ods, spray pyrolysis is one through which the films can be coated for large area. In this work, the structural and optical properties of CdO2 thin films deposited on glass and silicon wafer

This article presents a comprehensive investigation into the synthesis and characterization of CdO/CdS thin film heterojunctions. The objective is to elucidate the interplay ...

In this study, silicon-functionalized carbon quantum dots (Si-CQDs) were synthesized using a one-step hydrothermal method, and their optical properties, morphological structure, and ...

Thin-film photovoltaic (PV) technologies address crucial challenges in solar energy applications, including scalability, cost-effectiveness, and environmental sustainability. This paper ...

Un-doped and (Sn, Sb, Se) doped (CdO) cadmium oxide was prepared as a thin film (500nm). (Cd) thin films was deposit under vacuum (10 -5 mbar) on Si wafer and glass substrate. ...

Utilizing the advantages of both methods, we propose a pathway to obtaining high-quality CdO/CdS/ZnO heterostructures that are efficient, scalable, and accessible for broader applications in solar energy.

The characteristics and variation patterns of the total monthly power generation and typical monthly daily power generation are analyzed. Furthermore, the correlation between power generation performance ...

Here, we demonstrate the realization of a bandgap gradient in Cd (Se,Te) thin-film solar cells by introducing a Cd (O,S,Se,Te) region with the same crystal structure of the absorber...

Through this work, we propose a pathway to unlock the full potential of Zn-doped CdO thin films, offering a promising solution to the limitations of pure CdO and advancing ...

This research work is limited to the growth and characterization of CdO thin films grown on glass substrate using SILAR technique. The deposition of CdO will be carried out using ammonia (NH 3) ...

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