

## DAFTAR PUSTAKA

- [1] N. Hatziargyiou, *Microgrids: Architecture and Control*. Ed. West Sussex, UK: IEEE-Wiley, 2014.
- [2] D. Yoesgiantoro, *Kebijakan Energi Lingkungan*, 1st ed. Jakarta: LP3ES, 2017.
- [3] Kementerian Energi dan Sumber Daya Mineral, “Pemanfaatan Energi Surya di Indonesia,” 2010. [Online]. Available: <https://www.esdm.go.id/id/media-center/arsip-berita/pemanfaatan-energi-surya-di-indonesia>. [Accessed: 16-May-2019].
- [4] A. Reinders, H. Veldhuis, and A. Susandi, “Development of grid-connected PV systems for remote electrification in Indonesia,” *Conf. Rec. IEEE Photovolt. Spec. Conf.*, pp. 002420–002425, 2011.
- [5] F. G. Nst and Syukriyadin, “Studi pemodelan integrase pembangkit skala mikro terdistribusi pada daerah isolated di Aceh,” *Issn 2088-9984*, no. November, pp. 8–13, 2012.
- [6] I. Rahardjo and I. Fitriana, “Analisis Potensi Pembangkit Listrik Tenaga Surya Di Indonesia,” *Strateg. Penyediaan List. Nas. Dalam Rangka Mengantisipasi Pemanfaat. PLTU Batubara Skala Kecil, PLTN, dan Energi Terbarukan, P3TKKE, BPPT, Januari*, pp. 43–52, 2005.
- [7] M. G. Villalva, J. R. Gazoli, and E. Ruppert Filho, “Modeling and circuit-based simulation of photovoltaic arrays,” *2009 Brazilian Power Electron. Conf. COBEP2009*, pp. 1244–1254, 2009.
- [8] K. Ishaque, Z. Salam, M. Amjad, and S. Mekhilef, “An improved particle swarm optimization (PSO)-based MPPT for PV with reduced steady-state oscillation,” *IEEE Trans. Power Electron.*, vol. 27, no. 8, pp. 3627–3638, 2012.
- [9] B. Bendib, H. Belmili, and F. Krim, “A survey of the most used MPPT methods: Conventional and advanced algorithms applied for photovoltaic



- systems," *Renew. Sustain. Energy Rev.*, vol. 45, no. May, pp. 637–648, 2015.
- [10] R. T. Widodo, P. Sejati, Asmuniv, and Rugianto, "Maximum Power Point Tracker Sel Surya Menggunakan Algoritma Perturb and Observe," *Ind. Electron. Semin.*, no. 1, 2009.
  - [11] N. Femia, G. Petrone, G. Spagnuolo, and M. Vitelli, "Optimizing duty-cycle perturbation of P&O MPPT technique," *PESC Rec. - IEEE Annu. Power Electron. Spec. Conf.*, vol. 3, pp. 1939–1944, 2004.
  - [12] N. Femia, G. Petrone, G. Spagnuolo, and M. Vitelli, "Optimization of perturb and observe maximum power point tracking method," *IEEE Trans. Power Electron.*, vol. 20, no. 4, pp. 963–973, 2005.
  - [13] Y. M. K., E. Firmansyah, and S. Suharyanto, "Variable Step Size P&O MPPT Algorithm on 250 W Interleaved Flyback Converter," *IJITEE (International J. Inf. Technol. Electr. Eng.)*, vol. 1, no. 4, pp. 132–138, 2018.
  - [14] A. Bin Jusoh, O. J. E. I. Mohammed, and T. Sutikno, "Variable step size Perturb and observe MPPT for PV solar applications," *Telkomnika (Telecommunication Comput. Electron. Control.)*, vol. 13, no. 1, pp. 1–12, 2015.
  - [15] Y. M. Kolewora, E. Firmansyah, and S. Suharyanto, "Mppt Berdasarkan Algoritma P&O Dan Ic Pada Interleaved-Flyback 250W," *Telematika*, vol. 11, no. 1, p. 18, 2018.
  - [16] F. D. Murdianto, A. R. Nansur, A. S. L. Hermawan, E. Purwanto, A. Jaya, and M. M. Rifadil, "Modeling and Simulation of MPPT SEPIC - BUCK Converter Series Using Flower Pollination Algorithm (FPA) - PI Controller in DC Microgrid Isolated System," *2018 Int. Electr. Eng. Congr.*, pp. 1–4, 2019.
  - [17] P. Megantoro, Y. D. Nugroho, F. Anggara, A. Pakha, and B. A. Pramudita, "The implementation of genetic algorithm to MPPT technique in a DC/DC buck converter under partial shading condition," *Proc. - 2018 3rd Int. Conf. Inf. Technol. Inf. Syst. Electr. Eng. ICITISEE 2018*, pp. 308–312, 2018.
  - [18] P. Megantoro, F. D. Wijaya, and E. Firmansyah, "Analyze and optimization



of genetic algorithm implemented on maximum power point tracking technique for PV system,” *Proc. - 2017 Int. Semin. Appl. Technol. Inf. Commun. Empower. Technol. a Better Hum. Life, iSemantic 2017*, vol. 2018-Janua, pp. 79–84, 2018.

