

DAFTAR PUSTAKA

- [1] F. Karmelia, Maria Lestari, “Sistem Penjadwalan Karyawan Paruh Waktu Dengan Algoritma Genetika,” Vol. 15, No. 1, Pp. 142–152, 2024.
- [2] M. Hadi *Et Al.*, “Literature Review : Metode Evaluasi Performa Sistem Pembangkit Listrik Tenaga Surya (Plts) Di Indoensia,” Vol. 8, No. 1, Pp. 280–289, 2025.
- [3] L. E. R. Septiana Sihombing , Dian Mahardi Lestari , Mutiah Fitriani Nasution, “Analisis Konsumsi Energi Dan Emisi Grk Terhadap Biaya Perusahaan Manufaktur Di Indonesia,” *J. Community Dev. Disaster Manag.*, Vol. 7, No. 1, Pp. 229–244, 2025, Doi: 10.37680/Jcd.V7i1.6899.
- [4] N. B. Alnavis, R. R. Wirawan, K. I. Solihah, And V. H. Nugroho, “Energi Listrik Berkelanjutan: Potensi Dan Tantangan Penyediaan Energi Listrik Di Indonesia,” *J. Innov. Mater. Energy, Sustain. Eng.*, Vol. 1, No. 2, Pp. 119–139, 2024, Doi: 10.61511/Jimese.V1i2.2024.544.
- [5] N. C. Fitri And H. Hamdi, “Systematic Literature Review (Slr): Sumber Energi Terbarukan : Potensi Kotoran Ternak Dan Limbah Pertanian Untuk Produksi Biogas Berkelanjutan,” *J. Energi Baru Dan Terbarukan*, Vol. 5, No. 1, Pp. 57–69, 2024, Doi: 10.14710/Jebt.2024.21961.
- [6] D. A. Efriansyah, A. Herawati, I. N. Anggraini, R. S. Rinaldi, And Y. Rodiah, “Analisis Potensi Energi Matahari Dan Pembangkitan Daya Pada Plts Sebagai Sumber Rumah Energi Terbarukan Sederhana Di Kota Bengkulu,” *J. Serambi Eng.*, Vol. 9, No. 1, Pp. 8258–8267, 2024.
- [7] K. Mudhoffar And L. Magriasti, “Ekonomi Politik Energi Terbarukan: Peluang Dan Tantangan Di Indonesia,” *Multiverse Open Multidiscip. J.*, Vol. 3, No. 1, Pp. 47–52, 2024, Doi: 10.57251/Multiverse.V3i1.1382.
- [8] A. Kharisma, S. Pinandita, And A. E. Jayanti, “Literature Review: Kajian Potensi Energi Surya Alternatif Energi Listrik,” *J. Energi Baru Dan Terbarukan*, Vol. 5, No. 2, Pp. 145–154, 2024, Doi: 10.14710/Jebt.2024.23956.
- [9] M. Rachmawati And Z. A. Hoesein, “Jurnal Retentum Strategi Optimalisasi

Peran Bum Desa Sebagai Subjek Hukum Dalam Pengelolaan Energi Bersih Untuk Pembangunan Berkelanjutan,” Pp. 238–256, 2025.

- [10] S. Masfiah, E. Gamelia, A. F. Ayu Maghfiroh, And A. Pramasatya, “Efektifitas Pelatihan Media Audio-Visual Terkait Anemia Ibu Hamil Dalam Peningkatan Kompetensi Petugas Penyuluh Kesehatan Di Kabupaten Banyumas,” *Kesmas Indones.*, Vol. 9, No. 1, P. 12, 2017, Doi: 10.20884/1.Ki.2017.9.1.223.
- [11] R. Effendi, “Integrasi Sistem Energi Terbarukan Dan Penyimpanan Untuk Meningkatkan Efisiensi Konversi Energi Pada Mikrogrid,” *G-Tech J. Teknol. Terap.*, Vol. 8, No. 1, Pp. 255–264, 2023, Doi: 10.33379/Gtech.V8i1.3682.
- [12] M. S. Ummah, “Potensi Energi Terbarukan Pembangkit Listrik Tenaga Surya Off-Grid Pada Pesanggrahan Gordo Mulyo Kabupaten Magetan,” *Sustain.*, Vol. 11, No. 1, Pp. 1–14, 2019, [Online]. Available: Http://Scioteca.Caf.Com/Bitstream/Handle/123456789/1091/Red2017-Eng-8ene.Pdf?Sequence=12&Isallowed=Y%0ahttp://Dx.Doi.Org/10.1016/J.Regsciurbeco.2008.06.005%0ahttps://Www.Researchgate.Net/Publication/305320484_Sistem_Pembetungan_Terpusat_Strategi_Melestari.
- [13] A. A. Kurniawan, D. T. Listrik, F. Vokasi, And U. N. Surabaya, “Perancangan Dan Implementasi Sistem Pembangkit Listrik Tenaga Hybrid Untuk Penerangan Jalan Umum Widi Aribowo , Aditya Chandra Hermawan , Mahendra Widyartono,” *J. Univ. Negeri Surabaya*, Pp. 102–107, 2023.
- [14] Z. T. Alexius Purba, Ahsani Taqwim, Muhammad Khoiri, Angga Maulana, Samuel Pane, “Study Analisis Penghematan Daya Listrik Dan Pengaruhnya,” *J. Telecommun. Electr. Sci.*, Vol. 01, No. 02, Pp. 76–85, 2024.
- [15] P. R. Sobirin, D. T. Nugroho, And M. I. Zulfa, “Analisis Aliran Daya Terhadap Fluktuasi Pembebanan Di Pembangkit Listrik Tenaga Uap 1000 Mw,” *J. Sinta Sist. Inf. Dan Teknol. Komputasi*, Vol. 1, No. 2, Pp. 66–76, 2024, Doi: 10.61124/Sinta.V1i2.16.

