

Chemically Synthesized Yb_2S_3 @ GO Composite Thin films

In the recent years, rare earth metal (REM) sulfide thin film materials have great attentions due to their unique physical and chemical properties. The porous nanostructured morphology and wide potential window of electrode materials are very important aspects for supercapacitor applications. Therefore, REM sulfides are widely used for gas sensing, photocatalyst, glucose sensing, energy conversion and supercapacitor applications. Among the REM sulfide, ytterbium sulfide (Yb_2S_3) composite with graphene oxide (GO) is considered as a best candidate for negative electrode material in supercapacitor due to multiple oxidation state, better redox activity, wide potential window and excellent area under the curve.

Present book describes a chemical synthetic approaches of successive ionic layer adsorption and reaction (SILAR) and chemical bath deposition (CBD) method for Yb_2S_3 composite with GO thin film electrodes and their application in supercapacitor. This research highlighted crucial role of the synthesis methods on morphology of Yb_2S_3 composite with GO electrode materials for supercapacitors.



Dr. Shivaji Ubale received his Ph.D. in Physics from D. Y. Patil Education Society, Kolhapur India under the guidance of Prof. C. D. Lokhande. During his Ph.D., he was awarded by JRF by DST-SERB New Dehli (India) and CSMNRF Govt. of Maharashtra (India). He has published 15 research articles in peer review international journals.



GO/ Yb_2S_3 thin films for supercapacitor

Shivaji B. Ubale, Chandrakant D. Lokhande

Scholars'
Press

Shivaji B. Ubale
Chandrakant D. Lokhande

Chemically Synthesized Yb_2S_3 @ GO Composite Thin films

Chemically Deposited Yb_2S_3 @ GO Composite
Thin Films: Application in Supercapacitor