

DAFTAR PUSTAKA

- Al-Itry, R., Lamnawar, K., & Maazouz, A. (2012). Improvement of thermal stability, rheological and mechanical properties of PLA, PBAT and their blends by reactive extrusion with functionalized epoxy. *Polymer Degradation and Stability*, 97(10), 1898–1914.
- Agrawal, V., Patgaonkar, P. R., & Nagariya, S. P. (2010). Tuberculosis of spine. *Journal of Craniovertebral Junction and Spine*, 1(2), 74–85.
- Bogduk, N. (2016). Functional anatomy of the spine. In *Handbook of Clinical Neurology* (1st ed., Vol. 136).
- Bose, S., Roy, M., & Bandyopadhyay, A. (2012). Recent advances in bone tissue engineering scaffolds. *Trends in Biotechnology*, 30(10), 546–554.
- Bukhari, S. M. H., Khan, S., Rehanullah, M., & Ranjha, N. M. (2015). Synthesis and Characterization of Chemically Cross-Linked Acrylic Acid/Gelatin Hydrogels: Effect of pH and Composition on Swelling and Drug Release. *International Journal of Polymer Science*, 2015.
- Brooks, G. F. *et al.*, 2013. *Jawetz, Melnick & Adelberg's Medical Microbiology*. Edisi ke-26 ed. New York: McGraw Hill Lange.
- Chao, S. C., Wang, M. J., Pai, N. S., & Yen, S. K. (2015). Preparation and characterization of gelatin-hydroxyapatite composite microspheres for hard tissue repair. *Materials Science and Engineering C*, 57, 113–122.
- Chen, C. H., Chen, Y. M., Lee, C. W., Chang, Y. J., Cheng, C. Y., & Hung, J. K. (2016). Early diagnosis of spinal tuberculosis. *Journal of the Formosan Medical Association*, 115(10), 825–836.
- Chia, H. N., & Wu, B. M. (2015). Recent advances in 3D printing of biomaterials. *Journal of Biological Engineering*, 9(1), 1–14.
- Dhandayuthapani, B., Yoshida, Y., Maekawa, T., & Kumar, D. S. (2011). Polymeric scaffolds in tissue engineering application: A review. *International Journal of Polymer Science*, 2011(ii).

- Ding, C., Zhang, M., & Li, G. (2015). Preparation and characterization of collagen/hydroxypropyl methylcellulose (HPMC) blend film. *Carbohydrate Polymers*, *119*, 194–201.
- Du, S. and Kendall, K. (2012). Agregation and Adhesion of Gold Nanoparticles in Phosphate Buffered Saline. *Nanopart Res*, *14*(758).
- Farikhin, F., Ngafwan, Sedyono, J., (2016). *Analisa Scanning Electron Microscope Komposit Polyester dengan Filler Karbon Aktif dan Karbon Non-Aktif*. Teknik Mesin Universitas Muhammadiyah Surakarta. Surakarta.
- Frost, B. A., Camarero-Espinosa, S., & Johan Foster, E. (2019). Materials for the spine: Anatomy, problems, and solutions. *Materials*, *12*(2), 1–41.
- Garg, R. K., & Somvanshi, D. S. (2011). Spinal tuberculosis: A review. *Journal of Spinal Cord Medicine*, *34*(5), 440–454.
- Gopi, D., Ramya, S., Rajeswari, D., Karthikeyan, P., & Kavitha, L. (2014). Strontium, cerium co-substituted hydroxyapatite nanoparticles: Synthesis, characterization, antibacterial activity towards prokaryotic strains and in vitro studies. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, *451*(1), 172–180.
- Gouliouris, T., Aliyu, S. H., & Brown, N. M. (2010). Spondylodiscitis: Update on diagnosis and management. *Journal of Antimicrobial Chemotherapy*, *65*(SUPPL. 3), 11–24.
- Gunatillake, P. A. & Adhikari, R., (2003). Biodegradable Synthetic Polymers for Tissue Engineering. *European Cells and Materials*, Volume 5, pp. 1-16.
- Handayani, D., & Dominica, D. (2018). *Jurnal Farmasi Dan Ilmu Kefarmasian Indonesia Vol. 5 No. 1 Juli 2018* *36*. *5*(1), 36–44.
- Hidayat, G., Dewi, E. N., & Rianingsih, L. (2016). Karakteristik Gelatin Tulang Ikan Nila dengan Hidrolisis Menggunakan Asam Fosfat dan Enzim Papain. *Jurnal Pengolahan Hasil Perikanan Indonesia* *19*(1) : 69-78.
- Hikmawati, D., Maulida, H. N., Putra, A. P., Budiatin, A. S., & Syahrom, A. (2019). Synthesis and Characterization of Nanohydroxyapatite-Gelatin

Composite with Streptomycin as Antituberculosis Injectable Bone Substitute. *International Journal of Biomaterials*, 2019.

