

## DAFTAR PUSTAKA

- Abdullah, M., 2009, *Pengantar Nanosains*, Penerbit ITB, Bandung, Indonesia.
- Arshadi, S., Moghaddam, J., dan Eskandrian, M., 2014, LaMer Diagram Approach to Study of the Nucleation and Growth of Cu<sub>2</sub>O Nanoparticles using Supersaturation Theory. *Korean Journal of Chemical Engineering* vol 31: 2020-2026.
- Asmin, L. O., 2015, Fabrikasi nanopartikel Zinc Ferrite (ZnFe<sub>2</sub>O<sub>4</sub>) dengan Metode Kopresipitasi dan Karakterisasi Struktur Kristal dan Sifat Kemagnetannya, *Tesis Program Studi S2 Fisika Jurusan Fisika Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Gadjah Mada*, Indonesia.
- Ati, A. A., Othaman, Z., dan Samavati, A., 2013, Influence of Cobalt on Structural and Magnetic Properties of Nickel Ferrite Nanoparticles, *Journal of Molecular Structure*, 1052, 177-182.
- Berchmans, L. J., Selvan, R. K., Kumar, P. N. S., dan Augustin, C. O., 2003, Structural and Electrical Properties of Ni<sub>1-x</sub>Mg<sub>x</sub>Fe<sub>2</sub>O<sub>4</sub> Synthesized by Citrate Gel Process, *Journal of Magnetism and Magnetic Materials*, 279, 103-110.
- Briceno, S., Escamilla, W. B., Silva, P., Delgado, G. E., Plaza, E., Palacios, J., and Canizales, E., 2012, *Journal of Magnetism and Magnetic Materials*, 2926-2931
- Callister, W. D., 2007, *Materials Science and Engineering*, John Wiley & Sons, Inc., Amerika Serikat.
- Chen, D., Zhang, Y., dan Tu, C., 2012, Preparation of High Saturation Magnetic MgFe<sub>2</sub>O<sub>4</sub> Nanoparticles by Microwave-assisted Ball Milling, *Materials Letters* 82: 10-12.
- Coey, J. M. D., 2009, *Magnetism and Magnetic Materials*, Cambridge University Press, Cambridge, Inggris.
- Cullity, B. D., dan Graham, C. D., 2009. *Introduction to Magnetic Materials, Second Edition*. IEEE Press, John Wiley & Sons, Inc., Amerika Serikat.

- Cullity, B. D., 1956. *Elements of X-Ray Diffraction*, Addison-Wesley Publishing Company, Inc., Amerika Serikat.
- de Jong, K. P., 2009, *Synthesis of Solid Catalysts*, Wiley-VCH Verlag GmbH & Co., Weinheim, Jerman.
- Deraz, N. M., dan Abd-Alkader, O. H., 2013, Preparation and Characterization of Nano-Magnetic  $Ni_{0.5}Mg_{0.5}Fe_2O_4$  System for Biological Application, *Journal of Pure and Applied Microbiology*, 7, 333-339.
- El Hiti, M. A., Ahmed, M. A., dan El Shabasy, M. E., Structural Study of  $Ni_{1-x}Mg_xFe_2O_4$  Ferrites, *Phase Transitions: A Multinational Journal* 56, 87 – 95.
- Faraji, M., Yamini, Y., dan Razaee, M., 2009, Magnetic Nanoparticles: Synthesis, Stabilization, Functionalization, Characterization, and Application, *Journal of Iranian Chemical Society*, 7, 1-37.
- Foner, S., 1959, Versatile and Sensitive Vibrating-Sample Magnetometer, *The Review of Scientific Instruments*, Lincoln Laboratory, Massachusetts Institute of Technology, Lexington, Massachusetts, Amerika Serikat.
- Gabal, M. A., Al-Angari, Y. M., dan Zaki, H. M., 2014, Struktural, Magnetic and Electrical Characterization of Mg-Ni Nanocrystalline Ferrite Prepared through Egg-white Precursor, *Journal of Magnetism and Magnetic Materials*, 363, 6-12.
- Godbole, B., Badera, N., Shrivasta, S. B., Jain, D., Sharath, L.S., Chadra, dan Ganesan, V., 2013, Synthesis, Structural, Electrical and Magnetic Studies of Ni-Ferrite Nanoparticles, *Physics Procedia*, 49, 58-66.
- Goldman, A., 2006, *Modern Ferrite Technology Second Edition*, Springer, Amerika Serikat.
- Griffith, D. J., 1999, *Introduction to Electrodynamics Third Edition*, Prentice Hall: New Jersey, Amerika Serikat.
- Gustini, A. J., Petryk, A. A., Cassim, S. M., Tate, J. A., dan Baker I., 2010, Magnetic Nanoparticle Hyperthermia in Cancer Treatment, *Nano Life Vol 1*, 17 – 32.
- Gubin, S. P., 2009, *Magnetic Nanoparticles*, Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim, Jerman.

