DAFTAR PUSTAKA

Adams, M. A. (2015) 'Mechanical Properties of Aging Soft Tissues'. doi: 10.1007/978-3-319-03970-1.

Bohner, M. (2010) 'Design of ceramic-based cements and putties for bone graft substitution', *European Cells and Materials*, 20, pp. 1–12. doi: 10.22203/eCM.v020a01.

Bowman, C. N. and Kloxin, C. J. (2008) 'Toward an Enhanced Understanding and Implementation of Photopolymerization Reactions', 54(11). doi: 10.1002/aic.

Boyd, L. M. and Carter, A. J. (2006) 'Injectable biomaterials and vertebral endplate treatment for repair and regeneration of the intervertebral disc', *European Spine Journal*, 15(SUPPL. 3), pp. 414–421. doi: 10.1007/s00586-006-0172-2.

Callister, W. D. (2001) 'Fundamentals of Materials Science and Engineering An Interactive', p. 1619. doi: 10.1038/sj.bjp.0704396.

Campbell, D. (2013) 'Injectable biomimetic hydrogels for soft tissue repair', in *BMJ (Online)*. Woodhead Publishing Limited, pp. 276–301. doi: 10.1533/9780857098887.2.276.

Chakrabarty, A. and Teramoto, Y. (2018) 'Recent advances in nanocellulose composites with polymers: A guide for choosing partners and how to incorporate them', *Polymers*, 10(5). doi: 10.3390/polym10050517.

Chamradová, I. *et al.* (2012) 'Rheological properties of functionalised thermosensitive copolymers for injectable applications in medicine', *Chemical Papers*, 66(10), pp. 977–980. doi: 10.2478/s11696-012-0210-y.

Chan, S. C. W. *et al.* (2013) 'Papain-induced in vitro disc degeneration model for the study of injectable nucleus pulposus therapy', *Spine Journal*, 13(3), pp. 273–283. doi: 10.1016/j.spinee.2012.12.007.

Chavda, H., Patel, C. and Karen, H. (2009) ‘Preparation and Characterization of Chitosan-based Superporous Hydrogel Composite’. doi: 10.4103/0975-1483.57064.

Coates, J. (2000) ‘Interpretation of Infrared Spectra, A Practical Approach’, *Encyclopedia of Analytical Chemistry*, 112(1), pp. 10815–10837. doi: 10.1097/00010694-197107000-00005.

Cortes, D. H. *et al.* (2013) ‘Elastic, permeability and swelling properties of human intervertebral disc tissues : A benchmark for tissue engineering’, *Journal of Biomechanics*. Elsevier, pp. 1–7. doi: 10.1016/j.jbiomech.2013.12.021.

Cramer, G. D. (2014) *General Characteristics of the Spine*. Third Edit, *Clinical Anatomy of the Spine, Spinal Cord, and ANS*. Third Edit. Elsevier Inc. doi: 10.1016/B978-0-323-07954-9.00002-5.

Darr, A. and Calabro, A. (2009) ‘Synthesis and characterization of tyramine-based hyaluronan hydrogels’, *Journal of Materials Science: Materials in Medicine*, 20(1), pp. 33–44. doi: 10.1007/s10856-008-3540-0.

Diramio, J. A. *et al.* (2008) ‘Poly (ethylene glycol) Methacrylate / Dimethacrylate Hydrogels for Controlled Release of Hydrophobic Drugs’.

Frith, J. E. *et al.* (2013) ‘An injectable hydrogel incorporating mesenchymal precursor cells and pentosan polysulphate for intervertebral disc regeneration’, *Biomaterials*. Elsevier Ltd, 34(37), pp. 9430–9440. doi: 10.1016/j.biomaterials.2013.08.072.

Haughton, V. (2011) ‘The “Dehydrated” Lumbar Intervertebral Disk on MR, its Anatomy, Biochemistry and Biomechanics.’, *The neuroradiology journal*, 24(4), pp. 564–569. doi: 10.1177/197140091102400412.

Helmi, Z. N. (2012) *Buku Ajar Gangguan Muskuloskeletal*. Salemba Medika.

Hinestroza, J. N. A. N. (2014) *Cellulose Based Composites : New Green Nanomaterials*. Edited by A. N. Hinestroza, Juan P. ; Netravali. New York: Wiley-VCH Verlag GmbH & Co. KGaA.

Hospodarova, V., Singovszka, E. and Stevulova, N. (2018) 'Characterization of Cellulosic Fibers by FTIR Spectroscopy for Their Further Implementation to Building Materials', pp. 303–310. doi: 10.4236/ajac.2018.96023.

Huang, Z. *et al.* (2003) 'A review on polymer nanofibers by electrospinning and their applications in nanocomposites', 63, pp. 2223–2253. doi: 10.1016/S0266-3538(03)00178-7.

