

## **An open-framework magnesium isonicotinate with a rutile-type topology and its structural analogue**

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**Figure captions:**

**Figure S1.** IR spectrum of compound **1**.

**Figure S2.** Experimental and simulated powder XRD patterns of compound **1** (Co K $\alpha$  radiation).

**Figure S3.** TGA curve of compound **1**.

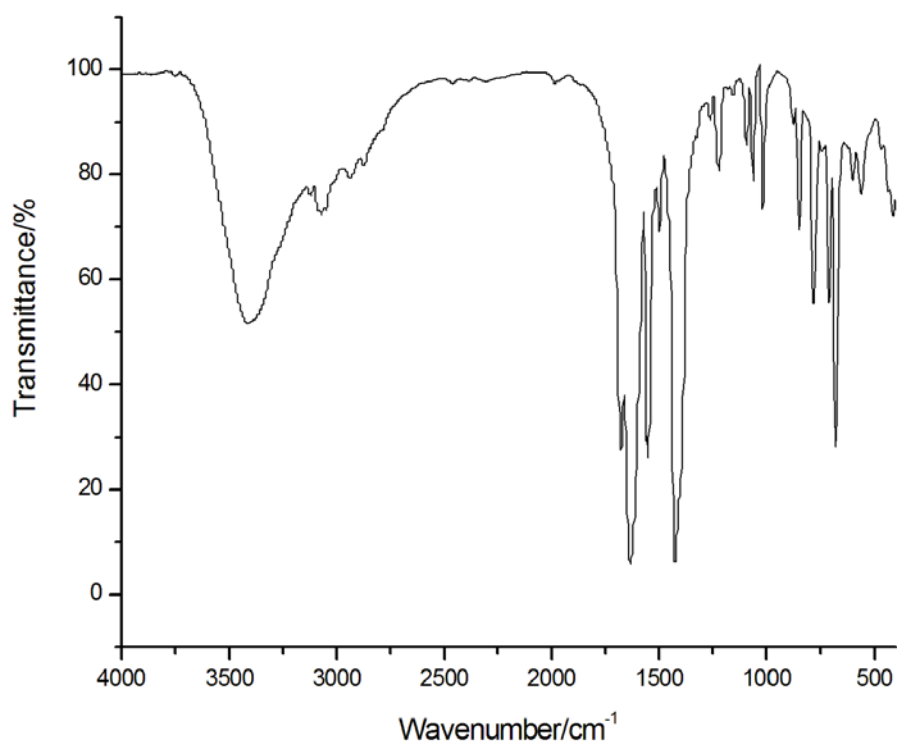
**Figure S4.** IR spectrum of compound **2**.

**Figure S5.** Experimental and simulated powder XRD patterns of compound **2** (Co K $\alpha$  radiation).

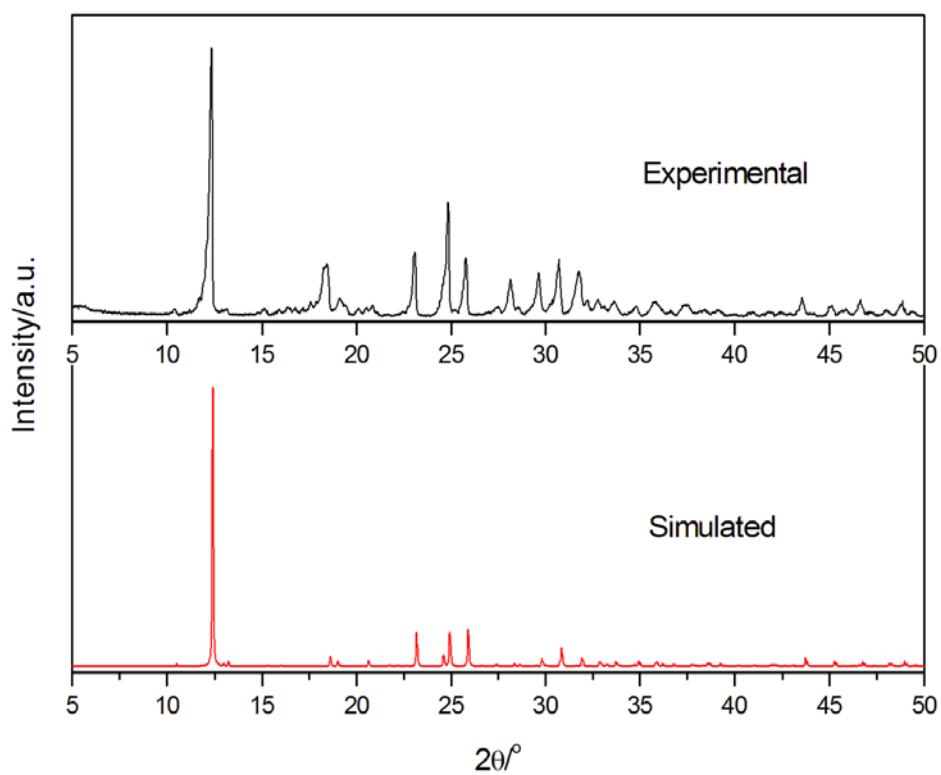
**Figure S6.** Powder XRD patterns of compound **2** after heating at 450 °C for 1 h

