Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics

Supporting Information

Femto to millisecond observations of indole-based squaraines molecules photodynamics in solution

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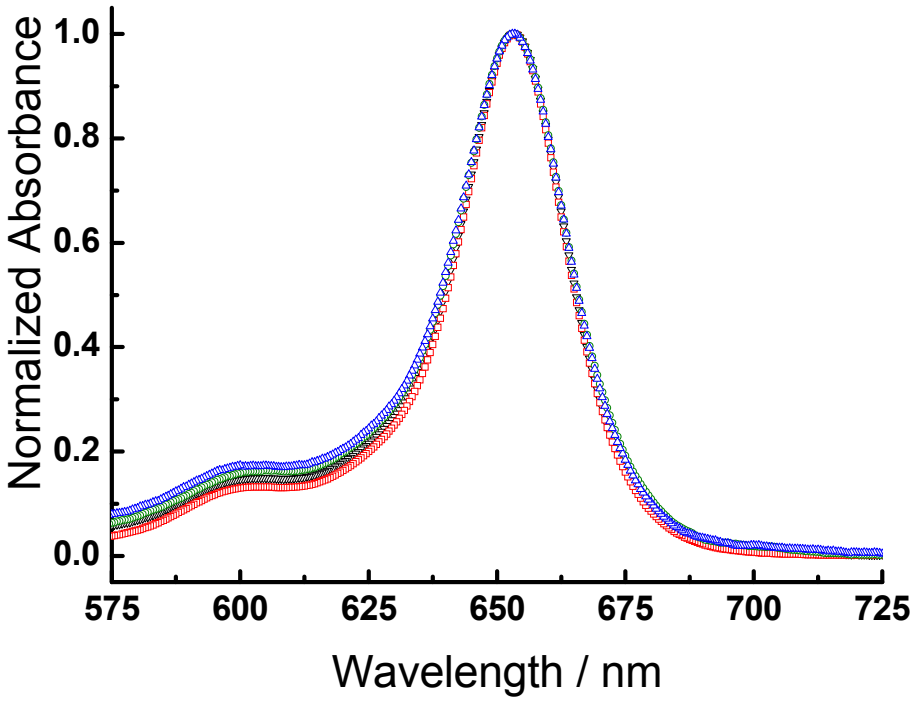

Figure S1. Normalized absorption spectra of SQ 4 in ACN at four different concentrations, 10^{-5} (black triangles, ▽), 10^{-6}(red squares, □), 10^{-7} (green circles ○) and $2x10^{-8}$ M (blue triangles, △).

