# DAFTAR PUSTAKA


[1] A. I. Mundiyah, M. M. S. Noor, and R. G. S. Noor, "Pelatihan budidaya jamur tiram dengan konsep urban farming untuk masyarakat perkotaan," *Jurnal Pengabdian Al-Ikhlas Universitas Islam Kalimantan Muhammad Arsyad Al Banjary*, vol. 6, no. 2, pp. 195-201, Dec. 2020.

[2] J. Gunawati, Z. Zaenudin, M. M. Efendi, and L. D. Samsumar, "Sistem Monitoring Kelembaban Suhu Ruangan pada Budidaya Jamur Tiram Berbasis IoT," *Journal of Computer Science and Information Technology*, vol. 5, no. 1, pp. 136-141, May 2024.

[3] Food and Agriculture Organization (FAO), "Smart Agriculture and IoT Applications Report 2024," Rome, Italy: FAO, 2024.

[4] R. Nurjasmi and L. S. Banu, "Budidaya Jamur Tiram Putih (Pleurotus ostreotus) Pada Berbagai Komposisi Media Tanam Menggunakan Konsep Urban Farming," *Jurnal Ilmiah Respati*, vol. 15, no. 2, pp. 172-182, Jun. 2024.

[5] Kementerian Pertanian Republik Indonesia, "Statistik Produksi Hortikultura Nasional 2023," Jakarta, Indonesia: Kementan RI, 2023.

[6] Badan Pusat Statistik (BPS), "Data Nilai Ekonomi Jamur Konsumsi Indonesia," Jakarta, Indonesia: BPS, 2023.

[7] I. Y. Dwinanda, A. Pramuntadi, A. S. Yazid, and D. Danianti, "IMPLEMENTASI SISTEM KONTROL SUHU DAN KELEMBABAN GREENHOUSE UNTUK BUDIDAYA JAMUR TIRAM BERBASIS ANDROID DAN IOT," *JATI (Jurnal Mahasiswa Teknik Informatika)*, vol. 9, no. 5, pp. 7556-7563, Oct. 2025.

[8] M. Rukhiran, C. Sutanthavibul, S. Boonsong, and P. Netinant, "IoT-based mushroom cultivation system with solar renewable energy integration: Assessing the sustainable impact of the yield and quality," *Sustainability*, vol. 15, no. 18, p. 13968, Sep. 2023.

[9] S. Mardiana, E. L. Panggabean, R. A. Kuswardani, and M. Usman, "Pemanfaatan limbah serbuk teh sebagai substitusi serbuk gergaji terhadap pertumbuhan miselium dan produksi jamur tiram putih (Pleurotus ostreatus)," *Agrotekma: Jurnal Agroteknologi dan Ilmu Pertanian*, vol. 3, no. 1, pp. 27-38, Dec. 2018.

[10] E. Triandini, M. K. Afrianto, B. A. Irawan, A. Maricar, and P. N. Crisnapati, "IoT-Based Automated Environmental Control System for Oyster Mushroom Cultivation Using ESP8266 and Telegram Bot," in *Proc. 2024 9th Int. Conf. Informatics and Computing (ICIC)*, Bali, Indonesia, 2024, pp. 1-6.

[11] J. L. Chong, K. W. Chew, A. P. Peter, H. Y. Ting, and P. L. Show, "Internet

of things (IoT)-Based environmental monitoring and control system for home-based mushroom cultivation," *Biosensors*, vol. 13, no. 1, p. 98, Jan. 2023.

[12] I. Satriawan, I. B. K. Sugirianta, and I. K. Parti, "Perancangan Sistem Kontrol dan Monitoring Temperatur dan Kelembaban pada Budidaya Jamur Tiram Berbasis IoT," Tugas Akhir, Jurusan Teknik Elektro, Politeknik Negeri Bali, Badung, Indonesia, 2023.

[13] N. R. Bujal, S. Jusoh, M. Hashim, S. M. Dali, N. S. Ali, and M. N. A. Bidin, "Development of IoT-Based Compact Mushroom Cultivation Monitoring System," in *Proc. 2024 Geoinformatics for Spatial-Infrastructure Development in Earth and Allied Sciences (GIS-IDEAS)*, Khon Kaen, Thailand, 2024, pp. 1-6.

