Supporting Information

Dumitru Sirbu, Constantin Turta, Andrew C. Benniston, Fawzi Abou-Chahine, Helge Lemmetyinen, Nikolai V. Tkachenko, Christopher Wood and Elizabeth Gibson

S1. Computer calculated structures for **F3P** showing the bow in the porphyrin ring. Top B3LYP (3-21G*), middle B3LYP (LanL2DZ), bottom B3PW91 (6-31G(d)). Groups are omitted for clarity.

S2. Selected molecular orbitals for **F3P** calculated by DFT (B3LYP) and using the 3-21G* basis set.

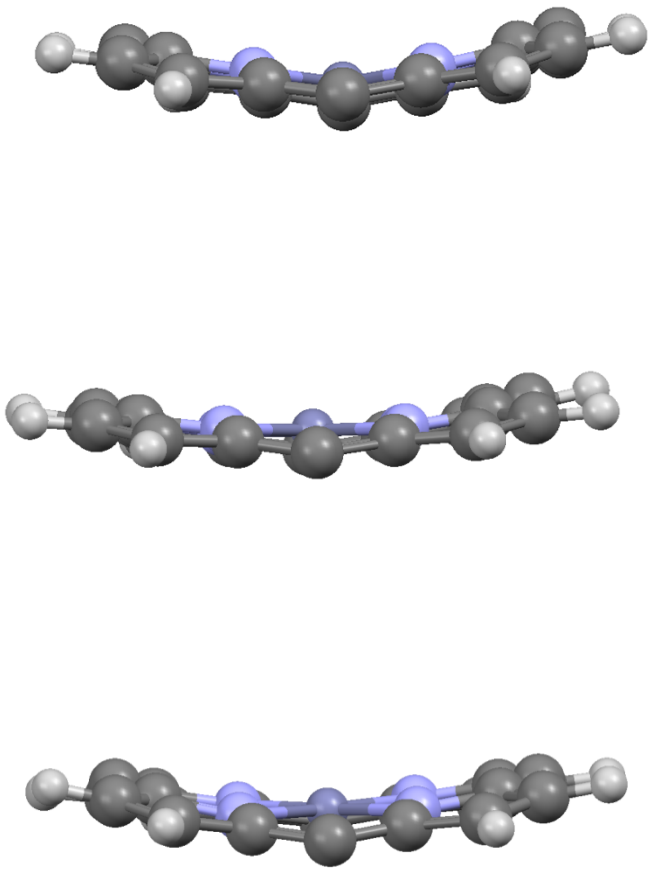
S3. Selected molecular orbitals for **F3P** calculated by DFT (B3LYP) and using the LanL2DZ basis set.

S4. DFT calculated electron density map for **F3P** using B3PW91 and a 6-31G(d) basis set.

