

DAFTAR PUSTAKA

- Ali, M. E.-S. (2013) "Natural Fiber Insulation Material and Method for Making The Same." United States Patent Application Publication.
- Ali, M. E. dan Zeitoun, O. M. (2012) "Discovering and Manufacturing a New Natural Insulating Material Extracted From a Plant Growing Up in Saudi Arabia," *Journal of Engineered Fibers and Fabrics*, 7(4), hal. 88–94. Tersedia pada: <http://www.jeffjournal.org>.
- ASHRAE Standard 55 (2010) "Thermal Environmental Conditions for Human Occupancy."
- ASTM D 1518 (2014) "Standard Test Method for Thermal Resistance of Batting Systems Using a Hotplate."
- ASTM D 1777 (1996) "Standard Test Method for Thickness of Textile Materials," hal. 1–5.
- ASTM D 3776 (2007) "Standard Test Methods for Mass per Unit Area (Weight) of Woven Fabric," hal. 1–5.
- ASTM D 5729 (1997) "Standard Test Method for Thickness of Nonwoven Fabrics," hal. 1–4.
- ASTM D 737 (2004) "Standard Test Method for Air Permeability of Textile Fabrics," hal. 2–6.
- Baker, H. (2018) *The Layering Systems*. Tersedia pada: <https://www.blacks.co.uk/blog/2016/09/the-layering-system-a16> (Diakses: 22 Januari 2020).
- Barker, R. L. dan Heniford, R. C. (2011) "Factors affecting the thermal insulation and abrasion resistance of heat resistant hydro-entangled nonwoven batting materials for use in firefighter turnout suit thermal liner systems," *Journal of Engineered Fibers and Fabrics*, 6(1), hal. 1–10. doi: 10.1177/155892501100600101.
- Bauer, E. (2018) *Winter Wear Market: Jackets/Coats Expected to be the Dominating Product Type During the Forecast Period: Global Industry Analysis (2013 – 2017) & Opportunity*. Tersedia pada: <https://www.futuremarketinsights.com/reports/winter-wear-market> (Diakses: 22 Januari 2020).
- Beaudry, F. (2017) *Sustainable Insulation for Winter Clothes*. Tersedia pada: <https://www.thoughtco.com/sustainable-insulation-for-winter-clothes-4114611> (Diakses: 22 Januari 2020).
- Bergman, T. L., S.Lavine, Andrienne, Incropera, Frank P., Dewitt, David P. (2011) *Fundamentals of Heat and Mass Transfer*. Seventh Ed. John Wiley & Sons, Inc.
- Bernstien, J. (2016) *How a Quebec company used a weed to create a one-of-a-kind winter coat Canadians warm , help monarch butterflies*. Tersedia pada: <https://www.cbc.ca/news/canada/montreal/quebec-milkweed-winter->

