

DAFTAR PUSTAKA

- [1] SIWI – Leading expert in water governance, "COP26 has 4 goals. Water is central to all of them," SIWI, 27 Oktober 2021. [Online]. Available: <https://siwi.org/latest/cop26-has-4-goals-water-is-central-to-all-of-them/>. [Accessed 6 Oktober 2024].
- [2] B. R. Scanlon, . S. Fakhreddine, A. Rateb, I. d. Graaf, J. Famiglietti, T. Gleeson, Q. Grafton and E. Jobbagy, "Global water resources and the role of groundwater in a resilient water future," *Nature Reviews Earth & Environment*, vol. 4, no. 2, pp. 87-101, 2023.
- [3] PDAM, "PPID Jember," 10 April 2023. [Online]. Available: <https://dislhk.badungkab.go.id/artikel/18293-penyebab-dan-dampak-pencemaran-air-oleh-limbah-pemukiman>. [Accessed 6 Oktober 2024].
- [4] B. M. Saalidon, S. A. Aram, S. Otu and P. O. Lartey, "Examining the dynamics of the relationship between water pH and other water quality parameters in ground and surface water systems," *PLoS ONE*, vol. 17, no. 1, pp. 1-17, 2022.
- [5] Database Peraturan, "Pengelolaan Kualitas Air Dan Pengendalian Pencemaran Air," [Online]. Available: <https://peraturan.bpk.go.id/Details/53103/pp-no-82-tahun-2001>. [Accessed 7 Oktober 2024].
- [6] UN-Water, "SDG 6 - water and sanitaiton for all," *Summary Progress Update 2021*, p. 53, Maret 2021.
- [7] M. A. F. RIZQULLAH, "Rancang Bangun Unit Terapung untuk Sistem Pengukur Terapung Kualitas Air di Berbagai Kedalaman Air," Universitas Telkom, S1 Teknik Elektro, Bandung, 2024.
- [8] M. S. WIDJAYA, "Rancang Bangun Unit Submersibel untuk Sistem Pemantauan Kualitas Air dengan Kedalaman Bervariasi," Universitas Telkom, S1 Teknik Elektro, Bandung, 2024.

- [9] L. AS-SIDQI, "Rancang Bangun Sistem Jaringan IoT Untuk Sistem Pengukur Terapung Kualitas Air di Berbagai Kedalaman," Universitas Telkom, S1 Teknik Elektro, Bandung, 2024.
- [10] R. Noori , E. Ansari, R. Bhattarai, Q. Tang, . S. Aradpour , M. Maghrebi, A. T. Haghighi, L. Bengtsson and . B. Kløve, "Complex dynamics of water quality mixing in a warm mono-mictic reservoir," *Science of the Total Environment*, vol. 777, p. 146097, 2021.
- [11] Y. Budianto, "Menyusutnya Separuh Cadangan Air Tawar Danau di Dunia," PT Kompas Media Nusantara, Jakarta, 2023.
- [12] D. Heriyansyah, "Indonesia Negara Kepulauan, Bukan Negara Pulau Terbanyak," Radio Republik Indonesia, 21 Mei 2024. [Online]. Available: <https://www.rri.co.id/ipitek/703524/indonesia-negara-kepulauan-bukan-negara-pulau-terbanyak>. [Accessed 6 Oktober 2024].
- [13] N. Naurah, "Indonesia Miliki Potensi Sumber Daya Air Terbarukan Paling Besar di Asia Tenggara," Good Stats, 18 November 2023. [Online]. Available: <https://goodstats.id/article/indonesia-miliki-potensi-sumber-daya-air-terbarukan-paling-besar-di-asia-tenggara-P6oc9>. [Accessed 6 Oktober 2024].
- [14] Humas BRIN, "Hadapi Tantangan Pengelolaan Sumber Daya Air, BRIN Siapkan Program Riset dan Inovasi," BRIN, 27 Februari 2024. [Online]. Available: <https://www.brin.go.id/news/117661/hadapi-tantangan-pengelolaan-sumber-daya-air-brin-siapkan-program-ri-set-dan-inovasi-1>. [Accessed 6 Oktober 2024].
- [15] Sekretariat Nasional SDGs, "Menjamin Ketersediaan Serta Pengelolaah Air Bersih dan sanitasi yang berkelanjutan untuk semua," [Online]. Available: <https://sdgs.bappenas.go.id/17-goals/goal-6/>. [Accessed 6 Oktober 2024].
- [16] UN Water, "Indonesia," United Nations, [Online]. Available: https://www.sdg6data.org/en/country-or-area/indonesia#anchor_6.3.2. [Accessed 6 Oktober 2024].

