SUPPLEMENTARY MATERIAL

Synthetic Sequence Strategy Enabled Hollow Metal-Organic Frameworks Engineering

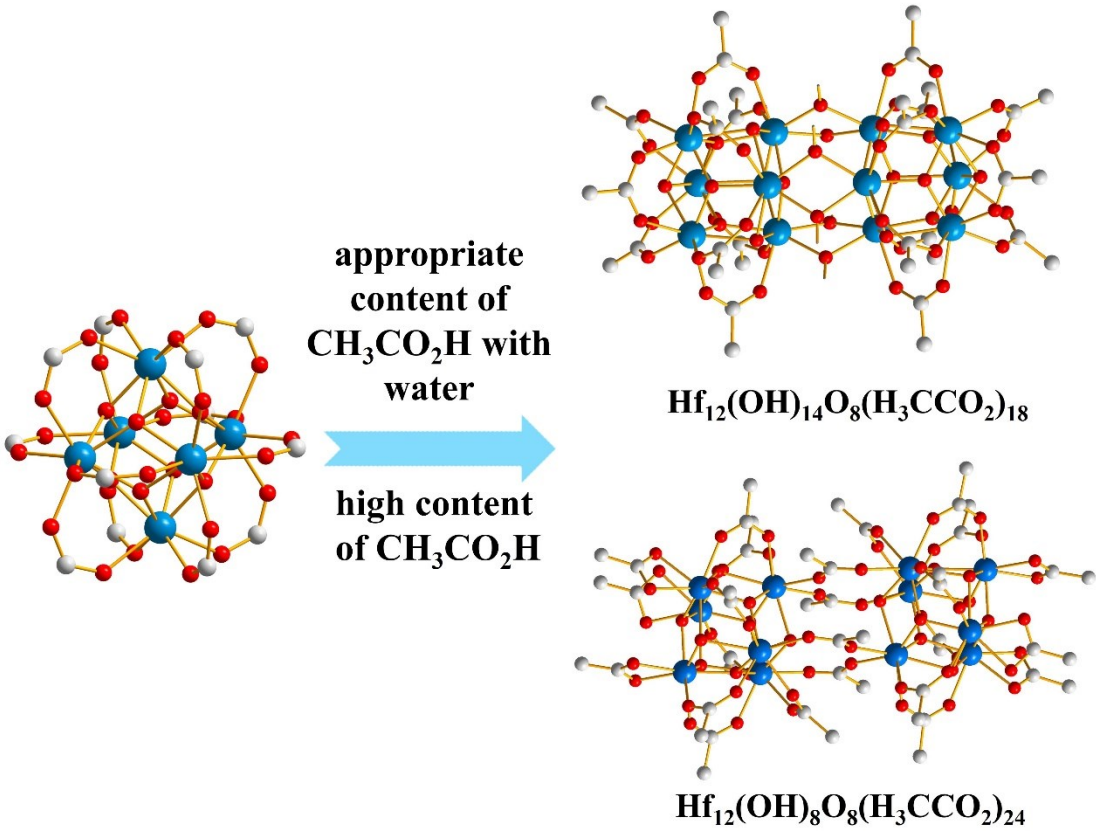

Figure S1. The transformation of Hf_6 SBUs in UiO-66 into soluble $Hf_{12}(OH)_{14}O_8(H_3CCO_2)_{18}$ or $Hf_{12}(OH)_8O_8(H_3CCO_2)_{24}$ under etching conditions. $Hf_{12}(OH)_{14}O_8(H_3CCO_2)_{18}$ consists of two Hf_6 clusters which are bridged by six μ_2-OH. $Hf_{12}(OH)_8O_8(H_3CCO_2)_{24}$, consists of two Hf_6 clusters which are bridged by four bridged $CH_3CO_2^-$.

