Electronic Supplementary Information

Facile synthesis of g-C_3N_4 nanosheets loaded with WO_3 nanoparticles with enhanced photocatalytic performance under visible light irradiation

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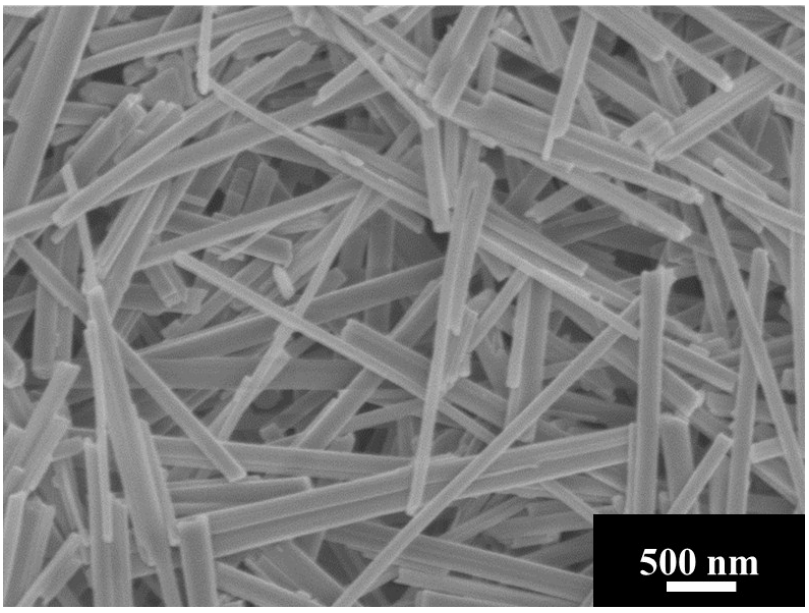


Fig. S1 SEM image of WO_x-EDA.

