

DAFTAR PUSTAKA

- Abebe, Y., Palani, S., & Sirahbizu, B. (2025). Effect of Al₂O₃ nanoparticle on mechanical properties of polyester/ glass-wool fiber reinforced polymer composites. *Hybrid Advances*, 10, 100472.
<https://doi.org/10.1016/j.hybadv.2025.100472>
- Aduwenye, P., Chong, B. W., Gujar, P., & Shi, X. (2024). Mechanical properties and durability of carbon fiber reinforced cementitious composites: A review. *Construction and Building Materials*, 452, 138822.
<https://doi.org/10.1016/j.conbuildmat.2024.138822>
- Agumba, D. O., Pham, D. H., Park, G., Kumar, B., & Kim, J. (2024). Strength and toughness of bioderived resin based on hyperbranched crosslinking and its application to cellulose long Filament-Reinforced polymer composite. *Composites Part A: Applied Science and Manufacturing*, 181, 108098.
<https://doi.org/10.1016/j.compositesa.2024.108098>
- Al-Furjan, M. S. H., Shan, L., Shen, X., Zarei, M. S., Hajmohammad, M. H., & Kolahchi, R. (2022). A review on fabrication techniques and tensile properties of glass, carbon, and Kevlar fiber reinforced polymer composites. *Journal of Materials Research and Technology*, 19, 2930–2959.
<https://doi.org/10.1016/j.jmrt.2022.06.008>
- Ali, K., Ravi, S., Mohanavel, V., Ayyar, M., Kathiresan, S., Kannan, S., Munimathan, A., Soudagar, M. E. M., & Kaliappan, S. (2025). Effect of continuous fiber reinforcement on mechanical and tribological characteristics of cellulose and human hair fiber polymer composites. *Results in Engineering*, 25, 104480.
<https://doi.org/10.1016/j.rineng.2025.104480>
- Alomari, A., Tahir, D., Heryanto, H., Akouibaa, A., & Sayyed, M. I. (2025). Correlation of structural-optical properties of Cu-, Co-, and Ni-doped ZnO/Alum and their role in photocatalytic activity and stability. *Materials Chemistry and Physics*, 341, 130906. <https://doi.org/10.1016/j.matchemphys.2025.130906>
- AL-Oqla, F. M. (2023). Biomaterial Hierarchy Selection Framework Under Uncertainty for More Reliable Sustainable Green Products. *JOM*, 75(7), 2187–2198.
<https://doi.org/10.1007/s11837-023-05797-4>
- Arnandan, P. T., Nadyaini Wan Omar, W. N., Hassan, Z. H., Abd Muhaimin, M. S., D. A., Michele Raissa, M. M., Shamjuddin, A., Chang, K.-L., & (2025). Novel sequential ozonolysis-hydrolysis treatments for cellulose synthesis from oil palm empty fruit bunch. *Biomass and* 107902. <https://doi.org/10.1016/j.biombioe.2025.107902>
- & Chauhan, S. (2024). Preparation and characterization of woven ed composite by using bamboo fiber reinforced polymers as resin



matrix. *Construction and Building Materials*, 411, 134343.
<https://doi.org/10.1016/j.conbuildmat.2023.134343>

Babu, T. N., Singh, S., Prabha, D. R., Mishra, S., & Pandey, V. (2024a). Mechanical, machinability and water absorption properties of novel kenaf fiber, glass fiber and graphene composites reinforced with epoxy. *Scientific Reports*, 14(1), 29955.
<https://doi.org/10.1038/s41598-024-81314-0>

Babu, T. N., Singh, S., Prabha, D. R., Mishra, S., & Pandey, V. (2024b). Mechanical, machinability and water absorption properties of novel kenaf fiber, glass fiber and graphene composites reinforced with epoxy. *Scientific Reports*, 14(1), 29955.
<https://doi.org/10.1038/s41598-024-81314-0>

Balasubramani, V., Nagarajan, K. J., Karthic, M., & Pandiyarajan, R. (2024). Extraction of lignocellulosic fiber and cellulose microfibrils from agro waste-palmyra fruit peduncle: Water retting, chlorine-free chemical treatments, physio-chemical, morphological, and thermal characterization. *International Journal of Biological Macromolecules*, 259, 129273. <https://doi.org/10.1016/j.ijbiomac.2024.129273>