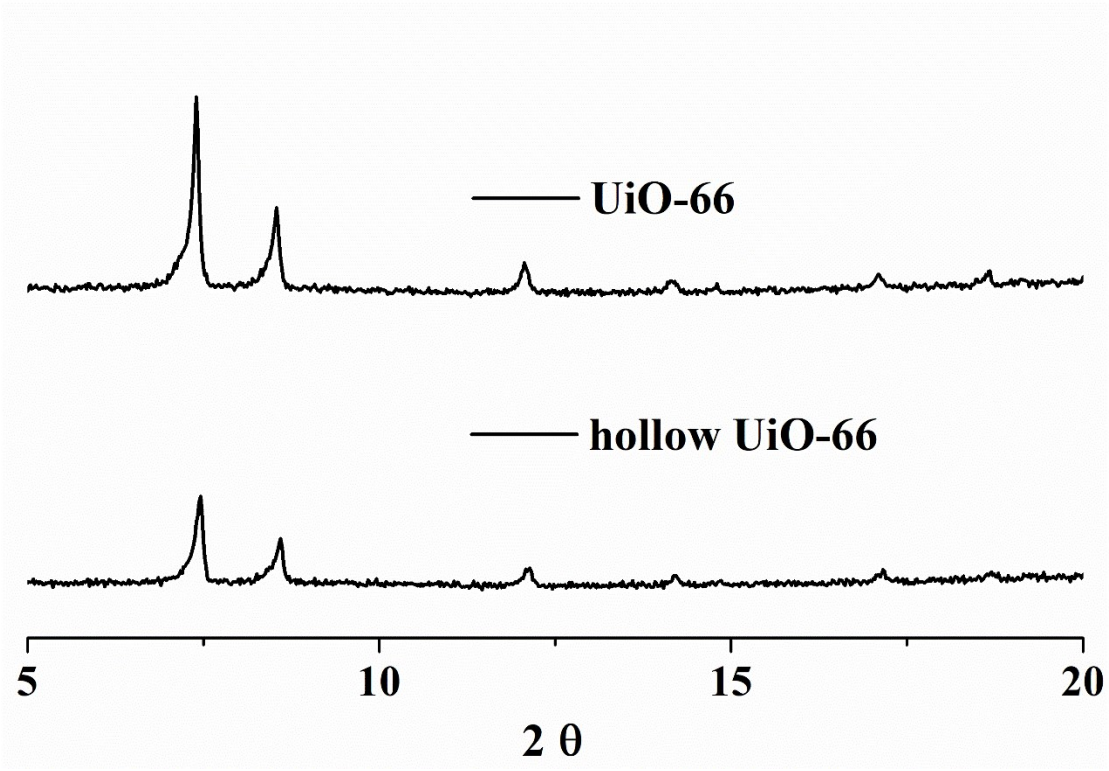

Figure S2. PXRD of hollow UiO-66.

