

Supplementary Material (ESI) for Journal of Materials Chemistry

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Supporting Information

**In situ Self-assembly Synthesis and Photocatalytic Performance of Hierarchical
 $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ Micro/Nanostructure**

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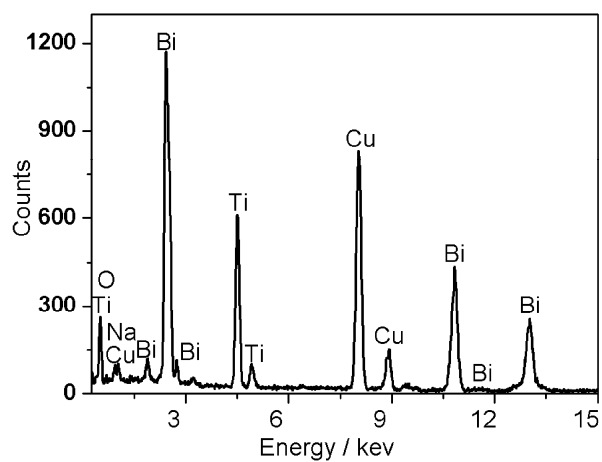
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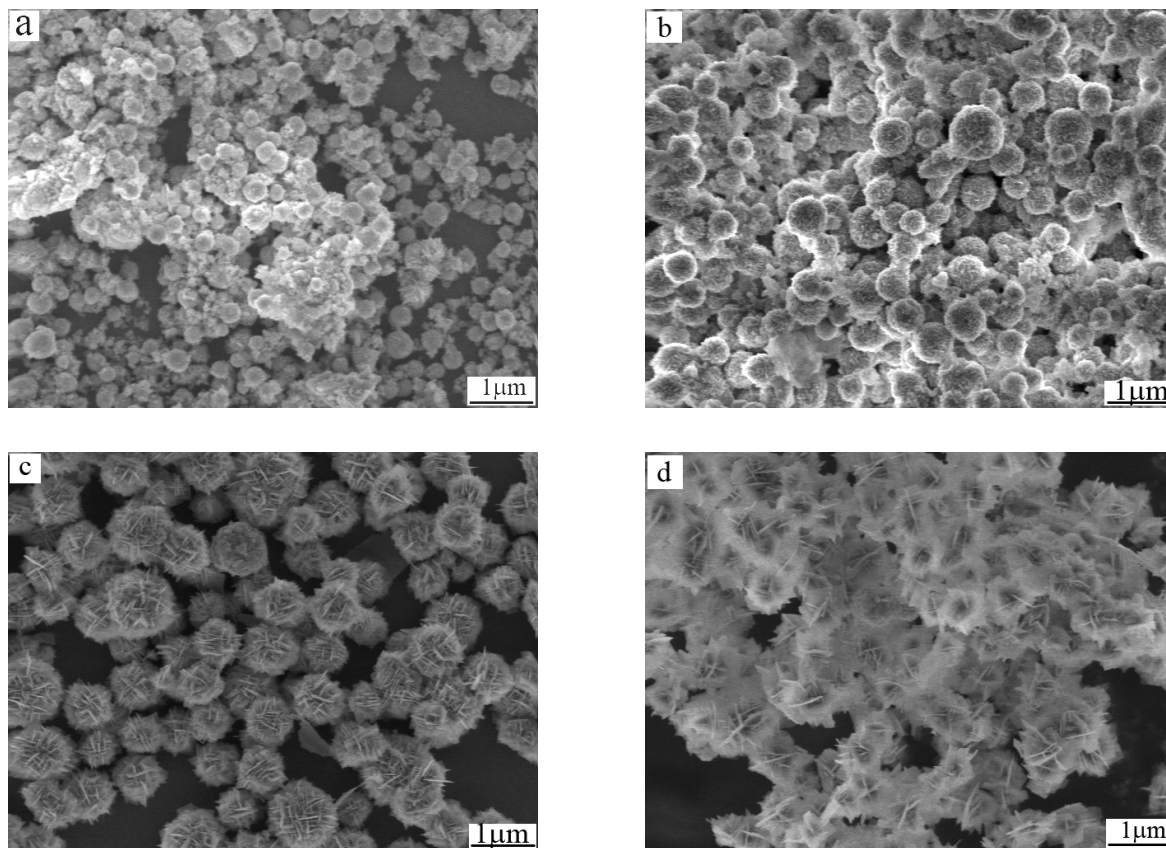
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Fig. S1 EDX spectrum of the hierarchical BNT micro/nanostructure.



