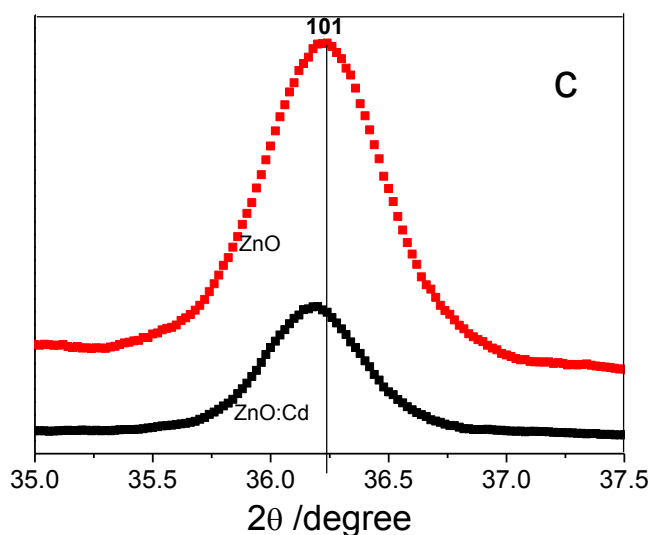


## Fabrication of Porous Cd-Doped ZnO Nanorods with Enhanced Photocatalytic Activity and Stability

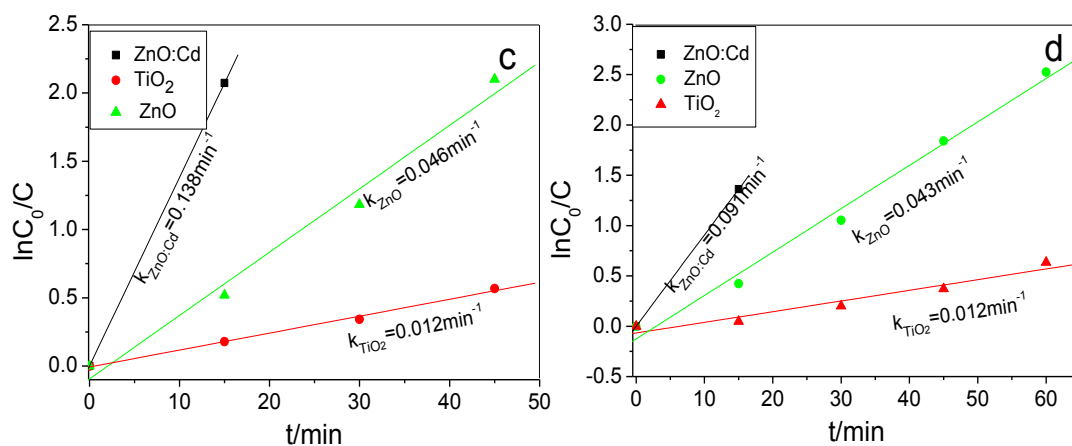
Yin Peng,<sup>†</sup> Shuchun Qin,<sup>†</sup> Wan-Sheng Wang,<sup>‡</sup> An-Wu Xu<sup>\*‡</sup>

<sup>†</sup> College of Chemistry and Materials Science, Key Laboratory of Functional Molecular Solids of Chinese Ministry of Education, Anhui Normal University, Wuhu 241000, China

