

## DAFTAR PUSTAKA

- Al-mulali, U., Sab, C.N.B.C., & Fereidouni, H.G. (2012). Exploring the bi-directional long run relationship between urbanization, energy consumption, and carbon dioxide emission. *Energy Journal*, 46(1), 156–167.
- Apriliyanti, S., Soeprbowati, T.R., Yulianto, B. (2016). Hubungan kemelimpahan *Chlorella* sp dengan kualitas lingkungan perairan pada skala semi masal di BBBPBAP Jepara. *Jurnal Ilmu Lingkungan*, 14(2), 77-81.
- Ardiani, N.A., Koerniawan, M.D., Martokusumo, W., Suyono, E.A., & Poerbo, H.W. (2019). Feasibility of algae photobioreactor as fasad in the office building in indonesia. *IOP Conference Series: Earth and Environmental Science*, 322(1), 1-7.
- Badan Pusat Statistik. (2012). *Penduduk Indonesia menurut provinsi 1971, 1980, 1990, 1995, 2000 dan 2010*. Diakses 14 Oktober 2019, dari <https://www.bps.go.id/statictable/2009/02/20/1267/penduduk-indonesia-menurut-provinsi-1971-1980-1990-1995-2000-dan-2010.html>.
- Badan Pusat Statistik. (2014) a. *Persentase penduduk daerah perkotaan menurut provinsi, 2010-2035*. Diakses 14 Oktober 2019, dari <https://www.bps.go.id/statictable/2014/02/18/1276/persentase-penduduk-daerah-perkotaan-menurut-provinsi-2010-2035.html>.
- Badan Pusat Statistik. (2014) b. *Proyeksi penduduk menurut provinsi 2010-2035*. Diakses 14 Oktober 2019, dari <https://www.bps.go.id/statictable/2014/02/18/1274/proyeksi-penduduk-menurut-provinsi-2010---2035.html>.
- Badan Pusat Statistik. (2019). *Statistik Indonesia 2019*. Diakses 21 Oktober 2019, dari <https://www.bps.go.id/publication/2019/09/26/c90ef44501d430ddb065bec5/statistik-indonesia-dalam-infografis-2019>.
- Baskoro, F., & Reynaldo, B. (2018). Detection of lock on radar system based on ultrasonic us 100 sensor and arduino uno R3 with image processing GUI. *IOP Conference Series: Materials Science and Engineering*, 336 (1), 1-7.
- Bold, H.C., & Wynne, M.J. (1985). *Introduction to the algae: Structure and reproduction*. United States of America : Prentice-Hall Inc.
- BPPT. (2018). *Outlook energi Indonesia 2018: Energi berkelanjutan untuk transportasi darat*. Jakarta: PTSEIK-BPPT. Diakses dari <https://www.bppt.go.id/outlook-energi/bppt-outlook-energi-indonesia-2018>.

