## **Supplementary Material**

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

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**S-Figure 1.** <sup>1</sup>H NMR spectra of *E*-**3a** in neutral (1) and basic (Me<sub>4</sub>NOH) (2-4) DMSO-d<sub>6</sub> solution ( $C_{E-3a}:C_{base} - 1:5$  (2), 1:10 (3), 1:15 (4).



**S-Figure 2.** <sup>1</sup>H NMR spectra of *E*-**3d** in neutral (1) and basic (Me<sub>4</sub>NOH) (2) DMSO-d<sub>6</sub> solution solution ( $C_{E-3a}$ :C<sub>base</sub> - 1:20 (4).

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

	E- <b>3</b> a	<i>E</i> - <b>3</b> b	E- <b>3c</b>	<i>E-</i> 3d	E- <b>3e</b>	E- <b>3f</b>
HOMO/	-5.7977	-5.9787	-5.8301	-5.3922	-5.5966	-5.5129
eV	C.	Core .		der the	<b>%</b>	
LUMO/	-2.2071	-2.4621	-2.1340	-1.9863	-1.9464	-1.8711
eV					99966	
∆/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<sup>-1</sup>, at 298 K) during the *E*-*Z* isomerization (*1*, *2*) and thermal *Z*-*E*-isomerization at 75° C (*3*).