Effect of Graphite Concentration on the Capacitance of Composite Supercapacitor of Hydrous Ruthenium Oxides Coatings by Cathodic Deposition

> Method 林育立,H.-S Hwang Mechanical Engineering Engineering yulilin@chu.edu.tw

Abstract

Supercapacitors have many advantages applied in a variety of fields for their larger capacitance, high power density and long cycle life. In general, supercapacitors can be classified into two categories, namely, pseudo-capacitors and double-layer capacitors. The fomer stores electrical charges in electrode surface region by faradaic reaction. While, in the latter, electrical charges are stored ate the double-layer formed at electrode/electrolyte interface. Various methods have been utilized to manufacture electrode including cyclic voltammetric method, sol-gel method, anodizing,

cathodic deposition method and etc.

Keyword : Capacitance, Hydrous Ruthenium Oxides, Supercapacitor, Cathodic Deposition Method.