- [16] T. R. Yudisthira, “Analisis Dan Implementasi Algoritma Pemantauan Kualitas Energi Listrik Pada Sistem Smart Grid,” Vol. 1, No. 4, Pp. 165–174, 2024.
- [17] J. Napitupulu, “Analisa Ketersediaan Dan Konservasi Energi Listrik,” *J. Darma Agung*, Vol. 20, No. 1, Pp. 105–123, 2022.
- [18] J. Li *Et Al.*, “Forward Solution Algorithm Of Fracture Reduction Robots Based On Newton-Genetic Algorithm,” *Biomim. Intell. Robot.*, P. 100216, Jan. 2025, Doi: 10.1016/J.Birob.2025.100216.
- [19] F. I. Maulana And A. Prapanca, “Pengembangan Sistem Penjadwalan Keberangkatan Kapal Berbasis Web Dengan Arsitektur Model View Controller Menggunakan Algoritma Genetika,” Vol. 06, Pp. 891–902, 2025.
- [20] M. C. Muhammad Farkhan El Ghiffary¹, Sigit Nurcahyo², Aditya Saputra³, Albi Surya Perdana ⁴, Anna Dina Kalifia,. S.Kom., “Penentuan Rute Optimal Untuk Pengiriman Makanan Menggunakan Algoritma Genetika,” *J. Sci.*, Vol. 3, Pp. 362–376, 2025.
- [21] H. K. C. Divia Cheetu, “Integration Of Pv And Diesel Generators For Off-Grid Power Systems : An Optimal Design Using,” 2025, Doi: 10.26855/Jepes.2024.12.003.
- [22] Z. M. Yaseen, O. A. Alawi, And B. C. Base, “Artificial Intelligence Models Development For Profitability Factor Prediction In Concentrated Solar Power With Dual Backup Systems,” 2025.
- [23] V. H. Nguyen, T. C. Do, And K. K. Ahn, “Hybrid Powertrain With Dual Energy Regeneration For Boom Cylinder Movement In A Hydraulic Excavator,” *Autom. Constr.*, Vol. 171, P. 105974, Mar. 2025, Doi: 10.1016/J.Autcon.2025.105974.
- [24] F. Duan, M. Eslami, M. Okati, D. J. Jasim, And A. K. Mahmood, “Hybrid Stochastic And Robust Optimization Of A Hybrid System With Fuel Cell For Building Electrification Using An Improved Arithmetic Optimization Algorithm,” *Sci. Rep.*, Vol. 15, No. 1, P. 1779, 2025, Doi: 10.1038/S41598-025-86074-Z.
- [25] A. Hendro Yuwono, I. Suryani Faradisa, And R. Cahyo M Putra, “Smart

