

Electronic supplementary information (ESI)

**Solvent-dependent zinc(II) coordination polymers with mixed ligands:
selective sorption and fluorescence sensing**

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Table S1 Hydrogen bonding data of **2**.

Complex 2				
<i>D</i> -H... <i>A</i>	<i>d</i> (<i>D</i> -H) (Å)	<i>d</i> (H... <i>A</i>) (Å)	<i>d</i> (<i>D</i> ... <i>A</i>)(Å)	<i>D</i> -H... <i>A</i> (°)
O1W-H1WB...O13#1	0.85	1.93	2.637(6)	140
O2W-H2WB...O14#1	0.85	1.85	2.557(6)	139
O1W-H1WA...O12#2	0.85	1.91	2.702(5)	155
C9-H9...O9#2	0.93	2.40	3.312(7)	166
O3W-H3WA...O3#3	0.85	2.03	2.783(5)	148
C18-H18...O1W#4	0.93	2.58	3.483(7)	165
C27-H27...O11#5	0.93	2.53	3.448(7)	169
C30-H30...O10#5	0.93	2.44	3.303(7)	155
C28-H28...O8#6	0.93	2.54	3.166(7)	125
C37-H37...O16'#7	0.93	2.55	3.334(13)	143

Symmetry codes: #1 2-x, -y, 2-z; #2 1+x, y, z; #3 -2+x, -1+y, z; #4 -1+x, y, z; #5 1-x, -y, 2-z; #6 1-x, -y, 1-z; #7 2-x, 1-y, 2-z.

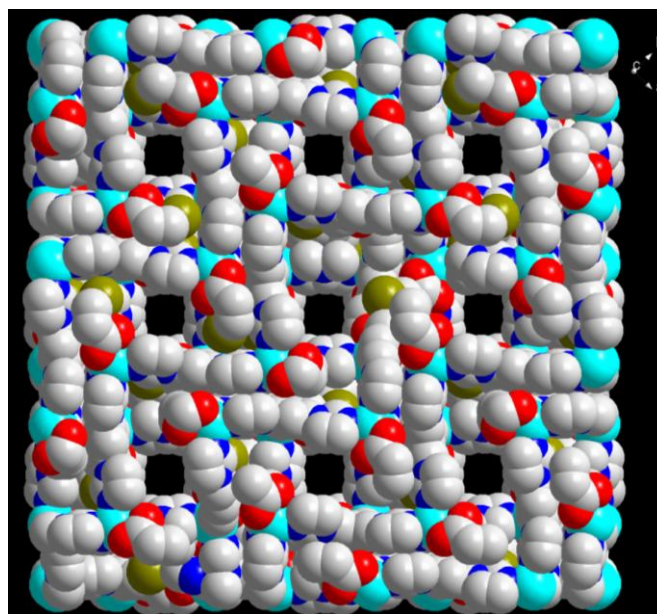


Fig. S1 Space-filling view of the crystal structure of **1** along the *c* axis.

