

Conjugating Luminescent CdTe Quantum Dots with Biomolecules

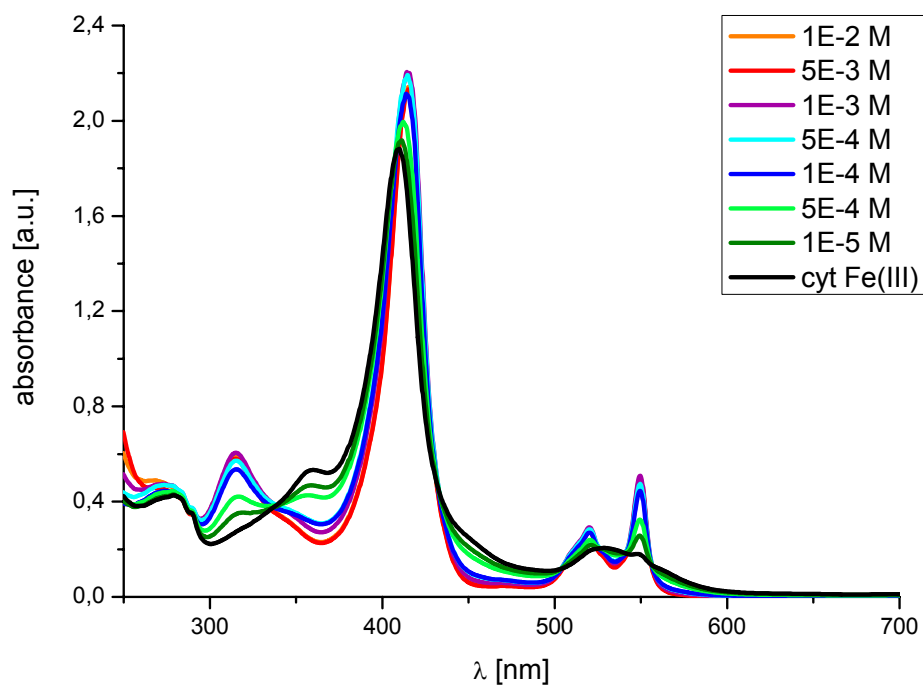


Figure S1: Absorption spectra of oxidized cytochrome c in water (2.85×10^{-5} M, black line) and corresponding spectra of reduced cytochrome c upon increased addition of 2-(dimethylamino)ethanethiol hydrochloride.

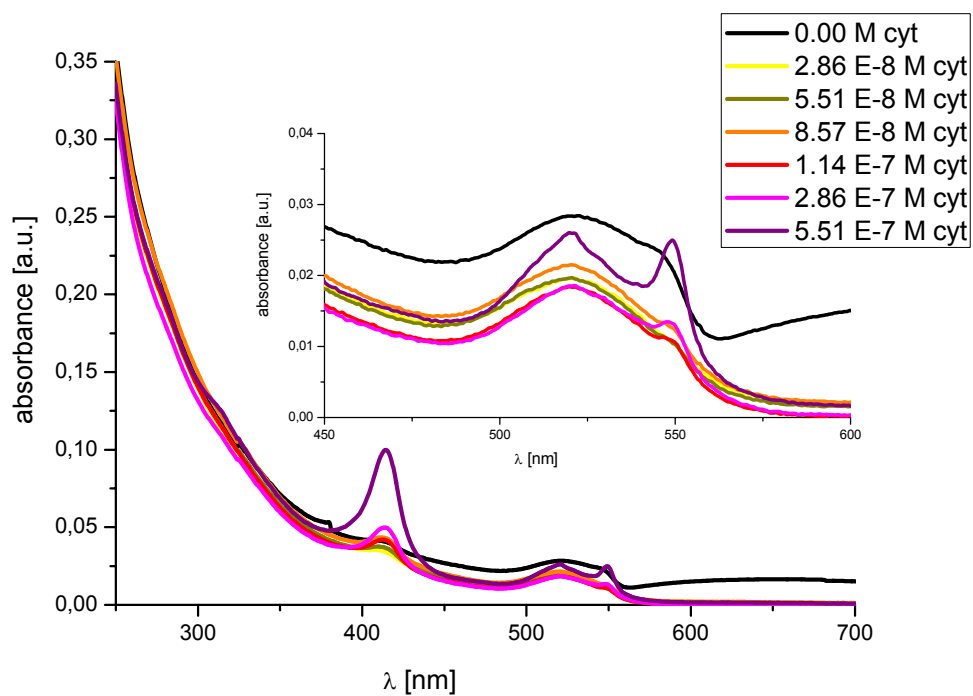


Figure S2: Absorption spectra of P3 (5×10^{-5} M) in water in the presence of different concentrations of cytochrome c (0 to 5.51×10^{-7} M). The inset shows the Q-band region of the reduced cytochrome c for better illustration.