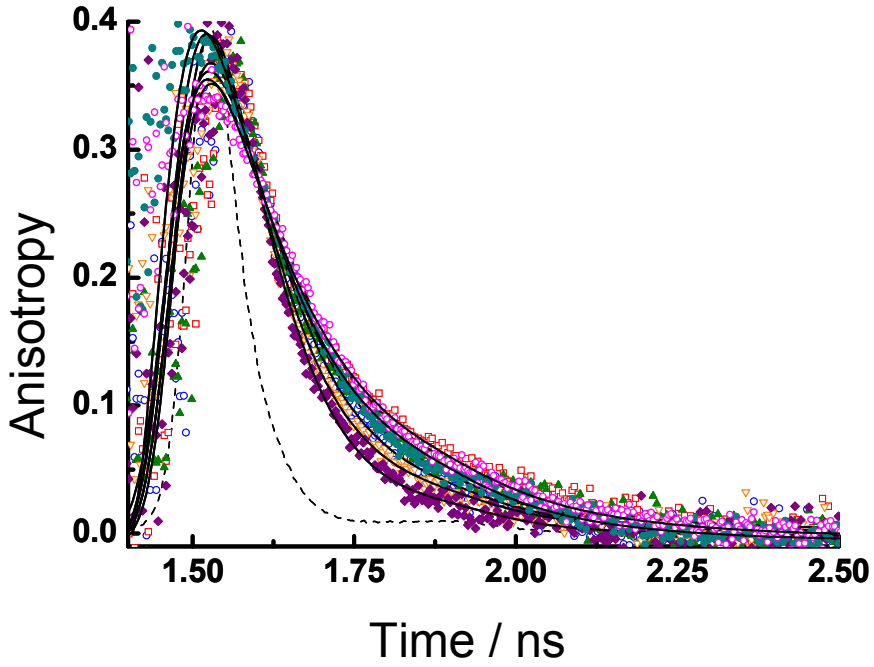

Figure S2. Anisotropy decays of SQ 2 (blue circles, ○), SQ 4 (red squares, □), SQ 26 (green triangles, △), SQ 41 (orange triangles, ▽), Me-SQ 41 (purple diamonds, ◆), Me-SQ 26 (pink circles, ○) and 2Me-SQ 26 (green circles,●) in ACN solutions, monitored at 680 nm and excited at 635 nm. The solid curves are from the best fits of the experimental data.

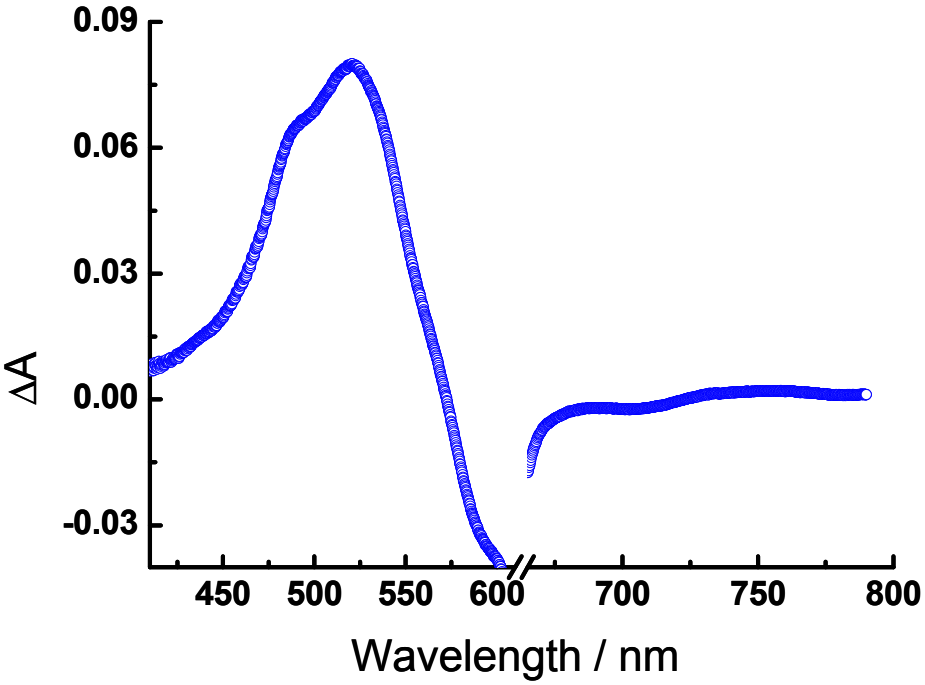

Figure S3. Normalized femtosecond transient absorption spectra of SQ 41 in ACN at 1 ps after excitation at 640 nm.

