Supporting Materials

Synthesis, Photophysics and Solvatochromic Studies of an Aggregated-Induced-Emission Luminogen Useful in Bioimaging

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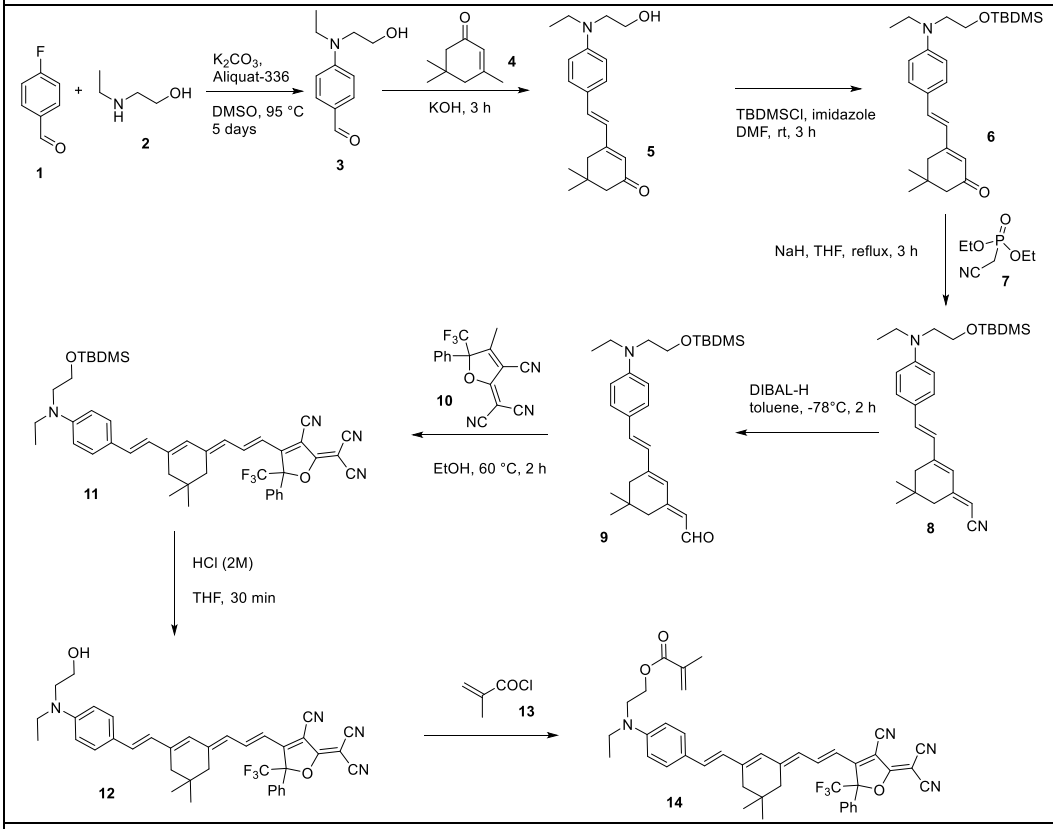
Index

Scheme S1.	
Figure S1. Lippert-Mataga	
Figure S2.	
Table S1.	
Figure S3.	
Figure S4.	
Figure S5.	
Figure S6.	

Scheme S1



Scheme S1. Synthesis of dye: 2-((4-((*E*)-2-((*E*)-3-((*E*)-3-(4-cyano-5-(dicyanomethylene)-2-phenyl-2-(trifluoromethyl)-2,5-dihydrofuran-3-yl)allylidene)-5,5-dimethylcyclohex-1-en-1-yl)vinyl)phenyl)(ethyl)amino)ethyl methacrylate.

Figure S1

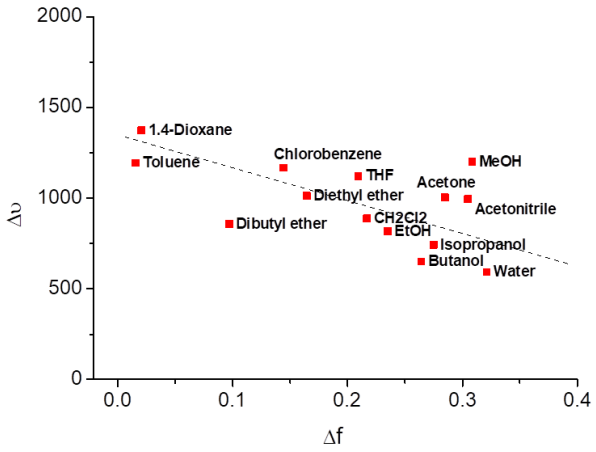


Figure S1. Lippert-Mataga representation of orientation polarizability of PEMC dissolved in different solvents.

