

†Electronic Supplementary Information (ESI) available:

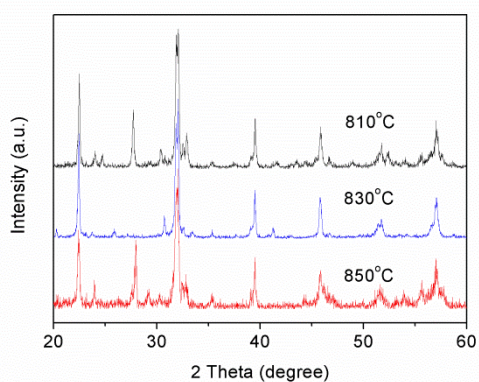
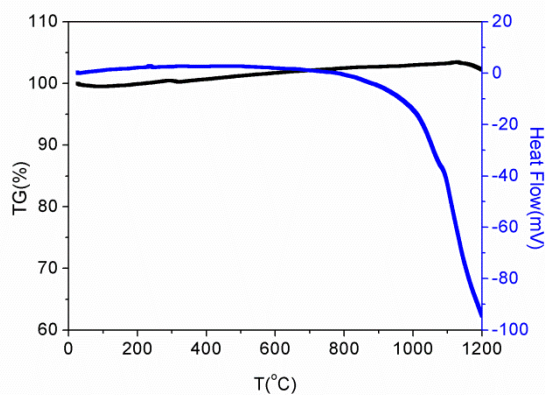
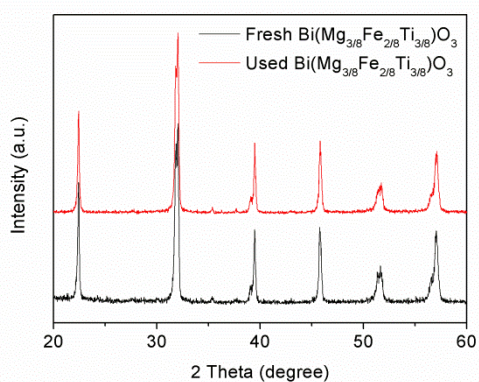


Fig. S1 The XRD patterns of $\text{Bi}(\text{Mg}_{3/8}\text{Fe}_{2/8}\text{Ti}_{3/8})\text{O}_3$ obtained at synthesizing temperature of 810 °C, 830 °C, and 850 °C.



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Fig. S2 The DSC-TG patterns of as-synthesized $\text{Bi}(\text{Mg}_{3/8}\text{Fe}_{2/8}\text{Ti}_{3/8})\text{O}_3$. The falling branch of the heat flow curve indicates that the $\text{Bi}(\text{Mg}_{3/8}\text{Fe}_{2/8}\text{Ti}_{3/8})\text{O}_3$ sample begins to decompose at 850 °C



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Fig. S3 The XRD patterns of the used and fresh powders of $\text{Bi}(\text{Mg}_{3/8}\text{Fe}_{2/8}\text{Ti}_{3/8})\text{O}_3$ for the photocatalytic experiment.