

## Supporting Information

# Thermally Evaporated Copper Iodide Hole-Transporter for Stable CdS/CdTe Thin-Film Solar Cells

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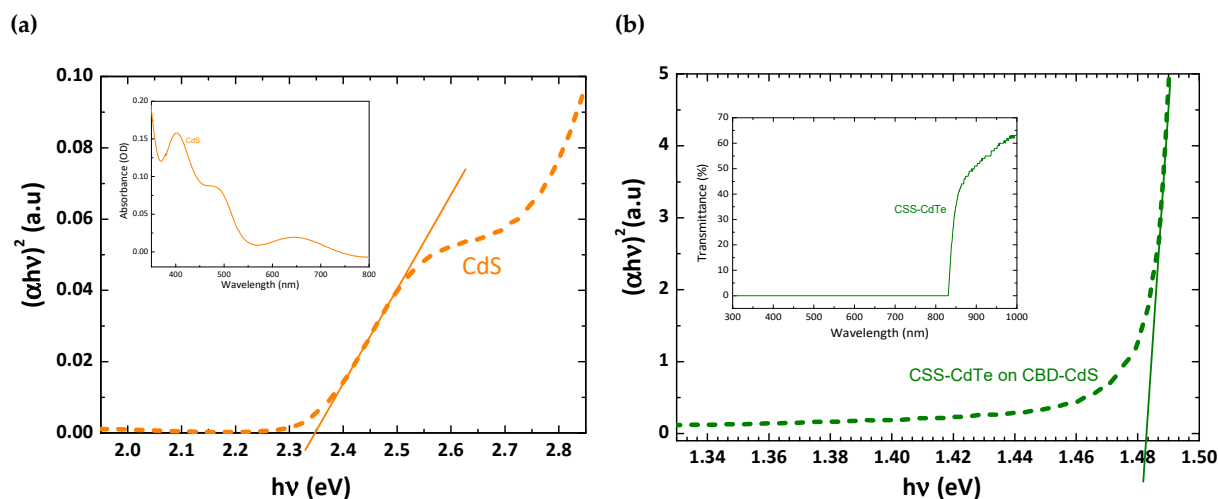
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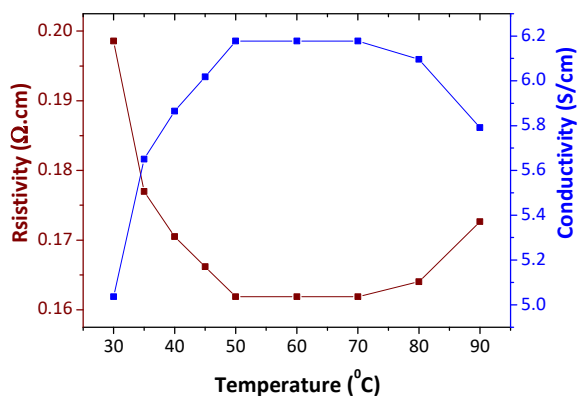
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**Figure S1:** Optical absorption spectra of (a) Chemically deposited CdS film and (b) closed space sublimated CdTe film.



