

DAFTAR PUSTAKA

- Akhtar, M.S., Lee, H.C., Kim, K.J., dan Yang, O.B., 2006, Quasi-Solid-State Dye Sensitized Solar Cell Based on Poly(Acrylonitrile-co-Methacrylonitrile)-Silica Gel Electrolyte, *Photovoltaic Energy Conversion-Conference Record of The 2006 IEEE 4th World Conference*, 2, 1568-1571.
- Andrienko, D., 2008, *Cyclic Voltammetry*, http://mpip-mainz.mpg.de/~andrienko/journal_club/cyclic_voltammetry.pdf, diakses tanggal 13 Mei 2015.
- Aranaz, I., Harris, R., Mengibar, M., Panos, I., Miralles, B., Acosta, M., Galed, G., dan Heras, A., 2009, Functional Characterizations of Chitin and Chitosan, *Curr. Chem. Biol.*, 3, 203-230.
- Avellaneda, C.O., Vieira D.F., Al-Kahlout, A., Heusing, S., Leite, E.R., Pawlicka, A., dan Aegerter, M.A., 2008, All Solid State Electrochromic Devices with Gelatin-based Electrolyte, *Sol. Energy Mater. Sol. Cells*, 92, 228 – 233.
- Bard, A. J. dan Faulkner, L. R., 2001, *Electrochemical Methods: Fundamentals and Applications*, John Wiley & Sons Inc., New York
- Bhattacharya, B., Lee, J.Y., Geng, J., Jung, H.T., dan Park, J.K., 2009, Effect of Cation Size on Solid Polymer Electrolyte Based Dye-Sensitized Solar Cells, *Langmuir*, 25, 3276-3281.
- Buraidah, M.H., Teo, L.P., Majid, S.R., dan Arof, A.K., 2010, Characteristics of TiO₂/Solid Electrolyte Junction Solar Cells with I⁻/I₃⁻ Redox Couple, *Opt. Mater.*, 32, 723-728.
- Buraidah, M.H., Teo, L.P., Yusuf, S.N.E., Noor, M.M., Kufian, M.Z., Careem, M.A., Majid, S.R., Taha, R.M., dan Arof, A.K., 2011, TiO₂/Chitosan-NH₄I(+I₂)-BMII-Based Dye Sensitized Solar Cells with Anthocyanin Dyes Extracted from Black Rice and Red Cabbage, *Int. J. Photoenergy*, Vol.2011, Article ID 273683.
- Chatzivasiloglou, E., Stergiopoulos, T., Kontos, A.G., Alexis, N., Prodromidis, M., dan Falaras, P., 2007, The Influence of The Metal Cation and The Filler on The Performance of Dye-Sensitized Solar Cells Using Polymer-Gel Redox Electrolytes, *J. Photochem. Photobiol., A*, 192, 49-55.
- Cho, T.Y., Yoon, S.G., Sekhon, S.S., dan Han, C.H., 2011, Effect of Ionic Liquids with Different Cations in I⁻/I₃⁻ Redox Electrolyte on The Performance of Dye-Sensitized Solar Cells, *Bull. Korean Chem. Soc.*, 6(32), 2058-2062.
- Dallas, P., Stamopoulos, D., Boukos, N., Tzitzios, V., Niarchos, D., dan Petridis, D., 2007, Characterization, Magnetic and Transport Properties of Polyaniline Synthesized through Interfacial Polymerization, *Polymer*, 48, 3162-3169.

- Dissanayake, M.A.K.L., Jayathissa, R., Seneviratne, V.A., Thotawatthage, C.A., Senadeera, G.K.R., dan Mellander, B.E., 2014, Polymethylmethacrylate (PMMA) Based Quasi-Solid Electrolyte with Binary Iodide Salt for Efficiency Enhancement in TiO₂ based Dye Sensitized Solar Cells, *Solid State Ionics*, 265, 85-91.