Huynh,C.T. and Lee, D.S. (2013) Injectable Temperature and pH/Temperature-Sensitive Block Copolymer Hydrogels Chapter 7 in Loh, X. J., Scherman, O. A. (2013) *Polymeric and Self Assembled Hydrogels, The Royal Society of Chemistry, Cambridge, 156-158.*

Hwang, J. W. *et al.* (2015) 'Gelation and crosslinking characteristics of photopolymerized poly (ethylene glycol) hydrogels', 41939, pp. 1–6. doi: 10.1002/app.41939.

J.Cole, A. and A. Herring, S. (2003) *Epidemiology in The Low Back Pain Handbook, 2nd edition*.

Jin, R. *et al.* (2010) 'Synthesis and characterization of hyaluronic acid-poly(ethylene glycol) hydrogels via Michael addition: An injectable biomaterial for cartilage repair', *Acta Biomaterialia*. Acta Materialia Inc., 6(6), pp. 1968–1977. doi: 10.1016/j.actbio.2009.12.024.

Kaech, A. (2013) 'An Introduction to Electron Microscopy Instrumentation , Imaging and Preparation'.

Karakas, H. (2015) 'ELECTROSPINNING OF NANOFIBERS AND THEIR APPLICATIONS'.

Khoushabi, A. *et al.* (2015) 'Photo-polymerization , swelling and mechanical properties of cellulose fi bre reinforced poly (ethylene glycol) hydrogels', *Composites Science and Technology*. Elsevier Ltd, 119, pp. 93–99. doi:

10.1016/j.compscitech.2015.10.002.

Krause, M. *et al.* (2000) 'Lumbar spine traction: Evaluation of effects and recommended application for treatment', *Manual Therapy*, 5(2), pp. 72–81. doi: 10.1054/math.2000.0235.

Krumeich, B. F. (2017) 'Properties of Electrons , their Interactions with Matter and Applications in Electron Microscopy', pp. 1–23.

Kumar Sahoo, P. and Mohanty, P. (2016) 'Sacralization and Herniated Nucleus Pulposus -An Association Study', *Journal of Spine*, 05(02). doi: 10.4172/2165-7939.1000297.

Kurisawa, M. *et al.* (2005) 'Injectable biodegradable hydrogels composed of hyaluronic acid-tyramine conjugates for drug delivery and tissue engineering', *Chemical Communications*, (34), pp. 4312–4314. doi: 10.1039/b506989k.

Kwarta, C. P., Widiyanti, P. and Siswanto (2017) 'Hyaluronic Acid (HA) - Polyethylene glycol (PEG) as inject- able hydrogel for intervertebral disc degeneration patients therapy'.

Lee, Y. R., Lee, S. and Kim, D.-G. (2019) 'Enhancement of emulsion penetration in agarose gel model using flexible plasma treatment'.

Leuner, C. and Dressman, J. (2000) 'Improving drug solibility for oral delivery using solid dispersions', *European Journal of Pharmaceutics and Biopharmaceutics 50*, 2(1), pp. 47–60. doi: 10.1016/j.phymed.2007.11.019.

Li, L. *et al.* (2014) 'Biodegradable and injectable in situ cross-linking chitosan-hyaluronic acid based hydrogels for postoperative adhesion prevention', *Biomaterials*. Elsevier Ltd, 35(12), pp. 3903–3917. doi: 10.1016/j.biomaterials.2014.01.050.

Maigne, R. (2006) *Diagnosis and Treatment of Pain of Vertebral Origin*, *The Journal of the Canadian Chiropractic Association*. doi: 10.1016/S1988-8856(08)70063-4.

Maitra, J. and Shukla, V. K. (2014) 'Cross-linking in Hydrogels - A Review', 4(2), pp.

25–31. doi: 10.5923/j.ajps.20140402.01.

Minhatul, U. and Agustini, R. (2012) 'Pengaruh Suhu Polimerisasi L-Asam Laktat Melalui Metode Ring Opening Polymerization (Rop) Terhadap Karakteristik Polylactic Acid (Pla) Polymerization Temperature Effect of L-Lactic Acid By Ring Opening Polymerization (Rop) Method on Polylactic Acid', 1(1), pp. 68–74.

Moon, R. J. *et al.* (2011) 'Cellulose Nanomaterials Review : Structure, Properties and Nanocomposites', in *Chemical Society Reviews*. Chem. Soc. Rev., pp. 3941–3994.

Mori, Y. *et al.* (2013) 'Usefulness of Agarose Mold as a Storage Container for Three-Dimensional Tissue-Engineered Cartilage', 2013(September), pp. 73–78.

Motohashi, R. and Hanasaki, I. (2019) 'Nanoscale Advances Characterization of aqueous cellulose nano fi ber dispersions from microscopy movie data of Brownian particles by trajectory analysis'. Royal Society of Chemistry, pp. 421–429. doi: 10.1039/c8na00214b.

Nguyen, K. T. and West, J. L. (2002) 'Photopolymerizable hydrogels for tissue engineering applications', 23(January), pp. 4307–4314.

