Electronic Supplementary Material (ESI) for Dalton Transactions

Secondary Spacer Modulated Assembly of Polyoxometalates based Metal-organic Frameworks

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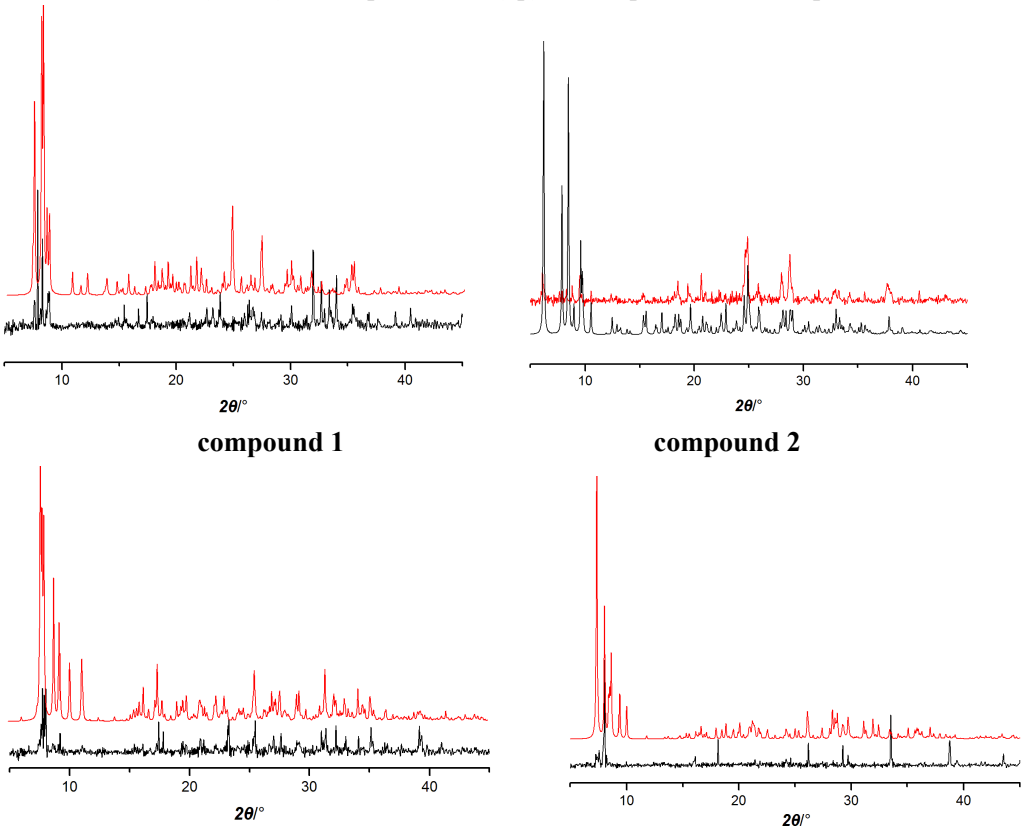
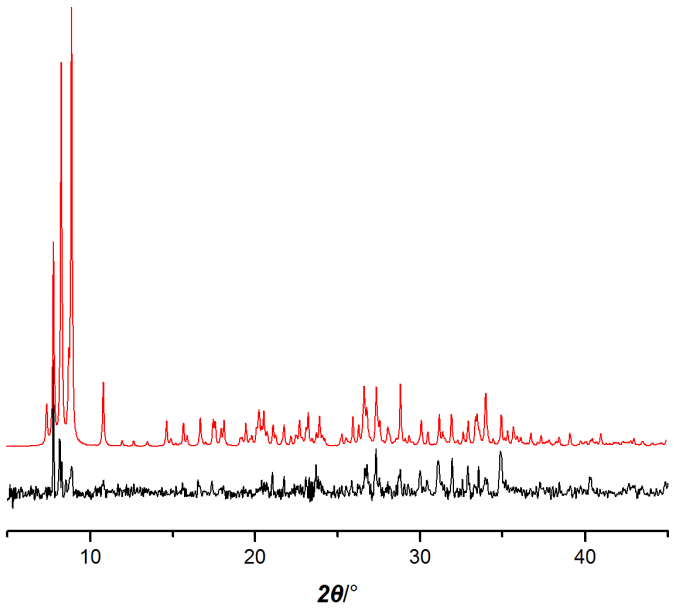
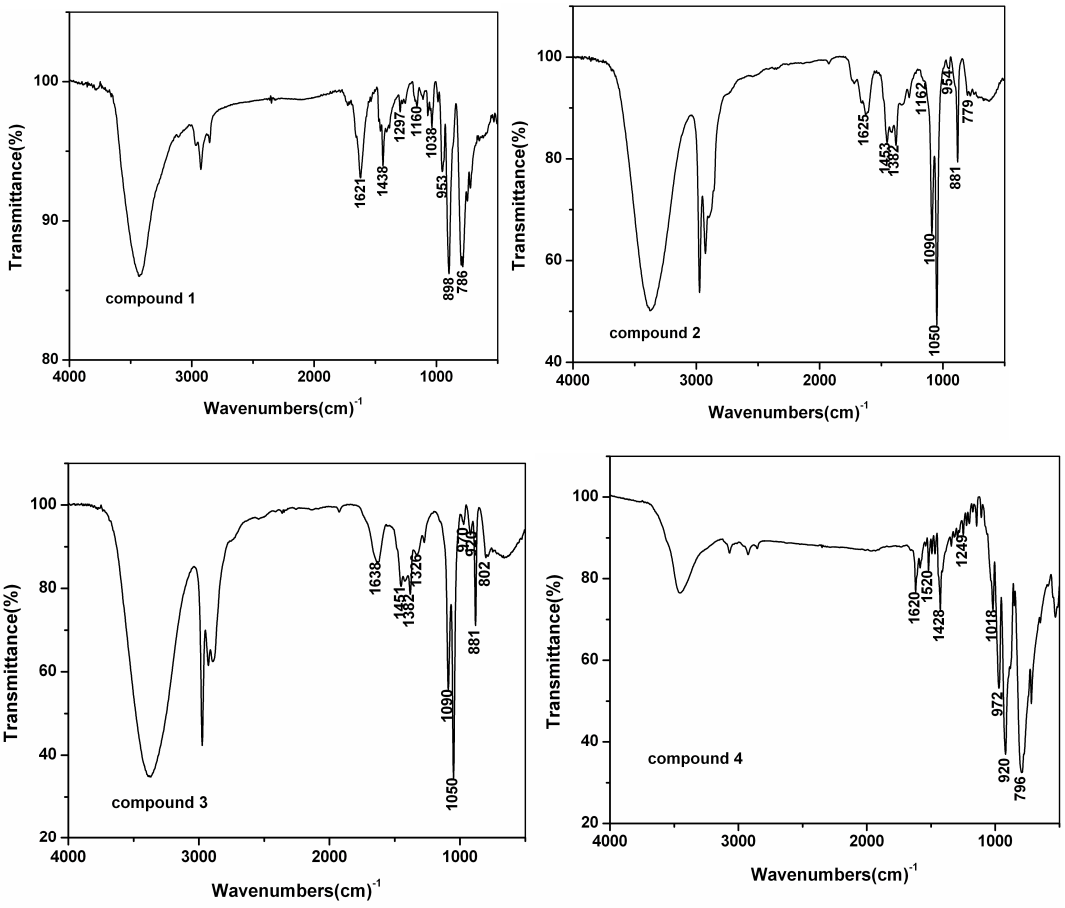
Fig.S1 The simulative (below) and experimental (up) XRPD patterns for compounds **1-5**.





compound 5

Fig.S2 The IR spectra of compounds **1-5.**



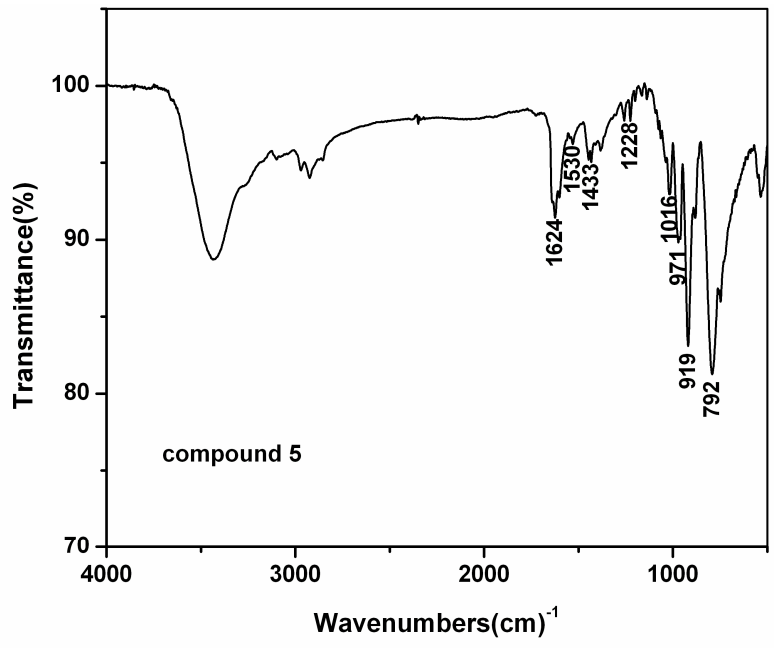


Fig.S3 UV–vis adsorption changes observed for RhB solutions as a function of UV light irradiation time: (a) in the presence of compound **1** as catalyst; (b) compound **2** as catalyst; (c) compound **5** as catalyst.

