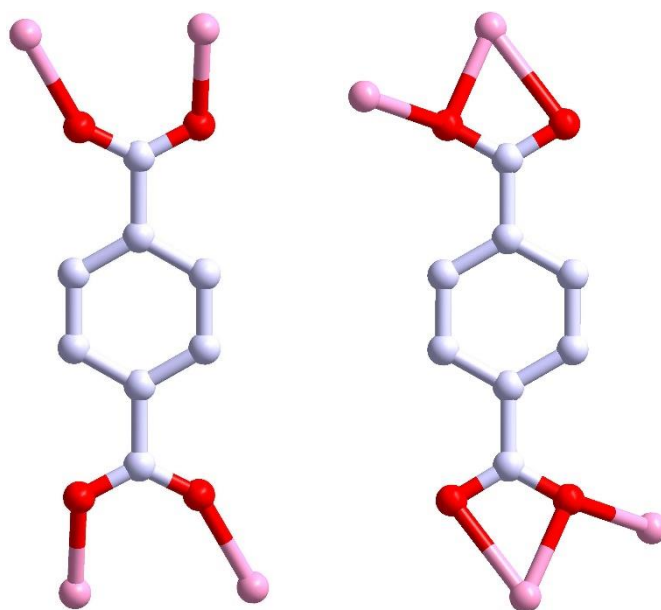


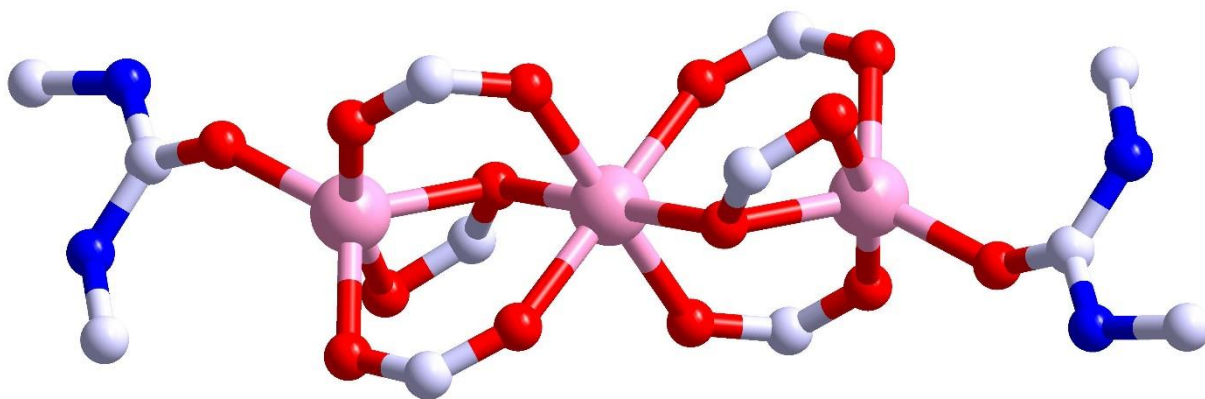
## Supporting Information

### A non-enzymatic electrochemical sensor of Cu@Co-MOF composite for glucose detection with high sensitivity and selectivity

