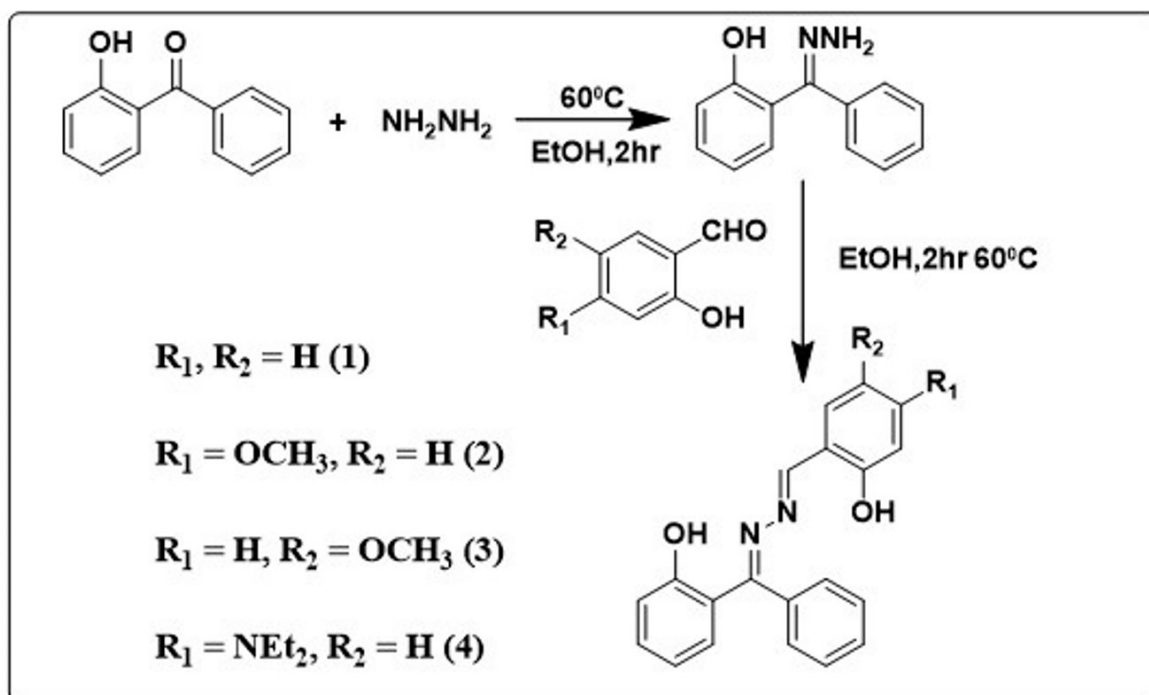
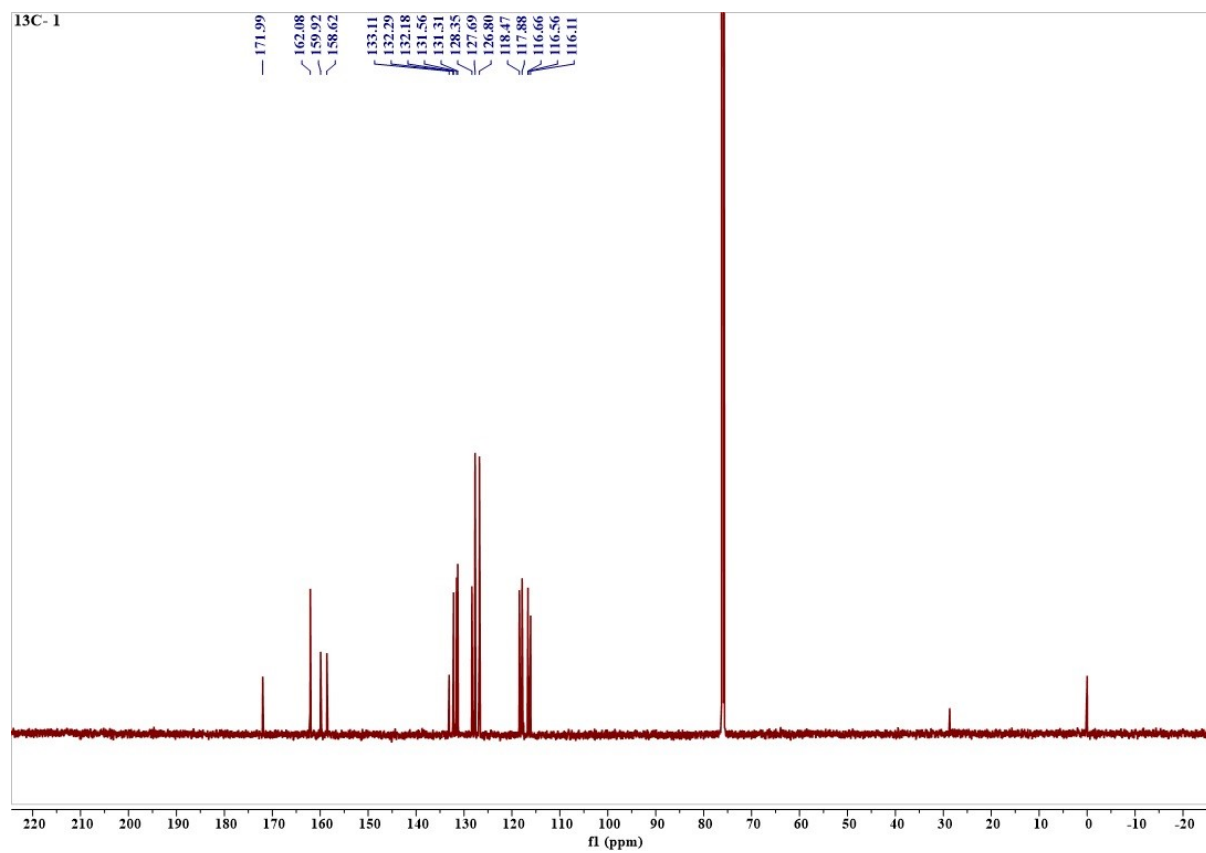
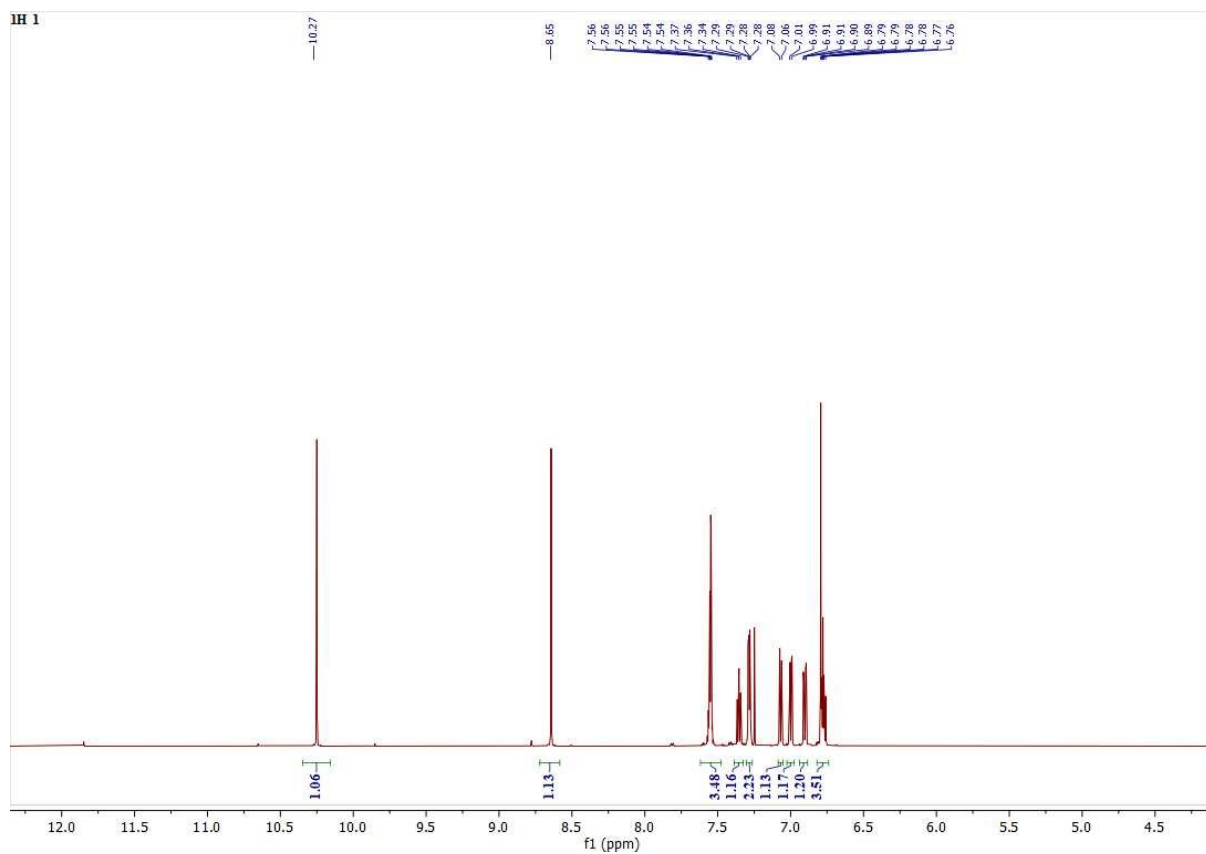


