Supporting Information

Branched hierarchical photoanode of anatase TiO_2 nanotubes on rutile TiO_2 nanorod arrays for efficient quantum dot-sensitized solar cells

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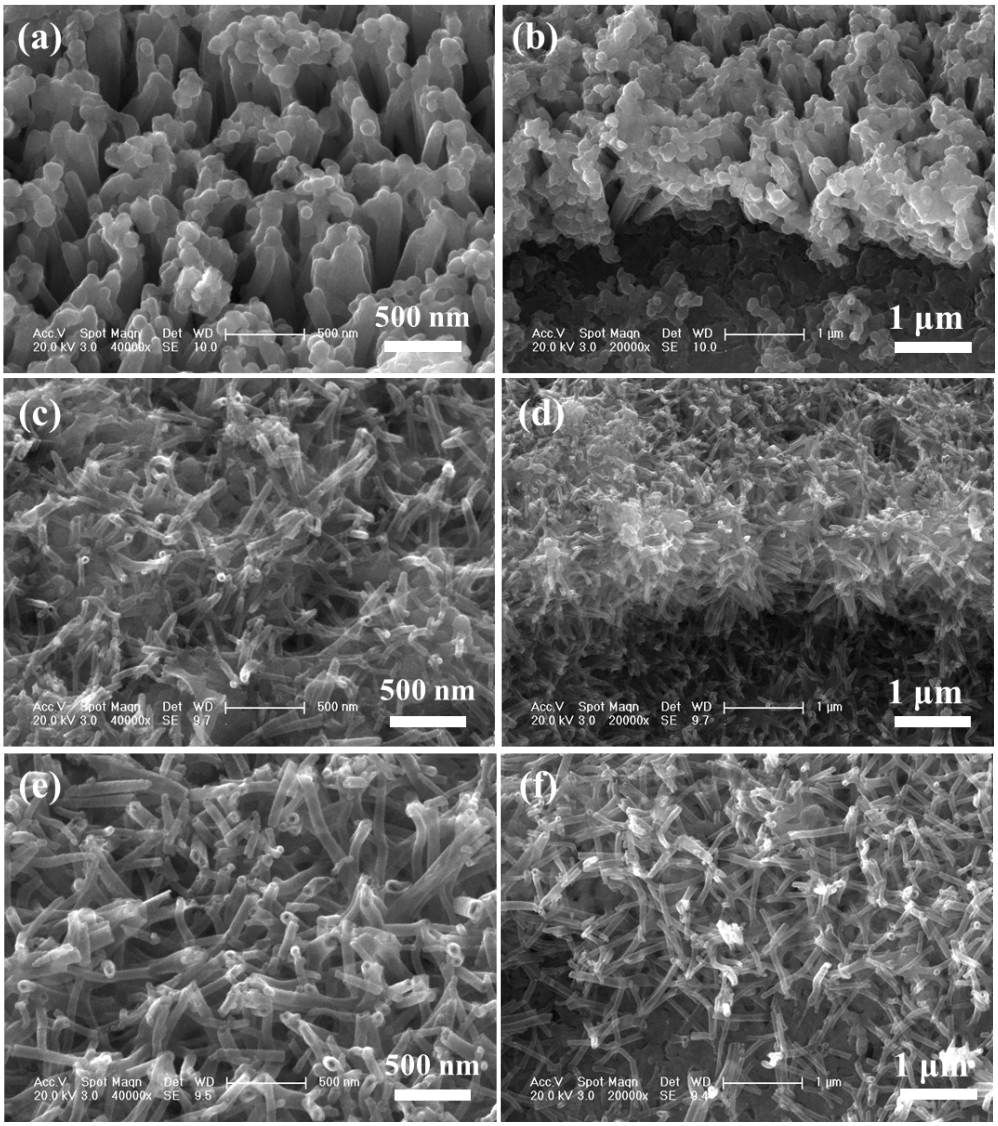

Fig. S1. FESEM images of top view and cross-sectional view of H-TiO_2 NRAs with different hydrothermal growth of ZnO nanorod templates for 1 h (a,b), 4 h (c,d) and 6 h (e,f).

