❖ Publications Based on This Work Journal [Published]:

1. **A. Roy,** P. Kalita, and B. Mondal, "Structural, spectroscopic and electrical properties of liquid phase exfoliated few layered two-dimensional tungsten disulfide (WS_2) using anionic surfactant," J Mater Sci: Mater Electron, vol. 34, no. 3, p. 224, Jan. 2023, doi: 10.1007/s10854-022-09687-4
2. **A. Roy,** S. Sharma, B. Mondal. Effect of n-type Cl doping on electrical conductivity of few layer WS_2. *Microsyst Technol* (2024). https://doi.org/10.1007/s00542-024-05683-2

❖ Journal [Under Review]:

1. **A. Roy**, J. Pati and B. Mondal. Contact Engineering and Doping-Driven Performance Enhancement of WS_2 FETs Fabricated via Mask-Less Lithography.
2. **A. Roy**, and B. Mondal. Amalgamated organic polymer of PVA/P(VDF-TrFE) as back gate dielectric in WS_2 FET fabrication.

❖ Conference & Workshops:

1. **A. Roy,** S. Sharma and B. Mondal, "Schottky barrier height modulation of Metal-WS_2 contact by molecular doping technique," 2023 IEEE Devices for Integrated Circuit (DevIC), Kalyani, India, 2023, pp. 359-363. https://doi.org/10.1109/DevIC57758.2023.10135040
2. **A. Roy**. Presented a poster on the Fabrication and electrical characterization of a WS_2 FET with polymer dielectric at an Offline familiarization workshop on nanoelectronics: Fabrication and characterization organized by INUP i2i IIT Guwahati in 2023. (**Awarded by best poster presentation**).
3. **A. Roy**, B. Mondal. Structural and Spectroscopic Characterization of a Ferroelectric thin film of P(VDF-TrFE) copolymer. CoDSS, Tezpur University,2024. (**Awarded by best presenter oral**).
4. **A. Roy**, B. Mondal. The atomically thin few-layer of WS_2 nanosheets in the Field Effect Transistor application. 6th International Conference on Emerging Technologies (ETMN-2024 conference).