Banerjee, A., Jha, K., Petru, M., Kumar, R., Sharma, S., Saini, M. S., Mohammed, K. A., Kumar, A., Abbas, M., & Tag-Eldin, E. M. (2023). Fabrication and characterization of weld attributes in hot gas welding of alkali treated hybrid flax fiber and pine cone fibers reinforced poly-lactic acid (PLA) based biodegradable polymer composites: studies on mechanical and morphological properties. *Journal of Materials Research and Technology*, 27, 272–297.
<https://doi.org/10.1016/j.jmrt.2023.09.252>

Basavaraju, B., Nagaraja, S., Banagar, A. R., Srinivasa, C. V., Ramesh, B. T., Ramdan, D., & Ammarullah, M. I. (2024a). Influence of suspended cenospheres on the mechanical characteristics and wear loss of natural fiber-reinforced hybrid composites: implications for biomedical applications and sustainable material management. *RSC Advances*, 14(45), 33332–33344.
<https://doi.org/10.1039/D4RA06223J>

Basavaraju, B., Nagaraja, S., Banagar, A. R., Srinivasa, C. V., Ramesh, B. T., Ramdan, D., & Ammarullah, M. I. (2024b). Influence of suspended cenospheres on the mechanical characteristics and wear loss of natural fiber-reinforced hybrid composites: implications for biomedical applications and sustainable material management. *RSC Advances*, 14(45), 33332–33344.
<https://doi.org/10.1039/D4RA06223J>



raja, S., Banagar, A. R., Srinivasa, C. V., Ramesh, B. T., Ramdan, D., & Ammarullah, M. I. (2024c). Influence of suspended cenospheres on the mechanical characteristics and wear loss of natural fiber-reinforced hybrid composites: implications for biomedical applications and sustainable material management. *RSC Advances*, 14(45), 33332–33344.
<https://doi.org/10.1039/D4RA06223J>

- Bekele, A. A., Mekonnen, H. T., Yigezu, B. S., & Nega, A. Y. (2024). Experimental investigation on tensile strength and impact strength of palmyra palm leaf stalk – Sisal fiber reinforced polymer hybrid composite. *Heliyon*, *10*(20), e39555. <https://doi.org/10.1016/j.heliyon.2024.e39555>
- Bhat, A. R., Kumar, R., & Mural, P. K. S. (2023). Natural fiber reinforced polymer composites: A comprehensive review of Tribo-Mechanical properties. *Tribology International*, *189*, 108978. <https://doi.org/10.1016/j.triboint.2023.108978>
- Biswas, S., Rahaman, T., Gupta, P., Mitra, R., Dutta, S., Kharlyngdoh, E., Guha, S., Ganguly, J., Pal, A., & Das, M. (2022). Cellulose and lignin profiling in seven, economically important bamboo species of India by anatomical, biochemical, FTIR spectroscopy and thermogravimetric analysis. *Biomass and Bioenergy*, *158*, 106362. <https://doi.org/10.1016/j.biombioe.2022.106362>
- Chen, K., Sun, J., Hou, X., Zhou, H., & Gao, Z. (2025a). Efficient fractionation of lignin from *Camellia oleifera* shell by acidic deep eutectic solvent under mild conditions. *Journal of Industrial and Engineering Chemistry*, *146*, 697–704. <https://doi.org/10.1016/j.jiec.2024.11.055>
- Chen, K., Sun, J., Hou, X., Zhou, H., & Gao, Z. (2025b). Efficient fractionation of lignin from *Camellia oleifera* shell by acidic deep eutectic solvent under mild conditions. *Journal of Industrial and Engineering Chemistry*, *146*, 697–704. <https://doi.org/10.1016/j.jiec.2024.11.055>
- Chen, K., Sun, J., Hou, X., Zhou, H., & Gao, Z. (2025c). Efficient fractionation of lignin from *Camellia oleifera* shell by acidic deep eutectic solvent under mild conditions. *Journal of Industrial and Engineering Chemistry*, *146*, 697–704. <https://doi.org/10.1016/j.jiec.2024.11.055>
- Daget, T. M., Kassie, B. B., & Tassew, D. F. (2025a). Extraction and characterization of natural cellulosic stem fiber from Melekuya (*Plumbago zeylanicum* L.) plant for sustainable reinforcement in polymer composites. *International Journal of Biological Macromolecules*, *304*, 141061. <https://doi.org/10.1016/j.ijbiomac.2025.141061>
- Daget, T. M., Kassie, B. B., & Tassew, D. F. (2025b). Extraction and characterization of natural cellulosic stem fiber from Melekuya (*Plumbago zeylanicum* L.) plant for sustainable reinforcement in polymer composites. *International Journal of Biological Macromolecules*, *304*, 141061. <https://doi.org/10.1016/j.ijbiomac.2025.141061>
- K. (2024a). Comprehensive evaluation of the mechanical and ties of dewaxed kapok fibre-reinforced polymer composites for ition in printed circuit boards. *Industrial Crops and Products*, *222*, doi.org/10.1016/j.indcrop.2024.119823



