

DAFTAR PUSTAKA

- [1] F. 'Rahmawati and R. ' Lumbantobing, "Analysis of Drinking Water Quality Directly Related to Health at Refill Depots in the South Bekasi Area, Indonesia," *Eximia Journal*, vol. 11, pp. 1–2, Jun. 2023.
- [2] M. A. Mahboby, "Identification of Bacterial Contamination in River Water Lulut in East Banjarmasin District," *Jurnal Biologi Tropis*, vol. 23, no. 2, pp. 335–340, Apr. 2023, doi: 10.29303/jbt.v23i2.4383.
- [3] I. Utami and M. Liani, "Identifikasi Mikroplastik pada Air Sumur Gali di sekitar TPA Piyungan Yogyakarta." [Online]. Available: <https://www.researchgate.net/publication/357551370>
- [4] M. Gufran, F. Kesehatan Masyarakat Universitas Muhammadiyah Aceh -Banda Aceh, and B. Pelatihan Kesehatan Aceh -Banda Aceh Koresponden, "Dampak Pembuangan Limbah Domestik terhadap Pencemaran Air Tanah di Kabupaten Pidie Jaya," *Serambi Engineering*, vol. IV, no. 1, 2019.
- [5] J. Saimin, Hartati, Y. Purnamasari, S. A. Mulyawati, Tien, and P. Aritrina, "Microbiological and biochemical contamination analysis of refilled drinking-water in Abeli, Kendari, Southeast Sulawesi," *Indonesian Biomedical Journal*, vol. 12, no. 2, pp. 124–129, Jun. 2020, doi: 10.18585/inabj.v12i2.871.
- [6] R. Adriano Dorledo de Faria, "Application of screen-printed carbon electrode as an electrochemical transducer in biosensors."
- [7] Q. K. Vu *et al.*, "A label-free electrochemical biosensor based on screen-printed electrodes modified with gold nanoparticles for quick detection of bacterial pathogens," *Mater Today Commun*, vol. 26, Mar. 2021, doi: 10.1016/j.mtcomm.2020.101726.
- [8] N. Baig, I. Kammakakam, W. Falath, and I. Kammakakam, "Nanomaterials: A review of synthesis methods, properties, recent progress, and challenges," Mar. 21, 2021, *Royal Society of Chemistry*. doi: 10.1039/d0ma00807a.
- [9] E. Omanović-Miklićanin, A. Badnjević, A. Kazlagić, and M. Hajlovac, "Nanocomposites: a brief review," *Health Technol (Berl)*, vol. 10, no. 1, pp. 51–59, Jan. 2020, doi: 10.1007/s12553-019-00380-x.

- [10] A. Kareem, M. Al Maamori, and S. N. K. Al-Thomir, "Preparation and Characterization of Antimicrobial PVA/ZnO Nanocomposite for Biomaterial Applications."
- [11] N. Jaiswal, C. M. Pandey, S. Solanki, I. Tiwari, and B. D. Malhotra, "An impedimetric biosensor based on electrophoretically assembled ZnO nanorods and carboxylated graphene nanoflakes on an indium tin oxide electrode for detection of the DNA of *Escherichia coli* O157:H7," *Microchimica Acta*, vol. 187, no. 1, Jan. 2020, doi: 10.1007/s00604-019-3921-8.
- [12] B. Abebe, H. C. A. Murthy, E. A. Zereffa, and Y. Adimasu, "Synthesis and characterization of ZnO/PVA nanocomposites for antibacterial and electrochemical applications," *Inorganic and Nano-Metal Chemistry*, vol. 51, no. 8, pp. 1127–1138, 2021, doi: 10.1080/24701556.2020.1814338.
- [13] S. A. Khan *et al.*, "Performance investigation of ZnO/PVA nanocomposite film for organic solar cell," in *Materials Today: Proceedings*, Elsevier Ltd, 2021, pp. 2615–2621. doi: 10.1016/j.matpr.2021.05.197.
- [14] S. A. Khan, A. Rahman, and F. B. D. A. Ibrahim, "The impact of film thickness on the properties of ZnO/PVA nanocomposite film," *Mater Res Express*, vol. 8, no. 7, Jul. 2021, doi: 10.1088/2053-1591/abf081.
- [15] D. Aggarwal, T. Kanitkar, M. Narouz, B. S. Azadian, L. S. P. Moore, and N. Mughal, "Clinical utility and cost-effectiveness of bacterial 16S rRNA and targeted PCR based diagnostic testing in a UK microbiology laboratory network," *Sci Rep*, vol. 10, no. 1, Dec. 2020, doi: 10.1038/s41598-020-64739-1.
- [16] M. Pohanka, "Overview of piezoelectric biosensors, immunosensors and DNA sensors and their applications," Mar. 19, 2018, *MDPI AG*. doi: 10.3390/ma11030448.
- [17] M. R. Nurliyana *et al.*, "The Detection Method of *Escherichia coli* in Water Resources: A Review," in *Journal of Physics: Conference Series*, Institute of Physics Publishing, Apr. 2018. doi: 10.1088/1742-6596/995/1/012065.
- [18] D. Petrovszki *et al.*, "An integrated electro-optical biosensor system for rapid, low-cost detection of bacteria," *Microelectron Eng*, vol. 239–240, Feb. 2021, doi: 10.1016/j.mee.2021.111523.

