

DAFTAR PUSTAKA

- Adawiyah, R., & Abu, F. (2020). Journal of Environmental Chemical Engineering Comparative study on stability , antioxidant and catalytic activities of bio-stabilized colloidal gold nanoparticles using microalgae and cyanobacteria. *Journal of Environmental Chemical Engineering*, 8(4), 103843. <https://doi.org/10.1016/j.jece.2020.103843>
- Al-Bat'hi, S. A. M. (2015). Electrodeposition of Nanostructure Materials. *Electroplating of Nanostructures*, 3–26. <https://doi.org/10.5772/61389>
- Alex, S., & Tiwari, A. (2015). Properties and Applications — A Review. *Journal of Nanoscience and Nanotechnology*, 15(3), 1869–1894. <https://doi.org/10.1166/jnn.2015.9718>
- Badwal, S. P. S., Giddey, S., Kulkarni, A., Goel, J., & Basu, S. (2015). Direct ethanol fuel cells for transport and stationary applications – A comprehensive review. *APPLIED ENERGY*, 145, 80–103. <https://doi.org/10.1016/j.apenergy.2015.02.002>
- Bai, J., Liu, D., Yang, J., & Chen, Y. (n.d.). A Minireiew on Nanocatalyst for Electrocataytic Oxidation of Ethanol. *ChemSusChem*. <https://doi.org/10.1002/cssc.201803063>
- Beyhan, S., Uosaki, K., Feliu, J. M., & Herrero, E. (2013). Electrochemical and in situ FTIR studies of ethanol adsorption and oxidation on gold single crystal electrodes in alkaline media. *Journal of Electroanalytical Chemistry*, 89–94. <https://doi.org/http://dx.doi.org/10.1016/j.jelechem.2013.08.034>
- Bonanni, A., Pumera, M., & Miyahara, Y. (2011). Influence of gold nanoparticle size (2-50 nm) upon its electrochemical behavior: an electrochemical impedance spectroscopic and voltammetric study. *Phys. Chem. Chem. Phys.*, 13, 4980–4986. <https://doi.org/10.1039/c0cp01209b>
- Chen, C., Karuppasamy, L., Chen, C. Y., Anandan, S., & Wu, J. J. (2017). High index surfaces of Au-nanocrystals supported on one-dimensional MoO₃-nanorod as a bi-functional electrocatalyst for ethanol oxidation and oxygen reduction. *Electrochimica Acta*, (June), 75–88. <https://doi.org/10.1016/j.electacta.2017.06.040>

- Chen, X., & et al. (2014). Gold nanostructures for bioimaging, drug delivery and therapeutics. In *Precious Metals for Biomedical Applications* (pp. 163–176). <https://doi.org/10.1533/9780857099051.2.163>
- Cheng, Z., Li, Z., Yao, R., Xiong, K., Cheng, G., & Zhou, Y. (2020). Improved SERS Performance and Catalytic Activity of Dendritic Au/Ag Bimetallic Nanostructures Based on Ag Dendrites. *Nano Express*, *15*(117). <https://doi.org/https://doi.org/10.1186/s11671-020-03347-4>
- Chinnadayala, S. R., Park, J., Choi, Y., Han, J. H., Yagati, A. K., & Cho, S. (2019). Electrochemical impedance characterization of cell growth on reduced graphene oxide-gold nanoparticles electrodeposited on indium tin oxide electrodes. *Applied Sciences (Switzerland)*, *9*(2). <https://doi.org/10.3390/app9020326>
- Chiu, C., Chung, P., Lao, K., Liao, C., & Huang, M. H. (2012). Facet-Dependent Catalytic Activity of Gold Nanocubes, Octahedra, and Rhombic Dodecahedra toward 4-Nitroaniline Reduction. *The Journal of Physical Chemistry*, *116*, 23757–23763. <https://doi.org/dx.doi.org/10.1021/jp307768h>
- Elgrishi, N., Rountree, K. J., McCarthy, B. D., Rountree, E. S., Eisenhart, T. T., & Dempsey, J. L. (2018). A Practical Beginner's Guide to Cyclic Voltammetry. *Journal of Chemical Education*, *95*(2), 197–206. <https://doi.org/10.1021/acs.jchemed.7b00361>
- Elias, J., Gizowska, M., Brodard, P., Widmer, R., DeHazan, Y., Graule, T., ... Philippe, L. (2012). Electrodeposition of gold thin films with controlled morphologies and their applications in electrocatalysis and SERS. *Nanotechnology*, *23*, 1–7. <https://doi.org/10.1088/0957-4484/23/25/255705>
- Etesami, M., Karoonian, F. S., & Mohamed, N. (2011). Electrochemical deposition of gold nanoparticles on pencil graphite by fast scan cyclic voltammetry. *Journal of the Chinese Chemical Society*, *58*(5), 688–693. <https://doi.org/10.1002/jccs.201190107>
- Feng, J., Li, A., Lei, Z., & Wang, A. (2012). Low-Potential Synthesis of “Clean” Au Nanodendrites and Their High Performance toward Ethanol Oxidation. *Applied Materials & Interfaces*, *4*, 2570–2576. <https://doi.org/dx.doi.org/10.1021/am3002346>

