



演 題 : **Electrochemical Capacitor Based on Carbon & Metal Oxide Composite**

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要旨 :

Electrochemical capacitors (ECs) called super-capacitors are electrochemical energy storage devices. It is considered a charge storage device with features exhibited similar to that of electric double layer capacitor (EDLC) and rechargeable batteries. According to the charge storage mechanism, ECs are divided as electrochemical double layer capacitors (EDLCs) and pseudocapacitors. Recently, the hybrid electrochemical supercapacitors have been developed where an activated carbon electrode is associated with a faradic electrode. The hybrid electrochemical supercapacitors normally consist of an electric double-layer capacitor electrode coupled with a battery electrode. In this presentation, lithium titanium oxide and carbon (activated carbon and CNT) composite used as working electrode in organic electrolyte will be presented for hybrid capacitor. This hybrid material has advantages of both the high rate capability and the high capacity.

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