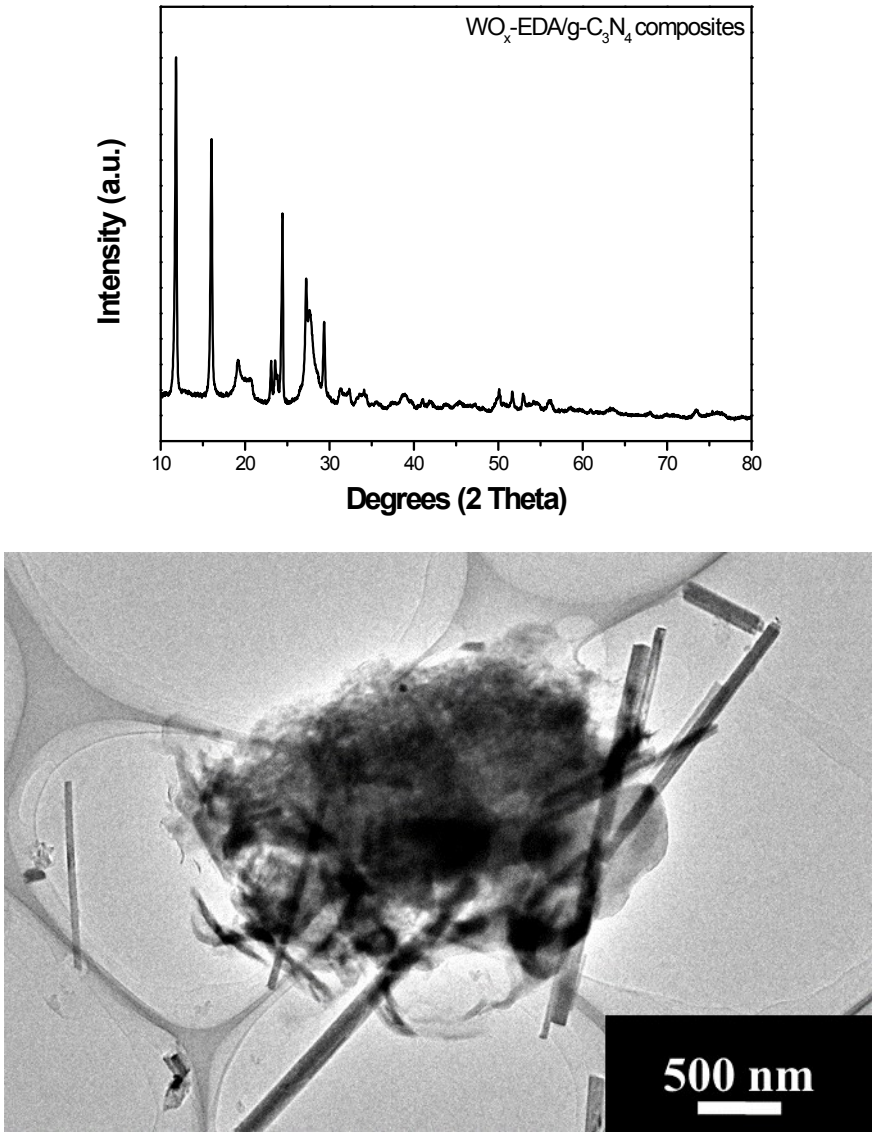


Fig. S2 XRD pattern and TEM image of WO_x-EDA/g-C_3N_4 composites.