Hussein-Al-Ali, S. H., El Zowalaty, M. E., Hussein, M. Z., Ismail, M., & Webster, T. J. (2014). Synthesis, characterization, controlled release, and antibacterial studies of a novel streptomycin chitosan magnetic nanoantibiotic. *International Journal of Nanomedicine*, 9(1), 549–557.

Iqbal, N., Abdul Kadir, M. R., Nik Malek, N. A. N., Humaimi Mahmood, N., Raman Murali, M., & Kamarul, T. (2012). Rapid microwave assisted synthesis and characterization of nanosized silver-doped hydroxyapatite with antibacterial properties. *Materials Letters*, 89, 118–122.

Jain, A. K., Dhammi, I. K., Jain, S., & Mishra, P. (2010). Kyphosis in spinal tuberculosis - Prevention and correction. *Indian Journal of Orthopaedics*, 44(2), 127–136.

Jatmiko, S., Joko, S., (2019). *Analisa Kekuatan Puntir dan Kekuatan Lentur Putar Poros Baja ST 60 sebagai Aplikasi Perancangan Bahan Poros Baling-Baling Kapal*. Teknik Perkapalan Fakultas Teknik. Universitas Diponegoro.

Jeffers, P., (2019). *Spondylolysis (Pars Fractures) and Lytic Spondylolisthesis* [Online].Dapat diakses pada: <https://www.pauljeffordsmd.com/spondylolysis-pars-fractures-and-lytic>. [Diakses pada tanggal 25 November 2019].

Jonathan, RMS., Hadi, Isra., Sulthoni, Alfian., (2010). *Modul C Uji Puntir*. Laboratorium Teknik Material. Institut Teknologi Bandung.

Kattimani, V.S., Kondaka, S. & Lingamaneni, K. P., 2016. Hydroxyapatite—Past, Present, and Future in Bone. *Bone Regeneration. Bone and Tissue Regeneration Insights*, Issue 7, pp. 9-19.

Kobayashi, K., Yuliwulandari, R., Yanai, H., Lien, L. T., Hang, N. T. Le, Hijikata, M., Tokunaga, K. (2011). Association of CD209 polymorphisms with tuberculosis in an Indonesian population. *Human Immunology*, 72(9), 741–745.

Kubiak, A. J., Lindqvist-Jones, K., Dearn, K. D., & Shepherd, D. E. T. (2019). Comparison of the mechanical properties of two designs of polyaxial pedicle

- screw. *Engineering Failure Analysis*, 95(August 2018), 96–106. <https://doi.org/10.1016/j.engfailanal.2018.08.023>.
- Liu, H. *et al.*, 2006. Novel injectable calcium phosphate/chitosan composites for bone substitute materials. *Acta Biomaterialia*, Volume 2, pp. 557-565.
- Low, K. L., Tan, S. H., Zein, S. H. S., Roether, J. A., Mouriño, V., & Boccaccini, A. R. (2010). Calcium phosphate-based composites as injectable bone substitute materials. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, 94(1).
- Madhavan Nampoothiri, K., Nair, N. R., & John, R. P. (2010). An overview of the recent developments in polylactide (PLA) research. *Bioresource Technology*, 101(22), 8493–8501.
- Maulida HN, Hikmawati D, Budiatin AS (2015) Injectable Bone Substitute Paste Based on Hydroxyapatite, Gelatin and Streptomycin for Spinal Tuberculosis. *J Spine* 4: 266.
- Mishra, D., Bhunia, B., Banerjee, I., Datta, P., Dhara, S., & Maiti, T. K. (2011). *Enzymatically crosslinked carboxymethyl-chitosan/gelatin/nano-hydroxyapatite injectable gels for in situ bone tissue engineering application. Materials Science and Engineering C*, 31(7), 1295–1304.
- Mutia Theresia, Rifaida Eriningsih, Ratu Safitri. 2011. Membran Alginat sebagai Pembalut Luka Primer dan Media Penyampaian Obat Topikal untuk Luka yang Terinfeksi. Bandung: Universitas Padjajaran. *Jurnal Riset Industri* Vol.V, No. 2, 2011, Hal 161-174.
- Nastiti, Arlita Dewi., Widyastuti., Fanny M Laihad. (2015). *Bioviability Hidroxyapatite Anadara granosa Shell Extract Against Mesenchyme Stem Cell As Bone Graft Material*. Vol. 9 No. 2 Agustus 2015. ISSN: 1907-5987.
- Upar, T. A. S., Besar, B., Veteriner, P., & No, J. R. E. M. (2008). *Tuberkulosis pada sapi, suatu penyakit zoonosis*. 16114(30), 174–186.
- Paramarta, I. G. E., Purniti, P. S., Subanada, I. B., & Astawa, P. (2016). Spondilitis Tuberkulosis. *Sari Pediatri*, 10(3), 177.