Figure S2

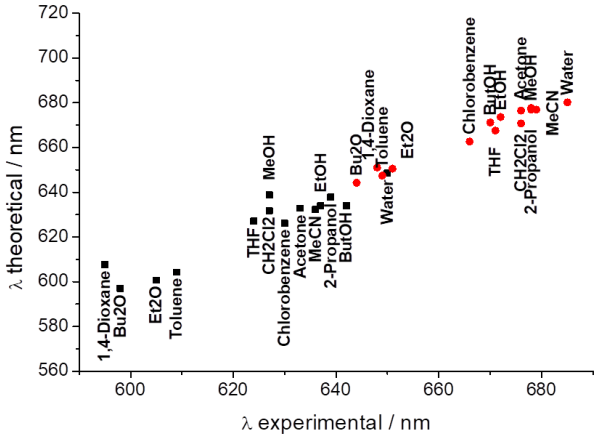


Figure S2. Experimental and theoretical wavelength (obtained from the Catalan approach data) of the 14 solvents used.

Table S1: Estimated coefficients ± standard errors and correlation coefficient (r) for the multilinear regression analyses of $\tilde{\nu}_{abs}$ and $\tilde{\nu}_{em}$ The estimates are expressed in cm^{-1}.

	A_0	*b (SA)*	*c (SB)*	*d (SP)*	*e (SdP)*	*r*
$\tilde{\nu}_{abs}$	19501 ± 970	-401 ±180	-606 ± 271	-3125 ± 1157	-1518 ±240	0.9420
	18803 ± 1071		-357 ± 288	-2213 ± 1262	-1724 ±258	0.9119
	17819 ±717	-235 ± 191		-1266 ± 941	-1367 ± 269	0.9116
	16919 ± 207	-229 ± 211	-81 ±237		-1274 ± 278	0.8974
	16484 ± 1804	-840 ± 354	-123 ± 555	-365 ± 2288		**0.6602**
	16945 ± 153				-1451 ± 211	**0.8856**
	15013 ± 1312			1384 ± 1898		**0.1983**
	15840 ± 229		297 ± 460			**0.1762**
	16169 ±112	-793 ± 251				**0.6583**
$\tilde{\nu}_{em}$	16658 ± 432	-89 ± 80	-325 ± 121	-1093 ± 515	-1112 ± 107	0.9736
	16504 ± 413		-269 ± 111	-891 ± 487	-1158 ± 99	0.9703
	15758 ± 342	0 ± 91		-98 ± 449	-1031 ± 128	0.9540
	15755 ± 84	-29 ± 86	-141 ± 96		-1027 ± 113	0.9615
	14448 ± 1236	-410 ± 243	30 ± 380	930 ± 1567		**0.6175**
	15685 ± 65				-1022 ± 89	**0.9538**
	13901 ± 821			1590 ± 1188		**0.3480**
	14955 ± 152		95 ± 305			**0.0858**
	15114 ± 79	-466 ± 176				**0.5915**

Figure S3

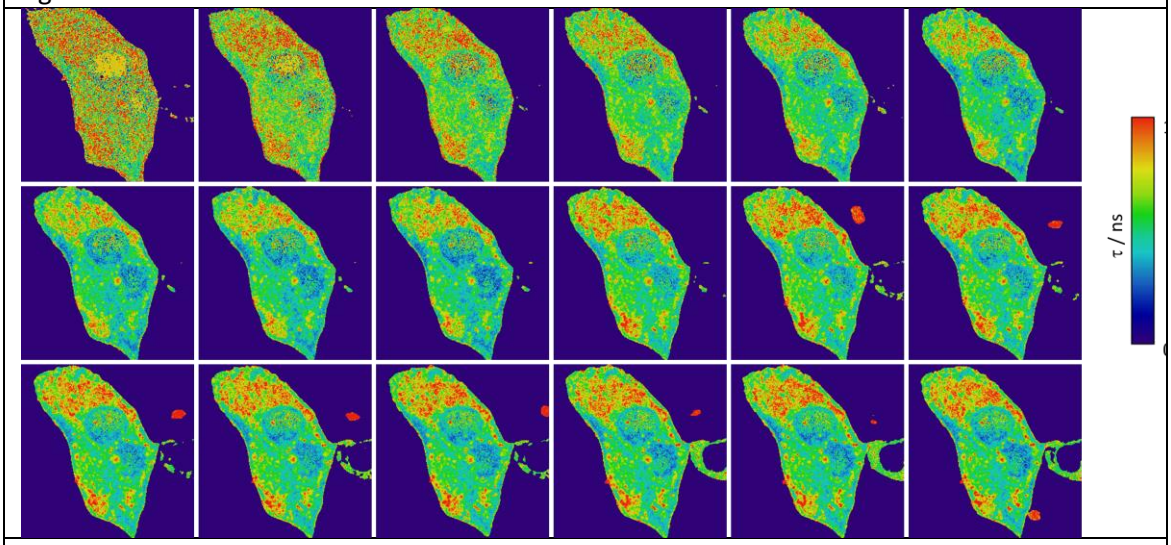


Figure S3. FLIM images of input kinetics of PEMC in MDA-MB-231 cells.

