

Supplementary Materials

Copper and manganese based layered hybrid organic-inorganic compounds with polymorphic transitions as energy storage materials

1 X-Ray Difraccion supplementary results

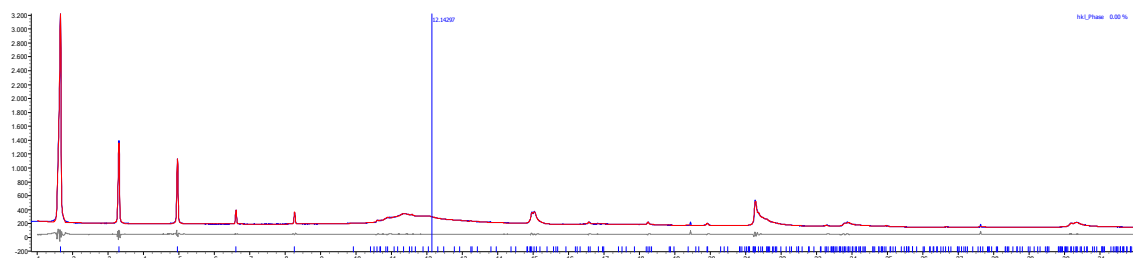


Figure S 1 Pattern matching Pawley fit plot of MnC_{12} . Agreement factors: $R_{wp} = 4.33\%$, $R_p = 2.57\%$. The plot shows the experimental powder XRD profile (blue solid line), the calculated powder XRD profile (red solid line), and the difference profile (grey, lower line). Blue tick marks indicate peak positions.

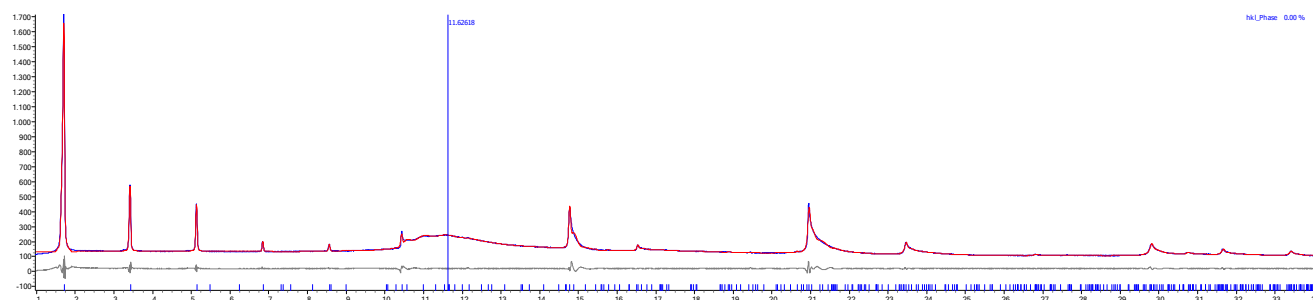


Figure S 2 Pattern matching Pawley fit plot of CuC_{12} . Agreement factors: $R_{wp} = 4.91\%$, $R_p = 2.97\%$. The plot shows the experimental powder XRD profile (blue solid line), the calculated powder XRD profile (red solid line), and the difference profile (grey, lower line). Blue tick marks indicate peak positions.

