Supporting Information's

Subphthalocyanine-pyrene dyad: Electron transfer and singlet oxygen generation

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Fig. S1. ¹H-NMR spectrum of SubPc-Py (3) in CDCl₃.



Fig. S2. MALDI-TOFF spectrum of SubPc-Py (3).



Fig. S3. Absorption spectra of SubPc-Py **3** in different solvents, as well as the SubPc and Py control compounds.



Fig. S4. CV voltammograms of the SubPc control (upper figure) and SubPcpyrene (lower figure) in THF.



Fig. S5. Nanosecond transient absorption spectra at the indicated time intervals of the SubPc control in Ar-saturated acetonitrile solution; $\lambda_{ex} = 570$ nm. Inset shows the decay profile of the triplet SubPc in argon and oxygen saturated solutions.



Figure S6. Nanosecond transient absorption spectra at the indicated time intervals of the SubPc-pyrene dyad in Ar-saturated DMF solution; $\lambda_{ex} = 570$ nm. Inset shows the decay profile of the triplet SubPc in argon and oxygen saturated solutions.



Fig. S7. Nanosecond transient absorption spectra at the indicated time intervals of the SubPc-pyrene dyad in Ar-saturated THF solution; $\lambda_{ex} = 570$ nm. Inset shows the decay profile of the triplet SubPc in argon and oxygen saturated solutions.



Fig. S8. Nanosecond transient absorption spectra at the indicated time intervals of the SubPc-pyrene dyad in Ar-saturated toluene solution; λ_{ex} = 355 nm. Inset shows the decay profile of the triplet SubPc in the presence of oxygen and argon saturated solutions.



Fig. S9. Nanosecond transient absorption spectra at the indicated time intervals of the SubPc-pyrene dyad in Ar-saturated DMF solution; λ_{ex} = 355 nm. Inset shows the decay profile of the triplet SubPc.