

DAFTAR PUSTAKA

- Al-Faraj, F. A. M., & Scholz, M. (2021). Vulnerability and resilience of hydropower generation under climate change scenarios: Haditha dam reservoir case study. *Science of the Total Environment*, 789, 147213.
- Asdak, C. (2023). *Hidrologi dan Pengelolaan Daerah Aliran Sungai*. Yogyakarta: Gadjah Mada University Press.
- Badan Standardisasi Nasional. (2015). SNI 6738:2015: Tata cara perhitungan debit andalan sungai dengan metode kurva durasi aliran (flow duration curve). Jakarta: Badan Standardisasi Nasional.
- Bahdanau, D., Cho, K., & Bengio, Y. (2015). Neural machine translation by jointly learning to align and translate. International Conference on Learning Representations (ICLR). <https://arxiv.org/abs/1409.0473>.
- Beven, K. J. (2012). Rainfall-Runoff Modelling: The Primer (2nd ed.). Wiley. <https://doi.org/10.1002/9781119951001>.
- Beven, K., & Freer, J. (2001). A dynamic TOPMODEL. *Hydrological Processes*, 15(10), 1993–2011. <https://doi.org/10.1002/hyp.252>.
- Brazzini, T., Lorenzo-Saez, E., Martinez, V. S., Perez, E. L., Ortega-Reig, M. V., Palau-Salvador, G. Is small-scale hydropower energy recovery a viable alternative for climate change mitigation and adaptation? The case of the traditional irrigation system in Valencia (Spain). *Energy Reports*, 12, 736–749.
- Chow, V. T., Maidment, D. R., & Mays, L. W. (1988). *Applied hydrology*. New York, NY: McGraw-Hill.
- Dixon, S. L., & Hall, C. A. (2014). *Fluid mechanics and thermodynamics of turbomachinery* (7th ed.). Butterworth-Heinemann.
- de Queiroz, A. R. G., & Fernandes, R. D. (2022). Seasonal pumped hydropower storage role in responding to climate change impacts on the Brazilian electrical sector. *Renewable Energy*, 194, 883–892.

- Durvasulu, V., Balliet, W. H., Lopez, C. J., Lin, Y., Li, B., Alam, S. M. S., Mahalik, M. R., Kwon, J., Mosier, T. M. R. (2024). Rationale for adding batteries to hydropower plants and tradeoffs in hybrid system operation: A review. *Renewable and Sustainable Energy Reviews*, 202, 114673.
- Esmansyah. (2022). *Analisis sensitivitas parameter morfologi DAS terhadap penelitian Geomorphological Instantaneous Unit Hydrograph*. Universitas Gadjah Mada, Magister Teknik Sipil. <https://etd.repository.ugm.ac.id/penelitian/detail/215285>.
- Gneiting, T., & Raftery, A. E. (2007). Strictly proper scoring rules, prediction, and estimation. *Journal of the American Statistical Association*, 102(477), 359–378. <https://doi.org/10.1198/016214506000001437>.
- Graves, A., & Schmidhuber, J. (2005). Framewise phoneme classification with bidirectional LSTM and other neural network architectures. *Neural Networks*, 18(5–6), 602–610. <https://doi.org/10.1016/j.neunet.2005.06.042>.
- Hu, X., Wang, T., Chen, K., Ye, P., Zhang, L. (2023). Research on control system for improving the grid-connected efficiency of small hydropower. *Energy Reports*. 9, 772–783.
- Hunt, J. D., Byers, E., Riahi, K., & Langan, S. (2018). Comparison between seasonal pumped-storage and conventional reservoir dams from the water, energy and land nexus perspective. *Energy Conversion and Management*, 166, 385–401. <https://doi.org/10.1016/j.enconman.2018.04.044>.
- Hunt, J. D., Nascimento, A., Zakeri, B., Ilyas, A., Ramos, D. S., Kuriqi, A., Tolmasquim, M. T., Freitas, M. A. V., Brandao, R., Wada, Y. (2025). Optimizing hydropower generation with reservoir level management in humid regions. *Energy Reports*, 13, 856–864.
- Hochreiter, S., and Schmidhuber, J. (1997). Long short-term memory. *Neural Computation*, 9(8), 1735–1780. <https://doi.org/10.1162/neco.1997.9.8.1735>.
- International Electrotechnical Commission. (2019). *IEC 60193: Hydraulic turbines, storage pumps and pump-turbines—Model acceptance tests*. IEC.

