

عنوان مقاله:

Fabrication of FeCo / Cu / Au multilayer nanowires in the alumina template by electrodeposition method: growth rate of FeCo, Cu and Au layers

محل انتشار:

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خلاصه مقاله:

Array of gold-iron/cobalt-copper multilayer nanowires have been synthesized with a length of 1100 nm and a diameter of 70 nm. Arrays of multilayer nanowires were grown using direct current electrodeposition (DC) in a porous anodic aluminum oxide (AAO) template. Anodic aluminum oxide template with a thickness of 80 μm , as a template for making nanowires array using two-step anodizing method, is made of pure aluminum foil with oxalic acid. According to the SEM results, the growth rate of different layers and their thickness were determined. The growth rate of FeCo, Cu and Au layers in the template with pore diameters of 70 nm was determined to be 0.3, 0.61 and 0.33 nm / sec, respectively.

کلمات کلیدی:

Electrodeposition, Anodic Aluminum Oxide template, Multilayer Nanowires

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