- [17] Kementrian Lingkungan Hidup dan Kehutanan, Republik Indonesia, "STATUS LINGKUNGAN HIDUP INDONESIA 2022," pp. 15-16, 22 Februari 2023.
- [18] A. Mahendro , "Danau Batur Kritis!," 24 Mei 2024. [Online]. Available: <https://travel.detik.com/travel-news/d-7355456/danau-batur-kritis>. [Accessed 6 Oktober 2024].
- [19] Rizal, "Hasil Penelitian Kedua di Pulau Kakaban Terkait Kualitas Air Masih Dugaan Sementara," 2024 Februari 2024. [Online]. Available: <https://kaltimtoday.co/hasil-penelitian-kedua-di-pulau-kakaban-terkait-kualitas-air-masih-dugaan-sementara>. [Accessed 6 Oktober 2024].
- [20] Merah Putih, "Masih Ingat Ribuan Ikan Mati di Waduk SIER? Ini Hasil Uji Lab DLH," 2 Juli 2020. [Online]. Available: <https://m.harianmerahputih.id/baca-2984-masih-ingat-ribuan-ikan-mati-di-waduk-sier-ini-hasil-uji-lab-dlh>. [Accessed 6 Oktober 2024].
- [21] E. Merli, "Tiba-Tiba Ikan Mabuk dan Mati di Danau Ranau Lampung Barat," 11 Januari 2023. [Online]. Available: <https://waktuindonesia.id/2023/01/11/tiba-tiba-ikan-mabuk-dan-mati-di-danau-ranau-lampung-barat/>. [Accessed 6 Oktober 2024].
- [22] PDAM, "Ini 4 Faktor yang Mempengaruhi Kualitas Air !," PDAM, 27 Juni 2023. [Online]. Available: <https://pdaminfo.pdampintar.id/blog/lainnya/ini-4-faktor-yang-mempengaruhi-kualitas-air>. [Accessed 10 Oktober 2024].
- [23] E. Wardhani and Z. A. Sugiarti, "Jatiluhur Water Quality at Various Depth," *Presipitasi*, vol. 18, no. 3, pp. 400-411, 2021.
- [24] S. Reliantoro, "Iklim dan Krisis Air Bersih," Maret 2024. [Online]. Available: https://www.its.ac.id/tgeofisika/wp-content/uploads/sites/33/2024/03/Materi-Webinar-Teknik-Geofisika-ITS_Ir.-Sigit-Reliantoro-M.Sc_.pdf. [Accessed 6 Oktober 2024].
- [25] L. Lin, H. Yang and X. Xu, "Effects of Water Pollution on Human Health and Disease Heterogeneity: A Review," *Frontier*, vol. 10, pp. 1-16, 2022.

- [26] Nurhadi, M. H. Hakim, R. E. Arini, . U. N. Khasanah, A. M. Khuluqi, F. Amania, M. F. A. Mustofa and Y. Elmasari, "RANCANG BANGUN PROTOTYPE INTERNET OF THINGS UNTUK MONITORING PH AIR KOLAM IKAN KOI SECARA REALTIME," *JIPi (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika)*, vol. 9, no. 2, pp. 1085-1090, 2024.
- [27] R. Wahyudi, M. A. Putra and L. H. Gunawan, "Rancang Bangun Alat Monitoring Kualitas Air Danau Perumahan Pinang Bahari," *Poligrid*, vol. 04, no. 02, pp. 62-67, 2023.
- [28] E. N. Aisyah, Z. M. A. Putra and H. A. Widodo, "RANCANG BANGUN PROTOTYPE WATER SAMPLING ELECTRIC BOAT DENGAN PENGATURAN MANUEVER KAPAL MENGGUNAKAN KONTROL PID," *JITET (Jurnal Informatika dan Teknik Elektro Terapan)*, vol. 11, no. 3, pp. 1214-1219, 2023.
- [29] D. R. Yoerger, G. J. Cooke and J.-J. E. Slotine, "The Influence of Thruster Dynamics on Underwater Vehicle Behavior and Their Incorporation Into Control System Design," *IEEE JOURNAL OF OCEANIC ENGINEERING*, vol. 15, no. 3, pp. 167-178, 1990.
- [30] Y. Katz and M. Groper , "On the Development of a Mid-Depth Lagrangian Float for Littoral Deployment," *Journal of Marine Science and Engineering*, vol. 10, no. 12, p. 2030, 2022.
- [31] X. Pang, C. Jia, W. Wang, Z. Chen, M. Li, F. Jiang and T. Hu, "Buoyance-driven hydrocarbon accumulation depth and its implication for unconventional resource prediction," *Geoscience Frontiers*, vol. 12, p. 101133, 2021.
- [32] "Monitoring Kualitas Air Tambak Udang Menggunakan Metode Data Logging," *Jurnal Teknik Informatika dan Sistem Informasi* , vol. 6, no. 1, pp. 102-116, 2020.
- [33] I. S. Patty, P. M. Rizki, H. Rifai and N. Akbar, "Kajian Kualitas Air dan Indeks Pencemaran Perairan Laut di Teluk Manado Ditinjau Dari Parameter Fisika-Kimia Air Laut," *JURNAL ILMU KELAUTAN KEPULAUAN*, vol. 2, no. 2, pp. 1-13, 2019.