- [19] G. L. H. Priyanka and A. S. H. Babu, “PSO & GSA Algorithms For Global MPPT In Photo Voltaic System,” vol. 6, pp. 167–175, 2017.
- [20] F. D. Murdianto, O. Penangsang, and A. Priyadi, “Modeling and simulation of MPPT-bidirectional using adaptive neuro fuzzy inference system (ANFIS) in distributed energy generation system,” *2015 Int. Semin. Intell. Technol. Its Appl. ISITIA 2015 - Proceeding*, pp. 207–212, 2015.
- [21] A. S. and R. S. Suyanto , Farid Dwi Murdianto, Ontoseno Penangsang, U.P. Dimas Fajar, “Wind-PV Hybrid System Modeling Using Bidirectional Converter with MPPT-Dual Adaptive Neuro Fuzzy Inference System (ANFIS) in Microgrid Isolated System,” *J. Eng. Appl. Sci.*, vol. 11, pp. 2353–2359, 2016.
- [22] D. F. Teshome, C. H. Lee, Y. W. Lin, and K. L. Lian, “A modified firefly algorithm for photovoltaic maximum power point tracking control under partial shading,” *IEEE J. Emerg. Sel. Top. Power Electron.*, vol. 5, no. 2, pp. 661–671, 2017.
- [23] J. Ahmed and Z. Salam, “A soft computing MPPT for PV system based on Cuckoo Search algorithm,” *Int. Conf. Power Eng. Energy Electr. Drives*, no. May, pp. 558–562, 2013.
- [24] S. Daraban, D. Petreus, and C. Morel, “A novel global MPPT based on genetic algorithms for photovoltaic systems under the influence of partial shading,” *IECON Proc. (Industrial Electron. Conf.)*, pp. 1490–1495, 2013.
- [25] I. S. Imran Pervez, S. Mekhilef;, A. Sarwar;, M. Tariq;, and B. Alamri, “Most Valuable Player Algorithm based Maximum Power Point Tracking for a Partially Shaded PV Generation System,” *IEEE Trans. Sustain. ENERGY*, vol. 12, no. 4, 2021.
- [26] K. Ishaque, Z. Salam, H. Taheri, and A. Shamsudin, “Maximum Power Point



Tracking for PV system under partial shading condition via particle swarm optimization,” *2011 IEEE Appl. Power Electron. Colloquium, IAPEC 2011*, vol. 2, no. 2, pp. 5–9, 2011.

- [27] C. L. Liu, Y. F. Luo, J. W. Huang, and Y. H. Liu, “A PSO-based MPPT algorithm for photovoltaic systems subject to inhomogeneous insolation,” *6th Int. Conf. Soft Comput. Intell. Syst. 13th Int. Symp. Adv. Intell. Syst. SCIS/ISIS 2012*, no. 1, pp. 721–726, 2012.
- [28] M. Z. Efendi, F. D. Murdianto, and R. E. Setiawan, “Modeling and simulation of MPPT sepie converter using modified PSO to overcome partial shading impact on DC microgrid system,” *Proc. IES-ETA 2017 - Int. Electron. Symp. Eng. Technol. Appl.*, vol. 2017-Decem, pp. 27–32, 2017.
- [29] F. D. Murdianto, M. Z. Efendi, R. E. Setiawan, E. Purwanto, G. Prabowo, and A. Jaya, “Modeling and Simulation of MPPT SEPIC-BOOST Using Modified Particle Swarm Optimization (MPSO)-FLC Under Dynamic Partial Shading Condition in DC Microgrid System,” *2018 Int. Electr. Eng. Congr.*, pp. 1–4, 2019.
- [30] S. Rajendran and H. Srinivasan, “Simplified accelerated particle swarm optimisation algorithm for efficient maximum power point tracking in partially shaded photovoltaic systems,” *IET Renew. Power Gener.*, vol. 10, no. 9, pp. 1340–1347, 2016.
- [31] A. W. Ibrahim *et al.*, “PV maximum power-point tracking using modified particle swarm optimization under partial shading conditions,” *Chinese J. Electr. Eng.*, vol. 6, no. 4, pp. 106–121, 2020.
- [32] Y. H. Liu, S. C. Huang, J. W. Huang, and W. C. Liang, “A particle swarm optimization-based maximum power point tracking algorithm for PV systems operating under partially shaded conditions,” *IEEE Trans. Energy Convers.*, vol. 27, no. 4, pp. 1027–1035, 2012.
- [33] K. Ishaque and Z. Salam, “A deterministic particle swarm optimization maximum power point tracker for photovoltaic system under partial shading condition,” *IEEE Trans. Ind. Electron.*, vol. 60, no. 8, pp. 3195–3206, 2013.



- [34] Z. Zhao, "High Efficiency Single-stage Grid-tied PV Inverter for Renewable Energy System," *Smart Grid, IEEE ...*, 2013.
- [35] M. Nasrun Hariyanto, "Energi Surya Dan Energi Biogas Di Kampung Haur," 2010.
- [36] J. Hui, A. Bakhshai, and P. K. Jain, "A hybrid wind-solar energy system: A new rectifier stage topology," *Conf. Proc. - IEEE Appl. Power Electron. Conf. Expo. - APEC*, pp. 155–161, 2010.
- [37] R. Eberhart and J. Kennedy, "A new optimizer using particle swarm theory," pp. 39–43, 2002.
- [38] Y. Shi and R. Eberhart, "A modified particle swarm optimizer algorithm," *Evol. Program. VII*, pp. 2675–2679, 1998.
- [39] F. Van Den Bergh, "An Analysis of Particle Swarm Optimizers," no. November, p. 315, 2006.
- [40] M. Clerc and J. Kennedy, "The particle swarm-explosion, stability, and convergence in a multidimensional complex space," *IEEE Trans. Evol. Comput.*, vol. 6, no. 1, pp. 58–73, 2002.
- [41] J. Kennedy, "Small worlds and mega-minds: Effects of neighborhood topology on particle swarm performance," *Proc. 1999 Congr. Evol. Comput. CEC 1999*, vol. 3, pp. 1931–1938, 1999.
- [42] SOLAREX, *MSX-60 and MSX-64 Photovoltaic Modules*. Frederick, USA: Solarex Court, 1998.