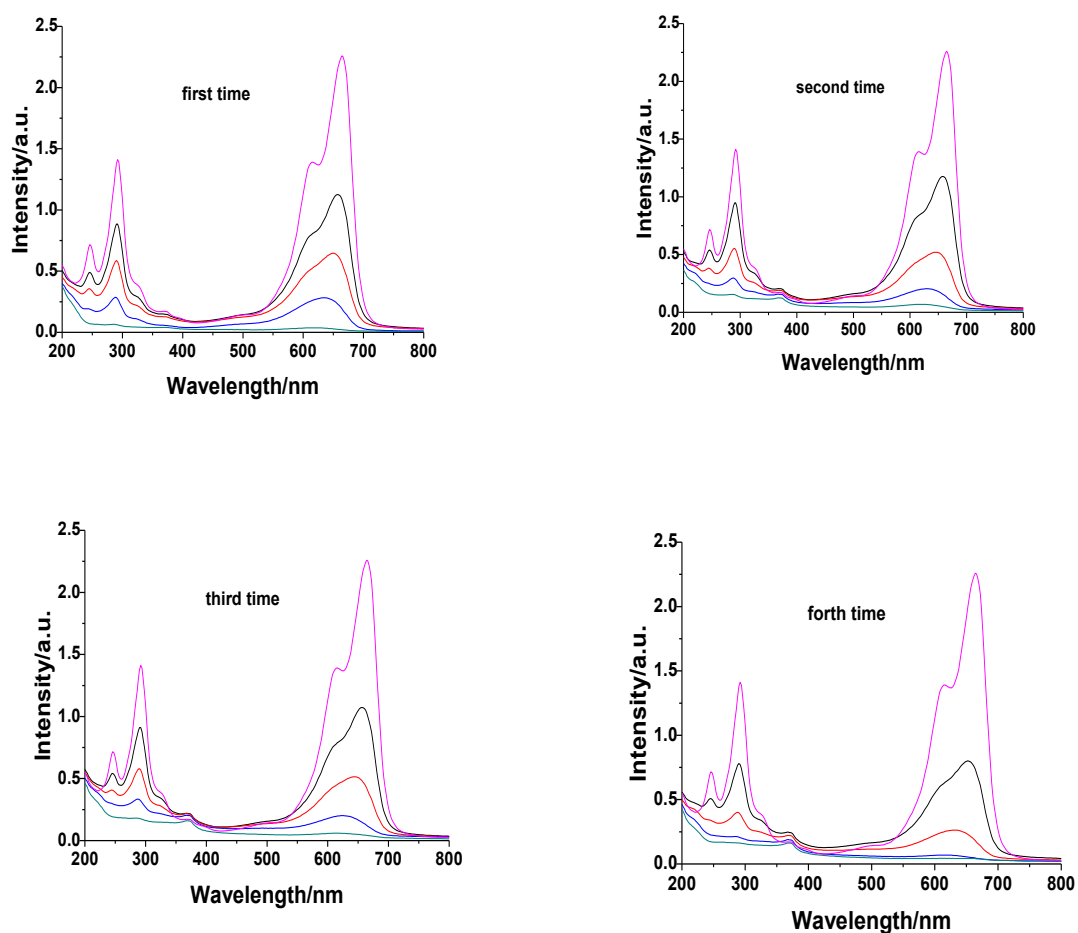
<sup>‡</sup> Division of Nanomaterials and Chemistry, Hefei National Laboratory for Physical Sciences at Microscale, University of Science and Technology of China, Hefei 230026, China

