INFLUENCE OF PRESSURE ON COLLECTIVE TRANSPORT IN SIMPLE LIQUIDS

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S u m m a r y

The values of the effective diameter of a molecule are calculated within the model of hard spheres with the use of the Carnahan–Starling equation of state, basing on the analysis of the data on the molecular dynamics of the self-diffusion of liquid argon. It is shown that the contribution of the collective component of the self-diffusion coefficient in the high-pressure range amounts approximately to 76%.