- Paru, P. T. (2011). Studi Kualitatif Faktor Yang Melatarbelakangi Drop Out Pengobatan Tuberkulosis Paru. *KESMAS - Jurnal Kesehatan Masyarakat*, 7(1), 83–90.
- Polley, P., & Dunn, R. (2009). Noncontiguous spinal tuberculosis: Incidence and management. *European Spine Journal*, 18(8), 1096–1101.
- Purnama, E. F., & Langenati, S. N. R. (2006). *Pengaruh Suhu Reaksi terhadap Derajat Kristalinitas dan Komposisi Hidroksiapatit Dibuat dengan Media Air dan Cairan Tubuh Buatan (Sybthetic Body Fluid)*. *Jurnal Sains Materi Indonesia*. 154–159.
- Putra, A. P., Hikmawati, D., & Budiatin, A. S. (2019). Injectable bone substitute of hydroxyapatite-gelatin composite with alendronate for bone defect due to osteoporosis. *Journal of International Dental and Medical Research*, 12(2), 813–818.
- Prahansari, 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.
- Pratiwi, Arini Eka. (2015). *Isolasi Seleksi dan Uji Aktivitas Antibakteri Mikroba Endofit dari Daun Tanaman Garcunia benthani Pierre terhadap Staphylococcus aureus, Bacillus subtilis, Escheria coli, Shigella dysenteriae, dan Salmonellatyphymurium*. Program Studi Farmasi Fakultas kedokteran dan Ilmu Kesehatan UIN Syarif Hidayatullah Jakarta.
- Rahim, A. R., Tiksnadi, B., Hidayat, N. N., & Ramdan, A. (2011). Keberhasilan Fusi Tulang Belakang pada Spondilitis Tuberkulosis. *Majalah Kedokteran Bandung*, 43(3), 134–139.
- Ramli, R. A., Adnan, R., Bakar, M. A., & Masudi, S. M. (2011). Synthesis and characterisation of pure nanoporous hydroxyapatite. *Journal of Physical Science*, 22(1), 25–37.
- Rasouli, M. R., Mirkoohi, M., Vaccaro, A. R., Yarandi, K. K., & Rahimi Movaghar, V. (2012). Spinal tuberculosis: Diagnosis and management. *Asian Spine Journal*, 6(4), 294–308.
- Ronca, D. (2016). Bone Tissue Engineering: 3D PCL - Based Nanocomposite Scaffold with Tailored Properties. Elsevier, pp. 51-54.

