



1993, Volume 32, Number S3, p. 561

Effects of the Cations on the Raman Spectra of Sulphur Defect Chalcopyrites

I. M. Tiginyanu, P. P. Lottici, C. Razzetti, S. Gennari

<https://doi.org/10.7567/jjaps.32s3.561>

Abstract

We report the Raman spectrum of defect chalcopyrite compounds CdAl_2S_4 , CdGa_2S_4 , ZnGa_2S_4 and of the isostructural mixed compounds $\text{Zn}_{0.7}\text{Cd}_{0.3}\text{Al}_2\text{S}_4$, $\text{ZnGa}_{0.2}\text{Al}_{1.8}\text{S}_4$ and $\text{ZnGa}_{0.8}\text{Al}_{1.2}\text{S}_4$. The role of the cations on the vibrational dynamics is discussed in terms of simple models.