



DAFTAR PUSTAKA

- Akincioğlu, G., Akincioğlu, S., Öktem, H., & Uygur, İ. (2021). Experimental investigation on the friction characteristics of hazelnut powder reinforced brake pad. *Reports in Mechanical Engineering*, 2(1), 23–30.
<https://doi.org/10.31181/rme200102023a>
- Albert Lawal, S., & Ruth Anayimi, L.-A. (2018). An Overview Of Brake Pad Production Using Non-Hazardous Reinforcement Materials.
<https://www.researchgate.net/publication/326914173>
- Alim, M. I., Firdausi, Amalia, & Nurmalasari, M. D. (n.d.). Laporan Praktikum Laboratorium Fisika Material: Densitas dan Porositas Batuan.
<https://doi.org/10.13140/RG.2.2.21184.89607>
- Aranganathan, N., & Bijwe, J. (2016). Development of copper-free eco-friendly brake-friction material using novel ingredients. *Wear*, 352–353, 79–91.
<https://doi.org/10.1016/j.wear.2016.01.023>
- Atmika, I. K. A., Subagia, I. D. G. A., Surata, I. W., & Sutantra, I. N. (2019). Hardness and wear rate of basalt/alumina/shellfish powder reinforced phenolic resin matrix hybrid composite brake lining pads. *IOP Conference Series: Materials Science and Engineering*, 539(1).
<https://doi.org/10.1088/1757-899X/539/1/012012>
- Awe, S. (2024). Sustainable aluminium brake discs and pads for electrified vehicles. <https://doi.org/10.46720/eb2023-tst-020>
- Dhanola, A. (2023). A comprehensive overview on tribo-mechanical characteristics of hybrid plant fiber-based biocomposites. In *Emergent Materials* (Vol. 6, Issue 6, pp. 1707–1726). Institute for Ionics.
<https://doi.org/10.1007/s42247-023-00567-z>
- Dixon, J., Morán, L., Rodríguez, J., & Domke, R. (2005). Reactive power compensation technologies: State-of-the-art review. *Proceedings of the IEEE*, 93(12), 2144–2163. <https://doi.org/10.1109/JPROC.2005.859937>



- Fawaid, M., Lusiani, R., & Parulian, R. (2017). Pengaruh Butiran Filler Kayu Sengon Terhadap Karakteristik Papan Partikel Yang Berpenguat Serat Tandan Kosong Kelapa Sawit. *Jurnal Mesin Teknologi (SINTEK Jurnal*, 11(1).
- Feist, J. (2014). Braking Fundamentals a Study of the Dynamics of Disc Brakes and Pad/Rotor Contact.
- García-León, R. A., Afanador-García, N., & Gómez-Camperos, J. A. (2021). Mechanical and dynamic maps of disc brakes under different operating conditions. *Fluids*, 6(10). <https://doi.org/10.3390/fluids6100363>
- García-León, R., Flórez-Solano, E., & Suárez-Quiñones, Á. (2019). Brake Discs: A Technological Review From Its Analysis And Assessment. *Informador Técnico*, 217–234. <https://doi.org/10.23850/22565035.1766>
- Hussain, H. S., Ridzuan, M. J. M., Abdul Majid, M. S., Rahman, M. T. A., Ismail, M. S., Khasri, A., & Yudhanto, F. (2024). Effects of Nanofillers on the Wear and Frictional Properties of Cellulosic Fibre-reinforced Composites Under Varying Applied loads. *FME Transactions*, 52(3), 461–470. <https://doi.org/10.5937/fme2403461H>
- Hussain, S., Hamid, A., Lazim, M., Bakar, A., Bahru, J., & Malaysia, J. (2014). Brake Wear Particle Size and Shape Analysis of Non-Asbestos Organic (NAO) and Semi Metallic Brake Pad. www.jurnalteknologi.utm.my
- Joy, N., & Prakash, S. (2020). An experimental study of drilling of hard-to-cut grade 5 titanium alloy using cobalt drill bits. *International Journal of Mechanical and Production Engineering Research and Development*, 10(2), 213–222. <https://doi.org/10.24247/ijmpedapr20219>
- Kumar, R., & Anand, A. (2019). ScienceDirect Tribological behavior of natural fiber reinforced epoxy based composites: A review. www.sciencedirect.com
- Nouari, A., Tafraoui, A., Tafraoui, S., & Mallem, M. (2023). Design of brake pads from economical materials. *Materials Research Proceedings*, 31, 538–549. <https://doi.org/10.21741/9781644902592-56>



Organek, P., Gosowski, B., & Redecki, M. (2024). Relationship between Brinell hardness and the strength of structural steels. *Structures*, 59.

