Do intermolecular interactions reflect in sound velocity?.

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Rok wydania

2005

Czasopismo

Journal de Physique IV France

Numer woluminu

129

Strony

15-19

DOI

10.1051/jp4:2005129004

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

A new attempt in acoustical investigations of interactions between components of liquid solution is presented and tested. It was shown, basing on very simple assumptions and relatively simple experiment, that changes in the concentration dependences of the adiabatic compressibility (calculated from sound velocity and density data) are influenced by intermolecular interactions occurring in solutions. However, it was also shown that these changes are not very strong and the strongest are caused by processes, where the total number of ions and/or their charge density are changing. We also suggest that for some weak association-like processes the compressibility can remain almost undisturbed and, consequently, not sensitive for them.

Adres publiczny

https://doi.org/ 10.1051/jp4:2005129004