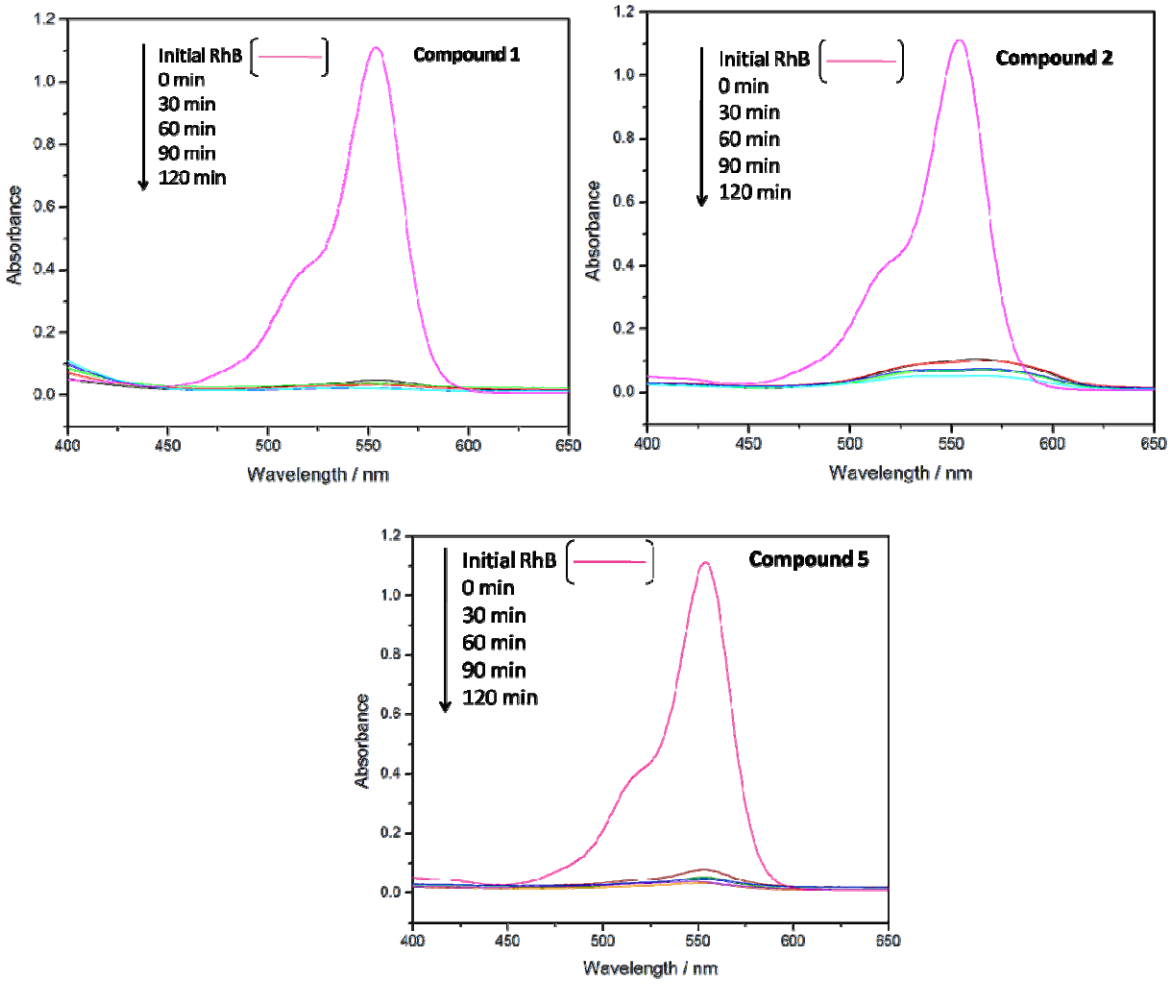


Table S 1 Bond lengths [Å] and angles [°] for compound **1**.

N(1)-Cu(2)	2.008(11)	O(6)-Mo(1)	1.936(11)
N(2)-Cu(2)	2.004(11)	O(7)-Mo(2)	1.858(10)
N(4)-Cu(1)	2.017(11)	O(7)-Mo(1)#3	1.931(10)
N(6)-Cu(1)	2.006(12)	O(8)-Mo(2)	1.891(12)
N(7)-Cu(1)	1.989(10)	O(8)-Mo(5)	1.892(12)
N(8)-Cu(3)	2.008(11)	O(9)-Mo(1)	1.651(10)
N(9)-Cu(3)	1.979(10)	O(10)-Mo(5)	1.645(12)
N(10)-Cu(1)	2.005(9)	O(12)-Mo(5)	1.889(13)
N(12)-Cu(3)	2.292(10)	O(12)-Mo(6)#3	1.923(16)
N(13)-Cu(3)	1.966(11)	O(13)-Mo(2)	1.646(11)
O(2)-Mo(2)	1.872(11)	O(14)-Mo(6)#3	1.856(13)
O(2)-Mo(6)	1.940(14)	O(14)-Mo(3)	1.909(13)
O(3)-Mo(6)	1.652(10)	O(17)-Si(1)	1.696(17)
O(2W)-Cu(3)	2.016(10)	O(17)-Mo(6)#3	2.306(16)
O(4)-Mo(4)	1.650(9)	O(17)-Mo(5)	2.326(18)
O(5)-Mo(4)	1.867(11)	O(17)-Mo(3)	2.397(16)
O(5)-Mo(6)	1.928(11)	O(18)-Si(1)	1.542(16)
O(6)-Mo(5)#3	1.847(10)	O(18)-O(20)	1.71(2)
Mo(1)-O(1)	1.874(12)	O(18)-O(19)#3	1.79(2)
Mo(1)-O(15)	1.891(12)	O(18)-Mo(2)	2.373(16)
Mo(1)-O(7)#3	1.931(10)	O(18)-Mo(1)#3	2.439(17)
Mo(1)-O(18)#3	2.439(17)	O(18)-Mo(5)	2.503(17)
Mo(2)-O(11)	1.926(11)	O(19)-Si(1)	1.678(16)
Mo(3)-O(21)	1.892(15)	O(19)-Mo(1)	2.274(15)
Mo(3)-O(22)	1.900(13)	O(19)-Mo(4)	2.386(15)
Mo(3)-O(1)	1.913(13)	O(19)-Mo(3)	2.446(16)
Mo(4)-O(11)	1.867(13)	O(20)-Si(1)	1.612(15)
Mo(4)-O(22)	1.900(13)	O(20)-Mo(2)	2.338(16)
Mo(4)-O(15)	1.946(13)	O(20)-Mo(4)	2.391(16)
Mo(5)-O(6)#3	1.847(10)	O(20)-Mo(6)	2.449(16)
Mo(5)-O(21)	1.901(15)	O(23)-Mo(3)	1.644(10)
Mo(6)-O(14)#3	1.856(13)	Cu(2)-N(2)#4	2.004(11)
Mo(6)-O(12)#3	1.923(16)	Cu(2)-N(1)#4	2.008(11)
Mo(6)-O(17)#3	2.306(16)	Si(1)-O(19)#3	1.678(16)
Si(1)-O(18)#3	1.542(16)	Si(1)-O(17)#3	1.696(17)
N(7)-Cu(1)-N(10)	93.3(4)	O(15)-Mo(4)-O(19)	61.9(6)
N(7)-Cu(1)-N(6)	174.0(4)	O(4)-Mo(4)-O(20)	158.6(5)
N(10)-Cu(1)-N(6)	80.7(4)	O(11)-Mo(4)-O(20)	63.6(6)
N(7)-Cu(1)-N(4)	93.2(4)	O(5)-Mo(4)-O(20)	66.1(5)
N(10)-Cu(1)-N(4)	173.4(4)	O(22)-Mo(4)-O(20)	94.7(6)
N(6)-Cu(1)-N(4)	92.8(4)	O(15)-Mo(4)-O(20)	98.3(6)

N(2)#4-Cu(2)-N(2)	180.0(7)	O(19)-Mo(4)-O(20)	46.9(5)
N(2)#4-Cu(2)-N(1)	97.8(5)	O(10)-Mo(5)-O(6)#3	101.0(6)
N(2)-Cu(2)-N(1)	82.2(5)	O(10)-Mo(5)-O(12)	99.8(9)
N(2)#4-Cu(2)-N(1)#4	82.2(5)	O(6)#3-Mo(5)-O(12)	89.5(6)
N(2)-Cu(2)-N(1)#4	97.8(5)	O(10)-Mo(5)-O(8)	100.2(7)
N(1)-Cu(2)-N(1)#4	180.0(7)	O(6)#3-Mo(5)-O(8)	89.8(5)
N(13)-Cu(3)-N(9)	93.4(4)	O(12)-Mo(5)-O(8)	159.7(8)
N(13)-Cu(3)-N(8)	173.7(4)	O(10)-Mo(5)-O(21)	100.1(7)
N(9)-Cu(3)-N(8)	80.7(4)	O(6)#3-Mo(5)-O(21)	158.9(7)
N(13)-Cu(3)-O(2W)	91.7(4)	O(12)-Mo(5)-O(21)	87.4(6)
N(9)-Cu(3)-O(2W)	145.5(5)	O(8)-Mo(5)-O(21)	86.1(6)
N(8)-Cu(3)-O(2W)	92.0(4)	O(10)-Mo(5)-O(17)	156.5(7)
N(13)-Cu(3)-N(12)	100.2(4)	O(6)#3-Mo(5)-O(17)	96.1(6)
N(9)-Cu(3)-N(12)	103.9(4)	O(12)-Mo(5)-O(17)	64.1(7)
N(8)-Cu(3)-N(12)	83.3(4)	O(8)-Mo(5)-O(17)	95.9(6)
O(2W)-Cu(3)-N(12)	108.7(4)	O(21)-Mo(5)-O(17)	63.8(6)
O(9)-Mo(1)-O(1)	101.7(6)	O(10)-Mo(5)-O(18)	157.3(7)
O(9)-Mo(1)-O(15)	101.5(6)	O(6)#3-Mo(5)-O(18)	65.0(5)
O(1)-Mo(1)-O(15)	89.9(5)	O(12)-Mo(5)-O(18)	97.9(8)
O(9)-Mo(1)-O(7)#3	98.1(5)	O(8)-Mo(5)-O(18)	63.6(5)
O(1)-Mo(1)-O(7)#3	88.8(5)	O(21)-Mo(5)-O(18)	94.8(7)
O(15)-Mo(1)-O(7)#3	160.2(6)	O(17)-Mo(5)-O(18)	46.2(6)
O(9)-Mo(1)-O(6)	99.9(6)	O(3)-Mo(6)-O(14)#3	101.8(7)
O(1)-Mo(1)-O(6)	158.3(6)	O(3)-Mo(6)-O(12)#3	97.4(8)
O(15)-Mo(1)-O(6)	88.1(5)	O(14)#3-Mo(6)-O(12)#3	90.8(6)
O(7)#3-Mo(1)-O(6)	85.8(5)	O(3)-Mo(6)-O(5)	98.4(6)
O(9)-Mo(1)-O(19)	160.2(6)	O(14)#3-Mo(6)-O(5)	159.8(7)
O(1)-Mo(1)-O(19)	65.6(6)	O(12)#3-Mo(6)-O(5)	86.7(6)
O(15)-Mo(1)-O(19)	64.9(6)	O(3)-Mo(6)-O(2)	100.2(7)
O(7)#3-Mo(1)-O(19)	96.7(5)	O(14)#3-Mo(6)-O(2)	89.0(7)
O(6)-Mo(1)-O(19)	94.1(6)	O(12)#3-Mo(6)-O(2)	162.1(8)
O(9)-Mo(1)-O(18)#3	155.4(6)	O(5)-Mo(6)-O(2)	87.3(5)
O(1)-Mo(1)-O(18)#3	93.5(6)	O(3)-Mo(6)-O(17)#3	156.1(6)
O(15)-Mo(1)-O(18)#3	97.8(6)	O(14)#3-Mo(6)-O(17)#3	65.6(6)
O(7)#3-Mo(1)-O(18)#3	62.6(5)	O(12)#3-Mo(6)-O(17)#3	64.1(7)
O(6)-Mo(1)-O(18)#3	65.4(5)	O(5)-Mo(6)-O(17)#3	95.5(6)
O(19)-Mo(1)-O(18)#3	44.3(5)	O(2)-Mo(6)-O(17)#3	99.8(6)
O(13)-Mo(2)-O(7)	101.3(6)	O(3)-Mo(6)-O(20)	154.7(6)
O(13)-Mo(2)-O(2)	100.6(8)	O(14)#3-Mo(6)-O(20)	96.7(8)
O(7)-Mo(2)-O(2)	89.0(5)	O(12)#3-Mo(6)-O(20)	99.5(8)
O(13)-Mo(2)-O(8)	99.7(7)	O(5)-Mo(6)-O(20)	64.1(5)
O(7)-Mo(2)-O(8)	89.4(5)	O(2)-Mo(6)-O(20)	62.8(5)
O(2)-Mo(2)-O(8)	159.5(7)	O(17)#3-Mo(6)-O(20)	48.9(6)