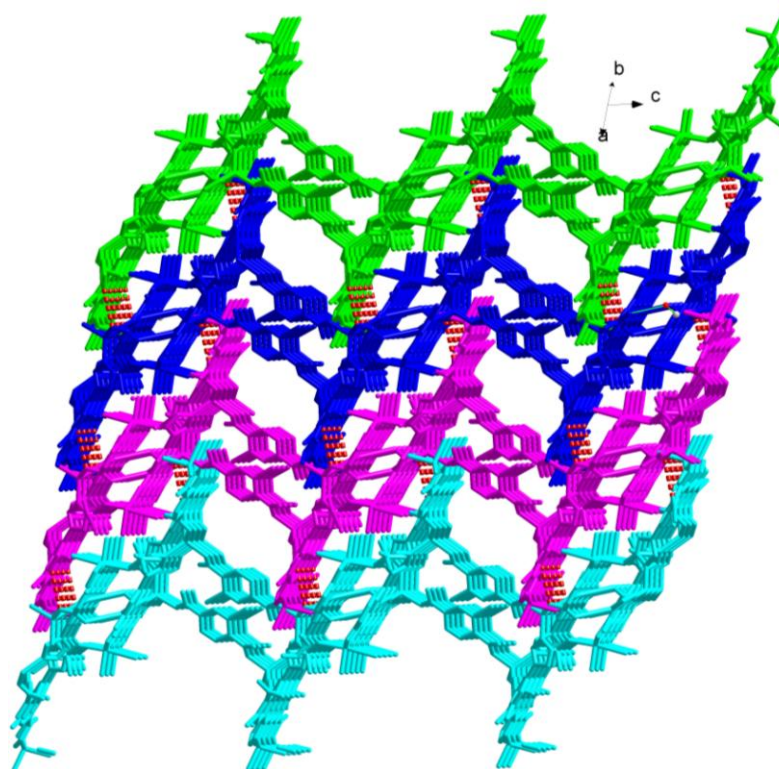
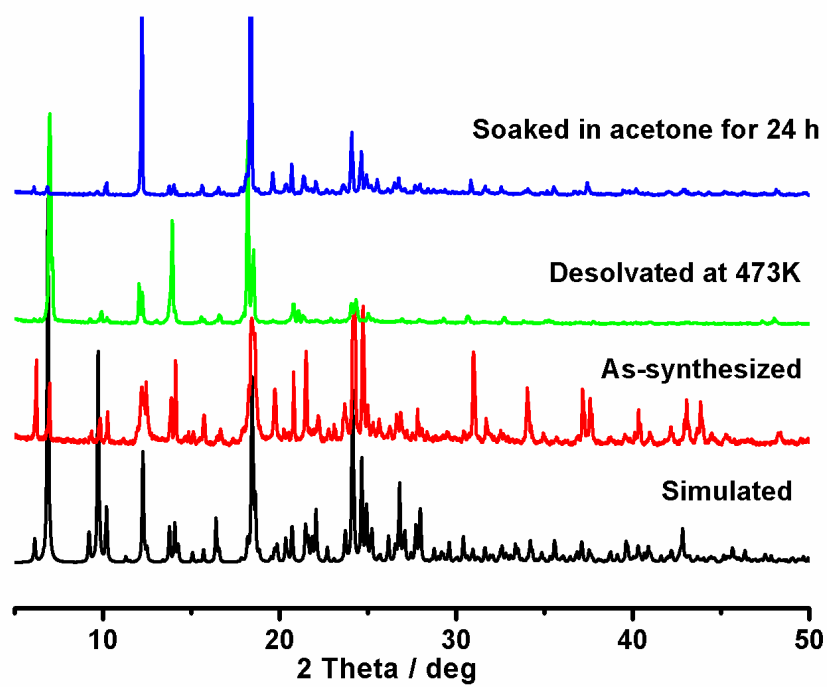
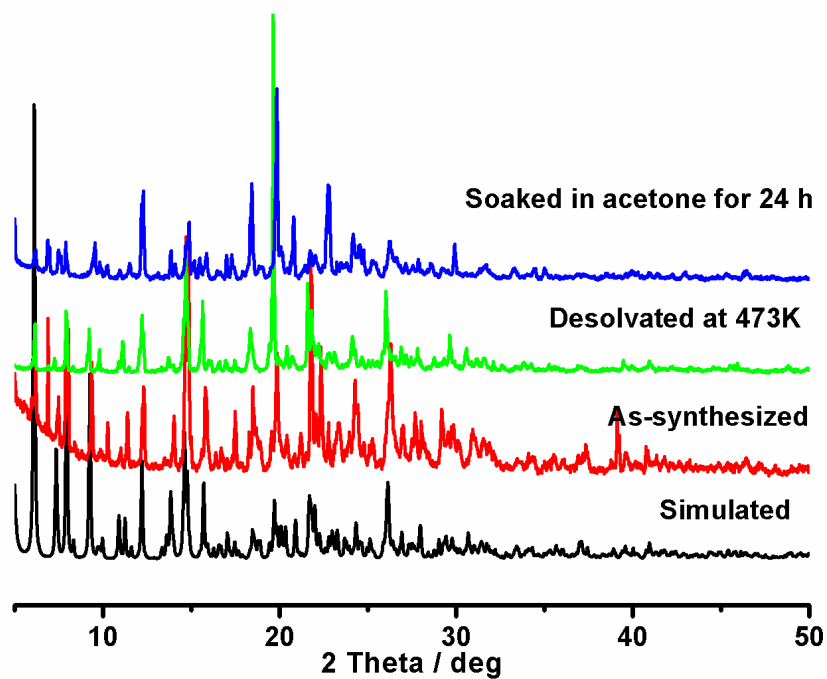


Fig. S2 3D supramolecular structure of **2** with 2D layers linked by hydrogen bonds: different color indicates the different layers. The hydrogen bonds are indicated by dashed lines.



