Vibrational spectra of liquid 1-propanol.

Autorzy

Natalia Michniewicz

Andrzej S. Muszyński

Władysław Wrzeszcz

Mirosław A. Czarnecki

Barbara Golec

Jerzy P. Hawranek

Zofia Mielke

Rok wydania

2008

Czasopismo

Journal of Molecular Structure

Numer woluminu

887

Strony

180-186

DOI

10.1016/j.molstruc.2008.03.020

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The spectrum of the complex refractive index in the 12,000–100 cm^{-1} region was determined for liquid Propan-1-ol from transmission studies. In the MIR region, very thin layers with thicknesses of a few micrometers had to be used to obtain reliable data. Liquid Propan-1-ol is totally associated via hydrogen bonds. To obtain information on the aggregation low-temperature IR spectra in argon matrixes were recorded. An attempt to elucidate the structure of formed adducts was made. FT-Raman spectra of the liquid are also reported. Identifications for numerous bands observed in the liquid phase were proposed basing on literature data and results of DFT calculations.

Słowa kluczowe

Propan-1-ol, Thin film IR spectra, IR dispersion, Raman spectra, Hydrogen bonding

Adres publiczny

https://doi.org/10.1016/j.molstruc.2008.03.020

Strona internetowa wydawcy

http://www.elsevier.com