

DAFTAR PUSTAKA

- Abdullah, M., 2009, *Pengantar Nanosains*, Institut Teknologi Bandung, Bandung.
- Anand, S., Amaliya, A.P., Janifer, M.A., Pauline, S., 2017. Structural, Morphological And Dielectric Studies Of Zirconium Substituted CoFe₂O₄. *Modern Electronic Materials*, 3,168-173.
- Asmin, L.O., Mutmainnah, Suharyadi, E., 2015, Sintesis Nanopartikel Zinc Ferrite (ZnFe₂O₄) dengan Metode Kopresipitasi dan Karakterisasi Sifat Kemagnetannya, *Jurnal Fisika dan Aplikasinya*, 16 (3), 62-66.
- Banwell, C. N., dan Elaine M. McCash. 1994. *Fundamentals of Molecular Spectroscopy*. McGraw-Hill.
- Behera, C., Choudhary, R. N. P., dan Das, P. R., 2015, Size Dependent Electrical and Magnetic Properties of Mechanically-Activated MnFe₂O₄, *Science Direct*, 41, 13042-13054.
- Borgohain, Chandan, Kula Kamal Senapati, K. C. Sarma, dan Prodeep Phukan, 2012, A Facile Synthesis of Nanocrystalline CoFe₂O₄ Embedded One- Dimensional ZnO Hetero-Structure and Its Use in Photocatalysis, *Journal of Molecular Catalysis A: Chemical*, 363–364, 495–500.
- Brown, B., Hess, D., Desai, V., dan Deen, M. J., 2006, Dielectric Science and Technology, *The Electrochemical Society Interface*, 28-31.
- Chand, P., Vaish, S., Kumar, P., 2017, Structural, Optical And Dielectric Properties Of Transition Metal (MFe₂O₄; M=Co, Ni Dan Zn) Nanoferrits. *Physica B: Condensed Matter*, 524, 53-63.
- Chandrasekaran, S., Ramanathan S., Basak T., 2013. Microwave food processing-A review. *Food Research International* 52(1):243–261.
- Chukwuocha, E. O., Onyeaju, M. C., dan Harry, T. S. T., 2012, Theoretical Studies on the Effect of Confinement on Quantum Dots Using the Brus Equation, *World Journal of Condensed Matter Physics*, 2, 96-100.
- Cullity, B.D., dan S.R. Stock, 2001, *Elements of X-Ray Diffraction, Third Edition*. Prentice-Hall.
- Datta, AK., Anantheswaran, RC., 2000. *Handbook of microwave technology for food applications*. New York: Marcel Dekker Inc.

- Datta, AK, Davidson, PM., 2000. Microwave and radio frequency processing. *Journal of Food Science* 65(8): 32–41.
- Fauzi, Angga Dito, 2017, Theoretical Study of The Effect of Oxygen Vacancies on Magnetism and Charge Transport of Fe₃O₄., *Tesis*, Faculty of Mathematics and Natural Sciences, Universitas Indonesia
- Ferawati, R., dan Toifur, M., 2014, Penentuan Nilai Rugi Tangen (Loss Tangent) Kaldu Daging Sapi Berbantuan Software Logger Pro, *Prosiding Pertemuan Ilmiah XXVIII HFI Jateng & DIY*, Yogyakarta, 26 April 2014, 0853-0823.
- Ferdosi, E., H. Bahiraei, and D. Ghanbari, 2019, Investigation the Photocatalytic Activity of CoFe₂O₄/ZnO and CoFe₂O₄/ZnO/Ag Nanocomposites for Purification of Dye Pollutants, *Separation and Purification Technology* 211, 35–39.
- Fox, Mark, 2010, *Optical Properties of Solids Second Edition*, Oxford University press Inc., New York.
- Fultz, Brent, and James Howe, 2013, Diffraction and the X-Ray Powder Diffractometer, In , 1–57.
- Ghanbarnezhad, S., S. Baghshahi, A. Nemati, and M. Mahmoodi, 2017, Preparation, Magnetic Properties, and Photocatalytic Performance under Natural Daylight Irradiation of Fe₃O₄-ZnO Core/Shell Nanoparticles Designed on Reduced GO Platelet, *Materials Science in Semiconductor Processing*, 72, 85–92.
- Hafeez, A., 2008, Synthesis dan Microstrucutral Studies of Fine Magnetic Particles, *Thesis*, Division of Science and Technology, University of Education Lahore, Pakistan.
- Halliday, D., Resnick R. dan Walker,J., 1989, *Fundamental of Physics*, John Wiley & Sons INC., Canada
- Hippel,V. A. R, 1954, *dielectrics and waves*, The M.I.T Press, Cambridge.
- Hong, R. Y. dkk, 2009, Synthesis, Surface Modification and Photocatalytic Property of ZnO Nanoparticles, *Powder Technology*, 189(3), 426–32.
- Jadhav, Vidhya, Prashant Chikode, Gurunath Nikam, and Sandip Sabale. 2016. 3 Materials Today: *Proceedings Polyol Synthesis and Characterization of ZnO@CoFe₂O₄ MNP's to Study the Photodegradation Rate of Azo and Diphenyl Type Dye.*

