

Supporting information  
For RSC Advances

## Efficient Dye-sensitized Solar Cells using Mesoporous Submicrometer TiO<sub>2</sub> Beads

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## 1. BET measurements for TiO<sub>2</sub> nanoparticles

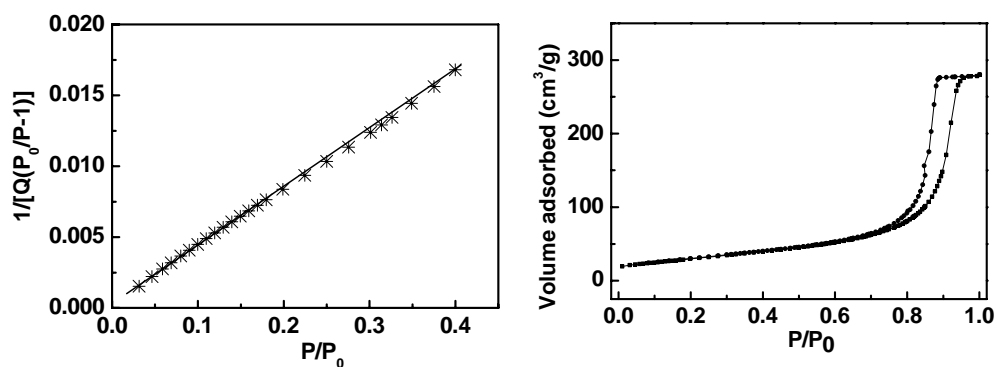


Figure S1 BET measurements for TiO<sub>2</sub> nanoparticles

## 2. Diffuse reflectance spectra of TiO<sub>2</sub> nanoparticles film

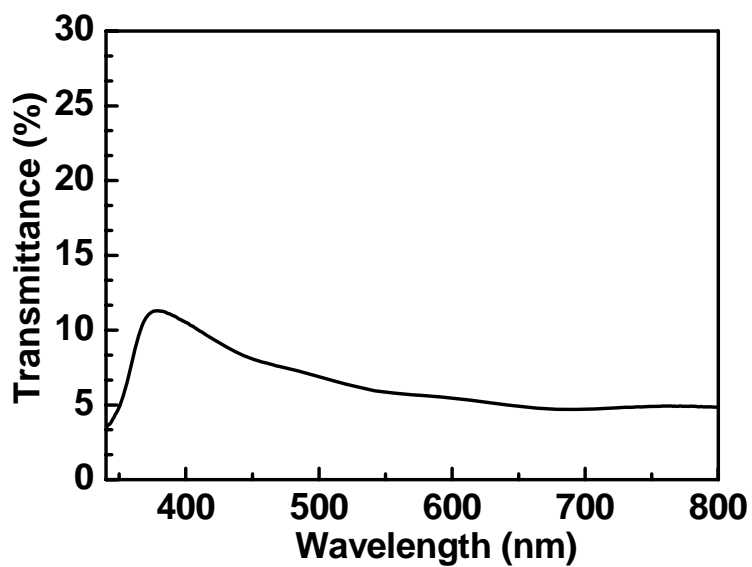


Figure S2 Diffuse reflectance spectra of TiO<sub>2</sub> nanoparticles film

