

Substrate Structured Bournonite CuPbSbS_3 Thin Film Solar Cells

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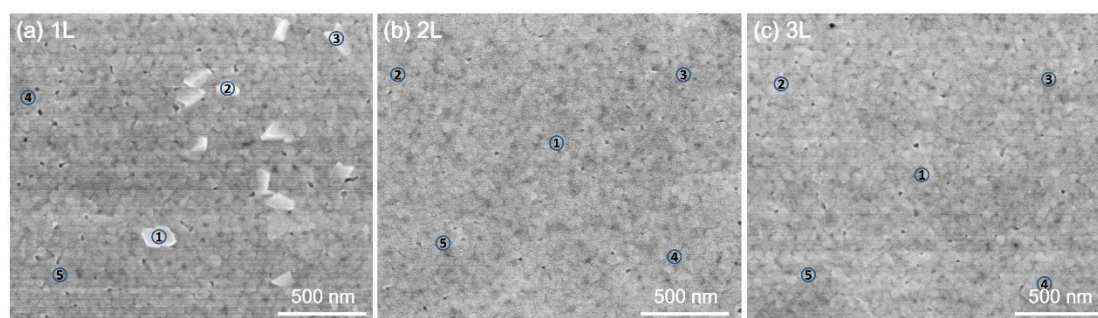


Figure S1. SEM images of CuPbSbS_3 films for EDS test: (a) 1 layer (1L), (b) 2 layers (2L) and (c) 3 layers (3L).

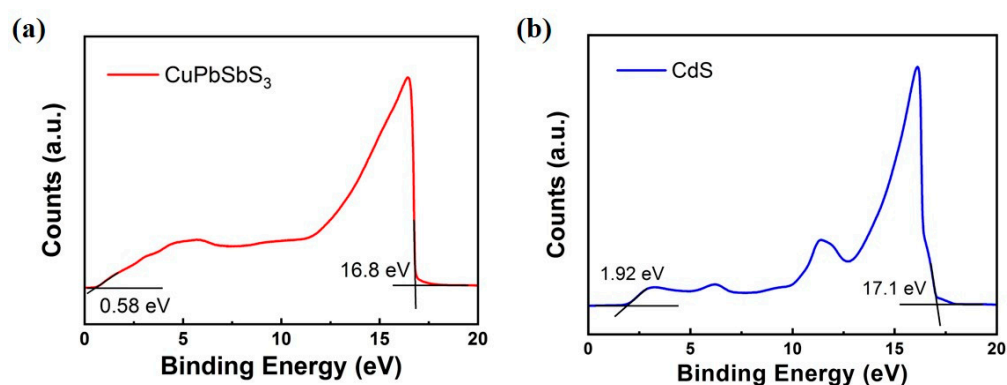


Figure S2. UPS results of (a) CuPbSbS_3 and (b) CdS thin films.

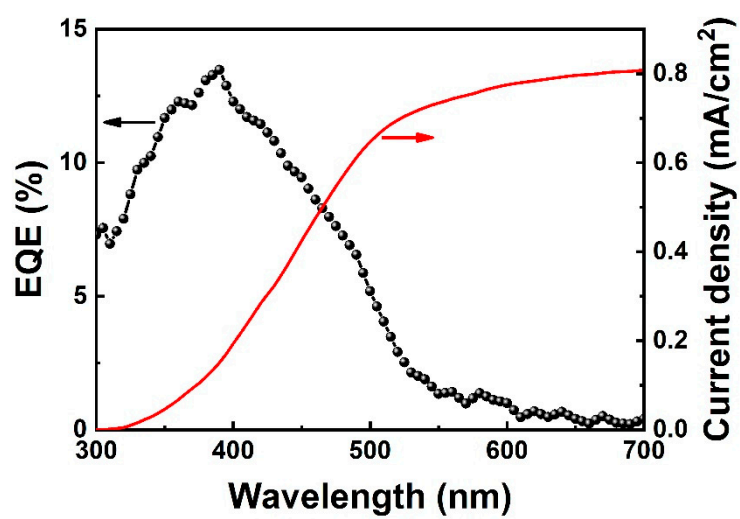


Figure S3. EQE spectrum of CuPbSbS₃ thin film solar cell.