[14] A. R. Ardiliansyah, M. D. Puspitasari, and T. Arifianto, "Rancang Bangun Prototipe Pompa Otomatis Dengan Fitur Monitoring Berbasis IoT Menggunakan Sensor Flow Meter dan Ultrasonik," *Explore IT: Jurnal Keilmuan dan Aplikasi Teknik Informatika*, vol. 13, no. 2, pp. 59-67, Dec. 2021.

[15] A. Zainal, R. F. Rizal, and F. Yumono, "Prototype Kontrol Tekanan Air Menggunakan Sensor Pressure Transducer Untuk Kerja Pompa Air Berbasis Arduino," *Journal Zetroem*, vol. 5, no. 1, pp. 1-9, Mar. 2023.

[16] H. Hermansyah and N. Silitonga, "Pengembangan Prototype Water Flow Meter Berbasis IOT Dengan Sistem Monitoring Menggunakan ESP 8266 Pada Pipa Di Unit Water Treatment Plant PT. Perkebunan Nusantara II PKS Sawit Hulu," *IRA Jurnal Teknik Mesin dan Aplikasinya (IRAJTMA)*, vol. 2, no. 3, pp. 22-29, Dec. 2023.

[17] A. Elewi, A. Hajhamed, R. Khankan, S. Duman, A. Souag, and A. Ahmed, "Design and implementation of a cost-aware and smart oyster mushroom cultivation system," *Smart Agricultural Technology*, vol. 8, p. 100439, Aug. 2024.

[18] J. Gunawati, Z. Zaenudin, M. M. Efendi, and L. D. Samsumar, "SISTEM MONITORING KELEMBAPAN SUHU RUANGAN PADA BUDIDAYA JAMUR TIRAM BERBASIS INTERNET OF THINGS (IOT)," *Journal of Computer Science and Information Technology*, vol. 1, no. 4, pp. 258-266, Nov. 2024.

[19] D. R. Kristiyanti, A. Wijayanto, and A. Aziz, "Sistem Monitoring Suhu dan Kelembaban pada Budidaya Jamur Tiram Berbasis IoT Menggunakan MQTT dan Telegram BOT," *ATASI: Journal of Informatics and Information Systems*, vol. 1, no. 1, pp. 24-34, Apr. 2022.

[20] M. E. Ntihung, P. Sugiartawan, and A. Willdalia, "Sistem Informasi Monitoring Kumbung Jamur Tiram Berbasis Internet of Things," *IJEIS (Indonesian Journal of Electronics and Instrumentation Systems)*, vol. 14,

no. 4, pp. 433-444, Nov. 2024.

[21] W. A. W. Mahari *et al.*, "A review on valorization of oyster mushroom and waste generated in the mushroom cultivation industry," *Journal of Hazardous Materials*, vol. 400, p. 123156, Dec. 2020.

[22] J. Nongthombam *et al.*, "A review on study of growth and cultivation of oyster mushroom," *Plant Cell Biotechnology and Molecular Biology*, vol. 22, no. 5-6, pp. 55-65, Feb. 2021.

[23] M. G. Rathod *et al.*, "Oyster mushroom: cultivation, bioactive significance and commercial status," *Frontiers in Life Science*, vol. 2, p. 21, Jun. 2021.

[24] A. Sofwan *et al.*, "IoT-Based Microclimate Control in Oyster Mushroom Cultivation," *Journal of Agricultural Engineering*, vol. 54, no. 1, p. 1435, Mar. 2023.

[25] S. Sharma, R. K. P. Yadav, and C. P. Pokhrel, "Growth and yield of oyster mushroom (Pleurotus ostreatus) on different substrates," *Journal on New Biological Reports*, vol. 2, no. 1, pp. 03-08, Jan. 2013.

[26] Balai Besar Pelatihan Pertanian (BBPP) Lembang, "Panduan Teknis Budidaya Jamur Tiram," BBPP Lembang, Lembang, Indonesia, Panduan Teknis, 2025.

