

Electronic Supplementary Information

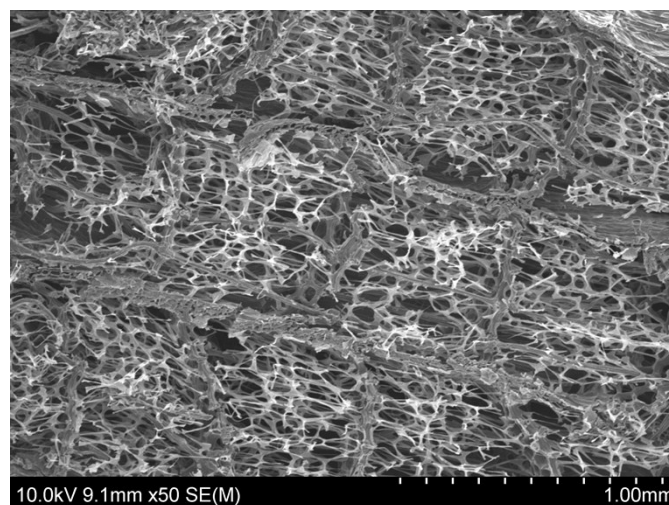


Fig. S1 SEM image of porous typha angustifolia.

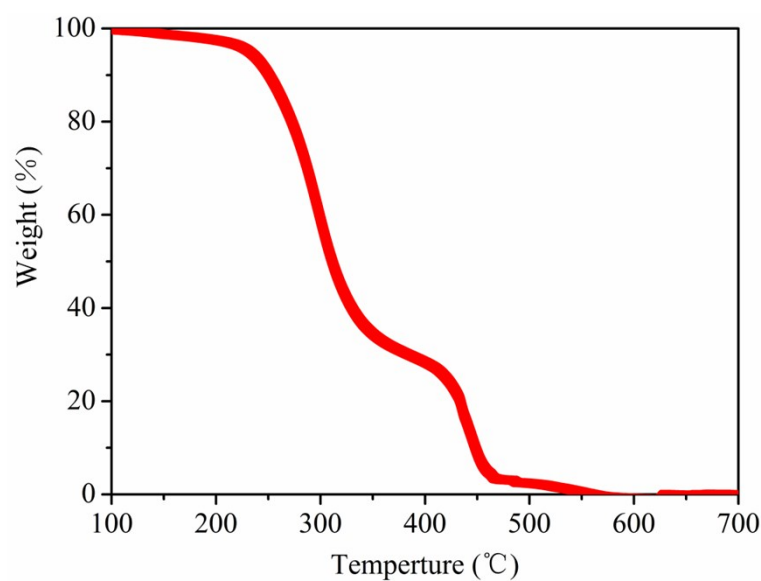


Fig. S2 The thermal gravimetric (TG) curve of the typha angustifolia as earth-abundant cost-free biotemplate.

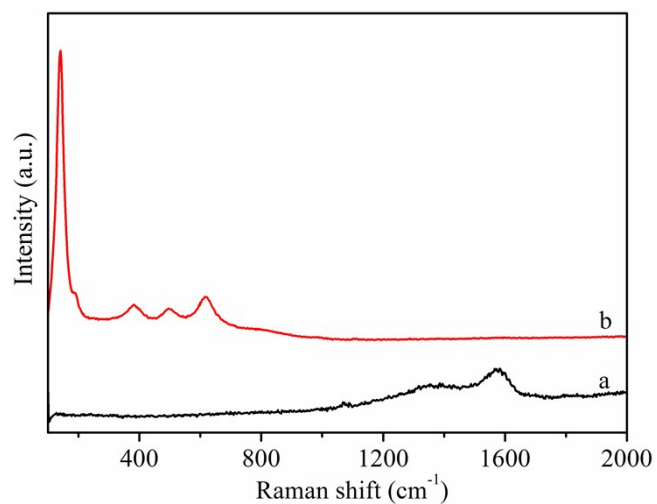


Fig. S3 Raman spectra of porous typha angustifolia biotemplate (a) and the stable mesoporous black TiO_2 nanosheets T600 (b).

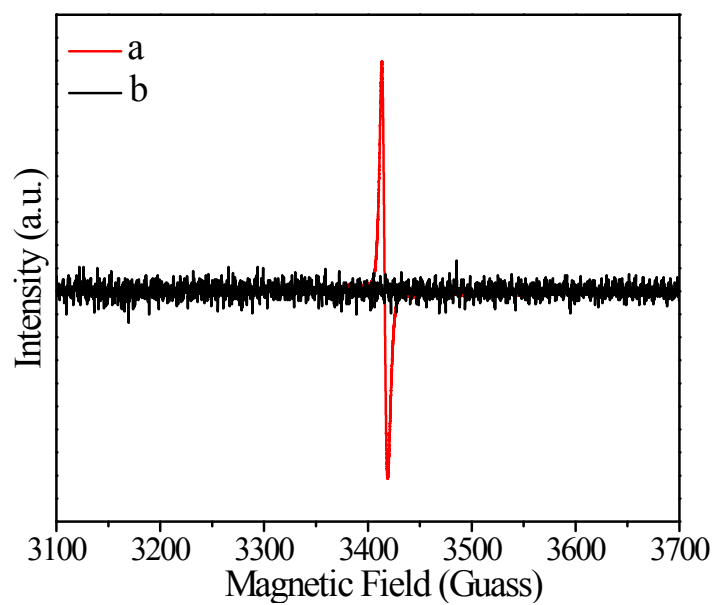


Fig. S4 Electron paramagnetic resonance (EPR) spectroscopy of the stable mesoporous black TiO_2 nanosheets after being calcined at 600 $^{\circ}\text{C}$ with (a) and without (b) surface hydrogenation.

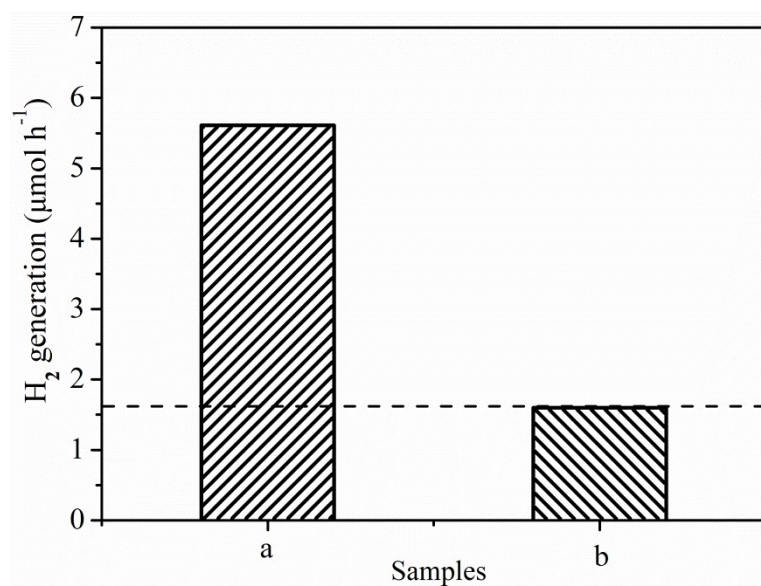


Fig. S5 Photocatalytic hydrogen evolution of the stable mesoporous black TiO₂ nanosheets after being calcined at 600 °C with (a) and without (b) surface hydrogenation under AM 1.5 without Pt cocatalysts for 1 h.