

## DAFTAR PUSTAKA

- [1] Indrasari W., R. Fahdiran, E. Budi, L. Jannah, L. V. Kadarwati, and Ramli, “Active Solar Tracker Based on the Horizon Coordinate System,” in *International Conference on Theoretical and Applied Physics*, Institute of Physics Publishing, Dec. 2018, pp. 1–6. doi: 10.1088/1742-6596/1120/1/012102.
- [2] Siagian P., “Uji Kinerja Panel Surya 120 Wp dengan Solar Tracker Double Axis di Daerah Kota Medan,” *SPROCKET Journal of Mechanical Engineering*, vol. 3, no. 2, pp. 115–128, 2022.
- [3] Hidayati Q., N. Yanti, N. Jamal, P. Negeri Balikpapan, and J. Soekarno Hatta km, “SISTEM PEMBANGKIT PANEL SURYA DENGAN SOLAR TRACKER DUAL AXIS DUAL AXIS,” in *Seminar Nasional Inovasi Teknologi Terapan*, 2020, pp. 68–73.
- [4] Rani P., O. Singh, and S. Pandey, “An Analysis on Arduino based Single Axis Solar Tracker,” in *Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON)*, 2018, pp. 1–5.
- [5] Sungur C., “Multi-axes sun-tracking system with PLC control for photovoltaic panels in Turkey,” *Renew Energy*, vol. 34, no. 4, pp. 1119–1125, Apr. 2009, doi: 10.1016/j.renene.2008.06.020.
- [6] Situngkir H., M. Fadlan Siregar, and M. Fadlan Siregar, “Panel Surya Berjalan dengan Mengikuti Gerak Laju Matahari,” *Journal of Electrical Technology*, vol. 3, no. 3, pp. 128–131, 2018.
- [7] Ramful R. and N. Sowaruth, “Low-cost solar tracker to maximize the capture of solar energy in tropical countries,” in *The 5th International Conference on Renewable Energy and Environment Engineering(REEE 2022)*, Elsevier Ltd, Nov. 2022, pp. 295–302. doi: 10.1016/j.egy.2022.10.145.

- [8] Zuhail E. and S. Marangozoglou, "New Design for Solar Panel Tracking System Based on Solar Calculations," *International Midwest Symposium on Circuits and Systems (MWSCAS)*, vol. 1, no. 978, pp. 1042–1046, 2019.
- [9] Mustafa F. I., "Direct and Indirect Sensing two-axis Solar Tracking System," in *International Renewable Energy Congress (I REC 2017)*, 2017, pp. 1–4.
- [10] Mustafa F. I., S. Shakir, F. F. Mustafa, and A. Thamer Naiyf, "Simple Design and Implementation of Solar tracking System Two Axis with Four Sensors for Baghdad city," in *International Renewable Energy Congress (IREC 2018)*, 2018, pp. 1–5.
- [11] Putri N. U., F. Santoso, and F. Trisnawati, "Rancang Bangun Solar Tracking System Pembangkit Listrik Tenaga Surya Skala Rumah Tangga Berbasis Mikrokontroler Arduino Uno," *Jurnal Rekayasa dan Teknologi Elektro*, vol. 16, no. 2, pp. 161–167, 2022.
- [12] Abdollahpour M., M. R. Golzarian, A. Rohani, and H. Abootorabi Zarchi, "Development of a machine vision dual-axis solar tracking system," *Solar Energy*, vol. 169, no. 1, pp. 136–143, Jul. 2018, doi: 10.1016/j.solener.2018.03.059.
- [13] Alam M., S. Miah, A. Dewan, A. Ghosh, and S. S. Bashar, "A Microcontroller Based Dual Axis Tracking System for Solar Panel," in *The International Conference on Electrical, Computer & Telecommunication Engineering*, 2019, pp. 25–28.
- [14] Sianturi Y. and C. Simbolon, "Pengukuran dan Analisa Data Radiasi Matahari di Stasiun Klimatologi Muaro Jambi," *Megasains*, vol. 12, no. 1, pp. 40–47, Apr. 2021, doi: 10.46824/megasains.v12i1.45.
- [15] Lillo-Bravo I., M. Larrañeta, E. Núñez-Ortega, and R. González-Galván, "Simplified model to correct thermopile *pyranometer* solar radiation measurements for photovoltaic module yield estimation," *Renew Energy*, vol. 146, no. 1, pp. 1486–1497, Feb. 2020, doi: 10.1016/j.renene.2019.07.070.
- [16] Azouzoute A., A. A. Merrouni, E. G. Bennouna, and A. Gennioui, "Accuracy measurement of *pyranometer* vs reference cell for PV resource

