

Supplemental Information

Quantitative Cathodoluminescence Mapping: CdMgSeTe Thin Film Case Study

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Figure S1. Transmission spectra of (black) Mg-435 and (red) Mg-450

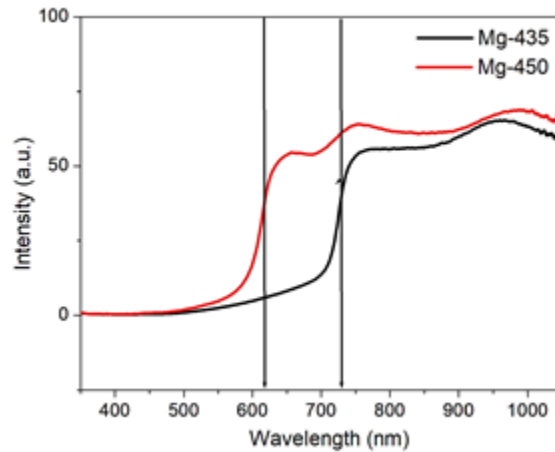


Figure S2. SEM images of $\text{Cd}_{1-x}\text{Mg}_x\text{Se}_y\text{Te}_{1-y}$ films at different sublimation temperatures with magnification of 20kx and accelerating voltage of 5kv

