DAFTAR PUSTAKA

[1] IAEA, 'Incidents of nuclear and other radioactive material out of regulatory control', 2021.

[2] Badan Pengawas Tenaga Nuklir (BAPETEN), 'Seminar Keselamatan Nuklir 2016', Jakarta Pusat, 2016. [Online]. Available: http://www.bapeten.go.id

[3] I. Wahyu *et al.*, 'Kajian Perbandingan SNI IEC 62244:2016 terhadap IEC 62244:2019 tentang Portal Monitor Radiasi untuk Deteksi Bahan Nuklir dan Radioaktif', *Seminar Keselamatan Nuklir*, 2021.

[4] P. D. P. Adi and A. Kitagawa, 'A performance of radio frequency and signal strength of LoRa with BME280 sensor', *Telkomnika (Telecommunication Computing Electronics and Control)*, vol. 18, no. 2, pp. 649–660, 2020, doi: 10.12928/telkomnika.v18i2.14843.

[5] S. S. Nafee and M. I. Abbas, 'A theoretical approach to calibrate *Radiation Portal Monitor* (RPM) systems', *Applied Radiation and Isotopes*, vol. 66, no. 10, pp. 1474–1477, 2008, doi: 10.1016/j.apradiso.2008.03.013.

[6] M. Seydaliev, L. Li, G. Bentoumi, and N. Chornoboy, 'Dual-panel polyvinyl toluene scintillator application as a *Radiation Portal Monitor* device for gamma and neutron detection', *Nucl Instrum Methods Phys Res A*, vol. 1049, Apr. 2023, doi: 10.1016/j.nima.2023.168131.

[7] L. Gallego Manzano *et al.*, 'An IoT LoRaWAN Network for environmental radiation monitoring', *IEEE Trans Instrum Meas*, 2021, doi: 10.1109/TIM.2021.3089776.

[8] H. Zhao, K. A. Kam, I. Kymissis, B. J. Mailloux, and P. J. Culligan, 'A LoRaWAN-based environmental sensing network for urban green space monitoring with demonstrated application for stormwater management', *Sustain Cities Soc*, vol. 115, Nov. 2024, doi: 10.1016/j.scs.2024.105852.

[9] Adrian I. Petrariu, Alexandru Lavric, and Eugen Coca, LoRa*WAN Gateway: Design, Implementation and Testing in Real Environment*. IEEE, 2019.

[10] H. Choi, J. yong Shin, H. Kim, J. hyeon Lee, and J. Jang, 'Accuracy improvement of a simulation model of a *Radiation Portal Monitor* by correcting dead-time effect', *Radiat Meas*, vol. 170, Jan. 2024, doi: 10.1016/j.radmeas.2023.107043.

[11] Q. L. Hoang, W. S. Jung, T. Yoon, D. Yoo, and H. Oh, 'A Real-Time LoRa Protocol for Industrial Monitoring and Control Systems', *IEEE Access*, vol. 8, pp. 44727–44738, 2020, doi: 10.1109/ACCESS.2020.2977659.

[12] J. Shin and H. Seo, 'Design of pedestrian *Radiation Portal Monitor* with NaIL dual-particle detector', *Radiation Physics and Chemistry*, vol. 207, Jun. 2023, doi: 10.1016/j.radphyschem.2023.110858.

[13] C. Milarokostas, D. Tsolkas, N. Passas, and L. Merakos, 'A Comprehensive Study on LPWANs With a Focus on the Potential of LoRa/LoRaWAN Systems', *IEEE Communications Surveys and Tutorials*, vol. 25, no. 1, pp. 825–867, 2023, doi: 10.1109/COMST.2022.3229846.

[14] H. C. Lee and K. H. Ke, 'Monitoring of Large-Area IoT Sensors Using a LoRa Wireless Mesh Network System: Design and Evaluation', *IEEE Trans Instrum Meas*, vol. 67, no. 9, pp. 2177–2187, Sep. 2018, doi: 10.1109/TIM.2018.2814082.

