

## Supporting Information

### **Light-driving integration of reducing nitrobenzene to aniline and transforming glycerol into valuable chemicals in water**

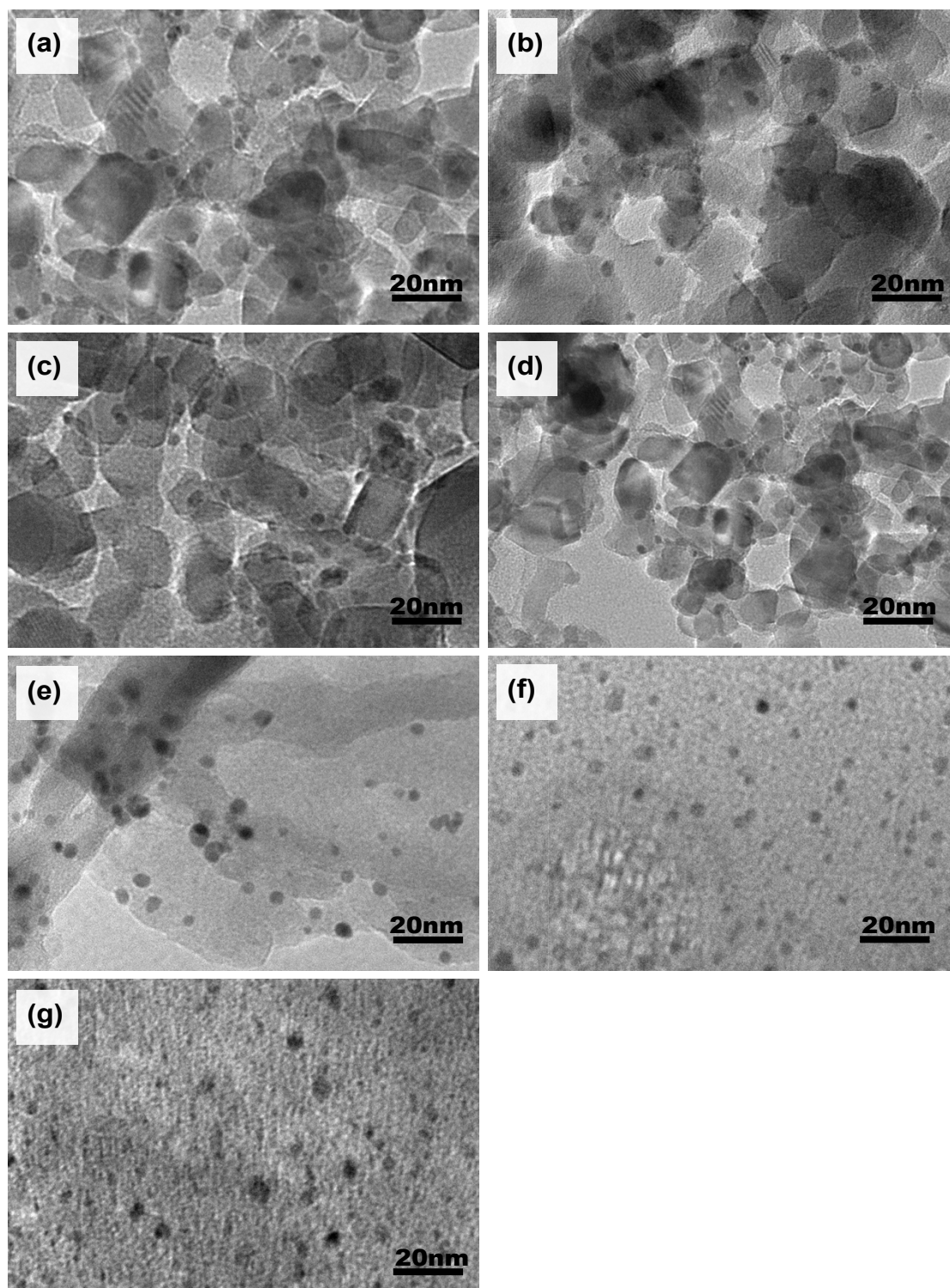
Baowen Zhou, Jinliang Song,\* Huacong Zhou, Lingqiao Wu, Tianbin Wu, Zhimin Liu, Buxing Han\*