- Das, R., & Bisoyi, D. K. (2024b). Comprehensive evaluation of the mechanical and electrical properties of dewaxed kapok fibre-reinforced polymer composites for potential application in printed circuit boards. *Industrial Crops and Products*, 222, 119823. <https://doi.org/10.1016/j.indcrop.2024.119823>
- Das, S. C., La Rosa, A. D., Goutianos, S., & Grammatikos, S. (2023). Effect of accelerated weathering on the performance of natural fibre reinforced recyclable polymer composites and comparison with conventional composites. *Composites Part C: Open Access*, 12, 100378. <https://doi.org/10.1016/j.jcomc.2023.100378>
- Devesa, S., Benzarti, Z., Costa, M., Cavaleiro, D., Faia, P., & Carvalho, S. (2025). Eco-friendly cellulose/TiO₂-hydroxyapatite films for biomedical applications. *International Journal of Biological Macromolecules*, 306, 141717. <https://doi.org/10.1016/j.ijbiomac.2025.141717>
- Dou, W., Wang, B., Li, D., Sun, X., Jiang, H., Wang, Y., Liao, X., Li, L., Wang, Y., Yang, Z., Jia, D., & Zhou, Y. (2025). High-temperature mechanical properties and interfacial microstructure of novel layered Csf/SiBCN composites. *Carbon*, 238, 120264. <https://doi.org/10.1016/j.carbon.2025.120264>
- Elfaleh, I., Abbassi, F., Habibi, M., Ahmad, F., Guedri, M., Nasri, M., & Garnier, C. (2023a). A comprehensive review of natural fibers and their composites: An eco-friendly alternative to conventional materials. *Results in Engineering*, 19, 101271. <https://doi.org/10.1016/j.rineng.2023.101271>
- Elfaleh, I., Abbassi, F., Habibi, M., Ahmad, F., Guedri, M., Nasri, M., & Garnier, C. (2023b). A comprehensive review of natural fibers and their composites: An eco-friendly alternative to conventional materials. *Results in Engineering*, 19, 101271. <https://doi.org/10.1016/j.rineng.2023.101271>
- Gashawtena, E., Kidane, A., & Sirahbizu, B. (2024a). The effect of nanocellulose and silica filler on the mechanical properties of natural fiber polymer matrix composites. *Results in Engineering*, 24, 102898. <https://doi.org/10.1016/j.rineng.2024.102898>
- Gashawtena, E., Kidane, A., & Sirahbizu, B. (2024b). The effect of nanocellulose and silica filler on the mechanical properties of natural fiber polymer matrix composites. *Results in Engineering*, 24, 102898. <https://doi.org/10.1016/j.rineng.2024.102898>
- Gashawtena, E., Kidane, A., & Sirahbizu, B. (2024c). The effect of nanocellulose and silica filler on the mechanical properties of natural fiber polymer matrix composites. *Results in Engineering*, 24, 102898. <https://doi.org/10.1016/j.rineng.2024.102898>
- Quiroz, F., Cadena, F., & Iribarren, J. I. (2025). Valorizing agricultural wastes and recycled polyethylene towards sustainable natural fiber-



reinforced polymer composites. *Cleaner Materials*, 16, 100313.
<https://doi.org/10.1016/j.clema.2025.100313>

Gond, R. K., Gupta, M. K., & Jawaid, M. (2021). Extraction of nanocellulose from sugarcane bagasse and its characterization for potential applications. *Polymer Composites*, 42(10), 5400–5412. <https://doi.org/10.1002/pc.26232>

Hao, J., Lomov, S. V., Fuentes, C. A., & Van Vuure, A. W. (2025). Creep behaviour and lifespan of flax fibre composites with different polymer matrices. *Composite Structures*, 367, 119246. <https://doi.org/10.1016/j.compstruct.2025.119246>

Hasan, Md. H., Hossain, S., Rahman, Md. L., Rahman, G. M. S., Khan, M. A., & Mamun, M. A. Al. (2025a). Effect of hydrolysis agitation and suspension drying temperature on the synthesis of crystalline cellulose from jute fiber. *Carbohydrate Polymer Technologies and Applications*, 10, 100769.
<https://doi.org/10.1016/j.carpta.2025.100769>