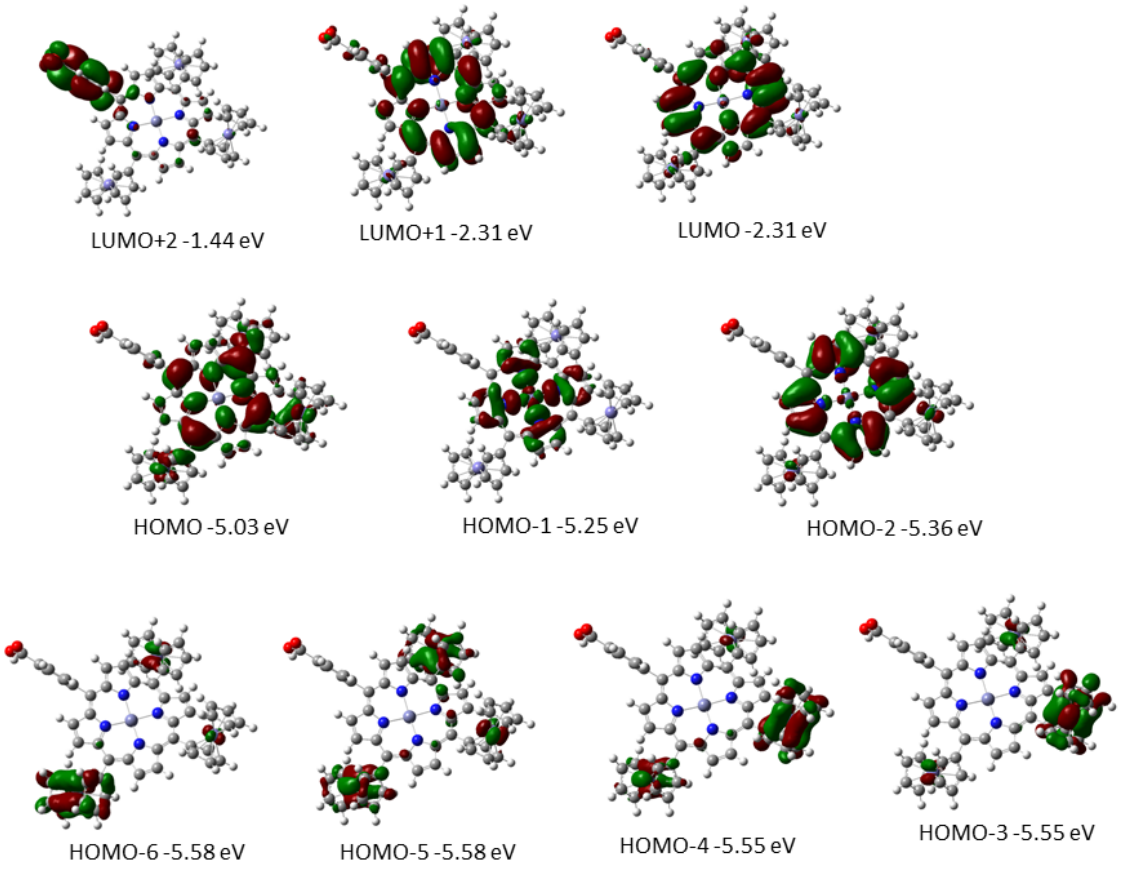
S5. Cyclic voltammogram for **F3P** in THF (0.2 M TBATFB) at a glassy carbon working electrode. Scan rate = 50 mV s^{-1}.

S6. Time resolved transient absorption spectra of **F3P** attached to TiO_2 (top), and transient absorption decay profiles at three selected wavelengths (top). Symbols are experimental data and curves are the data fits.

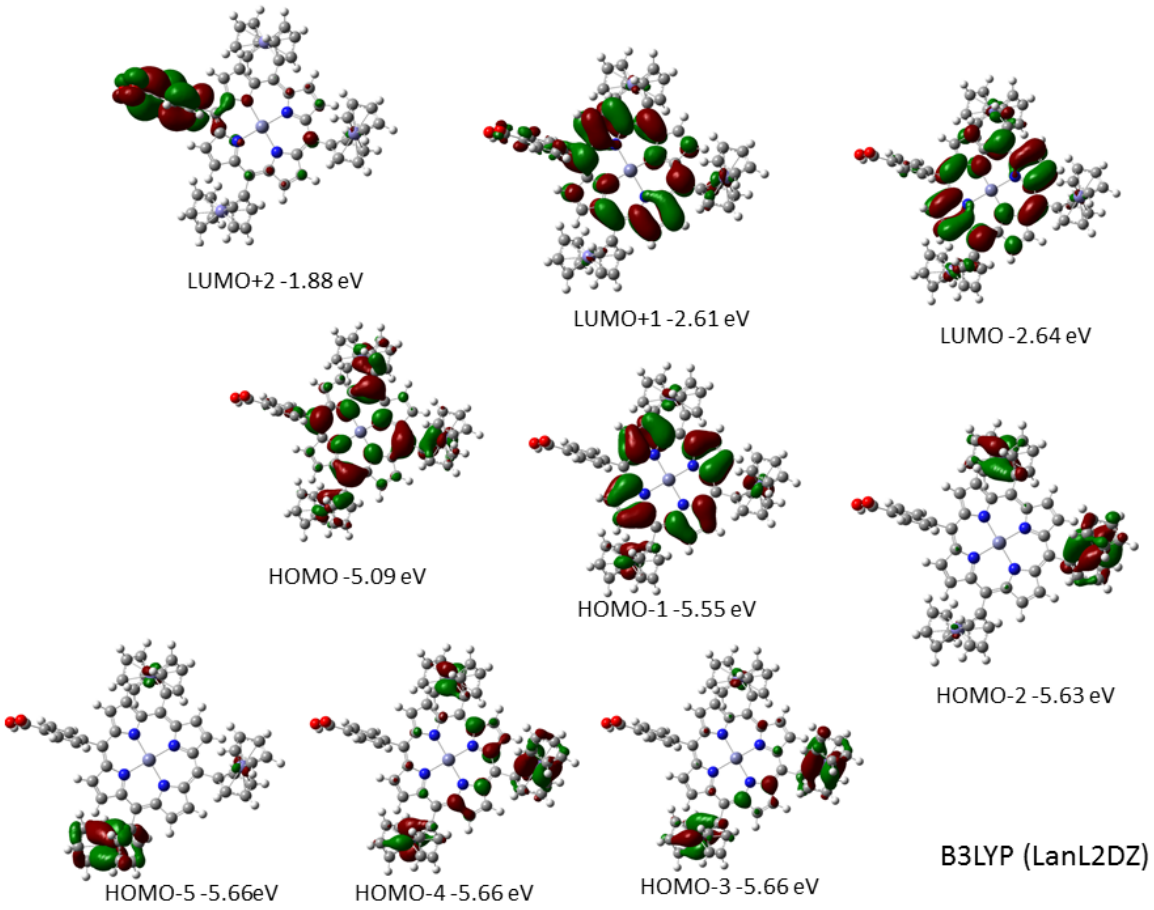
S7. Decay component spectra for **ZnTPP** supported on TiO_2. Excitation wavelength is 550 nm.