- Jaggi, Neena, and D.R. Vij, 2006, Fourier Transform Infrared Spectroscopy, In *Handbook of Applied Solid State Spectroscopy*, Boston, MA: Springer US, 411–50.
- Kadam, A. N. dkk , 2018, Facile Synthesis of Ag-ZnO Core–Shell Nanostructures with Enhanced Photocatalytic Activity, *Journal of Industrial and Engineering Chemistry*, 61, 78–86.
- Kalam, Abul dkk. 2018. “Modified Solvothermal Synthesis of Cobalt Ferrite (CoFe₂O₄) Magnetic Nanoparticles Photocatalysts for Degradation of Methylene Blue with H₂O₂/Visible Light.” *Results in Physics* 8: 1046–53
- Kasap, S.O., 2006, Principles of electronic materials and devices Third Edition, *The McGraw-Hill Companies, Inc.*, Canada.
- Koseoglu, Y., Baykal, A., Gozuak, F. dan Kavay, H., 2011, Structural and magnetic properties of Co_xZn_{1-x}Fe₂O₄ nanocrystals synthesized by microwave method, *Polyhedron*, 28, 2887–2892.
- Kuanr, B. K., Veerakumar, V., Mishra, S. R., Wilson, A. M., Kuanr, A. V., Camley, R. E., & Celinski, Z, 2014, High frequency study of core–shell reusable CoFe₂O₄–ZnO nanospheres, *Journal of Applied Physics*, 115(17).
- Lanje, A.S., Sharma, S.J. Ningthoujam, Ahn, J.S., Pode, R.B., 2013, Low Temperature Dielectric Studies Of Zinc Oxide (ZnO) Nanoparticles Prepared By Precipitation Method, *Advanced Powder Technology*, 24, 331-335.
- Loan, Nguyen Thi To dkk, 2019, CoFe₂O₄ Nanomaterials: Effect of Annealing Temperature on Characterization, Magnetic, Photocatalytic, and Photo-Fenton Properties, *Processes* 7(12), 1–14.
- Lvovich, Vadim F., 2012, Impedance Spectroscopy with Applications to Electrochemical and Dielectric Phenomena, *A John Wiley & Sons, Inc., Publication*, Canada.
- Majid, Nurhalis, 2012, Impedance Spectroscopic System Design for Determining The Complex Dielectric Constant of Materials at Frequency Range 5-120 kHz, *Tesis*, Department of Physics MIPA, Universitas Gadjah Mada, Yogyakarta.

- Martinez, J. dan Vega, 2010, *Dielectric Material for Electrical Engineering*, Willey, United Stated.
- McMahon, Gillian. 2007. *Analytical Instrumentation : A Guide to Laboratory, Portable and Miniaturized Instruments*. J. Wiley.
- Momin, A.A., Parvin, R., Akther Hossain, A.K.M., 2017, Structural, Morphological and Magnetic Properties Variation of Nickel-Manganese Ferrites with Lithium Substitution, *J. Magn. Magn. Mater.*, 423, September 2016, 124–132.
- Murugesen, C., Perumal, M., Chandrasekaran, G., 2014, Structural, Dielectric and Magnetic Properties of Cobalt Ferrite Prepared Using Auto Combustion and Ceramic Route. *Physica B: Condensed Matter*, 448, 53-56.
- Muzakki, A., Suharyadi, E., Nofrianti, A., Iqomah, N.I., Kato, T., Iwata, S., 2020, Photocatalytic Activity of Magnetic Core-Shell CoFe₂O₄@ZnO Nanoparticles for Purification of Methylene Blue. *Material Research Express*, 1-6.
- Pavia, D.L., Lampman, G.M., Kriz, G.S., Vyvyan, J.R., 2009. *Introduction to Spectroscopy*, 4th ed. Brooks/Cole, Washington.
- Powar, R., Phadtare, V. D., Parale, V.G., dan Park, H.H, 2018, Structural, Morphological, and Magnetic Properties of Zn_xCo_{1-x}Fe₂O₄ (0 ≤ x ≤ 1) prepared using a chemical co-precipitation method, *Ceramic International*, 44, 20782-20789.
- Prasankumar, Rohit P, and Antoinette J. Taylor, 2011, CRC Press *Optical Techniques for Solid-State Materials Characterization*.
- Puri, R. K., dan Babbar, V. K., 1996, *Solid State Physics*, S.Chand & Company Ltd, New Delhi.
- Qindeel, R., dan Alonizan, N.H, 2018, Structural, Dielectrical and Magnetic properties of cobalt based spinel ferrite, *Current Applied Physics*, 18, 519-525.
- Raihan, R., Rabbi, F., Vadlamudi, V., Reifsnider, K., 2015, Composite Materials Damage Modeling Based on Dielectric Properties, *Materials Sciences and Applications*, 6, 1033-1053.