Electronic Supplementary Information (ESI)

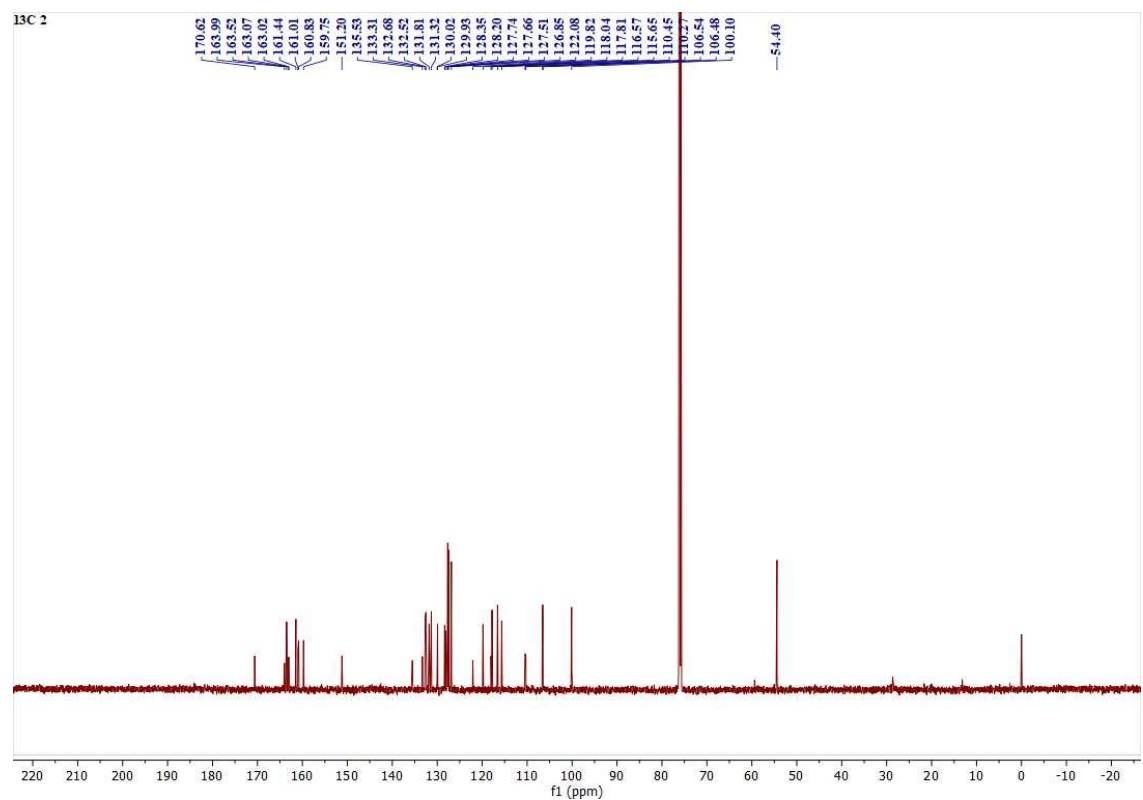
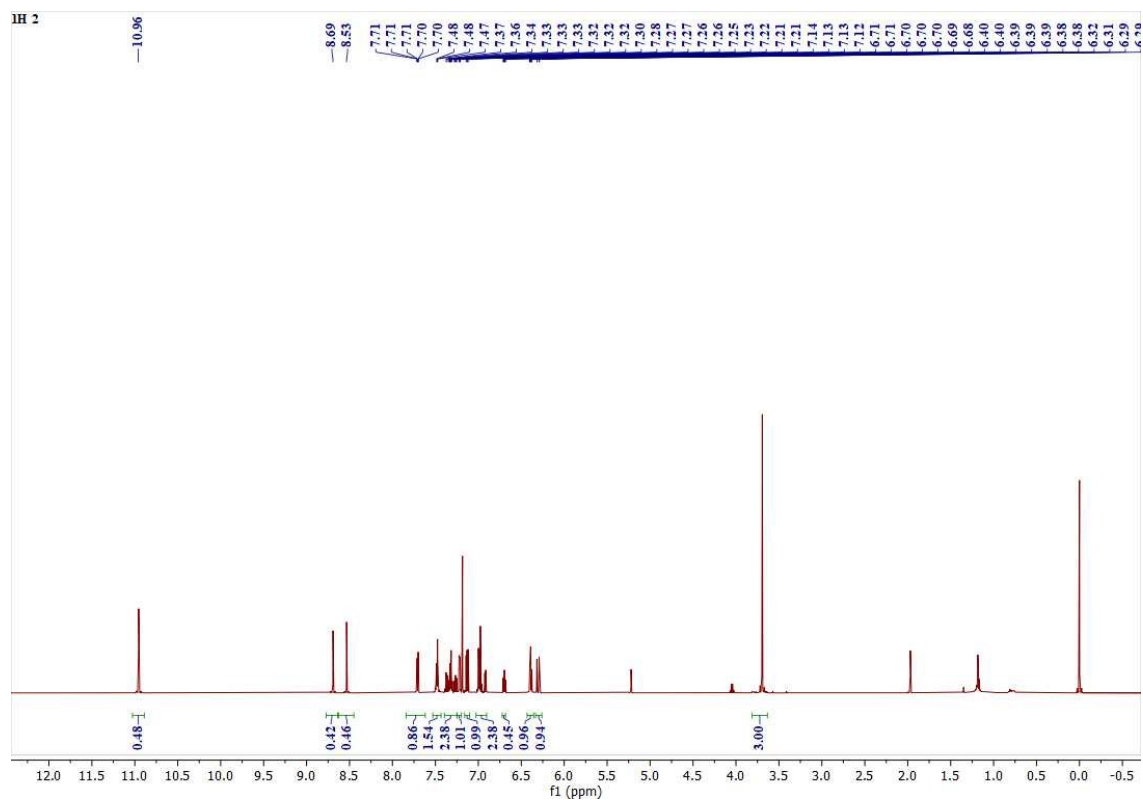
ESIPT geometrical isomers with distinct mechanofluorochromism and intra/intermolecular H-bonding controlled tunable fluorescence



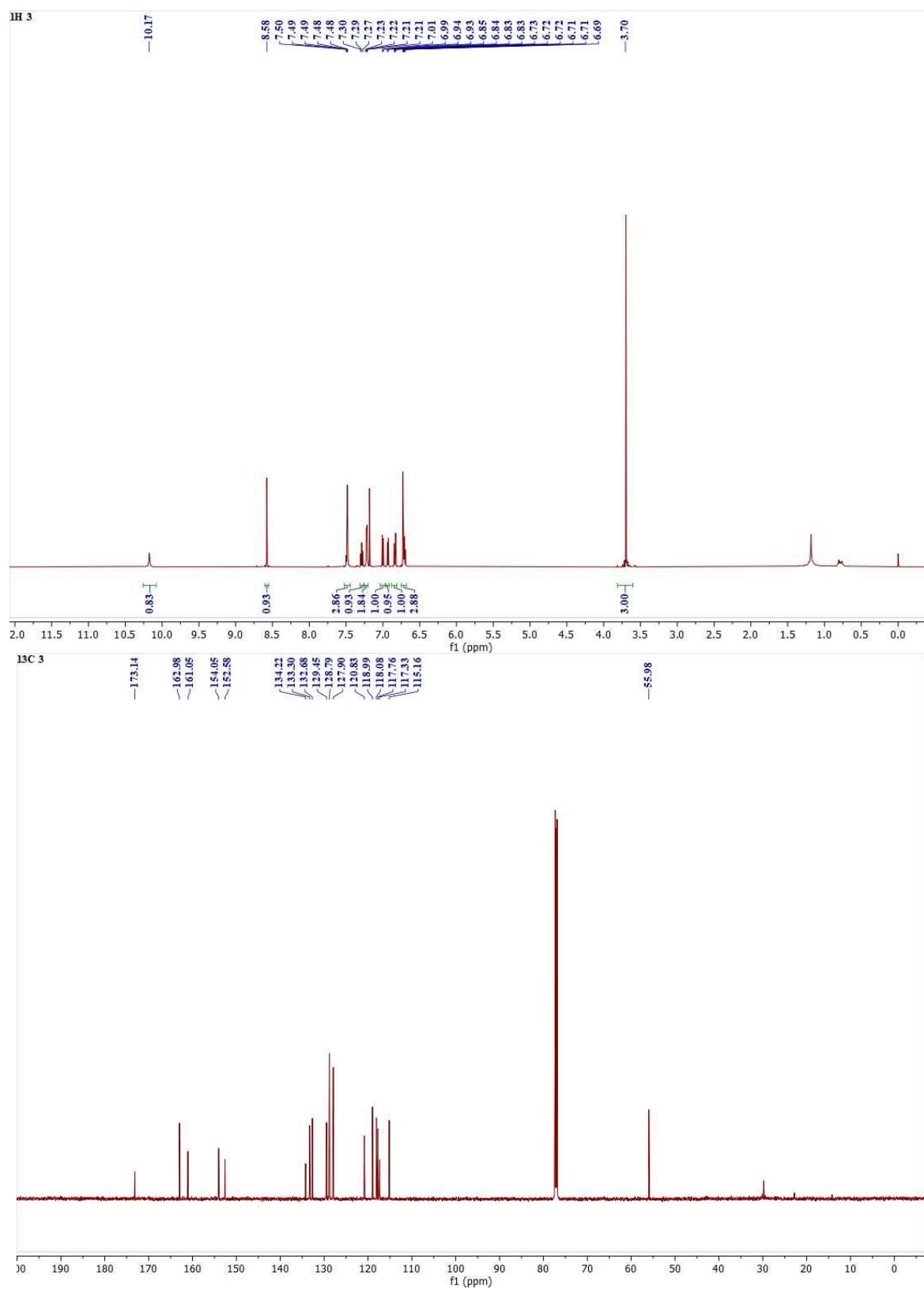
Scheme S1. Synthesis of **1-4**.



