

## DAFTAR PUSTAKA

- Aguilera, Gabriela, Ana Laura Colín-González, Edgar Rangel-López, Anahí Chavarría, and Abel Santamaría. 2018. Redox Signaling, Neuroinflammation, and Neurodegeneration. *Antioxidants and Redox Signaling* 28 (18): 1626–51. <https://doi.org/10.1089/ars.2017.7099>.
- Ahmad, Mahmoud A L, Zeina Al Natour, Farah Mustafa, and Tahir A Rizvi. 2018. Electrical Characterization of Normal and Cancer Cells. *IEEE Access* 6: 25979–86. <https://doi.org/10.1109/ACCESS.2018.2830883>.
- Alamsyah, Firman, Izzatun Niswah Ajrina, Fitriya Nur Annisa Dewi, Diah Iskandriati, Silvia Arin Prabandari, and Warsito P. Taruno. 2015. Antiproliferative Effect of Electric Fields on Breast Tumor Cells In Vitro and In Vivo. *Indonesian Journal of Cancer Chemoprevention* 6 (3): 71. <https://doi.org/10.14499/indonesianjcanchemoprev6iss3pp71-77>.
- Andiani, Linahtadiya, Mahfudz Al Huda, and Warsito Purwo 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 (38): 178–83. <https://doi.org/10.3269/1970-5492.2017.12.38>.
- 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.
- Ayala, Antonio, Mario F Muñoz, and Sandro Argüelles. 2014. Lipid Peroxidation : Production , Metabolism , and Signaling Mechanisms of Malondialdehyde and 4-Hydroxy-2-Nonenal. *Oxidative Medicine and Cellular Longevity* 2014: 1–31. <https://doi.org/10.1155/2014/360438>.
- Bae, Heekyong, Alec T. Barlow, Howard Young, and Julio C. Valencia. 2016. *Interferon  $\gamma$ : An Overview of Its Functions in Health and Disease*. *Encyclopedia of Immunobiology*. Vol. 2. Elsevier. <https://doi.org/10.1016/B978-0-12-374279-7.10006-2>.
- Bani, E. 2014. *Investigating the Effects of Applied Electric Fields on Microglial Cell Behaviour*. Thesis. Virginia Commonwealth University. Virginia <https://doi.org/10.25772/H6SW-9J62>

Bastarache, Julie A., Sara C. Seab, Brandon S. Grove, and Lorraine B. Ware. 2011.

Interferon- $\gamma$  and Tumor Necrosis Factor- $\alpha$  Act Synergistically to up-Regulate Tissue Factor in Alveolar Epithelial Cells. *Experimental Lung Research* 37 (8): 509–17. <https://doi.org/10.3109/01902148.2011.605512>.

Brawerman, George, Experimental Section, and Cell Incubations. 1972. A Procedure for the Isolation of Mammalian Messenger Ribonucleic Acid. *Biochemistry* 11 (4): 637–41.

Bruce, Kimberley D, Andrea Zsombok, Robert H Eckel, and Kimberley D Bruce. 2017. Lipid Processing in the Brain : A Key Regulator of Systemic Metabolism. *Frontiers in Endocrinology* 8 (April): 1–11. <https://doi.org/10.3389/fendo.2017.00060>.

Bryda, Elizabeth C. 2013. “The Mighty Mouse: The Impact of Rodents on Advances in Biomedical Research.” *Science of Medicine*, no. 110:3: 207–11.

Costa, Eduardo, T Ferreira-gonçalves, Miguel Cardoso, M P Coelho, Maria Manuela Gaspar, Pedro Fa, and Lia Ascens. 2020. A Step Forward in Breast Cancer Research : From a Natural-Like Experimental Model to a Preliminary Photothermal Approach. *International Journal of Molecular Sciences Article* 21 (9681): 1–28.

Daly, B. P., D. M. Eichen, B. Bailer, R. T. Brown, and C. L. Buchanan. 2012. *Central Nervous System. Encyclopedia of Human Behavior: Second Edition*. 2nd ed. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-375000-6.00084-7>.

Dong, Le-mei, Xiao-wei Chen, Xi-xi He, Xue-pei Jiang, and Fang Wu. 2019. Cell Division Cycle Protein 42 Regulates the Inflammatory Response in Mice Bearing Inflammatory Bowel Disease. *Artificial Cells, Nanomedicine, and Biotechnology* 47 (1): 1833–38. <https://doi.org/10.1080/21691401.2019.1596936>.

Fang, Wen Hui, Yong Ming Yao, Zhi Guo Shi, Yan Yu, Ye Wu, Lian Rong Lu, and Zhi Yong Sheng. 2003. The mRNA Expression Patterns of Tumor Necrosis Factor- $\alpha$  and TNFR-I in Some Vital Organs after Thermal Injury. *World Journal of Gastroenterology* 9 (5): 1038–44. <https://doi.org/10.3748/wjg.v9.i5.1038>.