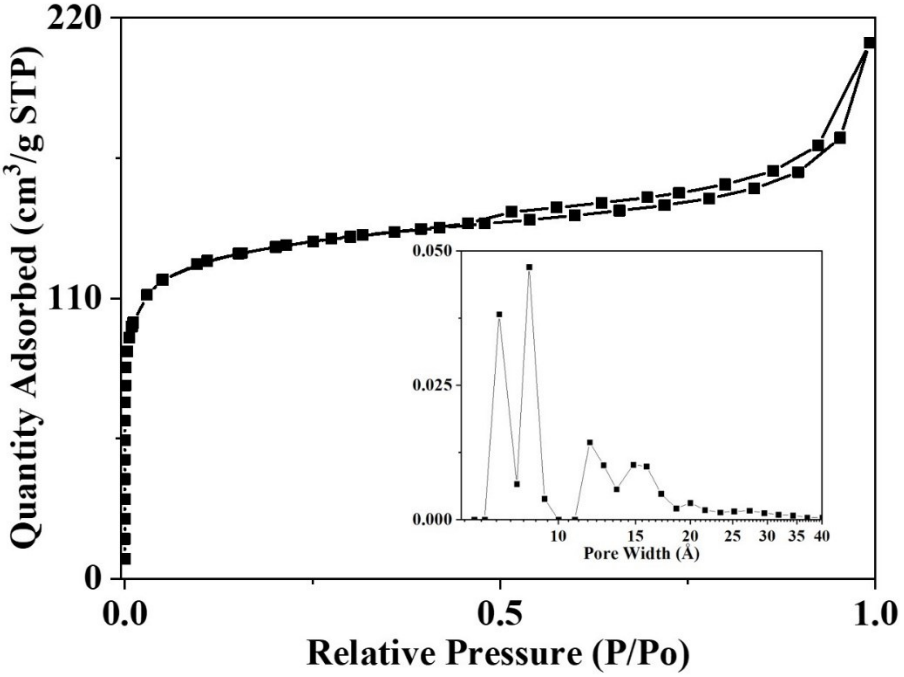

Figure S3 N_2 sorption isotherms at 77 K and the corresponding pore size distribution of hollow UiO-66.

