Supporting Information

In situ formation of 2-thiobarbituric acid incorporated g-C₃N₄ for enhanced visible-

light-driven photocatalytic performance

Tingting Chen ^{a #}, Shan Hu ^{a, b #}, Quanfeng Xing ^a, Xiaofeng Yu ^c, Jinming Chen ^c, Xiaolong Li ^c, Xiuquan Xu ^{c*}, Bo zhang ^a,

b

^a School of Environment and Safety Engineering, Jiangsu University, Zhenjiang 212013, PR China

^b Jiangsu Province synergistic innovation canter of modern agricultural equipment and technology, Zhenjiang 212013, PR

China

^c School of Pharmacy, Jiangsu University, Zhenjiang 212013, PR China

 \Box Corresponding author.

E-mail address: xxq781026@ujs.edu.cn (X. Xu).



The XPS analysis was carried out to gain insight into the surface composition distribution and chemistry states of CN and the results were depicted in Fig. S1.

Fig. S1. Survey XPS spectra (a) and high-resolution XPS spectra of C 1 s (b), N 1 s (c) for CN.

Binding energy(eV)

399

398

396

397

399.437 eV

401

400

401.04 eV

402

403

For the C 1s region (Fig. S1b), the three independent peaks centered at 284.83, 286.54 and 288.20 eV could be assigned to the C–C, C–NH₂ and N–C=N groups. For the N 1s region (Fig. S1c), the signal of N 1s could be fitted with three peaks located at 398.63, 399.47 and 400.04 eV, which were mainly originated from the nitrogen atom bond in the C-N=C, (C)₃ -N and terminal -NH₂ groups, respectively.