- Cheng, D., Li, D., Yuan, Y., Zhou, L., Li, X., Wu, T., Wang, L., Zhao, Q., Wei, W., & Sun, Y. (2017). Improving carbohydrate and starch accumulation in *Chlorella* sp. AE10 by a novel two-stage process with cell dilution. *Biotechnology for Biofuels*, 10(75), 1-14.
- Decker, M., Hahn, G., & Harris, M.L. (2016). Bio-Enabled fasad systems: Managing complexity of life through emergent technologies. *Complexity & Simplicity - Proceedings*, 34(1), 603-612.
- Elrayies, M. (2018). Microalgae: Prospects for greener future buildings. *Renewable and Sustainable Energy Reviews*, 81(1), 1175–1191.
- ESDM. (2016). *Data inventori emisi grk sektor energi*. Jakarta: Kementerian Energi dan Sumber Daya Mineral Republik Indonesia. Diakses dari <https://www.esdm.go.id/assets/media/content/content-data-inventory-emisi-grk-sektor-energi-.pdf>.
- ESDM. (2018). *Handbook of energy and economic statistics of Indonesia 2018*. Jakarta: Kementerian Energi dan Sumber Daya Mineral Republik Indonesia. Diakses dari <https://www.esdm.go.id/assets/media/content/content--handbook--of--energy--and--economic--statistics-of--indonesia-2018--final--edition.pdf>.
- Gatamaneni, B.L., Orsat, V., & Lefsrud, M. (2018). Factors affecting growth of various microalgal species. *Environmental Engineering Science*, 35(10), 1037-1048.
- Goldemberg, J. (2000). *World Energy Assessment: Energy and the Challenge of Sustainability*. New York: UNDP.
- Han, S.H. (2016). Design suggestions for glass building facades utilized with algae energy sources. *International Journal of Advances in Mechanical and Civil Engineering*, 3(6), 65-71.
- Hemaiswarya, S., Raja, R., Ravikumar, R., & Carvalho, I.S. (2013). *Microalgae Taxonomy and Breeding*. Wallingford: CABI.
- Hossain, A.B.M.S., Salleh, A., Boyce, A.N., Chowdhury, P., & Naquiuddin, M. (2008). Biodiesel fuel production from algae as renewable energy. *American Journal of Biochemistry and Biotechnology*, 4(3), 250-254.
- International Building Exhibition IBA-Hamburg. (2013). *Smart Material House-BIQ*. Hamburg: IBA Hamburg GmbH.
- Isnansetyo, A., & Kurniastuty. (1995). *Teknik Kultur Fitoplankton dan Zooplankton*. Yogyakarta: Kanisius.

- Jaycar Electronic. (2015). *Datasheet ESP-13 Wifi Shield*. Diakses dari <https://www.jaycar.com.au/arduino-compatible-esp-13-wifi-shield/p/XC461-4>, tanggal 20 November 2019.
- Kerestecioğlu, F.Ö., & Pekmezci, Y.T. (2019). Defining the problems in integration of microalgae photobioreactor systems to architecture. *International Journal of Engineering Science and Application*, 3(2), 52-70.
- Khetkorn, W., Rastogi, R.P., Incharoensakdi, A., Lindblad, P., Madamwar, D., Pandey, A., & Larroche, C. (2017). Microalgal hydrogen production - A review. *Bioresource Technology*, 243(1), 1194-1206.
- Kim, G.H., & Klochkova, T. (2005). Ornamented resting spores of a green algae, *Chlorella* sp., collected from stone standing Buddha statue at Jungwon Miruksazi in Korea. *Algae*, 20(4), 295-297.
- Kim, S.K. (2015). *Springer Handbook of Marine Biotechnology*. New York: Springer.
- Lee, E., Jalalizadeh, M., & Zhang, Q. (2015). Growth kinetic models for microalgae cultivation: A review. *Algal Research*, 12(1), 497-512.
- Low-Décarie, E., Fussmann, G.F., Dumbrell, A.J., & Bell, G. (2016). Communities that thrive in extreme conditions captured from a freshwater lake. *Biology Letters*, 12(9), 1-5.
- Ma, M., Wei, C., Wang, H., Sha, C., Chen, M., Gong, Y., & Hu, Q. (2019). Isolation and evaluation of a novel strain of *Chlorella sorokiniana* that resists grazing by the predator *Poteroochromonas malhamensis*. *Algal Research*, 38(1), 1-10.
- Manickam, S., Ranjan, R., & Singh, R., & Kumar, P. (2013). Performance analysis of sun sensors for satellite systems. *Proceedings of International Conference on Advanced Electronic Systems* (pp. 10-14). Pilani: IEEE.
- Martokusumo, W., Koerniawan, M.D., Poerbo, H.W., Ardiani, N.A., & Krisanti, S.H. (2017). Algae and building fasad revisited. A study of fasad system for infill design. *Journal of Architecture and Urbanism*, 41(4), 296-304.
- Maxim Integrated. (2019). *Datasheet DS18B20*. Diakses 20 November 2019, dari <https://datasheets.maximintegrated.com/en/ds/DS18B20.pdf>.
- Mohammady N., El-Sayed H.S., Taha H.M., Fakhry E.M., Mahmoud N.H., Mohamed J.H., & Mekawy L.M. (2015). *Chlorella* sp. as a source of biodiesel and by-products: An integral study of med-algae project; part A. *International Journal of TechnoChem Research*, 1(3), 144-151.

