Nanostructured CuO directly grown on copper electrochemically: synthesis and characterization

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Abstract : Nanostructured CuO was directly grown on copper foam. The Cu foil was modified electrochemically by Cyclic voltammetry (CVs) a three electrode cell with Cu foam working electrode, platinum foil counter electrode and saturated calomel reference electrode in 5 M KOH solution,after reaction for Cu electrooxidation at room temperature. The shiny Cu foil surface turned to complete black after the reaction. The obtained electrode (denoted as CuO/Cu). The morphology and structure of the CuO were examined by X-ray diffraction spectroscopy.

Keywords : Copper substrate, cyclic voltammetry