

MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM (A2)
Science Results from Ground Based Research (4)

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GROWTH OF CZT CRYSTAL BY THE THM ABOARD THE FOTON-M4 SPACECRAFT.

Abstract

Cd_{1-x}Zn_xTe (CZT) with the ZnTe content (x) of 8-15CZT crystal with 32 mm in diameter was successfully grown by the Travelling Heater Method (THM) from Te-rich solution with application of a rotating magnetic field. The translation speed was 0.3 mm/h, estimated growing interface temperature was about 780C. The crystal grown has a large single crystal part with good axial and radial composition homogeneity. Optical and electrical properties of the flight crystal are given in comparison with those for the reference crystal, grown under terrestrial conditions at the same technological regime.