- coat-1.3804138 (Diakses: 22 Januari 2020).
- BPPI Kementerian Perindustrian (2019) "Prioritas Riset Nasional 2020-2024.pdf."
- BS EN-342:2004 (2008) "Protective clothing — Ensembles and Garments for Protection Against Cold," *Management*, hal. 1–19.
- Cengel, Y. A. (2015) *Heat and Mass Transfer*. Fifth Edit. Mc Graw Hill.
- Chapman, R. A. (ed.) (2010) *Applications of nonwovens in technical textiles*. Woodhead Publishing Limited.
- Crews, P. C., Sievert, Shiela A, Woepel, Lisa T., Mccullough, Elizabeth A. (1991) "Evaluation of Milkweed Floss as an Insulative Fill Material," *Textile Research Journal*, 61(4), hal. 203–210.
- Das, A. dan Alagirusamy, R. (2010) *Thermal transmission, Science in Clothing Comfort*. doi: 10.1533/9780857092830.79.
- Debnath, S. dan Madhusoothanan, M. (2010) "Thermal insulation, compression and air permeability of polyester needle-punched nonwoven," *Indian Journal of Fibre and Textile Research*, 35(1), hal. 38–44.
- Deopura, B. L., Alagirusamy, R., Joshi, M., Gupta, B. (2008) *Polyesters and polyamides*. Woodhead Publishing.
- Diffen (2020) *Nylon vs Polyester*. Tersedia pada: https://www.diffen.com/difference/Nylon_vs_Polyester (Diakses: 20 Juni 2020).
- Dilli Babu, G., Sivaji Babu, K. dan Nanda Kishore, P. (2014) "Tensile and wear behavior of calotropis gigantea fruit fiber reinforced polyester composites," *Procedia Engineering*, 97, hal. 531–535. doi: 10.1016/j.proeng.2014.12.279.
- Dolezal, I., Hes, L. dan Bal, K. (2019) "A non-destructive single plate method for measurement of thermal resistance of polymer sheets and fabrics," *International Journal of Occupational Safety and Ergonomics*. Taylor & Francis, 25(4), hal. 562–567. doi: 10.1080/10803548.2018.1477247.
- Elnagar, K., Abou Elmaaty, T. dan Raouf, S. (2014) "Dyeing of Polyester and Polyamide Synthetic Fabrics with Natural Dyes Using Ecofriendly Technique," *Journal of Textiles*, hal. 1–8. doi: 10.1155/2014/363079.
- English, M. J. M. (2001) "Physical principles of heat transfer," hal. 66–71. doi: 10.1054/cacc.2001.0331.
- Fuller, M. E. (2015) *The structure and properties of down feathers and their use in the outdoor industry*. The University of Leeds.
- Gao, J., yu, W. dan Pan, N. (2007) "Structures and Properties of the Goose Down as a Material for Thermal Insulation," *Textile Research Journal*, 77(8), hal. 617–626. doi: 10.1177/0040517507079408.
- Ghosh, A., Chakraverty, R. dan Sarkar, S. (2014) "Calotropis Gigantea Linn. - A Complete Busket Of Indian Traditional Medicine," *International Journal*

of Pharmacy Research Science, 7(2348–0882), hal. 1–17.

- Gnanauthayan, G., Rengasamy, R. S. dan Kothari, V. (2018) “Heat insulation characteristics of multi-layer nonwovens,” *Research Journal of Textile and Apparel*, 22(2), hal. 94–108. doi: 10.1108/RJTA-06-2017-0028.
- Gnanauthayan, G., Rengasamy, R. S. dan Kothari, V. K. (2017) “Heat insulation characteristics of high bulk nonwovens,” *Journal of the Textile Institute*. Taylor & Francis, 108(12), hal. 2173–2179. doi: 10.1080/00405000.2017.1316697.
- Guptaa, D. (2011) “Functional clothing- Definition and classification,” *Indian Journal of Fibre and Textile Research*, 36(4), hal. 312–326.
- Hardi, J. dan Diharnaini, D. (2014) “Penggunaan Protease dari Getah Biduri dalam Produksi Flavor Udang Windu (*Penaeus monodon*) [Utilization of Protease from Biduri Sap for Production Windu Shrimp Flavor (*Penaeus monodon*)],” *Online Journal of Natural Science*, 3(2), hal. 39–49.
- Hassanzadeh, S. dan Hasani, H. (2015) “A Review on Milkweed Fiber Properties as a High-Potential Raw Material in Textile Applications,” *Journal of Industrial Textiles*. doi: 10.1177/1528083715620398.
- Hauss, E. (2019) *The Natural Insulator of the Future : Asclepias Animal-friendly Insulation*. Tersedia pada: <http://altitude-blog.com/en/natural-insulator-future-asclepias/>.
- Holmer, I. (2005) “Textile for Protection Against Cold,” in Scott, R. A. (ed.) *Textile for protection*. Woodhead Publishing Limited, hal. 378–397.
- Hu, J. Y., Hes, Lubos, Li, Y., Yeung, K. W., Yao, B. G. (2006) “Fabric Touch Tester: Integrated evaluation of thermal-mechanical sensory properties of polymeric materials,” *Polymer Testing*, 25(8), hal. 1081–1090. doi: 10.1016/j.polymertesting.2006.07.008.
- Huang, J. (2006) “Sweating guarded hot plate test method,” 25, hal. 709–716. doi: 10.1016/j.polymertesting.2006.03.002.
- Incropera, F. P., Dewitt, David P., Bergman, T. L., S. Lavine, Andrienne (2011) *Intorduction to Heat Transfer*. Sixth, Society. Sixth. John.
- Islam, S. dan Bhat, G. (2019) “Environmentally-friendly thermal and acoustic insulation materials from recycled textiles,” *Journal of Environmental Management*. Elsevier, 251(July), hal. 109536. doi: 10.1016/j.jenvman.2019.109536.
- ISO 11092 (2014) “Textiles - Physiological effects - Measurement of thermal and water-vapour resistance under steady-state conditions (sweating guarded-hotplate test),” *ISO*.
- ISO 5085-1 (1989) “Textiles - Determination of Thermal Resistance, Part 1 : Low thermal resistance,” *ISO*.
- ISO 9920 (2007) “Ergonomics of the thermal environment — Estimation of thermal insulation and water vapour resistance of a clothing ensemble.”
- J. P. Holman (2010) “Heat Transfer (10th Edition),” *The McGraw-Hill*

