

^{35}Cl NQR and ^1H NMR studies of molecular motions in guanidinium salt of chloroacetic acid.

Autorzy

M. Zdanowska-Frączek

M. Grottel

Ryszard Jakubas

Rok wydania

1998

Czasopismo

Zeitschrift für Naturforschung
Section A: A Journal of
Physical Sciences

Numer woluminu

53a

Strony

484-487

DOI

10.1515/zna-1998-6-733

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

Multinuclear NQR and NMR techniques have been applied in order to study the molecular dynamics in $[\text{C}(\text{NH}_2)_3](\text{ClH}_2\text{CCOO})$. The ^{35}Cl NQR frequency was measured over a wide range of temperature. The experimental results were described by using the theories of Bayer and Brown which take into account the torsional oscillations of the CClH_2 -group of the anion. A study of the proton NMR second moment as well as relaxation times T_1 and T_2 performed in a wide temperature range revealed an onset of the guanidinium cation reorientation around its two-fold symmetry axis. Activation parameters for this motion were determined.

Adres publiczny

<https://doi.org/10.1515/zna-1998-6-733>