

## Supporting Information for

### **A Facile Interfacial Assembling Strategy for Synthesizing Yellow TiO<sub>2</sub> Flakes with a Narrowed Bandgap**

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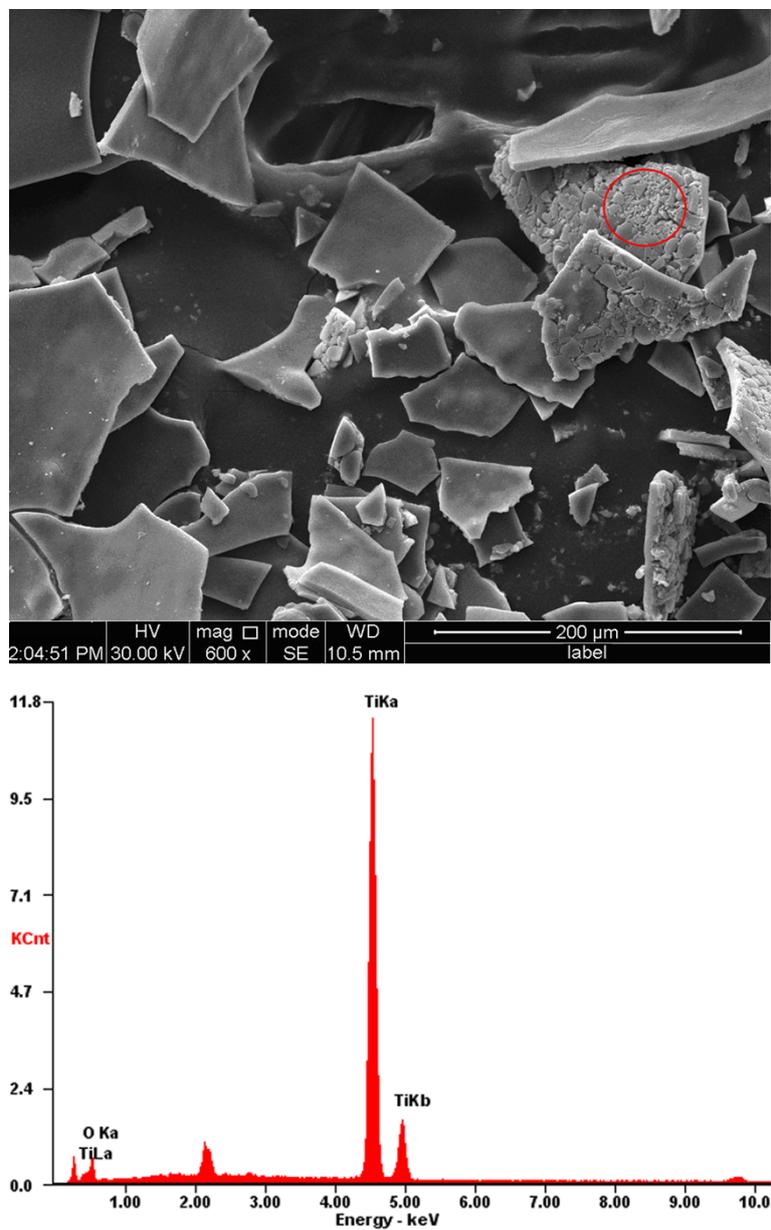
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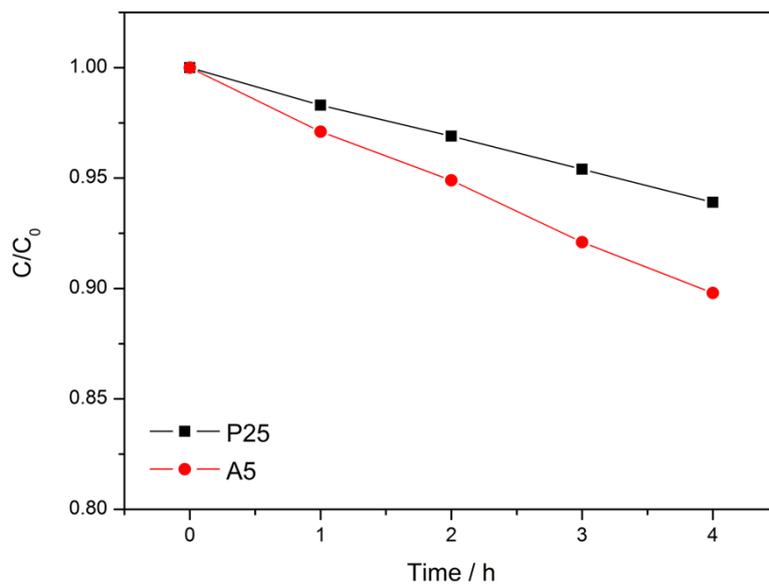
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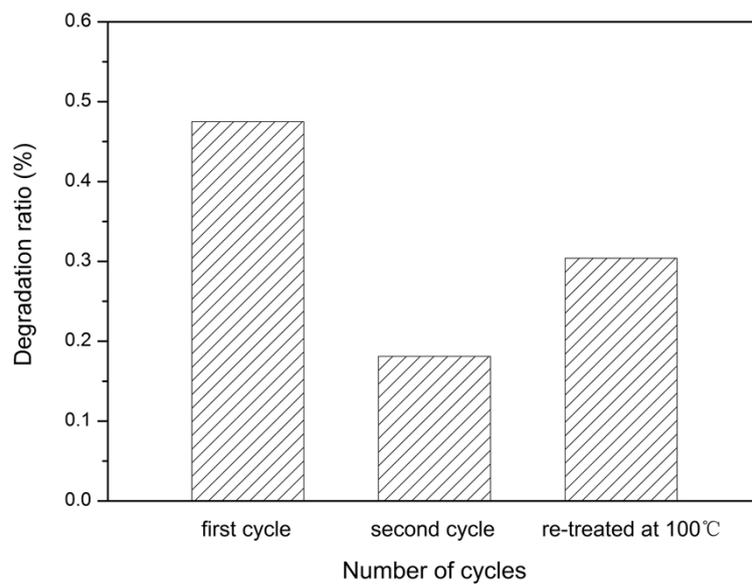
## Figures



**Fig. S1** SEM image and EDS spectrum of assembled TiO<sub>2</sub> NCs in sample A5. The red circle in SEM image indicates the discrete particles due to inadequate assembly.



**Fig. S2** Comparison of photocatalytic activities of commercial P25 and assembled sample A5 under visible light irradiation (300 W halogen lamp,  $\lambda > 420$  nm). MB is used as the model with detection of the reduction of its absorption at 664 nm.



**Fig. S3** Cycle photodegradation of MB dye with the assembled sample A4 under visible light irradiation (300 W halogen lamp,  $\lambda > 420$  nm). first cycle: as prepared sample; second cycle: filtering and washing the catalyst after first cycle; re-treat at 100°C: treating the catalyst at 100°C for 3 h after first cycle.

**Table S1** The binding energy values of Ti2p and O1s in assembly and crushed powder.

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	Ti2p <sub>3/2</sub>	Ti2p <sub>1/2</sub>	O1s <sub>1/2</sub>	*O1s <sub>1/2</sub>
Assembly	458.7, 459.5	464.6, 465.4	530.5	532.5
Crushed powder	458.7	464.6	530.5	532.7

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