<https://doi.org/10.1016/j.istruc.2023.105701>

Österle, W., Deutsch, C., Gradt, T., Orts-Gil, G., Schneider, T., & Dmitriev, A. I. (2014). Tribological screening tests for the selection of raw materials for automotive brake pad formulations. *Tribology International*, 73, 148–155. <https://doi.org/10.1016/j.triboint.2014.01.017>

Perdana, M., Eru Putra, M., Akmal, A., Putra, H., al Ikram, M., & Meidianda, A. (2023). Characteristics of Palm Kernel Shell/Alumina/Epoxy Composites as Motorcycle Brake Pad Material. *Jurnal Teknik Mesin*, 13(1), 13–18. <https://doi.org/10.21063/jtm.2023.v13.i1.13-18>

Pinca-Bretorean, C., Josan, A., & Birtok-Băneasă, C. (2018). Laboratory testing of brake pads made of organic materials intended for small and medium vehicles. *IOP Conference Series: Materials Science and Engineering*, 393(1). <https://doi.org/10.1088/1757-899X/393/1/012029>

Ridha, M., & Darminto, D. (2016). Analisis Densitas, Porositas, dan Struktur Mikro Batu Apung Lombok dengan Variasi Lokasi dan Kedalaman. *Jurnal Fisika Dan Aplikasinya*, 12(3). <https://doi.org/10.12962/j24604682.v12i3.1403>

S. Hadi Suryo, A.P. Bayuseno, J. Jamasri, & Herry Kiswanto. (2018). Material Power Influence Of Bucket Teeth Excavatoraisi 4140 Using Abrasive Wear Test With Ogoshi Universal High Speed Testing Metode. DOI: 10.5281/zenodo.1210222

Setyawan, E. Y., Djivo, S., Praswanto, D. H., & Siagian, P. (2020). Effect of cocopeat and brass powder composition as a filler on wear resistance properties. *IOP Conference Series: Materials Science and Engineering*, 725(1). <https://doi.org/10.1088/1757-899X/725/1/012041>

Singh, T., & Patnaik, A. (2015). Performance assessment of lapinus-aramid based brake pad hybrid phenolic composites in friction braking. *Archives of Civil and Mechanical Engineering*, 15(1), 151–161. <https://doi.org/10.1016/j.acme.2014.01.009>



- Teleke, S., Abdulahovic, T., Thiringer, T., & Svensson, J. (2008). Dynamic performance comparison of synchronous condenser and SVC. *IEEE Transactions on Power Delivery*, 23(3), 1606–1612.
<https://doi.org/10.1109/TPWRD.2007.916109>
- Valadez-Gonzalez, A., Cervantes-Uc, J. M., Olayo, R., & Herrera-Franco, P. J. (1998). Effect of fiber surface treatment on the fiber-matrix bond strength of natural fiber reinforced composites.
- Widya, Suluh Yakti. (2017). Pengaruh Variasi Temperatur Hot Press Pada Pembuatan Kampas Rem Sepeda Motor Komposit Kayu Jati. Fakultas Teknologi Industri, Universitas Islam Indonesia.
- Yudhanto, F. (2021). Effect of Addition Microcrystalline Cellulose on Mechanical Properties of Jute/Glass Fibers Hybrid Laminated Composite.
<http://www.globalhemp.com/2011/02/automotive->
- Abdulahovic, T., & Teleke, S. (2016). Modeling and Comparison of Synchronous Condenser and SVC. Report in Department of Energy and Environment Electric Power Engineering Master Programme, Chalmers University of Technology, Göteborg, Sweden
- Abdul Rafiq Septiyanto, M., Suroso, I., Utami, N., Teknik Dirgantara, P., & Tinggi Teknologi Kedirgantaraan Yogyakarta, S. (n.d.). Analisis kekerasan dan keausan bearing pada pesawat Cessna Grand Caravan 208B.
- Abutu, J., Lawal, S. A., Ndaliman, M. B., Lafia-Araga, R. A., Adedipe, O., & Choudhury, I. A. (2019). Production and characterization of brake pad developed from coconut shell reinforcement material using central composite design. *SN Applied Sciences*, 1(1).
<https://doi.org/10.1007/s42452-018-0084-x>.
- Adams, R. H., Cerecedo-López, R. A., Alejandro-Álvarez, L. A., Domínguez-Rodríguez, V. I., & Nieber, J. L. (2016). Treatment of water-repellent petroleum-contaminated soil from Bemidji, Minnesota, by alkaline desorption. *International Journal of Environmental Science and Technology*, 13(9), 2249–2260. <https://doi.org/10.1007/s13762-016-1058-4>