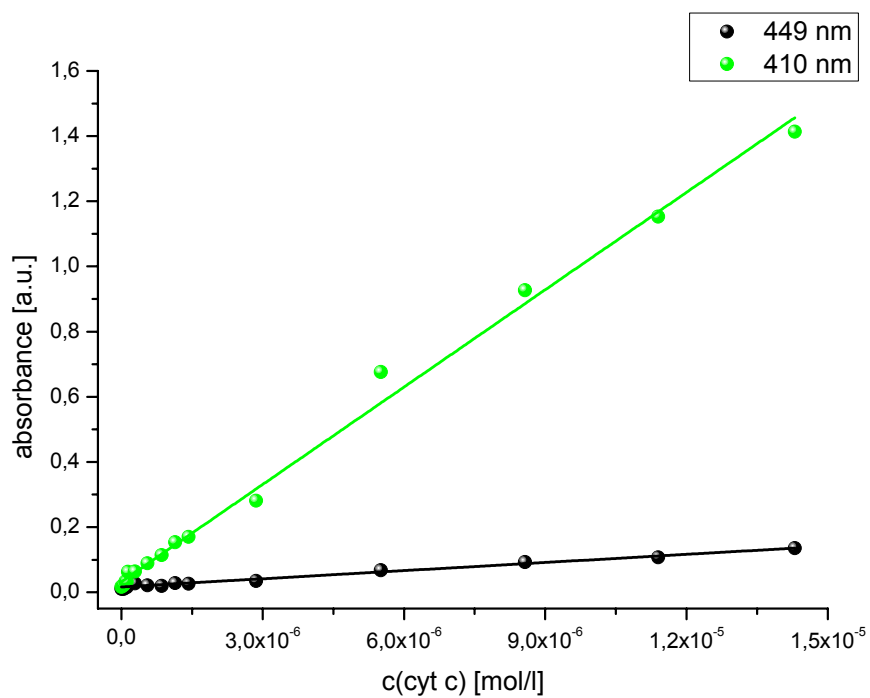


Figure S3: Dependency of the absorption intensity of both the Soret-band region (green line; 410 nm) and the Q-band region (black line; 449 nm) on the different concentrations of cytochrome c (0 to $1,43 \times 10^{-5}$ M).