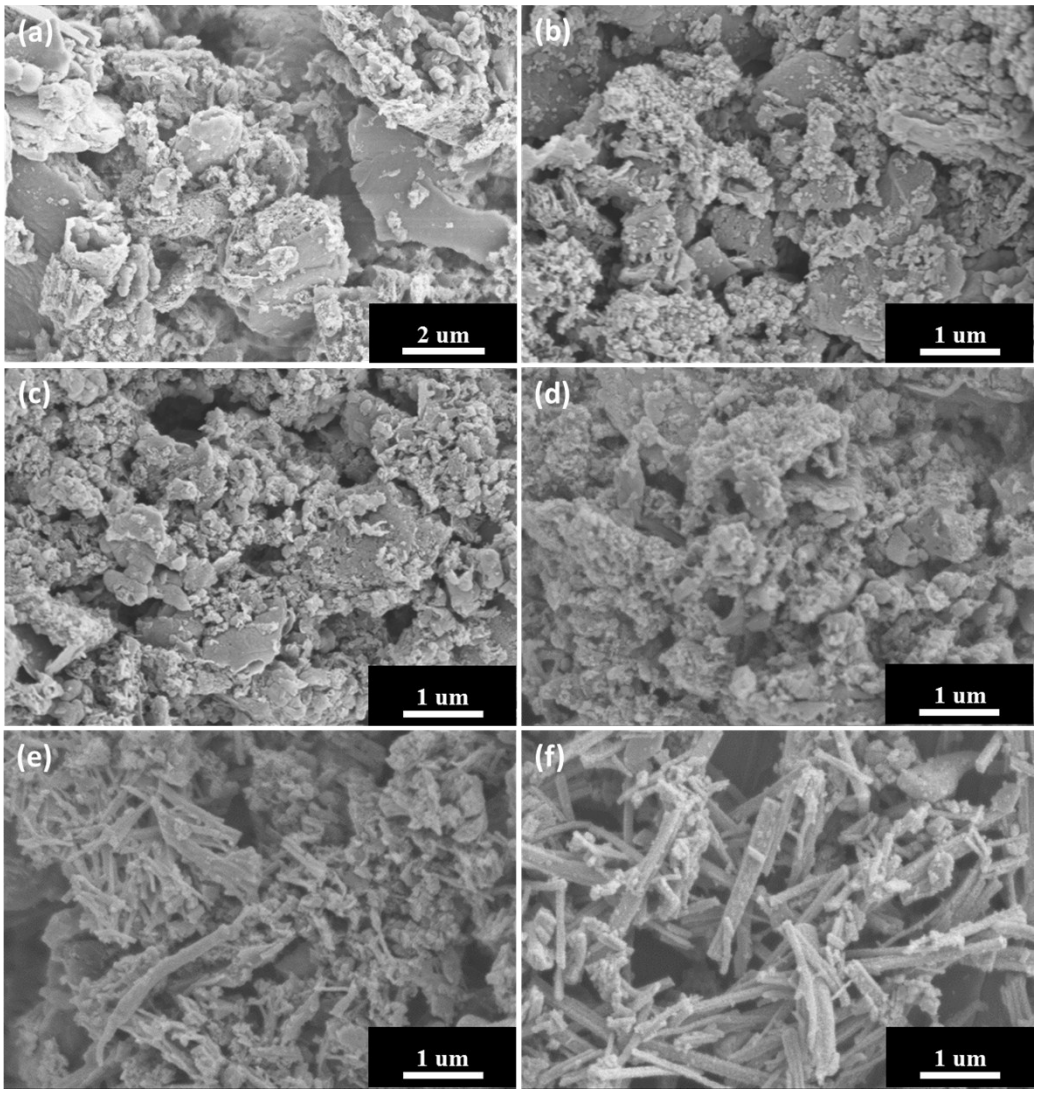


Fig. S3 SEM images of (a) CN; (b) WECN20; (c) WECN40; (d) WECN60; (e) WECN80; (f) WO_3;

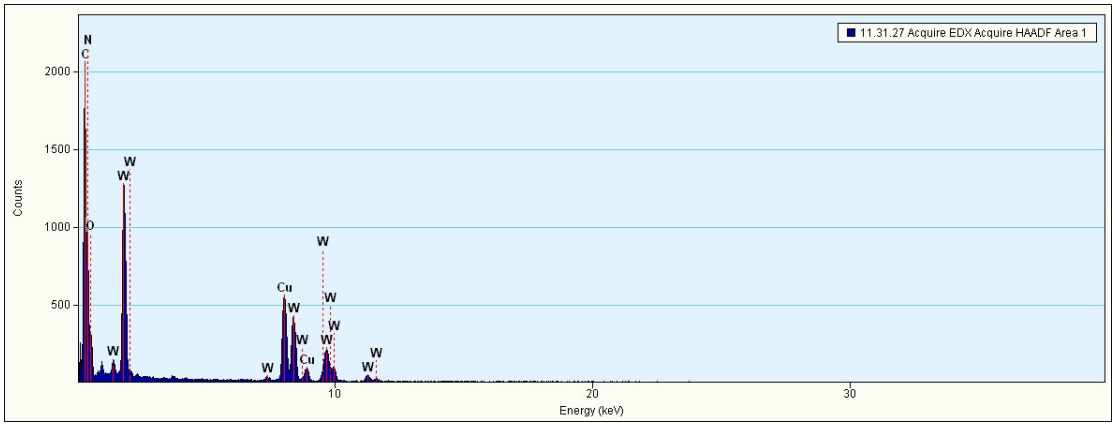


Fig. S4 EDS spectrum of WECN40.