- assessment,” *Energy Procedia*, vol. 157, no. 1, pp. 1202–1209, 2019, doi: 10.1016/j.egypro.2018.11.286.
- [17] Jamaaliddin, *BUKU PETUNJUK PENGOPERASIAN PEMBANGKIT LISTRIK TENAGA SURYA (PLTS)*, vol. 1. 2021.
- [18] Safitri N., T. Rihayat, and S. Riskina, *TEKNOLOGI PHOTOVOLTAIC*, vol. 1. 2019.
- [19] Wibowo A., *Instalasi Panel Listrik Surya*, vol. 1. 2022.
- [20] Rifan M., Sholeh, M. Sidiq, R. Yuwono, H. Suyono, and F. Susanti, “Optimasi Pemanfaatan Energi Listrik Tenaga Matahari di Jurusan Teknik Elektro Universitas Brawijaya,” *Jurnal EECCIS*, vol. 6, no. 1, pp. 44–48, 2012.
- [21] Tyagi V. V., N. A. A. Rahim, N. A. Rahim, and J. A. L. Selvaraj, “Progress in solar PV technology: Research and achievement,” 2013, *Elsevier Ltd.* doi: 10.1016/j.rser.2012.09.028.
- [22] Solanki C. S., *Solar photovoltaic technology and systems : a manual for technicians, trainers and engineers*. 2013.
- [23] Suyanto M., S. Priyambodo, Prasetyono, and P. A. Ari, “Optimalisasi Pengisian Accu Pada Sistem Pembangkit Listrik Tenaga Surya (PLTS) Dengan Solar Charge Controller (MPPT),” *J Teknol*, vol. 15, no. 1, pp. 22–29, 2022.
- [24] Witono K., A. Asrori, and A. Harijono, “The Comparison of Performance Polycrystalline and Amorphous Solar Panels under Malang City Weather Conditions (Perbandingan Kinerja Panel Surya Tipe Polycrystalline dan Amorphous di bawah Kondisi Cuaca Kota Malang).” [Online]. Available: <https://www.attractivejournal.com/index.php/bse/index>
- [25] Usman K. M., “ANALISIS INTENSITAS CAHAYA TERHADAP ENERGI LISTRIK YANG DIHASILKAN PANEL SURYA,” *Jurnal POLEKTRO: Jurnal Power Elektronik*, vol. 9, no. 2, pp. 52–58, 2020, [Online]. Available: <http://ejournal.poltektegal.ac.id/index.php/powerelektro>

- [26] Sujana, Kumara, and Giriantari, "PENGARUH KEBERSIHAN MODUL SURYA TERHADAP UNJUK KERJA PLTS," *E-Journal SPEKTRUM*, vol. 2, no. 3, pp. 49–54, 2015.
- [27] Kaban S., M. Jafri, and Gusnawati, "OPTIMALISASI PENERIMAAN INTENSITAS CAHAYA MATAHARI PADA PERMUKAAN PANEL SURYA (SOLAR CELL) MENGGUNAKAN CERMIN," *Jurnal Fisika*, vol. 5, no. 2, pp. 108–117, 2020.
- [28] Yani. S, "Pengukuran dan Analisa Data Radiasi Matahari di Stasiun Klimatologi Muaro Jambi," *Megasains*, vol. 12, no. 1, pp. 40–47, Apr. 2021, doi: 10.46824/megasains.v12i1.45.
- [29] SUHENDAR, *LISTRIK TENAGA SURYA*, vol. 1. 2022.
- [30] Tiyas K. P., and M. Widyartono, "Pengaruh Efek Suhu Terhadap Kinerja Panel Surya," *Jurnal Mahasiswa Universitas Negeri Surabaya*, vol. 9, no. 1, pp. 871–876, 2020.
- [31] Aprillia S. B., R. M. Zulfahmi, and A. Rizal, "Investigasi Efek Partial Shading Terhadap Daya Keluaran Sel Surya," *Jurnal ELEMENTER*, vol. 5, no. 2, pp. 9–17, 2019, [Online]. Available: <https://jurnal.pcr.ac.id/index.php/elementer>
- [32] Ramadhani B., *Instalasi Pembangkit Listrik Tenaga Surya Dos & Don'ts*, vol. 1. 2018.
- [33] Nugroho M. F., D. Riyanto, and G. Nanang Syaifuddin, "Analysis of the Effectiveness of Solar Cell Voltage Based on the Angle of Exposure to Sunlight," *JEEE-U (Journal of Electrical and Electronic Engineering-UMSIDA)*, vol. 6, no. 2, pp. 120–132, Oct. 2022, doi: 10.21070/jeeeu.v6i2.1559.
- [34] Mohamed T., E. Mohamed, A. Abdolsalam, and T. Amna, "Control of Single-Axis and Dual-Axis Solar Tracking System," in *Proceedings of: 2020 International Conference on Computer, Control, Electrical, and Electronics Engineering, ICCCEEE 2020*, Institute of Electrical and Electronics Engineers Inc., Feb. 2021. doi: 10.1109/ICCCEEE49695.2021.9429585.

