

DAFTAR PUSTAKA

- Ahmad, M., Hamzah, H., & Marsom, E. S. (1998). Development of an Hg (II) fibre-optic sensor for aqueous environmental monitoring. *Talanta*, 47(2), 275-283.
- Ahmed, M.J., dan Alam, M.S. 2003. A rapid spectrophotometric method for the determination of mercury in environmental, biological, soil and plant samples using diphenylthiocarbazone. *Spectroscopy*. 17(1):45–52.
- Alekya, G. 2017. A Survey Report on Fiber Optic Sensors. *International Journal of Innovative Research in Science, Engineering and Technology*. 6(8):16466–16477.
- Ananto, B. 2011. Simulasi Perambatan Cahaya pada Serat Optik. *Skripsi*, Universitas Diponogoro.
- Aranaz, I., Alcántara, A.R., Civera, M.C., I, B.E., Caballero, A.H., Acosta, N., dan Arias, C. 2021. Chitosan: An Overview of Its Properties and Applications. *Polymers*. 1:1–27.
- Asril, A.A., Maria, P., Herwita, P.A. 2019. Kabel Optik Single Mode. *Elektron Jurnal Ilmiah*
- Bhavsar, K., Prabhu, R., dan Pollard, P. 2013. Development of dithizone based fibre optic evanescent wave sensor for heavy metal ion detection in aqueous environments. *Journal of Physics: Conference Series*. 450(1):16–18.
- Boerner, L.K. 2025. *Mercury use is on the rise despite a UN push for phaseout*. American Chemical Society. URL: <https://cen.acs.org/environment/pollution/mercury-gold-minamata-toxic-skincare/103/web/2025/11>. Diakses 10 Januari 2026.
- Breiman, L. 2001. Random Forests. *Kluwer Academic Publishers*.
- Cortes, C., dan Vapnik, V. 1995. Support-Vector Networks. *Kluwer Academic Publishers*.
- El-Dib, F.I., Mohamed, D.E., El-Shamy, O.A.A., dan Mishrif, M.R. 2020. Study the adsorption properties of magnetite nanoparticles in the presence of different synthesized surfactants for heavy metal ions removal. *Egyptian Journal of Petroleum*. 29 (1):1–7.
- Hidayati, M. 2021. Rancang Bangun Sensor Serat Optik dengan *Cladding* Zinc

- Oxide untuk Mendeteksi Kelembaban Udara. *Jurnal Fisika Unand (JFU)*. 10 (2):255–261.
- Hruschka, F. 2023. *Countries - ASM status, ASM miners and ASM commodities mined*. *Artisanalmining.org – ASM Database*. URL: <https://artisanalmining.org/InventoryData/doku.php/country:country?do=>. Diakses 4 Januari 2026.
- Iqbal, M., dan Harmadi 2021. Prototipe Sistem Monitoring Bencana Banjir Berdasarkan Kekeruhan Air Sungai Menggunakan Sensor Serat Optik Dan Raspberry Pi 3B⁺. *Skripsi*, Universitas Andalas, Padang.
- Kaelbling, L.P., Littman, M.L., dan Moore, A.W. 1996. Reinforcement Learning : A Survey. *Journal of Artificial Intelligence*. 237–285.
- Lestaris, T. 2010. Faktor-Faktor yang Berhubungan dengan Keracunan Merkuri (Hg) pada Penambangan Emas Tanpa Izin (PETI) di Kecamatan Kurun, Kabupaten Gunung Mas, Kalimantan Tengah. *Skripsi*, Universitas Diponogoro.
- Lu, M., Wang, C., Fan, R., Lin, M., Guang, J., dan Peng, W. 2024. Review of Fiber-Optic Localized Surface Plasmon Resonance Sensors: Geometries, Fabrication Technologies, and Bio-Applications. *Photonic Sensors*. 14 (2):1–26.
- Meutia, A.A., Lumowa, R., dan Sakakibara, M. 2022. *Indonesian Artisanal and Small-Scale Gold Mining—A Narrative Literature Review*. *Environmental Research and Public Health*. URL: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8997897/>. Diakses 4 Februari 2026.
- Mudasir, Raharjo, G., Tahir, I., dan Wahyuni, E.T. 2008. Immobilization of *Dithizone* onto Chitin Isolated from Prawn Seawater Shells (*P. merguensis*) and its Preliminary Study for the Adsorption of Cd (II) Ion. *Journal of Physical Science*. 19 (1):63–78.
- Naeem, S., Ali, A., Anam, S., dan Ahmed, M.M. 2023. An Unsupervised Machine Learning Algorithms : Comprehensive Review. *International Journal of Computing and Digital Systems*. 1 (1).
- National Health and Medical Research Council 2022 n.d. *Mercury* | *Australian*

