Supporting Information

Structural diversity and magnetic property of five copper-organic frameworks containing one-, two-, and three-types of organic ligands†

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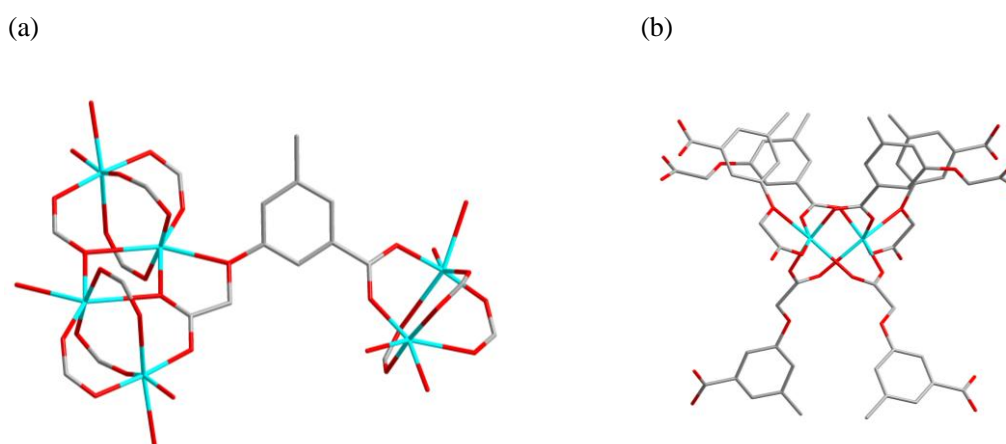
(a) (b)

Figure S1. (a) In **1**, one CMA^{2-} connects three paddle-wheel units; (b) One paddle-wheel unit connects six CMA^{2-} ligands.
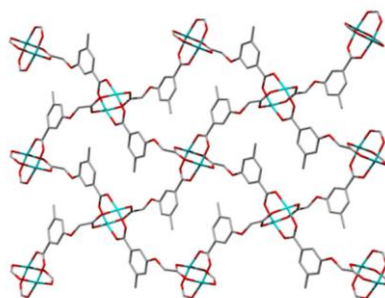

Figure S2. 2D layer structure of **2** consists of Cu^{2+} and CMA^{2-}. (Cu: cyan; C: grey; O: red; N: blue)
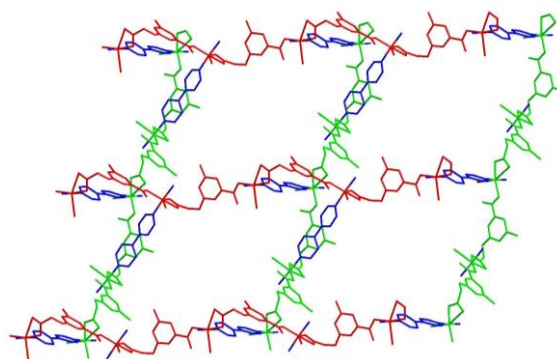
Figure S3. The interconnection between layers in **3** (Layer A: red; layer B: green; bpy: blue)
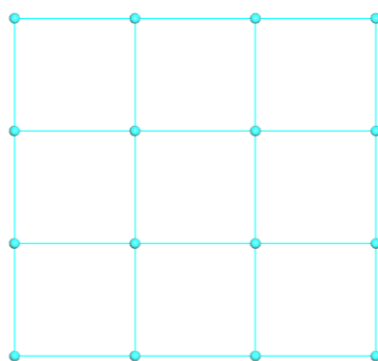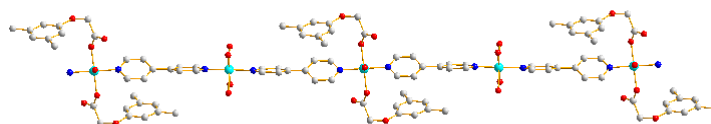

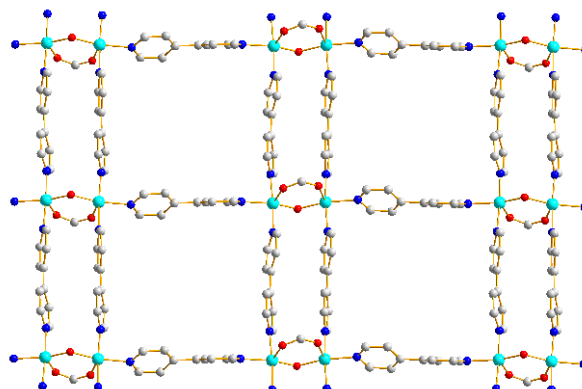**Figure S4.** Topological structure of **4**.