[27] M. E. Valverde *et al.*, "Edible Mushrooms: Improving Human Health and Promoting Quality Life," *International Journal of Microbiology*, vol. 2015, p. 376387, Jan. 2015.

[28] P. A. Buxton and K. Mellanby, "The measurement and control of humidity," *Bulletin of Entomological Research*, vol. 25, no. 2, pp. 171-175, Jun. 1934.

[29] E. P. Ramdan, P. I. Kanny, E. M. Pribadi, and B. Budiman, "Peranan suhu dan kelembaban selama penyimpanan benih kedelai terhadap daya kecambah dan infeksi patogen tular benih," *Jurnal Agrotek Tropika*, vol. 10, no. 3, pp. 389-394, Aug. 2022.

[30] A. Ridho'i, K. Setyadjit, and B. E. Yordhan, "Sistem Monitoring Suhu Dan Kelembaban Pada Budidaya Jamur Tiram Menggunakan ESP32," *Jurnal FORTECH*, vol. 4, no. 1, pp. 20-26, Jun. 2023.

[31] A. Sofwan, Y. Wafdulloh, M. R. Akbar, and B. Setiyono, "Sistem pengaturan dan pemantauan suhu dan kelembapan pada ruang budidaya jamur tiram berbasis IoT (internet of things)," *Transmisi*, vol. 22, no. 1, pp. 1-5, Jan. 2020.

[32] A. Triyanto and K. N. Nurwijayanti, "Pengatur Suhu dan Kelembapan otomatis pada Budidaya Jamur tiram menggunakan mikrokontroler ATMega16," *TESLA: Jurnal Teknik Elektro*, vol. 18, no. 1, pp. 25-36, Mar. 2016.

[33] K. Agustianto, R. Wardana, P. Destarianto, E. Mulyadi, and I. G. Wiryawan, "Development of automatic temperature and humidity control system in kumbung (oyster mushroom) using fuzzy logic controller," in *IOP Conf.*

*Ser.: Earth Environ. Sci.*, vol. 672, no. 1, p. 012090, Mar. 2021.

[34] M. H. Azhari, I. R. Wirosoedarmo, and I. B. Suharto, "Analisis Pengaruh Temperatur Udara, Kelembaban Relatif, dan Kecepatan Angin Terhadap Konsentrasi CO di Udara Ambien Menggunakan Metode Regresi Linier Berganda," Undergraduate Thesis, Universitas Brawijaya, Malang, Indonesia, 2021.

[35] A. V. Rachmawati, D. Dzulkiflih, and M. Yantidewi, "Analisis Kalibrasi Sensor BME280 dengan Pendekatan Regresi Linear pada Pengukuran Temperatur, Kelembaban Relatif, dan Titik Embun," *Jurnal Kolaboratif Sains*, vol. 7, no. 5, pp. 1589-1597, May 2024.

[36] A. H. Saptadi, "Perbandingan akurasi pengukuran suhu dan kelembaban antara sensor DHT11 dan DHT22," *Jurnal INFOTEL*, vol. 6, no. 2, pp. 49-56, Nov. 2014.

[37] I. Granet, J. Alvarado, and M. Bluestein, *Thermodynamics and Heat Power*, 9th ed. Boca Raton, FL, USA: CRC Press, 2020.

[38] J. L. Hatfield and J. H. Prueger, "Temperature extremes: Effect on plant growth and development," *Weather and Climate Extremes*, vol. 10, part A, pp. 4-10, Dec. 2015.

[39] H. Fitriawan, S. Purwiyanti, and S. Alam, "Pengendalian suhu dan kelembaban pada budidaya jamur tiram berbasis IoT," *Jurnal Teknik Pertanian Lampung*, vol. 9, no. 1, pp. 28-37, Mar. 2020.

[40] A. Arafat, D. I. Puspitasari, and W. Wagino, "Sistem Pengendalian Suhu dan Kelembaban Kumbung Jamur Tiram secara Realtime Menggunakan Esp8266," *Jurnal Fisika Flux: Jurnal Ilmiah Fisika FMIPA Universitas Lambung Mangkurat*, vol. 1, no. 1, pp. 6-12, Feb. 2019.

