



Far-infrared reflectivity and Raman study in the ferroelectric-ferroelastic crystal of tris(dimethylammonium) nonabromodiantimonate.

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Streszczenie

A study of far-infrared ($5\text{--}400\text{ cm}^{-1}$) polarized reflectivity spectra and preliminary Raman measurements of the ferroelectric crystal of DMABA, $[\text{NH}_2(\text{CH}_3)_2]_3\text{Sb}_2\text{Br}_9$, were made in the temperature range $80\text{--}300\text{ K}$. The paraelectric-ferroelectric phase transition occurring at $T_c = 164\text{ K}$ in this crystal has an impact on low-frequency phonons. Oscillator strengths, induced dipole moments and mode dampings were determined as a function of temperature. Low-frequency dielectric parameters were estimated from infrared reflectivity spectra of DMABA.

Adres publiczny

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