

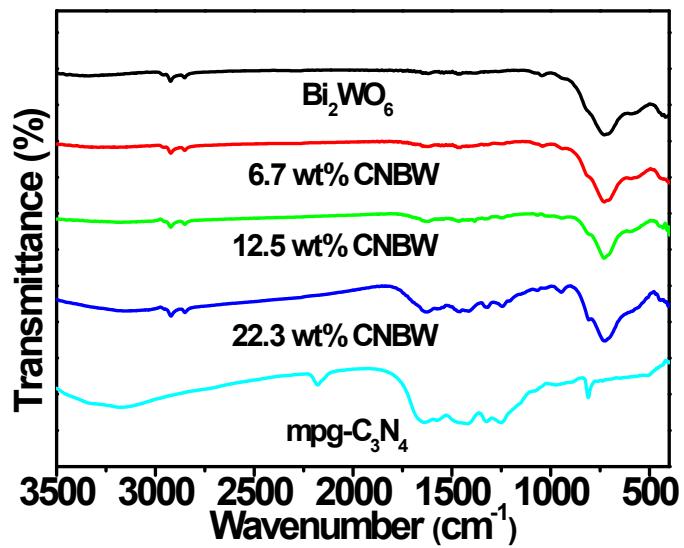
## Supporting Information

# Hydrothermal Synthesis of mpg-C<sub>3</sub>N<sub>4</sub> and Bi<sub>2</sub>WO<sub>6</sub> Nest-like Structure Nanohybrids with Enhanced Visible Light Photocatalytic Activities

