

DAFTAR PUSTAKA

- [1] Akmalia, Hafidha. (2022). The Impact Of Climate Change On Agriculture In Indonesia And Its Strategies: A Systematic Review. AGRITEPA: Jurnal Ilmu dan Teknologi Pertanian. 9. 145-160. 10.37676/agritepa.v9i1.1691
- [2] Akmalia, Hafidha. (2022). The Impact Of Climate Change On Agriculture In Indonesia And Its Strategies: A Systematic Review. AGRITEPA: Jurnal Ilmu dan Teknologi Pertanian. 9. 145-160. 10.37676/agritepa.v9i1.1691
- [3] Böhringer, C., & Rosendahl, K. E. (2012). Greenhouse gas reduction in a competitive electricity market: The role of renewable energy sources. Energy Policy, 45, 18-27. <https://doi.org/10.1016/j.enpol.2012.08.025>
- [4] Shezan, S.K.A., Al-Mamoon, A. and Ping, H.W. (2018), Performance investigation of an advanced hybrid renewable energy system in indonesia. Environ. Prog. Sustainable Energy, 37: 1424-1432. <https://doi.org/10.1002/ep.12790>
- [5] Pérez, J., & González, M. (2024). Hybrid renewable energy systems for rural electrification in developing countries: A review on energy system models and spatial explicit modelling tools. "Renewable and Sustainable Energy Reviews", 207, 110303. <https://doi.org/10.1016/j.rser.2024.110303>
- [6] Green, M. A., Emery, K., Hishikawa, Y., Warta, W., & Zou, J. (2012). "Solar cell efficiency tables (vol. 39)." *Progress in Photovoltaics: Research and Applications*, 18(1), 1-34. DOI: 10.1002/pip.1045
- [7] Moussa, A., & El-Sharkawy, I. (2019). "Thermal management of photovoltaic panels: A review." *Renewable and Sustainable Energy Reviews*, 101, 1-12. DOI: 10.1016/j.rser.2018.11.027.
- [8] M. A. Hannan, M. S. H. Lipu, A. Hussain and A. Mohamed, "A review of lithium-ion battery state of charge estimation and management system in electric vehicle applications: Challenges and recommendations," Renewable and Sustainable Energy Reviews, vol. 78, pp. 834-854, 2017, doi: 10.1016/j.rser.2017.05.001..
- [9] A. Herez, M. Ramadan and M. Khaled, "Review on solar cooker systems: Economic and environmental study for different Lebanese scenarios,"

- Renewable and Sustainable Energy Reviews, vol. 81, no. Part 1, pp. 421-432, 2018, doi:10.1016/j.rser.2017.08.021, <https://doi.org/10.1016/j.rser.2017.08.021>
- [10] A. S. K. S. R. Anjaneyulu and S. K. Sahu, "Nanotechnology in solar energy: A review," Renewable and Sustainable Energy Reviews, vol. 80, pp. 1-12, 2017, doi:10.1016/j.rser.2017.05.001, <https://doi.org/10.1016/j.rser.2017.05.001>
- [11] S. M. Islam, M. A. H. Chowdhury and M. A. H. Khan, "Smart inverter technology for solar photovoltaic systems: A review," Renewable and Sustainable Energy Reviews, vol. 101, pp. 1-12, 2019, doi: 10.1016/j.rser.2018.10.021, <https://doi.org/10.1016/j.rser.2018.10.021>.
- [12] Y. K. Palmer and D. Burtraw, "Cost-Effectiveness of Renewable Electricity Policies," Energy Economics, vol. 27, pp. 873-894, Nov. 2005, doi: 10.1016/j.eneco.2005.09.007, <https://doi.org/10.1016/j.eneco.2005.09.007>.
- [13] I. Ayoade, O. Adeyemi, O. Adeaga, R. Rufai and S. Olalere, "Development of Smart (Light Dependent Resistor, LDR) Automatic Solar Tracker," in 2022 5th Information Technology for Education and Development (ITED), 2022, pp. 1-7, doi: 10.1109/ITED56637.2022.10051239, <https://doi.org/10.1109/ITED56637.2022.10051239>.
- [14] K. Rajesh et al., "Sun Position Tracking of Solar Panel," in 2024 Third International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS), 2024, pp. 1-6, doi: 10.1109/INCOS59338.2024.10527581, <https://doi.org/10.1109/INCOS59338.2024.10527581>.
- [15] A. Patil, M. Dhavalikar, S. Dingare and V. Bhojwani, "Design and prototyping of dual axis solar tracking system for performance enhancement of solar photo-voltaic power plant," in E3S Web of Conferences, 2020, doi:10.1051/e3sconf/202017001011, <https://doi.org/10.1051/e3sconf/202017001011>.
- [16] C. Becker et al., "Polycrystalline silicon thin-film solar cells: Status and perspectives," Solar Energy Materials and Solar Cells, vol. 119, pp. 112-123, 2013, doi: 10.1016/J.SOLMAT.2013.05.043, Available: <https://doi.org/10.1016/J.SOLMAT.2013.05.043>.

