

DAFTAR PUSTAKA

1. Forcellese, A., et al., *Effect of Carbon Nanotubes Dispersion on the Microhardness of CFRP Composites*. Key Engineering Materials, 2019. **813**: p. 370-375.
2. Ouyang, Y., et al., *A Novel Branched Al₂O₃/Silicon Rubber Composite with Improved Thermal Conductivity and Excellent Electrical Insulation Performance*. Nanomaterials (Basel), 2021. **11**(10).
3. Ru-Min Wang, S.-R.Z.a.Y.-P.Z., *Polymer matrix composites and technology*. 2011, 80 High Street, Sawston, Cambridge CB22 3HJ, UK.
4. LAMET, et al., *Mechanical Testing and Evaluation*. Vol. 8. 2000.
5. Lairong, X., et al., *Microstructure and Property of Thermal Insulation Coating on the Carbon Fiber Reinforced Epoxy Resin Composites*. Journal of Inorganic Materials, 2020. **35**(8).
6. Latief, F.H., et al., *Effect of Alumina Contents on the Physicomechanical Properties of Alumina (Al₂O₃) Reinforced Polyester Composites*. Advances in Polymer Technology, 2019. **2019**: p. 1-9.
7. Mawardi, I., et al., *The effect of containing Al₂O₃ microparticles in different matrix polymers on properties of pineapple fiber-reinforced composites*. Frattura ed Integrità Strutturale, 2023. **18**(67): p. 94-107.
8. Fenta Aynalem, G., B. Sirahbizu, and J.A.F. de Oliveira Correia, *Effect of Al₂O₃ on the Tensile and Impact Strength of Flax/Unsaturated Polyester Composite with Emphasis on Automobile Body Applications*. Advances in Materials Science and Engineering, 2021. **2021**(1).
9. Aritonang, R., *Pengaruh Fraksi Volume Terhadap Kekuatan Tarik Komposit Berpenguat Serat Kulit Batang Melinjo (Gnetum Gnemon) - Resin Epoxy*. 2015. p. 7-14.
10. Ru-Min Wang, S.-R.Z.a.Y.-P.Z., *Polymer matrix composites and technology*. 2010, Woodhead Publishing Limited.
11. Altenbach, H., J. Altenbach, and W. Kissing, *Classification of Composite Materials*. 2018.
12. Mugahed Amran, Y.H., et al., *Properties and applications of FRP in strengthening RC structures: A review*. Structures, 2018. **16**: p. 208-238.

13. Istanta, D., *Analisis Pengaruh Texture Serat Terhadap Sifat Fisik Dan Mekanik Aramid Epoksi Prepreg*. 2013. **3**.
14. Shahabaz, S.M., et al., *Effect of Al₂O₃ and SiC Nano-Fillers on the Mechanical Properties of Carbon Fiber-Reinforced Epoxy Hybrid Composites*. Journal of Composites Science, 2023. **7**(4).
15. Zhou, L., et al., *Study on the mechanism of quasi-continuous wave (QCW) fiber laser low-damage processing of carbon fiber-reinforced plastics*. The International Journal of Advanced Manufacturing Technology, 2022. **124**(1-2): p. 429-447.
16. Kaybal, H.B., et al., *Effects of alumina nanoparticles on dynamic impact responses of carbon fiber reinforced epoxy matrix nanocomposites*. Engineering Science and Technology, an International Journal, 2018. **21**(3): p. 399-407.
17. Behera, A. and P. Mallick, *Application of nanofibers in aerospace industry*, in *Fiber-Reinforced Nanocomposites: Fundamentals and Applications*. 2020. p. 449-457.
18. Muhammad Labib Adyavit, L.I.R., Mardiyati & Steven, *Kajian Material Komposit Sandwich pada Floor Panel Pesawat Terbang*. 2023. **29**.
19. Abhishek T K, S.k., Channabasavesh N S, Shashank S, Shiva Chaitanya B and Siddesh B S, *Mechanical Characterization of Balsa wood, Depron and Glass fiber Composite for Aircraft floor panel and Luggage Compartment*. 2022.
20. B. Nagaraj Goud, V.V., A.Nandhishwari, S.Govinda Rahul, *An Experimental Study on E-Glass Fiber Reinforced Epoxy with Nano-Silica for an Aircraft Structural Applications*. 2024.
21. Alaa Al-Fatlawi, K.J.a.G.K., *Optimization of a Totally Fiber-Reinforced Plastic Composite Sandwich Construction of Helicopter Floor for Weight Saving, Fuel Saving and Higher Safety*. 2021.
22. Shahbazi, A. and A. Zeinedini, *Impact response of E-glass/epoxy composite bi-directional corrugated core sandwich panels*. Polymers and Polymer Composites, 2020. **29**(9): p. 1563-1574.

