

NONSINGULAR EXPRESSIONS FOR PAIR
CORRELATION FUNCTIONS OF A FINITE-SIZE
MULTICOMPONENT LIQUID SYSTEM

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S u m m a r y

The method that allows one to find nonsingular expressions for the pair correlation functions of a finite-size multicomponent liquid system has been proposed. The system with the geometry of a plane-parallel layer has been considered as an example. For this system, we find the asymptotic expressions for the pair correlation functions of density fluctuations and then we use a special iteration procedure to get the next approximation for them. These expressions do not involve singularities at the zero point, in contrast to the asymptotic ones.