[41] F. Amelia, J. Ferdinand, K. Maria, M. G. Waluyan, and I. J. Sari, "Pengaruh suhu dan intensitas cahaya terhadap pertumbuhan jamur tiram di Tangerang," *Biogenesis: Jurnal Ilmiah Biologi*, vol. 5, no. 1, pp. 1-6, Jun. 2017.

[42] A. Najmurrokhman *et al.*, "Development of temperature and humidity control system in internet-of-things based oyster mushroom cultivation," in *Proc. 2020 3rd Int. Seminar on Research of Information Technology and Intelligent Systems (ISRITI)*, Yogyakarta, Indonesia, 2020, pp. 551-555.

[43] Raspberry Pi Foundation, "Raspberry Pi Pico W datasheet," Raspberry Pi Ltd., Cambridge, UK, 2022. [Online]. Available: https://datasheets.raspberrypi.com/picow/pico-w-datasheet.pdf. [Accessed: Jun. 18, 2025].

[44] P. Debnath *et al.*, "MQTT Based Adaptive Estimation Over Distributed Network Using Raspberry Pi Pico W," *IEEE Embedded Systems Letters*, vol. 16, no. 1, pp. 69-72, Mar. 2024.

[45] I. R. Kusumawati and W. Y. Untoro, "SISTEM NOTIFIKASI BUKA/TUTUP PELINDUNG UNTUK TANAMAN HIDROPONIK

UNIVERSITAS ANDALAS
UNTUK KEDJAJAAN BANGSA

BERBASIS RAIN SENSOR MENGGUNAKAN RASPBERRY PI PICO RP2040," *Melek IT: Inf. Technol. J.*, vol. 8, no. 1, pp. 77-90, Jun. 2022.

[46] D. Loker, "Embedded Systems using the Raspberry Pi Pico," in *Proc. 2022 ASEE Annual Conference & Exposition*, Minneapolis, MN, USA, Jun. 2022, pp. 1-10.

[47] ETC, "DHT11 datasheet," Alldatasheet.com, 2022. [Online]. Available: https://www.alldatasheet.com/datasheet-pdf/download/1440068/ETC/DHT11.html. [Accessed: Jun. 24, 2025].

[48] R. Muttaqin, W. S. W. Prayitno, N. E. Setyaningsih, and U. Nurbaiti, "Rancang Bangun Sistem Pemantauan Kualitas Udara Berbasis Iot (Internet Of Things) dengan Sensor DHT11 dan Sensor MQ135," *J. Pengelolaan Lab. Pendidik.*, vol. 6, no. 2, pp. 102-115, Jul. 2024.

[49] R. P. Yunas and A. B. Pulungan, "Sistem kendali suhu dan kelembaban pada proses fermentasi tempe," *JTEV (J. Tek. Elektro dan Vokasional)*, vol. 6, no. 1, pp. 103-113, Jan. 2020.

[50] A. Andreas, G. Priyandoko, M. Mukhsim, and S. A. Putra, "Kendali Kecepatan Motor Pompa Air Dc Menggunakan Pid–Csa Berdasarkan Debit Air Berbasis Arduino," *J. Appl. Sci. Electr. Eng.*, vol. 1, no. 1, pp. 1-14, Apr. 2020.

[51] M. D. Ariansyah and S. Sariman, "Analisa Performa Pompa Air DC 12V 42 Watt terhadap Variasi Kedalaman Pipa Menggunakan Baterai dengan Sumber Energi dari Matahari," *J. Syntax Admiration*, vol. 2, no. 6, pp. 1083-1102, Jun. 2021.

[52] D. Usman and D. S. Permana, "Water Pump Control System using Pulse Width Modulation Method Based on Arduino Uno R3," *Mekanika: Majalah Ilmiah Mekanika*, vol. 23, no. 2, pp. 136-155, Sep. 2024.

[53] A. Jain, A. Sarkar, D. Ather, and D. Raj, "Temperature based automatic fan speed control system using arduino," in *Proc. Advancement in Electronics & Communication Engineering*, 2022, pp. 1-6.

