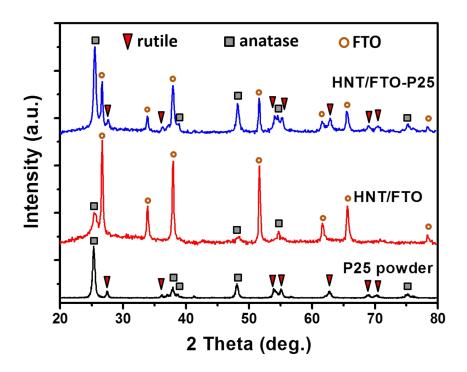
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## Fabrication and integration of quasi-one-dimensional hierarchical $TiO_2$ nanotubes for dye-sensitized solar cells

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## **Supporting Information**

- **Fig. S1.** XRD patterns of P25 powders, HNT arrays on FTO glass and HNT-P25 bilayered configuration on FTO glass.
- **Fig. S2.** *J-V* curves of DSSCs based on HNT arrays with different growth times.
- **Fig. S3.** Panorama SEM image of the cross-sectional view of HNT array.
- **Fig. S4.** UV-Vis absorption spectra of dye desorbed from different photoanodes (P25, HNT and HNT-P25).



**Fig. S1.** XRD patterns of P25 powders, HNT arrays on FTO glass and HNT-P25 bilayered configuration on FTO glass.

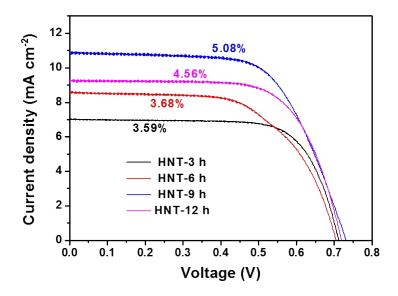


Fig. S2. J-V curves of DSSCs based on HNT arrays with different growth times.

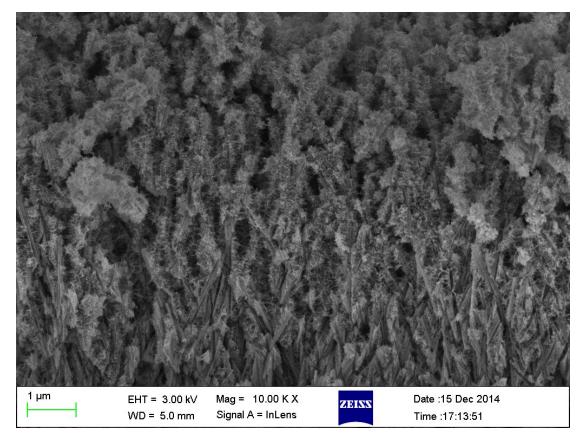
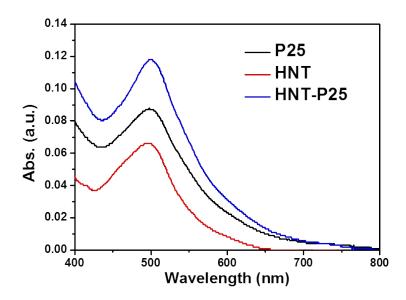


Fig. S3. Panorama SEM image of the cross-sectional view of HNT array.



**Fig. S4.** UV-Vis absorption spectra of dye desorbed from different photoanodes (P25, HNT and HNT-P25).