

DAFTAR PUSTAKA

- Abo-Neima, S.E., H.A. Motaweh, and M.F. Ragab. 2016. Biological Effects of Electric Field on Histopathological Study, Electrical Properties and Kidney Function of Albino Rats. *Physical Sciences Research International*, 4: 7–15.
- Aguilar, A. A., M.C. Ho, E. Chang, K.W. Carlson, A. Natarajan, T. Marciano, Z. Bomzon, and C.B. Patel. 2021. Permeabilizing Cell Membranes with Electric Fields. *Cancers*, 13(9): 1–19.
- Alamsyah, F., I.N. Ajrina, F.N.A. Dewi, D. Iskandriati, S.A. Prabandari, and W.P. Taruno. 2015. Antiproliferative Effect of Electric Fields on Breast Tumor Cells In Vitro and In Vivo. *Indonesian Journal of Cancer Chemoprevention*, 6: 71–77.
- Alspach, E., D.M. Lussier, and R.D. Schreiber. 2019. Interferon γ and Its Important Roles In Promoting and Inhibiting Spontaneous and Therapeutic Cancer Immunity. *Cold Spring Harbor Perspectives in Biology*, 11(3): 1–20.
- Andiani, L., Endarko, M. Al Huda, and W.P. Taruno. 2017. A Novel Method For Analyzing Electric Field Distribution of Electro Capacitive Cancer Treatment (ECCT) Using Wire Mesh Electrodes: A Case Study Of Brain Cancer Therapy. *EuroMediterranean Biomedical Journal*, 12: 178–183.
- Angersbach, A., V. Heinz, and D. Knorr. 2000. Effects of Pulsed Electric Fields on Cell Membranes in Real Food Systems. *Innovative Food Science and Emerging Technologies*, 1: 135–149.
- Antara, N.Y. 2020. *Ekspresi Gen Terkait Fungsi Makrofag Jaringan Tumor Payudara Tikus (*Rattus norvegicus* Berkenhout, 1769) dengan Perlakuan Terapi Medan Listrik Statis Frekuensi Menengah dan Intensitas Rendah*. Tesis, Fakultas Biologi, Universitas Gadjah Mada, Yogyakarta.
- Apte, S. P., and R. Sarangarajan. 2009. *Cellular Respiration and Carcinogenesis*. P. 46, Humana Press. New York.
- Batcioglu, K., A.B. Uyumlu, B. Satilmis, B. Yildirim, N. Yucel, H. Demirtas, R. Onkal, R.M. Guzel, and M.B.A. Djamgoz. 2012. Oxidative Stress in the In Vivo DMBA Rat Model of Breast Cancer: Suppression by a Voltage-gated Sodium Channel Inhibitor (RS100642). *Basic and Clinical Pharmacology and Toxicology*, 111(2): 137–141.
- Berry, M., and M.R. Clatworthy. 2016. Kidney Macrophages: Unique Position Solves a Complex Problem. *Cell*, 166(4): 799–801.
- Bryda, E. C. 2013. The Mighty Mouse: The Impact of Rodents on Advances in Biomedical Research. *Missouri Medicine*, 110(3): 207–211.
- Calvi, L. M. 2019. Bone Marrow and the Stem Cell Niche. In D.B. Burr and M.R. Allen (Ed). *Basic and Applied Bone Biology* 2nd Edition. Pp. 27–35, Elsevier Inc. New York.
- Cao, Q., D.C.H. Harris, and Y. Wang. 2015. Macrophages in Kidney Injury, Inflammation, and Fibrosis. *Physiology*, 30(3): 183–194.
- Cavalcanti, Y.V.N., M.C.A. Brelaz, J.K.D.A.L. Neves, J.C. Ferraz, and V.R.A. Pereira. 2012. Role of TNF-alpha, IFN-gamma, and IL-10 in The Development of Pulmonary Tuberculosis. *Pulmonary Medicine*, 2012: 1–10.
- Cêtre, C., C. Cocude, C. Pierrot, C. Godin, A. Capron, M. Capron, and J. Khalife.

1998. In Vivo Expression of Cytokine mRNA in Rats infected with *Schistosoma mansoni*. *Parasite Immunology*, 20(3): 135–142.