[15] Semtech Corporation, 'DATASHEET SX1276/77/78/79 LoRa SEMTECH', Mar. 2015. [Online]. Available: www.semtech.com

[16] Ltd. Chengdu E*byte* Electronic Technology Co., 'E90-DTU（900SL30）User Manual', 2012.

[17] TE Connectivity, 'ISM 915 MHz HDP LPWAN FPC ANTENNAS', 2024.

[18] W. Firdaus, B. P. Kamiel, and B. Riyanta, 'GERAKAN BODY STABILISER CONTROL PADA MODEL KENDARAAN RODA EMPAT (Design and Implementation of Arduino Mega 2560 Microcontroller Programming for Control of Body Stabilizer Control Movement on Four-Wheel Vehicle Models)', 2012.

[19] M. Slabinoha, S. Melnychuk, I. Manuliak, and B. Pashkovskyi, 'Comparative analysis of embedded databases performance on single board computer systems using Python', in *International Scientific and Technical Conference on Computer Sciences and Information Technologies*, Institute of Electrical and Electronics Engineers Inc., 2022, pp. 222–225. doi: 10.1109/CSIT56902.2022.10000475.

[20] *Raspberry Pi*, 'Buy a *Raspberry Pi* 4 Model B – *Raspberry Pi*'. Accessed: Oct. 30, 2024. [Online]. Available: https://www.raspberrypi.com/products/raspberry-pi-4-model-b/

[21] *Raspberry Pi* Ltd, '*Raspberry Pi* 4 Model B Datasheet', 2024

[22] Arduino®, 'Arduino® Nano', 2024. Accessed: Nov. 22, 2024. [Online]. Available: https://docs.arduino.cc/*Hardware*/nano/

[23] SIMAC Electronics GmbH, 'TTL TO RS485 CONVERTER', SIMAC Electronics GmbH. [Online]. Available: www.joy-it.net

[24] JOHN BOXALL, *Arduino Workshop A Hands-On Introduction with 65 Projects*. 2013.

[25] IlmuKomputer.Com, 'ANALISIS *DELAY* JITTER, THROUGHPUT, DAN PAKET LOST MENGGUNAKAN IPERF3', IlmuKomputer.Com. Accessed: Dec. 18, 2024. [Online]. Available: https://ilmukomputer.org/wp-content/uploads/2017/12/Agusriandi-Analisis.pdf

[26] W. Abdillah, D. Saripurna, S. Yakub, P. Studi Sistem Komputer, and S. Triguna Dharma, 'Analisis Kinerja LoRa (Long Range) berdasarkan Jarak dan Spreading

Factor pada Area Rural', *Jurnal CyberTech*, vol. 4, no. 4, 2021, [Online]. Available: https://ojs.trigunadharma.ac.id/

[27] F. Sanchez-Sutil and A. Cano-Ortega, 'Development and implementation of a PQ analyser to monitoring public lighting installations with a LoRa wireless system', *Internet of Things (Netherlands)*, vol. 22, Jul. 2023, doi: 10.1016/j.iot.2023.100711.

[28] S. Dawaliby, A. Bradai, and Y. Pousset, 'Adaptive dynamic network slicing in LoRa networks', *Future Generation Computer Systems*, vol. 98, pp. 697–707, Sep. 2019, doi: 10.1016/j.future.2019.01.042.

[29] L. Bao *et al.*, 'Coverage analysis on NB-IoT and LoRa in power wireless private network', in *Procedia Computer Science*, Elsevier B.V., 2018, pp. 1032–1038. doi: 10.1016/j.procs.2018.04.252.

[30] R. Liang, L. Zhao, and P. Wang, 'Performance evaluations of LoRa wireless communication in building environments', *Sensors (Switzerland)*, vol. 20, no. 14, pp. 1–19, Jul. 2020, doi: 10.3390/s20143828.

[31] M. Michael, J. Robert, C. Neumuller, and A. Heuberger, 'IoT Cloud RAN Testbed for Indoor Localization based on LPWANs', in *2021 8th International Conference on Internet of Things: Systems, Management and Security, IOTSMS 2021*, Institute of Electrical and Electronics Engineers Inc., 2021. doi: 10.1109/IOTSMS53705.2021.9704996.