

Supporting Information

Noble-metal-free $\text{Ni}_x\text{S}_y\text{-C}_3\text{N}_5$ hybrid nanosheet with highly efficient photocatalytic performance

Lixiao Han[†], Cong Peng[†], Jinming Huang, Linhao Sun, Shengyao Wang,
Xiaohu Zhang*, Yi Yang*

College of Science, Huazhong Agricultural University, Wuhan 430070, PR China

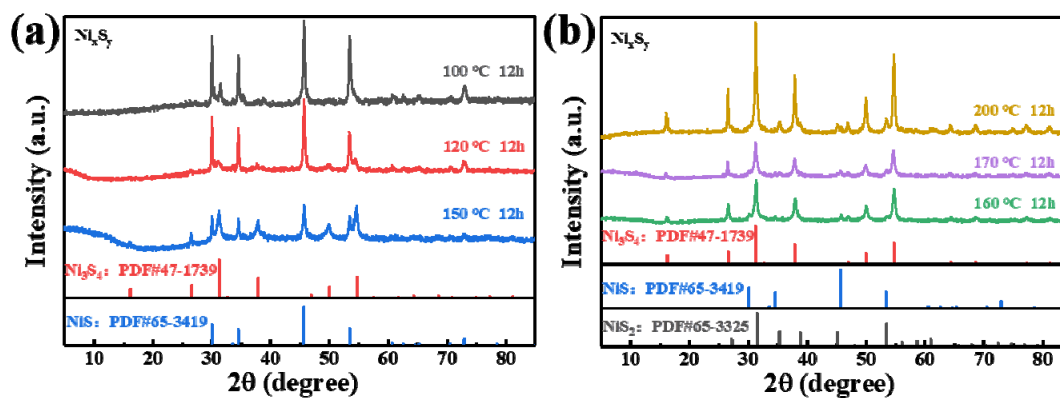


Figure S1. XRD patterns of Ni_xS_y prepared under different hydrothermal temperature.

* Corresponding author.

E-mail address: xiaohuzhang@mail.hzau.edu.cn

* Corresponding author.