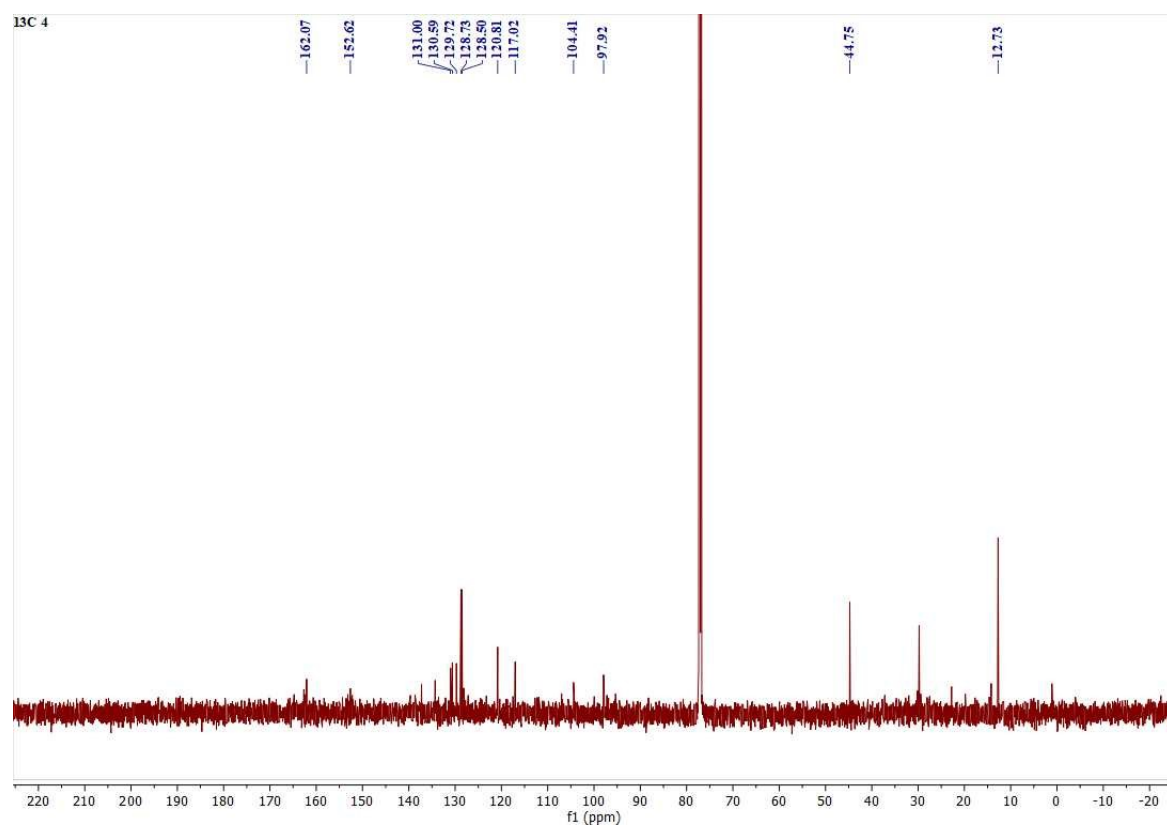
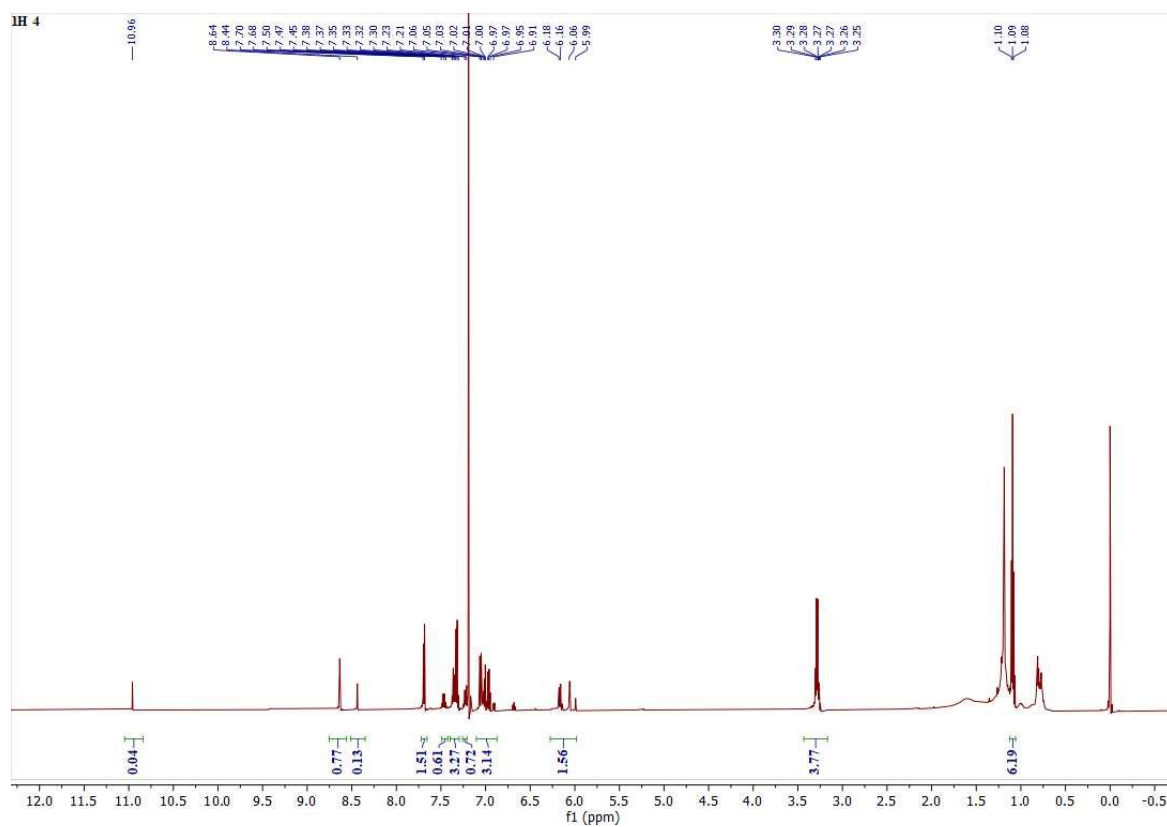
¹H & ¹³C NMR of 1



