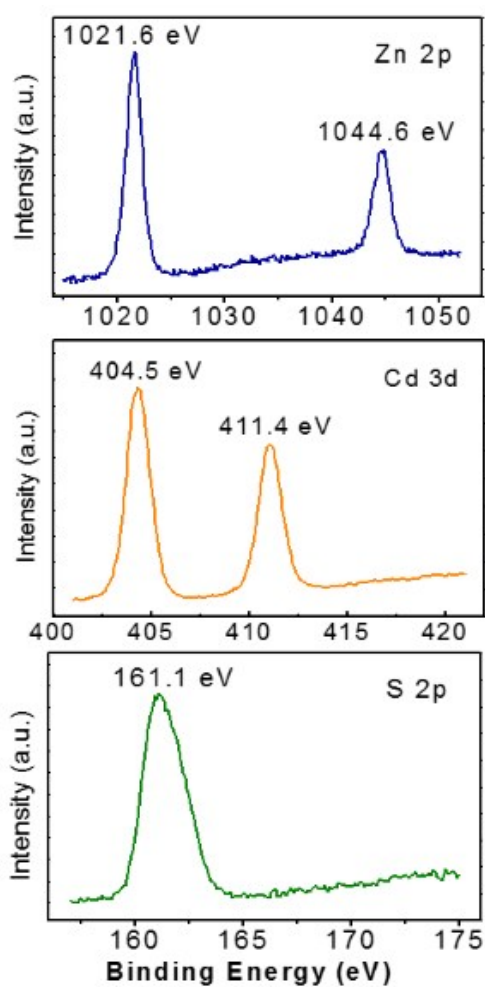


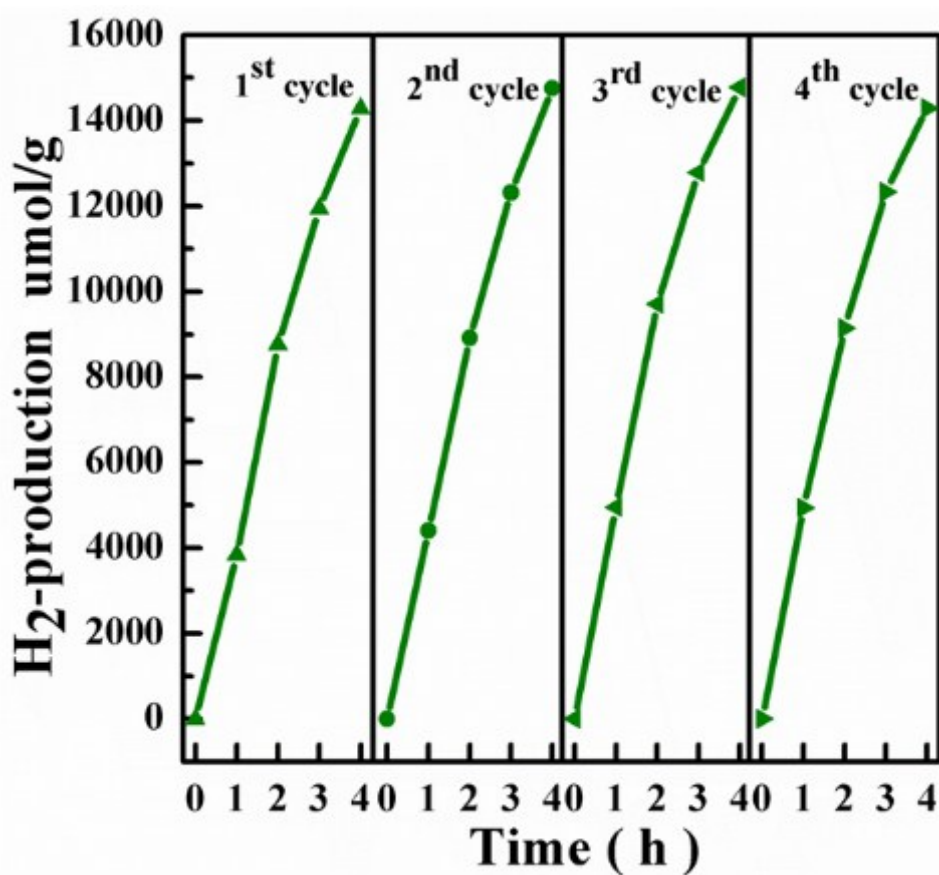
Supporting information

## Colloidal $\text{Cd}_x\text{Zn}_{1-x}\text{S}$ nanocrystals as efficient photocatalysts for $\text{H}_2$ production under visible-light irradiation

JingJing Xiang, Hanbin Wang\*, Xina Wang, Chen Xu, Tianci Wu, Houzhao Wan, Yongzheng liu, and Hao Wang\*



**Figure S1** XPS spectra of Zn 2p, Cd 3d, S 2p of the  $\text{Cd}_{0.8}\text{Zn}_{0.2}\text{S}$  nanocrystals.



**Figure S2** Time-cycle photocatalytic hydrogen production over the  $\text{Cd}_{0.8}\text{Zn}_{0.2}\text{S}$  nanocrystals with visible-light illumination ( $\lambda \geq 420 \text{ nm}$ ).