# Compositional and pressure effects on the phase transition in ferroelectric $NH_4H(ClH_2CCOO)_2$.

Autorzy

M. Zdanowska-Frączek

Ryszard Jakubas

P. Czarnecki

Rok wydania

2005

Czasopismo

Ferroelectrics

Numer woluminu

316

Strony

97-101

DOI

10.1080/00150190590963192

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The effects of pressure and of the substitution of $Rb^+$ for the ammonium cations on the dielectric responce in $NH_4H(ClH_2CCOO)_2$ (AHCA) crystals have been studied using electric permittivity measurements. The transition temperature ($T_c$) decreases with the pressure increasing up to 800 MPa and pressure coefficient $dT_c/dp = -1.4*10^{-2}$ [K/MPa] has been experimentally determined. In mixed crystals with different $Rb^+$ admixture proportion, $T_c$ lowers considerably and additional electric permittivity anomaly is clearly evidenced. The results are discussed assuming a model which combines polarizability effects related to the heavy ion units with the pseudospin tunnelling model.

Adres publiczny

https://doi.org/10.1080/00150190590963192