Supplementary Information for

Small Molecular Amine Mediated Synthesis of Hydrophilic CdS Nanorods and their Photoelectrochemical Water Splitting Performance

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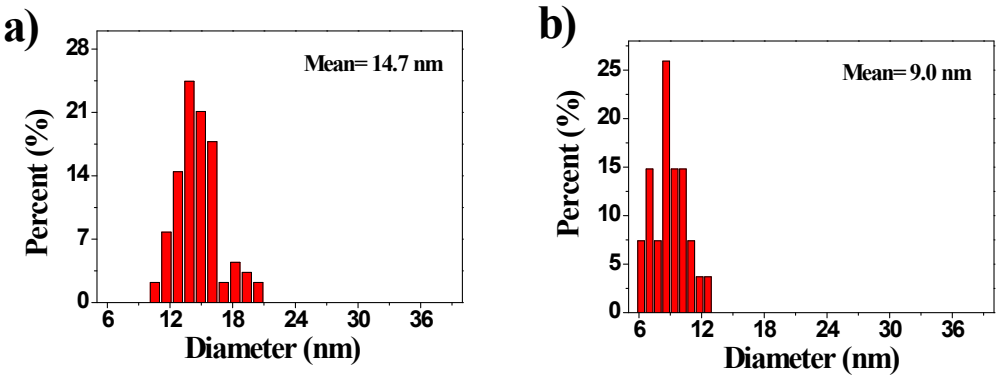

Fig. SI-1. Diameter distribution of the CdS-190 and CdS-130 product.

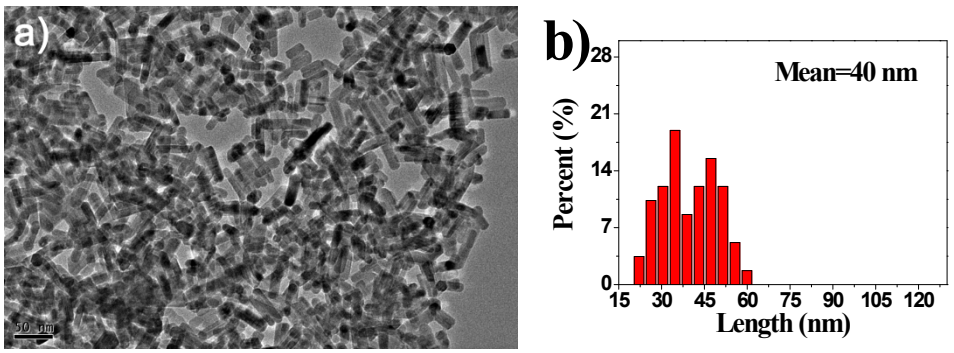

Fig. SI-2. a) TEM image and b) length distribution of CdS-150 product.

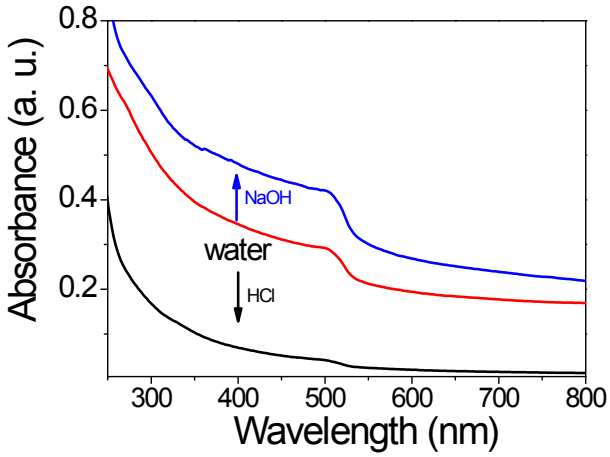

Fig. SI-3. The absorption spectra of CdS nanorods (CdS-190) dispersion (0.25 mg/mL) in aqueous solution with different pH values.

