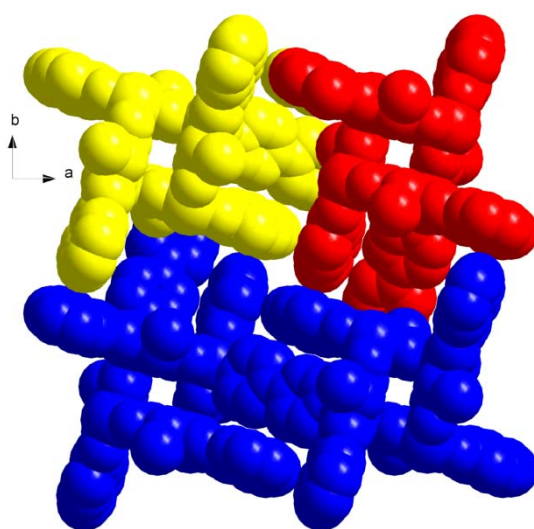


## Supporting Information

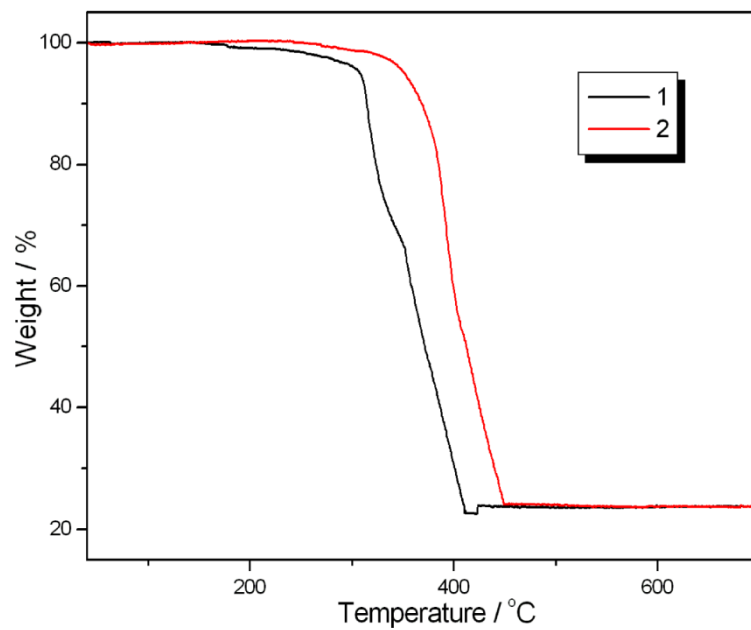
### Rational design of two bpy-bridged 3D and 2D Co<sup>II</sup> open frameworks with similar amino-acid-based Schiff bases

Zong-Ze Li, Lin Du, Jie Zhou, Ming-Rong Zhu, Fen-Hua Qian, Jing Liu, Peng Chen, Qi-Hua Zhao\*

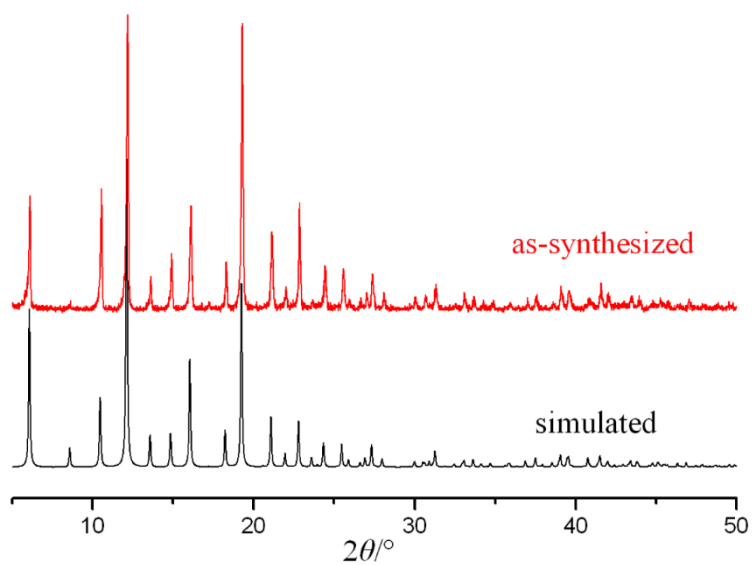
*Department of Chemistry, Key Laboratory of Medicinal Chemistry for Natural Resource, Ministry of Education, Yunnan University, Kunming, 650091, P.R.China. E-mail: qhzhao@ynu.edu.cn; Fax: +86 871 5032929; Tel: +86 871 5032929.*