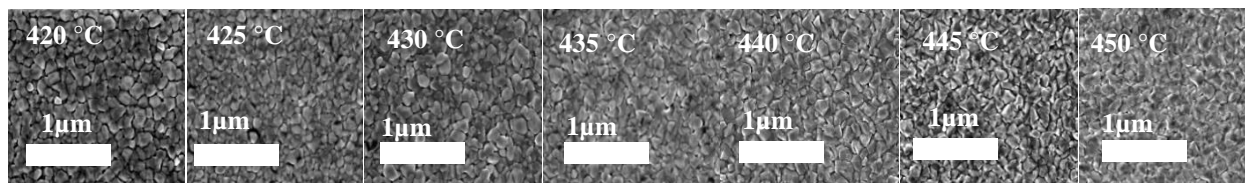


Figure S3. CL spectra of (left) Mg-435 and (right) Mg-450 with Gaussian fitting

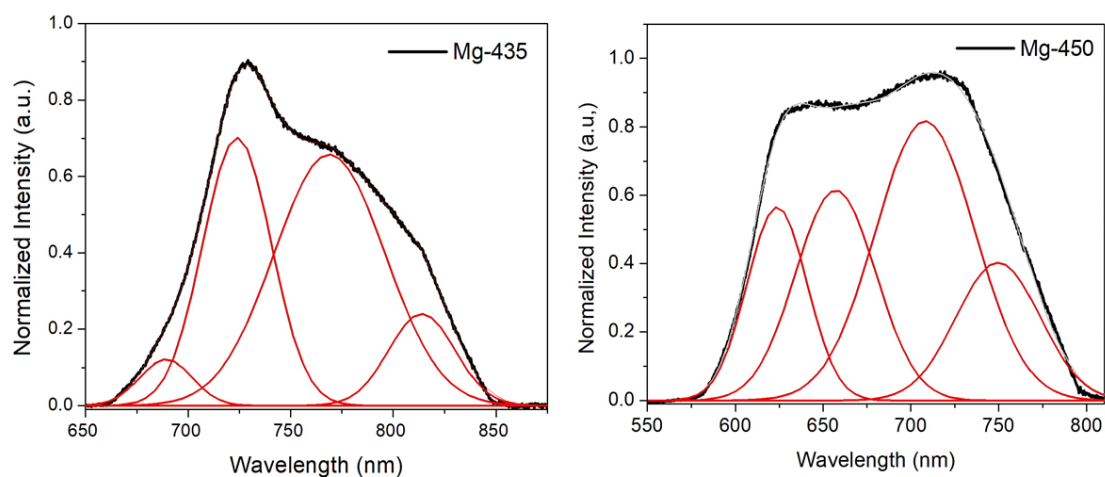
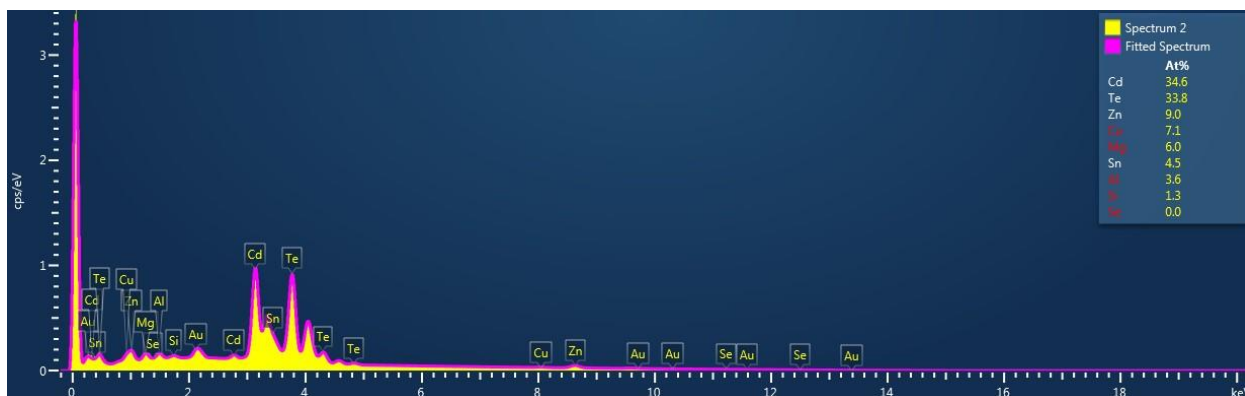


Figure S4. EDS spectra from Mg-435 (**top**) and Mg-450 (**bottom**). Sn, Cu, Zn, Al, Si signals from the back contacts and sample preparation. Mg and Se overlap and no independent Se fitting is possible or attempted. Cd, Te, Mg signals are not qualitatively accurate, but are within expect range.



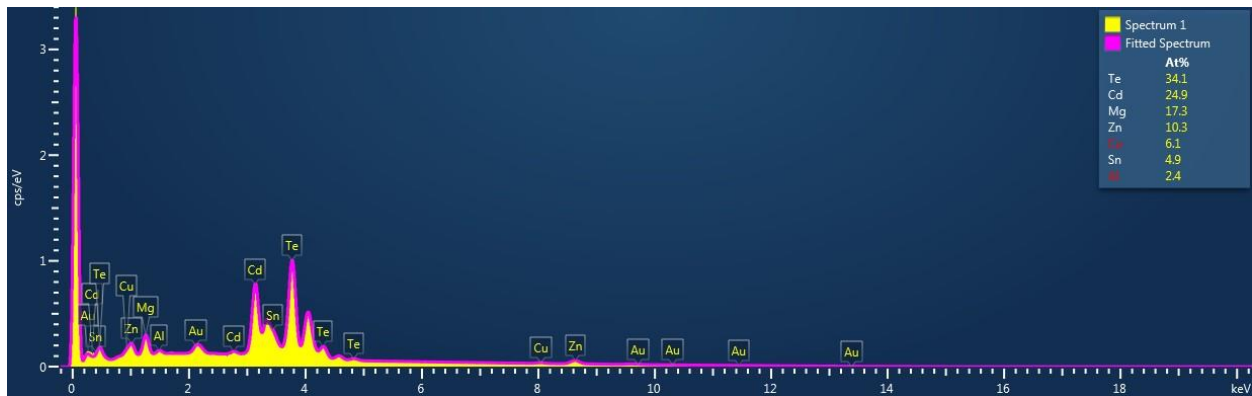


Figure S5. Plot of the relative intensity between the major local maxima grouping at 650 nm and 718 nm for Mg-450

