

DAFTAR PUSTAKA

- Aiman, M., Kormin, F., Ahmed, I., Gzara, L., Alsaiari, A.O. dan Abdel, M. (2024) "A new tropical wild fern for the green synthesis of gold nanoparticles : Comprehensive characterization and application in water treatment," *Journal of the Indian Chemical Society*, 101, hal. 101427.
- Akbari, S., Singh, V., Hannula, M., Hyttinen, J. dan Kellom, M. (2025) "Synthesis of porous and elastic composites functionalized with gold nanoparticles," *Materials Today Communications*, 49, hal. 114007. Tersedia pada: <https://doi.org/10.1016/j.mtcomm.2025.114007>.
- Alhasan, A., Tajuddin, H.A., Sani, S.F.A., Ali, T.H., Hisham, S., Mokti, M.H., Ung, N.M., Ng, M.P. dan Sim, K.S. (2022) "Iohexol functionalized Si-Ag:Mn₃O₄ hybrid nanoparticles based contrast agent for computed tomography imaging," *Materials Today Communications*, 33, hal. 104377. Tersedia pada: <https://doi.org/10.1016/j.mtcomm.2022.104377>.
- Ali, A., Zhang, N. dan Santos, R.M. (2023) "Mineral characterization using scanning electron microscopy (SEM): A review of the fundamentals , advancements , and research directions," *Applied sciences*, 13, hal. 12600.
- Anam, C., Naufal, A., Budi, W.S., Sutanto, H., Haryanto, F. dan Dougherty, G. (2023) "IndoQCT : A platform for automated CT image quality assesment," *Medical Physics International Journal*, 11(2), hal. 328–336.
- Balachandran, A., Sreenilayam, S.P., Madanan, K., Thomas, S. dan Brabazon, D. (2022) "Nanoparticle production via laser ablation synthesis in solution method and printed electronic application - A brief review," *Results in Engineering*, 16, hal. 100646. Tersedia pada: <https://doi.org/10.1016/j.rineng.2022.100646>.
- Baskan, O., Erol, C., Ozbek, H. dan Paksoy, Y. (2015) "Effect of radiation dose reduction on image quality in adult head CT with noise-suppressing reconstruction system with a 256 slice MDCT," *Journal of Applied Clinical Medical Physics*, 16(3), hal. 285–296. Tersedia pada: <https://doi.org/10.1120/jacmp.v16i3.5360>.
- Bechara, B., McMahan, C.A., Moore, W.S., Noujeim, M. dan Geha, H. (2012) "Contrast-to-noise ratio with different large volumes in a cone-beam computerized tomography machine : An in vitro study," *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, 114(5), hal. 658–665. Tersedia pada: <https://doi.org/10.1016/j.oooo.2012.08.436>.
- Blonskaya, I. V, Kirilkin, N.S., Kristavchuk, O. V, Lizunov, N.E., Mityukhin, S.A., Orelovich, O.L., Polezhaeva, O.A. dan Apel, P.Y. (2023) "Visualization and

