

## Supplementary Material

### **(E)-2-(hydroxystyryl)-3-phenylquinazolin-4(3H)-ones: synthesis, photochemical and luminescent properties**

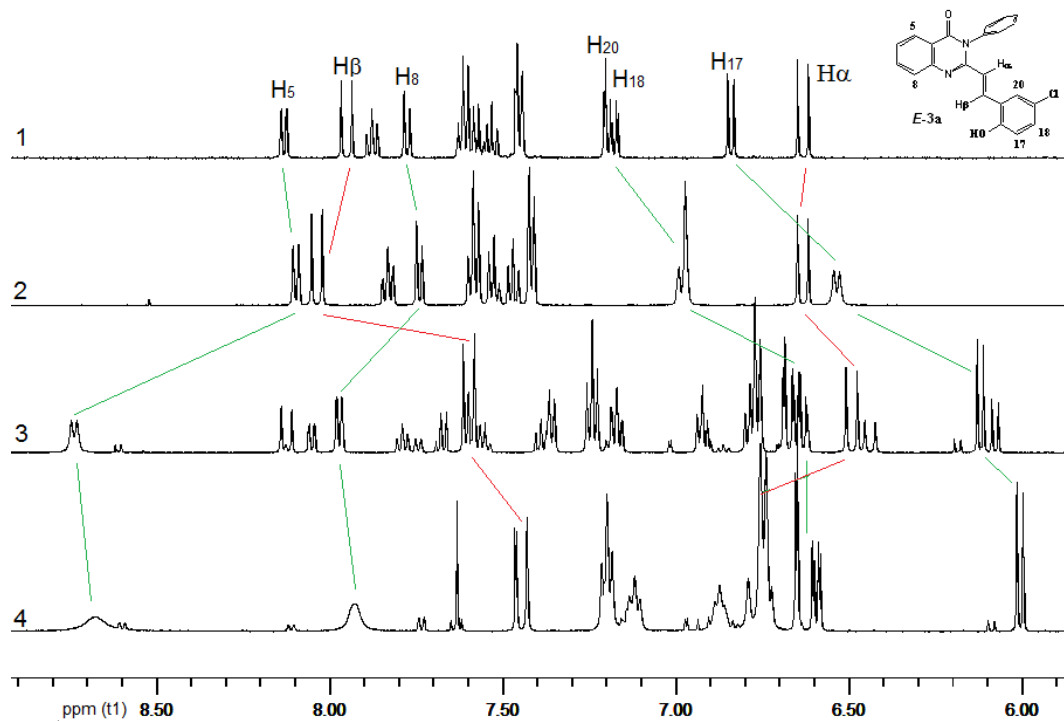
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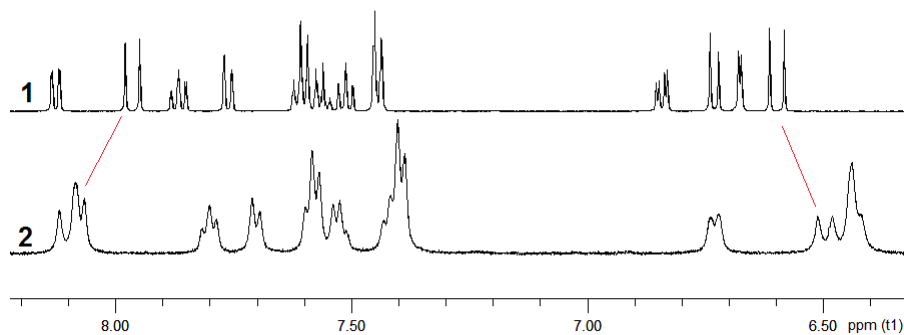
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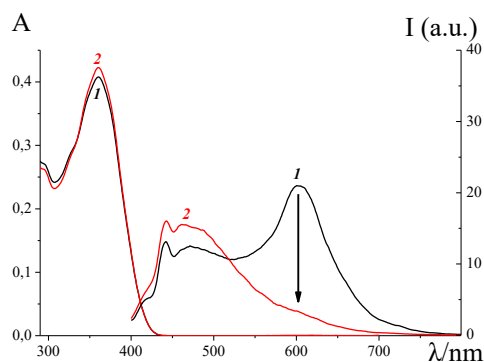
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**S-Figure 1.**  $^1\text{H}$  NMR spectra of *E-3a* in neutral (1) and basic ( $\text{Me}_4\text{NOH}$ ) (2-4)  $\text{DMSO-d}_6$  solution ( $C_{E-3a}:C_{base} = 1:5$  (2), 1:10 (3), 1:15 (4)).


