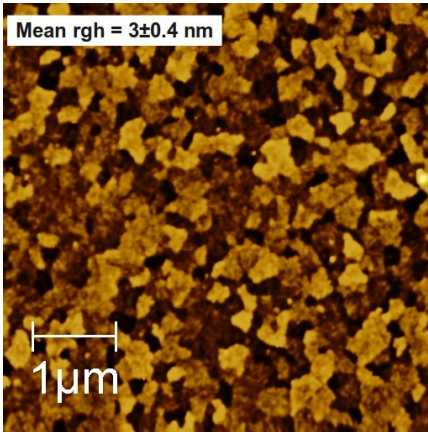


Cadmium Sulfide (CdS)



The PPD ablation technique allows to fabricate thin films to CdS with excellent composition and morphology (see inset). The composition transfer from the target to the substrate enables the fabrication of CdS in a safe environment. The low roughness of the films ($\sim 10\text{nm}$ r.m.s.) allows to generate well defined interfaces. The proprietary fabrication process has been transferred to Siena Solar Nanotech (2SN), a spin-off of Organic Spintronics.

- Low temperature (up to room temperature)
- Low roughness
- High deposition rate
- Environmentally friendly fabrication technology
- Excellent control of thickness by means of the OS-LTM accessory

E_g (eV)	Roughness nm (r.m.s.)	Typical deposition rate at 20 Hz (nm/min)
2.42	3	100

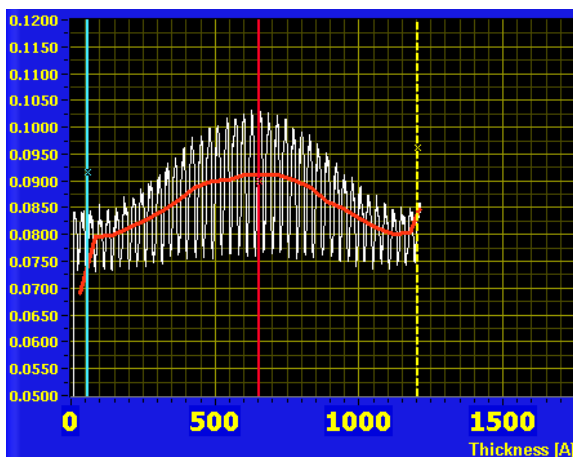


Fig. 1 In-situ thickness measurement during growth using the accessory LTM

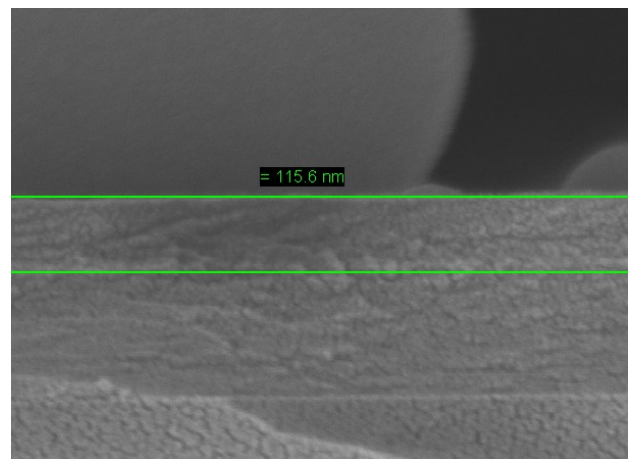


Fig. 2 SEM cross section of the CdS thin film on n-ZnO

(by courtesy of 2SN)