

## International Conferences

- 1) Trilochan Patra, **Swarup Kumar Mitra**, U. Bhattacharya, S. Rakshit, “Creating A Broadband Matching Network for a Low Noise Amplifier: Design and Optimization”, IEEE International Conference on Communication, Computing and Signal Processing (IICCCS 2024), September 2024.
- 2) Rabel Guharoy, Nanda Dulal Jana, **Suparna Biswas**, ‘Performance Analysis of Machine Learning Algorithms for the detection of epilepsy’, 3rd IEEE International Conference on Computer Vision and Machine Intelligence, 19-20 October 2024, IIIT Allahabad, Prayagraj, INDIA
- 3) **Antara Ghosal, Anurima Majumdar, Avali Banerjee**, Abhijit Ghosh, Moupali Roy, Swati Barui, “A perturbed CPW Fed Ultra wideband Multiband Microstrip Antenna for 5G Communication Application”, International Conference on Big Data Analysis in Bioinformatics (DABCon-2024), December 2024, 10.1109/DABCon63472.2024.10919318
- 4) **Palasri Dhar, Sunipa Roy**, “Design and simulation of low power signal conditioning unit using Sleepy logic for Volatile Organic Compound sensing application”, International Conference on Smart Systems and Communication [SSWC 2024], November 2024.
- 5) **Surajit Basak, Avali Banerjee, Suparna Biswas**, “Unveiling the Shield: A Comprehensive Exploration of Credit Card Fraud Detection through Machine Learning,” Third International Conference on Innovations in Software Architecture and Computational Systems (ISACS-2024), November 2024.
- 6) **Palasri Dhar, Sunipa Roy**, Sandipta Paul, “Study of thermal noise in InAsxSb1-x UTB MOS under sub-100 nm range”, 3rd IEEE Electron Devices Kolkata Conference (EDKCON 2024), December 2024.
- 7) **Sunipa Roy**, Koen Das, Tushar Basak, Abir Mitra, Arkaprova Das, **Palasri Dhar, Nabaneeta Banerjee**, “Volatile Organic Compound detection using Nano-Graphene: Determining the Fruit Ripeness”, International Conference on Advances in Communication, Medical Electronics and Smart Grid Automation (**ACMESGA 2k24**), November 2024.
- 8) **Sunipa Roy**, “Development of IoT based n-ZnO/p-rGO Nanohybrid H2 Sensor Node”, 3rd IEEE Electron Devices Kolkata Conference (EDKCON 2024), December 2024.
- 9) **Suparna Biswas, Avali Banerjee, Surajit Basak**, “An automatic skin cancer identification method with incorporation of deep learning approach,” 1st International Conference on Sustainable Communication, Machine Intelligence and Metaverse (SCMIM) – 2025, MCKV Institute of Engineering, Kolkata, February 2025.

10) Suparna Karmakar, **Suparna Biswas**, Nanda Dulal Jana, Aveek Chattopadhyaya “Electroencephalography based Autism Detection: A Comprehensive Review” Sixth International Ethical Hacking Conference: AI and Law, (eHaCON 2025), February 2025.

11) Subhankar Mukherjee, **Suparna Biswas**, “An Efficient Technique for the Diagnosis of Sleep Apnea by Integrating Wavelet Transform and Statistical Analysis”, International Conference on Recent Developments and Applications in Materials Science and Engineering (RDAMSE 2025), ISBN: 978-81-983133-3-1, Kolkata, January 2025.

12) **Sunipa Roy et.al.** “Spinel Nano Ferrite for Waste Water Treatment: A Review”, Proceedings of International Conference on Data, Electronics and Computing, ISBN: 9789819764884, October 2024, [https://doi.org/10.1007/978-981-97-6489-1\\_23](https://doi.org/10.1007/978-981-97-6489-1_23), [https://link.springer.com/chapter/10.1007/978-981-97-6489-1\\_23](https://link.springer.com/chapter/10.1007/978-981-97-6489-1_23)

13) **Sunipa Roy et.al.**, Designing and Utilizing of Novel Pass Transistor Logic for Low Power CMOS Full Adder, IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI), ISBN: 979-8-3315-2169-1, May 2025, doi:10.1109/IATMSI64286.2025.10984669, <https://ieeexplore.ieee.org/document/10984669>.