**Figure S7.** TGA curve of compound **2**.

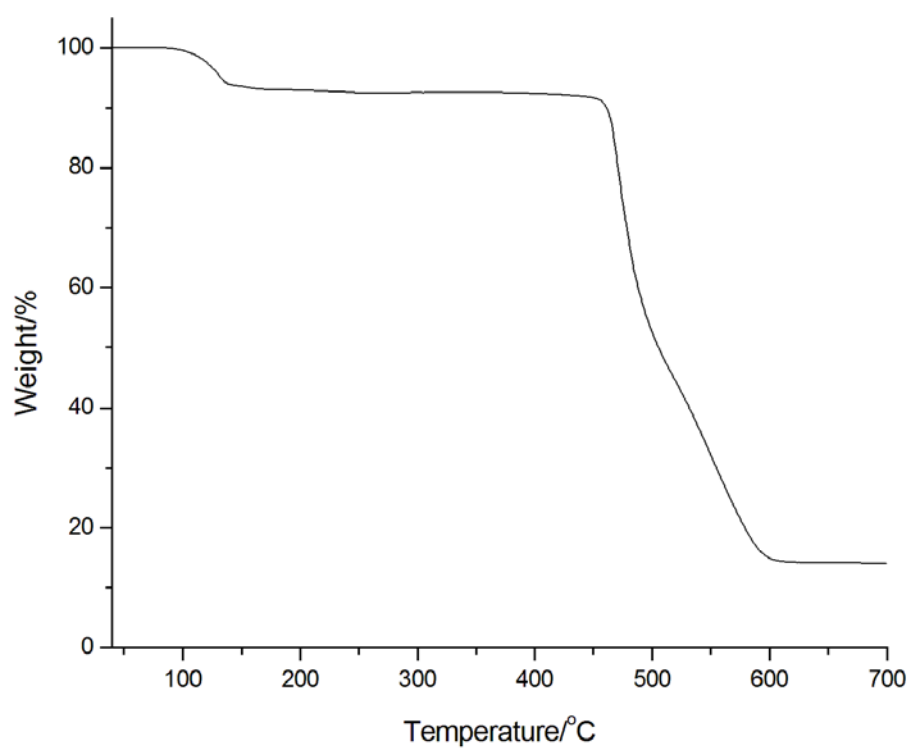
**Figure S8.** Hysteresis loop of electric polarization on a large single crystal of compound **1** at room temperature..



