

Supplementary Information

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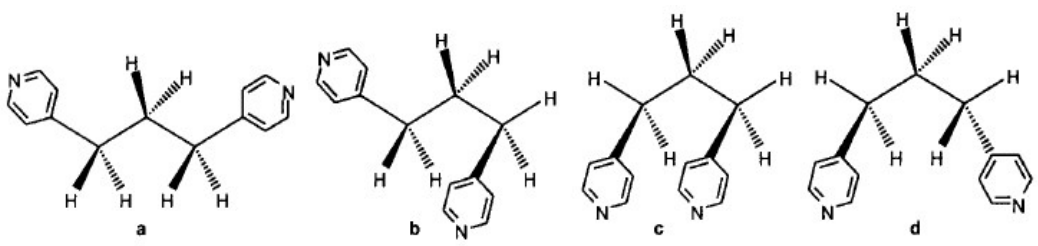
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Table S1 Selected bond lengths [Å] and angles [°] for complex **1-3**

1			
Zn(1)-O(1)#1	1.905(3)	Zn(1)-O(4)	1.957(3)
Zn(1)-N(1)#2	1.999(3)	Zn(1)-N(2)	2.071(3)
O(1)#1-Zn(1)-O(4)	106.63(17)	O(1)#1-Zn(1)-N(1)#2	125.21(13)
O(1)#1-Zn(1)-N(2)	98.92(13)	O(4)-Zn(1)-N(1)#2	119.88(15)
O(4)-Zn(1)-N(2)	95.02(14)	N(1)#2-Zn(1)-N(2)	103.81(12)
2			
Cd(1)-O(1)	2.450(3)	Cd(1)-O(2)	2.330(3)
Cd(1)-O(3)	2.267(3)	Cd(1)-O(3) #1	2.831(3)
Cd(1)-O(4)#1	2.273(3)	Cd(1)-N(1)	2.356(4)
Cd(1)-N(2)#2	2.351(4)		
O(3)-Cd(1)-O(2)	94.89(13)	O(3)-Cd(1)-O(4)#1	122.10(14)
O(4)#1-Cd(1)-O(2)	142.97(13)	O(2)-Cd(1)-N(1)	90.99(15)
O(2)-Cd(1)-N(2)#2	88.86(16)	O(3)-Cd(1)-N(1)	87.75(14)
O(3)-Cd(1)-N(2)#2	91.65(15)	O(4)#1-Cd(1)-N(1)	88.94(14)
O(4)#1-Cd(1)-N(2)#2	91.54(16)	N(2)#2-Cd(1)-N(1)	179.37(16)
3			
Cu(1)-O(1)	1.975(2)	Cu(1)-O(2)#1	1.960(2)
Cu(1)-O(3)#2	1.962(2)	Cu(1)-O(4)#3	1.969(2)
Cu(1)-N(1)	2.143(3)		
O(2)#1-Cu(1)-O(1)	167.60(10)	O(2)#1-Cu(1)-O(3)#2	88.90(11)
O(2)#1-Cu(1)-O(4)#3	88.84(11)	O(3)#2-Cu(1)-O(1)	88.84(11)
O(3)#2-Cu(1)-O(4)#3	167.79(10)	O(4)#3-Cu(1)-O(1)	90.81(11)
O(1)-Cu(1)-N(1)	96.63(11)	O(2)#1-Cu(1)-N(1)	95.74(11)

