

## Support Information

### Design of 3D $\text{WO}_3/\text{h-BN}$ nanosheets nanocomposites for efficient visible-light-driven photocatalysis

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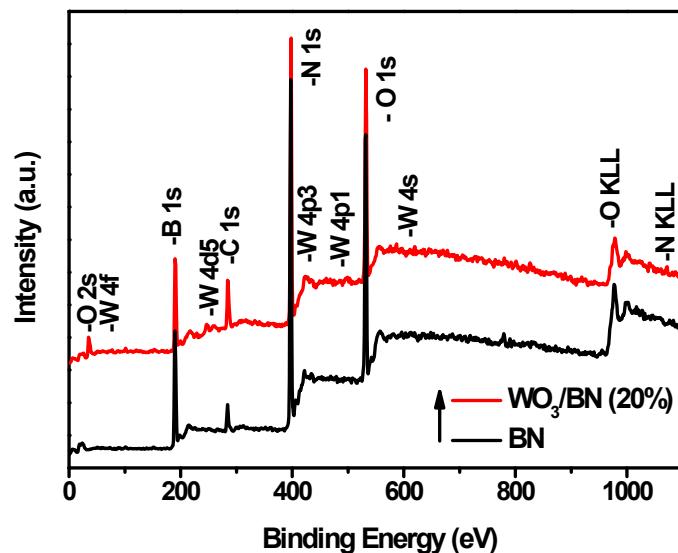


Fig. S1 XPS spectra of the 20%  $\text{WO}_3/\text{BN}$  nanocomposite.