(a)

(b)

Figure S5. In compound 5, (a) 1D chain along the *c* axis; (b) 2D sheet along the [001] direction.
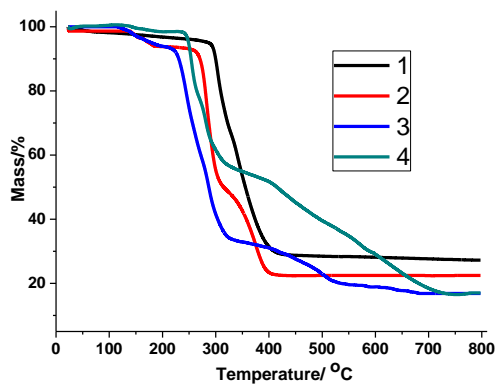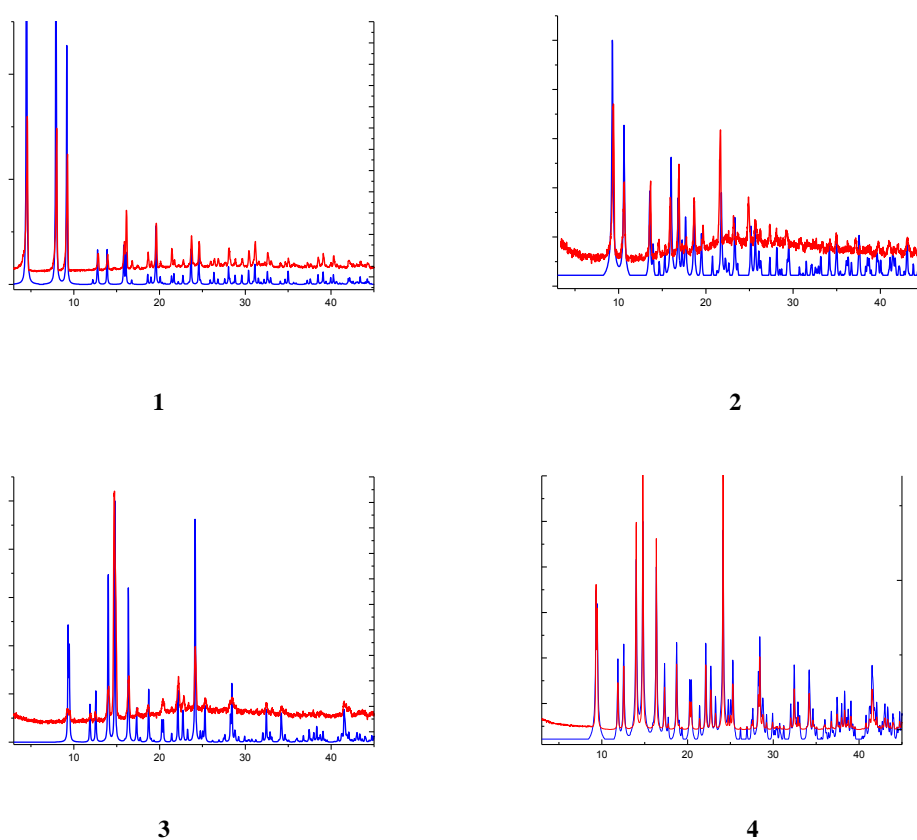Cu: cyan; C: grey; O: red; N: blue.

Figure S6. The TGA curves of **1**-**4**.

1

2

3

4

Figure S7. The XRPD patterns of **1**-**4** (red: experiment; blue: simulated)

Crystallographic Studies In **1**, the squeezed electron number is 98 in one cell, which is consistent with 0.8 free H_2O. [12*0.8*10 = 96], corresponding to the molecular formula $\{[Cu(CMA)]\cdot 0.8H_2O\}_n$.

3