

## DAFTAR PUSTAKA

- Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K. and Walter, P. 2002. *Molecular Biology of the Cell*. 4th ed. East Anglia: Garland Science
- Aryyaguna, D., Yuniastuti, M., Suniarti, D F., Idrus, E., Amir, L R. 2018. Architectural Properties of Chitosan and Chitosan-RGD Scaffolds of Crab Shells Using SEM and Swelling Test. *Journal of Physics: Conference Series* 1073 (2018), 022002. doi:10.1088/1742-6596/1073/2/022002
- Azizian, S., Hadjizadeh, A. and Niknejad, H. 2018. Chitosan-Gelatin Porous Scaffold Incorporated with Chitosan Nanoparticles for Growth Factor Delivery in Tissue Engineering. *Carbohydrate Polymers*. Elsevier, Vol. 202, pp. 315–322. DOI: 10.1016/j.carbpol.2018.07.023.
- Buckley, C. D. and Filer, A. 2017. Fibroblasts and Fibroblast-like Synoviocytes. Tenth Edit, Kelley and Firestein's Textbook of Rheumatology, 2-Volume Set. Tenth Edit. Elsevier Inc. DOI: 10.1016/B978-0-323-31696-5.00014-0.
- Castells-Sala, C., Alemany-Ribes, M., Fernández-Muiños, T., Recha-Sancho, L., López-Chicón, P., Reverté, C. A.-, Caballero-Camino, J., Márquez-Gil, A. and Semino, C. E. 2015. Current Applications of Tissue Engineering in Biomedicine. *J Biochip Tissue Chip*, Vol 2, p. 004. DOI: 10.4172/2153-0777.s2-004.
- Chiu, L. L. Y., Chu, Z. and Radisic, M. 2011. Tissue Engineering. *Comprehensive Nanoscience and Technology*. Toronto: Elsevier. Pp. 176-205
- Chicatun, F., Griffanti, G., McKee, M.D., Nazhat, S.N. 2017. Collagen/Chitosan Composite Scaffolds for Bone and Cartilage Tissue Engineering. *Biomedical Composites*. Canada: Elsevier. Pp. 163-198
- Chocolata, P., Kulda, V., Babuska, V. 2019. Fabrication of Scaffolds for Bone-Tissue Regeneration. *Materials* (Basel). Vol. 12, no. 4, pp. 568
- Dan, Y., Liu, O., Liu, Y., Zhang, Y., Li, S., Feng, X., Shao, Z. and Yang, C. 2016. Development of Novel Biocomposite Scaffold of Chitosan-Gelatin/Nanohydroxyapatite for Potential Bone Tissue Engineering Applications. *Nanoscale Research Letters*. Nanoscale Research Letters, pp. 1–6. DOI: 10.1186/s11671-016-1669-1.
- Dasgupta, S., Maji, K., and Nandi, S. K. 2018. Investigating the mechanical, physiochemical and osteogenic properties in gelatinchitosan-bioactive nanoceramic composite scaffolds for bone tissue regeneration: In vitro and in vivo. doi:10.1016/j.msec.2018.10.022
- Depan, D, Venkata Surya, P.K.C., Girase, B., Misra, R.D.K. 2011. Organic/inorganic hybrid network structure nanocomposite scaffolds based

- on grafted chitosan for tissue engineering. *Acta Biomaterialia* Vol. 7 pp. 2163–2175
- Escobar-sierra, D. M., Martins, J. and Ossa-Orozco, C. P. 2015. Chitosan/Hydroxyapatite Scaffolds for Tissue Engineering Manufacturing Method Effect Comparison. *Rev. Fac. Ing. Univ. Antioquia* N. ° 75 pp. 24–35. DOI: 10.17533/udea.redin.n75a04.
- Feller, L., Jadwat, Y., Khammissa, R. A. G., Meyerov, R., Schechter, I. and Lemmer, J. 2015. Cellular Responses Evoked by Different Surface Characteristics of Intraosseous Titanium Implants. *BioMed Research International*. Vol. 2015. pp 1-8
- Gattorno, M. and Martini, A. 2016. Immunology And Rheumatic Diseases: In Textbook Of Pediatric Rheumatology. Sixth Ed. Elsevier Inc., pp. 16–52. DOI: 10.1016/B978-1-4160-6581-4.10003-2.
