

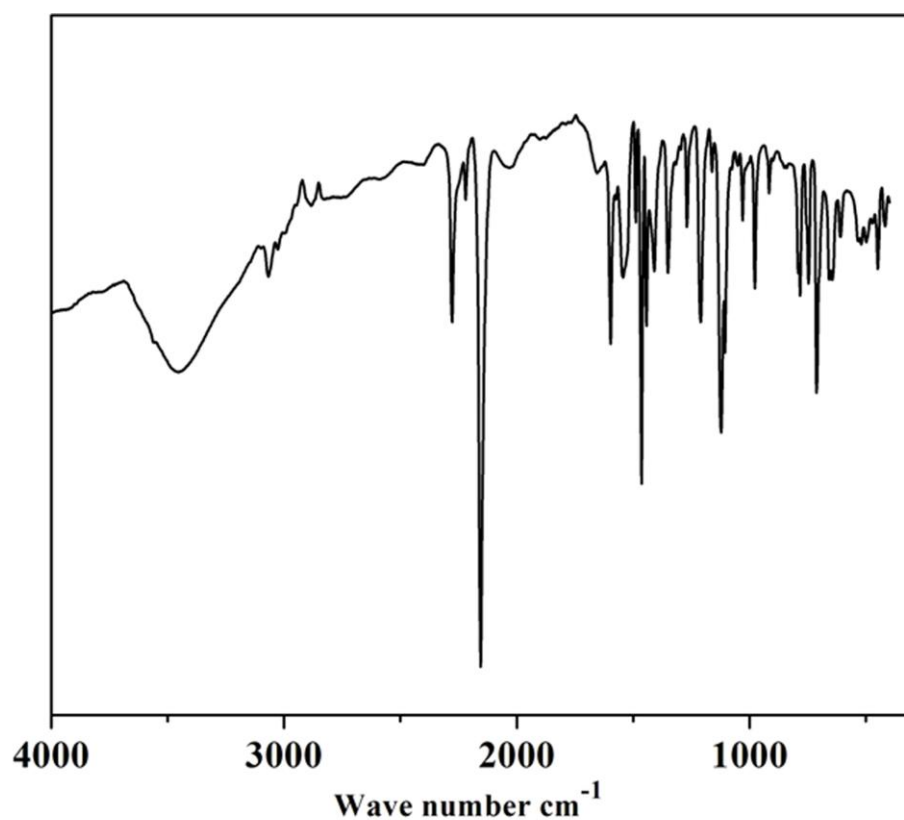
# **Assembly of trinuclear and tetranuclear building units of $\text{Cu}^{2+}$ towards two 1D magnetic systems: Synthesis and magneto-structural correlations**

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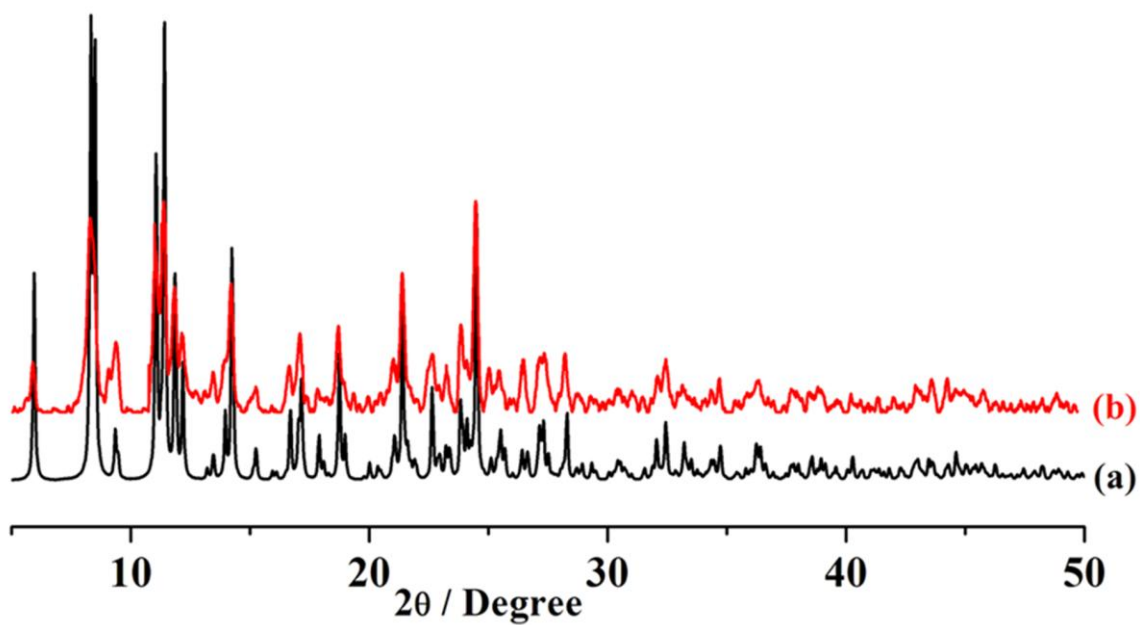
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**Fig. S1** FT-IR spectra for **1**.



