Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supporting Information

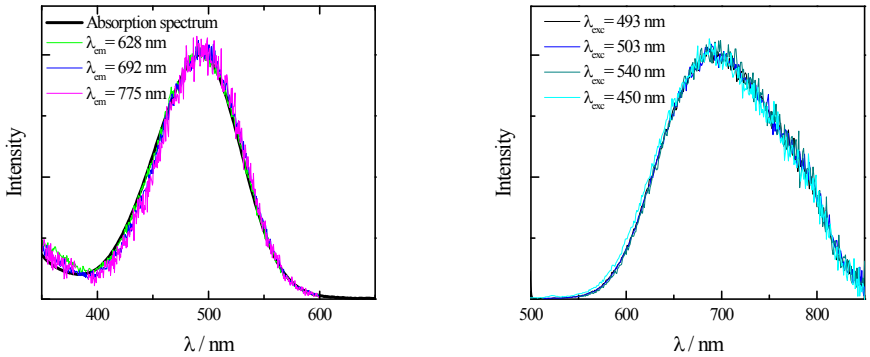

Figure S1. Normalized fluorescence excitation and emission spectra in DCM as a function of the emission (λ_{em}) and excitation (λ_{exc}) wavelenghts, respectively. The absorption spectrum is also shown.

Table S1. Temperature effect on the fluorescence maxima and quantum yields in EPA.

T/K	λ_{em}/nm	ϕ_F
293	650	0.019
280	650	0.023
265	650	0.032
250	650	0.044
235	650	0.057
220	650	0.078
205	650	0.11
190	650	0.16
140	640	0.55
120	600	0.85
83	522	0.97

A treatment of ϕ_F data in Table S2 according to the Arrhenius equation (1) is reported in Fig. S1:

$$\ln\left(\frac{\phi_F^{lim}}{\phi_F} - 1\right) = \ln\left(A\tau_F^{lim}\right) - \frac{\Delta E_a}{RT} \qquad (1)$$

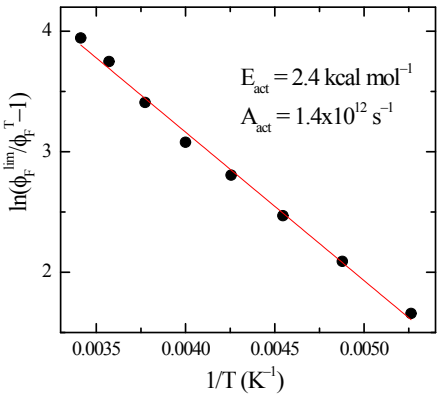

Figure S2. Plot of the fluorescence quantum yields according to the Arrhenius-type equation.

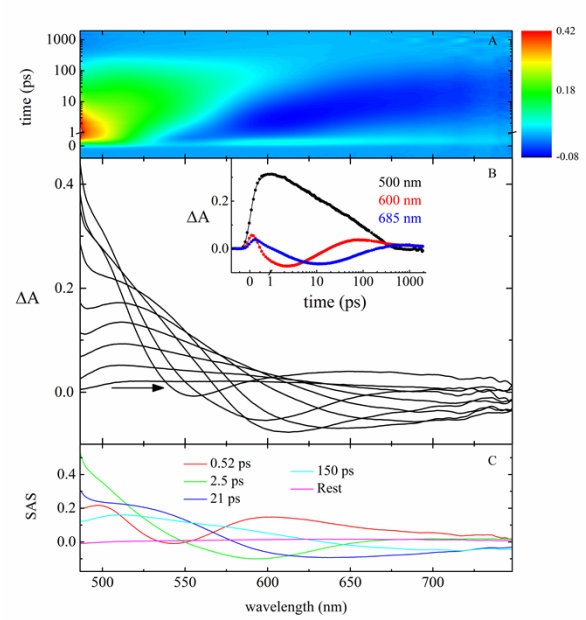

Figure S3. Pump−probe absorption (λ_{exc}=400 nm) in EPA: A) contour plot of the experimental data, B) time resolved absorption spectra recorded at different delays after the laser pulse. Insets: decay kinetics recorded at meaningful wavelengths together with the corresponding fitting traces and C) Species Associated Spectra (SAS) of the decay components obtained by Target Analysis.

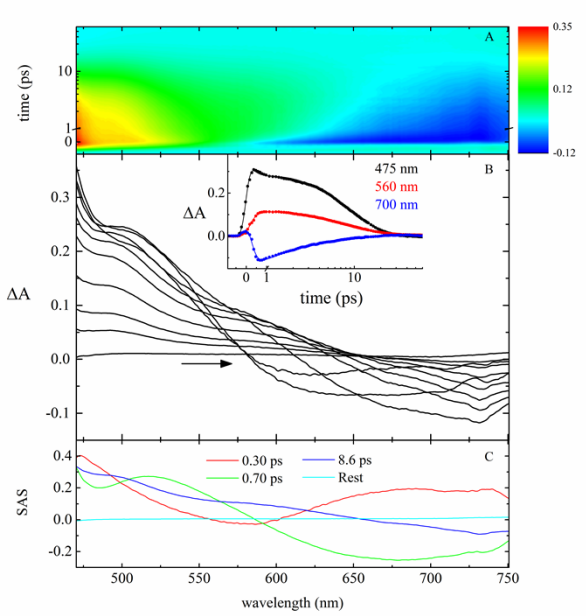

Figure S4. Pump−probe absorption (λ_{exc}=400 nm) in W: A) contour plot of the experimental data, B) time resolved absorption spectra recorded at different delays after the laser pulse. Insets: decay kinetics recorded at meaningful wavelengths together with the corresponding fitting traces and C) Species Associated Spectra (SAS) of the decay components obtained by Target Analysis.