Electronic Supporting information

Strongly coupled interface facilitating charge separation to the improved visible light driven hydrogen production on CdS@polydopamine/NiS photocatalyst

Yingying Qin, a,b Linli Xu, a,b* Zhi Zhu c and Wai-Yeung Wong a,b*

^a Department of Applied Biology and Chemical Technology and Research Institute for Smart Energy, The Hong Kong Polytechnic University (PolyU), Hung Hom, Hong Kong, P.R. China

^b PolyU Shenzhen Research Institute, Shenzhen 518057, P.R. China

^c Institute of the Green Chemistry and Chemical Technology, Institute for Advanced Materials, Jiangsu University, Zhenjiang 212013, P.R. China

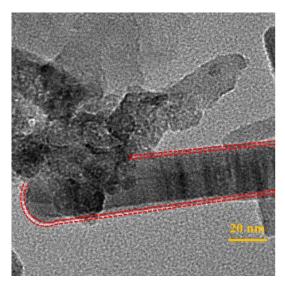


Fig. S1. TEM image of CdS@pDA.

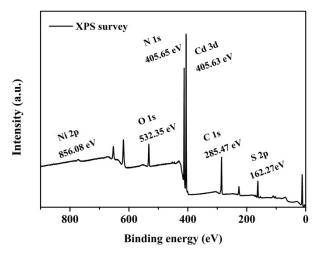


Fig. S2. XPS survey spectra of CdS@pDA/NiS.

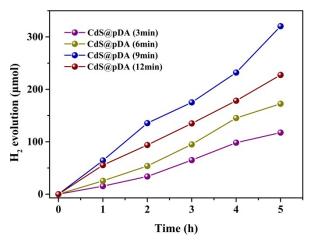


Fig. S3. Time courses of photocatalytic H_2 evolution over CdS@pDA with different polymerization time.

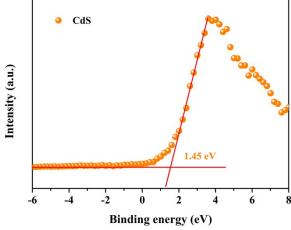


Fig. S4. The XPS-VB of CdS.

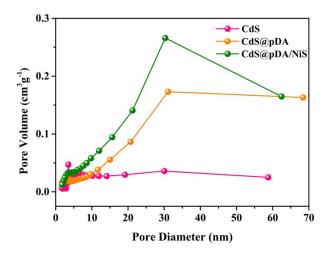


Fig. S5. BJH pore diameter distribution over CdS, CdS@pDA and CdS@pDA/NiS.