



Resonance impurity radiation in CuGaS_2 crystals

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Abstract

In this work the reflectivity spectra of the CuGaS_2 crystals have been investigated in the EIIc polarization and the absorption spectra were studied in the $E \perp c$ polarization at the 10K. The parameters of the excitons and the band gaps have been determined. The low temperature (10K) luminescence spectra of the CuGaS_2 crystals have been investigated under the excitation by 4880Å and 4965Å Ar^+ laser lines. A model of optic transitions between the levels of excitons bound on neutral donor is proposed.