2 Nuclear magnetic resonance supplementary results

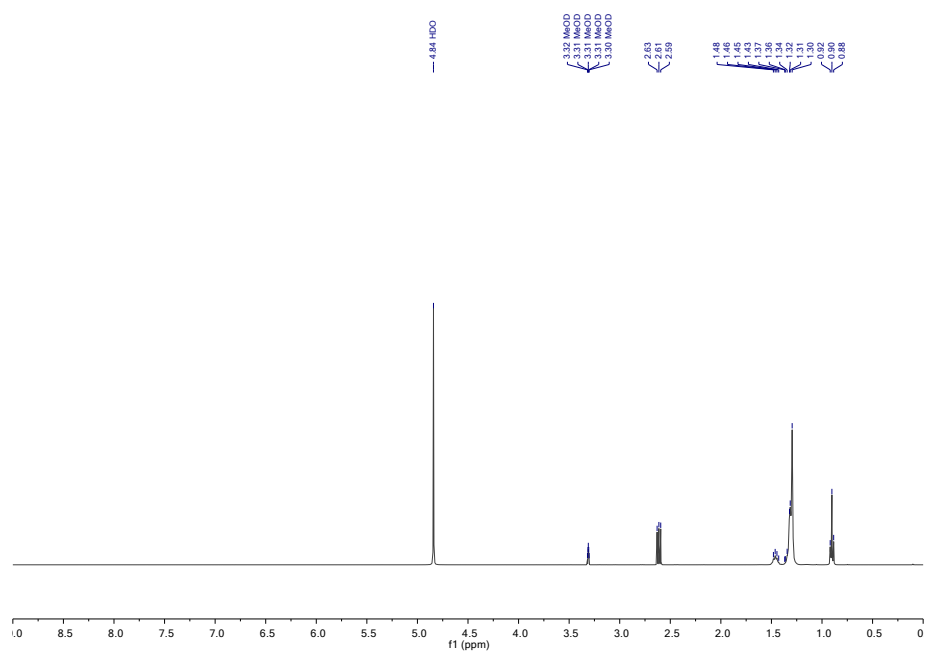


Figure S 3 ^1H NMR $\text{C}_{12}\text{H}_{27}\text{N}$.

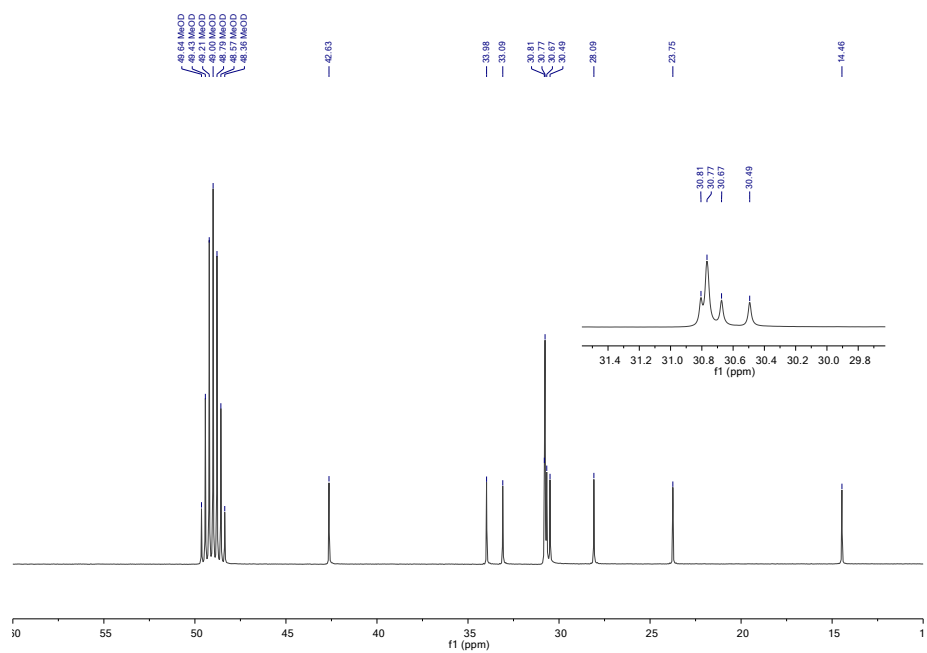


Figure S 4 ^{13}C NMR $\text{C}_{12}\text{H}_{27}\text{N}$.

