Electronic Supplementary Information

Electrospun $CuAl_2O_4$ hollow nanofibers as visible light photocatalyst with enhanced activity and excellent stability under acid and alkali conditions

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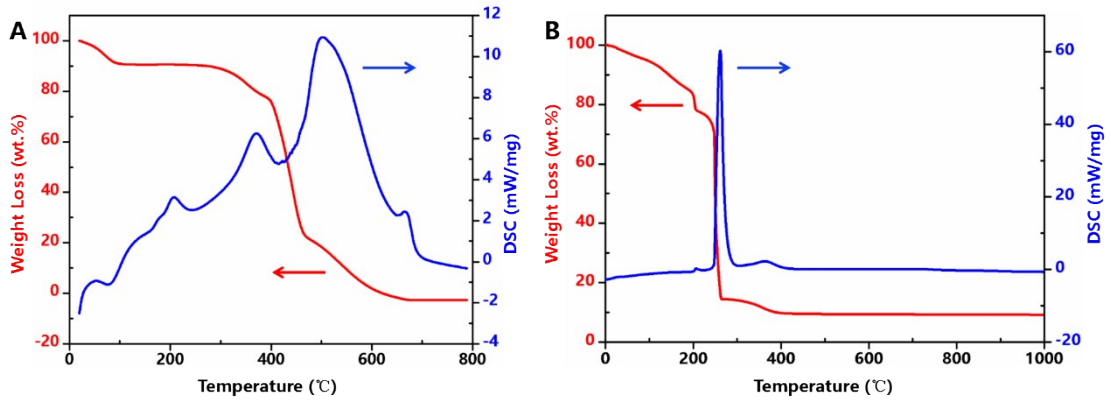

Fig. S1 TG-DSC curves of thermal decomposition of pure PVP NFs (A) and PVP/$Cu(NO_3)_2$/$Al(NO_3)_3$ composite NFs (B) at the heating rate of 10 °C/min in air.