[54] H. W. Chen, J. H. Lee, B. Y. Lin, S. Chen, and S. T. Wu, "Liquid crystal display and organic light-emitting diode display: present status and future perspectives," *Light: Sci. Appl.*, vol. 7, no. 3, pp. 17168-17168, Mar. 2018.

[55] A. Ryan, L. O'Donoghue, and H. Lewis, "Characterising components of liquid crystal displays to facilitate disassembly," *J. Cleaner Prod.*, vol. 19, no. 9-10, pp. 1066-1071, Jun. 2011.

[56] P. Soni and K. Suchdeo, "Exploring the serial capabilities for 16x2 lcd interface," *Int. J. Emerg. Technol. Adv. Eng.*, vol. 2, no. 11, pp. 109-112, Nov. 2012.

[57] R. Syafrialdi, "Rancang Bangun Solar Tracker Berbasis Mikrokontroler Atmega8535 dengan Sensor LDR dan Penampil LCD," *J. Fis. Unand*, vol. 4, no. 2, pp. 114-120, Apr. 2015.

[58] D. P. Sari and A. Nurjaman, "Desain Sistem Monitoring Pompa Air Menggunakan Sensor Flow Meter dan Pressure Berbasis IoT," *J. Energi dan Instrumentasi*, vol. 8, no. 1, pp. 33–42, Apr. 2023.

[59] R. Prasetyo and F. Rahman, "Analisis Efisiensi Pompa Air Menggunakan Sensor Tekanan dan Aliran Air Berbasis Mikrokontroler," *J. Rekayasa Elektronika*, vol. 14, no. 2, pp. 112–118, Oct. 2022.

[60] Sea, "YF-S201 Water Flow Sensor datasheet," Alldatasheet.com, 2021. [Online]. Available: https://www.alldatasheet.com/datasheet-pdf/download/1221259/ETC1/YF-S201.html. [Accessed: Oct. 25, 2025].

[61] S. H. Lee, K. Y. Park, and J. W. Kim, "Development of Low-Cost Water Flow Measurement System Using Hall-Effect Sensor," *Sensors Actuators A Phys.*, vol. 332, p. 113114, Dec. 2022.

[62] Y. F. S. Zhang, "Calibration and Performance Analysis of YF-S201 Flow Sensor," *J. Instrum. Autom.*, vol. 11, no. 4, pp. 210–216, Nov. 2023.

[63] S. H. Lee, K. Y. Park, and J. W. Kim, "Development of Low-Cost Water Flow Measurement System Using Hall-Effect Sensor," *Sensors Actuators A Phys.*, vol. 332, p. 113114, Dec. 2022, doi: 10.1016/j.sna.2021.113114.

[64] Components101, "YF-S201 Water Flow Measurement Sensor – Working, Pinout, Datasheet & Applications," Components101.com, 2022. [Online]. Available: https://components101.com/sensors/yf-s201-water-flow-measurement-sensor. [Accessed: Oct. 25, 2025].

[65] G. Sharma, A. Kumar, and R. Singh, "Design and Calibration of Low-Cost Water Flow Sensor Using Hall-Effect Principle," *Int. J. Eng. Res. Technol.*, vol. 12, no. 5, pp. 245–250, May 2023.

[66] A. Rahman, D. Siregar, and M. Fadhil, "Implementasi Sensor Tekanan Air pada Sistem Monitoring Pompa Otomatis Berbasis IoT," *J. Elektro dan Komput. Indones.*, vol. 7, no. 2, pp. 63–70, Jul. 2024.

[67] S. H. Lee, K. Y. Park, and J. W. Kim, "Development of Low-Cost Pressure Sensor Based on Silicon Piezoresistive Element," *Sensors Actuators A Phys.*, vol. 338, p. 113510, May 2022.

[68] N. H. Rohiem and N. P. U. Putra, "Sistem Monitoring Kecepatan Motor dan Tekanan pada Saluran Air Berbasis Internet of Things (IoT)," *INTEGER: J. Inf. Technol.*, vol. 6, no. 1, pp. 45–52, Mar. 2021.

