

Transmission Electron Microscopy of CdTe Single Crystals

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Abstract: Single crystals of CdTe were grown by the sublimation and condensation technique in a silica, under an argon gas flow, and also by allowing cadmium telluride transport within an evacuated silica ampoule. X-ray powder diffraction patterns prepared from each group of grown crystals showed the crystal structure of the examined samples to be zinc-blend face-centred cubic. Transmission electron microscopy of CdTe single crystals confirm the crystal structure to be face-centred cubic with $a = 6.5(3) \text{ \AA}$, and space group $F\bar{4}3m$.

Key Words : *Transmission electron microscopy, crystal grow, sublimation and condensation technique, crystal structure*