

Supplementary material, belonging to the paper:

2D-1D Structural Phase Transformation of Co(II) 3,5-Pyridinedicarboxylate Frameworks with Chromotropism

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Table S1. Hydrogen bonds of compounds **1** and **2**

D-H...A ^a	D-H	H...A/Å	D...A/Å	D-H...A/°
Compound 1				
O(3)–H(1)...O(2) ⁱ	0.73	2.07	2.7946	174
O(3)–H(2)...O(1) ⁱⁱ	0.76	2.01	2.7708	179
(i) -x, -y, -z ; (ii) -1/2+x, 1/2-y, -1/2+z				
Compound 2				
O(1)–H(4)...O(4) ⁱ	0.85	1.82	2.6507	166
O(1)–H(5)...O(5) ⁱⁱ	0.72	1.98	2.6673	160
O(2)–H(6)...O(5) ⁱⁱⁱ	0.85	1.99	2.8318	172
O(2)–H(7)...O(9)	0.84	2.05	2.8772	166
O(8)–H(8)...O(3) ⁱ	0.81	1.92	2.7266	173
O(8)–H(9)...O(3) ^{iv}	0.93	1.82	2.7335	169
O(7)–H(10)...O(4) ^v	0.88	2.56	3.0544	116
O(7)–H(11)...O(9)	0.87	1.99	2.8499	172
O(9)–H(12)...O(3) ^v	0.90	2.01	2.8929	169
O(9)–H(13)...O(4) ⁱ	0.85	2.09	2.8986	158
^a Symmetry codes: (i) 1/2-x,1/2+y,1/2-z; (ii) 1/2+x,1/2-y,1/2+z; (iii) 1/2+x,-1/2-y,1/2+z; (iv) 1/2+x,1/2-y,-1/2+z; (v) 1+x,y,z; (vi) 1-x,-y,-z				

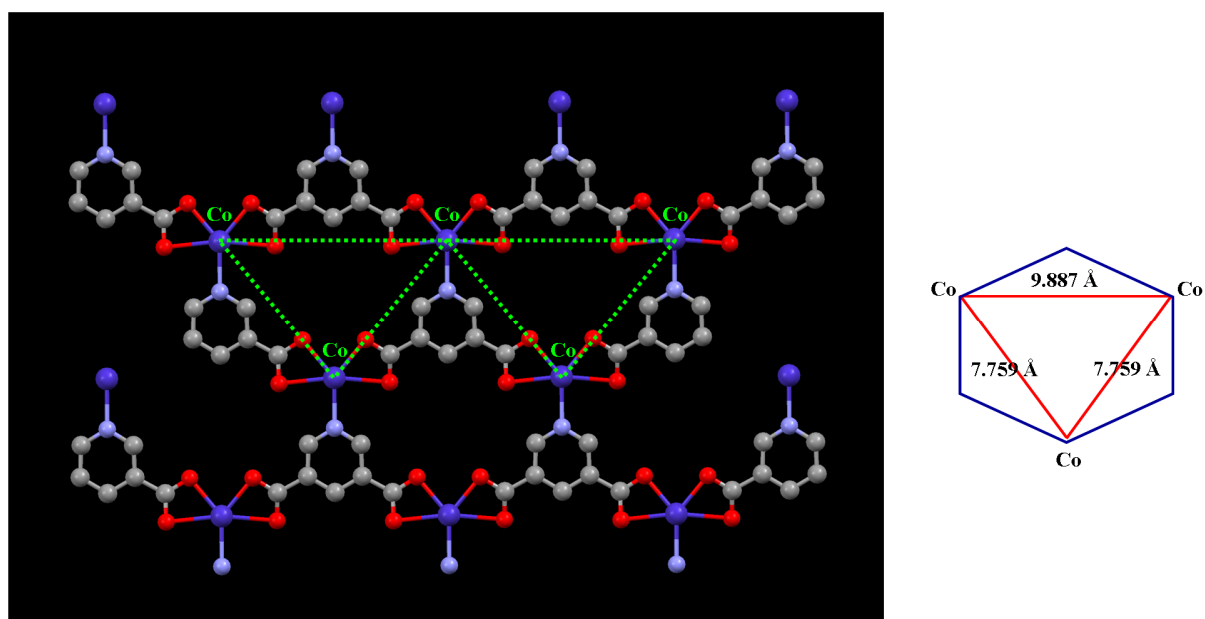


Fig. S1. An infinite 2D honeycomb network showing the isosceles triangle formed by the three metal centers with the edge lengths (Co···Co separation) of 9.887(1) and 7.759(1) Å.