- Gazit, Z., Aslan, H., Gafni, Y., Kimelman, N., Pelled, G. and Gazit, D. 2005. Mesenchymal Stem Cells. *Cells and Tissue Development*. pp. 318–343
- Giannoudis, P. V, Dinopoulos, H. and Tsiridis, E. 2005. Bone substitutes: An Update. *Injury, Int. J. Care Injured* (2005) 36S. pp. 20–27. DOI: 10.1016/j.injury.2005.07.029.
- Glenske, Kristina, Donkiewicz, Phil, Köwitsch, Alexander, Milosevic-Oljaca, Nada, Rider, Patrick, Rofall, Sven, Franke, Jörg, Jung, Ole, Smeets, Ralf, Schnettler, Reinhard, Wenisch, Sabine, Barbeck, Mike. 2018. Applications of Metals for Bone Regeneration. *International Journal of Molecular Sciences*, Vol. 19, no. 3, doi:10.3390/ijms19030826
- Gritsch, L., Maqbool, M., Viviana, M., Ciraldo, F. E., Cresswell, M., Jackson, P. R., Lovell, C., and Boccaccini A. R. 2019. Chitosan/hydroxyapatite composite bone tissue engineering scaffolds with dual and decoupled therapeutic ion delivery: copper and strontium. *J. Mater. Chem. B*.
- Hansson, S. and Halldin, A. 2012. Alveolar Ridge Resorption After Tooth Extraction: A Consequence of a Fundamental Principle of Bone Physiology. *Journal of Dental Biomechanics*. DOI: 10.1177/1758736012456543.
- Henggu, K. U., Ibrahim, B. and Suptijah, P. 2019. Hidroksiapatit dari cangkang sotong sebagai sediaan biomaterial perancah tulang. Vol 22, pp. 1–13
- Herda, E. dan Puspitasari, D. 2016. Tinjauan peran dan sifat material yang digunakan sebagai scaffold dalam rekayasa jaringan. *Jurnal material kedokteran gigi*, Vol 1(5), pp. 56–63
- Hong, S., Ergezen, E., Lec, R. and Ñ, K. A. B. 2006. Real-time analysis of cell – surface adhesive interactions using thickness shear mode resonator. Vol. 27, pp. 5813–5820. DOI: 10.1016/j.biomaterials.2006.07.031.

- Huang, Y., Onyeri, S., Siewe, M., Moshfeghian, A., Madihally, S. V. 2005. In vitro characterization of chitosan–gelatin scaffolds for tissue engineering. *Biomaterials* Vol. 26, pp. 7616–7627
- Ibraheim, H., Giacomini, C., Kassam, Z., Dazzi, F., Ibraheim, H., Giacomini, C., Kassam, Z. and Dazzi, F. 2018. Advances in mesenchymal stromal cell therapy in the management of Crohn “ s disease disease”, *Expert Review of Gastroenterology & Hepatology*. Taylor & Francis, 00(00), pp. 1–13. DOI: 10.1080/17474124.2018.1393332.
- Islam, M., Biswas, S., Sakib, N. and Ur, T. 2020. Bioactive Materials Chitosan based bioactive materials in tissue engineering applications-A review. *Bioactive Materials*. Elsevier, 5(1), pp. 164–183. DOI: 10.1016/j.bioactmat.2020.01.012.
- Jalise Zare, S., Baheiraei, N. and Baghery, F. 2018. The effects of strontium incorporation on a novel gelatin/bioactive glass bone graft: in vitro and in vivo characterization. *Ceramics International*. Elsevier Ltd and Techna Group S.r.l. DOI: 10.1016/j.ceramint.2018.05.025.
- Javaid, M. A. and Kaartinen, M. T. 2013. Mesenchymal Stem Cell-based Bone Tissue Engineering”, *International Dental Journal of Student’s Research*. Vol. 1 (3). Pp 24-35
- Jayakumar, P. and Silvio, L. Di. 2010. Osteoblasts in Tissue Engineering. *Proc. IMechE* Vol. 224 Part H: *J. Engineering in Medicine*. DOI: 10.1243/09544119JEIM821.
- Josef, M., Kamadjaja, K., Abraham, J. F. and Laksono, H. 2019. Biocompatibility of Portunus Pelagicus Hydroxyapatite Graft on Human Gingival Fibroblast Cell Culture. Vol 73(5), pp. 303–306. DOI: 10.5455/medarh.2019.73.303-306.
