



Energy band structure and optical constants of ZnAs₂ crystals

I. G. Stamov, N. N. Syrbu, V. V. Ursaki, A. V. Dorogan

https://doi.org/10.1016/j.optcom.2012.02.047

Abstract

The fine structure of the Fabry–Perot interference as well as the interference of ordinary and extraordinary waves is investigated in $ZnAs_2$ crystals. ε_1 , ε_2 , n and k optical constants are calculated in a wide spectral range of 0.4–12eV. The anisotropy of electronic transitions at the minimum energetic interval of the band structure is investigated. The interband energetic intervals are determined deep into the absorption band. The observed transitions are discussed taking into account the available data from the band structure calculations.