

**DAFTAR PUSTAKA**

- [1] A. Hamdan, K. I. Ibekwe, V. I. Ilojiyanya, S. Sonko, and E. A. Etukudoh, "AI in Renewable Energy: A Review of Predictive Maintenance and Energy Optimization," *Int. J. Sci. Res. Arch.*, vol. 11, no. 1, pp. 718–729, 2024, doi: 10.30574/ijrsra.2024.11.1.0112.
- [2] P. Gao and Z. Zeng, "The Core Connotations, Fundamental Goals, Realistic Dilemmas and Practical Paths of Aligning the Value of Artificial Intelligence," vol. 1, no. 12, pp. 38–43, 2024, doi: 10.62381/p243c06.
- [3] V. Terziyan *et al.*, "Towards Ethical Evolution: Responsible Autonomy of Artificial Intelligence Across Generations," *Ai Ethics*, 2025, doi: 10.1007/s43681-025-00759-9.
- [4] X. Chen, "The Application of Artificial Intelligence in Healthcare," *Front. Comput. Intell. Syst.*, vol. 8, no. 1, pp. 19–21, 2024, doi: 10.54097/5k5e0116.
- [5] ح. كريمي, "Contribution of Artificial Intelligence in the Development of the Educational Field: Reality and Models," vol. 35, no. 1, pp. 1–11, 2024, doi: 10.62341/bhkc1916.
- [6] A. Islam and F. Othman, "Renewable Energy MicroGrid Power Forecasting: AI Techniques With Environmental Perspective," 2024, doi: 10.21203/rs.3.rs-4260337/v1.
- [7] Seetharaman, K. Moorthy, N. Patwa, Saravanan, and Y. P. Gupta, "Breaking Barriers in Deployment of Renewable Energy," *Heliyon*, vol. 5, no. 1, p. e01166, 2019, doi: 10.1016/j.heliyon.2019.e01166.
- [8] D. Szpilko, F. J. Naharro, G. Lăzăroiu, E. Nica, and A. de la T. Gallegos, "Artificial Intelligence in the Smart City — A Literature Review," *Eng. Manag. Prod. Serv.*, vol. 15, no. 4, pp. 53–75, 2023, doi: 10.2478/emj-2023-0028.
- [9] A. Adewumi, C. E. Okoli, F. O. Usman, K. A. Olu-lawal, and O. T. Soyombo, "Reviewing the Impact of AI on Renewable Energy Efficiency

- and Management,” *Int. J. Sci. Res. Arch.*, vol. 11, no. 1, pp. 1518–1527, 2024, doi: 10.30574/ijrsra.2024.11.1.0245.
- [10] X. Wen, Q. Shen, S. Wang, and H. Zhang, “Leveraging AI and Machine Learning Models for Enhanced Efficiency in Renewable Energy Systems,” *Appl. Comput. Eng.*, vol. 96, no. 1, pp. 107–112, 2024, doi: 10.54254/2755-2721/96/20241416.
- [11] M. Y. Shaheen, “Applications of Artificial Intelligence (AI) in Healthcare: A Review,” 2021, doi: 10.14293/s2199-1006.1.sor-.ppvry8k.v1.
- [12] Z. Cao, “Development and Application of Artificial Intelligence,” 2017, doi: 10.2991/icmeit-17.2017.79.
- [13] G. S. Mauro, “The New Power Couple: Artificial Intelligence and Renewable Energy,” *J. Strateg. Innov. Sustain.*, vol. 19, no. 3, 2024, doi: 10.33423/jsis.v19i3.7374.
- [14] V. Puri *et al.*, “A Hybrid Artificial Intelligence and Internet of Things Model for Generation of Renewable Resource of Energy,” *Ieee Access*, vol. 7, pp. 111181–111191, 2019, doi: 10.1109/access.2019.2934228.
- [15] L. Zhang, J. Ling, and M. Lin, “Artificial intelligence in renewable energy: A comprehensive bibliometric analysis,” *Energy Reports*, vol. 8, pp. 14072–14088, 2022, doi: <https://doi.org/10.1016/j.egyr.2022.10.347>.
- [16] G. Marzi, M. Balzano, A. Caputo, and M. M. Pellegrini, “Guidelines for Bibliometric-Systematic Literature Reviews: 10 steps to combine analysis, synthesis and theory development,” *Int. J. Manag. Rev.*, no. December 2022, pp. 81–103, 2024, doi: 10.1111/ijmr.12381.
- [17] Aidi Ahmi, “Bibliometric Analysis using BiblioMagika,” p. 179, 2023.
- [18] H. Dagdougui, R. Minciardi, A. Ouammi, M. Robba, and R. Sacile, “Modeling and optimization of a hybrid system for the energy supply of a ‘green’ building,” *Energy Convers. Manag.*, vol. 64, pp. 351–363, 2012, doi: 10.1016/j.enconman.2012.05.017.
- [19] H. Dagdougui, R. Minciardi, A. Ouammi, M. Robba, and R. Sacile, “A

