

## **Vibrational modes of $\text{CuAl}_{1-x}\text{Ga}_x\text{Se}_2$ solid solution**

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### **Abstract**

In the present paper new results of Raman scattering of  $\text{CuAl}_{1-x}\text{Ga}_x\text{Se}_2$  crystals by the unpolarized light at 77 K are presented. IR reflectivity spectra of this solid solution have been investigated for polarizations  $E_{\parallel c}$  and  $E_{\perp c}$  at 300 K. Reflectivity spectra contours were calculated and phonon parameters and dielectric constant were determined.

### **References**

1. W. H. Koschel, V. Hohler, A. Romber and I. Baars, *Solid St. Com.*, vol. 13, pp. 1011, 1973.
2. W. H. Koschel and M. Bettini, *Phys. St. Sol. (b)*, vol. 72, pp. 729, 1975.
3. I. V. Bondar, A. G. Karoza and G. F. Smirnova, *Phys. St. Sol. (b)*, vol. 84, pp. k65, 1977.
4. A. M. Andriesh, N. N. Syrbu, M. S. Iovu and V. E. Tezlevan, *Phys. St. Sol. (b)*, vol. 187, pp. 83, 1995.