

# **Electronic Supplementary Information (ESI) for:**

## **Design and Construction of Coordination Polymers Based on 2,2'-Dinitro-4,4'-biphenyldicarboxylate and Imidazole-based Ligands: The Effect of Ligand Length and Metal ions**

**Baiyan Li, Xiaojing Zhou, Qi Zhou, Guanghua Li, Jia Hua, Ye Bi, Yijin Li, Zhan Shi\*  
and Shouhua Feng**

State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, College of Chemistry,  
Jilin University, Changchun, 130012, People's Republic of China

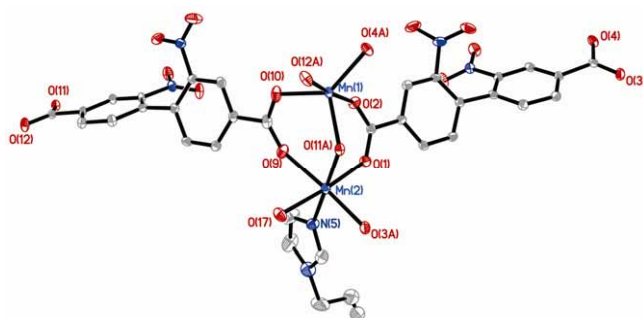


Figure S1. The ORTEP Figure of compound **1** (Hydrogen atoms and disordered atoms have been omitted for clarity).

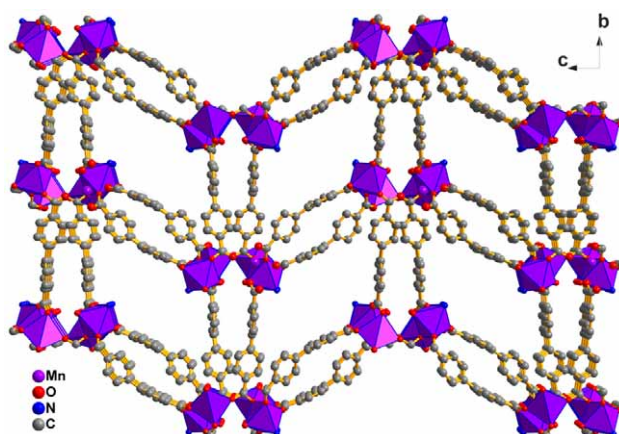


Figure S2. The 3D framework of crystal **1** by linking rod shape SBUs with nbpdc (nitro groups of nbpdc, hydrogen atoms and disordered atoms have been omitted for clarity).

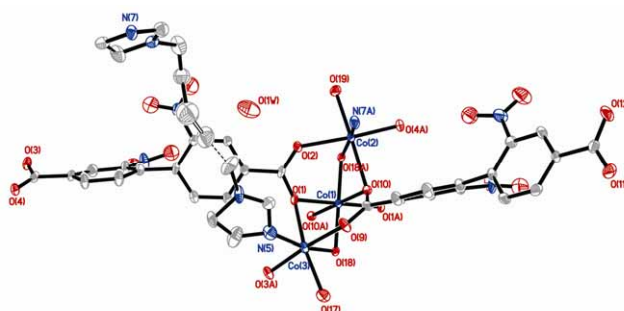


Figure S3. The ORTEP Figure of compound **2** (Hydrogen atoms and disordered atoms have been omitted for clarity).

