

# Bottom-Up Synthesis of Coordination Polymers based on Carborane backbones and $\text{Cu}_2(\text{CO}_2)_4$ Paddle-Wheel: Ligand metathesis with Metallotetrons

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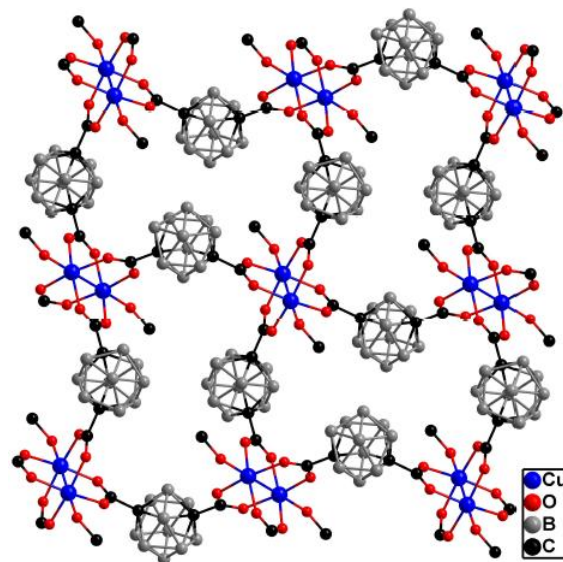