Zhen-zhen Ma, Bing Liu, Huang Jiao\*, Ling Xu\*



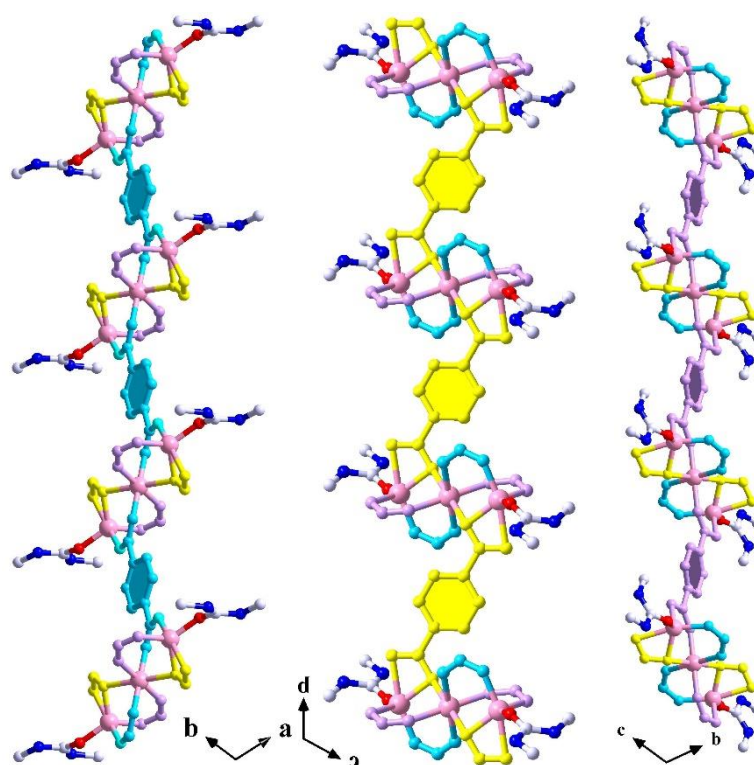
**Figure S1.** The coordination modes of BDC<sup>2-</sup> ligand in Co-MOF.



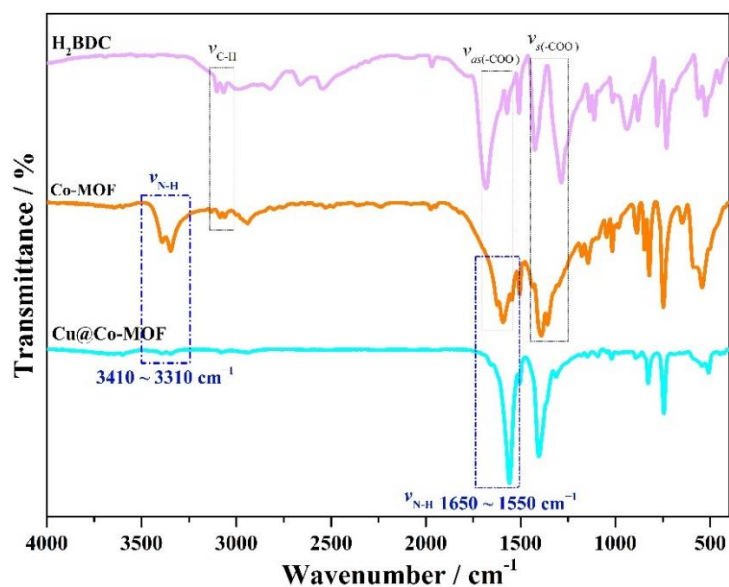
**Figure S2.** The structure motif of the linear trinuclear [Co<sub>3</sub>(COO)<sub>6</sub>(DMU)<sub>2</sub>] SBU.

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**Figure S3.**  $[\text{Co}_3(\text{COO})_6(\text{DMU})_2]$  SBUs connect  $\text{BDC}^{2-}$  ligands with O11/O12 (a), O21/O22 (b), and O31/O32 (c) into three 1D chains along the  $[110]$ ,  $b$ - and  $[011]$  directions respectively.



