DAFTAR PUSTAKA

Alkire, R. C. (1983). Electrochemical engineering. In *Journal of Chemical Education* (Vol. 60, Number 4). https://doi.org/10.1021/ed060p274

An, L., Tian, Y., dan Zhao, H. (2025). *Research on Water Flow Control Strategy for PEM Electrolyzer Considering the Anode Bubble Effect. Energies*, *18*(2). https://doi.org/10.3390/en18020273

Anggraini, I. N., Nugroho, W. S., Rinaldi, R. S., dan Herawati, A. (2020). *Analisis Pengaruh Tegangan Terhadap Karakteristik Kerja Sel Electrolyzer Dengan Variasi Bahan Elektroda*. *9*(1), 9–15.

Brauns, J. (2020). *Alkaline Water Electrolysis Powered by Renewable Energy : A Review*. https://doi.org/10.3390/pr8020248

Bergman, TL, Lavine, AS, Incropera, FP, dan DeWitt, DP (2011). *Pengantar perpindahan panas* . John Wiley & Sons.

Chauhan, S. V., Joshi, K. K., Pataniya, P. M., dan Sumesh, C. K. (2025). Advancing industrial rate current density in water electrolysis for green hydrogen production: catalyst development, benchmarking, and best practices. *Sustainable Energy and Fuels*, *9*(13), 3550–3576. https://doi.org/10.1039/d5se00262a

Cintia, O., Simanjuntak, B., Putra,R.,dan Setiawan, (2024). *Evaluasi Unjuk Kerja* Generator HHO Type *Dry Cell* dengan Variasi Penambahan Karbon Aktif pada Katalis Natrium Hidroksida *(NaOH)*. *8*(2), 275–279.

Doble, M. (2007). Buku pegangan insinyur kimia Perry. *McGraw-Hil, New York, AS* , 2008-2010.

Fayez, N. H. A., Qenawy, M., Mustafa, H. M. M., dan Shehadeh, M. (2026). *Optimization of a wet-cell electrolyzer for efficient oxyhydrogen (HHO) gas production : a step towards sustainable green energy solutions*. 1–15.

Fisika, J., Islam, U., dan Alauddin, N. (2019). Analisis Produktivitas Gas Hidrogen Berdasarkan Arus dan Tegangan pada proses Elektrolisis H 2 O. *6*(2), 154–161.

Franco, A., dan Rocca, M. (2024). Renewable Electricity and Green Hydrogen Integration for Decarbonization of “Hard-to-Abate” Industrial Sectors. *Electricity*, *5*(3), 471–490. https://doi.org/10.3390/electricity5030024

Gad, M. S., Soly, A. K. El, Singh, S., Sharma, K., dan Dixit, S. (2025). *Examining oxyhydrogen gas generation experimentally using wet cell design*. 1–23. https://doi.org/10.1371/journal.pone.0324921

Hidrogen, P., Teknik, M., Air, E., Variabel, D., dan Arus, K. (2023). *The Production Of Hydrogen Gas Employing Water Electrolysis With Electrical Current Variabels*. *12*(1), 61–66.

Hao, X., Wu, X., Pan, Q., Xiu, T., Zhang, Z., dan Qian, H. (2025). *Simulation of a Pressurized Alkaline Water Electrolysis Electrolyzer Cell and Its System*. https://doi.org/10.1021/acsomega.5c02476

Hodges, A., Renz, S., Lohmann-richters, F., Al-musawi, A., Jupke, A., Lehnert, W., Swiegers, G. F., dan Gordon, G. (n.d.). *Critical Analysis of Published Physical Property Data for Aqueous Potassium Hydroxide . Collation into Detailed Models for Alkaline Electrolysis*.

Huda, C., Sulisworo, D., dan Toifur, M. (2017). Analisis Buku Ajar Termodinamika dengan Konsep Technological Pedagogical and Content Knowledge (TPACK) untuk Penguatan Kompetensi Belajar Mahasiswa. *Jurnal Penelitian Pembelajaran Fisika*, *8*(1).

Islam, U., dan Alauddin, N. (2021). *JURNAL SAINS FISIKA*. *1*, 42–52

Jumali, M. A., Ahmad, A. H., Solah, A., Rosli, S., Muhamad, N., Norazam, A., Babalola Olawale, K., dan Osman, S. A. (2025). Effects of Oxyhydrogen (HHO) Gas Supplementation on Performance and Emissions of a 1.6L Spark Ignition (SI) Engine at Various Load Conditions. *Journal of Advanced Research in Experimental Fluid Mechanics and Heat Transfer Journal Homepage*, *21*(1), 149–164.

Kundu, PK, Cohen, IM, Dowling, DR, dan Capecelatro, J. (2024). *Mekanika fluida* . Elsevier.

Lamy, C., dan Millet, P. (2019). *A Critical Review on the Definitions used to calculate the Energy Efficiency Coefficients of Water Electrolysis Cells Working under Near Ambient Temperature Conditions*. 1–51.

