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Abstract

Hydrous Ruthenium oxide (h-RuO₂) nanoparticles and its composite with multiwalled carbon nanotubes (h-RuO₂/MWCNT) were synthesized by a simple hydrothermal method and proved to have potential application as hybrid supercapacitor material. The h-RuO₂ and h-RuO₂/MWCNT were characterized for their physico-chemical properties by PXRD, BET surface area, Raman, SEM-EDS and TEM techniques. The electrochemical performance of the materials were investigated, specific capacitance (Cs) of h-RuO₂ and h-RuO₂/MWCNT estimated by their cyclic voltammetric studies were found to be 604 and 1585 F/g respectively

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