



DAFTAR PUSTAKA

- Ahn, Y., Jeong, Y., Lee, D., dan Lee, Y., 2015, *Copper Nanowire-Graphene Core-Shell Nanostructure for Highly Stable Transparent Conducting Electrodes*, ASC Nano, Vol. 9, No. 3, h. 3125-3133.
- Bergin, S. M., Chen, Y.H., Rathmell, A. R., Charbonneau, P., Li, Z. Y., dan Wiley, B. J., 2012, *The effect of length and diameter on the properties of transparent, conducting nanowire films*, Nanoscale, V.4, h. 1996-2004.
- Borchert, J.W., Stewart, I.E., Ye, S., Rathmell, A.R., Wiley, B.J., Winey, K.I., 2015, *Effects of length dispersity and film fabrication on the sheet resistance of copper nanowire transparent conductors*, Nanoscale, V. 7, h. 14496-14504.
- Cao, G. dan Wang, Y., 2004, *Nanostructures and Nanomaterials, Synthesis: Properties and Application*, London: Imperial College Press.
- Chang, Y., Lye M.L., and Zeng, H.C., 2005, *Large-Scale Synthesis of High-Quality Ultralong Copper Nanowires*, Langmuir, 21, 3746-3748.
- Chen, J., Zhou, W., Chen, J., and Huang, Z.D., 2014, *Solution-processed copper nanowire flexible transparent electrodes with PEDOT:PSS as binder, protector and oxide-layer scavenger for polymer solar cells*, Nano Research, 273904164.
- Chen, Z., Ye, S., Stewart, I.E. and Wiley, B.J., 2014, *Copper Nanowire Networks with Transparent Oxide Shells That Prevent Oxidation without Reducing Transmittance*, ACS Nano, 8, 9673–9679.
- Christiana, H., dan Stuart, B., 2018, *Four Point Probe Resistivity Measurements*.
Diakses dari <https://www.pveducation.org/pvcdrom/characterisation/four-point-probe-resistivity-measurements> pada 22 Desember 2020.
- Copper Development Association, 2017, *The Copper Advantage : A Guide to Working With Copper and Copper Alloys*. Diakses dari alamat https://www.copper.org/publications/pub_list/pdf/a1360.pdf pada 12 November 2018.



- Cuya, H.J.L., Urushizaki, I., dan Jeyadevan, B., 2018, *Large-Scale Cu Nanowire Synthesis by PVP-Ethylene Glycol Route*, Journal of Nanomaterials, V. 2018, 1698357.
- Das, I. dan Ansari, S. A., 2009, *Nanomaterials in science and technology*. Journal of Scientific & Industrial Research, 68 (August), h. 657-667.
- Ethiraj, A. S., dan Kang, D. J., 2012, *Synthesis and characterization of CuO nanowires by a simple wet chemical method*, Nanoscale Research Letters, 7(1), 1-5.
- Gan, Y. X., Jayatissa, A. H., Yu, Z., Chen, X., dan Li, M., 2020, *Hydrothermal Synthesis of Nanomaterials*, 8917013.
- Ghadimkhani, G., de Tacconi, N. R., Chanmanee, W., Janaky, C. dan Rajeshwar, K., 2013, *Efficient solar photoelectrosynthesis of methanol from carbon dioxide using hybrid CuO-Cu₂O semiconductor nanorod arrays*, Chemical Communications, 49(13), 1297-1299.
- Gulati, M. S., Sachdeva, M., dan Bhasin, K. K., 2018, *Capping agents in nanoparticle synthesis: Surfactant and solvent system*, American Institute of Physics, 1953, 030214-1–030214-4.
- Guo, H., Lin, N., Chem, Y., Wang, Z., Xie, Q., Zheng, T., Gao, N., Li, S., Kang, J., Cai, D. dan Peng, D.-L., 2013, *Copper Nanowires as Fully Transparent Conductive Electrodes*, Sci. Rep., 3, 1-8.
- Harsojo, Puspita, L.A., Mardiansyah, D., Roto, R., Triyana, K., 2017, *The Roles of Hydrazine and Ethylene Diamine in Wet Synthesis of Cu Nano Wire*, Indonesian Journal of Chemistry., V. 17 (1), h. 43-48.
- He, X., He, R., Lan, Q., Duan, F., Xiao, J., Song, M., Zhang, M., Chen, Y., dan Li, Y., 2016, *A Facile Fabrication of Silver-Coated Copper Nanowires by Galvanic Replacement*, Journal of Nanomaterials, Vol. 2016, 2127980, pp. 8.
- Hiramoto, M., dan Shinmura, Y., 2017, *Organic Solar Cells*, Novel Materials and Selected Applications, Part E, 54, 1329-1338.



