Supporting Information:

In situ synthesis of $g-C_3N_4/TiO_2$ heterostructures with enhanced

photocatalytic hydrogen evolution under visible light

Hui Zhang¹, Feng Liu¹, Hao Wu¹, Xin Cao¹, Jianhua Sun^{1,*} and Weiwei Lei^{2,*}

¹ School of Chemistry and Environmental Engineering, Jiangsu University of Technology, Changzhou 213001, Jiangsu Province, P. R. China. E-mail: sunjh@jsut.edu.cn

² Institute for Frontier Materials, Deakin University, Waurn Ponds, Victoria 3216, Australia. E-mail: weiwei.lei@deakin.edu.au

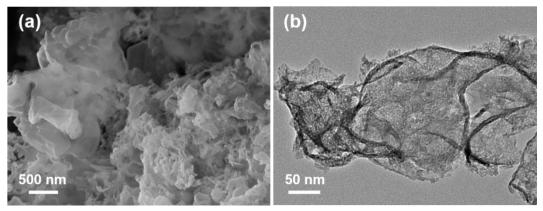


Fig. S1 (a) SEM and (b) TEM images of CNTO-0.

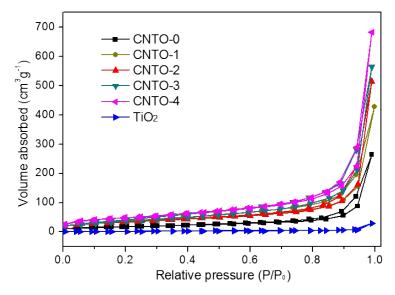


Fig. S2 Nitrogen sorption isotherms of CNTO-x and TiO₂.

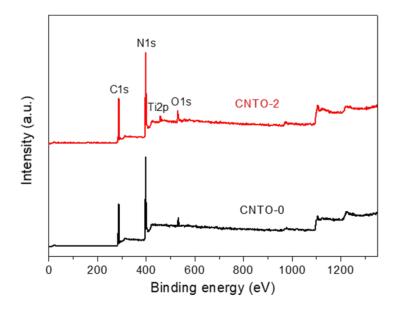


Fig. S3 Full scan XPS spectra of CNTO-0 and CNTO-2.

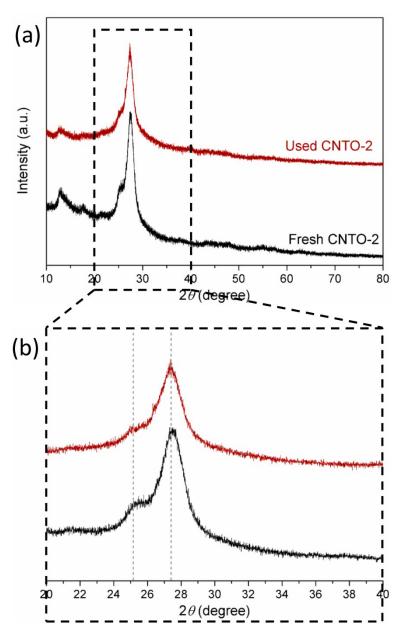


Fig. S4 The XRD patterns of CNTO-2 before and after 12 h of photocatalytic H_2 evolution. (b) is the magnified view of the selected region in (a).

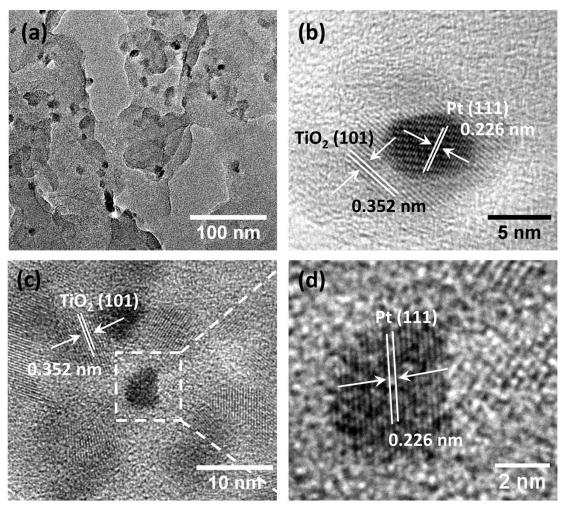


Fig. S5 (a) TEM and (b, c, d) HRTEM images of CNTO-2 after 12 h photocatalytic H₂ evolution. (d) is the selected area in (c).