

DAFTAR PUSTAKA

- Ahmad, T., Bustam, M.A., Irfan, M., Moniruzzaman, M., Asghar, H.M.A., & Bhattacharjee, 2018, Green Synthesis of Stabilized Spherical Shaped Gold Nanoparticles Using Novel Aqueous *Elaeis guineensis* (Oil Palm) Leaves Extract, *J. Mol. Struct.*, 1159, 167-173.
- Ahmad, T., Irfan, M., Bustam, M.A., & Bhattacharjee, S., 2016, Effect of Reaction Time on Green Synthesis of Gold Nanoparticles by Using Aqueous Extract of *Elaeis guineensis* (Oil Palm Leaves), *Procedia. Eng.*, 148, 467-472.
- Al-Akraa, I.M., Mohammad, A.M., El-Deab, M.S., & El-Anadouli, B.E, 2017, Flower-shaped Gold Nanoparticles: Preparation, Characterization, and Electrocatalytic Application, *Arab. J. Chem.*, 10, 877-884.
- Alaqad, K & Saleh, T.A., Gold and Silver Nanoparticles: Synthesis Methods, Characterization Routes and Applications Towards Drugs, *J. Environ. Anal. Toxicol.*, 6, 1-10.
- Ali, M.S., Eldin, T.S.A., El Moghazy, G.M., Tork, I.M., & Omara, I.I., 2014, Detection of *E-coli* O157:H7 in Feed Samples Using Gold Nanoparticles Sensor, *Int. J. Curr. Microbiol. App. Sci.*, 3, 697-708.
- Amendola, V., Meneghetti, M., Stener, M., Guo, Y., Chen, S., Crespo, P., Garcia, M.A., Hernando, A., Pengo, P., & Pasquato, L., 2014, Physico-Chemical Characteristics of Gold Nanoparticles, *Compr. Anal. Chem.*, 66, 81-152.
- Anigol, L.B., Charantimath, J.S., & Gurubasavaraj, P.M., 2017, Effect of Concentration and pH on the Size Silver Nanoparticles Synthesized by Green Chemistry, *OMCIJ.*, 3(5), 1-5.
- Annur, S., Santosa, S.J., & Aprilita, N.H., 2018, pH Dependence of Size Control in Gold Nanoparticles Synthesized at Room Temperature, *Orient. J. Chem.*, 34(5), 2305-2312.
- Aryal, S., Remant, B.K.C., Dharmaraj, N., Bhattarai, N., Kim, C.H., & Kim, H.Y., 2006, Spectroscopic Identification of S-Au Interaction in Cysteine Capped Gold Nanoparticles, *Spectrochim.Acta A.*, 63, 160-163.
- Atun, S & Handayani, S., 2017., Synthesis of Nanoparticles Produced by Ethanol Extract of *Boesenbergia rotunda* Rhizome Loaded with Chitosan and Alginate Acid and its Biological Activity test, *Pharmacogn. J.*, 9(2), 142-147.
- Bac, L.H., Kim, J.S., & Kim, J.S., 2011, Size, Optical and Stability Properties of Gold Nanoparticles Synthesized by Electrical Explosion of Wire in Different Aqueous Media, *Rev. Adv. Mater. Sci.*, 28, 117-121.
- Belachew, N., Devi, D.R., & Basavaiah, K., 2016, Facile Green Synthesis of L-methionine Capped Magnetite Nanoparticles for Adsorption of Pollutant Rhodamine B, *J. Mol. Liq.*, 224, 713-720.

- Boken, J., Dalela, S., Sharma, C.K., & Kumar, D., 2013, Detection of Pathogenic Escherichia coli (*E-coli*) Using Robust Silver and Gold Nanoparticles, *J. Chem. Eng. Process. Technol.*, 4(8), 1-6.
- Brosnan, J.T., Brosnan, M.E., Bertolo, R.F.P., & Brunton, J.A., 2007, Methionine: A Metabolically Unique Amino Acid, *Livets. Sci.*, 112, 2-7.
