

## Electronic Supplementary Information for

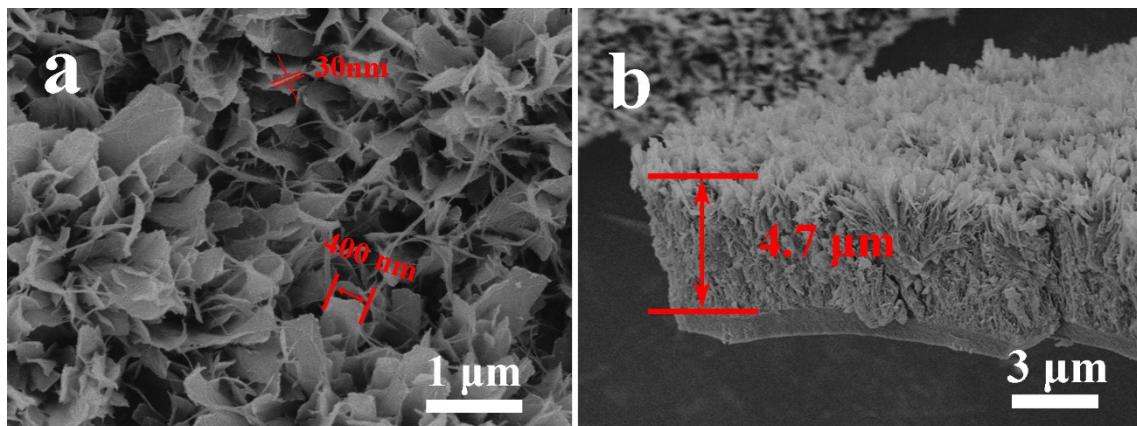
### Facile synthesis of Ni-doped TiO<sub>2</sub> ultrathin nanobelt arrays with enhanced photocatalytic performance