- Dissanayake, M.A.K.L., Rupasinghe, W.N.S., Seneviratne, V.A., Thotawatthage, C.A., dan Senadeera, G.K.R., 2014, Optimization of Iodide Ion Conductivity and Nano Filler Effect for Efficiency Enhancement in Polyethylene Oxide (PEO) based Dye Sensitized Solar Cells, *Electrochim. Acta*, 145, 319-326.
- Ekanayake, P., Zain, R., Iskandar, M., Tennakoon, K., Yoshikawa, S., dan Senadeera, R., 2011, Evaluation of Dyes from *Melastroma malabathricum*: A Native Plant of Borneo, As Potential Natural Colour for Dye-Sensitized Solar Cells, *Solar Asia 2011 Int. Conf.*, 28-30 Juli 2011, Kandy, Sri Lanka.
- Freitas, J.N., Nogueira, A.F., dan Paoli, M.A.D, 2009, New Insight into Dye Sensitized Solar Cells with Polymer Electrolytes, *J. Mater. Chem.*, 19, 5279-5294.
- Grätzel, M., 2003, Dye-Sensitized Solar Cells, *J. Photochem. Photobiol.*, A,2(4), 145-153.
- Green, M.A., Emery, K., King, D.L., Hisikawa, Y., dan Warta, W., 2006, Solar Cell Efficiency Tables (version 27), *Prog. Photovolt. Res. Appl.*, 14, 45-51.
- Hagberg, D., 2009, *Synthesis of Organic Chromophores for Dye Sensitized Solar Cells*, Thesis, KTH Chemical Science and Engineering, Royal Institute of Technology, Stockholm, Sweden.
- Huo, Z., Dai, S., Wang, K., Kong, F., Zhang, C., Pan, X., dan Fang, X., 2007, Nanocomposite Gel Electrolyte with Large Enhanced Charge Transport Properties of An I₃⁻/I Redox Couple for Quasi-Solid-State Dye Sensitized Solar Cells, *Sol. Energy Mater. Sol. Cells.*, 91, 1959 – 1965.
- Ito, S., Zakeeruddin, S.M., Humphry-Baker, R., Liska, P., Charvet, R., Comte, P., Nazeeruddin, M.K., Pechy, P., Takata, M., Miura, H., Uchida, S., dan Grätzel, M., 2006, High Efficiency Organic Dye Sensitized Solar Cells Controlled by Nanocrystalline TiO₂ Electrode Thickness, *Adv. Mater.*, 18, 1202.
- Jolly, D., Pelleja, L., Narbey, S., Oswald F., Chiron, J., Clifford, J., Palomares, E., dan Demadrille, R., 2014, Robust Organic Dye for Dye Sensitized Solar Cells Based on Iodine/Iodide Electrolytes Combining High Efficiency and Outstanding Stability, *Sci. Rep.*, 4033(4), 1-7.
- Kalaignan, G.P., Kang, M.S., dan Kang, Y.S., 2006, Effects of Composition on Properties of PEO-KI-I₂ Salts Polymer Electrolytes for DSSC, *Solid State Ionics*, 12(177), 1091-1097.

- Kim, S.S., Nah, Y.C., Noh, Y.Y., Jo, J., dan Kim, D.Y., 2006, Electrodeposited Pt for Cost-Efficient and Flexible Dye Sensitized Solar Cells, *Electrochim. Acta*, 51, 3814-3819.
- Kissinger, P.T., dan Heineman, W.R., 1983, Cyclic Voltammetry, *J. Chem. Educ.*, 9(60), 702-706.
- Kumirska, J., Czerwicka, M., Kaczynski, Z., Bychowska, A., Brzozowski, K., Thoming, J., dan Stepnowski, P., 2010, Application of Spectroscopic Methods for Structural Analysis of Chitin and Chitosan, *Mar. Drugs*, 8, 1567 – 1636.
- Lee, S.H.A., Jackson, A.M.S., Hess, A., Fei, S.T., Pursel, S.M., Basham, J., Grimes, C.A., Horn, M.W., Allcock, H.R., dan Mallouk, T.E., 2010, Influence of Different Iodide Salts on the Performance of Dye-Sensitized Solar Cells Containing Phosphazene-Based Nonvolatile Electrolytes, *J. Phys. Chem. C*, 114, 15234-15242.
