THE STRUCTURE AND MAGNETOTRANSPORT PROPERTIES OF GRANULAR CoCu FILMS

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The structure, transport and magnetotransport properties of CoCu thin films have been studied. The films were prepared by flash evaporation on glass substrates. Structural observations were carried out by transmission electron microscopy and confirmed that the samples consisted of fine magnetic particles embedded in the non-magnetic Cu matrix. The influence of the chemical composition and annealing on both volume fraction and and grain size of granular phase was observed. The resistance and the longitudinal magnetoresistance were measured by a four-point ac method with magnetic fields up to 6 T at low temperature. Also an unusual magnetoresistance behaviour after cyclic remagnetization was found.