

DAFTAR PUSTAKA

- Abdolhosseinzadeh, S., Asgharzadeh, H., Sadighikia, S., & Khataee, A. (2016). UV-assisted synthesis of reduced graphene oxide–ZnO nanorod composites immobilized on Zn foil with enhanced photocatalytic performance. *Research on Chemical Intermediates*, 42(5), 4479-4496.
- Abdullah, H., Atiqah, N. A., Omar, A., Asshaari, I., Mahalingam, S., Razali, Z., & Misran, H. (2015). Structural, morphological, electrical and electron transport studies in ZnO–rGO (wt% = 0.01, 0.05 and 0.1) based dye-sensitized solar cell. *Journal of Materials Science: Materials in Electronics*, 26(4), 2263-2270.
- Acharya, J., Ojha, G. P., Kim, B. S., Pant, B., & Park, M. (2021). Modish designation of hollow-tubular rGO–NiMoO₄@ Ni–Co–S hybrid core–shell electrodes with multichannel superconductive pathways for high-performance asymmetric supercapacitors. *ACS Applied Materials & Interfaces*, 13(15), 17487-17500.
- Akash, M. S. H., & Rehman, K. (2020). Ultraviolet-visible (UV-VIS) spectroscopy. In *Essentials of Pharmaceutical Analysis* (pp. 29-56). Springer, Singapore.
- Beka, L. G., Li, X., & Liu, W. (2017). Nickel Cobalt Sulfide core/shell structure on 3D Graphene for supercapacitor application. *Scientific reports*, 7(1), 1-11.
- Bockman, O., Østvold, T., Voyatzis, G. A., & Papatheodorou, G. N. (2000). Raman spectroscopy of cemented cobalt on zinc substrates. *Hydrometallurgy*, 55(1), 93-105.
- Bykkam, S., Kalagadda, V. R., Kalagadda, B., Selvam, K. P., & Hayashi, Y. (2017). Ultrasonic-assisted synthesis of ZnO nano particles decked with few layered graphene nanocomposite as photoanode in dye-sensitized solar cell. *Journal of Materials Science: Materials in Electronics*, 28(8), 6217-6225.
- Chen, Z., Deutsch, T. G., Dinh, H. N., Domen, K., Emery, K., Forman, A. J., & Turner, J. (2013). UV-vis Spectroscopy. In *Photoelectrochemical Water Splitting*. 6(2), 49-62
- Chen, X., Liu, Q., Bai, T., Wang, W., He, F., & Ye, M. (2021). Nickel and cobalt sulfide-based nanostructured materials for electrochemical energy storage devices. *Chemical Engineering Journal*, 409, 127237.