Hasan, Md. H., Hossain, S., Rahman, Md. L., Rahman, G. M. S., Khan, M. A., & Mamun, M. A. Al. (2025b). Effect of hydrolysis agitation and suspension drying temperature on the synthesis of crystalline cellulose from jute fiber. *Carbohydrate Polymer Technologies and Applications*, 10, 100769.
<https://doi.org/10.1016/j.carpta.2025.100769>

Jeong, Y., Sadeghi, K., & Seo, J. (2023). Effects of molecular weight of polyethylene glycol on the moisture-absorption capacity and morphology of the channeling structure in desiccant composite. *Food Packaging and Shelf Life*, 37, 101086.
<https://doi.org/10.1016/j.fpsl.2023.101086>

Karthikeyan, R., & Madhu, S. (2025). Impact of brown algae particles on the mechanical properties of jute-reinforced polymeric composites for sustainable development. *Results in Engineering*, 25, 104548.
<https://doi.org/10.1016/j.rineng.2025.104548>

Khalid, M. Y., Al Rashid, A., Arif, Z. U., Ahmed, W., Arshad, H., & Zaidi, A. A. (2021). Natural fiber reinforced composites: Sustainable materials for emerging applications. *Results in Engineering*, 11, 100263.
<https://doi.org/10.1016/j.rineng.2021.100263>

Khan, T., Karthikeyan, N., Naveen, J., Anand, S. P., & Sebaey, T. A. (2024). Coconut (Cocos nucifera) sheath-based polymeric composites - A review. *Heliyon*, 10(15), 100263.
<https://doi.org/10.1016/j.heliyon.2024.e35644>



M., Milani, A. S., Fakhrhoseini, S. M., Date, A., Shabani, B., akrishna, S., Fox, B., & Jazar, R. N. (2021). Improving energy bon fiber manufacturing through waste heat recovery: A circular each with machine learning. *Energy*, 225, 120113.
<https://doi.org/10.1016/j.energy.2021.120113>

- Khodayari, A., Vats, S., Mertz, G., Schnell, C. N., Rojas, C. F., & Seveno, D. (2025a). Electrospinning of cellulose nanocrystals; procedure and optimization. *Carbohydrate Polymers*, 347, 122698. <https://doi.org/10.1016/j.carbpol.2024.122698>
- Khodayari, A., Vats, S., Mertz, G., Schnell, C. N., Rojas, C. F., & Seveno, D. (2025b). Electrospinning of cellulose nanocrystals; procedure and optimization. *Carbohydrate Polymers*, 347, 122698. <https://doi.org/10.1016/j.carbpol.2024.122698>
- Kwak, J. Il, Liu, H., Wang, D., Lee, Y. H., Lee, J.-S., & An, Y.-J. (2022). Critical review of environmental impacts of microfibers in different environmental matrices. *Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology*, 251, 109196. <https://doi.org/10.1016/j.cbpc.2021.109196>
- Li, J., Wang, Z., Wang, P., Tian, J., Liu, T., Guo, J., Zhu, W., Khan, M. R., Xiao, H., & Song, J. (2024). Effects of hydrolysis conditions on the morphology of cellulose II nanocrystals (CNC-II) derived from mercerized microcrystalline cellulose. *International Journal of Biological Macromolecules*, 258, 128936. <https://doi.org/10.1016/j.ijbiomac.2023.128936>
- Li, M., Pu, Y., Thomas, V. M., Yoo, C. G., Ozcan, S., Deng, Y., Nelson, K., & Ragauskas, A. J. (2020). Recent advancements of plant-based natural fiber-reinforced composites and their applications. *Composites Part B: Engineering*, 200, 108254. <https://doi.org/10.1016/j.compositesb.2020.108254>
- Liu, G., Li, R., Wang, B., Wang, Z., & Zhang, H. (2025). Synergistic deformation of bimodal-structured AZ80 Mg alloy for excellent strength-ductility synergy via regulating the heterogeneity level. *Journal of Magnesium and Alloys*. <https://doi.org/10.1016/j.jma.2025.03.006>
- Ma, H., Xu, F., Zhang, Y., Huang, M., Li, M., Wang, G., Huang, M., Fang, Z., & Jiang, L. (2025a). Non-unified effects of cellulose allomorphs on fast pyrolysis and enzymatic hydrolysis. *Industrial Crops and Products*, 230, 121153. <https://doi.org/10.1016/j.indcrop.2025.121153>
- Ma, H., Xu, F., Zhang, Y., Huang, M., Li, M., Wang, G., Huang, M., Fang, Z., & Jiang, L. (2025b). Non-unified effects of cellulose allomorphs on fast pyrolysis and enzymatic hydrolysis. *Industrial Crops and Products*, 230, 121153. <https://doi.org/10.1016/j.indcrop.2025.121153>
- g, Y., Zhang, L., & Wang, Z. (2022). Strong water-resistant, UV-resistant/glucomannan/lignin composite films inspired by natural LCC. *Carbohydrate Polymers*, 281, 119083. <https://doi.org/10.1016/j.carbpol.2021.119083>



