magnetochemistry

MDPI

Supplementary Material: Two-Dimensional Nitronyl Nitroxide–Cu Networks Based on Multi-Dentate Nitronyl Nitroxides: Structures and Magnetic Properties

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Table S1. Selected bond lengths [Å] and angles [°] for complex **1**.

1			
Cu(1)-O(1)	1.947(3)	Cu(1)-O(2)	1.956(3)
Cu(1)-O(3)	2.166(3)	Cu(1)-O(4)	1.947(3)
Cu(1)-N(1)	1.991(3)	Cu(2)-O(9)	1.935(2)
Cu(2)-O(9)#3	1.935(2)	Cu(2)-O(10)	1.951(2)
Cu(2)-O(10)#3	1.951(2)	Cu(2)-O(15)	2.553(2)
Cu(2)-O(15)#3	2.553(2)	Cu(3)-O(5)	1.913(3)
Cu(3)-O(6)	2.146(3)	Cu(3)-O(7)	1.963(3)
Cu(3)-O(8)	1.904(3)	Cu(3)-O(16)	1.989(3)
Cu(4)-O(13)	1.930(3)	Cu(4)-O(13)#1	1.930(3)
Cu(4)-O(14)	1.943(3)	Cu(4)-O(14)#1	1.943(3)
Cu(4)-O(17)	2.428(3)	Cu(4)-O(17)#1	2.428(3)
Cu(5)-O(11)	1.950(3)	Cu(5)-O(11)#2	1.950(3)
Cu(5)-O(12)	1.941(3)	Cu(5)-O(12)#2	1.941(3)
O(15)-N(2)	1.281(4)	O(16)-N(3)	1.294(4)
O(18)-N(4)	1.296(4)	O(17)-N(5)	1.281(4)
N(1)-Cu(1)-O(3)	101.18(1)	O(15)-Cu(2)-O(15)#3	180.00(1)
N(2)-O(15)-Cu(2)	149.51(2)	N(3)-O(16)-Cu(3)	122.8(2)
N(5)-O(17)-Cu(4)	147.12(2)	O(17)-Cu(4)-O(17)#3	180.00(1)
O(18)-Cu(5)-O(18)#2	180.00(1)	N(4)-O(18)-Cu(5)	133.65(2)

Symmetry transformations used to generate equivalent atoms: #1 -x+2,-y,-z; #2 -x+2,-y+1,-z; #3 -x+2,-y+1,-z+1

Table S2. Selected bond lengths [Å] and angles [°] for complex **2**.

2			
Cu(1)-O(9)	2.039(5)	Cu(1)-O(9)#1	2.039(5)
Cu(1)-O(10)	2.229(5)	Cu(1)-O(10)#1	2.229(5)
Cu(1)-N(1)	2.018(5)	Cu(1)-N(1)#1	2.018(5)
Cu(2)-O(1)	2.326(5)	Cu(2)-O(5)	2.002(6)
Cu(2)-O(6)	1.952(6)	Cu(2)-O(7)	2.237(7)
Cu(2)-O(8)	1.945(6)	Cu(2)-N(2)	2.061(6)
Cu(3)-O(2)	2.362(5)	Cu(3)-O(2)#1	2.362(5)
Cu(3)-O(3)	1.947(5)	Cu(3)-O(3)#1	1.947(5)
Cu(3)-O(4)	1.942(5)	Cu(3)-O(4)#1	1.942(5)
O(1)-N(3)	1.278(7)	O(2)-N(4)	1.270(7)
N(1)-Cu(1)-N(1)#1	180.00(1)	N(2)-Cu(2)-O(1)	87.4(2)
N(3)-O(1)-Cu(2)	126.0(4)	N(4)-O(2)-Cu(3)	150.7(5)
O(2)#1-Cu(3)-O(2)	180.00(1)		

Symmetry transformations used to generate equivalent atoms: #1 -x,-y+2,-z-1

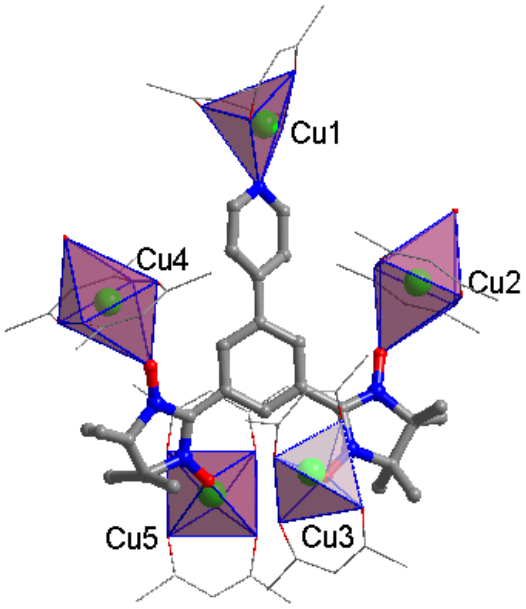


Figure S1. The coordination polyhedron of five Cu(II) ions in complex **1**. All of the fluorine and hydrogen atoms are omitted for clarity.

