STUDY OF THE FUNCTIONAL FORM OF INTERMOLECULAR POTENTIAL ON THE BASIS OF SELF-DIFFUSION OF LIQUID MOLECULES

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S u m m a r y

On the basis of researches of the temperature dependence of one-particle contributions to the self-diffusion coefficient, the fitting values of the slope parameter of the potential function have been calculated. The theoretical values of the self-diffusion coefficient of liquid argon coincide with both experimental data and the results of a computer simulation obtained at certain values of the slope parameter, with the auto-correlation function of the molecular velocity being approximated best by a quadratic polynomial.