- Mahmoud Zaghloul, M. Y., Yousry Zaghloul, M. M., & Yousry Zaghloul, M. M. (2021). Developments in polyester composite materials – An in-depth review on natural fibres and nano fillers. *Composite Structures*, 278, 114698. <https://doi.org/10.1016/j.compstruct.2021.114698>
- Mahmud, Md. Z. Al, Mobarak, M. H., & Hossain, N. (2024). Emerging trends in biomaterials for sustainable food packaging: A comprehensive review. *Heliyon*, 10(1), e24122. <https://doi.org/10.1016/j.heliyon.2024.e24122>
- Marichelvam, M. K., Kumar, C. L., Kandakodeeswaran, K., Thangagiri, B., Saxena, K. K., Kishore, K., Wagri, N. K., & Kumar, S. (2023a). Investigation on mechanical properties of novel natural fiber-epoxy resin hybrid composites for engineering structural applications. *Case Studies in Construction Materials*, 19, e02356. <https://doi.org/10.1016/j.cscm.2023.e02356>
- Marichelvam, M. K., Kumar, C. L., Kandakodeeswaran, K., Thangagiri, B., Saxena, K. K., Kishore, K., Wagri, N. K., & Kumar, S. (2023b). Investigation on mechanical properties of novel natural fiber-epoxy resin hybrid composites for engineering structural applications. *Case Studies in Construction Materials*, 19, e02356. <https://doi.org/10.1016/j.cscm.2023.e02356>
- Mkilima, T., Saspuhayeva, G., Kaliyeva, G., Samatova, I., Rakhimova, B., Tuleuova, G., Tauyekel, A., Batyayeva, Y., Karibzhanova, R., & Cherkeshova, S. (2024). Enhanced adsorption of emerging contaminants from pharmaceutical wastewater using alkaline-treated pineapple leaf fiber integrated with UV-LED technology. *Case Studies in Chemical and Environmental Engineering*, 10, 101000. <https://doi.org/10.1016/j.cscee.2024.101000>
- Mohammed, K., Zulkifli, R., Faizal Mat Tahir, M., & Sumer Gaaz, T. (2024). A study of mechanical properties and performance of bamboo fiber/polymer composites. *Results in Engineering*, 23, 102396. <https://doi.org/10.1016/j.rineng.2024.102396>
- Mulla, M. H., Norizan, M. N., Mohammad Rawi, N. F., Mohamad Kassim, M. H., Abdullah, C. K., Abdullah, N., & Norrahim, M. N. F. (2025). A review of fire performance of plant-based natural fibre reinforced polymer composites. *International Journal of Biological Macromolecules*, 305, 141130. <https://doi.org/10.1016/j.ijbiomac.2025.141130>
- Navaratnam, S., Selvaranjan, K., Jayasooriya, D., Rajeev, P., & Sanjayan, J. (2023). Applications of natural and synthetic fiber reinforced polymer in infrastructure: A sment. *Journal of Building Engineering*, 66, 105835. <https://doi.org/10.1016/j.jobe.2023.105835>
- , N. T., Mulugeta, E., & Workeneh, G. A. (2025). Eco-friendly gel based on cellulose and bentonite for removal of lead (II): therm studies. *Carbohydrate Polymer Technologies and* 100637. <https://doi.org/10.1016/j.carpta.2024.100637>