- Jayanta D., and Somenath Halder. (2024). *New Advancements in Geomorphological Research*. Switzerland: Springer Nature, page 226. <https://doi.org/10.1007/978-3-031-64163-3>.
- Khosravi, A., Nahavandi, S., Creighton, D., & Atiya, A. F. (2011). Comprehensive review of neural network-based prediction intervals and new advances. *IEEE Transactions on Neural Networks*, 22 (9), 1341–1356. <https://doi.org/10.1109/TNN.2011.2162110>.
- Kougias, I., Szabó, S., Monforti-Ferrario, F., Huld, T., & Bódis, K. (2016). A methodology for optimising multi-purpose reservoir operation for energy generation and irrigation. *Renewable Energy*, 85, 419–431.
- Kratzert, F., Klotz, D., Brenner, C., Schulz, K., & Herrnegger, M. (2019). Rainfall–runoff modelling using Long Short-Term Memory (LSTM) networks. *Hydrology and Earth System Sciences*, 23(12), 5089–5110. <https://doi.org/10.5194/hess-23-5089-2019>.
- Luo, Y. (2024). Optimal operation model of ecological flow of hydropower station based on genetic algorithm and neural network. *Heliyon*, 10, e39441.
- Mahardika, M., Sudiarso, A., Prihandana, G. S. (2021). *Perancangan dan Manufaktur Pompa Sentrifugal*. Yogyakarta: Gadjah Mada University Press.
- Marsudi, D. (2005). *Pembangkit Energi Listrik*. Jakarta: Penerbit Erlangga.
- Mizwar, Z. (2022). *Implementasi Model Hidrologi Aliran Permukaan Daerah Aliran Sungai Danau Singkarak*. Indramayu: Penerbit Adab.
- Muteba, M. C., Foster, S. N., Raheem, D., Agwu, A. E. (2023). Micro-hydropower systems for smallholder farmers in rural communities of Taraba state, Nigeria: Feasibility study, system analysis, design and performance evaluation (Part II). *Energy Nexus*, 11, 100228.
- Nathan, R. J., & McMahon, T. A. (1990). Evaluation of automated techniques for base flow and recession analyses. *Water Resources Research*, 26(7), 1465–1473. <https://doi.org/10.1029/WR026i007p01465>.

- Organisation for Economic Co-operation and Development (OECD). (2008). *OECD glossary of statistical terms: Percentage point*. <https://stats.oecd.org/glossary/detail.asp?ID=3153>.
- Petrescu, F. I. T. (2015). Hydropower and Pumped-Storage. In T. K. Nielsen (Ed.), *The World Scientific Handbook of Energy*. World Scientific Publishing. https://doi.org/10.1142/9789814343527_0013
- Rahayu, T., Arfis, A., Nurjanah, W., Indrayani, Rifai, S., Ridwan. (2022). *Bangunan Tenaga Air*. Medan: UMSU Press.
- Rehman, S., Al-Hadhrami, L. M., & Alam, M. M. (2015). Pumped hydro energy storage system: A technological review. *Renewable and Sustainable Energy Reviews*, 44, 586–598. <https://doi.org/10.1016/j.rser.2014.12.040>.
- Paish, O. (2002). Small hydro power: Technology and current status. *Renewable and Sustainable Energy Reviews*, 6(6), 537–556. [https://doi.org/10.1016/S1364-0321\(02\)00006-0](https://doi.org/10.1016/S1364-0321(02)00006-0).
- PT. PLN (Persero). (2024). *Laporan Akhir Pra Studi Kelayakan Grindulu Pump Storage Tahun 20023*. Jakarta: Penulis.
- PT PLN (Persero). (2025). *Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) PT PLN (Persero) Tahun 2025-2034*. Jakarta: PT PLN (Persero).
- Samsurizal, Y. Zuriatni and A. Makkulau. (2026). Multi-Variable Thunderstorm Algorithm for Efficiency and Power Stability Optimization in Battery-Integrated Micro-Hydropower Systems. *Journal of Engineering and Technology for Industrial Applications*, 12(59), 1986-1992. <https://doi.org/10.5935/jetia.v12i59.3739>.
- Sangolt, L., Lopez A. F. O., Quayson, E., Rognmo, A. U., Olteidal, V, M, O. (2025). Hydrogen production from a run-of-river hydropower plant: Modeling the economic viability. *Energy Reports*, 13, 4985–4997.

- Shrestha, D. L., Robertson, D. E., & Wang, Q. J. (2021). A review of approaches for prediction uncertainty quantification in hydrologic forecasting. *Water Resources Research*, 57(8). <https://doi.org/10.1029/2020WR028599>.
- Soeparman, S. (2015). *Teknologi Tenaga Surya*. Malang: Universitas Brawijaya Press.
- Soewarno. (1995). *Hidrologi Aplikasi Metode Statistik untuk Analisa Data*. Nova.
- Suwingnyo. (2021). *Hidrologi Aplikasi untuk Teknik Sipil*. Malang: UMM Press.
- Tokar, A. S., & Johnson, P. A. (1999). Rainfall-runoff modeling using artificial neural networks. *Journal of Hydrologic Engineering*, 4(3), 232–239. [https://doi.org/10.1061/\(ASCE\)1084-0699\(1999\)4:3\(232\)](https://doi.org/10.1061/(ASCE)1084-0699(1999)4:3(232))
- Vogel, R. M., & Fennessey, N. M. (1994). Flow duration curves I: New interpretation and confidence intervals. *Journal of Water Resources Planning and Management*, 120(4), 485–504. [https://doi.org/10.1061/\(ASCE\)0733-9496\(1994\)120:4\(485\)](https://doi.org/10.1061/(ASCE)0733-9496(1994)120:4(485))
- Widiasmadi, N. (2023). *Pembangkit Hidro*. Indramayu: Penerbit Adab.
- WMO. (2008). *Guide to hydrological practices* (6th ed.). World Meteorological Organization.
- Wood, A. J., & Wollenberg, B. F. (2012). *Power generation, operation, and control* (3rd ed.). Wiley.
- World Bank. (2011). Project Appraisal Document on a Proposed Loan in the Amount of US\$640 Million to the Republic of Indonesia for the Upper Cisokan Pumped Storage (UCPS) Hydroelectric Power Project. Washington, DC: World Bank.
- Yuniarti, D., Kummu, M., & Pokhrel, Y. (2023). Hydrologic and climatic constraints on hydropower operation during dry seasons in Southeast Asia. *Journal of Hydrology*, 620, 129702.