- [34] A. Lubis, Basis Data Dasar, Yogyakarta: Deepublish, 2016.
- [35] M. McGuinness-Hickey, "Perbedaan Antara Tahan Air, Anti Air, dan Tahan Banting," HZO, 10 Agustus 2023. [Online]. Available: https://hzo-com.translate.google/blog/waterresistant-waterrepellent-waterproof-whats-difference?_x_tr_sl=en&_x_tr_tl=id&_x_tr_hl=id&_x_tr_pto=sge#:~:text=Apa%20Arti%20Tahan%20Air?,ringan%20atau%20saat%20mencuci%20tangan.. [Accessed 7 November 2024].
- [36] C. Rolfe, B. Thornton and M. Massot-Campos, "Development of a passively pre-tensioned buoyancy engine for fail-safe underwater vehicle operation," *IEEE/OES Autonomous Underwater Vehicles Symposium (AUV)*, pp. 1-6, 2020.
- [37] G. A. W and A. Rahman, "Sistem Pengendali Robot Bergerak Lurus dengan Kontrol Proporsional Integral Derivatif (PID) Berbasis LabView," *TELEKONTRAN*, vol. 3, no. 2, pp. 13-24, 2015.
- [38] K. Kempf-Leonard, Encyclopedia of Social Measurement, Texas: Elsevier, 2005.
- [39] Y. Jon, Adaptive Sampling in Wireless Sensor Networks for Air Monitoring Systems, Uppsala : Teknisk- naturvetenskaplig fakultet UTH-enheten , 2016.
- [40] T. Melinda, H. Sholehah and T. Abdullah, "PENENTUAN STATUS MUTU AIR DANAU AIR ASIN GILI MENO MENGGUNAKAN METODE INDEKS PENCEMARAN," *Jurnal Sanitasi dan Lingkungan*, vol. 2, no. 2, pp. 199-208, 2021.
- [41] Depok Instrumen, "Fungsi Transfer Sensor LM35," Depok Instrumen, 14 Januari 2016. [Online]. Available: <https://depokinstruments.wordpress.com/2016/01/14/fungsi-transfer-sensor-lm35/>. [Accessed 22 Desember 2024].
- [42] rddtech, "Arduino Analog PH Sensor Board (RDD-AFE-001)," RDD Technologies, 25 November 2020. [Online]. Available: <https://wiki.rdd->

tech.com/index.php/knowledge-base/arduino-analog-ph-sensor-board-rdd-afe-001/. [Accessed 22 Desember 2024].

- [43] M. Simanjuntak, "HUBUNGAN FAKTOR LINGKUNGAN KIMIA, FISIKA TERHADAP DISTRIBUSI PLANKTON DI PERAIRAN BELITUNG TIMUR, BANGKA BELITUNG," *Jurnal Perikanan*, vol. 11, no. 1, pp. 31-45, 2009.
- [44] "Struktur Komunitas Fitoplankton pada Budidaya Ikan Koi (*Cyprinus Rubrofuscus*) dalam Sistem Vertiqua Menggunakan Biofikal Filter Atas," *Jurnal Ilmiah Perikanan dan Peternakan*, vol. 2, no. 2, pp. 191-212, 2024.
- [45] A. Abdulwahid, "IoT Based Water Quality Monitoring System for Rural Areas," in *Renewable Energy Research and Applications*, Glasgow, 2020.
- [46] S. Olisa, A. Shittu and B. O. Ekengwu, "Smart Two-Tank Water Quality and Level Detection System via IoT," *Heliyon*, vol. 7, no. 8, 2021.
- [47] S. A. Widyanto, A. Widodo and S. Nugroho, "Pengaruh Aspek Desain Leadscrew Sebagai Komponen Mekanisme Gerak Modular Terhadap Surface Finish Produk Pemotongan," in *Proceeding Seminar Nasional Tahunan Teknik Mesin XIII*, Depok, 2014.
- [48] Dinas Lingkungan Hidup Kota Salatiga, "Daftar Peraturan Bidang Lingkungan Hidup," [Online]. Available: <https://dlh.salatiga.go.id/daftar-peraturan-bidang-lingkungan-hidup/>. [Accessed 6 Oktober 2024].
- [49] B. E. Putro and I. Masrofah, "Kualitas Fisik dan Kimia Sungai Citarum yang bermuara ke Waduk Cirata," *Jurnal Ilmiah Universitas Batanghari Jambi*, vol. 19, no. 3, pp. 628-633, 2019.
- [50] O. Dogru, K. Velswamy, F. Ibrahim, Y. Wu, A. S. Sundaramoorthy, B. Huang, S. Xu, M. Nixon and N. Bell, "Reinforcement learning approach to autonomous PID tuning," *Computers and Chemical Engineering*, vol. 161, pp. 0098-1354, 2022.
- [51] Amphenol Sensors, "TSW-10 Turbidity Sensors," Amphenol Corporations, 2014.