- Palanisamy, S., Vijayananth, K., Murugesan, T. M., Palaniappan, M., & Santulli, C. (2024). The prospects of natural fiber composites: A brief review. *International Journal of Lightweight Materials and Manufacture*, 7(4), 496–506. <https://doi.org/10.1016/j.ijlmm.2024.01.003>
- Panyathip, R., Witthayapak, M., Thuephloi, P., Sukunta, J., Thipchai, P., Thanakkasaranee, S., Jantanasakulwong, K., & Rachtanapun, P. (2025). Characterization of corn husks carboxymethyl cellulose formation using Raman spectroscopy. *Industrial Crops and Products*, 228, 120887. <https://doi.org/10.1016/j.indcrop.2025.120887>
- Patel, B. H., Panchal, D. P., & Chaudhari, S. B. (2024). Per-acetic acid effect on separation of banana fiber and their dyeing with natural dyes. *Discover Materials*, 4(1), 24. <https://doi.org/10.1007/s43939-024-00086-6>
- Pawar, U. S., Chavan, S. S., & Mohite, D. D. (2024). Synthesis of glass FRP-natural fiber hybrid composites (NFHC) and its mechanical characterization. *Discover Sustainability*, 5(1), 44. <https://doi.org/10.1007/s43621-024-00231-4>
- Pazo-Cepeda, M. V., Nastasiienko, N. S., Kulik, T. V., Palianytsia, B. B., Alonso, E., & Aspromonte, S. G. (2023). Adsorption and thermal transformation of lignin model compound (ferulic acid) over HY zeolite surface studied by temperature programmed desorption mass-spectrometry, FTIR and UV–Vis spectroscopy. *Microporous and Mesoporous Materials*, 348, 112394. <https://doi.org/10.1016/j.micromeso.2022.112394>
- Pham, D. H., Kumar, B., & Kim, J. (2025). Environment-Friendly, High-Performance Lignin-Derived and Polyvinyl Alcohol Blended Resin for All-Green Natural Fiber-Reinforced Composite. *International Journal of Precision Engineering and Manufacturing-Green Technology*, 12(2), 607–619. <https://doi.org/10.1007/s40684-024-00650-8>
- Pramanik, T. J., Rafiquzzaman, Md., Karmakar, A., Nayeem, M. H., Turjo, S. M. K. S., & Abid, Md. R. (2024). Evaluation of mechanical properties of natural fiber based polymer composite. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*, 4(3), 100183. <https://doi.org/10.1016/j.tbench.2024.100183>
- Raja, K., Prabu, B., Ganeshan, P., Chandra Sekar, V. S., & NagarajaGanesh, B. (2021). Characterization Studies of Natural Cellulosic Fibers Extracted from Shwetark Stem. *Journal of Natural Fibers*, 18(11), 1934–1945. <https://doi.org/10.1080/15440478.2019.1710650>
- ε, M., Islam, S. M. M., & Uddin Labib, K. M. R. (2024). ε-enhanced fiber-reinforced polymer composites: Recent ε on processing techniques and applications. *Heliyon*, 10(2), doi.org/10.1016/j.heliyon.2024.e24692



- Sandeep, B. N., Buddha, K., & Basha, D. B. (2024a). Fabrication and characterization of a composite material from polymer matrix using citrus limetta fiber. *Nano-Structures & Nano-Objects*, 39, 101323. <https://doi.org/10.1016/j.nanoso.2024.101323>
- Sandeep, B. N., Buddha, K., & Basha, D. B. (2024b). Fabrication and characterization of a composite material from polymer matrix using citrus limetta fiber. *Nano-Structures & Nano-Objects*, 39, 101323. <https://doi.org/10.1016/j.nanoso.2024.101323>
- Sandeep, B. N., Buddha, K., & Basha, D. B. (2024c). Fabrication and characterization of a composite material from polymer matrix using citrus limetta fiber. *Nano-Structures & Nano-Objects*, 39, 101323. <https://doi.org/10.1016/j.nanoso.2024.101323>
- Segal, L., Creely, J. J., Martin, A. E., & Conrad, C. M. (1959). An Empirical Method for Estimating the Degree of Crystallinity of Native Cellulose Using the X-Ray Diffractometer. *Textile Research Journal*, 29(10), 786–794. <https://doi.org/10.1177/004051755902901003>
- Shadhin, M., Rahman, M., Jayaraman, R., Chen, Y., Mann, D., & Zhong, W. (2023). Natural biomass & waste biomass fibers – Structures, environmental footprints, sustainability, degumming methods, & surface modifications. *Industrial Crops and Products*, 204, 117252. <https://doi.org/10.1016/j.indcrop.2023.117252>
- Shin, H., Yoon, T., You, J., & Na, S. (2024). A study of forecasting the Nephila clavipes silk fiber's ultimate tensile strength using machine learning strategies. *Journal of the Mechanical Behavior of Biomedical Materials*, 157, 106643. <https://doi.org/10.1016/j.jmbbm.2024.106643>
- Soni, A., Das, P. K., Gupta, S. K., Saha, A., Rajendran, S., Kamyab, H., & Yusuf, M. (2024a). An overview of recent trends and future prospects of sustainable natural fiber-reinforced polymeric composites for tribological applications. *Industrial Crops and Products*, 222, 119501. <https://doi.org/10.1016/j.indcrop.2024.119501>
- Soni, A., Das, P. K., Gupta, S. K., Saha, A., Rajendran, S., Kamyab, H., & Yusuf, M. (2024b). An overview of recent trends and future prospects of sustainable natural fiber-reinforced polymeric composites for tribological applications. *Industrial Crops and Products*, 222, 119501. <https://doi.org/10.1016/j.indcrop.2024.119501>
- Z.1016/j.tsep.2024.103123
- Zashir, M. N., Vijayan, D. S., Hossain, I., Kannan, S., Obaid, S. Al, (25). Study of antimicrobial and mechanical behaviors on kapok bran particulates blended epoxy matrix composite. *Thermal gineering Progress*, 57, 103123. <https://doi.org/10.1016/j.tsep.2024.103123>



