Journal Articles

1. S. Biswas, S. Rumel, **H. M. M. R. Shuvo**, M. Shorif, J. Akbar, M. Ahmed, and P. C. Karmaker, "Numerical Performance Analysis of an Environment-Friendly High-Efficiency Copper-Based Perovskite Solar Cell Using SCAPS-1D Software," *Modeling and Numerical Simulation of Material Science*, vol. 16, no. 3, pp. 45–59, 2026. doi: 10.4236/mnsms.2026.163003.

2. T. Siddiqui, S. K. Biswas, M. Z. Rahman, **H. M. M. R. Shuvo**, M. M. Ahmed, and P. C. Karmaker, "A Comprehensive Analysis of a High-Efficiency Lead-Free Copper–Indium–Gallium–Selenide–Based Thin Film Solar Cell Using SCAPS 1D Software," *International Journal of Photoenergy*, vol. 2026, Art. no. 8815113, 2026. doi: 10.1155/ijph/8815113.

3. M. K. Mim, S. K. Biswas, **H. M. M. R. Shuvo**, and M. N. Islam, "Efficiency Enhancement of Lead-Free $CsSnGeI_3$-Based Perovskite Solar Cells Using ZnSe as an Electron Transport Material and Spiro-MeOTAD as the Hole Transport Medium," *International Journal of Imminent Science and Technology*, vol. 2, no. 1, pp. 23–33, 2024. doi: 10.70774/ijist.v2i2.23.

4. M. N. Hasan, **H. M. M. R. Shuvo**, and M. Ahmed, "Best Modulation Technique and Most Efficient Carrier Number for Getting Maximum SNR and Minimum BER for OFDM Generated Signal Over Rayleigh Distribution," *International Research Journal of Modernization in Engineering Technology and Science*, vol. 3, no. 9, pp. 324–331, 2021.

Conference Papers

1. **H. M. M. R. Shuvo**, M. N. Islam, S. K. Biswas, and M. S. Islam, "Improved Breast Cancer Detection in Ultrasound Images Using Masked Image Integration and Transfer Learning," in *Proc. 4th International Conference on Robotics, Electrical and Signal Processing Techniques (ICREST)*, Dhaka, Bangladesh, 2025, pp. 327–332. doi: 10.1109/ICREST63960.2025.10914389.

2. M. S. Islam, S. A. Liza, **H. M. M. R. Shuvo**, M. M. Hossain, M. A. Hossain, and M. S. Islam, "An Interpretable and Effective Machine Learning Method for Stroke Prediction: A Comparison Study Emphasizing the Explainable Extra Trees Classifier's Superiority," in *Proc. IEEE 2nd International Conference on Quantum Photonics, Artificial Intelligence & Networking (QPAIN)*, Chittagong, Bangladesh, 2026, pp. 1–6. doi: 10.1109/QPAIN69676.2026.11546091.

3. **H. M. M. R. Shuvo** and M. Hossam-E-Haider, "Design and Analysis of a Compact Dual-Band Microstrip Antenna for WLAN Communication and X-Band Radar Applications," in *Proc. 2026 International Conference on Power, Electronics, Communications, Computing, and Intelligent Infrastructure (PECCII)*, Pabna, Bangladesh, 2026, pp. 1-6, doi: 10.1109/PECCII70991.2026.11662095.