

PREPARATION OF ELABORATION AND CHARACTERIZATION OF CdZnS THIN FILMS DEPOSED BY CHEMICAL BATH DEPOSITION

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Abstract : This work involves the development of thin films of $\text{Cd}_x\text{Zn}_{1-x}\text{S}$ on glass substrates for photovoltaic applications, solar cells. The thin buffer CdZnS was synthesized by chemical bath (CBD), with different deposition protocols, studies the parameters influencing these layers as the temperature, deposition time and pH. The structural and optical properties of various thin films are studied and in relation to the photovoltaic performance. This work is a contribution in the field of thin films, to revive the CdZnS a new air of research and its introduction to nanotechnology. The different structural, morphological and optical analyzes yielded very interesting results.

Keywords : CdZnS, chemical bath, Thin films, solar cells.