

Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Synthesis and characterization of Cobalt Telluride Nanotubes¹

RAJENDRA DULAL, BISHNU DAHAL, KESHAB SAPKOTA, PARSHU GYAWALI, ADRIEN LERMECHIN, IAN L. PEGG, JOHN PHILIP, The Catholic University of America — Cobalt telluride nanotubes have been synthesized by means of a wet chemical synthesis. High quality cobalt telluride nanotubes were prepared through a two step process. Initially, tellurium nanowires were synthesized at 160 °C from TeO₃ and then cobalt precursor was injected into the solution containing tellurium nanowires at 180 °C. Cobalt diffusion into tellurium nanowires were not complete if the temperature was maintained below 180 °C. These CoTe nanotubes exhibit hexagonal crystal structure. They are ferromagnetic at 10 K.

¹NSF Grant ECCS-0845501

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Date submitted: 14 Nov 2013

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