

J.Fedotova, Yu.Kasiuk, A.Larkin, J.Przewoznik, Cz.Kapusta, Yu.Kalinin. Structure and resistivity of FeCoZr-dielectric granular nanocomposites sintered in mixed Ar+O₂ atmosphere // Proc. 54th IWK (Ilmenau, Germany, September 7-10, 2009) (2009).

The response of structure, electrical conductivity, magnetoresistivity and magnetic properties of (FeCoZr)_x(Al₂O₃)_{1-x} and (FeCoZr)_x(PZT)_{100-x} (17 at. % < *x* < 67 at. %) nanocomposite films on oxygen incorporation into the sputtering ambient was investigated using Mössbauer spectroscopy, resistivity and magnetoresistivity measurements. Change of Fe local states and carrier transport mechanisms due to incorporation of oxygen into FeCoZr-containing granular nanocomposites (*GNCs*) with two different matrixes are discussed with regard to the formation of complex semiconductive FeCooxide interlayers and/or shells possessing different types of conductivity as well as the specific properties of Al₂O₃ and PZT.

[Назад к списку публикаций](#)