Beijing National Laboratory for Molecular Sciences, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, PR China; Tel: (+) 86-10-62562821; E-mail: songjl@iccas.ac.cn; Hanbx@iccas.ac.cn

### Table of Contents

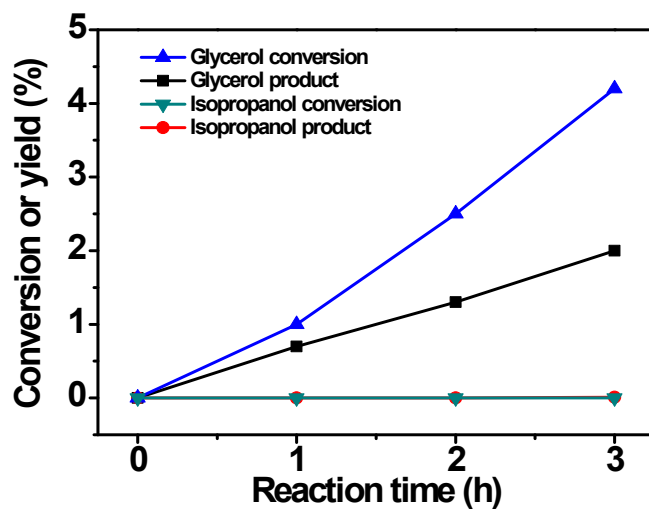
- 1. Figure S1. TEM images of various supported catalysts**
- 2. Figure S2. The conversion of glycerol and isopropanol in the photoreduction of nitrobenzene in glycerol/isopropanol aqueous solution**
- 3. Figure S3. XRD patterns of the TiO<sub>2</sub> with different crystal phases**

## 1. Figure S1



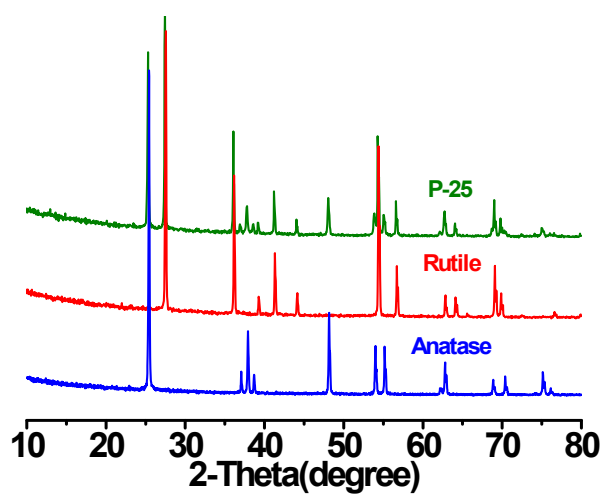
**Figure S1.** TEM images of various supported catalysts. (a) Pd/TiO<sub>2</sub>(P-25), (b) Pt/TiO<sub>2</sub>(P-25), (c) Rh/TiO<sub>2</sub>(P-25), (d) Ru/TiO<sub>2</sub>(P-25), (e) Pd/C<sub>3</sub>N<sub>4</sub>, (f) Pd/SiO<sub>2</sub> and (g) Pd/C.

## 2. Figure S2



**Figure S2.** The conversion of glycerol and isopropanol in the photoreduction of nitrobenzene in glycerol/isopropanol aqueous solution. Reaction conditions: glycerol concentration 0.5 mol/L; isopropanol concentration 0.5 mol/L; water 5 mL; 25 mg Pd/TiO<sub>2</sub> (P-25) with 2 wt% Pd; temperature 25 °C.

## 3. Figure S3



**Figure S3.** XRD patterns of the TiO<sub>2</sub> with different crystal phases.