

Supporting Information

Two Temperature-induced Isomers of Metal-Carboxylate Frameworks Based on Different Linear Trinuclear $\text{Co}_3(\text{RCOO})_8$ Clusters exhibiting Different Magnetic Behaviours

Xiao-Feng Wang,^{a,b} Yue-Biao Zhang,^a Wei Xue,^a Xiao-Lin Qi,^a and Xiao-Ming Chen^{a*}

^a MOE Key Laboratory of Bioinorganic & Synthetic Chemistry, State Key Laboratory of Optoelectronic Materials, School of Chemistry and Chemical engineering, Sun Yat-Sen university, Guangzhou 510275, P. R. China.

E-mail: cxm@mail.sysu.edu.cn

^b School of Chemistry and Chemical engineering, University of South China, Hengyang 421001, P. R. China.

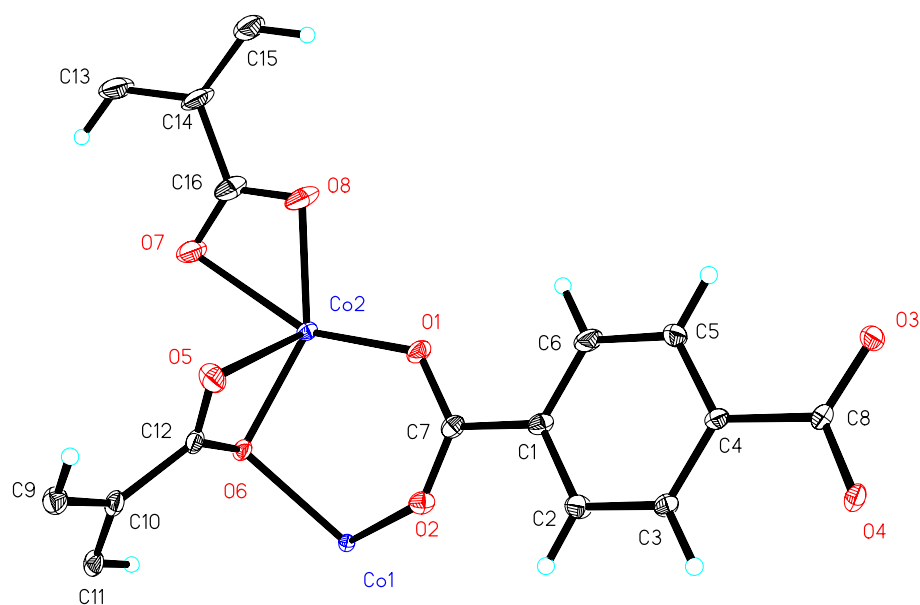


Fig. S1. The asymmetric coordination unit in **1** (All guests were omitted for clarity)

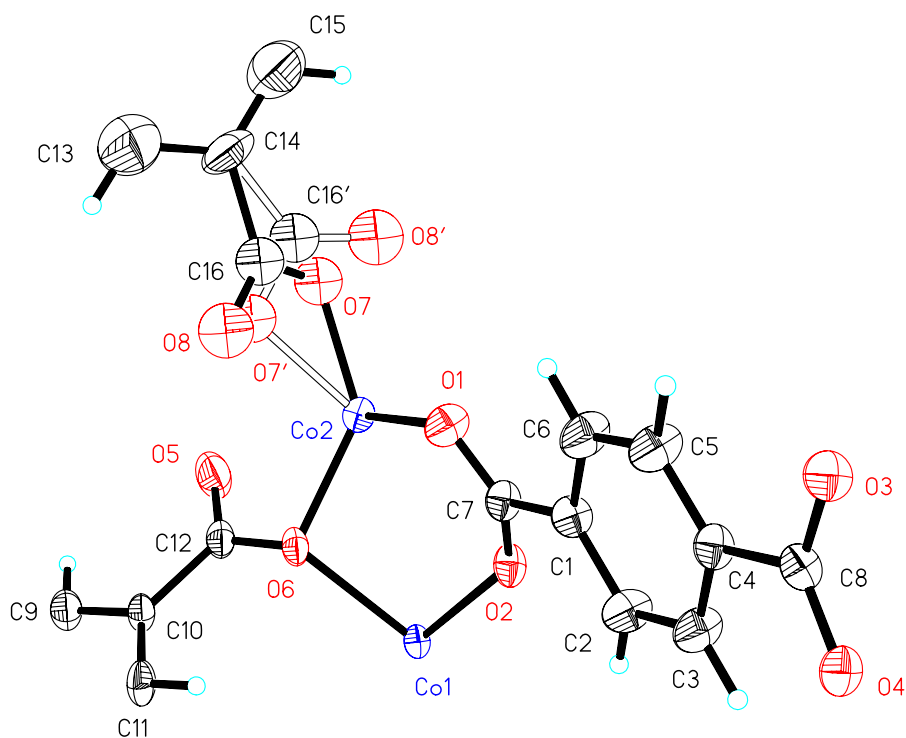


Fig. S2. The asymmetric coordination unit in **2** (The carboxylate group of the 1,4-bdc ligand as pillar is 2-fold disordered; all guests were omitted for clarity)

