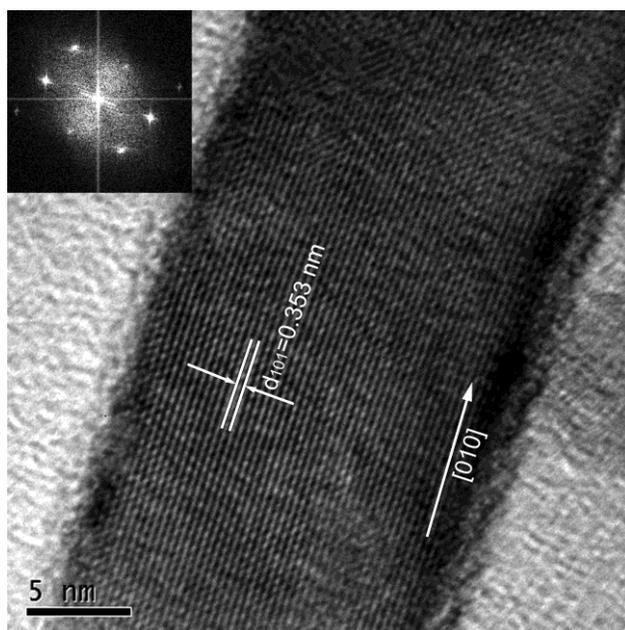
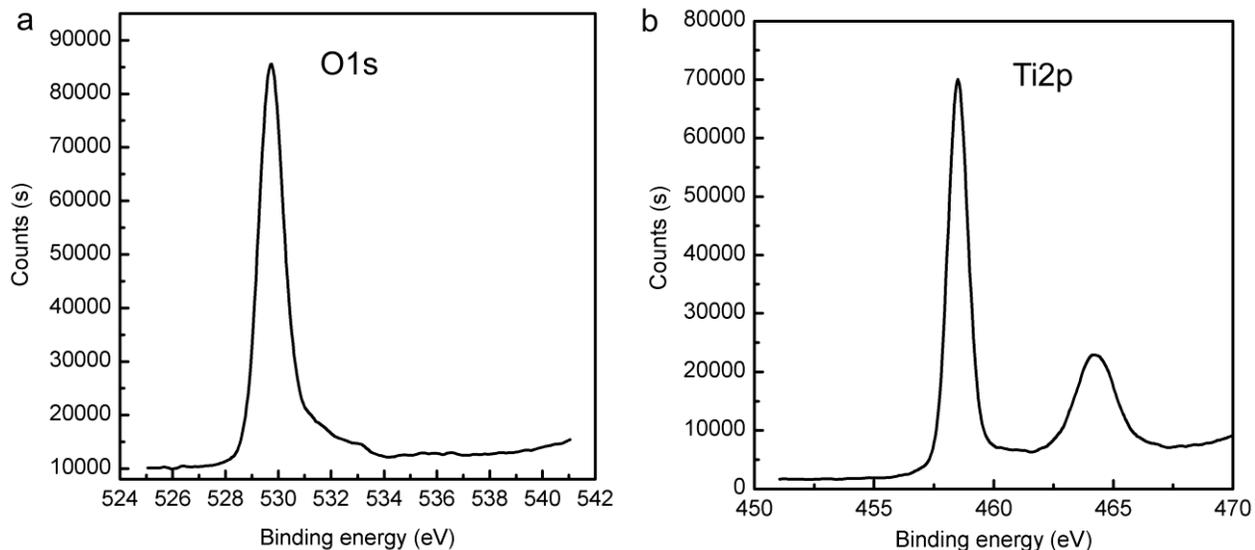


