Fabrication of ternary heterojunction $Cd_{0.5}Zn_{0.5}S@UIO-66@g-C_3N_4$ for enhanced visible-light photocatalytic hydrogen evolution and degradation of organic pollutant

Qian Liang^a, Jie Jin^a, Changhai Liu^b, Song Xu^a, Chao Yao^a, Zhongyu Li^{a,*}

^a School of Petrochemical Engineering, Changzhou University, Changzhou 213164, PR China.

^b School of Materials Science & Engineering, Jiangsu Collaborative Innovation Center of Photovolatic Science and Engineering, Changzhou University, Changzhou 213164, PR China.



Fig. S1. TEM images of (a) UIO-66 and (b) $g-C_3N_4$ nanosheet.



Fig. S2. SEM images of (a) UIO-66 and (b) $g-C_3N_4$ nanosheet.



Fig. S3. TGA curves of UIO-66@g-C₃N₄, $Cd_{0.5}Zn_{0.5}S$ and $Cd_{0.5}Zn_{0.5}S@UCN$.

Sample	S_{BET} (m ² g ⁻¹)	$S_{Langmuir}$ (m ² g ⁻¹)	Pore volume (cm ³ g ⁻
Ĩ			1)
)
UIO-66	948	1345	0.76
$g-C_3N_4$	15	27	0.04
	270	110	0.10
$UIO-66(a)g-C_3N_4$	270	446	0.19
Cd. Zn. S@UCN30	147	233	0.11
Cu _{0.5} 2110.55(@OC1150	14/	233	0.11

Table S1. Porous characteristics of the as-prepared samples.