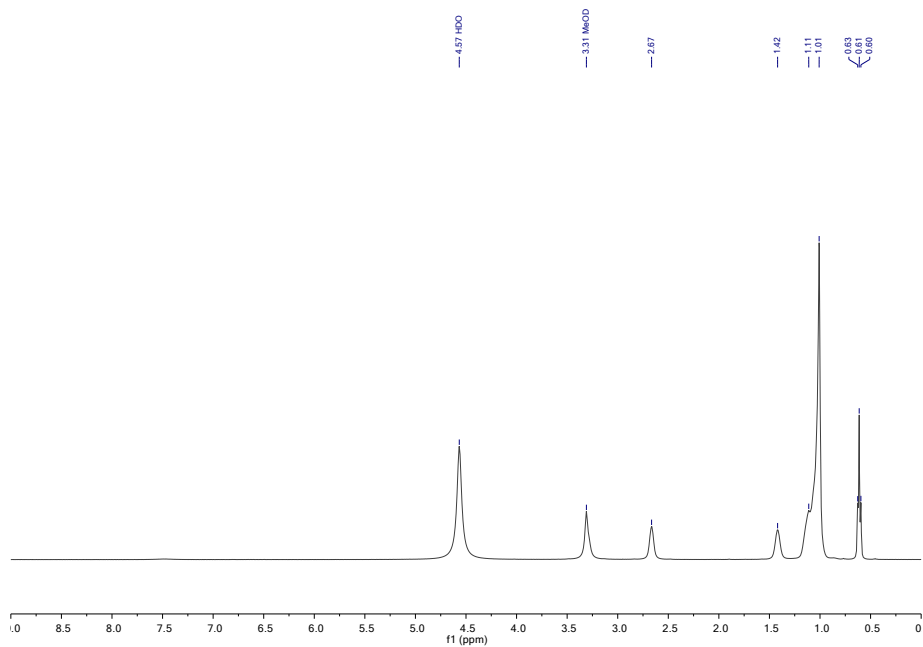


Figure S 5 ^1H NMR CuC_{12} .

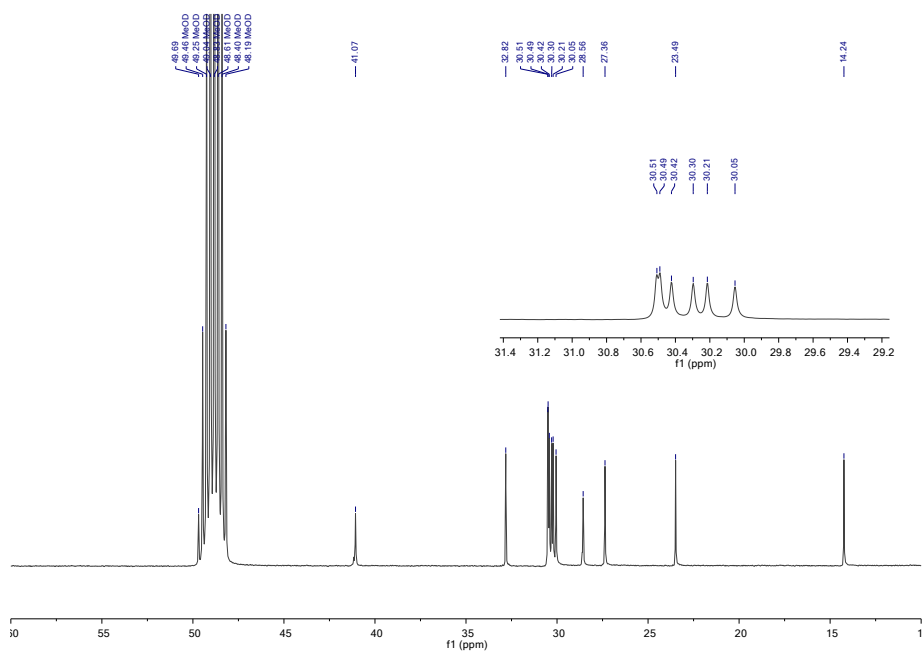


Figure S 6 ^{13}C NMR CuC_{12} .

