

## Supporting information

for

### **Effects of Zn<sup>2+</sup> and Pb<sup>2+</sup> dopants on the activity of Ga<sub>2</sub>O<sub>3</sub>-based photocatalyst for water splitting**

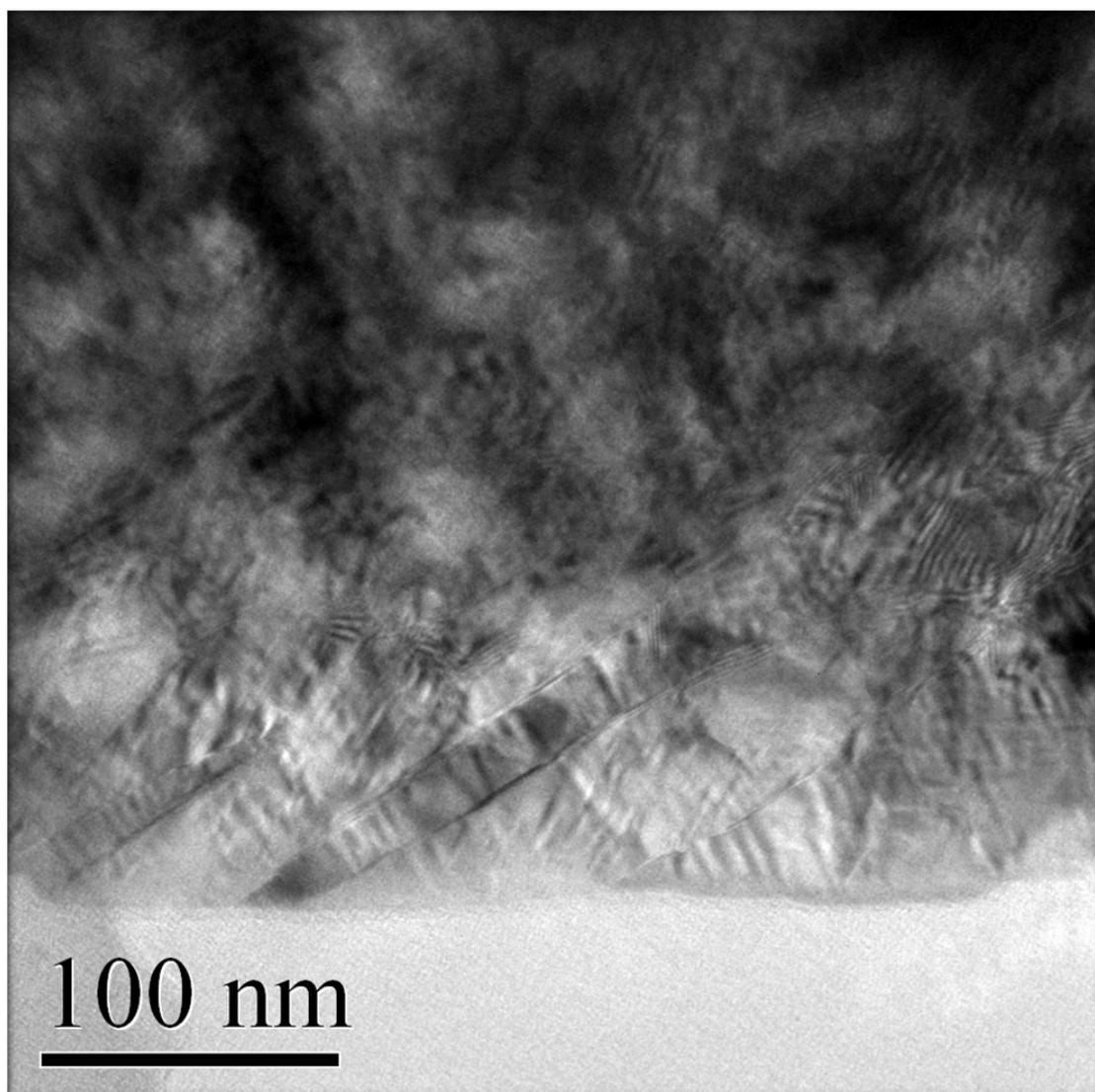
Xiang Wang, Shuai Shen, Shaoqing Jin, Jingxiu Yang, Mingrun Li, Xiuli Wang, Hongxian Han and Can Li\*

*State Key Laboratory of Catalysis, Dalian Institute of Chemical Physics,  
Chinese Academy of Sciences, Dalian National Laboratory for Clean Energy,  
457 Zhongshan Road, Dalian 116023, China*