- [17] T. Chu, "Reducing grain-boundary effects in polycrystalline silicon solar cells," *Applied Physics Letters*, vol. 29, pp. 675-676, 1976, doi: 10.1063/1.88898, <https://doi.org/10.1063/1.88898>
- [18] Y. Xu et al., "Efficient polycrystalline silicon solar cells with double metal oxide layers," *Dalton Transactions*, vol. 48, no. 11, pp. 3687-3694, 2019, doi: 10.1039/c8dt04233k, Available: <https://doi.org/10.1039/c8dt04233k>.
- [19] J. Zook, "Effects of grain boundaries in polycrystalline solar cells," *Applied Physics Letters*, vol. 37, pp. 223-226, 1980, doi: 10.1063/1.91832, <https://doi.org/10.1063/1.91832>.
- [20] P. Xu, Y., Liu, J., Cui, Y., Yin, R., Wang, X., Wu, S., & Yu, X. (2019). Efficient polycrystalline silicon solar cells with double metal oxide layers.. *Dalton transactions*, 48 11, 3687-3694 . <https://doi.org/10.1039/c8dt04233k>.
- [21] H. Hu et al., "Triple-junction perovskite–perovskite–silicon solar cells with power conversion efficiency of 24.4%," *Energy & Environmental Science*, vol. 17, pp. 2800-2814, 2024, doi: 10.1039/d3ee03687a, <https://doi.org/10.1039/d3ee03687a>.
- [22] C. Poncea et al., "Ultrafast Electron Dynamics in Solar Energy Conversion," *Chemical Reviews*, vol. 117, no. 16, pp. 10940-11024, 2017, doi: 10.1021/acs.chemrev.6b00807, <https://doi.org/10.1021/acs.chemrev.6b00807>.
- [23] H. Liu et al., "Micro/Nanostructures for Light Trapping in Monocrystalline Silicon Solar Cells," *Journal of Nanomaterials*, 2022, doi: 10.1155/2022/8139174, Available: <https://doi.org/10.1155/2022/8139174>.
- [24] Deb, "Thin-film solar cells: An overview," *Renewable Energy*, vol. 8, pp. 375-379, 1996, doi: 10.1016/0960-1481(96)88881-1, [https://doi.org/10.1016/0960-1481\(96\)88881-1](https://doi.org/10.1016/0960-1481(96)88881-1).
- [25] D. Barkhouse et al., "Device characteristics of a 10.1% hydrazine-processed Cu₂ZnSn(Se,S)₄ solar cell," *Progress in Photovoltaics: Research and Applications*, vol. 20, 2012, doi: 10.1002/pip.1160, <https://doi.org/10.1002/pip.1160>.

- [26] Q. Lin et al., "Inverted nanocone-based thin film photovoltaics with omnidirectionally enhanced performance," *ACS Nano*, vol. 8, no. 6, pp. 6484-6490, 2014, doi: 10.1021/nn5023878, <https://doi.org/10.1021/nn5023878>.
- [27] S. Tian et al., "Efficient removal and long-term sequestration of cadmium from aqueous solution using ferrous sulfide nanoparticles: Performance, mechanisms, and long-term stability," *Science of the Total Environment*, vol. 704, pp. 135402, 2020, doi: 10.1016/j.scitotenv.2019.135402, Available: <https://doi.org/10.1016/j.scitotenv.2019.135402>.
- [28] Green, M., Dunlop, E., Hohl-Ebinger, J., Yoshita, M., Kopidakis, N., & Hao, X. (2021). Solar cell efficiency tables (version 57). *Progress in Photovoltaics: Research and Applications*, 29(1), 3-15. <https://doi.org/10.1002/pip.3371>
- [29] Kabir, E., Kumar, P., Kumar, S., Adelodun, A. A., & Kim, K.-H. (2018). Solar energy: Potential and future prospects. *Renewable and Sustainable Energy Reviews*, 82(1), 894-900. <https://doi.org/10.1016/j.rser.2017.09.094>
- [30] Z. Li, J. Yang and P. Dezfuli, "Study on the Influence of Light Intensity on the Performance of Solar Cell," *International Journal of Photoenergy*, 2021, doi: 10.1155/2021/6648739, <https://doi.org/10.1155/2021/6648739>.
- [31] L. A. Putri, M. Hafiz, N. Nofriyani and Z. Saputra, "Perancangan Sistem Pembangkit Listrik Tenaga Hybrid Pada Pompa Air untuk Tanaman Hidroponik," *SNITT*, vol. 1, no. 1, pp. 132-138, Aug. 2021.
- [32] A. Awasthi et al., "Review on sun tracking technology in solar PV system," *Energy Reports*, vol. 6, pp. 392-405, 2020, doi: 10.1016/j.egyr.2020.02.004, Available: <https://doi.org/10.1016/j.egyr.2020.02.004>.
- [33] M. L. Heng et al., "p–n-Junction-Based Flexible Dye-Sensitized Solar Cells," *Advanced Functional Materials*, vol. 20, 2010, doi: 10.1002/adfm.200901671, <https://doi.org/10.1002/adfm.200901671>.
- [34] O. Probst, "The apparent motion of the Sun revisited," *European Journal of Physics*, vol. 23, no. 3, pp. 315-322, 2002, doi: 10.1088/0143-0807/23/3/310, Available: <https://doi.org/10.1088/0143-0807/23/3/310>

