

Electronic Supplementary Information

Size-Controlled Synthesis of CdS Nanoparticles Confined on Covalent Triazine-Based Frameworks for Durable Photocatalytic Hydrogen Evolution under Visible Light

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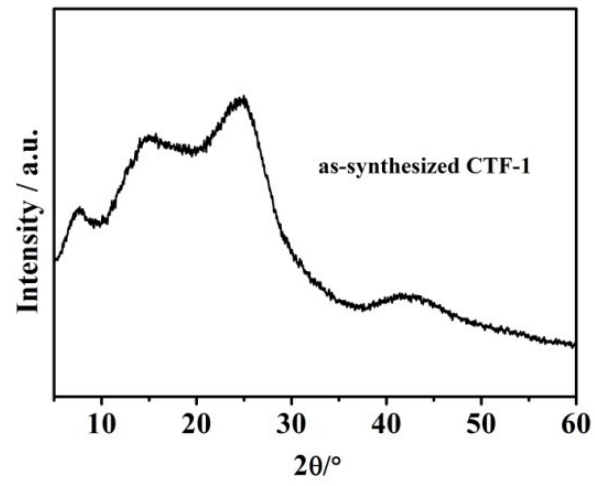


Fig. S1 XRD pattern of the as-synthesized CTF-1.

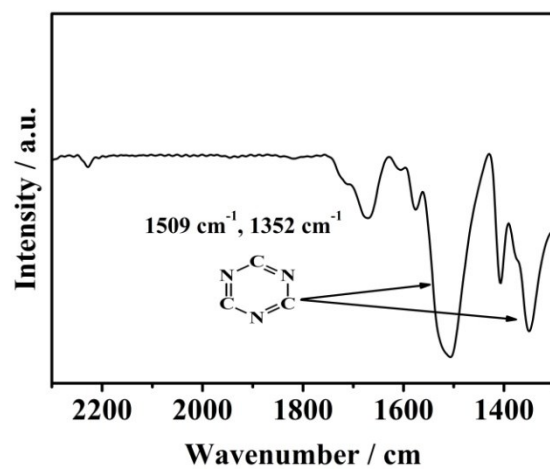


Fig. S2 FTIR spectrum of the as-synthesized CTF-1.

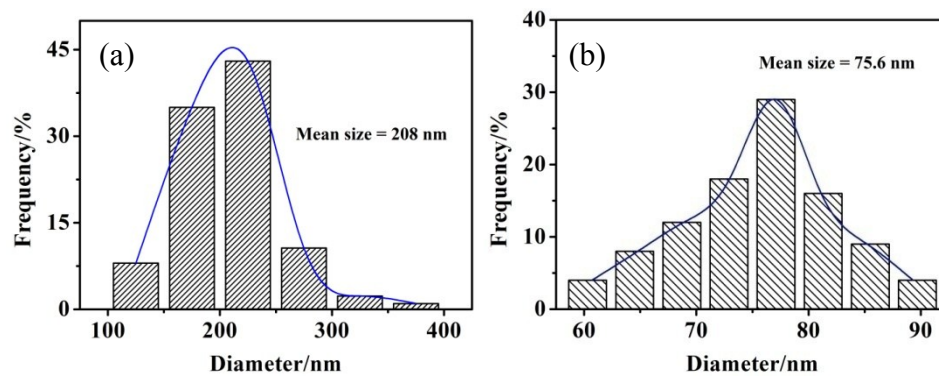


Fig. S3 CdS nanoparticles size distribution histogram of (a) pure CdS; (b) CdS NPs/5%CTF-1.

