Supporting Information

One-Step Synthesis Heterostructured g-C_3N_4/TiO_2 Composite for Rapid Degradation of Pollutants in Utilizing Visible Light

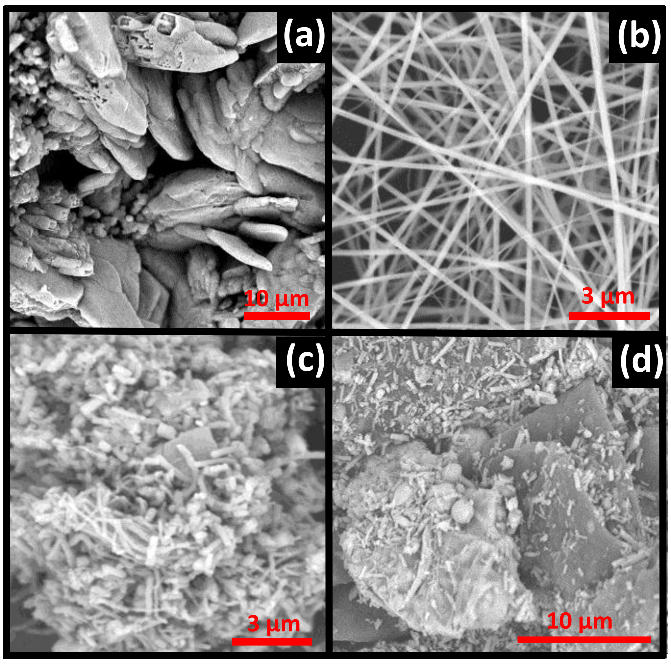

Figure S1. SEM images of (**a**) g-C_3N_4, (**b**) TiO_2 nanofibers, (**c**,**d**) CNT6 composite.

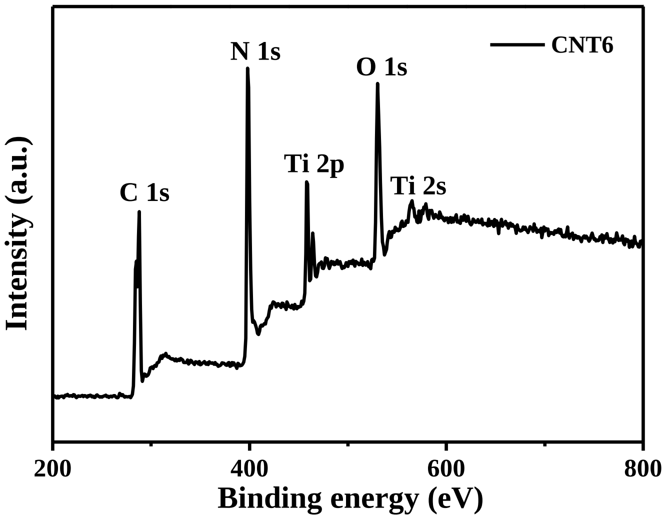

Figure S2. XPS survey spectra of CNT6.

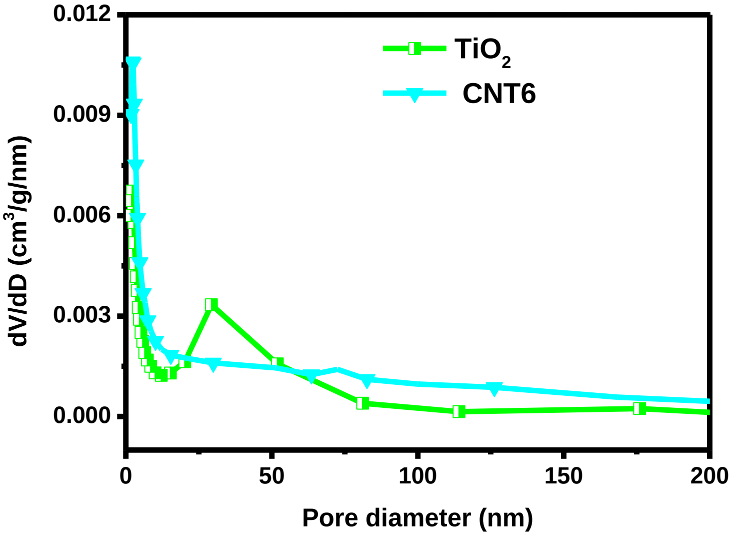

Figure S3. The pore size distribution of TiO_2 nanofibers and CNT6 composite.

Figure S4. Optical images of different products: (**a**) bare TiO_2 nanofibers, (**b**) g-C_3N_4, (**c**) CNT2, (**d**) CNT4, (**e**) CNT6, and (**f**) CNT7.

