

## Effects of Annealing on the Crystal Structure of Polycrystalline CdS Thin Films

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**Abstract:** CdS thin films were deposited by thermal evaporation in a vacuum of  $\sim 10^{-5}$  torr at room temperature. Samples were subjected to annealing in the range of temperatures 100-300 °C for 1 hour in air. The crystal structure of CdS films was characterized by XRD technique. Only hexagonal phase with the preferred (002) plane was found in CdS films.

**Keywords:** *CdS, Annealing, Crystal Structure, Vacuum Evaporation*