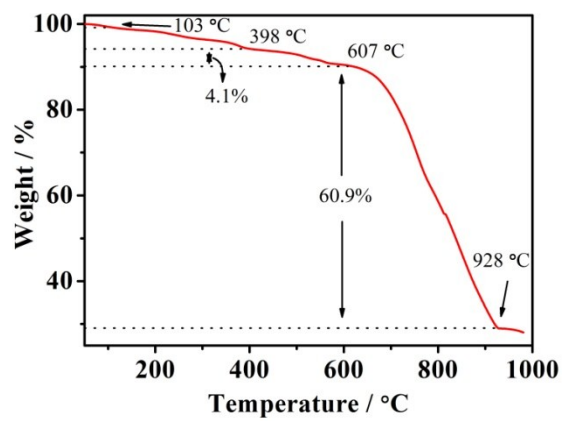


Fig. S4 Thermogravimetric analysis of CdS NPs/5%CTF-1.

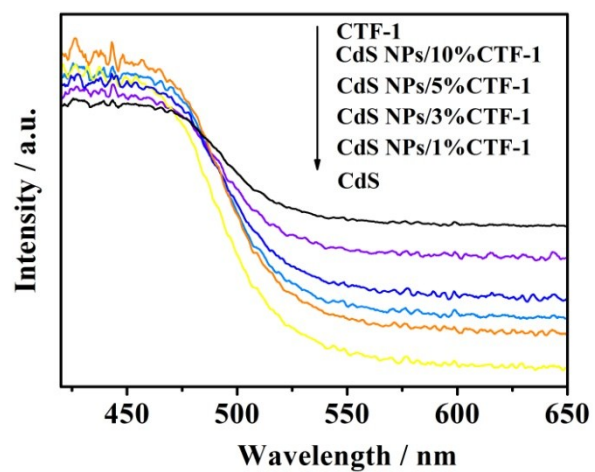


Fig. S5 UV-vis DRS spectra of CdS, CTF-1, and CdS NPs/CTF-1 with different amount of CTF-1.

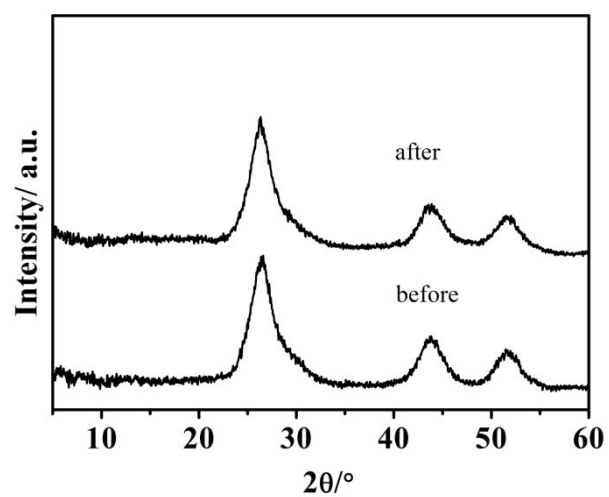


Fig. S6 XRD patterns of CdS NPs/5%CTF-1 before and after the reactions.

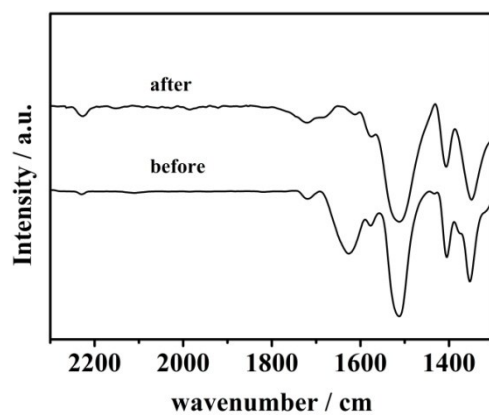


Fig. S7 FTIR spectra of CdS NPs/5%CTF-1 before and after the reactions.

Table S1 The comparison of photocatalytic hydrogen evolution rate between CdS NPs/3%CTF-1 and other catalysts reported previously.

Catalyst	H ₂ evolution rate (μmolh ⁻¹ g ⁻¹)	Reference
CdS NPs/3%CTF-1	12150	This work
WS ₂ -CdS	1984	[1]
MoS ₂ -CdS	1472	[1]
CdS-ZnO core-shell	792	[2]
CdS/g-C ₃ N ₄ core/shell	4152	[3]
Cd/CdS	11686	[4]

References

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