23. Edgar Adrián Franco-Urquiza, A.D., Mauricio Torres Arellano, Perla Itzel Alcántara Llanas, Victoria Rentería-Rodríguez, Cecilia Zarate Pérez, Saúl, *Innovation in Aircraft Cabin Interior Panels Part I: Technical Assessment on Replacing the Honeycomb with Structural Foams and Evaluation of Optimal Curing of Prepreg Fiberglass*. 2021.
24. Park, H.L.a.H., *Study on Structural Design and Manufacturing of Sandwich Composite Floor for Automotive Structure*. 2021.
25. International, A., *ASM Metal Handbook : Composite*. Vol. 21. 2001.
26. Rahman, M.A., et al., *3D printing of continuous carbon fiber reinforced thermoset composites using UV curable resin*. *Polymer Composites*, 2021. **42**(11): p. 5859-5868.
27. J.Hodgkin, *Thermosets : Epoxies and Polyesters*. 2001.
28. Maxineasa, S.G. and N. Taranu, *Life cycle analysis of strengthening concrete beams with FRP*, in *Eco-Efficient Repair and Rehabilitation of Concrete Infrastructures*. 2018. p. 673-721.
29. Hasan, Z., *Composite materials*, in *Tooling for Composite Aerospace Structures*. 2020. p. 21-48.
30. *Building Materials in civil engineering*. 2011.
31. H Ahmad, A.A.M., M V Porotnikov and F Ahmad, *A review of carbon fiber materials in automotive industry*. 2020.
32. Altin Karataş, M. and H. Gökkaya, *A review on machinability of carbon fiber reinforced polymer (CFRP) and glass fiber reinforced polymer (GFRP) composite materials*. *Defence Technology*, 2018. **14**(4): p. 318-326.
33. Puspitasari, N., *Design of an Aluminum Oxide Chemical Plant from Aluminum Chloride with a Production Capacity of 250,000 Tons a Year*. 2018.
34. Abdul. Malik Santoso Ali, A.Z.S., Al Gazali, *Pengaruh Senyawa Alumina (Al_2O_3) dan Silika (SiO_2) dalam Kualitas Batubara*. 2022. **3**.
35. Zhang, L., et al., *Study on the Tribological Properties of Micro- Al_2O_3 Modified Carbon Fiber Hybrid-Reinforced Polymer*. *Coatings*, 2023. **13**(7).
36. Yohanis Getahun, M.G.J., Balkeshwar Singh, Belay Brehane, *Effect Analysis of Fabrication Parameters on Mechanical Behaviours of*

Al₂O₃SiC Filled Jute Fiber Reinforced Polyester Matrix Hybrid Co. 2022. 7.

37. Mohit, H., et al., *Predicting physico-mechanical and thermal properties of loofa cylindrica fibers and Al₂O₃/Al-SiC reinforced polymer hybrid composites using artificial neural network techniques.* Construction and Building Materials, 2023. **409**.
38. Das, G. and S. Biswas, *Erosion wear behavior of coir fiber-reinforced epoxy composites filled with Al₂O₃ filler.* Journal of Industrial Textiles, 2016. **47**(4): p. 472-488.
39. Elkington, M., et al., *Hand layup: understanding the manual process.* Advanced Manufacturing: Polymer & Composites Science, 2015. **1**(3): p. 138-151.
40. Udupi, S.R. and L. Lester Raj Rodrigues, *Detecting Safety Zone Drill Process Parameters for Uncoated HSS Twist Drill in Machining GFRP Composites by Integrating Wear Rate and Wear Transition Mapping.* Indian Journal of Materials Science, 2016. **2016**: p. 1-8.
41. Meola, C., S. Boccardi, and G.m. Carlomagno, *Composite Materials in the Aeronautical Industry*, in *Infrared Thermography in the Evaluation of Aerospace Composite Materials*. 2017. p. 1-24.
42. Middleton, B., *Composites: Manufacture and Application*, in *Design and Manufacture of Plastic Components for Multifunctionality*. 2016. p. 53-101.
43. Yulius O. Bani, D.P.M., Jefri S. Bale, *Pembuatan Dan Pengujian Alat Fabrikasi Komposit Vacuum Bag Dengan Menggunakan Metode VDI 2221.* 2017. **04**.
44. Mujahid, Y., et al., *Effects of processing parameters for vacuum-bag-only method on void content and mechanical properties of laminated composites.* Polymer Composites, 2020. **42**(2): p. 567-582.
45. *Vacuum Bagging Techniques.* 2010, West System: Gougeon Brothers, Inc., Bay City, MIUSA.
46. Jamir, M.R.M., M.S.A. Majid, and A. Khasri, *Natural lightweight hybrid composites for aircraft structural applications*, in *Sustainable Composites for Aerospace Applications*. 2018. p. 155-170.

