

Electronic Supplementary Information

Switching the photoinduced processes in host-guest complexes of β -cyclodextrin-substituted silicon(IV) phthalocyanines and a tetrasulfonated porphyrin

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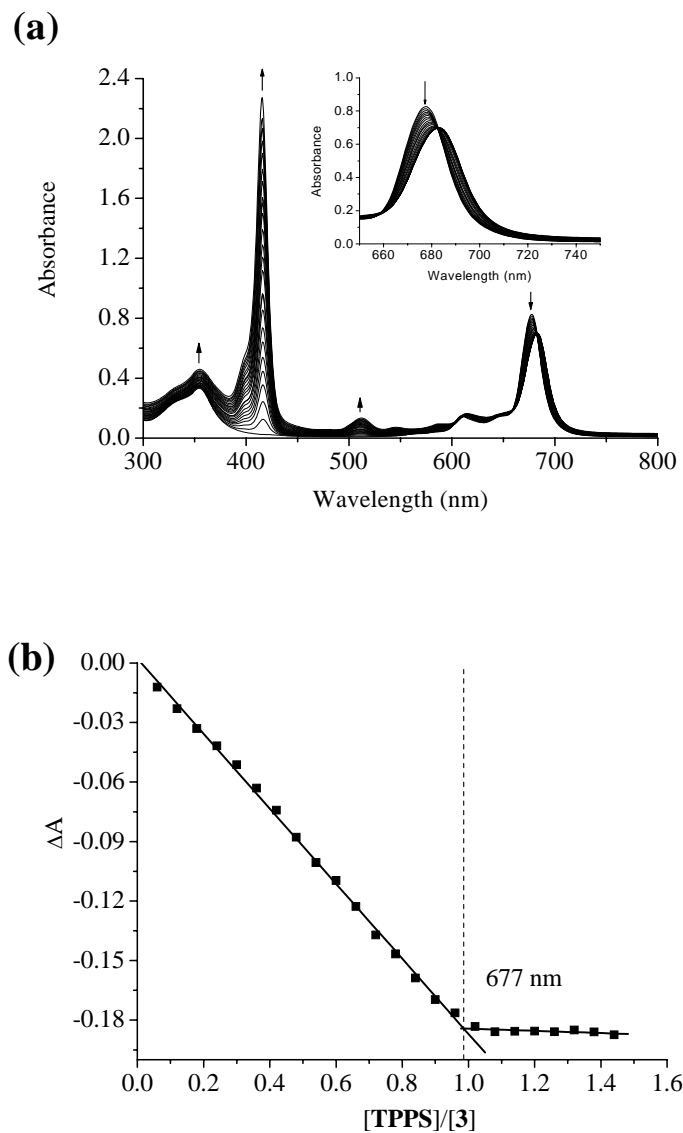


Fig. S1 (a) Change in absorption spectrum of **3** (5 μM) upon addition of TPPS in water. The inset enlarges the Q-band region. (b) Change in absorbance of the Q band at 677 nm vs. the concentration ratio of [TPPS]/[**3**].