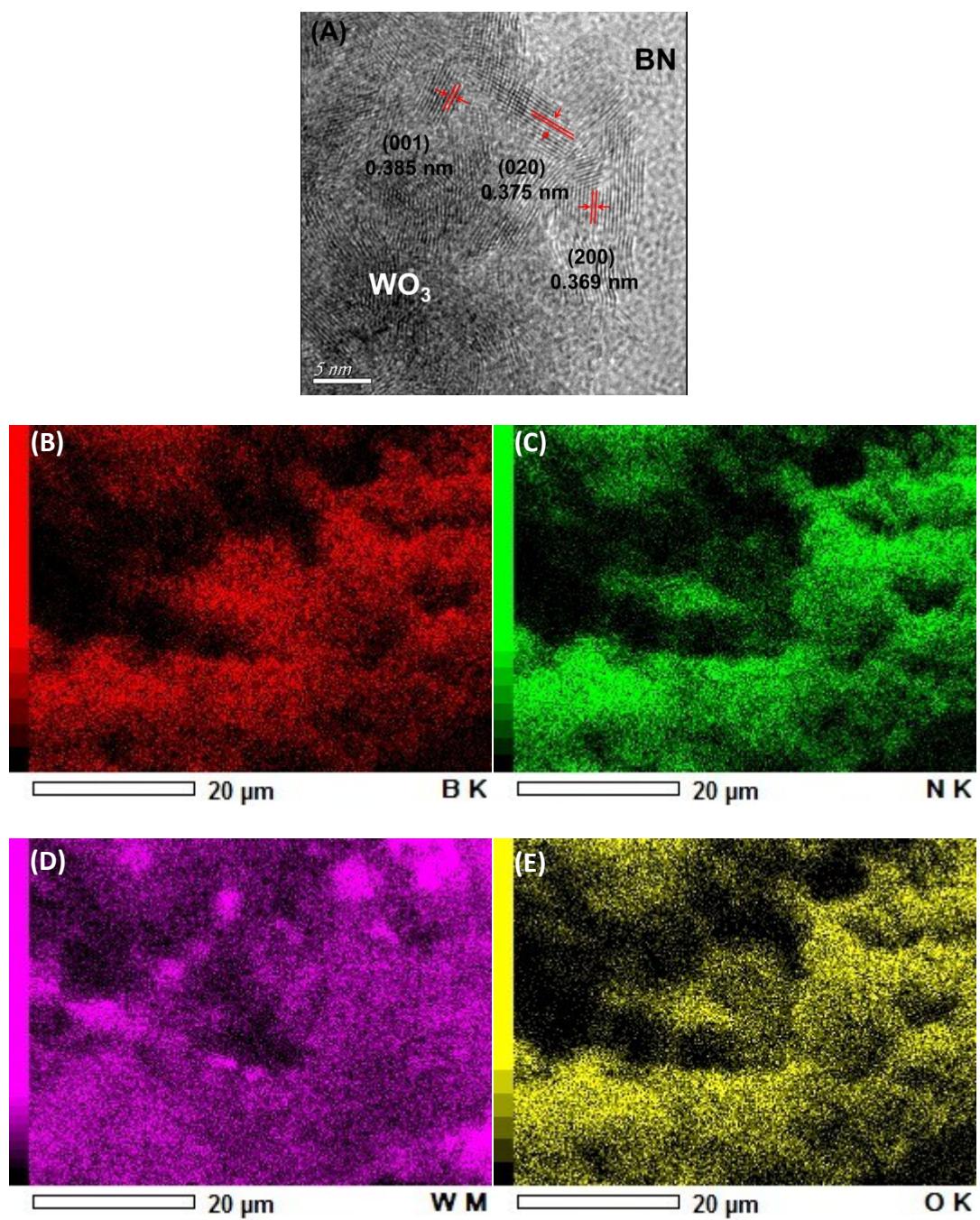
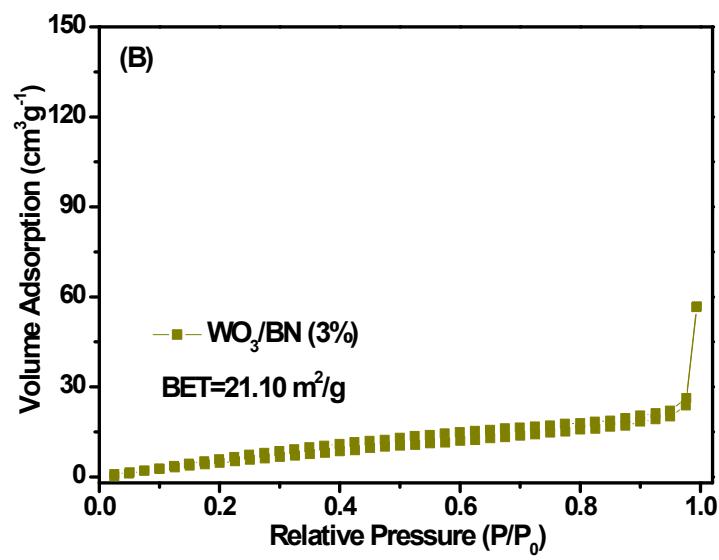
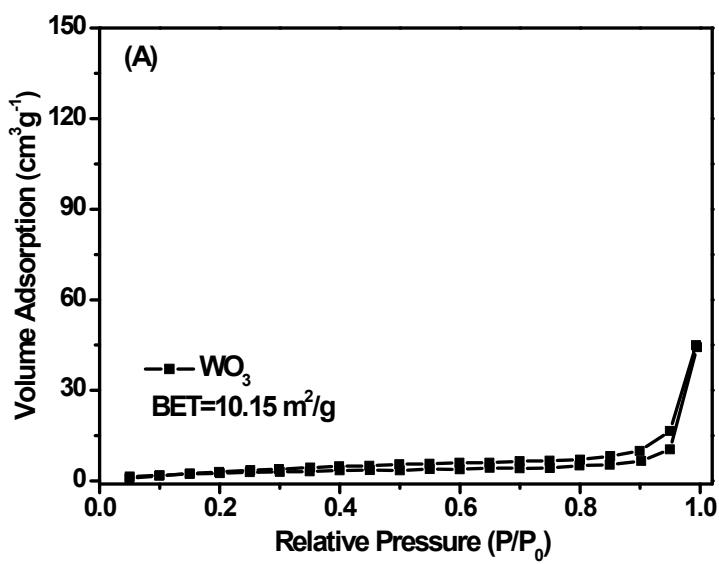
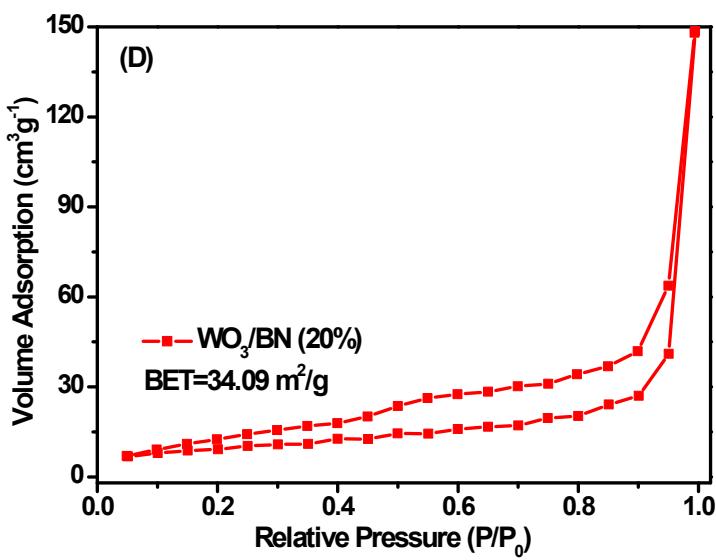
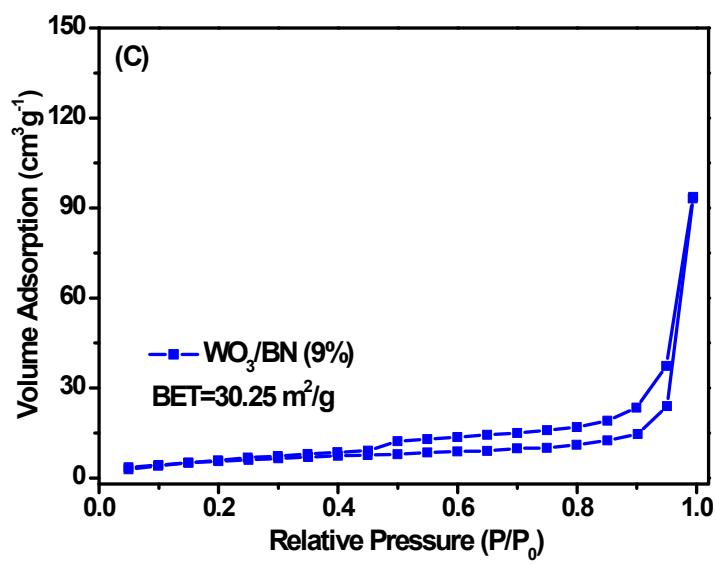


