

LIST OF PUBLICATIONS

Articles:

1. **S. Baruah**, D. Mohanta, C. A. Betty, Composite PEDOT-PSS based highly sensitive electrochemical sensors for sensing glucose from human saliva, *Microchemical Journal*, 206 (2024) 111411. (<https://doi.org/10.1016/j.microc.2024.111411>)
2. **S. Baruah**, D. Mohanta, C. A. Betty, Highly sensitive and label free on-site monitoring immunosensor for detection of Aflatoxin B1 from real samples, *Analytical Biochemistry*, 689 (2024) 115493. (<https://doi.org/10.1016/j.ab.2024.115493>)
3. **S. Baruah**, D. Mohanta, C. A. Betty, Significantly selective, Aflatoxin-B₁ immunosensors based on composite electrodes of AuNPs anchored, PEDOT-PSS conducting polymer infiltrated with WS₂ nanoflakes (*under review*).

Other articles:

1. **S. Baruah**, C.A. Betty, Point of Care Devices for Detection of Covid-19, Malaria and Dengue infections: A Review, *Bioelectrochemistry*, 158 (2024) 108704. (<https://doi.org/10.1016/j.bioelechem.2024.108704>)
2. A. Medhi, **S. Baruah**, J. Singh, C. A. Betty, D. Mohanta, Au nanoparticle modified GO/PEDOT-PSS based immunosensor probes for sensitive and selective detection of serum immunoglobulin g (IgG), *Applied Surface Science*, 575 (2022) 151775. (<https://doi.org/10.1016/j.apsusc.2021.151775>)

Conference Proceedings:

1. **S. Baruah**, D. Mohanta, C. A. Betty, Highly sensitive and selective label free immunosensor based on GO/PEDOT-PSS decorated with AuNPs for precise detection of Mycotoxin, *Journal of Physics: Conference series* (Vol. 2957, No. 1, p.012007), IOP Publishing. (<https://doi.org/10.1088/1742-6596/2957/1/012007>)
3. **S. Baruah**, D. Mohanta, 2D material functionalized PEDOT-PSS based bioelectrode: A highly selective electrochemical sensor, *Cambridge scholars* (Accepted)

Book Chapter:

1. **S. Baruah**, D. Mohanta, C. A. Betty, Investigation of electrochemical properties of Polyaniline-Polyvinyl alcohol composite nanofibers prepared by electrospinning, *Recent trends in physics research*, Editor-in-chief: Nangkham Nimai Singh, Editor: Thongam Gomti Devi (ISBN: 978-93-90951-66-6)

PAPERS PRESENTED IN CONFERENCES

1. **S. Baruah**, D. Mohanta, C.A. Betty, **DAE-SSPS 2024** (68th DAE Solid State Physics Symposium 2024-International Conference) Organized by **Bhabha Atomic Research Centre**, Mumbai, India during 18-22 December, 2024.
2. **S. Baruah**, D. Mohanta, **CoDSS 2024** (Conference on Devices, Sensors and Systems 2024-International Conference) organized by **Tezpur University** during 10-11 February 2024.
3. **S. Baruah**, D. Mohanta, C.A. Betty, **CMDAYS-23** (CONDENSED MATTER DAYS 2023-National Conference) organized by **Tezpur University** during 22-24 January 2024.
4. **S. Baruah**, D. Mohanta, C.A. Betty, **SPARK-2023** (SYMPOSIUM ON PHYSICS: ADVANCES IN RESEARCH AND KNOWLEDGE 2023-National Conference) organized by **North Lakhimpur University** on 14th October 2023.
5. **S. Baruah**, D. Mohanta, C.A. Betty, **IUMRS-ICA-2022** (International Union of Materials Research Society-International Conference in Asia 2022-International Conference) organized by **IIT Jodhpur** during 19-23 December 2022.
6. **S. Baruah**, D. Mohanta, C.A. Betty, **PANE-22** (XIII BIENNIAL NATIONAL CONFERENCE OF PHYSICS ACADEMY OF NORTH EAST, 2022-National Conference) organized by **Manipur University** during 8-10 November 2022.
7. **S. Baruah**, D. Mohanta, **ICETNMST-22** (EMERGING TRENDS IN NANOMATERIALS SCIENCE AND TECHNOLOGY 2022-National Conference) organized by **NIT Nagaland** during 27-29 January 2022.
8. **S. Baruah**, C.A. Betty, A. Medhi, A. Kumar, **TIMP-21** (TRENDS in MODERN PHYSICS 2021- International Conference) organized by **Assam Don Bosco University** during 26-27 February 2021.