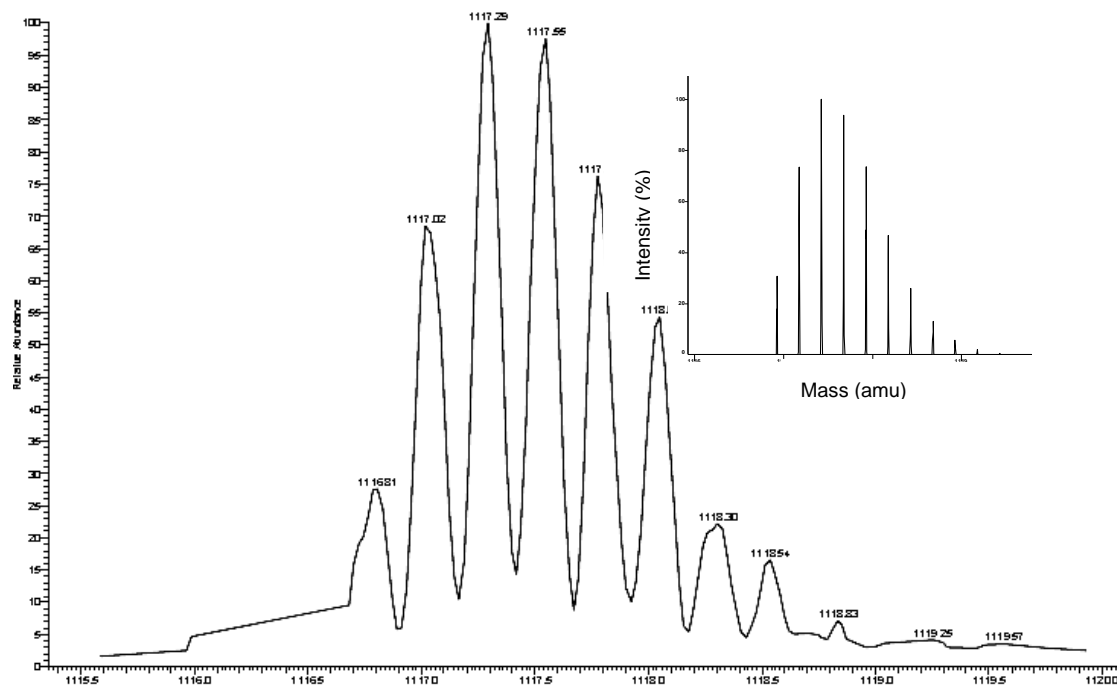


Fig. S2 Part of the ESI mass spectrum of an equimolar mixture of **3** and TPPS in water.

The inset shows the simulated isotopic pattern for $[3 \cdot \text{TPPS} - 4 \text{Na}]^{4+}$.

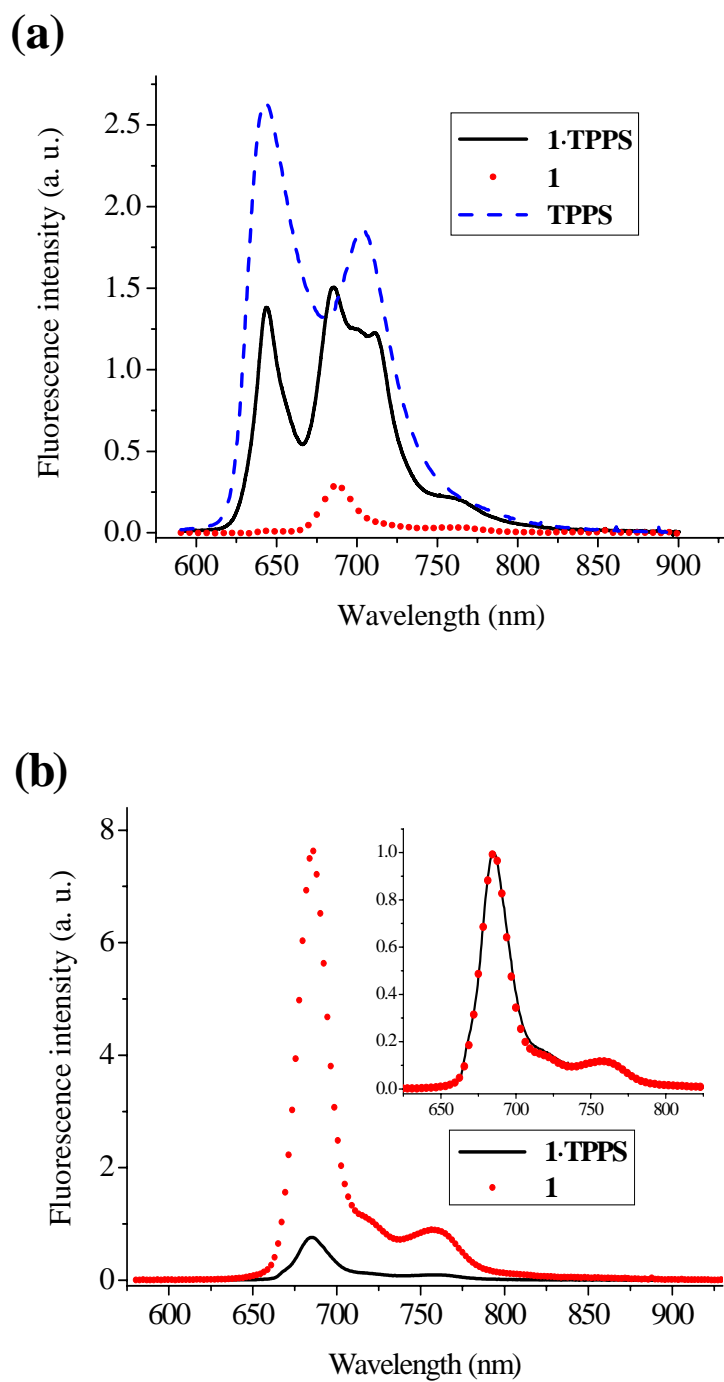


Fig. S3 Fluorescence spectra of a 1:1 mixture of **1** and TPPS (both at 5 μM) in water upon (a) Por-part excitation at 415 nm or (b) Pc-part excitation at 660 nm. The inset in (b) shows the normalised spectra.

