

DAFTAR PUSTAKA

- Alzaydien, A. S. 2016. Physical, chemical and adsorptive characteristics of local oak sawdust based activated carbons. *Asian Journal of Scientific Research*, 9(2), 45-56.
- Amer, M., & Elwardany, A. 2020. Biomass carbonization. In *Renewable energy-resources, challenges and applications*. IntechOpen
- Ardiansyah, I., Putra, A. Y., & Sari, Y. 2022. Analisis Nilai Kalor Berbagai Jenis Briket Biomassa Secara Kalormeter. *Journal of Research and Education Chemistry*, 4(2), 120-120.
- Arumugam, A., Malolan, V. V., & Ponnusami, V. 2021. Contemporary pretreatment strategies for bioethanol production from corncobs: a comprehensive review. *Waste and Biomass Valorization*, 12, 577-612.
- Anukam, A. I., Goso, B. P., Okoh, O. O., & Mamphweli, S. N. 2017. Studies on characterization of corn cob for application in a gasification process for energy production. *Journal of Chemistry*, 2017
- Arsyad, F. S., & Johan, A. 2019. Temperature carbonization effect on the quality of activated carbon based on rubber seed shell. In *Journal of Physics: Conference Series* (Vol. 1282, No. 1, p. 012043). IOP Publishing.
- ASTM D 1542-02.2003. *Standart Test Methods for Proximate Analysis of the Analysis Sample of Coal and Coke by Instrumental Procedures*. ASTM Internasional, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States.
- Basu, P. 2018. *Biomass gasification, pyrolysis and torrefaction: praktikal design and theory*. Academic press.
- Benedetti, V., Patuzzi, F., & Baratieri, M. 2018. Characterization of char from biomass gasification and its similarities with activated carbon in adsorption applications. *Applied Energy*, 227, 92-99.
- Badan Pusat Statistik. 2021. www.bps.go.id. diakses pada 21 Maret 2023.
- Choi, J. Y., Nam, J., Yun, B. Y., Kim, Y. U., & Kim, S. 2022. Utilization of corn cob, an essential agricultural residue difficult to disposal: Composite board manufactured improved thermal performance using microencapsulated PCM. *Industrial Crops and Products*, 183, 114931.
- Cheng, R., Liao, X., Addou, A. M., Qian, J., Wang, S., Cheng, Z., ... & Huang, J. 2021. Effects of “nine steaming nine sun-drying” on proximate composition, oil properties and volatile compounds of black sesame seeds. *Food Chemistry*, 344, 128577.
- Escamilla-García, M., García-García, M. C., Gracida, J., Hernández-Hernández, H. M., Granados-Arvizu, J. Á., Di Pierro, P., & Regalado-González, C. 2022.

Properties and Biodegradability of Films Based on Cellulose and Cellulose Nanocrystals from Corn Cob in Mixture with Chitosan. *International Journal of Molecular Sciences*, 23(18), 10560.

Damayanti, D., Wulandari, Y.R., Wu, H.-S. 2020. *Product Distribution of Chemical Product Using Catalytic Depolymerization of Lignin*. *Bulletin of Chemical Reaction Engineering & Catalysis*, 15(2), 432-453 (doi:10.9767/bcrec.15.2.7249.432-453)

Figueiredo, Mouljin, editors. Carbon and Coal Gasification. Dordrecht: Martinus Nijhoff Publishers; 1986

Gangil, S., & Bhargav, V. K. 2019. Influences of binderless briquetting stresses on intrinsic bioconstituents of rice straw based solid biofuel. *Renewable energy*, 133, 462-469.

Hasan, E. S., Jahiding, M., Ilmawati, W. O. S., Wati, W., & Sudiana, I. N. 2017. Proximate and the calorific value analysis of brown coal for high-kalore hybrid briquette application. In *Journal of Physics: Conference Series* (Vol. 846, No. 1, p. 012022). IOP Publishing.

Hornung, A. 2013. Intermediate pyrolysis of biomass. In *Biomass combustion science, technology and engineering* (pp. 172-186). Woodhead Publishing.

Imeh E.O., Ibrahim A.M., Alewo O.A., Stanley I.R. and Opeoluwa O.F., 2017. Production and characterization of biomass briquettes from tannery solid waste. *Recycling* 2(17): 1-19.

Ibitoye, S. E., Mahamood, R. M., Jen, T. C., & Akinlabi, E. T. 2022. Combustion, Physikal, and Mechanical Characterization of Composites Fuel Briquettes from Carbonized Banana Stalk and Corncob. *International Journal of Renewable Energy Development*, 11(2)

IRENA. Wind Energy. Retrieved from International Renewable Energy Agency 2019. Tersedia online: <https://www.irena.org/wind>. diakses pada 7 April 2023.

International Energy Agency. 2019

Jameel, H., & Keshwani, D. R. 2017. Thermochemical conversion of biomass to power and fuels. In *Biomass to renewable energy processes* (pp. 375-421). CRC Press.

