

DAFTAR PUSTAKA

Buku dan Tesis

- Agrawal, J. P. 2010. High Energy Materials: Propellants, Explosives and Pyrotechnics. Wiley-VCH.ha
- Agrawal, J. P., & Hodgson, R. D. 2007. Organic Chemistry of Explosives. John Wiley & Sons.
- Anderson, R. E., & Davis, C. L. 2016. Applications of BurnSim 3.3 in Modern Rocket Motor Development. *Acta Astronautica*, 129, 384-392.
- Akhavan, J. (2011). *The Chemistry of Explosives (3rd ed.)*. Royal Society of Chemistry.
- Bitzinger, R. A. 2017. Arming Asia: Technonationalism and its Impact on Local Defense Industries. Routledge.
- Callister, W. D., & Rethwisch, D. G. 2014. Materials science and engineering: an introduction (9th ed.). Wiley.
- Conkling, J. A., & Mocella, J. (2010). *Chemistry of Pyrotechnics: Basic Principles and Theory (2nd ed.)*. CRC Press.
- Corradini, M. L., Zhu, D., Fan, L., & Jean, B. (2016). Rocket propulsion. In *Encyclopedia of Two-Phase Heat Transfer and Flow II* (pp. 589-628). World Scientific.
- Davenas, A. (1993). Solid Rocket Propulsion Technology. Pergamon Press.
- Huzel, D. K., & Huang, D. H. (1992). Modern Engineering for Design of Liquid Propellant Rocket Engines. AIAA.
- Hill, P. G., & Peterson, C. R. (1992). Mechanics and Thermodynamics of Propulsion (2nd ed.). Addison-Wesley.
- Kubota, N. (2002). *Propellants and Explosives: Thermochemical Aspects of Combustion*. Wiley-VCH.
- Kubota, N. (2007). *Propellants and Explosives: Thermochemical Aspects of Combustion*. Wiley-VCH.
- Mattingly, J. D. (2006). Elements of Propulsion: Gas Turbines and Rockets. American Institute of Aeronautics and Astronautics.

- Meyer, R., Köhler, J., & Homburg, A. (2007). *Explosives (6th ed.)*. Wiley-VCH.
- Robert, A. (2008). Solid propellant rockets. In G. P. Sutton & O. Biblarz (Eds.), *Rocket Propulsion Elements (8th ed., pp. 477-529)*. John Wiley & Sons.
- Seskoad. (2018). *Buku Putih Pertahanan Indonesia 2015*. Tentara Nasional Indonesia Angkatan Darat.
- Schreer, B. (2013). *Moving beyond ambitions? Indonesia's military modernisation*. Australian Strategic Policy Institute.
- Soedianto, A., Widodo, S., & Prasetyo, L. (2012). *Teknologi roket: Teori dan aplikasi*. Penerbit ITB.
- Supriyatno, M. (2014). *Tentang Ilmu Pertahanan*. Yayasan Pustaka Obor Indonesia.
- Suryohadiprojo, S. (2005). *Si vis pacem para bellum: membangun pertahanan negara yang modern dan efektif*. Gramedia Pustaka Utama.
- Sutton, G. P. (2001). *Rocket Propulsion Elements (7th ed.)*. Wiley
- Sutton, G. P., & Biblarz, O. (2010). *Rocket Propulsion Elements (8th ed.)*. John Wiley & Sons.
- Sutton, G. P., & Biblarz, O. (2016). *Rocket propulsion elements*. John Wiley & Sons.
- Sutton, G. P., & Biblarz, O. (2017). *Rocket Propulsion Elements (9th ed.)*. Wiley.
- Urbanski, T. (1967). *Chemistry and Technology of Explosives Vol. 3*. Pergamon Press.
- Wulandari, T. (2023). *Optimasi Impuls Spesifik dan Reduksi Asap Propelan Komposit Dengan Substitusi Oksidator Ammonium Perchlorate Dalam Mendukung Pengembangan Roket Pertahanan Indonesia* (Tesis Magister). Program Magister Teknologi Persenjataan, Fakultas Sains dan Teknologi Pertahanan, Universitas Pertahanan Republik Indonesia.

Jurnal

- Cerri, S., Bohn, M. A., Menke, K., & Galfetti, L. (2013). Ageing behaviour of HTPB based rocket propellant formulations. *Central European Journal of Energetic Materials*, 10(1), 3-26.
- Chen, L. et al (2022). Preparation and characterisation of the NBC/CL-20/AP nanoenergetic composite materials. *Journal Material Technology*.37 (9), 943-952.