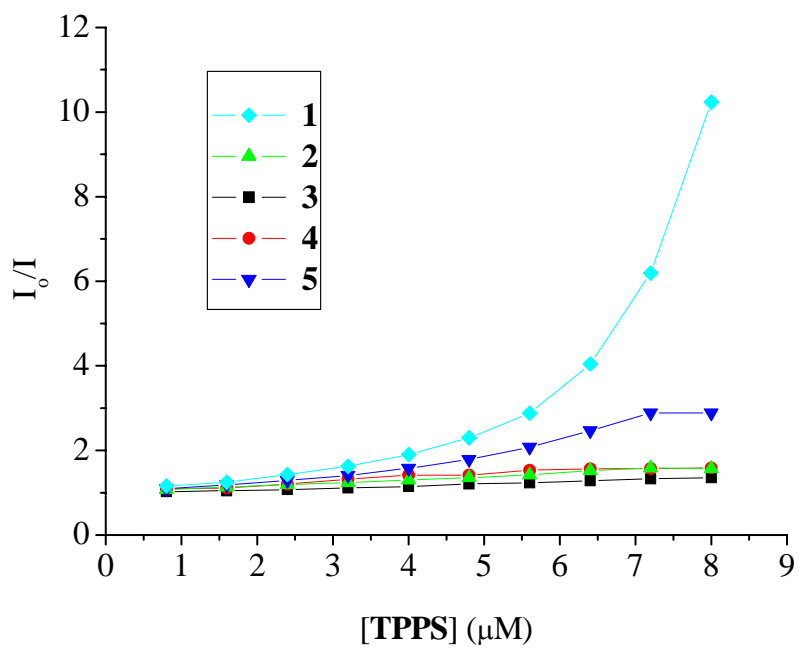


Fig. S4 Stern-Volmer plots for the fluorescence quenching of **1-5** (5 μM) upon addition of TPPS in water.

