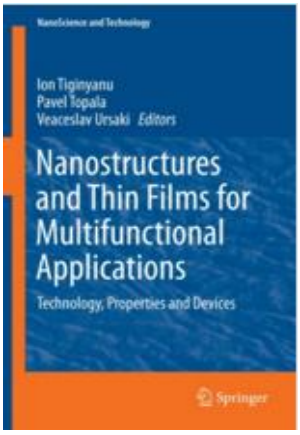

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Cobalt/Cobaltoxide Exchange Bias System for Diluted Ferromagnetic Alloy Films in Superconducting Spin-Valves

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Abstract

The present work reports on the influence of a Cobalt sublayer on a conventional exchange bias $CoO_x/Cu_{41}Ni_{59}$ interface. For superconducting spintronics the ability to exchange bias diluted ferromagnetic alloys is an essential building block, as they have advantages for the application in superconductor-ferromagnet spin-valve heterostructures. The magnetic properties are investigated by SQUID magnetometry and two separate strongly exchange biased signals are observed. The obtained results are compared with predictions of the domain state and spin-glass model of exchange bias.