

DAFTAR PUSTAKA

- Abdul, Rohman. (2014). *Validasi dan Penjaminan Mutu Metode Analisis Kimia*. UGM Press: Yogyakarta.
- Achmad, H. (2001). *Elektrokimia dan Kinetika Kimia*. Bandung: Citra Aditya Bakti.
- Andriani, V. (2007). Pengembangan Sensor Voltametri N₂O dengan Optimalisasi Polarisasi Elektroda dan Konsentrasi Elektrolit menggunakan Elektroda Kerja Perak (Ag). *Skripsi*. Universitas Jember.
- Arevalo, P., Isasi, J., Caballero, A.C., Marco, J.F and Martin-Hernandez, F. (2017) Magnetic and Structural Studies of Fe₃O₄ Nanoparticle Synthesized via Coprecipitation and Dispersed in Different Surfactant. *Ceramic International*. S0272-8842(17)30862-3.
- Aris, Mukimin. (2006). Pengolahan Limbah Industri Berbasis Logam dengan Teknologi Elektrokoagulasi Flotasi. *Skripsi*. Jurusan Ilmu Lingkungan: Universitas Diponegoro, Semarang.
- Atlas. I.D.F.D. (2019). *Idf diabetes atlas: 9th edition*. <https://www.diabetes.org/en/resources/>. Diakses Desember 2021
- Aziz, A., dan M. Hidayat. (2012). *Pengantar Kebutuhan dasar Manusia Edisi 2*. Salemba Medika : Jakarta.
- Bankar, S.B., Bule, M.V., Singhal, R.S and Ananthanarayan, L. (2009). Glucose Oxidase an Overview. *Biotechnology Advances*. 27, 489-501.
- Blum, Loic J. and P. R. Coulet. (2019). *Biosensor Principles and Applications*. Madison avenue: New York.
- Bright, H. J., and Appleby, M. (1969). The pH Dependence of the Individual Steps in the Glucose Oxidase Reaction. *Journal of Biological Chemistry*, 244(13): 3625-3634.
- Brunner dan Suddarth. (2014). *Keperawatan Medikal Bedah Edisi 12*. ECG: Jakarta.
- Cao, L. (2006). *Carrier-Bound Immobilized Enzymes. Principles, Application and Design*. John Wiley & Sons: US.
- Cavalcanti, A., Shirinzadeh, B., Zhang, M., and Kretly, L. C. (2008). Nanorobot Hardware Architecture for Medical Defense. *Sensors*, 8(5): 2932-2958.
- Collings, A. and Caruso, F. at Ying, M. (1997) Recent Advances in Fiber Optic DNA Biosensors. *Journal of Biomedical and Engineering*. 2(5): 312-317.

- Darwis, Y. (2005). *Pedoman Pemeriksaan Laboratorium untuk Penyakit Diabetes Melitus*. Departemen Kesehatan Indonesia. Jakarta.
- Depkes, R. I. (2008). *Profil Kesehatan Indonesia*. Depkes RI: Jakarta.
- Dewangga, N. (2010). Studi Pengembangan Sensor BOD Berbasis Rhodotorula Mucilaginosa UICCY-181. *Skripsi*. Departemen Kimia FMIPA UI.
- Dvorak, P., RM Ramos, V. Vyskocil and JA Rodrigues. (2020). *Talanta*, 217: 121068.
- Elnashar, Magdy M. (2009). The Art of Immobilization using Biopolymers, Biomaterials and Nanobiotechnology. *Journal of Application Polymer and Science*. 7(7): 114.
- Fabiano S, Minh CT, Piro B, Dang LA, PHam C, and Vittori O. (2002). Poly 3,4-Ethylenedioxythiophene as an Entrapment Support for Amperometric Enzyme Sensor. *Material Science and Engineering C*. 21(1-2): 61-67.
- Fatoni, A., Dwiasi, D. W., and Hermawan, D. (2016). Alginate Cryogel Based Glucose Biosensor. In IOP Conference Series: *Materials Science and Engineering* 107(1): 012010.
- Fatoni, A., Numnuam, A., Kanatharana, P., Limbut, W., and Thavarungkul, P. (2014). A Conductive Porous Structured Chitosan-Grafted Polyaniline Cryogel for use as a sialic acid biosensor. *Electrochimica Acta*. 130: 296-304.
- Fatoni, A., Numnuam, A., Kanatharana, P., Limbut, W., Thammakhet, C., and Thavarungkul, P. (2013). A Highly Stable Oxygen-Independent Glucose Biosensor Based on a Chitosan-Albumin Cryogel Incorporated with Carbon Nanotube and Ferrocene. *Sensors & Actuators: B. Chemical*, 185: 725-734.
- Fessenden, R.J., Fessenden H. (1995). *Kimia Organik*. Terjemahan oleh A.H.Pudjaatmaka. Jilid I dan Jilid II. Edisi ketiga. Cetakan keempat. Erlangga: Jakarta.
- Guisan, J. M. (2006). *Immobilization of Enzymes and Cells* (Vol. 22). Humana Press: Totowa, NJ.
- Guo, Q., Huang, J., Chen, P., Liu, Y., Hou, H., and You, T. (2012). Simultaneous Determination of Catechol and Hydroquinone using Electrospun Carbon Nanofibers Modified Electrode. *Sensor & Actuators B*. 163(1): 179-185.
- Guyton, A.C. and Hall, J.E. (2006). *Textbook of Medical Physiology 11th edition*. Philadelphia PA Elsevier Saunders, USA.
- Harmita. (2004). Petunjuk Pelaksanaan Validasi Metode dan Cara Perhitungannya. *Majalah Ilmu Kefarmasian*. Departemen Farmasi FMIPA: UI. 1 (3): 117-135.

