

WO₃ thin film prepared by magnetron sputtering for electrodes in Na-ion batteries

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WO₃ thin film coatings were successfully prepared by magnetron sputtering. Intercalation of Li and Na ions in the tungsten oxide coatings has been studied using electrochemical techniques. Structural characterization includes FT-IR, Raman, XPS and XRD measurements. ToF-SIMS analysis has been also performed in order to analyze the elements profile along the coating thickness. Electron microscopy evaluation of the cross section confirms the porous structure the coatings.