- [19] H. S. Raham and S. S. Al-Bassam, "Optical fiber sensor based on surface plasmon resonance for detection of Escherichia coli (E. coli)," *Journal of Optics (India)*, vol. 52, no. 2, pp. 631–636, Jun. 2023, doi: 10.1007/s12596-022-01007-7.
- [20] E. Cesewski and B. N. Johnson, "Electrochemical biosensors for pathogen detection," Jul. 01, 2020, *Elsevier Ltd.* doi: 10.1016/j.bios.2020.112214.
- [21] M. G. Al-Fandi *et al.*, "Direct electrochemical bacterial sensor using ZnO nanorods disposable electrode," *Sensor Review*, vol. 38, no. 3, pp. 326–334, May 2018, doi: 10.1108/SR-06-2017-0117.
- [22] N. Razmi, M. Hasanzadeh, M. Willander, and O. Nur, "Recent progress on the electrochemical biosensing of Escherichia coli O157:H7: Material and methods overview," May 18, 2020, *MDPI*. doi: 10.3390/BIOS10050054.
- [23] Y. Chen *et al.*, "Recent advances in rapid pathogen detection method based on biosensors," Jun. 01, 2018, *Springer Verlag*. doi: 10.1007/s10096-018-3230-x.
- [24] S. Khan, Akrema, S. Qazi, R. Ahmad, K. Raza, and Rahisuddin, "In Silico and Electrochemical Studies for a ZnO-CuO-Based Immunosensor for Sensitive and Selective Detection of E. coli," *ACS Omega*, vol. 6, no. 24, pp. 16076–16085, Jun. 2021, doi: 10.1021/acsomega.1c01959.
- [25] A. R. H. A. A. Hassan, A. de la Escosura-Muñiz, and A. Merkoçi, "Highly sensitive and rapid determination of Escherichia coli O157: H7 in minced beef and water using electrocatalytic gold nanoparticle tags," *Biosens Bioelectron*, vol. 67, pp. 511–515, May 2015, doi: 10.1016/j.bios.2014.09.019.
- [26] L. Ye, G. Zhao, and W. Dou, "An electrochemical immunoassay for Escherichia coli O157:H7 using double functionalized Au@Pt/SiO₂ nanocomposites and immune magnetic nanoparticles," *Talanta*, vol. 182, pp. 354–362, May 2018, doi: 10.1016/j.talanta.2018.01.095.
- [27] P. M. Shaibani *et al.*, "Portable Nanofiber-Light Addressable Potentiometric Sensor for Rapid Escherichia coli Detection in Orange Juice," *ACS Sens*, vol. 3, no. 4, pp. 815–822, Apr. 2018, doi: 10.1021/acssensors.8b00063.
- [28] P. Guillem, R. H. Bustos, V. Garzon, A. Munoz, and G. Juez, "A low-cost electrochemical biosensor platform for C-reactive protein detection," *Sens Biosensing Res*, vol. 31, Feb. 2021, doi: 10.1016/j.sbsr.2021.100402.

