

## Enhanced photocatalytic performance of ZnTi-LDHs with morphology control

Pengfei Fang, Zhongchuan Wang, Weiwei Wang\*

School of Material Science and Engineering, Shandong University of Technology, Zibo City, Shandong, P. R. China, 255049

\* Correspondence: wangweiwei@sdu.edu.cn; Tel.: +08615689078202

### Contents

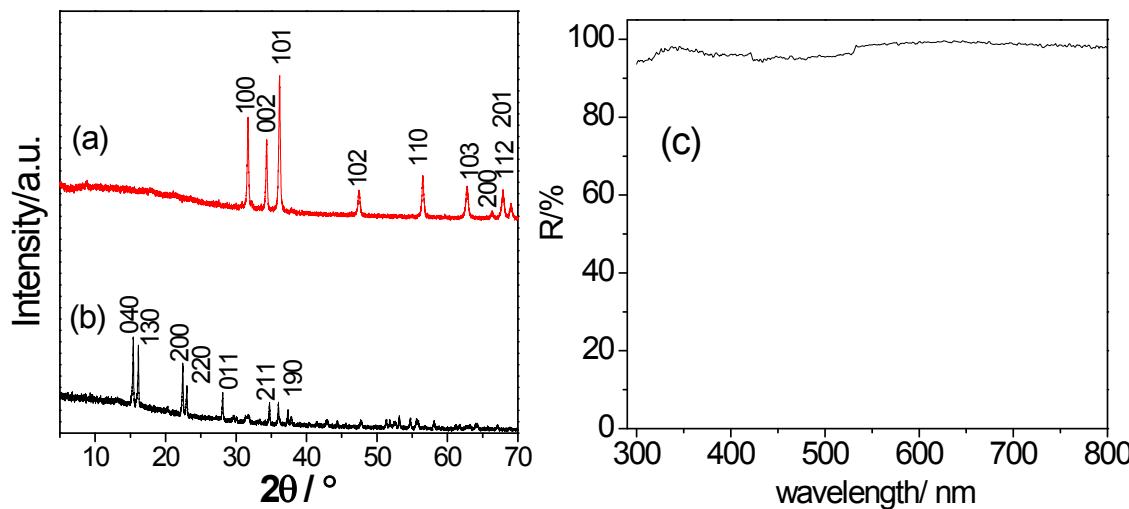
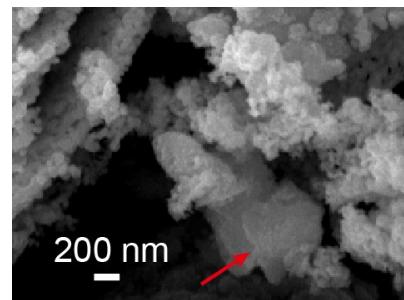
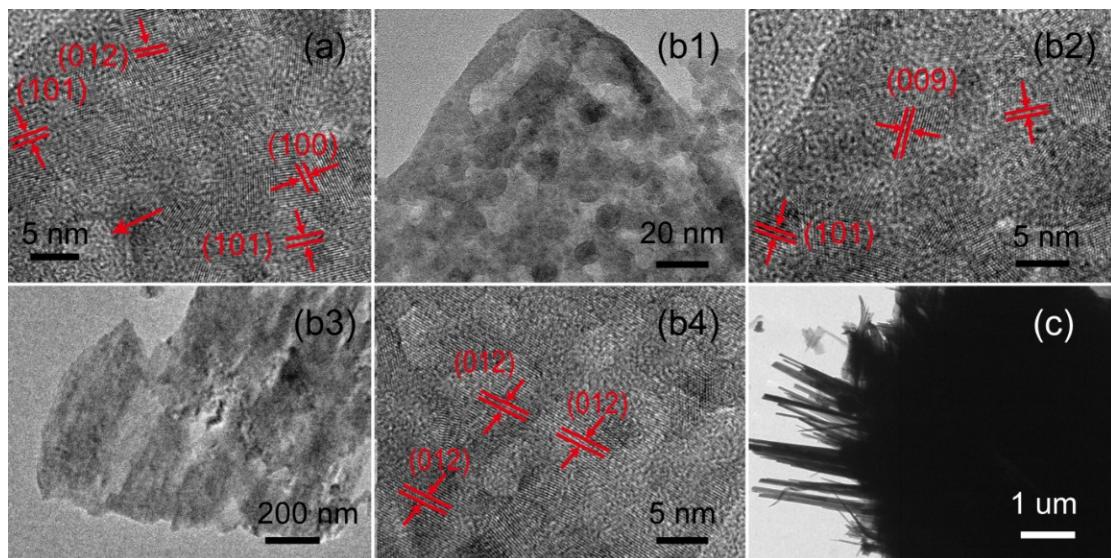


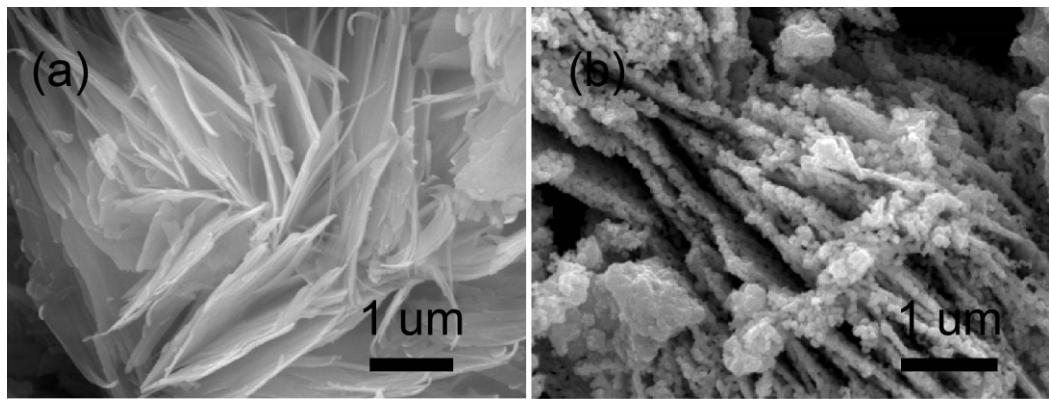
Figure S1 XRD patterns of (a)  $\text{ZnO}$  and (b)  $\text{Zn}(\text{OH})_2$ , (c) UV-vis diffuse reflectance spectrum of  $\text{Zn}(\text{OH})_2$ .



