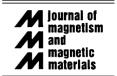


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Some effects of Fe/Mo disorder in double perovskite $Ba_2Fe_{1+x}Mo_{1-x}O_6$

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Abstract

Some effects of Fe/Mo disorder on magnetic and electrical properties in $Ba_2Fe_{1+x}Mo_{1-x}O_6$ have been investigated. As x increases from 0 to 0.5, saturation magnetization decreases from 3.5 to $1.8 \mu_B/f.u.$ with increasing of coercivity as well as remanence. The magnitude of magnetoresistance decreases from 26% for x = 0 to 15% for x = 0.5 with magnetic fields of 0.7 T at 20 K.

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