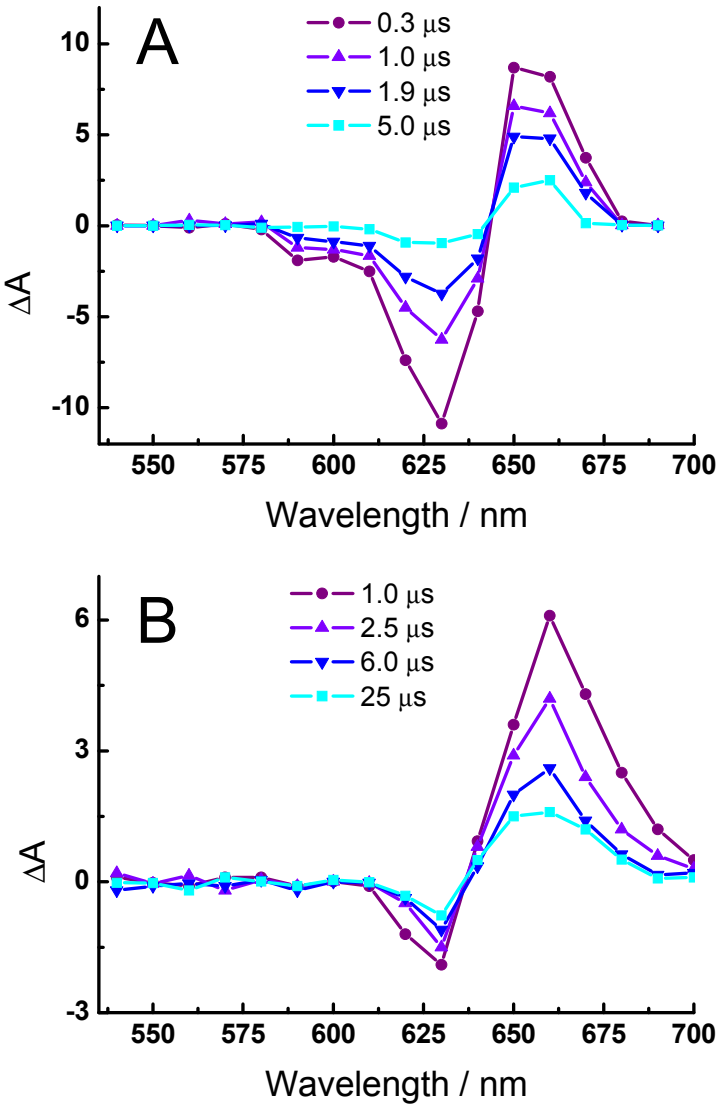

Figure S4. Change of the microsecond transient absorption spectra of SQ 41 in DCM (A) and in TAC (B) at four time delays after the laser pulse excitation (640 nm).