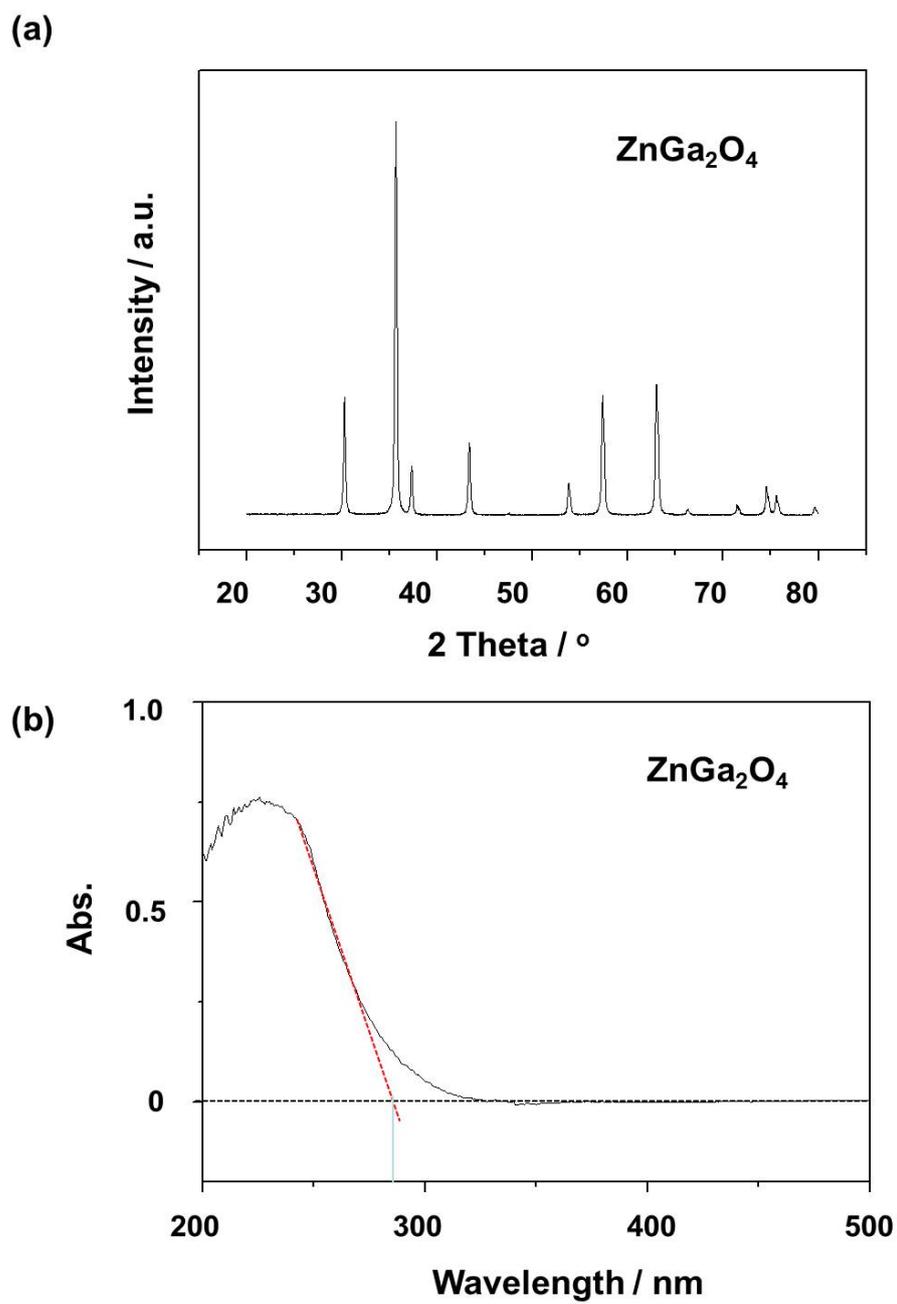
\* To whom correspondence should be addressed.

Tel: 86-411-84379070. Fax: 86-411-84694447.

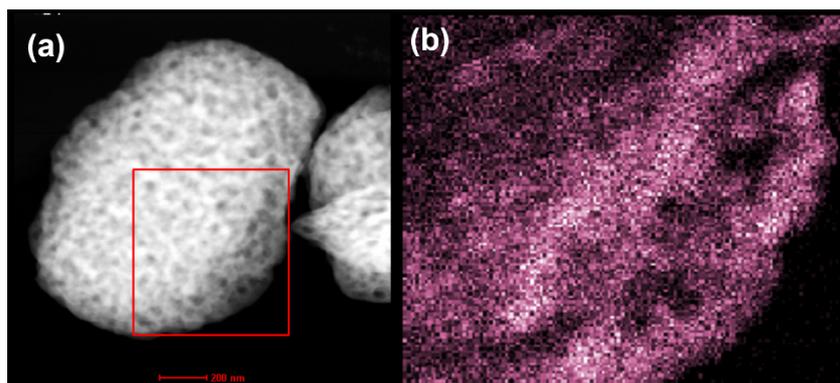
Email: canli@dicp.ac.cn (Prof. Can Li) Homepage: <http://www.canli.dicp.ac.cn>



**Figure S1.** TEM image of 3Zn-GaO.



**Figure S2.** (a) XRD pattern and (b) UV/vis diffuse reflectance spectrum of ZnGa<sub>2</sub>O<sub>4</sub>.



**Figure S3.** (a) High-angle annular dark-field (HAADF) image of 4Zn-GaO particle, (b) elemental mapping of Zn for 4Zn-GaO.