

EFFECT OF PRE-GROWTH ANNEALING
ON THE PROPERTIES OF NONPURIFIED
CADMIUM TELLURIDE SINGLE
CRYSTALS OBTAINED
BY SUBLIMATION
METHOD

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S u m m a r y

The effect of high-temperature annealing of a nominally undoped CdTe charge under dynamic vacuum conditions on the electrical and optical properties of single crystals grown from this charge with the use of a modified physical vapor transport method has been examined. It is shown that the annealing results in the disappearance or an extinction of chlorine-related lines in the low-temperature photoluminescence spectra and the absorption bands in the long-wavelength absorption-edge spectra of the crystals concerned, as well as in a drastic fall of their resistivity. The observed alterations are explained by a removal of the Cl impurity during the annealing owing to a high volatility of chlorine compounds.