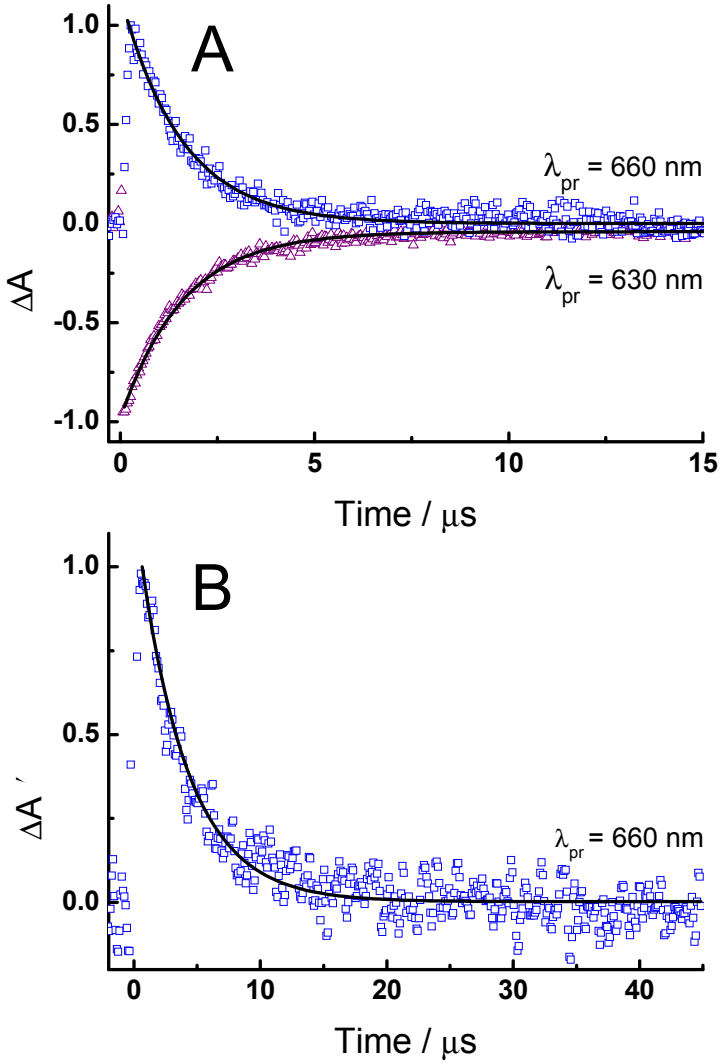

Figure S5. Microsecond time profiles of the variation in the normalized absorption intensity (ΔA) of SQ 41 in DCM (A) and in TAC (B) at 660 and 630 nm. The solid curves represent the best fits of the experimental data. Lifetimes of 1.6 and 4 μs were obtained from the fits in DCM and TAC, respectively.

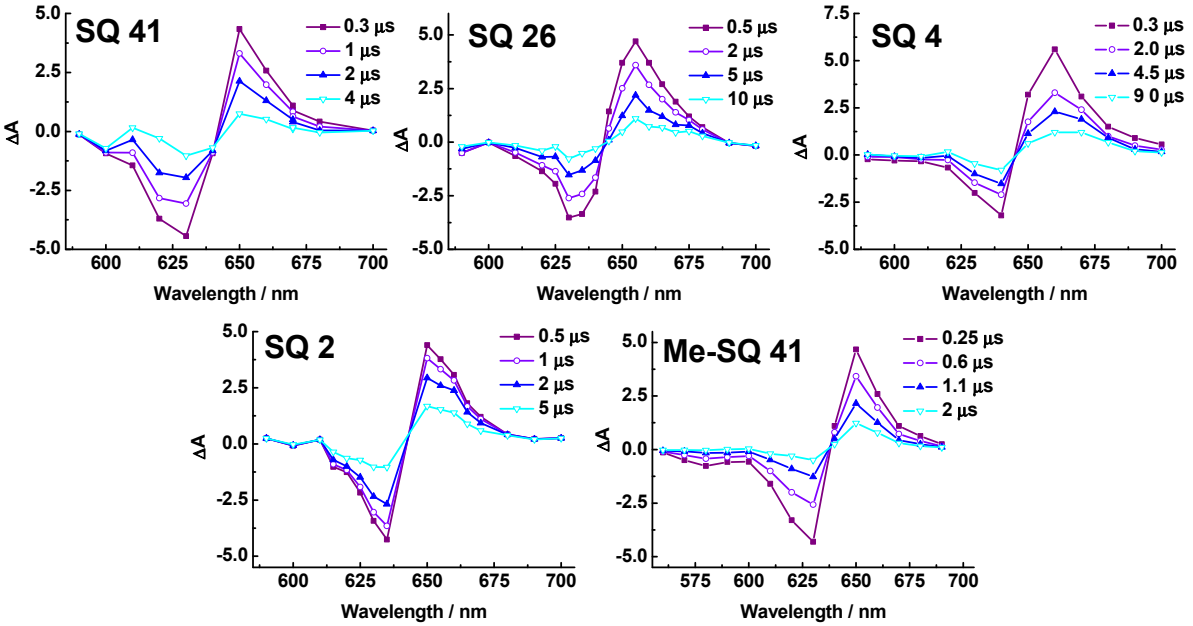

Figure S6. Microsecond transient visible absorption spectra of 10^{-4} M of SQ 41, SQ 26, SQ 4, SQ 2 and Me-SQ 41 in MeOH at four time delays after the laser pulse excitation (640 nm).