

# Influence of Defects on the Photocatalytic Activity of ZnO

*Daimei Chen<sup>1†\*</sup>, Zhihong Wang<sup>1,2,3†</sup>, Tiezhen Ren<sup>3</sup>, Hao Ding<sup>1</sup>, Wenqing Yao<sup>2</sup>,*

*Ruilong Zong<sup>2</sup>, Yongfa Zhu<sup>2\*</sup>*

(<sup>1</sup>National Laboratory of Mineral Materials, School of Materials Sciences and Technology, China University of Geosciences, Beijing 100083, China

<sup>2</sup>Department of Chemistry, Tsinghua University, Beijing, 100084, PR China

<sup>3</sup>School of Chemical Engineering, Hebei University of Technology, Tianjin 300130, China)

\*Corresponding author.

Tel.: +86 10 82332274; fax: +86 10 82322974.

<sup>1</sup> E-mail: chendaimei@cugb.edu.cn; chendaimei0611.student@sina.com

<sup>2</sup> E-mail: zhuyf@tsinghua.edu.cn

Author Contributions

†These authors contributed equally to this work.

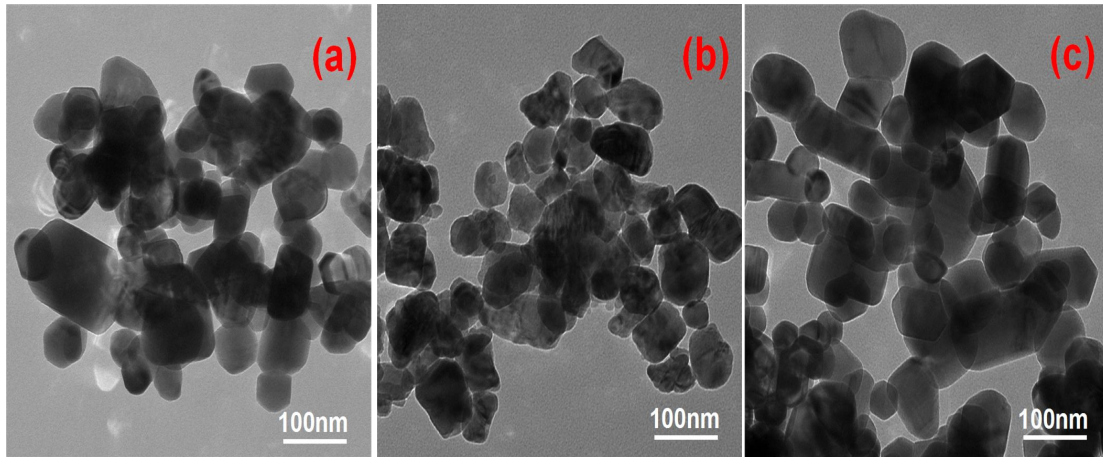


Fig.S1. TEM images of materials (a) ZnO; (b) the ZnO sample milled at the rotating speed of 350 rpm for 1 h, and (c) the annealed ZnO sample treated at 350 °C for 16 h.

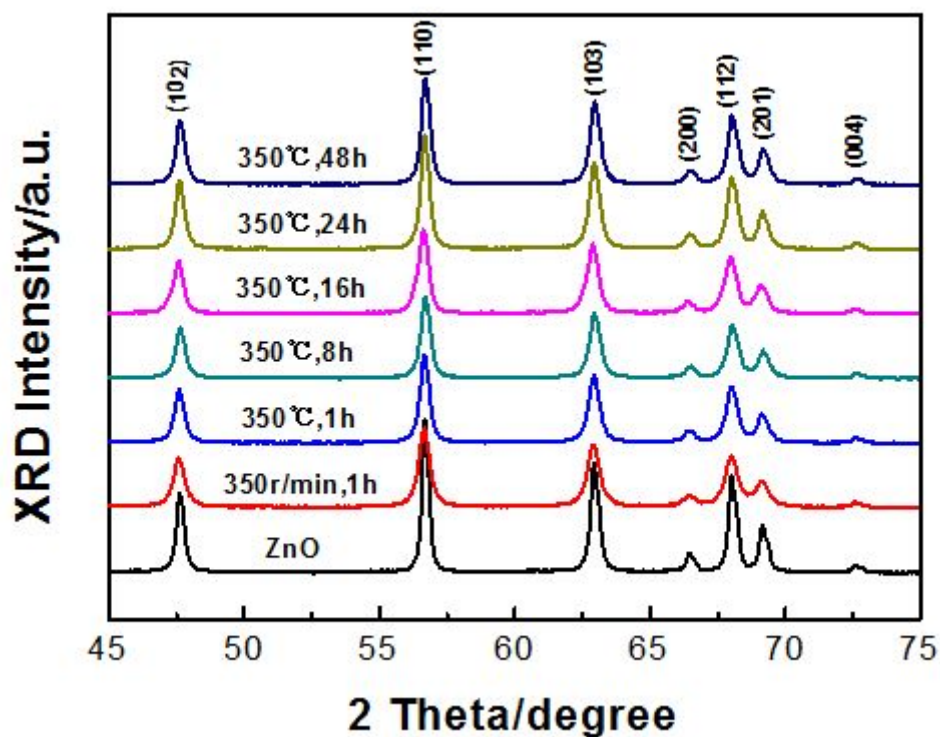


Fig.S2. XRD spectra of ZnO, the ZnO sample milled at the rotating speed of 350 rpm for 1 h and the annealed ZnO samples treated at 350°C with different times.