- Farming Dengan Pembangkit Hybrid Berbasis Iot Sebagai Kontrol Dan Monitoring Di Area Pertanian,” *Jati (Jurnal Mhs. Tek. Inform.*, Vol. 8, No. 1, Pp. 16–23, 2024, Doi: 10.36040/Jati.V8i1.8960.
- [26] Z. Tharo, “Analisis Pembangkit Listrik Hybrid Surya-Bayu Untuk,” Vol. 8, No. 1, Pp. 123–129, 2024, Doi: 10.31289/Jesce.V6i2.12522.
- [27] R. Muhammad Eko Saputro, Mohd Ilyas, “Generator Listrik Tenaga Gelombang Air Menggunakan Kristal Piezoelektrik,” *J. Tek. Elektro*, Vol. 03, No. 01, Pp. 7–12, 2024, Doi: 10.58466/Entries.
- [28] F. Saiful Azmi, Radhiah, “Rancang Bangun Pembangkit Listrik Tenaga Hybrid Berbasis Energi Surya Dan Angin,” *J. Tektro*, Vol. 3, No. 2, Pp. 148–151, 2021, [Online]. Available: [Http://Eprints.Polsri.Ac.Id/8217/%0ahttp://Eprints.Polsri.Ac.Id/8217/3/FileIii.Pdf](http://Eprints.Polsri.Ac.Id/8217/%0ahttp://Eprints.Polsri.Ac.Id/8217/3/FileIii.Pdf).
- [29] M. R. Ananda Saputra, “Analisis Ketercukupan Daya Listrik Pada Pembangkit Listrik Tenaga Hybrid (Angin Dan Surya) Pantai Baru,” *Emit. J. Tek. Elektro*, Pp. 32–49, 2024, Doi: 10.23917/Emito.V24i1.2741.
- [30] B. Y. Dewantara, I. D. P. K. I. Winarno, And S. Widiyanto, *Instalasi Pembangkit Listrik Tenaga Surya*. 2024.
- [31] I. S. Muh. Rais, Ritnawati, Rizki Wahyu P, B. Ahmad Thamrin Dahri, Rosihan Aminuddin, Erdawaty Sarman, Rosnita Rauf, Rahmi Berlianti, And Editor:, *Pembangkit Energi Listrik: Instalasi Dan Prinsip Kerja*. 2024.
- [32] M. Muhammad Bintang Ramadhan, Alfonsius Sinamo, Dahlia, Dr. Rahmanidar, St., *Energi Surya Untuk Desa Mandiri*. 2019.
- [33] M. Memtimin, N. Wang, And G. Mogi, “Solar Photovoltaics Adoption And Its Impacts On Energy Consumption: Evidence From Japanese Households,” *Renew. Energy Focus*, P. 100690, Feb. 2025, Doi: 10.1016/J.Ref.2025.100690.
- [34] N. A. Cano-Londoño, R. Saive, T. Bekius, And L. Franco-García, “Prediction And Assessment Methods For Sustainable Solar Energy Systems Within Our Planetary Boundaries: How Reliable Are They?,” *Curr. Opin. Chem. Eng.*, Vol. 48, P. 101100, Jun. 2025, Doi:

10.1016/J.Coche.2025.101100.

- [35] Z. Chang, J. Yang, Y. Chu, J. Hou, And Y. Su, “Energy, Exergy And Economic Analysis Of A Novel Immersion Tapered Solar Still For Combination With Solar Concentrator,” *Desalination*, Vol. 601, P. 118560, May 2025, Doi: 10.1016/J.Desal.2025.118560.
- [36] J. Meng, Z. Dong, And S. Zhu, “A Copula-Based Wind-Solar Complementarity Coefficient: Case Study Of Two Clean Energy Bases, China,” *Energy*, Vol. 318, P. 134904, Mar. 2025, Doi: 10.1016/J.Energy.2025.134904.
- [37] F. Martinez-Gil, C. Sansom, A. Fernández-García, A. Alcayde-García, And F. Manzano-Agugliaro, “Maintenance Techniques To Increase Solar Energy Production: A Review,” *Energy Nexus*, Vol. 17, P. 100384, Mar. 2025, Doi: 10.1016/J.Nexus.2025.100384.
- [38] H. T. Paradongan *Et Al.*, “Techno-Economic Feasibility Study Of Solar Photovoltaic Power Plant Using Retscreen To Achieve Indonesia Energy Transition,” *Heliyon*, Vol. 10, No. 7, P. E27680, Apr. 2024, Doi: 10.1016/J.Heliyon.2024.E27680.
- [39] M. Rifansyah And D. F. Hakam, “Techno Economic Study Of Floating Solar Photovoltaic Project In Indonesia Using Retscreen,” *Clean. Energy Syst.*, Vol. 9, P. 100155, Dec. 2024, Doi: 10.1016/J.Cles.2024.100155.
- [40] D. Paul And D. Devaprakasam, “Mitigating The Impact Of Ultraviolet Radiation And Extreme Environments On Solar Cell And Panel Performance: A State-Of-The-Art Review And Critical Analysis,” *Sol. Energy*, Vol. 290, P. 113342, Apr. 2025, Doi: 10.1016/J.Solener.2025.113342.
- [41] P. Bamola, Y. Colín García, J. D. Gonzaga Sánchez, E. Barrios Salgado, M. T. S. Nair, And P. K. Nair, “Solar Cells And Prototype Modules Of Variable Bandgap Antimony Sulfide Selenide Thin Films Made By Chemical Deposition,” *Sol. Energy*, Vol. 288, P. 113295, Mar. 2025, Doi: 10.1016/J.Solener.2025.113295.
- [42] E. Akpınar, G. Gül Katircioglu, And M. Das, “Effects Of Solar Tracking On

