

DAFTAR PUSTAKA

- [1] World Health Organization, “Asthma,” World Health Organization. [Online]. Available: <https://www.who.int/news-room/fact-sheets/detail/asthma>
- [2] Kementerian Kesehatan Republik Indonesia, “Asma,” Ayosehat. [Online]. Available: <https://ayosehat.kemkes.go.id/penyakit/asma>
- [3] Helen K. Reddel, Leonard B. Bacharier, and Eric D. Bateman, “Global Strategy for Asthma Management and Prevention,” 2024. [Online]. Available: <https://ginasthma.org/wp-content/uploads/2024/05/GINA-2024-Strategy-Report.pdf>
- [4] F. W. Dekker *et al.*, “Validity of peak expiratory flow measurement in assessing reversibility of airflow obstruction,” *Thorax*, vol. 47, no. 3, pp. 162–166, 1992, doi: DOI:10.1136/thx.47.3.162.
- [5] S. Gupta, Shabnam, and A. K. Verma, “Peak expiratory flow rate monitoring can predict asthma exacerbation better as compared to monitoring by symptoms, prospective cohort study,” *Int. J. Contemp. Pediatrics*, vol. 11, no. 10, pp. 1365–1371, Sep. 2024, doi: 10.18203/2349-3291.ijcp20242730.
- [6] X. Chen, P. Han, Y. Kong, and K. Shen, “The relationship between changes in peak expiratory flow and asthma exacerbations in asthmatic children,” *BMC Pediatr.*, vol. 24, no. 1, Dec. 2024, doi: 10.1186/s12887-024-04754-7.
- [7] “lung health diseases.” [Online]. Available: <https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/treatment/devices/peak-flow>
- [8] S. R. Anan, M. A. Hossain, M. Z. Milky, M. M. Khan, M. Masud, and S. Aljahdali, “Research and Development of an IoT-Based Remote Asthma Patient Monitoring System,” *J. Healthc. Eng.*, vol. 2021, 2021, doi: 10.1155/2021/2192913.
- [9] H. A. Abed, “Design and Implementation of Digital Spirometer Using Arduino,” 2025.

- [10] Nadiya Garnis, Endro Yulianto, and Torib Hamzah, "Peak Flow Meter Equipped with Inspection Results Indicator," *Indonesian Journal of electronics, electromedical engineering, and medical informatics*, vol. 2, pp. 7–12, Jan. 2020, doi: 10.35882/jeeemi.v2i1.2.
- [11] A. L. Wahyu Pambudi, E. Yulianto, and L. F. Wakidi, "Design and Development of Flow Analyzer for Peak Inspiratory Flow (PIF) and Peak Expiratory Flow (PEF) Parameters.," *Indonesian Journal of Electronics, Electromedical Engineering, and Medical Informatics*, vol. 5, no. 3, pp. 175–180, Aug. 2023, doi: 10.35882/ijeemi.v5i3.313.
- [12] N. F. Azzahra, P. C. Nugraha, T. Hamzah, K. O. Lawal, and A. D. Larasati, "Implementation of a Microcontroller Arduino for Portable Peak Expiratory Flow Rate to Examine the Lung Health," *International Journal of Advanced Health Science and Technology*, vol. 2, no. 2, pp. 54–59, Mar. 2022, doi: 10.35882/ijahst.v2i2.1.
- [13] F. Yanto and M. Rofi, "Design and Building of A Portable Spirometer Based on Arduino Uno," *SAINTEKBU: Journal of Science and Technology*, no. 01, p. 43, 2023.
- [14] E. D. Widiyanto, G. N. Huda, and O. D. Nurhayati, "Portable spirometer using pressure-volume method with Bluetooth integration to Android smartphone," *International Journal of Electrical and Computer Engineering*, vol. 13, no. 4, pp. 3977–3986, Aug. 2023, doi: 10.11591/ijece.v13i4.pp3977-3986.
- [15] F. Kadiwala, "A COMPREHENSIVE REVIEW ON ASTHMA AND ITS MANAGERMENTS," *Journal of Population Therapeutics and Clinical Pharmacology*, pp. 926–938, Dec. 2024, doi: 10.53555/8k10xq12.
- [16] N. Novziransyah, S. Veronica, and F. Balatif, "Penyuluhan dan Pengukuran Fungsi Paru Menggunakan Peak Flow Meter pada Buruh Pabrik Aspal PT.Karya Murni Patumbak Deli Serdang," *Pengabdian Deli Sumatera: Jurnal Pengabdian Masyarakat*, vol. 1, no. 2, Jul. 2022.