Figure S4

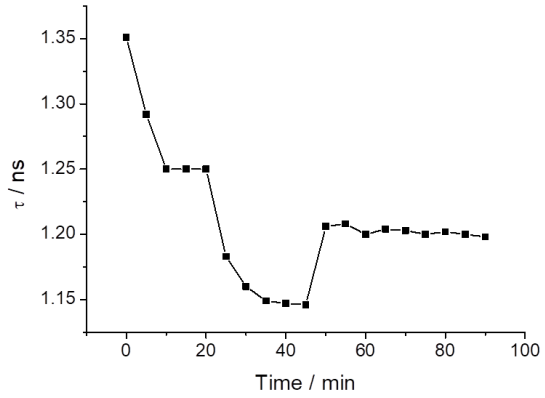


Figure S4. Fluorescence lifetime recovered from the input kinetics of PEMC in MDA-MB-231 cells from Figure S3

Figure S5

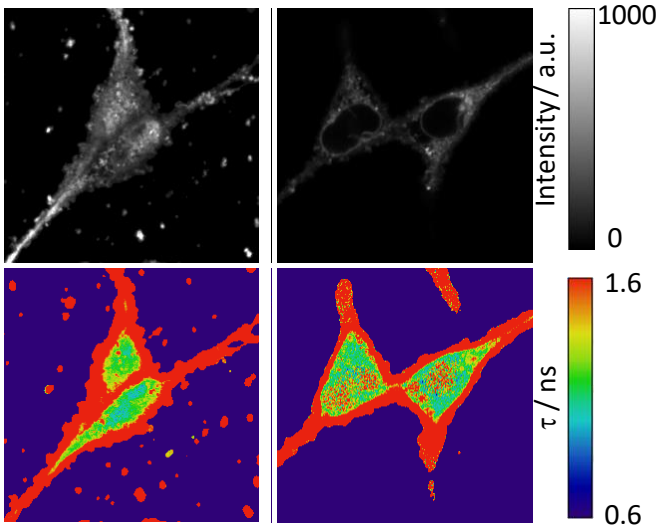


Figure S5. FLIM images of PEMC in HEK cells.

Figure S6

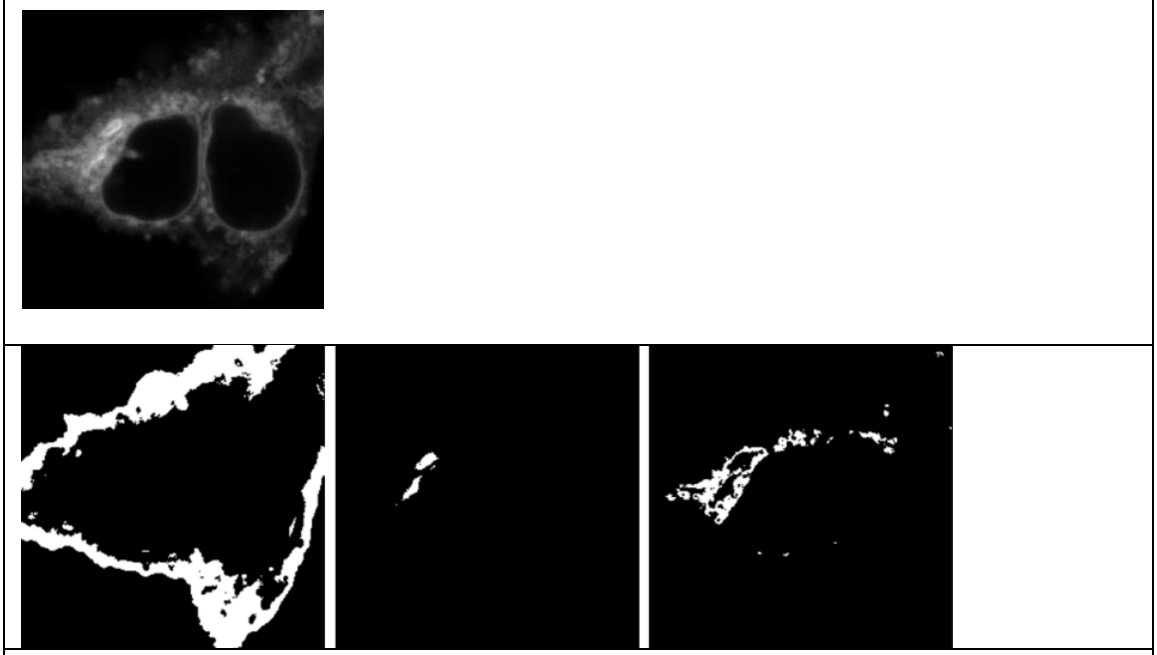


Figure S6. Intensity images of different organelles isolated by intensity threshold.