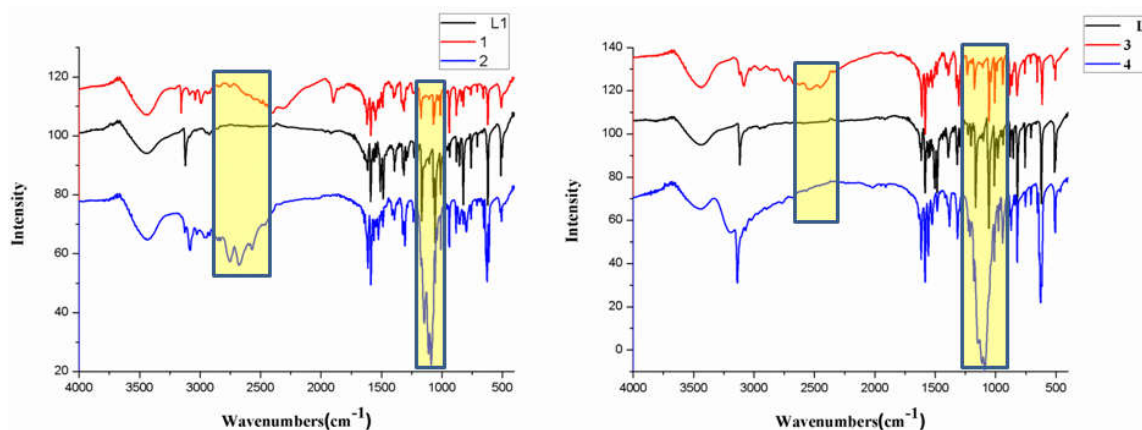
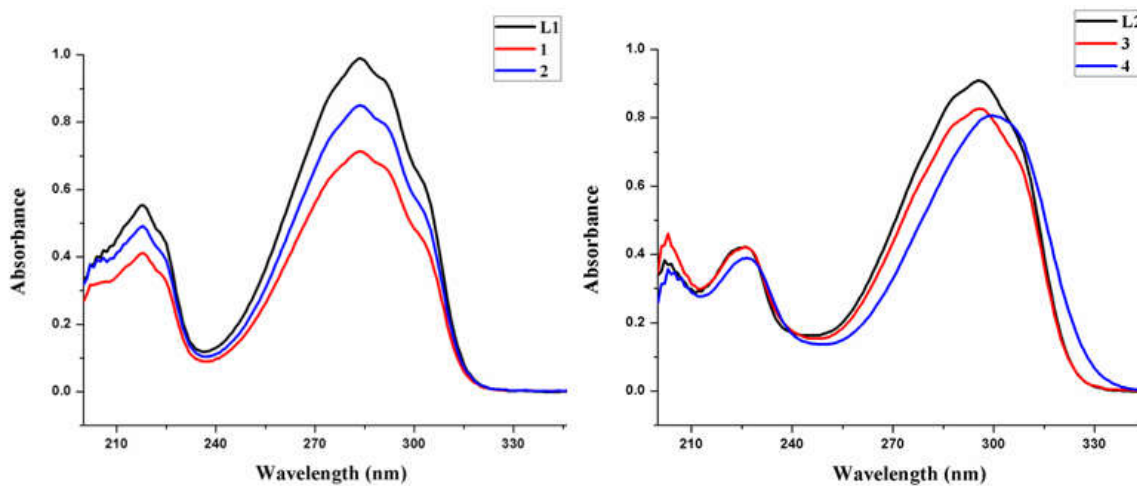


## Supporting information

### Halogen-bonding contacts determining the crystal structure and fluorescence properties of organic salts



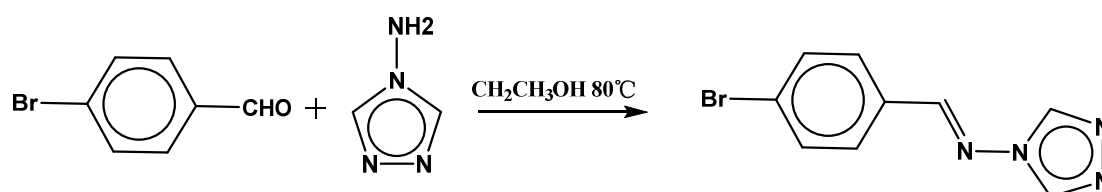
**Fig. S1** IR spectra of compounds  $L_1$ ,  $L_2$  and salts **1-4**. The differences are highlighted.



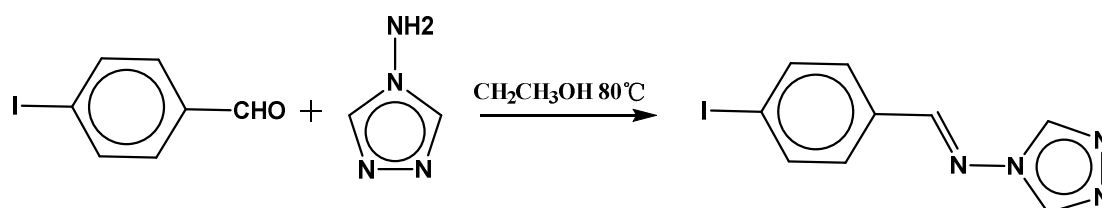
**Fig. S2** UV-visible absorption spectra for ligand  $L_1$ ,  $L_2$  and salts **1-4** in methanol solution ( $2.5 \times 10^{-6}$  mol·L<sup>-1</sup>).