- Hafeez, A., 2008, Synthesis and Microstructural Studies of Fine Magnetic Particles, *Thesis of Division of science and technology, University of Education Lahore*, Pakistan.
- Hankaree, P. P., Jadhav, S. P., Sankpal, U. B., Chavan, S. S., Sankpal, Chougule, B. K., dan Waghmare, B. K., 2009, Synthesis, Characterization and Effect of Sintering Temperature on Magnetic Properties of MgNi Ferrite Prepared by Co-precipitation Method, *Journal of Alloy and Compounds*, 475, 926 - 929.
- Hermawan, A., 2015, Fabrikasi Nanopartikel Magnesium Ferrite (MgFe<sub>2</sub>O<sub>4</sub>) dengan Metode Kopresipitasi dan Karakterisasi Struktur Kristal dan Sifat Kemagnetannya, *Tesis Program Studi S2 Fisika Jurusan Fisika Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Gadjah Mada*, Indonesia.
- Jagtap, S. S., dan Rathod, S. M., 2013, Synthesis and Characterization of Mg-Ni ferrites prepared by sol-gel auto combustion method, *Piasad Dada Funde Applied Research and Development Institute Journal*, 8 (1), 1-6.
- Jeyadevan, B., Chinnasamy, C. N., Shinoda, K., Tohji K., dan Oka, H., 2003, Mn-Zn Ferrite with Higher Magnetization for Temperature Sensitive Magnetic Fluid, *Journal of Applied Physics*, 90 (10), 8450-8452.
- Jiles, D., 1998, *Introduction to Magnetism and Magnetic Materials*, Chapman and Hall, Amerika Serikat.
- Jun, Y. W., Seo, J. W., dan Cheon, 2008, *Nanoscaling Law of Magnetic Nanoparticles And Their Applicabilities In Biomedical Science*, *Acc. Chem. Res.*, 41(2), 179-189.
- Kotz, J. C., Treichel, P. M., dan Townsend, J. R., 2009, *Chemistry and Chemical Reactivity*, Brooks/Cole, Cengage Learning, Amerika Serikat.
- LaMer, V. K., dan Dinegar, R. H., 1950, Theory, Production and Mechanism of Formation of Monodispersed Hydrosols, *Journal of American Chemical Society* vol 72: 4847-4854.
- Leng, Y., 2008, *Material Characterization : Introduction to Microscopic and Spectroscopic Methods*, John Wiley and Sons (Asia) Pte Ltd, Singapura.
- Liu, Y. L., Liu, Z. M., Yang, Y., Yang, H. F., Shen, G. L., dan Yu, R. Q., 2005, Simple Synthesis of MgFe<sub>2</sub>O<sub>4</sub> Nanoparticles as Gas Sensing Materials, *Sensors and Actuators B* 107: 600-604.