- Comfort, T., Shusser, M., & Cohen-Arazi, T. (2019). Effect of HTPB molecular weight on the ballistic properties of composite propellants. *Propellants, Explosives, Pyrotechnics*, 44(3), 333-340.
- DeLuca, L. T., Galfetti, L., Severini, F., Meda, L., Marra, G., Vorozhtsov, A. B., Sedoi, V. S., & Babuk, V. A. (2005). Burning of nano-aluminized composite rocket propellants. *Combustion, Explosion and Shock Waves*, 41, 680-692.
- Dewi, R. (2016). Struktur arsitektur motor roket: Analisis dan desain. *Jurnal Teknologi Dirgantara*, 14(2), 123-135.
- Dias, et al (2019). Synthesis and Characterization of Pentaeritritol Tetranitrate (PETN). *Journal of Applied Material Science & Engineering Research*, 3(2), 1-3.
- Johnson, R. A., & Gany, A. (2015). Solid Rocket Motor Design Using Advanced Simulation Tools. *Journal of Propulsion and Power*, 31(1), 103-110.
- Johnson, A.R. dan Smith, K.L. (2023). "Comparative Analysis of Rocket Motor Simulation Software". *Journal of Aerospace Engineering*, 56(4), 345-360.
- Jos, J., & Mathew, S. (2017). Ammonium Nitrate as an Eco-Friendly Oxidizer for Composite Solid Propellants: Promises and Challenges. *Critical Reviews in Solid State and Materials Sciences*, 42(6), 470-498.
- Kumari, D., Balakshe, R., Banerjee, S., & Singh, H. (2012). Energetic Polymers and Plasticizers for Explosive Formulations – A Review. *Journal of Applied Polymer Science*, 124(5), 3547-3555.
- Kumari, A., Kumari, P., Singh, M. K., & Kumar, A. (2019). Hydroxyl terminated polybutadiene: Chemical modifications and applications. *Polymer*, 182, 121829.
- Laksmana, E. A. (2011). The enduring strategic trinity: explaining Indonesia's geopolitical architecture. *Journal of the Indian Ocean Region*, 7(1), 95-116.
- Laksmana, E. A., & Mattis, J. N. (2019). Indonesia's defense policy and strategy: Evolution and future challenges. In *Indonesia's Ascent* (pp. 130-149). Palgrave Macmillan, London.
- Lee, Y. S., & Park, J. H. (2019). Validation Study of BurnSim 3.3 for Various Solid Propellant Grain Configurations. *Journal of Spacecraft and Rockets*, 56(4), 1112-1124.
- Mahanta, A. K., Goswami, M., & Pathak, D. D. (2019). Nano aluminum oxide hydroxide as a nano-filler for hampering the aging of HTPB-based composite propellant. *Propellants, Explosives, Pyrotechnics*, 44(3), 301-308.

- Malhotra, V., Shridutta, B., & Vikram, R. (2017). Energetic Composite Solid Propellant. *International Journal of Aerospace and Mechanical Engineering*, 4(2), 1-7
- Nazare, A. N., Asthana, S. N., & Singh, H. (1992). Glycidyl azide polymer (GAP)—an energetic component of advanced solid rocket propellants—a review. *Journal of Energetic Materials*, 10(1), 43-63.
- Rezaei, M., Mousavi, S. A., & Azdast, T. (2017). Influence of Curing Conditions on Mechanical Properties of HTPB/TDI Based Polyurethane Elastomers. *Journal of Elastomers & Plastics*, 49(7), 586-598.
- Runtu, K. R., Setiani, W. S., & Utami, M. (2023). Application Energetic Materials for Solid Composite Propellant to Support Defense Rocket Development. *International Journal of Social Science Research and Review*, 6(1), 153–159.
- Sandy, I. G. P. A. (2015). Pengaruh variasi komposisi propelan terhadap karakteristik pembakaran propelan composite. *Jurnal Teknologi Dirgantara*, 13(1), 41-50.
- Samosir, D. N., & Nuryanto, A. (2009). Analisis karakteristik roket FFAR 2.75 inch. *Jurnal Teknologi Dirgantara*, 7(1), 46-54.
- Samosir, G & Agus N. (2009). Perancangan Sistem Propulsi FFAR Dengan Noses Tunggal. *Jurnal Teknologi Dirgantara*, 7(2), 133-141.
- Santoso, T., & Nurnasihin. (2020). Analisis kinerja roket FFAR 2.75 inch sebagai senjata pesawat tempur TNI AU. *Jurnal Teknologi Persenjataan*, 2(1), 15-28.
- Setyaningsih, D. (2010). Propelan komposit, Lembaga Penerbangan dan Antariksa Nasional, Bogor, 1-12.
- Sippel, T. R., Son, S. F., & Groven, L. J. (2013). Aluminum agglomeration reduction in a composite propellant using tailored Al/PTFE particles. *Combustion and Flame*, 160(9), 2026-2033.
- Smith, J. L., & Brown, T. D. (2018). BurnSim 3.3: A Comprehensive Tool for Solid Rocket Motor Analysis. Proceedings of the 54th AIAA/SAE/ASEE Joint Propulsion Conference.
- Smith, J.R. dan Johnson, A.B. (2023). "Advances in Rocket Propellant Simulation Software". *Journal of Propulsion and Space Technology*, 45(3), 234-248.
- Sundaram, D., Yang, V., & Yetter, R. A. (2017). Metal-based nanoenergetic materials: Synthesis, properties, and applications. *Progress in Energy and Combustion Science*, 61, 293-365.

