Magnetocrystalline anisotropy of $Y_{n+1}(Co_{1-x}Fe_x)_{3n+5}B_{2n}$, n = 2,3

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Abstract: We report on a study of $Y_2(Co_{1-x}Fe_x)_7B_3$ and $Y_3(Co_{1-x}Fe_x)_{11}B_4$ by magnetic measurements and M??ssbauer spectroscopy. Fe substitution results in a drastic change of the magnetocrystalline anisotropy of the 3d sublattice. This effect is discussed in the framework of the individual site anisotropy (ISA) model.

Author Keywords: Magnetocrystalline anisotropy; Rare earth-transition metal compound

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