- characterization of ion latent tracks in semicrystalline polymers by FESEM,” *Nuclear Inst. and Methods in Physics Research, B*, 542, hal. 66–73. Tersedia pada: <https://doi.org/10.1016/j.nimb.2023.06.009>.
- Car, J. dan Krstulovi, N. (2022) “Fitting Procedure to Reconstruct the Size Distribution and the Concentration of Silver Colloidal Nanoparticles from UV-Vis Spectra,” *Nanomaterials*, 12, hal. 3302. Tersedia pada: <https://doi.org/10.3390/nano12193302>.
- Carolina, A., Vale, A.R., Das, A., Gomes, A.S.L. dan Júnior, S.A. (2025) “Ag-TiO₂ nanoparticles : Synthesis , characterization , and proof of concept as potential photoacoustic contrast agent,” *Journal of Alloys and Compounds Communications*, 7, hal. 100093. Tersedia pada: <https://doi.org/10.1016/j.jacomc.2025.100093>.
- Dang, C., Nguyen, L., Tran, M., Le, V., Ty, N.M., Pham, T.N.H., Vu-quang, H., Thi, T., Chi, K., Thi, T., Giang, H., Thi, N., Tu, T. dan Nguyen, T. (2024) “Enhanced catalytic reduction through in situ synthesized gold nanoparticles embedded in glucosamine / alginate nanocomposites,” *Beilstein Journal of Nanotechnology*, 15, hal. 1227–1237. Tersedia pada: <https://doi.org/10.3762/bjnano.15.99>.
- Dheyab, M.A., Aziz, A.A., Jameel, M.S., Khaniabadi, P.M. dan Oglat, A.A. (2020) “Rapid sonochemically-assisted synthesis of highly stable gold nanoparticles as computed tomography contrast agents,” *Applied Sciences (Switzerland)*, 10(20), hal. 7020. Tersedia pada: <https://doi.org/10.3390/app10207020>.
- Dileseigres, A.S., Prado, Y. dan Pluchery, O. (2022) “How to use localized surface plasmon for monitoring the adsorption of thiol molecules on gold nanoparticles ?,” *Nanomaterials*, 12(20), hal. 292. Tersedia pada: <https://doi.org/10.3390/nano12020292>.
- Fazio, E., Gökce, B. dan De Giacomo, A. (2020) “Nanoparticles Engineering by Pulsed Laser Ablation in Liquids: Concepts and Applications,” *Nanomaterials*, 10(11), hal. 2317. Tersedia pada: <https://doi.org/10.3390/nano10112317>.
- Forghani, R. dan Man, B. De (2017) “Dual-energy computed tomography physical principles, approaches to scanning, usage, and implementation : Part 2,” *Neuroimaging Clinics of NA*, 27(3), hal. 385–400. Tersedia pada: <https://doi.org/10.1016/j.nic.2017.03.003>.
- Gong, Y., Chen, X. dan Wu, W. (2024) “Application of fourier transform infrared (FTIR) spectroscopy in sample preparation : Material characterization and mechanism investigation,” *Advances in Sample Preparation*, 11, hal.

100122. Tersedia pada: <https://doi.org/10.1016/j.sampre.2024.100122>.

- Hamouda, R.A., Sindi, H.A., Alhazmi, N.M. dan Abdel-Hamid, M.S. (2024) "Functionalized gold nanoparticles coated with bacterial alginate and their antibacterial and anticancer activities," *Green Processing and Synthesis*, 13, hal. 20230170. Tersedia pada: <https://doi.org/10.1515/gps-2023-0170>.
- Hashemzadeh, V., Hashemzadeh, A., Mohebbati, R., Ehsan, M. dan Yazdi, T. (2024) "Fabrication and characterization of gold nanoparticles using alginate : In vitro and in vivo assessment of its administration effects with swimming exercise on diabetic rats," *Open Life Sciences*, 19, hal. 20220869.
- Huang, H., Grün, I.U., Eilersieck, M. dan Clarke, A.D. (2017) "Measurement of total sodium alginate in restructured fish products using fourier transform infrared spectroscopy," *EC Nutrition*, 11(1), hal. 33–45.
- Isa, S.Z.M., Zainon, R. dan Tamal, M. (2022) "State of the art in gold nanoparticle synthesis via pulsed laser ablation in liquid and its characterisation for molecular imaging: A review," *Materials*, 15(3). Tersedia pada: <https://doi.org/10.3390/ma15030875>.
- Jeong, C.H., Machek, E.J., Shakeri, M., Duirk, S.E., Ternes, T.A., Richardson, S.D., Wagner, E.D. dan Plewa, M.J. (2017) "The impact of iodinated X-ray contrast agents on formation and toxicity of disinfection by-products in drinking water," *Journal of Environmental Sciences*, 58, hal. 173–182. Tersedia pada: <https://doi.org/10.1016/j.jes.2017.03.032>.
- Kalyanam, B. dan Begum, S. (2025) "Synthesis, characterization, and neuroprotective effect of taxifolin-conjugated gold nanoparticles against amyloid β induced Alzheimer's disease," *Letters in Drug Design & Discovery*, 22(8), hal. 100109. Tersedia pada: <https://doi.org/10.1016/j.lidd.2025.100109>.
- Kovacs, H., Dinh, T. dan Dobo, Z. (2025) "A review of gold nanoparticle synthesis : Transitioning from conventional techniques to plant-mediated green nanofabrication," *Materials Today Chemistry*, 48, hal. 103003. Tersedia pada: <https://doi.org/10.1016/j.mtchem.2025.103003>.
- Kumar, M.N., Govindh, B. dan Annapurna, N. (2017) "Green synthesis and characterization of platinum nanoparticles using sapindus mukorossi gaertn. fruit Pericarp," *Asian Journal Of Chemistry*, 29(11), hal. 2541–2544.
- Kumari, P., Saw, S., Mallick, M.A. dan Chandra, N. (2025) "Green synthesis and characterization of gold nanoparticles using Withania somnifera leaf extract : In vivo biocompatibility with embryonic zebrafish and antibacterial activity," *Next Research*, 2(4), hal. 100987. Tersedia pada:

<https://doi.org/10.1016/j.nexres.2025.100987>.

- Larosa, C., Salerno, M., Silva, J., Lima, D., Merijs, R., Fernandes, M., Bezerra, L., Carvalho, D. dan Converti, A. (2018) "Characterisation of bare and tannase-loaded calcium alginate beads by microscopic , thermogravimetric , FTIR and XRD analyses," *International Journal of Biological Macromolecules*, 115, hal. 900–906. Tersedia pada: <https://doi.org/10.1016/j.ijbiomac.2018.04.138>.
- Lee, K.B. dan Goo, H.W. (2018) "Quantitative Image Quality and Histogram-Based Evaluations of an Iterative Reconstruction Algorithm at Low-to-Ultralow Radiation Dose Levels : A Phantom Study in Chest CT," *Korean Journal of Radiology*, 19(1), hal. 119–129. Tersedia pada: <https://doi.org/10.3348/kjr.2018.19.1.119>.
- Li, Y., Luo, Q., Hu, R., Chen, Z. dan Qiu, P. (2018) "A sensitive and rapid UV–vis spectrophotometry for organophosphorus pesticides detection based on Ytterbium (Yb³⁺) functionalized gold nanoparticle," *Chinese Chemical Letters*, 29(12), hal. 1845–1848. Tersedia pada: <https://doi.org/10.1016/j.ccllet.2018.11.016>.
- Litr, R., Felix, E., M, M., Rom, S., Lahoz, R., Natividad, E., Fern, C., Pfaff, C., Kriwet, J. dan Bomati-miguel, O. (2023) "Scanning pulsed laser ablation in liquids : An alternative route to obtaining biocompatible YbFe nanoparticles as multiplatform contrast agents for combined MRI and CT imaging," *Ceramics International*, 49, hal. 9324–9337. Tersedia pada: <https://doi.org/10.1016/j.ceramint.2022.11.099>.
- Liu, H., Ikeda, K., Nguyen, M.T., Sato, S., Matsuda, N., Tsukamoto, H., Tokunaga, T. dan Yonezawa, T. (2022) "Alginate-stabilized gold nanoparticles prepared using the microwave-induced plasma-in-liquid process with long-term storage stability for potential biomedical Applications," *ACS Omega*, 7(7), hal. 6238–6247. Tersedia pada: <https://doi.org/10.1021/acsomega.1c06769>.
- Mahan, M.M. dan Doiron, A.L. (2018) "Gold nanoparticles as X-Ray, CT, and multimodal imaging contrast agents: Formulation, targeting, and methodology," *Journal of Nanomaterials*, 2018. Tersedia pada: <https://doi.org/10.1155/2018/5837276>.
- Malekzadeh, R., Ghorbani, M., Faghani, P. dan Babaye, B. (2023) "Fabrication of targeted gold nanoparticle as potential contrast agent in molecular CT imaging," *Journal of Radiation Research and Applied Sciences*, 16(1), hal. 100490. Tersedia pada: <https://doi.org/10.1016/j.jrras.2022.100490>.
- Mazhit, A., Zhumanova, K., Duisenbayeva, B. dan Sh, T. (2023) "Highly efficient