O(13)-Mo(2)-O(11)	99.1(7)	O(18)-Si(1)-O(18)#3	180.0(12)
O(7)-Mo(2)-O(11)	159.6(7)	O(18)-Si(1)-O(20)#3	114.6(8)
O(2)-Mo(2)-O(11)	87.8(5)	O(18)#3-Si(1)-O(20)#3	65.4(8)
O(8)-Mo(2)-O(11)	86.5(5)	O(18)-Si(1)-O(20)	65.4(8)
O(13)-Mo(2)-O(20)	157.8(7)	O(18)#3-Si(1)-O(20)	114.6(8)
O(7)-Mo(2)-O(20)	96.3(6)	O(20)#3-Si(1)-O(20)	180.0(12)
O(2)-Mo(2)-O(20)	66.1(6)	O(18)-Si(1)-O(19)#3	67.2(8)
O(8)-Mo(2)-O(20)	93.8(6)	O(18)#3-Si(1)-O(19)#3	112.8(8)
O(11)-Mo(2)-O(20)	64.1(6)	O(20)#3-Si(1)-O(19)#3	70.6(8)
O(13)-Mo(2)-O(18)	159.6(7)	O(20)-Si(1)-O(19)#3	109.4(8)
O(7)-Mo(2)-O(18)	64.9(6)	O(18)-Si(1)-O(19)	112.8(8)
O(2)-Mo(2)-O(18)	94.3(7)	O(18)#3-Si(1)-O(19)	67.2(8)
O(8)-Mo(2)-O(18)	66.6(6)	O(20)#3-Si(1)-O(19)	109.4(8)
O(11)-Mo(2)-O(18)	95.2(7)	O(20)-Si(1)-O(19)	70.6(8)
O(20)-Mo(2)-O(18)	42.5(5)	O(19)#3-Si(1)-O(19)	180.000(3)
O(23)-Mo(3)-O(21)	98.4(6)	O(18)-Si(1)-O(17)	71.7(9)
O(23)-Mo(3)-O(22)	98.6(6)	O(18)#3-Si(1)-O(17)	108.3(9)
O(21)-Mo(3)-O(22)	91.4(6)	O(20)#3-Si(1)-O(17)	73.1(8)
O(23)-Mo(3)-O(14)	102.5(7)	O(20)-Si(1)-O(17)	106.9(8)
O(21)-Mo(3)-O(14)	89.0(6)	O(19)#3-Si(1)-O(17)	104.2(8)
O(22)-Mo(3)-O(14)	158.6(7)	O(19)-Si(1)-O(17)	75.8(8)
O(23)-Mo(3)-O(1)	102.3(6)	O(18)-Si(1)-O(17)#3	108.3(9)
O(21)-Mo(3)-O(1)	159.2(7)	O(18)#3-Si(1)-O(17)#3	71.7(9)
O(22)-Mo(3)-O(1)	87.0(6)	O(20)#3-Si(1)-O(17)#3	106.9(8)
O(14)-Mo(3)-O(1)	85.2(7)	O(20)-Si(1)-O(17)#3	73.1(8)
O(23)-Mo(3)-O(17)	154.5(6)	O(19)#3-Si(1)-O(17)#3	75.8(8)
O(21)-Mo(3)-O(17)	62.4(6)	O(19)-Si(1)-O(17)#3	104.2(8)
O(22)-Mo(3)-O(17)	98.6(6)	O(17)-Si(1)-O(17)#3	180.0(10)
O(14)-Mo(3)-O(17)	62.9(6)	O(11)-Mo(4)-O(5)	91.6(5)
O(1)-Mo(3)-O(17)	97.3(6)	O(4)-Mo(4)-O(22)	99.2(6)
O(23)-Mo(3)-O(19)	154.8(5)	O(11)-Mo(4)-O(22)	88.2(6)
O(21)-Mo(3)-O(19)	99.5(7)	O(5)-Mo(4)-O(22)	158.4(7)
O(22)-Mo(3)-O(19)	63.4(5)	O(4)-Mo(4)-O(15)	98.9(5)
O(14)-Mo(3)-O(19)	95.5(7)	O(11)-Mo(4)-O(15)	160.4(6)
O(1)-Mo(3)-O(19)	61.4(5)	O(5)-Mo(4)-O(15)	87.3(6)
O(17)-Mo(3)-O(19)	50.7(5)	O(22)-Mo(4)-O(15)	85.7(5)
O(4)-Mo(4)-O(11)	100.4(6)	O(4)-Mo(4)-O(19)	154.5(5)
O(4)-Mo(4)-O(5)	102.0(6)	O(11)-Mo(4)-O(19)	98.8(6)

Symmetry transformations used to generate equivalent atoms: #1 -x+1,-y+1,-z; #2 -x+1,-y,-z; #3 -x,-y+1,-z+1; #4 -x,-y,-z

Table S 2 Bond lengths [Å] and angles [°] for compound **2**.

O(2A)-Mo(1)	1.58(3)	Mo(2)-O(66)	2.32(2)

O(8A)-Mo(1)	1.83(3)	Mo(2)-O(68)	2.39(2)
O(8A)-Mo(4)#1	2.27(3)	Mo(3)-O(99)#1	1.810(19)
O(23A)-Mo(4)	1.75(3)	Mo(3)-O(67)#1	2.35(3)
O(23A)-O(69)	1.81(4)	Mo(3)-O(66)	2.39(2)
O(23A)-Mo(7)	1.93(3)	Mo(4)-O(8B)#1	1.86(3)
O(70A)-Mo(2)	1.77(3)	Mo(4)-O(8A)#1	2.27(3)
O(70A)-Mo(3)	1.83(3)	Mo(4)-O(69)	2.32(3)
O(97A)-Mo(4)	1.69(3)	Mo(5)-O(11)#1	1.86(2)
O(97A)-Mo(3)	2.11(4)	Mo(5)-O(4)#1	1.979(18)
O(98A)-Mo(5)	1.77(3)	Mo(5)-O(69)	2.36(3)
O(98A)-Mo(4)	1.96(3)	Mo(7)-O(69)	2.22(3)
O(96A)-O(69)	1.70(5)	O(67)-Mo(3)#1	2.35(3)
O(96A)-Mo(7)	1.75(4)	O(99)-Mo(3)#1	1.810(19)
O(96A)-Mo(5)	1.90(4)	N(11)-Cu(2)#3	1.99(2)
O(2B)-Mo(1)	1.80(3)	Si(1)-O(68)	1.54(2)
O(8B)-Mo(1)	1.85(3)	Si(1)-O(68)#1	1.54(2)
O(8B)-Mo(4)#1	1.86(3)	Si(1)-O(66)#1	1.57(2)
O(23B)-Mo(4)	2.05(3)	Si(1)-O(66)	1.57(2)
O(23B)-Mo(7)	2.16(3)	Si(1)-O(67)	1.61(3)
O(70B)-Mo(2)	1.84(3)	Si(1)-O(67)#1	1.61(3)
O(70B)-Mo(3)	2.25(3)	Si(1)-O(69)	1.83(3)
O(97B)-Mo(3)	1.90(3)	Si(1)-O(69)#1	1.83(3)
O(97B)-Mo(4)	2.09(3)	Mo(1)-O(99)	2.008(17)
O(98B)-Mo(5)	1.98(3)	Mo(1)-O(67)	2.33(3)
O(98B)-Mo(4)	2.15(3)	Mo(1)-O(68)	2.40(2)
O(96B)-Mo(7)	1.93(3)	O(11)-Mo(5)#1	1.86(2)
O(96B)-Mo(5)	2.18(4)	O(11)-Mo(2)	1.92(2)
N(1)-Cu(1)	1.911(15)	O(13)-Mo(5)	1.658(16)
N(2)-N(3)	1.39(2)	O(15)-Mo(7)	1.66(2)
N(3)-N(4)	1.32(2)	O(17)-Mo(2)	1.673(16)
N(3)-Cu(2)	2.015(17)	O(18)-Mo(1)	1.783(16)
N(5)-Cu(1)	1.967(17)	O(18)-Mo(2)	2.014(16)
N(7)-Cu(2)	1.97(2)	O(31)-Mo(4)	1.643(15)
N(8)-N(11)	1.37(2)	Cu(1)-N(1)#2	1.911(15)
N(8)-Cu(2)	2.105(18)	Cu(1)-N(5)#2	1.967(17)
O(1)-Mo(2)	1.82(2)	Cu(2)-N(11)#3	1.99(2)
O(1)-Mo(7)	1.999(19)	Cu(2)-N(76)	2.001(18)
O(3)-Mo(7)	1.821(17)	O(4)-Mo(3)	1.814(18)
O(3)-Mo(1)	1.983(18)	O(4)-Mo(5)#1	1.979(18)
N(1)#2-Cu(1)-N(1)	180.0(12)	O(8B)#1-Mo(4)-O(98B)	86.0(12)
N(1)#2-Cu(1)-N(5)#2	80.9(7)	O(98A)-Mo(4)-O(98B)	29.5(10)
N(1)-Cu(1)-N(5)#2	99.1(7)	O(23B)-Mo(4)-O(98B)	79.5(11)
N(1)#2-Cu(1)-N(5)	99.1(7)	O(97B)-Mo(4)-O(98B)	172.7(12)

