

List of publications in peer-reviewed journals

- [1] **Chamuah, N.** and Nath, P. Periodically varying height in metal nano-pillars for enhanced generation of localized surface plasmon field. *Plasmonics*, 10(6):1367-1372, 2015.
- [2] **Chamuah, N.**, Vaidya, G. P., Joseph, A. M., and Nath, P. Diagonally aligned squared metal nano-pillar with increased hotspot density as a highly reproducible SERS substrate. *Plasmonics*, 12(5):1353-1358, 2017.
- [3] **Chamuah, N.**, Chetia, L., Zahan, N., Dutta, S., Ahmed, G. A., and Nath, P. A naturally occurring diatom frustule as a SERS substrate for the detection and quantification of chemicals. *Journal of Physics D: Applied Physics*, 50(17):175103, 2017.
- [4] **Chamuah, N.**, Hazarika, A., Hatiboruah, D., and Nath, P. SERS on paper: an extremely low cost technique to measure raman signal. *Journal of Physics D: Applied Physics*, 50(48):485601, 2017.
- [5] **Chamuah, N.**, Bhuyan, N., Das, P. P., Ojah, N., Choudhary, A. J., Medhi, T., and Nath, P. Gold-coated electrospun pva nanofibers as SERS substrate for detection of pesticides. *Sensors and Actuators B: Chemical*, 273:710-717, 2018.
- [6] **Chamuah, N.**, Saikia, A., Joseph, A. M., and Nath, P. Blu-ray DVD as SERS substrate for reliable detection of albumin, creatinine and urea in urine. *Sensors and Actuators B: Chemical*, 285:108-115, 2019.

Papers presented in conferences

- [1] **Chamuah, N.**, and Nath, P. Generation of Enhanced LSPR Field in Periodically Varying Height Metal Nano-pillars, COMSOL conference, Pune, India, 2015.
- [2] **Chamuah, N.**, Zahan N., and Nath, P. Enhanced generation of localized surface plasmon resonance field condition upon attachment of metal nanoparticle on diatom

frustules, International conference on electronic devices, circuits, applied electronics and communication technology [EDCAECT], Gauhati University, India, 2015.

[3] **Chamuah, N.**, Chetia, L., Dutta, S., Zahan, N., Ahmed, G.A., and Nath, P. Naturally occurring biosilica for SERS based applications, International conference on Light and Light based Technologies [ICLLT], Tezpur University, India, 2016.

[4] **Chamuah, N.**, Bezbaruah, P. and Nath, P. Detection of harmful food preservative using paper based SERS substrate National conference on materials, condensed matter and theoretical physics, ADP College, India, 2018.