



Daftar Pustaka

- Abidi, N. (2021). FTIR Microspectroscopy. In *FTIR Microspectroscopy*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-84426-4>
- Arifvianto, B., Wirawan, Y. B., Salim, U. A., Suyitno, S., & Mahardika, M. (2021). Effects of extruder temperatures and raster orientations on mechanical properties of the FFF-processed polylactic-acid (PLA) material. *Rapid Prototyping Journal*, 27(10), 1761–1775. <https://doi.org/10.1108/RPJ-10-2019-0270>
- Chanda, M. (2018). *Plastics Technology Handbook* (D. E. Hudgin, Ed.; 5th ed.). CRC Press.
- Chieng, B. W., Ibrahim, N. A., Yunus, W. M. Z. W., & Hussein, M. Z. (2014). Poly(lactic acid)/poly(ethylene glycol) polymer nanocomposites: Effects of graphene nanoplatelets. *Polymers*, 6(1), 93–104. <https://doi.org/10.3390/polym6010093>
- Chin, C. O., Yang, X., Paul, S. C., Susilawati, Wong, L. S., & Kong, S. Y. (2020). Development of thermal energy storage lightweight concrete using paraffin-oil palm kernel shell-activated carbon composite. *Journal of Cleaner Production*, 261. <https://doi.org/10.1016/j.jclepro.2020.121227>
- Cogorno, G. R. (2006). *Geometric Dimensioning and Tolerancing for Mechanical Design*. MC Graw Hill.
- Cuiffo, M. A., Snyder, J., Elliott, A. M., Romero, N., Kannan, S., & Halada, G. P. (2017). Impact of the fused deposition (FDM) printing process on polylactic acid (PLA) chemistry and structure. *Applied Sciences (Switzerland)*, 7(6). <https://doi.org/10.3390/app7060579>
- Dave, H. K., Prajapati, A. R., Rajpurohit, S. R., Patadiya, N. H., & Raval, H. K. (2022). Investigation on tensile strength and failure modes of FDM printed part using in-house fabricated PLA filament. *Advances in Materials and Processing Technologies*, 8(1), 576–597. <https://doi.org/10.1080/2374068X.2020.1829951>
- Dodziuk, H. (2016). Applications of 3D printing in healthcare. In *Kardiochirurgia i Torakochirurgia Polska* (Vol. 13, Issue 3, pp. 283–293). Termedia Publishing House Ltd. <https://doi.org/10.5114/kitp.2016.62625>
- Dontsov, Y. V., Panin, S. V., Buslovich, D. G., & Berto, F. (2020). Taguchi optimization of parameters for feedstock fabrication and FDM manufacturing of wear-resistant UHMWPE-based composites. *Materials*, 13(12), 1–26. <https://doi.org/10.3390/ma13122718>
- Drakopoulos, S. X., Psarras, G. C., Forte, G., Martin-Fabiani, I., & Ronca, S. (2018). Entanglement dynamics in ultra-high molecular weight polyethylene as revealed by dielectric spectroscopy. *Polymer*, 150, 35–43. <https://doi.org/10.1016/j.polymer.2018.07.021>



- Exconde, M. K. J. E., Co, J. A. A., Manapat, J. Z., & Magdaluyo, E. R. (2019). Materials selection of 3D printing filament and utilization of recycled polyethylene terephthalate (PET) in a redesigned breadboard. *Procedia CIRP*, 84, 28–32. <https://doi.org/10.1016/j.procir.2019.04.337>
- Fang, L. M., Gao, P., & Cao, X. W. (2011). Temperature window effect and its application in extrusion of ultrahigh molecular weight polyethylene. *Express Polymer Letters*, 5(8), 674–684. <https://doi.org/10.3144/expresspolymlett.2011.66>
- Feng, Y., Gao, Y., Chen, J., Jiang, J., Yin, X., He, G., Zeng, Y., Kuang, Q., & Qu, J. (2019). Properties of compression molded ultra-high molecular weight polyethylene products pretreated by eccentric rotor extrusion. *Polymer International*, 68(5), 862–870. <https://doi.org/10.1002/pi.5775>
- Gibson, Ian. , R. David. , S. Brent. (2015). *Additive Manufacturing Technologies 3D Printing, Rapid Prototyping, and Direct Digital Manufacturing Second Edition* (second). Springer. <https://doi.org/10.1007/978-1-4939-2113-3>
- Haddadi, S. A., Ahmad, A. R., Amini, M., & Kheradmand, A. (2018). In-situ preparation and characterization of ultra-high molecular weight polyethylene/diamond nanocomposites using Bi-supported Ziegler-Natta catalyst: Effect of nanodiamond silanization. *Materials Today Communications*, 14, 53–64. <https://doi.org/10.1016/j.mtcomm.2017.12.011>
- Hamizi, N. A., Johan, M. R., Chowdhury, Z. Z., Wahab, Y. A., Al-Douri, Y., Saat, A. M., & Pivezhzhani, O. A. (2019). Raman spectroscopy and FTIR spectroscopy studies of Mn-doped CdSe QDs at different particles size. *Optik*, 179, 628–631. <https://doi.org/10.1016/j.ijleo.2018.10.214>
- Helmi, M. (2017). *Optimization Fabrication Process Of Wire Filament Waste-Derived HA/UHMWPE Composites as Feedstock Material for Fdm Process by Using Taguchi Method*. <https://www.researchgate.net/publication/321760204>
- Herianto, Atsani, S. I., & Mastrisiswadi, H. (2020). Recycled Polypropylene Filament for 3D Printer: Extrusion Process Parameter Optimization. *IOP Conference Series: Materials Science and Engineering*, 722(1). <https://doi.org/10.1088/1757-899X/722/1/012022>
- Irawan, C., Arifvianto, B., & Mahardika, M. (2021a). PENGARUH TEMPERATUR EKSTRUSI TERHADAP SIFAT FISIS, KIMIAWI DAN KEKUATAN TARIK FILAMEN ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE (UHMWPE). *Jurnal Teknologi Terapan* 1, 7(2).
- Irawan, C., Arifvianto, B., & Mahardika, M. (2021b). PENGARUH TEMPERATUR EKSTRUSI TERHADAP SIFAT FISIS, KIMIAWI DAN KEKUATAN TARIK FILAMEN ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE (UHMWPE). *Jurnal Teknologi Terapan* 1, 7(2).