- Drinking Water Guidelines. National Health and Medical Research Council.*
URL: <https://guidelines.nhmrc.gov.au/australian-drinking-water-guidelines/part-5/physical-chemical-characteristics/mercury>. Diakses 4 Februari 2026.
- Nur, Y., Rohaeti, E., dan Darusman, L.K. 2017. Optical sensor for the determination of Pb²⁺ based on immobilization of *dithizone* onto Chitosan-Silica membrane. *Indonesian Journal of Chemistry*. 17 (1):7–14.
- Oyekunle, J.A.O., Ore, O.T., Durodola, S.S., Oyinloye, J.A., Oyeboode, B.A., dan Ajanaku, O.L. 2020. Heavy metal levels and changes in trimethylamine content of smoked fish and meat under different storage conditions. *SN Applied Sciences*. 2 (6).
- Pandey, D., Niwaria, K., dan Chourasia, B. 2019. Machine Learning Algorithms: A Review. *International Research Journal of Engineering and Technology (IRJET)*. 153:495–507.
- Pendão, C., dan Silva, I. 2022. Optical Fiber Sensors and Sensing Networks: Overview of the Main Principles and Applications. *Sensors*. 22 (19).
- Pemerintah Indonesia, 2021, *Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup*, PP/No.22/2021, Indonesia.
- Pemerintah Republik Indonesia, 2001, *Pengelolaan Bahan Berbahaya dan Beracun*, PP/No.74/2001, Indonesia.
- Prihatin, A.W., Prasetya, A.T., dan Sumarni, W. 2017. Validasi Metode Analisis Mn Dalam Sedimen Sungai Kaligarang Dengan ICP-OES dan GFAAS. *Indonesian Journal of Chemical Science*. 6 (1):19–26.
- Putra, J.W.G. 2020. *Pengenalan Konsep Pembelajaran Mesin dan Deep Learning*, 1 ed. Tokyo. Jepang.
- Putri, S.E., dan Harmadi, H. 2017. Rancang Bangun Sistem Pengukuran Frekuensi Getaran Akustik pada Speaker Piezoelektrik Menggunakan Sensor Serat Optik. *Jurnal Fisika Unand*. 6 (1):47–52.
- Rahayu, A. 2019. Rancang Bangun Alat Ukur Konsentrasi Ion Logam Berat Timba Berbasis Sensor Serat Optik Evanescent dengan *Cladding* Kitosan. *Skripsi*, Universitas Andalas.