### 3. J-V curve of DSSC with commercial 20 nm TiO<sub>2</sub> nanoparticles

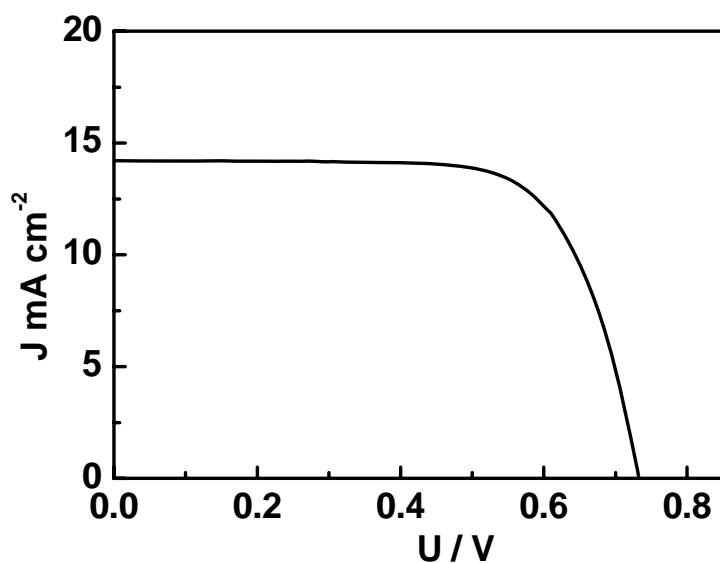


Figure S3 J-V curve of DSSC with commercial 20 nm TiO<sub>2</sub> nanoparticles

### 4. The IPCE spectra of devices D, E and F

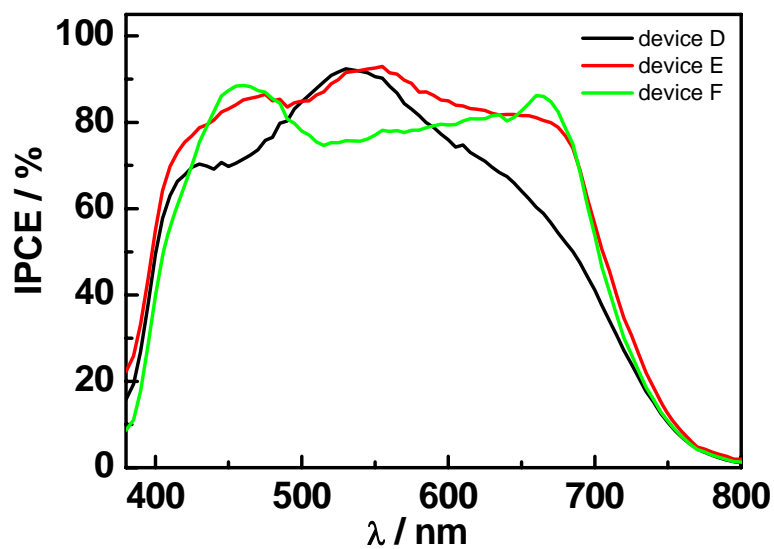
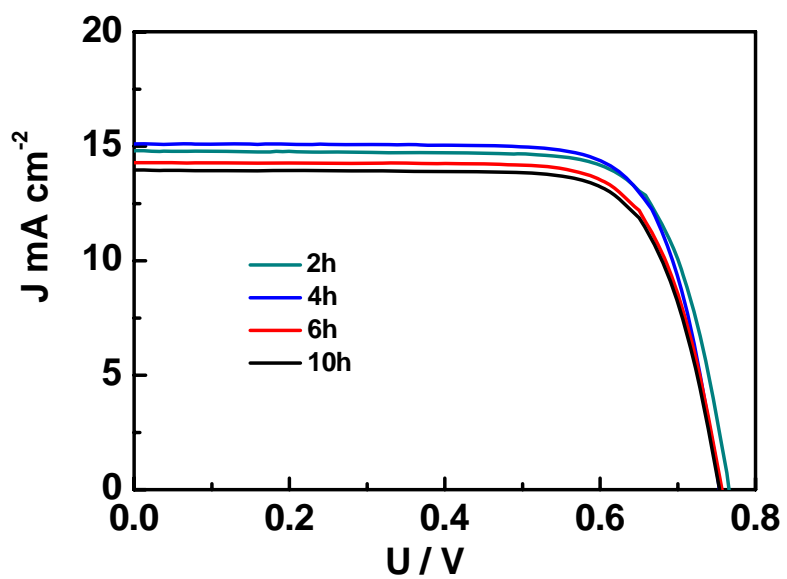


Figure S4 The IPCE spectra of devices D (with PDB-LW4/PDB-KW1(1:1)), E (with PDB-LW4/PDB-KW1(1:2)) and F (with PDB-LW4/PDB-KW1(1:3))

## 5. J-V curves of DSSCs using sequential soaking method



**Figure S5** J-V curves of the DSSC devices prepared using sequential soaking method with different dipping time