- Rodrigues, N. (2016). Manufacture and Characterisation of PLA Scaffolds. *Procedia CIRP*, Issue 49, pp. 33-38.
- Rowe, R.C., Sheskey, P.J. & Quinn, M., (2009). *Handbook of Pharmaceutical Excipients*, 6 ed. London: Pharmaceutical Press.
- Saeidlou, S., Huneault, M. A., Li, H., & Park, C. B. (2012). Poly(lactic acid) crystallization. *Progress in Polymer Science*, 37(12), 1657–1677.
- Saikh, N. S. & Sawakar, S. P., (2017). Targetting Approacher to Effective Therapeutics of Bone Tuberculosis. *imedPub Journals*, vol. 4, pp. 1-13.
- Schirmer, P., Renault, C. A., & Holodniy, M. (2010). Is spinal tuberculosis contagious? *International Journal of Infectious Diseases*, 14(8).
- Saputra, R. E., & Munandar, I. (2015). Spondilitis Tuberkulosa Cervical. *Jurnal Kesehatan Andalas*, 4(2), 639–648.
- Saputra, T. H., Herianto., & Pamasari, A. H. (2019). Analisa Pengaruh Pemilihan Komponen terhadap Ketelitian Dimensi dan Kualitas Permukaan Produk pada Mesin 3D Printing Jenis FDM (Fused Deposition Modelling). *Fakultas Teknik Universitas Gajah Mada*. 2337 - 4349. 208–214.
- Saryati, Sukaryo, S. G., Handayani, A., Untoro, P., & Sugeng, B. (2012). Hidrosiapatit berpori dari kulit kerang. *Jurnal Sains Materi Indonesia*, (April), 31–35.
- Sensusiati, A. D. (n.d.). (2017). *IMAGING OF CENTRAL NERVOUS SYSTEM TUBERCULOSIS : A CASE REPORT*. 2, 84–90.
- Sionkowska, A., & Kozłowska, J. (2010). Characterization of collagen/hydroxyapatite composite sponges as a potential bone substitute. *International Journal of Biological Macromolecules*, 47(4), 483–487.
- Siregar, Y. D. I., Nurlela., Riyadhi, A., Lestari, T. H., & Heryanto, R., (2015). Karakterisasi Karbon Aktif Asal Tumbuhan dan Tulang Hewan Menggunakan FTIR dan Analisis Kemometrika. *Jurnal Kimia VALENSI*, 1(November), 103–116.

- Sugiyono, Zein, H. S., Murruckmihadi, M., (2009). Pengaruh Konsentrasi HPMC sebagai Gelling Agent terhadap Sifat Fisik dan Stabilitas Gel Ekstrak Etanol Ubi Jalar (*Ipomoea batatas L.*). *Media Farmasi Indonesia* Vol 9 No. 2.
- Terbatas, F. (2016). Pendekatan Diagnosis Tuberkulosis Pada Anak Di Sarana Pelayanan Kesehatan Dengan Fasilitas Terbatas. *Jurnal Kedokteran Syiah Kuala*, 16(2), 120–126.
- Todar, K., (2012). *Todar's Online Textbook of Bacteriology*. [Online]
Dapat diakses pada : <http://textbookofbacteriology.net/tuberculosis.html>
[Diakses pada tanggal 21 November 2019].
- Thermo Nicolet Corporation. (2007). *Introduction to Fourier Transform Infrared Spectrometry*.
- Țucureanu, V., Matei, A., & Avram, A. M. (2016). *FTIR Spectroscopy for Carbon Family Study. Critical Reviews in Analytical Chemistry*, 46(6), 502–520.
- Wheeler, T., (2018). *Back Pain : Common Spine Problems*. [Online]
Dapat diakses pada: https://www.emedicinehealth.com/common_back_pain_spine_problems/article_em.html
[Diakses pada tanggal 25 November 2019].
- Weiss, P., (2007). Injectable Bone Substitute using a hydrophilic polymer. *BONE, Elsevier*, Volume 2, pp.67-70.
- Widodo, W., Irianto, A., & Pramono, H. (2017). Karakteristik Morfologi Mycobacterium tuberculosis yang Terpapar Obat Anti TB Isoniazid (INH) secara Morfologi. *Biosfera*, 33(3), 109.
- Yuniarto, Martak, F. dan Atmaja, L., (2010). Analisa Sifat Kimia gelatin Kulit Ikan Patin (Pangasius) Melalui Variasi Jenis Larutan Asam. *Seminar Nasional Kimia*. FMIPA-ITS.
- Zainoel, R., & Banda, A. (2014). Efektifitas Terapi Kombinasi Pedicle Screw Sublaminary Wiring (Pssw) Dan Obat Anti Tuberkulosa Terhadap Koreksi Kifosis Dan Perbaikan Defisit Neurologis Pada Pasien Spondilitis Tuberkulosa Di Rsud Dr. Zainoel Abidin Banda Aceh. *Jurnal Kedokteran Syiah Kuala*, 14(1), 7–13.

Zarghooni, K., Röllinghoff, M., Sobottke, R., & Eysel, P. (2012). Treatment of spondylodiscitis. *International Orthopaedics*, 36(2), 405–411.