- Khairuddin, Pramono, E., Utomo, S. B., Wulandari, V., Zahrotul, A. W., & Clegg, F. (2016). FTIR studies on the effect of concentration of polyethylene glycol on polymerization of Shellac. *Journal of Physics: Conference Series*, 776(1). <https://doi.org/10.1088/1742-6596/776/1/012053>
- Kurtz, S. M. (2016). *UHMWPE Biomaterials Handbook* (D. Jackson, Ed.; 3rd ed.). Matthew Deans.
- Kuznetsov, V. E., Solonin, A. N., Tavitov, A., Urzhumtsev, O., & Vakulik, A. (2020). Increasing strength of FFF three-dimensional printed parts by influencing on temperature-related parameters of the process. *Rapid Prototyping Journal*, 26(1), 107–121. <https://doi.org/10.1108/RPJ-01-2019-0017>
- Lee, H. C., Gaire, J., Currin, S. W., McDermott, M. D., Park, K., & Otto, K. J. (2017). Foreign body response to intracortical microelectrodes is not altered with dip-coating of polyethylene glycol (PEG). *Frontiers in Neuroscience*, 11(SEP). <https://doi.org/10.3389/fnins.2017.00513>
- Li, Y., He, H., Ma, Y., Geng, Y., & Tan, J. (2019). Rheological and mechanical properties of ultrahigh molecular weight polyethylene/high density polyethylene/polyethylene glycol blends. *Advanced Industrial and Engineering Polymer Research*, 2(1), 51–60. <https://doi.org/10.1016/j.aiepr.2018.08.004>
- Liu, S., Wang, F., Chen, J., & Cao, Y. (2015). Ultra-High Molecular Weight Polyethylene with Reduced Fusion Defects and Improved Mechanical Properties by Liquid Paraffin. *International Journal of Polymer Analysis and Characterization*, 20(2), 138–149. <https://doi.org/10.1080/1023666X.2015.988025>
- Liu, W., Zhou, J., Ma, Y., Wang, J., & Xu, J. (2018). Fabrication of PLA Filaments and its Printable Performance. *IOP Conference Series: Materials Science and Engineering*, 275(1). <https://doi.org/10.1088/1757-899X/275/1/012033>
- Maliki, Al. , J. A. (2015). The Processes and Technologies of 3D Printing Analysis Review on Spatial and Transform Domain Technique in Digital Steganography View project. *International Journal of Advances in Computer Science and Technology*, 4.
- Masood, S. H. (2014). Advances in Fused Deposition Modeling. In *Comprehensive Materials Processing* (Vol. 10, pp. 69–91). Elsevier Ltd. <https://doi.org/10.1016/B978-0-08-096532-1.01002-5>
- Muralidhara, H. B., & Banerjee, S. (2022). *3D PRINTING TECHNOLOGY AND ITS DIVERSE APPLICATIONS*. Apple Academic Press, Inc.
- Nandiyanto, A. B. D., Oktiani, R., & Ragadhita, R. (2019). How to read and interpret ftir spectroscope of organic material. *Indonesian Journal of Science and Technology*, 4(1), 97–118. <https://doi.org/10.17509/ijost.v4i1.15806>
- Noorani, R. (2018). *3D Printing TECHNOLOGY, APPLICATION, and SELECTION*. CRC Press.