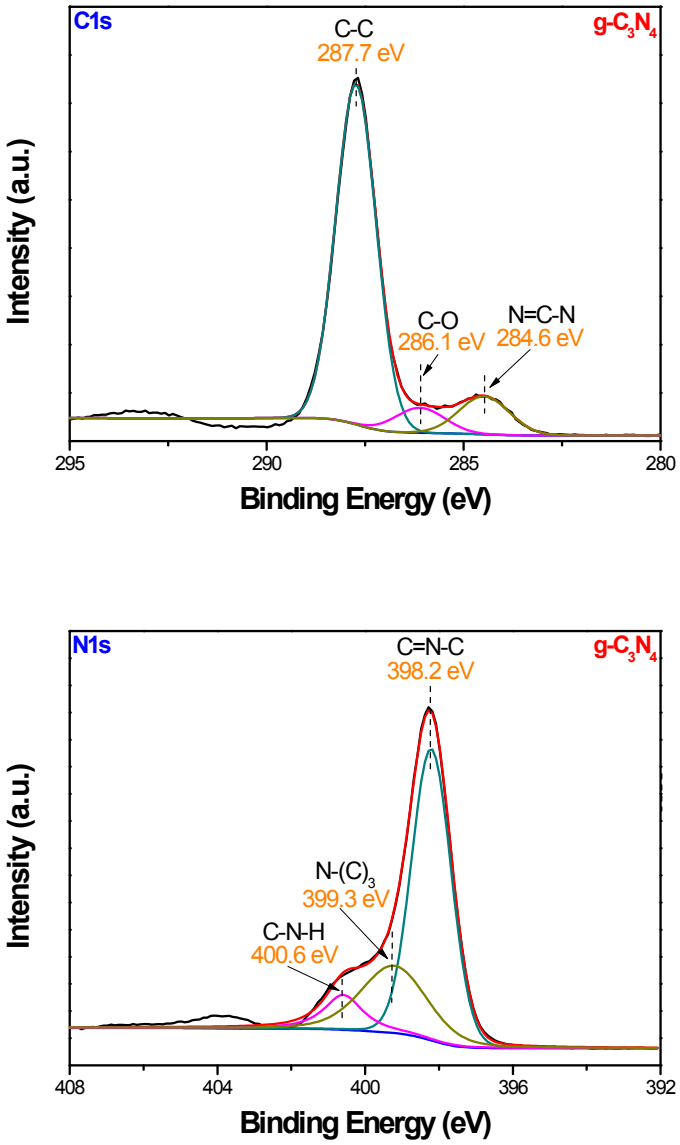


Fig. S5 High revolution XPS spectra of C1s and N1s for CN.

