

PHASE COMPOSITION AND ELECTRON STRUCTURE OF $(\text{Co}_{41}\text{Fe}_{39}\text{B}_{20})_{1-x}(\text{SiO}_2)_x$ NANOCOMPOSITES

Domashevskaya E. P., Storozhilov S. A., Stogney O. V.

Granulated $(\text{Co}_{41}\text{Fe}_{39}\text{B}_{20})_{1-x}(\text{SiO}_2)_x$ nanocomposites with different content of metal phase, determining nonlinear dependence of magnetoresistance from the composition, were investigated by X-ray diffraction and X-ray emission spectroscopy. The presence of silicide, sub-oxide and low-coordinated silicon phases has been found, that may be connected with nonlinear magnetoelectric properties.