**Table S1** Geometrical parameters for halogen bonds in compounds  $L_1$ ,  $L_2$  and crystals **2**, **3**.

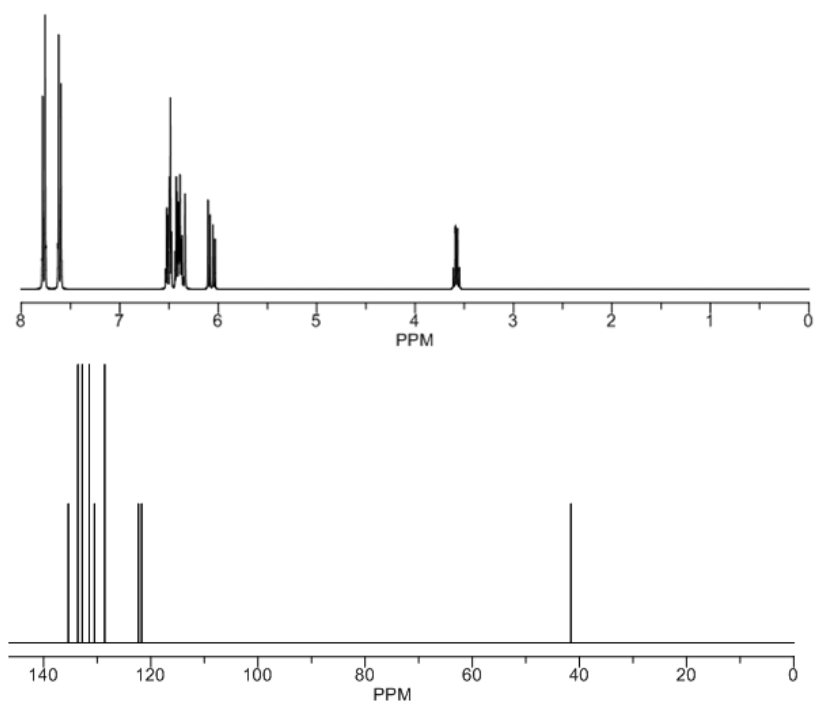
Y...D	X...D (Å)	Symmetry operation
Compound $L_1$		
Br...N1	3.296	-1.5+x, 1.5-y, 1/2+z
Compound $L_2$		
I...N1	3.210	-1.5+x, 1/2-y, 1/2+z
crystal <b>2</b>		
O4...Br1	3.240	2-x, 2-y, 2-z
C4...Br1	3.524	1-x, 2-y, 2-z
crystal <b>3</b>		
Cl...I	3.344	1+x, -2+y, z
Cl...Cl	3.376	-x, 2-y, 1-z



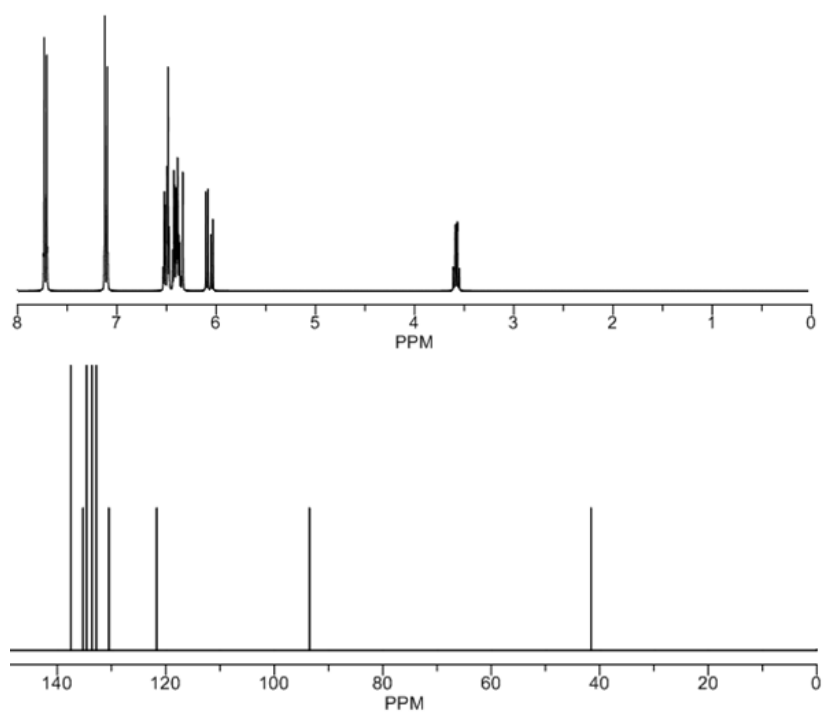
Scheme S1 The synthetic route for compound  $L_1$ .



Scheme S2 The synthetic route for compound  $L_2$ .



**Fig. S3**  $^1\text{H}$ NMR and  $^{13}\text{C}$ NMR of compound  $L_1$ .



**Fig. S4**  $^1\text{H}$ NMR and  $^{13}\text{C}$ NMR of compound  $L_2$ .