47. Wawan Trisnadi Putra, K.W., Fadelan, *Analisa Kekuatan Tarik Seng Galvanis terhadap Beban yang di Berikan*. 2019. **5**.
48. International, A., *ASTM D3039 Standard Test Method for Tensile Properties of Polymer Matrix Composite Materials*. 2002.
49. Fentje Abdul Rauf, F.P.S., Arwanto M. A. Lakat, *Uji Kekerasan Dengan Menggunakan Alat Microhardness Vickers pada Berbagai Jenis Material Teknik*. 2018. **5**.
50. INTERNATIONAL, A., *ASTM E92-23 Standard Test Methods for Vickers Hardness and Knoop Hardness of Metallic Materials*. 2023.
51. 340-5-3, I., *IEC 61 340-5-3*. 2015.
52. Baskaran, R., M. Sarojadevi, and C.T. Vijayakumar, *Unsaturated polyester nanocomposites filled with nano alumina*. Journal of Materials Science, 2011. **46**(14): p. 4864-4871.
53. Kaykilarli, C., et al., *Mechanical and Tribological Properties of Carbon Fiber/Glass Fiber-Reinforced Epoxy Hybrid Composites Filled with Al₂O₃ Particles*. Hittite Journal of Science and Engineering, 2023. **10**(4): p. 317-322.
54. Yousri, O.M., M.H. Abdellatif, and G. Bassioni, *Effect of Al₂O₃ Nanoparticles on the Mechanical and Physical Properties of Epoxy Composite*. Arabian Journal for Science and Engineering, 2017. **43**(3): p. 1511-1517.
55. Christian, C., *Effect of Aluminum Oxide Addition and Stirring Time on the Mechanical Properties, Electrical Properties, and Microstructure of Copper Matrix Composites Fabricated by Stir Casting Method*. 2021.
56. Meeuw, H., M. Radek, and B. Fiedler, *Development of a colored GFRP with antistatic properties*. 2019.
57. Tao, G., et al., *A carbon-nanofiber glass composite with high electrical conductivity*. 2020.
58. Nisticò, R., et al., *The Role of Inorganic Fillers in Electrostatic Discharge Composites*. Inorganics, 2022. **10**(12).

59. Joseph, N., J. Varghese, and M.T. Sebastian, *PVDF-SIC Composite Thick Films an Effective ESD Composition for Growing Anti-static Applications*. Journal of Electronic Materials, 2019. **49**(3): p. 1638-1645.
60. Musianto, L.S., *Perbedaan Pendekatan Kuantitatif dengan Pendekatan Kualitatif dalam Metode Penelitian*. 2002. **4**.
61. Ardiansyah, R., M.Syahrani Jailani, *Teknik Pengumpulan Data Dan Instrumen Penelitian Ilmiah Pendidikan Pada Pendekatan Kualitatif dan Kuantitatif*. 2023. **1**.
62. Husaini, L.N., *Pengaruh Variasi Silika (Sio₂) dari Abu Sekam Padi Terhadap Sifat Mekanis Material Komposit CFRP (Carbon Fiber Reinforced Polymer) Dengan Metode Hand Lay-Up dan Vacuum Bag*. 2024.
63. Pavan Hirematha, M.S., Gowri Shankar M Ca, N S Mohana, *Investigation on Effect of Egg shell powder on mechanical properties of GFRP Composites*. 2016.
64. *ISO-6507-1-2018 : Metallic materials — Vickers hardness test* 2018.
65. *IEC 61340-4-1 : Consolidated Version*. 2015.
66. Kale, V. and M. Moukwa, *Electrostatic dissipation control with an organic flooring system*. 1996.
67. Jan Setiawan, S., *Karakteristik Daktilitas Ss304 Yang Teroksidasi Pada Temperatur Tinggi*. 2017. **23**: p. 139-204.
68. Risteska, S., et al., *The Effect of Textile Structure Reinforcement on Polymer Composite Material Mechanical Behavior*. Polymers (Basel), 2024. **16**(24).
69. INTERNATIONAL, A., *ASTM E111 : Standard Test Method for Young's Modulus, Tangent Modulus, and Chord Modulus*. 2017.
70. Tutunchi, A., R. Kamali, and A. Kianvash, *Effect of Al₂O₃ nanoparticles on the steel-glass/epoxy composite joint bonded by a two-component structural acrylic adhesive*. Soft Materials, 2015. **14**(1): p. 1-8.
71. Sathiya Narayanan, N., et al., *Effects on microhardness, tensile strength, deflection, and drop weight impact resistance with the addition of hybrid filler materials for enhancing GFRP composites*. Sci Rep, 2024. **14**(1): p. 27524.

72. Demir, E.C., et al., *A predictive model towards understanding the effect of reinforcement agglomeration on the stiffness of nanocomposites*. J Compos Mater, 2022. **56**(10): p. 1591-1604.
73. Li, L., T. Khraishi, and Y.-L. Shen, *Indentation and Hardness of Materials: An Inherently Multiscale-Dependent Problem*. Metals, 2025. **15**(3).
74. Alsoufi, M.S., et al., *Surface Roughness and Knoop Indentation Micro-Hardness Behavior of Aluminium Oxide (Al_2O_3) and Polystyrene (C_8H_8) $_n$ Materials*. 2016.
75. Ramezani, A., H. Jamshidi Aval, and R. Jamaati, *Influence of Al_2O_3 addition on microstructure, mechanical strength, and wear behavior of AA7075- Al_2O_3 matrix composites fabricated using deformation-driven metallurgy*. Results in Engineering, 2025. **26**.