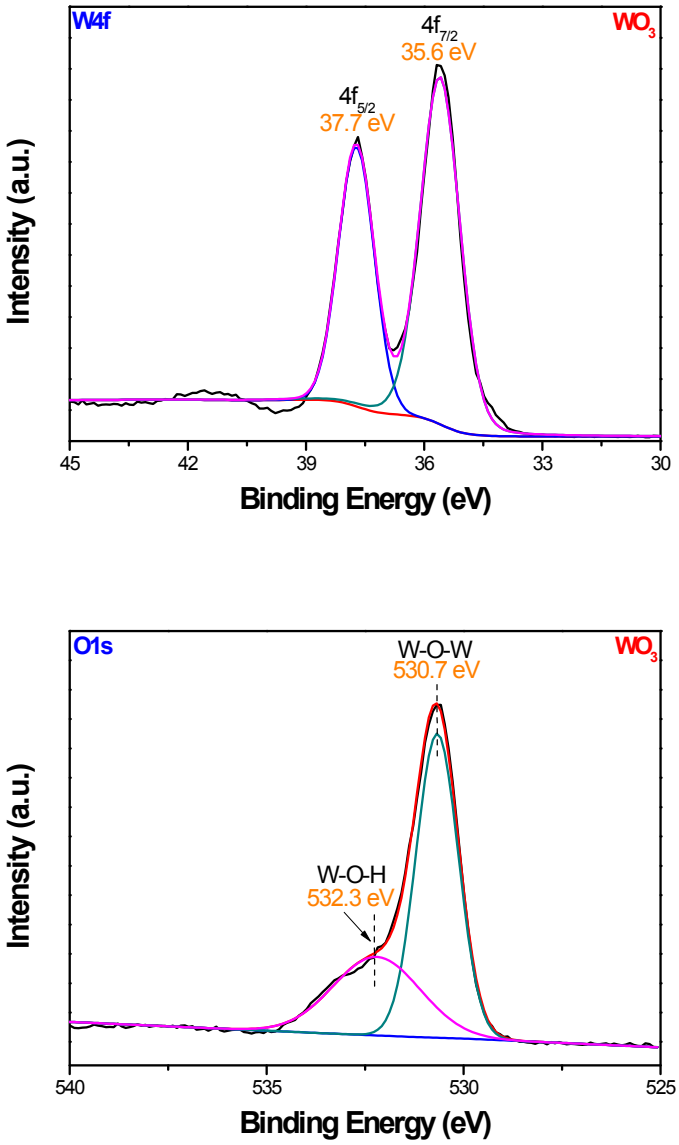


Fig. S6 High revolution XPS spectra of W4f and O1s for WO_3