- Chiba, Y., Islam, A., Watanabe, Y., Komiya, R., Koide, N., & Han, L. (2006). Dye-sensitized solar cells with conversion efficiency of 11.1%. *Japanese journal of applied physics*, 87(3), 56-63.
- Dhasmana, H., Dutta, V., Kumar, A., Kumar, A., Verma, A., & Jain, V. K. (2020). Hydrothermally synthesized zinc oxide nanoparticles for reflectance study onto Si surface. *Materials Today: Proceedings*, 32, 287-293.
- El Haimeur, A., El Gana, L., Addou, M., & El Kenz, A. (2018). Effect Of Tuning the Structure on The Optical And Magnetic Properties By Various Transition Metal Doping In ZnO/TM (TM= Fe, Feco, Cr, And Mn) Thin Films. *Journal of Superconductivity and Novel Magnetism*, 31(2), 569-576.
- Epp, J. (2016). X-Ray Diffraction (XRD) Techniques For Materials Characterization. In *Materials characterization using nondestructive evaluation (NDE) methods* (pp. 81-124). Woodhead Publishing.
- Etheridge, J. R., Birgand, F., Osborne, J. A., Osburn, C. L., Burchell, M. R., & Irving, J. (2014). Using In Situ Ultraviolet-Visual Spectroscopy To Measure Nitrogen, Carbon, Phosphorus, And Suspended Solids Concentrations At A High Frequency In A Brackish Tidal Marsh. *Limnology and oceanography: methods*, 12(1), 10-22.
- Gandhi, V., Ganesan, R., Abdulrahman Syedahamed, H. H., & Thaiyan, M. (2014). Effect Of Cobalt Doping on Structural, Optical, And Magnetic Properties of ZnO Nanoparticles Synthesized By Coprecipitation Method. *The Journal of Physical Chemistry C*, 118(18), 9715-9725.
- Gnanamoorthy, P., Karthikeyan, V., & Prabu, V. A. (2014). Field Emission Scanning Electron Microscopy (FESEM) characterisation of the porous silica nanoparticulate structure of marine diatoms. *Journal of Porous Materials*, 21(2), 225-233.
- Gong, J., Liang, J., & Sumathy, K. (2012). Review On Dye-Sensitized Solar Cells (Dsscs): Fundamental Concepts And Novel Materials. *Renewable and Sustainable Energy Reviews*, 16(8), 5848-5860.
- Handayani, R. (2018). Sintesis dan Identifikasi Perubahan Struktur Lokal Bi₄Ti₃O₁₂ Terdoping V⁵⁺ dengan Spektroskopi Raman.
- Henry, A., Suryadi, M. T., & Yanuar, A. (2002). Analisis Spektrofotometri UV-Vis pada Obat Influenza dengan Menggunakan Aplikasi Sistem Persamaan Linier. *Komputer dan Sistem Intelijen*, 2-3.

- Hongsith, K., Hongsith, N., Wongratanaaphisan, D., Gardchareon, A., Phadungdhitidhada, S., & Choopun, S. (2015). Efficiency enhancement of ZnO dye-sensitized solar cells by modifying photoelectrode and counterelectrode. *Energy Procedia*, 79, 360-365.
- Huo, J., Zheng, M., Tu, Y., Wu, J., Hu, L., & Dai, S. (2015). A high performance cobalt sulfide counter electrode for dye-sensitized solar cells. *Electrochimica Acta*, 159, 166-173.
- Janotti, A., & Van de Walle, C. G. (2009). Fundamentals Of Zinc Oxide as a Semiconductor. *Reports on progress in physics*, 72(12), 126-132.
- Jumeri, F. A., Lim, H. N., Zainal, Z., Huang, N. M., Pandikumar, A., & Lim, S. P. (2015). Dual Functional Reduced Graphene Oxide As Photoanode And Counter Electrode In Dye-Sensitized Solar Cells And Its Exceptional Efficiency Enhancement. *Journal of Power Sources*, 293, 712-720.
- Kilic, B., & Turkdogan, S. (2017). Fabrication of dye-sensitized solar cells using graphene sandwiched 3D-ZnO nanostructures based photoanode and Pt-free pyrite counter electrode. *Materials Letters*, 193, 195-198.
- Kristiawan, H., Kumara, I. N. S., & Giriantari, I. A. D. (2019). Potensi Pembangkit Listrik Tenaga Surya Atap Gedung Sekolah di Kota Denpasar. *Jurnal SPEKTRUM.*, 6(4) : 43-49.
- Le, T. T. N., Le, T. P., Nguyen, T. T. M., Ho, H. D., Le, K. H., Tran, M. H., & Hieu, N. H. (2020). Synthesis of zinc oxide/reduced graphene oxide composites for fabrication of anodes in dye-sensitized solar cells. *Chemical Engineering Transactions*, 78, 61-66.
- Lin, C. Y., Lai, Y. H., Chen, H. W., Chen, J. G., Kung, C. W., Vittal, L. R., & Ho, K. C. (2011). Highly efficient dye-sensitized solar cell with a ZnO nanosheet-based photoanode. *Energy & Environmental Science*, 4(9), 3448-3455.
- Ma, C., Liu, Z., Cai, Q., Han, C., & Tong, Z. (2018). ZnO Photoelectrode Simultaneously Modified With Cu₂O And Co-Pt Based On Broader Light Absorption And Efficiently Photogenerated Carrier Separation. *Inorganic Chemistry Frontiers*, 5(10), 2571-2578.
- McCune, M., Zhang, W., & Deng, Y. (2012). High efficiency dye-sensitized solar cells based on three-dimensional multilayered ZnO nanowire arrays with “caterpillar-like” structure. *Nano letters*, 12(7), 3656-3662.

