

**DAFTAR PUSTAKA**

- Ardhiyanto, H. B. (2011) ‘Peran hidroksiapatit sebagai bone graft dalam proses penyembuhan tulang’, *stomatognatik Jurnal Kedokteran Gigi*, 8(2), pp. 6–9.
- Arifah, S. L. and Cahyaningrum, S. E. (2017) ‘Synthesis and Characterization of Hydroxyapatite-Chitosan-Collagen For Bone Graft Biomaterials’, *Journal of Chemistry*, 6(2).
- Aufan, M. R. *et al.* (2012) ‘Sintesis Scaffold Alginat-Kitosan-Karbonat Apatit Sebagai Bone Graft Menggunakan Metode Freeze Drying’, *Jurnal Biofisika*, 8(1), pp. 16–24. doi: 10.1007/s00259-009-1306-7.
- Chesnutt, B. M. *et al.* (2009) ‘Composite chitosan/nano-hydroxyapatite scaffolds induce osteocalcin production by osteoblasts in vitro and support bone formation in vivo.’, *Tissue Engineering Part A*, 15(9), pp. 2571–2579. doi: 10.1089/ten.TEN.2008.0054.
- Chhabra, P. *et al.* (2016) ‘Optimization, characterization, and efficacy evaluation of 2% chitosan scaffold for tissue engineering and wound healing’, *Journal of Pharmacy & BioAllied Science*, 8(4), pp. 300–308.
- Cunniffe, G. M. *et al.* (2010) ‘The Synthesis and Characterization of Nanophase Hydroxyapatite using a Novel Dispersant-aided Precipitation Method’, *Journal of Biomedical Materials Research - Part A*, 95(4), pp. 1142–1149. doi: 10.1002/jbm.a.32931.
- Daculsi, G. *et al.* (2013) ‘Osteoconduction, Osteogenicity, Osteoinduction, what are the fundamental properties for a smart bone substitutes’, *Irbm*. Elsevier Masson SAS, 34(4–5), pp. 346–348. doi: 10.1016/j.irbm.2013.07.001.
- Du, S. and Kendall, K. (2012) ‘Aggregation and adhesion of gold nanoparticles in phosphate buffered saline’, *Nanopart Res*, 14(758). doi: 10.1007/s11051-012-0758-z.

- Eliaz, N. (ed.) (2012) *Degradation of Implant Materials*. London: Springer.
- Farikhin, F. (2016) ‘Analisa Scanning Electron Microscope Komposit Polyester dengan Filler Karbon Aktif dan Karbon Non Aktif’.
- Ferdiansyah *et al.* (2011) ‘Regenerasi pada Massive Bone Defect dengan Bovine Hydroxyapatite sebagai Scaffold Mesenchymal Stem Cell’, *JBP*, 13(3), pp. 179–195.
- Gunawan, B. and Azhari, C. D. (2010) ‘Karakteristik Spektrometri IR dan Scanning Electron Microscopy (SEM) Sensor Gas dari Bahan Polimer Poly Ethelyn Glycol (PEG)’ , *Jurnal Sains dan Teknologi*, 3(2), pp. 1–17.
- Henkel, J. *et al.* (2013) ‘Bone Regeneration Based on Tissue Engineering Conceptions — A 21st Century Perspective’, *Bone Research*. Sichuan University, 1(3), pp. 216–248. doi: 10.4248/BR201303002.
- Hughes, C. M. (2014) *A Finite Element Modelling Strategy for Suture Anchor Devices A thesis submitted for the degree of Doctor of Philosophy*. Brunel University.
- ISO109953-5:2009 (2009) *Biological Evaluation of Medical Devices - Part 5: Test for In Vitro Cytotoxicity*. 3rd edn. Geneva, Switzerland.
- Khan, W. S. *et al.* (2012) ‘An osteoconductive, osteoinductive, and osteogenic tissue-engineered product for trauma and orthopaedic surgery: How far are we?’ , *Stem Cells International*, 2012. doi: 10.1155/2012/236231.
- Khoiriyah, M. and Cahyaningrum, E. (2018) ‘Sintesis dan Karakterisasi Bone Graft dari Komposit Hidroksiapatit/Kolagen/Kitosan (HA/Coll/Chi) dengan Metode Ex-Situ sebagai Kandidat Implan Tulang’, *Kimia Unesa*, 7(1).
- Kurniasari, M. and Cahyaningrum, S. E. (2016) ‘Sintesis dan Karakterisasi Komposit Hidroksiapatit-Kolagen-Kitosan (HA/Coll/Chi) dengan Metode Ex-situ’, *Kimia Unesa*, 5(3).

