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### **Recent progress in nickel oxide-based electrodes for high-performance supercapacitors**

#### **Abstract:**

In recent years, interest in nanostructured electrode materials for use in supercapacitors has been on the rise. Nickel oxide has been reported as a good candidate for supercapacitor applications due to its high theoretical capacitance and low cost. However, its poor electrical conductivity has resulted in actual poor specific capacitance and cycling ability. Over the years, researchers have studied various techniques to modify the structure and composition of NiO with the aim of improving its electrochemical performance. In this review, we opine that NiO-based electrodes can be fabricated using different approaches and different composite forms in order to obtain cells of high efficiency and specific capacitances. We discuss the recent advances in NiO-based electrodes fabricated using different approaches.