

BFB04

Study on the Supercapacitor using the Polymer Electrolytes based on the P(VdF-co-HFP)

PVdF공중합체를 기초로한 고분자 전해질을 이용한
슈퍼캐패시터에 관한 연구

권태오, 이영기, 박정기, 신경희*, 김종휘*

KAIST 화학공학과, *한국에너지기술연구소

The supercapacitor has been importantly considered as rechargeable pulse power source or backup power supply for electric vehicles and electronic devices. To fabricate supercapacitor with high energy and power density, the use of a thin-layer electrolyte is effective. The application of the polymer electrolytes to supercapacitor can lead to thin film cells. In this study, we prepared the plasticized polymer electrolytes based on the porous P(VdF-co-HFP) matrix and assembled unit cells for the supercapacitor. The ion conductivities, interfacial characteristics, and performances with cycles were investigated by a.c. impedance spectroscopy.