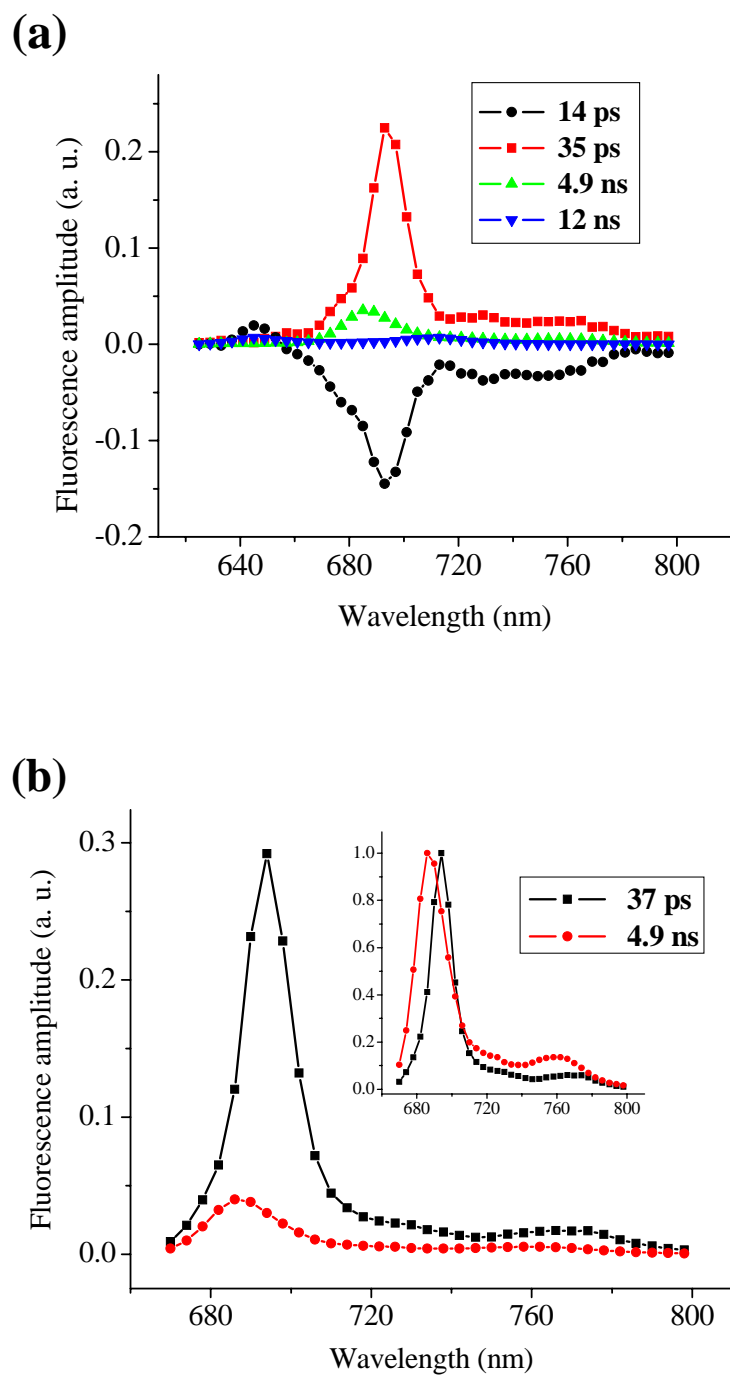


Fig. S5 DAF spectra of a 1:1 mixture of **1** and TPPS (both at 5 μ M) in water upon (a) Por-part excitation at 532 nm or (b) Pc-part excitation at 615 nm. The inset in (b) shows the normalised spectra.

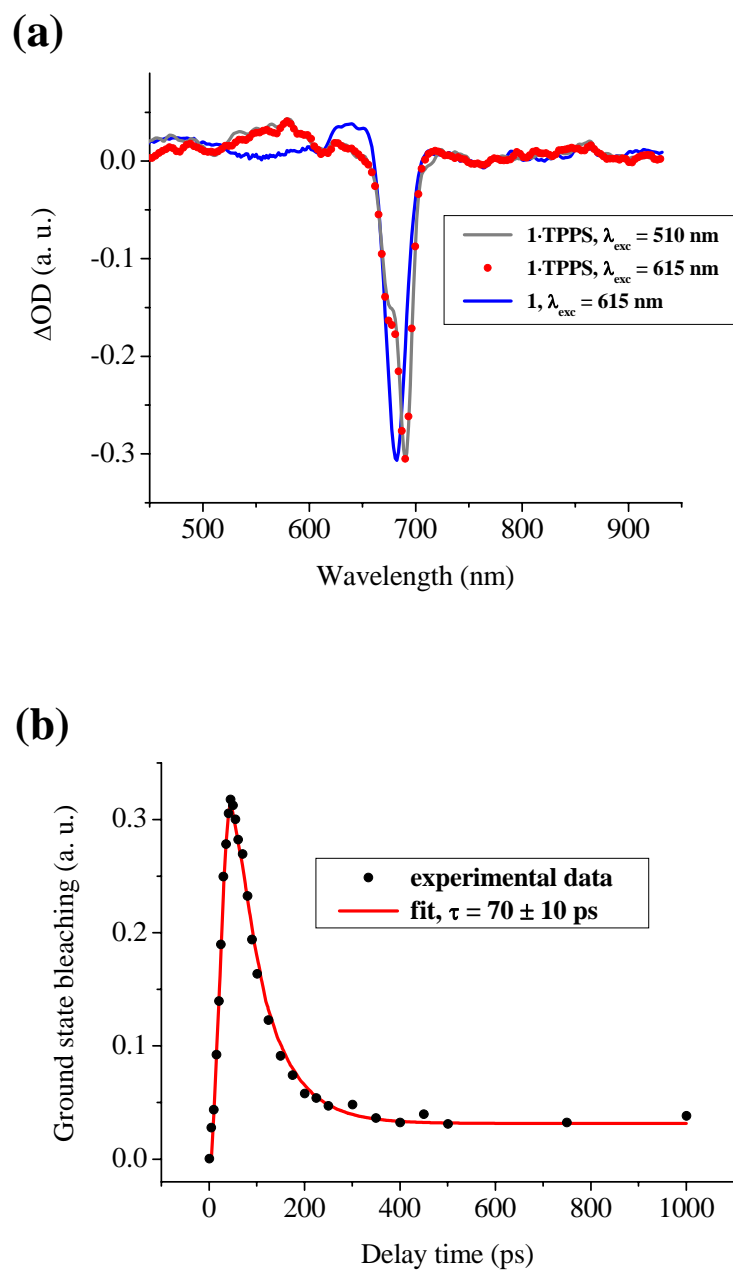


Fig. S6 (a) Transient absorption spectra of **1** and its 1:1 mixture with TPPS in water and (b) recovery of the phthalocyanine ground state bleaching after photoexcitation of the complex.