N(1)-Cu(1)-N(5)	80.9(7)	O(31)-Mo(4)-O(8A)#1	90.8(10)
N(5)#2-Cu(1)-N(5)	180.0(7)	O(97A)-Mo(4)-O(8A)#1	91.9(14)
N(7)-Cu(2)-N(11)#3	173.9(8)	O(23A)-Mo(4)-O(8A)#1	153.9(14)
N(7)-Cu(2)-N(76)	88.9(8)	O(8B)#1-Mo(4)-O(8A)#1	17.5(11)
N(11)#3-Cu(2)-N(76)	93.5(7)	O(98A)-Mo(4)-O(8A)#1	77.2(13)
N(7)-Cu(2)-N(3)	88.9(7)	O(23B)-Mo(4)-O(8A)#1	175.0(11)
N(11)#3-Cu(2)-N(3)	91.8(7)	O(97B)-Mo(4)-O(8A)#1	78.4(11)
N(76)-Cu(2)-N(3)	149.3(7)	O(98B)-Mo(4)-O(8A)#1	95.5(11)
N(7)-Cu(2)-N(8)	79.1(8)	O(31)-Mo(4)-O(69)	151.3(9)
N(11)#3-Cu(2)-N(8)	94.7(7)	O(97A)-Mo(4)-O(69)	92.8(14)
N(76)-Cu(2)-N(8)	114.2(7)	O(23A)-Mo(4)-O(69)	50.7(12)
N(3)-Cu(2)-N(8)	95.3(7)	O(8B)#1-Mo(4)-O(69)	90.1(12)
O(68)-Si(1)-O(68)#1	180.000(7)	O(98A)-Mo(4)-O(69)	55.9(11)
O(68)-Si(1)-O(66)#1	117.4(13)	O(23B)-Mo(4)-O(69)	71.3(11)
O(68)#1-Si(1)-O(66)#1	62.6(12)	O(97B)-Mo(4)-O(69)	107.3(11)
O(68)-Si(1)-O(66)	62.6(12)	O(98B)-Mo(4)-O(69)	70.3(10)
O(68)#1-Si(1)-O(66)	117.4(13)	O(8A)#1-Mo(4)-O(69)	107.2(11)
O(66)#1-Si(1)-O(66)	180.0(10)	O(13)-Mo(5)-O(98A)	117.2(12)
O(68)-Si(1)-O(67)	64.2(12)	O(13)-Mo(5)-O(11)#1	104.4(8)
O(68)#1-Si(1)-O(67)	115.8(13)	O(98A)-Mo(5)-O(11)#1	83.9(13)
O(66)#1-Si(1)-O(67)	67.1(12)	O(13)-Mo(5)-O(96A)	111.9(15)
O(66)-Si(1)-O(67)	112.9(12)	O(98A)-Mo(5)-O(96A)	93.4(15)
O(68)-Si(1)-O(67)#1	115.8(13)	O(11)#1-Mo(5)-O(96A)	140.3(16)
O(68)#1-Si(1)-O(67)#1	64.2(12)	O(13)-Mo(5)-O(4)#1	96.9(8)
O(66)#1-Si(1)-O(67)#1	112.9(12)	O(98A)-Mo(5)-O(4)#1	145.9(12)
O(66)-Si(1)-O(67)#1	67.1(12)	O(11)#1-Mo(5)-O(4)#1	86.9(8)
O(67)-Si(1)-O(67)#1	180.000(4)	O(96A)-Mo(5)-O(4)#1	73.4(14)
O(68)-Si(1)-O(69)	72.9(12)	O(13)-Mo(5)-O(98B)	89.8(11)
O(68)#1-Si(1)-O(69)	107.1(12)	O(98A)-Mo(5)-O(98B)	32.3(12)
O(66)#1-Si(1)-O(69)	79.5(13)	O(11)#1-Mo(5)-O(98B)	107.8(11)
O(66)-Si(1)-O(69)	100.5(13)	O(96A)-Mo(5)-O(98B)	88.5(15)
O(67)-Si(1)-O(69)	100.1(13)	O(4)#1-Mo(5)-O(98B)	161.9(10)
O(67)#1-Si(1)-O(69)	79.9(13)	O(13)-Mo(5)-O(96B)	87.5(11)
O(68)-Si(1)-O(69)#1	107.1(12)	O(98A)-Mo(5)-O(96B)	96.1(13)
O(68)#1-Si(1)-O(69)#1	72.9(12)	O(11)#1-Mo(5)-O(96B)	166.7(11)
O(66)#1-Si(1)-O(69)#1	100.5(13)	O(96A)-Mo(5)-O(96B)	26.4(13)
O(66)-Si(1)-O(69)#1	79.5(13)	O(4)#1-Mo(5)-O(96B)	85.8(10)
O(67)-Si(1)-O(69)#1	79.9(13)	O(98B)-Mo(5)-O(96B)	77.7(11)
O(67)#1-Si(1)-O(69)#1	100.1(13)	O(13)-Mo(5)-O(69)	149.9(9)
O(69)-Si(1)-O(69)#1	180.000(8)	O(98A)-Mo(5)-O(69)	56.9(11)
O(2A)-Mo(1)-O(18)	110.9(13)	O(11)#1-Mo(5)-O(69)	104.1(10)
O(2A)-Mo(1)-O(2B)	24.2(14)	O(96A)-Mo(5)-O(69)	45.7(14)
O(18)-Mo(1)-O(2B)	98.5(13)	O(4)#1-Mo(5)-O(69)	94.2(9)

O(2A)-Mo(1)-O(8A)	78(2)	O(98B)-Mo(5)-O(69)	72.3(11)
O(18)-Mo(1)-O(8A)	103.9(11)	O(96B)-Mo(5)-O(69)	65.5(12)
O(2B)-Mo(1)-O(8A)	100.9(18)	O(15)-Mo(7)-O(96A)	120.8(17)
O(2A)-Mo(1)-O(8B)	100.4(19)	O(15)-Mo(7)-O(3)	102.0(9)
O(18)-Mo(1)-O(8B)	90.6(11)	O(96A)-Mo(7)-O(3)	87.1(15)
O(2B)-Mo(1)-O(8B)	122.5(16)	O(15)-Mo(7)-O(96B)	91.9(14)
O(8A)-Mo(1)-O(8B)	23.4(10)	O(96A)-Mo(7)-O(96B)	30.1(14)
O(2A)-Mo(1)-O(3)	108.5(15)	O(3)-Mo(7)-O(96B)	102.0(10)
O(18)-Mo(1)-O(3)	91.4(7)	O(15)-Mo(7)-O(23A)	111.7(12)
O(2B)-Mo(1)-O(3)	88.7(13)	O(96A)-Mo(7)-O(23A)	88.2(15)
O(8A)-Mo(1)-O(3)	160.4(11)	O(3)-Mo(7)-O(23A)	143.1(13)
O(8B)-Mo(1)-O(3)	148.1(11)	O(96B)-Mo(7)-O(23A)	91.6(12)
O(2A)-Mo(1)-O(99)	92.5(13)	O(15)-Mo(7)-O(1)	99.2(9)
O(18)-Mo(1)-O(99)	156.4(9)	O(96A)-Mo(7)-O(1)	139.7(16)
O(2B)-Mo(1)-O(99)	102.1(13)	O(3)-Mo(7)-O(1)	88.7(8)
O(8A)-Mo(1)-O(99)	83.7(11)	O(96B)-Mo(7)-O(1)	162.7(11)
O(8B)-Mo(1)-O(99)	88.3(10)	O(23A)-Mo(7)-O(1)	71.9(11)
O(3)-Mo(1)-O(99)	77.5(7)	O(15)-Mo(7)-O(23B)	87.7(10)
O(2A)-Mo(1)-O(67)	145.6(15)	O(96A)-Mo(7)-O(23B)	92.5(15)
O(18)-Mo(1)-O(67)	98.9(9)	O(3)-Mo(7)-O(23B)	169.0(10)
O(2B)-Mo(1)-O(67)	162.2(13)	O(96B)-Mo(7)-O(23B)	82.7(10)
O(8A)-Mo(1)-O(67)	78.8(13)	O(23A)-Mo(7)-O(23B)	26.0(10)
O(8B)-Mo(1)-O(67)	61.4(12)	O(1)-Mo(7)-O(23B)	84.6(9)
O(3)-Mo(1)-O(67)	86.9(9)	O(15)-Mo(7)-O(69)	154.9(9)
O(99)-Mo(1)-O(67)	60.1(9)	O(96A)-Mo(7)-O(69)	49.2(15)
O(2A)-Mo(1)-O(68)	172.9(15)	O(3)-Mo(7)-O(69)	100.4(9)
O(18)-Mo(1)-O(68)	64.0(9)	O(96B)-Mo(7)-O(69)	72.3(14)
O(2B)-Mo(1)-O(68)	149.1(14)	O(23A)-Mo(7)-O(69)	51.3(11)
O(8A)-Mo(1)-O(68)	107.8(13)	O(1)-Mo(7)-O(69)	92.6(9)
O(8B)-Mo(1)-O(68)	84.7(12)	O(23B)-Mo(7)-O(69)	71.4(10)
O(3)-Mo(1)-O(68)	67.8(8)	O(5)-Mo(3)-O(99)#1	103.0(9)
O(99)-Mo(1)-O(68)	92.4(8)	O(5)-Mo(3)-O(4)	103.2(10)
O(67)-Mo(1)-O(68)	41.4(8)	O(99)#1-Mo(3)-O(4)	97.7(9)
O(17)-Mo(2)-O(70A)	116.3(13)	O(5)-Mo(3)-O(70A)	107.4(12)
O(17)-Mo(2)-O(1)	101.7(10)	O(99)#1-Mo(3)-O(70A)	148.4(13)
O(70A)-Mo(2)-O(1)	96.9(13)	O(4)-Mo(3)-O(70A)	84.0(13)
O(17)-Mo(2)-O(70B)	93.9(12)	O(5)-Mo(3)-O(97B)	88.3(12)
O(70A)-Mo(2)-O(70B)	23.1(11)	O(99)#1-Mo(3)-O(97B)	86.7(11)
O(1)-Mo(2)-O(70B)	96.9(11)	O(4)-Mo(3)-O(97B)	166.3(12)
O(17)-Mo(2)-O(11)	99.1(10)	O(70A)-Mo(3)-O(97B)	85.6(15)
O(70A)-Mo(2)-O(11)	83.8(13)	O(5)-Mo(3)-O(97A)	104.0(12)
O(1)-Mo(2)-O(11)	156.3(9)	O(99)#1-Mo(3)-O(97A)	93.4(10)
O(70B)-Mo(2)-O(11)	92.8(11)	O(4)-Mo(3)-O(97A)	147.4(12)