- Li, Q., Tang, Q., Lin, L., Chen, X., Chen, H., Chu, L., Xu, H., Li, M., Qin, Y., dan He, B., 2014, A Simple Approach of Enhancing Photovoltaic Performances of Quasi-Solid-State Dye-Sensitized Solar Cells by Integrating Conducting Polyaniline into Electrical Insulating Gel Electrolyte, *J. Power Sources*, 245, 468-474.
- Lu, S., Koeppe, R., Gunes, S., dan Sariciftci, N. S., 2007, Quasi-Solid-State Dye Sensitized Solar Cell with Cyanoacrylate as Electrolyte Matrix, *Sol. Energy Mater. Sol. Cells.*, 91, 1081-1086.
- Mohamad, S.A., Ali, M.H., Yahya, R., Ibrahim, Z.A., dan Arof, A.K., 2007, Photovoltaic Activity in a ZnSe/PEO-Chitosan Blend Electrolyte Junction, *Sol. Energy Mater. Sol. Cells.*, 4(13), 235-240.
- Ogawa, K., Oka, K., Miyanishi, T., dan Hirano, S., 1984, *Chitin, Chitosan, and Related Enzymes*, Academic Press, Orlando, USA.
- O'Regan, B., dan Grätzel, M., 1991, A Low Cost, High Efficiency Solar Cell Based on Dye Sensitized Colloidal TiO₂ Film, *Nature*, 353, 737-740.
- Rajendran, S., Mahendran, O., dan Mahalingam, T., 2002, Thermal and Ionic Conductivity Studies of Plasticized PMMA/PVdF Blend Polymer Electrolytes, *Eur. Polym. J.*, 38(1), 49-55.
- Saito, Y., Kubo, W., Kitamura, T., Wada, Y., dan Yanagida, S., 2004, I⁻/I₃⁻ Redox Reaction Behaviour on Poly(3,4-ethylenedioxythiophene) Counter Electrode in Dye-Sensitized Solar Cells, *J. Photochem. Photobiol., A*, 164, 153-157.
- Shafiee, A., Salleh, M.M., dan Yahaya, M., 2011, Determination of HOMO and LUMO of [6,6]-Phenyl C61-Butyric Acid 3-Ethylthiophene Ester and Poly(3-Octyl-Thiophene-2,5-Diyil) through Cyclic Voltammetry Characterization, *Sains Malays.*, 2(40), 173-176.

- Singh, P.K., Bhattacharya, B., Nagarale, R.K., Kim, K.W., dan Rhee, H.W., 2010, Synthesis, Characterization and Application of Biopolymer-Ionic Liquid Composite Membranes, *Synth. Met.*, 160, 139-142.
- Singh, R., Jadhav, N.A., Majumder, S., Bhattacharya, B., dan Singh, P.K., 2013, Novel Biopolymer Gel Electrolyte for Dye-Sensitized Solar Cell Application, *Carbohydr. Polym.*, 91, 682-685.
- Skoog, D., West, D.M., dan Holler, F.J., 1996, *Fundamentals of Analytical Chemistry*, 7th Edition, Saunders College Publishing.
- Suratman, A., Buchari, Noviandri, I., dan Gandasasmita, S., 2004, Studi Proses Elektropolimerisasi Pirol dengan Teknik Voltametri Siklis, *Indo. J. Chem.*, 2(4), 117 – 124.
- Tang, Z., Liu, Q., Tang, Q., Wu, J., Wang, J., Chen, S., Cheng, C., Yu, H., Lan, Z., Lin, J., dan Huang, M., Preparation of PAA-g-CTAB/PANI Polymer Based Gel-Electrolyte and The Application in Quasi-Solid-State Dye-Sensitized Solar Cells, *Electrochim. Acta*, 58, 52-57.
