

DAFTAR PUSTAKA

- Ahn, K., Zaccaron, S., Zwirchmayr, N.S., Hettegger, H., Hofinger, A., Bacher, M., Henniges, U., Hosoya, T., Potthast, A. & Rosenau, T. (2019) Yellowing and Brightness Reversion of Celluloses: CO or COOH, Who is the Culprit? *Cellulose*. 26 (1), 429–444. doi:10.1007/s10570-018-2200-x.
- Albornoz-Palma, G., Ching, D., Valerio, O., Mendonça, R.T. & Pereira, M. (2020) Effect of Lignin and Hemicellulose on the Properties of Lignocellulose Nanofibril Suspensions. *Cellulose*. 27 (18), 10631–10647. doi:10.1007/s10570-020-03304-5.
- Badan Pusat Statistik (2021) *Import-Ekspor Pulp Tahun 2017 sampai 2021 di Indonesia*. 2021.
- Bajwa, D.S., Pourhashem, G., Ullah, A.H. & Bajwa, S.G. (2019) A Concise Review of Current Lignin Production, Applications, Products and Their Environment Impact. *Industrial Crops and Products*. 139. doi:10.1016/j.indcrop.2019.111526.
- Balkissoon, S., Andrew, J. & Sithole, B. (2022) Dissolving Wood Pulp Production: A Review. *Biomass Conversion and Biorefinery*. doi:10.1007/s13399-022-02442-z.
- Biantoro, R., Septiningrum, K. & Kardiansyah, T. (2020) Dissolving Pulp dari Kayu dan Nonkayu: Tinjauan Proses Pembuatan dan Karakteristiknya. *Jurnal Selulosa*. 10 (01), 35. doi:10.25269/jsel.v10i01.294.
- Boeva, R. & Radeva, G. (2016) Effect of bleaching procedure type on the aging resistance of chemical-mechanical pulp. *Greta Radeva Journal of Chemical Technology and Metallurgy*. 51, 257–262.
- Boeva, R., Radeva, G., Hinkov, P. & Hinkov, E. (2012) Thermal Ageing of Different Kinds of Fiber Materials: A Kinetic Study. *Journal of the University of Chemical Technology and Metallurgy*. 47 (1), 37–42.
- Buchanan, C.M., Buchanan, N.L., Debenham, J.S., Gatenholm, P., Jacobsson, M., Shelton, M.C., Watterson, T.L. & Wood, M.D. (2003) Preparation and Characterization of Arabinoxylan Esters and Arabinoxylan Ester/Cellulose Ester Polymer Blends. *Carbohydrate Polymers*. 52 (4), 345–357. doi:10.1016/S0144-8617(02)00290-4.
- Budischowsky, D., Zwirchmayr, N.S., Hosoya, T., Bacher, M., Hettegger, H., Potthast, A. & Rosenau, T. (2021) Degradation of Cellulosic Key Chromophores by Ozone: A Mechanistic and Kinetic Study. *Cellulose*. 28 (10), 6051–6071. doi:10.1007/s10570-021-03909-4.
- Cadena, E.M., Vidal, T. & Torres, A.L. (2010) Influence of the hexenuronic acid content on refining and ageing in eucalyptus TCF pulp. *Bioresource Technology*. 101 (10), 3554–3560. doi:10.1016/j.biortech.2009.11.105.
- Chen, C., Duan, C., Li, J., Liu, Y., Ma, X., Zheng, L., Stavik, J. & Ni, Y. (2016) Cellulose (Dissolving Pulp) Manufacturing Processes and Properties: A Mini-Review. *BioResources*. 11 (2).
- Fardim, P. (2011) *Chemical Pulping Part 1, Fibre Chemistry and Technology*. Second Edition. Espoo, Finland, Paper Engineers' Association / Paperi ja Puu Oy.

