

DAFTAR PUSTAKA

- [1] S. Rosad, A. Yudhana, and T. Sutikno, “Zoned Audio Distribution: Systematic Review and Optimization Framework in Mosque,” *ELKHA*, vol. 17, no. 2, pp. 148–154, Oct. 2025, doi: 10.26418/elkha.v17i2.96757.
- [2] Y. Yani, “Penilaian kualitas akustik masjid Raudhaturrahmah Padang Tiji dengan menggunakan simulasi Ecotect,” *Jurnal Arsitektur Pendapa*, vol. 4, no. 1, pp. 19–27, Mar. 2021, doi: 10.37631/pendapa.v4i1.234.
- [3] G. Anindita, E. Setiawan, U. Hanif, and A. R. Ardiansyah, “Analisis Karakteristik ‘Akustik Ruang’ pada Tempat Peribadatan Informasi Akustik Ruang,” *Jurnal Teknologi Maritim*, vol. 8, no. 1, pp. 1–13, Oct. 2024, doi: 10.35991/jtm.v8i1.46.
- [4] A. Adawiyah, A. Rahman, S. Almaniar, and T. Rahmadiyah, “Implementasi *Digital Twin* dalam Manajemen Peralatan Laboratorium dengan Studi Kasus pada Laboratorium Teknik Industri,” *Laboratium Sains dan teknologi*, vol. 4, no. 2, pp. 51–55, Nov. 2024, doi: 10.33369/pelastek.v4i2.41672.
- [5] B. P. Jati, D. Nugroho, and I. Widiastuti, “Literasi Sistem Audio melalui Revitalisasi, Pembenahan dan Optimisasi Audio di Masjid At-Taqwa Sronol Bumi Indah,” *Indonesian Journal of Community Services*, vol. 6, no. 2, p. 108, Nov. 2024, doi: 10.30659/ijocs.6.2.108-118.
- [6] A. Nowoświat and M. Olechowska, “Experimental Validation of the Model of Reverberation Time Prediction in a Room,” *Buildings*, vol. 12, no. 3, Mar. 2022, doi: 10.3390/buildings12030347.
- [7] W. Saputra, “Evaluasi Akustik Ruang Salat Masjid Raya Pinrang,” 2025.
- [8] M. Cairolis and L. C. Tagliabue, “Digital Twin for Acoustics and Stage Craft Facility Management in a Multipurpose Hall,” *Acoustics*, vol. 5, no. 4, pp. 909–927, Dec. 2023, doi: 10.3390/acoustics5040053.
- [9] P. Kalisalvan, M. S. Ab Karim, and S. N. Musa, “Design and Evaluation of Noise Simulation Algorithm Using MATLAB Ray Tracing Engine for Noise Assessment and Prediction,” *Applied Sciences (Switzerland)*, vol. 15, no. 3, Feb. 2025, doi: 10.3390/app15031009.
- [10] T. Supriyadi, A. Ashari, S. Slameta, T. Utomo, and R. Solihin, “Perancangan dan Implementasi Sistem Tata Suara Masjid dengan Dua Posisi Mimbar yang berbeda,” *Jurnal Pengabdian Masyarakat Sultan Indonesia*, vol. 2, no. 1, pp. 35–44, Mar. 2025, doi: 10.58291/abdisultan.v2i1.346.
- [11] G. Anindita, E. Setiawan, U. Hanif, and A. R. Ardiansyah, “Analisis Karakteristik ‘Akustik Ruang’ pada Tempat Peribadatan Informasi Akustik Ruang,” *Jurnal Teknologi Maritim*, vol. 8, no. 1, pp. 1–13, Oct. 2024, doi: 10.35991/jtm.v8i1.46.