- dynamic decision model for the real-time control of hybrid renewable energy production systems,” *IEEE Syst. J.*, vol. 4, no. 3, pp. 323–333, 2010, doi: 10.1109/JSYST.2010.2059150.
- [20] Y. Gao, Y. Matsunami, S. Miyata, and Y. Akashi, “Operational optimization for off-grid renewable building energy system using deep reinforcement learning,” *Appl. Energy*, vol. 325, 2022, doi: 10.1016/j.apenergy.2022.119783.
- [21] D. C. Das, A. K. Roy, and N. Sinha, “GA based frequency controller for solar thermal-diesel-wind hybrid energy generation/energy storage system,” *Int. J. Electr. Power Energy Syst.*, vol. 43, no. 1, pp. 262–279, 2012, doi: 10.1016/j.ijepes.2012.05.025.
- [22] R. Ak, O. Fink, and E. Zio, “Two Machine Learning Approaches for Short-Term Wind Speed Time-Series Prediction,” *IEEE Trans. Neural Networks Learn. Syst.*, vol. 27, no. 8, pp. 1734–1747, 2016, doi: 10.1109/TNNLS.2015.2418739.
- [23] Y. Tang, P. Ju, H. He, C. Qin, and F. Wu, “Optimized control of DFIG-based wind generation using sensitivity analysis and particle swarm optimization,” *IEEE Trans. Smart Grid*, vol. 4, no. 1, pp. 509–520, 2013, doi: 10.1109/TSG.2013.2237795.
- [24] M. G. M. Almihat and J. L. Munda, “Review on recent control system strategies in Microgrid,” *Edelweiss Appl. Sci. Technol.*, vol. 8, no. 6, pp. 5089–5111, 2024, doi: 10.55214/25768484.v8i6.3116.
- [25] Y. Liu, M. Lv, and K. Sun, “Comprehensive tradeoff and utilization of airborne renewable energy and uncertain stratospheric wind potential based on reinforcement learning,” *Energy*, vol. 324, 2025, doi: 10.1016/j.energy.2025.135932.
- [26] D. Albahdal, M. Almousa, W. Aljebreen, and A. A. Almutairi, “Sunrise in the Desert: Leveraging Big Data Analytics for Predictive Solar Energy Production in Saudi Arabia,” *IEEE Access*, vol. 13, pp. 54585–54600, 2025, doi: 10.1109/ACCESS.2025.3551271.

- [27] S. Pangvuthivanich, W. Roynarin, P. Boonraksa, and T. Boonraksa, "Deep Learning-Driven Forecasting for Compressed Air Oxygenation Integrating With Floating PV Power Generation System," *IET Energy Syst. Integr.*, vol. 7, no. 1, 2025, doi: 10.1049/esi2.70000.
- [28] M. M. Elkholy, M. A. Mostafa, and E. A. El-Hay, "Enhancing steady-state and dynamic performance of wind turbine doubly fed induction generator using AI optimization approaches with adaptive PI controllers," *Results Eng.*, vol. 26, 2025, doi: 10.1016/j.rineng.2025.104631.
- [29] X. Chen, W. Cao, Q. Zhang, S. Hu, and J. Zhang, "Artificial Intelligence-Aided Model Predictive Control for a Grid-Tied Wind-Hydrogen-Fuel Cell System," *IEEE Access*, vol. 8, pp. 92418–92430, 2020, doi: 10.1109/ACCESS.2020.2994577.
- [30] M. Elsis, N. Bazmohammadi, J. M. Guerrero, and M. A. Ebrahim, "Energy management of controllable loads in multi-area power systems with wind power penetration based on new supervisor fuzzy nonlinear sliding mode control," *Energy*, vol. 221, 2021, doi: 10.1016/j.energy.2021.119867.
- [31] Y. Zhang, C. Qin, A. K. Srivastava, C. Jin, and R. K. Sharma, "Data-Driven Day-Ahead PV Estimation Using Autoencoder-LSTM and Persistence Model," *IEEE Trans. Ind. Appl.*, vol. 56, no. 6, pp. 7185–7192, 2020, doi: 10.1109/TIA.2020.3025742.
- [32] P. Xu, X. Wang, and Z. Li, "Impact and optimization of vehicle charging scheduling on regional clean energy power supply network management," *Energy Informatics*, vol. 8, no. 1, 2025, doi: 10.1186/s42162-025-00476-x.
- [33] M. Xia, H. Shao, X. Ma, and C. W. De Silva, "A Stacked GRU-RNN-Based Approach for Predicting Renewable Energy and Electricity Load for Smart Grid Operation," *IEEE Trans. Ind. Informatics*, vol. 17, no. 10, pp. 7050–7059, 2021, doi: 10.1109/TII.2021.3056867.
- [34] S. Ghimire, R. C. Deo, N. Raj, and J. Mi, "Wavelet-based 3-phase hybrid SVR model trained with satellite-derived predictors, particle swarm optimization and maximum overlap discrete wavelet transform for solar