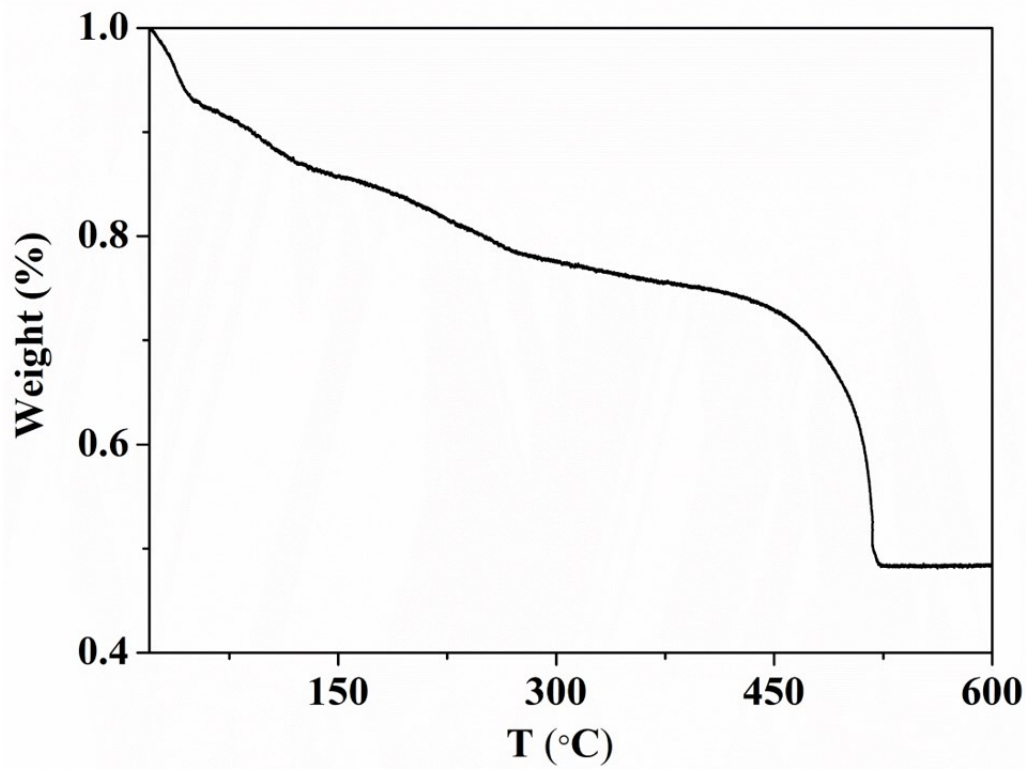

Figure S4. the TGA of hollow UiO-66

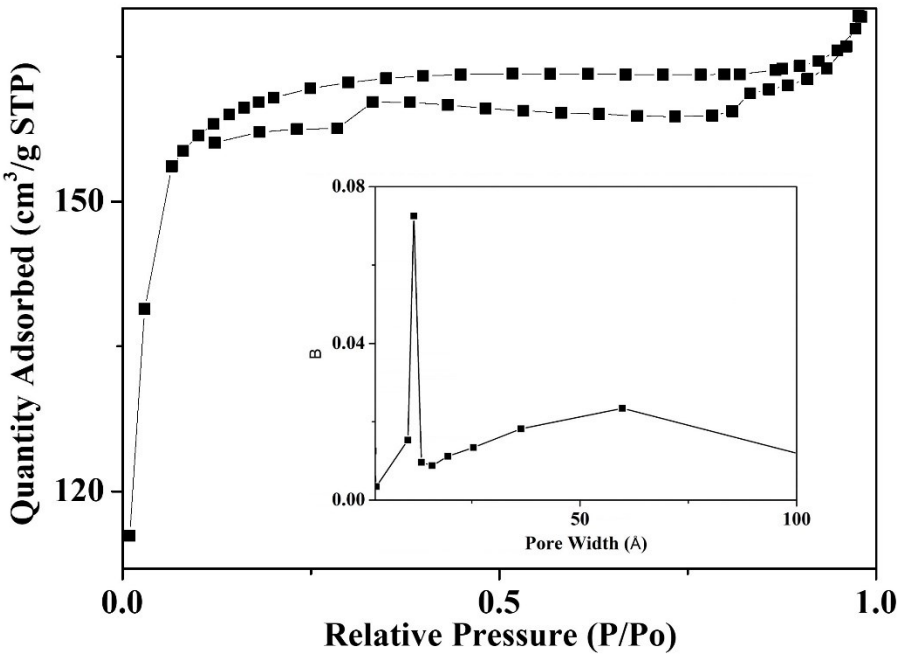

Figure S5 N_2 sorption isotherms at 77 K and the corresponding pore size distribution of hollow MOF-808.

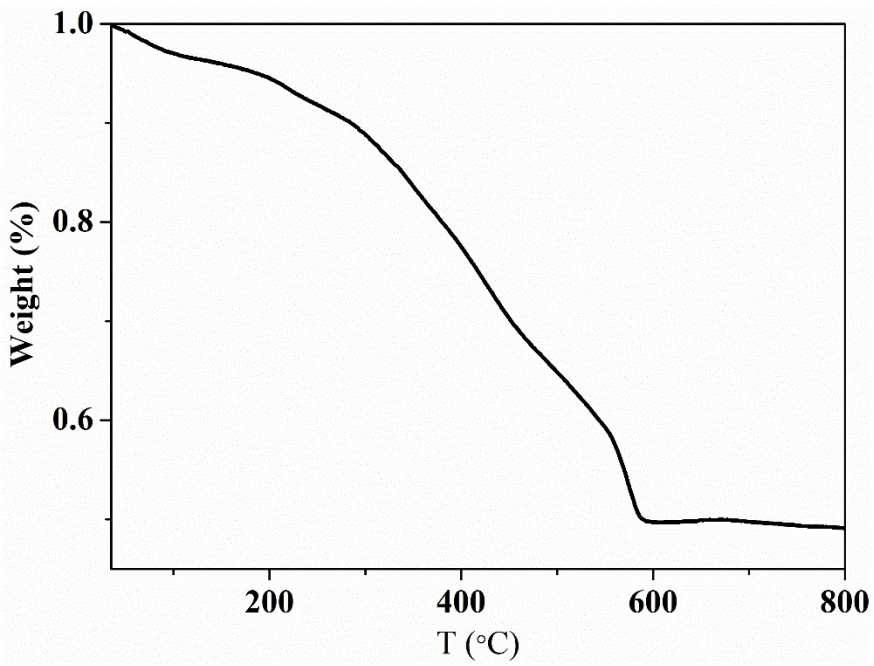

Figure S6. the TGA of hollow MOF-808.

