Synthesis of Urchin-like CdWO₄ Microspheres via a Facile Template Free Hydrothermal Method

Yichuan Ling,^{a‡} Liang Zhou,^{a‡} Lei Tan,^a Yunhua Wang^a and Chengzhong Yu^{a,b}*

^{*a*} Department of Chemistry and Shanghai Key Laboratory of Molecular Catalysis and Innovative Materials, Fudan University, Shanghai, 200433, P. R. China.

^b ARC Centre of Excellence for Functional Nanomaterials and Australian Institute for Bioengineering and Nanotechnology, The University of Queensland, Brisbane, QLD 4072, Australia.

Fax: +86-21-65641740; *Tel:* +86-21-55665103; *E-mail:* <u>czyu@fudan.edu.cn</u>; <u>c.yu@uq.edu.au</u>

‡ These authors contribute equally to this paper.

Supporting Information



Figure S1. SEM images of the products synthesized at a urea / tungsten molar ratio of 0 (a and b). The hydrothermal treatment temperature is fixed at 473 K and the reaction time is kept at 6 h in all synthesis. The product is mainly composed of plate-like CdWO₄ particles.



Figure S2. TEM (a) and HRTEM images of the CdWO₄ nanorods. Inset of Figure a shows the

SAED pattern of the CdWO₄ nanorods taken from the area marked by the white circle.



Figure.S3 PL spectra (excitation wavelength of 293 nm) of CdWO₄ prepared at a hydrothermal treatment of 473 K with a tungsten/urea molar ratio (a) 0.33, (b) 0.66, (c) 1.5 and (d) 2, respectively. The reaction time is kept at 6 h in all synthesis.