

Supercapacitor built from discarded Lithium Ion battery

Indian Scientists from CSIR-CECERI and CSIR-CSMCRI collected discarded Lithium Ion batteries and created reduced graphene oxide from them. This material showed high specific capacity at low current, making it an ideal material for next generation high performance supercapacitor. Specific capacity was found to be 112 Farad per gram from some basic evaluation which is comparable with commercially available ones, but at less cost and environment friendly. Commercial ones are made with activated carbon and are expensive and hazardous. Lithium ion batteries are nowadays used extensively in e-vehicles, UPS and various systems for power back up. They are disposed after run out, leading to mounting e-waste. They can be reused successfully with this new technology.