Ali, A., Shaker, K., Nawab, Y., Jabbar, M., Hussain, T., Militky, J., & Baheti, V. (2018). Hydrophobic treatment of natural fibers and their composites—A review. In *Journal of Industrial Textiles* (Vol. 47, Issue 8, pp. 2153–2183). SAGE Publications Ltd.
<https://doi.org/10.1177/1528083716654468>

Anaidhuno, U. P., Ologe, S., Maduike, F., & Mgbemena, C. E. (2017). The Development of Vehicle Brake Pad Using Local Materials - (Palm Kernel, Coconut And Cashew Shells As Base Materials). *IOSR Journal of Engineering*, 07(06), 61–67. <https://doi.org/10.9790/3021-0706016167>

ASTM-D1965-87-1998-. (1998).

Bakar, S. S. S., Saufi, N. F. M., Rahman, R. A., Musa, L., & Marzuki, H. F. A. (2018). Study on the effect of NaOH concentration treatment on kenaf fiber and placement of winding angle on tensile properties of kenaf fibre reinforced epoxy composites. *AIP Conference Proceedings*, 2045.
<https://doi.org/10.1063/1.5080918>.

Bhandari, V.B., (2007). *Design of Machine Elements* 2nd Edition. Tata McGraw Hill Publishing Company Ltd. New Delhi.

Bittelli, M., Pellegrini, S., Olmi, R., Andrenelli, M. C., Simonetti, G., Borrelli, E., & Morari, F. (2022). Experimental evidence of laser diffraction accuracy for particle size analysis. *Geoderma*, 409.
<https://doi.org/10.1016/j.geoderma.2021.115627>

Blau, P. J., & Jolly, B. C. (2005). Wear of truck brake lining materials using three different test methods. *Wear*, 259(7–12), 1022–1030.
<https://doi.org/10.1016/j.wear.2004.12.022>

Boz, M., & Kurt, A. (2007). The effect of Al₂O₃ on the friction performance of automotive brake friction materials. *Tribology International*, 40(7), 1161–1169. <https://doi.org/10.1016/j.triboint.2006.12.004>

Callister, William D. Jr., Rethwisch, David G. (2009). *Materials Science and Engineering An Introduction*.

Chan, D., & Stachowiak, G. W. (2004). Review of automotive brake friction materials. *Proceedings of the Institution of Mechanical Engineers Part D*



Journal of Automobile Engineering, 218(9), 953–966.

<https://doi.org/10.1243/0954407041856773>

Compositions, Functions, and Testing of Friction Brake Materials and Their Additives ORNL-27 (4-00). (2001).

<http://www.ntis.gov/supportVordernowabout.htm>

Dulmalik, Dwiky, M. I., Kumala, S. N., Fety, I. R., & Khaliq, F. N. (2019). The effect of NaOH concentration variation in the process of paper making from bamboo fiber. IOP Conference Series: Materials Science and Engineering, 535(1). <https://doi.org/10.1088/1757-899X/535/1/012008>

Duma, Z. S., Sihvonen, T., Havukainen, J., Reinikainen, V., & Reinikainen, S. P. (2022). Optimizing energy dispersive X-Ray Spectroscopy (EDS) image fusion to Scanning Electron Microscopy (SEM) images. Micron, 163. <https://doi.org/10.1016/j.micron.2022.103361>

Elmes, P. C., & Reader in Therapeutics, M. (1966). The Epidemiology And Clinical Features Of Asbestosis And Related Diseases. In POSTGRAD. MED. J.