- Rahayu, D.I., 2018, Studi Pengaruh Konsentrasi Zn Terhadap Sifat Dielektrik Nanopartikel Magnetik Zn_xNi_{1-x}Fe₂O₄, *Tesis*, Jurusan Fisika, FMIPA, Universitas Gadjah Mada.
- Rahmayenia, Alfina A, Stiadi Y, Lee H J, Zulhadjri, 2019, Green synthesis and Characterization of ZnO- CoFe₂O₄ Semiconductor Photocatalysts Prepared Using Rambutan (*Nephelium lappaceum* L.) Peel Extract, *Materials Research*, 22(5), 1-10.
- Rani, B Jansi dkk, 2018, Nano-Structures & Nano-Objects Ferrimagnetism in Cobalt Ferrite (CoFe₂O₄) Nanoparticles, 14, 84–91.
- Setiadi, Eko Arief dkk, 2016, Sintesis Nanopartikel Cobalt Ferrite (CoFe₂O₄) Dengan Metode Kopresipitasi Dan Karakterisasi Sifat Kemagnetannya, *Indonesian Journal Of Applied Physics*, 3(01), 55.
- Settle, Frank A, 1998, 14 IEEE Electrical Insulation Magazine *Handbook of Instrumental Techniques for Analytical Chemistry*.
- Sharifianjazi, Fariborz dkk, 2020, Magnetic CoFe₂O₄ Nanoparticles Doped with Metal Ions: A Review, *Ceramics International*, 46, 18391-18412.
- Sharma, Ravi Kant, and Ranjana Ghose, 2014, Synthesis of Nanocrystalline CuO-ZnO Mixed Metal Oxide Powder by a Homogeneous Precipitation Method, *Ceramics International* 40(7 PART B), 10919–26.
- Sheoran, N, Kumar, V, Kumar, A, 2019, Comparative Study of Structural, Magnetic and Dielectric Properties of CoFe₂O₄@BiFeO₃ and BiFeO₃@CoFe₂O₄ Core-Shell Nanocomposites, *Journal of Magnetism and Magnetic Materials*, 475, 30-37.
- Shifa, AA., Ludiyati H., Solihin R., 2020, Perancangan dan Simulasi Antena Mikrostrip Satu Elemen Berbahan Material Dielektrik Anisotropik untuk Aplikasi WiFi (Wireless Fidelity) pada Frekuensi 2400 MHz, *Prosiding Industrial Research*, 613-619.
- Singh, L.H., Pati, S.S., Oliveira, A.C., Garg, V.K., Kuzmann, E., 2017. Thermal-Induced Magnetic Transition in CoFe₂O₄@ZnO, *Journal of Applied Physics*, 122.
- Strein, C.R., Bezerra, M.T.S., Holanda, G.H.A., Andre-Filho, J., Morais, P.C., 2018. Structural and Magnetic Properties of Cobalt Ferrite

Nanoparticles Synthesized by Co-Precipitation at Increasing Temperatures, *AIP Advances*.8. 2158-3226.

