DAFTAR PUSTAKA

Abou Neel, E. A., Chrzanowski, W., Salih, V. M., Kim, H. W. and Knowles, J. C. (2014) 'Tissue engineering in dentistry', *Journal of Dentistry*. Elsevier Ltd, 42(8), pp. 915–928. DOI: 10.1016/j.jdent.2014.05.008.

Ambore, S., Sangameshwar, K., Mukesh, G., Chandrakant, R., Avinash, D., Ambore, M. and Pharm, M. (2014) 'A brief overview on chitosan applications', *Indo American Journal of Pharmaceutical Research*, 20133(February), pp. 2231–6876

Araújo, M. G., Silva, C. O., Misawa, M. and Sukekava, F. (2015) 'Alveolar socket healing: What can we learn?', *Periodontology 2000*, 68(1), pp. 122–134. DOI: 10.1111/prd.12082.

Ariani, M. D., Matsuura, A., Hirata, I., Kubo, T., Kato, K. and Akagawa, Y. (2013) 'New development of carbonate apatite-chitosan scaffold based on lyophilization technique for bone tissue engineering', *Dental Materials Journal*, 32(2), pp. 317–325. DOI: 10.4012/dmj.2012-257.

Baptista, P. M. and Atala, A. (2016) *Regenerative Medicine: The Hurdles and Hopes, Translating Regenerative Medicine to the Clinic*. Elsevier Inc. DOI: 10.1016/B978-0-12-800548-4.00001-2.

Barone, A., Ricci, M., Tonelli, P., Santini, S. and Covani, U. (2013) 'Tissue changes of extraction sockets in humans: A comparison of spontaneous healing vs. ridge preservation with secondary soft tissue healing', *Clinical Oral Implants Research*, 24(11), pp. 1231–1237. DOI: 10.1111/j.1600-0501.2012.02535.x.

Beşkardeş, I. G., Demirtaş, T. T., Durukan, M. D. and Gümüşderelioğlu, M. (2015) 'Microwave-assisted fabrication of chitosan-hydroxyapatite superporous hydrogel composites as bone scaffolds', *Journal of Tissue Engineering and Regenerative Medicine*, 9(11), pp. 1233–1246. DOI: 10.1002/term.1677.

Cai, X., Chen, L., Jiang, T., Shen, X., Hu, J. and Tong, H. (2011) 'Facile synthesis of anisotropic porous chitosan/hydroxyapatite scaffolds for bone tissue engineering', *Journal of Materials Chemistry*, 21(32), p. 12015. DOI: 10.1039/c1jm11503k.

Covani, U., Ricci, M., Bozzolo, G., Mangano, F., Zini, A. and Barone, A. (2011) 'Analysis of the pattern of the alveolar ridge remodelling following single tooth extraction', *Clinical Oral Implants Research*, 22(8), pp. 820–825. DOI: 10.1111/j.1600-0501.2010.02060.x.

Croisier, F. and Jérôme, C. (2013) 'Chitosan-based biomaterials for tissue engineering', *European Polymer Journal*, 49(4), pp. 780–792. DOI: 10.1016/j.eurpolymj.2012.12.009.

Darus, F. and Jaafar, M. (2020) 'Enhancement of carbonate apatite scaffold properties with surface treatment and alginate and gelatine coating', *Journal of Porous Materials*. Springer US, 27(3), pp. 831–842. DOI: 10.1007/s10934-019-00848-1.

Discepoli, N., Vignoletti, F., Laino, L., De Sanctis, M., Muñoz, F. and Sanz, M. (2013) 'Early healing of the alveolar process after tooth extraction: An experimental study in the beagle dog', *Journal of Clinical Periodontology*, 40(6), pp. 638–644. DOI: 10.1111/jcpe.12074.

Eltom, A., Zhong, G. and Muhammad, A. (2019) 'Scaffold Techniques and Designs in Tissue Engineering Functions and Purposes: A Review', *Advances in Materials Science and Engineering*, 2019. DOI: 10.1155/2019/3429527.

Emam, H. A. and Stevens, M. R. (2013) 'Concepts in Bone Reconstruction for Implant Rehabilitation', in *A Textbook of Advanced Oral and Maxillofacial Surgery*. InTech, p. 13. DOI: 10.5772/53401.