- Mathew, D.S., dan Juang, R., 2006, An Overview of The Structure and Magnetism of Spinel Ferrite Nanoparticles and Their Synthesis in Microemulsions, *Chemical Engineering Journal*, 129, 51-56.
- McMahon, G., 2007, *Analytical Instrumentation: A guide to Laboratory, Portable and Miniaturized Instruments*, John Wiley and Sons Ltd, Sussex Inggris.
- Mittemeijer, E. J., dan Welzel, U., 2008. The State of Art of the Diffraction Analysis of Crystallite Size and Lattice Strain. *Zeitschrift fur Kristallographie*, 552-560
- Mittal V.K., Bera, S., Nithya, R., Srinivasan, M. P., Velmugaran, S., dan Narasimhan. S. V., 2004, Solid State Synthesis of Mg-Ni Ferrite and Characterization by XRD and XPS, *Journal of Nuclear Materials*, 335, 302-310.
- Moradmard, H., Shayesteh, S. F., Tohidi, P., Abbas, Z., Khaleghi, M., 2015, Structural, Magnetic and Dielectric Properties of Magnesium doped Nickel Ferrite Nanoparticles, *Journal of Alloys and Compounds*, 650, 116-172.
- Muflihatun, 2015, Sintesis Nanopartikel *Nickel Ferrite* (NiFe<sub>2</sub>O<sub>4</sub>) dengan Metode Kopresipitasi beserta Karakterisasi Struktur Kristal dan Sifat Kemagnetannya, *Tesis Program Studi S2 Fisika Jurusan Fisika Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Gadjah Mada, Indonesia*.
- Murty, B. S., Shankar, P., Raj, B., Rath, B. B., Murday, J., 2013, *Textbook of Nanoscience and Nanotechnology*, Springer and Universities Press, India.
- Naeem, M., Shah, N. A., Gul, I. H., dan Masqood, A., 2009, Structural, Electrical and Magnetic Properties of Ni-Mg Spinel Ferrite, *Journal of Alloy and Compounds*, 487, 739-743.
- Naseri, M. G., Ara, M. H. M., dan Saion, E. B., 2014, Superparamagnetic Magnesium Ferrite Nanoparticles Fabricated by a Simple, Thermal-treatment Method, *Journal Of Magnetism and Magnetic Materials* 350 : 141-147.
- Natelson, D., 2015, *Nanostructures and Nanotechnology*, Cambridge University Press, Cambridge, Inggris.
- Noorkhan, P. A. Dan Kalayne, S., 2012, Synthesis, Characteristic of Ni<sup>2+</sup> doped in Magnesium Ferrite, *International Journal of Modern Engineering Research (IJMER)*, 2, 1757-1760

- Noyan, I. C., dan Cohen, J. B., 1987, *Residual Stress : Measurement by Diffraction and Interpretation*, Springer, New York, Amerika Serikat.
- Pavia, D. L., Lampman, G. M., Kriz, G.S., dan Vyvyan J. R., 2009, *Introduction to Spectroscopy*, Western Washington University, Washington, Amerika Serikat.
- Pikir, Suharno, 1995, *Kimia Dasar*, Airlangga University Press, Surabaya, Indonesia.
- Puri, R. K. dan Babbar, V. K., 1997, *Solid State Physics*, S. Chand & Company LTD, New Delhi, India.
- Qu, Y., Yang, H., Yang, N., Fan, Y., Zhu, H., dan Zhou, G., 2006, The Effect of Reaction Temperature on the Particle Size, Structure and Magnetic Properties of Coprecipitated, *Materials Letters*, vol. 60, 3548 – 3552.
- Rana, M. U., 1998, Cation Distribution and Magnetic Properties of Ferrites, *Disertasi Departement of Physics Bahudin Zakariya University*, Multan, Pakistan.
- Sattler, K. D., 2011, *Handbook of Nanophysics, Nanoparticles and Quantum Dots*, Taylor and Francis Group, Amerika Serikat.
- Semat, H. dan Albright, J. R., 1973, *Introduction to Atomic and Nuclear Physics fifth edition*, Chapman and Hall Ltd, Inggris.
- Shah, M.A., 2010, *Principles of Nanoscience and Nanotechnology*, Alpha Science International Ltd., Inggris.
- Shen, T., 1994, Superparamagnetic Contrast Agents for Magnetic Resonance Imaging, *Doctoral Thesis*, Massachusetts Institute of Technology, Amerika Serikat.
- Sinha, M., Dutta, H., dan Pradhan, S.K., 2005, X-ray Characterization and Phase Transformation Kinetich of Ball-mill Prepared Nanocrystalline Mg-Ni-Ferrite at Elevate Temperatures, *Physica E*, 28, 43-49.
- Singh, R., 2009, *Introduction to Modern Physics Volime I Second Edition*, New Age International (P) Limited, Publishers, New Delhi, India.
- Sivakumar, P., Ramesh, R., Ramanand, A., Ponnusamy, S., dan Muthamizhchelvan, C., 2013, Synthesis and Characterization of  $NiFe_2O_4$  Nanoparticles and Nanorods, *Journal of Alloys and Coumponds 563*: 6-11.