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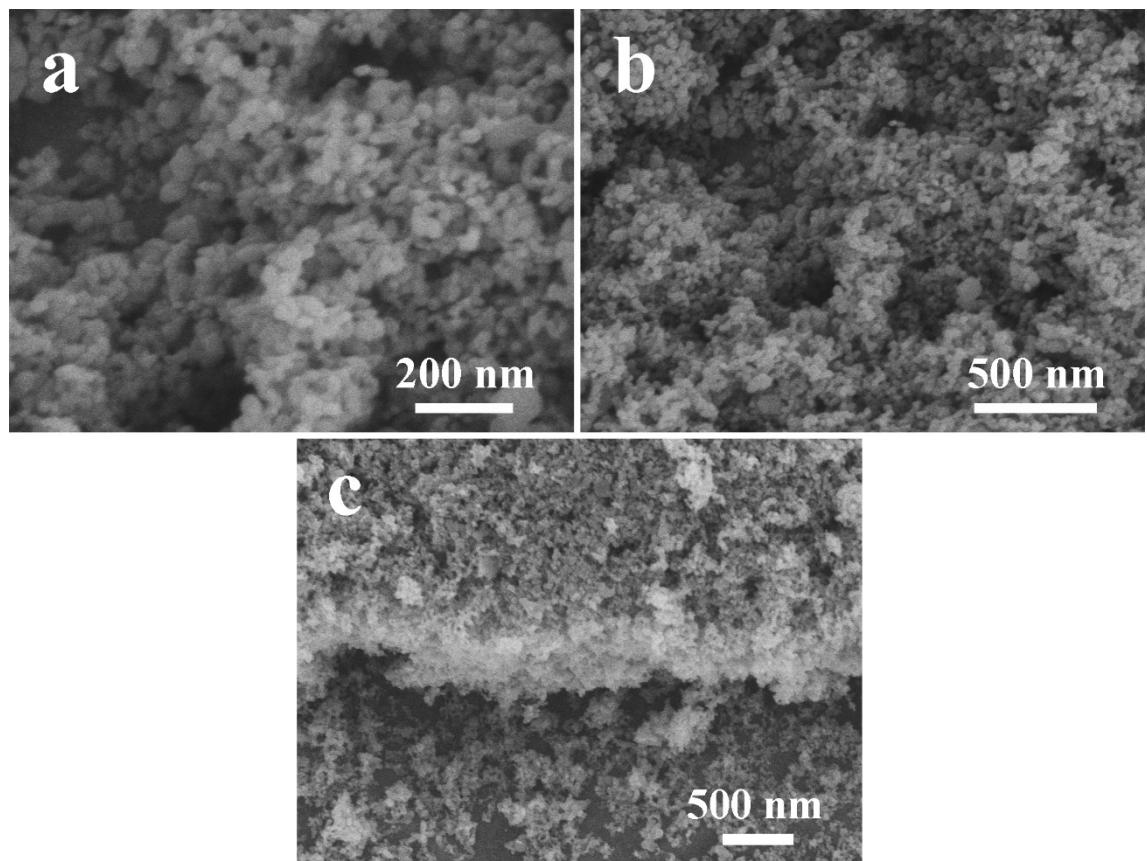
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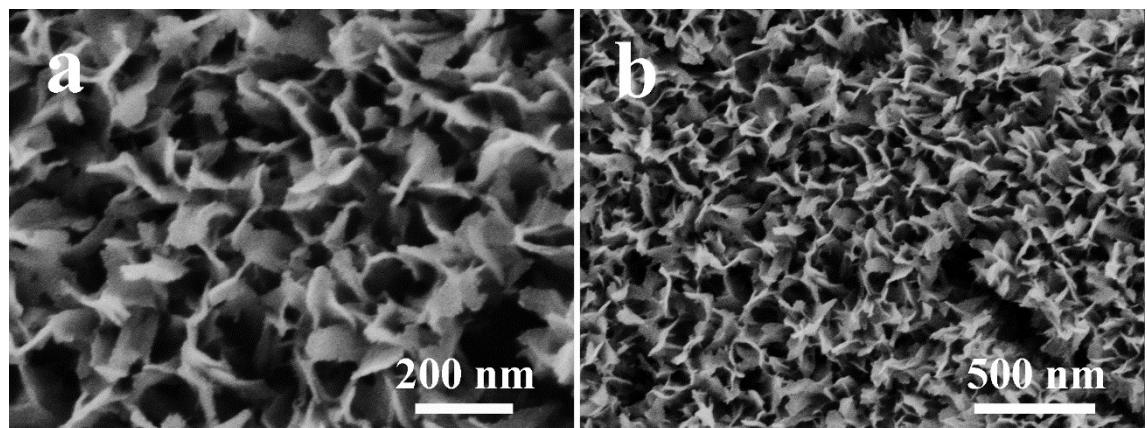
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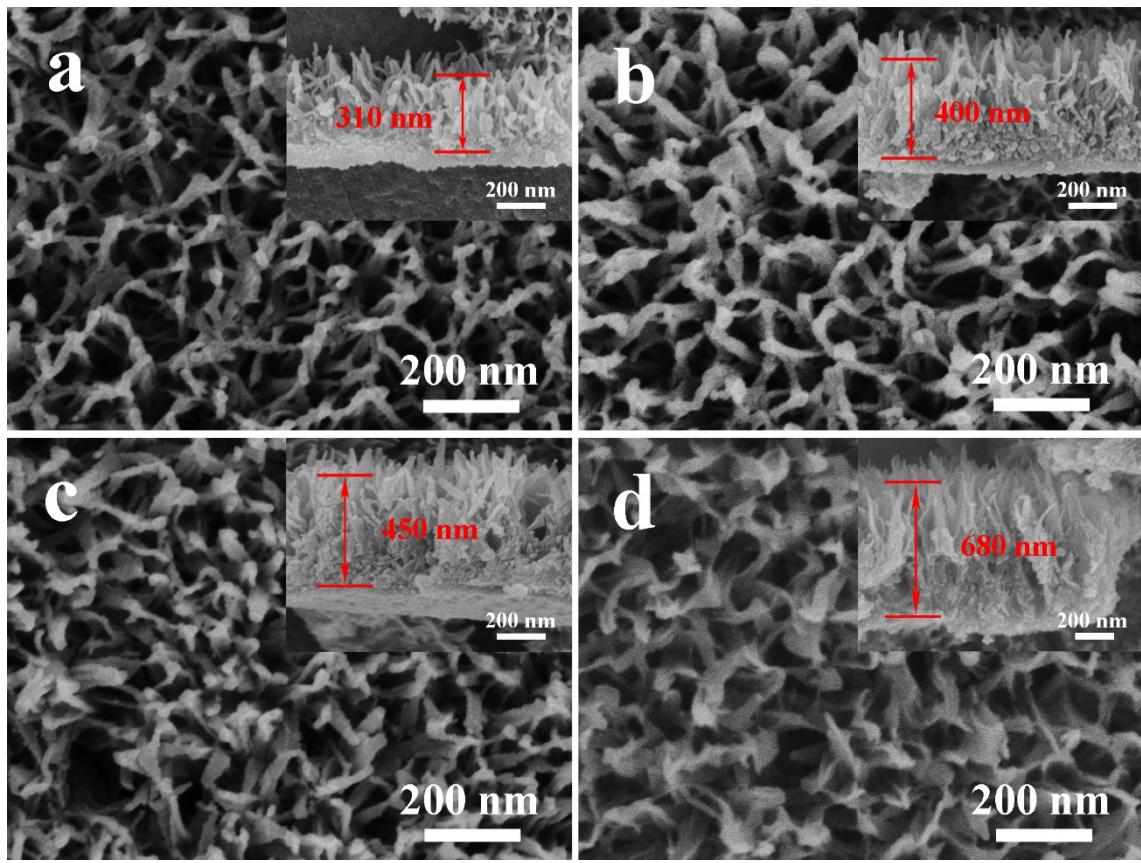
**Fig. S1** FESEM images of alkali-hydrothermal TiO<sub>2</sub> nanobelt arrays: (a) top view, and (b) cross-sectional view.