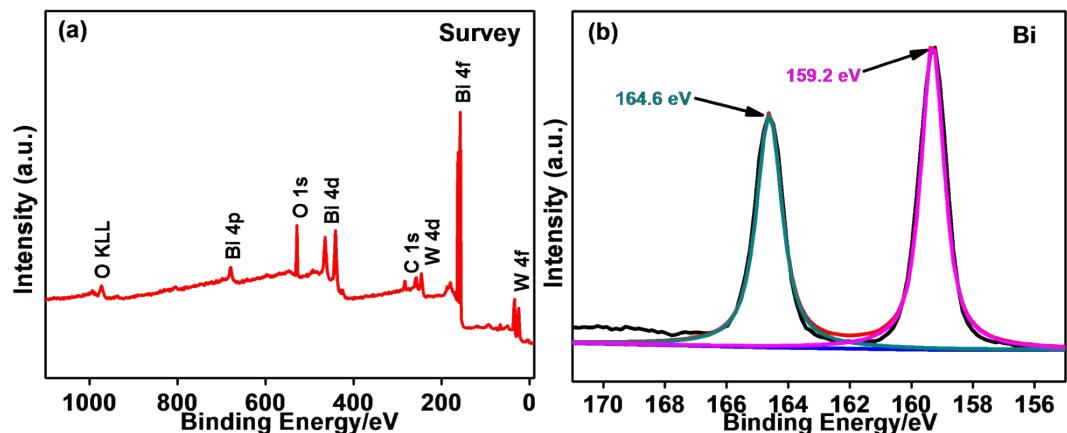
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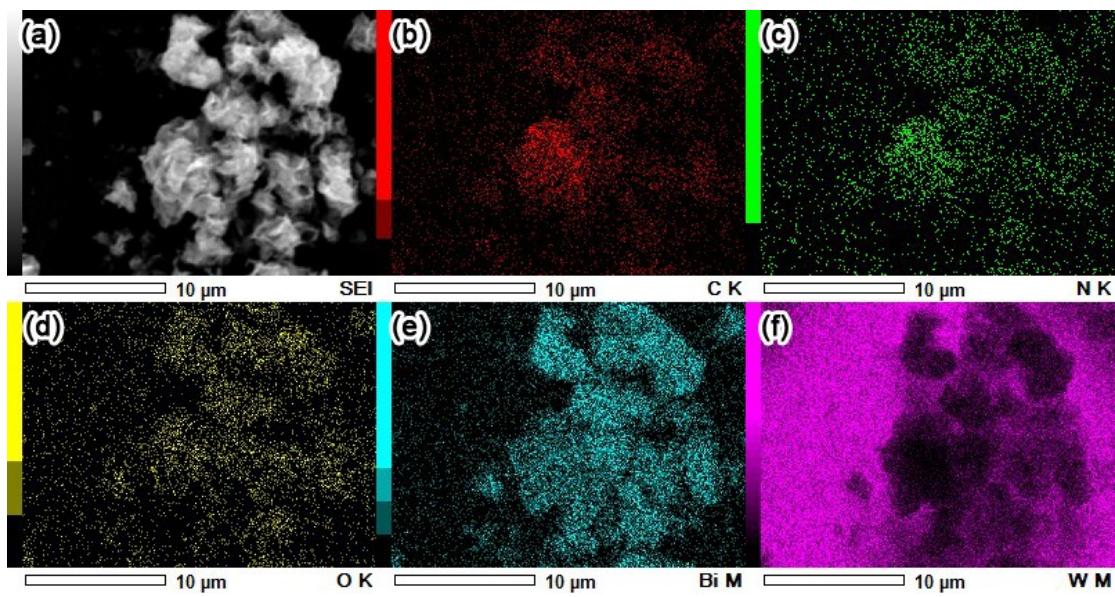
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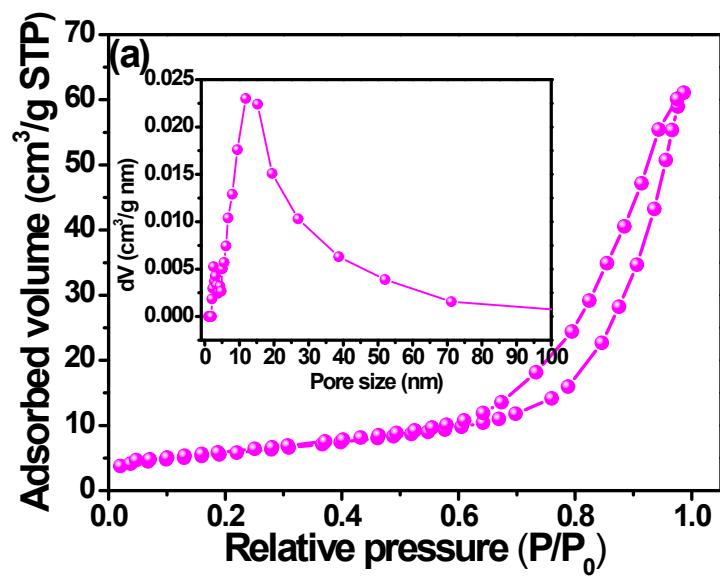
**Fig. S1.** FT-IR spectra of the as-prepared mpg- $\text{C}_3\text{N}_4$ ,  $\text{Bi}_2\text{WO}_6$  and CNBW composites.