Eriksson, M., Bergman, F., & Jacobson, S. (2002). On the nature of tribological contact in automotive brakes. In Wear (Vol. 252).

Ermrich, M., & Opper, D. (2011). X-Ray Powder Diffraction $n\lambda = 2d \sin \theta$ The Analytical X-ray Company. www.panalytical.de

Forensics, G. (n.d.). How Does Scanning Electron Microscope/Energy Dispersive X-ray (SEM/EDX) Work?.

Forest Service, U., & Products Laboratory, F. (2010). Wood Handbook, Wood as an Engineering Material. www.fpl.fs.fed.us.

Gibson, R. F. (1994). Principles of Composite Material Mechanics, Fourth Edition.

Gilardi, R., Alzati, L., Thiam, M., Brunel, J. F., Desplanques, Y., Dufrénoy, P., Sharma, S., & Bijwe, J. (2012). Copper substitution and noise reduction in brake pads: Graphite type selection. Materials, 5(11), 2258–2269. <https://doi.org/10.3390/ma5112258>



- Hagino, H., Iwata, A., & Okuda, T. (2024). Iron Oxide and Hydroxide Speciation in Emissions of Brake Wear Particles from Different Friction Materials Using an X-ray Absorption Fine Structure. *Atmosphere*, 15(1).
<https://doi.org/10.3390/atmos15010049>
- Hajare, B., Bhutada, D. S., Khare, A. M., Radhakrishnan, S., & Kulkarni, M. B. (2023). Review on conversion of jackfruit (*Artocarpus heterophyllus*) waste for making value added polymers. In *Biomass Conversion and Biorefinery*. Springer Science and Business Media Deutschland GmbH.
<https://doi.org/10.1007/s13399-023-04347-x>.
- Herlina Sari, N., Wardana, I. N. G., Irawan, Y. S., & Siswanto, E. (2018). Characterization of the Chemical, Physical, and Mechanical Properties of NaOH-treated Natural Cellulosic Fibers from Corn Husks. *Journal of Natural Fibers*, 15(4), 545–558.
<https://doi.org/10.1080/15440478.2017.1349707>.
- Indria, Akbar Wicaksono. (2021). Karakterisasi Serat Rami Dan Pengaruh Perlakuan Alkali Serta Penambahan *Micro Crystalline Cellulose* (MCC) Terhadap Kekuatan Mekanis Komposit Rami/*Poliester*. Universitas Gadjah Mada.
- Irawan, A. P., Fitriyana, D. F., Tezara, C., Siregar, J. P., Laksmidewi, D., Baskara, G. D., Abdullah, M. Z., Junid, R., Hadi, A. E., Hamdan, M. H. M., & Najid, N. (2022). Overview of the Important Factors Influencing the Performance of Eco-Friendly Brake Pads. In *Polymers* (Vol. 14, Issue 6). MDPI. <https://doi.org/10.3390/polym14061180>
- Islam, T., Hossain, S., Jalil, M. A., Mujahid, S. M. Z., Bhoumik, T. K., & Mahmud, R. U. (2024). Development of Reinforced Polyester Hybrid Composites Using Varied Ratios of Jack Tree and Jute Fibers with Eggshell Filler. *Mechanics of Composite Materials*, 60(4), 817–830.
<https://doi.org/10.1007/s11029-024-10228-9>.
- Jamasri, Rochardjo, H., Nawangsari, P., & Waskito, A. T. (2021). Friction modifiers optimization on tribological properties of non-asbestos organic



(Nao) brake pad by doe-taguchi method. *Tribology in Industry*, 43(2), 310–320. <https://doi.org/10.24874/ti.1044.01.21.04>

Jang, H., Lee, J. S., & Fash, J. W. (2001). Compositional effects of the brake friction material on creep groan phenomena. In *Wear* (Vol. 251).