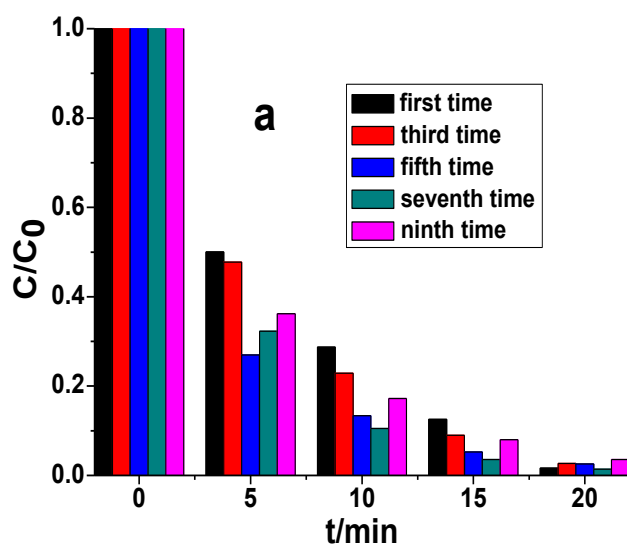
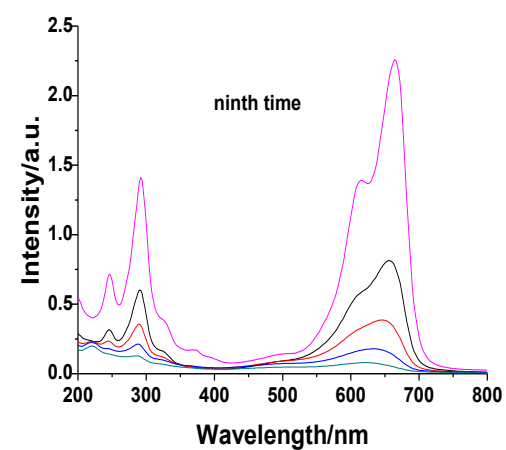
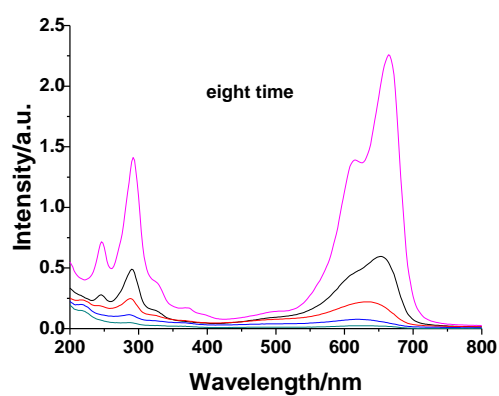
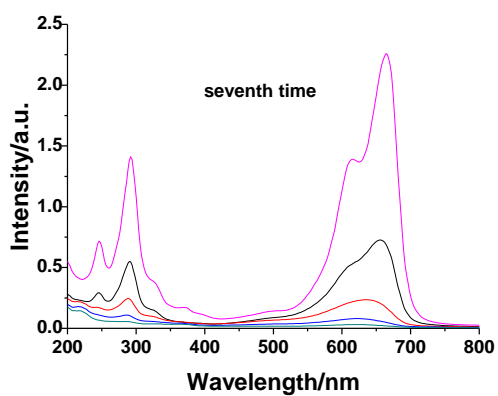
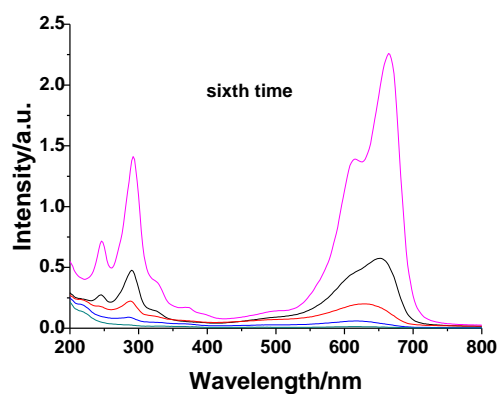
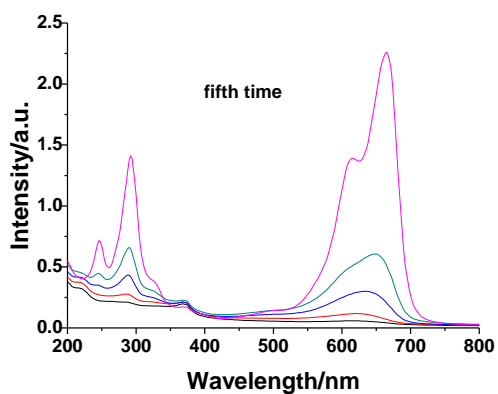


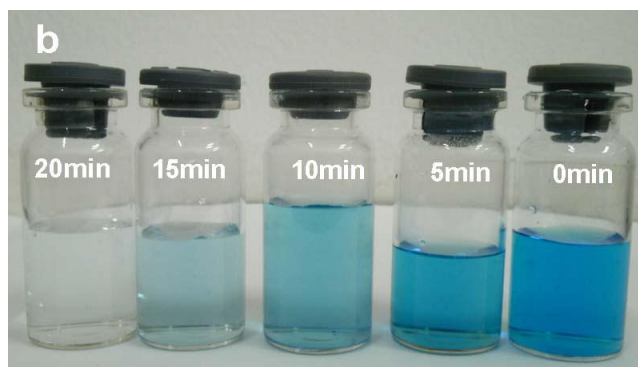
**Fig. S1.** The corresponding (101) peak of the pure ZnO and Cd-doped ZnO sample.