**Figure S4.** FT-IR spectra of Co-MOF, Cu@Co-MOF and free  $\text{H}_2\text{BDC}$  ligand.

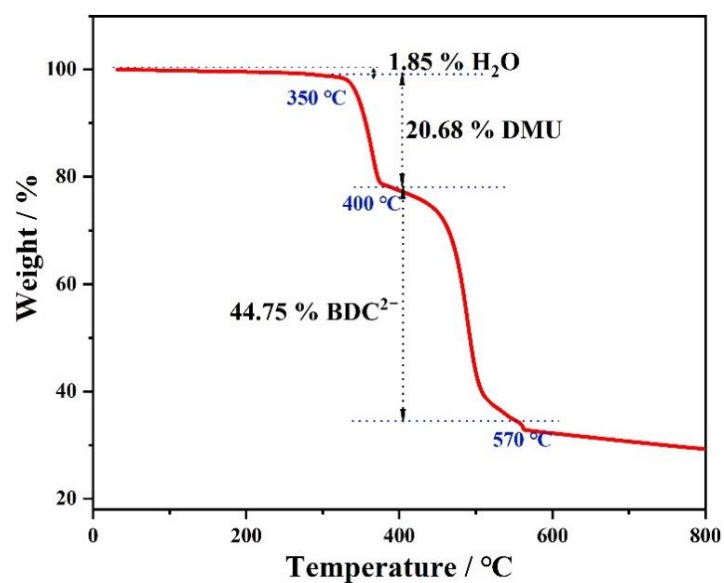


Figure S5. TGA curve of Co-MOF.