**Fig. S2** PXRD pattern of compound **1**: (a) simulated; (b) bulk as-synthesized

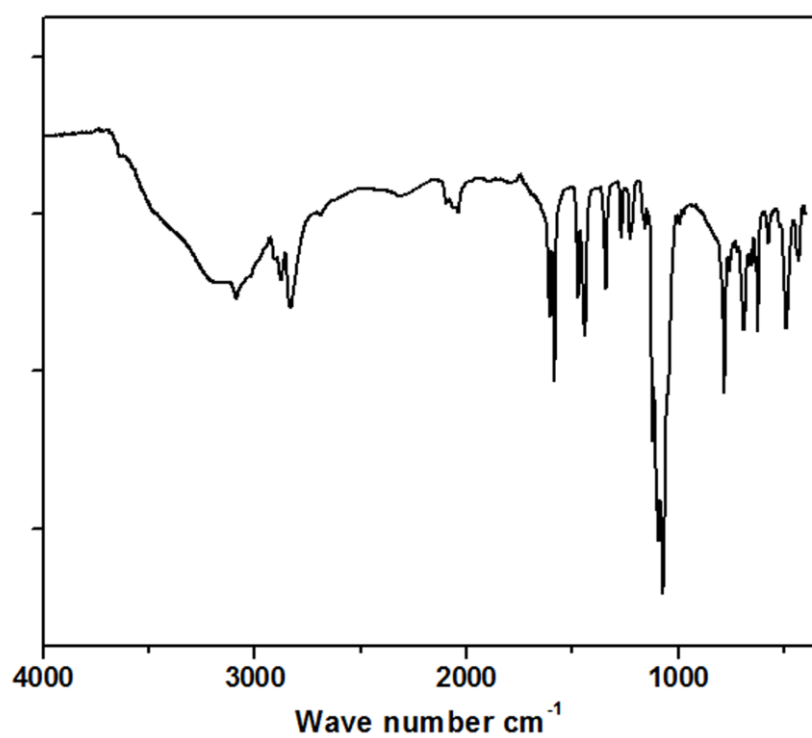


Fig. S3 FT-IR spectra for 2.