- Chen, G., Chen, W., Yen, Y., Wang, C., Chang, H., & Chen, C., 2014, Detection of Mercury (II) Ions Using Colorimetric Gold Nanoparticles on Paper-based Analytical Devices, *Anal. Chem.*, 86, 6843-6849.
- Chen, S., Fang, Y.M., Xiao, Q., Li, J., Li, S.B., Chen, H.J., Sun, J.J., & Yang, H.H., 2012, Rapid Visual Detection of Aluminium Ion Using Citrate Capped Gold Nanoparticles, *Analyst.*, 137, 2021-2023.
- Choi, Y., Lee, S., Lee, H., Lee, S., Kim, S., Lee, J., Ha, J., oh, H., Lee, Y., Kim, Y., & Yoon, Y., 2018, Rapid Detection of Escherichia coli in Fresh Food Using a Combination of Enrichment and PCR Analysis, *Korean J, Food. Sci. An.*, 4, 829-834.
- Chucita., Santosa, S.J., & Suyanta., 2018, Sintesis Nanopartikel dari Perak Nitrat dengan Tirosin sebagai Reduktor dan Agen Pengkaping untuk Membentuk Nanokomposit AgNPs-Poli Asam Laktat sebagai Antibakteri, *Berkala MIPA.*, 25(2), 140-153.
- Courrol, L.C & Matos, R.A.D., 2016, *Synthesis of Gold Nanoparticles Using Amino Acids by Light Irradiation*, IntechOpen Limited, London.
- Daima, H., Periasamy, S., Shukla, S., Bhargava, R., & Bansal, V., 2013, Fine-tuning the Antimicrobial Profile of Biocompatible Gold Nanoparticles by their Sequential Surface Functionalization Using Polyoxometalates and Lysine, *PLoS. ONE*, 8(10), 1-14.
- Du, L., Jiang, H., Liu, X., & Wang, E., 2007, Biosynthesis of Gold Nanoparticles Assisted by Escherichia coli DH5a and its Application on Direct electrochemistry of hemoglobin, *Electrochem*, 9, 1165-1170.
- Exum, N.G., Kosek, M.N., & Davis, M.F., 2017, Surface Sampling Collection and Culture Methods for Escherichia coli in Household Environments with High Fecal Contamination, *Int. J. Environ. Res. Public Health*, 14, 1-9.
- Herizchi, R., Abbasi, E., Milani, M., & Akbarzadeh, A., 2014, Current Methods for Synthesis of Gold Nanoparticles, *Artif. Cells. Nanomed. Biotechnol.*, 44, 596-602.
- Horiba., 2017, *Guidebook to Particles Size Analysis*, Horiba Instrument INC, Irvine.
- Huang, X & El-sayed, M.A., 2010, Gold Nanoparticles: Optical Properties and Implementations in Cancer Diagnosis and Photothermal Therapy, *Int. J. Adv. Res.*, 1(1), 13-28.

- Husna, Q., 2012, Optimasi Konsentrasi Na-Sitrat dan Pengaruh Potensial dalam Sintesis Emas Nanopartikel, *Tesis.*, Institut Teknologi Sepuluh November, Surabaya.
- Hussain, N., Abro, M.I., Sherazi, S.T.H., & Hassan, S.S., 2011, Synthesis of L-methionine Stabilized Nickel Nanowires and their Application for Catalytic Oxidative Transfer Hydrogenation of Isopropanol, *Appl. Catal. A.*, 400, 215-220.
- Imtiaz, J., Hashmi, I., Saeed, A., Qazi, I.A., & Arshad M., 2013, Development of PCR Protocol for Detection of Escherichia coli in Drinking Water, *WIT Transactions on Ecology and the Environment.*, 171, 225-234.
