Electronic Supplementary Information

Synthesis and characterization of hierarchical TiO$_2$ microspheres composed of nanorods: effect of reaction conditions on nanorod density

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**Fig. S1** (a) a typical nanorod as building unit in hierarchical TiO$_2$ microspheres and (b) selected area electron diffraction (SAED) pattern (scale bar in Fig. S1b is 5 1/nm).
Fig. S2 Relationship between TiO$_2$ rod density and rod diameter.

(A) Ti(OBu)$_4$ volume:
(A): 1.5 ml; (B): 3.0 ml;
(C): 4.5 ml; (D): 6.0 ml;

(D) (C) (B)
Fig. S3 (a) TEM image of solid TiO$_2$ microspheres prepared in the presence of Na$_2$SO$_4$ as additives and (b) selected electron diffraction pattern.
**Fig. S4** XRD pattern of solid TiO$_2$ microspheres prepared in the presence of Na$_2$SO$_4$ as additives by hydrothermal method.