# DAFTAR PUSTAKA

Albert, B., Johnson, A., Lewis, J., Raff, M., Robert, K., Walter, P., 2008, *Molecular Biology of The Cell,* 5 th ed. USA: Garland Science, 19: 1131-204.

Anonim, *Wistar Institute Archives*, Philadelphia: Bienmal Report, 9(11): 1958-59.

Ariffin, S. H. Z., Yamamoto, Z., Abidin, I. Z. Z., Wahab, R. M. A., Ariffin, Z. Z., 2011, Cellular and Molecular Changes in Orthodontic Tooth Movement, *Sci World J*, 11: 1788-1803.

Armellin, E., Bovessecchi G., Coppa P., Pasquantonio G., Cerronil L., 2016, LED Curing Lights and Temperature Changes in Different Tooth Sites, *Biomed Res. Int*, 18: 4672-82.

Asa, F.N.M., Sumarsih S., Zaidan A.H., Fahmi M.Z., Hikmawati D., Astuti S.D., 2016, Komposit Kolagen Fibril-Alginat sebagai Kandidat Membran Hidrogel Skin Substitute, *JBP*, 12(2): 112-26.

Asiri, M.A., 2018, Biological Apects of Orthodontic Tooth Movement: A Review of Literature, *Saudi J. Biol. Sci,* 25: 1027-32.

Barolet, D., Roberge, C.J., Auger, F.A., Boucher, A., Germain, L., 2009, Regulation of Skin Collagen Metabolism In Vitro Using a Pulsed 660 nm LED Light Source: Clinical Correlation with a Single-Blinded Study, *J Invest Dermatol*, 129: 2751–9.

Bozkurt, A., Onaral, B., 2004, Safety Assessment of Near Infrared Light Emitting Diodes for Diffuse Optical Measurements, *Biomed Eng*, 3(9): 1-10.

Bhad-Patil, WA., 2016, Laser Therapy for Faster Orthodontic Tooth Movement, *APOS Trends Orthod*, 4: 5.

Bumann, A., Carvalho, R.S., Schwarzer, C.L., Yen, E.H.K., 1997, Collagen synthesis from human PDL cells following orthodontic tooth movement, *Eur J Orthod*, 19: 29-37.

Chung, S.E.V., 2013, The Effect of Light Emitting Diode Phototherapy on the Rate of Orthodontic Tooth Movement - A Clinical Study. *Laser Med Sci*, 55(4):124-35.

Dean, R., 2017, The Periodontal Ligamen: Development, Anatomy and Function, *Oral Health Dent Manag*, 16: 6.

De Freitas, L.F., Hamblin, M.R., 2016, Proposed Mechanisms of Photobiomodulation or Low-Level Light Therapy, *IEEE J Sel Top Quantum Electron*, 22(3): 1-37.

De Sousa, A.P.C., Santos, J.N., dos ReisJr, J.A., Ramos, T.A., de Souza, J., Cangussu, M.C.T., Pinheiro, A.L.B., 2010, Effect of LED Phototherapy of Three Distinct Wavelengths on Fibroblass on Wound Healing: A Histological Study in a Rodent Model, *Photomed Laser Surg*, 28(4): 26-35.

Ekizer, A., Uysal, T., Guray, E., 2013, Effect of LED-mediated Photobiomodulation Therapy on Orthodontic Tooth Movement and Root Resorption in Rats, *Laser Med Sci*, 30(2): 779-85.

Friedrichsdorf, S.P., Chavez, V.E.A., Bradaschia-Correa, V., Cattaneo, P.M., Dominguez, G.C., 2019, Infrared Light-Emitting Diode (LED) Effects on Orthodontic Tooth Movement, *Braz Dent J*, 30(4): 410-6.

Goyal, M., Makkar, S., Pasricha, S., 2013, Low Level Laser Therapy in Dentistry, *JP Journals*, 1022-43.

Hamblin, M.R., 2017, Mechanisms and Applications of The Anti-Inflammatory Effects of Photobiomodulation, *AIMS Biophys*, 4(3), 337-61.

Handayani, B., Mardanus, L., 2017, Pengaruh Ekstrak Propolis Dalam Meningkatkan Fibroblas untuk Remodeling di Daerah Tarikan pada Pergerakan Gigi Ortodonti, *Denta J Ked Gigi*, 11(1): 62-8.

Hickman, D. L., Johnson, J., Vemulapalli, T. H., Crister, J. R., Shepherd, R., 2017, *Principle of Animal Research for Graduate and Undergraduate Students*, USA: Academic Press, p: 117-75

Huang, H., Williams, R. C., Kyrkanides, S., 2014, Accelerated Orthodontic tooth Movement: Molecular Mechanisms, Am J Orthod Dentofacial Orthop, 146(5), 620-32.