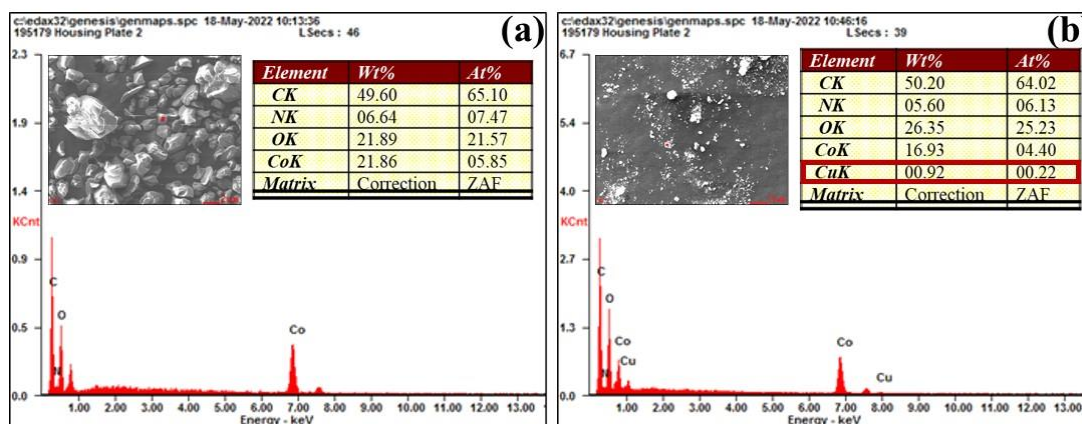
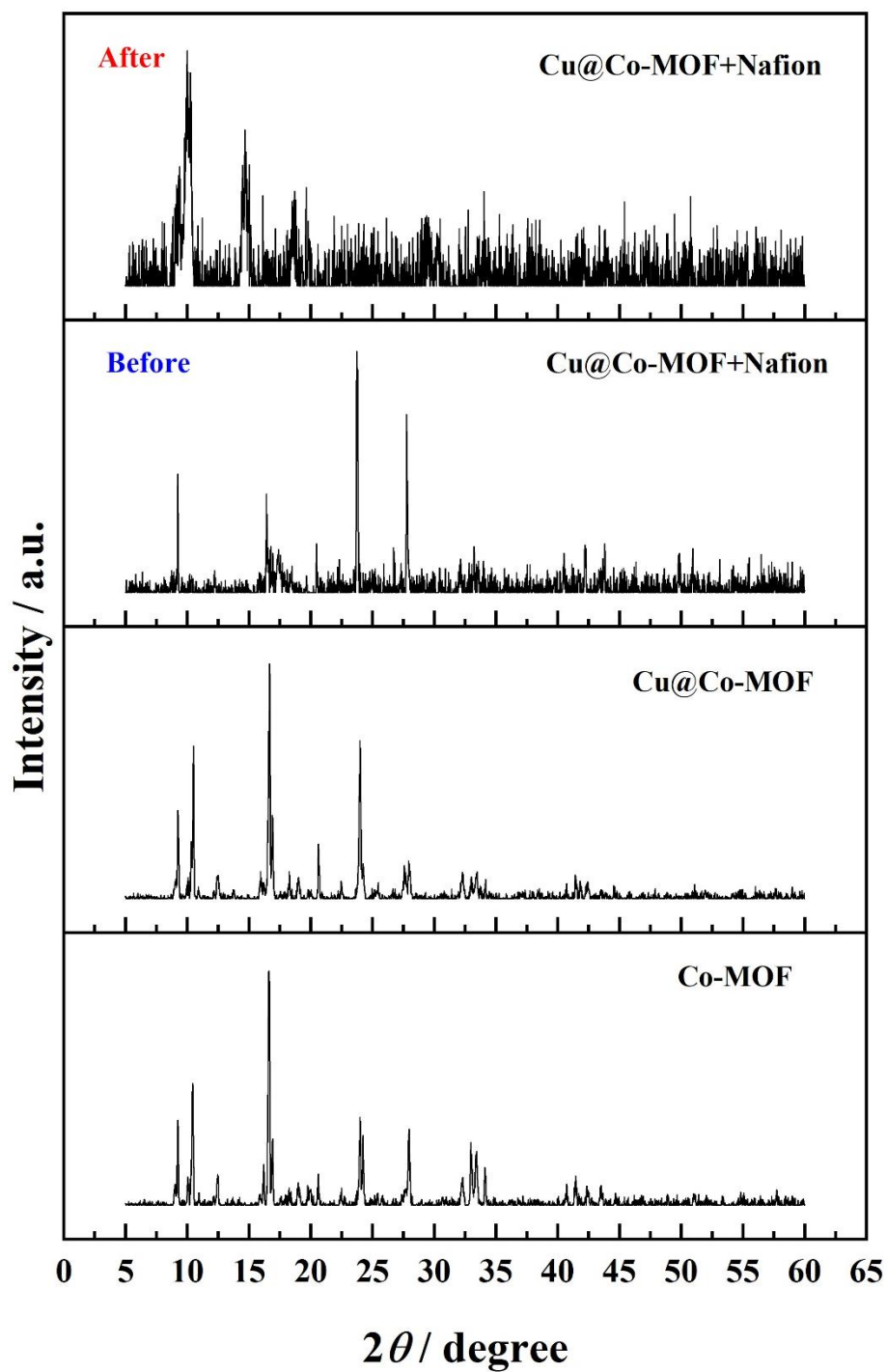
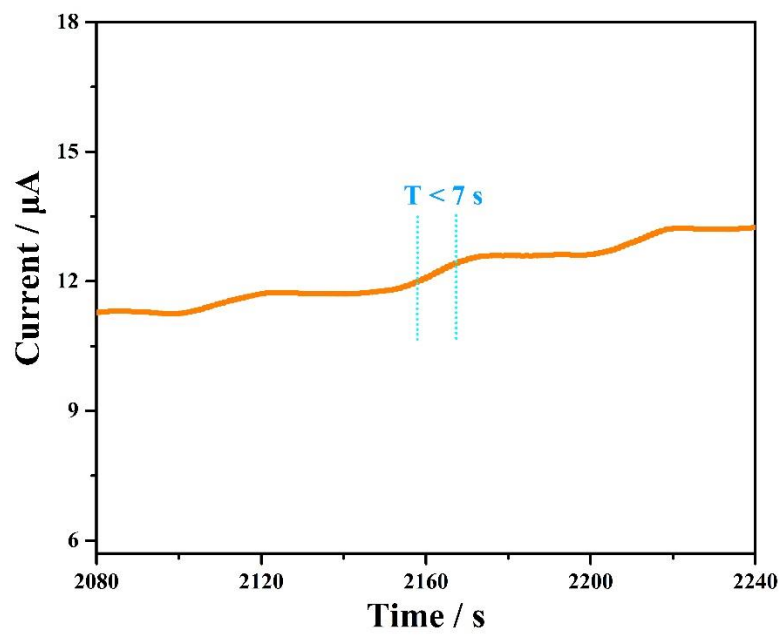


Figure S6. EDS of Co-MOF (a) and Cu@Co-MOF (b).



**Figure S7.** The comparison of XRD patterns of Co-MOF, Cu@Co-MOF, Cu@Co-MOF/Nafion and Cu@Co-MOF/Nafion after the electrochemical detection



**Figure S8.** The current response of Cu@Co-MOF/GCE to Glu.