- Different Types Of Solar Panels; Experimental Study For Thermal And Photovoltaic Types,” *Int. J. Hydrogen Energy*, Feb. 2025, Doi: 10.1016/J.Ijhydene.2025.02.155.
- [43] Z. Yang And F.-Y. Gong, “Utilizing Street View Images To Estimate Solar Energy Potential For Photovoltaic-Powered Buses,” *Appl. Geogr.*, Vol. 177, P. 103567, Apr. 2025, Doi: 10.1016/J.Apgeog.2025.103567.
- [44] S. A. Putri, A. D. Farhani, A. S. Anjani, A. D. Saragih, And P. N. Nilam, “Transformasi Teknologi Dalam Sel Surya Film Tipis Generasi Kedua,” *J. Appl. Mech. Eng. Renew. Energy*, Vol. 5, No. 1, Pp. 34–42, 2025.
- [45] A. I. Adi Kurniawan, “Systematic Literature Review (Slr): Kemajuan Teknik Lapisan Semprot Pada Sel Surya Ditinjau Dari Aspek Efisiensi Dan Prospek Komersialisasi,” *J. Ris. Fis. Indones.*, Vol. 2, No. 2, Pp. 26–30, 2022.
- [46] A. Boucharef, A. Tahri, F. Tahri, S. Silvestre, And M. Bourahla, “Solar Module Emulator Based On A Low-Cost Microcontroller,” *Measurement*, Vol. 187, P. 110275, Jan. 2022, Doi: 10.1016/J.Measurement.2021.110275.
- [47] M. S. Endiz, “Design And Implementation Of Microcontroller-Based Solar Charge Controller Using Modified Incremental Conductance Mpppt Algorithm,” *J. Radiat. Res. Appl. Sci.*, Vol. 17, No. 2, P. 100938, Jun. 2024, Doi: 10.1016/J.Jrras.2024.100938.
- [48] A. R. Abd Elbar And H. Hassan, “An Experimental Work On The Performance Of New Integration Of Photovoltaic Panel With Solar Still In Semi-Arid Climate Conditions,” *Renew. Energy*, Vol. 146, Pp. 1429–1443, Feb. 2020, Doi: 10.1016/J.Renene.2019.07.069.
- [49] G. Min Choi *Et Al.*, “Mono-Axial Stretching-Induced Growth Of Crystalline Phase Of Melt-Processed Perfluoroalkoxy Alkane (Pfa) Films For Protecting Inner Layer Of Battery Pouch Films,” *Eur. Polym. J.*, Vol. 219, P. 113380, Oct. 2024, Doi: 10.1016/J.Eurpolymj.2024.113380.
- [50] X. Sun *Et Al.*, “Reducing The Temperature Of Monofacial Double-Glass Photovoltaic Module By Enhancing In-Plane Thermal Conductivity,” *Next Energy*, Vol. 7, P. 100236, Apr. 2025, Doi: 10.1016/J.Nxener.2024.100236.
- [51] Y. Wu, Y. Wu, X. Sun, And Y. Sun, “Improvement Of The Flexible Support

- Photovoltaic Module System: A New Type Of Cable-Truss Support Structure System,” *Structures*, Vol. 71, P. 108203, Jan. 2025, Doi: 10.1016/J.Istruc.2025.108203.
- [52] J. Song *Et AL.*, “Crystalline Poly (Ether Ether Ketone) Nanofiber-Reinforced Composite Proton Exchange Membranes With Dual Proton Channels,” *J. Memb. Sci.*, Vol. 718, P. 123702, Mar. 2025, Doi: 10.1016/J.Memsci.2025.123702.
- [53] D. A. Pratiwi *Et AL.*, “Experimental Study Of Amorphous Photovoltaic Systems In Indoor Performance With Different Coolants,” In *The 8th Mechanical Engineering, Science And Technology International Conference*, Jan. 2025, P. 84024, Doi: 10.3390/Engproc2025084024.
- [54] E. Assareh *Et AL.*, “Assessment Of A Wind Energy Installation For Powering A Residential Building In Rome, Italy: Incorporating Wind Turbines, Compressed Air Energy Storage, And A Compression Chiller Based On A Machine Learning Model,” *Energy*, P. 135083, Feb. 2025, Doi: 10.1016/J.Energy.2025.135083.
- [55] M. Daoudi, “Cleaner Energy Solutions Using Wind Energy And Hydrogen Production In Agriculture,” *Clean. Energy Syst.*, Vol. 10, P. 100183, Jun. 2025, Doi: 10.1016/J.Cles.2025.100183.
- [56] M. Karjadi, “Desain Turbin Angin Modern Sebagai Upaya Meningkatkan Efisiensi Dan Kinerja Energi Angin,” Vol. 7, No. 1, Pp. 457–467, 2024.
- [57] S. Mulyani, D. Hermawan, And D. Prihandoko, “Implementasi Energi Angin Di Bandara Kulon Progo Menuju Bandara Berkonsep Eco-Airport,” *J. Rekayasa Lingkungan.*, Vol. 24, No. 1, Pp. 76–82, 2024, [Online]. Available: <https://www.journal.itj.ac.id/index.php/jrl/article/view/267>.
- [58] D. Ghazali, A. Stefanie, T. Elektro, U. Singaperbangsa, And K. Abstrak, “Perancangan Sistem Pembangkit Energi Angin Menggunakan Generator 12 V Untuk Pembangkit Listrik Tenaga Bayu,” *J. Ilm. Wahana Pendidik.*, Vol. 10, No. 1, Pp. 265–270, 2024, [Online]. Available: <https://doi.org/10.5281/zenodo.10466143>.
- [59] B. Harianto And M. Karjadi, “Pengembangan Turbin Angin Skala Kecil

