EXPERIMENTAL INVESTIGATION ON STRUCTURE, ELECTRICAL AND MAGNETIC PROPERTIES OF Sc-{Fe,Co}-Ge

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9.7 cm

The structure examinations, measuring of magnetic responsivity, magnetoresistivity and electrical resistivity amorphous and crystallized ternary Sc-{Fe,Co}-Ge thin films, vaporing on the ceramic substrates were carried out under different thermodynamic conditions. The object of investigations was an alloy with contents of transition metal 25 - 34 at. % , which have propensity to amorphization. The observed dates kind show particular specificity of the performance, which is bound to strong influence of presence RE atoms. The analysis magnetic measuring dates and transport phenomena in amorphous condensates Sc-{Fe,Co}-Ge, defines, with some approach, changes of properties, as modification of a band structure, which are characterized in much greater density of states in tails of band, than in the relevant amorphous alloys of germanide.

13.4 cm

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