



Semiconductors

1997, Volume 31, Issue 3, pag. 271-275

Lattice vibrations in CuInSe_2 crystals

Syrbu N. N., Bogdanash M., Tezlevan V. E.

<https://doi.org/10.1134/1.1187125>

Abstract

Infrared reflection spectra of CuInSe_2 crystals are investigated for the polarizations $E \parallel c$ and $E \perp c$. Contours of the reflection spectra are calculated and phonon parameters and dielectric constants are determined. The effective charges of the Cu, In, and Se ions in these materials are determined. The two-phonon absorption spectra in CuInSe_2 are investigated and the absorption bands are identified from the selection rules.