[69] Keyestudio, "Water Pressure Sensor 0–1.2 MPa Technical Datasheet," Shenzhen Keyes Technology, 2023. [Online]. Available: https://wiki.keyestudio.com/KS0457_Keyestudio_Water_Pressure_Sensor. [Accessed: Oct. 25, 2025].

[70] R. Prasetyo and F. Rahman, "Analisis Efisiensi Pompa Air Menggunakan Sensor Tekanan dan Aliran Air Berbasis Mikrokontroler," *J. Rekayasa Elektronika*, vol. 14, no. 2, pp. 112–118, Oct. 2022.

[71] D. P. Sari and A. Nurjaman, "Desain Sistem Monitoring Pompa Air Menggunakan Sensor Flow Meter dan Pressure Berbasis IoT," *J. Energi dan Instrumentasi*, vol. 8, no. 1, pp. 33–42, Apr. 2023.

[72] J. P. Sorensen and A. S. Butcher, "Water level monitoring pressure transducers—A need for industry-wide standards," *Groundwater Monit. Remediat.*, vol. 31, no. 4, pp. 56–62, Fall 2011.

[73] W. Q. Feng, Z. Y. Liu, H. Y. Tam, and J. H. Yin, "The pore water pressure sensor based on Sagnac interferometer with polarization-maintaining photonic crystal fiber for the geotechnical engineering," *Measurement*, vol. 90, pp. 208–214, Aug. 2016.

[74] C. V. Geelen, D. R. Yntema, J. Molenaar, and K. J. Keesman, "Monitoring support for water distribution systems based on pressure sensor data," *Water Resour. Manage.*, vol. 33, no. 10, pp. 3339–3353, Aug. 2019.

[75] A. Zainal, R. F. Rizal, and F. Yumono, "Prototype Kontrol Tekanan Air Menggunakan Sensor Pressure Transducer Untuk Kerja Pompa Air Berbasis Arduino," *J. Zetroem*, vol. 5, no. 1, pp. 1–9, May 2023.

[76] P. Seneviratne, *Hands-On Internet of Things with Blynk: Build on the Power of Blynk to Configure Smart Devices and Build Exciting IoT Projects*. Birmingham, UK: Packt Publishing Ltd., 2018.

[77] S. Ramalingam, K. Baskaran, and D. Kalaiarasan, "IoT enabled smart industrial pollution monitoring and control system using raspberry pi with blynk server," in *2019 Int. Conf. Commun. Electron. Syst. (ICCES)*, 2019, pp. 2030–2034.

[78] D. Hasan and A. Ismaeel, "Designing ECG monitoring healthcare system based on internet of things blynk application," *J. Appl. Sci. Technol. Trends*, vol. 1, no. 2, pp. 106–111, Jun. 2020.

[79] R. Hariri, M. A. Novianta, and S. Kristiyana, "Perancangan Aplikasi Blynk Untuk Monitoring Dan Kendali Penyiramaan Tanaman," *J. Elektrikal*, vol. 6, no. 1, pp. 1–10, Jun. 2019.

[80] H. Durani, M. Sheth, M. Vaghani, and S. Khelani, "Smart automated home application using IoT with Blynk app," in *2018 2nd Int. Conf. Inventive Commun. Comput. Technol. (ICICCT)*, 2018, pp. 393–397.

[81] K. V. Vardhan, Y. K. Sai, and S. Musala, "IoT-Based Home Automation Using Blynk Application and Google Assistance," in *Int. Conf. Algorithms Comput. Theory Eng. Appl.*, Cham, Switzerland: Springer Nature, 2024, pp. 119–125.

[82] H. R. Iskandar, E. Juniarto, and N. Heryana, "Sistem Monitoring dan Data Logging Motor Induksi 3 Fasa Berbasis Jaringan Sensor Nirkabel Menggunakan Blynk Cloud Server," *J. Tek.*, vol. 17, no. 2, pp. 94–101, Dec. 2018.

[83] J. C. Naik, et al., "IoT based home automation using Blynk cloud," in *AIP Conf. Proc.*, vol. 3045, no. 1, 2024, Art. no. 020015.

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