Escobar-Sierra, D. M., Martins, J. and Ossa-Orozco, C. P. (2015) 'Chitosan/hydroxyapatite scaffolds for tissue engineering manufacturing method effect comparison', *Revista Facultad de Ingenieria*, 1(75), pp. 24–35. DOI: 10.17533/udea.redin.n75a04.

Guo, Y.-P., Guan, J.-J., Yang, J., Wang, Y., Zhang, C.-Q. and Ke, Q.-F. (2015) 'Hybrid nanostructured hydroxyapatite–chitosan composite scaffold: bioinspired fabrication, mechanical properties and biological properties', *Journal of Materials Chemistry B*, 3(23), pp. 4679–4689. DOI: 10.1039/C5TB00175G.

Hannink, G. and Arts, J. J. C. (2011) 'Bioresorbability, porosity and mechanical of bone substitutes: What is optimal for bone regeneration?', *Injury*. Elsevier Ltd, 42(SUPPL. 2), pp. S22–S25. DOI: 10.1016/j.injury.2011.06.008.

Hengky, A. (2011) 'Peran hidroksiapatit sebagai bone graft dalam proses penyembuhan tulang', *stomatognatik Jurnal Kedokteran Gigi*, 8(2), pp. 6–9

Henkel, J., Woodruff, M. A., Epari, D. R., Steck, R., Glatt, V., DIckinson, I. C., Choong, P. F. M., Schuetz, M. A. and Hutmacher, Di. W. (2013) 'Bone Regeneration Based on Tissue Engineering Conceptions-A 21st Century Perspective', *Bone Research*. Sichuan University, 1, pp. 216–248. DOI: 10.4248/BR201303002.

Herda, E. and Puspitasari, D. (2016) 'Tinjauan peran dan sifat material yang digunakan sebagai scaffold dalam rekayasa jaringan', *Jurnal material kedokteran gigi*, 1(5), pp. 56–63

Horowitz, R., Holtzclaw, D. and Rosen, P. S. (2012) 'A review on alveolar ridge preservation following tooth extraction', *Journal of Evidence-Based Dental Practice*. Elsevier Inc., 12(3 SUPPL.), pp. 149–160. DOI: 10.1016/S1532-3382(12)70029-5.

Horváth, A., Mardas, N., Mezzomo, L. A., Needleman, I. G. and Donos, N. (2013) 'Alveolar ridge preservation. A systematic review', *Clinical Oral Investigations*, 17(2), pp. 341–363. DOI: 10.1007/s00784-012-0758-5.

Im, K. H., Park, J. H., Kim, K. N., Kim, K. M., Choi, S. H., Kim, C. K. and Lee, Y. K. (2005) 'Organic-inorganic hybrids of hydroxyapatite with chitosan', *Key Engineering Materials*, 284–286, pp. 729–732. DOI: 10.4028/www.scientific.net/kem.284-286.729.

Indrani, D. J. and Adi, W. A. (2018) 'Preparasi Nanokristalin Hidroksiapatit Untuk Scaffold Rekayasa Jaringan Tulang', *Jusami | Indonesian Journal of Materials Science*, 13(4), pp. 36–39. DOI: 10.17146/JSMI.2012.13.4.4754.

Kamadjaja, M. J. K., Abraham, J. F. and Laksono, H. (2019) 'Biocompatibility of Portunus Pelagicus Hydroxyapatite Graft on Human Gingival Fibroblast Cell Culture', *Medical archives (Sarajevo, Bosnia and Herzegovina)*, 73(6), pp. 378–381. DOI: 10.5455/medarh.2019.73.378-381.

Kartikasari, N., Yuliati, A. and Kriswandini, I. L. (2016) 'Compressive and porosity tests on bovine hydroxyapatite-gelatin-chitosan scaffolds', *Dental Journal (Majalah Kedokteran Gigi)*, 49(3), p. 153. DOI: 10.20473/j.djmkg.v49.i3.p153-157.

Kashiwazaki, H., Kishiya, Y., Matsuda, A., Yamaguchi, K., Iizuka, T., Tanaka, J. and Inoue, N. (2009) 'Fabrication of porous chitosan/hydroxyapatite nanocomposites: Their mechanical and biological properties', *Bio-Medical Materials and Engineering*, 19(2–3), pp. 133–140. DOI: 10.3233/BME-2009-0572.

Kumar, P., Vinitha, B. and Fathima, G. (2013) 'Bone grafts in dentistry', *Journal of Pharmacy and Bioallied Sciences*, 5(SUPPL.1), pp. 125–128. DOI: 10.4103/0975-7406.113312.

