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Structure-property relationships of water adsorption in Metal-Organic Frameworks

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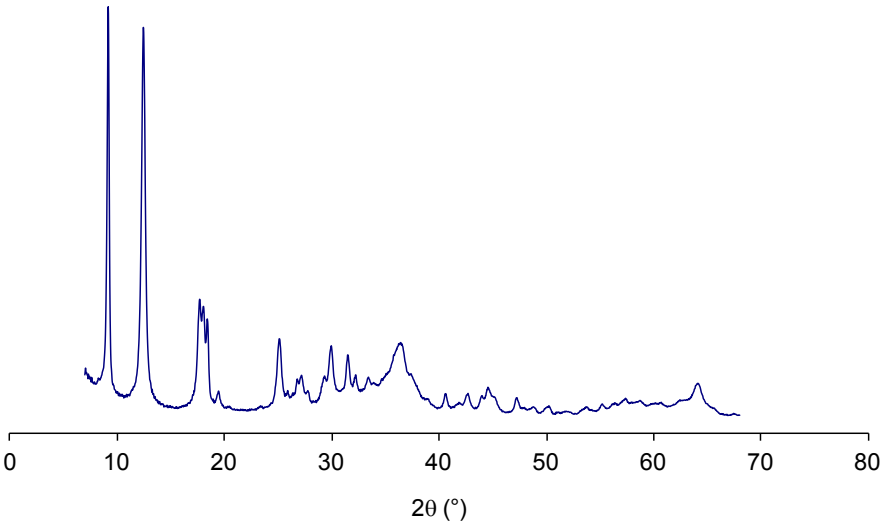

Fig. S1. PXRD pattern of Ga-MIL-53-NH_2

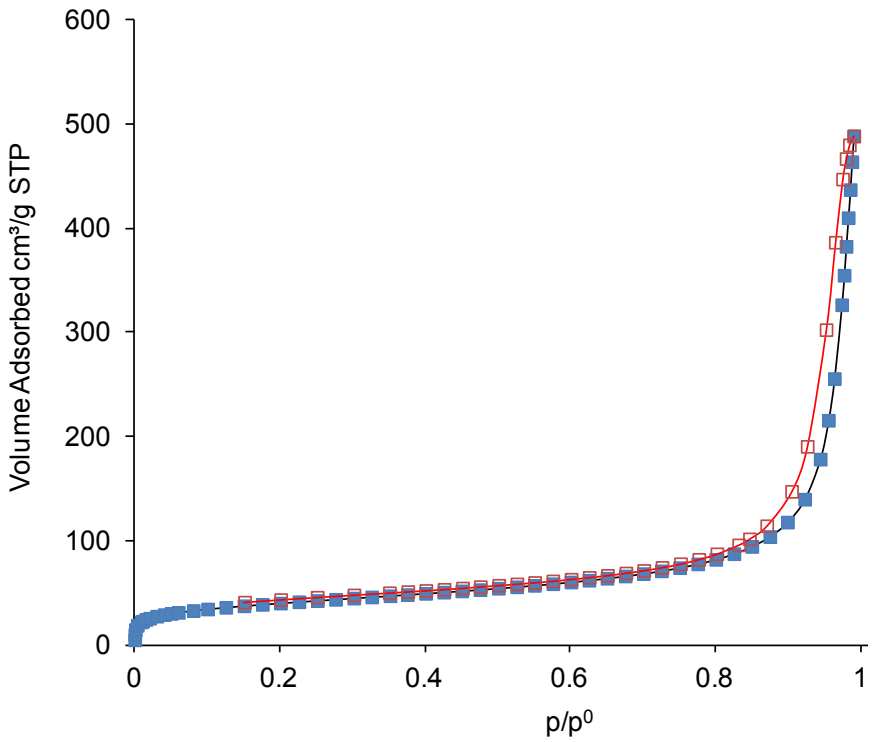

Fig. S2. Nitrogen adsorption isotherm of Ga-MIL-53-NH_2 at 77K. The full and empty symbols are the adsorption and desorption branches, respectively.

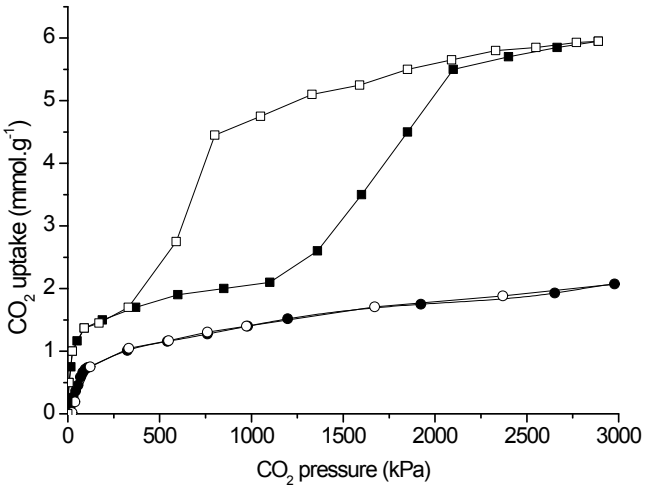

Fig. S3. CO_2 adsorption isotherms at 303K: Al-MIL-53 (square) and Ga-MIL-53-NH_2 (circle). The full and empty symbols are the adsorption and desorption branches, respectively.

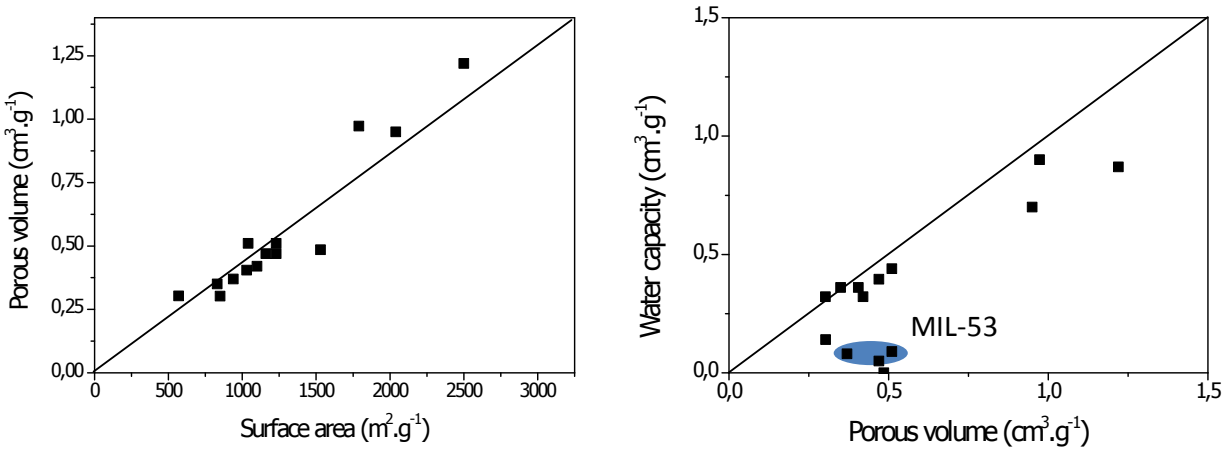

Fig. S4. Correlation between the morphological properties of MOFs and their nitrogen or water adsorption capacity. (left) Porous volume as a function of the surface area (BET method) obtained from N_2 physisorption at 77 K. (right) Water adsorption capacity measured at p/p°=0.9 at 298 K as a function of the porous volume measured by N_2 physisorption at 77 K.