- Srisuk, R., Techawinyutham, L., Vinod, A., Mavinkere Rangappa, S., & Siengchin, S. (2023a). Agro-waste from *Bambusa flexuosa* stem fibers: A sustainable and green material for lightweight polymer composites. *Journal of Building Engineering*, 73, 106674. <https://doi.org/10.1016/j.jobe.2023.106674>
- Srisuk, R., Techawinyutham, L., Vinod, A., Mavinkere Rangappa, S., & Siengchin, S. (2023b). Agro-waste from *Bambusa flexuosa* stem fibers: A sustainable and green material for lightweight polymer composites. *Journal of Building Engineering*, 73, 106674. <https://doi.org/10.1016/j.jobe.2023.106674>
- Swain, P. K., Rout, A. kumar, Singh, J. K., Sahoo, D., & Mishra, S. K. (2024). Development and analysis of Fe-doped ZnO nanoparticle-infused sisal fiber reinforced hybrid polymer composites for high-performance sound absorption and thermal insulation applications. *Industrial Crops and Products*, 222, 119763. <https://doi.org/10.1016/j.indcrop.2024.119763>
- Tao, L., Ma, X., Ye, L., Jia, J., Wang, L., Ma, P., & Liu, J. (2021). Interactions of lignin and LDPE during catalytic co-pyrolysis: Thermal behavior and kinetics study by TG-FTIR. *Journal of Analytical and Applied Pyrolysis*, 158, 105267. <https://doi.org/10.1016/j.jaap.2021.105267>
- Tasgin, Y., Demircan, G., Kandemir, S., & Acikgoz, A. (2024). Mechanical, wear and thermal properties of natural fiber-reinforced epoxy composite: cotton, sisal, coir and wool fibers. *Journal of Materials Science*, 59(24), 10844–10857. <https://doi.org/10.1007/s10853-024-09810-2>
- Thirumurugan, R., Jayaraj, M., Shanmugam, D., & Ramkumar, T. (2021). Characterization of New Natural Cellulosic Fiber from *Coconut Tree Primary Flower Leaf Stalk Fiber (CPFLSF)*. *Journal of Natural Fibers*, 18(11), 1844–1856. <https://doi.org/10.1080/15440478.2019.1701608>
- Vârban, R., Crişan, I., Vârban, D., Ona, A., Olar, L., Stoie, A., & Ştefan, R. (2021). Comparative FT-IR Prospecting for Cellulose in Stems of Some Fiber Plants: Flax, Velvet Leaf, Hemp and Jute. *Applied Sciences*, 11(18), 8570. <https://doi.org/10.3390/app11188570>
- Venkatesh, R., Ballal, S., Krishnan, A. M., Prabakaran, S., Mohankumar, S., & Ramaraj, E. (2023). Effect of fiber layer formation on mechanical and wear properties of natural fiber filled epoxy hybrid composites. *Heliyon*, 9(5), e15934. <https://doi.org/10.1016/j.heliyon.2023.e15934>



, D., Wang, Z., Zhu, Y., Qian, K., & Zhang, D. (2022). Influence of
 tion on mechanical properties and damage mechanisms of three-
 -directional braided composites under hydrostatic pressure.
 , 114, 107693.
 0.1016/j.polymertesting.2022.107693