O(17)-Mo(2)-O(18)	97.1(8)	O(70A)-Mo(3)-O(97A)	71.0(15)
O(70A)-Mo(2)-O(18)	144.2(13)	O(97B)-Mo(3)-O(97A)	19.0(10)
O(1)-Mo(2)-O(18)	88.0(7)	O(5)-Mo(3)-O(70B)	90.7(10)
O(70B)-Mo(2)-O(18)	166.7(12)	O(99)#1-Mo(3)-O(70B)	162.8(11)
O(11)-Mo(2)-O(18)	78.2(7)	O(4)-Mo(3)-O(70B)	89.2(10)
O(17)-Mo(2)-O(66)	162.2(10)	O(70A)-Mo(3)-O(70B)	16.8(12)
O(70A)-Mo(2)-O(66)	52.4(13)	O(97B)-Mo(3)-O(70B)	83.3(12)
O(1)-Mo(2)-O(66)	93.8(9)	O(97A)-Mo(3)-O(70B)	72.9(12)
O(70B)-Mo(2)-O(66)	75.5(12)	O(5)-Mo(3)-O(67)#1	157.4(10)
O(11)-Mo(2)-O(66)	67.8(9)	O(99)#1-Mo(3)-O(67)#1	62.1(9)
O(18)-Mo(2)-O(66)	91.9(8)	O(4)-Mo(3)-O(67)#1	95.9(10)
O(17)-Mo(2)-O(68)	155.9(9)	O(70A)-Mo(3)-O(67)#1	86.3(13)
O(70A)-Mo(2)-O(68)	87.2(13)	O(97B)-Mo(3)-O(67)#1	74.7(12)
O(1)-Mo(2)-O(68)	68.4(8)	O(97A)-Mo(3)-O(67)#1	62.8(11)
O(70B)-Mo(2)-O(68)	108.8(12)	O(70B)-Mo(3)-O(67)#1	101.7(11)
O(11)-Mo(2)-O(68)	88.0(10)	O(5)-Mo(3)-O(66)	156.6(8)
O(18)-Mo(2)-O(68)	61.6(8)	O(99)#1-Mo(3)-O(66)	100.1(9)
O(66)-Mo(2)-O(68)	40.1(8)	O(4)-Mo(3)-O(66)	69.8(9)
O(97A)-Mo(4)-O(98A)	140.2(16)	O(70A)-Mo(3)-O(66)	50.7(13)
O(23A)-Mo(4)-O(98A)	95.8(13)	O(97B)-Mo(3)-O(66)	96.8(12)
O(8B)#1-Mo(4)-O(98A)	62.9(14)	O(97A)-Mo(3)-O(66)	78.1(12)
O(31)-Mo(4)-O(23B)	88.8(10)	O(70B)-Mo(3)-O(66)	67.4(10)
O(97A)-Mo(4)-O(23B)	92.9(14)	O(67)#1-Mo(3)-O(66)	43.5(8)
O(23A)-Mo(4)-O(23B)	27.4(11)	O(31)-Mo(4)-O(97A)	109.1(13)
O(8B)#1-Mo(4)-O(23B)	159.3(12)	O(31)-Mo(4)-O(23A)	115.1(13)
O(98A)-Mo(4)-O(23B)	98.2(13)	O(97A)-Mo(4)-O(23A)	77.4(17)
O(31)-Mo(4)-O(97B)	98.0(10)	O(31)-Mo(4)-O(8B)#1	104.9(11)
O(97A)-Mo(4)-O(97B)	17.4(13)	O(97A)-Mo(4)-O(8B)#1	97.0(15)
O(23A)-Mo(4)-O(97B)	94.3(14)	O(23A)-Mo(4)-O(8B)#1	139.3(14)
O(8B)#1-Mo(4)-O(97B)	87.1(12)	O(31)-Mo(4)-O(98A)	109.2(11)
O(98A)-Mo(4)-O(97B)	143.4(14)	O(97A)-Mo(4)-O(98B)	163.0(15)
O(23B)-Mo(4)-O(97B)	106.6(11)	O(23A)-Mo(4)-O(98B)	89.4(13)

Symmetry transformations used to generate equivalent atoms: #1 -x,-y+2,-z+2； #2 -x+2,-y,-z+1； #3 -x+2,-y+1,-z+1； #4 -x+1,-y+2,-z+1； #5 -x+1,-y+1,-z+2.

Table S 3 Bond lengths [Å] and angles [°] for compound **3**.

Cu(2)-N(5)#1	1.96(3)	O(4)-W(24)	1.91(2)
Cu(2)-N(5)	1.96(3)	O(4)-W(22)	1.92(2)
Cu(2)-O(1W)#1	2.02(2)	O(5)-W(13)	1.883(18)
Cu(2)-O(1W)	2.02(2)	O(5)-W(24)	1.98(2)
Cu(2)-O(2W)#1	2.36(3)	O(6)-W(22)	1.66(2)
Cu(2)-O(2W)	2.36(3)	O(7)-W(22)	1.91(2)

Cu(3)-N(7)	1.97(2)	O(7)-W(13)	1.934(18)
Cu(3)-N(3)	1.98(2)	O(8)-W(13)	1.72(2)
Cu(3)-N(8)	1.99(2)	O(9)-W(9)	1.853(19)
Cu(3)-N(10)	2.00(2)	O(9)-W(22)	1.94(2)
Cu(3)-O(6W)	2.31(2)	O(11)-W(9)	1.91(2)
O(1)-W(24)	1.69(2)	O(11)-W(12)	1.92(2)
O(3)-W(24)	1.89(2)	O(12)-W(12)	1.91(2)
O(3)-W(10)	1.91(2)	O(12)-W(23)	1.93(2)
O(27)-W(20)	1.688(18)	O(13)-W(5)	1.70(2)
O(28)-W(13)	1.88(2)	O(14)-W(12)	1.65(2)
O(28)-W(11)	1.92(2)	O(15)-W(9)	1.69(2)
O(29)-W(11)	1.931(19)	O(16)-W(23)	1.883(19)
O(29)-W(10)	1.948(19)	O(16)-W(9)	1.95(2)
O(30)-W(5)	1.86(2)	O(17)-W(23)	1.704(19)
O(30)-W(10)	1.90(2)	O(18)-W(2)	1.813(19)
O(31)-Si(1)	1.64(2)	O(18)-W(22)	1.94(2)
O(31)-W(10)	2.318(19)	O(19)-Si(1)	1.61(2)
O(31)-W(11)	2.34(2)	O(19)-W(13)	2.343(17)
O(31)-W(19)	2.362(19)	O(19)-W(24)	2.344(19)
O(32)-W(11)	1.662(18)	O(19)-W(22)	2.39(2)
O(33)-W(19)	1.885(18)	O(20)-W(2)	1.64(2)
O(33)-W(20)	1.904(19)	O(21)-W(9)	1.85(2)
O(34)-Si(1)	1.59(2)	O(21)-W(2)	1.99(2)
O(34)-W(5)	2.37(2)	O(22)-W(19)	1.695(19)
O(34)-W(20)	2.367(19)	O(23)-W(12)	1.88(2)
O(34)-W(2)	2.39(2)	O(23)-W(19)	1.90(2)
O(36)-W(2)	1.86(2)	O(24)-W(19)	1.91(2)
O(36)-W(5)	1.93(2)	O(24)-W(10)	1.920(19)
O(37)-W(20)	1.88(2)	O(25)-W(12)	1.88(2)
O(37)-W(2)	1.94(2)	O(25)-W(20)	1.89(2)
O(38)-W(11)	1.89(2)	O(26)-W(5)	1.87(2)
O(38)-W(23)	1.90(2)	O(26)-W(20)	1.94(2)
O(39)-W(11)	1.93(2)	O(83)-W(12)	2.34(2)
O(39)-W(19)	1.95(2)	O(83)-W(9)	2.41(2)
O(41)-W(10)	1.68(2)	W(5)-O(2)	1.95(2)
O(83)-Si(1)	1.61(2)	W(13)-O(10)	1.96(2)
O(83)-W(23)	2.32(2)	W(23)-O(10)	1.82(2)
N(5)#1-Cu(2)-N(5)	180.000(4)	O(5)-W(13)-O(10)	157.4(9)
N(5)#1-Cu(2)-O(1W)#1	90.5(9)	O(7)-W(13)-O(10)	86.4(8)
N(5)-Cu(2)-O(1W)#1	89.5(9)	O(8)-W(13)-O(19)	169.4(9)
N(5)#1-Cu(2)-O(1W)	89.5(9)	O(28)-W(13)-O(19)	86.2(8)
N(5)-Cu(2)-O(1W)	90.5(9)	O(5)-W(13)-O(19)	73.3(8)
O(1W)#1-Cu(2)-O(1W)	180.0(13)	O(7)-W(13)-O(19)	73.2(8)

N(5)#1-Cu(2)-O(2W)#1	91.2(10)	O(10)-W(13)-O(19)	84.2(7)
N(5)-Cu(2)-O(2W)#1	88.8(10)	O(22)-W(19)-O(33)	105.9(9)
O(1W)#1-Cu(2)-O(2W)#1	88.8(10)	O(22)-W(19)-O(23)	102.9(10)
O(1W)-Cu(2)-O(2W)#1	91.2(10)	O(33)-W(19)-O(23)	86.7(8)
N(5)#1-Cu(2)-O(2W)	88.8(10)	O(22)-W(19)-O(24)	100.2(10)
N(5)-Cu(2)-O(2W)	91.2(10)	O(33)-W(19)-O(24)	89.2(9)
O(1W)#1-Cu(2)-O(2W)	91.2(10)	O(23)-W(19)-O(24)	156.8(9)
O(1W)-Cu(2)-O(2W)	88.8(10)	O(22)-W(19)-O(39)	97.0(9)
O(2W)#1-Cu(2)-O(2W)	180.000(6)	O(33)-W(19)-O(39)	157.1(9)
N(7)-Cu(3)-N(3)	80.4(9)	O(23)-W(19)-O(39)	88.1(9)
N(7)-Cu(3)-N(8)	92.9(9)	O(24)-W(19)-O(39)	86.9(8)
N(3)-Cu(3)-N(8)	158.9(10)	O(22)-W(19)-O(31)	166.9(9)
N(7)-Cu(3)-N(10)	171.2(10)	O(33)-W(19)-O(31)	84.4(8)
N(3)-Cu(3)-N(10)	93.5(8)	O(23)-W(19)-O(31)	85.4(8)
N(8)-Cu(3)-N(10)	95.0(9)	O(24)-W(19)-O(31)	71.5(7)
N(7)-Cu(3)-O(6W)	84.2(10)	O(39)-W(19)-O(31)	72.9(8)
N(3)-Cu(3)-O(6W)	104.4(9)	O(27)-W(20)-O(37)	101.7(10)
N(8)-Cu(3)-O(6W)	94.7(10)	O(27)-W(20)-O(25)	102.1(10)
N(10)-Cu(3)-O(6W)	91.4(10)	O(37)-W(20)-O(25)	90.5(9)
O(34)-Si(1)-O(19)	110.3(11)	O(27)-W(20)-O(33)	103.3(10)
O(34)-Si(1)-O(83)	111.8(11)	O(37)-W(20)-O(33)	155.0(9)
O(19)-Si(1)-O(83)	109.8(10)	O(25)-W(20)-O(33)	86.3(9)
O(34)-Si(1)-O(31)	109.3(11)	O(27)-W(20)-O(26)	99.5(10)
O(19)-Si(1)-O(31)	107.1(11)	O(37)-W(20)-O(26)	88.7(9)
O(83)-Si(1)-O(31)	108.3(10)	O(25)-W(20)-O(26)	158.1(9)
O(20)-W(2)-O(18)	103.3(11)	O(33)-W(20)-O(26)	85.1(9)
O(20)-W(2)-O(36)	102.9(11)	O(27)-W(20)-O(34)	168.7(10)
O(18)-W(2)-O(36)	94.6(9)	O(37)-W(20)-O(34)	72.3(9)
O(20)-W(2)-O(37)	100.9(11)	O(25)-W(20)-O(34)	87.7(9)
O(18)-W(2)-O(37)	154.2(10)	O(33)-W(20)-O(34)	82.7(8)
O(36)-W(2)-O(37)	88.4(8)	O(26)-W(20)-O(34)	71.2(8)
O(20)-W(2)-O(21)	100.8(11)	O(6)-W(22)-O(7)	97.6(9)
O(18)-W(2)-O(21)	84.7(9)	O(6)-W(22)-O(4)	99.7(11)
O(36)-W(2)-O(21)	155.7(10)	O(7)-W(22)-O(4)	86.9(9)
O(37)-W(2)-O(21)	82.2(8)	O(6)-W(22)-O(18)	104.7(10)
O(20)-W(2)-O(34)	169.9(10)	O(7)-W(22)-O(18)	157.7(9)
O(18)-W(2)-O(34)	85.9(8)	O(4)-W(22)-O(18)	88.6(9)
O(36)-W(2)-O(34)	71.7(9)	O(6)-W(22)-O(9)	103.3(10)
O(37)-W(2)-O(34)	70.8(8)	O(7)-W(22)-O(9)	90.7(8)
O(21)-W(2)-O(34)	84.1(9)	O(4)-W(22)-O(9)	157.0(9)
O(13)-W(5)-O(30)	102.8(10)	O(18)-W(22)-O(9)	85.0(8)
O(13)-W(5)-O(26)	103.5(11)	O(6)-W(22)-O(19)	167.3(9)
O(30)-W(5)-O(26)	91.9(10)	O(7)-W(22)-O(19)	72.5(7)