- Untuk Energi Terbarukan Untuk Daerah Terpencil,” Vol. 7, No. 1, Pp. 468–476, 2024.
- [60] S. Yang, K. Lin, And A. Zhou, “Exploring The Performance Of Horizontal Axis Wind Turbine In Yawed Turbulent Flows Through Wind Tunnel Experiments,” *Renew. Energy*, Vol. 243, P. 122579, Apr. 2025, Doi: 10.1016/J.Renene.2025.122579.
 - [61] Z. Jiang, “Mooring Design For Floating Wind Turbines: A Review,” *Renew. Sustain. Energy Rev.*, Vol. 212, P. 115231, Apr. 2025, Doi: 10.1016/J.Rser.2024.115231.
 - [62] M. Franke, A. Guironnet, And C. Cardozo, “Comparing Iec And Wecc Generic Dynamic Models For Type 4 Wind Turbines,” *Electr. Power Syst. Res.*, Vol. 235, P. 110806, Oct. 2024, Doi: 10.1016/J.Epsr.2024.110806.
 - [63] H. Fadilah, M. F. Soetanto, And K. Kunci, “Pengembangan Turbin Angin Jenis Savonius Dengan Bilah Kombinasi Profil Lurus Dan Sudut Potong Bilah,” Pp. 24–25, 2024.
 - [64] Q. A. L. Kautsar, S. M. Amira, S. Z. Khansa, A. Nursidah, And S. Si, “Rancang Bangun Turbin Angin Tipe Savonius Hybrid Photovoltaic Untuk Penerangan Pada Jalan Tol,” *J. Mat. Sains Teknol. Lingkung.*, No. 2015, Pp. 19–27, 2020.
 - [65] A. De Moura Ribeiro, P. H. Hallak, A. C. De Castro Lemonge, And F. Dos Santos Loureiro, “Automatic Grouping Of Wind Turbine Types Via Multi-Objective Formulation For Nonuniform Wind Farm Layout Optimization Using An Analytical Wake Model,” *Energy Convers. Manag.*, Vol. 315, P. 118759, Sep. 2024, Doi: 10.1016/J.Enconman.2024.118759.
 - [66] M. Sun *Et Al.*, “A Novel Small-Scale H-Type Darrieus Vertical Axis Wind Turbine Manufactured Of Carbon Fiber Reinforced Composites,” *Renew. Energy*, Vol. 238, P. 121923, Jan. 2025, Doi: 10.1016/J.Renene.2024.121923.
 - [67] D. Monika, N. Nadhiroh, I. Kamil, M. F. Aprilianto, A. H. Pamekas, And E. Sitindaon, “Rancang Bangun Pembangkit Listrik Tenaga Bayu Dengan Turbin Savonius,” *Semin. Nas. Tek. Elektro*, Vol. 9, No. 1, Pp. 62–67, 2024.

- [68] R. C. Ardina Surya Gracya, Ariesta Damayanti, “Algoritma Genetika Untuk Optimasi Parameter Nilai K Pada Metode K- Nearest Neighbor,” *J. Innov. Res. Knowl.*, Vol. 4, No. 8, Pp. 361–366, 2024.
- [69] R. Salman, “Optimalisasi Waktu Komputasi Algoritma Genetika Dengan Variasi Probabilitas Mutasi Pada Penjadwalan Kuliah Optimization Of Genetic Algorithm Computation Time With Mutation Probability Variations In Course Scheduling,” Vol. 7, Pp. 77–81, 2025.
- [70] Sumarna, I. Nawawi, Suhardjono, H. Sugiarto, And D. Yuliandari, “Meningkatkan Akurasi Prediksi Kelulusan Mahasiswa Menggunakan Metode Algoritma Genetika,” *J. Inform. Manaj. Dan Komput.*, Vol. 16, No. 2, Pp. 243–251, 2024.
- [71] R. D. Setyawan, “Analisis Penjadwalan Belanja Bulanan Kebutuhan Keluarga Menggunakan Algoritma Genetika,” *J. Ilm. Sains*, Vol. 3, Pp. 354–361, 2025.
- [72] A. Y. S. ;Ahmad H. M. A. Widoyoningrum, “Sistem Penjadwalan Bimbingan Belajar Berbasis Web Menggunakan Algoritma Genetika Fakultas Teknologi Informasi , Universitas Hasyim Asy ’ Ari Tebuireng Jombang Sistem Penjadwalan Bimbingan Belajar Berbasis Web Menggunakan Algoritma Genetika,” *J. Univ. Hasyim Asy’ari*, Pp. 234–243, 2024.
- [73] T. V. Avdeenko, K. E. Serdyukov, And Z. B. Tsydenov, “Formulation And Research Of New Fitness Function In The Genetic Algorithm For Maximum Code Coverage,” *Procedia Comput. Sci.*, Vol. 186, Pp. 713–720, 2021, Doi: 10.1016/J.Procs.2021.04.194.
- [74] Z. H. Ahmed, H. Haron, And A. Al-Tameem, “Appropriate Combination Of Crossover Operator And Mutation Operator In Genetic Algorithms For The Travelling Salesman Problem,” *Comput. Mater. Contin.*, Vol. 79, No. 2, Pp. 2399–2425, 2024, Doi: 10.32604/Cmc.2024.049704.
- [75] Chichi Rizka Gunawan, “Optimasi Travelling Salesman Problem Berbasis Algoritma Genetika Dengan Probabilitas Crossover Dan Mutasi Adaptif,” *J. Ilmu Komput. Dan Sist. Inf.*, No. September, Pp. 234–242, 2024.

