

DAFTAR PUSTAKA

- Asdi, R. Z., dan Kaelani, Y., 2013, Kajian Tribologi Gesekan antara Material Komposit Hidroksiapatit (HA) + *Polymethylmethacrylate* (PMMA) dengan *Ultra High Molecular Weight Polyethylene* sebagai *Prosthesis* Sendi Rahang (TMJ) pada Manusia, *Jurnal Teknik POMITS*, 2 (3), 362-366.
- Bankoff, A. D. P., 2012. Biomechanical Characteristics of The Bone. *Human Musculoskeletal Biomechanics*. InTech.
- Berretta, S., Ghita, O., Evans, K.E., Anderson, A. and Newman, C., 2013, Size, Shape and Flow of *Dengans* for Use in Selective Laser Sintering (SLS). *High Value Manufacturing: Advanced Research in Virtual and Rapid Prototyping: Proceedings of the 6th International Conference on Advanced Research in Virtual and Rapid Prototyping*, Leiria, Portugal, CRC Press.
- Bezerra, M.A., Santelli, R.E., Oliveira, E.P., Villar, L.S. and Escalera, L.A., 2008, Response Surface Methodology (RSM) as a Tool for Optimization in Analytical Chemistry, *Talanta*, 76(5), 965-977.
- Boskey, A. L., 2013, Bone Composition : Relationship to Bone Fragility and Antiosteoporotic Drug Effects, *BoneKey Reports 2*, International Bone & Mineral Society.
- Castelan, J., Schaeffer, L., Daleffe, A., Fritzen, D., Salvaro, V. and Silva, F.P.D., 2014. Manufacture of Custom-Made Cranial Implants from DICOM® Images Using 3D *Printing*, CAD/CAM Technology and Incremental Sheet Forming. *Revista Brasileira de Engenharia Biomédica*, 30(3), 265-273.
- Editor Team, 2016, *Polymethyl methacrylate (PMMA)*, Encyclopædia Britannica, <https://www.britannica.com/science/polymethyl-methacrylate>, diakses tanggal 12 Desember 2016.

- Herliansyah, M.K., Dewo, P., Shukor, B.A., Hamdi, M. and Ide-Ektessabi, A., 2011, Development and Characterization of Bovine Hydroxyapatite Porous Bone Graft for Biomedical Applications, *Advanced Materials Research*, 277, 59-65, Trans Tech Publications.
- Hernandez, D. D., 2015, Factors Affecting Dimensional Precision of Consumer 3D Printing, *International Journal of Aviation, Aeronautics, and Aerospace*, 2(4), p.2.
- Hill, W.J. and Hunter, W.G., 1966, A Review of Response Surface Methodology: a Literature Survey, *Technometrics*, 8(4), 571-590.
- Kamble, V. B. and Deshmukh, S. N., Comparison of Percentage Error by Using Imputation Method on Mid Term Examination Data, *International Journal of Innovations in Engineering Research and Technology (IJERT)*, Impact Factor, 2.
- Kang, B. H., Ryu, S. C. and Park, H. C., 2012, A Study of The Use of a Hydroxyapatite and Poly(methylmethacrylate) Composite as a Material for Implants, *Journal of Ceramic Processing Research*, 13(6), 791-796.
- Leukers, B., Gülkan, H., Irsen, S.H., Milz, S., Tille, C., Schieker, M. and Seitz, H., 2005, Hydroxyapatite Scaffolds for Bone Tissue Engineering Made by 3D Printing, *Journal of Materials Science: Materials in Medicine*, 16(12), 1121-1124.
- Lim, G., Choi, D. and Richardson, E. B., 2014. 3-D Printing in Organ Transplantation, *Hanyang Medical Reviews*, 34(4), 158-164.
- Maloul, A., Fialkov, J. and Whyne, C.M., 2013. Characterization of The Bending Strength of Craniofacial Sutures. *Journal of Biomechanics*, 46(5), 912-917.
- Mohamed, O. A., Masood, S. H. and Bhowmik, J. L., 2015. Optimization of Fused Deposition Modeling Process Parameters: a Review of Current Research and Future Prospects, *Advances in Manufacturing*, 3(1), 42-53.