- Mufidah, A., Agustono, Sudarno, & Nindarwi, D.D. (2017). Teknik kultur *Chlorella* sp. skala laboratorium dan intermediet di Balai Perikanan Budidaya Air Payau (BPBAP) Situbondo Jawa Timur. *Journal of Aquaculture and Fish Health*, 7(2), 50-56.
- Patel, K.K., & Patel, S.M. (2016). Internet of Things-IOT: Definition, characteristics, architecture, enabling technologies, application & future challenges. *International Journal of Engineering Science and Computing*, 6(5), 6122-6131.
- Prihantini, N., Putri, B., & Yuniati, R. (2005). Pertumbuhan *Chlorella* spp. dalam medium ekstrak tauge (MET) dengan variasi ph awal. *Makara Journal of Science*, 9(1), 1-6.
- Qiu, F. (2013). *Algae architecture*. (Thesis Master, Delft University of Technology, Delft, Netherlands). Diakses dari <https://repository.tudelft.nl/islandora/object/uuid%3Ab0b6e05d-49d8-4cc0-9e28-f510b0a8b215>.
- Rahardini, R., Helmiati, S., & Triyatmo, B. (2018). Effect of inorganic fertilizer on the growth of freshwater *Chlorella* sp. *IOP Conference Series: Earth and Environmental Science*, 139(1), 1-9.
- Ray, P.P. (2016). A Survey of IoT cloud platforms. *Future Computing and Informatics Journal*, 1(1-2), 35-46.
- Rohm Semiconductor. (2009). *Datasheet BH1750*. Diakses tanggal 20 november 2019, dari [https://www.rohm.com/documents/11308/12926/CNA09016\\_sg.pdf](https://www.rohm.com/documents/11308/12926/CNA09016_sg.pdf).
- Safi, C., Zebib, B., Merah, O., Pontalier, P.-Y., & Vaca-Garcia, C. (2014). Morphology, composition, production, processing and applications of *Chlorella vulgaris*: A review. *Renewable and Sustainable Energy Reviews*, 35(1), 265–278.
- Senroy, S., & Pal, R. (2014). Microalgae in Aquaculture: A review with special references to nutritional value and fish dietetics. *Proceedings of the Zoological Society*, 68(1), 1-8.
- Shanthini, S., Deekshath, R., DeepakDinakaran, G., Dharanya, P., & DimpilKabadiaK, R. (2018). IOT based environmental monitoring system using arduino uno and thingspeak. *International Journal of Science Technology & Engineering*, 4(9), 68-75.

- Škultéty E., Pivarčiová E., & Karrach L. (2018). The comparing of the selected temperature sensors compatible with the arduino platform. *Management Systems In Production Engineering*, 26(3), 168-171.
- Tapakire, B.A., & Patil M.M. (2019). IoT based smart agriculture using thingspeak. *International Journal Of Engineering Research & Technology*, 8(12), 270-274.
- United Nations, Department of Economic and Social Affairs, Population Division. (2019). *World Urbanization Prospects: The 2018 Revision*. New York: United Nations. Diakses 14 Oktober 2019, dari <https://population.un.org/wup/Publications/Files/WUP2018-Report.pdf>.
- Wang, W., Han, F., Li, Y., Wu, Y., Wang, J., Pan, R., & Shen, G. (2014). Medium screening and optimization for photoautotrophic culture of *Chlorella pyrenoidosa* with high lipid productivity indoors and outdoors. *Bioresource Technology*, 170(1), 395-403.
- Wilkinson, S., Stoller, P., Ralph, P., Hamdorf, B., Catana, L.N., & Kuzava, G.S. (2017). Exploring the feasibility of algae building technology in NSW. *Procedia Engineering*, 180(1), 1121-1130.
- Wurm, J. (2013). Photobioreactor on facades for energy generation alternatives technologies in the building envelope. *International Rosenheim window & facade conference*, 41(1), 83-87.
- Zagi, N.Z. (2017). Studi penerapan solarleaf - the bioreactor fasad sebagai solusi alternatif arsitektur tanggap iklim dan energi. *Jurnal Lingkungan Binaan*.