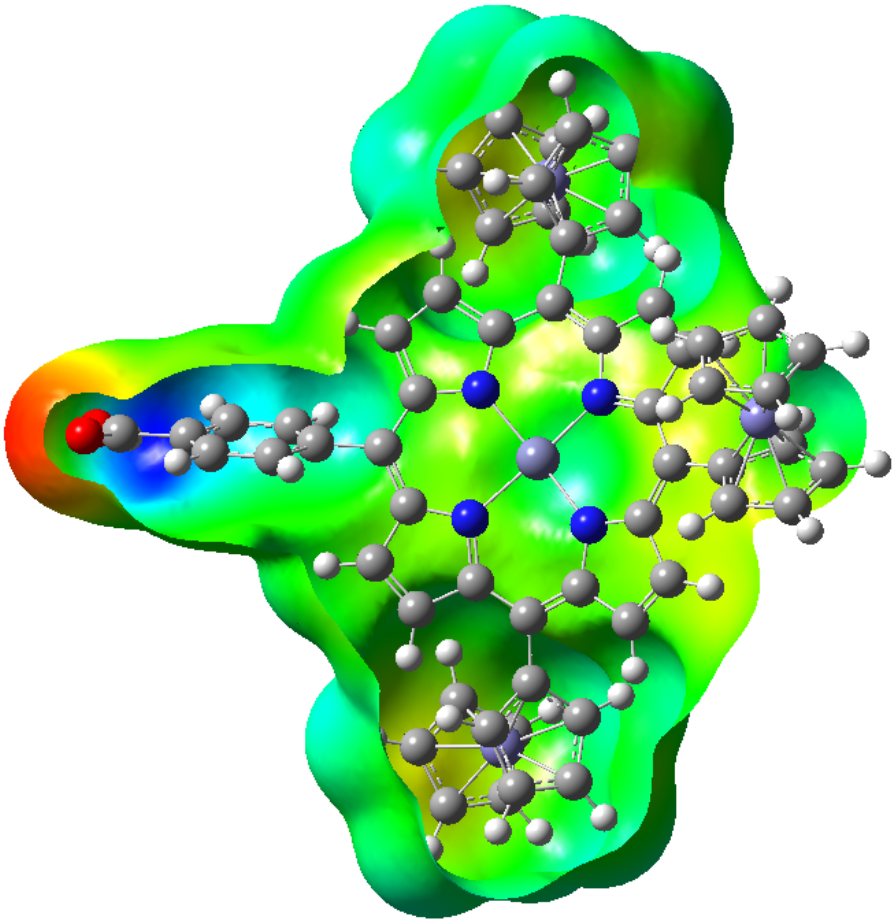
S1. Computer calculated structures for **F3P** showing the bow in the porphyrin ring. Top B3LYP (3-21G*), middle B3LYP (LanL2DZ), bottom B3PW91 (6-31G(d)). Groups are omitted for clarity.



