Toxicological Assessment of TiO2 Nanoparticles by Recombinant Escherichia coli

Bacteria

Guoxiang Jiang, Zhenyao Shen, Junfeng Niu, Yueping Bao, Jing Chen, Tiande He

State Key Laboratory of Water Environment Simulation, School of Environment, Beijing Normal University, Beijing 100875, P. R. China.

Fluorescence excitation and emission scan spectra were generated by collecting scan spectra over a range of emission wavelengths (500-600 nm emission wavelength in increments of 1 nm under 488 nm excitation wavelength) and excitation wavelengths (230-500 nm excitation wavelength in increments of 1 nm under 520 nm emission wavelength). The fluorescence excitation and emission scan spectra showed that nano-TiO₂ under 520 nm emission wavelength did not display any fluorescence when irradiated at 488 nm.

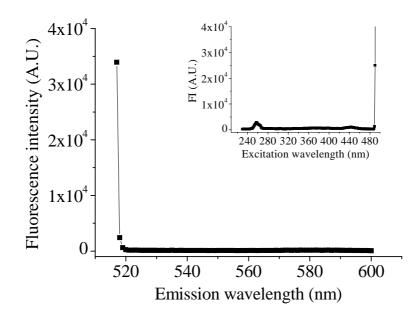


Fig. S1. The fluorescence emission and excitation (inserted picture) scan spectra of $20 \ \mu g \ mL^{-1}$ nano-TiO₂. The emission scan spectrum was generated by collecting fluorescence intensity over a range of emission wavelengths (500-600 nm) under 488 nm excitation wavelength. The inserted picture illustrates the excitation scan spectrum (230-500 nm) of nano-TiO₂ under 520 nm emission wavelength.