MAGNETIC PROPERTIES OF *GdMnAl* COMPOUND

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9.7 cm

Single phase, policrystalline samples of GdMnAl compound were obtained in the arc furnace. The samples were identified by X-ray powder diffraction. GdMnAl crystallize in the cubic $MgCu_2$ - type structure with a=7.887 Å. The XPS valence band spectrum showed that Mn 3d states are localized near the Fermi level. Measurements of magnetization versus magnetic field up to 150 kOe revealed paramagnetic character of GdMnAl and the electron paramagnetic resonance investigation showed strong bottleneck effect existing in this compound.

13.4 cm

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