O(13)-W(5)-O(36)	101.0(10)	O(4)-W(22)-O(19)	72.4(8)
O(30)-W(5)-O(36)	155.8(9)	O(18)-W(22)-O(19)	85.3(8)
O(26)-W(5)-O(36)	86.7(9)	O(9)-W(22)-O(19)	85.1(8)
O(13)-W(5)-O(2)	103.3(11)	O(17)-W(23)-O(10)	103.4(9)
O(30)-W(5)-O(2)	85.6(9)	O(17)-W(23)-O(16)	100.9(10)
O(26)-W(5)-O(2)	152.9(9)	O(10)-W(23)-O(16)	94.2(8)
O(36)-W(5)-O(2)	84.8(9)	O(17)-W(23)-O(38)	100.3(10)
O(13)-W(5)-O(34)	171.0(10)	O(10)-W(23)-O(38)	85.5(8)
O(30)-W(5)-O(34)	85.5(8)	O(16)-W(23)-O(38)	158.3(9)
O(26)-W(5)-O(34)	72.3(8)	O(17)-W(23)-O(12)	97.9(11)
O(36)-W(5)-O(34)	71.1(8)	O(10)-W(23)-O(12)	158.5(10)
O(2)-W(5)-O(34)	80.6(8)	O(16)-W(23)-O(12)	84.5(9)
O(15)-W(9)-O(21)	101.4(10)	O(38)-W(23)-O(12)	87.9(9)
O(15)-W(9)-O(9)	103.1(10)	O(17)-W(23)-O(83)	168.3(9)
O(21)-W(9)-O(9)	88.8(9)	O(10)-W(23)-O(83)	87.5(8)
O(15)-W(9)-O(11)	100.2(9)	O(16)-W(23)-O(83)	73.9(8)
O(21)-W(9)-O(11)	92.1(10)	O(38)-W(23)-O(83)	84.4(8)
O(9)-W(9)-O(11)	156.0(9)	O(12)-W(23)-O(83)	71.4(9)
O(15)-W(9)-O(16)	99.7(9)	O(1)-W(24)-O(2)	105.2(10)
O(21)-W(9)-O(16)	158.8(9)	O(1)-W(24)-O(3)	102.9(9)
O(9)-W(9)-O(16)	86.2(8)	O(2)-W(24)-O(3)	86.9(9)
O(11)-W(9)-O(16)	84.4(9)	O(1)-W(24)-O(4)	100.1(9)
O(15)-W(9)-O(83)	167.9(9)	O(2)-W(24)-O(4)	92.0(10)
O(21)-W(9)-O(83)	88.4(9)	O(3)-W(24)-O(4)	156.4(9)
O(9)-W(9)-O(83)	84.0(8)	O(1)-W(24)-O(5)	98.3(10)
O(11)-W(9)-O(83)	72.1(8)	O(2)-W(24)-O(5)	156.3(9)
O(16)-W(9)-O(83)	70.7(7)	O(3)-W(24)-O(5)	84.9(8)
O(41)-W(10)-O(30)	103.6(9)	O(4)-W(24)-O(5)	86.8(9)
O(41)-W(10)-O(3)	104.0(10)	O(1)-W(24)-O(19)	168.2(9)
O(30)-W(10)-O(3)	85.6(9)	O(2)-W(24)-O(19)	85.2(8)
O(41)-W(10)-O(24)	100.5(10)	O(3)-W(24)-O(19)	82.7(8)
O(30)-W(10)-O(24)	86.2(9)	O(4)-W(24)-O(19)	73.7(8)
O(3)-W(10)-O(24)	155.4(9)	O(5)-W(24)-O(19)	71.7(7)
O(41)-W(10)-O(29)	99.2(9)	W(23)-O(10)-W(13)	150.7(11)
O(30)-W(10)-O(29)	157.3(8)	W(24)-O(2)-W(5)	152.6(13)
O(3)-W(10)-O(29)	88.7(8)	O(14)-W(12)-O(83)	167.9(10)
O(24)-W(10)-O(29)	90.1(8)	O(23)-W(12)-O(83)	84.8(8)
O(41)-W(10)-O(31)	168.8(9)	O(25)-W(12)-O(83)	86.9(9)
O(30)-W(10)-O(31)	84.7(8)	O(12)-W(12)-O(83)	71.4(10)
O(3)-W(10)-O(31)	83.9(8)	O(11)-W(12)-O(83)	73.8(8)
O(24)-W(10)-O(31)	72.3(8)	O(8)-W(13)-O(28)	101.4(10)
O(29)-W(10)-O(31)	72.8(8)	O(8)-W(13)-O(5)	99.0(10)
O(32)-W(11)-O(38)	102.4(10)	O(28)-W(13)-O(5)	90.8(8)

O(32)-W(11)-O(28)	100.0(10)	O(8)-W(13)-O(7)	99.9(10)
O(38)-W(11)-O(28)	85.4(9)	O(28)-W(13)-O(7)	158.6(9)
O(32)-W(11)-O(39)	99.7(9)	O(5)-W(13)-O(7)	88.7(8)
O(38)-W(11)-O(39)	94.4(9)	O(8)-W(13)-O(10)	103.6(9)
O(28)-W(11)-O(39)	159.9(9)	O(28)-W(13)-O(10)	85.9(8)
O(32)-W(11)-O(29)	97.6(9)	O(14)-W(12)-O(12)	99.0(12)
O(38)-W(11)-O(29)	159.3(9)	O(23)-W(12)-O(12)	91.1(9)
O(28)-W(11)-O(29)	85.8(8)	O(25)-W(12)-O(12)	158.2(11)
O(39)-W(11)-O(29)	87.4(8)	O(14)-W(12)-O(11)	98.6(11)
O(32)-W(11)-O(31)	168.1(8)	O(23)-W(12)-O(11)	158.2(10)
O(38)-W(11)-O(31)	88.2(8)	O(25)-W(12)-O(11)	87.4(10)
O(28)-W(11)-O(31)	86.2(8)	O(12)-W(12)-O(11)	85.8(10)

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

Table S 4 Bond lengths [Å] and angles [°] for compound **4**.

N(1)-Cu(1)#1	2.02(2)	O(10)-Cu(2)	2.03(2)
N(2)-Cu(2)#1	2.35(2)	O(11)-W(1)	1.85(3)
N(4)-Cu(1)	1.97(2)	O(11)-W(2)	1.89(3)
N(5)-Cu(1)	2.05(2)	O(12)-Si(1)	1.48(4)
N(6)-Cu(2)	2.00(3)	O(12)-O(21)	1.59(5)
N(7)-Cu(2)	1.95(3)	O(12)-O(23)	1.81(5)
O(2)-W(3)	1.70(2)	O(12)-W(2)	2.37(4)
O(3)-W(5)#2	1.84(3)	O(12)-W(1)	2.53(4)
O(3)-W(3)	1.89(3)	O(13)-W(2)	1.65(3)
O(2W)-Cu(1)	1.88(2)	O(14)-W(1)	1.86(3)
O(2W)-Cu(2)	1.91(2)	O(14)-W(6)#2	1.91(3)
O(4)-W(5)	1.84(4)	O(15)-W(4)	1.83(4)
O(4)-W(4)	1.91(4)	O(15)-W(3)	1.92(4)
O(5)-W(4)	1.90(4)	O(16)-W(5)	1.67(3)
O(5)-W(1)	1.91(4)	O(17)-W(6)	1.66(3)
O(6)-W(2)	1.88(2)	O(18)-W(1)	1.64(3)
O(6)-W(6)#2	1.89(2)	O(19)-W(5)#2	1.84(3)
O(8)-W(4)	1.85(4)	O(19)-W(2)	1.94(3)
O(8)-W(6)	1.89(4)	O(20)-Si(1)	1.66(4)
O(10)-W(4)	1.68(2)	O(20)-W(3)	2.33(4)
O(22)-W(2)	1.87(3)	O(20)-W(6)	2.36(4)
O(22)-W(3)	1.89(3)	O(20)-W(4)	2.41(4)
O(23)-Si(1)	1.62(4)	O(21)-Si(1)	1.59(3)
O(23)-W(5)	2.32(3)	O(21)-W(2)	2.34(3)
O(23)-W(1)	2.38(4)	O(21)-W(5)#2	2.41(3)
O(23)-W(4)	2.46(3)	O(21)-W(3)	2.46(3)
Si(1)-O(12)#2	1.48(4)	W(3)-O(7)	1.92(5)