Kuntjoro, M., Rostiny, R. and Widajati, W. (2010) 'Alveolar ridge rehabilitation to increase full denture retention and stability', *Dental Journal (Majalah Kedokteran Gigi)*, 43(4), p. 181. DOI: 10.20473/j.djmkg.v43.i4.p181-185.

Lan Levengood, S. and Zhang, M. (2015) 'Chitosan-based scaffolds for bone tissue engineering', *J Mater Chem B Mater Biol Med.*, 2(21), pp. 3161–3184. DOI: 10.1039/C4TB00027G.Chitosan-based.

Mahanani, E. S. (2013) 'Perancah Hidogel untuk Aplikasi Rekayasa Jaringan

Tulang Hydrogel Scaffold for Bone Tissue Engineering Application', *Insisiva Dental Journal*, 2(2), pp. 51–56

Milla, L. El, Indrani, D. J. and Irawan, B. (2018) 'Sintesis Dan Uji Porositas Scaffold Hidroksiapatit/Alginat', *ODONTO : Dental Journal*, 5(1), p. 49. DOI: 10.30659/odj.5.1.49-53.

Mozartha, M. (2015) 'Hidroksiapatit dan Aplikasinya di Bidang Kedokteran Gigi', *Journal of Visual Languages & Computing*, 11(3), pp. 287–301

O'Brien, F. J. (2011) 'Biomaterials & scaffolds for tissue engineering', *Materials Today*. Elsevier Ltd, 14(3), pp. 88–95. DOI: 10.1016/S1369-7021(11)70058-X.

Pagni, G., Pellegrini, G., Giannobile, W. V. and Rasperini, G. (2012) 'Postextraction alveolar ridge preservation: Biological basis and treatments', *International Journal of Dentistry*, 2012. DOI: 10.1155/2012/151030.

Perez-Puyana, V., Rubio-Valle, J. F., Jiménez-Rosado, M., Guerrero, A. and Romero, A. (2020) 'Chitosan as a potential alternative to collagen for the development of genipin-crosslinked scaffolds', *Reactive and Functional Polymers*. Elsevier, 146(October 2019), p. 104414. DOI: 10.1016/j.reactfunctpolym.2019.104414.

Perić Kačarević, Ž., Rider, P., Alkildani, S., Retnasingh, S., Pejakić, M., Schnettler, R., Gosau, M., Smeets, R., Jung, O. and Barbeck, M. (2020) 'An introduction to bone tissue engineering', *International Journal of Artificial Organs*, 43(2), pp. 69–86. DOI: 10.1177/0391398819876286.

Pina, S., Ribeiro, V. P., Marques, C. F., Maia, F. R., Silva, T. H., Reis, R. L. and Oliveira, J. M. (2019) 'Regenerative Medicine Applications', *Materials*, 12(i)

Polo-Corrales, L., Latorre-Esteves, M. and Ramirez-Vick, J. E. (2014) 'Scaffold design for bone regeneration. Journal of nanoscience and nanotechnology', 14(1), pp. 15–56. DOI: 10.1109/TMI.2012.2196707.Separate.

Prasadh, S. and Wong, R. C. W. (2018) 'Unraveling the mechanical of biomaterials used as a bone scaffold in oral and maxillofacial defects', *Oral Science International*. Japanese Stomatological Society, 15(2), pp. 48–55. DOI: 10.1016/S1348-8643(18)30005-3.

Rahmitasari, F. (2018) 'Scaffold 3D Kitosan dan Kolagen Sebagai Graft pada Kasus Kerusakan Tulang', *Jurnal Material Kedokteran Gigi*, 5(2), p. 1. DOI: 10.32793/jmkg.v5i2.246.

Ramesh, N., Ratnayake, J. T. B., Moratti, S. C. and Dias, G. J. (2020) 'Effect of chitosan infiltration on hydroxyapatite scaffolds derived from New Zealand

bovine cancellous bones for bone regeneration', *International Journal of Biological Macromolecules*. Elsevier B.V., 160, pp. 1009–1020. DOI: 10.1016/j.ijbiomac.2020.05.269.

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*, 2015. DOI: 10.1155/2015/821279.

Samarawickrama, K. G. (2018) 'A review on bone grafting, bone substitutes and bone tissue engineering', *ACM International Conference Proceeding Series*, (June), pp. 244–251. DOI: 10.1145/3239438.3239457.