- Jans, H., Jans, K., Lagae, L., Borghs, G., Maes, G., & Huo, Q., 2010, Poly(acrylic)-stabilized Colloidal Gold Nanoparticles: Synthesis and Properties, *J. Nanotechnol.*, 21(45), 1-7.
- Khan, I., Saeed, K., & Khan, I., 2017, Nanoparticles: Properties, Applications and Toxicities, *Arab. J. Chem.*, 12(7), 908-931.
- Kim, D., Heo, J., Kim, M., Lee, Y.W., & Han, S.W., 2009, Size-controlled Synthesis of Monodisperse Gold Nanooctahedrons and their Surface-enhanced Raman Scattering Properties, *Chem. Phys. Lett.*, 468, 245-248.
- Kumalasari, M.R., 2018, Sintesis Nanopartikel Emas Menggunakan Agen Pereduksi dan Penudung Serin sebagai Sarana Pendeteksi Al^{3+} dalam Air Alam, *Tesis.*, Departemen Kimia FMIPA UGM, Yogyakarta.
- Lee, J.H., Kim, Y.A., Huh, Y.D., Hyun, J.W., Kim, H.S., Noh, S.J., Hwang, C.S., 2007, Synthesis and Optical Properties of the Water-Dispersible ZnS:Mn Nanocrystals Surface Capped by L-Aminoacid Ligands: Arginine, Cysteine, Histidine, and Methionine, *Bull. Korean. Chem. Soc.*, 28(7), 1091-1096.
- Maier, S.A., 2007, *Plasmonics: Fundamentals and Applications*, Springer, New York.
- Manning, S.D., 2005, *Escherichia coli Infection*. Chelsea House Publisher, Philadelphia.
- Narayan, R.L & Muthusamy. S., 2014, Preparation and Characterization of Gold Nanoparticles in Chitosan Suspension by One-pot Chemical Reduction Method, *Nano Hybrids.*, 6, 47-57.
- Nita, R., Trammel, S.A., Ellis, G.A., Moore, M.H., Soto, C.M., Leary, D.H., Fontana, J., Talebzadeh, S.F., & Knight, D.A., 2016, Kinetic Analysis of the Hydrolysis of Methyl Parathion Using Citrate Stabilized 10 nm Gold Nanoparticles, *Chemosphere.*, 144, 1916-1919.
- Priyadarshini, E., & Pradhan, N., 2017, Gold Nanoparticles as Efficient Sensors in Colorimetric Detection of Toxic Metal Ions: A Review, *Sens. Actuators. B Chem.*, 238, 888-902.

- Rahme, K & Holmes, J.D., 2015, *Dekker Encyclopedia of Nanoscience and Nanotechnology*, 3rd Ed., CRC Press, Florida.
- Raj, V., Vijayan, A.N., & Joseph, K., 2015, Cysteine Capped Gold Nanoparticles for Naked Eye Detection of *E-coli* Bacteria in UTI Patients., *Sens. Biosensing. Res.*, 5, 33-36.
- Ramezani, F., Habibi, M., Rafii-Tabar, H., Amanlou, M., 2015, Effect of Peptide Length on the Conjugation to the Gold Nanoparticles Surface: A Molecular Dynamic Study., *DARU J. Pharm. Sci.* 23(9), 2-5.
- Raza, A., Javed, S., Qureshi, M.Z., Khan, M.U., Khan, M.K., 2017, Synthesis and Study of Catalytic Application of L-Methionine Protected Gold Nanoparticles, *Appl. Nanosci.*, 7(7), 429-437.
- Saha, K., Agasti, S.S., Kim, C., Li, X., & Rotello, V.M., 2012, Gold Nanoparticles in Chemical and Biological Sensing, *Chem. Rev.*, 112(5), 2739-2779.
- Salcedo, A.R.M., & Sevilla, F.B., 2013, Citrate-capped Gold Nanoparticles as Colorimetric Reagent for Copper (II) Ions, *Philippine. Sci. Lett.*, 6, 90-96.
