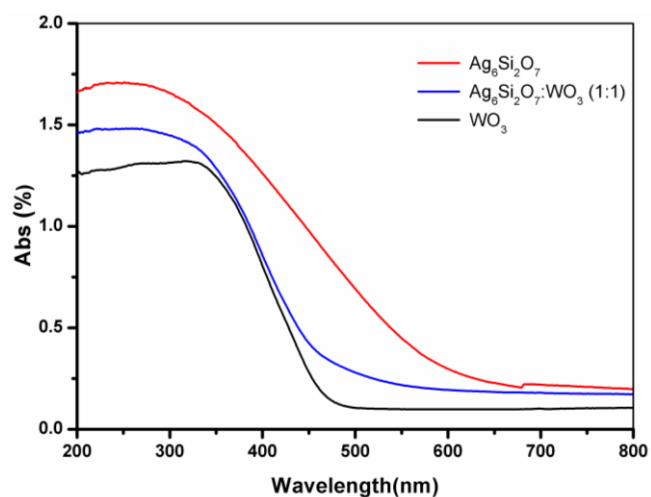


## Supporting Information

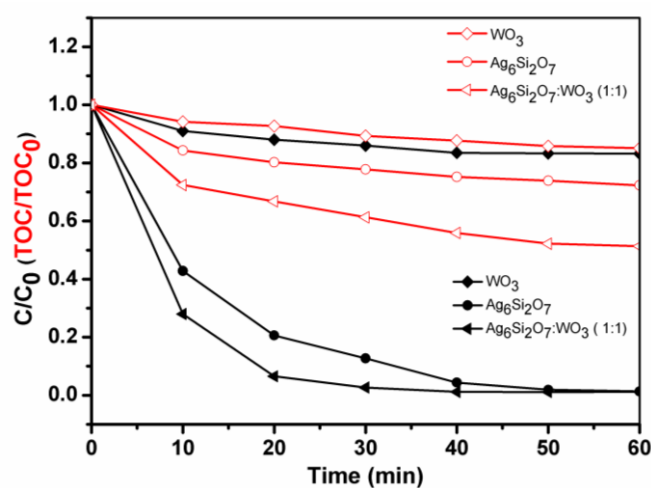
### **Highly efficient $\text{Ag}_6\text{Si}_2\text{O}_7/\text{WO}_3$ photocatalyst based on heterojunction with enhanced visible light photocatalytic activities**

Yonggang Hu, Hong Zheng\*, Tongzhou Xu, Ning Xu, Hongwen Ma\*

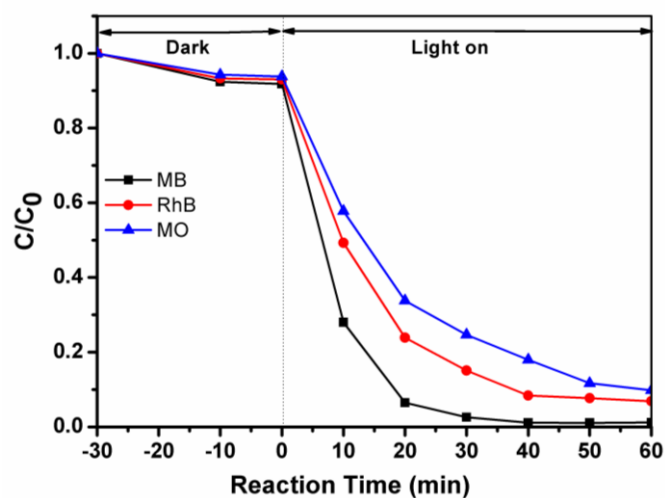
Beijing Key Laboratory of Materials Utilization of Nonmetallic Minerals and Solid  
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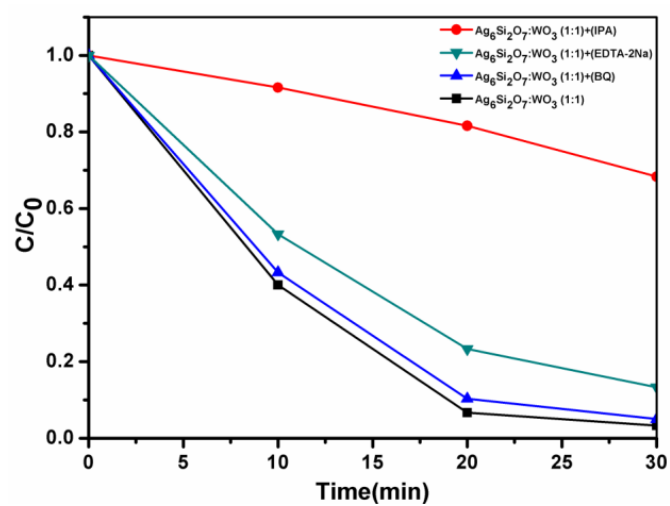
**Fig.S1** UV-vis diffuse reflectance spectra of  $\text{WO}_3$ ,  $\text{Ag}_6\text{Si}_2\text{O}_7$  and  $\text{Ag}_6\text{Si}_2\text{O}_7/\text{WO}_3$  (1:1) composite.



**Fig. S2** The comparison of decolorization and mineralization of MB over  $\text{Ag}_6\text{Si}_2\text{O}_7$ ,  $\text{WO}_3$  and  $\text{Ag}_6\text{Si}_2\text{O}_7/\text{WO}_3$  (1:1) composite under visible light irradiation.



**Fig.S3** Photocatalytic degradation of MB, MO and RhB by  $\text{Ag}_6\text{Si}_2\text{O}_7/\text{WO}_3$ (1:1) composite under visible light irradiation.



**Fig.S4** Active species trapping experiments of the  $\text{Ag}_6\text{Si}_2\text{O}_7/\text{WO}_3$  (1:1) heterojunction photocatalyst under visible light irradiation.