SUPPORTING INFORMATION FOR

A Microporous Cationic Metal-Organic Framework with Nanocages based on Metallamacrocycle Subunits: Structures and luminescence property

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Table S1 Selected Bond Lengths (Å) and Angles (°) for **1**

		1	
Cu(1)-N(3)	1.971(6)	Cu(1)-N(22)	1.978(6)
Cu(1)-N(14)	2.045(6)	Cu(1)-Cu(7)	2.962(2)
Cu(2)-N(23)	1.941(6)	Cu(2)-N(18)	1.962(6)
Cu(2)-N(8)	2.092(6)	Cu(2)-Cu(7)	2.990(2)
Cu(3)-N(24)	1.860(6)	Cu(3)-N(24)#1	1.860(6)
Cu(4)-N(19)	1.877(6)	Cu(4)-N(9)#2	1.882(6)
Cu(5)-N(2)	1.868(6)	Cu(5)-N(13)#3	1.868(6)
Cu(6)-N(17)	1.862(6)	Cu(6)-N(4)#4	1.864(6)
Cu(7)-N(7)	1.846(6)	Cu(7)-N(12)	1.854(6)
N(6)…O(1)	3.258(1)	N(6)…O(4b)	2.800(23)
N(15)…O(2)	2.945(1)	N(16)…O(3)	3.042(1)
N(3)-Cu(1)-N(22)	128.5(2)	N(3)-Cu(1)-N(14)	117.6(3)
N(22)-Cu(1)-N(14)	113.8(3)	N(23)-Cu(2)-N(18)	135.5(3)
N(23)-Cu(2)-N(8)	117.9(3)	N(18)-Cu(2)-N(8)	106.5(3)
N(24)-Cu(3)-N(24)#1	180.0(2)	N(19)-Cu(4)-N(9)#2	172.5(3)
N(2)-Cu(5)-N(13)#3	171.1(3)	N(17)-Cu(6)-N(4)#4	175.0(3)
N(7)-Cu(7)-N(12)	166.9(3)	N(6)-H…O(1)	156.2(0)
N(6)-H…O(4b)	166.4(0)	N(15)-H…O(2)	165.9(0)
N(16)-H…O(3)	142.0(0)		

[a] 1. (#1) -x, -y, -z+2; (#2) -x, -y, -z+1; (#3) -x, -y-1, -z+1; (#4) x+1, y, z; (#5) x-1, y, z.

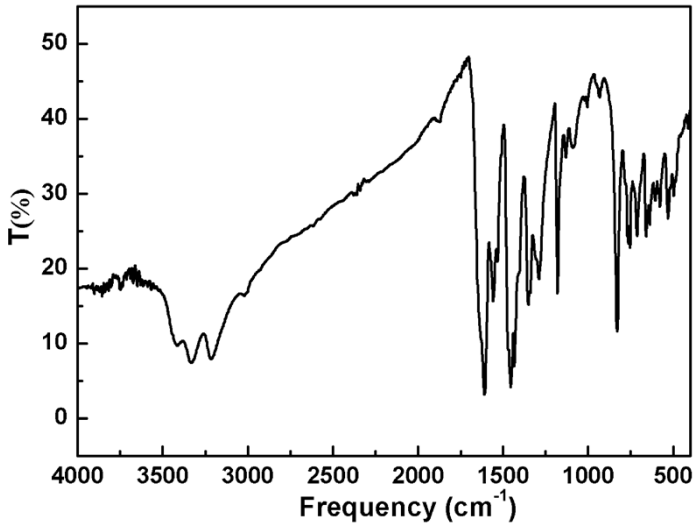

Fig. S1 The FT-IR spectrum of **1**.

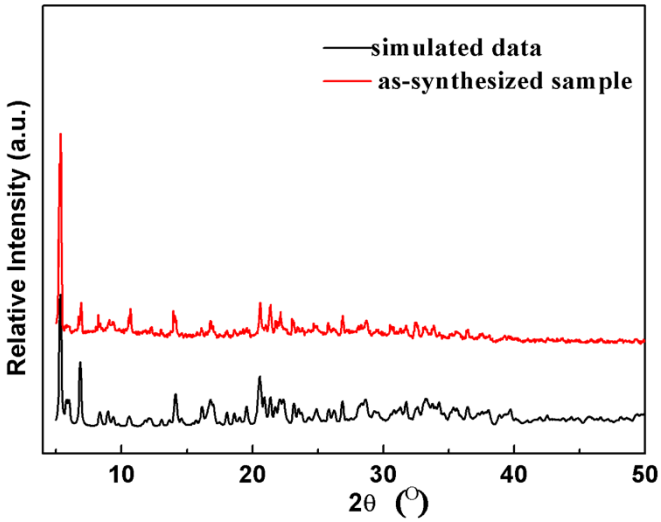

Fig. S2 XRPD pattern simulated from a single crystal of **1** (dark), and that of as-synthesized sample of **1** (red).

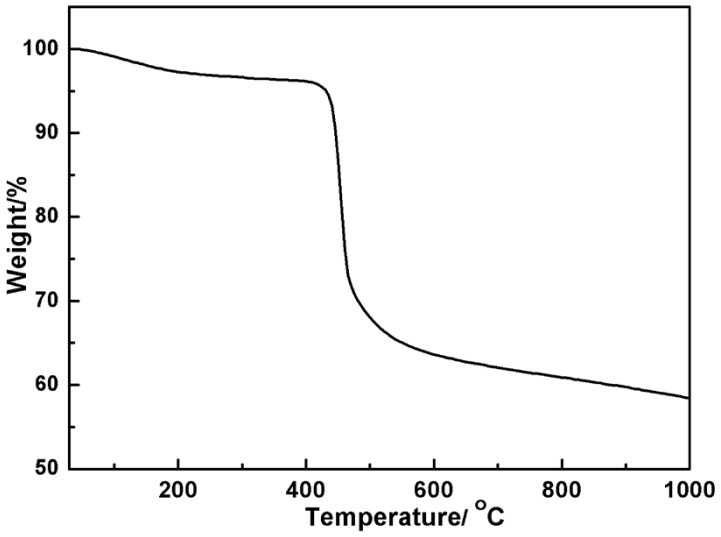

Fig. S3 The thermogravimetric analysis(TGA) of **1**.

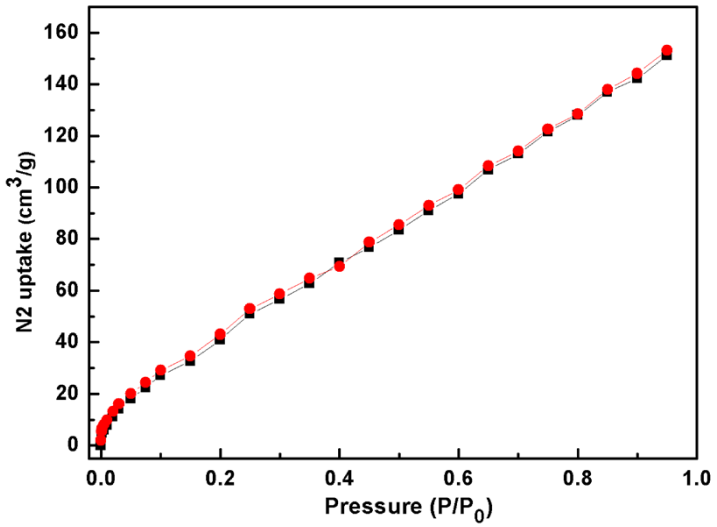

Fig. S4 The N_2 adsorption (black line) and desorption (red line) isotherms of dry sample **1**.