

2017

ELABORATION AND CHARACTERIZATION OF PBT/Si AND PBT/ITO COMPOSITE FILMS

Leila LAMIRI, B. Nessark

Abstract : This work reports on the photoelectrochemical and optical properties of polybithiophene (PBT) films electrochemically synthesized onto indium-tin oxide (ITO) and silicon substrates of different concentrations. The properties of the composite layers were studied by electrochemical method (cyclic voltammetry), scanning electron microscopy (SEM) energy dispersive X-ray spectroscopy, UV-visible and photoelectrochemical measurements. The photocurrent measurement showed good photoelectrochemical properties of this composite making it an ideal candidate for photovoltaic cell application.

Keywords : Composite material. Photocurrent, polybithiophene, Silicon