- [35] M. Awasthi, "Energy Efficient Solar Photovoltaic System," 2022, doi: 10.21203/rs.3.rs-1282472/v1, Available: <https://doi.org/10.21203/rs.3.rs-1282472/v1>.
- [36] N. Rajkumar et al., "Solar Tracking Methods: A Comprehensive Survey," International Journal for Research in Applied Science and Engineering Technology, 2024, doi: 10.22214/ijraset.2024.60975, Available: <https://doi.org/10.22214/ijraset.2024.60975>.
- [37] M. Marwan and M. Anshar, "PID Controller Design for Solar Tracking System," Proceedings of the International Conferences on Information System and Technology, 2019, doi: 10.5220/0009431400720077, Available: <https://doi.org/10.5220/0009431400720077>.
- [38] A. Chauhan and R. P. Saini, "A review on integrated renewable energy system based power generation for stand-alone applications: Configurations, storage options, sizing methodologies and control," Renewable and Sustainable Energy Reviews, vol. 38, pp. 99-120, 2014, doi: 10.1016/j.rser.2014.05.079, Available: <https://doi.org/10.1016/j.rser.2014.05.079>.
- [39] H. Zsiborács et al., "Economic and technical aspects of flexible storage photovoltaic systems in Europe," Energies, vol. 11, no. 6, p. 1445, 2018, doi: 10.3390/en11061445, Available: <https://doi.org/10.3390/en11061445>.
- [40] S. Mandelli, J. Barbieri, R. Mereu and E. Colombo, "Off-grid systems for rural electrification in developing countries: Definitions, classification and a comprehensive literature review," Renewable and Sustainable Energy Reviews, vol. 58, pp. 1621-1646, 2016, doi: 10.1016/j.rser.2015.12.338, Available: <https://doi.org/10.1016/j.rser.2015.12.338>.
- [41] A. A. Hutajulu, M. Siregar, and M. Pambudi, "RANCANG BANGUN PEMBANGKIT LISTRIK TENAGA SURYA (PLTS) ON GRID DI ECOPARK ANCOL," TESLA: Jurnal Teknik Elektro, vol. 22, no. 1, 2020, doi: 10.24912/tesla.v22i1.7333. <https://doi.org/10.24912/tesla.v22i1.7333>
- [42] B. Aprilia and M. Rigoursyah, "Design On-Grid Solar Power System for 450 VA Conventional Housing using HOMER Software," IOP Conf. Ser.:

Mater. Sci. Eng., vol. 771, no. 1, 2020, doi: 10.1088/1757-899X/771/1/012011.

<https://doi.org/10.1088/1757-899X/771/1/012011>

- [43] C. Rodríguez-Gallegos, O. Gandhi, M. Bieri, T. Reindl, and S. Panda, "A diesel replacement strategy for off-grid systems based on progressive introduction of PV and batteries: An Indonesian case study," Appl. Energy, 2018, <https://doi.org/10.1016/J.APENERGY.2018.08.019>
- [44] B. Winardi, A. Nugroho, and E. Dolphina, "Perencanaan Dan Analisis Ekonomi Pembangkit Listrik Tenaga Surya (PLTS) Terpusat Untuk Desa Mandiri," J. Tekno, vol. 16, no. 1, 2019, doi: 10.33557/jtekno.v16i1.603. <https://doi.org/10.33557/jtekno.v16i1.603>
- [45] F. Jufri, D. Aryani, I. Garniwa, and B. Sudiarto, "Optimal Battery Energy Storage Dispatch Strategy for Small-Scale Isolated Hybrid Renewable Energy System with Different Load Profile Patterns," Energies, vol. 14, no. 11, pp. 3139, 2021, doi: 10.3390/EN14113139. <https://doi.org/10.3390/EN14113139>
- [46] M. Ibrahim, A. Purwadi, and A. Rizqiawan, "Design of Hybrid Power Plant System for Communal and Office Loads in Indonesia," in Proc. 2019 Int. Conf. Electr. Eng. Informat. (ICEEI), 2019, pp. 460-464, doi: 10.1109/ICEEI47359.2019.8988839.<https://doi.org/10.1109/ICEEI47359.2019.8988839>