- [17] H. Alsagaff, H. Mangunnegoro', M. Amin, F. Yunus, R. S. Bernstein, and L. Johnson, "NIIAI NORMAL FAAL PARU ORANG INDONESIA PADA USIA SEKOIAH DAN PEKERJA DEWASA BERDASARKAN REKOMENDASI AMERICAN THORACIC SOCIETY," vol. 12–4, Oct. 1992.
- [18] B. O. Adeniyi and G. E. Erhabor, "The peak flow meter and its use in clinical practice," *African Journal of Respiratory Medicine*, vol. 6, Mar. 2011.
- [19] D. Hercog, T. Lerher, M. Truntič, and O. Težak, "Design and Implementation of ESP32-Based IoT Devices," *Sensors*, vol. 23, no. 15, Aug. 2023, doi: 10.3390/s23156739.
- [20] NXP Semiconductors, "MPX5010-MPXV5010-MPVZ5010 Integrated silicon pressure sensor on-chip signal conditioned, temperature compensated and calibrated," May 2024. [Online]. Available: <https://www.nxp.com/docs/en/data-sheet/MPX5010.pdf>
- [21] A. Santoso, D. Dj, and D. Nurdiana, "Rancang Bangun System Pintu Otomatis Menggunakan Keypad dan RFID Berbasis Arduino Mega 2560," *Jurnal Ilmiah Teknik Elektro*, vol. 02, no. 1, pp. 5–13, May 2021.
- [22] L. B. Setyawan, "Prinsip Kerja dan Teknologi OLED," *Techné Jurnal Ilmiah Elektroteknika*, vol. 16, no. 2, pp. 121–132, Oct. 2017.
- [23] R. Trishardian, A. Fadli, S. Aliim, R. Supriyanti, and Y. Ramadhani, "APLIKASI BOT TELEGRAM PADA SISTEM PRESENSI DAN PENGUKURAN SUHU TUBUH BERBASIS IOT," *Jurnal Teknik Elektro dan Komputer TRIAC*, vol. 9, no. 2, pp. 113–121, 2022.
- [24] A. Suryowinoto, A. Hamid, and A. Fauzi Desmalasa, "DETEKSI DINI PENYAKIT PERNAFASAN ASMA DENGAN PEAK EXPIRATORY FLOW METER BERBASIS MICROCONTROLLER," *Jurnal Ilmiah Mikrotek*, vol. 2, no. 4, pp. 21–28, 2018.
- [25] Q. Fitriyah, A. Agung, D. Setyawan, and M. Prihadi, "APLIKASI HUKUM BERNOULLI PADA ALAT PERAGA FLOW METER

- UNTUK PRAKTIKUM MEKANIKA FLUIDA,” Semarang: Jurusan Teknik Mesin, Politeknik Negeri Semarang, 2020, pp. B277–B285.
- [26] I. PRIYADI, F. HADI, R. FAURINA, and I. AGUSTIAN, “Ventilator Non-Invasive berbasis Kontrol Volume dengan Orifice Plate Flow Meter,” *ELKOMIKA: Jurnal Teknik Energi Elektrik, Teknik Telekomunikasi, & Teknik Elektronika*, vol. 10, no. 2, p. 259, Apr. 2022, doi: 10.26760/elkomika.v10i2.259.