Template Synthesis of Ni(OH)₂ nanowires by Electrochemical Process

Wentao Zhang, Pang Beili and Hong-Ro Lee

Department of Applied Materials Engineering, Chungnam National University, Daejeon 305-764, Korea

Abstract: There are several methods for oxide coating on metals, such as aluminum or carbon nanotubes (CNTs). Usually CVD method is introduced for various oxide coating on CNTs. Another method is electrochemical method which use potential-pH diagram for oxide coating on metal or CNTs. In this experiment, electrochemical coating parameter for oxide coating on aluminum template modified by acids and hydrogen peroxide (H_2O_2) were examined. SEM micrographs displayed clearly Ni(OH)₂ coating on template. For confirmation of electrochemical method application to EDLC electrode material fabrication, EDS spectrum was analyzed.

Key word: aluminium template; Ni(OH)₂ coating; Electrochemical properties; Electrode double layer