(a)



(b)

Fig. S3 PXRD patterns of **1** (a) and **2** (b).

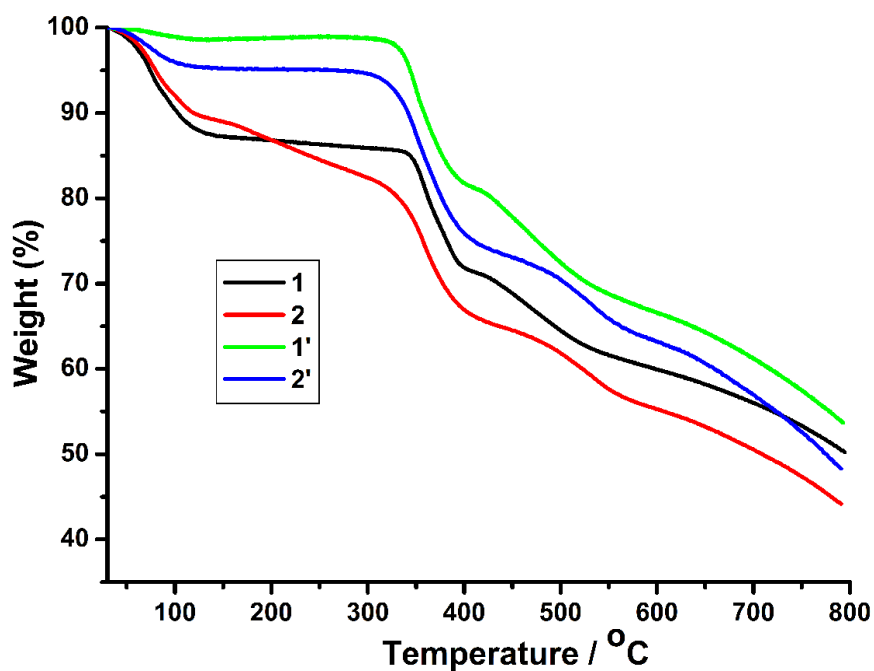


Fig. S4 TGA curves of **1** and **2** and desolvated samples **1'** and **2'**.

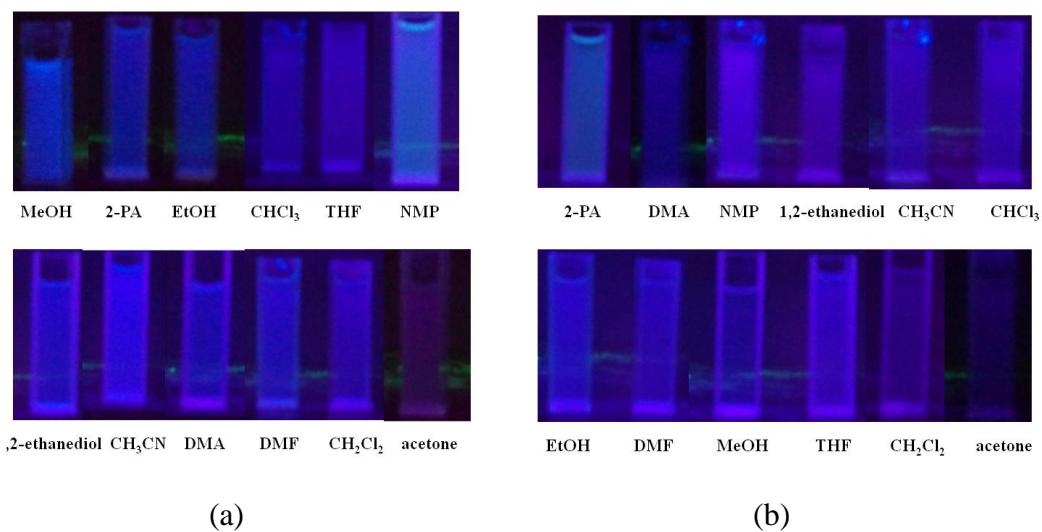


Fig. S5 Photographs of the samples of **1** (a) and **2** (b) showing the fluorescence under ultraviolet light.