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Crystallization of paracetamol of rhombic form

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Abstract

Production of rhombic shape paracetamol has been reported. The method of vacuum evaporation of powder from crystals of monoclinic modification with subsequent condensation of vapor on the copper substrate is used for synthesis.

It has been found that the process is complex and done in the form of superposition of two phase transitions: phase transition of the first order with changing the density and the second order – the one with changing structural order. Second order phase transition occurred in the form of smeared phase transition with the formation of intermediate phase, irreversibly consumed in the process of phase transformation. The data of differential scanning calorimetry, X-ray phase analysis and microphotography is given.