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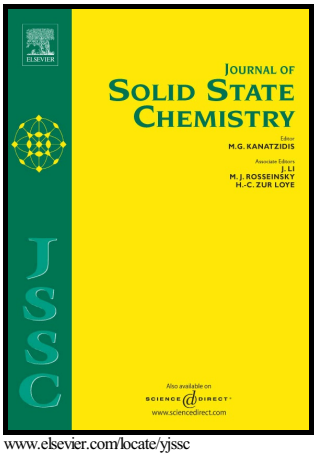

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Abstract

The crystal structure of new hexagonal $MgZn_2$-type {Ho, Tm}FeGa compounds (space group $P6_3/mmc$, N 194, $hP12$) has been established using powder X-ray diffraction studies. The magnetic properties of polycrystalline $MgZn_2$-type ErFeGa compound have been studied using bulk magnetization data. ErFeGa exhibits ferromagnetic ordering at T_C = 77 K and field sensitive antiferromagnetic-like ordering at T_m ~ 58 K in field of 100 Oe and T_m ~ 10 K in field of 5 kOe. The