- [12] D. A. A. Masih, N. K. Jalal, M. N. A. Mohammed, and S. A. Mustafa, “*Assessment of Acoustical Characteristics for Recent Mosque Buildings in Erbil City of Iraq*,” *ARO-The Scientific Journal of Koya University*, vol. 9, no. 1, pp. 51–66, Jun. 2021, doi: 10.14500/aro.10784.
- [13] D. H. Kassim, A. Putra, M. J. M. Nor, and N. S. Muhammad, “*Effect of pyramidal dome geometry on the acoustical characteristics in a mosque*,” *Journal of Mechanical Engineering and Sciences*, vol. 7, no. 1, pp. 1127–1133, Dec. 2014, doi: 10.15282/jmes.7.2014.11.0109.
- [14] P. Kalisalvan, M. S. Ab Karim, and S. N. Musa, “*Design and Evaluation of Noise Simulation Algorithm Using Matlab Ray Tracing Engine for Noise Assessment and Prediction*,” *Applied Sciences (Switzerland)*, vol. 15, no. 3, Feb. 2025, doi: 10.3390/app15031009.
- [15] A. D. Pierce, “*Diffraction of sound around corners and over wide barriers**.” [Online]. Available: <http://acousticalociety.org/content/terms>.
- [16] P. Kavipriya, C. Dhanalakshmi, L. Nagarajan, C. Kayalvizhi, S. Year Student, and A. Professor, “*Kapok and Cotton Blend non -Moven Fabric*,” *International Journal Of Novel Research And Development*, Jul. 2024, [Online]. Available: www.ijnrd.org
- [17] M. H. Heruputra, W. Widyarko, and D. Susanto, “*Uncovering the Influence of Mosque Openness on Speech Intelligibility: A Simulation Study*,” *Journal of Islamic Architecture*, vol. 8, no. 4, pp. 998–1011, Dec. 2025, doi: 10.18860/jia.v8i4.23828.
- [18] R. Haasjes, “*Towards an active acoustic anechoic chamber*,” University of Twente, Enschede, The Netherlands, 2025. doi: 10.3990/1.9789036562836.
- [19] M. Versaci, M. Cacciola, F. Laganà, and G. Angiulli, “*Analysis of Acoustic Wave Propagation in Defective Concrete: Evolutionary Modeling, Energetic Coercivity, and Defect Classification*,” *Applied Sciences (Switzerland)*, vol. 15, no. 21, Nov. 2025, doi: 10.3390/app152111378.
- [20] Autio and Hanna, “*Room Acoustic Ray-Tracing Understanding, evaluating and expanding the toolset- Tracing*,” Mar. 2024.
- [21] A. G. Prinn, “*A Review of Finite Element Methods for Room Acoustics*,” Jun. 01, 2023, MDPI. doi: 10.3390/acoustics5020022.
- [22] T. Okuzono, “*Computational Accuracy and Efficiency of Room Acoustics Simulation Using a Frequency Domain FEM with Air Absorption: 2D Study*,” *Applied Sciences (Switzerland)*, vol. 14, no. 1, Jan. 2024, doi: 10.3390/app14010194.
- [23] G. Götz, D. G. Nielsen, S. Guðjónsson, and F. Pind, “*Room-acoustic simulations as an alternative to measurements for audio-algorithm evaluation*,” Sep. 2025, doi: 10.1109/ACCESS.2025.3637534.

- [24] Y. Mousavi, Z. Gharineiat, A. A. Karimi, K. McDougall, A. Rossi, and S. Gonizzi Barsanti, “*Digital Twin Technology in Built Environment: A Review of Applications, Capabilities and Challenges*,” Oct. 01, 2024, *Multidisciplinary Digital Publishing Institute (MDPI)*. doi: 10.3390/smartcities7050101.
- [25] W. Yu, G. Liu, L. Zhu, and W. Yu, “*Digital Twin: A Literature Review of Concepts, Technologies and Applications*,” vol. 11, 2023, doi: 10.1109/ACCESS.2024.0429000.
- [26] C. Wang and J. Kang, “*Development of acoustic computer simulation for performance spaces: A systematic review and meta-analysis*,” Oct. 01, 2022, *Tsinghua University*. doi: 10.1007/s12273-022-0901-4.
- [27] M. E. Iliuță, M. A. Moisesescu, E. Pop, A. D. Ionita, S. I. Caramihai, and T. C. Mitulescu, “*Digital Twin—A Review of the Evolution from Concept to Technology and Its Analytical Perspectives on Applications in Various Fields*,” *Applied Sciences (Switzerland)*, vol. 14, no. 13, Jul. 2024, doi: 10.3390/app14135454.
- [28] M. Cairoli and L. C. Tagliabue, “*Digital Twin for Acoustics and Stage Craft Facility Management in a Multipurpose Hall*,” *Acoustics*, vol. 5, no. 4, pp. 909–927, Dec. 2023, doi: 10.3390/acoustics5040053.
- [29] Z. Piao *et al.*, “*Low-Frequency Piezoelectric Hydrophone with High Sensitivity Based on a Piston Structure*,” *Acoustics*, vol. 8, no. 1, p. 15, Feb. 2026, doi: 10.3390/acoustics8010015.
- [30] Y. Zang and Q. Kong, “*GSound-SIR: A Spatial Impulse Response Ray-Tracing and High-order Ambisonic Auralization Python Toolkit*,” Mar. 2025, doi: 10.48550/arXiv.2503.17866.
- [31] V. M. S. ZoBell, “*UC San Diego UC San Diego Electronic Theses and Dissertations Title Moving Cargo, Keeping Whales: Investigating Solutions for Ocean Noise Pollution*,” 2023. [Online]. Available: <https://escholarship.org/uc/item/2508k0b1>