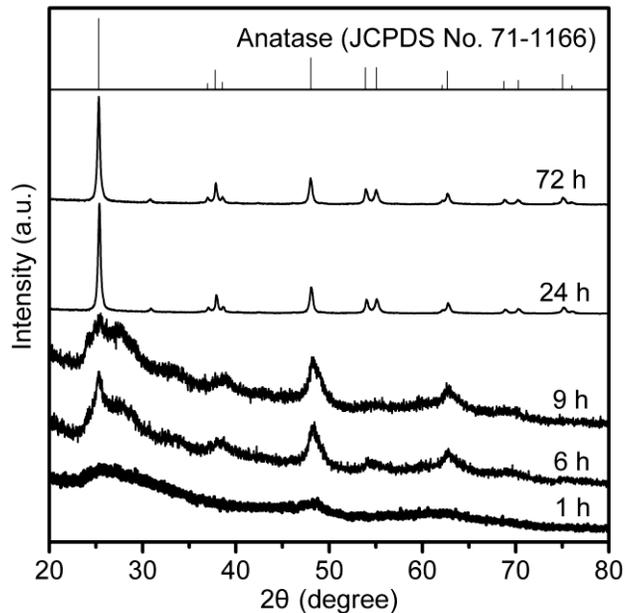
**Supporting Information for “One-Step Ammonia Hydrothermal Synthesis of Single Crystal Anatase TiO<sub>2</sub> Nanowires for Highly Efficient Dye-Sensitized Solar Cells” by Xiao Yu, Hai Wang, Yong Liu, Xiang Zhou, Baojun Li, Ling Xin, Yu Zhou, and Hui Shen**



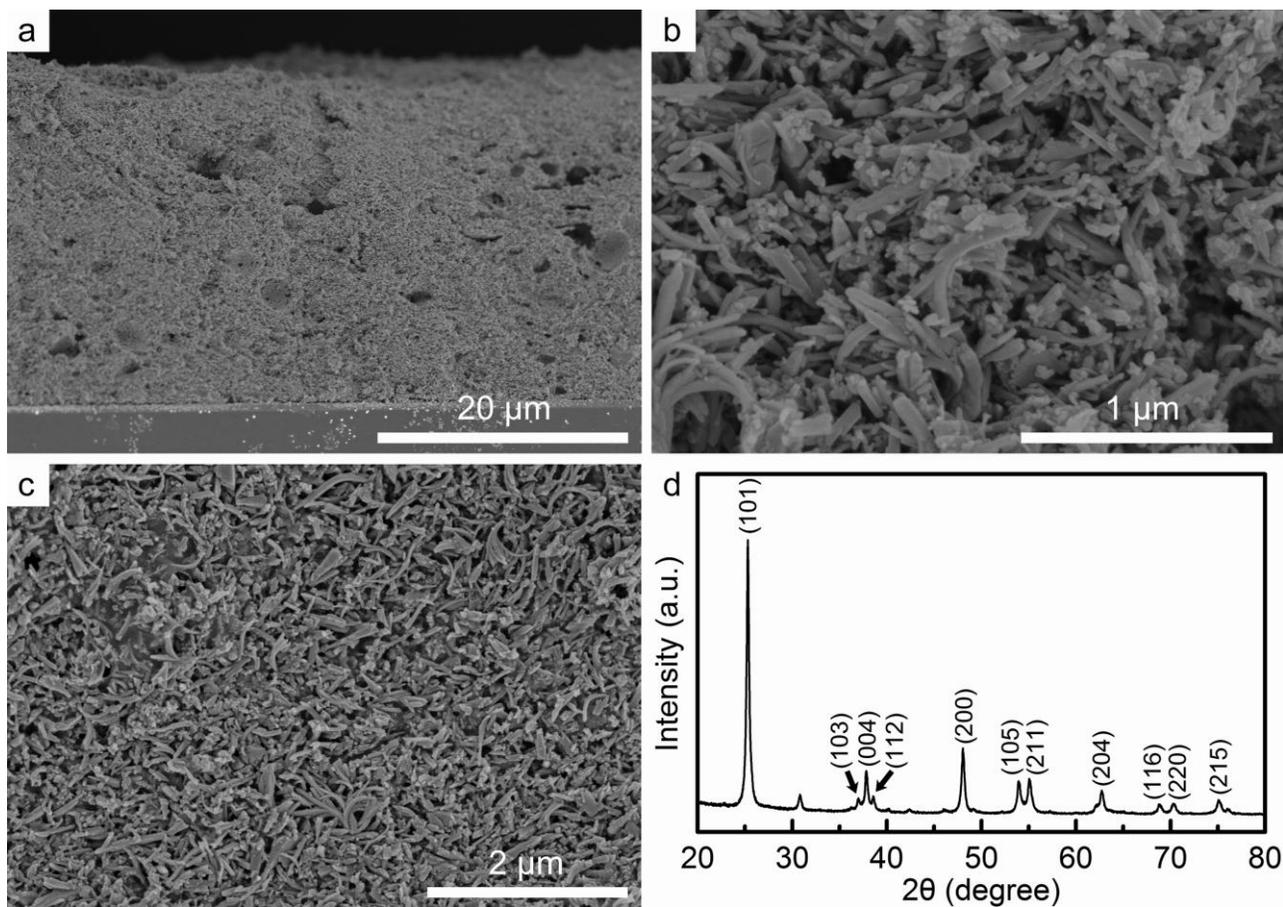
**Fig. S1.** HRTEM of the anatase TiO<sub>2</sub> nanowire and corresponding FFT pattern.



