

Supporting information

Large-scale synthesis of carbon dots/TiO₂ nanocomposites for photocatalytic color switching

Aiwu Wang^{1,2+}, Xufen Xiao²⁺, Cangtao Zhou^{1,3,4}, Fucong Lyu², Li Fu⁵, Chundong Wang^{6*}, Shuangchen Ruan^{1,3}

¹ *Center for Advanced Material Diagnostic Technology, Shenzhen Technology University, Shenzhen 518118, People's Republic of China*

² *Center of Super-Diamond and Advanced Films (COSDAF), City University of Hong Kong, Hong Kong, People's Republic of China*

³ *College of Applied Technology, Shenzhen University, Shenzhen 518060, People's Republic of China*

⁴ *Center for Applied Physics and Technology, HEDPS, and School of Physics, Peking University, Beijing 100871, People's Republic of China*

⁵ *College of Materials and Environmental Engineering, Hangzhou Dianzi University, Hangzhou 310018, People's Republic of China*

⁶ *School of Optical and Electronic Information, Huazhong University of Science and Technology, Wuhan 430074, People's Republic of China*

*Corresponding author E-mail: apcdwang@hust.edu.cn

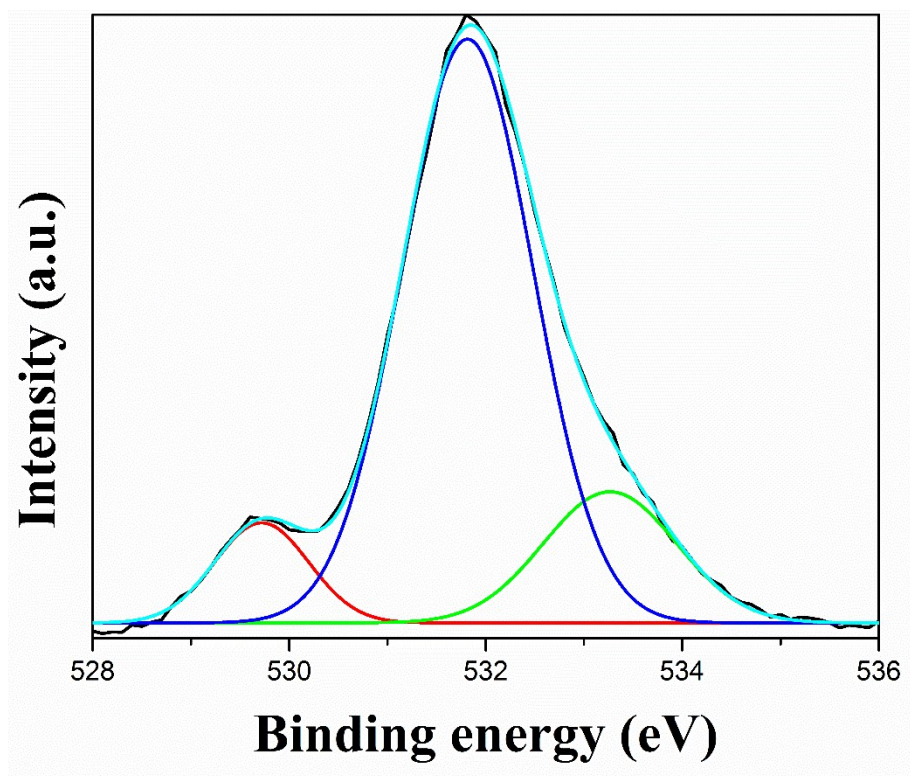


Figure S1 XPS O 1s spectrum of CDs/TiO₂ nanocomposites.

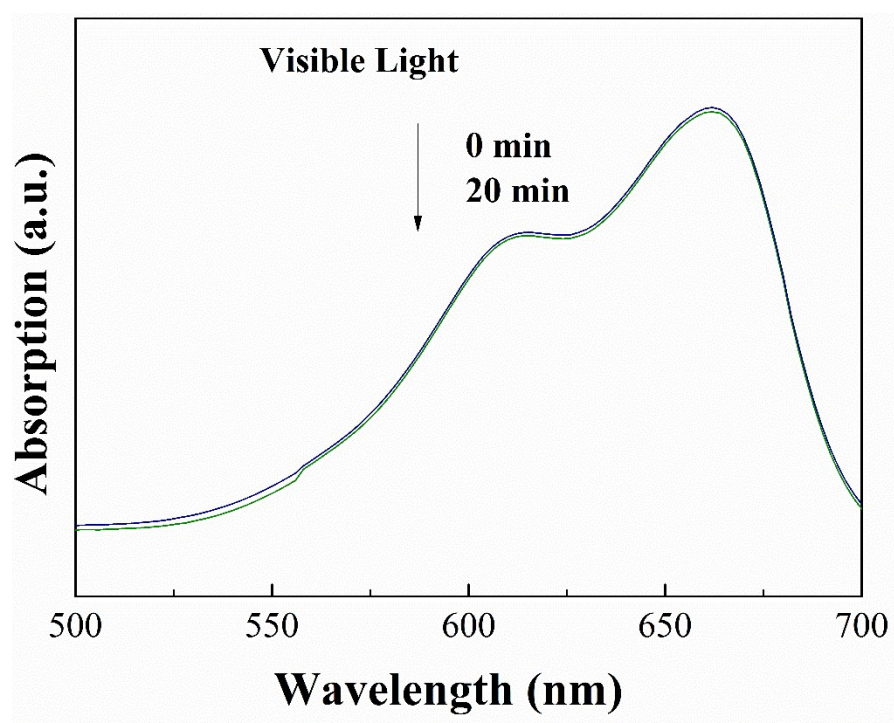


Figure S2. UV-vis spectra of the CDs/TiO₂ nanocomposites under recoloration process under visible light irradiation.