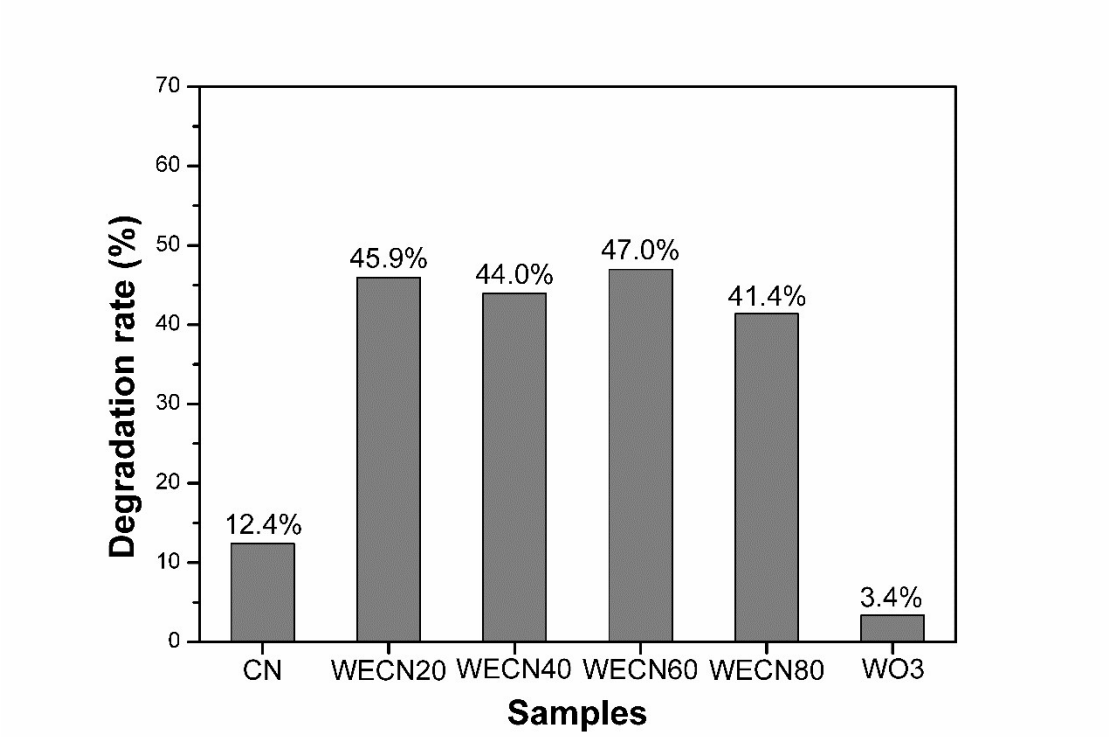
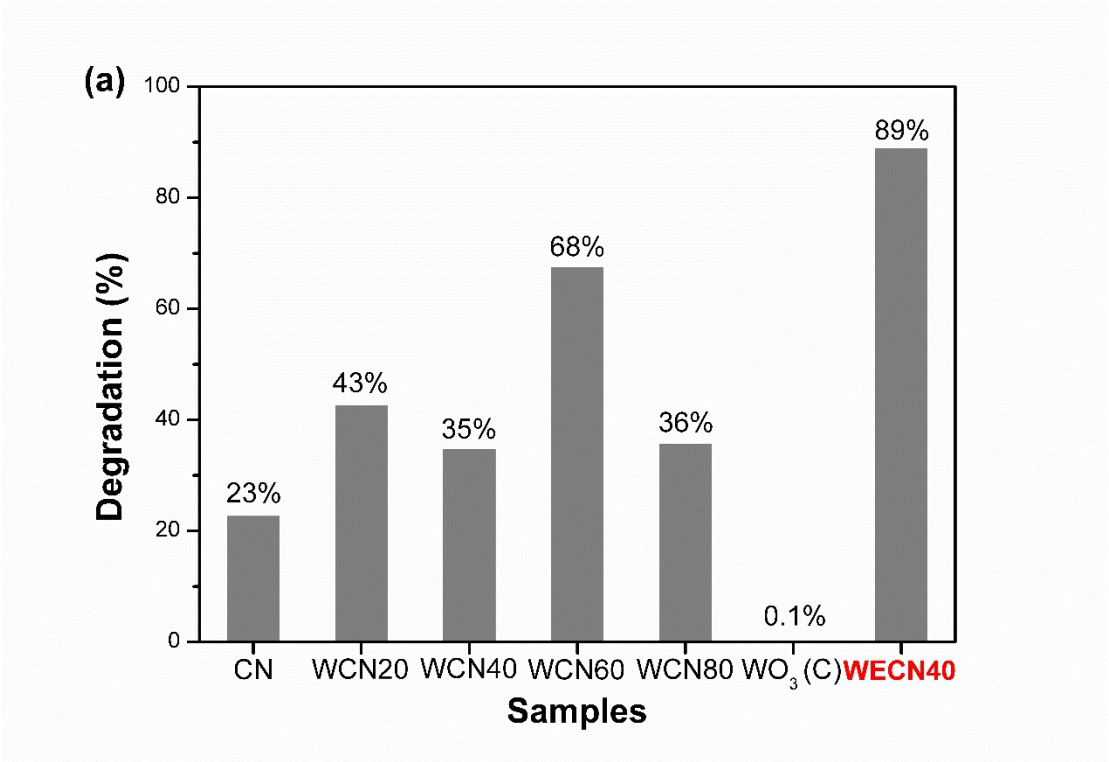
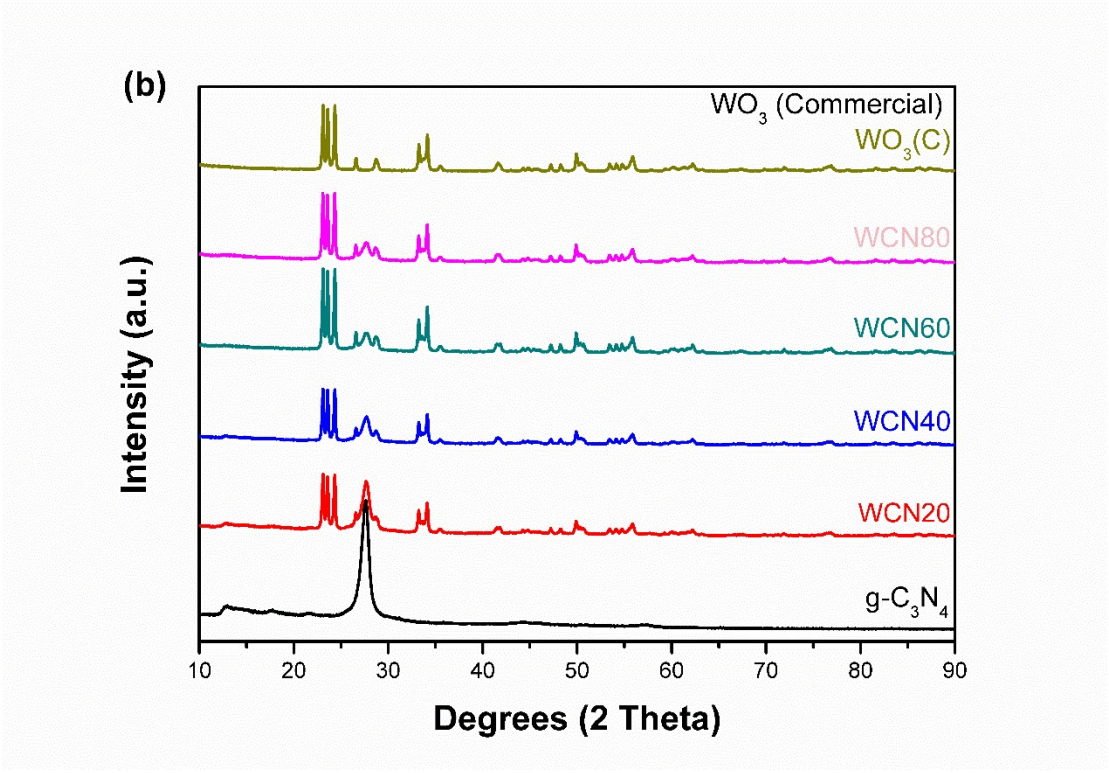


