Synergy of metal and nonmetal dopants for visible-light photocatalysis: A case-study of Sn, N co-doped TiO₂

Huaqiang Zhuang, Yingguang Zhang, Zhenwei Chu, Jinlin Long*, Xiaohan An, Hongwen Zhang, Huaxiang Lin, Zizhong Zhang, Xuxu Wang*

State Key Laboratory of Photocatalysis on Energy and Environment, College of Chemistry, Fuzhou University, Fuzhou 350116, People’s Republic of China

E-mail: jllong@fzu.edu.cn; xwang@fzu.edu.cn

Web: http://chem.fzu.edu.cn/szdw/teacherinfo.aspx?id=23
Tel: +86-591-83739012; Fax: +86-591-83779121
Figure S1 (A) Nitrogen adsorption-desorption isotherms of the Sn/TiO$_2$ and SNT-x samples. (B) Barret-Joyner-Halenda (BJH) pore size distributions of the Sn/TiO$_2$ and SNT-x samples.
Figure S2 Photocatalytic degradation of phenol (50 mg/L) over TiO$_2$ and SNT-500 samples under visible light irradiation.
Figure S3 Recycling photocatalytic degradation of RhB over SNT-500 sample under visible light irradiation.
Figure S4 Plots of photodegradation of RhB over SNT-500 sample with different scavengers under visible light irradiation. Different scavengers include ethylenediamine tetraacetic acid disodium salt (EDTA-2Na, 10 mM), benzoquinone (BQ, 1 mM) and tertiary butanol (TBA, 20 mM).