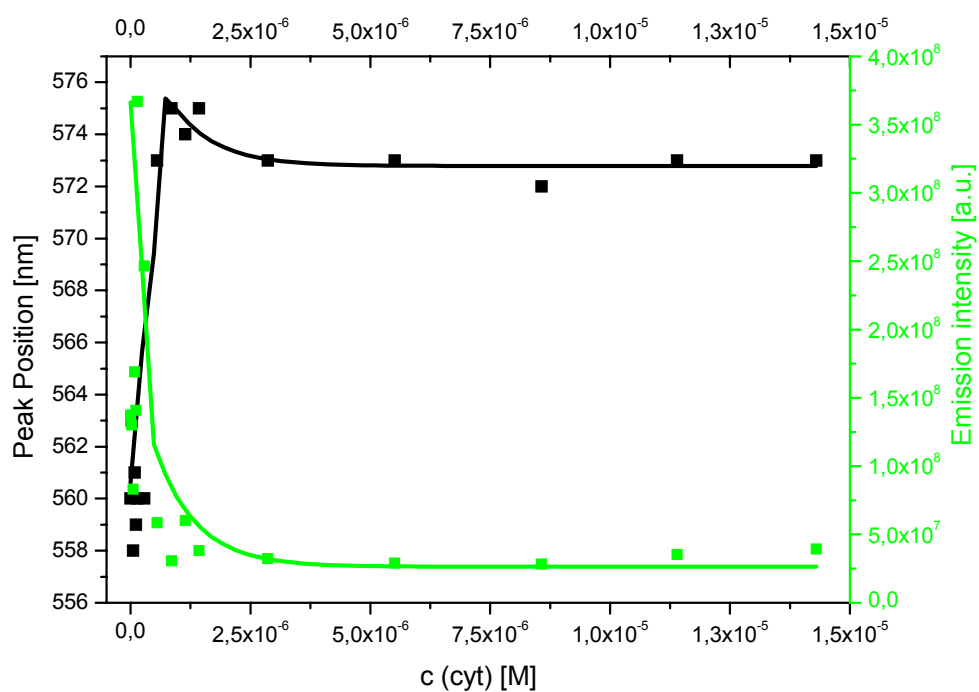


Figure S4: Dependency of emission intensity (green curve) and peak position (black curve) of the emission maximum on the different concentrations of cytochrome c (0 to 1.43×10^{-5} M) mixed with N3 (5×10^{-5} M).

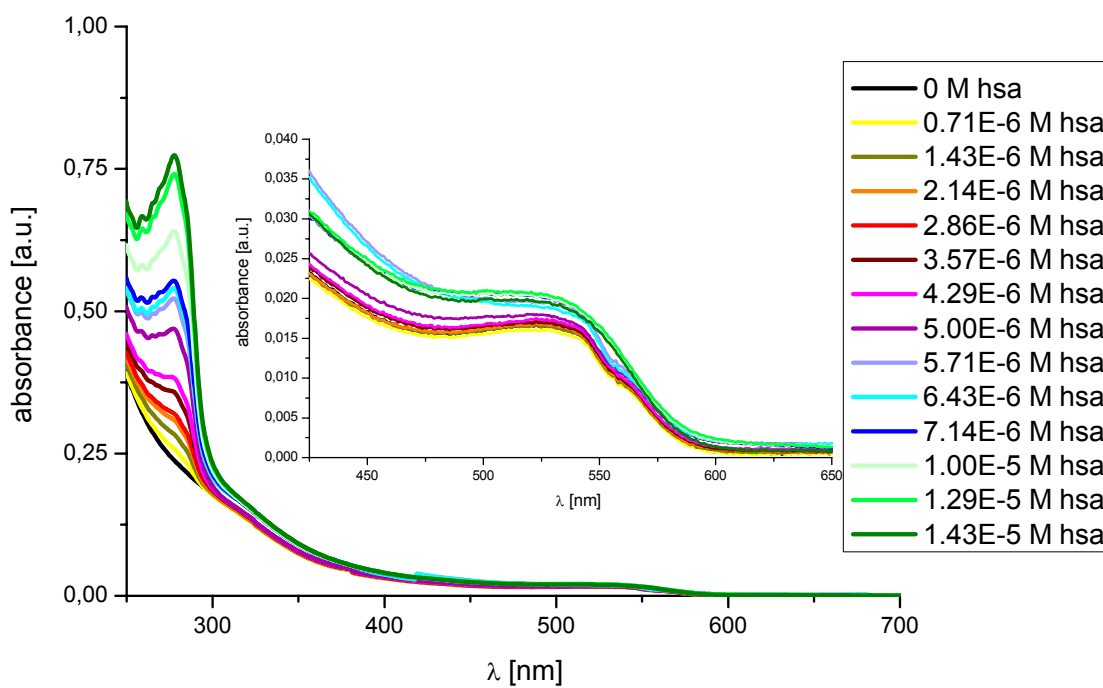


Figure S5: Absorption spectra of N3 (5×10^{-5} M) in water in the presence of different concentrations of human serum albumin (0 to 1.43×10^{-5} M). The inset shows the characteristic QD band-gap absorption region for better illustration.