**Figure S2:** Temperature dependant electrical property of thermally evaporated CuI.

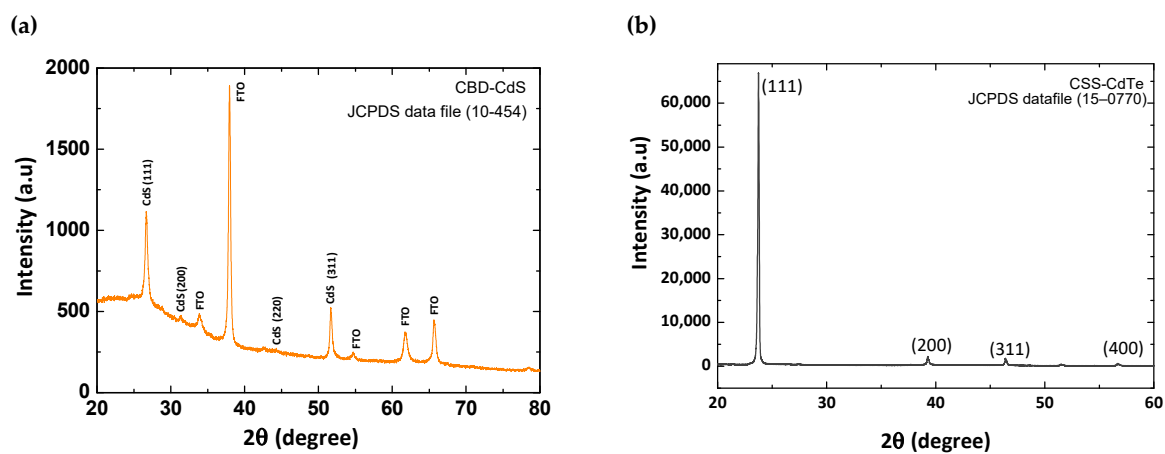


Figure S3: XRD pattern of (a) CBD-CdS and (b) CSS-CdTe.

Table S1: Average crystallite size of CBD-CdS and CSS-CdTe.