- Hartati, Y.W. (2018). *Elektroanalisis Kimia*. Bitread: Bandung.
- Hartono, A., Sanjaya, E., and Ramli, R. (2018). Glucose Sensing using Capacitive Biosensor Based on Polyvinylidene Fluoride Thin Film. *Biosensors*. 8(1): 1-10.
- Hartoto, L. (2008). *Immobilisasi Enzim Program Studi TIP Institut Pertanian Bogor*. Bogor: IPB.
- Harvey, D. (2011). Analytical Chemistry 2.0 an Open Access Digital Textbook. *Analytical and Bioanalytical Chemistry*. 339(1). 149-152.
- Herawati, D. (2012). Stabilitas dan Efektivitas Biosensor Glukosa Berbasis Escherichia coli yang diimmobilisasi pada Matriks Nanokomposit Zeolit. *Skripsi*. Bogor: Departemen Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Institut Pertanian Bogor.
- Hosseini Ghalehno, M., Mirzaei, M., and Torkzadeh-Mahani, M. (2019). Electrochemical Aptasensor for Activated Protein C using a Gold Nanoparticle Chitosan/Graphene Paste Modified Carbon Paste Electrode. *Bioelectrochemistry*. 130: 107322.
- Huang J, and Kaner RB. (2005). The Intrinsic Nanofibrillar Morphology of Polyaniline. *Chemistry Community*. 4: 367-376.
- International Diabetes Federation. (2017). *IDF Diabetes Atlas 8th Edition*. Brussels: International Diabetes Federation.
- Ismoyo, A.H. (2018). Pengembangan Biosensor dengan Glukosa Beads Alginat dan Detektor TCS. *Skripsi*. Universitas Jenderal Soedirman. Purwokerto.
- Keenan. (1996). *Kimia Untuk Universitas*. Erlangga: Jakarta.
- Krzyczmonik, P. E. Socha and S. Skrzypek. (2018). *Elektrokatalisis*, 9: 380.
- Kurniasih, R. (2014). Glukosa Oksidase teramobil Glutaraldehyd pada Elektroda Pasta Karbon Termodifikasi Nanoserat Polianilin Sebagai Biosensor Glukosa. *Skripsi*. Jurusan Kimia, MIPA: Institut Pertanian Bogor.
- Lukovic N, Knezevic-Jugovic Z, Bezbradica D. (2011). Biodiesel Fuel Production by Enzymatic Transesterification of Oils. *Recent Trends, Challenges and Future Perspectives*. Serbia (RS): Faculty of Technology and Metallurgy University of Belgrade.
- McCormick, W. and McCrudden, D. (2020). *Journal Electroanalytical. Kimia*. 860: 113912.
- Muflihatun, S. S., dan Suharyadi, E. (2015). Sintesis Nanopartikel Nickel Ferrite (NiFe_2O_4) dengan Metode Kopresipitasi dan Karakterisasi Sifat Kemagnetannya. *Jurnal Fisika Indonesia*, 19(55): 20-25.

