

Supplementary information

Table S1. Stability constants of the mononuclear Ni(II) and Co(II) complexes (log K) with L1, L2, and L3 (0.15 NaCl, 298.1 K) in anaerobic conditions.

Reaction	Log K		
	L1 ^(a)	L2	L3
Ni + L = NiL ^(b)	9.94(4) ^(c)	11.7(1)	12.38(9)
NiL + H = NiHL	8.13(8)	9.2(1)	8.9(1)
NiHL + H = NiH ₂ L	7.52(7)	8.1(1)	7.77(9)
NiH ₂ L + H = NiH ₃ L			5.75(8)
NiL + OH = NiL(OH)	2.9(1)		2.8(1)
Co + L = CoL	7.12(4)	9.3(1)	8.40(3)
CoL + H = CoHL	8.67(7)	8.7(1)	9.21(4)
CoHL + H = CoH ₂ L	7.61(6)	7.6(1)	8.26(4)
CoH ₂ L + H = CoH ₃ L	6.3(1)		
CoL + OH = CoL(OH)		4.5(1)	
Co + L + 2H = CoH ₂ L	23.40(7)	25.87(1)	25.94(3)

^(a) Taken from ref. 27b

^(b) Charged omitted for clarity

^(c) Value in parentheses are standard deviation in the last significant figure.

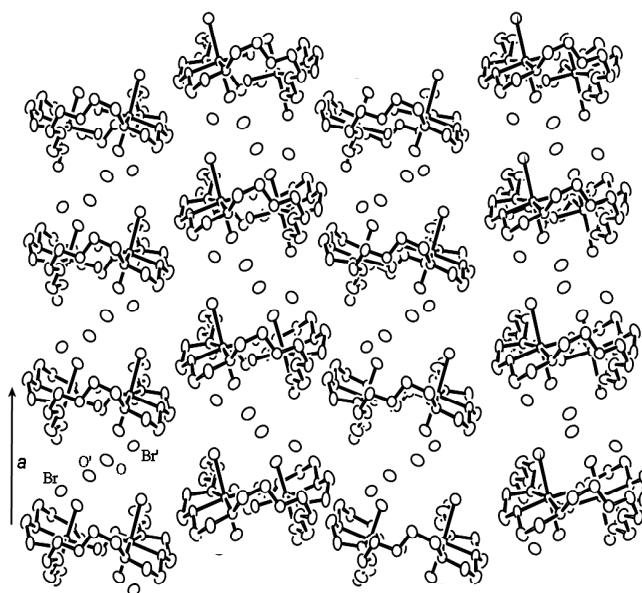


Figure S1. Crystal packing of $[\text{Ni}_2\text{L1Br}_2(\text{H}_2\text{O})_4]\text{Br}_2 \cdot 2\text{H}_2\text{O}$ showing the pillars growing along the a axis. The labelled Br, Br', O and O' atoms are symmetry related by an inversion centre.