Oktavian, D., Arifvianto, B., & Mahardika, M. (2021). EKSTRUksi DAN KARAKTERISASI FILAMEN KOMPOSIT POLYLACTID ACID (PLA) / CARBON NANO TUBE (CNT). *Jurnal Material Teknologi Proses: Warta Kemajuan Bidang Material Teknik Teknologi Proses*, 2(2), 12. <https://doi.org/10.22146/jmtp.70481>

Okubo, H., Kaneyasu, H., Kimura, T., Phanthong, P., & Yao, S. (2021). Effects of a twin-screw extruder equipped with a molten resin reservoir on the mechanical properties and microstructure of recycled waste plastic polyethylene pellet moldings. *Polymers*, 13(7). <https://doi.org/10.3390/polym13071058>

Panin, S. V., Kornienko, L. A., Alexenko, V. O., Buslovich, D. G., & Dontsov, Y. V. (2017). Extrudable polymer-polymer composites based on ultra-high molecular weight polyethylene. *AIP Conference Proceedings*, 1915. <https://doi.org/10.1063/1.5017317>

Pratama, J., Cahyono, S. I., Suyitno, S., Muflikhun, M. A., Salim, U. A., Mahardika, M., & Arifvianto, B. (2021). A review on reinforcement methods for polymeric materials processed using fused filament fabrication (FFF). In *Polymers* (Vol. 13, Issue 22). MDPI. <https://doi.org/10.3390/polym13224022>

Prayoga, B. T., & Dharmastiti, R. (2015). PERBANDINGAN SIFAT KEAUSAN UHMWPE TERHADAP COMMERCIALLY PURE TITANIUM (CP-Ti) DAN STAINLESS STEEL 316L UNTUK APLIKASI SENDI LUTUT BUATAN. In *Jurnal Material Teknologi Proses* (Vol. 1, Issue 1).

Ramadhan, A. I., Diniardi, E., Daroji, M., & Artikel, H. (2017). *Jurnal Riset Sains dan Teknologi ANALISA PENYUSUTAN PRODUK PLASTIK PADA PROSES INJECTION MOLDING MENGGUNAKAN MEDIA PENDINGIN COOLING TOWER DAN UDARA DENGAN MATERIAL POLYPROPYLENE ANALYSIS OF PLASTIC DEPRECIATION ON INJECTION MOLDING PROCESS USING COOLANT MEDIA OF COOLING TOWER AND AIR WITH POLYPROPYLENE MATERIAL.*

Rauwendaal, C. (2013). *Polymer extrusion* (5th ed.). Hanser Publication.

Reddy Polu, A., & Kumar, R. (2011). *Impedance Spectroscopy and FTIR Studies of PEG-Based Polymer Electrolytes* (Vol. 8, Issue 1). <http://www.e>

Sajjadi, S. P. (2016). Impact of Die Materials on the Effect of New Polymer Processing Aids for Sharkskin Properties. *Journal of Materials Science and Chemical Engineering*, 04(09), 17–27. <https://doi.org/10.4236/msce.2016.49002>

Seppala, J. E. , K. A. P. , S. C. R. (2019). *POLYMER-BASED ADDITIVE MANUFACTURING RECENT DEVELOPMENTS* (J. E. , K. A. P. , S. C. R. Seppala, Ed.).

Skoog, D. A., Holler, F. J., & Crouch, S. R. (2018). Principles of Instrumental Analysis. In *Pure and Applied Chemistry* (7th ed., Issue 3). Cengage Learning.

Smith, G. T. (2002). *Industrial Metrology : Surfaces and Roundness*. Springer. <http://www.springer.de/phys/>



- Stevens, M. J., & Covas, J. A. (1995). Extruder Principles and Operation. In *Extruder Principles and Operation*. Springer Netherlands. <https://doi.org/10.1007/978-94-011-0557-6>
- Syam, W. P. (2019). *Toleransi Dimensi dan Geometri Analisis rantai variasi dalam proses perakitan produk* (W. P. Syam, Ed.; 1.0).
- Whulanza, Y., Setiawan, J., & Person, C. (2016). *Seminar Nasional Teknologi dan Rekayasa (SENTRA) 2016 ISSN (Cetak) 2527-6042 eISSN (Online)*.
- Wood, W. (2012). *PROCESSING, WEAR, AND MECHANICAL PROPERTIES OF POLYETHYLENE COMPOSITES PREPARED WITH PRISTINE AND ORGANOSILANE-TREATED CARBON NANOFIBERS*.
- Yousef, S., Visco, A., Galtieri, G., Nocita, D., & Espro, C. (2017). Wear behaviour of UHMWPE reinforced by carbon nanofiller and paraffin oil for joint replacement. *Materials Science and Engineering C*, 73, 234–244.
<https://doi.org/10.1016/j.msec.2016.11.088>
- Yuniarto, K., Purwanto, Y. A., Purwanto, S., Welt, B. A., Purwadaria, H. K., & Sunarti, T. C. (2016). Infrared and Raman studies on polylactide acid and polyethylene glycol-400 blend. *AIP Conference Proceedings*, 1725. <https://doi.org/10.1063/1.4945555>
- Zhang, H., & Liang, Y. (2018). Extrusion Processing of Ultra-High Molecular Weight Polyethylene. In *Extrusion of Metals, Polymers and Food Products*. InTech.
<https://doi.org/10.5772/intechopen.72212>