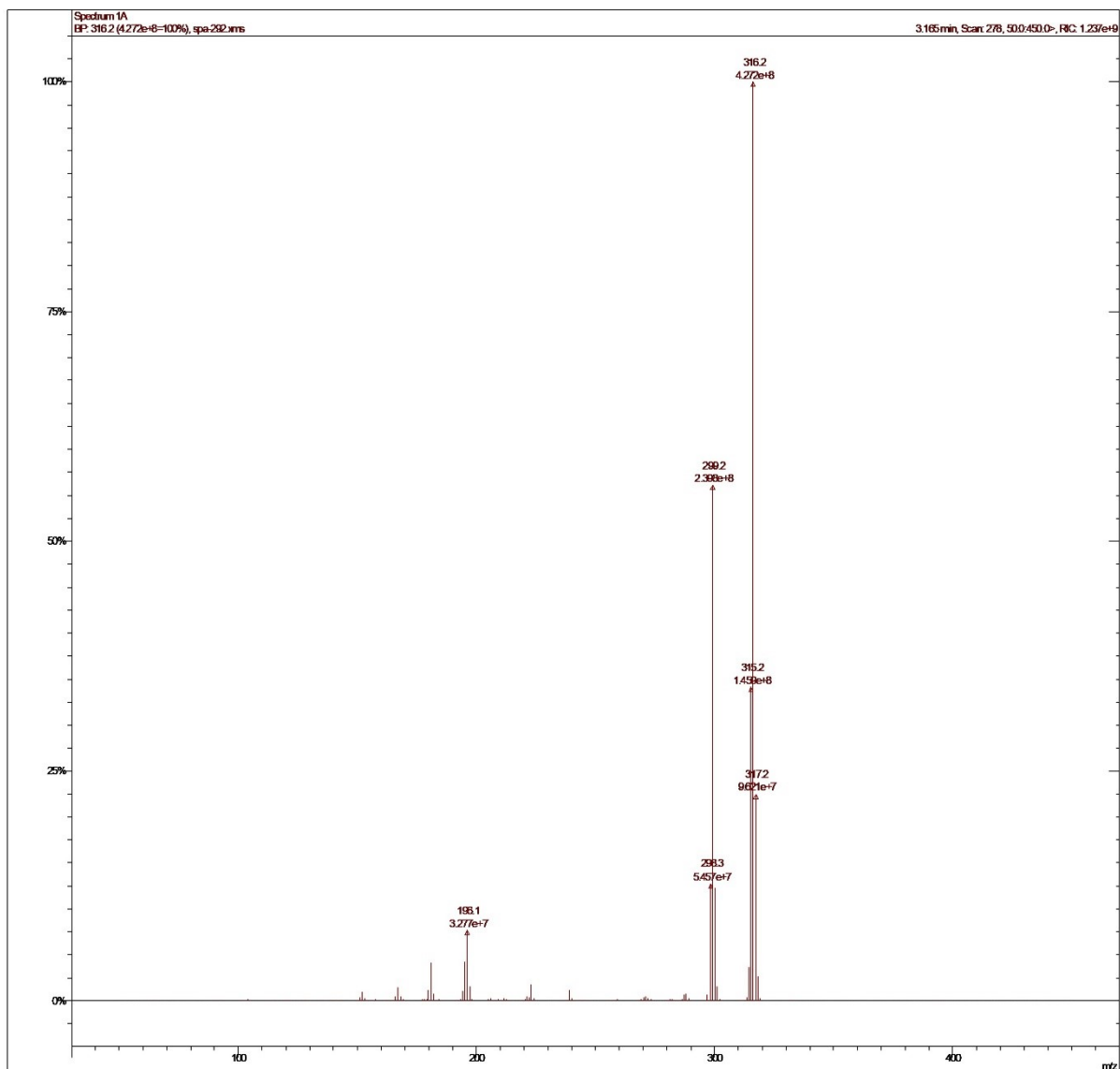
¹H & ¹³C NMR of 2



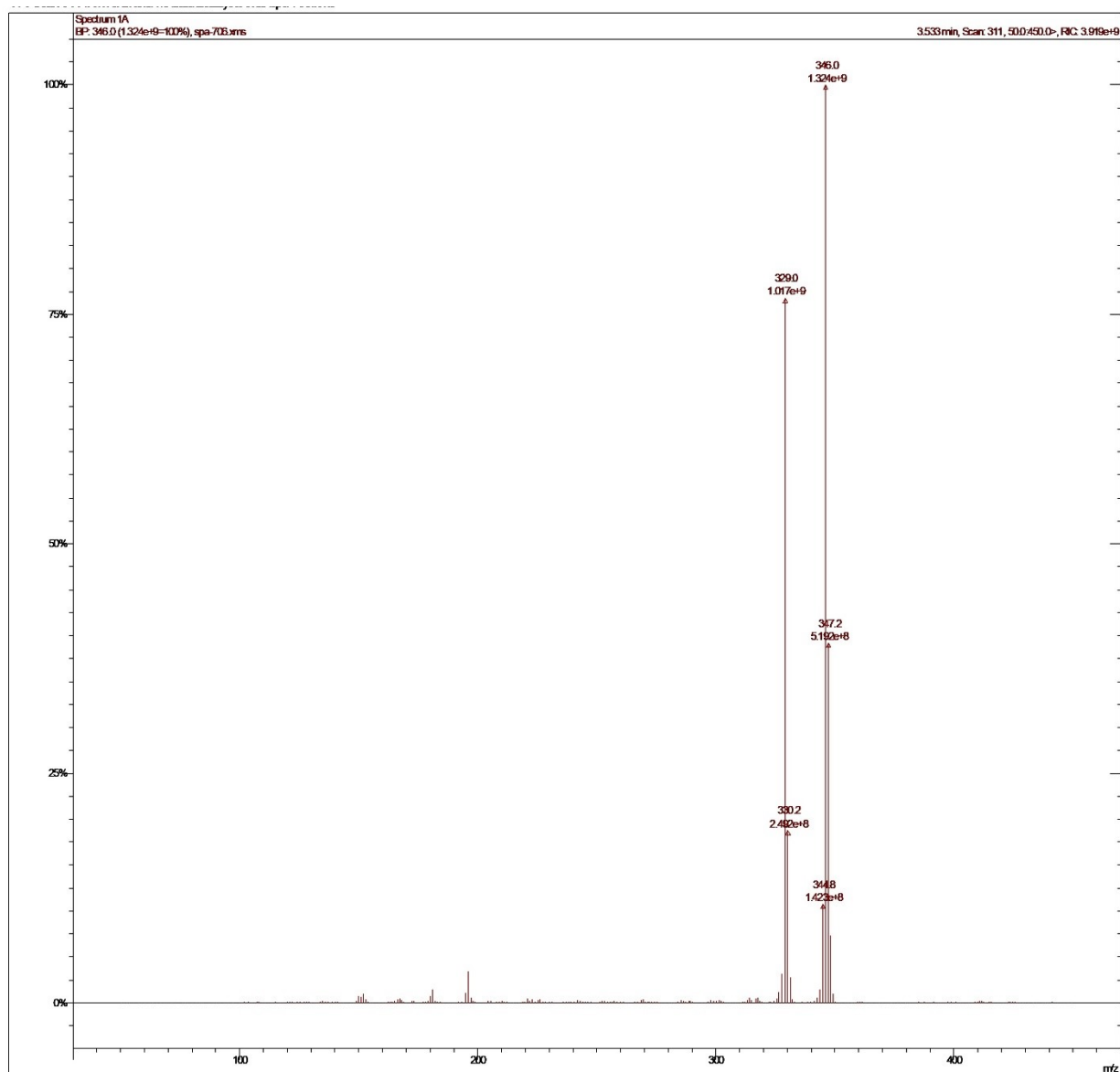
¹H & ¹³C NMR of 3



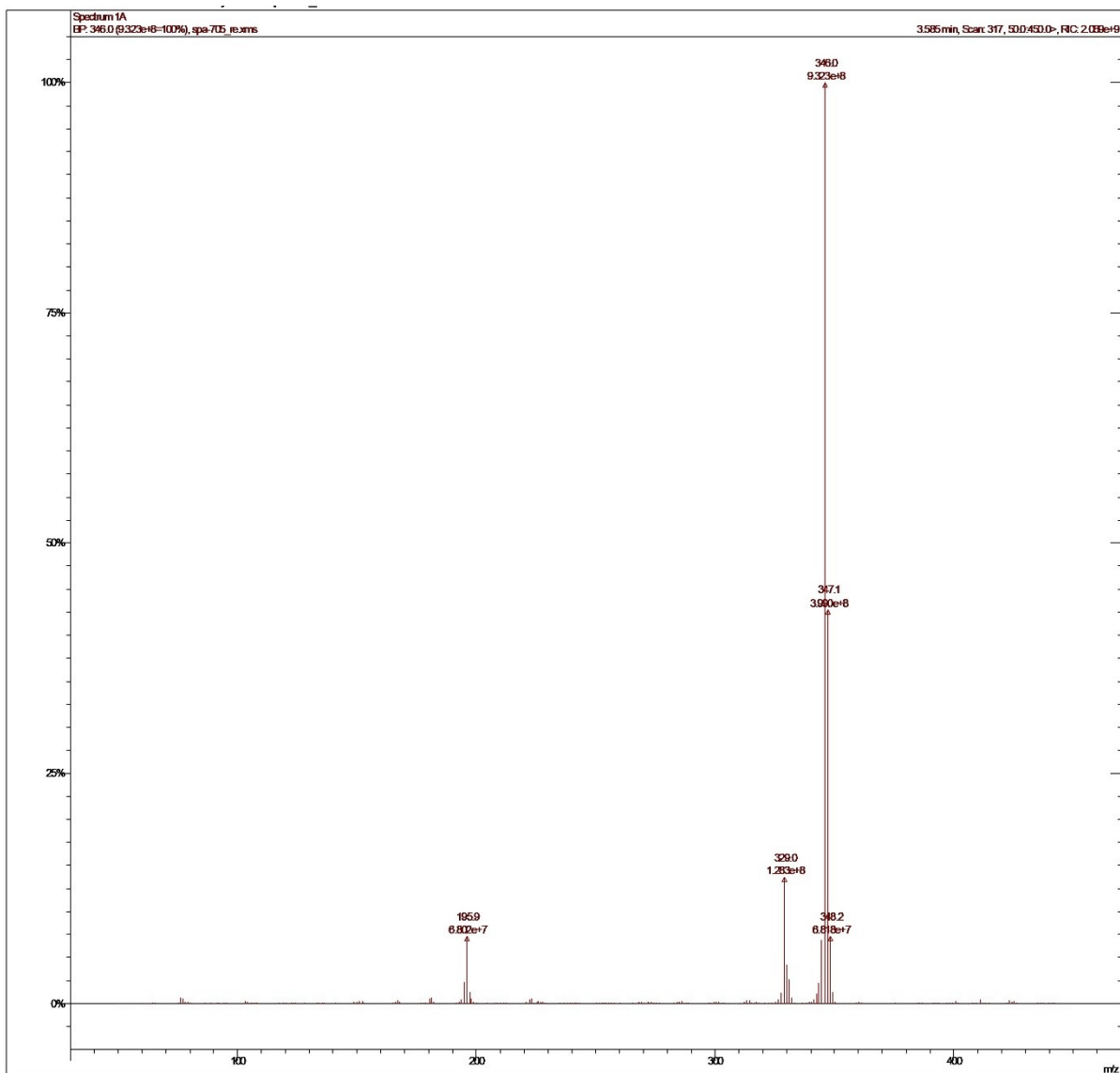
¹H & ¹³C NMR of 4



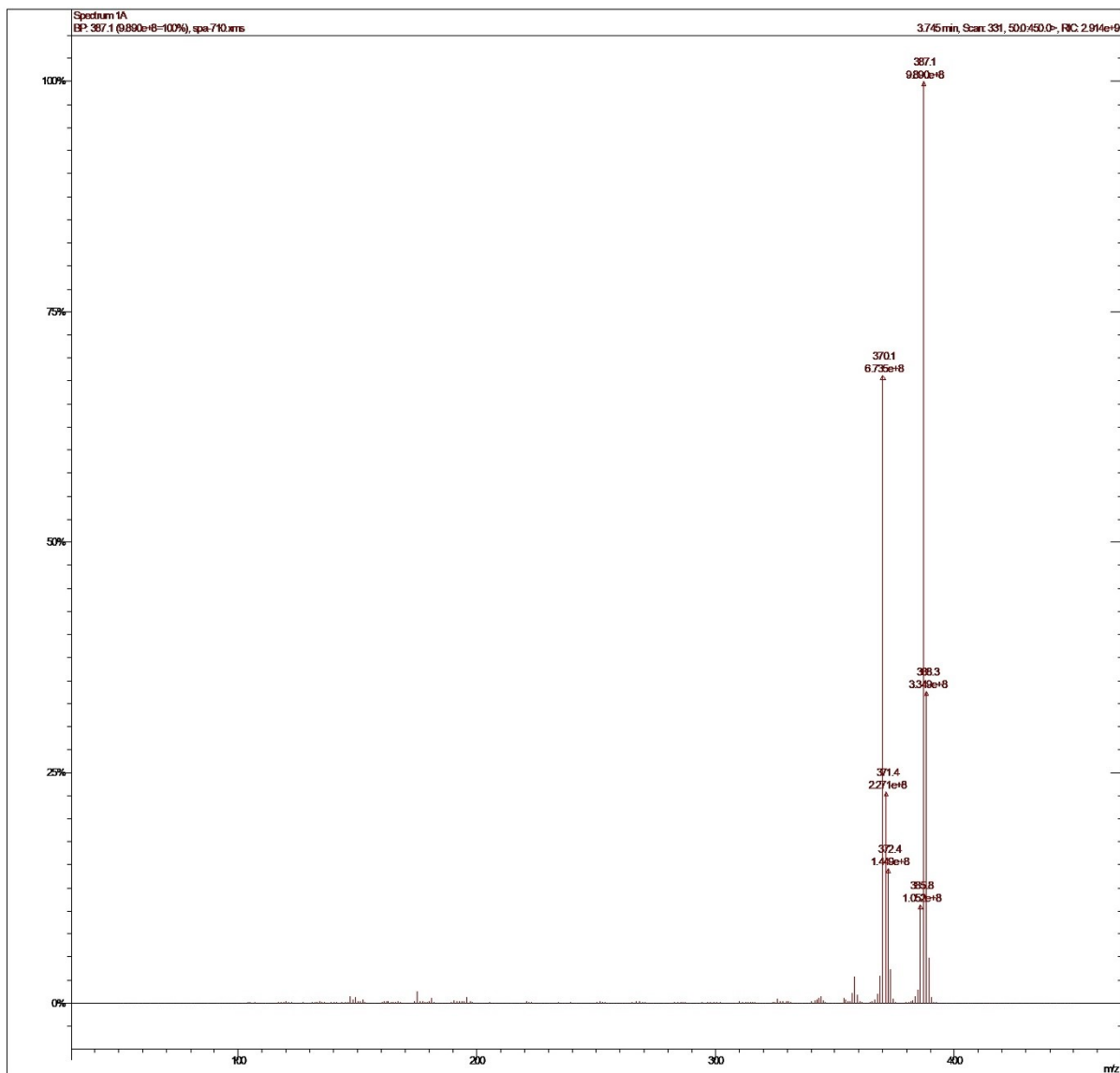
I: m/z calcd for $C_{20}H_{16}N_2O_2$ (M + H): 316.12, found: 316.2.



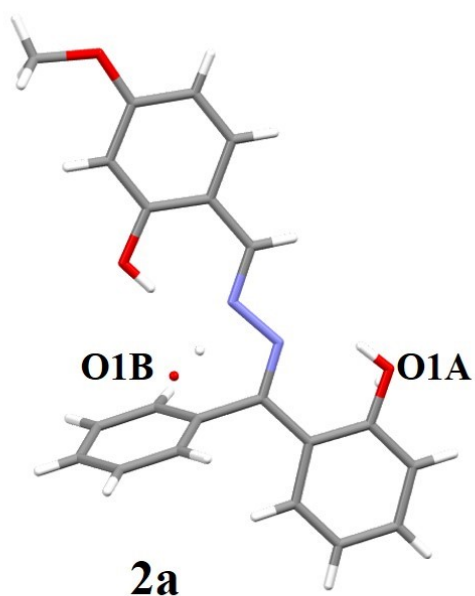
2: m/z calcd for $C_{21}H_{18}N_2O_3$ (M + H): 346.13, found: 346.0.



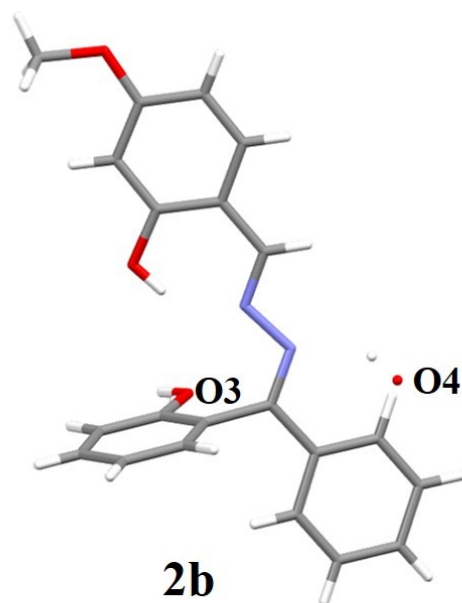
3: m/z calcd for $C_{21}H_{18}N_2O_3$ (M + H): 346.13, found: 346.0.



4: m/z calcd for $C_{24}H_{25}N_3O_2$ (M + H): 387.19, found: 387.1.

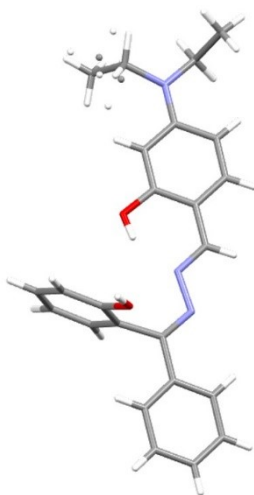


OH occupancy is 63:37 at O1A:O1B



OH occupancy is 56:44 at O3:O4

Figure S1.
lattice of 2a and 2b.
respective position is
N (blue) and O (red).



Disordered structure of **2** in the crystal
The occupancy percentage of OH in the
given at the bottom. C (grey), H (white)

Figure S2. Disordered structure of **2** in the crystal lattice. C (grey), H (white) N (blue) and O (red).