- Mohan, A. C., & Renjanadevi, B. (2016). Preparation of zinc oxide nanoparticles and its characterization using scanning electron microscopy (SEM) and X-ray diffraction (XRD). *Procedia Technology*, 24, 761-766.
- Murthy, N. S. (2013). Scattering techniques for structural analysis of biomaterials. In Characterization of Biomaterials (pp. 34-72). Woodhead Publishing.
- Nageswara Rao, Bhuvanagiri; Srinadhu, Endu Sekhar; Madhusudhanrao, Vallabhaneni; Satyanarayana, Nallani (2018). Structural and Optical Studies of ZnO Nanostructures Synthesized by Rapid Microwave Assisted Hydrothermal and Solvothermal Methods. *Transactions of the Indian Ceramic Society*, 77(3), 169–174.
- Nixdorf, S. L. (2017). UV–Vis Spectroscopy. In *Spectroscopic methods in food analysis* (pp. 35-68). CRC Press.
- Obotowo, I. N., Obot, I. B., & Ekpe, U. J. (2016). Organic sensitizers for dye-sensitized solar cell (DSSC): Properties from computation, progress and future perspectives. *Journal of Molecular Structure*, 1122, 80-87.
- Ooyama, Y., & Harima, Y. (2012). Photophysical and electrochemical properties, and molecular structures of organic dyes for dye-sensitized solar cells. *ChemPhysChem*, 13(18), 4032-4080.
- Panthy, G., Park, M., Kim, H. Y., Lee, S. Y., & Park, S. J. (2015). Electrospun ZnO Hybrid Nanofibers For Photodegradation Of Wastewater Containing Organic Dyes: A Review. *Journal of Industrial and Engineering Chemistry*, 21, 26-35.
- Pardede, B.B., 2018. Analisis Pengaruh Penambahan Reduced Graphene Oxide Terhadap Sifat Fotokatalitik Dari Komposit ZnO/rGO Dengan Metode Oksidasi Serbuk Zink Dan Reduksi Grafit Oksida Untuk Degradasi Rhodamine B. *Institut Teknologi Surabaya*.
- Ponhan, W., Phadungdhitdhada, S., & Choopun, S. (2017). Fabrication of ethanol sensors based on ZnO thin film field-effect transistor prepared by thermal evaporation deposition. *Materials Today: Proceedings*, 4(5), 6342-6348.
- Ramadhan, D. A. (2018). Preparasi Katoda Sel Surya Melalui Elektrodepositi Graphene/Pedot: Pss Pada Substrat Indium Tin Oxide (ITO). *Universitas Negeri Semarang*.