14) **Sunipa Roy et.al.**, Study of Thermal Noise in InAs<sub>x</sub>Sb<sub>1-x</sub> UTB MOS Under Sub-100 nm Range, ISBN: 979-8-3503-7464-3, February 2025. 10.1109/EDKCON62339.2024.10870677, <https://ieeexplore.ieee.org/10870842>.

15) **Sunipa Roy et.al.**, Portable IoT-Based Health Monitoring and Prediction System with Machine Learning, IEEE XPLOR-E-2025 AI-Driven Smart Healthcare for Society 5.0, ISBN: 979-8-3315-3633-6, doi:10.1109/IEEECONF64992.2025.10963009, April 2025, <https://ieeexplore.ieee.org/document/10963009>.

16) **Sunipa Roy et.al.**, Study of Electrical Characteristics and Charge Storage Behaviour of Gold Embedded Floating Gate MOS Structure, ISBN: 979-8-3503-7464-3, November 2024, <https://ieeexplore.ieee.org/document/10870854>.

17) **Suparna Biswas**, Moumita Pal, Ranjana Ray, Saptarshi Pramanik, Sambit Chanda, Sourav Paul, "FOREST FIRE PREDICTION SYSTEM USING NODE MCU", Proceedings of International Conference on Engineering Materials and Sustainable Societal Development [ICEMSSD 2024], IIP Series, Volume 4, June, 2025, Page no.253-264, e-ISBN: 978-93-7020-967-1, DOI/Link: <https://www.doi.org/10.58532/nbennurICEMSSD22>

18) Moupali Roy, Sanjoy Bhattacharjee, Debraj Sadhukhan, Swati Barui, **Anurima Majumdar**, Abhijit Ghosh, Anushka Datta, “Assistive Smart Stick: Safe and Independent Mobility for the Visually Disabled Using Sensor Based Technology”, 2025 AI-Driven Smart Healthcare for Society 5.0, February 14-15, 2025, Kolkata, India, ISBN : 979-8-3315-3633-6, DOI : <https://ieeexplore.ieee.org/document/10963315>

19) Trilochan Patra, **Swarup Kumar Mitra**, Ujjal Bhattacharya, Shampurna Rakshit, "Creating a Broadband Matching Network for a Low Noise Amplifier: Design and Optimization", 2024 IEEE International Conference on Communication, Computing and Signal Processing, ASANSOL, India, 2024, doi: 10.1109/IICCCS61609.2024.10763632.

- 20) C. Sadhukhan, Rathindra Nath Biswas, **Swarup Kumar Mitra**, Mrinal Kanti Naskar, "Unscented Kalman Filter Based Short Circuit Fault Diagnosis of Lithium-ion Battery," 2023 Second IEEE International Conference on Measurement, Instrumentation, Control and Automation, Kurukshetra, India, 2024, doi: 10.1109/ICMICA61068.2024.10732789.
- 21) Trilochan Patra, **Swarup Kumar Mitra**, Ujjal Bhattacharya, Shampurna Rakshit, "Creating a Broadband Matching Network for a Low Noise Amplifier: Design and Optimization," 2024 IEEE International Conference on Communication, Computing and Signal Processing, ASANSOL, India, 2024, doi: 10.1109/IICCCS61609.2024.10763632.
- 22) Trilochan Patra, **Swarup Kumar Mitra**, Evaluation of MIMO Multipath Fading Channels Based on the IEEE 802.11n Channel Models for Indoor Wireless Local Area Networks, Pages 529 - 534, DOI: 10.3233/ATDE240801, Research Article Series Advances in Transdisciplinary Engineering, IOS Press Ebook, Volume 61: Applied Mathematics, Modeling and Computer Simulation, August 2024.