Sapphyrin-Nanotube Assemblies

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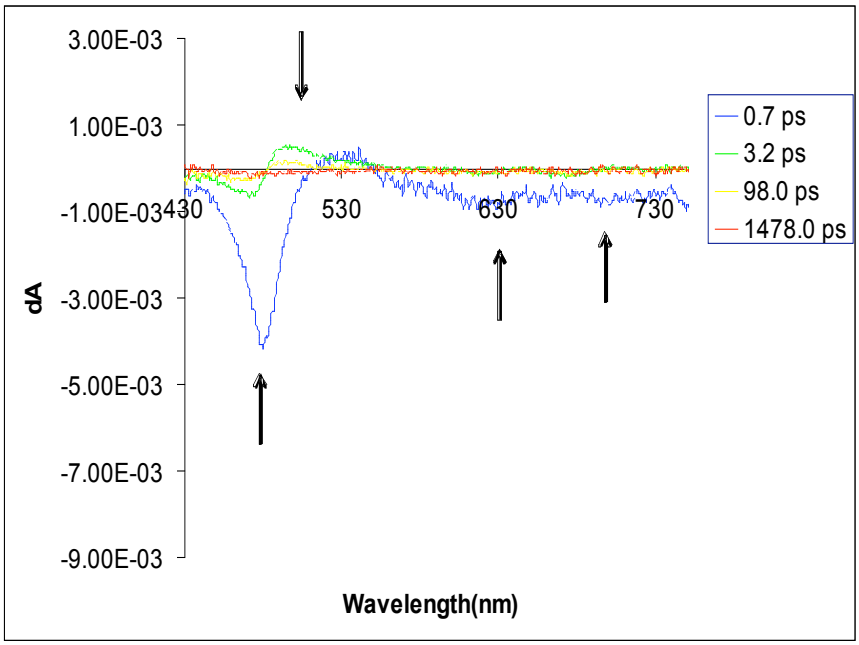
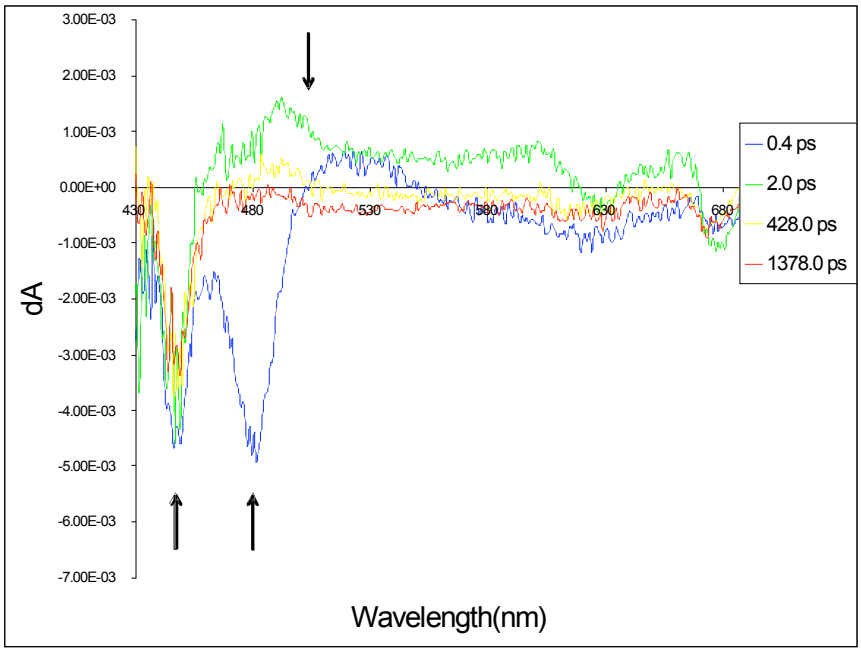


(a)



(b)

Figure S1. 387 nm flash photolysis transient absorption spectra of nanotube-sapphyrin complexes in (a) water and (b) BMIM-PF6. Note the bleaching of the Soret-like band at 481 nm.