Fig. S2 (A) The HRTEM of the 20%  $\text{WO}_3$ /BN nanocomposite, and EDS maps of element (B) B, (C) N, (D) W, and (E) O, respectively.





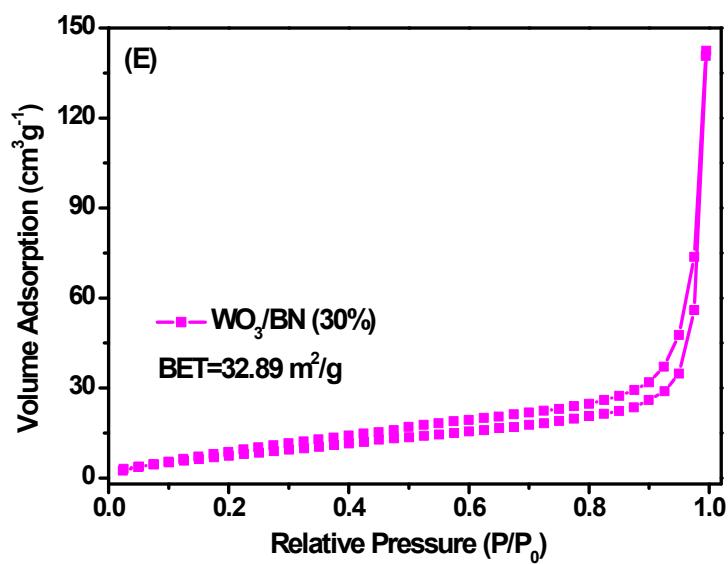


Fig. S3 Nitrogen absorption-desorption isotherms of (A) WO<sub>3</sub> and WO<sub>3</sub>/BN nanocomposites: (B) 3%; (C) 9%; (D) 20% and (E) 30%.

