

Journal Publication

- [1] Hazarika, C. and Sharma, S. Survey on Ion Sensitive Field Effect Transistor from the view point of pH Sensitivity and Drift, *Indian Journal of Science and Technology*, 10(37):1-18, 2017.
- [2] Hazarika, C. and Sharma, S. A mathematical model describing drift in SiO₂ gate pH ISFET's due to hydrogen ion diffusion, *International Journal of Applied Engineering Research*, 9(23):21099-21115, 2014.
- [3] Hazarika, C., Sarma, D., Neroula, S., Das, K., Medhi, T. and Sharma, S. Characterization of a Schottky ISFET as Hg-MOSFET and as Cytochrome P450 ENFET, *International Journal of Electronics*, 105(11): 1855–1865, 2018.
- [4] Hazarika, C., Sarma, D., Puzari, P., Medhi, T. and Sharma, S. Use of Cytochrome P450 enzyme isolated from *Basillus stratosphericus sp.* as recognition element in designing Schottky based ISFET biosensor for hydrocarbon detection, *IEEE Sensors Journal*, 18(15): 6059-6069, 2018.

Conference Publication

- [5] Hazarika, C., Dutta, A., and Sharma, S. Modeling of reference electrode for a Si₃N₄ gate pH ISFET. In *Innovations in Electronics, Signal Processing and Communication (IESC)*, NIT Meghalaya, pages 149-154, 6-7 April, 2017, DOI: 10.1109/IESPC.2017.8071882
- [6] Hazarika, C., Mazid, Md. A., and Sharma, S. Modeling and analysis of force experienced by ions in an Electrolyte Insulator Semiconductor structure, In *3rd International Conference on electronics and communication system(ICECS)*, Karapakkam College of Engineering, pages 420-425, 25-26 February, 2016.
- [7] Hazarika, C. and Sharma, S. A novel approach for modeling threshold voltage of MOSFET using CV characteristics, In *International Conference on Electrical, Electronics, Signals, Communication & Optimization(EESCO)*, Visakhapatnam, Andhra Pradesh, pages 798-801, 24-25 January, 2016.

Papers under Review

- [8] Hazarika, C. and Sharma, S. Modeling and experimental validation of the optimal positioning of reference electrode for a Si_3N_4 gate pH ISFET, *IEEE Sensors Journal*.