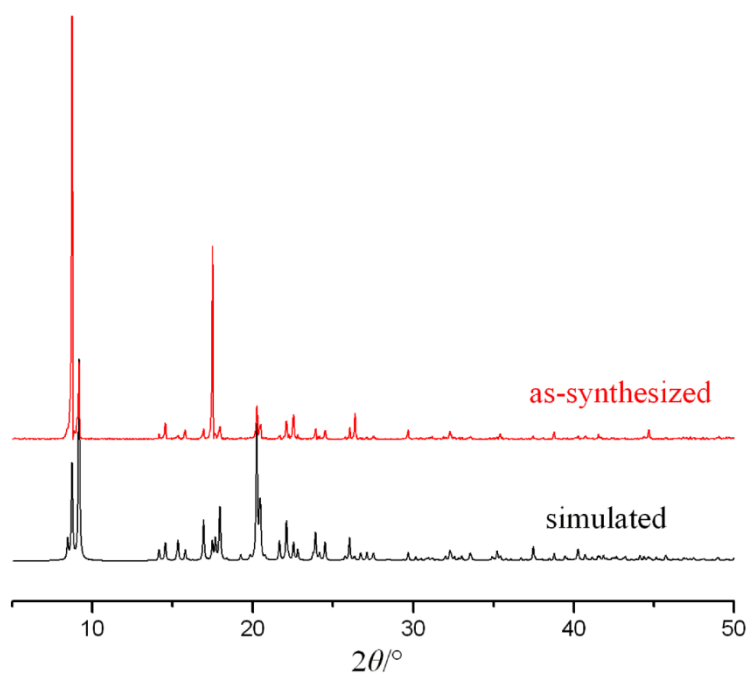
**Fig. S1** A space-filling model of the 3-fold interpenetration in complex **1**, showing the open square channels with dimensions of  $\sim 4.9 \times 4.9 \text{ \AA}$  along the *c* direction (water molecules omitted).



**Fig. S2** TG curves for complexes **1 – 2**.

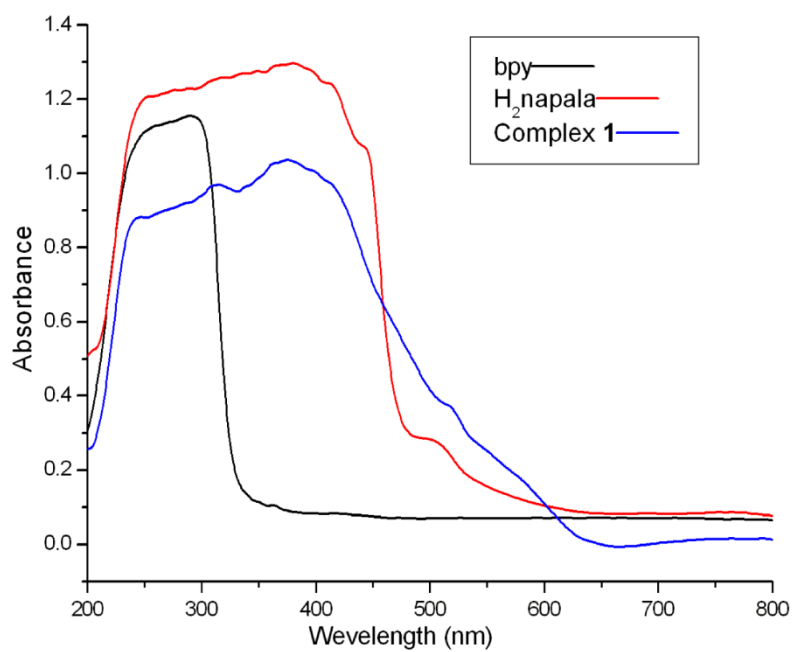


(a)

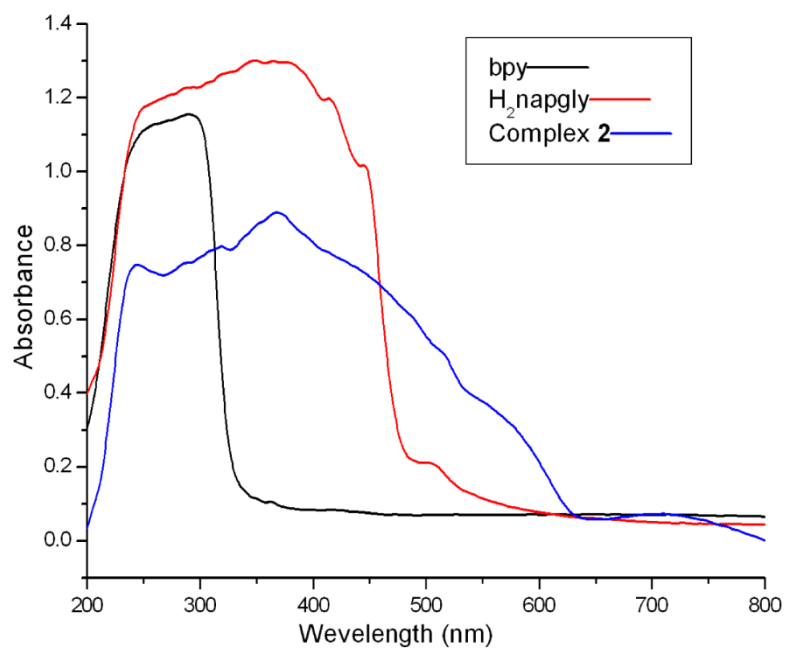


(b)

**Fig. S3** Simulated (black) and as-synthesized (red) X-ray powder diffraction patterns for **1** (a) and **2** (b).



(a)



(b)

**Fig. S4** Solid-state UV-Vis absorption spectra of complexes **1** (a) and **2** (b) as well as the free organic ligands with BaSO<sub>4</sub> as the background.