

Supporting information

Photo–Redox Properties of $-\text{SO}_3\text{H}$ Functionalized Metal-Free $\text{g-C}_3\text{N}_4$ and Its Application in the Photooxidation of Sunset Yellow FCF and Photoreduction of Cr (VI)

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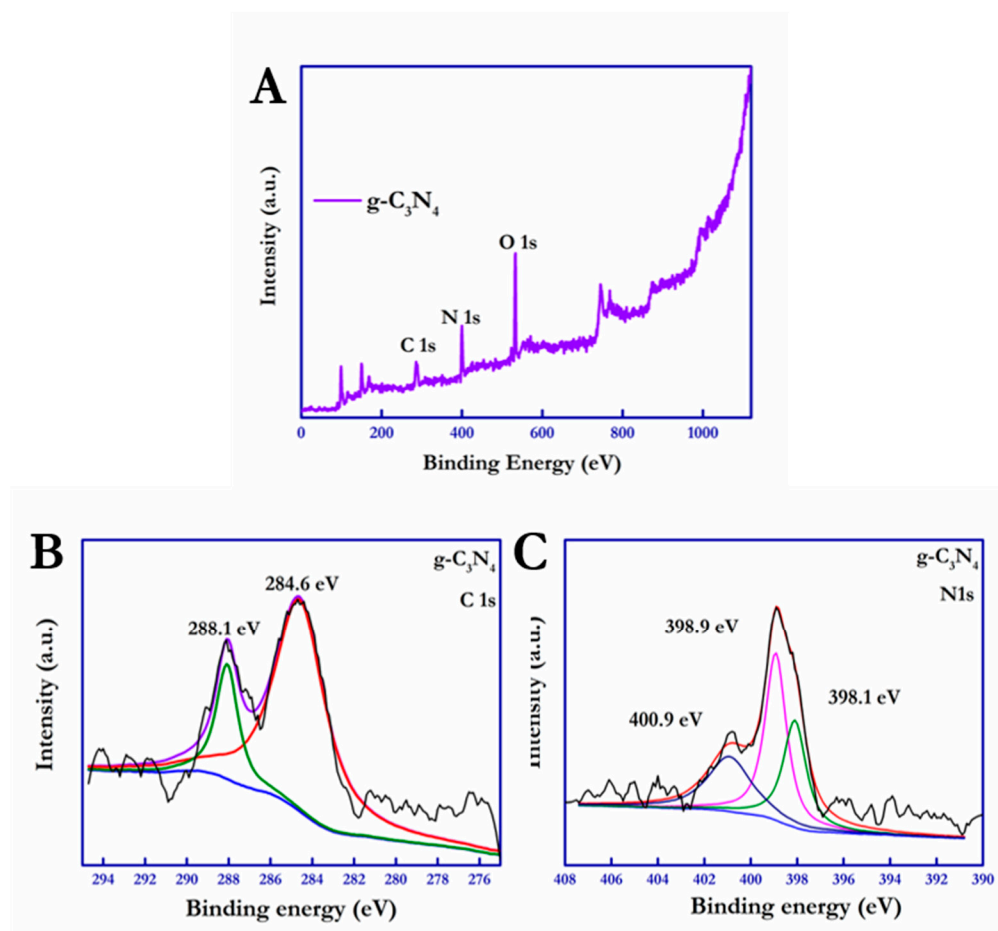


Figure S1. Complete XPS survey spectra of prepared g-C₃N₄ (A) and individual deconvoluted C1s and N1s (B & C) spectra of g-C₃N₄.

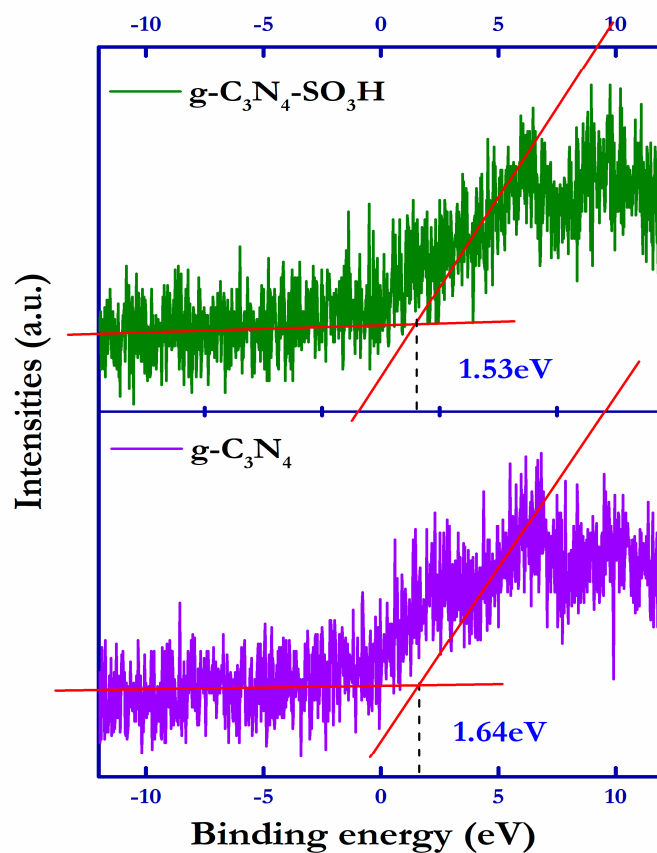


Figure S2. Valence bond x-ray photoelectron spectroscopy (VB-XPS) survey spectra of prepared g-C₃N₄ and g-C₃N₄-SO₃H.