- Montgomery, D. C., dan Runger, G. C., 2013, *Applied Statistics and Probability for Engineers*, 3rd ed, John Wiley & Sons.
- Nugroho, Y. C., 2015, Optimasi Parameter Proses Ekstrusi Pasta Biokomposit [Hidroksiapatit/Bioplastik/Serisin] Menggunakan Metode Response Surface, *Skripsi*, Universitas Gadjah Mada, Yogyakarta.
- Orlovskii, V. P., Komlev, V. S. and Barinov, S. M., 2002, Hydroxyapatite and Hydroxyapatite-based Ceramics, *Inorganic Materials*, 38(10), 973-984.
- Pon-On, W., Suntornsaratoon, P., Charoenphandhu, N., Thongbunchoo, J., Krishnamra, N. and Tang, I. M., 2016. Hydroxyapatite from Fish Scale for Potential Use as Bone Scaffold or Regenerative Material. *Materials Science and Engineering: C*, 62, 183-189.
- Puska, M., Aho, A. J. and Vallittu, P., 2011, Polymer Composites for Bone Reconstruction. *INTECH Open Access Publisher*.
- Rauwendaal, C., 1998. *Understanding extrusion* (107-109). Hanser.
- Rauwendaal, C., 2014. *Polymer extrusion*. Carl Hanser Verlag GmbH Co KG.
- Razali, N.M. and Wah, Y.B., 2011, Power Comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling Tests, *Journal of Statistical Modeling and Analytics*, 2(1), 21-33.
- Ridho, H., 2014, Evaluasi Laju Aliran Volumetrik Material Pasta Silika-Bioplastik dari Sistem Pengumpanan Ekstrusi Ulir Tunggal Mesin Printer Tiga Dimensi, *Skripsi*, Universitas Gadjah Mada, Yogyakarta.
- Rivera, E. M., Araiza, M., Brostow, W., Castano, V. M., Diaz-Estrada, J.R., Hernandez, R. and Rodriguez, J.R., 1999, Synthesis of Hydroxyapatite from Eggshells, *Materials Letters*, 41(3), 128-134.
- Roeder, R. K., Converse, G. L., Kane, R. J. and Yue, W., 2008. Hydroxyapatite-Reinforced Polymer Biocomposites for Synthetic Bone Substitutes. *JOM*, 60 (3), 38-45.
- Saha, P. K., 2000, *Fundamentals of Extrusion*, American Society for Metals, <http://www.asminternational.org/documents/10192/3475884/06826G>

[Chapter 1.pdf/3ec90285-70c7-46cc-85a3-061841cdceddb](#), diakses tanggal 13 Desember 2016.

- Schickert, S.D.L., 2014, Polymer-ceramic Nanocomposites for Bone Regeneration, *Doctoral dissertation*, Instituto de Ciencias da Saude.
- Sekarjati, K. A., dan Tontowi, A. E., 2017, Komposisi Biokomposit [Polimetilmetakrilat/Hidroksiapatit] sebagai Material untuk Pencetakan Spesimen dengan Mesin 3D Bioprinter, *Proceeding Seminar Nasional Pengkajian dan Penerapan Teknologi III*.
- Serbetci, K., Korkusuz, F. Hasirci, N., 2004, Thermal and Mechanical Properties of Hydroxyapatite Impregnated Acrylic Bone Cements, *Polymer Testing*, 23(2), 145-155.
- Shyang, C.W., Khim, L.Y., Ariffin, A., Arifin, Z. and Ishak, M., 2008. Flexural properties of hydroxyapatite reinforced poly (methyl methacrylate) composites. *Journal of Reinforced Plastics and Composites*, 27(9), 945-952.
- Sihaloho, R. I. A., 2016, Optimasi Komposisi Campuran Biokomposit [PMMA/Hidroksiapatit/ Sericin] Menggunakan Metode Taguchi, *Skripsi*, Universitas Gadjah Mada, Yogyakarta.
- Solechan dan Sugiantoro, B., 2015, Analisa Metode Ekstruder untuk Pembuatan *Scaffolds* Rekonstruksi Mandibular dari Material Hidroksiapatit dan Pati Ketela, *Intuisi Teknologi dan Seni*, 7(3).
- Tham, W.L., Chow, W.S. and Mohd Ishak, Z.A., 2010. Flexural and Morphological Properties of Poly (Methyl Methacrylate)/ Hydroxyapatite Composites: Effects of Planetary Ball Mill Grinding Time. *Journal of Reinforced Plastics and Composites*, 29(13), pp.2065-2075.
- Tontowi, A. E., Anggraeni, D., Saragih, H. T., Raharjo, K. P. N., Utami, P., 2017, Experimental Study of 3D-printable Biocomposite of [HA/PMMA/Sericin] Materials, *Advanced Materials Letters*, 8(8), 857-861.
- Utami, P., 2016, Optimasi Parameter Proses Ekstrusi Pasta Biokomposit

[PMMA/Hidroksiapatit/Sericin] pada Mesin Printer 3D Menggunakan Metode *Response Surface*, *Skripsi*, Universitas Gadjah Mada, Yogyakarta.

Vaishya, R., Chauhan, M. and Vaish, A., 2013. Bone Cement. *Journal of Clinical Orthopaedics and Trauma*, 4(4), 157-163.

Wang, X., Jiang, M., Zhou, Z., Gou, J. and Hui, D., 2016, 3D *Printing* of Polymer Matrix Composites: A Review and Prospective, *Composites Part B: Engineering*, 442-458.

Zebarjad, S. M., Sajjadi, S. A., Sdrabadi, T. E., Yaghmaei, A., Naderi, B., 2011, A Study on Mechanical Properties of PMMA/Hydroxyapatite Nanocomposite, *Engineering*, 3, 795-801.