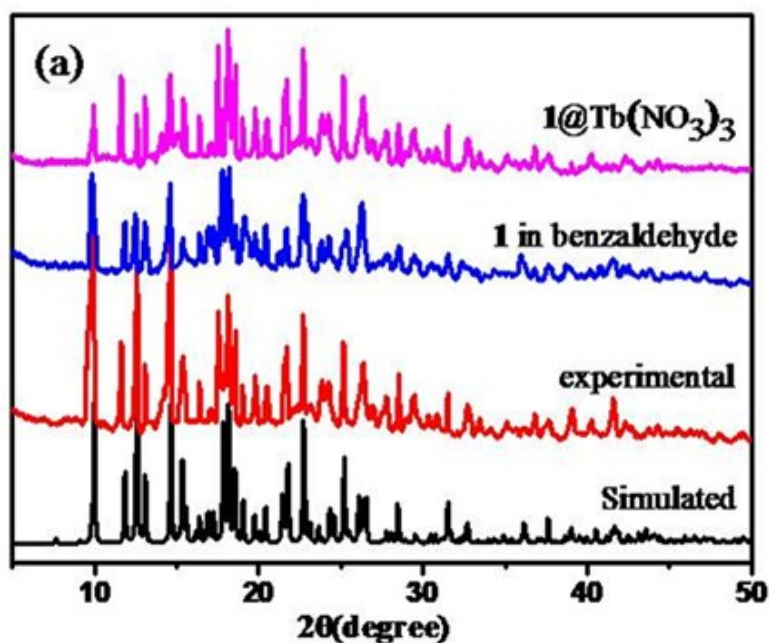
O(3)#2-Cu(1)-N(1)	97.09(11)	O(4)#3-Cu(1)-N(1)	95.07(11)
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Symmetry transformations used to generate equivalent atoms: **1**: #1 $x-1/2, -y+5/2, -z+1$, #2 $x, -y+3/2, z+1/2$; **2**: #1 $-x+7/2, -y, -z-1/2$, #2 $x-3/4, -y, z+1/4$; **3**: #1: $-x+1, -y+3/2, z+0$; #2: $-y+7/4, x+1/4, z+1/4$; #3: $y-3/4, -x+5/4, z+1/4$.



	The distances of N...N [Å]
a	9.1-10.1
b	8.6-9.2
c	3.9
d	6.7-8.6

Scheme S1 The different conformations of bpp ligand [TT(a), TG(b), GG(c) and GG'(d)].



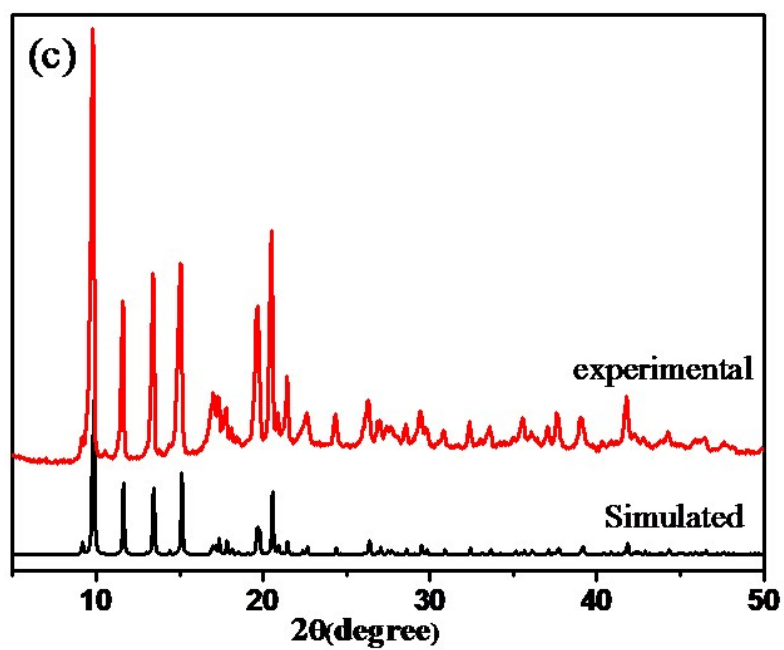
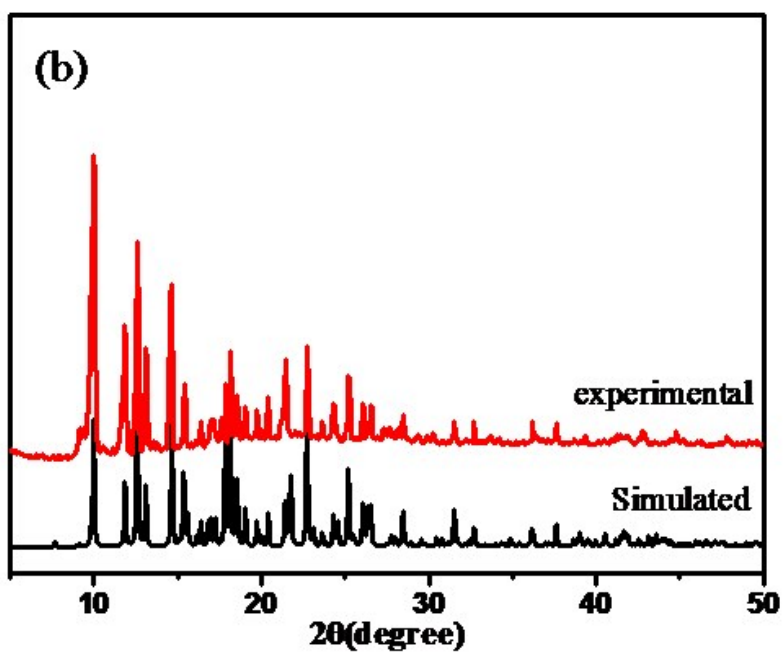