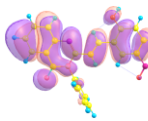
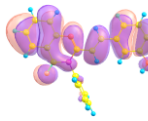

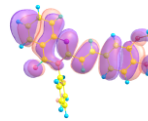
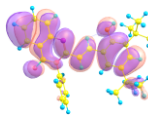
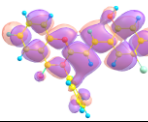
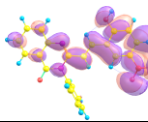

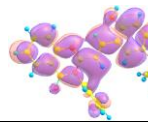
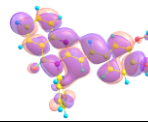
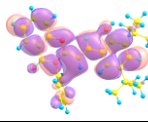


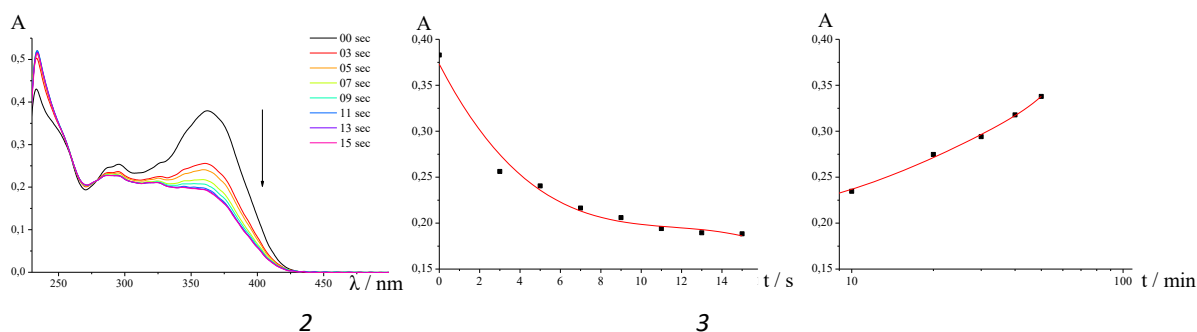
**S-Figure 2.**  $^1\text{H}$  NMR spectra of *E-3d* in neutral (1) and basic ( $\text{Me}_4\text{NOH}$ ) (2)  $\text{DMSO-d}_6$  solution solution ( $C_{E-3a}:C_{base} = 1:20$  (4)).



**S-Figure 3.** The changes in the luminescence spectra of *E-3a* solutions ( $2 \cdot 10^{-5}$  mol L $^{-1}$ , at 298 K) before (1, black line) and after addition of 0.1 N acetic acid (2, red line) in DMF ( $\lambda_{\text{ex}} = 390$  nm).

**S-Table 3.** Plots of HOMO and LUMO energy levels and energy gaps of the dyes **3a-f** (Orca 4.0.1, DFT B3LYP, 6-311G\*)

	<i>E-3a</i>	<i>E-3b</i>	<i>E-3c</i>	<i>E-3d</i>	<i>E-3e</i>	<i>E-3f</i>
HOMO/ eV	-5.7977 	-5.9787 	-5.8301 	-5.3922 	-5.5966 	-5.5129 
LUMO/ eV	-2.2071 	-2.4621 	-2.1340 	-1.9863 	-1.9464 	-1.8711 
$\Delta$ / eV	3,5906	3,5166	3,6961	3,4059	3,6502	3,6418



**S-Figure 4.** The changes in the electron absorption spectra of *E-3a* BuOH solutions ( $2 \cdot 10^{-5}$  mol L $^{-1}$ , at 298 K) during the *E-Z* isomerization (1, 2) and thermal *Z-E*-isomerization at 75° C (3).