



Energetic band structure and optical spectra of CdGa_2Se_4 , CdGa_2S_4 and CdAl_2S_4 crystals

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[https://doi.org/10.1016/0921-4526\(94\)00918-L](https://doi.org/10.1016/0921-4526(94)00918-L)

Abstract

Reflectivity spectra of CdGa_2Se_4 , CdGa_2S_4 and CdAl_2S_4 crystals have been investigated in the range 1–6 eV for the polarization $E \parallel c$ and $E \perp c$ at 300 and 77 K. The valence band splitting caused by spin-orbital interaction and by crystal field are calculated for the point $k = 0$. The band model has been built in actual points of the Brillouin zone, Γ , N, T, P.