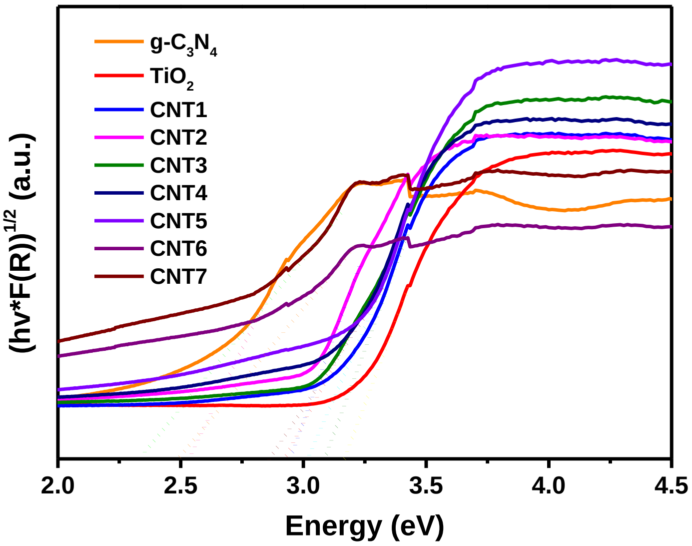

Figure S5. The curves of $(h\nu \cdot F(R))^{1/2}$ versus hυ originated from the diffuse reflectance spectra.

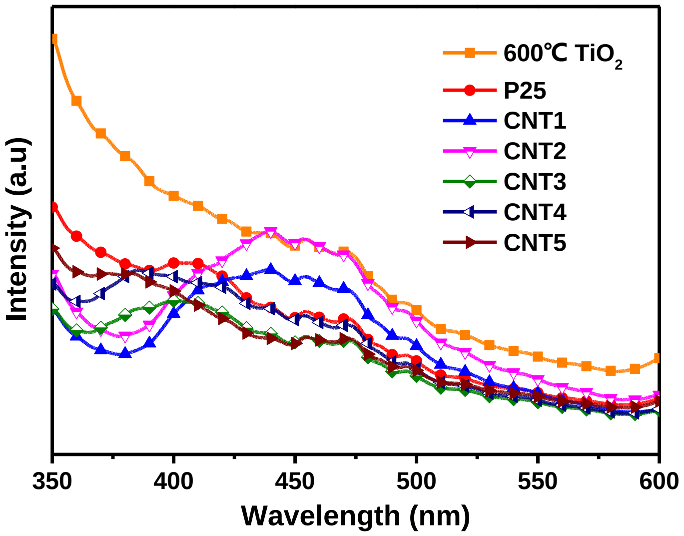

Figure S6. PL spectra of commercial TiO₂ P25 and the enlarged view of partial curves in Figure 6.

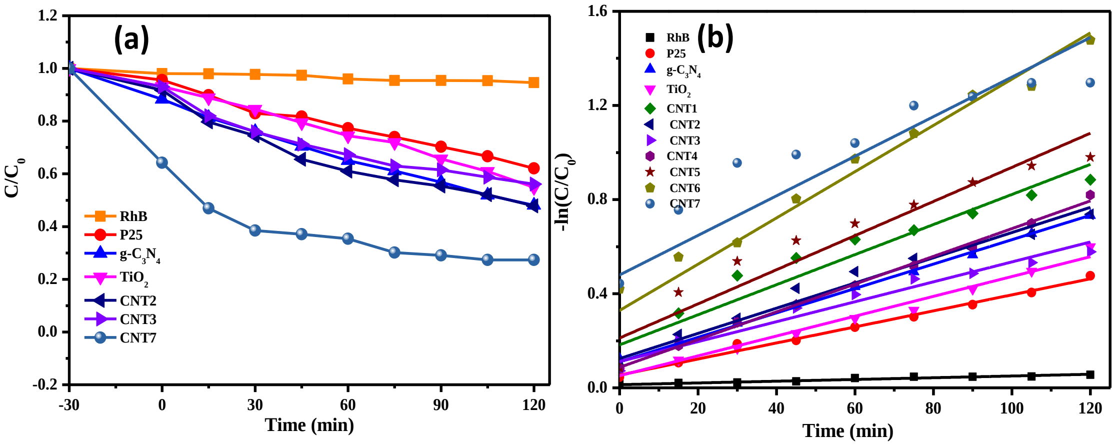

Figure S7. (**a**) Photocatalytic degradation RhB curves under visible light irradiation over different samples, (**b**) kinetic curves of degradation RhB over different as-prepared photocatalysts.