- Geraldes, A., da Silva, D., Pino, E., César, J., Fernando, R., Souza, B. De, ... Coelho, M. (2013). Ethanol electro-oxidation in an alkaline medium using Pd/C, Au/C and PdAu/C electrocatalysts prepared by electron beam irradiation. *Electrochimica Acta*, *111*, 455–465. <https://doi.org/10.1016/j.electacta.2013.08.021>
- Gilmer, G. H., Huang, H., & Roland, C. (1998). Thin film deposition: fundamentals and modeling. *Computational Materials Science*, *12*, 354–380.
- Gowthaman, N. S. K., & John, S. A. (2017). Simultaneous growth of spherical, bipyramidal and wires of gold nanostructures on solid and solution phases: SERS and electrocatalytic applications. *CrystEngComm*, *00*(1–3). <https://doi.org/10.1039/C7CE01044C>
- Guin, S. K., Pillai, J. S., Ambolika, A. S., Saha, A., & Aggarwal, S. K. (2013). Template-free electrosynthesis of gold nanoparticles of controlled size dispersion for the determination of lead at ultratrace levels. *RSC Advances*, *3*(39), 17977–17988. <https://doi.org/10.1039/c3ra42198h>
- Habekost, A. (2020). Fundamentals and Applications of Electrochemical Impedance Spectroscopy - A Didactic Perspective. *World Journal of Chemical Education*, *9*(1), 14–21. <https://doi.org/10.12691/wjce-9-1-3>
- Haruta, M., & Daté, M. (2001). Advances in the catalysis of Au nanoparticles. *Journal of Applied Catalysis*, *222*, 427–437.
- Hebié, S., Kokoh, K. B., Servat, K., & Napporn, T. W. (2013). Shape-dependent electrocatalytic activity of free gold nanoparticles toward glucose oxidation. *Gold Bull*, *46*, 311–318. <https://doi.org/10.1007/s13404-013-0119-4>
- Hebie, S., Napporn, T. W., Morais, C., & Kokoh, K. B. (2016). Size-Dependent Electrocatalytic Activity of Free Gold Nanoparticles for the Glucose Oxidation Reaction. *ChemPhysChem*, *17*, 1454–1462. <https://doi.org/10.1002/cphc.201600065>
- How the SEM Works. (n.d.). Retrieved December 9, 2020, from Iowa State University Material Science and Engineering website: <https://www.mse.iastate.edu/research/sem/microscopy/how-does-the-sem-work/high-school/how-the-sem-works/>
- Jiji, S. G., & Gopchandran, K. G. (2019). Shape dependent catalytic activity of

- unsupported gold nanostructures for the fast reduction of 4-nitroaniline. *Colloid and Interface Science Communications*, 29(September 2018), 9–16. <https://doi.org/10.1016/j.colcom.2018.12.003>
- Li, S., & Thomas, A. (2020). Emerged carbon nanomaterials from metal-organic precursors for electrochemical catalysis in energy conversion. In *Advanced Nanomaterials for Electrochemical Energy Conversion and Storage* (pp. 393–424). <https://doi.org/10.1016/B978-0-12-814558-6.00012-5>
- Liu, Jin-xun, Filot, I. A. W., Su, Y., Zijlstra, B., & Hensen, E. J. M. (2018). Optimum Particle Size for Gold-Catalyzed CO Oxidation. *The Journal of Physical Chemistry*, 122, 8327–8340. <https://doi.org/10.1021/acs.jpcc.7b12711>
- Liu, Jun, Wang, X., Lin, Z., Cao, Y., Zheng, Z., Zeng, Z., & Hu, Z. (2014). Shape-Controllable Pulse Electrodeposition of Ultrafine Platinum Nanodendrites for Methanol Catalytic Combustion and the Investigation of their Local Electric Field Intensification by Electrostatic Force Microscope and Finite Element Method. *Electrochimica Acta*, 136, 66–74. <https://doi.org/10.1016/j.electacta.2014.05.082>
- Mangalaraj, D., & Poongodi, S. (n.d.). *Electrodeposition — A Simple and Effective Method for the Preparation of Metal Oxide Nanostructured Thin Films*. 49–60. <https://doi.org/10.1007/978-3-319-44890-9>
- Marinkovic, N. S., Li, M., & Adzic, R. R. (2019). Pt-Based Catalysts for Electrochemical Oxidation of Ethanol. In *Topics in Current Chemistry* (Vol. 377). <https://doi.org/10.1007/s41061-019-0236-5>
- Matias, A. S., Ribeiro, A. P. C., Oliveira-silva, R. P., & Prazeres, D. M. F. (2018). Gold Nanotriangles as Selective Catalysts for Cyclohexanol and Cyclohexanone Production. *Applied Sciences*, 8. <https://doi.org/10.3390/app8122655>
- Mohanty, U. S. (2011). Electrodeposition: A versatile and inexpensive tool for the synthesis of nanoparticles, nanorods, nanowires, and nanoclusters of metals. *Journal of Applied Electrochemistry*, 41, 257–270. <https://doi.org/10.1007/s10800-010-0234-3>
- Mundotiya, M., & Ullah, W. (n.d.). Morphology Controlled Synthesis of the