Saravanan, S., Leena, R. S. and Selvamurugan, N. (2016) 'Chitosan based biocomposite scaffolds for bone tissue engineering', *International Journal of Biological Macromolecules*. Elsevier B.V., 93, pp. 1354–1365. DOI: 10.1016/j.ijbiomac.2016.01.112.

Sun, T., Khan, T. H. and Sultana, N. (2014) 'Fabrication and in vitro evaluation of nanosized hydroxyapatite/chitosan- based tissue engineering scaffolds', *Journal of Nanomaterials*, 2014. DOI: 10.1155/2014/194680.

Supangat, D. and Cahyaningrum, S. E. (2017) 'SYNTHESIS AND CHARACTERIZATION OF HYDROXYAPATITE OF CRABS SHELL (scylla serrata) BY WET APPLICATION METHOD', *UNESA Journal of Chemistry*, 6(3), pp. 143–149

Taylor, B. L., Andric, T. and Freeman, J. W. (2013) 'Recent advances in bone graft technologies', *Recent Patents on Biomedical Engineering*, 6(1), pp. 40–46. DOI: 10.2174/1874764711306010006.

Tran, T. T., Hamid, Z. A. and Cheong, K. Y. (2018) 'A Review of Mechanical Properties of Scaffold in Tissue Engineering: Aloe Vera Composites', *Journal of Physics: Conference Series*, 1082(1). DOI: 10.1088/1742-6596/1082/1/012080.

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., 38(1), pp. 341–349. DOI: 10.1016/j.ceramint.2011.07.012.

Tsiourvas, D., Sapalidis, A. and Papadopoulos, T. (2016) 'Hydroxyapatite/chitosan-based porous three-dimensional scaffolds with complex geometries', *Materials Today Communications*. Elsevier Ltd., 7, pp. 59–66. DOI: 10.1016/j.mtcomm.2016.03.006.

Turnbull, G., Clarke, J., Picard, F., Riches, P., Jia, L., Han, F., Li, B. and Shu, W. (2018) '3D bioactive composite scaffolds for bone tissue engineering', *Bioactive Materials*, 3(3), pp. 278–314. DOI:

10.1016/j.bioactmat.2017.10.001.

Velasco, M. A., Narváez-Tovar, C. A. and Garzón-Alvarado, D. A. (2015) 'Design, materials, and mechanobiology of biodegradable scaffolds for bone tissue engineering', *BioMed Research International*, 2015. DOI: 10.1155/2015/729076.

Wang, W. and Yeung, K. W. K. (2017) 'Bone grafts and biomaterials substitutes for bone defect repair: A review', *Bioactive Materials*. Elsevier Ltd, 2(4), pp. 224–247. DOI: 10.1016/j.bioactmat.2017.05.007.

William D. Callister, D. G. R. (2015) *Fundamentals Materials science and Engineering : An Integrated Approach*, *Fundamentals of Materials Science and Engineering AN INTEGRATED APPROACH*. Available at: 9781119230403.

Ying, R., Wang, H., Sun, R. and Chen, K. (2020) 'Preparation and properties of a highly dispersed nano-hydroxyapatite colloid used as a reinforcing filler for chitosan', *Materials Science and Engineering C*. Elsevier, 110(January), p. 110689. DOI: 10.1016/j.msec.2020.110689.

Zhang, J., Liu, G., Wu, Q., Zuo, J., Qin, Y. and Wang, J. (2012) 'Novel Mesoporous Hydroxyapatite/Chitosan Composite for Bone Repair', *Journal of Bionic Engineering*. Jilin University, 9(2), pp. 243–251. DOI: 10.1016/S1672-6529(11)60117-0.

Zhang, J., Nie, J., Zhang, Q., Li, Y., Wang, Z. and Hu, Q. (2014) 'Preparation and characterization of bionic bone structure chitosan/hydroxyapatite scaffold for bone tissue engineering', *Journal of Biomaterials Science, Polymer Edition*, 25(1), pp. 61–74. DOI: 10.1080/09205063.2013.836950.

Zhao, H., Liao, J., Wu, F. and Shi, J. (2020) 'Mechanical improvement of chitosan / hydroxyapatite scaffolds by coating and cross-linking', *Journal of the Mechanical Behavior of Biomedical Materials*. Elsevier Ltd, (April), p. 104169. DOI: 10.1016/j.jmbbm.2020.104169.