- Salimi, F., Zarei, K., & Karami, C., 2018, Naked Eye Detection of Cr³⁺ and Ni²⁺ Ions by Gold Nanoparticles Modified with Ribavirin, *Silicon.*, 10(4), 1755-1761.
- Su, H., Ma, Q., Shang, K., Liu, T., Yin, H., & Ai, S., 2012, Gold Nanoparticles as Colorimetric Sensor: A Case Study on *E. coli* O157:H7 as A Model for Gram-negative Bacteria, *Sens. Actuators. B Chem.*, 161, 298-303.
- Sung, Y., & Wu, S., 2014, Colorimetric Detection of Cd (II) Ions Based Ondi-(1H-pyrrol-2-yl)-methanethione Functionalized Gold Nanoparticles, *Sens. Actuators. B Chem.*, 201, 86-91.
- Trigo, B.C., Garcia, V.D., & Oyarzun, P., 2018, Slight pH fluctuations in the Gold Nanoparticles Synthesis Process Influence the Performance of the Citrate Reduction Method, *Sensors.*, 18(7), 2246.
- Tyagi, H., Kushwaha, A., & Kumar, A., 2011, pH-Dependent Synthesis of Stabilized Gold Nanoparticles Using Ascorbic Acid, *Int. J. Nanosci.*, 10(4), 857-860.
- Wagers, K., Chui, T., & Adem, S., 2014, Effect of pH the Stability of Gold Nanoparticles and their Application for Melamine Detection in Infant Formula, *IOSR-JAC.*, 7(8), 15-20.
- Wang, A.J., Guo, H., Zhang, M., Zhou, D.L./ Wang, R.Z., & Feng, J.J., 2013, Sensitive and Selective Colorimetric Detection of Cadmium (II) Using Gold Nanoparticles Modified with 4-amino-3-hydrazino-5-mercapto-1,2,4-triazole., *Microchim. Acta.*, 180, 1051-1057.
- Wu, Y., Ali, M.R.K., Chen, K., Fang, N., & El-Sayed, M.A., 2019, Gold Nanoparticles in Biological Optical Imaging, *Nano. Today.*, 24, 120-140.

- Xie, X., Liao, J., Shao, X., Li, Q., & Lin, Y., 2017, The Effect of Shapes on Cellular Uptake of Gold Nanoparticles in the Form of Star, Rods, and Triangles, *Nature.*, 7(1), 1-9.
- Xum, N.G., Kosek, M.N., Davis, M.F., & Schwab, K.J., 2017, Surface Sampling Collection and Culture Methods for Escherichia coli in Household Environments with High Fecal Contamination, *Int. J. Environ. Res. Public Health.*, 14, 947-956.
- Zang, Y., Xu, Q., Zhang, S., Liu, J., Zhou, J., Xu, H., & Li, J., 2013, Preparation of Thiol-Modified Fe₃O₄@SiO₂ Nanoparticles and Their Application for Gold Recovery from Dilute Solution, *Sep. Purif. Technol.*, 116, 391-397.
- Zha, J., Dong, C., Wang, X., Zhang, X., Xiao, X., & Yang, X., 2017, Green Synthesis and Characterization of Gold Nanoparticles Using Ginkgo Biloba Leaf Extract, *Optik*, 144, 511-521.
- Zhan, S., Yu, M., Lv, J., Wang, L., & Zhou, P., 2014, Colorimetric Detection of Trase Arsenic (III) in Aqueous Solution Using Arsenic Aptamer and Gold Nanoparticles, *Aust. J. Chem.*, 67, 813-818.
- Zhao, Y., Tian, Y., Cui, Y., Liu, W., Ma, W., & Jiang, X., 2010, Small Molecul-Capped Gold Nanoparticles as Potent Antibacterial Agent thet Target Gram-Negative Bacteria, *J. Am. Chem. Soc.*, 132(35), 12349-12356.