

ABSTRACT

In this work we use coprecipitation method to synthesis lanthanum tin oxide nanoparticles. It was annealed at X-ray diffraction (XRD) analysis was used to estimate the crystal structure. William son hall analysis was used to calculate crystallite size and microstrain. Functional group characteristic were confirmed by Fourier Transform Infrared Spectroscopy (FTIR) analysis. Fourier Transform Infrared Spectroscopy (FTIR) analysis also shows the presence of formation of Sn—O stretching vibrational mode and bending vibration of La— O. We deposited the Lanthanum tin oxide nanoparticles on glassy carbon in order to check electrochemical properties. The best results were obtained by the sample annealed at 700°C. Our results indicate that Lanthanum tin oxide shows electric double layer (EDLC) type super capacitor behavoieur.