Supporting Information

Assembling of a high-scattering photoelectrode using a hybrid nano-TiO$_2$ paste

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**Fig. S1** The cross-sectional SEM image of the original NT layer before ultrasonic dispersion.

**Fig. S2** The typical TEM image of the NT-NP hybrid structure.
Fig. S3 The cross-sectional SEM image of 100%-NT sample annealed at 650 °C.

Fig. S4 The diffuse reflectance spectra of the NT-NP hybrid photoanodes.