Investigation of phase equilibria in Ga–InBi system

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Abstract

Phase equilibria in the Ga-InBi system is investigated by DSC and scanning electron microscopy. It is established that the section on the Ga-Bi-InBi phase diagram is non-quasibinary. We found two of invariant equilibria: eutectic $L \leftrightarrow (Ga) + (Bi) + InBi$ at 24.3 ± 0.5 °C and monotectic $L'' \leftrightarrow L' + (Bi) + InBi$ at 98.4 ± 0.5 °C. The position of the liquid phase separation boundary in the Ga-InBi system is defined more exactly.