Fathurrohman, Siti, G A B P C Yehezkiel, Firman Alamsyah, and Rarastoeti Pratiwi. 2022. Electric Field-Based Cancer Therapy Induces the Expression of HMGB1 and PD-L1 mRNA Genes on Breast Tumor of Female Rats 13 (2): 128–36.

Félix, Nuno M, Isabelle Goy-thollot, Ronald S Walton, Solange A Gil, Luísa M Mateus, Ana S Matos, and Maria M R E Niza. 2016. Effects of Etomidate in the Adrenal and Cytokine Responses to Hemorrhagic Shock in Rats. *European Journal of Inflammation* 14 (3): 147–61. <https://doi.org/10.1177/1721727X16677604>.

Fujimoto, Saki, Kazuki Mochizuki, Masaya Shimada, and Yuki Murayama. 2014.

Variation in Gene Expression of Inflammatory Cytokines in Leukocyte-Derived Cells of High-Fat- Diet-Induced Insulin-Resistant Rats Variation in Gene Expression of Inflammatory Cytokines 8451 (May). <https://doi.org/10.1271/bbb.80259>.

Ginhoux, Florent, and Marco Prinz. 2015. Origin of Microglia: Current Concepts and Past Controversies. *Cold Spring Harbor Perspectives in Biology* 7 (8): 1–15. <https://doi.org/10.1101/cshperspect.a020537>.

Gulbahce, Mutlu, and SB Baltaci. 2020. Zinc and Melatonin Supplementation Ameliorates Brain Cortex Tissue Damage in DMBA-Induced Breast Cancer in Rats. *Bratisl Med J* 121 (10): 745–52. <https://doi.org/10.4149/BLL>.

Gutin, By Philip H, and Eric T Wong. 2012. Noninvasive Application of Alternating Electric Fields in Glioblastoma : A Fourth Cancer Treatment Modality. *American Society of Clinical Oncology* 32 (1): 126–31.

Gray, P., Goeddel, D. 1982. Structure of the human immune interferon gene. *Nature* 298, 859–863. <https://doi.org/10.1038/298859a0>

Hoare, Joseph I, Ann M Rajnicek, Colin D Mccaig, Robert N Barker, and Heather M Wilson. 2016. Electric Fields Are Novel Determinants of Human Macrophage Functions. 99 (June). <https://doi.org/10.1189/jlb.3A0815-390R>.

Hossain, Shadeeb. 2020. Biodielectric Phenomenon for Actively Differentiating Malignant and Normal Cells : An Overview. *Electromagnetic Biology and Medicine* 00 (00): 1–8. <https://doi.org/10.1080/15368378.2020.1737804>.

Hsieh, Hsi-lung, and Chuen-mao Yang. 2013. Role of Redox Signaling in Neuroinflammation and Neurodegenerative Diseases. *BioMed Research International* 2013. <https://doi.org/doi:10.1155/2013/484613>.

Isaković, Jasmina, Dunja Gorup, and Dinko Mitrečić. 2019. Molecular Mechanisms of Microglia- And Astrocyte-Driven Neurorestoration Triggered by Application of Electromagnetic Fields. *Croatian Medical Journal* 60 (2): 127–40. <https://doi.org/10.3325/cmj.2019.60.127>.

Kaur, Kuljeet, Anita K Sharma, Sanjiv Dhingra, and Pawan K Singal. 2006. Interplay of TNF-  $\alpha$  and IL-10 in Regulating Oxidative Stress in Isolated Adult Cardiac Myocytes. *Journal of Molecular and Cellular Cardiology* 41: 1023–30. <https://doi.org/10.1016/j.yjmcc.2006.08.005>.

Kerdelhué, Bernard, Claude Forest, and Xavier Coumoul. 2016. Dimethyl-Benz(a)Anthracene: A Mammary Carcinogen and a Neuroendocrine Disruptor.