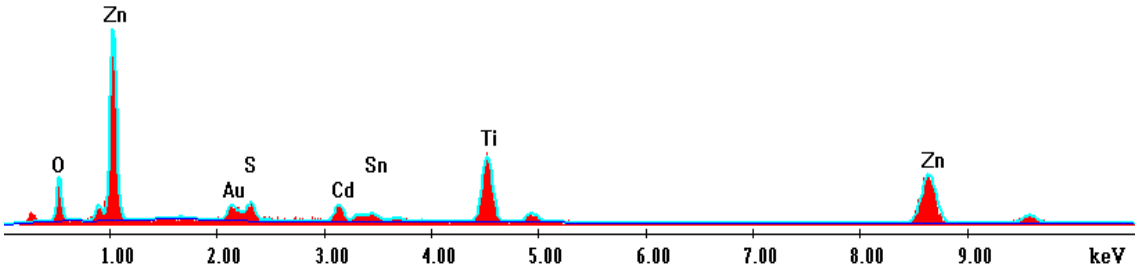

Fig. S2. EDX spectrum of CdS QD-sensitized branched ZnO/TiO_2 NRAs.

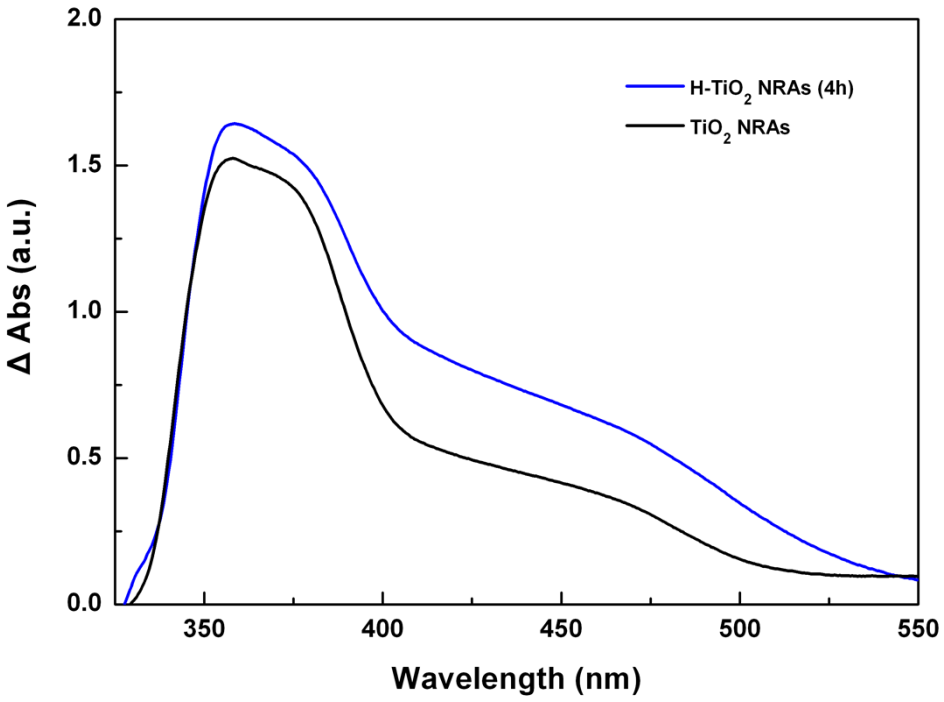

Fig. S3. The optical absorbance of CdS QDs at different electrodes.

By subtracting the electrode effect from QDs-sensitized TiO_2 samples (From Figure 4 in main manuscript), we can deduce the optical absorbance value of only CdS QDs (Δ Abs). From Figure S3, high absorbance value has been observed at H-TiO_2 NRAs, which indicates that higher loading of QDs in this electrode compare to TiO_2 NR electrode.

