

Manganese and copper doped CdS nanowire arrays preparation

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Manganese and copper doped CdS nanowires were obtained by the template technique in a two step process. In the first step metallic alloy CdMnCu nano and microwires were electrodeposited in ion track membranes with pore diameters in the range 150 nm-2 μm . In the following step the resulted nanowires were anodized in a sodium sulphide alkaline solution. Electron microscopy results show participation of the whole metallic wire in the anodization process; manganese and copper doped CdS wires are obtained. The composition of micro and nanowires was determined by energy dispersive X-ray analysis.