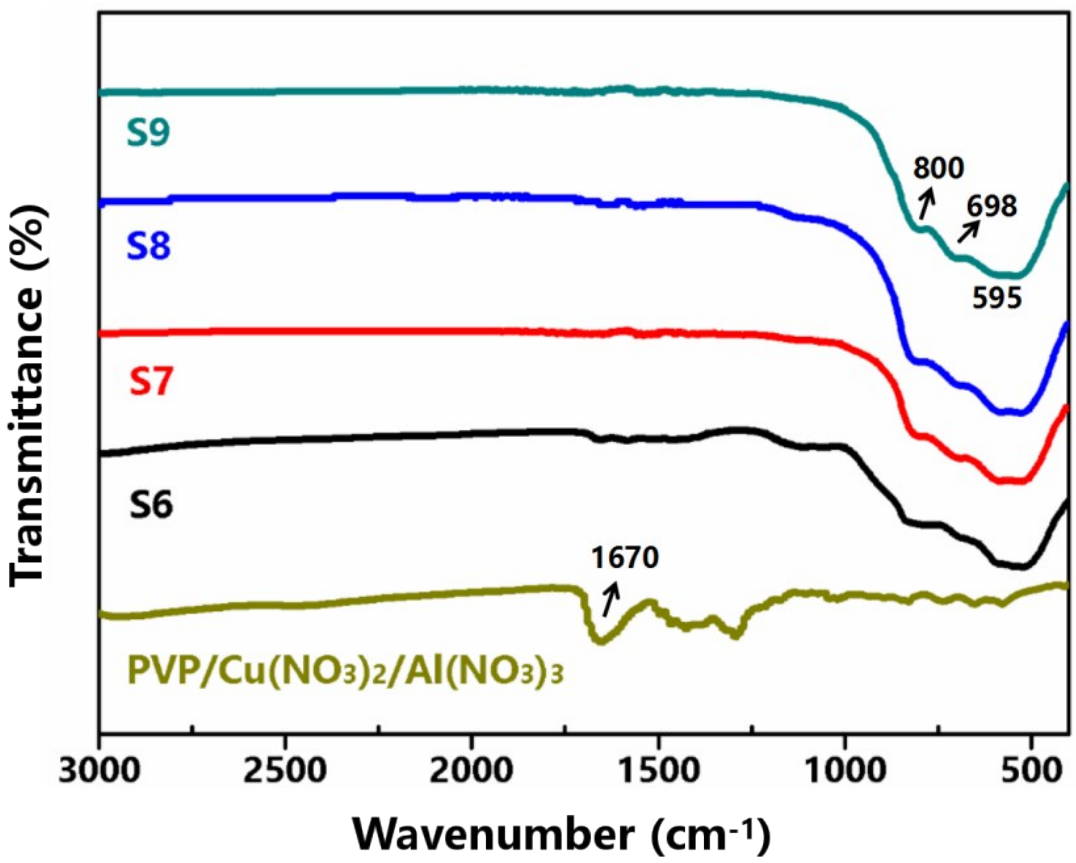

Fig.S2 FT-IR spectra of PVP/$Cu(NO_3)_2$/$Al(NO_3)_3$ composite nanofibers and S6-S9.

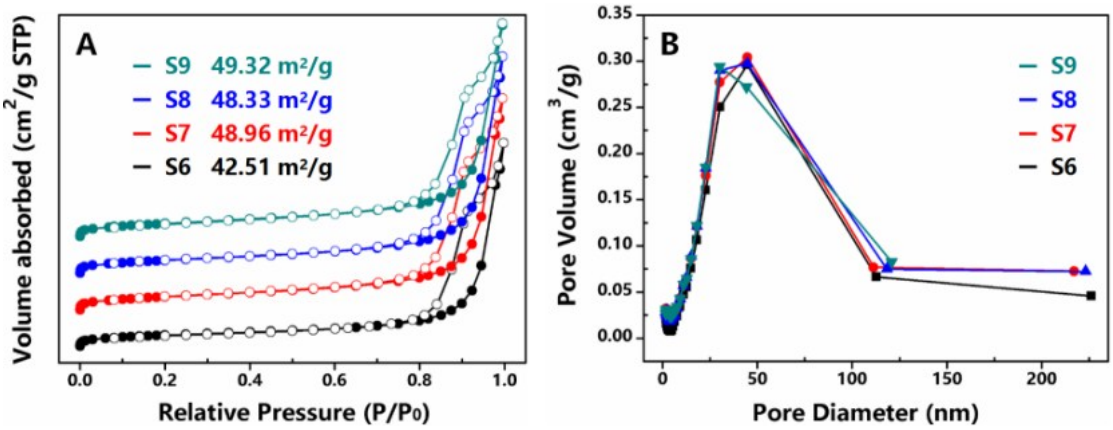

Fig. S3 Nitrogen adsorption-desorption isotherms (A) and pore size distribution (B) of S6 - S9.

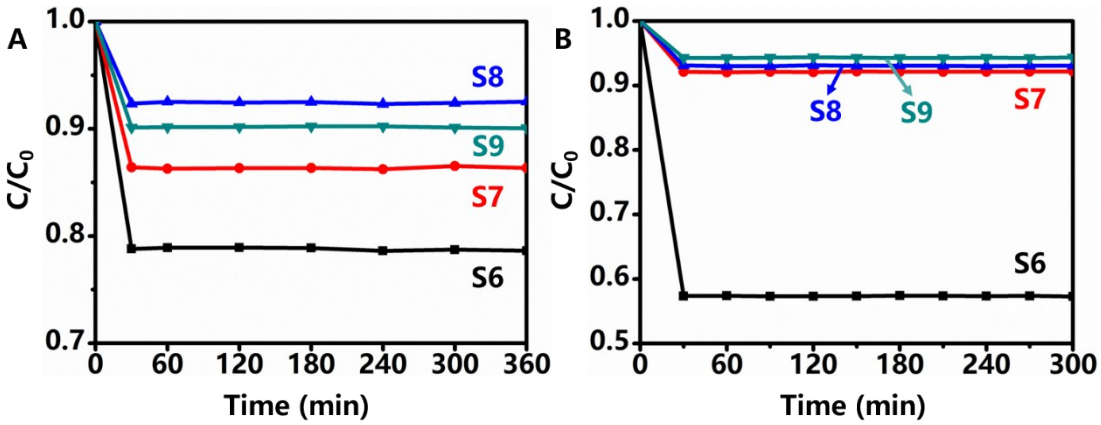

Fig. S4 Absorption of RhB and MO solution with the samples in the dark.