- Lee, J. T. Y. and Chow, K. L. (2012) 'SEM Sample Preparation for Cells on 3D Scaffolds by Freeze-Drying and HMDS', *SCANNING*, 34, pp. 12–25. doi: 10.1002/sca.20271.
- Li, X. *et al.* (2013) 'Chitin, Chitosan, and Glycated Chitosan Regulate Immune Responses: The Novel Adjuvants for Cancer Vaccine', *Clinical and Developmental Immunology*, 2013. doi: 10.1155/2013/387023.
- Lieberman, J. R. and Friedlaender, G. E. (2005) *Bone Regeneration, Bone Regeneration*. Totwa, New Jersey: Humana Press. doi: 10.5772/1071.
- Milla, L. El, Indrani, D. J. and Irawan, B. (2018) 'Sintesis dan Uji Porositas Scaffold Hidroksiapatit/Alginat', *ODONTO Dental Journal*, 5, pp. 49–53.
- Mohamed, M. A. *et al.* (2017) *Spectroscopy, Membrane Characterization*. Elsevier B.V. doi: 10.1016/B978-0-444-63776-5.00001-2.
- Mollazadeh, S., Javadpour, J. and Khavandi, A. (2007) 'In situ synthesis and characterization of nano-size hydroxyapatite in poly(vinyl alcohol) matrix', *Ceramics International*, 33(8), pp. 1579–1583. doi: 10.1016/j.ceramint.2006.06.006.
- Munthe, R. V. and Suroto, H. (2014) 'Chip Freeze Dried Cancellous Bone Allograft as Scaffold to Fill Small Bone Deffect in Long Bone', 3, pp. 192–201.
- Pallela, R. *et al.* (2011) 'Biophysicochemical evaluation of chitosan-hydroxyapatite-marine sponge collagen composite for bone tissue engineering', *Biomedical Materials Research A*, 100A(2), pp. 486–495. doi: 10.1002/jbm.a.33292.
- Peng, L. *et al.* (2006) 'Preparation and Evaluation of Porous Chitosan/Collagen Scaffolds for Periodontal Tissue Engineering', *Journal of Bioactive and compatible Polymers*, 21(May 2006), pp. 207–220. doi: 10.1177/0883911506065100.

- Prahasanti, C., Wulandari, D. T. and Ulfa, N. (2018) 'Viability Test of Fish Scale Collagen (*Oshpronemus Gouramy*) on Baby Hamster Kidney Fibroblasts-21 Fibroblast Cell Culture', *Veterinary World*, 11, pp. 506–510. doi: 10.14202/vetworld.2018.506-510.
- Pramanik, N. *et al.* (2009) 'Study of Hydroxyapatite / Chitosan Phosphate Nanocomposite for Bone Tissue Engineering Applications', *Biomaterials*, 2009. doi: 10.1155/2009/512417.
- Riss, T. L. *et al.* (2016) 'Cell Viability Assays', in *Assay Guidance Manual*. Bethesda, Maryland: Eli Lilly & Company and the National Center for Advancing Translational Sciences, pp. 289–314.
- Saleha *et al.* (2015) 'Sintesis Dan Karakterisasi Hidroksiapatit dari Nanopartikel Kalsium Oksida ( CaO ) Cangkang Telur Untuk Aplikasi Dental Implan', (3), pp. 124–127.
- Sampath, U. G. T. M., Ching, Y. C. and Chuah, C. H. (2016) 'Fabrication of Porous Materials from Natural / Synthetic Biopolymers and Their Composites', pp. 1–32. doi: 10.3390/ma9120991.
- Sari, N. K. *et al.* (2017) 'Evaluation of chitosan-hydroxyapatite-collagen composite strength as scaffold material by immersion in simulated body fluid', *Physics: Conf. Series*. doi: 10.1088/1742-6596/884/1/012116.
- Sujatno, A. *et al.* (2015) 'Studi Scanning Electron Microscopy(SEM) untuk Karakterisasi Proses Oksidasi Paduan Zirkonium', *Jurnal Forum Nuklir (JFN)*, 9, pp. 44–50.
- Teixeira, S. *et al.* (2010) 'Proliferation and mineralization of bone marrow cells cultured on macroporous hydroxyapatite scaffolds functionalized with collagen type I for bone tissue regeneration', *Journal of Biomedical Materials Research Part A*, pp. 1–8. doi: 10.1002/jbm.a.32600.

- Teng, S. H. *et al.* (2016) ‘Biomimetic composite microspheres of collagen/chitosan/nano-hydroxyapatite: In-situ synthesis and characterization’, *Materials Science and Engineering C*. Elsevier B.V., 58, pp. 610–613. doi: 10.1016/j.msec.2015.09.021.
- Türk, S. *et al.* (2018) ‘3D porous collagen/functionalized multiwalled carbon nanotube/chitosan/hydroxyapatite composite scaffolds for bone tissue engineering’, *Materials Science and Engineering C*. Elsevier B.V, 92, pp. 757–768. doi: 10.1016/j.msec.2018.07.020.
- Wang, W. and Yeung, K. W. K. (2017) ‘Bone Grafts and Biomaterials Substitutes for Bone Defect’, *Bioactive Materials*. Elsevier Ltd, 2(4), pp. 224–247. doi: 10.1016/j.bioactmat.2017.05.007.
- Wang, Xiaoliang *et al.* (2009) ‘Synthesis and evaluation of collagen-chitosan-hydroxyapatite nanocomposites for bone grafting’, *Journal of Biomedical Materials Research - Part A*, 89(4), pp. 1079–1087. doi: 10.1002/jbm.a.32087.
- Wattanuchariya, W. and Changkowchai, W. (2014) ‘Characterization of Porous Scaffold from Chitosan - Gelatin / Hydroxyapatite for Bone Grafting’, *Proceedings of the International MultiConference of Engineers and Computer Scientists, II*.
- Zhao, H. *et al.* (2008) ‘Fabrication and properties of mineralized collagen-chitosan/hydroxyapatite scaffolds’, *Polym. Adv. Technol*, 19(1), pp. 1590–1596. doi: 10.1002/pat.1174.