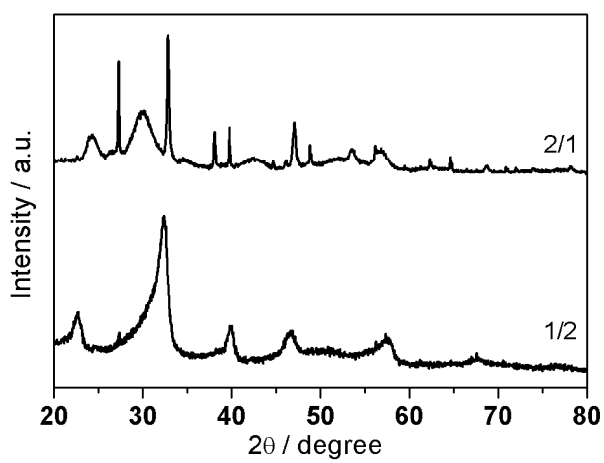
S-Fig. 1 J. Li *et al.*

Fig. S2 SEM images of the products obtained with 15 M of NaOH and the Bi/Ti molar ratio of 1/1 at a) 80 °C, b) 110 °C, c) 140 °C and d) 170 °C for 10 h.



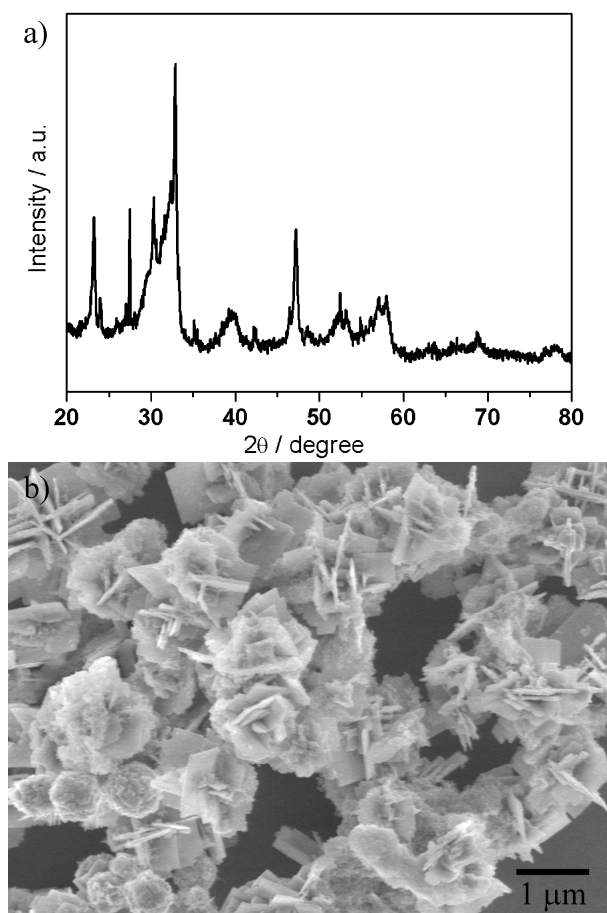
S-Fig. 2 J. Li *et al.*

Fig. S3 XRD patterns of the products synthesized at 170 °C for 10 h with different molar ratio of Bi/Ti: 1/2 and 2/1 using 15 M of NaOH.



S-Fig. 3 J. Li *et al.*

Fig. S4 (a) XRD pattern and (b) SEM image of the products prepared by the hydrothermal method at 170 °C for 10 h with the Bi/Ti molar ratio of 1/1 using 17 M of NaOH.



S-Fig. 4 J. Li *et al.*