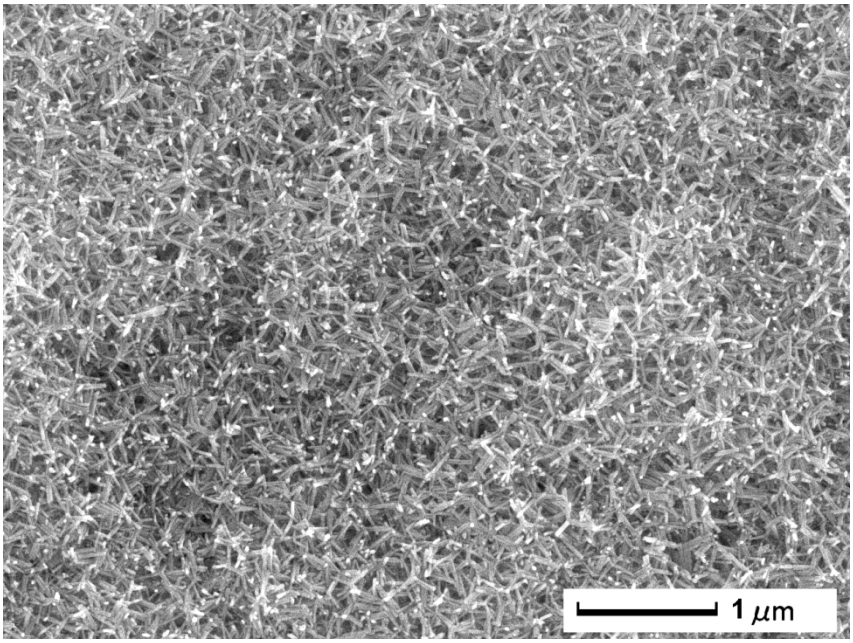

Fig. SI-4. SEM image of the CdS-190 film.

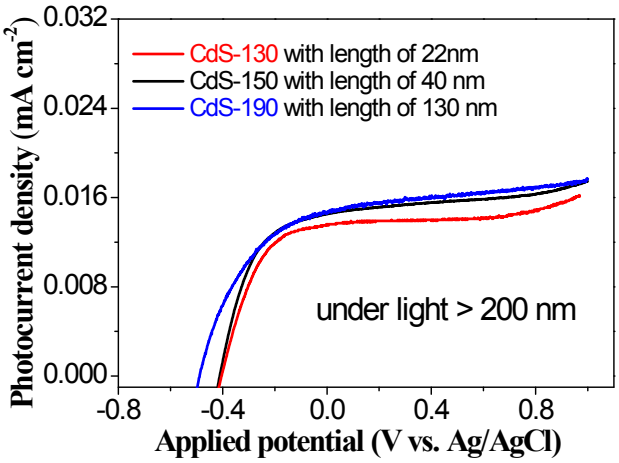

Fig. SI-5. The current-voltage characteristic of CdS photoelectrodes with different length under illumination of light > 200 nm.

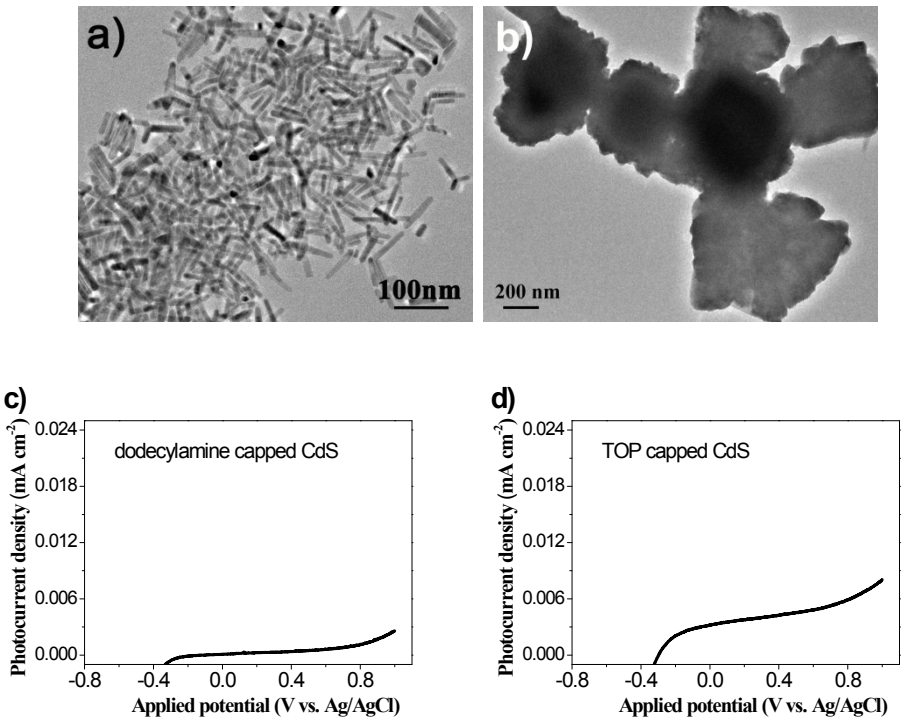

Fig. SI-6. TEM images of a) dodecylamine capped CdS nanorods and b) TOP capped CdS. c) The corresponding current-voltage characteristic of hydrophobic CdS thin films under illumination of light > 200 nm.