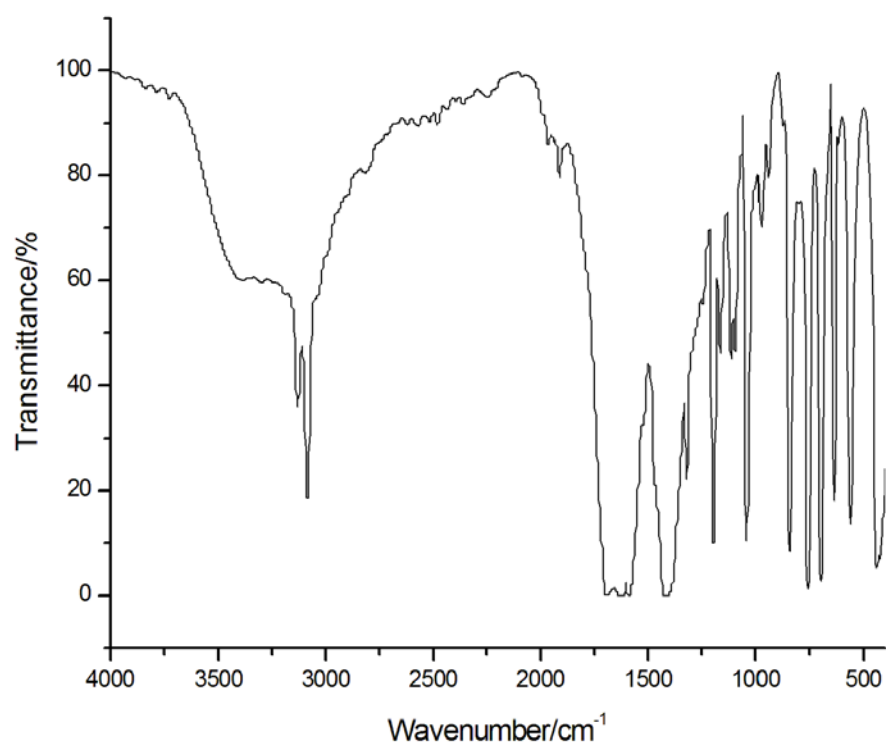
**Figure S1**



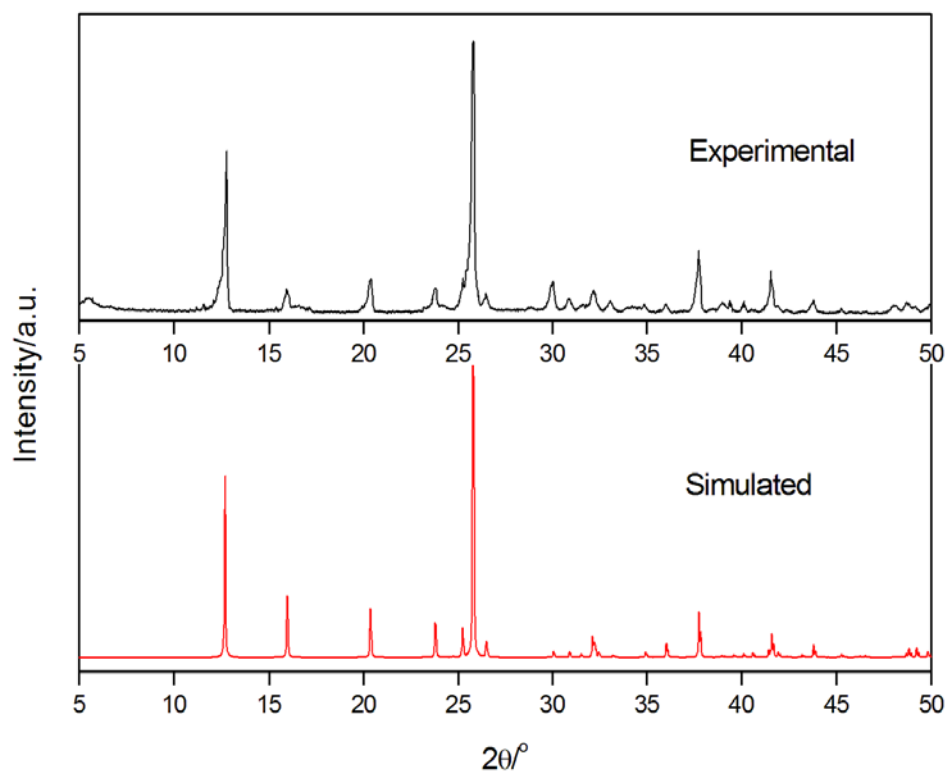
**Figure S2**



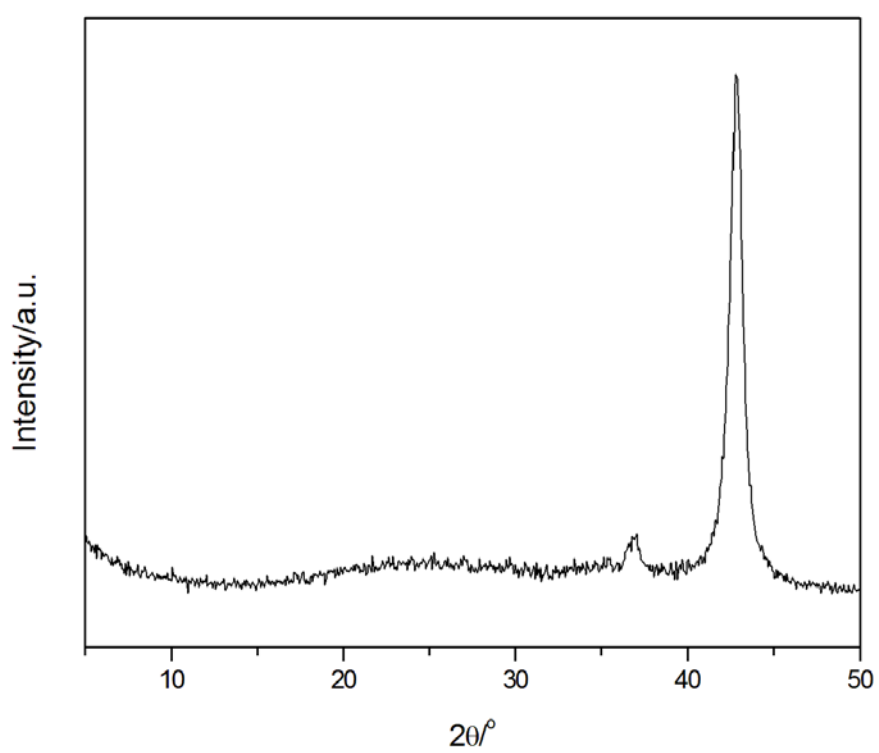
