

DAFTAR PUSTAKA

- Al Hakim, R. R. (2020). Model Energi Indonesia, Tinjauan Potensi Energi Terbarukan untuk Ketahanan Energi di Indonesia: Sebuah Ulasan. *ANDASIH Jurnal Pengabdian Kepada Masyarakat*, 1(1). <https://doi.org/10.57084/andasih.v1i1.374>
- Alsufyani, S. J., Alnassar, N., Sallah, M., Abdel-Rahman, M. A. E., Amrani, N., & Galahom, A. A. (2025). Investigating the possibility of using iridium as a burnable absorber in new fuel pellet designs of VVER-1200 for reactivity management. *Nuclear Engineering and Design*, 436, 113989. <https://doi.org/10.1016/j.nucengdes.2024.113989>
- Anggoro, Y. D., Dewi, D., Yuliyanto, A. T., & Prapatan, M. (2013). Kajian Perkembangan PLTN Generasi IV. *Jurnal Pengembangan Energi Nuklir*, 15(2).
- Bahari, Susiati, D. (2023). Pembangkit Listrik Tenaga Nuklir di Indonesia Upaya Berkelanjutan Menuju Net Zero Emission. In *Unisma Press* (Vol. 1, Issue 1).
- Dodd, B., Britt, T., Lloyd, C., Shah, M., & Goddard, B. (2020). Novel homogeneous burnable poisons in pressurized water reactor ceramic fuel. *Nuclear Engineering and Technology*, 52(12). <https://doi.org/10.1016/j.net.2020.05.021>
- Dwijayanto, R. A. P., Oktavian, M. R., Putra, M. Y. A., & Harto, A. W. (2021). Model Comparison of Passive Compact-Molten Salt Reactor Neutronic Design Using MCNP6 and Serpent-2. *Atom Indonesia*, 47(3). <https://doi.org/10.17146/aij.2021.1122>
- E.P. Naessens, K. A. (2006). Use of Pu-240 Waste as a Burnable Absorber in Light Water Reactors. *Nucl Sci Eng*.
- Evans, J. A., DeHart, M. D., Weaver, K. D., & Keiser, D. D. (2022). Burnable absorbers in nuclear reactors – A review. In *Nuclear Engineering and Design* (Vol. 391). <https://doi.org/10.1016/j.nucengdes.2022.111726>
- Han, E. O., Kim, J. R., Choi, Y. S., & Lochhead, J. (2015). DEVELOPMENT OF NUCLEAR ENERGY AND RADIATION TEXTBOOKS FOR ELEMENTARY, MIDDLE, AND HIGH SCHOOL STUDENTS. *Journal of Radiation Protection and Research*, 40(3). <https://doi.org/10.14407/jrp.2015.40.3.132>

- Hausner, H. H. (1963). Beryllium as a Moderator and Reflector for Nuclear Reactors. *Atomic Energy Review*, 1(2).
- Idaho National Laboratory. (2019). Nuclear graphite components [PowerPoint slides]. NRC Training. https://art.inl.gov/NRC%20Training%202019/10_Nuclear%20Graphite%20Components.pdf
- Iman Kuntoro. (2023). Keselamatan Reaktor Nuklir: Reaktor Serba Guna G.A Siwabesy (RSG-GAS). In *Keselamatan Reaktor Nuklir: Reaktor Serba Guna G.A Siwabesy (RSG-GAS)*. <https://doi.org/10.55981/brin.568>
- Iman Kuntoro, Surian Pinem, & Tagor Malem Sembiring. (2023). Pengenalan Ilmu Fisika dalam Operasi Reaktor Nuklir. In *Pengenalan Ilmu Fisika dalam Operasi Reaktor Nuklir*. <https://doi.org/10.55981/brin.584>
- Kementerian Energi dan Sumber Daya Mineral. (2024, Januari 15). *Konsumsi Listrik Masyarakat Meningkat, Tahun 2023 Capai 1.285 kWh/Kapita*. Retrieved from <https://www.esdm.go.id/id/media-center/arsip-berita/konsumsi-listrik-masyarakat-meningkat-tahun-2023-capai-1285-kwh-kapita>
- Krūmiņš, J., & Kļaviņš, M. (2023). Investigating the Potential of Nuclear Energy in Achieving a Carbon-Free Energy Future. In *Energies* (Vol. 16, Issue 9). <https://doi.org/10.3390/en16093612>
- Kurpaska, L., Frelek-Kozak, M., Wilczopolska, M., Bonicki, W., Diduszko, R., Zaborowska, A., Wyszowska, E., Clozel, M., Kosinska, A., Cieslik, I., Duchna, M., Jozwik, I., Chmurzynski, W., Olszewski, G., Zajac, B., & Jagielski, J. (2020). Structural and mechanical properties of different types of graphite used in nuclear applications. *Journal of Molecular Structure*, 1217. <https://doi.org/10.1016/j.molstruc.2020.128370>
- LeBlanc, D. (2010). Molten salt reactors: A new beginning for an old idea. *Nuclear Engineering and Design*, 240(6). <https://doi.org/10.1016/j.nucengdes.2009.12.033>
- Li, X. X., Cui, D. Y., Zou, C. Y., Wu, J. H., Cai, X. Z., & Chen, J. G. (2023). Assembly-level analysis on temperature coefficient of reactivity in a graphite-moderated fuel salt reactor fueled with low-enriched uranium. *Nuclear Science and Techniques*, 34(5). <https://doi.org/10.1007/s41365-023-01216-0>

