Supporting Information

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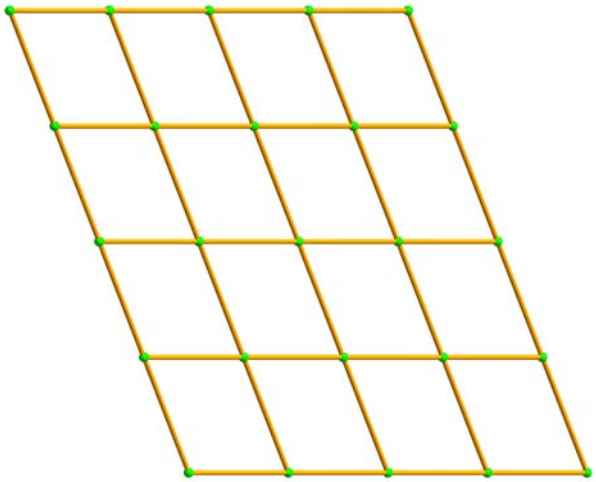

Fig. S1 The (4,4) net where dinuclear SBUs can be viewed as nodes and Hbtca$^-$(b) anions as connectors

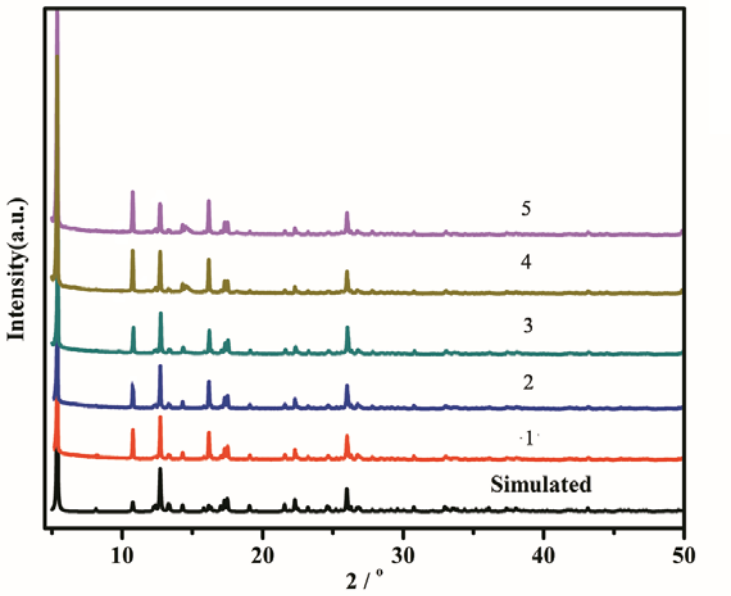

Fig. S2 XRD curves of 1–5

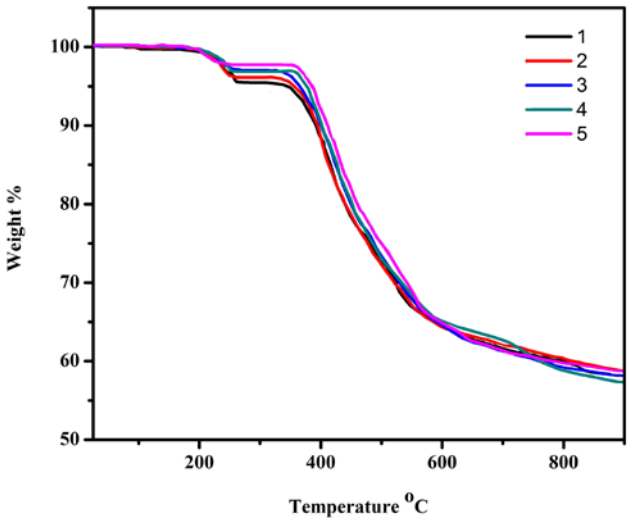

Fig. S3 The TG curves of 1–5.

Table S1 Hydrogen Bond Lengths (Å) and Bond Angles (°) in **1**−**5**[a]

Compound **1**				
D—H···A	d(D—H)	d(H···A)	d(D···A)	<(DHA)
O1—H2W···O7	0.85	1.96	2.766	157
O1—H1W···O2$^{\#1}$	0.85	1.96	2.755	155
N3—H3···N4$^{\#2}$	0.86	2.05	2.869 (6)	159
N3—H3···N5$^{\#2}$	0.86	2.57	3.196 (6)	130
N6—H6···N2$^{\#3}$	0.86	2.22	3.036 (5)	159

[a]Symmetry codes: #1 −x+1, y+1/2, −z−1/2; #2 −x, −y+1, −z+1; #3 x, y+1, z.

Compound **2**				
D—H···A	d(D—H)	d(H···A)	d(D···A)	<(DHA)
O1—H2W···O7	0.85	1.96	2.765 (4)	157
O1—H1W···O2$^{\#1}$	0.85	1.97	2.761 (4)	155
N3—H3···N4$^{\#2}$	0.86	2.04	2.861 (6)	160
N3—H3···N5$^{\#2}$	0.86	2.55	3.176 (6)	131
N6—H6···N2$^{\#3}$	0.86	2.20	3.006 (6)	157

[a]Symmetry codes: #1 −x+1, y+1/2, −z−1/2; #2 −x, −y+1, −z+1; #3 x, y+1, z.

Compound **3**				
D—H···A	d(D—H)	d(H···A)	d(D···A)	<(DHA)
O1—H2W···O7	0.85	1.98	2.782 (6)	157
O1—H1W···O2$^{\#1}$	0.85	1.98	2.781 (5)	156
N3—H3···N4$^{\#2}$	0.86	2.07	2.892 (8)	160
N3—H3···N5$^{\#2}$	0.86	2.57	3.201 (7)	131
N6—H6···N2$^{\#3}$	0.86	2.19	3.001 (7)	158

[a]Symmetry codes: #1 −x+1, y+1/2, −z−1/2; #2 −x, −y+1, −z+1; #3 x, y+1, z.

Compound **4**				
D—H···A	d(D—H)	d(H···A)	d(D···A)	<(DHA)
O1—H2W···O7	0.85	1.96	2.765 (3)	158
O1—H1W···O2$^{\#1}$	0.85	1.98	2.773 (3)	156
N3—H3···N4$^{\#2}$	0.86	2.04	2.864 (4)	160
N3—H3···N5$^{\#2}$	0.86	2.53	3.159 (4)	130
N6—H6···N2$^{\#3}$	0.86	2.19	3.000 (4)	158

[a]Symmetry codes: #1 −x+1, y+1/2, −z−1/2; #2 −x, −y+1, −z+1; #3 x, y+1, z.

Compound **5**				
D—H···A	d(D—H)	d(H···A)	d(D···A)	<(DHA)
O1—H2W···O7	0.85	1.96	2.756 (3)	158
O1—H1W···O2$^{\#1}$	0.85	1.97	2.766 (3)	157
N3—H3···N4$^{\#2}$	0.86	2.04	2.863 (4)	160
N3—H3···N5$^{\#2}$	0.86	2.53	3.148 (4)	130
N6—H6···N2$^{\#3}$	0.86	2.17	2.989 (4)	158