- Ramelan, A H., Wahyuningsih, S., Saputro, S., Supriyanto, E., Hanif, Q A. (2017). TiO₂ Nanostructure by Sol-Gel for Dye-Sensitized Solar Cells as Renewable Energy Source. IOP Publishing. 012013
- Sha, S., Lu, H., Yang, S., Li, T., Wu, J., Ma, J., & Li, Y. (2021). One-step electrodeposition of ZnO/graphene composite film as photoanode for dye-sensitised solar cells. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 630, 127491.
- Song, X., Tan, L., Wang, X., Zhu, L., Yi, X., & Dong, Q. (2017). Synthesis of CoS@ rGO composites with excellent electrochemical performance for supercapacitors. *Journal of Electroanalytical Chemistry*, 794, 132-138.
- Sugathan, V., John, E., & Sudhakar, K. (2015). Recent improvements in dye sensitized solar cells: A review. *Renewable and Sustainable Energy Reviews*, 52, 54-64.
- Supriyanto, A., Mustaqim, A., Agustin, M., Ramelan, A H., Suyitno., Rosa, E S., Yofentina., Nurosyid, F., (2016). Fabrication of organic solar cells with design blend P3HT: PCBM variation of mass ratio. IOP Publishing. 012050
- Susana, H. dan Astuti, A. 2016. Pengaruh Konsentrasi LiOH terhadap Sifat Listrik Anoda Baterai Litium Berbasis Karbon Aktif Tempurung Kemiri. *Jurnal Fisika Unand*, 5(2), 136-141.
- Syukron, A., Wahyuono, R. A., Sawitri, D., & Risanti, D. D. (2014). The effect of paste preparation and annealing temperature of ZnO photoelectrode to dye-sensitized solar cells (dssc) performance. In *Advanced Materials Research* (Vol. 896, pp. 183-186). Trans Tech Publications Ltd.
- Suhartati, T., 2017. Dasar-Dasar Spektrofotometri Uv-Vis Dan Spektrometri Massa Untuk Penentuan Struktur Senyawa Organik. Perpustakaan Nasional RI: Katalog Dalam Terbitan (KDT).
- Vinoth, S., Kanimozhi, G., Kumar, H., Srinadhu, E. S., & Satyanarayana, N. (2017). Symbiotic Organism Search Algorithm for Simulation Of J-V Characteristics And Optimizing Internal Parameters Of DSSC Developed Using Electrospun TiO₂ Nanofibers. *Journal of Nanoparticle Research*, 19(12), 1-14.
- Vittal, R., & Ho, K. C. (2017). Zinc oxide based dye-sensitized solar cells: A review. *Renewable and Sustainable energy reviews*, 70, 920-935.
- Wan, H. Z., Jiang, J. J., Yu, J. W., Ruan, Y. J., Peng, L., Zhang, L., ... & Bie, S. W. (2014). Cobalt sulfide nanotube arrays grown on FTO and graphene

- membranes for high-performance supercapacitor application. *Applied surface science*, 311, 793-798.
- Wen, M. Y. S., Abdullah, A. H., & Ngee, L. H. (2017). Synthesis of ZnO/rGO Nanohybrid for improved photocatalytic activity. *Malaysian Journal of Analytical Sciences*, 21(4), 889-900.
- Wong, Ka Kan; Ng, Annie; Chen, Xin Yi; Ng, Yip Hang; Leung, Yu Hang; Ho, Kam Hong; Djurišić, Aleksandra B.; Ng, Alan Man Ching; Chan, Wai Kin; Yu, Lihong; Phillips, David Lee (2012). Effect of ZnO Nanoparticle Properties on Dye-Sensitized Solar Cell Performance. *ACS Applied Materials & Interfaces*, 4(3), 1254–1261.
- Wu, J., Lan, Z., Lin, J., Huang, M., Huang, Y., Fan, L., & Luo, G. (2015). Electrolytes In Dye-Sensitized Solar Cells. *Chemical reviews*, 115(5), 2136-2173.
- Yan, L. T., Wu, F. L., Peng, L., Zhang, L. J., Li, P. J., Dou, S. Y., & Li, T. X. (2012). Photoanode of Dye-Sensitized Solar Cells Based On A ZnO/Tio2 Composite Film. *International Journal of Photoenergy*, 23(3), 76-82.
- Yan, L. T., Wu, F. L., Peng, L., Zhang, L. J., Li, P. J., Dou, S. Y., & Li, T. X. (2012). Photoanode Of Dye-Sensitized Solar Cells Based On A ZnO/Tio2 Composite Film. *International Journal of Photoenergy*, 12(4), 34-42.
- Yeh, M. H., Lin, L. Y., Chang, L. Y., Leu, Y. A., Cheng, W. Y., Lin, J. J., & Ho, K. C. (2014). Dye-Sensitized Solar Cells With Reduced Graphene Oxide As The Counter Electrode Prepared By A Green Photothermal Reduction Process. *ChemPhysChem*, 15(6), 1175-1181.