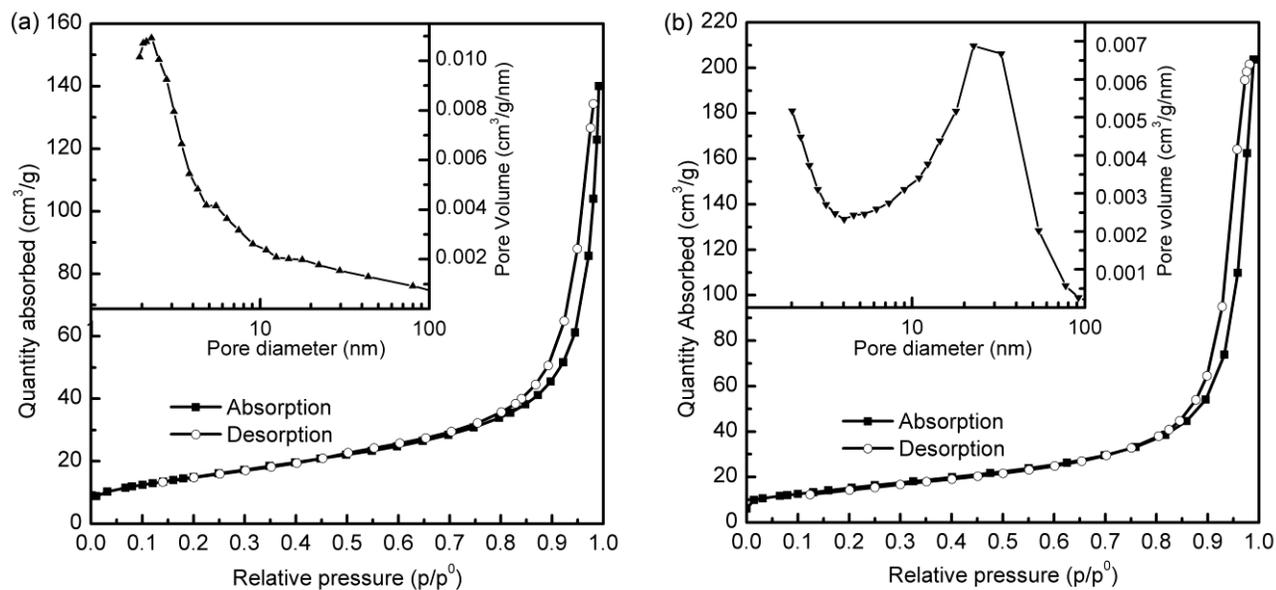
**Fig. S2.** X-ray photoelectron spectroscopy pattern of the O1s and Ti2p core-levels for TiO<sub>2</sub> nanowires obtained at 200 °C for 12 h.



**Fig. S3.** Time dependent XRD patterns of as-synthesized nanowires obtained by hydrothermal treatment at 180 °C for 1 h, 6 h, 9 h, 24 h, and 72 h, respectively.



**Fig. S4.** SEM images and XRD of the TiO<sub>2</sub> nanowires after calcination at 500 °C for 1 h. (a) and (b) The cross-sectional TiO<sub>2</sub> nanowire film coated on FTO glass under low magnification and high magnification. (c) The top side of TiO<sub>2</sub> nanowire film coated on FTO glass. (d) XRD pattern.



**Fig. S5.** Nitrogen adsorption-desorption isotherms for (a) as-synthesized TiO<sub>2</sub> nanowires and (b) P25 powder, respectively. Insets show their corresponding pore size distribution.