**Figure S3**



**Figure S4**

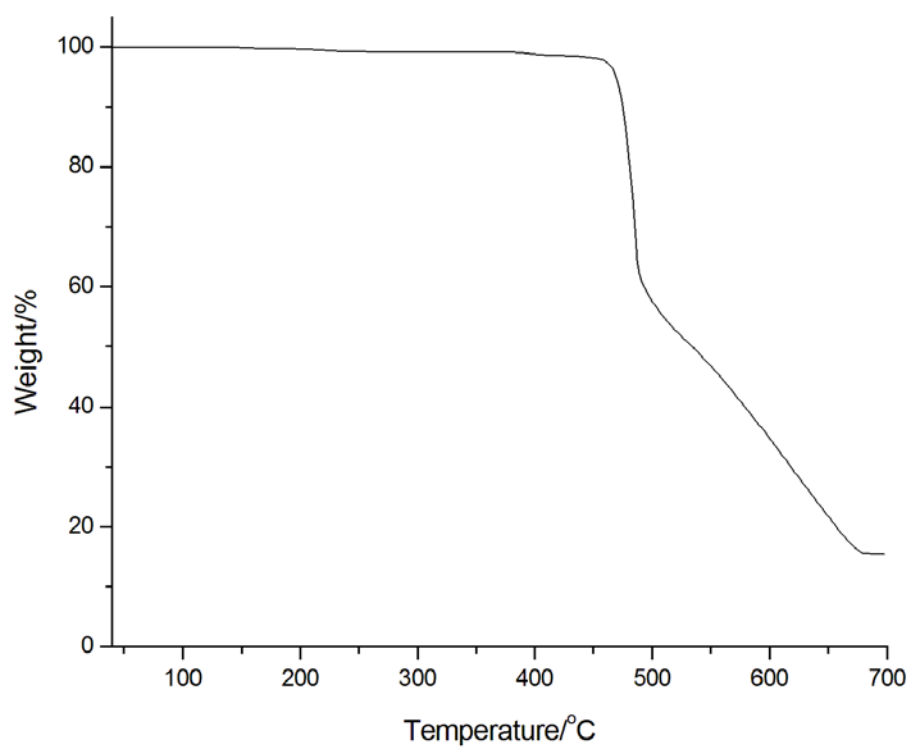


**Figure S5**

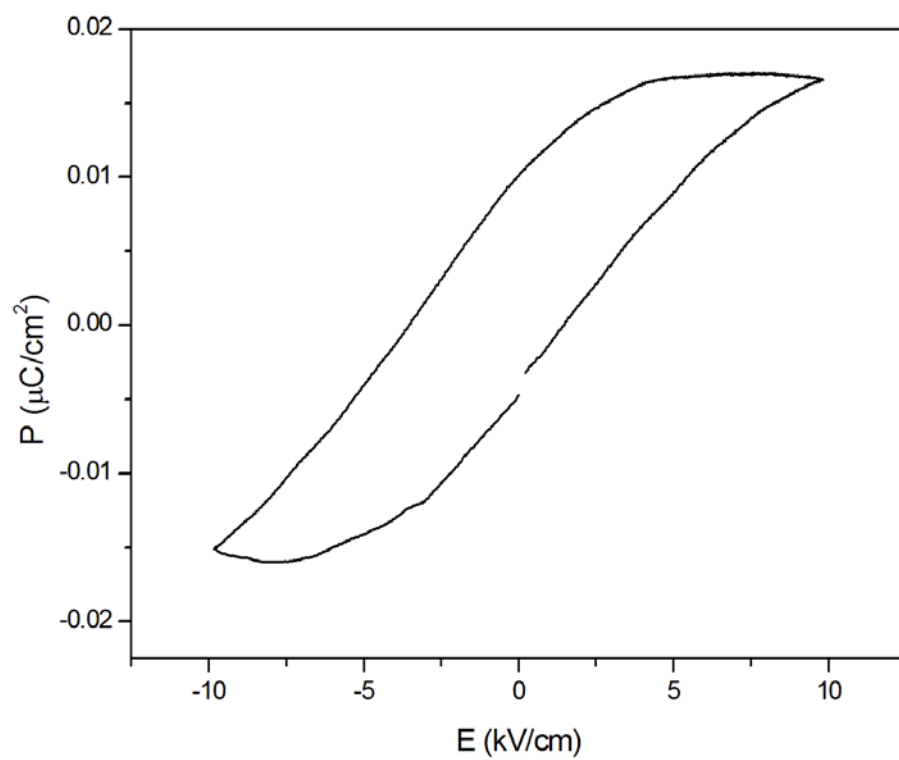


**Figure S6**





**Figure S7**



**Figure S8**