- CT contrast agent based on barium-doped mesoporous silica nanoparticles (SiO₂-Ba NPs),” *Materials Letters*, 353, hal. 135318. Tersedia pada: <https://doi.org/10.1016/j.matlet.2023.135318>.
- Miller, E.M., Xia, Q., Cella, M.E., Nenninger, A.W., Mruzik, M.N., Brillos-Monia, K.A., Hu, Y.Z., Sheng, R., Ragain, C.M. dan Crawford, P.W. (2017) “Voltammetric Study of Some 3-Aryl-quinoxaline-2-carbonitrile 1,4-di-N-oxide Derivatives with Anti-Tumor Activities,” *Molecules*, 22(9), hal. 1442. Tersedia pada: <https://doi.org/10.3390/molecules22091442>.
- Mollah, M.Z.I., Faruque, M.R.I., Bradley, D.A., Khandaker, M.U. dan Al, S. (2023) “FTIR and rheology study of alginate samples: Effect of radiation,” *Radiation Physics and Chemistry*, 202, hal. 110500. Tersedia pada: <https://doi.org/10.1016/j.radphyschem.2022.110500>.
- National Center for Biotechnology Information (2025) *PubChem Compound Summary for CID 23985, Gold*. Tersedia pada: <https://pubchem.ncbi.nlm.nih.gov/compound/Gold> (Diakses: 6 November 2025).
- Ng, S.A., Razak, K.A., Aziz, A.A. dan Cheong, K.Y. (2014) “The effect of size and shape of gold nanoparticles on thin film properties,” *Journal of Experimental Nanoscience*, 9(1), hal. 64–77. Tersedia pada: <https://doi.org/10.1080/17458080.2013.813651>.
- Nilforoushan, S., Ghiaci, M., Mahdi, S. dan Kulinich, S.A. (2022) “In situ generated Ligand-Free gold nanoparticles in polyvinylpyrrolidone solution assisted laser in liquid method for green oxidation of cyclohexane to adipic acid with high yield,” *Applied Surface Science*, 581, hal. 152388. Tersedia pada: <https://doi.org/10.1016/j.apsusc.2021.152388>.
- Ohno, I., Hayashi, H., Aonuma, K., Horio, M., Kashihara, N., Okada, H., Komatsu, Y., Tamura, S., Awai, K., Yamashita, Y., Kuwatsuru, R., Hirayama, A., Saito, Y., Murohara, T., Tamaki, N., Sato, A., Imai, E., Yasuda, Y., Koya, D., Tsubakihara, Y., Horie, S., Narumi, Y., Hayakawa, K., Daida, H., Node, K., Kubota, I. dan JSN, JRS, and J.J.W.G. (2013) “Guidelines on the use of iodinated contrast media in patients with kidney disease 2012: digest version,” *Clinical and Experimental Nephrology*, 17, hal. 441–479. Tersedia pada: <https://doi.org/10.1007/s10157-013-0843-3>.
- Rabiei, M., Palevicius, A., Monshi, A. dan Nasiri, S. (2020) “Comparing methods for calculating nano crystal size of natural hydroxyapatite using X-ray diffraction,” *Nanomaterials*, 10(9), hal. 1627.
- Saidi, A.K.A. Al, Ghazanfari, A., Liu, S., Tegafaw, T., Ahmad, M.Y., Zhao, D., Liu, Y., Yang, S.H., Hwang, D.W., Yang, J.U., Park, J.A., Jung, J.C., Nam,