- Wasti, S., Kamath, D., Armstrong, K., Clarkson, C., Tekinalp, H., Ozcan, S., & Vaidya, U. (2024a). Life cycle assessment of coir fiber-reinforced composites for automotive applications. *Journal of Cleaner Production*, 485, 144368. <https://doi.org/10.1016/j.jclepro.2024.144368>
- Wasti, S., Kamath, D., Armstrong, K., Clarkson, C., Tekinalp, H., Ozcan, S., & Vaidya, U. (2024b). Life cycle assessment of coir fiber-reinforced composites for automotive applications. *Journal of Cleaner Production*, 485, 144368. <https://doi.org/10.1016/j.jclepro.2024.144368>
- Wodag, A. F., Yang, C., Islam, M. M., Islam, M. A., Zhou, B., Raza, M., Yimer, T. T., Wang, Y., & Xu, F. (2025). Enhancing mechanical and thermal properties of three dimensional (3D) woven flax fiber/ polylactic acid (PLA) green composites. *Materials Today Communications*, 46, 112833. <https://doi.org/10.1016/j.mtcomm.2025.112833>
- Wong, D., Fabito, G., Debnath, S., Anwar, M., & Davies, I. J. (2024). A critical review: Recent developments of natural fiber/rubber reinforced polymer composites. *Cleaner Materials*, 13, 100261. <https://doi.org/10.1016/j.clema.2024.100261>
- Wu, S., Shen, Y., Yuan, J., Du, X., Li, J., Shi, S., & Han, L. (2025). The comparison of cellulose regeneration behavior in different solvents after sulfuric acid treatment. *Carbohydrate Research*, 553, 109509. <https://doi.org/10.1016/j.carres.2025.109509>
- Xin, W., Zhou, Y., Xiong, W., Yao, Y., Zhang, J., & Wang, L. (2025). Characterisation of microcrystalline cellulose derived from wheat bran and evaluation of its ice recrystallisation inhibiting activity. *Food Research International*, 208, 116212. <https://doi.org/10.1016/j.foodres.2025.116212>
- Xu, F., Sha, Z., Zhuo, L., Chang, W., Sun, B., Wang, C. H., Gu, B., & Zhang, J. (2025). Improving thermal stability and mechanical properties of high temperature carbon fibre phthalonitrile resin composites via Nano-CuO modified matrices. *Composites Part A: Applied Science and Manufacturing*, 197, 109035. <https://doi.org/10.1016/j.compositesa.2025.109035>
- Yadav, V. K., Verma, N., Kardam, S. K., & Pullela, M. (2025a). Pineapple leaf fiber in polymer composites: Structure, characterization, and applications. *Materials Chemistry and Physics: Sustainability and Energy*, 2, 100011. <https://doi.org/10.1016/j.macse.2025.100011>



N., Kardam, S. K., & Pullela, M. (2025b). Pineapple leaf fiber in sites: Structure, characterization, and applications. *Materials Physics: Sustainability and Energy*, 2, 100011. [J.1016/j.macse.2025.100011](https://doi.org/10.1016/j.macse.2025.100011)

- Yang, J., Dong, X., Wang, J., Ching, Y. C., Liu, J., Chunhui li, Baikeli, Y., li, Z., Mohammed Al-Hada, N., & Xu, S. (2022). Synthesis and properties of bioplastics from corn starch and citric acid-epoxidized soybean oil oligomers. *Journal of Materials Research and Technology*, 20, 373–380.
<https://doi.org/10.1016/j.jmrt.2022.07.119>
- Yin, H., Huang, X., Song, X., Miao, H., & Mu, L. (2022). Co-pyrolysis of de-alkalized lignin and coconut shell via TG/DTG–FTIR and machine learning methods: pyrolysis characteristics, gas products, and thermo-kinetics. *Fuel*, 329, 125517.
<https://doi.org/10.1016/j.fuel.2022.125517>
- You, S., Fan, Y., Chen, Y., Jiang, X., Liu, W., Zhou, X., Zhang, J., Zheng, J., Yang, H., & Hou, X. (2024). Advancements and prospects of deep learning in biomaterials evolution. *Cell Reports Physical Science*, 5(9), 102116.
<https://doi.org/10.1016/j.xcrp.2024.102116>
- Zhang, S., Gan, J., Lv, J., Shen, C., Xu, C., & Li, F. (2024). Environmental impacts of carbon fiber production and decarbonization performance in wind turbine blades. *Journal of Environmental Management*, 351, 119893.
<https://doi.org/10.1016/j.jenvman.2023.119893>
- Zhao, M., Zhang, Y., Zhang, D., & Zhang, D. (2025). Deformation driven enhancement of strength-ductility synergy of a PM AA6061-10Cu hybrid material. *Materials Science and Engineering: A*, 932, 148268.
<https://doi.org/10.1016/j.msea.2025.148268>