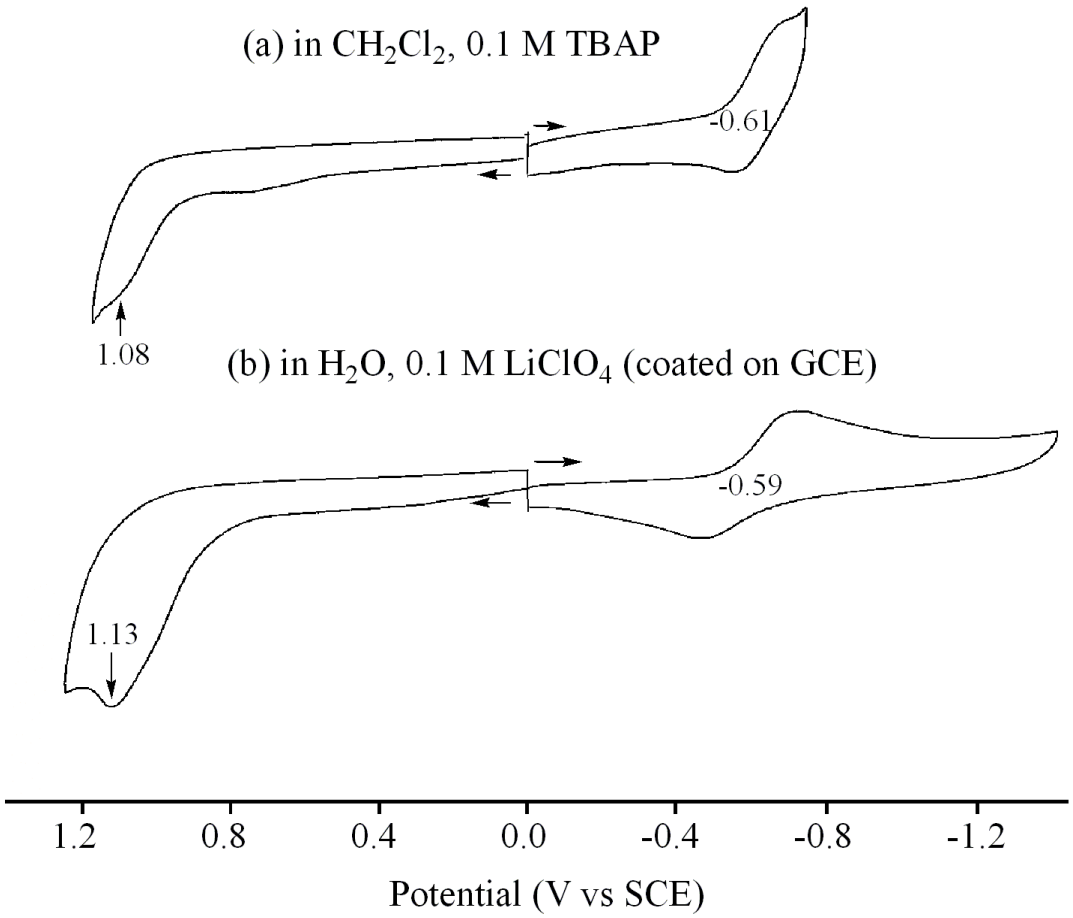
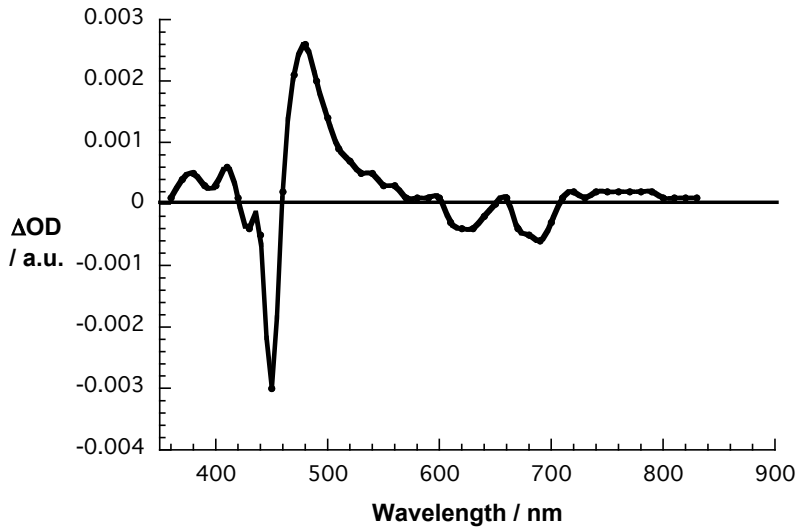