- Chen, L., H. Deng, H. Cui, J. Fang, Z. Zuo, J. Deng, Y. Li, X. Wang, and L. Zhao. 2018. Inflammatory Responses and Inflammation-associated Diseases in Organs. *Oncotarget*, 9(6): 7204–7218.
- Clarke, C.J.P., A. Hales, A. Hunt, and B.M.J. Foxwell. 1998. IL-10-mediated Suppression of TNF- α Production Is Independent of Its Ability To inhibit NF κ B activity. *European Journal of Immunology*, 28(5):1719–1726.
- Couper, K.N., D.G. Blount, and E.M. Riley. 2008. IL-10: The Master Regulator of Immunity to Infection. *The Journal of Immunology*, 180(9): 5771–5777.
- Dagvadorj, J., Y. Naiki, G. Tumurkhuu, F. Hassan, S. Islam, N. Koide, I. Mori, T. Yoshida, and T. Yokochi. 2008. Interleukin-10 Inhibits Tumor Necrosis Factor- α Production in Lipopolysaccharide-Stimulated RAW 264.7 Cells Through Reduced Myd88 Expression. *Innate Immunity*, 14(2): 109–115.
- Dean, D.F., and B.A. Molitoris. 2019. The Physiology of The Glomerulus. In C. Ronco, R. Bellomo, J. Kellum, and Z. Ricci (Ed). *Critical Care Nephrology: Third Edition*. Pp. 34–42, Elsevier Inc. New York.
- DenDekker, A.D., and K.A. Gallagher. 2020. Dysregulated Inflammation in Diabetic Wounds. In D. Bagchi, A. Das, and S. Roy (Ed). *Wound Healing, Tissue Repair, and Regeneration in Diabetes*. Pp. 81–82, Academic Pres. Cambridge.
- Di Meo, S., J. Bonello, I. Farhat, L. Farrugia, M. Pasian, M.T. Camilleri-Podesta, S. Suleiman, J. Calleja-Agius, and C.V. Sammut. 2022. The Variability of Dielectric Permittivity of Biological Tissues With Water Content. *Journal of Electromagnetic Waves and Applications*, 36(1): 48–68.
- Fasoulakis, Z., G. Kolios, V. Papamanolis, and E.N. Kontomanolis. 2018. Interleukins Associated with Breast Cancer. *Cureus*, 10(11): e3549.
- Fatihassari, F. 2021. *Level Ekspresi mRNA Gen CD4, CD8 Alfa, dan IFN-Gamma Jaringan Tumor Payudara Tikus (*Rattus norvegicus* Berkenhout, 1769) dengan Perlakuan Paparan Medan Listrik Statis*. Skripsi Fakultas Biologi, Universitas Gadjah Mada, Yogyakarta.
- Firdausi, N. 2018. *Pengaruh Medan Listrik Statis Terhadap Jaringan Ginjal Tikus (*Rattus Norvegicus*) Galur Sprague Dawley Terinduksi 7,12-Dimethylbenz[A]Anthracene*. Seminar, Fakultas Biologi, Universitas Gadjah Mada, Yogyakarta.
- Foti, M., and M. Locati. 2017. *Cytokine Effector Function in Tissue*. Pp. 4–7, Elsevier Inc. New York.
- Gabriel, C. 2000. The Dielectric Properties of Tissues. In B.J. Klauenberg, and D. Miklavčič. *Radio Frequency Radiation Dosimetry and Its Relationship to Pzthe Biological Effects of Electromagnetic Fields*. Pp. 75–84, Springer. Dordrecht.
- Genard, G., S. Lucas, and C. Michiels. 2017. Reprogramming of Tumor-Associated Macrophages With Anticancer Therapies: Radiotherapy Versus Chemo- and Immunotherapies. *Frontiers in Immunology*, 8(JUL).
- Giladi, M., R.S. Schneiderman, T. Voloshin, Y. Porat, M. Munster, R. Blat, S. Sherbo, Z. Bomzon, N. Urman, A. Itzhaki, S. Cahal, A. Shteingauz, A. Chaudhry, E.D. Kirson, U. Weinberg, and Y. Palti. 2015. Mitotic Spindle Disruption by Alternating Electric Fields Leads to Improper Chromosome

- Segregation and Mitotic Catastrophe in Cancer Cells. *Scientific Reports*, 5(November): 1–16.