Zainuddin, M. F., Kpallo, S.Y., Abd Manaf, L., & Roslan, A. M. 2021. Evaluation of hybrid briquettes from corncob and oil palm trunk bark in a domestic cooking application for rural communities in Nigeria. *Journal of Cleaner Production*, 284, 124745.

Kluska, J., Ochnio, M., & Kardaś, D. 2020. Carbonization of corncobs for the preparation of barbecue charcoal and combustion characteristics of corncob char. *Waste Management*, 105, 560-565.

Kpallo, S. Y., Zainuddin, M. F., Manaf, L. A., & Roslan, A. M. 2020. Production and characterization of hybrid briquettes from corncobs and oil palm trunk

- bark under a low pressure densification technique. *Sustainability*, 12(6), 2468.
- Lukmuang, R., Dasaard, C., Chantawong, P. dan Ngamrungruj, D. 2019. Material Ratio Analysis of Charcoal Briquettes from *Dendrocalamus Asper Backer* Bamboo. *IOP Conference Series: Materials Science and Engineering* 526(1).
- Lestari, L., Hasan, E. S., & Variani, V. I. 2014. Optimization of Particle Size, Composition and Pressure in Charcoal Briquette Sago Stem Alloy. *Jurnal Aplikasi Fisika*, 10(1), 27-30.
- Lichty P. Rapid high temperature solar thermal biomass gasification in a prototype cavityreactor. *Journal of Solar Energy Engineering*. 2010;132:11-1
- López-Cano, I., Cayuela, M. L., Mondini, C., Takaya, C. A., Ross, A. B., & Sánchez-Monedero, M. A. 2018. Suitability of different agricultural and urban organic wastes as feedstocks for the production of biochar—Part 1: Physicochemical characterisation. *Sustainability*, 10(7), 2265.
- Mahapatra, D. 2016. A review on steam coal analysis-kalorific value. *American International Journal of Research in Science, Technology, Engineering & Mathematics*, 14(1), 57-68.
- Manić, N. G., Janković, B. Ž., Stojiljković, D. D., Jovanović, V. V., & Rad M. B. 2019. TGA-DSC-MS analysis of pyrolysis process of agricultural residues. *Thermal Science*, 23(Suppl. 5), 1457-1472.
- Marreiro, H. M., Peruchi, R. S., Lopes, R. M., Andersen, S. L., Eliziário, S. A., & Rotella Junior, P. (). Empirical studies on biomass briquette production: A literature review. *Energies*, 14(24), 8320.
- Merdun, H., & Laougé, Z. B. 2021. Kinetic and thermodynamic analyses during co-pyrolysis of greenhouse wastes and coal by TGA. *Renewable Energy*, 163, 453-464.
- Mohtasham, J. 2015. Renewable energies. *Energy Procedia*, 74, 1289-1297.
- National Coal Council, 2015. Coal: Past, Present and Future, 5pp. <http://www.nationalcoalcouncil.org>.
- Suárez-Ruiz, I., Diez, M. A., & Rubiera, F. 2019. Coal. In *New Trends in Coal Conversion* (pp.1-30). Woodhead Publishing.
- Lichty P. Rapid high temperature solar thermal biomass gasification in a prototype cavityreactor. *Journal of Solar Energy Engineering*. 2010;132:11-1
- Park, S. H., Jang, J. H., Qi, Y., Hidayat, W., Hwang, W. J., Febrianto, F., and Kim, N. H. 2018. Anatomical and Physical Properties of Indonesian Bamboo Carbonized at Different Temperatures. *Journal of the Korean Wood Science and Technology* 46(6): 9–18.
- Nwabue, F. I., Unah, U., & Itumoh, E. J. 2017. Production and characterization of smokeless bio-coal briquettes incorporating plastic waste materials. *Environmental Technology & Innovation*, 8, 233-245.