- Fiserová, M. & Gigac, J. (2011) Comparison of Hardwood Kraft Pulp Fibre Characteristics and Tensile Strength. *CELLULOSE CHEMISTRY AND TECHNOLOGY Cellulose Chem. Technol.* 45 (9), 627–631.
- Fundador, N.G. V., Enomoto-Rogers, Y., Takemura, A. & Iwata, T. (2012) Acetylation and Characterization of Xylan from Hardwood Kraft Pulp. *Carbohydrate Polymers.* 87 (1), 170–176. doi:10.1016/j.carbpol.2011.07.034.
- Glasser, W.G., Kaar, W.E., Jain, R.K. & Sealey, J.E. (2000) Isolation Options for Non-cellulosic Heteropolysaccharides (HetPS). *Cellulose.* 7, 299–317.
- Gooch, J.W. (2011) *Encyclopedic Dictionary of Polymers.* Springer New York. doi:10.1007/978-1-4419-6247-8.
- Granstrom, A., Eriksson, T. & Gellerstedt, G. (2001) Variables Affecting the Thermal Yellowing of TCF-bleached Birch Kraft Pulps. *Nordic Pulp and Paper Research Journal* . 16 (1), 18–23.
- Hettegger, H., Amer, H., Zwirchmayr, N.S., Bacher, M., Hosoya, T., Potthast, A. & Rosenau, T. (2019) Pitfalls in the chemistry of cellulosic key chromophores. *Cellulose.* 26 (1) pp.185–204. doi:10.1007/s10570-018-2131-6.
- Hosoya, T., Bacher, M., Potthast, A., Elder, T. & Rosenau, T. (2018) Insights into degradation pathways of oxidized anhydro-glucose units in cellulose by β -alkoxy-elimination: A combined theoretical and experimental approach. *Cellulose.* 25 (7), 3797–3814. doi:10.1007/s10570-018-1835-y.
- Huber, P., Burnet, A. & Petit-Conil, M. (2014) Scale Deposits in Kraft Pulp Bleach Plants with Reduced Water Consumption: A Review. *Journal of Environmental Management.* 141, 36–50. doi:10.1016/j.jenvman.2014.01.053.
- Kaushik, N., Agrawal, A. & Biswas, S. (2014) Derivatives and Applications of Lignin – An Insight. *THE SCITECH JOURNAL.* 01. <https://www.researchgate.net/publication/281052604>.
- Kemenperin (2021) *Mungkinkah Peran Industri Bersandar pada Industri Pulp dan Paper? Buku Analisis Pembangunan Industri Edisi IV - 2021.*
- Korntner, P., Hosoya, T., Dietz, T., Eibinger, K., Reiter, H., Spitzbart, M., Röder, T., Borgards, A., Kreiner, W., Mahler, A.K., Winter, H., Groiss, Y., French, A.D., Henniges, U., Potthast, A. & Rosenau, T. (2015) Chromophores in Lignin-Free Cellulosic Materials Belong to Three Compound Classes. Chromophores in Cellulosics, XII. *Cellulose.* 22 (2), 1053–1062. doi:10.1007/s10570-015-0566-6.
- Li, Q., He, Z., Krishnan, S., Lussier, C., Woloveck, M., Gao, Y., Sarwar Jahan, M. & Ni, Y. (2014) The Effect of Pulp Pad Dryness in Determining Brightness using Non-Standard Fast Drying Methods. *Bioresources.* 9 (1), 828–835.
- Loureiro, P.E.G., Cadete, S.M.S., Tokin, R., Evtuguin, D. V., Lund, H. & Johansen, K.S. (2021) Enzymatic Fibre Modification During Production of Dissolving Wood Pulp for Regenerated Cellulosic Materials. *Frontiers in Plant Science.* 12. doi:10.3389/fpls.2021.717776.
- Luo, H. & Abu-Omar, M.M. (2017) Chemicals From Lignin. *Encyclopedia of Sustainable Technologies.* 573–585. doi:10.1016/B978-0-12-409548-9.10235-0.

