, S., Yin, J., dan Zhou, E., 2006, Synthesis of NiZn ferrite-silica nanocomposites with a novel watermelon-like structure, *Colloids and Surface A: Physicochem. Eng. Aspects*, 287, 153-157.
- Zhao, L., Yang, H., Cui, Y., Zhao, X., dan Feng, S., 2007, Study of preparation and magnetic properties of silica-coated cobalt ferrite nanocomposites, *Journal of Materials Science*, Volume 42, Issue 11, pp. 4110-4114.
- Zhaohui, Z., 2004, Formation and Properties of Ferrite-Based Nanoparticles and Nanocomposite, *Doctoral Thesis*, National University of Singapore.