

DAFTAR PUSTAKA

- [1] X. F. Wang, Z. D. Wang, Q. Liu, G. Wilson, D. Walker, and P. W. R. Smith, “Dissolved gas analysis DGA of mineral oil under thermal faults with tube heating method,” in 2017 IEEE 19th International Conference on Dielectric Liquids (ICDL), IEEE, Jun. 2017, pp. 1–4. [Online]. Available: <https://doi.org/10.1109/icdl.2017.8124635>
- [2] P. Przybylek and J. Gielniak, “Analysis of Gas Generated in Mineral Oil, Synthetic Ester, and Natural Ester as a Consequence of Thermal Faults,” IEEE Access, vol. 7, pp. 65040–65051, 2019, doi: 10.1109/access.2019.2917761.
- [3] L. Du, Y. Wang, W. Wang, and X. Chen, “Studies on a Thermal Fault Simulation Device and the Pyrolysis Process of Insulating Oil,” Energies, vol. 11, no. 12, p. 3392, Dec. 2018, doi: 10.3390/en1123392.
- [4] X. F. Wang, Z. D. Wang, Q. Liu, and P. Dyer, “Dissolved gas analysis of thermal faults in transformer liquids simulated using immersed heating method,” IEEE Transactions on Dielectrics and Electrical Insulation, vol. 25, no. 5, pp. 1749–1757, Oct. 2018, doi: 10.1109/tdei.2018.007158.
- [5] I. Djufri, Transformator. CV Budi Utama, 2022.
- [6] S. A. Wani, A. S. Rana, S. Sohail, O. Rahman, S. Parveen, and S. A. Khan, “Advances in DGA based condition monitoring of transformers: A review,” Renewable and Sustainable Energy Reviews, vol. 149, p. 111347, Oct. 2021, doi: 10.1016/j.rser.2021.111347.
- [7] M. Koch, M. Krueger, and S. Tenbohlen, “On-site methods for reliable moisture determination in power transformers,” in IEEE PES T&D 2010, IEEE, 2010, pp. 1–6. [Online]. Available: <https://doi.org/10.1109/tdc.2010.5484227>
- [8] S. Singh, S. W. Holland, and P. Bandyopadhyay, “Trends in the development of system-level fault Dependency matrices,” in 2010 IEEE Aerospace

- Conference, IEEE, Mar. 2010, pp. 1–9. [Online]. Available: <https://doi.org/10.1109/aero.2010.5446825>
- [9] K. Dawood, M. A. Çakır, and S. Tursun, “Evaluation of the Economic Feasibility of Different Materials for Transformer Windings,” in 2024 15th National Conference on Electrical and Electronics Engineering (ELECO), IEEE, Nov. 2024, pp. 1–4. [Online]. Available: <https://doi.org/10.1109/eleco64362.2024.10847238>
- [10] H. Setijasa and T. Triyono, “Perhitungan Efisiensi Transformator,” *Orbith: Majalah Ilmiah Pengembangan Rekayasa dan Sosial*, vol. 19, no. 3, pp. 315–323, Dec. 2023, doi: 10.32497/orbith.v19i3.5264.
- [11] Z. Jurkovic, B. Trkulja, K. Petrovic, and M. Jurkovic, “Quasi-3D Calculation of Stray Losses in Outer Lamination Stack of Power Transformer Core,” *IEEE Access*, vol. 13, pp. 119279–119291, 2025, doi: 10.1109/access.2025.3588066.
- [12] K. Jongvilaikasem, N. Pattanadech, W. Wattakapaiboon, M. Kando, S. Maneerot, and P. Pannil, “The Comparison of DGA Interpretation Techniques Application for Actual Failure Transformer Inspections Including Experience from Power Plants in Thailand,” *International Journal on Electrical Engineering and Informatics*, vol. 14, no. 1, pp. 224–233, Mar. 2022, doi: 10.15676/ijeei.2022.14.1.14.
- [13] A. Mannu and A. Mele, “Fischer-Speier Esterification and Beyond: Recent Mechanistic Advances,” *Catalysts*, vol. 14, no. 12, p. 931, Dec. 2024, doi: 10.3390/catal14120931.
- [14] S. V. Kulkarni and S. A. Khaparde, *Transformer Engineering*. CRC Press, 2004. [Online]. Available: <https://doi.org/10.1201/9780367800598>
- [15] X. Peng et al., “Research progress in modified mineral oil, natural ester and mixed oil in transformers,” *Electrical Materials and Applications*, vol. 1, no. 1, Apr. 2024, doi: 10.1049/ema3.12005.