Jaya, H., Omar, M. F., Akil, M., Ahmad, Z. A., & Zulkepli, N. N. (2016). Effect of particle size on mechanical properties of sawdust-high density polyethylene composites under various strain rates. *BioResources*, 11(3), 6489–6504. <https://doi.org/10.15376/biores.11.3.6489-6504>

Jones, R. M., & Millard, R. (1999). *Mechanics Of Composite Materials Mechanics Of Composite Materials Second Edition*. Library of Congress Cataloging-in-Publication Data.

Kalse, S. B., & Swami, S. B. (2022). Recent application of jackfruit waste in food and material engineering: A review. *Food Bioscience*, 48. <https://doi.org/10.1016/j.fbio.2022.101740>.

Kaushik, A., & Singh, M. (2011). Isolation and characterization of cellulose nanofibrils from wheat straw using steam explosion coupled with high shear homogenization. *Carbohydrate Research*, 346(1), 76–85. <https://doi.org/10.1016/j.carres.2010.10.020>.

Khafidh, M., Putera, F. P., Yotenga, R., Fitriyana, D. F., Widodo, R. D., Ismail, R., Irawan, A. P., Cionita, T., Siregar, J. P., & Ismail, N. H. (2023). A Study on Characteristics of Brake Pad Composite Materials by Varying the Composition of Epoxy, Rice Husk, Al₂O₃ and Fe₂O₃. *Automotive Experiences*, 6(2), 303–319. <https://doi.org/10.31603/ae.9121>

Khan, A. U., Ema, I. J., Faruk, M. R., Tarapder, S. A., Khan, A. U., Noreen, S., & Adnan, M. (2021). A Review on Importance of Artocarpus heterophyllus L. (Jackfruit). In *Journal of Multidisciplinary Applied Natural Science* (Vol. 1, Issue 2, pp. 106–116). Pandawa Institute. <https://doi.org/10.47352/jmans.v1i2.88>.

Kirubakaran, G., & Senthamarai Kannan, C. (2024). Mechanical, wear, and water absorption behavior of polyester biocomposite using jackfruit seed husk



cellulose and pineapple fiber. Biomass Conversion and Biorefinery, 14(9), 10759–10769. <https://doi.org/10.1007/s13399-024-05268-z>.

Komayarati, Sri. (1995). Prospek Pengembangan Tanaman Nangka Ditinjau dari Sifat Arang dan Aspek Lainnya.

Koohestani, B., Darban, A. K., Mokhtari, P., Yilmaz, E., & Darezereshki, E. (2019). Comparison of different natural fiber treatments: a literature review. In International Journal of Environmental Science and Technology (Vol. 16, Issue 1, pp. 629–642). Center for Environmental and Energy Research and Studies. <https://doi.org/10.1007/s13762-018-1890-9>

Kouidri, D., Rokbi, M., Rahmouni, Z. E., Kherbiche, Y., Bouchareb, S., Mavinkere Rangappa, S., & Siengchin, S. (2024). Investigation of mechanical and physico-chemical properties of new natural fiber extracted from Bassia indica plant for reinforcement of lightweight bio-composites. *Heliyon*, 10(15).

<https://doi.org/10.1016/j.heliyon.2024.e35552>

Limpert, Rudolf. Brake Design and Safety Second Edition. (1999).

www.sae.org/BOOKSTORE

Lubis, M., Gana, A., Maysarah, S., Ginting, M. H. S., & Harahap, M. B. (2018). Production of bioplastic from jackfruit seed starch (*Artocarpus heterophyllus*) reinforced with microcrystalline cellulose from cocoa pod husk (*Theobroma cacao* L.) using glycerol as plasticizer. IOP Conference Series: Materials Science and Engineering, 309(1).

<https://doi.org/10.1088/1757-899X/309/1/012100>.

Menapace, C., Leonardi, M., Matějka, V., Gialanella, S., & Straffelini, G. (2018). Dry sliding behavior and friction layer formation in copper-free barite containing friction materials. *Wear*, 398–399, 191–200.