- Tang, Z., Wu, J., Liu, Q., Zheng, M., Tang, Q., Lan, Z., dan Lin, J., 2012, Preparation of Poly(acrylic acid)/gelatin/polyaniline Gel-Electrolyte and Its Application in Quasi-Solid-State Dye-Sensitized Solar Cells, *J. Power Sources*, 203, 282-287.
- Tsai, T.H., Chiou, S.C., Chen, S.M., Lin, dan K.C., 2011, Enhanced Photoelectrochemical Performance of Dye-Sensitized Solar Cells base on Iodine-PEDOT Compositated Film, *Int. J. Electrochem. Sci.*, 6, 3938-3950.
- Vincent, C.A., 1995, Ion Transport in Polymer Electrolyte, *Electrochim. Acta*, 40, 2035.
- Wang, J., 1994, *Analytical Electrochemistry*, VHC Publishers Inc., New York.
- Wang, W., Guo, X., dan Yang, Y., 2011, Lithium Iodide Effect on the Electrochemical Behavior of Agarose Based Polymer Electrolyte for Dye-Sensitized Solar Cell, *Electrochim. Acta*, 56, 7347-7351.
- Wenling, C., Duohoi, J., Jiamou, L., Yandao, G., Nanming, Z., dan Xiufang, Z., 2005, Effects of the Degree of Deacetylation on the Physicochemical Properties and Schwann Cell Affinity of Chitosan Films, *J. Biomater. Appl.*, 20, 157-177.
- Wu, T.Y., Tsao, M.H., Chen, F.L., Su, S.G., Chang, C.W., Wang, H.P., Lin, Y.C., dan Sun, I.W., 2010, Synthesis and Characterization of Three Organic Dyes with Various Donors and Rhodamine Ring Acceptor for Using in Dye-Sensitized Solar Cells, *J. Iran. Chem. Soc.*, 3(7), 707-720.
- Xing, S., Zheng, H., dan Zhao, G., 2008, Preparation of Polyaniline Nanofibers via a Novel Interfacial Polymerization Method, *Synth. Met.*, 158, 59-63.
- Xu, Y.X., Kim, K.M., Hanna, M.A., dan Nag, D., 2005, Chitosan-Starch Composite Film: Preparation and Characterization, *Ind. Crops Prod.*, 21, 185-192.

- Yang, Y., Hu, H., Zhou, C.H., Xu, S., Sebo, B., dan Zhao, X.Z., 2011, Novel Agarose Polymer Electrolyte for Quasi-Solid State Dye Sensitized Solar Cell, *J. Power Sources*, 196, 2410-2415.
- Yuan, S., Tang, Q., He, B., dan Yang, P., 2014, Efficient Quasi-Solid-State Dye-Sensitized Solar Cells Employing Polyaniline and Polypyrrole Incorporated Microporous Conducting Gel Electrolytes, *J. Power Sources*, 254, 98-105.
- Yuan, S., Tang, Q., He, B., dan Yu, L., 2015, Conducting Gel Electrolytes with Microporous Structures for Efficient Quasi-Solid State Dye-Sensitized Solar Cells, *J. Power Sources*, 273, 1148-1155.
- Zanotti, G., Angelini, N., Notarantonio, S., Paoletti, A.M., Pannesi, G., Rossi, G., Lembo, A., Colonna, D., Carlo, A.D., Reale, A., Brown, T.M., dan Calogero, G., 2010, Bridged Phthalocyanine Systems for Sensitization of Nanocrystalline TiO₂ Films, *Int. J. Photoenergy*, ArticleID136807.
- Zhang, L., Huai, W.J., Ming, L.J., dan Liang, H.M., 2010, A Highly Efficient Electric Additive for Enhancing Photovoltaic Kinerjance of Dye Sensitized Solar Cells, *Sci. China*, 6(53), 1352-1357.
- Zhang, J., Yu, C., Wang, L., Li, Y., Ren, Y., dan Shum, K., 2014, Energy Barrier at the N719-dye/CsSnI₃ Interface for Photogenerated Holes in Dye-Sensitized Solar Cells, *Sci. Rep.*, 4, 6954-6959.