

DAFTAR PUSTAKA

- [1] T. University, “Prototipe sistem monitoring blood glucose menggunakan antena,” Universitas Telkom, Fakultas Teknik Elektro, Program Studi S1 Teknik Telekomunikasi, Tech. Rep., 2023.
- [2] G. Santoso, Subandi, S. Hani, and A. Wicaksono, “Rancang bangun prototipe detektor glukosa darah secara non-invasive menggunakan near infrared,” Institut Sains & Teknologi Akprind Yogyakarta, Fakultas Teknologi Industri, Tech. Rep., 2018.
- [3] E. F. Santika. (2024) Prevalensi diabetes indonesia naik jadi 11,7% pada 2023. Accessed: 2025-06-17. [Online]. Available: <https://databoks.katadata.co.id/layanan-konsumen-kesehatan/statistik/8a95a31a9cb29b4/prevalensi-diabetes-indonesia-naik-jadi-117-pada-2023>
- [4] P. Wahyuningsih, “Perancangan antena mikrostrip untuk mendeteksi perubahan gula darah secara non-invasive,” 2023. [Online]. Available: <https://repositori.telkomuniversity.ac.id/home/catalog/id/197072>
- [5] Y. Cheng and J. Zhang, “A review of non-invasive glucose monitoring techniques: Current status and future prospects,” *Sensors and Actuators B: Chemical*, vol. 321, p. 128563, 2020.
- [6] S. E. Kahn and M. E. Cooper, “Continuous glucose monitoring: A review of the technology and its clinical applications,” *Diabetes Care*, vol. 42, no. 6, pp. 1030–1037, 2019.
- [7] N. F. Fahmi, N. Firdaus, and N. Putri, “Pengaruh waktu penundaan terhadap kadar glukosa darah sewaktu dengan metode poct pada mahasiswa,” Universitas/Institusi tidak disebutkan, Tech. Rep., 2020.
- [8] V. V. Deshmukh and S. S. Chorage, “Non-invasive determination of blood glucose level using narrowband,” *Journal of Ambient Intelligence and Humanized Computing*, p. 1, volume dan tahun tidak disebutkan.
- [9] M. S. Ali, S. Khatun, L. M. Kamarudin, V. Veeraperumal, M. Islam, and S. N., “Non-invasive ultra-wide band system for reliable blood glucose level detection,” *Conference/Journal not specified*, p. 1, 2016.

- [10] A. Fitrianto, E. Erfiani, and R. Nisa, "Penentuan lama waktu optimal pada pengukuran glukosa darah noninvasif," *Jurnal Sains dan Teknologi*, vol. 11, no. 1, pp. 59–66, February 2022.
- [11] ISO, "Iso 15197:2003 - in vitro diagnostic test systems – requirements for blood-glucose monitoring systems for self-testing in managing diabetes mellitus," International Organization for Standardization, Tech. Rep., 2003.
- [12] H. Eren and J. G. Webster, *Telemedicine and Electronic Medicine*. CRC Press, 2015.
- [13] M. Nurdin, L. N. Olivia, T. Yunita, S. Prodi, T. Telekomunikasi, F. Teknik, and U. Telkom, "Antena tekstil patch segi empat 5.8 ghz pada tubuh untuk aplikasi jaringan nirkabel area tubuh," *e-Proceeding Engineering*, vol. 5, pp. 362–371, 2018.
- [14] F. D. Shivany, H. Wijanto, and L. N. Olivia, "Antena mikrostrip tekstil persegi wearable 5.8 ghz untuk telemedis," *e-Proceeding Engineering or related (volume/journal unspecified)*, vol. 8, p. 1, 2022.
- [15] M. Sameer and P. Agarwal, "Coplanar waveguide microwave sensor for label-free real-time glucose detection," *Conference/Journal unspecified*, vol. XVIII, 2019.
- [16] M. Praktikum, *Modul Praktikum Antena Dan Propagasi*. Unspecified Institution, 2021.
- [17] I. Surjati, *Antena Mikrostrip: Konsep dan Aplikasinya*. Unspecified Publisher, 2010.
- [18] TV Digital Surabaya. (2015) Apa yang dimaksud dengan gain antena. Accessed: 2025-06-17. [Online]. Available: <http://tvdigital-surabaya.blogspot.com/2015/06/apa-yang-di-maksud-dengan-gain-antena-html>
- [19] L. A. et al., "Studi pengaruh bentuk defected ground structure pada study of defected ground structure shapes on microstrip patch mimo antenna," *Unspecified Journal*, pp. 1–9, Unspecified.
- [20] Kementerian Komunikasi dan Digital Republik Indonesia, "Peraturan Menteri Komunikasi dan Digital Nomor 2 Tahun 2025 tentang Perubahan Atas Peraturan Menteri Komunikasi dan Informatika Nomor 2 Tahun 2023 tentang Penggunaan Spektrum Frekuensi Radio Berdasarkan Izin Kelas,"

https://jdih.komdigi.go.id/produk_hukum/view/id/949/t/peraturan+menteri+komunikasi+dan+digital+nomor+2+tahun+2025, 2025, diundangkan pada 7 Februari 2025 dalam Berita Negara Republik Indonesia Tahun 2025 Nomor 83.