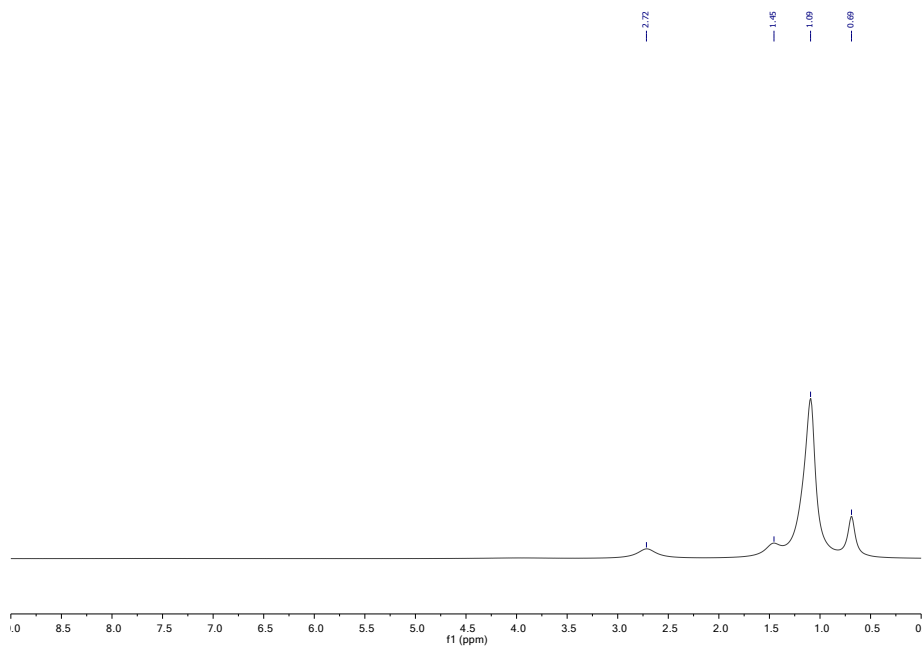


Figure S 7 ¹H NMR MnC₁₂.

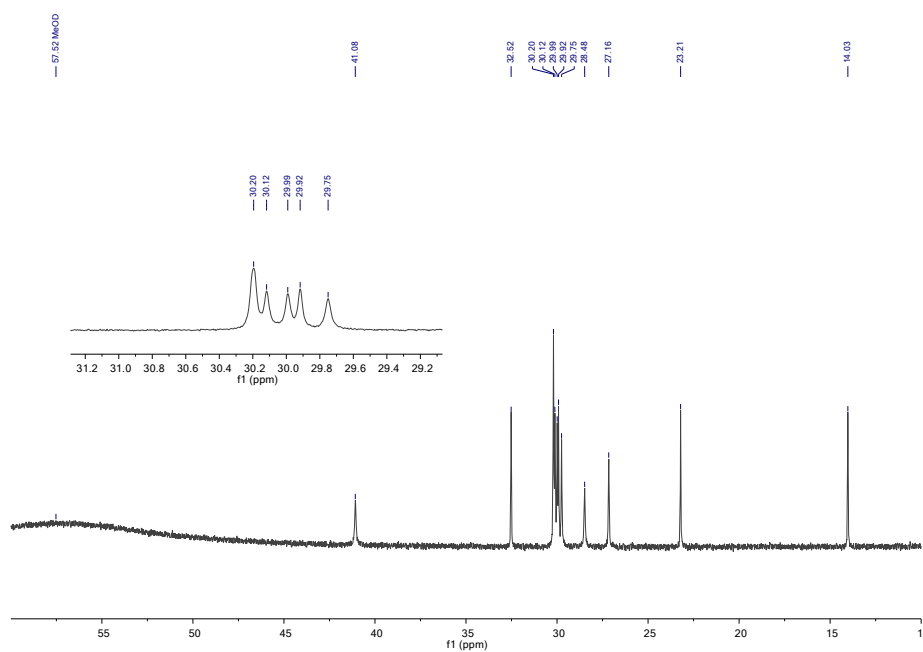


Figure S 8 ¹³C NMR MnC₁₂.

