

# CdS Quantum Dots Sensitized TiO<sub>2</sub> Nanorod Array on Transparent Conductive Glass Photoelectrodes

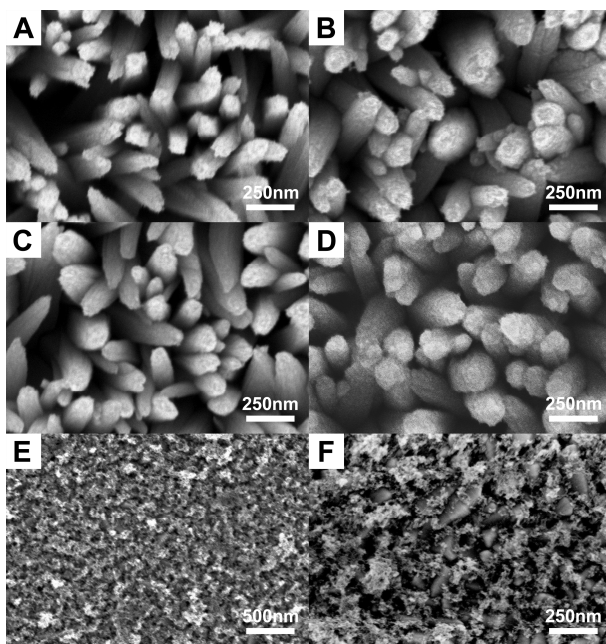
*Hua Wang<sup>†</sup>, Yusong Bai<sup>†</sup>, Hao Zhang<sup>‡</sup>, Zhonghao Zhang<sup>†</sup>, Jinghong Li<sup>\*,‡</sup>, Lin Guo<sup>\*,†</sup>*

School of Chemistry and Environment, Beijing University of Aeronautics and Astronautics, Beijing  
100191, People's Republic of China

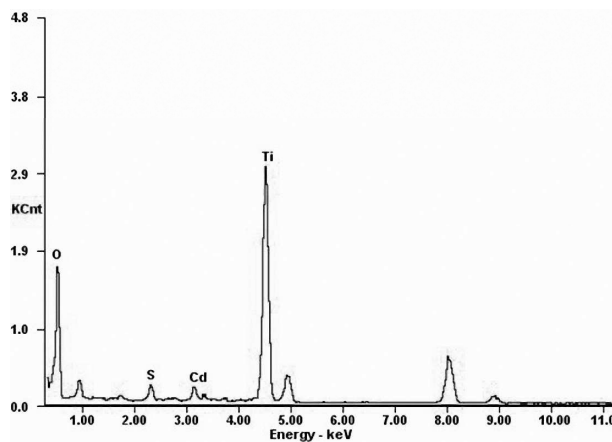
Department of Chemistry, Lab. of Bioorganic Phosphorus Chemistry & Chemical Biology, Tsinghua  
University, Beijing 100084, People's Republic of China

E-mail: guolin@buaa.edu.cn; jhli@mail.tsinghua.edu.cn

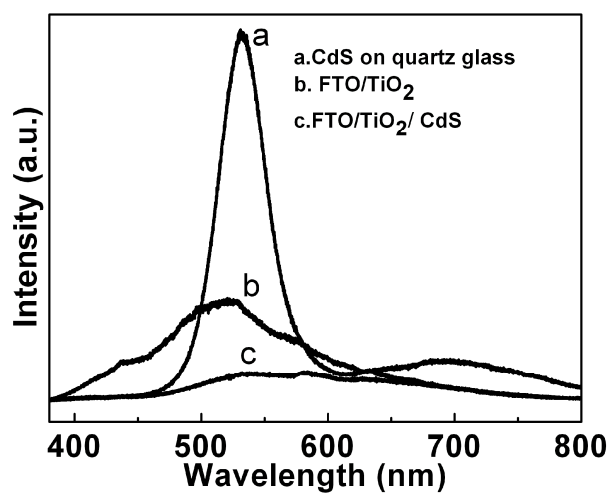
## Supporting information:



**Figure S1.** SEM images of FTO/TiO<sub>2</sub>/CdS electrodes with CdS QDs deposition for different cycles: (A) 5 cycles; (B) 10 cycles; (C) 20 cycles; (D) 30 cycles. SEM images of FTO/CdS electrode with CdS QDs deposition for 30 cycles at low (E) and high (F) magnifications.



**Figure S2.** EDS spectrum of  $\text{TiO}_2$  nanorod array deposited with CdS QDs.



**Figure S3.** Photoluminescence (PL) emission spectra of quartz glass deposited with CdS QDs film (a), FTO/ $\text{TiO}_2$  (b) and FTO/ $\text{TiO}_2$ /CdS electrodes (c). Strong suppression of the PL emission spectra of the FTO/ $\text{TiO}_2$ /CdS electrode implies that charge separation occurred before the recombination with CdS.