Appendix-I

List of Published Papers

A. Contributing to Thesis

1. Bahuguna, G.; Mondal, I.; Verma, M..; Kumar, M.; Bhattacharya, S.; Gupta, R*.; Kulkarni, G.U. Innovative Approach to Photo-Chemiresistive Sensing Technology: Surface-Fluorinated SnO_2 for VOC Detection. *ACS Appl. Mater. Interfaces,* **2020**. 12 , 33.
2. Bahuguna, G.; Adhikary, V.; Sharma, R. K.; Gupta, R*. Ultrasensitive Organic Humidity Sensor with High Specificity for Healthcare Applications. *Electroanalysis*, **2020**, 32, 76.
3. Bahuguna, G.; Chaudhary, S.; Sharma, R. K.; Gupta, R*. Electrophilic Fluorination of Graphitic Carbon for Enhancement in Electric Double Layer Capacitance. *Energy Technol.*, **2019**, 19000667.
4. Bahuguna, G.; P. Ram.; Sharma, R. K.; Gupta, R*. An Organo-Fluorine Compound Mixed Electrolyte for Ultrafast Electric Double Layer Supercapacitors. *ChemElectroChem,* **2018**, 5, 1-8.
5. Janu, V. C.; Bahuguna, G.; Laishram, D.; Shejale, K. P.; Kumar, N.; Sharma, R. K*.; Gupta, R*. Surface Fluorination of α-Fe_2O_3 using Selectfluor for Enhancement in Photoelectrochemical Properties. *Sol. Energy Mater. Sol. Cells* **2018**, *174*, 240–247.
6. Bahuguna, G.; Janu, V. C.; Uniyal, V.; Kambhala, N.; Angappane, S.; Sharma, R. K.; Gupta, R*. Electrophilic Fluorination of α-Fe_2O_3 Nanostructures and Influence on Magnetic Properties. *Mater. Des.* **2017**, *135*, 84–91.
7. Urgunde, A.B.;# Bahuguna, G.;# Dhamija, A.; Das, P. P.; Gupta, R*. Ni Ink Catalysed Conversion of Waste Polystyrene-Sugar Composite to Graphitic Carbon for Electric Double Layer Supercapacitors, *ACS Appl. Electron. Mater,* **2020**, 10.1021/acsaelm.0c00542. *(#equal contribution).*
8. Mondal, I.; Bahuguna, G.; Ganesha, M.; Verma, M..; Gupta, R.; Singh, A.; Kulkarni, G.U. Scalable Fabrication of Scratch-proof Transparent Al/F-SnO_2 Hybrid Electrodes with Unusual Thermal and Environmental Stability. *ACS Appl. Mater. Interfaces,* **2020**, 12, 54203.
9. Bahuguna, G.; Verma, M..; Gupta, R*. Chemical Insights into Electrophilic Fluorination of Tin Oxide Layer for Photoelectrochemical Applications , 2021, (*in review).*

B. Collaborative Work

10. Urgunde, A.B.; Bahuguna, G.; Gupta, R*. Scalable Ni-Co Inks for Fabrication of Superparamagnetic Nickel Cobaltite Nanoplates as Electrocatalyst for OER, **2021**, *Materials Research Bulletein*, (*in press).*

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