- Kartikasari, N., Yuliati, A., dan Listiana, I. 2016. Compressive strength and porosity on bovine hydroxyapatite-gelatin-chitosan scaffolds. *Dental Journal*. Vol. 49, no. 3. pp. 153-157
- Khalili, A. A. and Ahmad, M. R. 2015. A Review of Cell Adhesion Studies for Biomedical and Biological Applications. *Int. J. Mol. Sci.* 2015, 16, pp. 18149–18184. DOI: 10.3390/ijms160818149.
- Kim, Ah Young; Kim, Yongsun; Lee, Seung Hoon; Yoon, Yongseok; Kim, Wan-Hee; Kweon, Oh-Kyeong. 2017. Effect of Gelatin on Osteogenic Cell Sheet Formation Using Canine Adipose-Derived Mesenchymal Stem Cells. *Cell Transplantation*, Vol. 26, no. 1, pp. 115–123. doi:10.3727/096368916x693338

- Kumar, P., Dehiya, B. S., and Sindhu, A., 2017. Comparative study of chitosan and chitosan–gelatin scaffold for tissue engineering. *International Nano Letters* Vol. (2017), no. 7. pp. 285–290
- Krishnamurithy, G., 2013. A Review On Hydroxyapatite-based Scaffolds As A potential Bone Graft Substitute For Bone Tissue engineering Applications. *JUMMEC* Vol. 16, no. 2
- Kumar, P., Vinitha, B. and Fathima, G. 2013. Bone grafts in dentistry. *Journal of Pharmacy and Bioallied Sciences*. Vol. 5 Supplement 1 pp. 125–128. DOI: 10.4103/0975-7406.113312.
- Levengood, S. K. L. and Zhang, M. 2014. Chitosan-based scaffolds for bone tissue engineering. *J. Mater. Chem. B*. Vol. 2 pp. 3161–3184. DOI: 10.1039/c4tb00027g.
- Lian, H., Zhang, L., and Meng Z. 2018. Biomimetic hydroxyapatite/gelatin composites for bone tissue regeneration: fabrication, characterization, and osteogenic differentiation in vitro. *Jmade* (2018), doi:10.1016/j.matdes.2018.07.009
- Maji, K., Dasgupta, S., Kundu, B., & Bissoyi, A. 2015. Development of gelatin-chitosan-hydroxyapatite based bioactive bone scaffold with controlled pore size and mechanical strength, *Journal of Biomaterials Science, Polymer Edition*, DOI: 10.1080/09205063.2015.1082809
- Martínez, A., Blanco, M. D., Davidenko, N., & Cameron, R. E. 2015. Tailoring chitosan/collagen scaffolds for tissue engineering: Effect of composition and different crosslinking agents on scaffold properties. *Carbohydrate Polymers*, Vol. 132, pp. 606–619. doi:10.1016/j.carbpol.2015.06.084
- Merrett, K., Cornelius, R. M., McClung, W. G., Unsworth, L. D. and Sheardown, H. 2002. Surface analysis methods for characterizing polymeric biomaterials. *J. Biomater. Sci. Polymer Edn*, Vol. 13, No. 6, pp. 593–621 DOI: 10.1163/156856202320269111.
- Mondal, Sudip and Pal, Umapada. 2019. 3D hydroxyapatite scaffold for bone regeneration and local drug delivery applications. *Journal of Drug Delivery Science and Technology*, Vol. 53, 101131. doi:10.1016/j.jddst.2019.101131
- Moreira, C. D. F., Carvalho, S. M., Florentino, R. M., França, A., Okano, B. S., Rezende, C. M. F., Mansur, H. S. and Pereira, M. M. 2019. International Journal of Biological Macromolecules Injectable chitosan/gelatin/bioactive glass nanocomposite hydrogels for potential bone regeneration : In vitro and in vivo analyses. *International Journal of Biological Macromolecules*. Elsevier B.V., Vol 132, pp. 811–821. DOI: 10.1016/j.ijbiomac.2019.03.237.