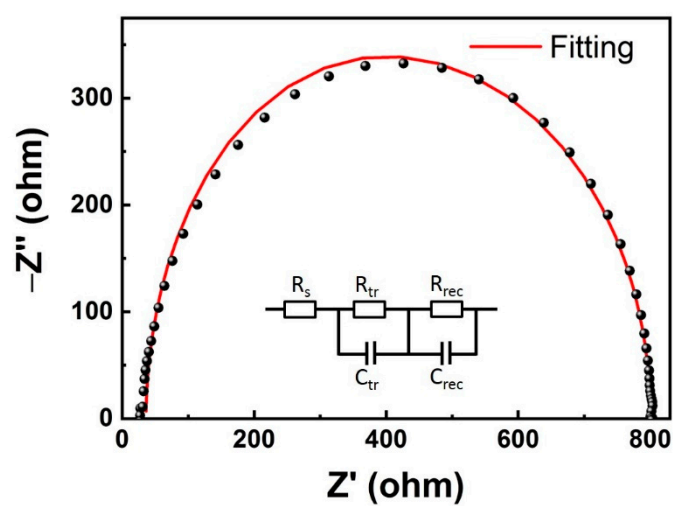


Figure S4. Electrochemical impedance spectroscopy measurement of CuPbSbS₃ thin film solar cell (inset equivalent circuit diagram).

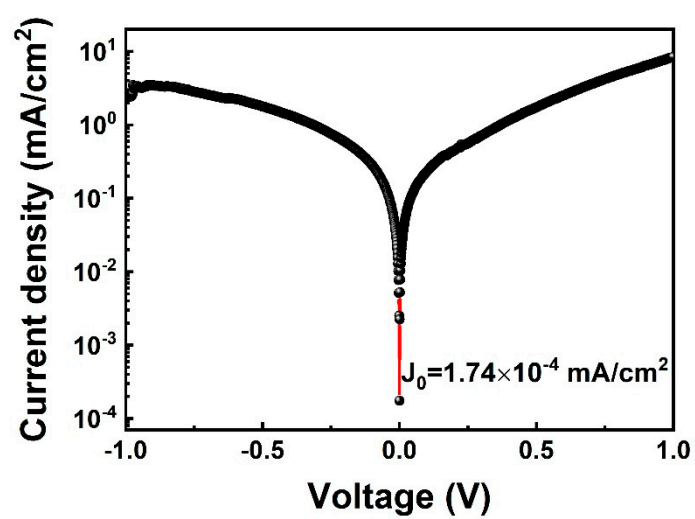


Figure S5. Dark J-V characteristic of CuPbSbS₃ thin film solar cell.

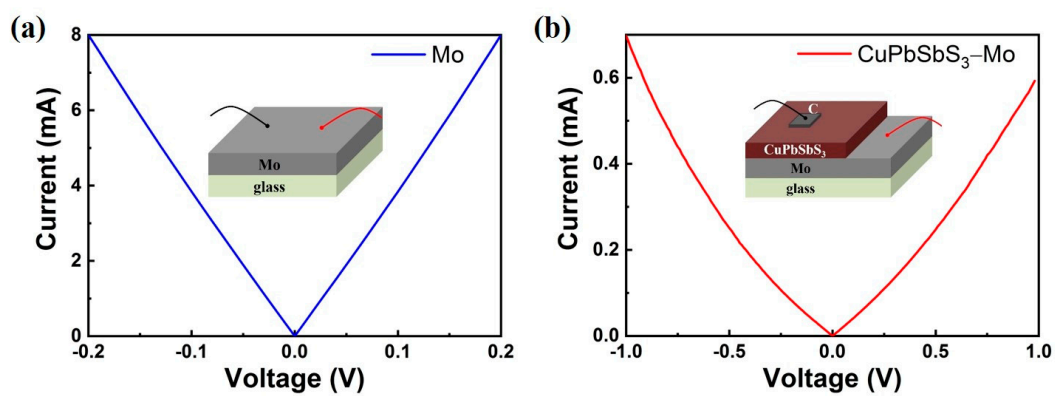


Figure S6. I-V Curves of (a) Mo and (b) CuPbSbS₃/Mo structures (inset resistance test modes).