

C₃N₄-sensitized TiO₂ nanotube arrays with enhanced visible-light photoelectrochemical performance

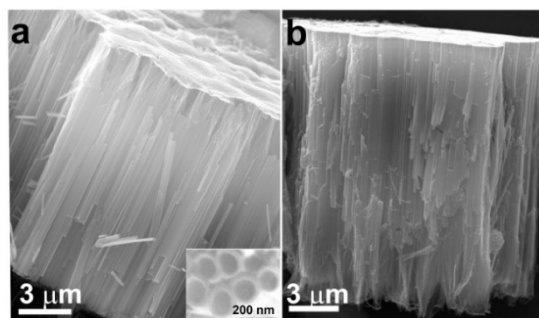


Fig. S1 (a) Scanning electron microscopy (SEM) image of TiO₂ NTs. (b) SEM image of C₃N₄/TiO₂ NTs.

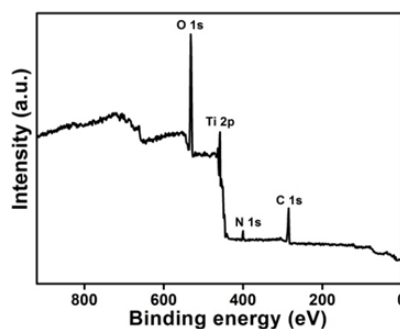


Fig. S2 X-ray photoelectron spectra (XPS) full survey spectrum of C₃N₄/TiO₂ NTs.

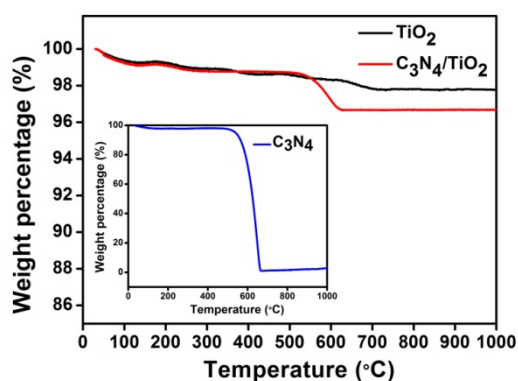


Fig. S3 TGA curves of TiO₂ NTs, C₃N₄ (the inset) and C₃N₄/TiO₂ NTs.

The Faradaic efficiency was calculated using the following equation:

$$\text{Faradaic efficiency} = \frac{\text{Evolved hydrogen [mol]} \times 2 \times N_A}{\text{current density [Acm}^{-2}] \times \text{Time[S]} \times \text{Active area of photoanode [cm}^2] \times e} \times 100\%$$

Where, N_A is avogadro's number, e is the electron charge.