

LIST OF PUBLICATIONS

JOURNAL PAPERS: (Total Impact Factor: 116.657 (2024))

- [1] **Aritra Acharyya**, and Angsuman Sarkar, "Vector Bend-Sensor Based on Flexible Optical Waveguide with Dual-Antisymmetric-Cores," *IEEE Sensors Journal*, vol. 26, issue 10, pp. 15334 - 15341, 2026, DOI: 10.1109/JSEN.2026.3680538. **(Impact Factor: 4.500 (2024))**
- [2] S. Ray, **A. Acharyya**, and R. Das, "Experimental Realization of Programmable Optically Variable Potentiometer," *Journal of Circuits, Systems and Computers*, World Scientific Publishing, Published Online, 2026, DOI: 10.1142/S0218126626502075. **(Impact Factor: 1.000 (2024))**
- [3] Tanushree Saha, Sneha Ray, Rohit Biswas, Soutik Mondal, Sourav Sarkar, Debarghya Paul, Kanta Bhattacheryya, Palash Das, Anshuman Sarkar, and **Aritra Acharyya**, "Matrix-Coupled LED-CdS Photoresistor Arrays: Fabrication, Optical-Electronic Coupling Modelling, and Wide-Range Programmable Resistance Characteristics," *Journal of Electronic Materials*, Springer [USA], vol. 55, pp. 4658-4672, 2026. **(Impact Factor: 2.500 (2024))**
- [4] Pallab Kumar Pramanik, Rohit Biswas, Soutik Mondal, Sourav Sarkar, Debarghya Paul, Sneha Ray, Soumya Kanti Raj, Palash Das, Sukhendu Shekhar Mondal, Sandip Nandi, Angsuman Sarkar, and **Aritra Acharyya**, "Flexible Optical Bend-Sensor Based on TiO₂-Gel-Wax Nanocomposite Core and Silicone-Rubber Cladding," *Micro and Nanostructures*, Elsevier, vol. 209, pp. 208437-1-23, 2026. **(Impact Factor: 3.000 (2024))**
- [5] Kanta Bhattacheryya, Sneha Ray, Tanushree Saha, Palash Das, and **Aritra Acharyya**, "TiO₂-epoxy nanocomposite-based wide-range planar programmable optically variable resistors," *Micro and Nanostructures*, Elsevier, vol. 209, pp. 208433-1-22, 2026, DOI: 10.1016/j.micrna.2025.208433. **(Impact Factor: 3.000 (2024))**
- [6] Sneha Ray, Tanushree Saha, Kanta Bhattacheryya, Palash Das, Prasenjit Dey, and **Aritra Acharyya**, "Ultra-Wide Range Programmable Optically Variable Resistors: Wide-Spectrum Source Control," *Journal of Electronic Materials*, Springer [USA], vol. 55, pp. 1205-1221, 2026, DOI: 10.1007/s11664-025-12556-5. **(Impact Factor: 2.500 (2024))**
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- [8] Sneha Ray, Abhigyan Das, Tanushree Saha, Kanta Bhattacheryya, Angsuman Sarkar, Palash Das, and **Aritra Acharyya**, "Programmable Optically Variable Resistors: Long-Range, Compact and Scalable Voltage Controlled Resistors," *Journal of Active and Passive Electronic Devices* [USA], Old City Publishing, vol. 19, no. 3, pp. 217-238, 2025.
- [9] Rajib Das, **Aritra Acharyya**, and Shubhankar Majumdar, "Influences of Human Presence on the Indoor Air Quality of Educational Institutions: Concurrent Multi-Pollutant Sensing Approach," *IEEE Open Journal of Instrumentation and Measurement*, vol. 4, pp. 9500508-1-8, 2025, DOI: 10.1109/OJIM.2025.3583294. **(Impact Factor: 1.500 (2024))**
- [10] Prerona Sanyal, Sneha Ray, **Aritra Acharyya**, Arindam Biswas, and Rudra Sankar Dhar, "Application of Machine Learning for Predicting the Millimetre-Wave and Sub-Millimetre-Wave Characteristics of Avalanche Transit Time Sources," *Journal of Computational Electronics*, vol. 24, pp. 137-1-20, 2025. **(Impact Factor: 2.500 (2024))**

- [11] Santu Mondal, Sneha Ray, **Aritra Acharyya**, Rudra Sankar Dhar, Arindam Biswas, Hiroaki Satoh, Gurudas Mandal, Vitaliy Maksimenko, and Victor Krishtop, "Accelerated Prediction of Terahertz Performance Metrics in GaN IMPATT Sources via Artificial Neural Networks," *IEEE Access*, vol. 13, pp. 84284-84302, 2025, DOI: 10.1109/ACCESS.2025.3567410. **(Impact Factor: 3.600 (2024))**
- [12] Sneha Ray, Tanushree Saha, Angsuman Sarkar, Palash Das, and **Aritra Acharyya**, "TiO₂~Epoxy Nanocomposite-Based Lossy Optical Fiber Core-Structures for Realizing Wide-Range Programmable Optically Variable Resistors," *Journal of Electronic Materials*, Springer [USA], vol. 54, pp. 4726-4742, 2025, DOI: 10.1007/s11664-025-11909-4. **(Impact Factor: 2.500 (2024))**
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- [14] Partha Banerjee, Rajib Das, **Aritra Acharyya**, Dwaipayan Ghosh, Arindam Biswas, Hiroshi Inokawa, Hiroaki Satoh, and A. K. Bhattacharjee, "Edge Terminated GaN Reverse Double-Drift IMPATT Structure for Efficient Millimeter-Wave Radiation," *IETE Journal of Research*, Taylor and Francis [India], vol. 71, no. 6, pp. 2070-2086, 2025. **(Impact Factor: 1.300 (2024))**
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- [17] Monisha Ghosh, Shilpi Bhattacharya Deb, **Aritra Acharyya**, Arindam Biswas, Hiroshi Inokawa, Hiroaki Satoh, Amit Banerjee, Alexy Y. Seteikin, and Ilia G. Samusev, "Edge-Terminated AlGaIn/GaN/AlGaIn Multi-Quantum Well Impact Avalanche Transit Time Sources for Terahertz Wave Generation," *Nanomaterials*, MDPI Journal, vol. 14, pp. 873-1-25, 2024. **(Impact Factor: 4.300 (2024))**
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- [22] Prajukta Mukherjee, **Aritra Acharyya**, and Sandipan Mallik, "Bovine Serum Albumin Based Thin-Film Capacitors for Flexible Electronic Applications," *IETE Journal of Research [India]*, Taylor & Francis, vol. 69, no. 12, pp. 9120-9127, 2022. **(Impact Factor: 1.300 (2024))**

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