Fig. S1 The PXRD patterns of complex 1, 1 immersed in benzaldehyde and 1@Tb(NO₃)₃ immersed in DMF(a), complex 2 (b) , and complex 3 (c).

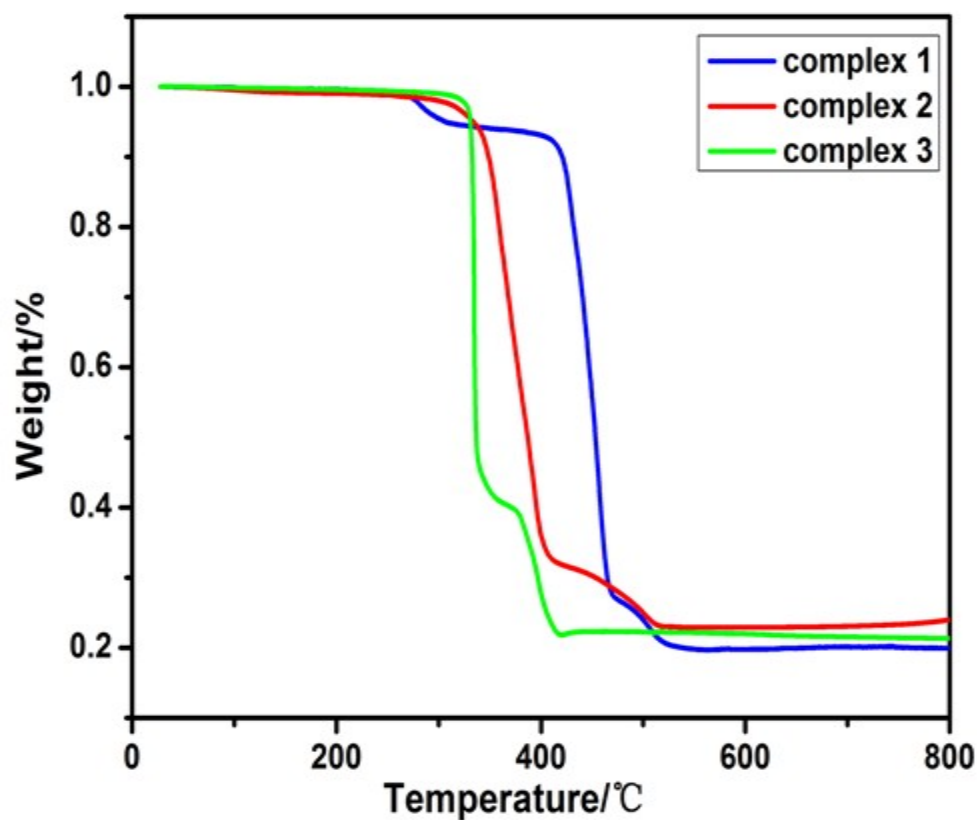


Fig. S2 The TGA curves of complexes 1-3.

