

# Far Infrared and Raman Optical Study of CdInGaS<sub>4</sub>, CdIn<sub>2</sub>S<sub>4</sub>, HgInGaS<sub>4</sub> and CdIn<sub>2</sub>S<sub>2</sub>Se<sub>2</sub> Crystals

Syrbu N. N., Radautsan S. I., Cretu R. V.,  
Tezlevan V. E., Moldoveanu N. A.

<https://doi.org/10.1002/crat.2170310308>

## Abstract

Abstract Raman and infrared reflectivity spectra of CdInGaS<sub>4</sub>, CdIn<sub>2</sub>G<sub>4</sub>, HgInGaS<sub>4</sub>, and CdIn<sub>2</sub>S<sub>2</sub>Se<sub>2</sub> crystals have been investigated. The fiindamental phonon parameters, the limiting dielectric constants  $\epsilon_0$  and  $\epsilon_\infty$  and the reflectivity spectrum contours have been calculated using classical dispersion relations.