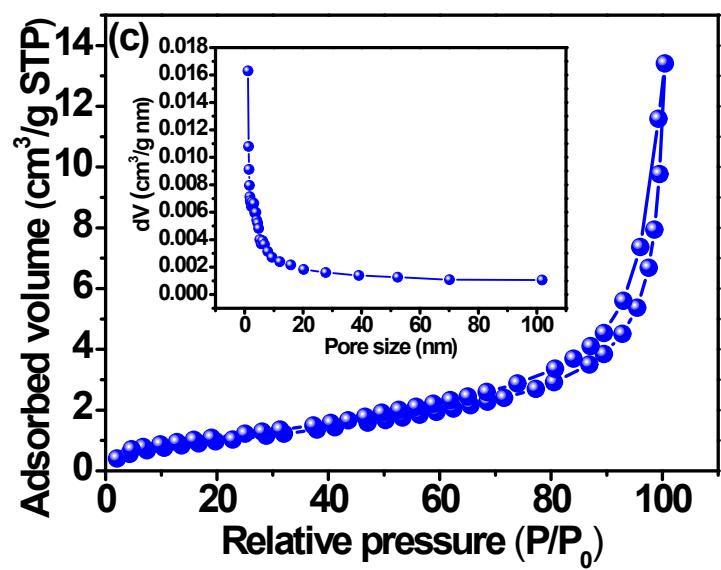
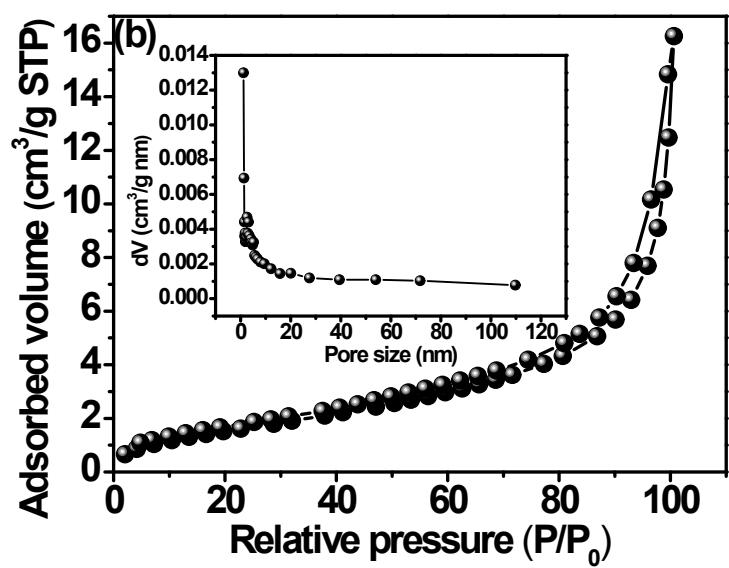


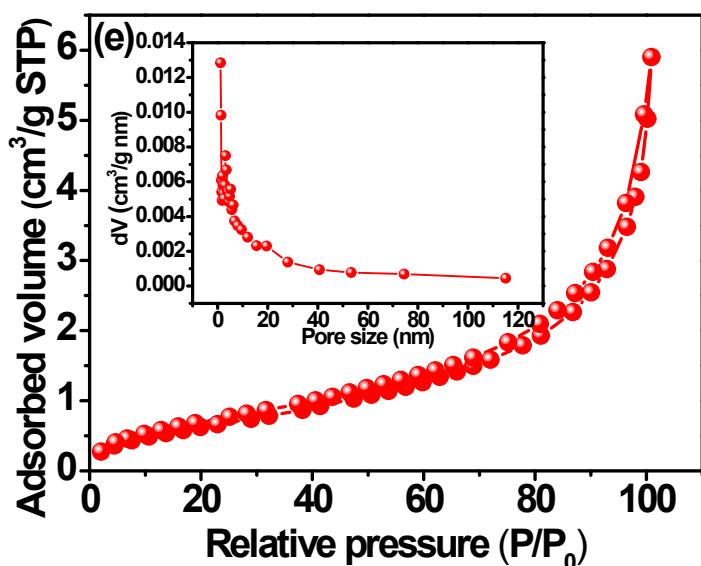
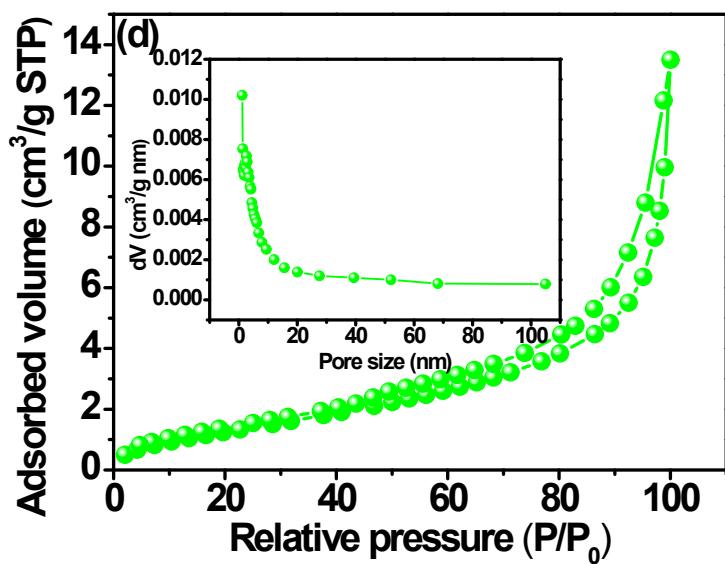
**Fig. S2.** XPS spectra (a) of 12.5 wt% CNBW composite, Bi 4f (b).



