Supporting information for

Growth of hierarchical TiO$_2$ nanostructures on anatase nanofibers and their application in photocatalytic activity

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**Fig. S1** (1) HR-TEM image for pure anatase nanofibers.
Fig. S2 (1) equivalent absorption coefficients ($\alpha_{KM}$) for pure anatase nanofibers and hierarchical structure. These hierarchical nanostructures were prepared at 150 °C for 2.5 hrs using titanium isopropoxide solutions of different weight: (a) pure anatase nanofibers, (b) 0.4 g, (c) 0.5 g, (d) 0.7 g and (e) 1.0 g.
Fig. S3 SEM images of the samples for BET measurement and photocatalyst ability. (a) nanofibers and (b) TiO$_2$ hierarchical nanostructures.
Fig. S4 The UV-vis absorbance spectra of photocatalytic degradation of Rhodamine-6G solutions after different periods of time over (A) anatase nanofibers and (B) hierarchical TiO2.