<https://doi.org/10.1016/j.wear.2017.12.008>

Nao, O. (2021). Rekayasa Pembuatan Kampas Rem Non-Asbestos.



- Naresh Kumar, K., & Suman, K. N. S. (2017). Review of brake friction materials for future development. In *Journal of Mechanical and Mechanics Engineering* (Vol. 3, Issue 2).
- Nasidi, I. N., Ismail, L. H., & Samsudin, E. M. (2021). Effect of sodium hydroxide (NAOH) treatment on coconut coir fibre and its effectiveness on enhancing sound absorption properties. *Pertanika Journal of Science and Technology*, 29(1), 693–706. <https://doi.org/10.47836/pjst.29.1.37>
- Nawangsari, P., (2021). Rekayasa Pembuatan Kampas Rem Non-Asbestos Organik (Nao). Universitas Gadjah Mada.
- Nawangsari, P., Jamasri, & Rochardjo, H. S. B. (2019). Effect of Phenolic Resin on Density, Porosity, Hardness, Thermal Stability, and Friction Performance as A Binder in Non-Asbestos Organic Brake Pad. *IOP Conference Series: Materials Science and Engineering*, 547(1). <https://doi.org/10.1088/1757-899X/547/1/012012>.
- Nawangsari, P., Jamasri, Heru, Rochardjo, S. B., Arif, & Waskito, T. (2020). Optimization of the Ternary Combinations of Rockwool-PAN-Cellulose Fibers for the best Fade-Recovery Performance in Nonasbestos Organic Brake Pad Composite.
- Neira, Maria. (2014). Chrysotile Asbestos. *World Healty Organizer*. http://www.who.int/ipcs/assessment/public_health/chemicals_phc
- NeoScope. (2019). Scientific / Metrology Instruments Benchtop Scanning Electron Microscope.
- Noh, H. J., & Jang, H. (2018). Friction instability induced by iron and iron oxides on friction material surface. *Wear*, 400–401, 93–99. <https://doi.org/10.1016/j.wear.2017.12.025>
- PANDUAN PRAKTIKUM MATERIAL TEKNIK. (2023).
- PerkinElmer (2015). A Beginner's Guide - Thermogravimetric Analysis (TGA).
- Praveenkumar, B., & Darius Gnanaraj, S. (2020). Case Studies on the Applications of Phenolic Resin-Based Composite Materials for Developing Eco-Friendly Brake Pads. *Journal of The Institution of Engineers (India) Part C*, 101(1), 1–6. <https://doi.org/10.1080/02564344.2020.1718100>



- Engineers (India): Series D, 101(2), 327–334.
<https://doi.org/10.1007/s40033-020-00231-4>
- Quamar, D., & Sarkar, C. (2024). Modelling of performance parameters of phenolic base resins Non-Asbestos Organic (NAO) friction material in brake pad using machine learning algorithms. *Tribology International*, 191. <https://doi.org/10.1016/j.triboint.2023.109188>
- Rajan, B. S., Balaji, M. A. S., Sathickbasha, K., & Hariharasakthisudan, P. (2018). Influence of binder on thermomechanical and tribological performance in brake pad. *Tribology in Industry*, 40(4), 654–669.
<https://doi.org/10.24874/ti.2018.40.04.12>.
- Rajeshkumar, G., Hariharan, V., & Scalici, T. (2016). Effect of NaOH Treatment on Properties of Phoenix Sp. Fiber. *Journal of Natural Fibers*, 13(6), 702–713. <https://doi.org/10.1080/15440478.2015.1130005>.
- Raju, J. S. N., Depoures, M. V., & Kumaran, P. (2021). Comprehensive characterization of raw and alkali (NaOH) treated natural fibers from Symphirema involucratum stem. *International Journal of Biological Macromolecules*, 186, 886–896.
<https://doi.org/10.1016/j.ijbiomac.2021.07.061>.
- Ranasinghe, R. A. S. N., Maduwanthi, S. D. T., & Marapana, R. A. U. J. (2019). Nutritional and Health Benefits of Jackfruit (*Artocarpus heterophyllus Lam.*): A Review. In *International Journal of Food Science* (Vol. 2019). Hindawi Limited. <https://doi.org/10.1155/2019/4327183>
- Rao, S. S. . (2009). Engineering optimization : theory and practice. John Wiley & Sons.
- Robert, Y. (2000). History, Nature, And Products Of Wood.
- Rokbi, M., Osmani, H., Imad, A., & Benseddiq, N. (2011). Effect of chemical treatment on flexure properties of natural fiber-reinforced polyester composite. *Procedia Engineering*, 10, 2092–2097.
<https://doi.org/10.1016/j.proeng.2011.04.346>
- Rubiyah, M. H., Melethil, K., Varghese, S., Kurian, M., Babu, S., Jojo, L., & Thomas, B. (2023). Isolation and characterization of cellulose nanofibrils



