

CRITICAL PHENOMENA IN FILLED LIQUID SYSTEMS

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S u m m a r y

We consider the filled liquid system at a close vicinity of the critical point. To find its pair correlation function and the correlation length of order parameter (density) fluctuations, we use the Ornstein—Zernike (OZ) approximation. We show that the presence of macroscopic impurities causes shifts of the critical temperature and density in the system, and even a low impurity concentration can cause significant changes of critical parameters. We also find the analogy of the filled liquid system with a finite-size system.