- Murray, L. A., Knight, A. and Laurent, J. 2009. Fibroblasts in Asthma and COPD: Basic and clinical Management, pp. 193–200

- Naini, A., Sudiana, I. K., Rubianto, M., Kresnoadi, U., Latief, F. D. E. 2019. Effects of hydroxyapatite scaffold applied to rat alveolar bone sockets on osteoclast, osteoblast, and trabecular bone area. *Dental Journal*. Vol. 52, no. 1. pp. 13-17
- Ng, T. K., Pelaez, D., Fortino, V. R., Greenberg, J. and Cheung, H. S. 2013. Pluripotent Adult Stem Cells : A Potential Revolution in Regenerative Medicine and Tissue Engineering. DOI: 10.5772/54366.
- Paz, A. G., Maghaireh, H. and Mangano, F. G. 2018. Review Article Stem Cells in Dentistry: Types of Intra- and Extraoral Tissue-Derived Stem Cells and Clinical Applications. *Stem Cells International*. Vol 2018. pp 14
- Polo-Corrales, L., Latorre-Esteves, M. and Ramirez-Vick, J. E. 2014. Scaffold design for bone regeneration. *Journal of Nanoscience and Nanotechnology*, Vol 14(1), pp. 15–56. DOI: 10.1166/jnn.2014.9127.
- Pratiwi, A. R., Yuliati, A., Soepribadi, I., dan Ariani, M. D. 2015. Application of chitosan scaffolds on vascular endothelial growth factor and fibroblast growth factor 2 expressions in tissue engineering principles. *Dental Journal*. Vol 48, no 4, pp. 213-216
- Prasadh, Somasundaram Wong, and Raymond Chung Wen. 2018. Unraveling the mechanical strength of biomaterials used as a bone scaffold in oral and maxillofacial defects. *Oral Science International*. doi:10.1016/S1348-8643(18)30005-3
- Proksch, S. and Galler, K. M. 2018. Scaffold Materials and Dental Stem Cells in Dental Tissue Regeneration. *Current Oral Health Reports*, pp. 304–316
- Ragunathan, S., Govindasamy, G., Raghul, D. R., Karuppaswamy, M. and Vijayachandratogo, R. K. 2019. Materials Today: Proceedings Hydroxyapatite reinforced natural polymer scaffold for bone tissue regeneration. *Materials Today: Proceedings*. Elsevier Ltd, (xxxx). DOI: 10.1016/j.matpr.2019.07.712.
- Rahmitasari, F. 2016. Scaffold 3D kitosan dan kolagen sebagai graft pada kasus kerusakan tulang (Study Pustaka). *Jurnal Material Kedokteran Gigi*. Vol. 5(2), pp. 1–7. DOI: 10.32793/jmkg.v5i2.246.
- Rahmitasari, F., Rahayu, R. P., dan Munadziroh, E. 2016. The Potential of Chitosan Combined with Chicken Shank Collagen as Scaffold on Bone Defect Regeneration Process in *Rattus novergicus*. *Dental Journal*. Vol. 49, no. 1, pp. 22-27
- Raya, I., Mayasari, E., Yahya, A., Syahrul, M. and Latunra, A. I. 2015. Synthesis and Characterizations of Calcium Hydroxyapatite Derived from Crabs Shells (*Portunus pelagicus*) and Its Potency in Safeguard against to Dental Demineralizations. *International Journal of Biomaterials* Vol. 2015, pp. 8

- Reznikof, N., Sharar, R., Weiner, S., 2014. Three-Dimensional Structure of Human Lamellar Bone; The Presence of two Different Materials and New Insights into the Hierarchical organization. *Bone* 59, pp 93-104
- Reznikof, N., Chase, H., Brumfeld, V., Sharar, R., Weiner, S., 2015. The 3D Structure of Collagen Fibril Network in Human Trabecular Bone; Relation to Trabecular organization. *Bone* 71, pp 189-195
- Riveiro, A., Maçon, A. L. B., del Val, J., Comesaña, R. and Pou, J. 2018. Laser surface texturing of polymers for biomedical applications. *Frontiers in Physics*, Vol. 6. (16) DOI: 10.3389/fphy.2018.00016.
- Rodríguez-vázquez, M., Vega-ruiz, B., Ramos-zúñiga, R., Saldaña-koppel, D. A. and Quiñones-olvera, L. F. 2015. Chitosan and Its Potential Use as a Scaffold for Tissue Engineering in Regenerative Medicine. *BioMed Research International*. Vol. 2015, pp 1-15
- Roi, A., Ardelean, L. C., Roi, C. I., Boia, E., Boia, S. and Rusu, L. 2019. Oral Bone Tissue Engineering: Advanced Biomaterials for Cell Adhesion, Proliferation and Differentiation. *Materials*. Vol. 12, pp. 1–16. DOI: 10.3390/ma12142296.