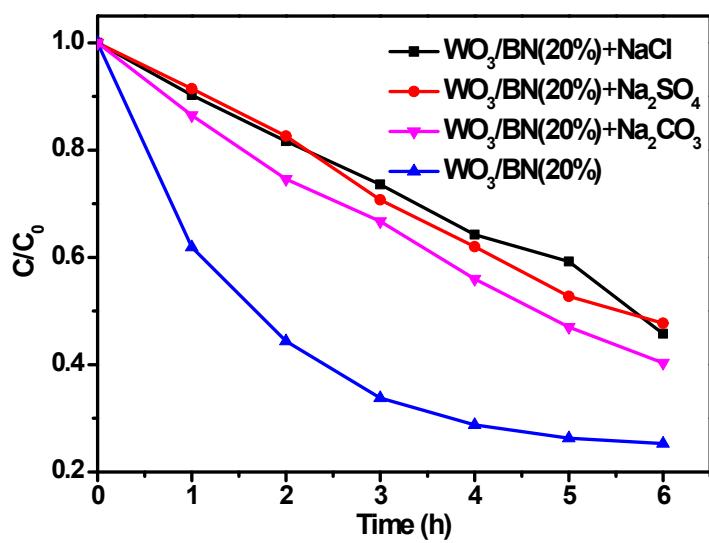


Fig. S4 The photocatalytic degradation performance of RhB in the presence of  $\text{Cl}^-$ ,  $\text{SO}_4^{2-}$ ,  $\text{CO}_3^{2-}$ , respectively

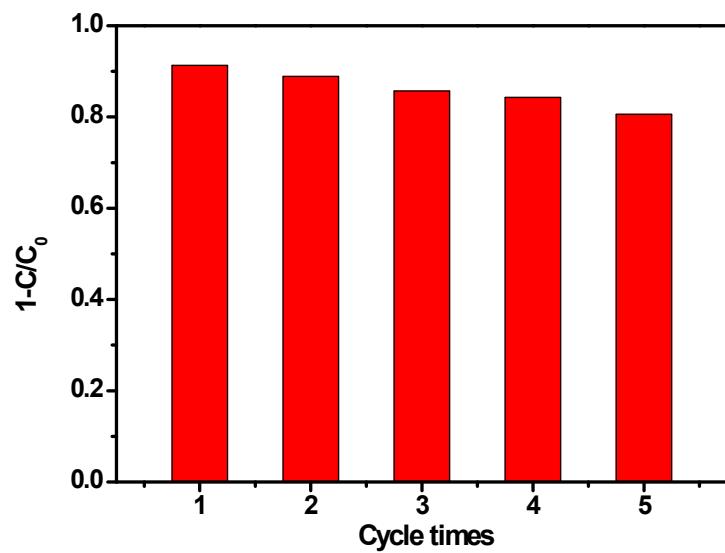
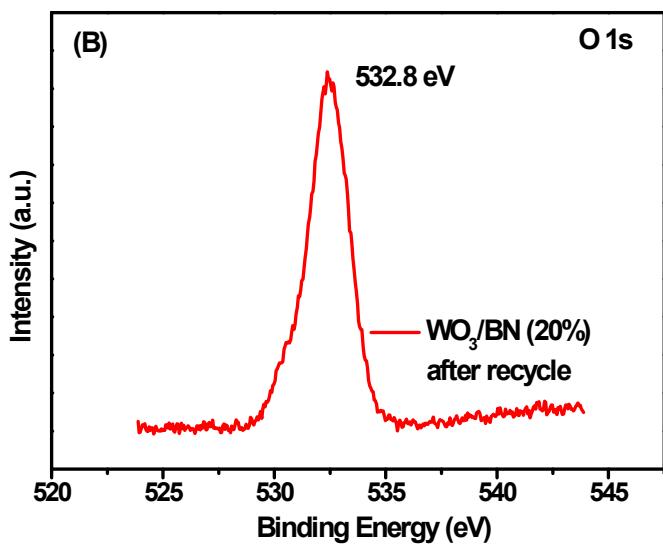
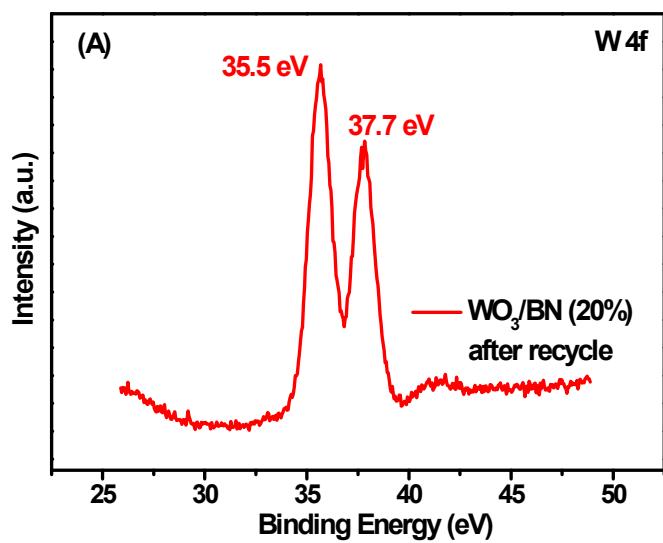


