Rung-Defected Ladder of Azido-Bridged Cu(II) Chains Linked by [Cu(picolinate)$_2$] Units

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Table S1. Bond lengths [Å] and angles [deg] for Complexes **1**.

Complex **1**			
Cu(1)-N(13)	1.979(12)	Cu(6)-O(2)	1.944(9)
Cu(1)-N(7)	2.013(10)	Cu(6)-N(3b)	1.955(12)
Cu(1)-N(10)	2.030(10)	O(6)-Cu(6b)	1.916(9)
Cu(1)-N(4)	2.058(10)	N(3)-Cu(6b)	1.955(12)
Cu(1)-O(3)	2.253(9)	N(22)-Cu(4c)	2.014(10)
Cu(2)-N(19)	1.991(12)	N(25)-Cu(4c)	2.025(10)
Cu(2)-N(13)	2.003(11)	Cu(4)-O(5)	2.249(10)
Cu(2)-N(10)	2.000(10)	Cu(5)-O(4b)	1.941(9)
Cu(2)-N(16)	2.037(10)	Cu(5)-O(4)	1.941(9)
Cu(2)-O(1)	2.265(10)	Cu(5)-N(2)	1.947(12)
Cu(3)-N(22)	1.967(11)	Cu(5)-N(2b)	1.947(12)
Cu(3)-N(16)	1.974(10)	Cu(6)-O(6b)	1.916(9)
Cu(3)-N(25)	2.003(10)	Cu(6)-N(1)	1.928(11)
Cu(3)-N(19)	2.007(10)	N(17)-N(18)	1.146(18)
Cu(4)-N(7)	1.988(10)	N(19)-N(20)	1.190(15)
Cu(4)-N(22a)	2.014(10)	N(20)-N(21)	1.139(16)
Cu(4)-N(4)	2.018(10)	N(22)-N(23)	1.210(16)
Cu(4)-N(25a)	2.025(10)	N(26)-N(27)	1.160(16)
N(13)-Cu(1)-N(7)	102.9(4)	N(10)-Cu(2)-O(1)	97.2(4)
N(13)-Cu(1)-N(10)	78.3(4)	N(16)-Cu(2)-O(1)	88.2(4)
N(7)-Cu(1)-N(10)	171.9(4)	N(22)-Cu(3)-N(16)	101.0(4)
N(13)-Cu(1)-N(4)	164.5(4)	N(22)-Cu(3)-N(25)	81.2(4)
N(7)-Cu(1)-N(4)	78.2(4)	N(16)-Cu(3)-N(25)	167.4(4)
N(10)-Cu(1)-N(4)	98.6(4)	N(22)-Cu(3)-N(19)	177.0(5)

N(13)-Cu(1)-O(3)	102.4(4)	N(16)-Cu(3)-N(19)	79.7(4)
N(7)-Cu(1)-O(3)	99.5(4)	N(25)-Cu(3)-N(19)	97.5(4)
N(10)-Cu(1)-O(3)	88.0(4)	N(7)-Cu(4)-N(22a)	164.2(5)
N(4)-Cu(1)-O(3)	92.6(4)	N(7)-Cu(4)-N(4)	79.7(4)
N(19)-Cu(2)-N(13)	102.9(4)	N(22a)-Cu(4)-N(4)	98.5(4)
N(19)-Cu(2)-N(10)	173.6(4)	N(7)-Cu(4)-N(25a)	98.6(4)
N(13)-Cu(2)-N(10)	78.5(4)	N(22a)-Cu(4)-N(25a)	79.5(4)
N(19)-Cu(2)-N(16)	78.6(4)	N(4)-Cu(4)-N(25a)	166.8(4)
N(13)-Cu(2)-N(16)	172.9(4)	N(7)-Cu(4)-O(5)	103.6(4)
N(10)-Cu(2)-N(16)	99.3(4)	N(22a)-Cu(4)-O(5)	92.1(4)
N(19)-Cu(2)-O(1)	88.9(4)	N(4)-Cu(4)-O(5)	92.9(4)
N(13)-Cu(2)-O(1)	98.7(4)	N(25a)-Cu(4)-O(5)	100.2(4)
O(4b)-Cu(5)-O(4)	180.000(2)	C(12)-N(2)-Cu(5)	129.2(9)
O(4b)-Cu(5)-N(2)	96.1(4)	C(8)-N(2)-Cu(5)	112.7(9)
O(4)-Cu(5)-N(2)	83.9(4)	C(18)-N(3)-C(14)	118.7(13)
O(4b)-Cu(5)-N(2b)	83.9(4)	C(18)-N(3)-Cu(6b)	129.4(10)
O(4)-Cu(5)-N(2b)	96.1(4)	C(14)-N(3)-Cu(6b)	111.9(9)
N(2)-Cu(5)-N(2b)	180.0(4)	N(5)-N(4)-Cu(4)	119.8(9)
O(6b)-Cu(6)-N(1)	96.3(4)	N(5)-N(4)-Cu(1)	120.2(8)
O(6b)-Cu(6)-O(2)	170.6(5)	Cu(4)-N(4)-Cu(1)	98.9(4)
N(1)-Cu(6)-O(2)	83.9(4)	N(8)-N(7)-Cu(4)	125.6(8)
O(6b)-Cu(6)-N(3b)	84.5(4)	N(8)-N(7)-Cu(1)	127.0(8)
N(1)-Cu(6)-N(3b)	168.6(5)	Cu(4)-N(7)-Cu(1)	101.5(5)
O(2)-Cu(6)-N(3b)	97.2(4)	N(11)-N(10)-Cu(2)	123.7(8)
C(1)-O(1)-Cu(2)	132.6(10)	N(11)-N(10)-Cu(1)	121.9(9)
C(1)-O(2)-Cu(6)	114.5(9)	Cu(2)-N(10)-Cu(1)	100.3(5)
C(7)-O(3)-Cu(1)	124.2(9)	N(14)-N(13)-Cu(1)	130.9(9)
C(7)-O(4)-Cu(5)	114.9(8)	N(14)-N(13)-Cu(2)	123.9(9)
C(13)-O(5)-Cu(4)	126.2(10)	Cu(1)-N(13)-Cu(2)	101.9(5)
C(13)-O(6)-Cu(6b)	114.0(8)	Cu(3)-N(22)-Cu(4c)	100.5(5)
C(6)-N(1)-C(2)	116.7(13)	N(26)-N(25)-Cu(3)	116.3(8)
C(6)-N(1)-Cu(6)	129.7(10)	N(26)-N(25)-Cu(4c)	123.9(8)
C(2)-N(1)-Cu(6)	113.5(10)	Cu(3)-N(25)-Cu(4c)	98.9(4)
C(12)-N(2)-C(8)	118.0(12)		

Symmetry codes: a) x,y-1,z; b) -x,-y+1,-z+1; c) x,y+1,z.

Table S2. Hydrogen bond geometrical parameters for **1** (in Å for the distances and ° for the angles).

D–H···A		*d*(D–H)	*d*(H···A)	*d*(D···A)	<(DHA)
C(5)-H(5A)···N(21)	[1455.01]	0.93	2.56	3.28(3)	135
C(6)-H(6A)···N(27)	[2576.01]	0.93	2.39	3.28(2)	159

Translation of ARU-Code to CIF and Equivalent Position Code: [2576.01] = [2_576] = -x, 2-y, 1-z; [1455.01] = [1_455] = -1+x, y, z.