

## DAFTAR PUSTAKA

- Atmam, Z., & Situmeang, U. (2017). Analisis pengaruh perubahan besaran kapasitor terhadap arus start motor induksi satu fasa. *SainETIn*, 1(1), 1–8.  
<https://doi.org/10.31849/sainetin.v1i1.164>
- Bahramian, M. A., Ebadi, M., Ghadimi, A. A., & Khalili, M. (2025). Starting electro-motor loads in battery-less off-grid photovoltaics using a super-capacitor based charge-pump. *Journal of Power Sources*, 626, 235694.  
<https://doi.org/10.1016/j.jpowsour.2024.235694>
- Chapman, S. (2012). *Electric machinery fundamentals* (5th ed.). New York: McGraw-Hill.
- Colmenar-Santos, A., De Palacio, C., Enríquez-García, L., & López-Rey, Á. (2015). A methodology for assessing islanding of microgrids: Between utility dependence and off-grid systems. *Energies*, 8(5), 4436–4454.  
<https://doi.org/10.3390/en8054436>
- Conway, B. E. (1999). *Electrochemical supercapacitors: Scientific fundamentals and technological applications*. New York: Springer Science+Business Media, LLC.
- Daghouri, A., El Hani, S., El Hachimi, Y., & Mediouni, H. (2024). Enhanced hybrid energy storage system combining battery and supercapacitor to extend nanosatellite lifespan. *Results in Engineering*, 23, 102634.  
<https://doi.org/10.1016/j.rineng.2024.102634>

- Dissanayake, K., & Kularatna-Abeywardana, D. (2024). A review of supercapacitors: Materials, technology, challenges, and renewable energy applications. *Journal of Energy Storage*, 96, 112563.
- Dong, Z., Zhang, Z., Li, Z., Li, X., Qin, J., Liang, C., Han, M., Yin, Y., Bai, J., Wang, C., & Wang, R. (2022). A survey of battery–supercapacitor hybrid energy storage systems: Concept, topology, control and application. *Symmetry*, 14(6), 1085. <https://doi.org/10.3390/sym14061085>
- Dorf, R. C., & Svoboda, J. A. (2014). *Introduction to electric circuits* (9th ed.). Hoboken: John Wiley & Sons.
- Hannan, M. A., Wali, S. B., Ker, P. J., Rahman, M. S. A., Mansor, M., Ramachandaramurthy, V. K., Muttaqi, K. M., Mahlia, T. M. I., & Dong, Z. Y. (2021). Battery energy-storage system: A review of technologies, optimization objectives, constraints, approaches, and outstanding issues. *Journal of Energy Storage*, 42, 103023. <https://doi.org/10.1016/j.est.2021.103023>
- Ihsan, B., & Sahidin, D. (2024). Peningkatan umur baterai pada PLTS off-grid menggunakan penyimpanan energi hibrida berbasis superkapasitor-baterai. *Jurnal Energi Terbarukan*, 6(1), 1–10.
- King, B. F., Panjaitan, S. D., Hartoyo, A., & Nawawi, J. H. H. (2020). Sistem kontrol charging dan discharging serta monitoring kesehatan baterai. *Jurnal Teknik Elektro*, 12(2), 45–52.

- Kumar, N., Kim, S.-B., Lee, S.-Y., & Park, S.-J. (2022). Recent advanced supercapacitor: A review of storage mechanisms, electrode materials, modification, and perspectives. *Journal of Energy Storage*, 50, 104168.
- Lakshmi, K. C. S., & Vedhanarayanan, B. (2023). High-performance supercapacitors: A comprehensive review on paradigm shift of conventional energy storage devices. *Batteries*, 9(4), 202. <https://doi.org/10.3390/batteries9040202>
- Lawrence, H., & Van Vlack. (1995). *Ilmu dan teknologi bahan: Ilmu logam dan bukan logam*. Jakarta: Erlangga.
- Nurhasmia, N. (2021). Studi penggunaan superkapasitor sebagai media penyimpan energi. *Progressive Physics Journal*, 2(2), 79. <https://doi.org/10.30872/ppj.v2i2.770>
- Shan, W., Schwalm, M., & Shan, M. (2024). A design tool for battery/supercapacitor hybrid energy storage systems based on the physical–electrochemical degradation battery model BaSiS. *Energies*, 17(14), 3481. <https://doi.org/10.3390/en17143481>
- Shuai, Z., Sun, Y., Shen, Z. J., Tian, W., Tu, C., Li, Y., & Yin, X. (2016). Microgrid stability: Classification and a review. *Renewable and Sustainable Energy Reviews*, 58, 167–179.
- Siregar, I. G. Y. (2022). Design of battery charging time based on microcontroller. *Brilliance: Research of Artificial Intelligence*, 2(2), 44–48. <https://doi.org/10.47709/brilliance.v2i2.1538>
- Sumanto. (1989). *Motor: Arus bolak-balik (motor AC)*. Yogyakarta: Andi.

Thowil Afif, M., & Ayu Putri Pratiwi, I. (2015). Analisis perbandingan baterai lithium-ion, lithium polymer, lead acid dan nickel-metal hydride pada penggunaan mobil listrik—review. *Jurnal Rekayasa Mesin*, 6(2), 95–99. <https://doi.org/10.21776/ub.jrm.2015.006.02.1>

Wang, Z., Xu, S., Zhu, X., Wang, H., Huang, L., Yuan, J., & Yang, W. (2021). Effects of short-term over discharge cycling on the performance of commercial 21,700 lithium-ion cells and the identification of degradation modes. *Journal of Energy Storage*, 35, 102257.