

Supplementary Information for

Efficient Electron Transfer in Carbon Nanodot-Graphene Oxide Nanocomposites

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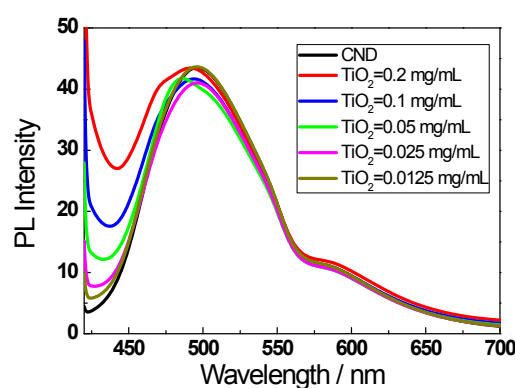


Figure S1. The fluorescence spectra of carbon nanodots (CNDs) mixed with various concentrations of TiO₂ nanoparticles.

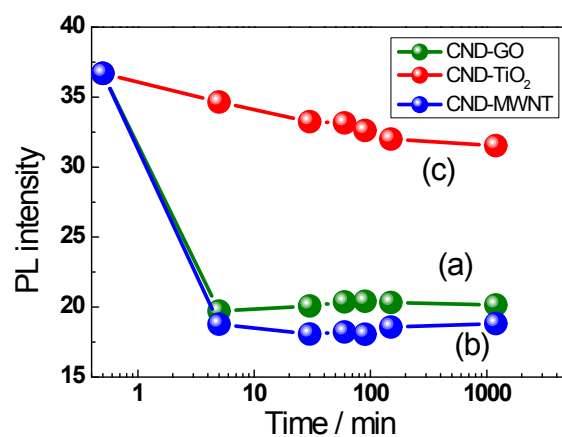


Figure S2. Fluorescence quenching of CNDs by (a) GO, (b) MWNTs and (c) TiO₂ nanoparticles before and after being incubated with target as a function of time, respectively.

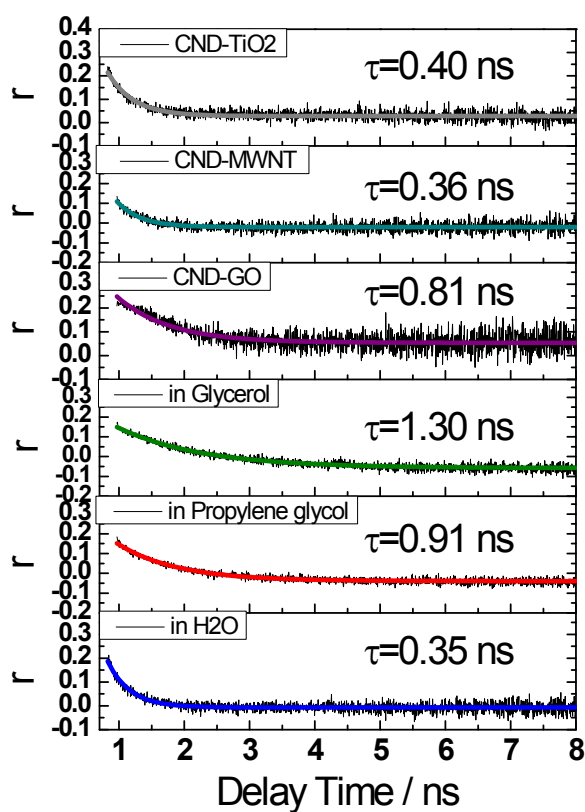


Figure S3. Fluorescence anisotropy decay of CNDs in water, propylene glycol and glycerol and CNDs-GO, CNDs-MWNTs and CNDs-TiO₂ NPs composites (from bottom to upper panel).