- [35] Marc M., *Introduction to Stepper Motors Part 1: Types of Stepper Motors*, vol. 1. 2007.
- [36] Wardhana A. W. and D. T. Nugroho, “Pengontrolan Motor *Stepper* Menggunakan Driver DRV 8825 Berbasis Signal Square Wave dari Timer Mikrokontroler AVR,” *JURNAL NASIONAL TEKNIK ELEKTRO*, vol. 7, no. 1, p. 80, Mar. 2018, doi: 10.25077/jnte.v7n1.530.2018.
- [37] Wibowo B. C. and F. Nugraha, “*Stepper* Motor Speed Control Using Start-Stop Method Based On PLC,” *Jurnal Teknik Elektro dan Komputer*, vol. 10, no. 3, pp. 213–220, 2021.
- [38] Santoso H., *Paduan Praktis Arduino untuk Pemula*, vol. 1. 2015. [Online]. Available: [www.elangsakti.com](http://www.elangsakti.com)
- [39] Basri I. Y. and D. Irfan, *KOMPONEN ELEKTRONIKA*, vol. 1. 2018.
- [40] Aulia S. J. and D. Prabowo, “PERANCANGAN PERALATAN UNTUK PENGUKURAN RADIASI GELOMBANG PENDEK MATAHARI,” *Jurnal Meteorologi Klimatologi dan Geofisika*, vol. 3, no. 3, 2016.
- [41] Oyelami S., N. A. Azeez, S. A. Adedigba, O. J. Akinola, and R. M. Ajayi, “A *Pyranometer* for Solar Radiation Measurement-Review,” *Adeleke University Journal of Engineering and Technology*, vol. 3, no. 1, pp. 61–68, 2020, [Online]. Available: <https://www.researchgate.net/publication/349210517>
- [42] Kipp and Zonen, *CMP series • Pyranometer CMA series • Albedometer Instruction Manual*, vol. 1. 2016. [Online]. Available: [www.kippzonen.com](http://www.kippzonen.com)
- [43] Kuik F., *Instruction Manual*, vol. 1. 2016. [Online]. Available: [www.kippzonen.com](http://www.kippzonen.com)
- [44] Sasmoko D., *Arduino dan Sensor*, vol. 1. 2021.
- [45] Rahmat A., *RANGKAIAN DAN PROGRAM BOARD ARDUINO UNTUK PEMULA*, vol. 1. 2021.
- [46] Imaduddin I. R., D. A. Fahreza, L. Hakim, and F. R. Maulana, “ANALISIS POTENSI PEMBANGKIT LISTRIK TENAGA HIDRO VORTEX (PLTHV) DI DESA SAWAH KEMBANG,” *ELEMEN: JURNAL*

*TEKNIK MESIN*, vol. 9, no. 2, pp. 110–118, Dec. 2022, doi: 10.34128/je.v9i2.207.

- [47] Paramudita I. *et al.*, “The Effect of Measurement Distances and Infrared Thermometer Types for Body Temperature Measurement as Early Screening of COVID-19,” *Jurnal Standardisasi*, vol. 23, no. 2, pp. 133–140, 2021.
- [48] Hammoumi A. E, S. Chtita, S. Motahhir, and A. El Ghzizal, “Solar PV energy: From material to use, and the most commonly used techniques to maximize the power *output* of PV systems: A focus on solar trackers and floating solar panels,” Nov. 01, 2022, *Elsevier Ltd.* doi: 10.1016/j.egy.2022.09.054.
- [49] Prasetyo E. E., G. Marausna, and D. W. Nugroho, “Optimalisasi Pembangkitan Daya Panel Surya 200 WP Menggunakan Solar Tracker System Dual Axis,” *Jurnal Nasional Teknik Elektro dan Teknologi Informasi /*, vol. 11, no. 3, pp. 215–221, 2022.