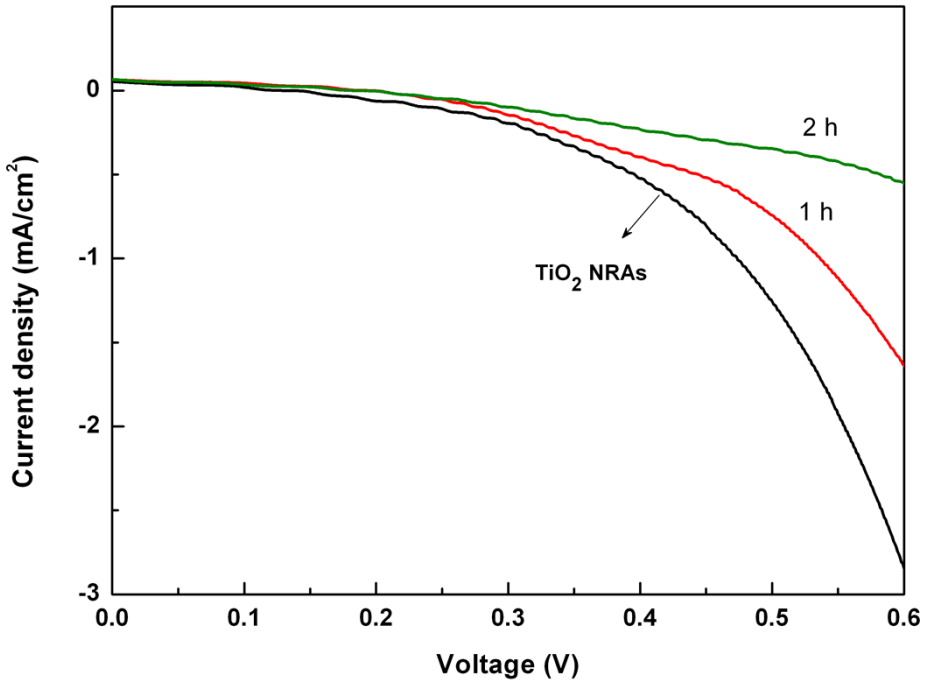

Fig. S4. Dark current-voltage curves of QDSCs assembled with TiO_2 NRAs and H-TiO_2 NRAs with various time.

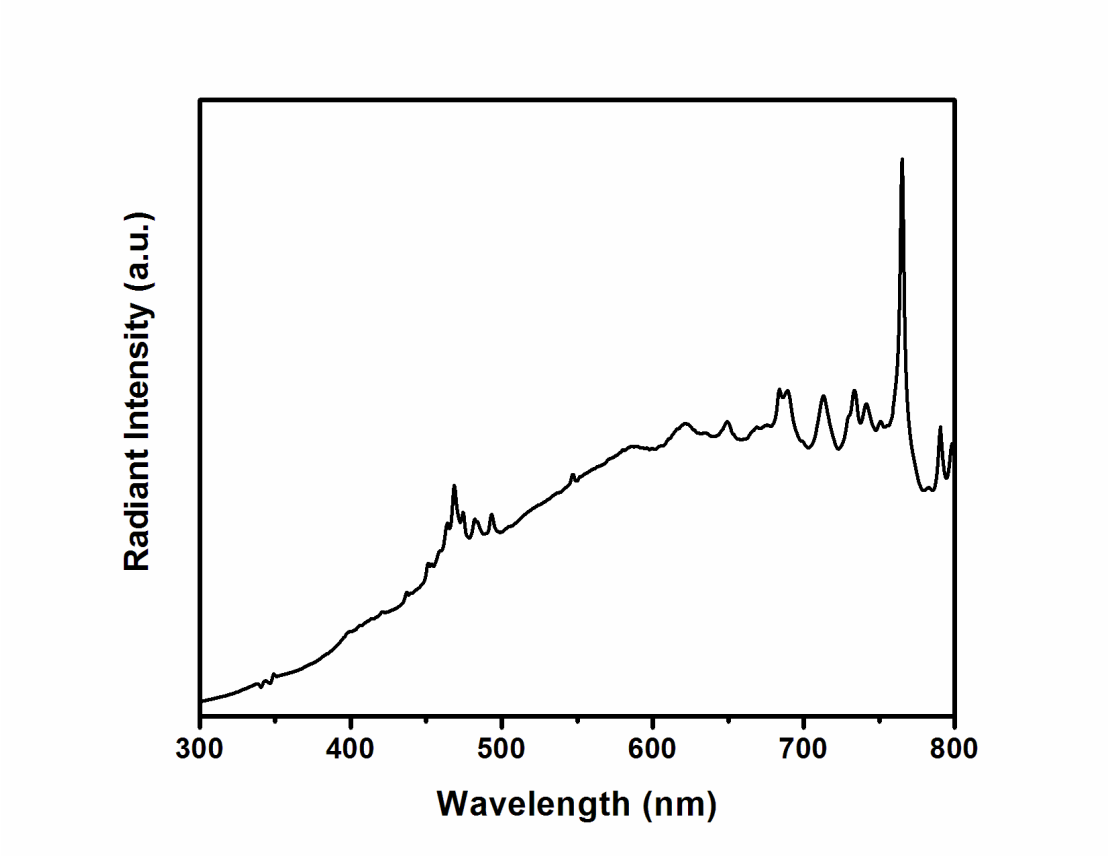

Fig. S5. The spectrum of Xe lamp used in our experiments.