- Spaldin, N., 2003, *Magnetic Materials Fundamental and Application*, Cambridge University Press, New York, Amerika Serikat.
- Sudarmono, A., Widyastuti, dan Susanti, D., 2011, Rekayasa Doping Silang pada Nanokristalin Keramik Ferrite XFe<sub>2</sub>O<sub>4</sub> (X = Ni, Mg) sebagai Aplikasi Sensor LPG, *Tugas Akhir Jurusan Teknik Material dan Metalurgi Fakultas Teknologi Industri Institut Teknologi Sepuluh November*, Indonesia.
- Tewari, K. K., 1987, *Electricity and Magnetism with Electronics*, S. Chand & Company LTD, New Delhi, India.
- Vader, V. T., Achary, S. N., dan Meena, S. S., 2013, A facile combustion route for fine particle of spinel ferrichromite: X-ray and Mössbauer study on effect of Mg and Ni content, *Material Research Bulletin*, 50, 172-177.
- Weddemann, A., Ennen, I., Regtmeier, A., Albon, C., Wolff, A., Eckstädt, K., Mill, N., Peter, M. K. H., Mattay, J., Plattner, C., Sewald, N., dan Hütten, A., 2010, Review and Outlook : From Single Nanoparticles to Self-assembled Monolayers and Granular GMR Sensors, *Beilstein Journal of Nanotechnology 1*: 75-93.
- William, D. B., dan Carters, C. B., 2009, *Transmission Electron Microscopy*, Springer, New York, Amerika Serikat.
- Wolfgang, N., dan Ramakanth, A., 2009, *Quantum Theory of Magnetism*, Springer, Berlin, Jerman.
- Xu, C., 2004, *Modification of Superparamagnetic Nanoparticles for Biomedical Applications, Ph.D.Dissertation, M.Phil.*, Hong Kong University of Science & Technology, Hong Kong.
- Yadav, N., Kumar, A., Rana, P. S., Rana, D. S., Arora, M., Pant, R. P., 2015, Finite Size Effect on Sm<sup>3+</sup> doped Mn<sub>0.5</sub>Zn<sub>0.5</sub>Sm<sub>x</sub>Fe<sub>2-x</sub>O<sub>4</sub> (0 ≤ x ≤ 0,5) Ferrite Nanoparticles, *Ceramic International 41*: 8623 – 8629.
- Yousefi, M., Kar, M. H. K. A., dan Kar, M. K. A., 2013, Ni-doped MgFe<sub>2</sub>O<sub>4</sub> as a Novel Catalyst for Selective Oxidation of Benzyl Alcohol to Benzaldehyde, *Main Group Chemistry 12*: 177-184.