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OPTOELECTRONIC PROPERTIES OF PURE AND AL-DOPED CdS FILMS

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Polycrystalline thin films of cadmium sulphide have received considerable attention because of their potential applications in many semiconducting devices. Pure and Al-doped CdS films were deposited on glass substrates by a chemical bath technique. Current-voltage characteristics of the films have been studied. Study of the spectral distribution of the absorption coefficient from 400 nm to 700 nm shows a higher absorption coefficient for the Al-doped films compared to the pure films. Variation of the photocurrent with incident light intensity shows that the Al-doped films have a higher photoresponse. Results obtained are in general agreement with those reported in literature for CdS films prepared by different techniques.

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