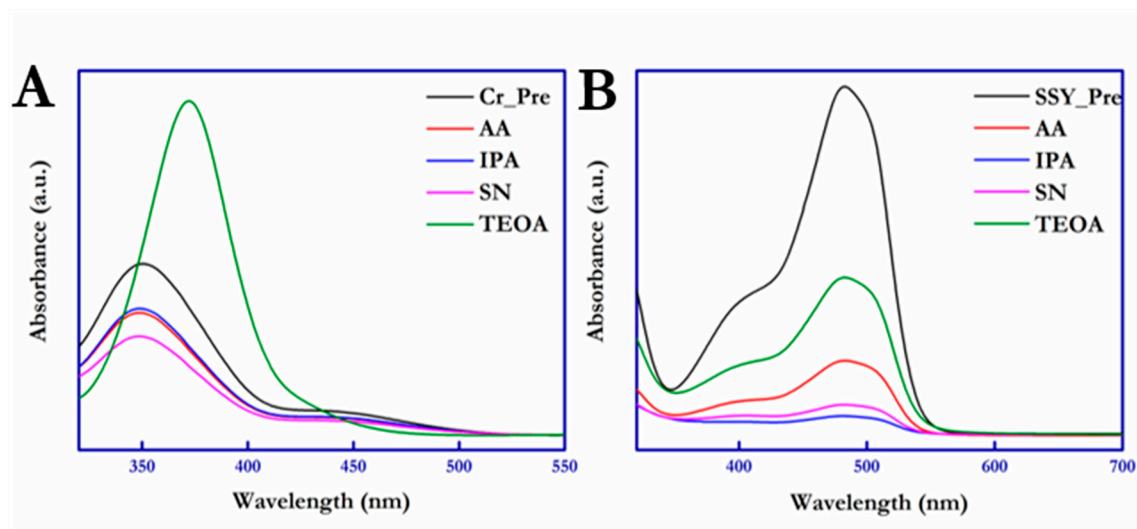


Figure S3. Photocatalytic reduction of Cr (VI) (A) and oxidation of SSY (B) under the influence of distinct scavenging species.

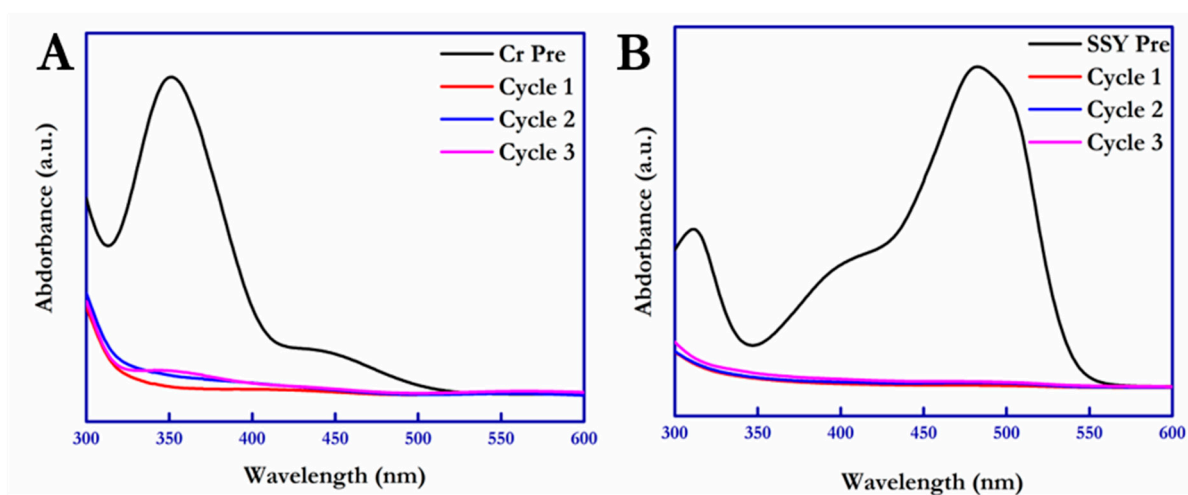


Figure S4. Degradation ability over repeatability of photocatalytic reduction of Cr (VI) (A) and photocatalytic oxidation of SSY (B) for 3 repeated cycles.