- [76] K. Triyono, “Algoritma Genetika Dalam Penjadwalan Mata Kuliah: Eksplorasi Metode Crossover, Mutasi, Dan Seleksi Terbaik,” *J. Univ. Amikom*, Vol. 17, Pp. 126–153, 2024.
- [77] J. Lilley *Et Al.*, “Efficacy Of An Intranasal Tear Neurostimulator In Sjögren Syndrome Patients,” *Clinical Ophthalmology (Auckland, N.Z.)*, Vol. 15. Pp. 4291–4296, 2021, Doi: 10.2147/Oph.S312108.
- [78] A. N. Rohmad And M. Akbar, “Penerapan Algoritma Genetika Dalam Pengelompokan Mahasiswa Kkn (Studi Kasus: Kkn Angkatan Xlii Universitas Mercu Buana Yogyakarta),” *Jiko (Jurnal Inform. Dan Komputer)*, Vol. 8, No. 1, P. 50, 2024, Doi: 10.26798/Jiko.V8i1.1073.
- [79] R. M. Permadi, “Optimasi Sistem Distribusi Dalam Lingkup Single-Products, Multi-Buyers, Menggunakan Pendekatan Algoritma Genetika,” 2024.
- [80] K. B. Gevano Randhi Pilko, Resmi Darni, Yeka Hendriyani, “Implementasi Algoritma Genetika Untuk Memberikan Rekomendasi Konsumsi Makanan Berbasis Kearifan Lokal Dalam Memenuhi Angka Kecukupan Gizi (Akg) Pada Balita Gevano,” *Scientica*, Vol. 3, No. 4, Pp. 1–23, 2025.
- [81] K. K. Sari, “Multiobjective Nonlinear Programming Problems With Normalized Objective Function,” Vol. 06, No. 02, Pp. 91–105, 2024.
- [82] A. Banaei, J. Alamatian, And R. Zia Tohidi, “Active Control Of Structures Using Genetic Algorithm With Dynamic Weighting Factors Using In The Constrained Objective Function,” *Structures*, Vol. 47, Pp. 189–200, Jan. 2023, Doi: 10.1016/J.Istruc.2022.11.049.
- [83] A. Nazarius, R. Delon Pratama, R. Aryapati Soebagijo, R. Priskila, And V. Handrianus Pranatawijaya, “Pengimplementasian Algoritma Genetika Dalam Sistem Penjadwalan Praktikum,” *Jati (Jurnal Mhs. Tek. Inform.)*, Vol. 8, No. 3, Pp. 3237–3243, 2024, Doi: 10.36040/Jati.V8i3.9656.
- [84] D. Darmawati, T. N. Siregar, H. Kamil, And T. Tahlil, “The Effectiveness Of Local Wisdom-Based Counseling To Prevent Iron Deficiency Anemia Among Pregnant Women: A Protocol Of A Randomized Controlled Trial,” *Belitung Nurs. J.*, Vol. 6, No. 3, Pp. 91–96, 2020, Doi: 10.33546/Bnj.1080.

- [85] M. Zain, “Penerapan Algoritma Differential Evolution Pada Optimasi Ekonomis Sistem Kelistrikan Hybrid Pltd Dan Plts Selayar Disusun Dan Diajukan Oleh : Muflih Zain Penerapan Algoritma Differential Evolution,” 2024.
- [86] A. S. Hadi, T. Alawiy, And E. S. Wirateruna, “Optimasi Pv Dengan Metode Mppt Berbasis Algoritma Genetika.”
- [87] I. Standard, E. R. Directive, E. R. Directive, T. Directive, And E. R. Directive, “Ieee Standard 1680 Section 4 Environmental Performance Criteria,” 2006.
- [88] A. P. K. & K. Senthilkumara, “Genetic Algorithm Optimised Leach Protocol For Energy Efficiency In Wireless Sensor Networks,” *Acta Sci.*, Vol. 07, Pp. 117–130, 2024, Doi: 10.17648/Acta.Scientiae.6369.
- [89] N. A. Cia, “Implementasi Algoritma Genetika Dalam Rekomendasi Makanan Untuk Penderita Obesitas,” *J. Inform. Dan Tek. Elektro Terap.*, Vol. 12, No. 2, Pp. 819–828, 2024, Doi: 10.23960/Jitet.V12i2.3993.
- [90] E. A. D. Charisma, “Prediksi Daya Listrik Jangka Sangat Pendek Pembangkit Listrik Mikrohidro Menggunakan Metode Hybrid Decomposisi Feed Forward Neural Network (Ffnn) Erryka Ayu Diah Charisma Unit Three Kartini , Lilik Anifah , Subuh Isnur Haryudo Keywords : Decomposition ,” *J. Unesa*, Pp. 176–184, 2024.
- [91] H. Arnawan, I. Muzamir, I. Y. Mohd, R. A. R. Siti, And S. Hadi, “Evaluation Of 20 Kv Distribution Network Losses In Radial Distribution Systems Due To Distributed Generation Penetration,” *J. Phys. Conf. Ser.*, Vol. 2129, No. 1, 2021, Doi: 10.1088/1742-6596/2129/1/012085.
- [92] I. Wahyu Alisia Pratama, Mohammad Fakhturrokhman, “Pengaruh Azimuth Terhadap Intensitas Cahaya , Tegangan , Dan Arus Panel Surya 50 Wp Off-Grid Pada Program Match Fund Solar Cell Untirta Universitas Sultan Ageng Tirtayasa , Indonesia Program Match Fund Solar Cell Untirta Adalah Strategi Inisiatif Untuk Me,” *J. Tek. Mesin, Ind. Elektro Dan Inform.*, Vol. 4, No. 1, Pp. 94–106, 2025.
- [93] A. Hasibuan, W. V. Siregar, M. Isa, E. Warman, R. Finata, And M. Mursalin,