- Kirson, Eilon D., Zoya Gurvich, Rosa Schneiderman, Erez Dekel, Aviran Itzhaki, Yoram Wasserman, Rachel Schatzberger, and Yoram Palti. 2004. Disruption of Cancer Cell Replication by Alternating Electric Fields. *Cancer Research* 64 (9): 3288–95. <https://doi.org/10.1158/0008-5472.CAN-04-0083>.
- Kıvrak, Elfide Gizem, Kıymet Kübra Yurt, Arife Ahsen Kaplan, and Gamze Altun. 2017. Effects of Electromagnetic Fields Exposure on the Antioxidant Defense System. *Journal of Microscopy and Ultrastructure* 5: 167–76. <https://doi.org/10.1016/j.jmau.2017.07.003>.
- Livak, Kenneth J, and Thomas D Schmittgen. 2001. Analysis of Relative Gene Expression Data Using Real- Time Quantitative PCR and the 2<sup>-ΔΔC<sub>T</sub></sup> Method. *METHODS* 408 (2001): 402–8. <https://doi.org/10.1006/meth.2001.1262>.
- Mohapatra, Swati, Carlotta Pioppini, Bulent Ozpolat, and George A Calin. 2021. Non-Coding RNAs Regulation of Macrophage Polarization in Cancer. *Molecular Cancer* 20 (24): 1–15. <https://doi.org/https://doi.org/10.1186/s12943-021-01313-x>.
- Morimoto, Keiko, and Kazunori Nakajima. 2019. Role of the Immune System in the Development of the Central Nervous System. *Frontiers in Neuroscience* 13 (916): 1–11. <https://doi.org/10.3389/fnins.2019.00916>.
- Nakagawa, Yutaka, and Kenji Chiba. 2014. Role of Microglial M1/M2 Polarization in Relapse and Remission of Psychiatric Disorders and Diseases. *Pharmaceuticals* 7 (12): 1028–48. <https://doi.org/10.3390/ph7121028>.
- 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, Rarastoeti, Nyoman Yudi Antara, Lalu Gunawan Fadliansyah, Syamsul Arif Ardiansyah, Luthfi Nurhidayat, Eti Nurwening Sholikhah, Sunarti Sunarti, et al. 2020. CCL2 and IL18 Expressions May Associate with the Anti-Proliferative Effect of Noncontact Electro Capacitive Cancer Therapy in Vivo. *F1000Res* 8 (1770): 1–15. <https://doi.org/10.12688/f1000research.20727.2>.
- Qiao, G, W Duan, C Chatwin, A Sinclair, and W Wang. 2010. Electrical Properties of Breast Cancer Cells from Impedance Measurement of Cell Suspensions Electrical

Properties of Breast Cancer Cells from Impedance Measurement of Cell Suspensions.

*Journal of Physics: Conference Series*, no. 224 012081. <https://doi.org/10.1088/1742-6596/224/1/012081>.

Sellati, T. J., and B. Sahay. 2014. *Cells of Innate Immunity: Mechanisms of Activation. Pathobiology of Human Disease: A Dynamic Encyclopedia of Disease Mechanisms*. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-386456-7.01804-9>.

Standiford, T.J., and J.C Deng. 2020. *INTERLEUKINS/IL-10. Literature Compass*. 1st ed. Vol. 2. Michigan: Elsevier Ltd. <https://doi.org/10.1111/lic3.12596>.

Sun, Yung Shin. 2018. Direct-Current Electric Field Distribution in the Brain for Tumor Treating Field Applications: A Simulation Study. *Computational and Mathematical Methods in Medicine* 2018. <https://doi.org/10.1155/2018/3829768>.

Sung, Hyuna, Jacques Ferlay, Rebecca L Siegel, Mathieu Laversanne, Isabelle Soerjomataram, Ahmedin Jemal, and Freddie Bray. 2021. Global Cancer Statistics 2020 : GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA CANCER J CLIN*, 1–41. <https://doi.org/10.3322/caac.21660>.

Supardi, R.W. 2021. *Level Ekspresi Gen IL2R, IFN- $\gamma$  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.

Swanson, Kenneth D., Edwin Lok, and Eric T. Wong. 2016. An Overview of Alternating Electric Fields Therapy (NovoTTF Therapy) for the Treatment of Malignant Glioma. *Current Neurology and Neuroscience Reports* 16 (1): 1–10. <https://doi.org/10.1007/s11910-015-0606-5>.

Tambuyzer, Bart R., Peter Ponsaerts, and Etienne J. Nouwen. 2009. Microglia: Gatekeepers of Central Nervous System Immunology. *Journal of Leukocyte Biology* 85 (3): 352–70. <https://doi.org/10.1189/jlb.0608385>.

Tau, G, and P Rothman. 1999. Biologic Functions of the IFN-Gamma Receptors. *Allergy*, no. 54: 1233–51. <https://doi.org/doi:10.1034/j.1398-9995.1999.00099.x>.

Widiasri, N.K. 2022. *Ekspresi Relatif mRNA IFN- $\gamma$ , IL-10, Dan TNF- $\alpha$  Ginjaltikus (*Rattus Norvegicus* Berkenhout, 1769) Dengan Dan Tanpa Tumor Payudara Setelah Paparan Medan Listrik Statis Frekuensi Menengah*. Skripsi. Fakultas Biologi, Universitas Gadjah Mada

Yang, Ming, and William J Brackenbury. 2013. Membrane Potential and Cancer Progression. *Frontiers in Physiology* 4 (July): 1–10.

- Yardıı, Y, E Keskin, A Levent, and M Özsöz. 2010. Talanta 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: 1347–55. <https://doi.org/10.1016/j.talanta.2009.09.035>.
- Yin, Jie, Katherine L Valin, Michael L Dixon, and Jianmei W Leavenworth. 2017. Review Article The Role of Microglia and Macrophages in CNS Homeostasis , Autoimmunity , and Cancer. *Journal of Immunology Research* 2017: 1–12. <https://doi.org/https://doi.org/10.1155/2017/5150678>.
- Yoram Palti. Method for Selectively Destroying Dividing Cells. Patent Application Publication. US 20070033660A1. 8 February 2007. pp. 1-3.