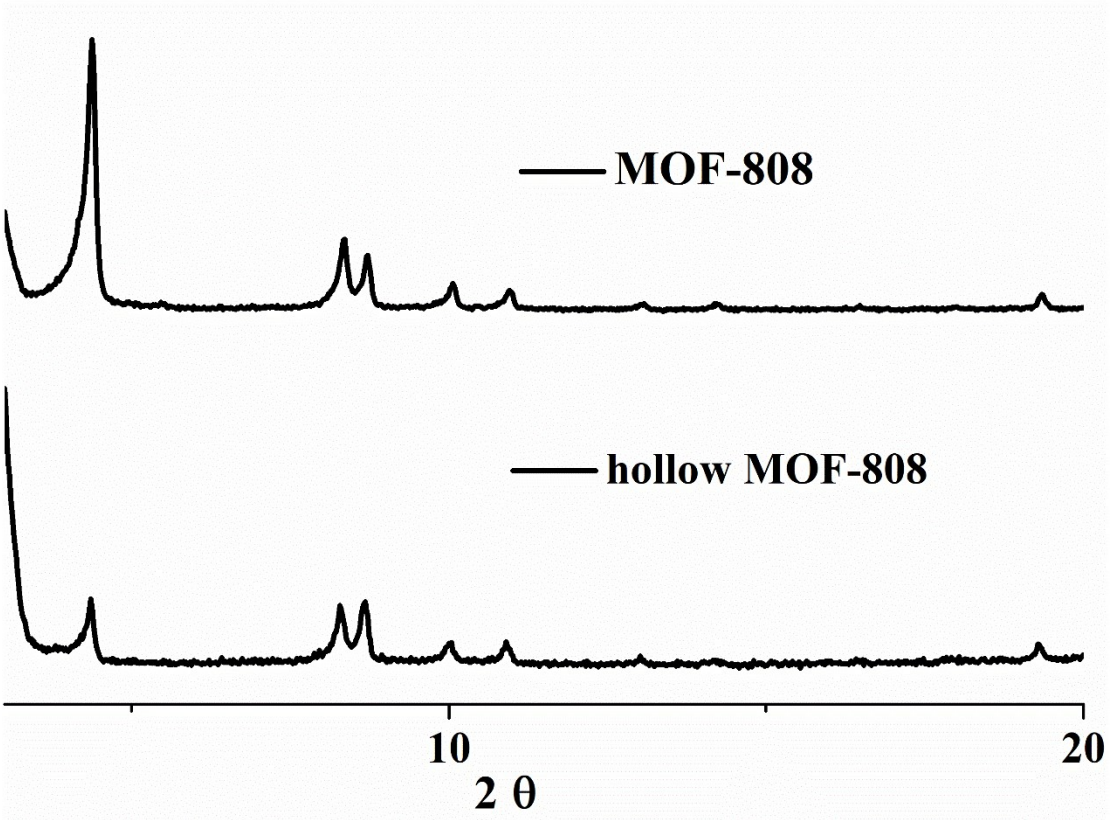

Figure S7. PXRD of MOF-808 and hollow MOF-808.

