

Supplementary Information

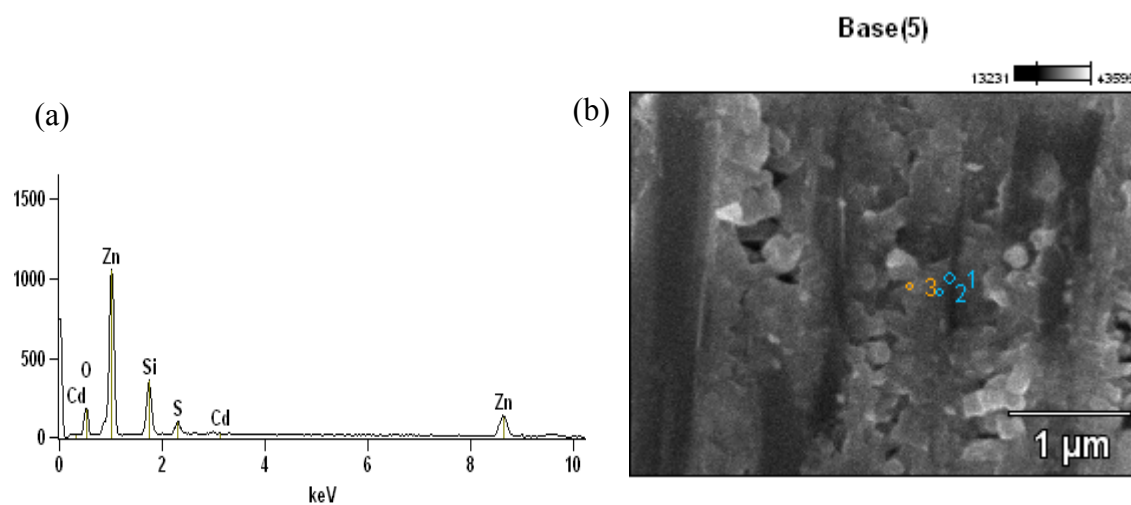


Fig. S1 EDS spectra (a) at point 2 in cross section SEM image (b) of the solar cell.

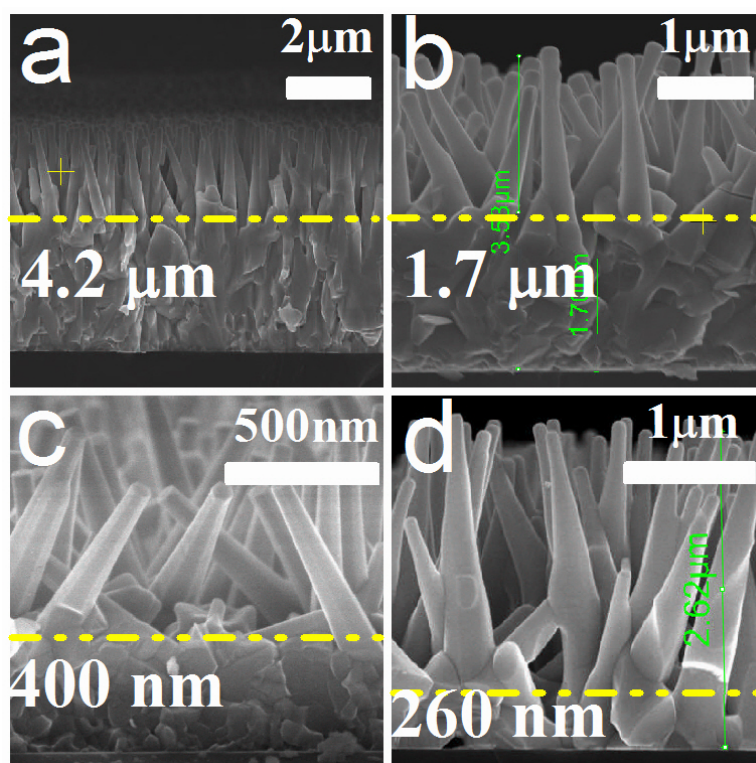


Fig. S2 ZnO nanowires arrays with different layer thickness. (a) 4.2 μm (b) 1.7 μm (c) 400 nm (d) 260 nm