- Haanen, C., and I. Vermes. 1995. Apoptosis and Inflammation. *Mediators of Inflammation*, 4: 5–15.
- Haddad, J.J., and C.S. Fahlman. 2002. Redox- And Oxidant-mediated Regulation of Interleukin-10: An Anti-Inflammatory, Antioxidant Cytokine?. *Biochemical and Biophysical Research Communications*, 297: 163–176.
- Hossain, S. 2020. Biodielectric Phenomenon for Actively Differentiating Malignant and Normal Cells: An overview. *Electromagnetic Biology and Medicine*, 39(2): 89–96.
- Howes, A., L. Gabryšová, and A. O’Garra. 2014. Role of IL-10 and the IL-10 Receptor in Immune Responses. *Reference Module in Biomedical Sciences*, 1: 1–11.
- Irfan, M. 2019. *Kadar Kreatinin Plasma Darah Tikus (*Rattus norvegicus* Berkenhout, 1769) dengan Induksi 7,12-Dimethylbenz[*A*]Anthracene Sebelum dan Setelah Paparan Medan Listrik Statis*. Seminar, Fakultas Biologi, Universitas Gadjah Mada, Yogyakarta.
- Irfan, M. 2021. *Level Ekspresi mRNA Gen KLRK1, IL2 Dan IL10 Jaringan Tumor Payudara Tikus (*Rattus Norvegicus* Berkenhout, 1769) dengan Perlakuan Paparan Medan Listrik Statis*. Skripsi, Fakutlas Biologi, Universitas Gadjah Mada, Yogyakarta.
- Iyer, S.S., and G. Cheng. 2012. Role Of Interleukin 10 Transcriptional Regulation in Inflammation and Autoimmune Disease. *Critical Reviews in Immunology*, 32(1): 23–63.
- Joines, W.T., Y. Zhang, C. Li, and R.J. Jirtle. 1994. The Measured Electrical Properties of Normal and Malignant Human Tissues from 50 to 900 MHz. *Medical Physics*, 21(4): 547–550.
- Kak, G., M. Raza, and B.K. Tiwari. 2018. Interferon-gamma (IFN- γ): Exploring Its Implications in Infectious Diseases. *Biomolecular Concepts*, 9(1): 64–79.
- Khairani, S., S.A. Keban, and M. Afrianty. 2019. Evaluation of Drug Side Effects Chemotherapy on Quality of Life (QOL) Breast Cancer Patients at Hospital X in Jakarta. *Jurnal Ilmu Kefarmasian Indonesia*, 17(1): 9–13.
- Khurana, I., and A. Khurana. 2020. *Medical Physiology for Undergraduate Students* (2nd edition). Pp. 349–355, RELX India Pvt. Ltd. New Delhi.
- King, A., S. Balaji, L.D. Le, T.M. Crombleholme, and S.G. Keswani. 2014. Regenerative Wound Healing: The Role of Interleukin-10. *Advances in Wound Care*, 3(4): 315–323.
- Kirson, E.D., V. Dbalý, F. Tovaryš, J. Vymazal, J.F. Soustiel, A. Itzhaki, D. Mordechovich, S. Steinberg-Shapira, Z. Gurvich, R. Schneiderman, Y. Wasserman, M. Salzberg, B. Ryffel, D. Goldsher, E. Dekel, and Y. Palti. 2007. Alternating Electric Fields Arrest Cell Proliferation in Animal Tumor Models and Human Brain Tumors. *Proceedings of the National Academy of Sciences of the United States of America*, 104(24): 10152–10157.
- Kivrak, E., K. Yurt, A. Kaplan, I. Alkan, and G. Altun. 2017. Effects of Electromagnetic Fields Exposure on The Antioxidant Defense System. *Journal of Microscopy and Ultrastructure*, 5(4): 167.
- Kotas, M.E., and R. Medzhitov. 2015. Homeostasis, Inflammation, and Disease Susceptibility. *Physiology and Behavior*, 176(3): 139–148.

- Kulkarni, O.P., J. Lichtnekert, H.J. Anders, and S.R. Mulay. 2016. The Immune System in Tissue Environments Regaining Homeostasis after Injury: Is “Inflammation” Always Inflammation?. *Mediators of Inflammation*, 2016:1–9.