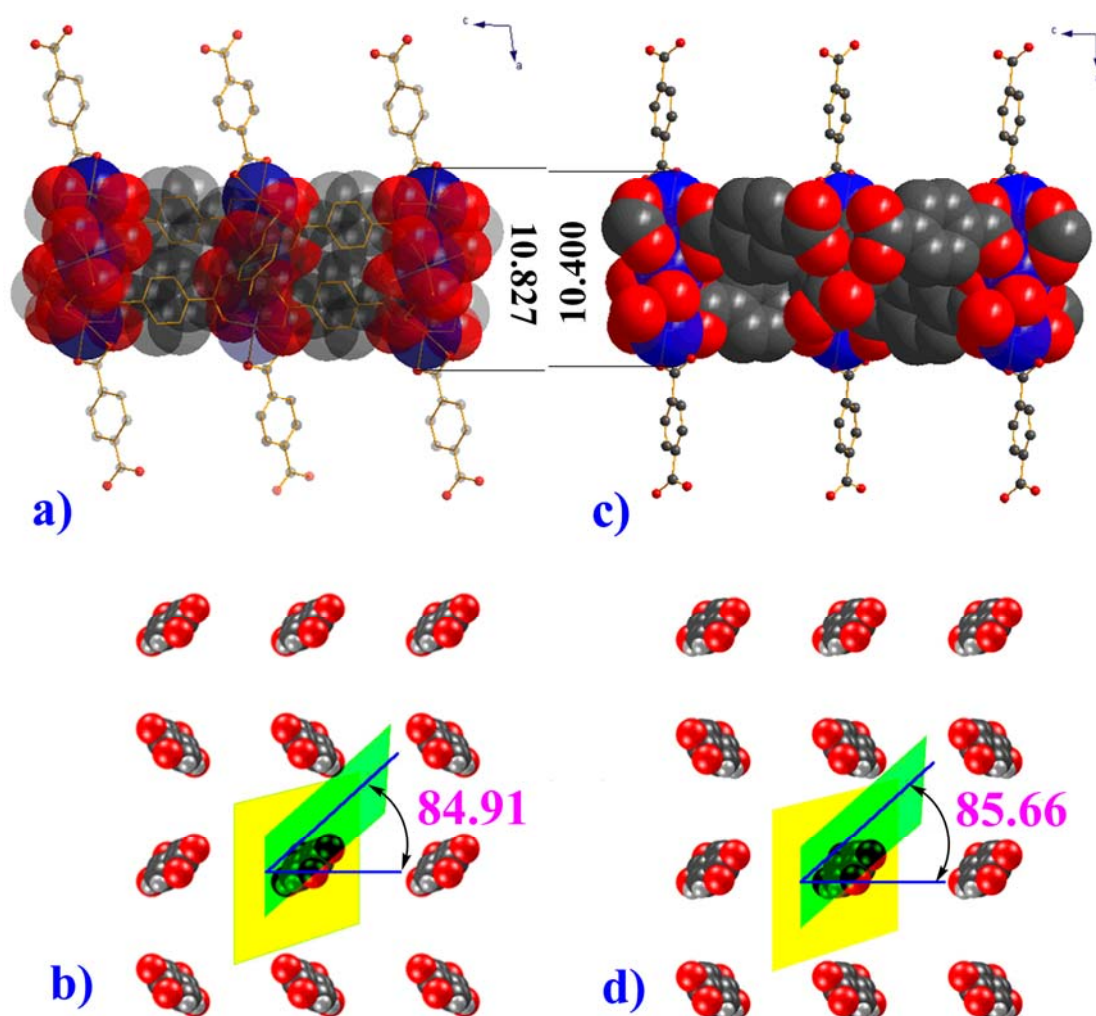


Fig. S3. The dissimilar thickness of the layers in **1** (a) and **2** (c); the slight different slant angles between the pillar bdc and the layer in *c*-axis in **1** (b) and **2** (d).

