

A NEW LiNH_4SO_4 CRYSTAL WITH AN ISOTROPIC POINT

V.Yo. Stadnyk, M.O. Romanyuk, R.S. Brezvin

Ivan Franko National University of L'viv
(8, Kyrylo i Mefodiy Str., Lviv 79005, Ukraine;
e-mail: vasylstadnyk@ukr.net)

S u m m a r y

LiNH_4SO_4 crystals of α -modification were grown up, and the spectral dependences of their refractive indices and birefringence are studied. The intersection of $n_i(\lambda)$ curves is found, which testifies to the inversion of birefringence sign ($\Delta n_y = 0$) at the light wavelength $\lambda_0 \approx 683$ nm at room temperature. For higher temperatures, this point shifts toward the short-wave spectral range. The temperature dependence of the angle between the optical axes is examined, and the change of the optic axial plane at the transition into the isotropic state is demonstrated.