Companies, hal. 28–29. doi: 10.1603/EN11245.

- Jhanji, Y., Gupta, D. dan Kothari, V. K. (2017) “Thermal and mass transport properties of polyester–cotton plated fabrics in relation to back layer fibre profiles and face layer yarn types,” *Journal of the Textile Institute*. Taylor & Francis, 109(5), hal. 669–676. doi: 10.1080/00405000.2017.1363948.
- Kaleeswaran, P. dan Kothari, V. K. (2017) “Thermal resistance of nonwoven waddings,” *Journal of the Textile Institute*. Taylor & Francis, 108(10), hal. 1657–1661. doi: 10.1080/00405000.2016.1275445.
- Karthik, T. (2014) *Studies on the spinnability of milkweed fibre blends and its influence on ring compact and rotor yarn characteristics*. Anna University. Tersedia pada: <http://hdl.handle.net/10603/33561>.
- Karthik, T. dan Murugan, R. (2016) “Milkweed - A Potential Sustainable Natural Fibre Crop,” in *Sustainable Fibres for Fashion Industry*, hal. 111–146. doi: 10.1007/978-981-10-0522-0.
- Karthik, T., Rathinamoorthy, R. dan Karan, C. P. (2016) *Nonwovens: Process, structure, properties and applications*. Woodhead Publishing India PVT LTD.
- Kasturiya, N., Subbulakshmi, M.S., Gupta, S.C., Raj, Hans (1999) “System Design of Cold Weather Protective Clothing,” *Defence Science Journal*, 49(5), hal. 457–464.
- Kemal, N., Gunawan, Ichwan, Muhammad, Sumihartati, Atin (2013) “Bahan Ajar Pendidikan & Latihan Profesi Guru - Teknologi Tekstil.”
- Kori, P. dan Alawa, P. (2014) “Antimicrobial activity and phytochemical analysis of *Calotropis gigantea* root, latex extracts,” *IOSR Journal of Pharmacy (IOSRPHR)*, 4(6), hal. 07–11. doi: 10.9790/3013-04060207011.
- Kothandaraman, C. P. (2006) *Fundamentals of Heat and Mass Transfer*. Third Edit. New Delhi: New Age International (P) Limited.
- Kreith, F., Manglik, R. M. dan Bohn, M. S. (2011) *Principles of Heat Transfer*. seventh ed.
- Kumala, S. dan Pratiwi, A. A. (2014) “Efek Antimikroba dari Kapang Endofit Ranting Tanaman Biduri,” *Jurnal Farmasi Indonesia*, 7(2), hal. 111–120.
- Lawrence, C. (2014) *Fibre to Yarn: Filament Yarn Spinning, Textiles and Fashion: Materials, Design and Technology*. Elsevier Ltd. doi: 10.1016/B978-1-84569-931-4.00010-6.
- Li, Y., Hsu, J. dan Fernie, G. (2010) “Design Resources: Protective Winter Clothing,” *Center for inclusive design and environmental access*.
- Li, Y. dan Wong, A. S. W. (2006) “Thermal Properties,” in *Clothing biosensory engineering*. Woodhead Publishing Limited, hal. 192–194.
- Liao, X., Li, Yi, Hu, Junyan, Wu, Xinxing, Li, Quanhai (2014) “A Simultaneous Measurement Method to Characterize Touch Properties of Textile Materials,” 15(7), hal. 1548–1559. doi: 10.1007/s12221-014-1548-2.