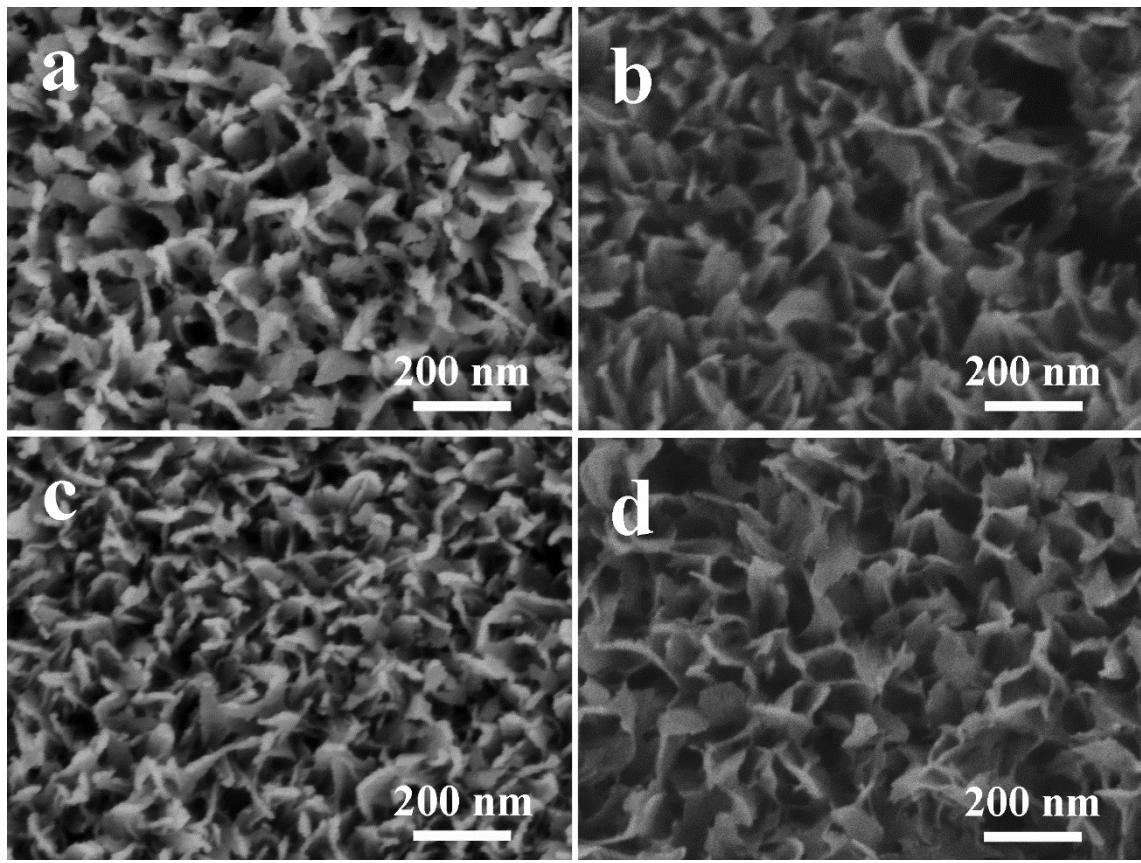
**Fig. S2** (a, b) top-view and (c) cross-sectional FESEM images of the P25 nanoparticulate film.



**Fig. S3** FESEM images of the as-synthesized Ni-doped hydrogen titanate nanobelt arrays.



**Fig. S4** FESEM images of Ni-doped TiO<sub>2</sub> nanobelt arrays precipitated for (a) 3 h, (b) 6 h, (c) 12 h, and (d) 24 h. Insets show the corresponding cross-sectional images.



**Fig. S5** FESEM images of Ni-doped TiO<sub>2</sub> nanobelt arrays derived with various nickel nitrate concentrations of (a) 0 mM, (b) 1.5 mM, (c) 3.0 mM, and (d) 6.0 mM in the solution for combustion to prepare the black precursor.