- Liliana Yetta Pandi, Y. P. (2019). *REAKTOR NUKLIR: PEMANFAATAN DAN PENGAWASAN*. BADAN PENGAWAS TENAGA NUKLIR (BAPETEN).
- Liu, D., Gludovatz, B., Barnard, H. S., Kuball, M., & Ritchie, R. O. (2017). Damage tolerance of nuclear graphite at elevated temperatures. *Nature Communications*, 8. <https://doi.org/10.1038/ncomms15942>
- Maemunah, I. R., Yuningsih, N., & Irwanto, D. (2019). Studi Komparasi Reaksi Fisi dan Fusi pada Pembangkit Listrik Tenaga Nuklir Masa Depan. *Prosiding Seminar Nasional Fisika 5.0*, 0.
- Mahbuba Nabila, U., & Hossain Sahadath, M. (2022). Neutronic and fuel cycle performance of LEU fuel with different means of excess reactivity control: Impact of neutron leakage and refueling scheme. *Annals of Nuclear Energy*, 175. <https://doi.org/10.1016/j.anucene.2022.109245>
- Marsden, B. J., Jones, A. N., Hall, G. N., Treifi, M., & Mummery, P. M. (2017). Graphite as a core material for Generation IV nuclear reactors. In *Structural Materials for Generation IV Nuclear Reactors*. <https://doi.org/10.1016/B978-0-08-100906-2.00014-8>
- Merk, B., Detkina, A., Atkinson, S., Litskevich, D., & Cartland-Glover, G. (2021). Innovative investigation of reflector options for the control of a chloride-based molten salt zero-power reactor. *Applied Sciences (Switzerland)*, 11(15). <https://doi.org/10.3390/app11156795>
- Mghar, M., & Chetaine, A. (2015). Effect of graphite reflector on the neutronic parameters of the TRIGA mark II research reactor. *Advanced Studies in Theoretical Physics*, 9(14). <https://doi.org/10.12988/astp.2015.5666>
- Mignacca, B., & Locatelli, G. (2020). Economics and finance of Molten Salt Reactors. In *Progress in Nuclear Energy* (Vol. 129). Elsevier Ltd. <https://doi.org/10.1016/j.pnucene.2020.103503>
- Muhammad Ilham, S. P. (2016). Analisis Kemampuan Breeding Ratio dan Void Reactivity. *PROSIDING SKF*.
- Novalianda, S., Ramadhan, A., & Su'ud, Z. (2020). Perhitungan Burnup Desain Reaktor GFR berbasis bahan bakar Uranium Nitride. *Jurnal Penelitian Sains*, 22(2). <https://doi.org/10.56064/jps.v22i2.577>
- OpenMC. (n.d.). Retrieved from <https://openmc.org/>

