CdSe Quantum Dots/g-C_3N_4 Heterostructure for Efficient H_2 Production under Visible Light Irradiation

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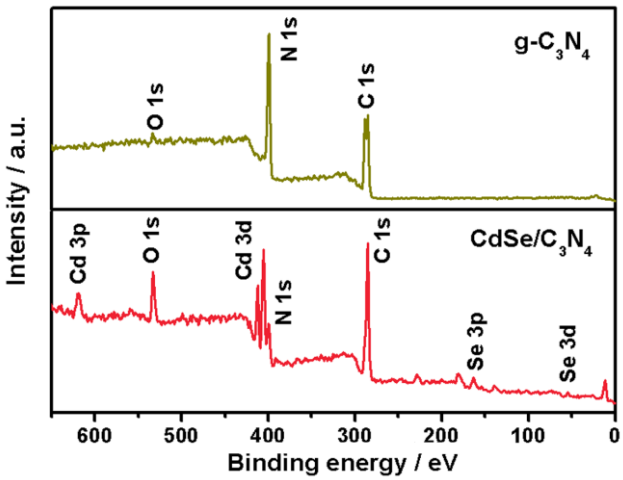

Figure S1. Full XPS spectra of the pure g-C_3N_4 and $CdSe/C_3N_4$.

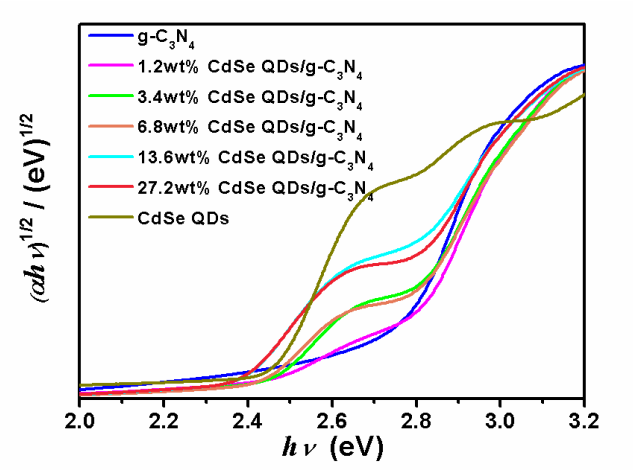

Figure S2. Plots of $(\alpha hv)^{1/2}$ versus hv for the samples.

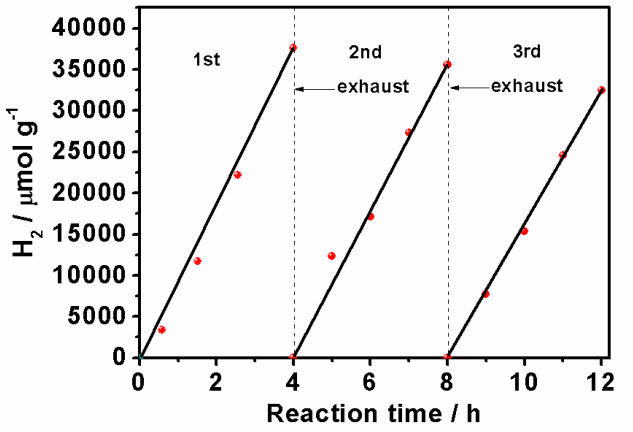

Figure S3. Cyclic H_2-evolution curve for the CdSe QDs/g-C_3N_4 sample.

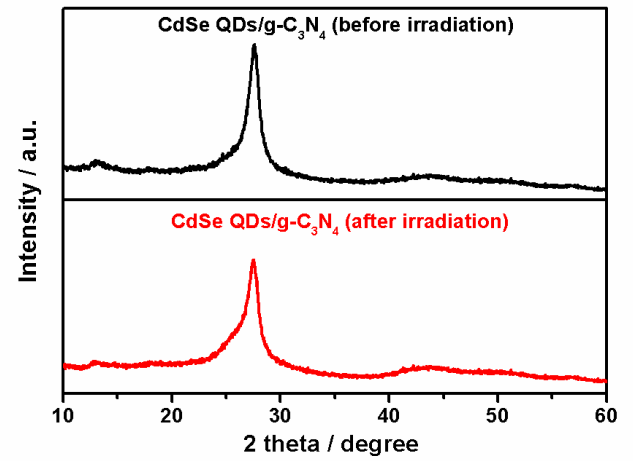

Figure. S4. XRD patterns of CdSe QDs/g-C_3N_4 before and after irradiation.

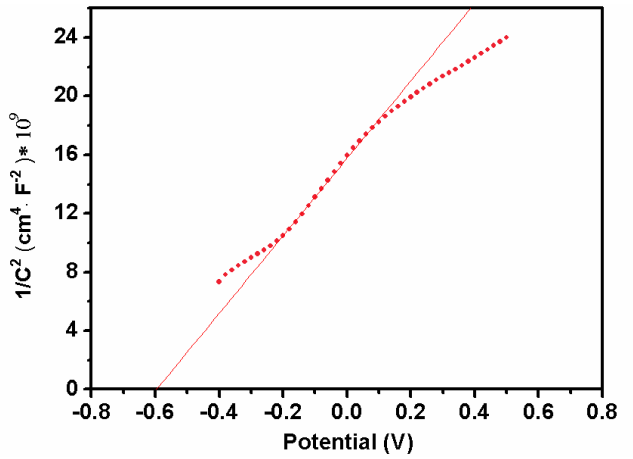

Figure S5. Mott-Schottky (MS) plots of g-C_3N_4.

Table S1. Optical absorption cut off and corresponding band gap of all the samples.

Sample	Optical cutoff (nm)	Band gap (eV)
g-C_3N_4	450	2.76
1.2 wt% CdSe QDs/g-C_3N_4	445	2.78
3.4 wt% CdSe QDs/g-C_3N_4	450	2.76
6.8 wt% CdSe QDs/g-C_3N_4	452	2.74
13.6 wt% CdSe QDs/g-C_3N_4	450	2.76
27.2 wt% CdSe QDs/g-C_3N_4	450	2.76
CdSe QDs	490	2.53