Supporting Information

Relating the Photodynamics of Squaraine-Based DSSCs to the Molecular Structure of the Sensitizers and to the Presence of Additives

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Electrolyte	τ (β) / ps			
	SQ 41	**SQ 26**	**SQ 4**	**SQ 2**
I	3.8 (0.54)	6.8 (0.45)	5.5 (0.50)	8 (0.35)
II	8.4 (0.67)	9.7 (0.51)	2.5 (0.45)	10.5 (0.5)
III	0.9 (0.45)	1.1 (0.5)	0.42 (0.45)	2.2 (0.5)
No electrolyte	0.9 (0.50)	0.77 (0.45)	0.32 (0.4)	1.3 (0.65)

Table S1. Characteristic time, τ, and dispersion factor, β, obtained from a stretched exponential fit (eq. 2) of the decay of the transient signals at 500 nm of complete cells prepared with TiO_2 nanoparticles, sensitized with SQ 41, SQ 26, SQ 4, and SQ 2 with electrolytes I-III and without electrolyte.

	τ (β) / μs			
	Electrolyte			**No electrolyte**
	I	**II**	**III**	
SQ 41	4.7 (0.49)	28 (0.55)	6.4 (0.5)	109 (0.9)
SQ 26	0.9 (0.51)	11 (0.9)	3.5 (0.64)	181 (0.8)
SQ 4	12 (0.55)	17 (0.50)	1.9 (0.35)	167 (0.8)
SQ 2	17 (0.60)	9.4 (0.4)	6.5 (0.5)	92 (0.9)

Table S2. Characteristic time, τ, and dispersion factor, β, obtained from a stretched exponential fit (eq. 2) of the decay of the transient signals at 550 nm of complete cells prepared with TiO_2 nanoparticles sensitized with SQ 41, SQ 26, SQ 4, and SQ 2 with electrolytes I-III and without electrolyte.

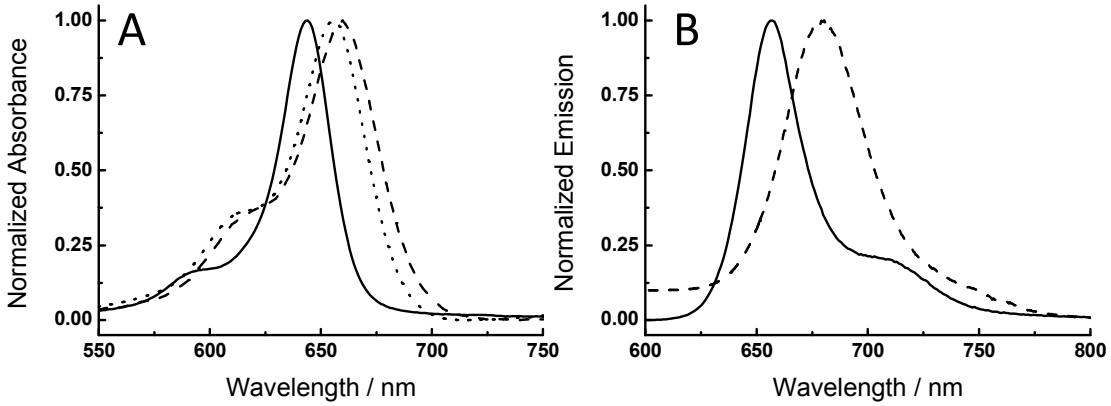

Figure S1. A: Normalized steady-state UV-visible absorption spectra of SQ 26 in ACN solution (solid line) and sensitizing TiO_2 NP (dotted line) and ZrO_2 NP (dashed line) in complete cells with electrolyte I. B: Normalized emission spectra of SQ 26 in ACN solution (solid line) and sensitizing ZrO_2 NP (dashed line) in a complete cell with electrolyte I. $\lambda_{exc} = 580$ nm.