- Murray R.K., Granner D.K., Mayes P.A., and Rodwell V.W. (2006). *Biokimia* Murray R.K., Granner D.K., Mayes P.A., dan Rodwell V.W. (2006). *Biokimia Harper Edisi 25*. EGC, Jakarta.
- Nuraini, I.S., Sulchan, M and Dieny, F.F. (2017) Resistensi Insulin pada Remaja Stunted Obesity Usia 15-18 Tahun di Kota Semarang. *Journal of Nutrition College*. 6(2), 164-171.
- Ozturk, B. (2001). Immobilization of Lipase from *Candida Rugosa* On Hydrophobic and Hydrophilic Support. Turkey. *Dissertation Master of Science*. Turkey: Izmir Institute of Technology.
- Pratiwi, N.H. (2017). Pembuatan Sensor Monosodium Glutamat secara Potensiometri Menggunakan Membran Kitosan-Nanopartikel Fe₃O₄ Berbasis *Screen printed Carbon Electrode* (SPCE). *Skripsi*. Jurusan Kimia, MIPA. Universitas Brawijaya: Malang.
- Pelczar, M.J dan Chan, E.C.S. (2005). *Dasar-Dasar Mikrobiologi Jilid 2*. UI-Press: Jakarta.
- Petrucci, R. H. (1999). *Kimia Dasar Prinsip dan Terapan Modern jilid 3*. Edisi IV. Erlangga : Jakarta.
- Pramono. (2016) Diet Olahraga Sebagai Upaya Pengendalian Kadar Gula Darah pada Pasien Diabetes Melitus Tipe 2 di Poliklinik Penyakit Dalam RSUD Ulin Banjarmasin. *The Indonesian Journal of Health*. 6(2): 4.
- Riyanto. (2012). *Reaksi Kimia dan Aplikasinya*. Edisi 1. Graha Ilmu: Yogyakarta.
- Riyanto. (2013). *Elektrokimia dan Aplikasinya*. Edisi 2. Graha Ilmu: Yogyakarta.
- Riyanto.(2015). *Validasi dan Verifikasi Metode Uji*. CV Budi Utama: Yogyakarta.
- Saragi, T., Permana, B., Saputri, M., Safriani, L., Rahayu, I. and Risdiana, R. (2017). Synthesis and Properties of Iron Oxide Particles Prepared by Hydrothermal Method. *IOP Conference Series: Material Science and Engineering*. 1: 196-198.
- S. K. W. Ningsih. (2016). *Sintesis Anorganik*, UNP Press: Padang, Sumatera Barat.
- Sacher, R. A. dan R. A. McPherson. (2004). *Tinjauan Klinis Hasil Pemeriksaan Laboratorium, Edisi 11*. (Diterjemahkan oleh: dr. Brahm U. Pendit dan dr. Dewi Wulandari). Buku Kedokteran EGC: Jakarta.
- Shariatnia, Z., and Jalali, A. M. (2018). International Journal of Biological Macromolecules Chitosan-based hydrogels : Preparation , Properties and Applications. *International Journal of Biological Macromolecules*, 115: 194-220.

- Sheldon, R. A., and van Pelt, S. (2013). Enzyme Immobilization in Biocatalysis: Why, What and How. *Chemical Society Reviews*, 42(15): 6223-6235.
- Soegono, S. (2008). *Hidup Secara Mandiri dengan: Diabetes Mellitus, Kencing Manis, Sakit Gula*. Fakultas Kedokteran Universitas Indonesia.
- Suhartono MT. (1989). *Enzim dan Bioteknologi*. Bogor (ID): Departemen Pendidikan dan Kebudayaan. IPB.
- Triana, R. (2013). Pemurnian Parsial dan Karakterisasi Glukosa Oksidase dari Isolat *Aspergillus Niger* (IPBCC.08.610). *Skripsi*. Departemen Biokimia FMIPA: IPB, Bogor.
- Turner, A., Wilson, G. dan Kaube, I. (1987). *Biosensors. Fundamentals and Applications*. Oxford, UK: Oxford University Press.
- Urrutia, P., Bernal, C., Wilson, L., and Illanes, A. (2018). Use of Chitosan Heterofunctionality for Enzyme Immobilization: β -galactosidase Immobilization for Galacto-Oligosaccharide Synthesis. *International Journal of Biological*. 116: 182-193.
- Vigneswari, T., and Raji, P. (2017). Structural and Magnetic Properties of Calcium doped Nickel Ferrite Nanoparticles by Co-Precipitation Method. *Journal of Molecular Structure*. 1127: 515-521.
- Wardaniati, R.A., Setyaningsih, S. (2010). Pembuatan Kitosan dari Kulit Udang dan Aplikasinya untuk Pengawet Bakso. *Skripsi*. Teknik Kimia: Universitas Diponegoro, Semarang.
- Wang, J. (2006). *Analytical Electrochemistry* 3th edition. A John Wiley & Son. Inc Publication. 2932.
- Wang, J. (2008). Electrochemical Glucose Biosensors. *Chemical reviews*. 108(2): 814-825.
- Wang, K., Yang, H., Zhu, L., Liao, J., Lu, T., Xing, W., Xing, S., and Lv, Q. (2009) Direct Electrochemistry and Electrocatalysis of Glucose Oxidase Immobilized on Glassy Carbon Electrode Modified by Nafion and Ordered Mesoporous. *Journal of molecular Catalysis B. Enzymatic*. 58: 194-198.
- Whitaker, R.J. (1972). *Principle of enzymology for the food science*. Mergel Dekker Inc. New York. 561-570.
- Xiu, G.L M. Li, DW Li, dan Long, Curr. (2017). *Pendapat elektrokimia*. 3: 137.
- Zhang, X., and Ding, S.N. (2017) Graphite Paper-Based Bipolar Electrode Electrochemiluminescence Sensing Platform. *Biosensors and Bioelectronics*. 94: 47-55.

Zhao, L., Yang, H., Cui., Zhao, X., and Feng, S. (2017). Study of Preparation and Magnetic Properties of Silica Coated Cobalt Ferrite Nanoparticles. *Journal of Materials Science*. 42(11): 4110-4114.

Zsoldos, S. (1953). Neue Erfahrungen mit Quecksilber Diuretika. *Therapia Hungarica: English Edition*. 10(1): 19-23.

Zusfahair, Z., Ningsih, D.R., Lestari, E. D. P., and Fatoni, A. 2019. Development of Urea Biosensor Based on Immobilized Urease in Chitosan *Cryogel*. *Molekul*. 14(1): 64-71.