Fig. S7 Photocatalytic degradation of phenol under visible light irradiation ($\lambda \geq 420$ nm). Catalysts: 0.1g; phenol: 10 mg/L, 100 mL; Reaction time: 3h.





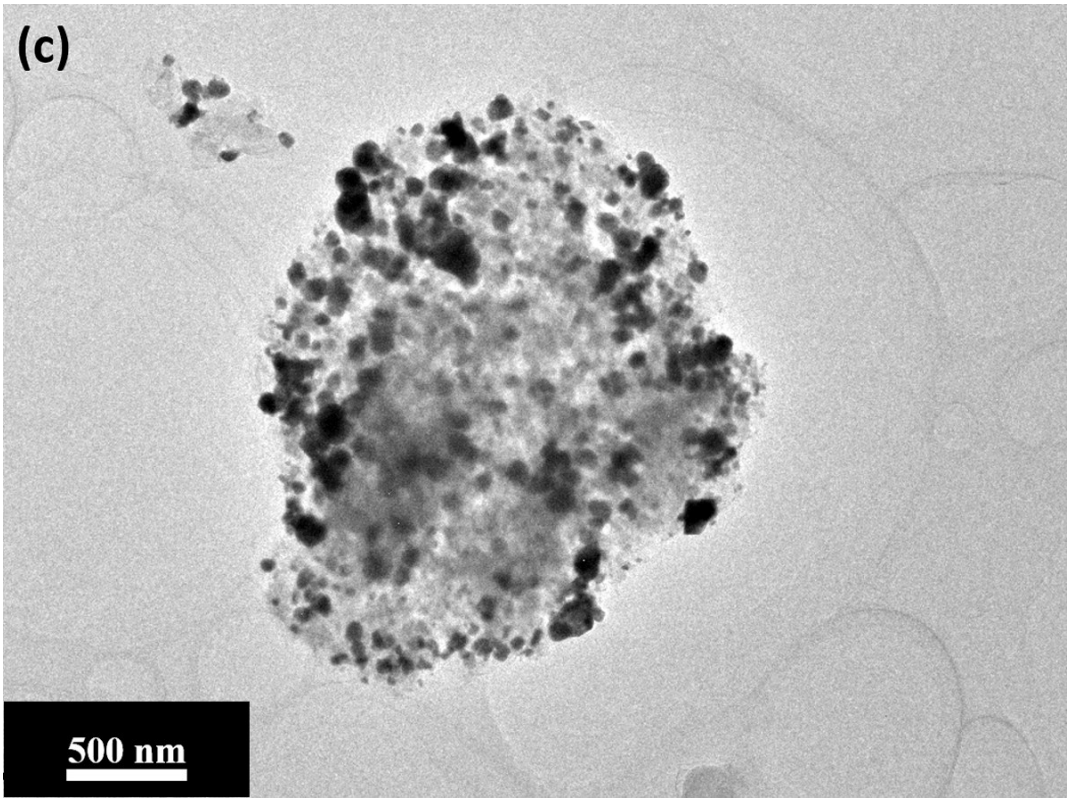


Fig. S8 (a) Photodegradation of RhB, (b) XRD patterns of samples; and TEM image of WCN60 using commercial WO_3 instead of WO_x-EDA as precursor to fabricate g-C_3N_4 nanosheets loading with WO_3 particles and WECN40 is used as comparison.