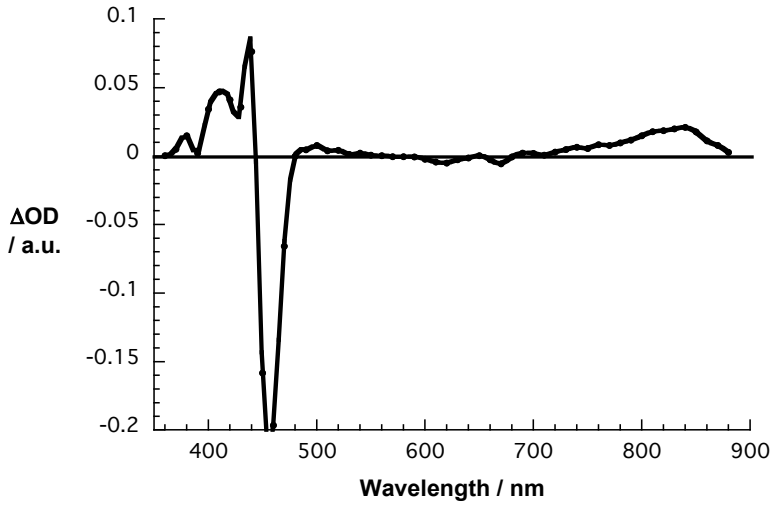