- S.W., Chang, Y. dan Lee, G.H. (2023) "Facile synthesis and X-ray attenuation properties of ultrasmall platinum nanoparticles grafted with three types of hydrophilic polymers," *Nanomaterials*, 13(5), hal. 806. Tersedia pada: <https://doi.org/10.3390/nano13050806>.
- Sivakavinesan, M., Vanaja, M., Lateef, R., Alhadlaq, H.A., Mohan, R., Annadurai, G. dan Ahamed, M. (2022) "Citrus limetta Risso peel mediated green synthesis of gold nanoparticles and its antioxidant and catalytic activity," *Journal of King Saud University - Science*, 34(7), hal. 102235. Tersedia pada: <https://doi.org/10.1016/j.jksus.2022.102235>.
- Slavov, D., Tomaszewska, E., Grobelny, J., Drenchev, N., Karashanova, D., Peshev, Z. dan Bliznakova, I. (2024) "FTIR spectroscopy revealed nonplanar conformers , chain order , and packaging density in diOctadecylamine- and octadecylamine-passivated gold nanoparticles," *Journal of Molecular Structure*, 1314, hal. 138827. Tersedia pada: <https://doi.org/10.1016/j.molstruc.2024.138827>.
- Tirkey, A. dan Babu, P.J. (2024) "Synthesis and characterization of citrate-capped gold nanoparticles and their application in selective detection of creatinine (A kidney biomarker)," *Sensors International*, 5, hal. 100252. Tersedia pada: <https://doi.org/10.1016/j.sintl.2023.100252>.
- Tormo, L., Furio, M.M. dan Camacho, A.I. (2025) "Exploring the potential of cryo-FESEM for the taxonomic study of aquatic microcrustaceans : Bathynellacea (Crustacea , Malacostraca) as an example," *Micron*, 190, hal. 103780. Tersedia pada: <https://doi.org/10.1016/j.micron.2024.103780>.
- Verma, A., Chauhan, A., Sharma, T., Thakur, S. dan Bhatia, R. (2024) "Advances in gene therapy : Polysaccharide nanoparticles as pioneers in safe and effective gene delivery," *Journal of Drug Delivery Science and Technology*, 102, hal. 106287. Tersedia pada: <https://doi.org/10.1016/j.jddst.2024.106287>.
- Wang, L., Li, Q., Wang, X., Hao, G., Hu, S. dan Hu, C. (2017) "Enhanced radiation damage caused by iodinated contrast agents during CT examination," *European Journal of Radiology*, 92, hal. 72–77. Tersedia pada: <https://doi.org/10.1016/j.ejrad.2017.04.005>.
- Wathen, C.A., Foje, N., van Avermaete, T., Miramontes, B., Chapaman, S.E., Sasser, T.A., Kannan, R., Gerstler, S. dan Matthew Leevy, W. (2013) "In vivo X-ray computed tomographic imaging of soft tissue with native, intravenous, or oral contrast," *Sensors (Switzerland)*, 13(6), hal. 6957–6980. Tersedia pada: <https://doi.org/10.3390/s130606957>.
- Webb, T.D., Leung, S.A., Rosenberg, J., Ghanouni, P., Dahl, J., Pelc, N.J. dan

- Pauly, K.B. (2018) "Measurements of the relationship between CT Hounsfield units and acoustic velocity and how it changes with photon energy and reconstruction method," *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, 65(7), hal. 1111–1124.
- Withers, P.J., Bouman, C., Carmignato, S. dan Cnudde, V. (2021) "X-ray computed tomography," *Nature Reviews Methods Primers*, 1, hal. 18. Tersedia pada: <https://doi.org/10.1038/s43586-021-00015-4>.
- Wu, G., Feng, J., Zhou, R., Fan, Q., Ren, B. dan Huang, Y. (2025) "Gadolinium coordination nanoparticle-based contrast agent for T1 -Weighted magnetic resonance imaging of tumors," *Precision Medicine and Engineering*, 2(2), hal. 100033. Tersedia pada: <https://doi.org/10.1016/j.preme.2025.100033>.
- Zhai, L., Guo, X., Zhang, H., Jin, Q., Zeng, Q., Tang, X. dan Gao, C. (2017) "Non-ionic iodinated contrast media related immediate reactions : A mechanism study of 27 patients," *Legal Medicine*, 24, hal. 56–62. Tersedia pada: <https://doi.org/10.1016/j.legalmed.2016.11.006>.
- Zhang, Y., Wu, J., Li, Y., Ma, J., Wang, L., Zhao, Y., Xiao, L. dan Jia, S. (2012) "Improvement of signal-to-noise ratio of the Cs₂ photoassociation spectroscopy by using dark SPOT magneto-optical trap," *Journal of Molecular Spectroscopy*, 273, hal. 11–15. Tersedia pada: <https://doi.org/10.1016/j.jms.2012.01.005>.
- Zhao, X., Li, Z., Deng, Y., Zhao, Z., Li, X. dan Xia, Y. (2017) "Facile synthesis of gold nanoparticles with alginate and its catalytic activity for reduction of 4-nitrophenol and H₂O₂ Detection," *Materials*, 10(5), hal. 557. Tersedia pada: <https://doi.org/10.3390/ma10050557>.