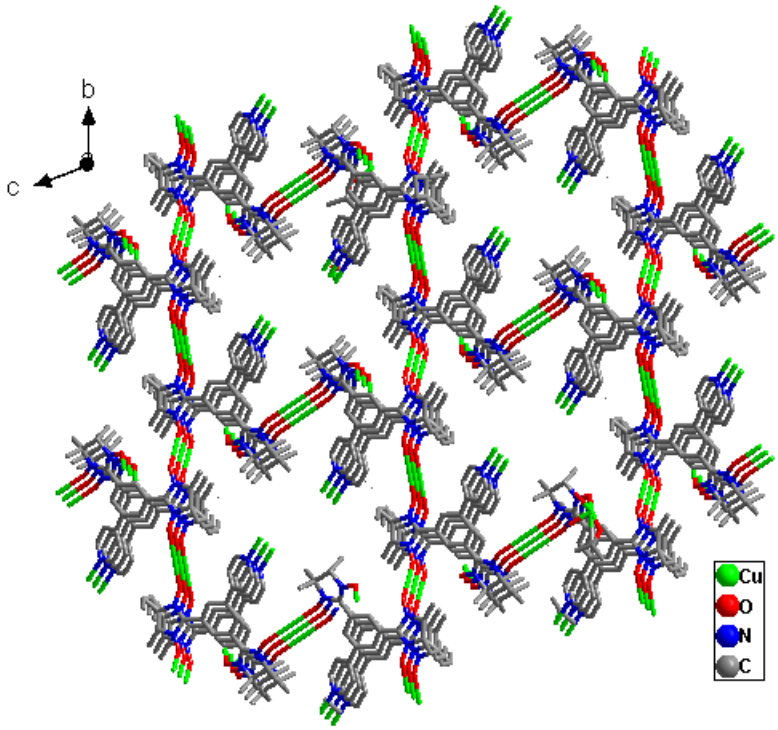


Figure S2. Crystal packing arrangement for complex **1**. All of the hydrogen and $hfac^-$ coligands are omitted for clarity.

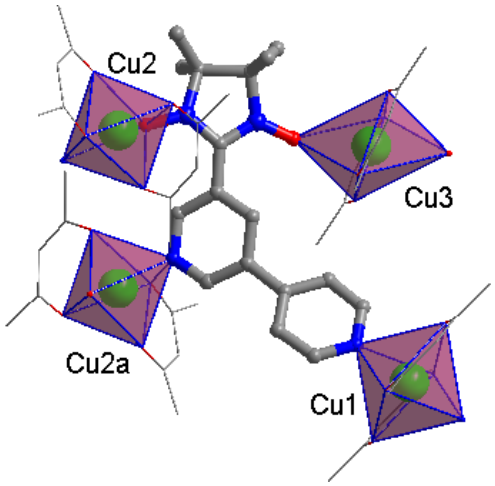


Figure S3. The coordination polyhedron of four Cu(II) ions in complex **2**. All of the fluorine and hydrogen atoms are omitted for clarity.

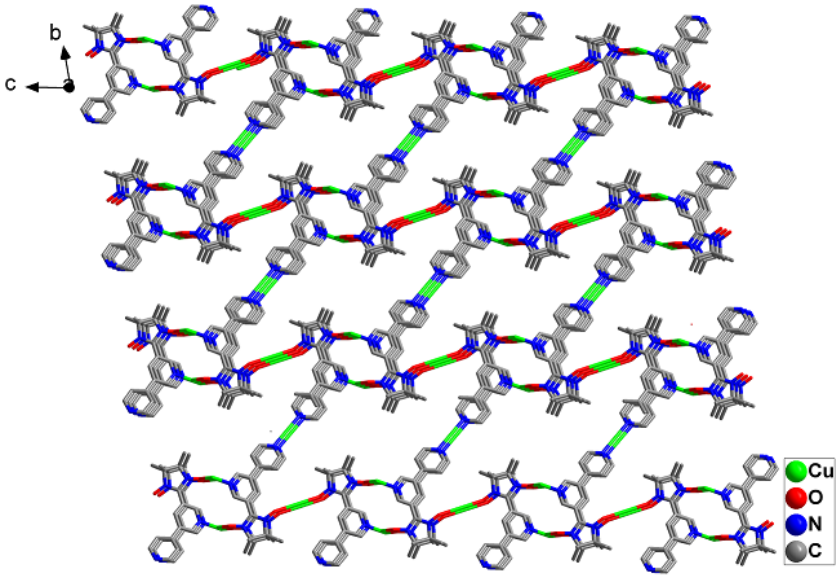
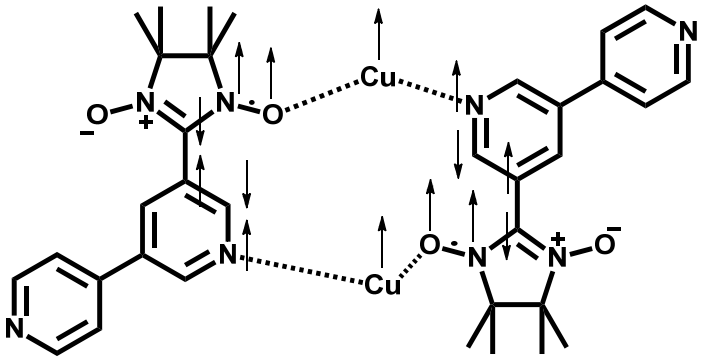


Figure S4. Crystal packing arrangement for complex **2**. All of the hydrogen and hfac⁻ coligands are omitted for clarity.



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