Figure S2. Cyclic voltammograms of sapphyrin (a) in CH_2Cl_2, 0.1 M TBAP and (b) coated on the surface of a glassy carbon electrode (GCE) in H_2O, 0.1 M $LiClO_4$ (scan rate = 0.1 V/s).



(a)



(b)

Figure S3. Differential absorption spectra recorded following (a) 200 μs after pulse radiolytic oxidation of sapphyrin in oxygenated dichloromethane with $^{\bullet}OOCH_2Cl$ or $^{\bullet}OOCHCl_2$ radicals and (b) 200 μs after pulse radiolytic reduction of sapphyrin in deoxygenated 2-propanol with solvated electrons and $(CH_3)_2{}^{\bullet}COH$ radicals.

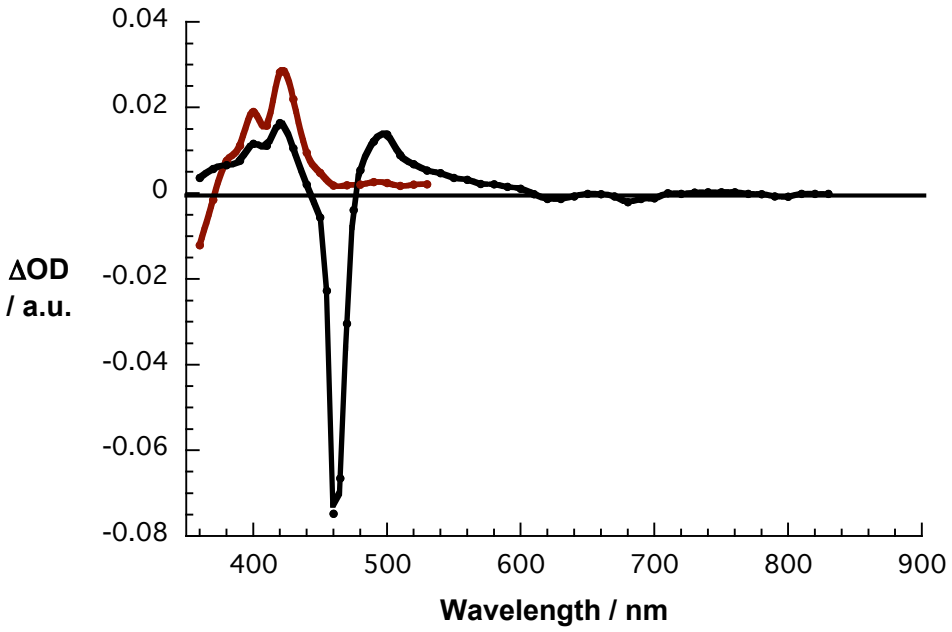


Figure S4. Differential absorption changes recorded 20 ns (red spectrum) and 200 µs (black spectrum) after pulse radiolytic excitation of naphthalene (0.02 M) and sapphyrin (~10^{-6} M) in deoxygenated toluene.

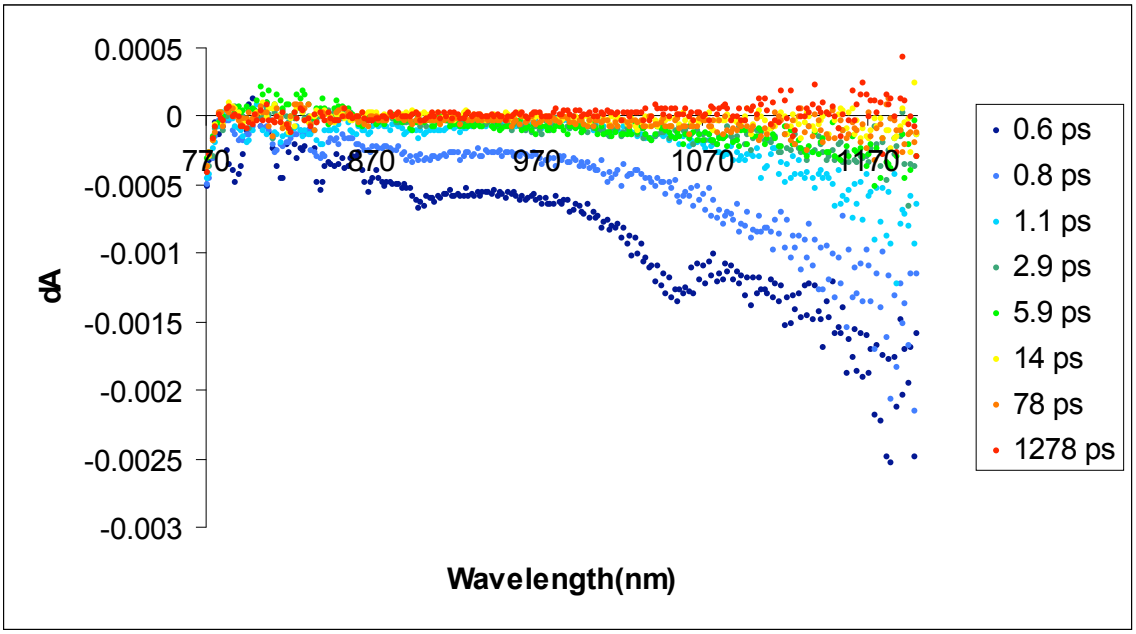


Figure S5. Femtosecond transient absorption spectrum of the sapphyrin-nanotube complex recorded after irradiation at 775 nm, with monitoring being made in the near-IR spectral region.