

## ANALYSIS OF THE DIODE CHARACTERISTICS OF THIN FILM SOLAR CELLS BASED ON CdTe

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### S u m m a r y

A physical approach to the optimization of photoelectric processes in thin film multilayer systems has been developed. By means of a simulation of the influence of light-diode characteristics on the efficiency factor, it is concluded that the optimization of the photoelectric processes in ITO/CdS/CdTe/Cu/Au film solar cells is mainly determined by two competing physical mechanisms: an increase in the efficiency of the process of distribution of nonequilibrium charge carriers and a reduction in the efficiency of their generation, as the CdS layer thickness grows.