- [16] S. Singh and M. N. Bandyopadhyay, "Duval Triangle: A Noble Technique for DGA in Power Transformers," *International Journal of Electrical and Power Engineering*, vol. 4, no. 3, pp. 193–197, Mar. 2010, doi: 10.3923/ijepe.2010.193.197.
- [17] M. Duval, "Dissolved gas analysis: It can save your transformer," *IEEE Electrical Insulation Magazine*, vol. 5, no. 6, pp. 22–27, Nov. 1989, doi: 10.1109/57.44605.
- [18] Y. Jia, X. Luo, S. Ji, W. Gao, S. Li, and F. Zhang, "Pyrolysis and temperature characteristics of the gas produced by power-frequency arc in transformer oil," *Case Studies in Thermal Engineering*, vol. 61, p. 104913, Sep. 2024, doi: 10.1016/j.csite.2024.104913.
- [19] R. Furqaranda, A. Bintoro, A. Asri, W. K. A. Al-Ani, and A. Shrestha, "Analysis Oil Condition of Transformer PT-8801-A by Using the Method TDCG, Rogers Ratio, Key Gas, and Duval Triangle: A Case Study at PT. Perta Arun Gas," *Journal of Renewable Energy, Electrical, and Computer Engineering*, vol. 2, no. 2, pp. 47–54, Sep. 2022, doi: 10.29103/jreece.v2i2.8567.
- [20] U. Elele, A. Nekahi, A. Arshad, and I. Fofana, "Towards Online Ageing Detection in Transformer Oil: A Review," *Sensors*, vol. 22, no. 20, p. 7923, Oct. 2022, doi: 10.3390/s22207923.
- [21] M. Badawi et al., "Reliable Estimation for Health Index of Transformer Oil Based on Novel Combined Predictive Maintenance Techniques," *IEEE Access*, vol. 10, pp. 25954–25972, 2022, doi: 10.1109/access.2022.3156102.
- [22] R. Furqaranda, A. Bintoro, A. Asri, W. K. A. Al-Ani, and A. Shrestha, "Analysis Oil Condition of Transformer PT-8801-A by Using the Method TDCG, Rogers Ratio, Key Gas, and Duval Triangle: A Case Study at PT. Perta Arun Gas," *Journal of Renewable Energy, Electrical, and Computer Engineering*, vol. 2, no. 2, pp. 47–54, Sep. 2022, doi: 10.29103/jreece.v2i2.8567.

- [23] F. Vernando and F. Rolos, “Manfaat Karet dalam Pertumbuhan Ekonomi Indonesia,” *Jurnal Media Akademik (JMA)*, vol. 2, no. 1, Jan. 2024, doi: <https://doi.org/10.62281/v2i1.60>.
- [24] E. Hokayem, “The War Against Iran,” *Survival*, vol. 68, no. 2, pp. 41–48, Mar. 2026, doi: 10.1080/00396338.2026.2647633.
- [25] U. Egwuatu, “The Strait of Hormuz as a Strategic Maritime Chokepoint: Implications of Escalating Geopolitical Tensions for Global Shipping,” Elsevier BV, 2026. [Online]. Available: <https://doi.org/10.2139/ssrn.6563258>
- [26] X. Wang, D. Du, Q. Gui, and Y. Peng, “Where are the chokepoints? Exposing the global straits’ connectivity pattern using the port-strait bimodal network,” *Maritime Policy & Management*, vol. 53, no. 2, pp. 200–226, Apr. 2025, doi: 10.1080/03088839.2025.2482573.
- [27] M. Duval, “Correction of DGA Results in Transformers and Accessories Equipped With a Nitrogen Blanket,” *IEEE Transactions on Dielectrics and Electrical Insulation*, vol. 33, no. 3, pp. 2319–2320, Jun. 2026, doi: 10.1109/tdei.2026.3677142.
- [28] P. K. Maiti and M. Chakraborty, “Dissolved Gas Analysis of Thermally Aged Mineral Oil and Vegetable Oil Based Nanofluids,” in 2021 IEEE International Conference on the Properties and Applications of Dielectric Materials (ICPADM), Johor Bahru, Malaysia, Jul. 2021, pp. 53–56, doi: 10.1109/ICPADM49635.2021.9493964.