- Liendhard, J. H. (2019) *A Heat Transfer Textbook*. Fifth Edit. Cambridge Massachusets: Phlogiston Press.
- Liu, L. (2018) "Evaluation on a Promising Natural Cellulose Fiber- Calotropis Gigantea Fiber," *Trends in Textile Engineering & Fashion Technology*, 2(4), hal. 205–211. doi: 10.31031/tteft.2018.02.000543.
- Maity, S., Singha, Kunal, Gon, Debi Prasad, Paul, Palash, Singha, Mrinal (2012) "A Review on Jute Nonwovens: Manufacturing , Properties and Applications," (April 2015). doi: 10.5923/j.textile.20120105.02.
- Matusiak, M. dan Kowalczyk, S. (2014) "Thermal-insulation properties of multilayer textile packages," *Autex Research Journal*, 14(4), hal. 299–307. doi: 10.2478/aut-2014-0030.
- Matusiak, M. dan Sybilska, W. (2016) "Thermal resistance of fabrics vs. thermal insulation of clothing made of the fabrics," *Journal of the Textile Institute*, 107(7), hal. 842–848. doi: 10.1080/00405000.2015.1061789.
- McIntyre, J. E. (ed.) (2005) *Synthetics Fibres: nylon, polyester, acrylic, polyolefin*. Woodhead Publishing Limited.
- Montgomery, M. (2016) *Possible world first: canadian winter coat uses renewable plant insulation*. Tersedia pada: <http://www.rcinet.ca/en/2016/10/13/world-first-canadian-winter-coat-uses-renewable-plant-insulation/> (Diakses: 22 Januari 2020).
- Muniyasamy, S. (2016) "Evaluation of Mechanical Properties of Calotropis Gigantea Stem Fiber-Reinforced Composite Material," *Proceedings of 88th The IIER International Conference*, hal. 53–57.
- Musa, A. B. H., Malengier, Benny, Vasile, Simona, Van Langenhove, Lieva, De Raeve, Alexandra (2018) "Analysis and Comparison of Thickness and Bending Measurements from Fabric Touch Tester (FTT) and Standard Methods," *Autex Research Journal*, 18(1), hal. 51–60. doi: 10.1515/aut-2017-0011.
- Oakes, J., Riewe, Rick, Kelker, Doug, Forest, Tom (1995) *Comparison of traditional and manufactured cold weather ensembles*.
- Phoo, Z. W. M. M., Razon, Luis F., Knothe, Gerhard, Ilham, Zul, Goembira, Fadjar, Madrazo, Cynthia F., Roces, Susan A., Saka, Shiro (2014) "Evaluation of Indian milkweed (Calotropis gigantea) seed oil as alternative feedstock for biodiesel," *Industrial Crops and Products*. Elsevier B.V., 54, hal. 226–232. doi: 10.1016/j.indcrop.2014.01.029.
- Pusat Komunikasi Publik Kementerian Perindustrian (2015) *Rencana Induk Pembangunan Industri Nasional 2015 - 2035*. doi: 10.1017/CBO9781107415324.004.
- Rawal, A., Lomov, Stepan, Ngo, Thanh, Verpoest, Ignaas, Vankerrebrouck, Jozef (2007) "Mechanical Behavior of Thru-air Bonded Nonwoven Structures," *Textile Research Journal*, 77(6), hal. 417–431. doi: 10.1177/0040517507081313.
- Rohsenow, W. M. dan Hartnett, J. R. (1999) *Handbook of heat transfer*. Third