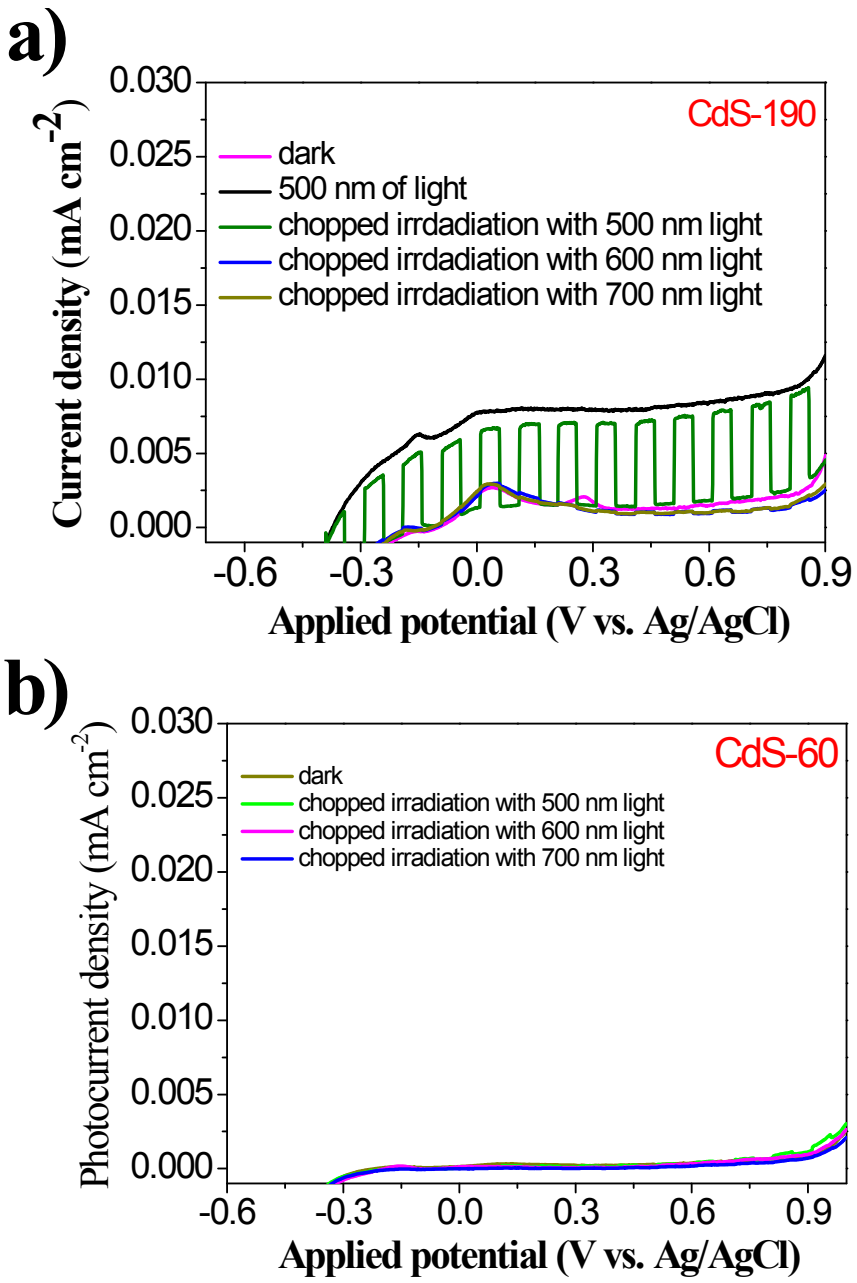

Fig. SI-7. The current-voltage characteristics for (a) the CdS nanorod sample (CdS-190) and (b) the CdS particle (CdS-60) thin films under chopped monochrome light illumination with wavelengths of 500, 600, 700 nm, respectively.