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Authors: Xinbao Li, Tianxiao Peng, Yongcai Zhang, Yaoting Wen, Zhaodong Nan

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# ACCEPTED MANUSCRIPT

#### A new efficient visible-light photocatalyst made of SnO<sub>2</sub> and cyclized polyacrylonitrile

Xinbao Li<sup>a</sup>, Tianxiao Peng<sup>b</sup>, Yongcai Zhang<sup>b,c,\*</sup>, Yaoting Wen<sup>b</sup>, Zhaodong Nan<sup>b,\*</sup>

<sup>a</sup> School of Environmental & Municipal Engineering, North China University of Water Resources and

Electric Power, Zhengzhou 450011, China

<sup>b</sup> School of Chemistry and Chemical Engineering, Yangzhou University, Yangzhou 225009, China

<sup>c</sup> Hubei Key Laboratory of Processing and Application of Catalytic materials, Huanggang Normal University,

Huanggang 438000, China

\*E-mail address: zhangyc@yzu.edu.cn (Yongcai Zhang)

### **Graphical abstract**



## Highlights

- A new visible-light photocatalyst was made of SnO<sub>2</sub> and cyclized polyacrylonitrile.
- This catalyst can efficiently harvest visible-light ( $\lambda$  > 420 nm).
- This catalyst showed enhanced separation and transfer of photoinduced charges.
- This catalyst had far higher photocatalytic activity than SnO<sub>2</sub> in Cr(VI) reduction.

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