- Lee, K., G.L. Gusella, and J.C. He. 2021. Epithelial Proliferation and Cell Cycle Dysregulation in Kidney Injury and Disease. *Kidney International*, 100(1): 67–78.
- Martinez, F.O. and S. Gordon. 2014. The M1 and M2 Paradigm of Macrophage Activation: Time for Reassessment. *F1000Prime Reports*, 6(13): 1–13.
- Lin, R., J. Cai, E.W. Kostuk, R. Rosenwasser, and L. Iacovitti. 2016. Fumarate Modulates The Immune/Inflammatory Response and Rescues Nerve Cells and Neurological Function After Stroke in Rats. *Journal of Neuroinflammation*, 13(1): 1–15.
- Livak, K.J., and T.D. Schmittgen. 2001. Analysis of Relative Gene Expression Data Using Real-Time Quantitative PCR And The $2^{-\Delta\Delta CT}$ Method. *Methods*, 25(4): 402–408.
- Lovelace, D.L., L.R. McDaniel, and D. Golden. 2019. Long-Term Effects of Breast Cancer Surgery, Treatment, and Survivor Care. *Journal of Midwifery and Women's Health*, 64(6): 713–724.
- Meng, S., M. Rouabhia, and Z. Zhang. 2011. Electrical Stimulation in Tissue Regeneration. In G. Gargiulo (Ed). *Applied Biomedical Engineering*. Pp. 37–62, InTech. Rijeka.
- Miklavčič, D., N. Pavšelj, and F.X. Hart. 2007. Electric Properties of Tissue. In M. Akay (Ed). *Wiley Encyclopedia of Biomedical Engineering*. Pp. 1–12, John Wiley & Sons, Inc. New York.
- Mohamed, S.A., A.S. Mohamed, E. El-Zayat, and M.R. Shehata. 2021. Protective and Curative Mechanisms of Echinchrome Against 7, 12-Dimethylbenz[A]Anthracene -induced Renal Toxicity in Rats. *GSC Advanced Research and Reviews*, 6(1): 047–055.
- Mohapatra, S., C. Pioppini, B. Ozpolat, and G.A. Calin. 2021. Non-coding RNAs Regulation of Macrophage Polarization in Cancer. *Molecular Cancer*, 20(1): 1–16.
- Mu, W., X. Ouyang, A. Agarwal, L. Zhang, D.A. Long, P.E. Cruz, C.A. Roncal, O.Y. Glushakova, V.A. Chiodo, M.A. Atkinson, W. Hauswirth, T.R. Flotte, B. Rodriguez-Iturbe, and R.J. Johnson. 2005. IL-10 Suppresses Chemokines, Inflammation, and Fibrosis in A Model of Chronic Renal Disease. *Journal of the American Society of Nephrology*, 16(12): 3651–3660.
- Mun, E.J., H.M. Babiker, U. Weinberg, E.D. Kirson, and D.D. Von Hoff. 2018. Tumor-Treating Fields: A Fourth Modality in Cancer Treatment. *Clinical Cancer Research*, 24(2): 266–275.
- Nava, P., S. Koch, M.G. Laukoetter, W.Y. Lee, K. Kolegraff, C.T. Capaldo, N. Beeman, C. Addis, K. Gerner-Smidt, I. Neumaier, A. Skerra, L. Li, C.A. Parkos, and A. Nusrat. 2010. Interferon- γ Regulates Intestinal Epithelial Homeostasis through Converging β -Catenin Signaling Pathways. *Immunity*, 32(3): 392–402.
- Padlianah, M. Arif, and I. Yustisia. 2019. Blood Chemistry Profiles of DMBA-induced Mammary Tumor in Female Sprague Dawley Rats. *AIP Conference Proceedings*, 2108(June): 020043-1-020043–020044.

- Pangribowo, S. 2019. *Beban Kanker di Indonesia*. Pp: 1–9, Pusat Data dan Informasi Kemetrian Kesehatan RI. Jakarta.
- Pless, M., and U. Weinberg. 2011. Tumor Treating Fields: Concept, Evidence and Future. *Expert Opinion on Investigational Drugs*, 20(8): 1099–1106.