Si(1)-O(21)#2	1.59(3)	W(5)-O(19)#2	1.84(3)
Si(1)-O(23)#2	1.62(4)	W(5)-O(3)#2	1.84(3)
Si(1)-O(20)#2	1.66(4)	W(5)-O(24)	1.95(5)
Cu(1)-N(1)#1	2.02(2)	W(5)-O(21)#2	2.41(3)
Cu(2)-N(2)#1	2.35(2)	W(6)-O(6)#2	1.89(2)
W(1)-O(24)	1.91(4)	W(6)-O(7)	1.90(4)
O(12)-Si(1)-O(21)#2	118.0(19)	O(15)-W(3)-O(20)	63.1(15)
O(12)#2-Si(1)-O(21)#2	62.0(19)	O(7)-W(3)-O(20)	63.5(17)
O(21)-Si(1)-O(21)#2	180(4)	O(2)-W(3)-O(21)	155.8(11)
O(12)-Si(1)-O(23)	71(2)	O(3)-W(3)-O(21)	62.9(12)
O(12)#2-Si(1)-O(23)	109(2)	O(22)-W(3)-O(21)	61.4(12)
O(21)-Si(1)-O(23)	110.6(17)	O(15)-W(3)-O(21)	92.0(14)
O(21)#2-Si(1)-O(23)	69.4(17)	O(7)-W(3)-O(21)	97.7(15)
O(12)-Si(1)-O(23)#2	109(2)	O(20)-W(3)-O(21)	47.0(13)
O(12)#2-Si(1)-O(23)#2	71(2)	O(10)-W(4)-O(15)	103.1(14)
O(21)-Si(1)-O(23)#2	69.4(17)	O(10)-W(4)-O(8)	102.6(14)
O(21)#2-Si(1)-O(23)#2	110.6(17)	O(15)-W(4)-O(8)	89.7(17)
O(23)-Si(1)-O(23)#2	180(3)	O(10)-W(4)-O(5)	99.9(13)
O(12)-Si(1)-O(20)	108(2)	O(15)-W(4)-O(5)	85.7(16)
O(12)#2-Si(1)-O(20)	72(2)	O(8)-W(4)-O(5)	157.5(16)
O(21)-Si(1)-O(20)	72.3(18)	O(10)-W(4)-O(4)	100.3(14)
O(21)#2-Si(1)-O(20)	107.7(18)	O(15)-W(4)-O(4)	156.5(17)
O(23)-Si(1)-O(20)	76.6(19)	O(8)-W(4)-O(4)	87.7(17)
O(23)#2-Si(1)-O(20)	103.4(19)	O(5)-W(4)-O(4)	87.8(16)
O(12)-Si(1)-O(20)#2	72(2)	O(10)-W(4)-O(20)	155.6(13)
O(12)#2-Si(1)-O(20)#2	108(2)	O(15)-W(4)-O(20)	62.3(15)
O(21)-Si(1)-O(20)#2	107.7(18)	O(8)-W(4)-O(20)	60.4(15)
O(21)#2-Si(1)-O(20)#2	72.3(18)	O(5)-W(4)-O(20)	98.2(15)
O(23)-Si(1)-O(20)#2	103.4(19)	O(4)-W(4)-O(20)	96.5(15)
O(23)#2-Si(1)-O(20)#2	76.6(19)	O(10)-W(4)-O(23)	155.0(11)
O(20)-Si(1)-O(20)#2	180(3)	O(15)-W(4)-O(23)	95.3(14)
O(2W)-Cu(1)-N(4)	175.6(9)	O(8)-W(4)-O(23)	94.3(14)
O(2W)-Cu(1)-N(1)#1	90.0(9)	O(5)-W(4)-O(23)	64.3(14)
N(4)-Cu(1)-N(1)#1	92.8(9)	O(4)-W(4)-O(23)	61.7(14)
O(2W)-Cu(1)-N(5)	96.2(9)	O(20)-W(4)-O(23)	49.3(13)
N(4)-Cu(1)-N(5)	80.9(9)	O(16)-W(5)-O(4)	101.6(15)
N(1)#1-Cu(1)-N(5)	173.7(9)	O(16)-W(5)-O(19)#2	101.3(14)
O(2W)-Cu(2)-N(7)	161.0(10)	O(4)-W(5)-O(19)#2	88.7(16)
O(2W)-Cu(2)-N(6)	96.2(10)	O(16)-W(5)-O(3)#2	101.5(13)
N(7)-Cu(2)-N(6)	83.6(11)	O(4)-W(5)-O(3)#2	156.7(15)
O(2W)-Cu(2)-O(10)	89.6(9)	O(19)#2-W(5)-O(3)#2	89.4(14)
N(7)-Cu(2)-O(10)	90.2(10)	O(16)-W(5)-O(24)	96.2(16)
N(6)-Cu(2)-O(10)	173.7(10)	O(4)-W(5)-O(24)	86.7(18)

O(2W)-Cu(2)-N(2)#1	83.8(9)	O(19)#2-W(5)-O(24)	162.5(16)
N(7)-Cu(2)-N(2)#1	115.1(10)	O(3)#2-W(5)-O(24)	88.1(16)
N(6)-Cu(2)-N(2)#1	98.6(9)	O(16)-W(5)-O(23)	157.7(13)
O(10)-Cu(2)-N(2)#1	84.4(9)	O(4)-W(5)-O(23)	65.5(15)
O(18)-W(1)-O(11)	101.6(12)	O(19)#2-W(5)-O(23)	96.7(14)
O(18)-W(1)-O(14)	99.9(12)	O(3)#2-W(5)-O(23)	91.7(13)
O(11)-W(1)-O(14)	89.8(11)	O(24)-W(5)-O(23)	66.0(16)
O(18)-W(1)-O(5)	101.6(14)	O(16)-W(5)-O(21)#2	156.9(12)
O(11)-W(1)-O(5)	86.3(13)	O(4)-W(5)-O(21)#2	94.2(15)
O(14)-W(1)-O(5)	158.5(14)	O(19)#2-W(5)-O(21)#2	62.0(13)
O(18)-W(1)-O(24)	97.8(16)	O(3)#2-W(5)-O(21)#2	64.7(12)
O(11)-W(1)-O(24)	160.4(16)	O(24)-W(5)-O(21)#2	101.4(15)
O(14)-W(1)-O(24)	89.4(15)	O(23)-W(5)-O(21)#2	45.4(12)
O(5)-W(1)-O(24)	87.4(17)	O(17)-W(6)-O(8)	104.1(15)
O(18)-W(1)-O(23)	158.3(12)	O(17)-W(6)-O(6)#2	101.1(12)
O(11)-W(1)-O(23)	95.4(12)	O(8)-W(6)-O(6)#2	85.3(13)
O(14)-W(1)-O(23)	93.5(12)	O(17)-W(6)-O(7)	102.2(16)
O(5)-W(1)-O(23)	65.9(14)	O(8)-W(6)-O(7)	88.6(18)
O(24)-W(1)-O(23)	65.2(16)	O(6)#2-W(6)-O(7)	156.8(16)
O(18)-W(1)-O(12)	158.4(13)	O(17)-W(6)-O(14)#2	101.7(13)
O(11)-W(1)-O(12)	62.1(12)	O(8)-W(6)-O(14)#2	154.2(14)
O(14)-W(1)-O(12)	67.8(12)	O(6)#2-W(6)-O(14)#2	90.7(11)
O(5)-W(1)-O(12)	91.8(14)	O(7)-W(6)-O(14)#2	85.0(16)
O(24)-W(1)-O(12)	99.7(16)	O(17)-W(6)-O(20)	157.6(14)
O(23)-W(1)-O(12)	43.3(12)	O(8)-W(6)-O(20)	61.1(15)
O(13)-W(2)-O(22)	103.3(14)	O(6)#2-W(6)-O(20)	94.6(13)
O(13)-W(2)-O(6)	101.2(13)	O(7)-W(6)-O(20)	63.1(17)
O(22)-W(2)-O(6)	155.3(13)	O(14)#2-W(6)-O(20)	93.9(13)
O(13)-W(2)-O(11)	102.8(13)	O(22)-W(3)-O(15)	84.1(15)
O(22)-W(2)-O(11)	87.6(13)	O(2)-W(3)-O(7)	99.2(16)
O(6)-W(2)-O(11)	89.8(11)	O(3)-W(3)-O(7)	85.4(16)
O(13)-W(2)-O(19)	101.8(14)	O(22)-W(3)-O(7)	158.2(16)
O(22)-W(2)-O(19)	87.5(14)	O(15)-W(3)-O(7)	91.3(18)
O(6)-W(2)-O(19)	84.7(12)	O(2)-W(3)-O(20)	157.0(13)
O(11)-W(2)-O(19)	155.4(13)	O(3)-W(3)-O(20)	92.5(14)
O(13)-W(2)-O(21)	159.0(13)	O(22)-W(3)-O(20)	95.7(14)
O(22)-W(2)-O(21)	64.2(13)	O(19)-W(2)-O(12)	90.7(14)
O(6)-W(2)-O(21)	91.5(11)	O(21)-W(2)-O(12)	39.3(12)
O(11)-W(2)-O(21)	93.9(12)	O(2)-W(3)-O(3)	101.4(12)
O(19)-W(2)-O(21)	62.4(13)	O(2)-W(3)-O(22)	102.6(13)
O(13)-W(2)-O(12)	161.6(14)	O(3)-W(3)-O(22)	89.5(14)
O(22)-W(2)-O(12)	90.6(14)	O(2)-W(3)-O(15)	104.7(14)
O(6)-W(2)-O(12)	66.1(12)	O(3)-W(3)-O(15)	153.9(14)

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

Table S 5 Bond lengths [Å] and angles [°] for compound **5**.

W(5A)-O(18)	1.63(3)	O(23)-W(6)#1	1.89(4)
W(5A)-O(4)	2.22(5)	Si(1)-O(10)#1	1.51(5)
W(5A)-O(8)#1	2.41(5)	Si(1)-O(7)#1	1.62(5)
W(5B)-O(4)	1.70(4)	Si(1)-O(9)#1	1.67(5)
W(5B)-O(18)	1.82(3)	Si(1)-O(8)#1	1.75(4)
W(5B)-O(9)#1	2.30(5)	W(1)-O(14)#1	1.92(4)
W(5B)-W(3)	3.226(14)	W(1)-O(6)#1	1.95(6)
W(5B)-W(4)	3.231(13)	W(1)-O(7)#1	2.50(4)
O(12A)-W(8)	2.01(5)	W(2)-O(6)#1	1.83(6)
O(12B)-W(8)	1.93(5)	W(2)-O(10)#1	2.45(5)
O(15A)-W(6)#1	1.92(6)	W(4)-O(9)#1	2.31(5)
O(15B)-W(6)#1	1.84(5)	W(4)-O(10)#1	2.34(5)
O(5A)-W(4)	2.14(4)	W(6)-O(15B)#1	1.84(5)
O(5B)-W(4)	1.83(6)	W(6)-O(23)#1	1.89(4)
Cu(1)-N(8)	1.97(3)	W(6)-O(15A)#1	1.92(6)
Cu(1)-N(1)#2	2.00(4)	W(6)-O(7)#1	2.47(4)
Cu(1)-N(5)	2.03(4)	W(8)-O(16)#1	1.85(4)
Cu(1)-O(2W)	2.06(3)	W(8)-O(17)#1	1.88(6)
Cu(2)-N(4)#3	1.96(4)	W(8)-O(11)#1	1.89(4)
Cu(2)-N(4)	1.96(4)	W(8)-O(8)#1	2.23(4)
Cu(2)-N(9)#3	1.98(3)	W(3)-O(2)	1.73(5)
Cu(2)-N(9)	1.98(3)	W(3)-O(2)#1	1.73(5)
Cu(2)-O(3W)	2.40(3)	W(3)-O(4)#1	1.86(4)
Cu(2)-O(3W)#3	2.40(3)	O(10)-W(4)#1	2.34(5)
N(1)-Cu(1)#4	2.00(4)	O(10)-W(2)#1	2.45(5)
O(1)-W(1)	1.66(4)	O(11)-W(4)	1.87(3)
O(3)-W(4)	1.70(5)	O(11)-W(8)#1	1.89(4)
O(4)-W(3)	1.86(4)	O(13)-W(4)	1.86(4)
O(6)-W(2)#1	1.83(6)	O(13)-W(3)	1.89(4)
O(6)-W(1)	1.95(6)	O(14)-W(6)	1.84(4)
O(8)-Si(1)	1.75(4)	O(14)-W(1)	1.92(4)
O(8)-W(8)#1	2.23(4)	O(16)-W(8)#1	1.85(4)
O(8)-W(6)	2.31(5)	O(16)-W(2)	1.90(4)
O(8)-W(5A)#1	2.41(5)	O(19)-W(6)	1.65(4)
O(9)-O(10)	1.63(7)	O(21)-W(2)	1.68(3)
O(9)-Si(1)	1.67(5)	O(7)-Si(1)	1.62(5)
O(9)-O(9)#1	1.81(10)	O(7)-O(10)#1	1.67(6)
O(9)-W(5B)#1	2.30(5)	O(7)-W(2)	2.23(4)
O(9)-W(3)	2.31(5)	O(7)-W(6)#1	2.47(4)