Fig. S1 Crystal structure of compound 3

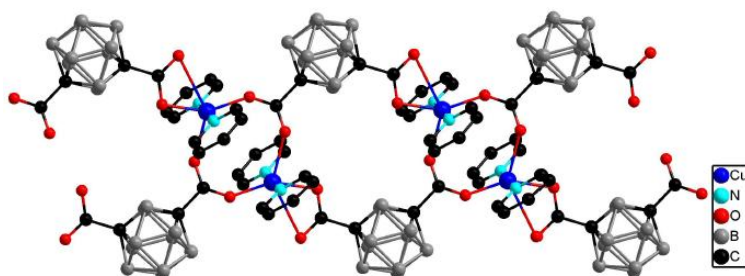


Fig. S2 Crystal structure of compound 4

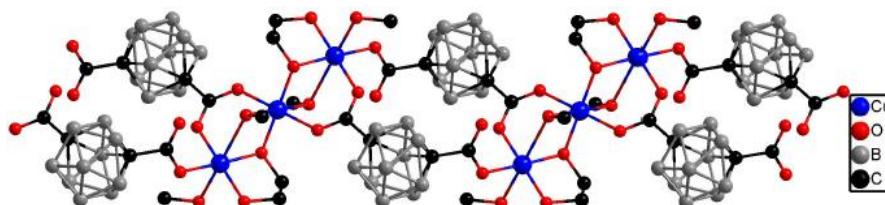


Fig. S3 Crystal structure of compound 7

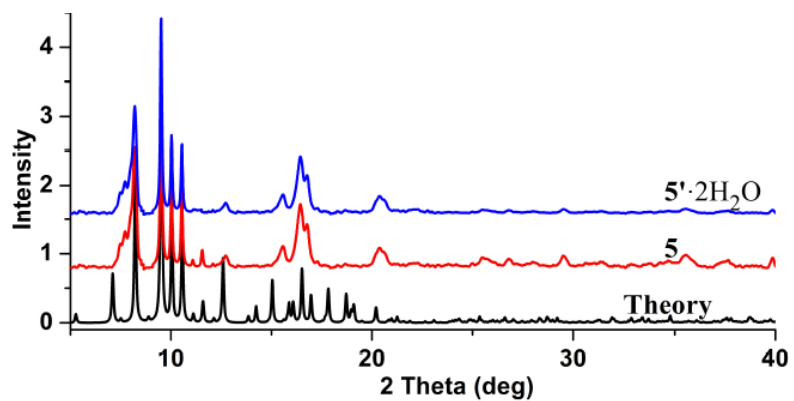


Fig. S4 PXR D patterns for different samples

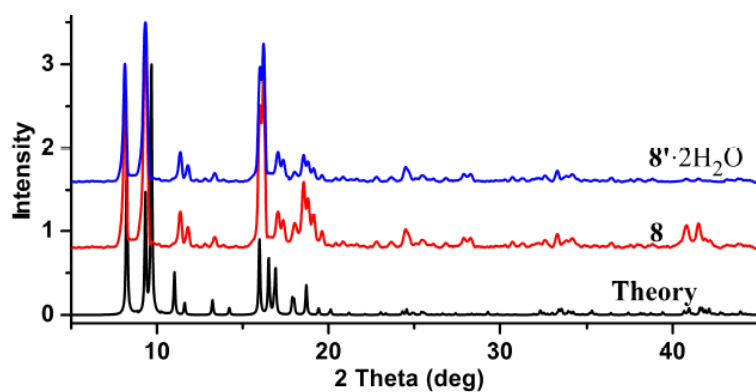


Fig. S5 PXR D patterns for different samples

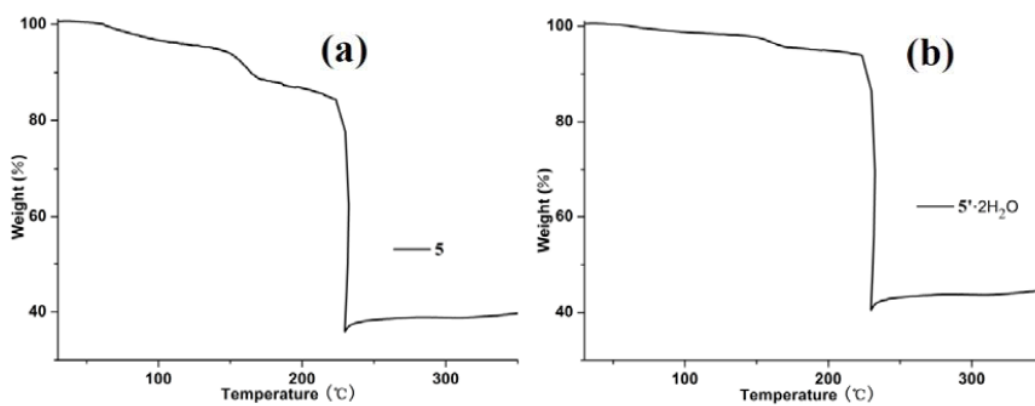


Fig. S6 TGA of compound 5 (a) and 5'·2H<sub>2</sub>O (b)

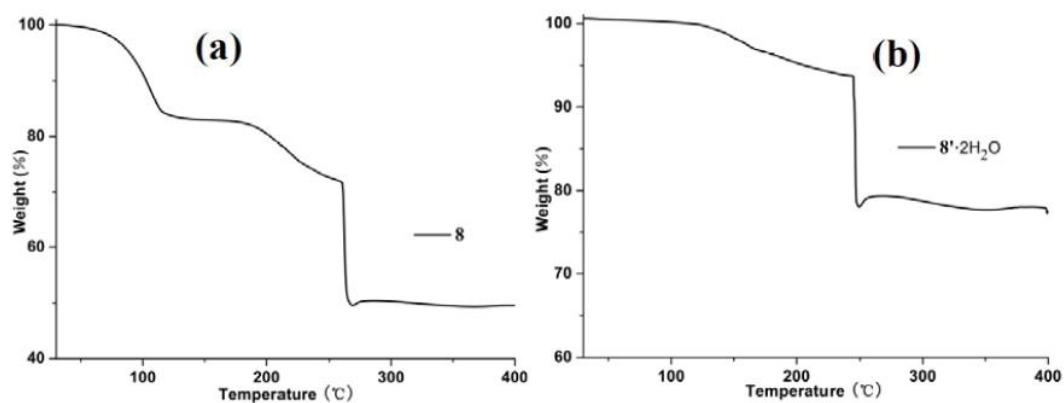


Fig. S7 TGA of compound **8** (a) and **8'·2H<sub>2</sub>O** (b)