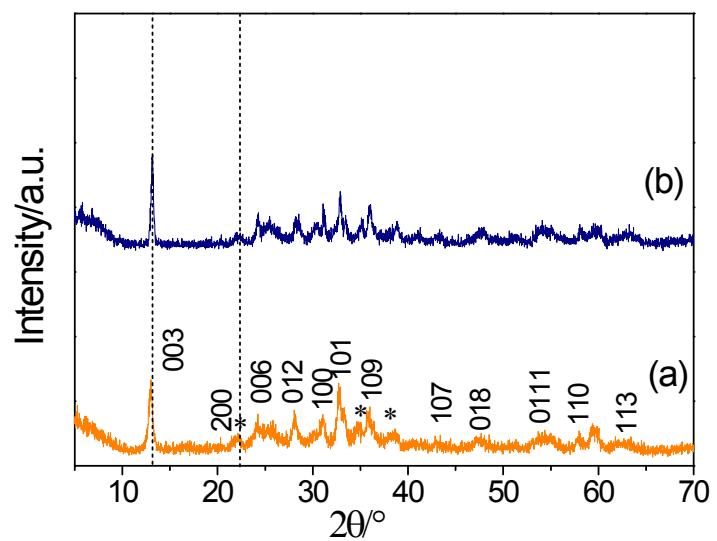
**Figure S2** SEM image of ZT-P.



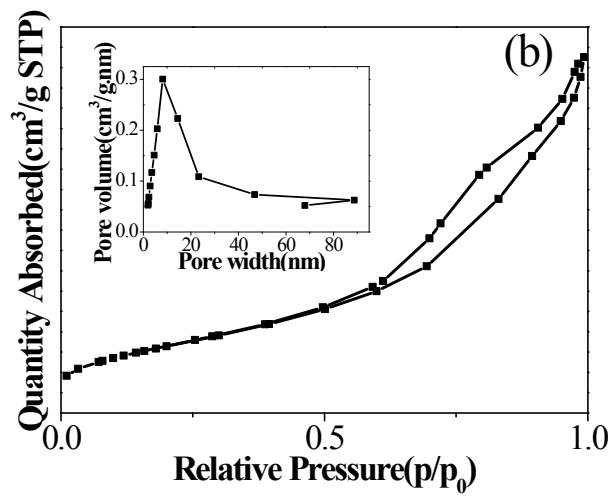
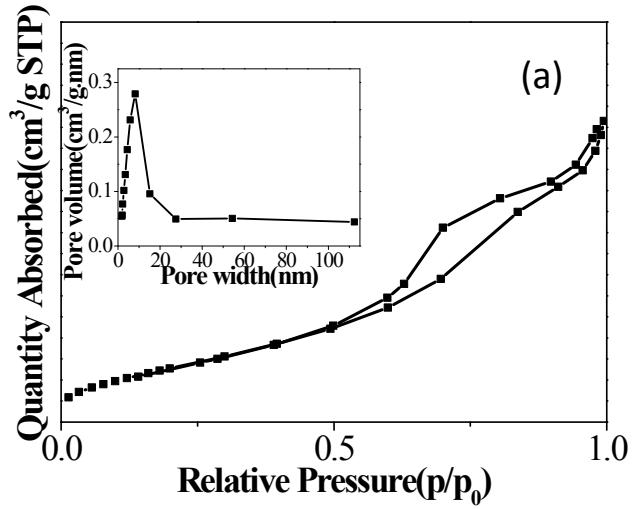
**Figure S3** TEM and HTEM images of (a) ZT-CTAB, (b) ZT-PVP, (c) ZT-SDS.



**Figure S4** SEM images of (a) ZT-SDBS and (b) ZT-F.



**Figure S5** XRD patterns of (a) ZT-SDBS and (b) ZT-F.



**Figure S6** Nitrogen adsorption-desorption isotherms and pore size distributions curve for (a) ZT-PVP and (b) ZT-CTAB.

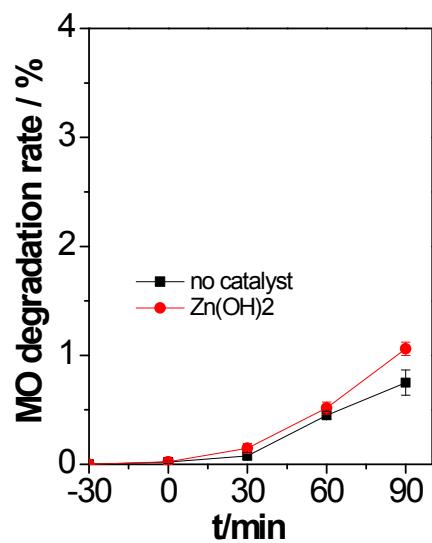


Figure S7 The magnification of the photocatalytic degradation curve of methyl orange without catalyst and with Zn(OH)<sub>2</sub> as catalyst