

Dielectric relaxation of 1-bromoadamantane.

Autorzy

Magdalena Kosmowska

Jolanta Tarasiewicz

Hubert A. Kołodziej

Rok wydania

2012

Czasopismo

Journal of Molecular
Structure

Numer woluminu

1016

Strony

8-12

DOI

10.1016/j.molstruc.2012.02.030

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

Electric properties were examined on polycrystalline samples of 1-bromoadamantane in the temperature range from 273 K to 333 K and the frequency range from 10 MHz to 1000 MHz. The frequency and temperature dependence of electric properties were analysed using the Cole–Cole model of dielectric relaxation. The activation energy which describes the reorientation of 1-bromoadamantane, in the orientationally disordered phases, under electric field has been calculated. TGA and DSC measurements confirmed the presence of phase transitions. The linear thermal expansion measurement evidences that in the orientationally disordered phase (crI) the changes in the shape of the crystal are isotropic.

Słowa kluczowe

dielectric relaxation, plastic crystal, electric properties, DSC, TGA, Linear thermal expansion measurements

Adres publiczny

<https://doi.org/10.1016/j.molstruc.2012.02.030>

Strona internetowa wydawcy

<http://www.elsevier.com>