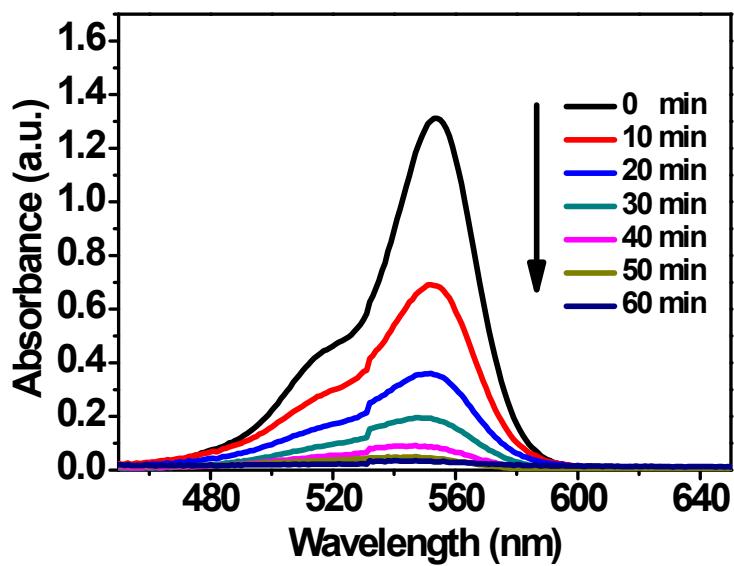
**Fig. S3.** SEM of 12.5 wt% CNBW (a) and the corresponding elemental mapping of C (b), N (c), O (d), Bi (e) and W (f).



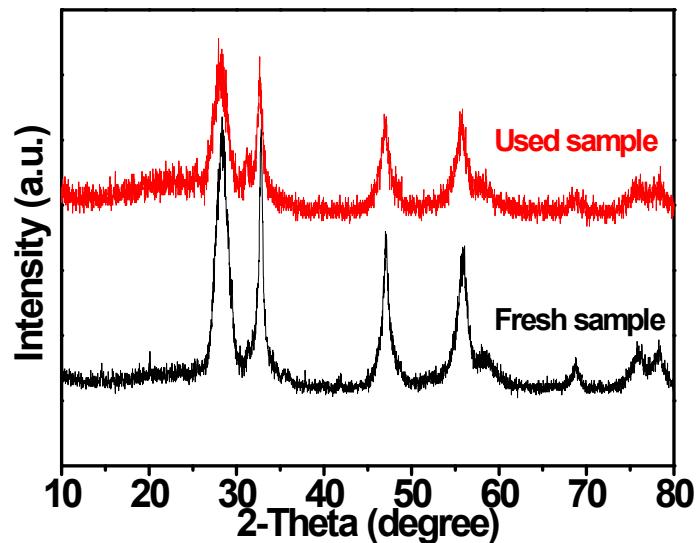




**Fig. S4.** Nitrogen adsorption-desorption isotherms and the corresponding pore size distribution curves (inset) of mpg-C<sub>3</sub>N<sub>4</sub> (a), 6.7 wt% CNBW, (b) 12.5 wt% CNBW (c), 22.3 wt% CNBW (d) and Bi<sub>2</sub>WO<sub>6</sub> (e).



**Fig. S5.** Temporal UV-vis absorption spectral changes during the photocatalytic degradation of RhB in aqueous solution in the presence of the 12.5wt% CNBW.



**Fig. S6.** XRD patterns of the 12.5 wt% CNBW before and after the cycling photocatalytic experiments.