Laoun, B. (2007). *Thermodynamics aspect of high pressure hydrogen production by water electrolysis*. *10*, 435–444.

Li, W., Tian, H., Ma, L., Wang, Y., Liu, X., dan Gao, X. (2022). Materials Advances Low-temperature water electrolysis : fundamentals , progress , and new strategies. *Materials Advances*, *3*(May), 5598–5644. https://doi.org/10.1039/D2MA00185C

Mahesi, T. Z., Saputra, R., Febriana, I., dan A, S. E. (2025). *Jurnal Teknik Kimia USU Pengaruh Jumlah Sel Elektroda Terhadap Produksi Gas Hidrogen dengan Proses Elektrolisis sebagai Sumber Energi Fuel Cell The Influence of the Number of Electrode Cells on Hydrogen Gas Production Using the Electrolysis Process as a Fuel Cell Energy Source*. *14*(1), 10–18.

Manyà, J. J., Antal, M. J., Kinoshita, C. K., dan Masutani, S. M. (n.d.). *Specific Heat Capacity of Pure Water at 4 . 0 MPa*.

Mousa, A. M., Sayed, H. A. A., Ali, K. A. M., Elkaoud, N. S., dan Mahmoud, W. A. E. (2024). Energy-conversion efficiency for producing oxy-hydrogen gas using a simple generator based on water electrolysis. *Scientific Reports*, *14*(1), 1–13. https://doi.org/10.1038/s41598-024-73534-1

Nikoli, V. M., Dimi, K. M., Maslovara, L., dan Popovi, D. P. (2026). *Advances in Alkaline Water Electrolysis — The Role of In Situ Ionic Activation in Green Hydrogen Production*. 1–48.

N, A. P. W. T. (n.d.). *Convection Heat Transfer – Fundamentals and Flow over a Flat Plate , Cylinder and Sphere*.

Nabil, T., dan Access, O. (2019). *Impact of addition oxy-hydrogen gas (HHO) on vehicle engines performance and emissions* https://doi.org/10.30464/jmee.2019.3.2.177

O'brien, TF, Bommaraju, TV, dan Hine, F. (2005). *Buku Pegangan Teknologi Klor-Alkali: Volume I: Dasar-Dasar, Volume II: Pengolahan Air Garam dan Pengoperasian Sel, Volume III: Desain Fasilitas dan Penanganan Produk, Volume IV: Operasi, Volume V: Korosi, Isu Lingkungan, dan Perkembangan Masa Depan* (Vol. 1582). Boston, MA: Springer US.

Perancangan, J. (2024). *254 Sheli Fitriyani*. *6*(3), 254–263.

Putra, R., dan Islami, N. (2025). *Effect of Hydroxy Gas Enrichment and Higher Biodiesel Concentration on Diesel Engine Performance*. *8*(1), 216–226.

Rahman, A., Jassim, H., Abd, O. I., dan Abid, K. W. (2024). *Experimental Performance of HHO Gas Generator*. *030034*.

Rashidi, S., Karimi, N., Sunden, B., Chun, K., dan Ghani, A. (2022). Progress and challenges on the thermal management of electrochemical energy conversion and storage technologies : Fuel cells , electrolysers , and supercapacitors. *Progress in Energy and Combustion Science*, *88*(December 2020), 100966. https://doi.org/10.1016/j.pecs.2021.100966

Riaz, M. A., Trogadas, P., Aymé-Perrot, D., Sachs, C., Dubouis, N., Girault, H., dan Coppens, M. O. (2025). Water electrolysis technologies: the importance of new cell designs and fundamental modelling to guide industrial-scale development. *Energy and Environmental Science*, *18*(11), 5190–5214. https://doi.org/10.1039/d4ee05559d

Sunoko, A., Witono, K., Elektronik, T. O., dan Malang, P. N. (2024). *Pengaruh Jumlah Pelat dan Berat Katalis pada HHO Generator Tipe Dry Cell terhadap Emisi Gas Buang*. *21*(1), 1–10.

Taibi, E., Blanco, H., Miranda, R., dan Carmo, M. (2020). *Green Hydrogen Cost Reduction Scaling Up Electrolysers To Meet the 1.5°C Climate Goal H 2 O 2*. www.irena.org/publications%0Ahttps://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Dec/IRENA_Green_hydroge

n_cost_2020.pdf

Typical values of the convection heat transfer coefficient. From Incropera et al., Fundamentals of Heat and Mass Transfer, 6. (2007). 2500.

Ursúa, A., Gandía, L. M., dan Sanchis, P. (2012). Hydrogen production from water electrolysis: Current status and future trends. *Proceedings of the IEEE*, *100*(2), 410–426. https://doi.org/10.1109/JPROC.2011.2156750

Zulfany, M. D., Manggala, A., dan Pratiwi, I. (2024). *Produksi Gas Hidrogen Dengan Proses Elektrolisis Air Laut Ditinjau Dari Konsentrasi KOH*. *9*(Dc), 105–113.