- radiation prediction,” *Renew. Sustain. Energy Rev.*, vol. 113, 2019, doi: 10.1016/j.rser.2019.109247.
- [35] M. Sharifzadeh, A. Sikinioti-Lock, and N. Shah, “Machine-learning methods for integrated renewable power generation: A comparative study of artificial neural networks, support vector regression, and Gaussian Process Regression,” *Renew. Sustain. Energy Rev.*, vol. 108, pp. 513–538, 2019, doi: 10.1016/j.rser.2019.03.040.
- [36] D. Khan, J. A. Ansari, S. A. Khan, and U. Abrar, “Power optimization control scheme for doubly fed induction generator used in wind turbine generators,” *Inventions*, vol. 5, no. 3, pp. 1–13, 2020, doi: 10.3390/inventions5030040.
- [37] A. Thiagarajan, B. S. Revathi, and V. Suresh, “A Deep Learning Model Using Transformer Network and Expert Optimizer for an Hour Ahead Wind Power Forecasting,” *IEEE Access*, vol. 13, pp. 33935–33955, 2025, doi: 10.1109/ACCESS.2025.3543594.
- [38] M. Sonnenschein, O. Lünsdorf, J. Bremer, and M. Tröschel, “Decentralized control of units in smart grids for the support of renewable energy supply,” *Environ. Impact Assess. Rev.*, vol. 52, pp. 40–52, 2015, doi: 10.1016/j.eiar.2014.08.004.
- [39] D. Cao *et al.*, “Deep Reinforcement Learning Based Approach for Optimal Power Flow of Distribution Networks Embedded with Renewable Energy and Storage Devices,” *J. Mod. Power Syst. Clean Energy*, vol. 9, no. 5, pp. 1101–1110, 2021, doi: 10.35833/MPCE.2020.000557.
- [40] A. F. Mirza, P. Szczepankowski, and J. Luszcz, “Cleaner energy for sustainable future using hybrid photovoltaics-thermoelectric generators system under non-static conditions using machine learning based control technique,” *Sustain. Energy Technol. Assessments*, vol. 53, 2022, doi: 10.1016/j.seta.2022.102482.
- [41] X. Wang, R. Flores, J. Brouwer, and M. Papaefthymiou, “Real-time detection of electrical load anomalies through hyperdimensional

- computing,” *Energy*, vol. 261, 2022, doi: 10.1016/j.energy.2022.125042.
- [42] Y. Gao, Y. Matsunami, S. Miyata, and Y. Akashi, “Model predictive control of a building renewable energy system based on a long short-term hybrid model,” *Sustain. Cities Soc.*, vol. 89, 2023, doi: 10.1016/j.scs.2022.104317.
- [43] B. Jegajothi, S. Arumugam, N. K. Shukla, I. Kathir, P. Yamunaa, and M. Digra, “An Efficient MPPT Tracking in Solar PV System with Smart Grid Enhancement Using CMC MAC Protocol,” *Comput. Syst. Sci. Eng.*, vol. 47, no. 2, pp. 2417–2437, 2023, doi: 10.32604/csse.2023.038074.
- [44] Y. Wang *et al.*, “The Wind and Photovoltaic Power Forecasting Method Based on Digital Twins,” *Appl. Sci.*, vol. 13, no. 14, 2023, doi: 10.3390/app13148374.
- [45] C. Gu, C. Chen, and W. Tang, “Accurate and fast machine learning algorithm for systems outage prediction,” *Sol. Energy*, vol. 251, pp. 286–294, 2023, doi: 10.1016/j.solener.2023.01.014.
- [46] G. Abbas, W. Zhi, and A. Ali, “A two-stage reactive power optimization method for distribution networks based on a hybrid model and data-driven approach,” *IET Renew. Power Gener.*, vol. 18, no. 16, pp. 3967–3979, 2024, doi: 10.1049/rpg2.13096.
- [47] V. Mnih *et al.*, “Human-level control through deep reinforcement learning,” *Nature*, vol. 518, no. 7540, pp. 529–533, 2015, doi: 10.1038/nature14236.
- [48] “ROBOT LEARNING, edited by Jonathan H. Connell and Sridhar Mahadevan, Kluwer, Boston, 1993/1997, xii+240 pp., ISBN 0-7923-9365-1 (Hardback, 218.00 Guilders, \$120.00, £89.95).,” *Robotica*, vol. 17, no. 2, pp. 229–235, 1999, doi: DOI: 10.1017/S0263574799271172.