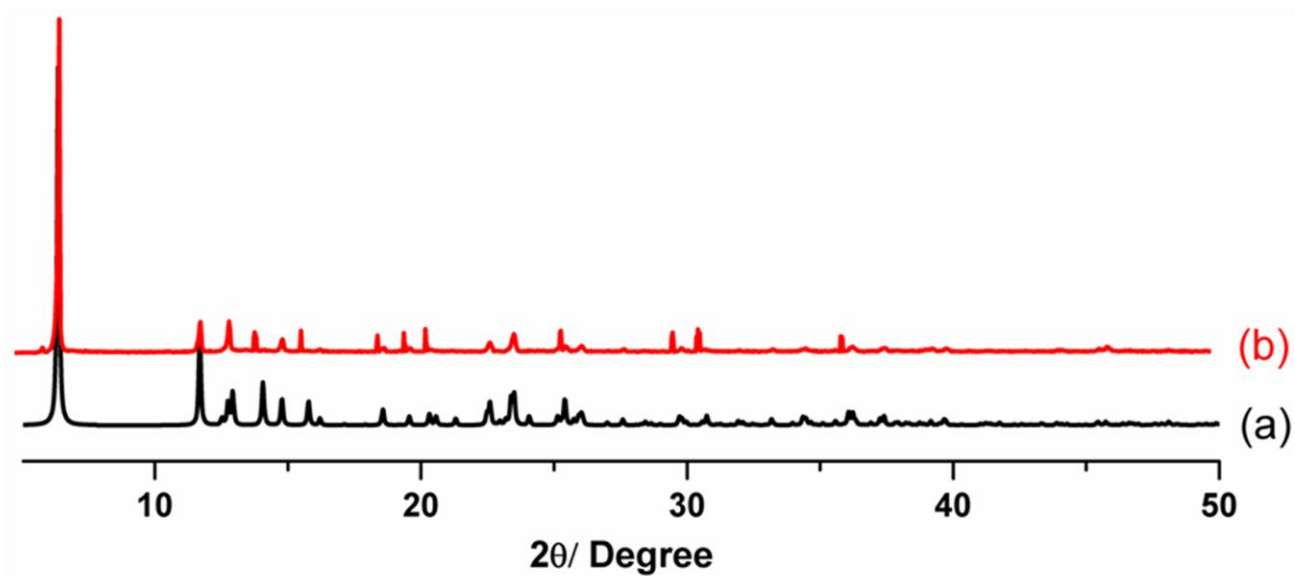
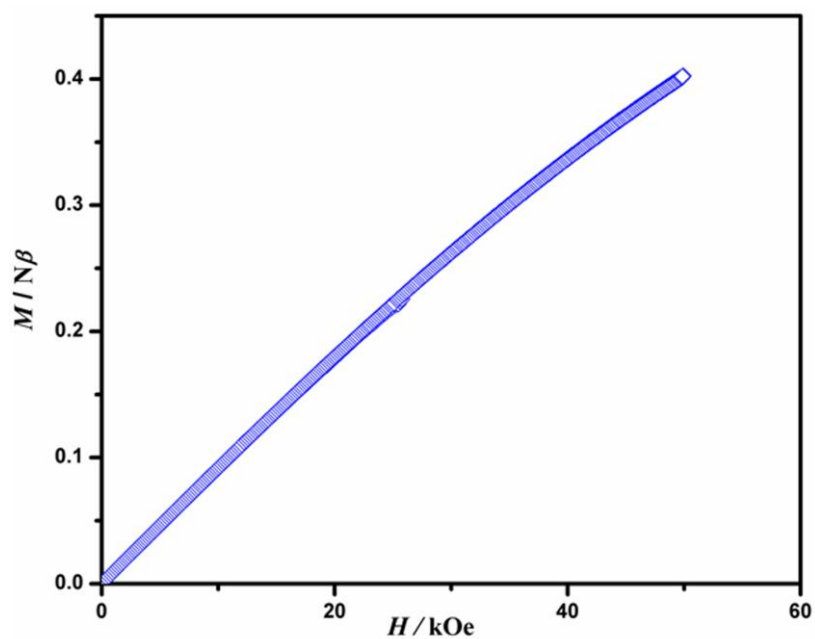
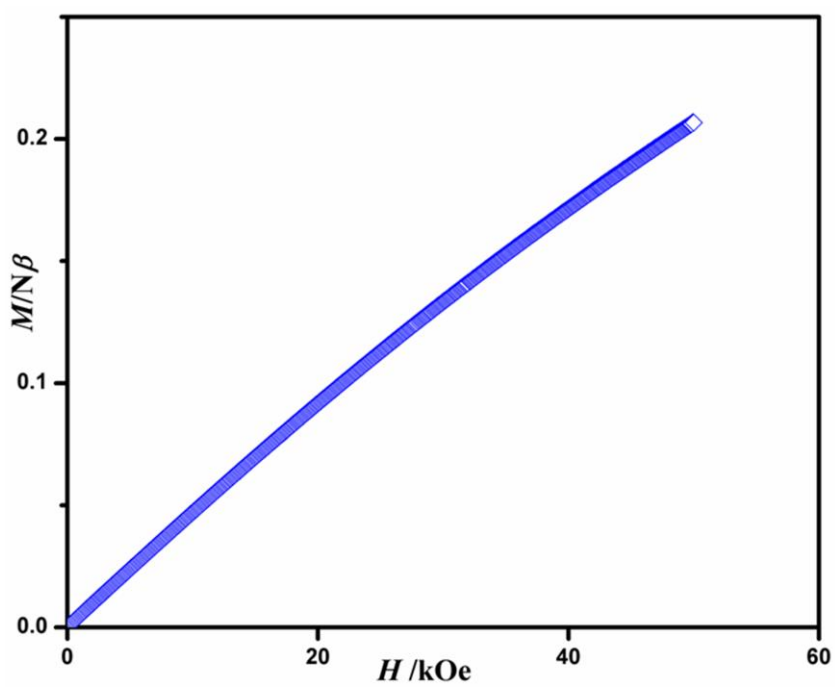


Fig. S4 PXRD pattern of compound 2: (a) simulated; (b) bulk as-synthesized



**Fig. S5** The  $M$  vs.  $H$  curve for **1** at 5 K.



**Fig. S6** The  $M$  vs.  $H$  curve for **2** at 5 K