- Supriya, S., Kumar, S., dan Kar, M, 2017, Electrical Properties and Dipole Relaxation Behaviour of Zinc Substituted Cobalt Ferrite, *Journal of electronics materials*, 64, 12, 6884:6894.
- Sun, X., Ma, G., Lv, X., Sui, M., Li, H., Wu, F., W, J., (2108), Controllable Fabrication of Fe₃O₄/ZnO Core–Shell Nanocomposites and Their Electromagnetic Wave Absorption Performance in the 2–18 GHz Frequency Range, *Materials*., 11(5), 780.
- Suvarna, R. P., Rao, K. R., dan Subbarangaiah, 2002, A Simple Technique for A.C. Conductivity Measurements, *Bull. Mater. Sci.*, 25, 647-65.
- Tatarchuk, T., Bououdina, M., Macyk, W., Shyichuk, O dan Paliychuk, Yaremiy, I., Al-Najar, B. dan Pacia, M., 2017, Structural, optical, and magnetic properties of Zn-Doped CoFe₂O₄ nanoparticles, *Nanoscale Res. Lett.* 12, 141 - 145.
- Tatarchuk, T.R., Paliychuk, N.D., Bououdina, M., Al-Najar B., Pacia, M., Macyk,W. dan Shyichuk, A., 2017, Effect of Cobalt Substitution on Structural, Elastic, Magnetic and Optical Properties of Zinc Ferrite Nanoparticles, *Journal of Alloys and Compounds*, xxx, 1- 11.
- Tipler, P. A. dan Mosca, G., 2008, *Physics for Scientist and Engineers 6th Ed*, W.H. Freeman and Company, New York.
- Vaseem, Mohammad, Ahmad Umar, and Yb Hahn, 2010, Metal Oxide Nanostructures and Their Applications *ZnO Nanoparticles : Growth, Properties, and Applications*.
- Wang, Jian dkk, 2016, Preparation and Photocatalytic Properties of Magnetically Reusable Fe₃O₄@ZnO Core/Shell Nanoparticles, *Physica E: Low-Dimensional Systems and Nanostructure*, 75, 66–71.
- Williams, David B., dan C. Barry Carter. 2009. Transmission Electron Microscopy: A Textbook for Materials Science *Transmission Electron Microscopy: A Textbook for Materials Science*. Springer US.
- Yahya, N., Kashif, M., dan Nasir, N., 2012, Cobalt Ferrite Nanoparticles: An Innovative Approach for Enhanced Oil Recovery Application, *Journal of Nano Research*, 17, 115-126.

- Yan, Wei, Huiqing Fan, dan Chao Yang, 2011, Ultra-Fast Synthesis and Enhanced Photocatalytic Properties of Alpha-Fe₂O₃/ZnO Core-Shell Structure, *Materials Letters*, 65(11),1595–97.
- Yuan, J., Yao, S., dan Poulin, P., 2017, Dielectric Constant of Polymer Composites and The Routes To High-K or Low-K Nanocomposite Materials, *Polymer Nanocomposite*, 3-27.
- Yusandika, A.D, 2014, Kajian Sifat Dielektrik Pada Nanopartikel Cobalt Ferrite (CoFe₂O₄) Yang Dienkapsulasi Dengan Polyethylene Glycol (Peg-4000), *Tesis*, Department of Physics MIPA, Universitas Gadjah Mada, Yogyakarta.
- Zaid, H. M., Azahar, W. A. W., Soleimani, H., Latiff, N. R. A., Shafie, A., Lee, K. C., dan Beh, H. G., 2014, Effect of Nickel: Zinc Ratio in Nickel-Zinc-Ferrite Nanoparticles as Surfactant on Recovery Efficiency in Enhanced Oil Recovery, *Journal of Nano Research*, 29, 115-120.
- Zamiri, R., Singh, B., Belsley, M.S., Ferreira, J.M.F., 2014, Structural and Dielectric Properties of Al-Doped ZnO Nanostructures, *Ceramics International*, 40, 6031-6036.
- Zhang, R., Sun, L., Wang, Z., Hao, W., Cao, E., Zhang, Y., 2018, Dielectric and Magnetic Properties of Cofe₂O₄ Prepared by Sol-Gel Auto-Combustion Method, *Materials Research Bulletin*, 98, 133-138.
- Zhang, Yong Hui dkk, 2018, Facile Synthesis of Core–Shell Cu₂O@ ZnO Structure with Enhanced Photocatalytic H₂ Production., *Journal of Physics and Chemistry of Solids* 116, 126–30.
- Zhang, Guoxin dkk, 2009, Preparation and Characterization of Multi-Functional CoFe₂O₄-ZnO Nanocomposites, *Journal of Magnetism and Magnetic Materials*, 321(10), 1424–27.
- Zheng, J., Song, X., Liu, X., Chen, W., Li, Y., Guo, J., 2012. Synthesis of Hexagonal CoFe₂O₄/ZnO Nanoparticles and Their Electromagnetic Properties. *Materials Letters*, 73, 143-146.
- Zulkarnain, 2020, Kajian Sifat Dielektrik dan Energi Gap Pada Nanopartikel Magnetik Mn_{1-x}Ni_xFe₂O₄, *Tesis*, Department of Physics MIPA, Universitas Gadjah Mada, Yogyakarta.