Peak, C. W., Wilker, J. J. and Schmidt, G. (2013) 'A review on tough and sticky hydrogels', *Colloid and Polymer Science*, 291(9), pp. 2031–2047. doi: 10.1007/s00396-013-3021-y.

Peng, Y., Gardner, D. J. and Han, Y. (2012) 'Drying cellulose nanofibrils : in search of a suitable method', (December 2011), pp. 91–102. doi: 10.1007/s10570-011-9630-z.

Poplawska, M. *et al.* (2014) 'Synthesis and characterization of polyethylene glycol dimethacrylate hydrogels for biomedical application .', 679, pp. 158–170. doi: 10.4028/www.scientific.net/AMM.679.158.

Raymond C, R., Paul J, S. and Marian E, Q. (2009) *Handbook of Pharmaceutical Excipients*. the Pharmaceutical Press and American Pharmacists Association.

Roberts, M.J.; Bentley, M.D. ; Harris, J. M. (2002) 'Chemistry for Peptide and Protein

PEGylation', *Chemical Reviews*, 115(12), pp. 5979–6050. doi: 10.1021/cr500453t.

Schmocker, A. *et al.* (2016) 'A photopolymerized composite hydrogel and surgical implanting tool for a nucleus pulposus replacement', *Biomaterials*. Elsevier Ltd, 88, pp. 110–119. doi: 10.1016/j.biomaterials.2016.02.015.

Schmocker, A. *et al.* (2019) 'Miniature probe for the delivery and monitoring of a photopolymerizable material'. doi: 10.1117/1.JBO.20.12.127001.

Shi, X. *et al.* (2015) 'Electrospinning of Nanofibers and Their Applications for Energy Devices', 2015.

Singha, K. (2012) 'Biomechanism Profile of Intervertebral Discs (IVD): Strategies to Successful Tissue Engineering for Spinal Healing by Reinforced Composite Structure', *Journal of Tissue Science & Engineering*, 03(02). doi: 10.4172/2157-7552.1000118.

Sivashanmugam, A. *et al.* (2015) 'An overview of injectable polymeric hydrogels for tissue engineering', *European Polymer Journal*. Elsevier Ltd, 72, pp. 543–565. doi: 10.1016/j.eurpolymj.2015.05.014.

Skaalure, S. C. *et al.* (2014) 'Semi-interpenetrating networks of hyaluronic acid in degradable PEG hydrogels for cartilage tissue engineering', *Acta Biomaterialia*. Acta Materialia Inc., 10(8), pp. 3409–3420. doi: 10.1016/j.actbio.2014.04.013.

Stokroos, I. *et al.* (1998) 'A comparative study of thin coatings of Au / Pd , Pt and Cr produced by magnetron sputtering for FE-SEM', 189(April 1997), pp. 79–89.

Stuart, B. (2004) *Infrared Spectroscopy : Fundamentals and Applications*, *Journal of Beijing Institute of Technology (English Edition)*. John Wiley & Sons, Ltd. doi: 10.1002/0470011149.

Tan, H., Rubin, J. P. and Marra, K. G. (2010) 'Injectable in situ forming biodegradable chitosan-hyaluronic acid based hydrogels for adipose tissue regeneration', *Organogenesis*. Elsevier Ltd, 6(3), pp. 173–180. doi: 10.4161/org.6.3.12037.

Vadodaria, K. (2012) 'Investigating the Formation of Functional and Smart Materials by Nanospinning and other Spinning Techniques KETANKUMAR VIJAYKUMAR VADODARIA', (December).

Walewangko, R., Poeng, R. and Mende, J. (2013) 'Reanalysis Sifat Mekanis Material Komponen Alat Angkat Kendaraan Niaga Kapasitas 2 Ton', 60, pp. 1–10.

Whatley, B. R. and Wen, X. (2012) 'Intervertebral disc (IVD): Structure, degeneration, repair and regeneration', *Materials Science and Engineering C*. Elsevier B.V., 32(2), pp. 61–77. doi: 10.1016/j.msec.2011.10.011.

Wieland, J. A., Houchin-Ray, T. L. and Shea, L. D. (2007) 'Non-viral vector delivery from PEG-hyaluronic acid hydrogels', *Journal of Controlled Release*, 120(3), pp. 233–241. doi: 10.1016/j.jconrel.2007.04.015.

Zeng, Z. *et al.* (2016) 'An in Situ Forming Tissue Adhesive Based on Poly(ethylene glycol)-Dimethacrylate and Thiolated Chitosan Through Michael Reaction'. doi: 10.1039/C6TB01475E.

Zhao, L., Weir, M. D. and Xu, H. H. K. (2010) 'An injectable calcium phosphate-alginate hydrogel-umbilical cord mesenchymal stem cell paste for bone tissue engineering', *Biomaterials*. Elsevier Ltd, 31(25), pp. 6502–6510. doi: 10.1016/j.biomaterials.2010.05.017.