



Infrared lattice vibration spectra of tetragonal ZnP_2

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[https://doi.org/10.1016/0038-1098\(83\)90291-0](https://doi.org/10.1016/0038-1098(83)90291-0)

Abstract

Infrared reflectivity spectra of tetragonal ZnP_2 are measured in the frequency range from 40 to 600 cm^{-1} for both polarization directions $E \perp c$ and $E \parallel c$. The parameters of 9 E modes and 4 A_2 modes are determined by a dispersion analysis of the spectra. Three additional A_2 modes are detected by infrared transmission measurements. The results obtained are compared with previous Raman scattering and two-phonon combination mode spectra.