- from agro-biomass of Jackfruit (*Artocarpus heterophyllus*) rind, using a soft and benign acid hydrolysis. Carbohydrate Polymer Technologies and Applications, 6. <https://doi.org/10.1016/j.carpta.2023.100374>
- Saha, S., Sarker, M., Redwan Haque, A., Ahmed Nayeem, T., & Rashed Maukeeb, A. (2022). Asian Journal of Advances in Research A REVIEW ON TROPICAL FRUIT: JACKFRUIT (*Artocarpus heterophyllus*).
Saindane, U. v., Soni, S., & Menghani, J. v. (2020). Recent research status on modern friction materials-an Overview. IOP Conference Series: Materials Science and Engineering, 810(1). <https://doi.org/10.1088/1757-899X/810/1/012067>
- Shah, I., Jing, L., Fei, Z. M., Yuan, Y. S., Farooq, M. U., & Kanjana, N. (2022). A Review on Chemical Modification by using Sodium Hydroxide (NaOH) to Investigate the Mechanical Properties of Sisal, Coir and Hemp Fiber Reinforced Concrete Composites. In Journal of Natural Fibers (Vol. 19, Issue 13, pp. 5133–5151). Taylor and Francis Ltd.
<https://doi.org/10.1080/15440478.2021.1875359>.
- Sheltami, R. M., Abdullah, I., Ahmad, I., Dufresne, A., & Kargarzadeh, H. (2012). Extraction of cellulose nanocrystals from mengkuang leaves (*Pandanus tectorius*). Carbohydrate Polymers, 88(2), 772–779.
<https://doi.org/10.1016/j.carbpol.2012.01.062>
- Singaravelu, D. L., Vijay, R., & Filip, P. (2019). Influence of various cashew friction dusts on the fade and recovery characteristics of non-asbestos copper free brake friction composites. Wear, 426–427, 1129–1141.
<https://doi.org/10.1016/j.wear.2018.12.036>
- Society for Testing, A. (1970). ASTM E11: Standard Specification for Wire Cloth and Sieves for Testing Purposes.
- Stephen, B. S., & Jayakumari, L. S. (2016). Effect of rockwool and steel fiber on the friction performance of brake lining materials. Revista Materia, 21(3), 656–665. <https://doi.org/10.1590/S1517-707620160003.0063>.
- Sugözü, B., & Dağhan, B. (2016). Effect of BaSO₄ on Tribological Properties of Brake Friction Materials.



Sunardi, Fawaid, M., Lusiani, R., Aji Kesworo, S. B., & Widodo, T. D. (2019).

The Effect of Wood Sawdust Mesh Combination on Mechanical Behaviour of Particle Board. IOP Conference Series: Materials Science and Engineering, 494(1). <https://doi.org/10.1088/1757-899X/494/1/012089>

Sunaryono, H. 1992. Budidaya dan Bioteknologi Nangka. Prosiding Seminar Nasional Penelitian dan Pengembangan Jenis-Jenis Pohon Serbaguna. Badan Penelitian dan Pengembangan Kehutanan Kerjasama dengan Winrock Inter-national, Bogor.

Sunny, P. P. (2017). Wood Property Variation In Jack Trees (Artocarpus Heterophyllus Lam.) Grown In Thrissur District, Kerala Doctor Of Philosophy In Forestry.

