

Cuprous Sulfide Counter Electrodes Prepared by Ion Exchange for High-Efficiency Quantum Dot-sensitized Solar Cells

Chao Shen,^a Lidong Sun,^a Zhen Yu Koh,^a and Qing Wang*^a

^aDepartment of Materials Science and Engineering, Faculty of Engineering, NUSNNI-NanoCore, National University of Singapore, Singapore 117576, Fax: +65 67763604, Tel: +65 65167118; E-mail: qing.wang@nus.edu.sg

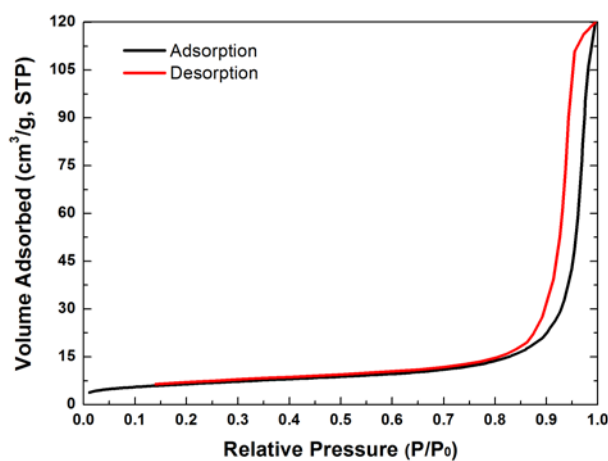


Figure S1. N₂ sorption isotherms of the ITO powder

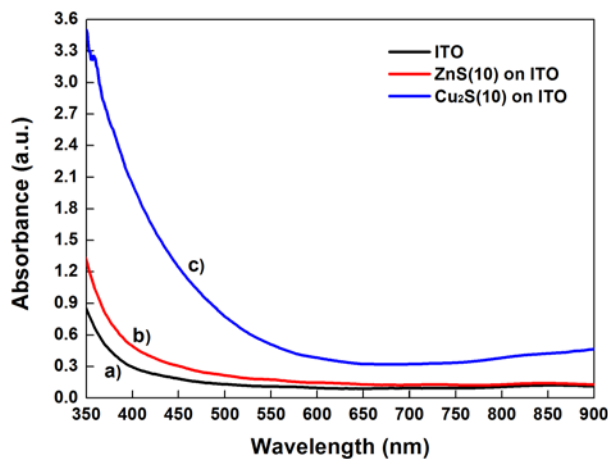


Figure S2. Absorbance spectra of a bare ITO electrode (a) after depositing 10 cycles of ZnS (b) and subsequently subjected to ion exchanging for 10 min to form cuprous sulfide (c).

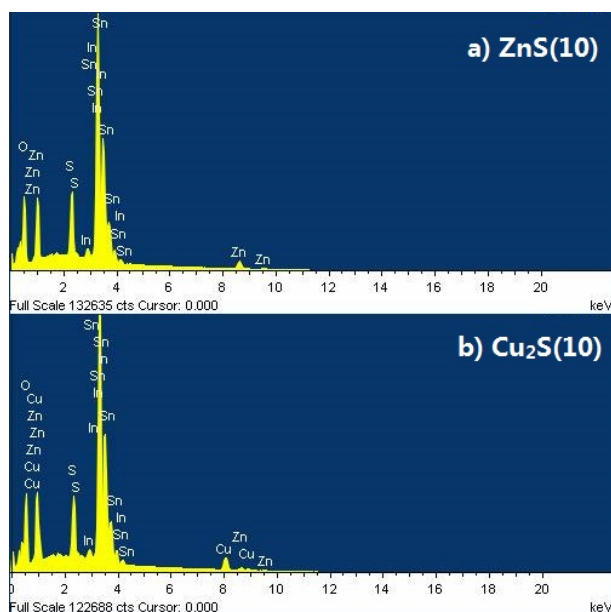


Figure S3. EDX spectra of a bare ITO electrode after depositing 10 cycles of ZnS (a) and subsequently subjected to ion exchanging for 10 min to form cuprous sulfide (b).

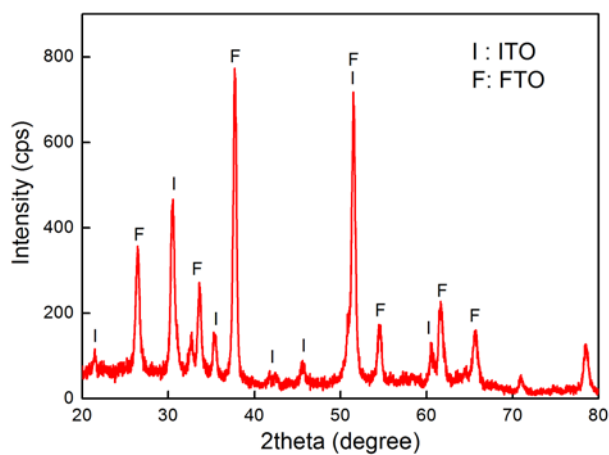


Figure S4. Glancing angle XRD patterns of Cu₂S(10) on ITO electrodes.