E-mail address: yiyang@mail.hzau.edu.cn

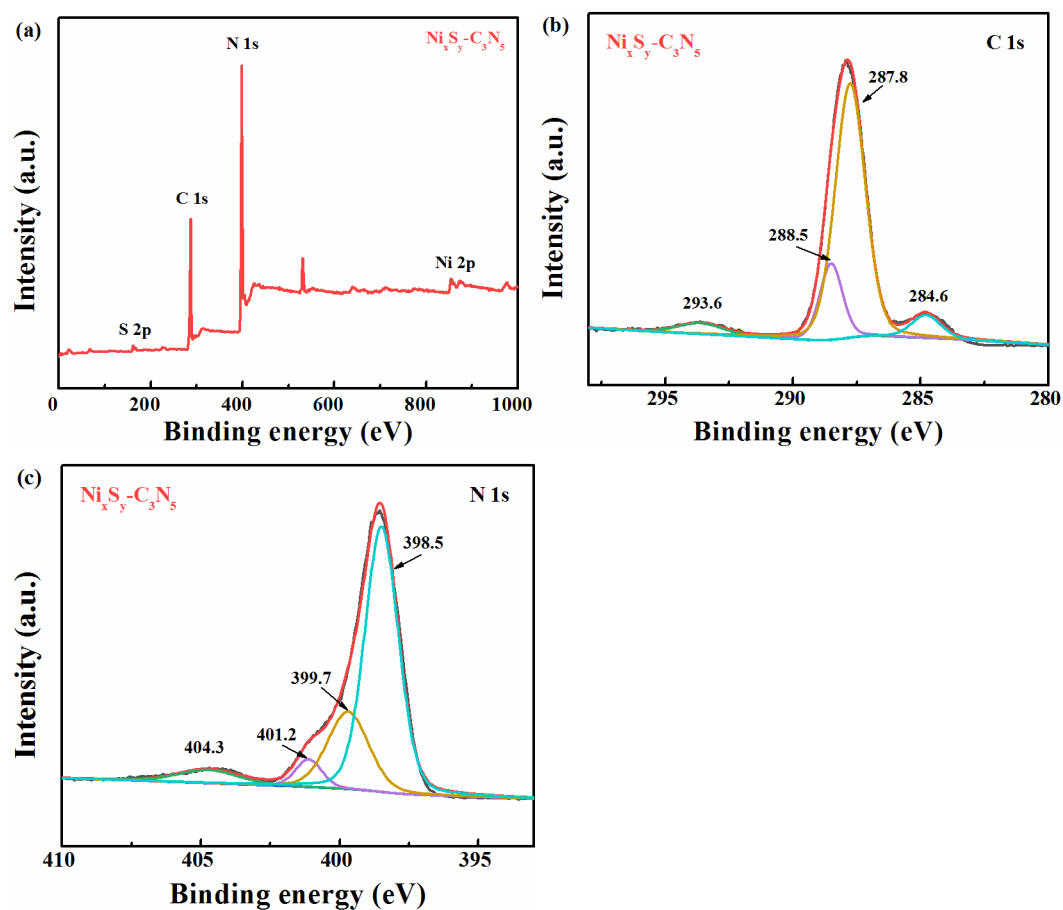


Figure S2. XPS survey spectrum of $\text{Ni}_x\text{S}_y\text{-C}_3\text{N}_5$ (a) and high resolution spectra of C 1s (b) and N 1s (c).

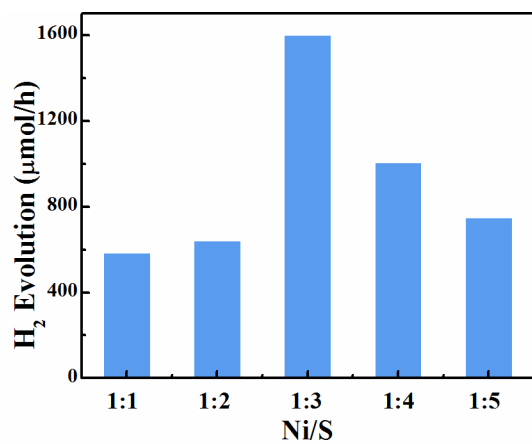


Figure S3. Influence of mole ratio of Ni/S on the H_2 production activity of 3.0 wt% $\text{Ni}_x\text{S}_y\text{-C}_3\text{N}_5$.

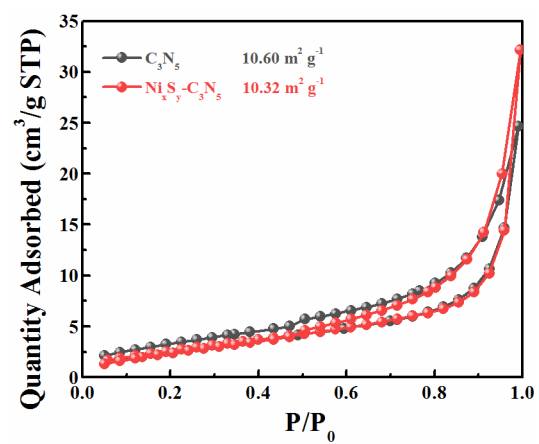


Figure S4. Comparison of nitrogen adsorption-desorption isotherms between C_3N_5 and $Ni_xS_y-C_3N_5$.

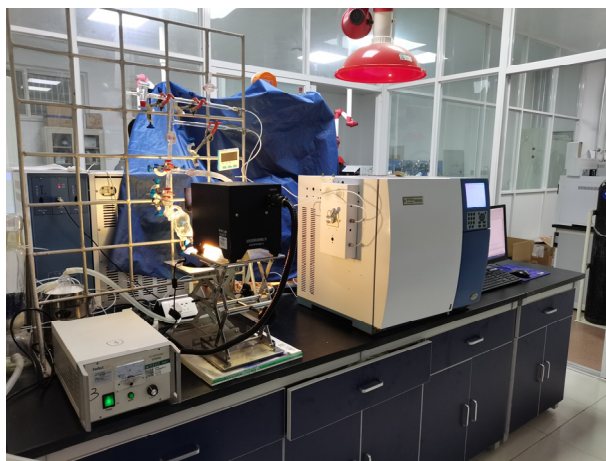


Figure S5. Photograph of photocatalytic H_2 production system.