- [21] M. Kaffa, “Perancangan dan analisis antena mikrostrip untuk aplikasi wireless capsule endoscopy pada wban,” *Laporan Tugas Akhir Teknik Telekomunikasi Universitas Telkom*, pp. 1–Unspecified, 2017.
- [22] Y. Zahrah, H. Wijanto, and B. S. Nugroho, “Perancangan dan realisasi antena tekstil body centric untuk komunikasi wbans,” *e-Proceeding Engineering*, vol. 2, pp. 313–322, 2015.
- [23] S. Ahmed, A. Mehmood, L. Sydanheimo, L. Ukkonen, and T. Bjorninen, “Glove-integrated textile antenna with reduced sar for wearable uhf rfid reader.” *IEEE*, 2019, pp. 231–235.
- [24] K. Wang, “Jeans textile antenna for smart wearable antenna.” *IEEE*, 2018, pp. 1–3.
- [25] I. OnderArif, C. Loriz, C. Feiquan, and L. Peng, “Body area network,” *Tech. Rep.*, Unspecified.
- [26] S. Rita, L. Caroline, G. Ricardo, and P. Pedro, “Textile material for the design of wearable antennas: A survey,” *Sensors Journal*, p. Unspecified, Unspecified.
- [27] T. Kellomaki, W. G. Whittow, J. Heikkinen, and L. Kettunen, “2.4 ghz plaster antennas for health monitoring.” *IEEE*, 2009, pp. 211–215.
- [28] A. N. Dewantoro, I. Santoso, and A. Ajulian, “Perancangan dan analisis antena jaringan area lokal nirkabel 2.4 ghz,” *ResearchGate Publication*, pp. 1–Unspecified, 2015.
- [29] R. Augustine, “Electromagnetic modelling of human tissues and its application on the interaction between antenna and human body in the ban context,” *Tech. Rep.*, 2009.
- [30] J. A. Kaw, S. Gull, and S. A. Parah, “Sviot: A secure visual-iot framework for smart healthcare,” *Unspecified Journal*, p. Unspecified, 2022.
- [31] Mambang, *Buku Ajar Teknologi Komunikasi Internet (Internet of Things)*. Purwokerto Selatan, Jawa Tengah: CV. PENA PERSADA, 2021.

- [32] M. Muthmainnah and D. B. Tabriawan, "Prototipe alat ukur detak jantung menggunakan sensor max30102 berbasis internet of things (iot) esp8266 dan blynk," *Unspecified Journal*, vol. 7, no. 3, pp. 163–176, 2022.
- [33] M. Muthmainnah, D. B. Tabriawan, and I. Tazi, "Karakterisasi sensor max30102 sebagai alat ukur detak jantung dan suhu tubuh berbasis photoplethysmograph," *Unspecified Journal*, vol. 12, no. 3, pp. 726–731, 2022.
- [34] Y. S. Parihar, "Internet of things and nodemcu: A review of use of nodemcu esp8266 in iot," *COJ Electronics & Communication*, vol. 1, no. 1, p. Unspecified, 2018.
- [35] A. N. Qahar and Y. S. Amrulloh, "Desain alat ukur denyut jantung dan saturasi oksigen pada satu sensor," *Unspecified Journal*, p. Unspecified, 2018.
- [36] M. Jafar and A. Trisna, "Sistem monitoring detak jantung pada sepeda treadmill menggunakan sensor max30102," *Unspecified Journal*, vol. 3, no. 2, p. Unspecified, 2020.
- [37] J. Wen, H. Chen, and Z. Zhou, "An optimal condition for the block orthogonal matching pursuit algorithm," *IEEE Access*, vol. 6, pp. 38 179–38 185, 2018.
- [38] S. N. Pandit, R. M. K. G. V. L, R. Akash, and M. Moharir, "Cloud based smart parking system for smart cities." Tirunelveli: IEEE, 2019, p. Unspecified.
- [39] D. Parida, A. Behera, J. K. Naik, S. R. Pattanaik, and R. S. Nanda, "Real-time environment monitoring system using esp8266 and thingspeak on internet of things platform." Madurai: IEEE, 2019, p. Unspecified.
- [40] P. A. Darmawan, L. O. Nur, and H. Wijanto, "Antena mikrostrip array 1x4 insetfed patch persegi untuk wifi 2.4 ghz access point," *e-Proceeding of Engineering*, vol. 5, pp. 321–330, 2018.
- [41] S. Bhosale and S. Chorage, "Implementation of wireless sensor network for medical applications," *Journal of Ambient Intelligence and Humanized Computing*, 2020, diakses dari ResearchGate. Gambar blok diagram MAX30102 tersedia pada Figure 1. [Online]. Available: https://www.researchgate.net/publication/340083555_Implementation_of_wireless_sensor_network_for_medical_applications