## Electronic Supplementary Material (ESI) for Dalton Transactions. This journal is © The Royal Society of Chemistry 2014

†Electronic Supplementary Information (ESI) available:

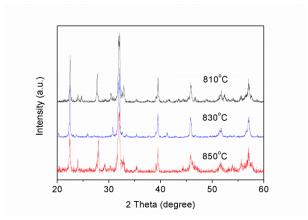


Fig. S1 The XRD patterns of Bi(Mg $_{3/8}$ Fe $_{2/8}$ Ti $_{3/8}$ )O $_3$  obtained at synthesizing temperature of 810 °C, 830 °C, and 850 °C.

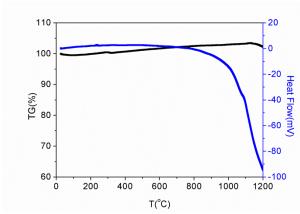


Fig. S2 The DSC-TG patterns of as-synthesized  $Bi(Mg_{3/8}Fe_{2/8}Ti_{3/8})O_3$ . The falling branch of the heat flow curve indicates that the  $Bi(Mg_{3/8}Fe_{2/8}Ti_{3/8})O_3$  sample begins to decompose at 850 °C

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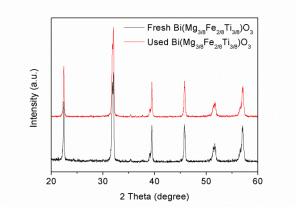


Fig. S3 The XRD patterns of the used and fresh powders of  $Bi(Mg_{3/8}Fe_{2/8}Ti_{3/8})O_3$  for the photocatalytic experiment.