- Pacific Northwest National Laboratory. (2021). *Compendium of material composition data for radiation transport modeling* (Rev. 2, PNNL-15870).
https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-15870Rev2.pdf
- Porta, J., Baldi, S., Chauvin, J. P., & Fougeras, P. (2001). Qualification of the neutronic efficiency of erbium at zero burnup. *Progress in Nuclear Energy*, 38(3–4). [https://doi.org/10.1016/S0149-1970\(00\)00134-7](https://doi.org/10.1016/S0149-1970(00)00134-7)
- Prasetyo, K. A., Yudho Prakoso, L., & Sianturi, D. (2019). Strategi Pertahanan Laut Pemerintah Indonesia dalam Menjaga Keamanan Maritim (Marine Defense Strategy the Government of Indonesia in Keeping Maritime Security). *Jurnal Strategi Pertahanan Laut*, 5(1).
- Rohman, B. (2009). Koefisien Reaktivitas Temperatur Bahan Bakar Reaktor Kartini. *Jurnal Sains Dan Teknologi Nuklir Indonesia*, 10(2).
- Roper, R., Harkema, M., Sabharwall, P., Riddle, C., Chisholm, B., Day, B., & Marotta, P. (2022). Molten salt for advanced energy applications: A review. In *Annals of Nuclear Energy* (Vol. 169). <https://doi.org/10.1016/j.anucene.2021.108924>
- Santiani. (2011). *Nuklir, Fisika Inti, dan Politik Energi Nuklir (1st ed.)*. Intimedia.
- Serp, J., Allibert, M., Beneš, O., Delpech, S., Feynberg, O., Ghetta, V., Heuer, D., Holcomb, D., Ignatiev, V., Kloosterman, J. L., Luzzi, L., Merle-Lucotte, E., Uhlíř, J., Yoshioka, R., & Zhimin, D. (2014). The molten salt reactor (MSR) in generation IV: Overview and perspectives. *Progress in Nuclear Energy*, 77. <https://doi.org/10.1016/j.pnucene.2014.02.014>
- Suhaemi, T. (2018). Prospek Desain Reaktor Berbahan Bakar Cair Molten Salt Reactor. *Prosiding Seminar Nasional Teknoka*, 3. <https://doi.org/10.22236/teknoka.v3i0.2824>
- Susdarwono, E. T. (2021). Reaksi Fisi dan Reaksi Fusi dalam Mekanisme Bom Atom dan Senjata Termonuklir. *VEKTOR: Jurnal Pendidikan IPA*, 2(1). <https://doi.org/10.35719/vektor.v2i1.19>
- Suparlina, L., Budiono, T., Mardha, A., & Tukiran. (1998). Void coefficient of reactivity calculation for AP-600 core. *Proceeding of*

the Seminar of Research Result of Multipurpose Reactor Center Year of 1997/1998. International Atomic Energy Agency.

Syarip. (2019). *Pengenalan Kinetika dan Pengendalian Reaktor Nuklir (2nd)*. Pustaka Pelajar (Anggota IKAPI No. 028/DIY/95).

Talamo, A. (2006). Effects of the burnable poison heterogeneity on the long term control of excess of reactivity. *Annals of Nuclear Energy*, 33(9). <https://doi.org/10.1016/j.anucene.2006.04.009>

Thomas, J.-B., Anzieu, P., & Lenain, R. (2021). Chapter 9. Molten Salt Reactors. In *Nuclear Reactor Systems*. <https://doi.org/10.1051/978-2-7598-1985-0-012>

Tukiran, R. (2007). Analysis of Moderator Temperature Reactivity Coefficient of the PWR Core Using WIMS-ANL. *Proceedings of the Scientific Meeting and Presentation on Basic Research in Nuclear of the Science and Technology part I : Physics and Nuclear Reactor*. International Atomic Energy Agency.

Wang, Y., Zhu, C., Zhang, M., & Zhou, W. (2023a). Molten salt reactors. In *Nuclear Power Reactor Designs: From History to Advances*. <https://doi.org/10.1016/B978-0-323-99880-2.00009-6>

Wang, Y., Zhu, C., Zhang, M., & Zhou, W. (2023b). Molten salt reactors. In *Nuclear Power Reactor Designs: From History to Advances* (pp. 163–183). Elsevier. <https://doi.org/10.1016/B978-0-323-99880-2.00009-6>

Zhao, Y., Lv, S., Gao, J., Zhou, Z., Yeli, G., & Li, Z. (2023). Microstructure and defect evolution of nuclear graphite under temperature-dependent ion irradiation. *Journal of Nuclear Materials*, 577. <https://doi.org/10.1016/j.jnucmat.2023.154308>

Zhong, Y., Norman, P., & Wu, W. (2022). A feasibility study of SMART reactor power performance optimizations-part 2: Reflector material selection. *Frontiers in Energy Research*, 10. <https://doi.org/10.3389/fenrg.2022.987513>