- Małachowska, E., Dubowik, M., Lipkiewicz, A., Przybysz, K. & Przybysz, P. (2020) Analysis of Cellulose Pulp Characteristics and Processing Parameters for Efficient Paper Production. *Sustainability (Switzerland)*. 12 (17). doi:10.3390/su12177219.
- Mandlekar, N., Cayla, A., Rault, F., Giraud, S., Salaün, F., Malucelli, G. & Guan, J.-P. (2018) An Overview on the Use of Lignin and Its Derivatives in Fire Retardant Polymer Systems. In: *Lignin - Trends and Applications*. InTech. p. doi:10.5772/intechopen.72963.
- Nogi, M., Iwamoto, S., Nakagaito, A.N. & Yano, H. (2009) Optically Transparent Nanofiber Paper. *Advanced Materials*. 21 (16), 1595–1598. doi:10.1002/adma.200803174.
- Pérez, J., Muñoz-Dorado, J., De La Rubia, T. & Martínez, J. (2002) Biodegradation and Biological Treatments of Cellulose, Hemicellulose and Lignin: An Overview. *International Microbiology*. 5 (2), 53–63. doi:10.1007/s10123-002-0062-3.
- Pérez, S. & Samain, D. (2010) Structure and Engineering of Celluloses. In: *Advances in Carbohydrate Chemistry and Biochemistry*. Academic Press Inc. pp. 25–116. doi:10.1016/S0065-2318(10)64003-6.
- Potgieter, M.S. (2018) *Improving Dissolving Wood Pulp Quality Using Brown-stock Fractionation*. Durban, South Africa, Durban University of Technology. doi:10.51415/10321/3166.
- Potthast, A., Ahn, K., Becker, M., Eichinger, T., Kostic, M., Böhmendorfer, S., Jeong, M.J. & Rosenau, T. (2022) Acetylation of Cellulose – Another Pathway of Natural Cellulose Aging During Library Storage of Books and Papers. *Carbohydrate Polymers*. 287. doi:10.1016/j.carbpol.2022.119323.
- Quintana, E., Valls, C., Vidal, T. & Blanca Roncero, M. (2013) An Enzyme-catalysed Bleaching Treatment to Meet Dissolving Pulp Characteristics for Cellulose Derivatives Applications. *Bioresource Technology*. 148, 1–8. doi:10.1016/j.biortech.2013.08.104.
- Ragauskas, A.J., Beckham, G.T., Biddy, M.J., Chandra, R., Chen, F., Davis, M.F., Davison, B.H., Dixon, R.A., Gilna, P., Keller, M., Langan, P., Naskar, A.K., Saddler, J.N., Tschaplinski, T.J., Tuskan, G.A. & Wyman, C.E. (2014) Lignin Valorization: Improving Lignin Processing in the Biorefinery. *Science*. 344 (6185). doi:10.1126/science.1246843.
- Rosenau, T., Potthast, A., Krainz, K., Yoneda, Y., Dietz, T., Shields, Z.P.-I. & French, A.D. (2011) Chromophores in Cellulosics, VI. First Isolation and Identification of Residual Chromophores from Aged Cotton Linters. *Cellulose*. 18 (6), 1623–1633. doi:10.1007/s10570-011-9585-0.
- Rosenau, T., Potthast, A., Zwirchmayr, N.S., Hosoya, T., Hettegger, H., Bacher, M., Krainz, K., Yoneda, Y. & Dietz, T. (2017) Chromophores from hexeneuronic acids (HexA): Synthesis of Model Compounds and Primary Degradation Intermediates. *Cellulose*. 24 (9), 3703–3723. doi:10.1007/s10570-017-1396-5.
- Silva, V.L., Lino, A.G., Ribeiro, R.A., Colodette, J.L., Forsström, A. & Wackerberg, E. (2011) Factors Affecting Brightness Reversion of Hardwood Kraft Pulps. *BioResources*. 6 (4), 4801–4814.
- Sousa, A.M., Pinto, I.S.S., Machado, L., Gando-Ferreira, L. & Quina, M.J. (2023) Sustainability of Kraft Pulp Mills: Bleaching Technologies and Sequences with



- Reduced Water Use. *Journal of Industrial and Engineering Chemistry*. 125, 58–70. doi:10.1016/j.jiec.2023.05.033.
- Uraki, Y. & Koda, K. (2015) Utilization of Wood Cell Wall Components. *Journal of Wood Science*. 61 (5), 447–454. doi:10.1007/s10086-015-1492-9.
- Vaysi, R. & Ebadi, S.E. (2021a) Thermal yellowing of hornbeam chemi-mechanical pulps bleached with hydrogen peroxide and sodium dithionite. *BioResources*. 16 (4), 7635–7647.
- Vaysi, T. & Ebadi, S.E. (2021b) Thermal Yellowing of Hornbeam Chemimechanical Pulps Bleached with Hydrogen Peroxide and Sodium Dithionite. *BioResources*. 16 (4), 7635–7647.
- Wang, M., He, W., Wang, S. & Song, X. (2015) Carboxymethylated Glucomannan as Paper Strengthening Agent. *Carbohydrate Polymers*. 125, 334–339. doi:10.1016/j.carbpol.2015.02.060.
- Zou, X., Gurnagul, N., Uesaka, T. & Bouchard, J. (1994) Accelerated aging of papers of pure cellulose: mechanism of cellulose degradation and paper embrittlement. *Polymer Degradation and Stability*. 43 (3), 393–402. doi:10.1016/0141-3910(94)90011-6.
- Zou, X., Uesaka, T. & Gurnagul, N. (1996) Prediction of paper permanence by accelerated aging I. Kinetic analysis of the aging process. *Cellulose*. 3 (1), 243–267. doi:10.1007/bf02228805.