- “The Use Of Regression Method On Simple E For Estimating Electrical Energy Consumption,” *Hightech Innov. J.*, Vol. 3, No. 3, Pp. 306–318, 2022, Doi: 10.28991/Hij-Sp2022-03-06.
- [94] Y. Wang *Et Al.*, “Power Regulative Triboelectric-Electromagnetic Hybrid Generator For Light Air Harvesting,” *Chem. Eng. J.*, Vol. 505, P. 159505, Feb. 2025, Doi: 10.1016/J.Cej.2025.159505.
- [95] A. H. Ahmed Adam, J. Chen, S. Kamel, M. Safaraliev, And P. Matrenin, “Power Management And Control Of Hybrid Renewable Energy Systems With Integrated Diesel Generators For Remote Areas,” *Int. J. Hydrogen Energy*, Vol. 89, Pp. 320–341, Nov. 2024, Doi: 10.1016/J.Ijhydene.2024.09.247.
- [96] L. M. Martulli, M. Diani, G. Sabetta, S. Bontumasi, M. Colledani, And A. Bernasconi, “Critical Review Of Current Wind Turbine Blades’ Design And Materials And Their Influence On The End-Of-Life Management Of Wind Turbines,” *Eng. Struct.*, Vol. 327, P. 119625, Mar. 2025, Doi: 10.1016/J.Engstruct.2025.119625.
- [97] A. Hasibuan, M. Daud, M. Sayuti, F. Hidayatullah, W. V. Siregar, And R. Fachroji, “Utilization Of Small Wind Turbines As Source Alternative Electrical Energy For Lighting In The Banyak Island Tourism Area, Aceh Singkil, Indonesia,” In *2022 6th International Conference On Electrical, Telecommunication And Computer Engineering (Elticom)*, 2022, Pp. 44–47, Doi: 10.1109/Elticom57747.2022.10037795.
- [98] J. J. Escobar, P. Sánchez-Cuevas, B. Prieto, R. S. Kızıltepe, F. Díaz-Del-Río, And D. Kimovski, “Energy–Time Modelling Of Distributed Multi-Population Genetic Algorithms With Dynamic Workload In Hpc Clusters,” *Futur. Gener. Comput. Syst.*, Vol. 167, P. 107753, Jun. 2025, Doi: 10.1016/J.Future.2025.107753.
- [99] E. Hormozi *Et Al.*, “Energy-Efficient Virtual Machine Placement In Data Centres Via An Accelerated Genetic Algorithm With Improved Fitness Computation,” *Energy*, Vol. 252, P. 123884, Aug. 2022, Doi: 10.1016/J.Energy.2022.123884.

