

INFLUENCE OF CONJUNCTION
LAYERS ON PHOTOELECTRIC
PROPERTIES IN FILM POLYCRYSTALLINE
HETEROSYSTEMS ON THE CADMIUM
TELLURIDE BASE

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S u m m a r y

By comparing the photoelectric properties of the film heterosystems ITO/CdS/CdTe and ITO/CdTe, we study the influence of conjunction layers on the photoelectric processes in the base polycrystalline cadmium telluride layers. It is shown that the efficiency of the photoelectric processes is determined by the interphase interaction in CdTe-ITO or CdTe-CdS. The availability of a layer of cadmium sulphide is not a necessary condition for the existence of a separating barrier, but it determines the efficiency of photoelectric processes in ITO/CdS/CdTe film heterosystems. The intensification of photoelectric processes in such heterosystems as compared with ITO/CdTe solar cells is stipulated by the presence of variable gap layers of solid solutions $\text{CdS}_x\text{Te}_{1-x}$ ($0 < x < 0.2$) on the interphase surface CdS/CdTe. A simple optical method for determination of the thickness of such layers is offered.