

Supplementary Material

Construction and Enhanced Photocatalytic Activities of Hydrogenated TiO₂ Nanobelt Coated with CDs/MoS₂ nanosheets

Chunbo Liu ^a, Jibin Chen ^b, Huinan Che ^b, Kai Huang ^b, Paul A. Charpentier^c, William Z. Xu^c, Weidong Shi* ^a, HongJun Dong *^a

a. School of Chemistry and Chemical Engineering, Jiangsu University, Zhenjiang, 212013, People's Republic of China

b. School of Chemistry and Chemical Engineering, Jiangsu University, Zhenjiang, 212013, People's Republic of China

c. Department of Chemical and Biochemical Engineering, University of Western Ontario, London, Ontario, Canada N6A 5B9

*Corresponding author: Tel.: +86 511 8879 0187 Fax: +86 511 8879 1108

E-mail address: swd1978@ujs.edu.cn (W. shi)

donghongjun6698@aliyun.com (H. dong)

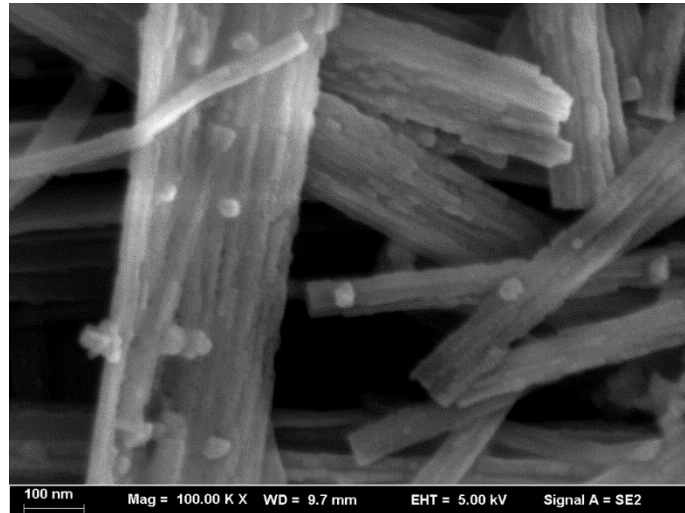


Fig. S1. SEM images of (a) pure TiO₂ nanobelts

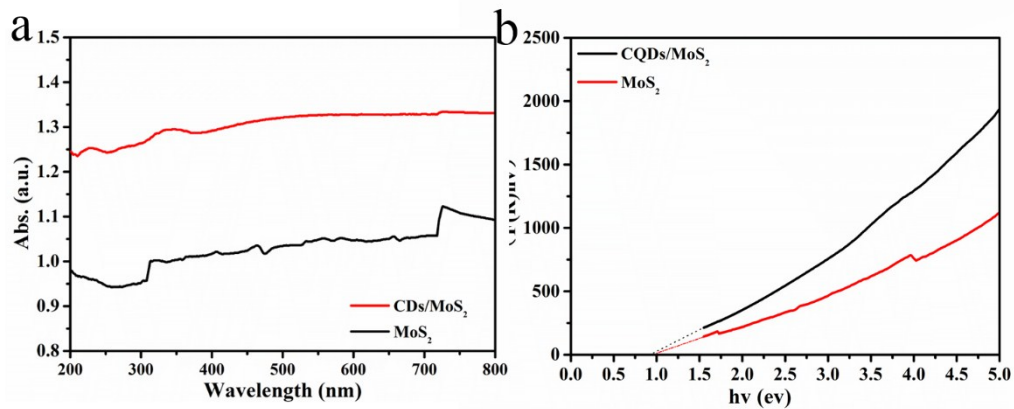


Fig. S2 (a) UV-vis spectra of MoS₂ and CDs/MoS₂ nanohybrid, (b) plots of $(F(R)hv)^2$ vs (hv) for estimation of the optical band gaps of MoS₂ and CDs/MoS₂ nanohybrid.

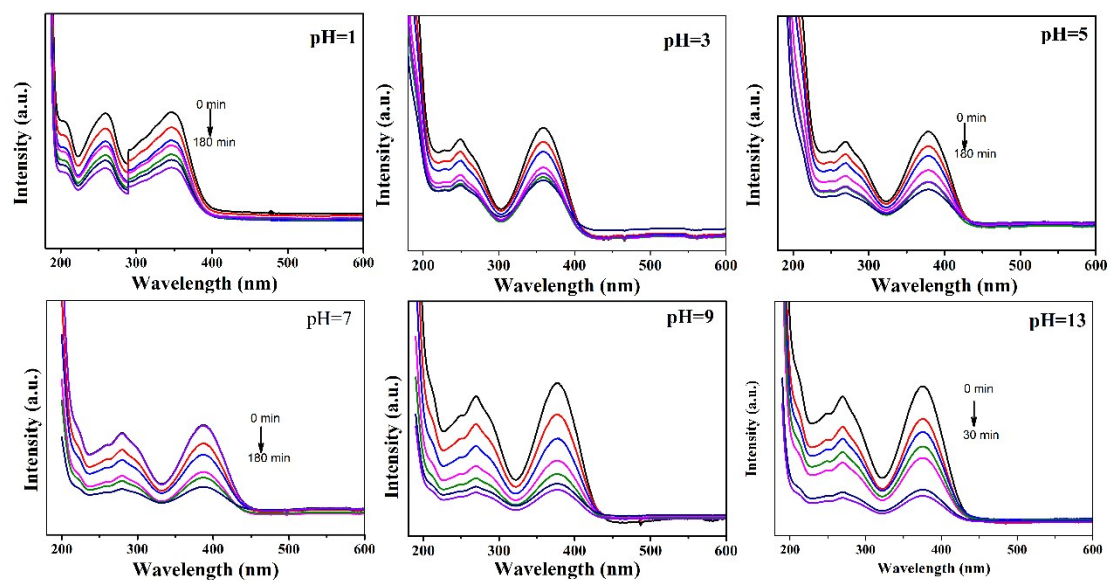


Fig. S3 Photocatalytic degradation of TC at various pH conditions in the presence of CDs/MoS₂@H-TiO₂ under visible light irradiation.