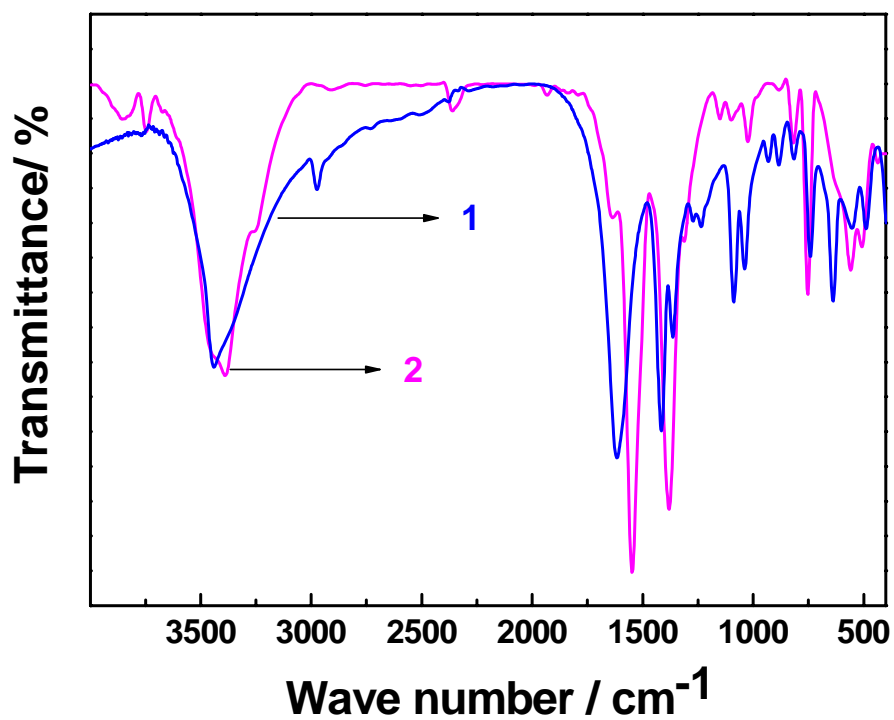


Fig. S4. The FT-IR spectra of **1** (blue) and **2** (pink).

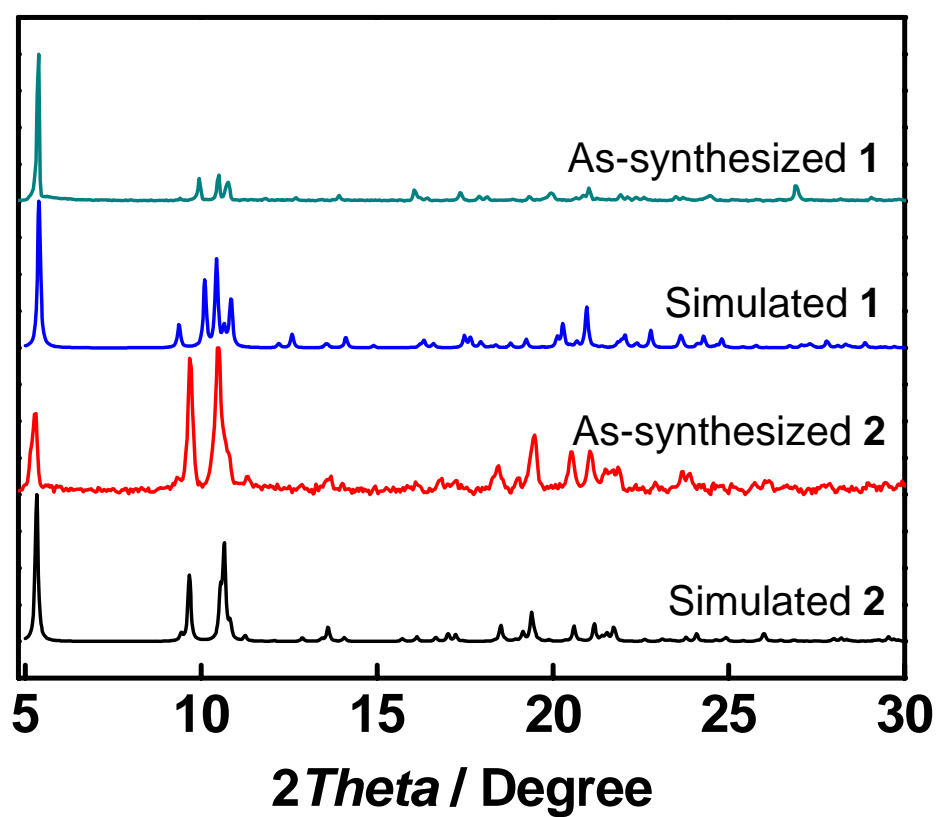


Fig. S5. Calculated and experimental powder X-ray diffraction patterns of **1** and **2**.