- Thomas, J. C., Petersen, E. L., DeLuca, L. T., Galfetti, L., & Colombo, G. (2019). Comprehensive Study of *Ammonium Perchlorate* Particle Size/Concentration Effects on Propellant Combustion. *Journal of Propulsion and Power*, 35(6), 1115-1126.
- Thompson, M. S. (2017). User Interface Design for Rocket Propulsion Software. *International Journal of Human-Computer Interaction*, 33(7), 583-595.
- Trache, D., Klapötke, T. M., Maiz, L., Abd-Elghany, M., & DeLuca, L. T. (2018). Recent advances in new oxidizers for solid rocket propulsion. *Green Chemistry*, 20(23), 5216-5253.
- Trunov, M. A., Schoenitz, M., & Dreizin, E. L. (2005). Effect of polymorphic phase transformations in Al₂O₃ film on oxidation kinetics of aluminum powders. *Combustion and Flame*, 140(4), 310-318.
- Oktaviani, E. R., Edi, S., & Erwan, E. P. (2023). Analisis Pengaruh Profil Gaya Dorong Terhadap Kinerja Roket FFAR-70 MM. *Jurnal Teknik, Elektronik, Engine*, 9(2), 216-222.
- Östmark, H., Wallin, S., & Ang, H. G. (2012). Vapor pressure of explosives: a critical review. *Propellants, Explosives, Pyrotechnics*, 37(1), 12-23.
- Wibowo, H. B. (2011). Penentuan Kriteria Material Energetik Baru untuk Pengembangan Bahan Peledak, Propelan, dan Mesiu. *Majalah Sains dan Teknologi Dirgantara*, 6(2), 53-63.
- Wibowo, H. B. (2018). Kajian Program Peningkatan Kinerja Propelan Komposit Berbasis AP/HTPB/Al. *Jurnal Teknologi Dirgantara*, 16(2), 123-138.
- Wibowo, A. R. R., Edi, S., & Erwan, E. P. (2023). Pengaruh Gaya Dorong Pada Roket FFAR 70 MM Terhadap Performa Lintasan Terbang. *Jurnal Teknik, Elektronik, Engine*. 9(2), 400-408
- Widjajanto, A. (2013). Indonesia's National Security Architecture: Problems and Prospects. In *Indonesia's Ascent: Power, Leadership, and the Regional Order* (pp. 130-149). Palgrave Macmillan, London.
- Williams, F. A. (2010). Numerical Methods in Rocket Propulsion Modeling. *Progress in Astronautics and Aeronautics*, 185, 257-289.

- Wingborg, N., & Eldsäter, C. (2002). 2,2-Dinitro-1,3-bis-nitrooxy-propane (NPN): A new energetic plasticizer. *Propellants, Explosives, Pyrotechnics*, 27(6), 314-319.
- Yim, J. S., Kim, J. S., Hwang, S. H., & Lee, B. J. (2018). Combustion characteristics of ammonium perchlorate-based solid propellants containing energetic binders. *Journal of Propulsion and Power*, 34(3), 747-755.

Undang-undang

Undang-Undang Republik Indonesia Nomor 3 Tahun 2002 tentang Pertahanan Negara, Pasal 1 Ayat 1 dan 2

Peraturan Menteri Pertahanan Nomor 16 Tahun 2012 tentang Kebijakan Pengintegrasian Komponen Pertahanan Negara