- Edit, *Choice Reviews Online*. Third Edit. McGraw-Hill. doi: 10.5860/choice.36-3347.
- Rossi, R. M. (2015) "Cold weather sports clothing," in Roshan Shishoo (ed.) *Textiles for Sportswear*. Woodhead Publishing.
- Russell, S. J. (ed.) (2007) *Handbook of Nonwoven*. Woodhead Publishing Limited.
- Russell, S. J. dan Smith, P. A. (2016) "Technical Fabric Structures - 3. Nonwoven Fabrics," in Horrocks, A. R. dan Anand, S. C. (ed.) *Handbook of Technical Textiles*. Woodhead Publishing Limited.
- Sakthivel, J. C. dan Mukhopadhyay, S. (2005) "Some Studies on Mudar Fibers," *Journal of Industrial Textiles*, 35(1), hal. 63–76. doi: 10.1177/1528083705053390.
- Sana, Arif Wibi, Noerati, Sugiyana, Doni, Sukardan, M. Danny (2020) "Aplikasi Serat Alam biduri (*Calotropis gigantea*) sebagai Bahan Pengisi Insulatif pada Jaket Musim Dingin," *Arena Tekstil*, 35(I), hal. 1–12. doi: <http://dx.doi.org/10.31266/at.v35i1.6050>.
- Sayanjali Jasbi, M. Hasani, Hossein, Zadhoush, Ali, Safi, Somayeh (2018) "Effect of alkali treatment on mechanical properties of the green composites reinforced with milkweed fibers," *Journal of the Textile Institute*. Taylor & Francis, 109(1), hal. 24–31. doi: 10.1080/00405000.2017.1320816.
- Shabaridharan dan Das, A. (2012) "Study on heat and moisture vapour transmission characteristics through multilayered fabric ensembles," *Fibers and Polymers*, 13(4), hal. 522–528. doi: 10.1007/s12221-012-0522-0.
- Shabaridharan, M. dan Das, A. (2013) "Study on thermal and evaporative resistances of multilayered fabric ensembles," *Journal of the Textile Institute*, 104(10), hal. 1025–1041. doi: 10.1080/00405000.2013.771428.
- Siddiqui, M. O. R. dan Sun, D. (2018) "Development of Experimental Setup for Measuring the Thermal Conductivity of Textiles," *Clothing and Textiles Research Journal*, 36(3), hal. 215–230. doi: 10.1177/0887302X18768041.
- Siler, W. (2009) *Could Humble Milkweed Replace Down Feathers In Your Outdoor Gear?* Tersedia pada: <https://gizmodo.com/could-humble-milkweed-replace-down-feathers-1698295598> (Diakses: 23 Januari 2020).
- Song, G. (2011) *Improving Comfort in Clothing, Improving Comfort in Clothing*. Woodhead Publishing Limited. doi: 10.1533/9780857090645.
- Steindhart, E. (2015) "Determining an Easily Measured Factor of Merit for The Thermal Performance of Jackets," in *Measurement and Instrumentation*. Cambridge, hal. 1–7.
- Sukardan, M. D., Natawijaya, Dikdik, Prettyanti, Puri, Cahyadi, Novarini, Eva (2016) "Karakterisasi Serat dari Tanaman Biduri (*Calotropis gigantea*) dan Identifikasi Kemungkinan Pemanfaatannya sebagai Serat Tekstil," *Arena Tekstil*, 31(2), hal. 51–62.