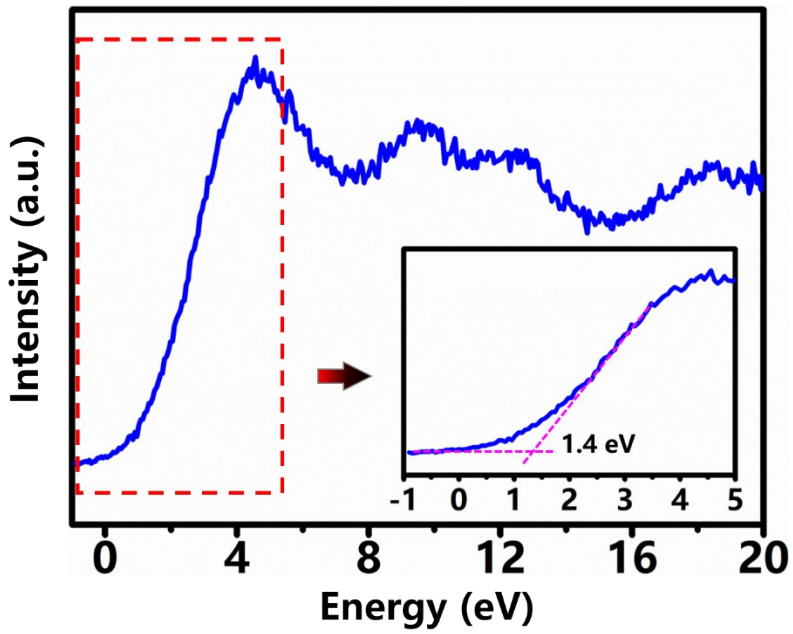

Fig. S5 XPS valence band spectrum of as-prepared $CuAl_2O_4$ HNFs (S8). The insert is the enlarged spectrum from the region noted by dotted box

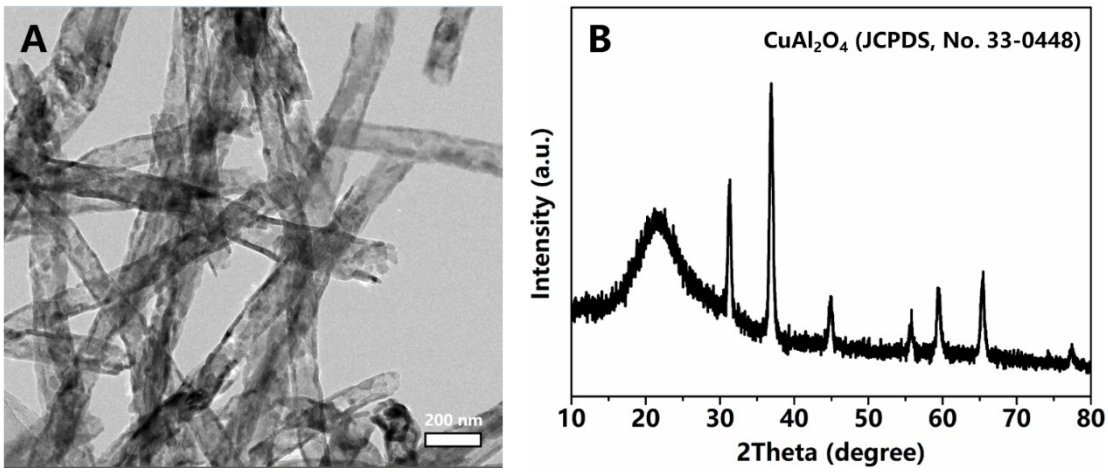

Fig. S6 TEM image (A) and XRD pattern (B) of S8 after photodegradation of MO.