INFLUENCE OF DOPING WITH Cu, Au AND Ga ONTO THE MAGNETIC SUSCEPTIBILITY OF SINGLE CRYSTALS OF $HgCr_2Se_4$

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Magnetic susceptibilities of single crystals of $HgCr_2Se_4$ doped with Cu (7 %), Au (2 %) and Ga (8 %) were measured in the temperature range of 4.2 K ÷ 125 K in the weak stationary magnetic fields and for different frequencies of the weak alternating magnetic fields. For the crystals with Ga and Cu a magnetic anisotropy was observed. All the three doped crystals exhibit a very strong dependence of the imaginary part of susceptibility on the frequencies of the fields applied.

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