- Sukmawati, A. (2018) *Pembuatan dan Karakterisasi Nirtenun Serat Biduri (Calotropis gigantea) untuk Aplikasi Bahan Penyerap Bunyi*. Tesis Program Magister Ilmu dan Teknik Material, Institut Teknologi Bandung.
- Tessier, D. (2018) "Testing Thermal Properties of Textiles," in *Advanced Characterization and Testing of Textiles*. Woodhead Publishing, hal. 71–92.
- Turnip, J. (2018) *Studi Pembuatan Kain Nonwoven untuk Isolator Panas dari Serat Biduri (Calotropis gigantea)*. Politeknik Sekolah Tinggi Teknologi Tekstil.
- Uttam, D. (2012) "Objective Measurement of Heat Transport through Clothing," *International Journal of Engineering Research and Development*, 2(12), hal. 2278–67.
- Verma, V. N. (2014) "The Chemical Study of Calotropis," *International Letters of Chemistry, Physics and Astronomy*, 20, hal. 74–90. doi: 10.18052/www.scipress.com/ILCPA.20.74.
- Wang, F. (2010) "Comparisons of thermal and evaporative resistances of kapok coats and traditional down coats," *Fibres and Textiles in Eastern Europe*, 78(1), hal. 75–78.
- Wardiningsih, W. (2009) *Study of Comfort Properties of Natural and Synthetic Knitted Fabrics in Different Blend Ratios for Winter Active Sportswear*. RMIT University.
- Wardiningsih, W. dan Troynikov, O. (2019) "Treated knitted fabric for hip protective pads for elderly women. Part II. Performance relevant to thermal comfort," *Textile Research Journal*, 89(23–24), hal. 5006–5013. doi: 10.1177/0040517519845687.
- Williams, J. T. (ed.) (2009) *Textiles for Cold Weather Apparel*. Woodhead Publishing Limited.
- Witono Y, Am A, Subagio A, W. S. (2007) "Purifikasi dan Karakterisasi Parsial Enzim Protease dari Getah Biduri (*Calotropis gigantea*)," *Jurnal Teknologi dan Industri Pangan*, XVIII(1), hal. 7.
- Witono, Y. (2013) *Enzim Biduri Agen Aktif Potensial Untuk Proses Pangan*. Pustaka Radja.
- www.engineeringtoolbox.com (2020) *Clothing and Thermal Insulation*. Tersedia pada: https://www.engineeringtoolbox.com/clo-clothing-thermal-insulation-d_732.html (Diakses: 20 April 2020).
- www.fibre2fashion.com (2020) *Nonwoven Fabrics*. Tersedia pada: <https://www.fibre2fashion.com/fabrics/nonwoven-fabric-suppliers-s48> (Diakses: 3 Agustus 2020).
- Yao, J., Yang, Feng, Zhuang, Zhi, Shao, Yuhan, Yuan, Philip F. (2018) "The effect of personal and microclimatic variables on outdoor thermal comfort: A field study in a cold season in Lujiazui CBD, Shanghai," *Sustainable Cities and Society*. Elsevier, 39(November), hal. 181–188. doi: 10.1016/j.scs.2018.02.025.

- Zakriya, G. M., GR, G. Ramakrishnan, Abinaya, D., S. Brundha Devi, A., Senthil Kumar, S. Theyva Kumar (2016) "Design and development of winter over coat using Jute and hollow conjugated polyester non-woven flexible composite," *Journal of Industrial Textiles*. doi: 10.1177/1528083716670314.
- Zhao, Z., Zheng, Zhaozhu, Chen, Peng, Zhang, Haifeng, Yang, Chunyu, Wang, Xiaoqin, Li, Gang (2019) "Pre-treatment of *Calotropis gigantea* fibers with functional plasticizing and toughening auxiliary agents," *Textile Research Journal*. doi: 10.1177/0040517519826885.
- Zheng, Y., Cao, E., Zhu, Yongfeng, Wang, Aiqin, Hu, Huimin (2016) "Perfluorosilane treated *Calotropis gigantea* fiber: Instant hydrophobic-oleophilic surface with efficient oil-absorbing performance," *Chemical Engineering Journal*. Elsevier B.V., 295, hal. 477–483. doi: 10.1016/j.cej.2016.03.074.
- Zheng, Y., Zhu, Y., Wang, Aiqin, Hu, Huimin (2016) "Potential of *Calotropis gigantea* fiber as an absorbent for removal of oil from water," *Industrial Crops and Products*. Elsevier B.V., 83, hal. 387–390. doi: 10.1016/j.indcrop.2016.01.009.
- Zhu, G., Kremenakova, Dana, Wang, Yan, Militky, Jiri (2015) "Air permeability of polyester nonwoven fabrics," *Autex Research Journal*, 15(1), hal. 2–6. doi: 10.2478/aut-2014-0019.