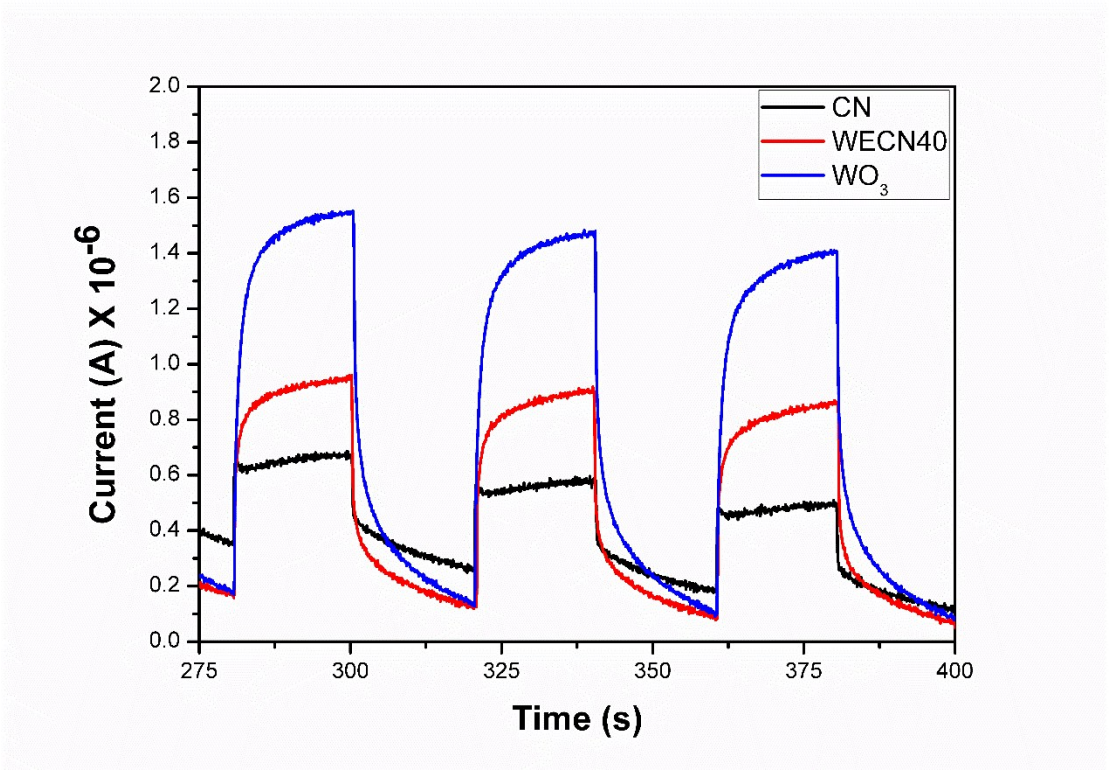


Fig. S9 Transient photocurrent response of CN, WECN40 and WO_3.

Table S1

The specific surface area, pore volume, and pore diameter of samples.

	g-C_3N_4	**WECN20**	**WECN40**	**WECN60**	**WECN80**	**WO_3**
S_{BET} (m^2/g)	21.469	31.913	38.835	50.925	41.081	19.844
Pore Volume (cm/g)	0.166	0.175	0.167	0.179	0.153	0.046
Pore Diameter (nm)	51.796	2.582	2.105	1.148	1.959	19.844