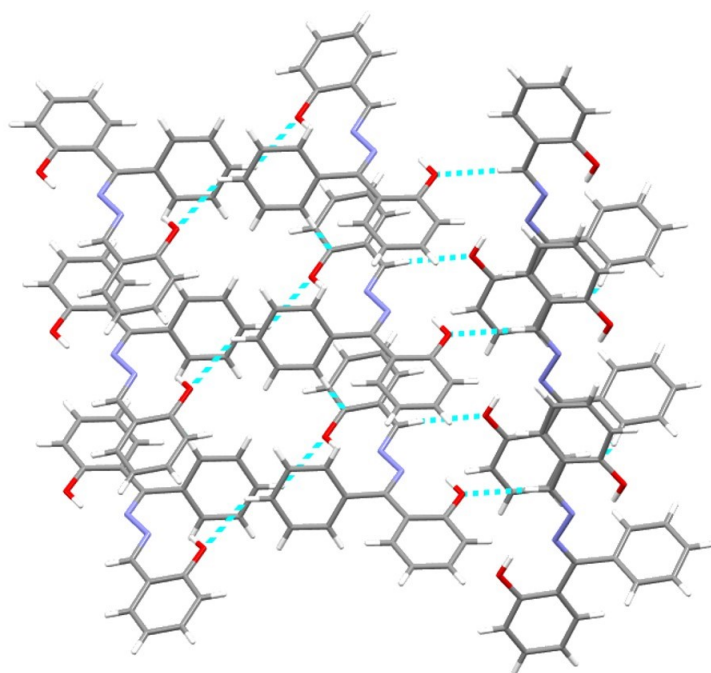


Figure S3. Intermolecular interactions in the crystal lattice of **1**. C (grey), H (white), N (blue) and O (red). Dotted lines indicate the hydrogen bonding interactions in Å.

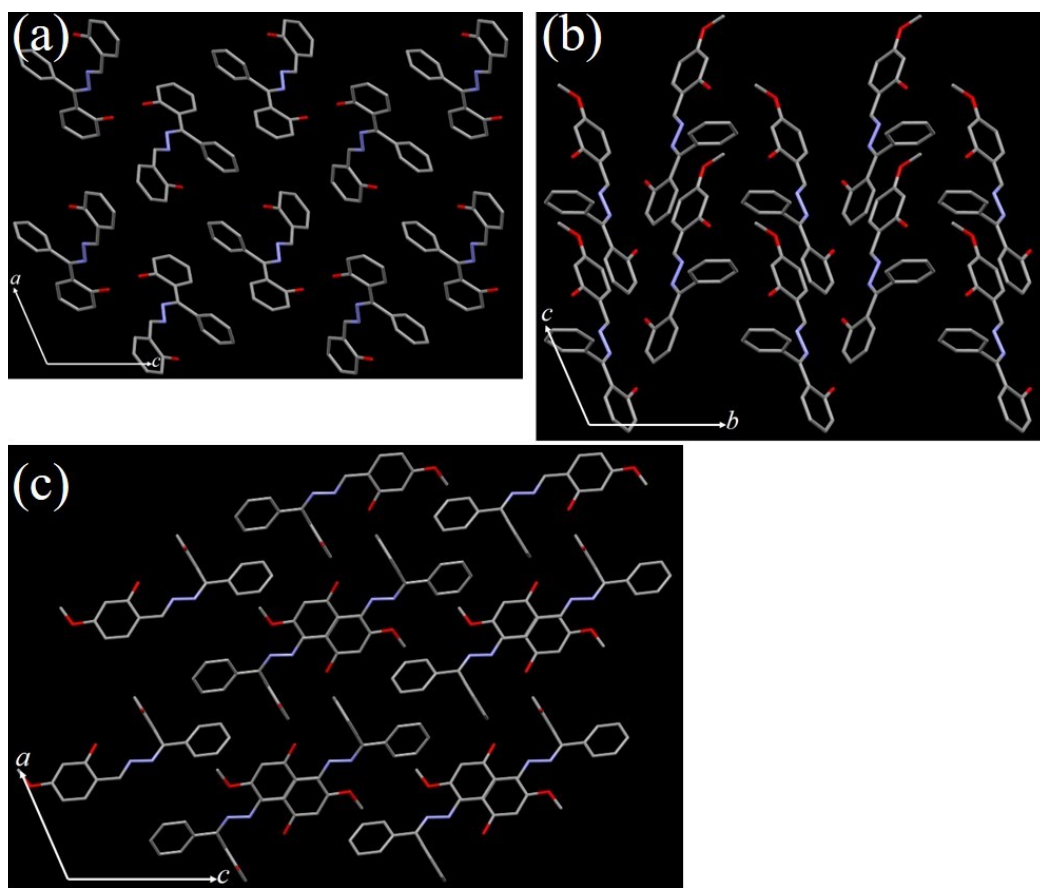


Figure S4. Molecular packing in the crystal lattice of (a) **1**, (b) **2a** and (c) **2b**. C (grey), H (white), N (blue) and O (red). Dotted lines indicate the hydrogen bonding interactions in Å.

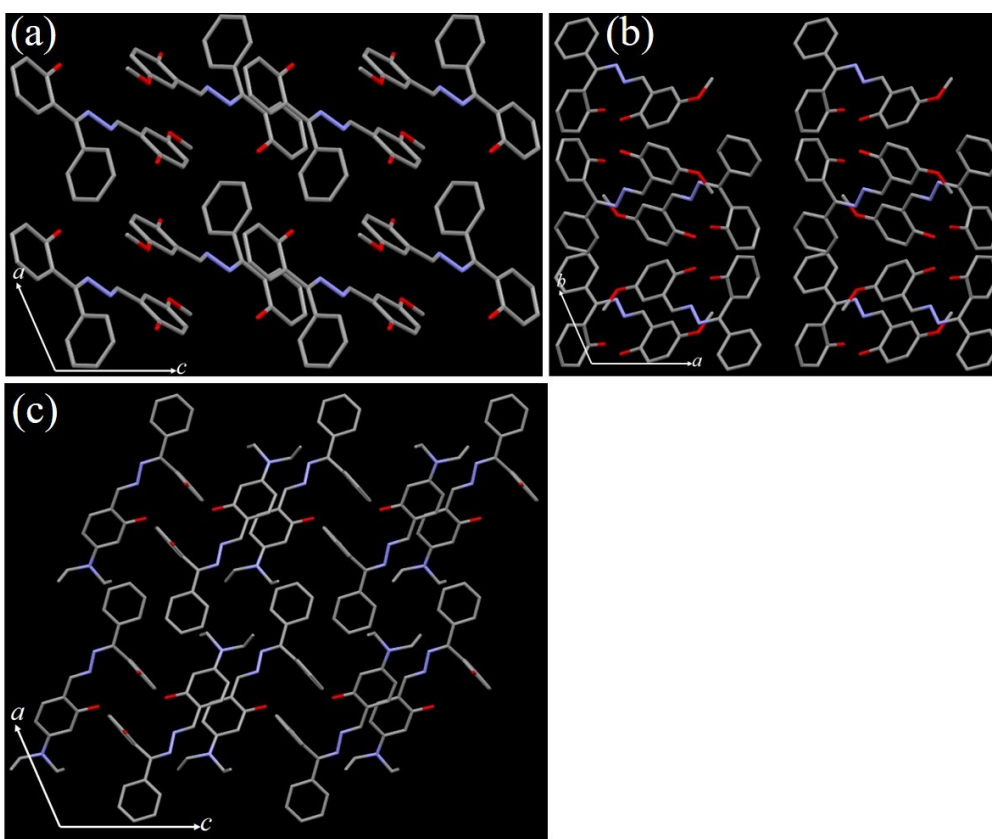


Figure S5. Molecular packing in the crystal lattice of (a) **3-Y**, (b) **3-R** and (c) **4**. C (grey), H (white), N (blue) and O (red). Dotted lines indicate the hydrogen bonding interactions in Å.

