

## Supporting Information

Figure S1

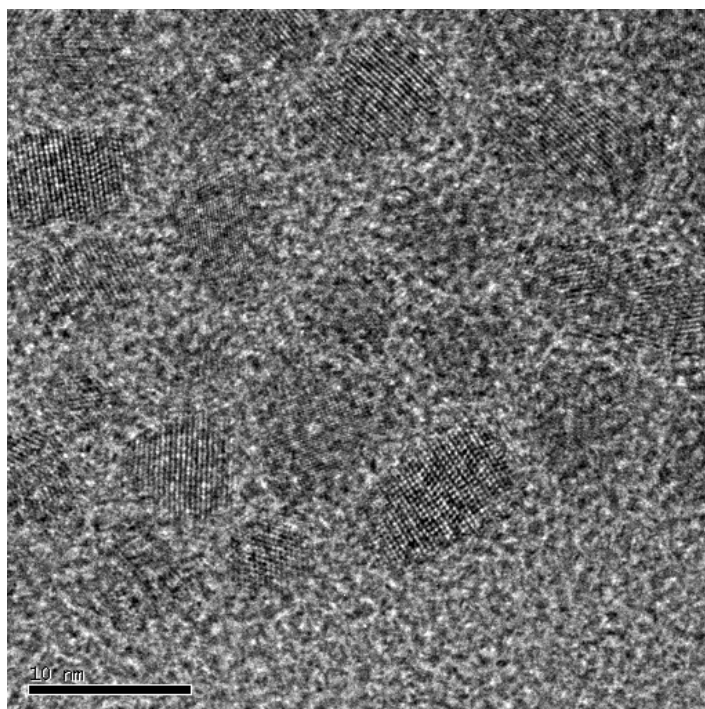


Figure S1. A High resolution transmission electron microscopy (HRTEM) image of the CdS-NCs used for the fabrication of the CdS-NC/PSO composite.

Figure S2

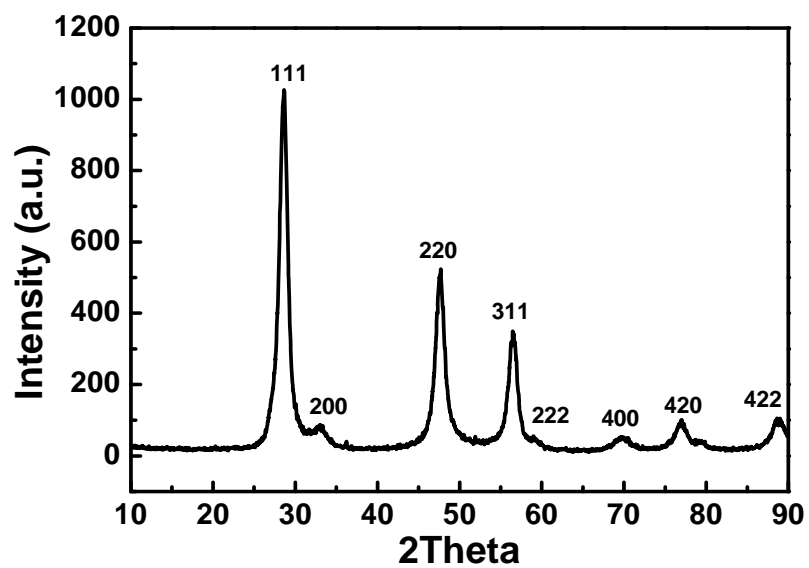


Figure S2. A X-ray diffraction pattern of the CdS-NCs (CuK $\alpha$  radiation).

Figure S3

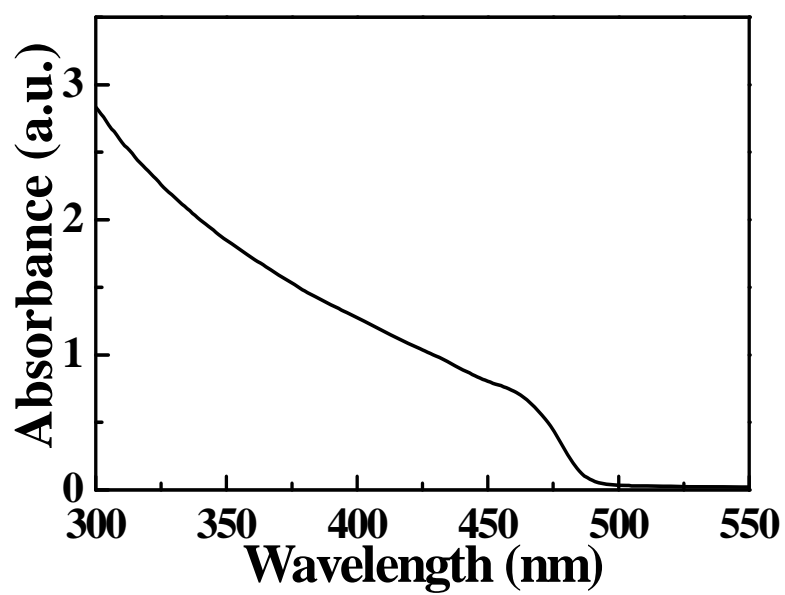


Figure S3. An ultraviolet-visible absorption spectrum of CdS-NCs in hexane ( $6.2 \times 10^{-7}$  mol/L)