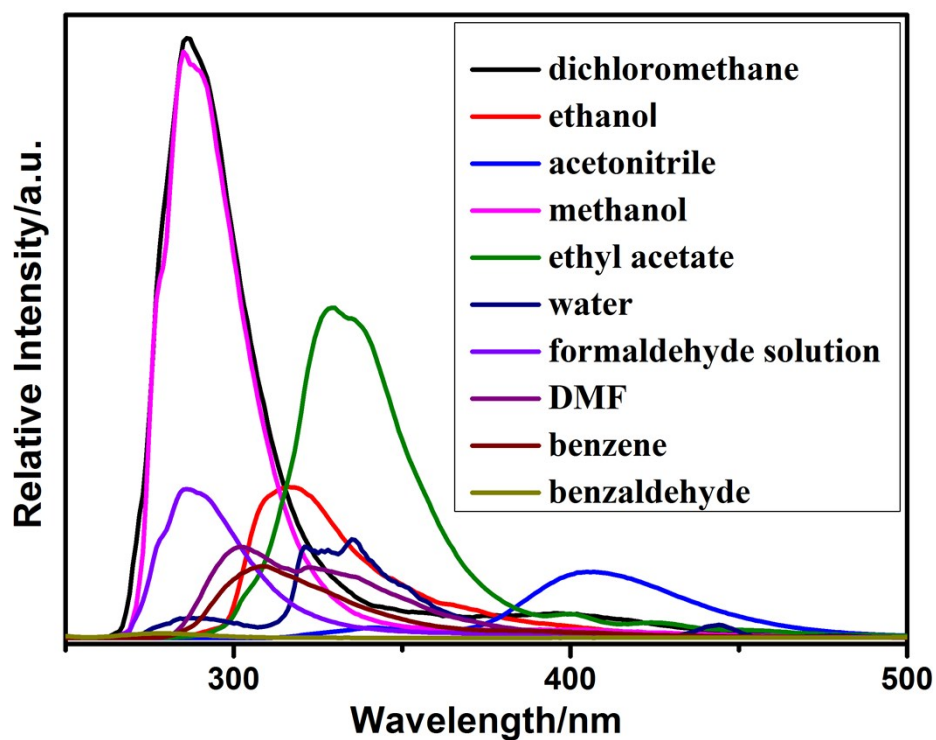


Fig. S3 Emission spectra of various solvents (λ_{ex} = 268, 167, 268, 267, 286, 221, 268, 274, 280, and 250 nm, respectively).

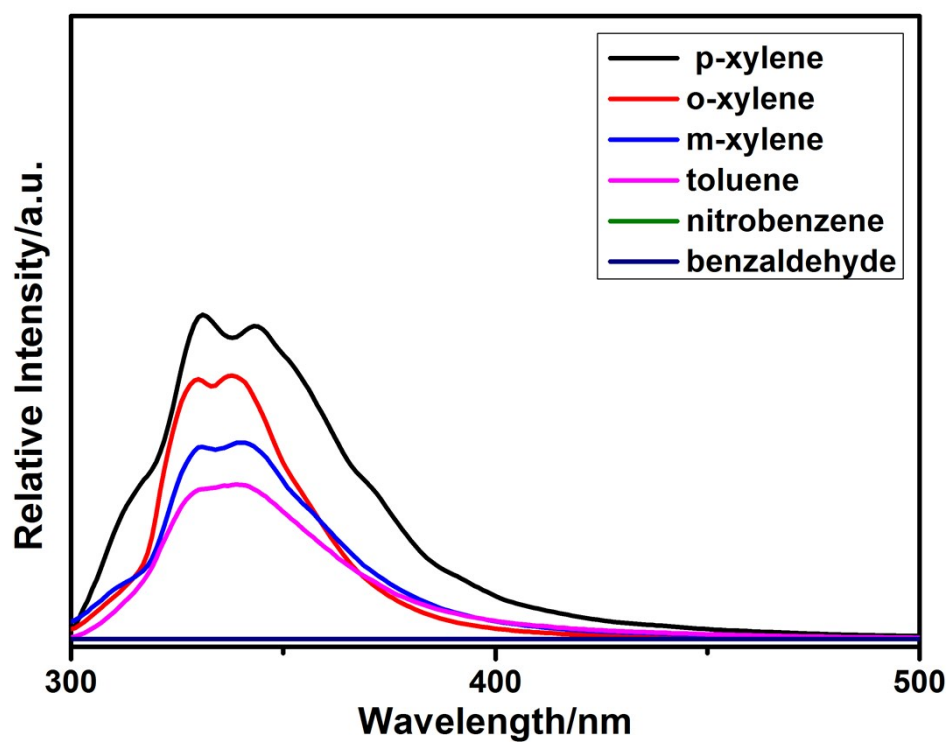


Fig. S4 Emission spectra of **1** dispersed in ethanol containing toluene, nitrobenzene, o,m,p-xylenes and benzaldehyde ($\lambda_{\text{ex}} = 283$ nm).