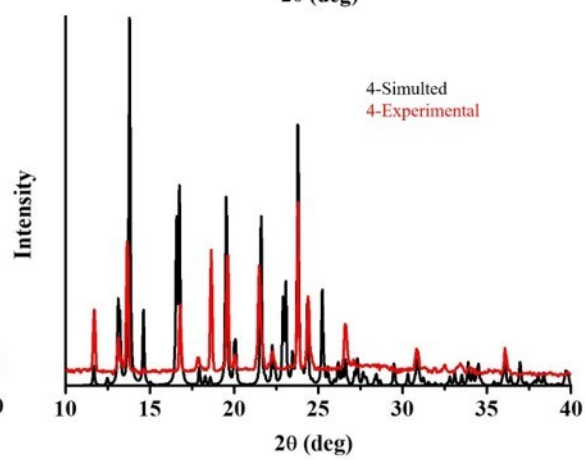
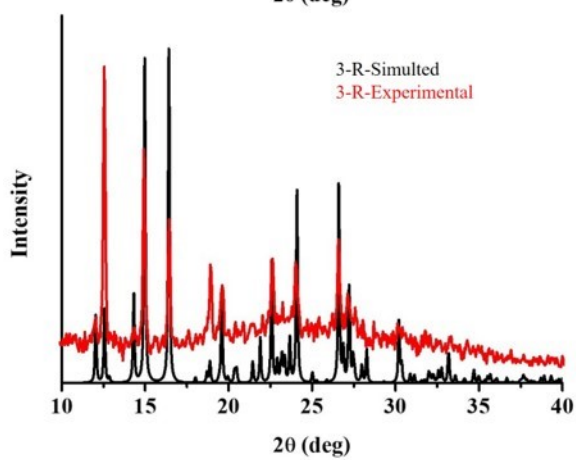
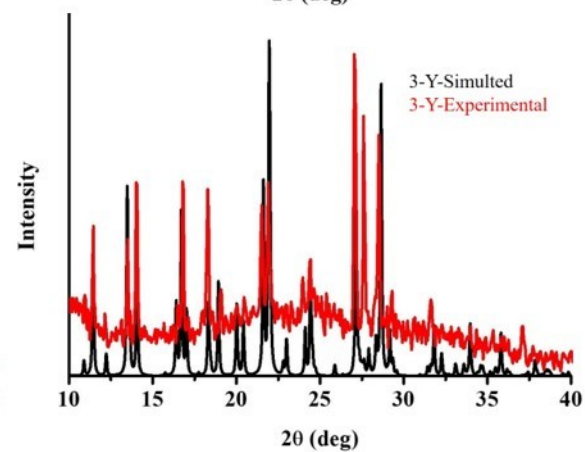
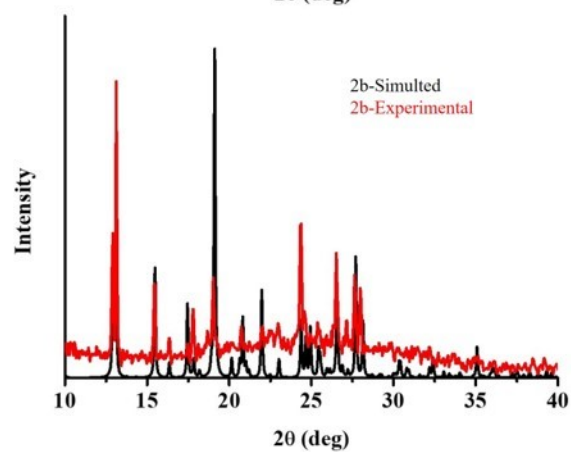
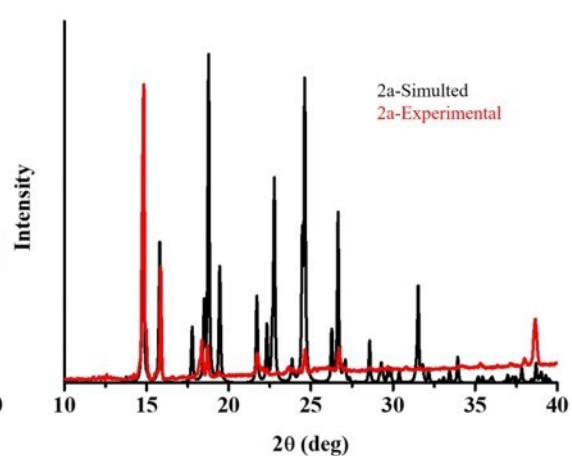
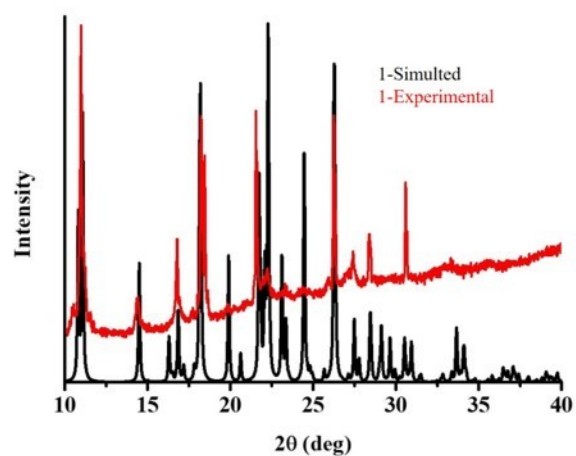


Figure S6. Comparison of experimental and simulated PXRD pattern of **1-4**.

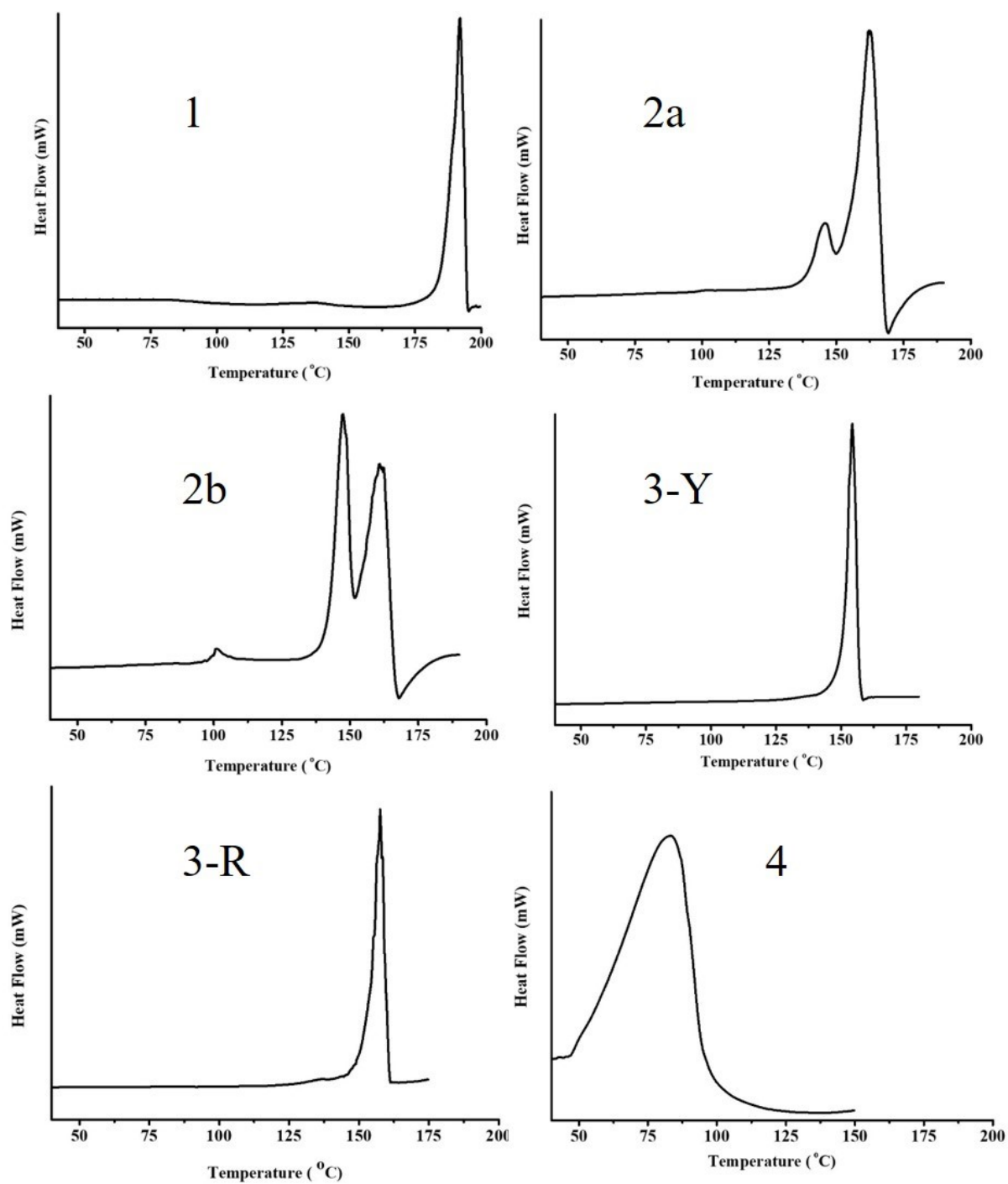


Figure S7. DSC of 1-4.