- Patel, M., Zhang, X., & Kumar, A. 2016. Techno-economic and life cycle assessment on lignocellulosic biomass thermochemical conversion technologies: A review. *Renewable and Sustainable Energy Reviews*, 53, 1486-1499.
- Purwanto, H., Zakiyuddin, A. M., Rozhan, A. N., Mohamad, A. S., & Salleh, H. M. 2018. Effect of charcoal derived from oil palm empty fruit bunch on the sinter characteristics of low grade iron ore. *Journal of Cleaner Production*, 172, 954-959.
- Pariyar, P., Kumari, K., Jain, M. K., & Jadhao, P. S. 2020. Evaluation of char and biokarbon properties derived from different feedstock and pyrolysis temperature for environmental and agricultural application. *Science of the Total Environment*, 713, 136433.
- Qian, K., Kumar, A., Zhang, H., Bellmer, D., & Huhnke, R. 2015. Recent advances in utilization of biochar. *Renewable and Sustainable Energy Reviews*, 42, 1055-1064.
- Rahmawati, S., Sakung, J., Fudholi, A., & Sushmita, L. 2020. The utilization of corncob for the manufacture of charcoal briquette as an alternative fuel. In *Journal of Physics: Conference Series* (Vol. 1563, No. 1, p. 012022). IOP Publishing.
- Rencana Usaha Penyediaan Tenaga Listrik Nasional (RUPTL) 2019-2028 (Keputusan Menteri Energi dan Sumber Daya Mineral Nomor 39 K/20/MEM/2019)
- Rizwan, M., Ali, S., Qayyum, M. F., Ibrahim, M., Zia-ur-Rehman, M., Abbas, T., & Ok, Y. S. (2016). Mechanisms of biochar-mediated alleviation of toxicity of trace elements in plants: a critical review. *Environmental Science and Pollution Research*, 23, 2230-2248
- Saqib, N. U., Sharma, H. B., Baroutian, S., Dubey, B., & Sarmah, A. K. 2019. Valorisation of food waste via hydrothermal carbonisation and techno-economic feasibility assessment. *Science of the Total Environment*, 690, 261-276.
- Shrivastava P., Kumar A., Tekasakul P., Lam, S.S., Palamanit A., 2021. *Comparative Investigation of Char and Quality of Bio-Oil and Biokarbon from Pyrolysis of Woody and NonWoody Biomasses*. *Energies* 2021, 14, 1092. <https://doi.org/10.3390/en14041092>
- Standar Nasional Indonesia. 2000. SNI Briket Karbon Kayu SNI 01-62352000. Badan Standarisasi Nasional – BSN. (online). www.bsn.go.id (Diakses pada 20 Maret 2023).
- Sihombing, H. V., Setyawan, E. Y., & Ambarita, H. 2020. Comparison of the calorific value of corn cobs, areca nut fiber and paper waste as alternative fuel. *Conference Proceedings* (Vol. 2221, No. 1, p. 070001). AIP Publishing.
- Speight, J. G. 2017. Industrial organic chemistry. *Environmental Organic Chemistry for Engineers*, 87-151.

- Stach, E., Mackowsky, M.-T., Teichmüller, M., Taylor, G.H., Chandra, D., Teichmüller, R. (Eds.), 1982. Coal Petrology. Gebrüder Borntraeger, Berlin - Stuttgart, 535pp.
- Sunardi, S., Djuanda, D., & Mandra, M. A. S. 2019. Characteristics of charcoal briquettes from agricultural waste with compaction pressure and particle size variation as alternative fuel. *International Energy Journal*, 19(3), 139-148.
- Sugiarto, E., Putera, A. D. P., & Petrus, H. T. B. M. 2017. Kinetic study of nickel laterite reduction roasting by palm kernel shell charcoal. In *IOP Conference Series: Earth and Environmental Science* (Vol. 65, No. 1, p. 012027). IOP Publishing.
- Sulistyah, S., & Sari, I. P. 2021. Effect of temperature and time of carbonization on coal-based activated carbon adsorption. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1098, No. 6, p. 062020). IOP Publishing.
- Takada, M., Niu, R., Minami, E., Saka, S., 2018. Characterization of three tissue fractions in corn (*Zea mays*) cob. *Biomass Bioenergy* 115, 130–135. <https://doi.org/10.1016/j.biombioe.2018.04.023>
- Varma, A. K., & Mondal, P. 2017. Pyrolysis of sugarcane bagasse in semi batch reactor: Effects of process parameters on product chars and characterization of products. *Industrial Crops and Products*, 95, 704-717
- Wojcieszak, D., Przybył, J., Czajkowski, Ł., Majka, J., & Pawłowski, A. 2022. Effects of harvest maturity on the chemical and energetic properties of stover biomass combustion. *Materials*, 15(8), 2831.
- Wang, J., & Wang, S. 2019. Preparation, modification and environmental application of biochar: A review. *Journal of Cleaner Production*, 227, 1022.
- Yu, J., Guo, Q., Ding, L., Gong, Y., & Yu, G. 2020. Studying effects of structure evolution on gasification reactivity of coal carbons by in-situ Raman spectroscopy. *Fuel*, 270, 117603.
- Yacob TW et al. Pyrolysis of human feces: Gas char analysis and kinetic model WasteManagement. 2018;79:214-222
- Yao, H., He, B., Ding, G., Tong, W., & Kuang, Y. 2019. Thermogravimetric analyses of oxy-fuel co-combustion of semi-coke and bituminous coal. *Applied Thermal Engineering*, 156, 708-721.
- Zheng, Q., Zhang, Y., Montazerian, M., Gulbitten, O., Mauro, J. C., Zanotto & Yue, Y. 2019. Understanding glass through differential scanning calorimetry. *Chemical reviews*, 119(13), 7848-7939.
- Zhang, G., Sun, Y., & Xu, Y. 2018. Review of briquette binders and briquetting mechanism. *Renewable and Sustainable Energy Reviews*, 82, 477-487.
- Ziaee, M., & Crane, N. B. 2019. Binder jetting: A review of process, materials, and methods. *Additive Manufacturing*, 28, 781-80