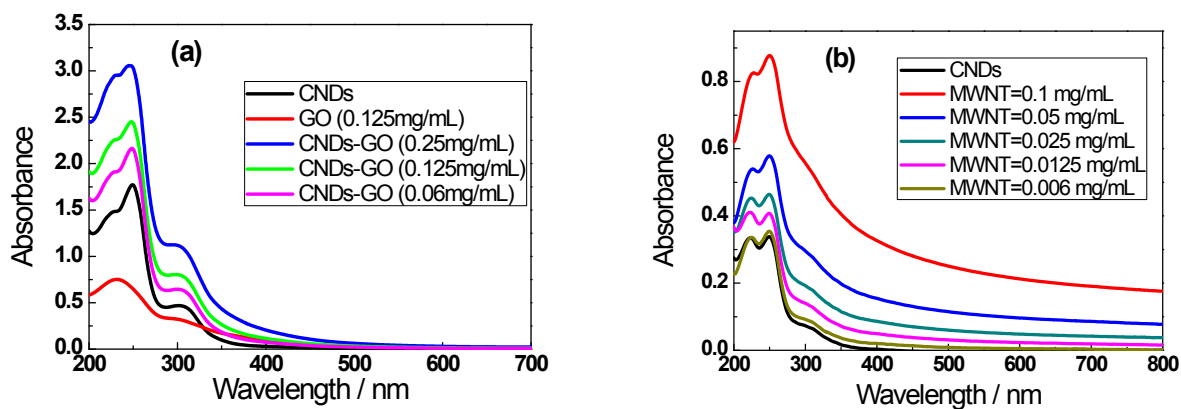


Figure S4. The Absorption spectra of CNDs mixed with various concentrations of (a) GO and (b) MWNTs, respectively.

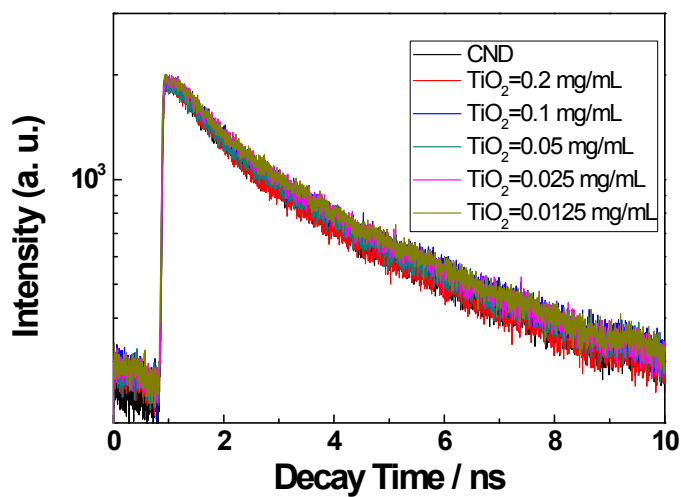


Figure S5. The fluorescence evolution of CNDs and mixed with various concentrations of TiO_2 nanoparticles at 500 nm measured by the TCSPC technique.

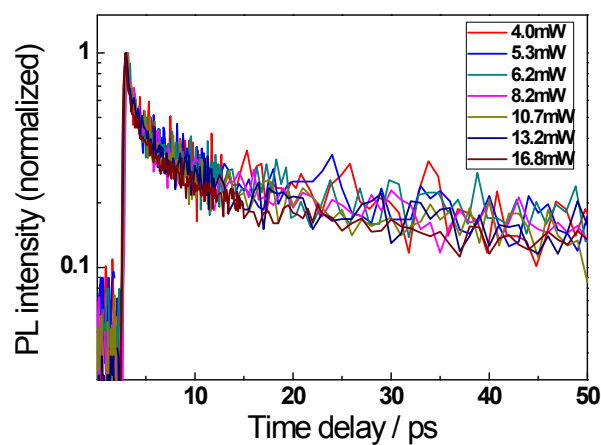


Figure S6. PL up-conversion traces recorded at different pump fluence from CND solution. The fast time constant does not vary with increasing pump fluence.