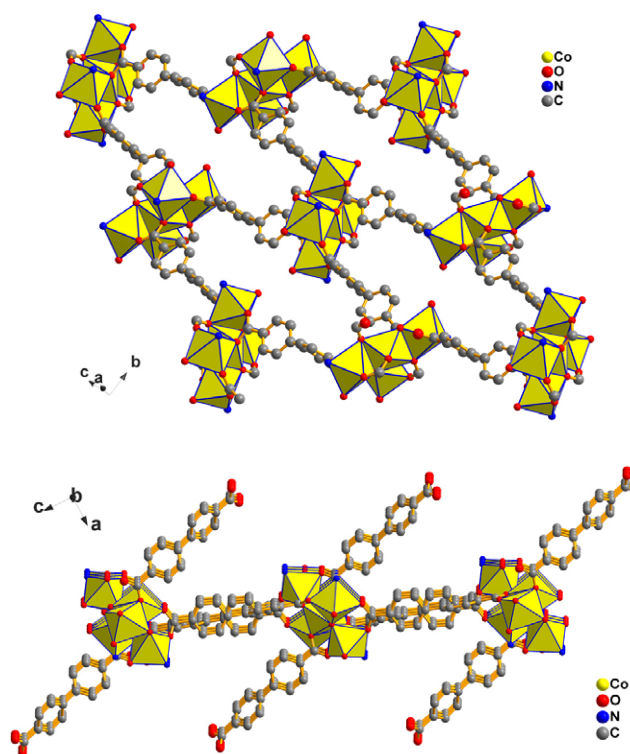


Figure S4 Structure of crystal **2**. (a) The 2D layer of crystal **2** (nitro groups of nbpdc, hydrogen atoms, and nbpdc molecules with C mode have been omitted for clarity); (b) the 2D layer of crystal **2** viewed along b axis direction (nitro groups of nbpdc, and hydrogen atoms have been omitted for clarity).

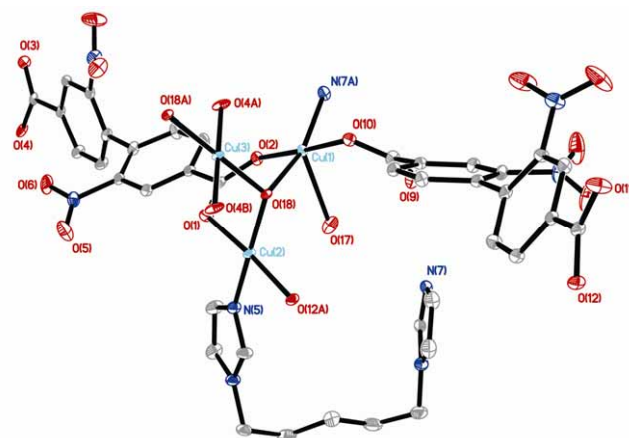


Figure S5. The ORTEP Figure of compound **3** (Hydrogen atoms have been omitted for clarity).



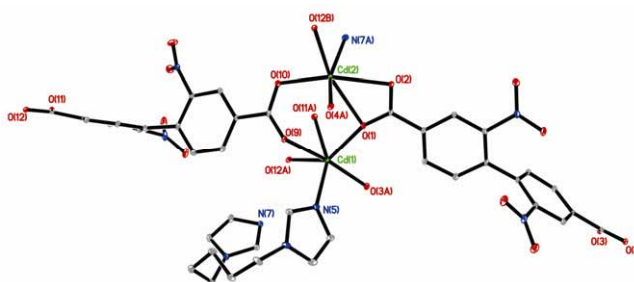


Figure S9. The ORTEP Figure of compound **5** (Hydrogen atoms have been omitted for clarity).

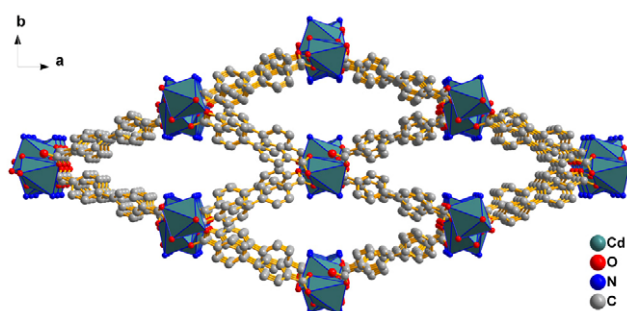


Figure S10. The 3D sub net of crystal **5** (nitro groups of nbpdc, and hydrogen atoms have been omitted for clarity).

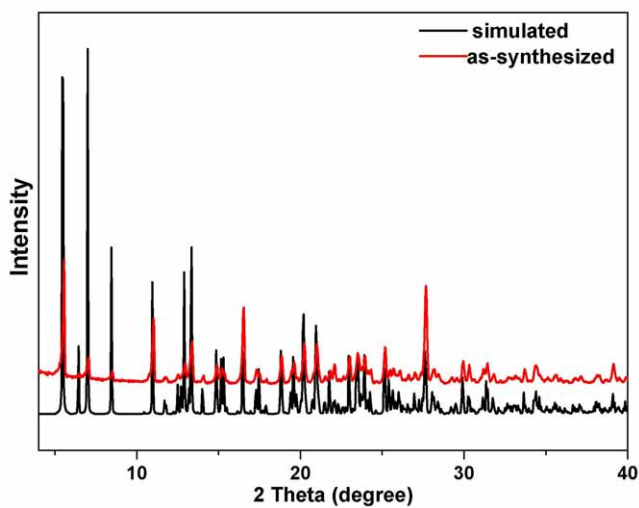


Figure S11. The XRD Figure of compound **1**.