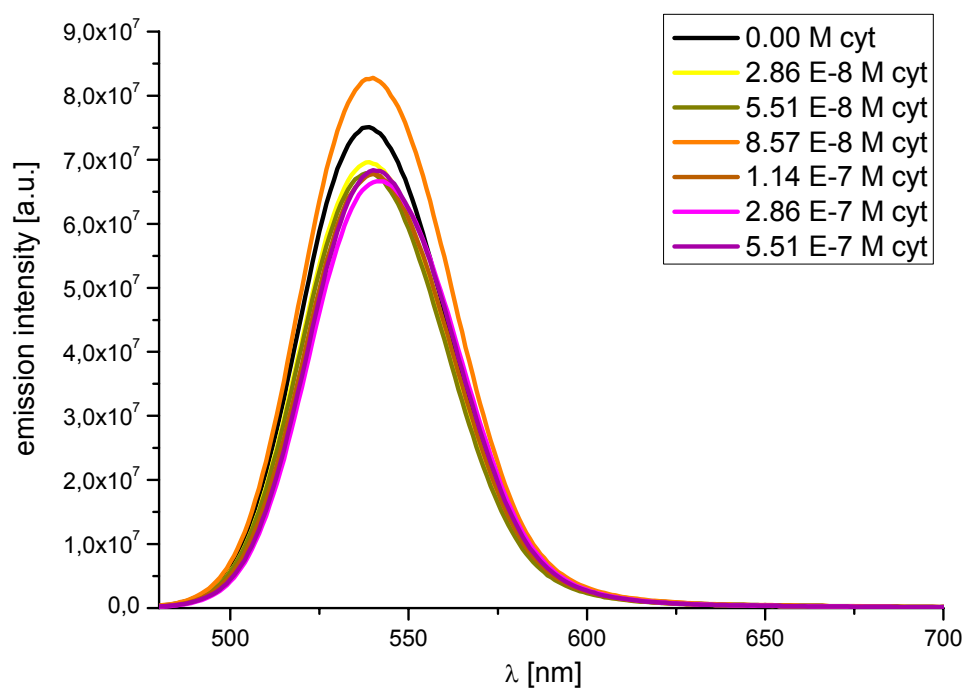


Figure S6: Emission spectra (excited at 300 nm) of P3 (5×10^{-5} M) in water in the presence of different concentrations of cytochrome c (0 to 1.43×10^{-5} M).

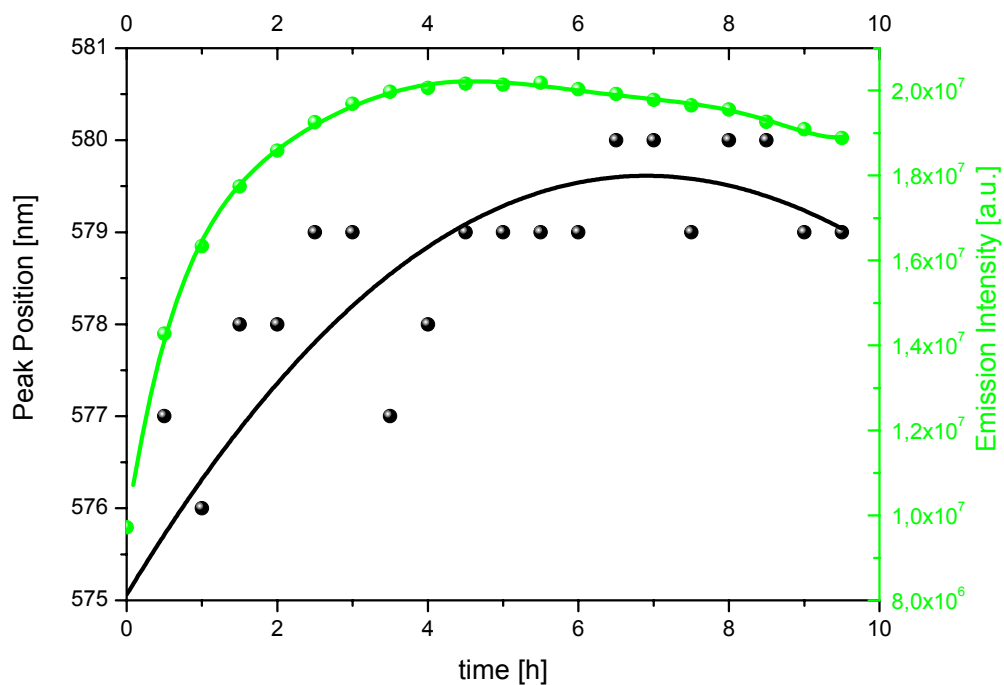


Figure S7: Dependency of both emission intensity (green line) and peak position of the emission maximum (black line) based on emission spectra of **N3** (5×10^{-5} M, based on the Cd^{2+} concentration) mixed with cytochrome c (1.43×10^{-5} M) in 30 minute intervals during a 9.5 hour period.