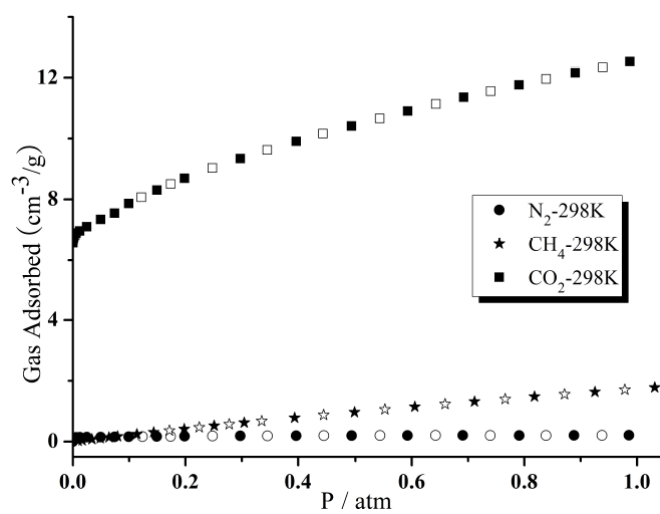


Fig. S8 Gas sorption curves of compound **5'** at 298 K

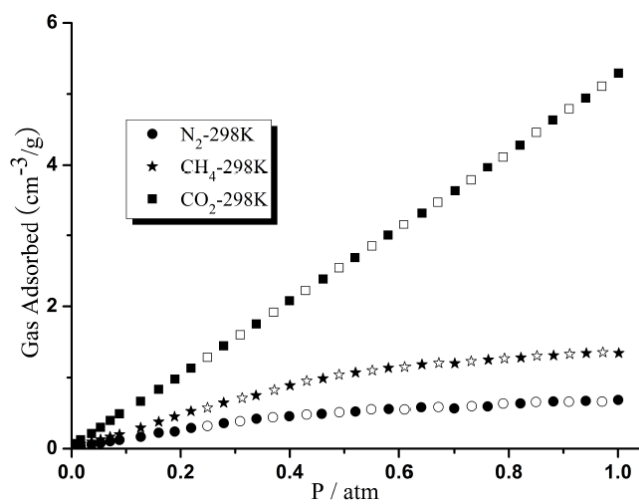
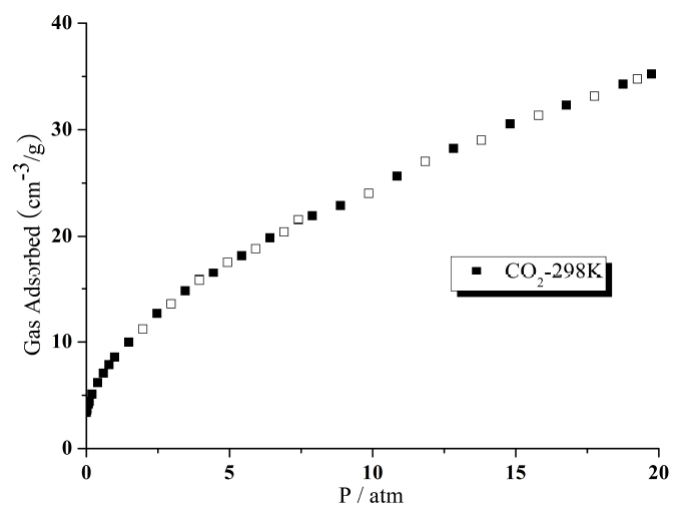


Fig. S9 Gas sorption curves of compound **8'** at 298 K



**Fig. S10** CO<sub>2</sub> sorption curve of compound 5' at 298 K