Huldani, 2012, Biomarker Remodelling Tulang, *Universitas Lambung Mangkurat, Fakultas Kedokteran*, Banjarmasin, 9:2.

Jamali, S., Khosravi, S., Shadmanpour, M., Gharibpour, F., Payahoo, S., Darvish, M., 2020, Hialinization and Molecular Pathways Involved in Orthodontic Tooth Movement: A Systematic Review and Meta-Analysis, *APESB*, 20:5408, 1-12.

Jones, A.P., 2019, The Value of Mallory's Connective Tissue Stain for The Demonstration of Variation in Thyroid Colloid, *JEM*, 70(5): 547-55.

Kasai, K., Yuching Chou, M., Yamaguchi, M., 2015, Molecular Effects of Low Energy Laser Irradiation During Orthodontic Tooth Movement, *Semin Orthod*, 21(3): 203–9.

Katili, A.S., 2009, Struktur Dan Fungsi Protein Kolagen, *Jurnal Pelangi Ilmu*, 2: 5.

Keren, N., Liszkay, A.K., 2011, Photoinhibition: Molecular Mechanisms and Physiological Significance, *Physiol. Plant*, 142: 1–5.

Kim, Y.D., Kim, S.S., Kim, S.J., Kim, D.W., Joo, E.S., Seok, S.S., 2010, Low-Level Laser Irradiation Facilitates Fibronectin and Collagen Type I Turnover During Tooth Movement in Rats, *Laser Med Sci*, 25: 25-31.

Komori, T., 2006. Regulation of osteoblast differentiation by transcription factors. *Journal of Cell Bio*, 99(5):1233–9.

Kuboyama, N., Ohta M., Sato Y., Abiko Y., 2012, Anti-inflammatory Activities of Light Emitting Diode Irradiation on Collagen-Induced Arthritis in Mice (a secondary publication), *Laser Ther*, 23(3): 191-9.

Lee, S.H., Kim, K.A., Anderson S., Kang Y.G., Kim S.J., 2016, Combined Effect of Photobiomodulation with A Matrix Metalloproteinase Inhibitor on the Rate of Relapse in Rats, *Angle Orthod*, 86: 206-13.

Lewis, E. M., Carlson, M. B., Hoberman, A. M., 2013, *Reproductive and Developmental Assessments in an Alternate Rodent Species: The Guinea Pig* (*Cavia porcellus*), Itali: European Teratology Society, p. 1

Liu, Y., Keikhosravi A., Mehta G.S., Drifkal C.R., Eliceiri K.W., 2017, Methods for Quantifying Fibrillar Collagen Alignment, *Methods Mol Biol*, 1627: 429–51.

Li, Y., Jacox, L.A., Little, S.H., Ko, C.C., 2018, Orthodontic Tooth Movement: The biology and clinical implications, *Kaohsiung J Med Sci*, 34: 207-14.

Li, Z., Yu M., Jin S., Wang., Luo R., Huo B., Liu D., He D., Zhou Y., Liu Y., 2019, Stress Distribution and Collagen Remodeling of Periodontal Ligamen During Orthodontic Tooth Movement, *Front Pharmacol* 10: 1-8.

Lundstrom, K., 2009, An overview on GPCRs and drug discovery: structure-based drug design and structural biology on GPCRs". *Methods Mol Biol*, 552: 51–66.

Meike, M. C., 2006, The Tissue, Cellular and Molecular Regulation of Orthodontic Tooth Movement: 100 years after carl sandsteadt. *European J Orthod*, 28: 221-40.

Mouhat, M., Mercer J., Stangvaltaite L., Örtengren U., 2017, Light-curing units used in dentistry: factors associated with heat development—potential risk for patients, *Clin Oral Invest*, 21:1687–96.

Na, S., Truong, T., Feifei, V., Joll, J.E, Guo, Y., Utreja, A., Chen, J., 2018, Dose analysis of photobiomodulation therapy on osteoblast, osteoclast, and osteocyte, *J Biomed Sci*. 23(7): 075008-17.

Nayak, U.A., Winnier, J., Ruseph, S., 2009, The Relationship of Dental Aesthetic Index with Dental Appearance, Smile and Desire for Orthodontic Correction. *Int J Clin*, 2(2):8-13.

Palumpun, E.F., Wiraguna A.A.G.P., Pangkahila W., 2017, Pemberian ekstrak daun sirih *(Piper betle)* secara topikal meningkatkan ketebalan epidermis, jumlah fibroblas, dan jumlah kolagen dalam proses penyembuhan luka pada tikus jantan galur Wistar *(Rattus norvegicus), eBm,* 5(1): 202-9.

