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Synthesis and Photocatalysis Performances of Bismuth Oxynitrate Photocatalysts with Layered Structure

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- **Fig. S1.** Powder diffraction patterns of as-prepared goffered particle samples (0.8 g, the precursor pH = 1.22) with or without suspended in 9 mL of 1 M NaOH solution for 120 min
- **Fig. S2.** Powder diffraction patterns of as-prepared bismuth oxynitrate calcined in air under different temperature for 2h.
 - **Fig. S3.** The crystal structures of layered bismuth oxynitrate, Bi₅O₇NO₃, and β-Bi₂O₃.
- **Fig. S4.** Plots of the recycled degradation of methyl blue in the square multi-layered particle sample as a function of the irradiation period.

Fig. S1

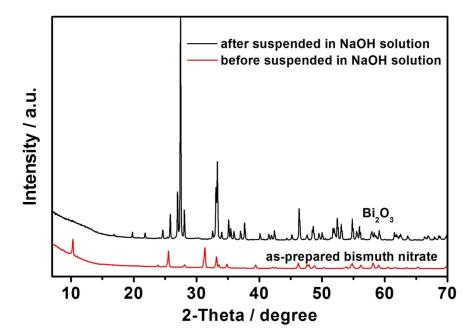


Fig. S2

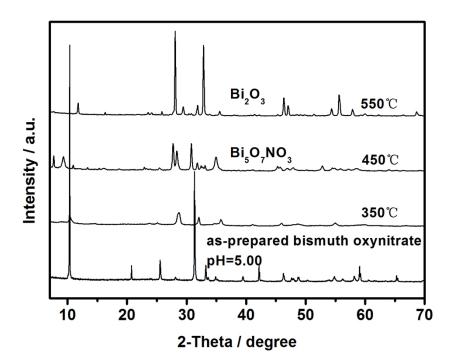
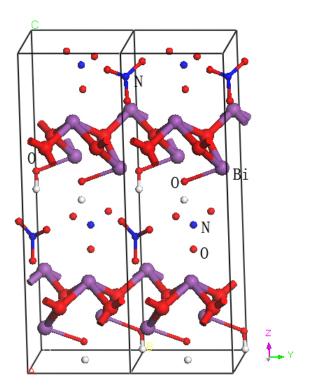
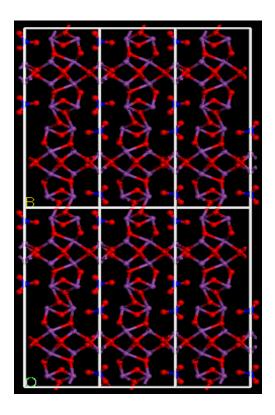


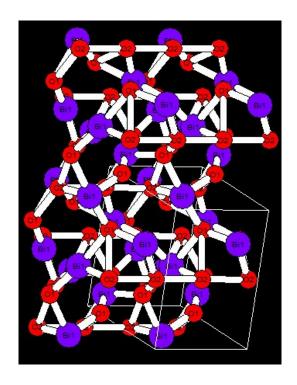
Fig. S3



(a) Layered crystal structure of layered bismuth oxynitrate



(b) Crystal structure of $Bi_5O_7NO_3$



(c) Reticular crystal structure of $\mathrm{Bi}_2\mathrm{O}_3$

Fig. S4