- Jager, K., Isabella, O., Smets, A.H.M., Swaaij, R.A.C.M.M.V., dan Zeman, M., 2014, *Solar Energy: Fundamentals, Technology, and Systems*, Delft University of Technology.
- Khasanah, D. U., 2018, *Studi Pelapisan Nano Ag Terhadap Oksidasi CuNWs dan Konduktor Transparannya*, Thesis, Universitas Gadjah Mada, Yogyakarta.
- Kumar, A., 2017, *Predicting efficiency of solar cells based on transparent conducting electrodes*, J. Appl. Phys, 121, 014502.
- Liu, Z., Yang, Y., Liang, J., Hu, Z., Li, S., Peng, S., dan Qian, Y., 2003, *Synthesis of Copper Nanowires via a Complex-Surfactant-Assisted Hydrothermal Reduction Process*, J. Phys. Chem. B, 107, h. 12658-12661.
- Mahajan, P., Singh, A., dan Arya, S., 2019, *Improved performance of solution processed organic solar cells with an additive layer of sol-gel synthesized ZnO/CuO core/shell nanoparticles*, Journal of Alloys and Compounds, V. 814, 152292.
- Mardiansyah, D., 2018, *Studi Sintesis dan Pelapisan Cu Nanowires sebagai Bahan Utama Pembuatan Konduktor Transparan*, Disertasi, Universitas Gadjah Mada, Yogyakarta.
- Mardiansyah, D., Triyana, K., dan Harsojo, 2019, *Study on Growth Mechanism of Cu Nanowires and Its Application as Transparent Conducting Electrode*, Indones. J. Chem., 19 (1), h. 160-165.
- Mishra, A.M., dan Shukla, R.K., 2021, *Simulation of photovoltaic material (donor blends PTB7:PC₇₀BM) polymer for solar cell application*, Material Today, 46, h. 2288-2293.
- Mousavi, K.M., Zarghami, Z., dan Salavati, N.M., 2016, *Facile and Novel Chemical Synthesis, Characterization, and Formation Mechanism of Copper Sulfides (Cu₂S, Cu₂S/CuS, CuS) Nanostructures for Increasing the Efficiency of solar Cells*, J. Phys. Chem. C.
- Mitin, V. V., Sementsov, D. I., dan Vagidov, N. Z., 2010, *Quantum Mechanics for Nanostructures*, Cambridge University Press, New York.



National Library of Medicine, 2005, *Octadecylamine*. Diakses dari alamat <https://pubchem.ncbi.nlm.nih.gov/compound/Octadecylamine> pada 13 Agustus 2020

Nunes, D., Pimentel, A., Barquinha, P., Carvalho, P. A., Fortunato, E., dan Martins, R., 2015, *Cu₂O nanowires produced by oxidation of Cu nanowires: a comparison between microwave irradiation and furnace annealing in atmospheric conditions*, Microsc. Microanal. 21(228144), 112– 113.

Ohienko, O., dan Oh, Y.J., 2020, *Preparation of narrow copper nanowires with less oxidized surface for flexible and transparent electrodes under octadecylamine*, Materials Chemistry and Physics, 246, 122783.

Photonic Media, 2009, *Oriel IQE-200*. Diakses dari alamat https://www.photonics.com/Products/Oriel_IQE-200/pr40232 pada 11 Agustus 2020.

Ravi, K.D.V., Ki, I., Zhong, Z., Kim, K., Lee, D., dan Moon. J., 2014, *Cu(II)-alkyl amine complex mediated hydrothermal synthesis of Cu nanowire: exploring the dual role of alkyl amines*, Phys. Chem. Chem. Phys., V. 16, h. 22107-22115.

Shi, Y., Li, H., Chen, L., dan Huang, X., 2005, *Obtaining ultra-long copper nanowires via a hydrothermal process*, Science and Technology of Advanced Materials, V. 6, h. 761-765.

Stolterfoht, M., Armin, A., Shoae, S., Kassal, I., Burn, P., dan Meredith, P., 2016, *Slower carriers limit charge generation in organic semiconductor light-harvesting systems*, Nature Communication, 7, 11944.

Surya Utama Putra, 2016, *Kinerja panel surya, efisiensi versus daya maksimum*. Diakses dari alamat <https://suryautamaputra.co.id/blog/2016/05/30/kinerja-panel-surya-efisiensi-versus-daya-maksimum/> pada 19 Desember 2020.

Thelander, C., Agarwal, P., Brongersma, S., Eymery, J., Feiner, L. F., Forchel, A., Scheffler, M., Riess, W., Ohlsson, B. J., Gosele, U., dan Samuelson, L.,



2006, *Nanowire-based one-dimensional electronics*, Materials Today, Vol. 9, No. 10.

Wang, B.Y., Yoo, T.H., Lim, J.W., Sang, B.I., Lim, D.S., Choi, W.K., Hwang, D.K., dan Oh, Y.J., 2015, *Enhanced Light Scattering and Trapping Effect of Ag Nanowire Mesh Electrode for High Efficient Flexible Organic Solar Cell*, Small II, 02161.

Wang, Y., Liu, P., Zeng, B., Liu, L., dan Yang, J., 2018, *Facile Synthesis of Ultralong and Thin Copper Nanowires and Its Application to High-Performance Flexible Transparent Conductive Electrodes*, Nanoscale Research Letters, 13, 78.

Wilman Septina, 2013, *Sel Surya: Struktur & Cara Kerja*. Diakses dari alamat <https://teknologisurya.wordpress.com/dasar-teknologi-sel-surya/prinsip-kerja-sel-surya/> pada 9 Juli 2021.

Xu, P.; Chen, W.Z.; Wang, Q.; Zhu, T.S.; Wu, M.J.; Qiao, J.L.; Chen, Z.W.; Zhang, J.J., 2015, *Effects of transition metal precursors (Co, Fe, Cu, Mn, or Ni) on pyrolyzed carbon supported metal-aminopyrine electrocatalysts for oxygen reduction reaction*, RSC Adv. 5, 6195–6206.

Yoon, H., Shin, D. S., Babu, B., Kim, T. G., Song, K. M., dan Park, J., 2017, *Control of copper nanowire network properties and application to transparent conducting layer in LED*, Materials and Design, 132, h. 66–71.

Zhang, D., Wang, R., Wen, M., Weng, D., Cui, X., Sun, J., dan Li, H., 2012, *Synthesis of Ultralong Copper Nanowires for High-Performance Transparent Electrodes*, Journals of the American Chemical Society, 134, 14283–14286.

Zhang, F., Xu, X., Tang, W., Zhang, J., Zhuo, Z., Wang, J., Wang, J., Xu, Z., dan Wang, Y., 2011, *Recent development of the inverted configuration organic solar cells*, Solar Energy Materials & Solar Cells, 95, 1785-1799.