

## **Novel graphene-based electrode materials for high-power aqueous electrochemical supercapacitors**

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In the ongoing effort for energy storage and sustainability electrochemical supercapacitors have emerged as new, attractive solutions due to their interesting characteristics in terms of power and energy density. The performance of an electrochemical capacitor is governed mainly by the specific capacitance of the active electrode materials and the cell voltage, leading to a large number of interesting technologies including the evolution of novel, promising electrode materials. This paper describes an overview of the research carried out at Elbit laboratories to design and develop novel composite graphene-based electrode materials for high-power, aqueous supercapacitors. More specifically, the focus will be on the beneficial impact of applying some novel coating techniques to graphene-based electrodes and the significant improvement on the capacitance, cyclability and high-current rate/high power performance.