Film	Average crystallite size (nm)
CBD-CdS	18.20
CSS-CdTe	45.47

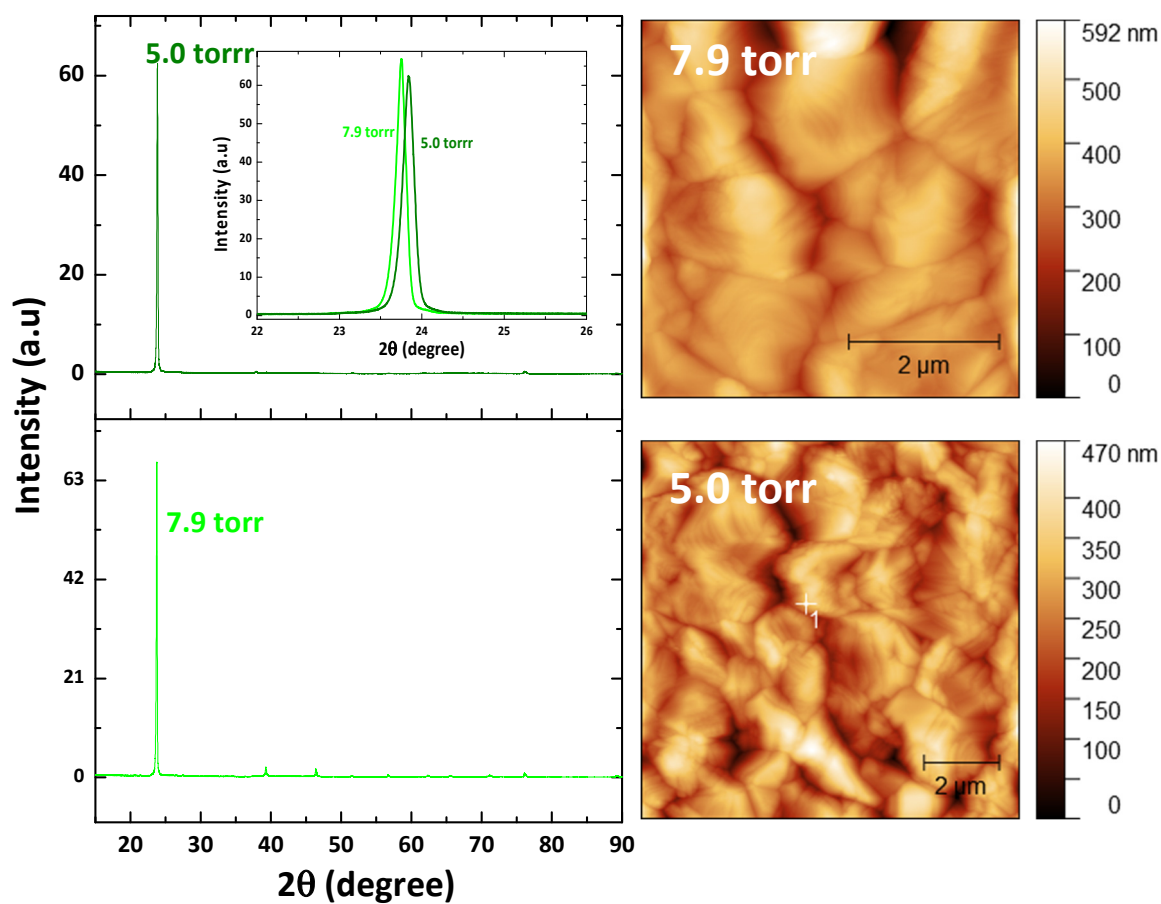


Figure S4: XRD pattern and AFM Topography images of CSS-CdTe with different fabrication parameter

Table S2: Structural parameters of CSS-CdTe with different fabrication parameter.

Vacuum Pressure	Lattice Parameter (Å)	Crystallite size D (nm)	Micro strain $\epsilon$ ( $10^{-3}$ )
7.9 torr	6.49	50.62	3.33
5.0 torr	6.46	45.47	3.69

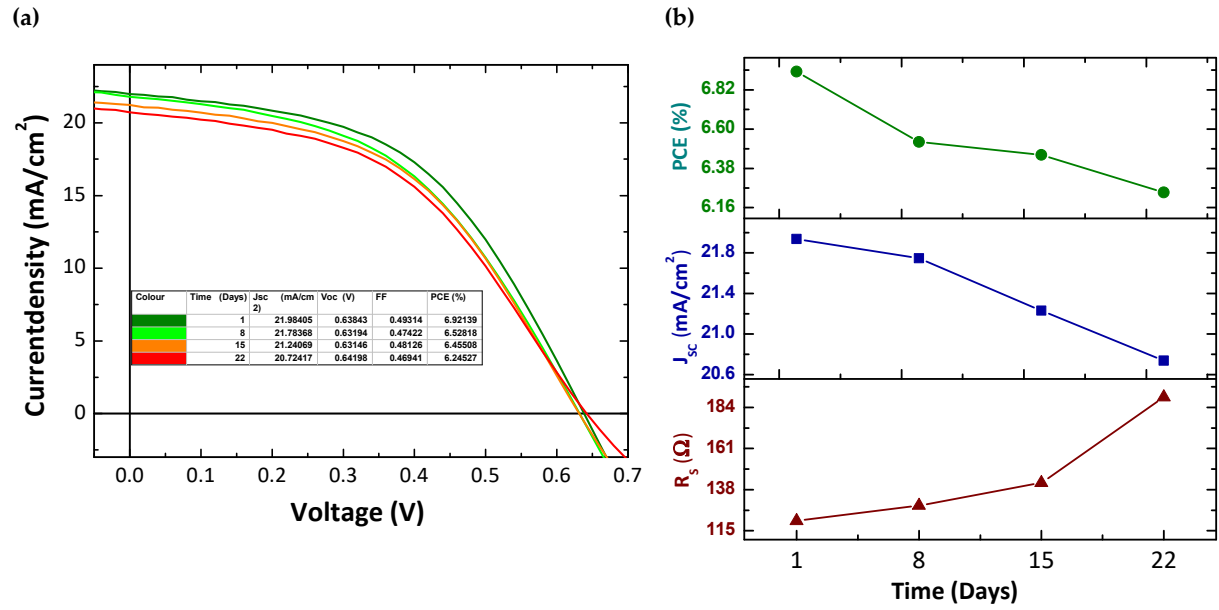


Figure S5: (a) J-V characteristic and (b) Variation of photovoltaic parameters of CdS/CdTe/CuI/Au solar cells with time.