- [29] H.-W. Wang, C. Bringans, A. J. R. Hickey, J. A. Windsor, P. A. Kilmartin, and A. R. J. Phillips, "Cyclic Voltammetry in Biological Samples: A Systematic Review of Methods and Techniques Applicable to Clinical Settings," *Signals*, vol. 2, no. 1, pp. 138–158, Mar. 2021, doi: 10.3390/signals2010012.
- [30] A. Khoshroo, M. Mavaei, M. Rostami, B. Valinezhad-Saghezi, and A. Fattahi, "Recent advances in electrochemical strategies for bacteria detection," *BioImpacts*, vol. 12, no. 6, pp. 567–588, Nov. 2022, doi: 10.34172/bi.2022.23616.
- [31] H. Ogi, "Wireless-electrodeless quartz-crystal-microbalance biosensors for studying interactions among biomolecules: A review," Nov. 11, 2013. doi: 10.2183/pjab.89.401.
- [32] A. A. Ansari, M. Alhoshan, M. S. Alsalhi, and A. S. Aldwayyan, "Prospects of nanotechnology in clinical immunodiagnosics," Jul. 2010. doi: 10.3390/s100706535.
- [33] N. Jaffrezic-Renault and S. V Dzyadevych, "Conductometric Microbiosensors for Environmental Monitoring," *Sensors*, vol. 8, pp. 2569–2588, 2008, [Online]. Available: www.mdpi.org/sensors
- [34] E. Della Gaspera *et al.*, "Comparison study of conductometric, optical and SAW gas sensors based on porous sol-gel silica films doped with NiO and Au nanocrystals," *Sens Actuators B Chem*, vol. 143, no. 2, pp. 567–573, Jan. 2010, doi: 10.1016/j.snb.2009.09.060.
- [35] Y. Shevchenko, T. J. Francis, D. A. D. Blair, R. Walsh, M. C. Derosa, and J. Albert, "In situ biosensing with a surface plasmon resonance fiber grating aptasensor," *Anal Chem*, vol. 83, no. 18, pp. 7027–7034, Sep. 2011, doi: 10.1021/ac201641n.
- [36] Will Dickson, "Worked Examples Cyclic Voltammetry," Web IO-Rodeo Potentiostat.
- [37] Will Dickson, "Voltametric Test Square Wave Voltammetry," Web IO-Rodeo Potentiostat.
- [38] N. Elgrishi, K. J. Rountree, B. D. McCarthy, E. S. Rountree, T. T. Eisenhart, and J. L. Dempsey, "A Practical Beginner's Guide to Cyclic Voltammetry," *J Chem Educ*, vol. 95, no. 2, pp. 197–206, Feb. 2018, doi: 10.1021/acs.jchemed.7b00361.
- [39] D. Gao *et al.*, "Direct implementation of K₃Fe(CN)₆ as cathode materials of sodium-ion batteries," *Mater Today Energy*, vol. 10, pp. 302–306, Dec. 2018, doi: 10.1016/j.mtener.2018.10.005.

- [40] Metrohm AG 2022-2024, “Tech specs of Screen-Printed Carbon Electrode Metrohm,” Metrohm AG 2022-2024. Accessed: Jun. 30, 2024. [Online]. Available: https://www.metrohm.com/id_id/products/110/110.html
- [41] M. G. Al-Fandi *et al.*, “Direct electrochemical bacterial sensor using ZnO nanorods disposable electrode,” *Sensor Review*, vol. 38, no. 3, pp. 326–334, May 2018, doi: 10.1108/SR-06-2017-0117.
- [42] A. Åsberg and B. J. Bolann, “Calculating the Coefficient of Variation from Duplicate Measurements: A New Method,” Jan. 01, 2023, *Oxford University Press*. doi: 10.1093/jalm/jfac098.
- [43] S. Panhwar, S. S. Hassan, R. B. Mahar, K. Carlson, M. ul H. Rajput, and M. Y. Talpur, “Highly Sensitive and Selective Electrochemical Sensor for Detection of Escherichia coli by Using L-Cysteine Functionalized Iron Nanoparticles ,” *J Electrochem Soc*, vol. 166, no. 4, pp. B227–B235, 2019, doi: 10.1149/2.0691904jes.
- [44] F. Biabangard, H. Nazari, and R. Arefinia, “Effect of pH on the electrochemical properties of polyaniline nanoparticle suspension in strongly acidic solution: an experimental and theoretical study”, doi: 10.1007/s10008-020-04863-0/Published.