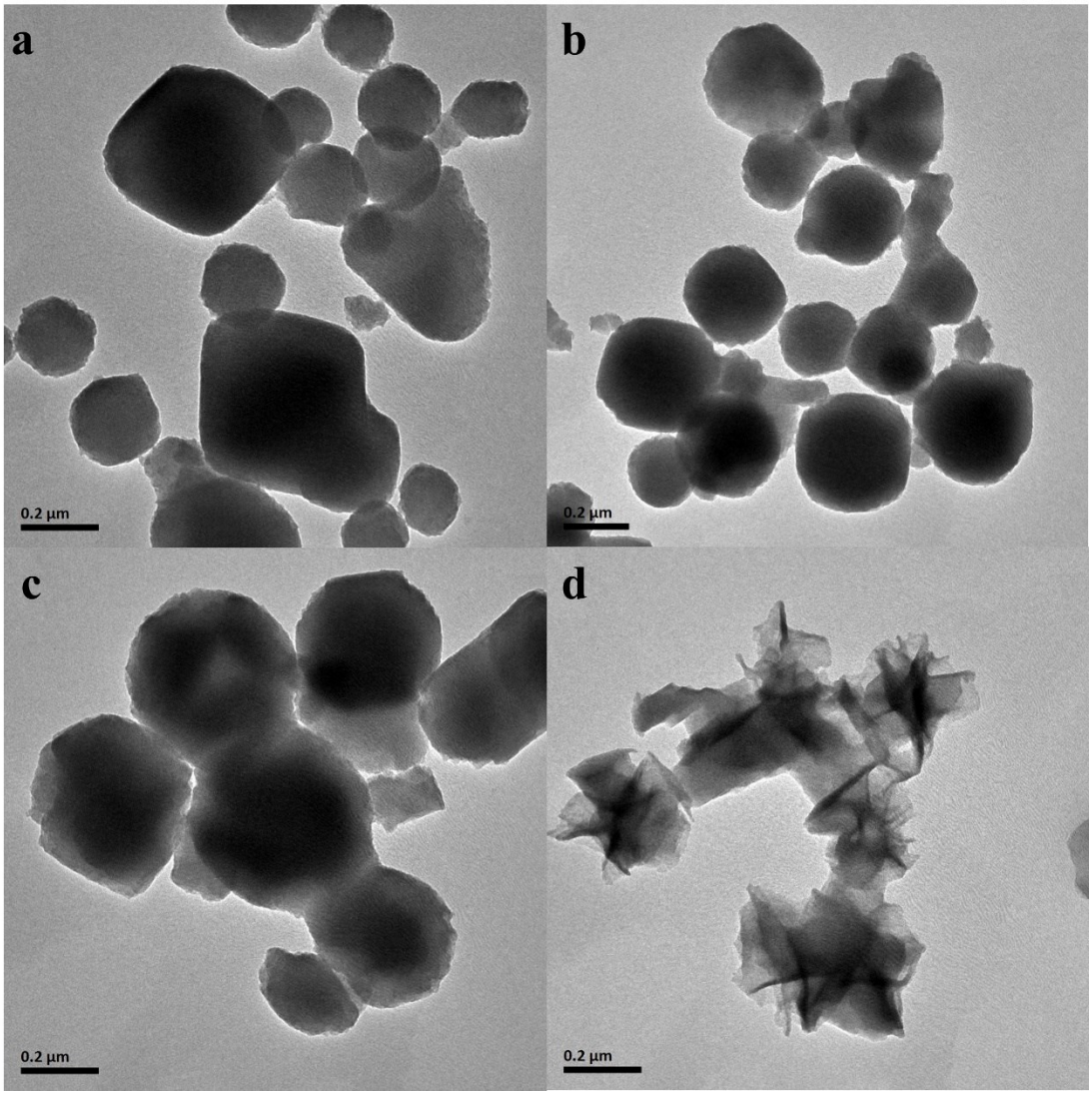

Figure S8. TEM images of MOF-808 with different amounts of benzoic acid in 2 mL of DMF and 0.2 mL of H_2O for 16 hours: (a) 213 mg mL; (b) 366 mg; (c) 427 mg and (d) 540 mg.