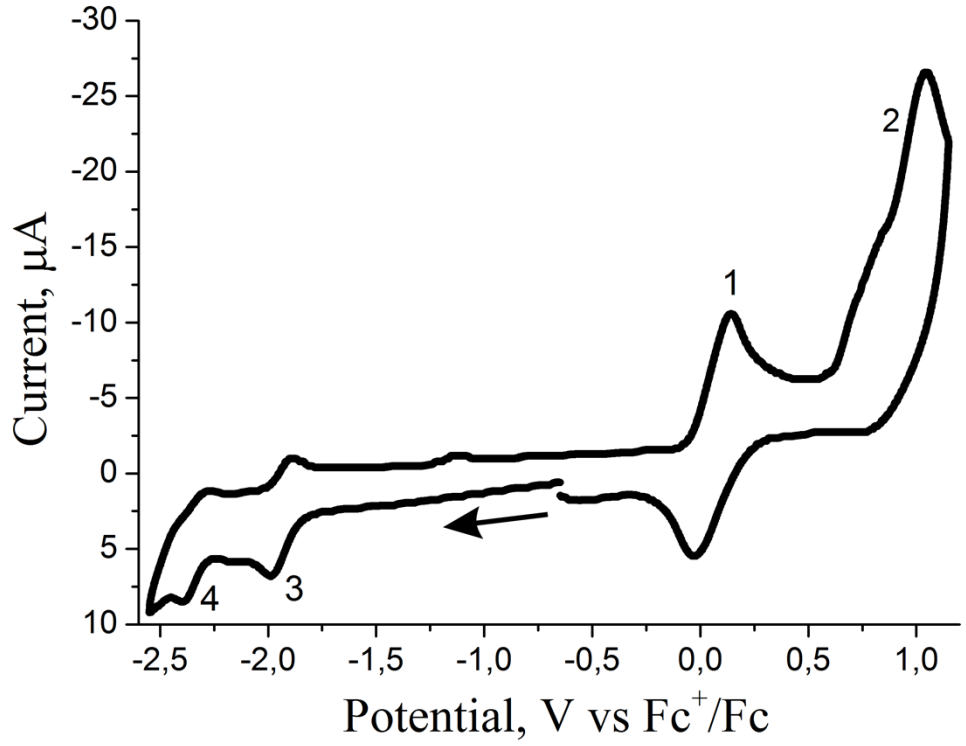
S2. Selected molecular orbitals for **F3P** calculated by DFT (B3LYP) and using the 3-21G* basis set.



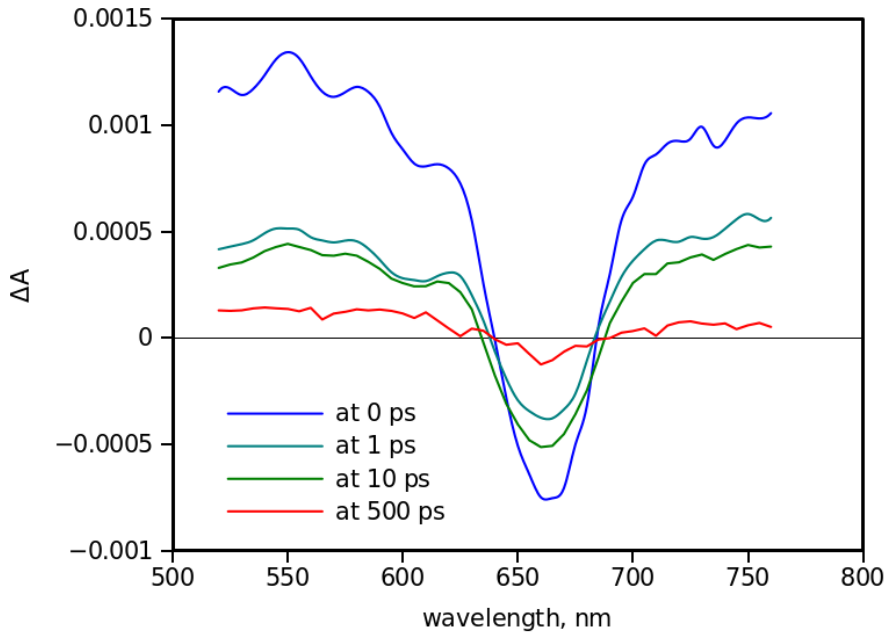
S3. Selected molecular orbitals for **F3P** calculated by DFT (B3LYP) and using the LanL2DZ basis set.

