

## Electronic Supporting Information

### Shape-Controlled Hydrothermal Synthesis and Growth

#### Mechanism of $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ Nanostructure

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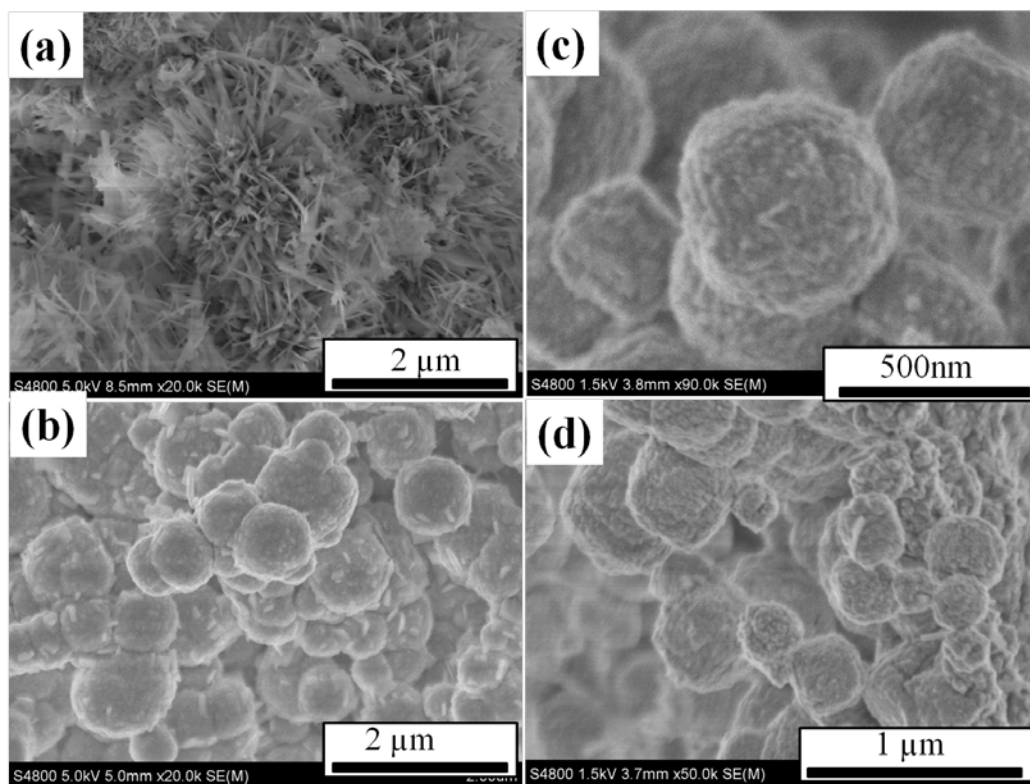


Figure S1. SEM images of the as-synthesized BIT products obtained at 200 °C in the presence of different concentration of mineralizer at 24 h: (a) 1M NaOH, (b) 3M NaOH, (c) 2M KOH, and (d) 3M KOH.

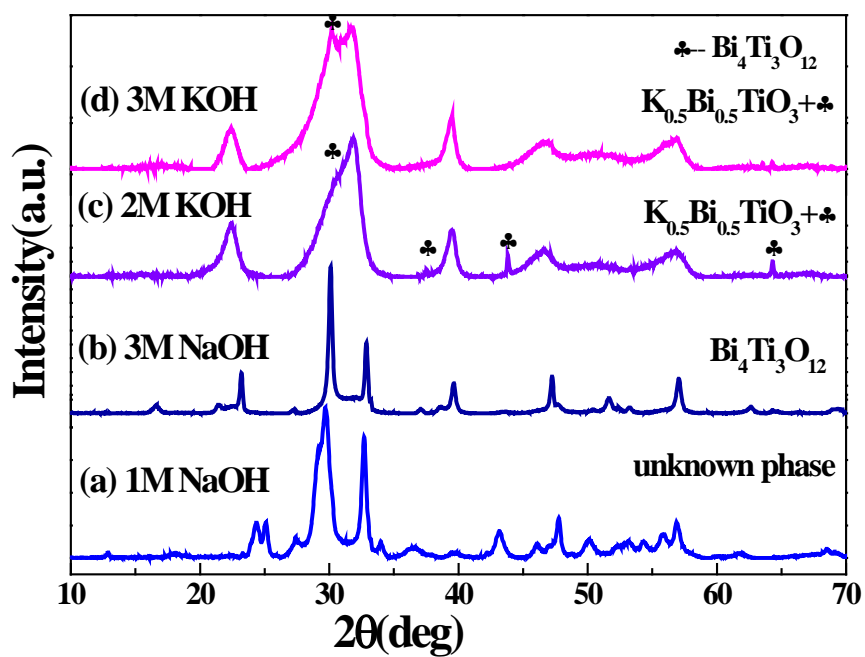


Figure S2. XRD patterns of the as-synthesized BIT products obtained at 200 °C in the presence of different concentration of mineralizer at 24 h: (a) 1M NaOH, (b) 3M NaOH, (c) 2M KOH, and (d) 3M KOH.

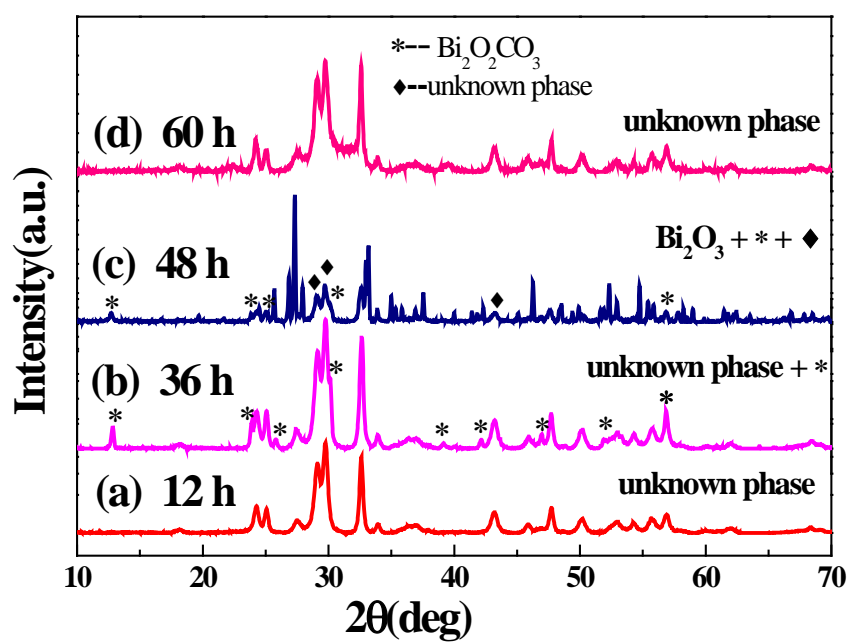


Figure S3. XRD patterns of the as-synthesized BIT products obtained at 200 °C in the presence of 1 M KOH at different reaction time: (a) 0 h, (b) 12h, (c) 36h and (d) 60 h.