- Ram, V. 2021. Study on the impact of water pollution on human health based on questionnaire vicinity of Son River at Nawalpur. *International Journal of Global Science Research*. 8 (2):1596–1602.
- Rathee, V., dan Balpande, S. 2022. Development of Machine Learning-based system for mercury (Hg) detection. *Neuro Quantology* |. 20 (9):2119–2124.
- Roberta Zulphi Surya, Alpiyandri, M.Q. 2022. Identifikasi Penggunaan Merkuri (Rasio Hg:Au) Pada Proses Amalgamasi Pada Pertambangan Emas Skala Kecil (PESK) Di Logas, Kuantan Singingi, Riau. *Surya Teknika*. 9 (9):435–440.
- Rudin, A., dan Choi, P. 2013. *Polymer Science and Engineering*, III. ed. Academic Press, United States of America.
- Safavi, A., dan Bagheri, M. 2004. Design and characteristics of a mercury (II) optode based on immobilization of *dithizone* on a triacetylcellulose membrane. *Sensors and Actuators, B: Chemical*. 99(2–3):608–612.
- Sahumena, M.H., Djuwarno, E.N., Ruslin, dan Asriyanti 2020. Identifikasi Jamu yang Beredar di Kota Kendari Menggunakan Metode Spektrofotometri UV-Vis. *Journal Syifa Sciences and Clinical Research*. 2 (2):65–72.
- Senila, M. 2024. Recent Advances in the Determination of Major and Trace Elements in Plants Using Inductively Coupled Plasma Optical Emission Spectrometry. *Molecules*. 29(13).
- Sharma, A.K., Gupta, J., dan Sharma, I. 2019. Fiber optic evanescent wave absorption-based sensors: A detailed review of advancements in the last decade (2007–18). *Optik*. 183(12):1008–1025.
- Soe, P.S., Kyaw, W.T., Arizono, K., Ishibashi, Y., dan Agusa, T. 2022. Mercury Pollution from Artisanal and Small-Scale Gold Mining in Myanmar and Other Southeast Asian Countries. *International Journal of Environmental Research and Public Health*. 19 (10).
- Ssenku, J.E., Naziriwo, B., Kutesakwe, J., Mustafa, A.S., Kayeera, D., dan Tebandeke, E. 2023. Mercury Accumulation in Food Crops and Phytoremediation Potential of Wild Plants Thriving in Artisanal and Small-Scale Gold Mining Areas in Uganda. *Pollutants*. 3 (2):181–196.

- Suhartati, T. 2017. *Dasar-Dasar Spektrofotometri Uv-Vis dan Spektrometri Massa untuk Penentuan Struktur Senyawa Organik*. AURA CV. Anugrah Utama Raharja, Bandar Lampung.
- Sulistiyarti, H., Wijaya, M.M., Setyowati, D., dan Sulisty, E. 2019. Simple and Rapid Device for Mercury Detection Based on The Formation of Mercury (II)-Dithizonate on Polytetrafluoroethylene (PTFE) Membrane. *J. Pure App. Chem. Res.* 8 (7):185–196.
- Umaternate, I., Saifuddin, M.Z., Saman, H., dan Elliyati, R. 2016. Sistem Penyambungan dan Pengukuran Kabel Fiber Optik Menggunakan Optical Time Domain Reflectometer (OTDR) pada. *PROtek.* (1):26–34.
- Vaeruza, I., Kurniansyah, K.E., Darma, F., dan Yulianti, I. 2019. Fabrikasi Sensor Serat Optik Plastik Untuk Deteksi Ion Logam Merkuri Dalam Air. *Komunikasi Fisika Indonesia.* 16 (2):123.
- Widianti, N.N., Jenius, V.A.S., Hidayat, N.A.R., Sukma, W.M., dan Radianto, D.O. 2024. Pengelolaan Limbah, Faktor dan Penyebab Paparan logam Berat Merkuri pada Lingkungan. *Jurnal Sains Student Research.* 2 (2):118–124.
- World Health Organization 2022. *Guidelines for Drinking-water Quality: Fourth Edition Incorporating the First and Second Addenda.*, 4 ed. World Health Organization, Geneva.
- Yulis, P.A.R. 2018. Analisis Kadar Logam Merkuri (Hg) dan (pH) Air Sungai Kuantan Terdampak Penambangan Emas Tanpa Izin (PETI). *Jurnal Pendidikan Kimia.* Volume2, N:37–42.
- Zhang, Y. nan, Sun, Y., Cai, L., Gao, Y., dan Cai, Y. 2020. Optical fiber sensors for measurement of heavy metal ion concentration: A review. *Measurement: Journal of the International Measurement Confederation.* 158:107742.