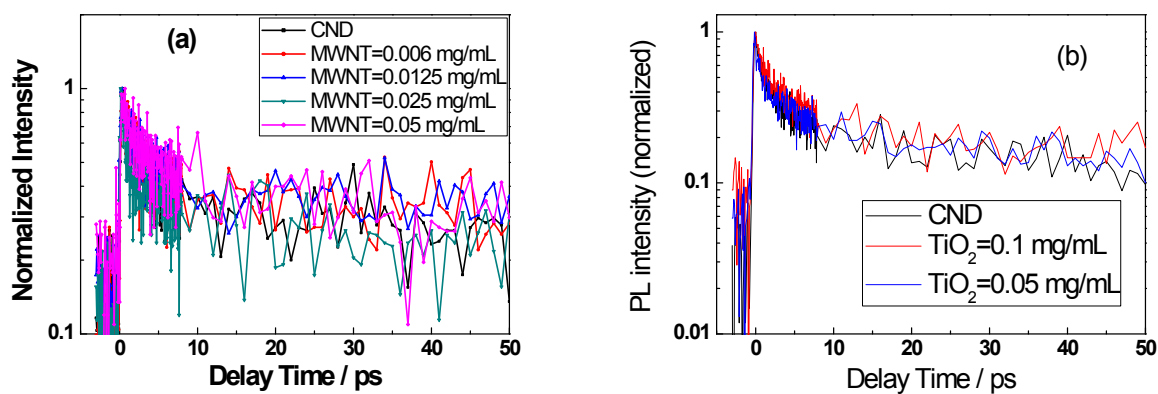


Figure S7. The fluorescence evolutions of CNDs and mixed with various concentrations of (a) MWNTs and (b) TiO_2 nanoparticles at 500 nm measured by up-conversion technique, respectively.

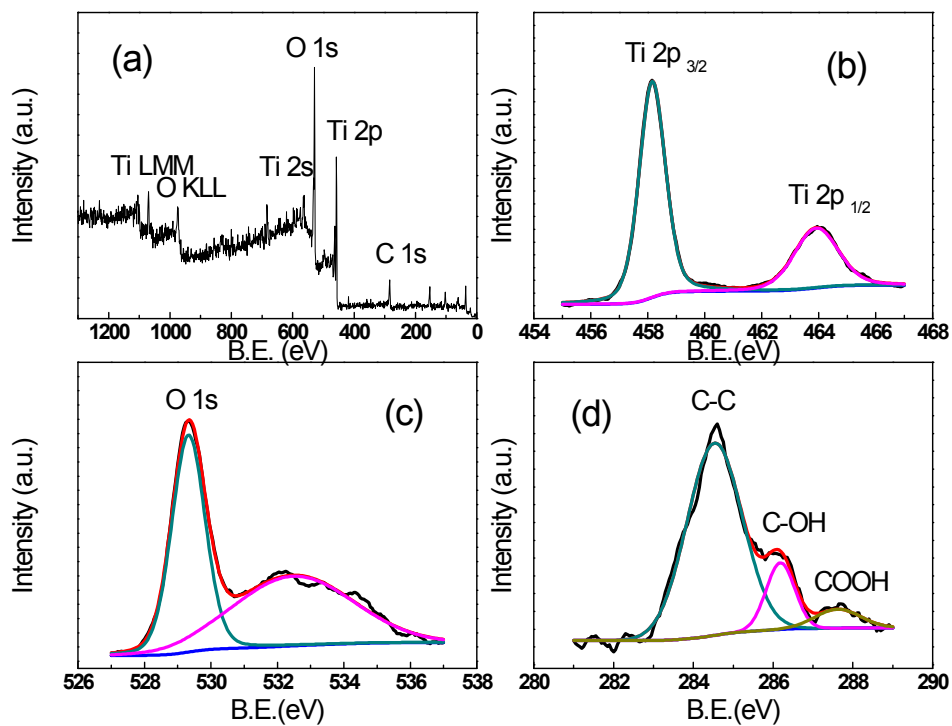


Figure S8. (a) Whole XPS spectrum of the TiO₂ nanoparticles, (b-d) are the corresponding Ti2p spectrum, O1s spectrum and C1s spectrum of TiO₂ nanoparticles. The C1s XPS shows three carbon peaks (C-C, C-OH and C=O) with binding energy of 284.5, 285.9 and 287.6 eV, respectively.