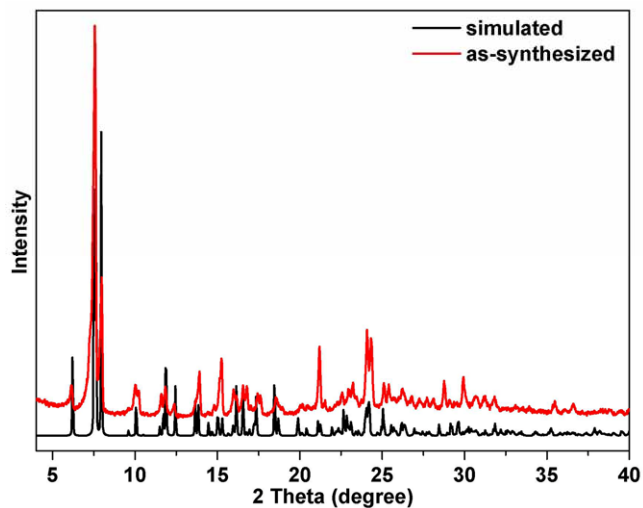


Figure S12. The XRD Figure of compound 2.

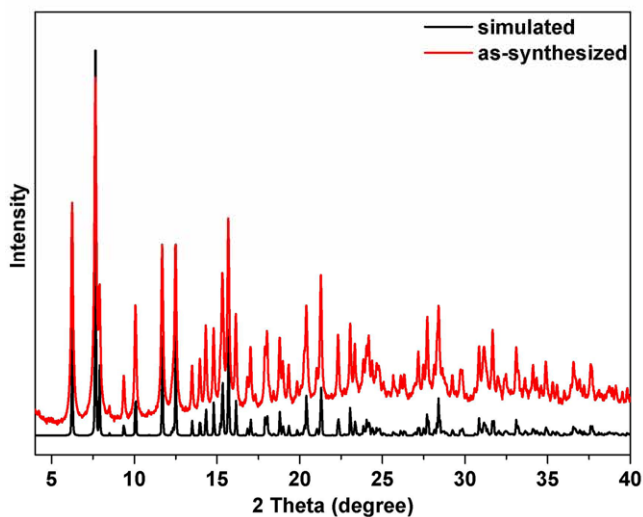


Figure S13. The XRD Figure of compound 3.

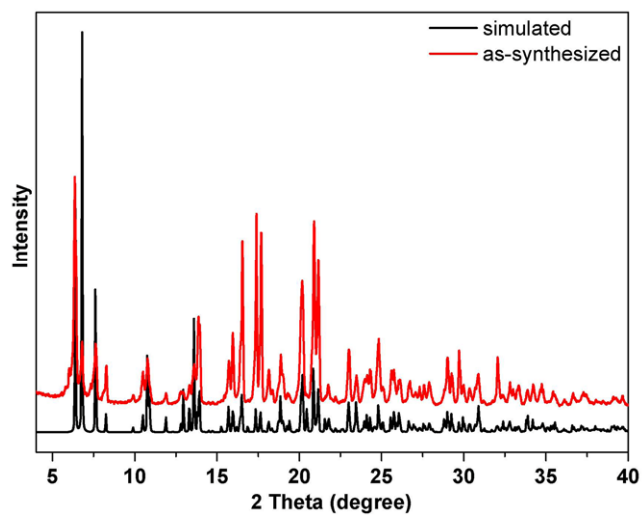


Figure S14. The XRD Figure of compound 4.

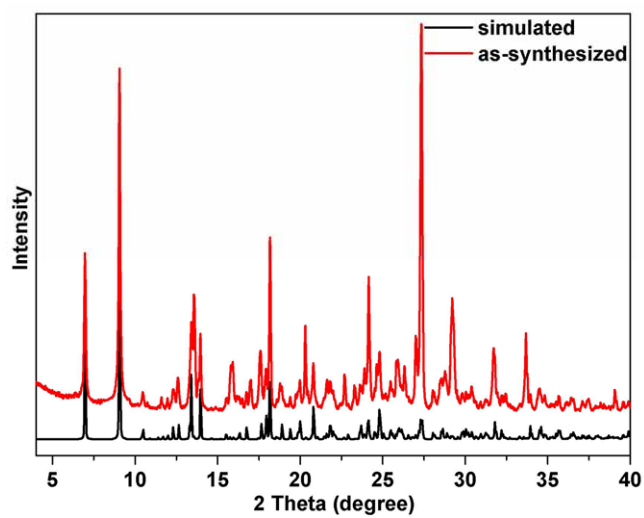


Figure S15. The XRD Figure of compound 5.