- Rujitanapanich, S., Kumpapan, P. and Wanjanoi, P. 2014. Synthesis of Hydroxyapatite from Oyster Shell via Precipitation. *Energy Procedia*. Elsevier B.V., 56, pp. 112–117. DOI: 10.1016/j.egypro.2014.07.138.
- Rupani, A., Balint, R. and Cartmell, S. H. (2012) „Osteoblasts and their applications in bone tissue engineering“, 4, pp. 49–61 Samyukta (2016) „Residual Ridge Resorption in Complete Denture Wearers“, 8(6), pp. 565–569
- Seif-naraghi, S. B. and Christman, K. L. 2013. Biomaterial Scaffolds The Evolution of Cardiac Tissue Engineering. Resident Stem Cells and Regenerative Therapy. Elsevier Inc., pp. 43–67. DOI: 10.1016/B978-0-12-416012-5.00003-7.
- Sularsih dan Wahjuningsih, E. 2015. Expression of bone morphogenetic protein-2 after using chitosan gel with different molecular weight on wound healing process of dental extraction. *Dental journal* Vol. 48 no. 2, pp. 53-58
- Tachaboonyakiat, W., Ogomi, D., Serizawa, T. and Akashi, M. 2006. Evaluation of cell adhesion and proliferation on a novel tissue engineering scaffold containing chitosan and hydroxyapatite. *Journal of Bioactive and Compatible Polymers*, Vol. 21(6), pp. 579–589. DOI: 10.1177/0883911506070441.
- Taylor, P., Roberts, T. T., Rosenbaum, A. J., Roberts, T. T. and Rosenbaum, A. J. 2012. Bone grafts, bone substitutes and orthobiologics The bridge between basic science and clinical advancements in fracture healing. *Organogenesis* Vol. 8:4, pp. 114–124; DOI: 10.4161/org.23306.

- Thein-Han, W.W. and Misra, R.D.K. 2009. Biomimetic chitosan–nanohydroxyapatite composite scaffolds for bone tissue engineering. *Acta Biomaterialia*. Vol. 5, pp. 1182–1197
- Tripathi, G. and Basu, B. 2012. A porous hydroxyapatite scaffold for bone tissue engineering: Physico-mechanical and biological evaluations. *Ceramics International*. Elsevier Ltd and Techna Group S.r.l., Vol. 38(1), pp. 341–349. DOI: 10.1016/j.ceramint.2011.07.012.
- Vachiraroj, N., Damrongsakkul, S. and Kanokpanont, S. 2010. Gelatin/hydroxyapatite scaffolds: Studies on adhesion, growth and differentiation of Mesenchymal stem cells. *Advanced Materials Research* Vols. 93-94, pp. 121–124. DOI: 10.4028/www.scientific.net/AMR.93-94.121.
- Wardiana Aspita, E., Shalli Gitra, F., Saputra Candra, E. and Cahyaningrum Edi, S. 2019. Pemanfaatan Batu Kapur Sebagai Bahan Baku Hidroksiapatit. *Unesa Journal of Chemistry*, Vol. 8, no. 2, pp. 62-66
- Winias, S., Ernawati, D. S., Ariani, M. D., dan Rahayu, R. P. 2017. Scaffold combination of chitosan and collagen synthesized from chicken feet induces osteoblast and osteoprotegerin expression in bone healing process of mice. *Dental Journal* Vol. 50, no. 2, pp. 86-90
- Zarif Maria-Elena. 2018. A Review of Chitosan-, Alginate-, and Gelatin-based Biocomposites for Bone Tissue Engineering. *Biomaterials and Tissue Engineering Bulletin*. Vol. 5, Issue (3-4), pp. 97-109
- Zhang, J., Nie, J., Zhang, Q., Li, Y., Wang, Z., & Hu Q. 2013. Preparation and characterization of bionic bone structure chitosan/hydroxyapatite scaffold for bone tissue engineering, *Journal of Biomaterials Science, Polymer Edition*, DOI: 10.1080/09205063.2013.836950