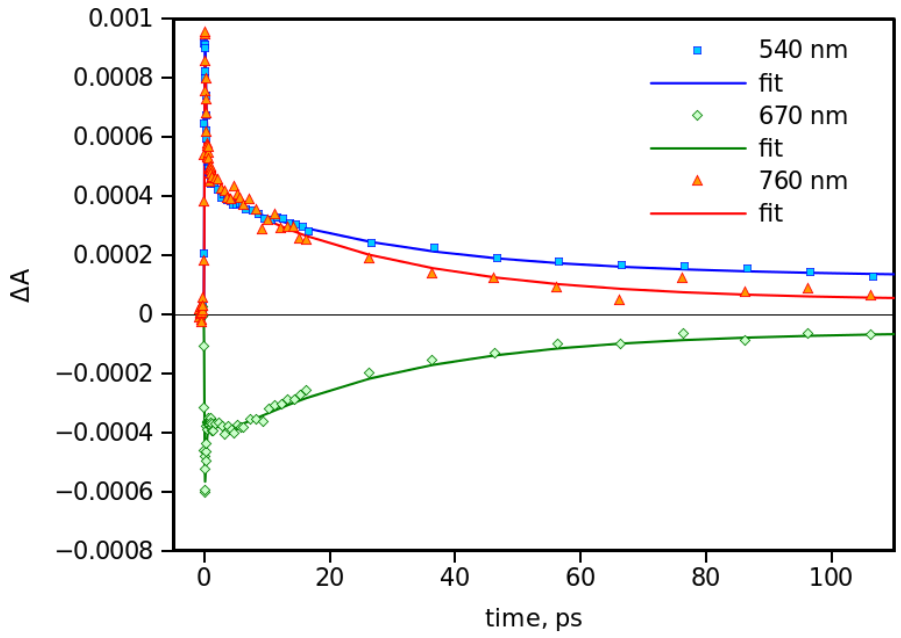


S4. DFT calculated electron density map for **F3P** using B3PW91 and a 6-31G(d) basis set.

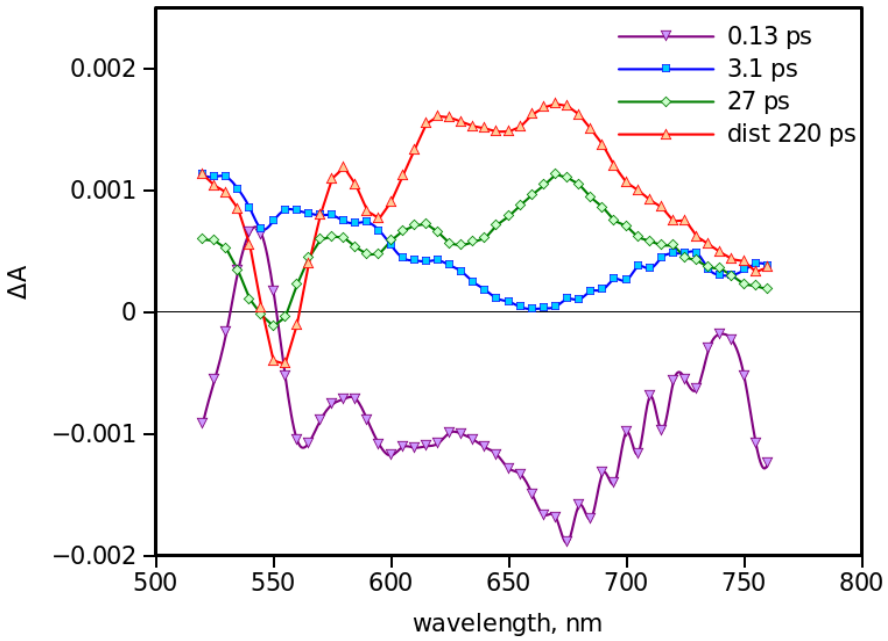


S5. Cyclic voltammogram for **F3P** in THF (0.2 M TBATFB) at a glassy carbon working electrode. Scan rate = 50 mV s^{-1}.





S6. Time resolved transient absorption spectra of **F3P** attached to TiO_2 (top), and transient absorption decay profiles at three selected wavelengths (top). Symbols are experimental data and curves are the data fits.



S7. Decay component spectra for **ZnTPP** supported on TiO_2. Excitation wavelength is 550 nm.