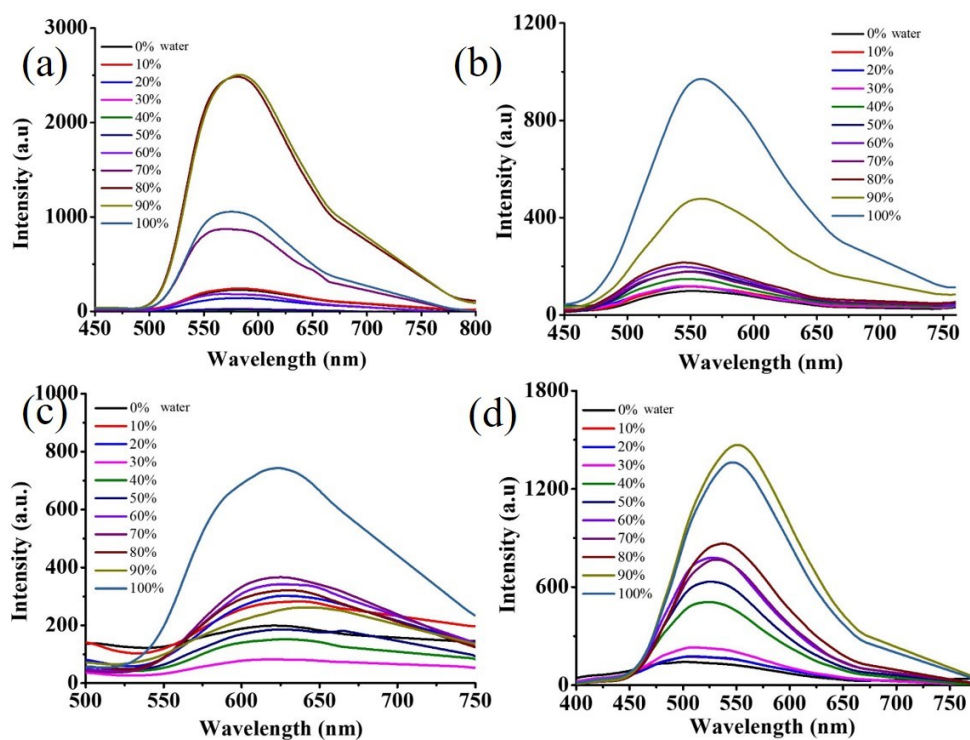


Figure S8. AIE studies of 1-4 in CH_3CN :water mixture.

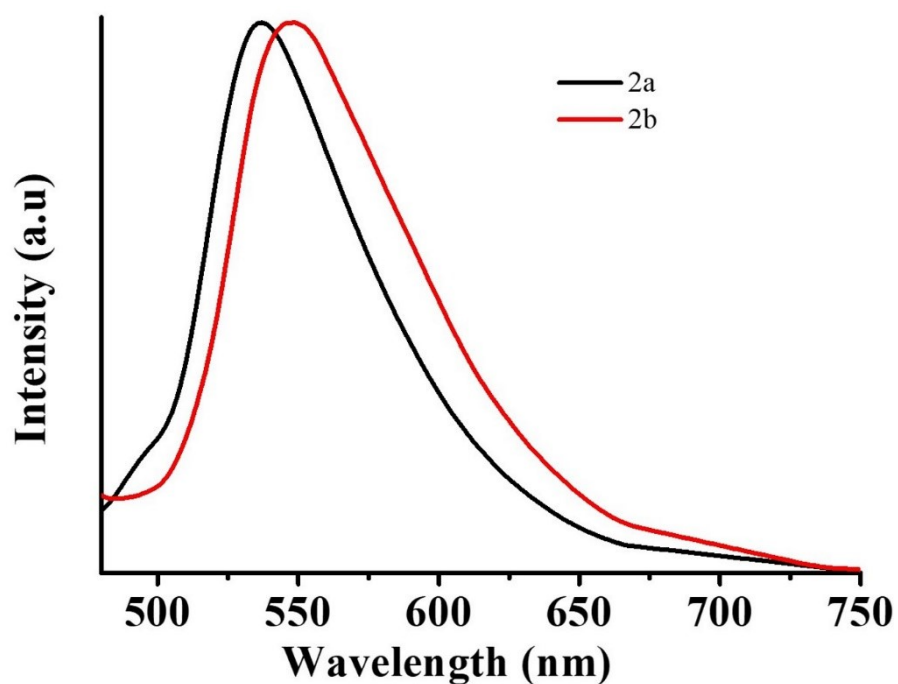


Figure S9. Solid state fluorescence spectra of 2a and 2b.

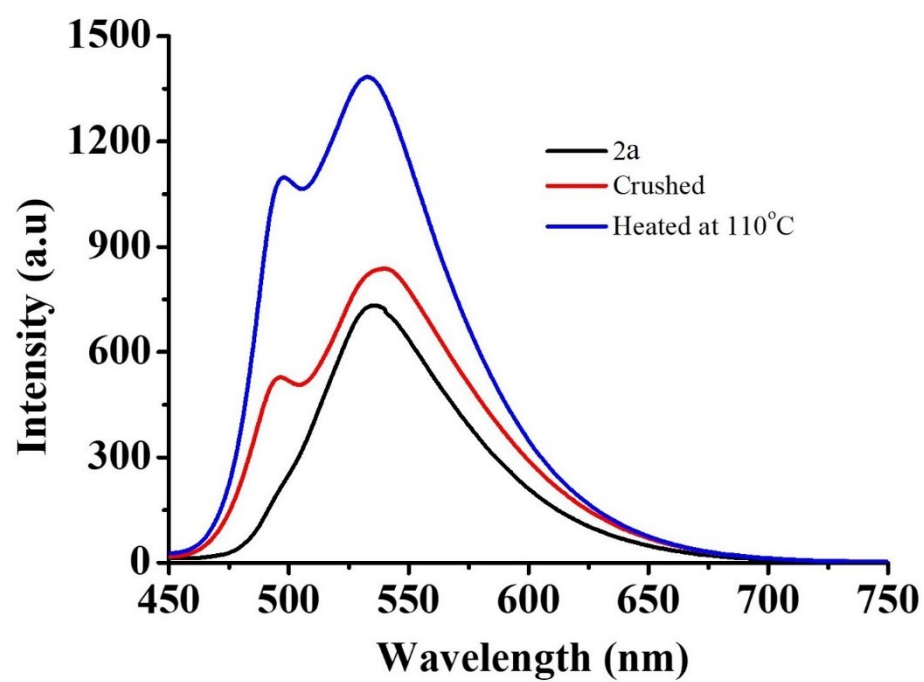


Figure S10. Mechanofluorochromism of **2a**.

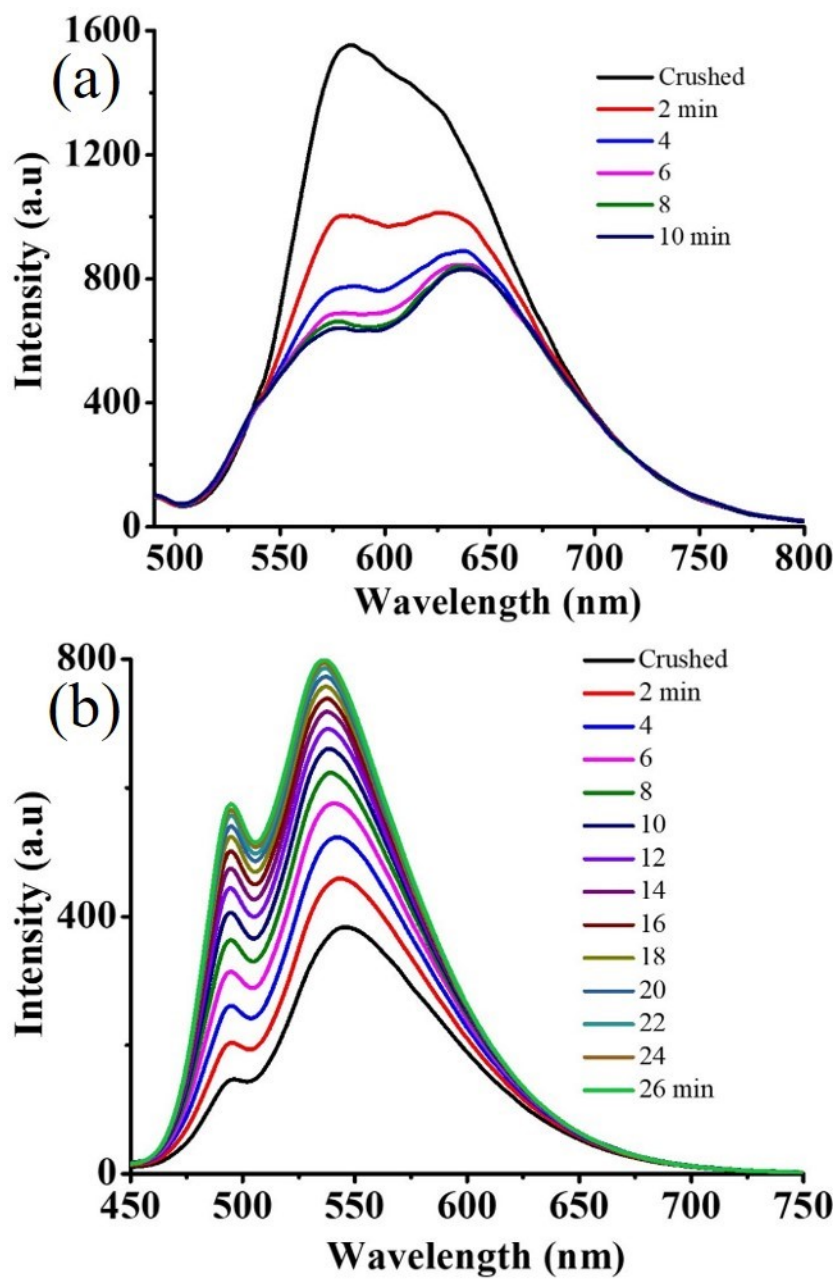


Figure S11. Self-reversible mechanofluorochromism of (a) **1** and (b) **2a**.