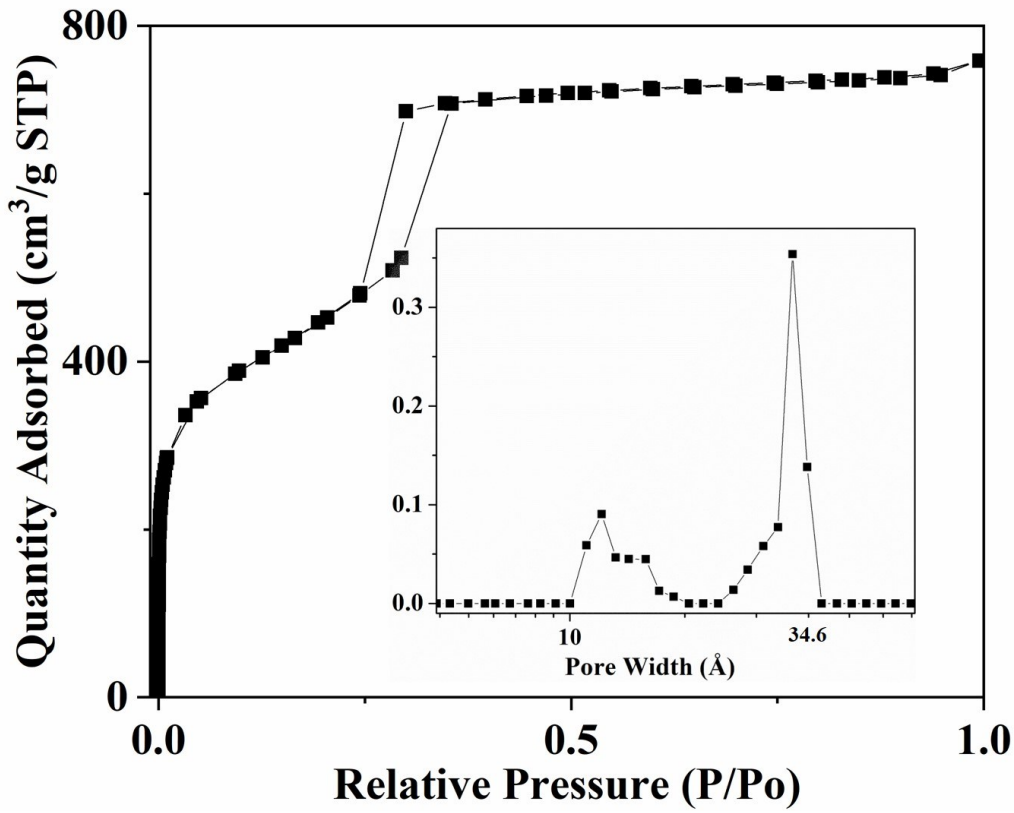

Figure S9 N_2 sorption isotherms at 77 K and the corresponding pore size distribution of hollow PCN-223.

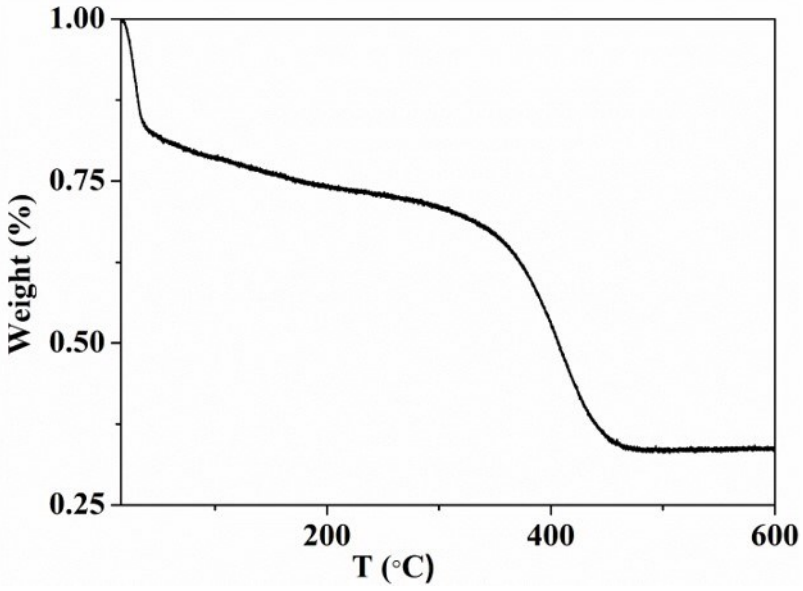

Figure S10. the TGA of hollow PCN-223