

68. Synthesis And Characterization Of Antimony Doped SnO₂

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ABSTRACT

SnO₂ nanoparticles were synthesized by co-precipitation method from SnCl₂.2H₂O as a precursor. Sb₂O₃ is doped with SnO₂. Then subsequent heat treatment is given to Sb₂O₃ doped SnO₂ at 600⁰C. The prepared sample is characterised by X-ray diffraction (XRD), Transmission Electron Microscope, Scanning Electron Microscope and FTIR. In XRD study, the average particle size is found to 5.94 nm using Scherer formula and in SEM study, the particle size is found to be 10.2 nm.