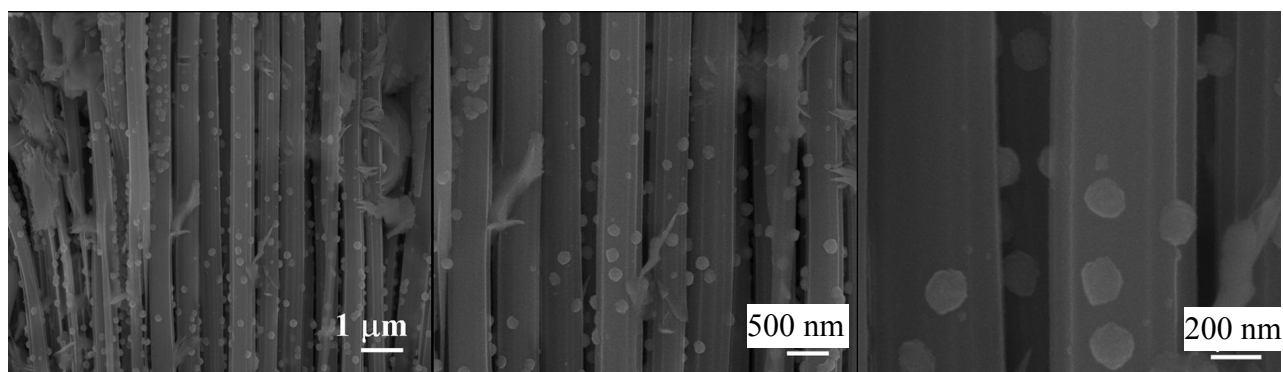


Fig. S3. Typical SEM image of the as-deposited CdS nanoparticles onto Si nanopillars, showing the average size is around 100 nm.

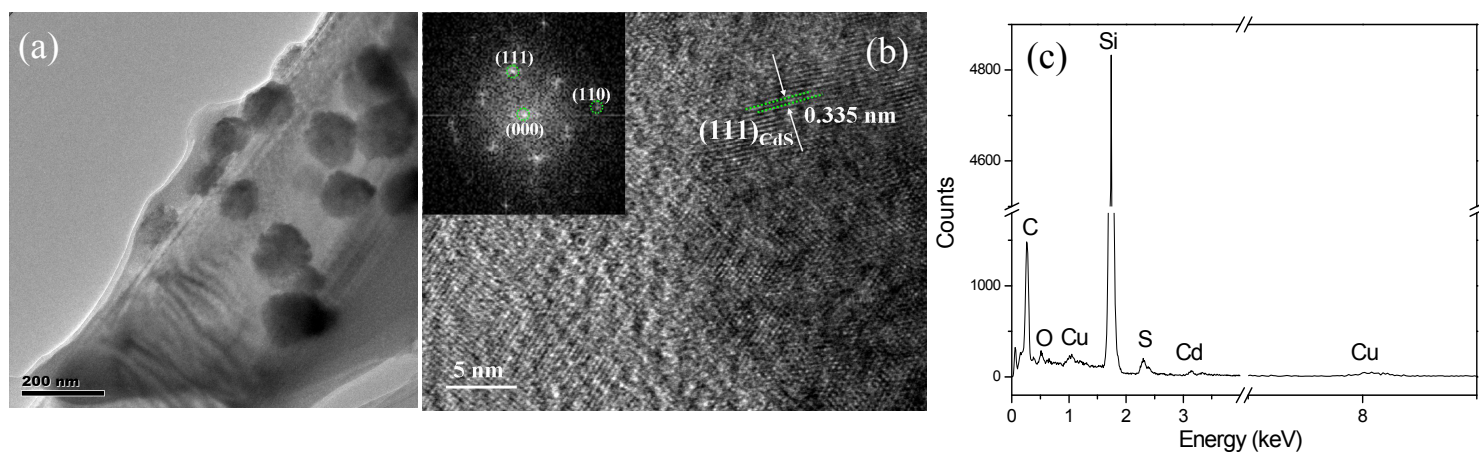


Fig. S4(a) TEM image of the deposited nanoparticles on Si nanopillar. (b) TEM image of structural determination of CdS nanoparticle. (c) EDS spectra of the CdS nanoparticles on the Si nanopillar.