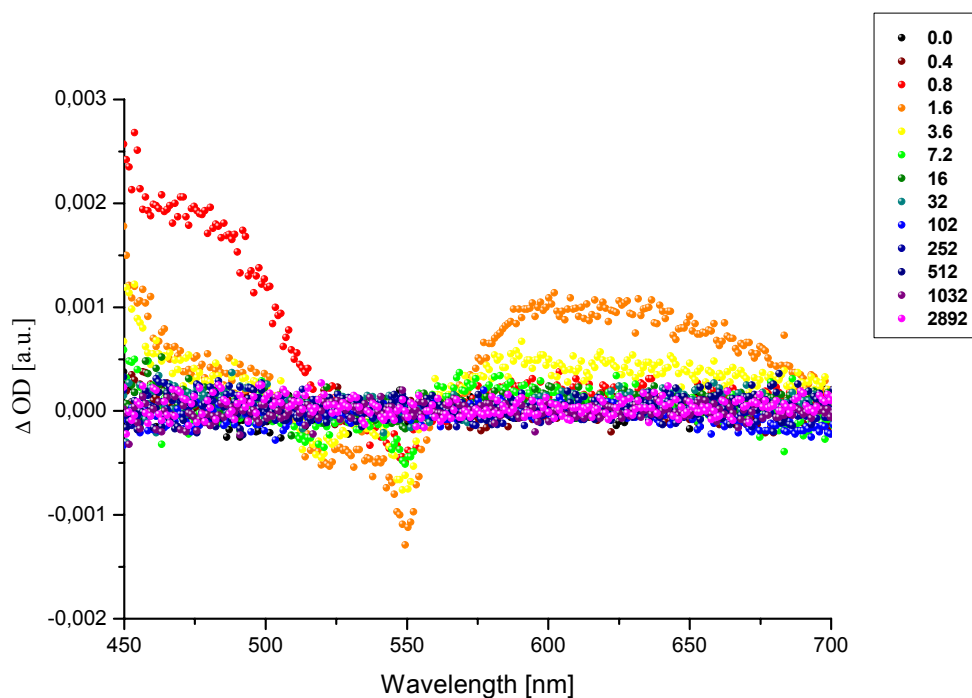


Figure S8: Differential absorption spectra (visible region) obtained upon femtosecond flash photolysis (excitation wavelength 387 nm) of reduced cytochrome c (i.e. Fe(II)) with several time delays between 0 and 2892 ps at room temperature.

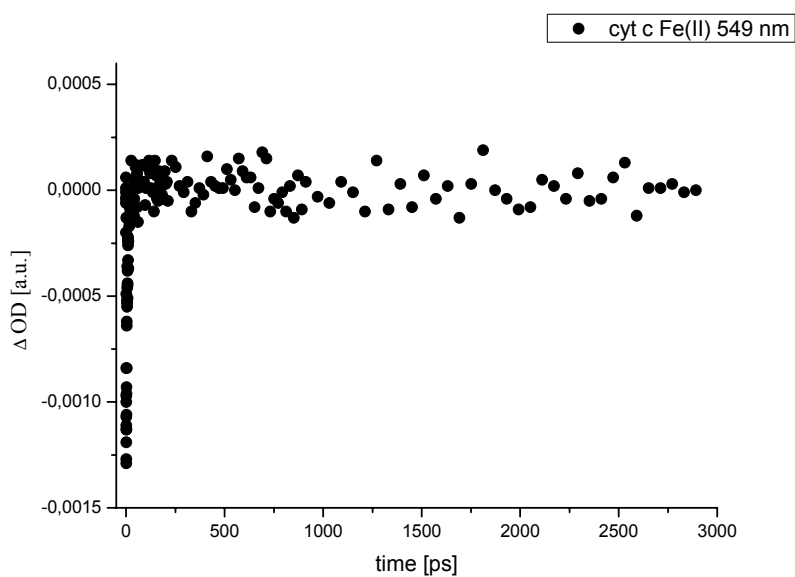


Figure S9: Absorption-time profile of the spectra shown above (i.e. Figure S8) at 549 nm, monitoring the kinetics of the recovery of the cytochrome c (i.e. Fe(II)) excited state.

