Electronic Supplementary Information (ESI)

Facile synthesis of an ultra-stable metal-organic framework with excellent acid and base resistance

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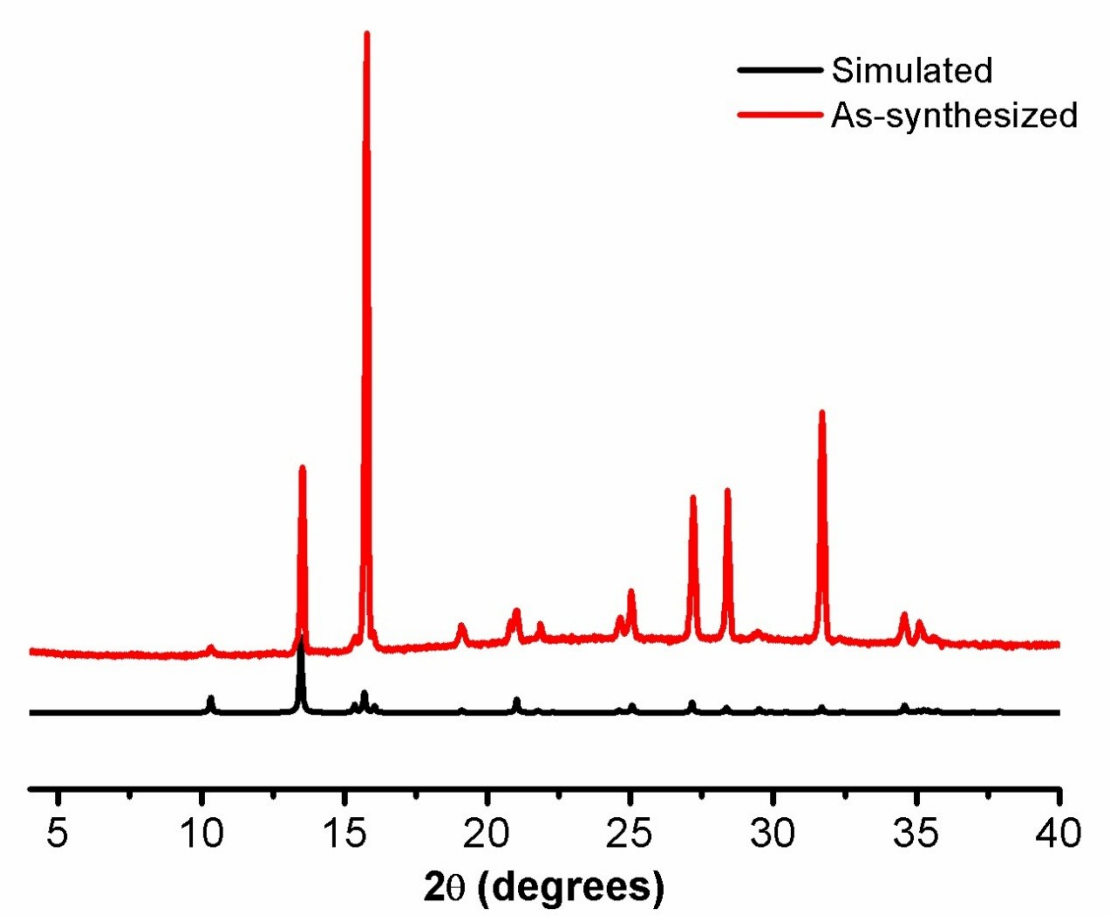

Figure S1. The PXRD pattern of MCIF-1.

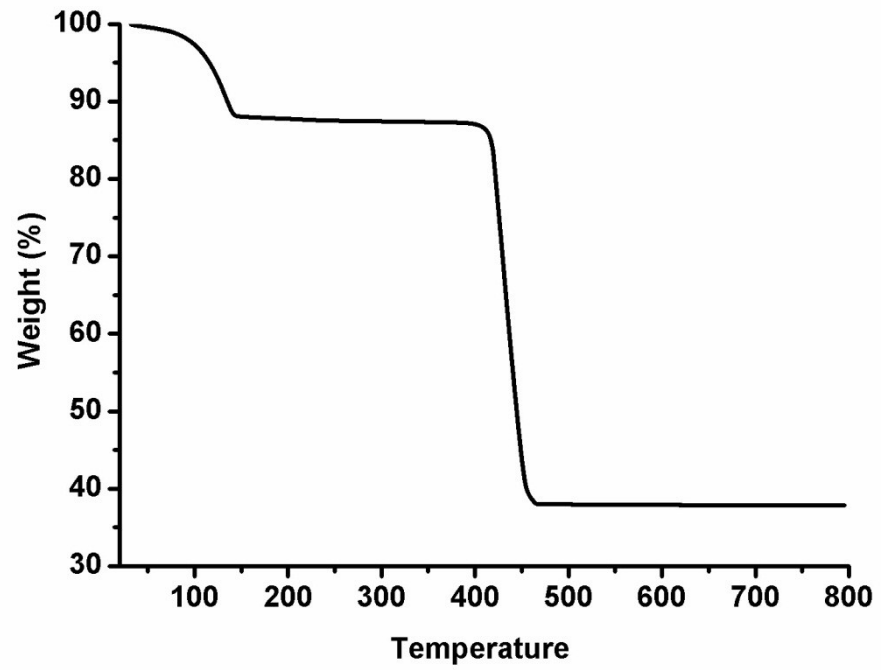

Figure S2. The TG curve of MCIF-1.

Table S1. Crystal data and structure refinement for 1.

Identification code	1	
Empirical formula	C12 H5 Cu2 N9	
Formula weight	402.35	
Temperature	293(2) K	
Wavelength	0.71073 Å	
Crystal system	Tetragonal	
Space group	$I4_122$	
Unit cell dimensions	a = 9.281(17) Å	α= 90°.
	b = 9.281(17) Å	β= 90°.
	c = 22.07(5) Å	γ = 90°.
Volume	1901(8) $Å^3$	
Z	4	
Density (calculated)	1.406 Mg/m^3	
Absorption coefficient	2.247 mm^{-1}	
F(000)	792	
Crystal size	0.150 x 0.100 x 0.100 mm^3	
Theta range for data collection	3.104 to 28.517°.	
Index ranges	-10<=h<=12, -12<=k<=12, -26<=l<=29	
Reflections collected	5753	
Independent reflections	1215 [R(int) = 0.1513]	
Completeness to theta = 25.242°	99.8 %	
Absorption correction	Semi-empirical from equivalents	
Refinement method	Full-matrix least-squares on F^2	
Data / restraints / parameters	1215 / 12 / 76	
Goodness-of-fit on F^2	1.056	
Final R indices [I>2sigma(I)]	R1 = 0.0721, wR2 = 0.1753	
R indices (all data)	R1 = 0.0993, wR2 = 0.1951	
Absolute structure parameter	0.46(10)	
Extinction coefficient	n/a	
Largest diff. peak and hole	1.738 and -1.168 $e.Å^{-3}$	