

Electronic Supplementary Information (ESI)

Bottom-up Synthesis of 2D Co-based Metal-Organic Framework Nanosheets by an Ammonia-assisted Strategy for Tuning the Crystal Morphology

Pei Nian, Haiou Liu, Xiongfu Zhang*

State Key Laboratory of Fine Chemicals, School of Chemical Engineering, Dalian University of Technology, Dalian, 116024, China.

Corresponding author: xfzhang@dlut.edu.cn (X. Zhang)

Supplemental Figures:

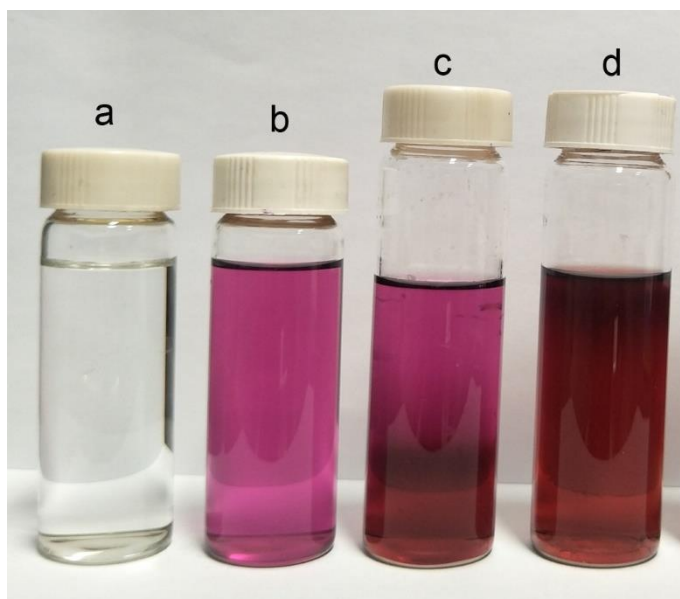


Figure S1 The digital photographs of precursor solution with different amounts of NH_4OH in the precursor solution: (a) the mixed solution of methanol and toluene; (b) the mixed solution added with $\text{Co}(\text{Ac})_2 \cdot 4\text{H}_2\text{O}$; (c) the mixed solution added with both $\text{Co}(\text{Ac})_2 \cdot 4\text{H}_2\text{O}$ and $1\text{mol/L NH}_4\text{OH}$; (d) the mixed solution added with both $\text{Co}(\text{Ac})_2 \cdot 4\text{H}_2\text{O}$ and $4\text{ mol/L NH}_4\text{OH}$.

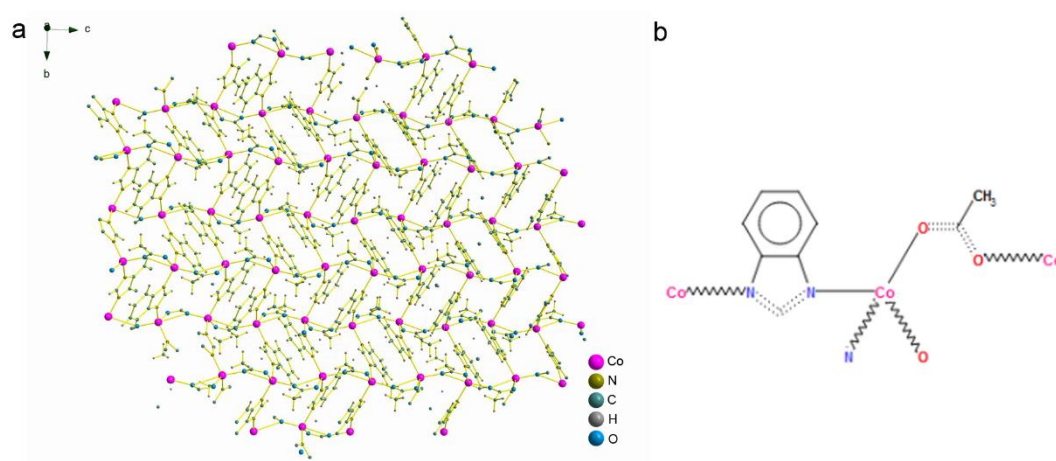


Figure S2 (a) Packing diagram of $\text{Co}(\text{bim})(\text{OAc})$ along the $[100]$ axis highlighting the 2D sheets formed by $\text{Co}(\text{bim})_{2/2}$ chains and $\text{Co}(\text{OAc})_{2/2}$ chains connected by Co^{2+} tetrahedra; (b) The chemical diagram of $\text{Co}(\text{bim})(\text{OAc})$.