- Pratiwi, R., F. Alamsyah, S. Mubarika, Sunarti, S. Widyarini, C.M. Airin, W.A.S. Tunjung, E.N. Sholihah, L. Fitria, L. Nurhidayat, L. Hidayati, Fadlil, A. Saputra, A.G. Fadhlurrahman, and Sugiyanto. 2018. *Uji praklinis Electro-Capacitive Cancer Therapy (ECCT) Pada Tikus Model Kanker Payudara dan Uji Klinis Fase I Pada Sukarelawan Sehat*. Laporan Akhir Penelitian, Fakultas Biologi, Universitas Gadjah Mada, Yogyakarta.
- Pratiwi, R., N.Y. Antara, L.G. Fadliansyah, S.A. Ardiansyah, L. Nurhidayat, E.N. Sholikhah, S. Sunarti, S. Widyarini, A.G. Fadhlurrahman, H. Fatmasari, W.A.S. Tunjung, S.M. Haryana, F. Alamsyah, and W.P. Taruno. 2020. CCL2 and IL18 Expressions May Associate with The Anti-proliferative Effect of Noncontact Electro Capacitive Cancer Therapy In Vivo. *F1000Research*, 8(1770): 1–24.
- Ramseyer, V.D., and J.L. Garvin. 2013. Tumor Necrosis Factor- α : Regulation of Renal Function and Blood Pressure. *American Journal of Physiology - Renal Physiology*, 304(10): 1231–1242.
- Schülke, S. 2018. Induction of Interleukin-10 Producing Dendritic Cells as A Tool To Suppress Allergen-specific T Helper 2 responses. *Frontiers in Immunology*, 9(MAR): 1–18
- Sengupta, P. 2013. The Laboratory Rat: Relating Its Age with Human's. *International Journal of Preventive Medicine*, 4(6): 624–630.
- Sowunmi, A.C., P.C. Onuoha, A.O. Alabi, and U.S. Okoro. 2020. Side Effects of Radiotherapy on Breast Cancer Patients in the Department of Radiotherapy, Lagos University Teaching Hospital, Idi-Araba, Lagos, Nigeria. *Journal of Clinical Sciences*, 17(2): 30–37.
- Sung, H., J. Ferlay, R.L. Siegel, M. Laversanne, I. Soerjomataram, A. Jemal, and F. Bray. 2021. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA: A Cancer Journal for Clinicians*, 0(0): 1–41.
- Supardi, R.W. 2021. *Level Ekspresi Gen IL2R, IFN- γ Dan TGF-B Pada Jaringan Tumor Payudara Tikus (*Rattus norvegicus* Berkenhout, 1769) dengan Perlakuan Paparan Medan Listrik Statis Frekuensi Menengah dan Intensitas Rendah*. Skripsi, Fakultas Biologi, Universitas Gadjah Mada, Yogyakarta.
- Tau, G., and P. Rothman. 1999. Biologic Functions of The IFN-c Receptors. *Allergy*, 54: 1233–1251.
- Tecklenborg, J., D. Clayton, , S. Siebert, and S.M. Coley. 2018. The Role of The Immune System in Kidney Disease. *Clinical and Experimental Immunology*, 192(2): 142–150.
- Watkins, E.J. 2019. Overview of Breast Cancer. *Journal of the American Academy of Physician Assistans*, 32(10): 13–17.
- Yanagawa, Y., K. Iwabuchi, and K. Onoé. 2009. Co-operative Action of Interleukin-10 and Interferon- γ To Regulate Dendritic Cell Functions. *Immunology*, 127(3): 345–353.
- Yang, M., and W.J. Brackenbury. 2013. Membrane Potential and Cancer Progression. *Frontiers in Physiology*, 4 JUL(July): 1–10.



- Yardim, Y., E. Keskin, A. Levent, and Z. Senturk. 2010. Voltammetric Studies on The Potent Carcinogen, 7,12-dimethylbenz[a]anthracene: Adsorptive Stripping Voltammetric Determination in Bulk Aqueous Forms and Human Urine Samples and Detection of DNA Interaction on Pencil Graphite Electrode. *Talanta*, 80(2010): 1347–1355.
- Yildirim, S., S. Ekin, Z. Huyut, G. Oto, A. Comba, H. Uyar, E. Sengul, and D.A. Cinar. 2018. Effect of Chronic Exposure To Sodium Fluoride and 7,12-dimethylbenz[a]anthracene on Some Blood Parameters and Hepatic, Renal, and Cardiac Histopathology in Rats. *Fluoride*, 51(3): 278–290.