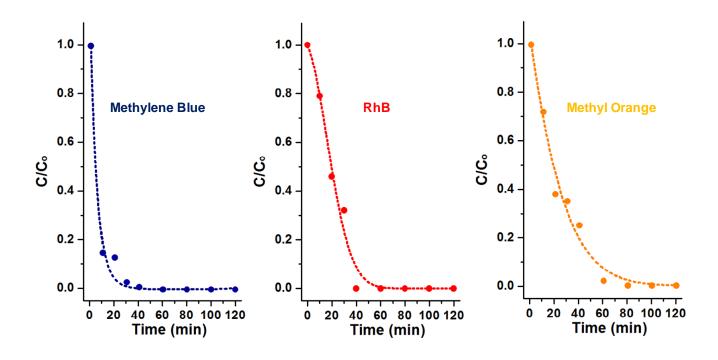
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## **Electronic Supplementary Information for**

## Chemical Bottom-Up and Successive Top-Down Approach for Nanoporous SnO<sub>2</sub> Hollows from Ni<sub>3</sub>Sn<sub>2</sub> Nanoalloys: High Surface Area Photocatalysts and Anode Materials for Lithium Ion Batteries

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**Figure S1.** Photocatalytic studies of nanoporous  $SnO_2$  hollow materials (20 mg) for the decomposition of RhB (red line), methylene blue (MB, blue line), and methyl orange (MO, orange line) under UV irradiation (2.0 mW/cm<sup>2</sup>) from an 120W Xe arc lamp. The 0.01 mM dye solutions (6 mL) were used.



**Figure S2.** Photocatalytic studies of nanoporous  $SnO_2$  hollow materials (20 mg, red line), TiO<sub>2</sub> nanopowder (20 mg, green line), and  $SnO_2$  nanopowder (20 mg, dark blue line) for the decomposition of RhB under visible light irradiation (0.9 mW/cm<sup>2</sup>) from an 120W Xe arc lamp. The 0.01 mM dye solutions (6 mL) were used.

