

Mössbauer investigations of magnetic system stratification in europium and thulium ferromanganites

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Abstract

Strontium-substituted ferromanganites of europium and thulium were investigated. Samples of $\text{Eu}_{0.65}\text{Sr}_{0.35}\text{Mn}_{1-x}\text{Fe}_x\text{O}_3$ and $\text{Tm}_{0.65}\text{Sr}_{0.35}\text{Mn}_{1-x}\text{Fe}_x\text{O}_3$ were prepared using ceramic processing. Based on the data from X-ray analysis, the samples with europium had a perovskite lattice, whereas the thulium samples were crystallized in an ilmenite lattice. Stratification of the magnetic subsystem was observed in the Mössbauer spectra of certain samples at $T \approx 300$ K. © Allerton Press, Inc., 2010.

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