Fig. S5 Cycling runs of 20%  $\text{WO}_3/\text{BN}$  nanocomposite for the degradation of RhB.



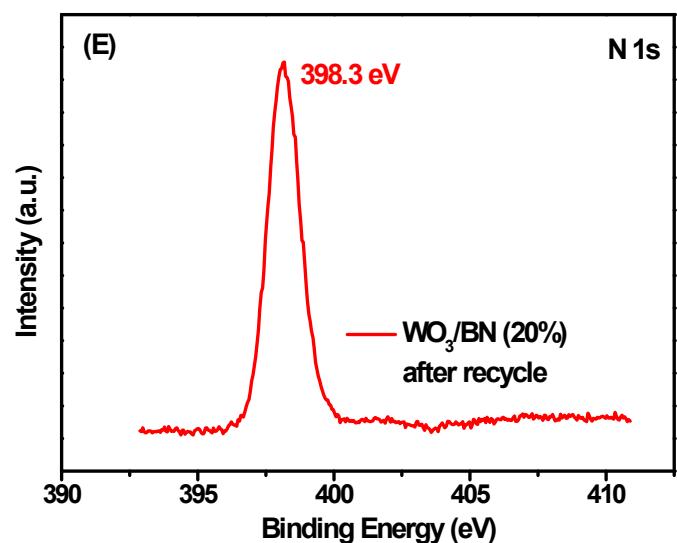
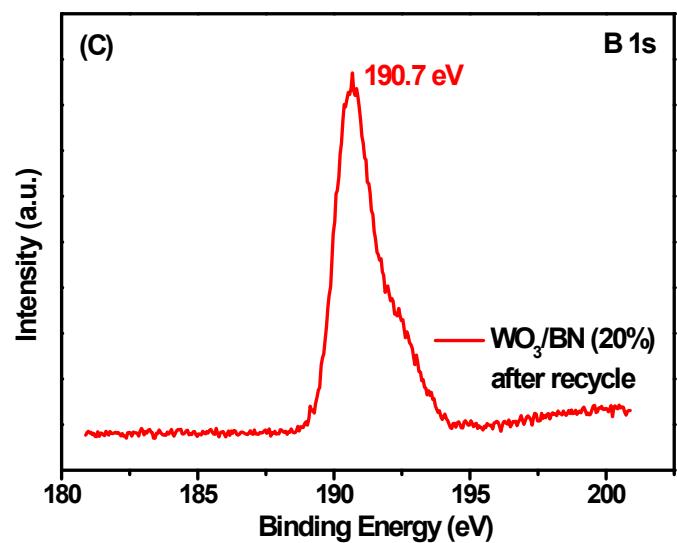


Fig. S6 High resolution XPS spectra of 20%  $\text{WO}_3/\text{BN}$  nanocomposite after recycle: (A) W 4f, (B) O 1s, (C) B 1s, (D) N 1s.