Paschotta, R., 2008, *"Laser" and "laser light". Encyclopedia of laser physics and technology (1st ed)*. Berlin: Wiley-VCH, p.225.

Pasupuleti, M. K., Molahally, S. S., Salwaji, S., 2016, Ethical Guideline. Animal Profile, Various Animal Models used in Peridontal Research with Alternatives and Future Perpective, 20 (4): 360-8.

Prayogo, R.D., Sandy, B.N., Sujarwo, H., Fitri, K., Brahmanta, A., Rahardjo, P., Handayani, B., 2020, The Changes of Fibroblas and Periodontal Ligamen Characteristics in Orthodontic Tooth Movement with Adjuvant HBOT and Propolis: A study in Guinea pigs, *Padjadjaran Journal of Dentistry*; 32(1):48-56.

Retamoso, L., Knop L., Shintcovsk R., Maciel J.V., Machado M.A., Tanaka O., 2011, Inflluence of Anti-Inflflammatory Administration in Collagen Maturation Process During Orthodontic Tooth Movement, *Micros Res Techniq*, 74: 709–13.

Rueggeberg, F.A, Giannini, M., Arrais, C.A.G., Price, B.G.T., 2017, Light curing in dentistry and clinical implications: a literature review, *Braz Oral Res*, 31(61):64-91.

Sami K., Elshah A., 2015, Image Analyzer Study of the Skin in Patients With Morbid Obesity and Massive Weight Loss, *Eplasty*, 15: 17-28.

Sharma, R., Preethi, N., Sidana, A., 2015, Neurological Mechanisms involved in Orthodontic Tooth Movement: A contemporary review, *Int J Contemp Dent Med Rev*, 15 (1): 1-7

Silitonga, I.R., Sukarsa M.R.A., Pohan L.R., Armawan E., Handono B., 2015, Perbandingan Kerapatan Kolagen Ligamenum Sakrouterina pada Pasien dengan dan tanpa Prolaps Uteri, *MKB*, 47(4): 212-7.

Singh, V.P., dan Sharma, A., 2014, Epidemiology of Malocclusion and Assessment of Orthodontic Treatment Need for Nepalese Children, *International Scholarly Research Notices*, 14 (12): 1-4.

Soedjono-Aswin, 2001, *Metodologi Penelitian Kedokteran*, Fakultas Kedokteran Universitas Gadjah Mada, Jogjakarta, p. 6.

Sommer, A. P., Pinherio, A. L., and Mester, A. R., 2001, Biostimulatory Windows in Low-Intensity Laser Activation: Lasers, Scanners, and NASA's LightEmitting Diode Array System, *J Clin Laser Med Surg*, 19(1): 29-33.

Suparwitri, S., 2016, Pengaruh Isoflavon Genistein Tempe Kedelai terhadap Osteoklas, Osteoblas, Osteokalsin, Estrogen dan Reseptor Estrogen pada Pergerakan gigi secara Ortodonti, *Disertasi*: Fakultas Kedokteran Gigi UGM

Susilowati, 2010, Peran matriks metaloproteinase-8 pada cairan krevikuler gingiva selama pergerakan gigi secara ortodonti, *Dentofasial*, 9(1) :47-54.

Streicher, C., Heyny, A., Andrukhova, O., Haigl, B., Slavic, S., Schuler, C., Kollmann, K., Kantner, I., Sexl, V., Kleiter, M., Hofbauer, L., Kostteunik, P. J., Erben, R. G., 2017, Estrogen Regulates Bone Turnover by Targeting RANKL Expression in Bone Lining Cells, *Scientific reports*, 17 (7): 1-14

Tyystjärvi, E., 2013, Photoinhibition of Photosystem II, *Int Rev Cel Mol Bio*, 300: 243-303.

Ubolviroj, C., Komoltri, C., Manopattanakul, S., Viwattanatipa, N., 2018, Effect of Light Emitting Diodes (LED) with 430-480 nm Wavelength Upon Tooth Movement, *BJTSR*, 10(3):7778-86.

Vlaminck, L., Pinherio, A. L., Mester, A.R., 2007, Tooth Extraction Techniques in Horses, Pet Animals and Man, *Vlaams Diergeneskundig Tidjdschrift*, 76(2), p: 249-61

Vo Dinh, T., 2015, *Biomedical Photonics Handbook*, Florida: CRC Press, p.228.

Yasseai, S., Fekrazad, R., Shahraki, N., 2013, Effect of Low Level Laser Therapy on Orthodontic Tooth Movement: A Review Article, *fdent,* 10(3):264-72.

Zein, R., Selting, W. Hamblin, Michael R., 2018, Review of light parameters and photobiomodulation efficacy: dive into complexity, *SPIE,*10(1):11-7.