- [100] S. A. Board, *Ieee Standard For Environmental Assessment Of Personal Computer Products, Including Laptop Personal Computers, Desktop Personal Computers, And Personal Computer Monitors*, No. April. 2006.
- [101] N. Dhandapani *Et Al.*, “A Hybrid Troposkein Wind Turbine With Piezoelectric Energy Harvesting Patches And Solar Panels : Design And Performance Evaluations,” *Ain Shams Eng. J.*, Vol. 16, No. 2, P. 103277, Feb. 2025, Doi: 10.1016/J.Asej.2025.103277.
- [102] R. Zhao, N. Zhu, X. Zhao, Z. Luo, And J. Chang, “Multi-Objective Optimization Of A Novel Photovoltaic-Thermoelectric Generator System Based On Hybrid Enhanced Algorithm,” *Energy*, Vol. 319, P. 135046, Mar. 2025, Doi: 10.1016/J.Energy.2025.135046.
- [103] A. Mazouzi, N. Hadroug, W. Alayed, A. Hafaifa, A. Iratni, And A. Kouzou, “Comprehensive Optimization Of Fuzzy Logic-Based Energy Management System For Fuel-Cell Hybrid Electric Vehicle Using Genetic Algorithm,” *Int. J. Hydrogen Energy*, Vol. 81, Pp. 889–905, Sep. 2024, Doi: 10.1016/J.Ijhydene.2024.07.237.
- [104] A. Sb, “Analisa Daya Listrik Panel Surya Dengan Variasi Kemiringan,” *Repos. Uisu*, P. 6, 2025.
- [105] M. Hamam, M. Martanto, A. R. Dikananda, And A. Rifa'i, “Meningkatkan Efisiensi Panel Surya Melalui Iot Berbasis Arduino,” *J. Inform. Teknol. Dan Sains*, Vol. 7, No. 1, Pp. 204–212, Feb. 2025, Doi: 10.51401/Jinteks.V7i1.5231.
- [106] H. Gusmedi, R. P. Putra, And A. S. Samosir, “Desain Pembangkit Listrik Tenaga Surya (Plts) On-Grid 60 Kwp,” *J. Inform. Dan Tek. Elektro Terap.*, Vol. 13, No. 1, Jan. 2025, Doi: 10.23960/Jitet.V13i1.5537.
- [107] A. Yebarat, A. Tayebi, And Y. Shekari, “Numerical Investigation Of The Torque Produced By Darrieus Vertical Axis Wind Turbine In Dusty Flow,” *Renew. Energy*, P. 122731, Feb. 2025, Doi: 10.1016/J.Renene.2025.122731.
- [108] J. Zhu *Et Al.*, “Enhanced Wind Energy Harvesting Performance Of Triboelectric-Electromagnetic Hybrid Generator Via Whale Fin Blades And Speed Matching,” *Nano Energy*, Vol. 135, P. 110615, Mar. 2025, Doi:

10.1016/J.Nanoen.2024.110615.

- [109] O. Delgado Fernández, A. Hentunen, S. Jenu, M. Allam, A. Gusrialdi, And T. Minav, “A Rule-Based Energy Management System Integrating A Semi-Empirical Battery Model For Hybrid Wheel Loaders,” *J. Energy Storage*, Vol. 114, P. 115721, Apr. 2025, Doi: 10.1016/J.Est.2025.115721.
- [110] S. H. Hong, S. Bin Choi, And S. J. Kim, “Hybrid Energy Management Strategy Based On Neural Networks Robust To Fluctuations In Operational Load,” *Ocean Eng.*, Vol. 316, P. 119937, Jan. 2025, Doi: 10.1016/J.Oceaneng.2024.119937.
- [111] Y. Hu, S. Yao, Y. Yao, And H. Lv, “Performance Evaluation And Scale Optimization Of A Spectral Splitting Solar-Wind-Hydrogen Hybrid System,” *Energy*, Vol. 314, P. 134316, Jan. 2025, Doi: 10.1016/J.Energy.2024.134316.
- [112] N. Zoghipour, A. F. Yaran, And Y. Kaynak, “Multi Objective Optimization Of Rough Pocket Milling Strategies During Machining Of Lead-Free Brass Alloys Using Desirability Function And Genetic Algorithms-Based Analysis,” *Procedia Cirp*, Vol. 99, Pp. 145–150, 2021, Doi: 10.1016/J.Procir.2021.03.022.
- [113] A. Farajollahi, M. Baharvand, And H. R. Takleh, “Modeling And Optimization Of Hybrid Geothermal-Solar Energy Plant Using Coupled Artificial Neural Network And Genetic Algorithm,” *Process Saf. Environ. Prot.*, Vol. 186, Pp. 348–360, Jun. 2024, Doi: 10.1016/J.Psep.2024.04.001.
- [114] P. D. Shah And R. S. Bichkar, “Secret Data Modification Based Image Steganography Technique Using Genetic Algorithm Having A Flexible Chromosome Structure,” *Eng. Sci. Technol. An Int. J.*, Vol. 24, No. 3, Pp. 782–794, Jun. 2021, Doi: 10.1016/J.Jestch.2020.11.008.
- [115] S. Aliyev, N. Ismayilova, And C. Zanni-Merk, “Improvement Of The Rules Selection Process In Fis With Genetic Algorithms,” *Procedia Comput. Sci.*, Vol. 246, Pp. 1690–1699, 2024, Doi: 10.1016/J.Procs.2024.09.657.
- [116] Z. Moradi-Shahrbabak, “A Genetic Approach To Design An Ssr Damping Controller In A Hybrid Photovoltaic-Battery System By Considering The

State Of Charge,” *J. Energy Storage*, Vol. 108, P. 115003, Feb. 2025, Doi: 10.1016/J.Est.2024.115003.

- [117] V. H. R. Machado *Et Al.*, “Ultrasound Imaging Using Spoma: Simultaneous Plane-Waves With Genetic Algorithm Optimization And Fast Delay-Multiply-And-Sum Multiple Acquisitions,” *Ndt E Int.*, Vol. 151, P. 103308, Apr. 2025, Doi: 10.1016/J.Ndteint.2024.103308.