Surojo, E., Malau, V., & Ilman, M. N. (2014). Effects Of Phenolic Resin And Fly Ash On Coefficient Of Friction Of Brake Shoe Composite. 9(11). www.arpnjournals.com

Talib, R. J., Hisyam Basri, M., Ismail, N. I., Fakulti, R. R., Meknikal, K., & Selamat, M. A. (2017). Influence of Iron Oxide Powders on Braking Performance of Brake Friction Materials. Journal of Mechanical Engineering, 4(1), 129–142.

Thiyagarajan, V., Kalaichelvan, K., Vijay, R., & Lenin Singaravelu, D. (2016). Influence of thermal conductivity and thermal stability on the fade and recovery characteristics of non-asbestos semi-metallic disc brake pad. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 38(4), 1207–1219. <https://doi.org/10.1007/s40430-015-0448-8>.

Tomášek, V., Kratošová, G., Yun, R., Fan, Y., & Lu, Y. (2009). Effects of alumina in nonmetallic brake friction materials on friction performance. Journal of Materials Science, 44(1), 266–273. <https://doi.org/10.1007/s10853-008-3041-z>

Trilokesh, C., & Uppuluri, K. B. (2019). Isolation and characterization of cellulose nanocrystals from jackfruit peel. Scientific Reports, 9(1). <https://doi.org/10.1038/s41598-019-53412-x>.



Valery V., Vasiliev & Evgeny I. Morozov. (2001). Mechanics and Analysis of Composite Materials.

Wang, X., Chang, L., Shi, X., & Wang, L. (2019). Effect of hot-alkali treatment on the structure composition of jute fabrics and mechanical properties of laminated composites. *Materials*, 12(9).

<https://doi.org/10.3390/ma12091386>.

Williams, S. C. (2020). Industrial Specialties Mfg. and IS MED Specialties ISM MESH and MICRON SIZES.

Wiriya-Amornchai, A., Patanathabutr, P., & Hongsriphan, N. (2012). Thermal Stability Of Natural Dyed Wood Fibers For Using In Wood-Filled Biocomposites. In Pure and Applied.

Woo, S. H., Jang, H., Na, M. Y., Chang, H. J., & Lee, S. (2022). Characterization of brake particles emitted from non-asbestos organic and low-metallic brake pads under normal and harsh braking conditions. *Atmospheric Environment*, 278. <https://doi.org/10.1016/j.atmosenv.2022.119089>

Yashwhanth, S., Mithun Mohan, M., Anandhan, R., & Selvaraj, S. K. (2021). Present knowledge and perspective on the role of natural fibers in the brake pad material. *Materials Today: Proceedings*, 46, 7329–7337. <https://doi.org/10.1016/j.matpr.2020.12.995>

Yu, K., Shang, X., Zhao, X., Fu, L., Zuo, X., & Yang, H. (2024). Fiber-reinforced friction materials: Experimental, statistical and computational universal analysis. *Composite Structures*, 338.

<https://doi.org/10.1016/j.compstruct.2024.118122>

Yudha, V., Rochardjo, H. S. B., Jamasri, J., Widyorini, R., Yudhanto, F., & Darmanto, S. (2018). Isolation of cellulose from salacca midrib fibers by chemical treatments. *IOP Conference Series: Materials Science and Engineering*, 434(1). <https://doi.org/10.1088/1757-899X/434/1/012078>

Yudhanto, F. (2021). Komposit Polimer-Nanoselulosa Dari Serat Agave Cantala Dengan Ekstraksi Kimia Dan Proses Mekanis.

<https://etd.repository.ugm.ac.id/penelitian/detail/197446>



Yudhanto, Ferriawan. (2021). Komposit Polimer-Nanoselulosa Dari Serat Agave Cantala Dengan Ekstraksi Kimia Dan Proses Mekanis Disertasi. Teknik Mesin, Departemen Teknik Mesin Dan Industri Fakultas Teknik, Universitas Gadjah Mada Yogyakarta.

Yue, Y. (2007). A comparative study of cellulose I and II and fibers and A comparative study of cellulose I and II and fibers and nanocrystals nanocrystals A Comparative Study Of Cellulose I And Ii Fibers And Nanocrystals.