- Nanostructured Gold by Electrodeposition Techniques. In *Novel Metal Electrodeposition and the Recent Application* (pp. 1–17). IntechOpen.
- Ni, B., & Wang, X. (2015). Face the Edges: Catalytic Active Sites of Nanomaterials. *Advanced Science*, 2, 1–22. <https://doi.org/10.1002/advs.201500085>
- Online, V. A., Rodriguez, P., & Koper, M. T. M. (2014). Electrocatalysis on gold. *Phys. Chem. Chem. Phys.*, 16, 13583–13594. <https://doi.org/10.1039/c4cp00394b>
- Rahman, D. S., Chatterjee, H., & Ghosh, S. K. (2015). Excess Surface Energy at the Tips of Gold Nanospikes: From Experiment to Modeling. *Journal of Physical Chemistry C*, (June). <https://doi.org/10.1021/acs.jpcc.5b03944>
- Rahman, M., Li, X., Lopa, N. S., & Lee, J. (2014). Electrodeposition of Gold on Fluorine-Doped Tin Oxide: Characterization and Application for Catalytic Oxidation of Nitrite. *Bull. Korean Chem. Soc.*, 35(February 2015). <https://doi.org/10.5012/bkcs.2014.35.7.XXX>
- Ren, B., Soc, J. E., Ren, B., Jones, L. A., Chen, M., Oppedisano, D. K., & Qiu, D. (2017). The Effect of Electrodeposition Parameters and Morphology on the Performance of Au Nanostructures for the Detection of As (III). *Journal of The Electrochemical Society*, 164(14). <https://doi.org/10.1149/2.1261714jes>
- Rodriguez, C., & Tremiliosi-Filho, G. (n.d.). *Electrochemical Deposition* (p. 918). p. 918. Brazil.
- Sheridan, E., Hjelm, J., & Forster, R. J. (2007). Electrodeposition of gold nanoparticles on fluorine-doped tin oxide: Control of particle density and size distribution. *Journal of Electroanalytical Chemistry*, 608, 1–7. <https://doi.org/10.1016/j.jelechem.2006.11.015>
- Svalova, A. I., & Stishenko, P. V. (2016). Distribution of active site types on Au nanoparticles with different structures: study of thermal dependence. *Procedia Engineering*, 152, 67–72. <https://doi.org/10.1016/j.proeng.2016.07.629>
- Tian, S., Cao, Y., Chen, T., Zang, S., & Xie, J. (2020). Ligand-protected atomically precise gold nanoclusters as model catalysts for oxidation reactions. *ChemComm*. <https://doi.org/10.1039/C9CC08215H>
- Zhang, A., Chen, Y., Yang, Z., Ma, S., Huang, Y., Richter, G., ... Wang, Z. (2019).

Enhanced Electrocatalytic Activities toward the Ethanol Oxidation of Nanoporous Gold Prepared via Solid-Phase Reaction. *ACS Applied Energy Materials*, 3(1), 336–343. <https://doi.org/10.1021/acsaem.9b01588>

Zhang, K., Wei, J., Zhu, H., Ma, F., & Wang, S. (2013). Electrodeposition of gold nanoparticle arrays on ITO glass as electrode with high electrocatalytic activity. *Materials Research Bulletin*, 48(3), 1338–1341. <https://doi.org/10.1016/j.materresbull.2012.12.029>

Zheng, Y., Wan, X., Cheng, X., Cheng, K., Liu, Z., & Dai, Z. (2020). Advanced catalytic materials for ethanol oxidation in direct ethanol fuel cells. *Catalysts*, 10(2). <https://doi.org/10.3390/catal10020166>