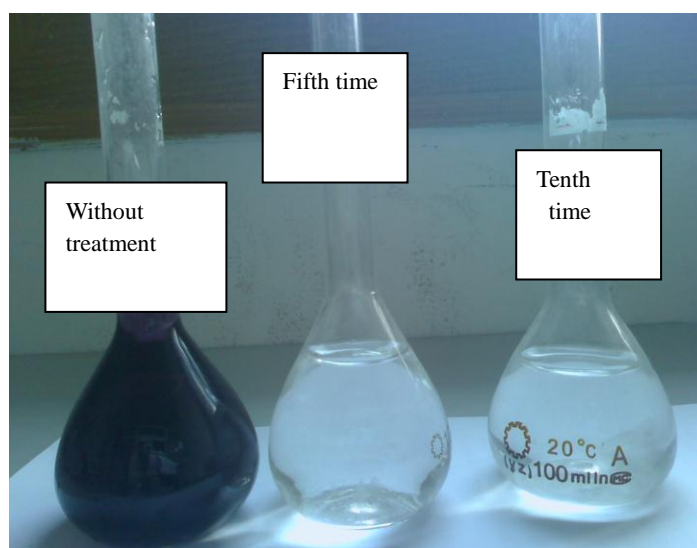
**Fig. S2** Photocatalytic degradation reaction kinetics of (a) MO and (b) MB over P25, pure ZnO nanorods and porous Cd-doped ZnO nanorods.



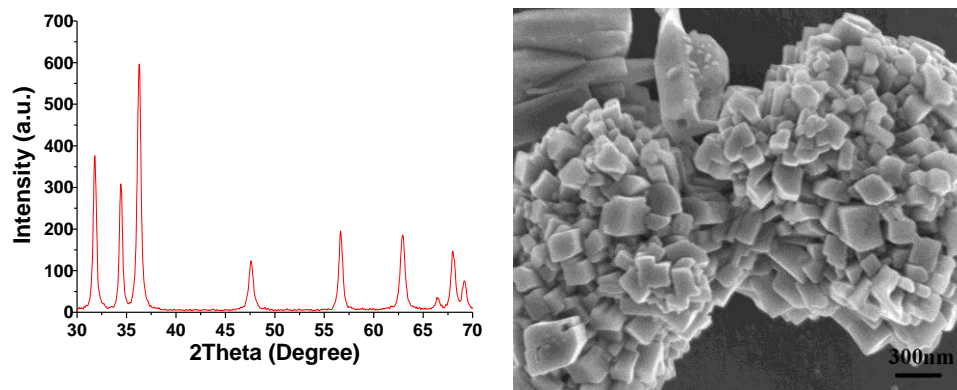




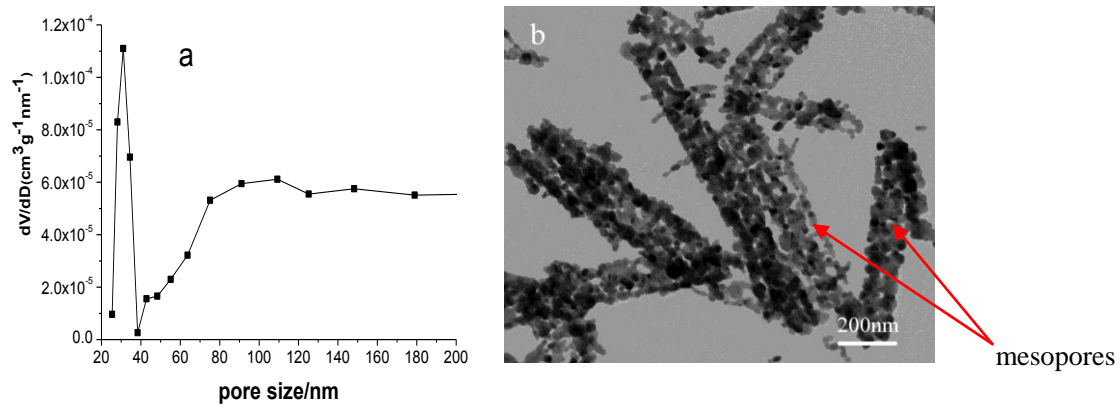
**Fig. S3** The UV spectra of MB after being irradiated at different time and the degradation curve.



**Fig. S4.** The color of sewage without treatment (left), the fifth time (middle) and the tenth time (right) after being treated by reused Cd-Doped ZnO sample.



**Fig. S5** XRD pattern and SEM image of the Cd-Doped ZnO after being reused for the ninth time.



**Fig. S6** the corresponding pore size distribution (a) and TEM image (b) of the Cd-doped ZnO.