

Electronic Supplementary Information (ESI)

In Situ Synthesis of N-doped Carbon Nanotubes–BiOCl Nanocomposites and Their Synergistic Photocatalytic Performance

Lu-Ping Zhu^{a,b,*}, Ling-Ling Wang^a, Nai-Ci Bing^a, Peng Li^b, Li-Jun Wang^{a,*}, Chao Huang^c, and Gui-Hong Liao^d

^a*School of Environmental and Materials Engineering, Shanghai Second Polytechnic University, Shanghai, 201209, China.*

^b*Environmental Remediation Materials Unit, National Institute for Materials Science (NIMS) 1-1 Namiki, Tsukuba, Ibaraki 305-0044, Japan*

^c*Department of Physics and Materials Science, City University of Hong Kong, Hong Kong SAR.*

^d*Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing 100190, China*

E-mail address: lpzhu@sspu.edu.cn; ZHU.luping@nims.go.jp; wang_lijun@yahoo.cn.

Supporting information table of contents:

Fig. S1 Plots of $\ln(C/C_0)$ against time t of various samples: without catalyst, CN_xNTs, P25, the as-prepared BiOCl and NCB samples, respectively. ($C_0 = 10 \text{ mg L}^{-1}$, 200 mL, and catalyst: 20 mg).

Fig. S2 Reuse cycles of photodegradation of RhB over the N-doped carbon nanotubes–BiOCl nanocomposites loaded with 2.0 wt% N-doped carbon nanotubes. ($C_0 = 10 \text{ mg L}^{-1}$, 200 mL, temperature: room temperature, time: 50 min.) Regeneration: the used catalyst was washed with deionized water and absolute ethanol, and finally dried under vacuum at 50 °C for 8 h.

Fig. S3. Comparison of the adsorption efficiency of CN_xNTs and 2-NCB.

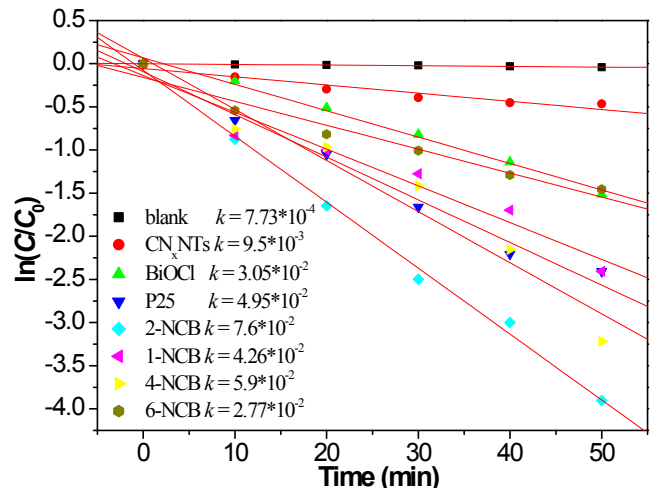


Fig. S1

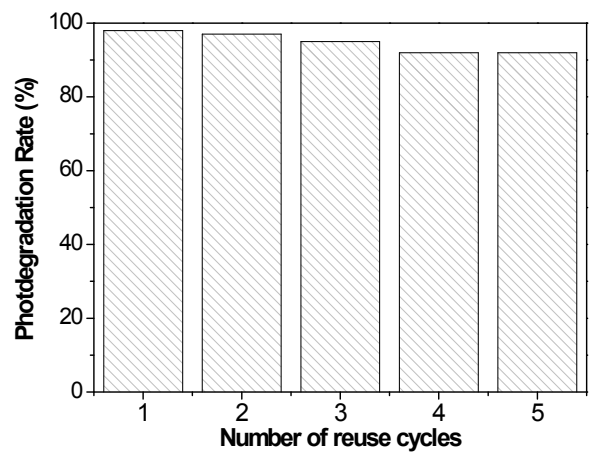


Fig. S2

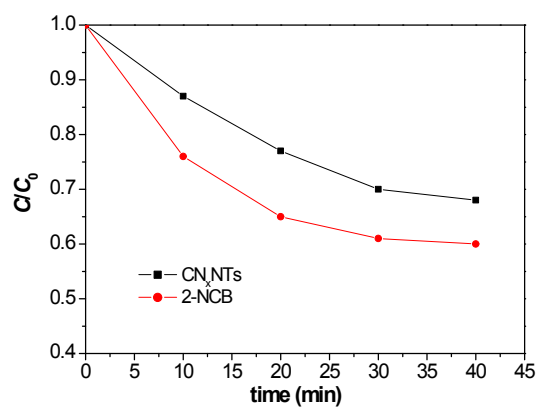


Fig. S3