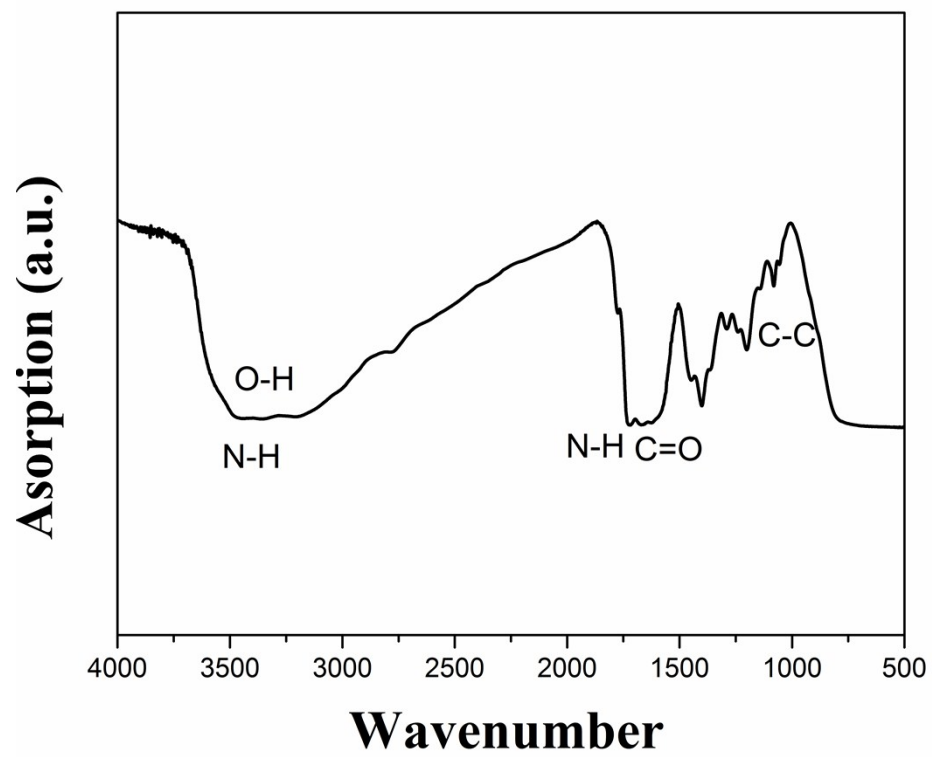


Figure S3. FTIR of obtained nitrogen rich carbon dots.

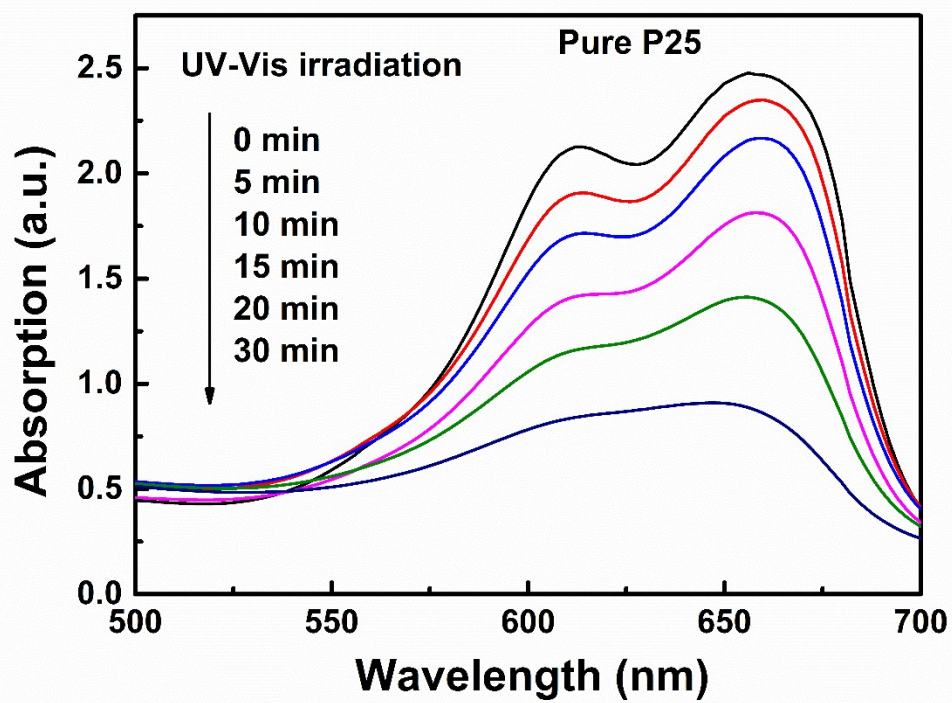


Figure S4. UV-vis spectra of P25 under recoloration process under UV-visible light irradiation.