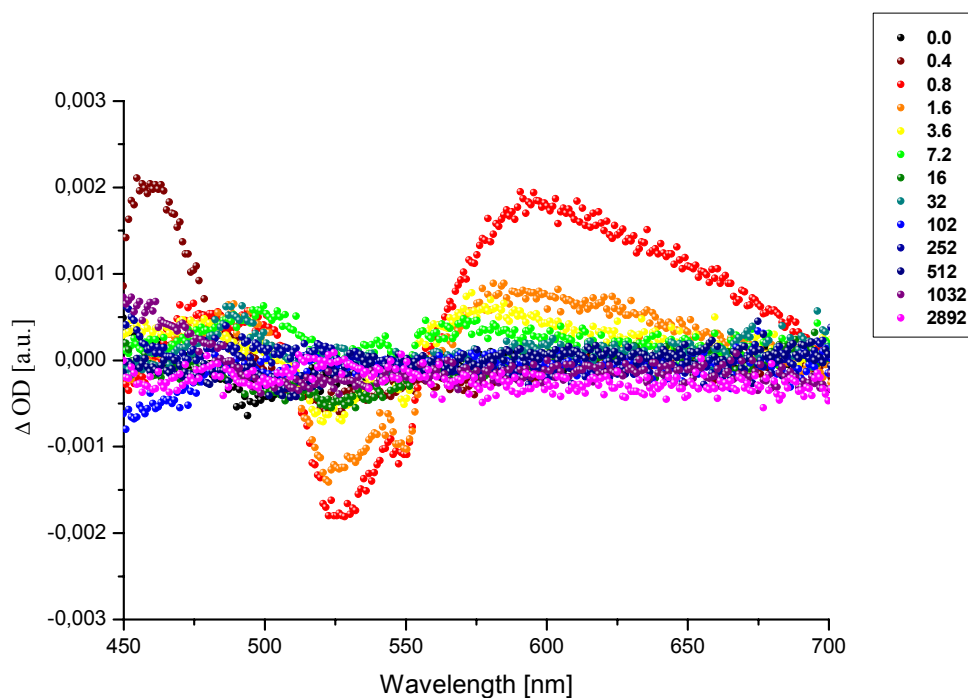


Figure S10: Differential absorption spectra (visible region) obtained upon femtosecond flash photolysis (excitation wavelength 387 nm) of oxidized cytochrome c (i.e. Fe(III)) with several time delays between 0 and 2892 ps at room temperature.

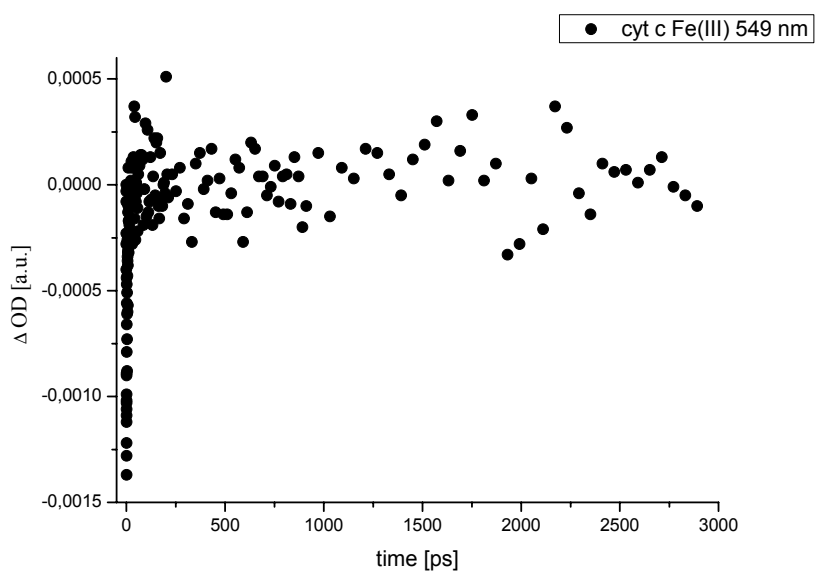


Figure S11: Absorption-time profile of the spectra shown above (i.e. Figure S10) at 549 nm, monitoring the kinetics of the recovery of the cytochrome c (i.e. Fe(III)) excited state.