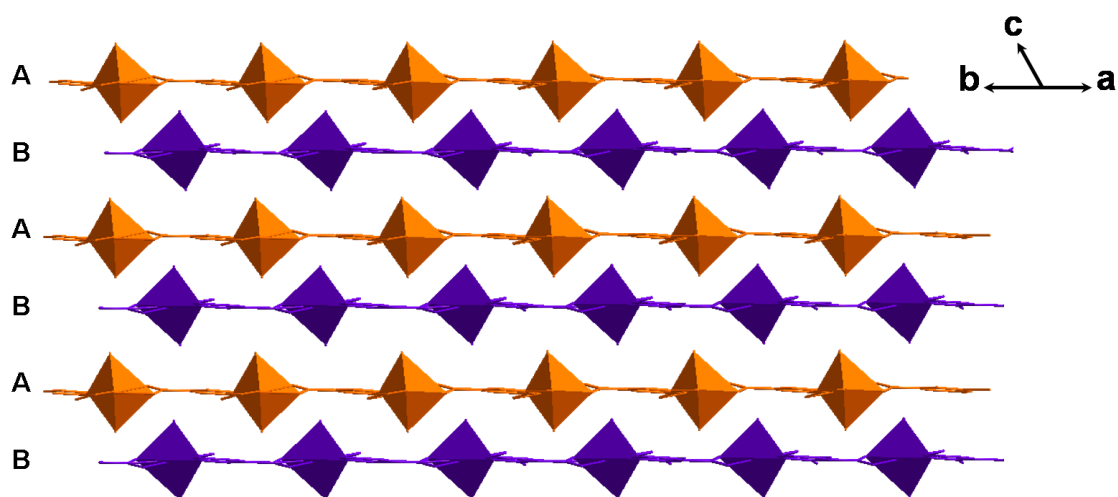
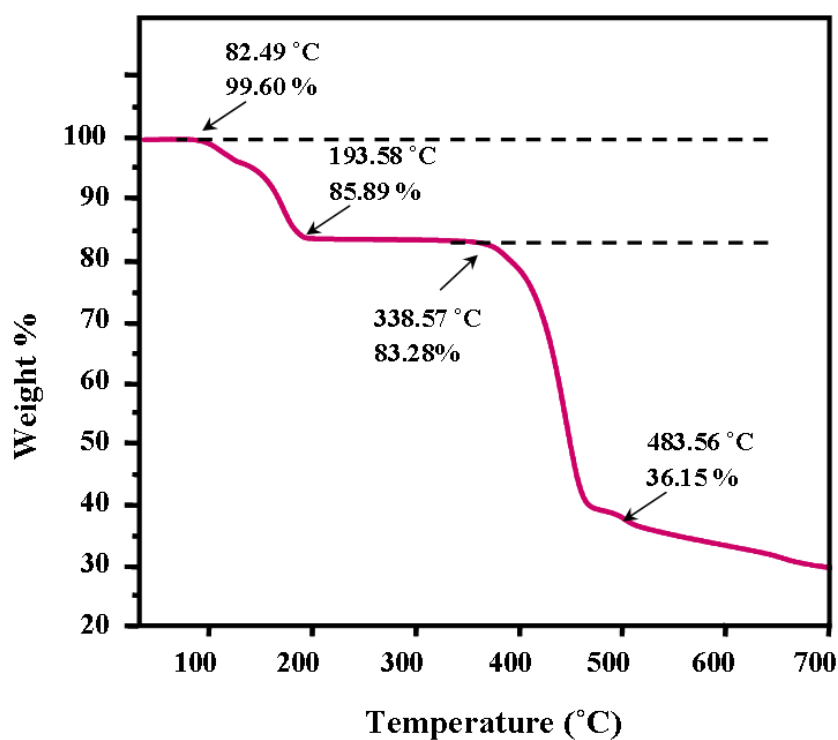


Fig. S2. Packing of **1** in which 2D layers are packed orderly in an ABAB-sequence view parallels the *ab* plane.

(a)



(b)

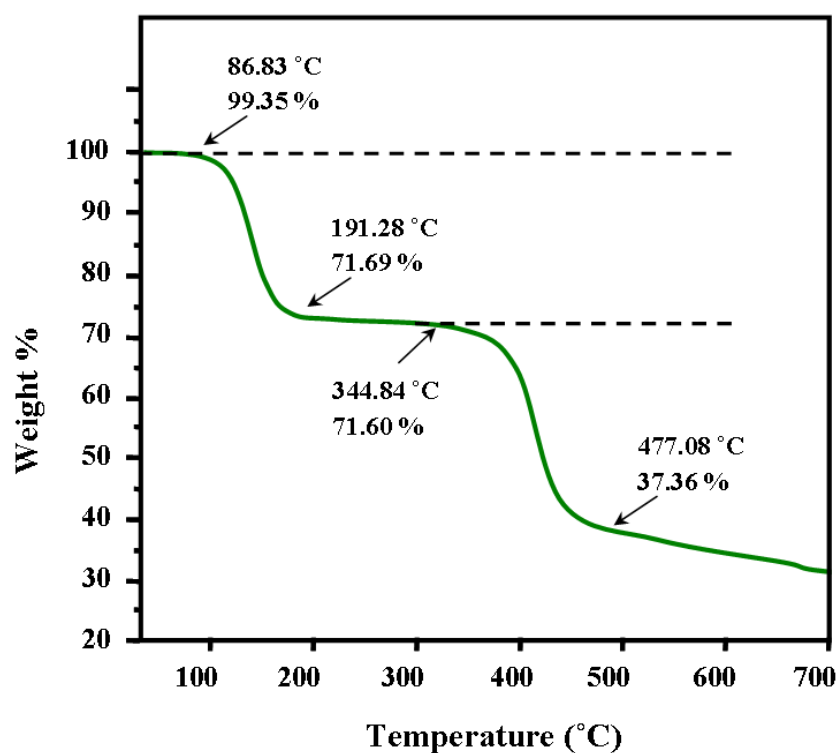


Fig. S3. TGA curves of compounds (a) 1 and (b) 2.