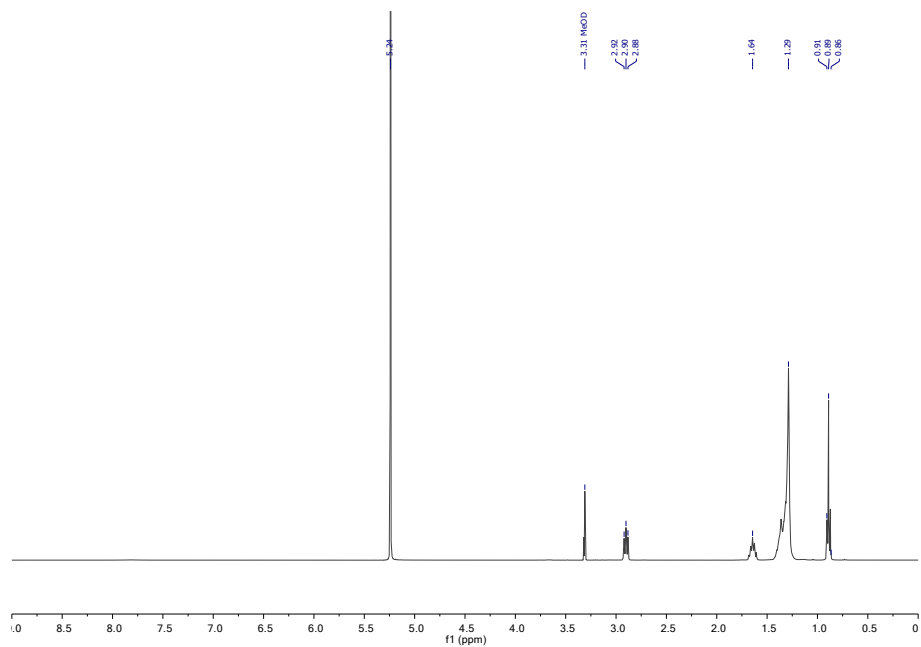


Figure S 9 ^1H NMR $\text{C}_{12}\text{H}_{27}\text{N} + \text{TFA}$.

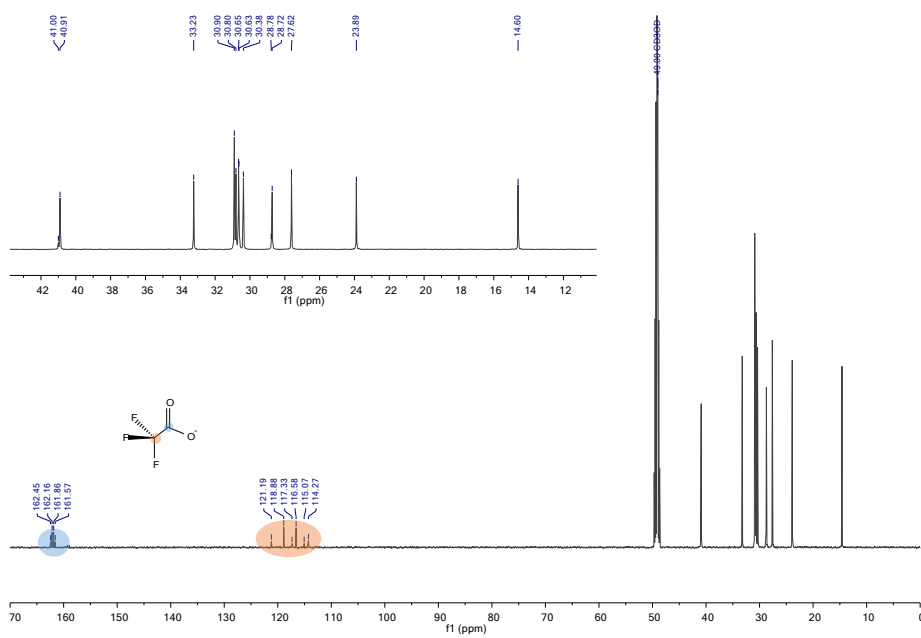


Figure S 10 ^{13}C NMR $\text{C}_{12}\text{H}_{27}\text{N} + \text{TFA}$.