O(9)-W(4)#1	2.31(5)	O(7)-W(1)	2.50(4)
O(10)-Si(1)	1.51(5)	O(17)-W(8)#1	1.88(6)
O(10)-O(7)#1	1.67(6)	O(17)-W(6)	1.91(6)
W(3)-O(9)#1	2.31(5)	O(17)-W(6)-O(7)#1	99(2)
O(10)-Si(1)-O(10)#1	173(4)	O(15A)#1-W(6)-O(7)#1	107(2)
O(10)-Si(1)-O(7)	122(3)	O(8)-W(6)-O(7)#1	49.5(15)
O(10)#1-Si(1)-O(7)	64(2)	O(20)-W(8)-O(16)#1	103.2(18)
O(10)-Si(1)-O(7)#1	64(2)	O(20)-W(8)-O(17)#1	100(2)
O(10)#1-Si(1)-O(7)#1	122(3)	O(16)#1-W(8)-O(17)#1	86(2)
O(7)-Si(1)-O(7)#1	78(3)	O(20)-W(8)-O(11)#1	100.9(17)
O(10)-Si(1)-O(9)	61(3)	O(16)#1-W(8)-O(11)#1	87.5(15)
O(10)#1-Si(1)-O(9)	112(3)	O(17)#1-W(8)-O(11)#1	159(2)
O(7)-Si(1)-O(9)	174(3)	O(20)-W(8)-O(12B)	115(2)
O(7)#1-Si(1)-O(9)	108(2)	O(16)#1-W(8)-O(12B)	141.9(18)
O(10)-Si(1)-O(9)#1	112(3)	O(17)#1-W(8)-O(12B)	91(2)
O(10)#1-Si(1)-O(9)#1	61(3)	O(11)#1-W(8)-O(12B)	81.0(19)
O(7)-Si(1)-O(9)#1	108(2)	O(20)-W(8)-O(12A)	85.0(19)
O(7)#1-Si(1)-O(9)#1	174(3)	O(16)#1-W(8)-O(12A)	168.3(18)
O(9)-Si(1)-O(9)#1	66(4)	O(17)#1-W(8)-O(12A)	84(2)
O(10)-Si(1)-O(8)#1	73(2)	O(11)#1-W(8)-O(12A)	99.2(19)
O(10)#1-Si(1)-O(8)#1	107(2)	O(12B)-W(8)-O(12A)	32.3(18)
O(7)-Si(1)-O(8)#1	73(2)	O(20)-W(8)-O(8)#1	155.5(18)
O(7)#1-Si(1)-O(8)#1	102(2)	O(16)#1-W(8)-O(8)#1	92.5(17)
O(9)-Si(1)-O(8)#1	104(2)	O(17)#1-W(8)-O(8)#1	62(2)
O(9)#1-Si(1)-O(8)#1	82(2)	O(11)#1-W(8)-O(8)#1	98.5(16)
O(10)-Si(1)-O(8)	107(2)	O(12B)-W(8)-O(8)#1	54.2(19)
O(10)#1-Si(1)-O(8)	73(2)	O(12A)-W(8)-O(8)#1	77.2(18)
O(7)-Si(1)-O(8)	102(2)	O(2)-W(3)-O(2)#1	37(3)
O(7)#1-Si(1)-O(8)	73(2)	O(2)-W(3)-O(4)	116(2)
O(9)-Si(1)-O(8)	82(2)	O(2)#1-W(3)-O(4)	80(2)
O(9)#1-Si(1)-O(8)	104(2)	O(2)-W(3)-O(4)#1	80(2)
O(8)#1-Si(1)-O(8)	173(3)	O(2)#1-W(3)-O(4)#1	116(2)
O(1)-W(1)-O(14)#1	101.8(12)	O(4)-W(3)-O(4)#1	164(3)
O(1)-W(1)-O(14)	101.8(12)	O(2)-W(3)-O(13)#1	103(2)
O(14)#1-W(1)-O(14)	156(2)	O(2)#1-W(3)-O(13)#1	100(2)
O(1)-W(1)-O(6)	104.1(18)	O(4)-W(3)-O(13)#1	91.0(18)
O(14)#1-W(1)-O(6)	83(2)	O(4)#1-W(3)-O(13)#1	85.6(17)
O(14)-W(1)-O(6)	91(2)	O(2)-W(3)-O(13)	100(2)
O(1)-W(1)-O(6)#1	104.1(18)	O(2)#1-W(3)-O(13)	103(2)
O(14)#1-W(1)-O(6)#1	91(2)	O(4)-W(3)-O(13)	85.6(17)
O(14)-W(1)-O(6)#1	83(2)	O(4)#1-W(3)-O(13)	91.0(18)
O(6)-W(1)-O(6)#1	152(4)	O(13)#1-W(3)-O(13)	156(2)
O(1)-W(1)-O(7)#1	155.9(10)	O(2)-W(3)-O(9)#1	159(2)

O(14)#1-W(1)-O(7)#1	92.9(16)	O(2)#1-W(3)-O(9)#1	145(2)
O(14)-W(1)-O(7)#1	65.0(15)	O(4)-W(3)-O(9)#1	68.9(18)
O(6)-W(1)-O(7)#1	58(2)	O(4)#1-W(3)-O(9)#1	95.7(19)
O(6)#1-W(1)-O(7)#1	94(2)	O(13)#1-W(3)-O(9)#1	97.2(17)
O(1)-W(1)-O(7)	155.9(10)	O(13)-W(3)-O(9)#1	59.1(17)
O(14)#1-W(1)-O(7)	65.0(15)	O(2)-W(3)-O(9)	145(2)
O(14)-W(1)-O(7)	92.9(16)	O(2)#1-W(3)-O(9)	159(2)
O(6)-W(1)-O(7)	94(2)	O(4)-W(3)-O(9)	95.7(19)
O(6)#1-W(1)-O(7)	58(2)	O(4)#1-W(3)-O(9)	68.9(18)
O(7)#1-W(1)-O(7)	48(2)	O(13)#1-W(3)-O(9)	59.1(17)
O(21)-W(2)-O(6)#1	102(2)	O(13)-W(3)-O(9)	97.2(17)
O(21)-W(2)-O(22)	99.5(13)	O(9)#1-W(3)-O(9)	46(3)
O(6)#1-W(2)-O(22)	158(2)	O(2)-W(3)-W(5B)	135.6(18)
O(21)-W(2)-O(23)	101.7(16)	O(2)#1-W(3)-W(5B)	101.6(17)
O(6)#1-W(2)-O(23)	92(2)	O(4)-W(3)-W(5B)	23.8(12)
O(22)-W(2)-O(23)	87.4(14)	O(4)#1-W(3)-W(5B)	141.1(14)
O(21)-W(2)-O(16)	101.4(15)	O(13)#1-W(3)-W(5B)	97.2(12)
O(6)#1-W(2)-O(16)	82(2)	O(13)-W(3)-W(5B)	70.8(11)
O(22)-W(2)-O(16)	89.6(14)	O(9)#1-W(3)-W(5B)	45.4(13)
O(23)-W(2)-O(16)	156.9(17)	O(9)-W(3)-W(5B)	79.4(13)
O(21)-W(2)-O(7)	160.6(15)	O(2)-W(3)-W(5B)#1	101.6(17)
O(6)#1-W(2)-O(7)	66(2)	O(2)#1-W(3)-W(5B)#1	135.6(18)
O(22)-W(2)-O(7)	94.4(14)	O(4)-W(3)-W(5B)#1	141.1(14)
O(23)-W(2)-O(7)	65.3(17)	O(4)#1-W(3)-W(5B)#1	23.8(12)
O(16)-W(2)-O(7)	92.1(16)	O(13)#1-W(3)-W(5B)#1	70.8(11)
O(21)-W(2)-O(10)#1	157.8(15)	O(13)-W(3)-W(5B)#1	97.2(12)
O(6)#1-W(2)-O(10)#1	95(2)	O(9)#1-W(3)-W(5B)#1	79.4(13)
O(22)-W(2)-O(10)#1	62.9(15)	O(9)-W(3)-W(5B)#1	45.4(13)
O(23)-W(2)-O(10)#1	91.3(17)	O(22)-W(4)-O(9)#1	97.1(16)
O(16)-W(2)-O(10)#1	67.1(16)	O(5A)-W(4)-O(9)#1	57.3(18)
O(7)-W(2)-O(10)#1	41.4(15)	O(3)-W(4)-O(10)#1	159(2)
O(3)-W(4)-O(5B)	95(3)	O(5B)-W(4)-O(10)#1	101(2)
O(3)-W(4)-O(13)	103(2)	O(13)-W(4)-O(10)#1	92.6(18)
O(5B)-W(4)-O(13)	85(2)	O(11)-W(4)-O(10)#1	68.2(16)
O(3)-W(4)-O(11)	97(2)	O(22)-W(4)-O(10)#1	64.7(15)
O(5B)-W(4)-O(11)	167(2)	O(5A)-W(4)-O(10)#1	77.4(17)
O(13)-W(4)-O(11)	89.9(16)	O(9)#1-W(4)-O(10)#1	41.0(17)
O(3)-W(4)-O(22)	100.9(19)	O(3)-W(4)-W(5B)	123.0(16)
O(5B)-W(4)-O(22)	92(2)	O(5B)-W(4)-W(5B)	29.3(19)
O(13)-W(4)-O(22)	156.2(15)	O(13)-W(4)-W(5B)	70.9(12)
O(11)-W(4)-O(22)	88.1(14)	O(11)-W(4)-W(5B)	138.2(11)
O(3)-W(4)-O(5A)	117(2)	O(22)-W(4)-W(5B)	95.3(8)
O(5B)-W(4)-O(5A)	23.3(19)	O(5A)-W(4)-W(5B)	18.0(12)

O(13)-W(4)-O(5A)	88.6(17)	O(9)#1-W(4)-W(5B)	45.3(13)
O(11)-W(4)-O(5A)	145.4(18)	O(10)#1-W(4)-W(5B)	75.7(11)
O(22)-W(4)-O(5A)	79.8(14)	O(19)-W(6)-O(14)	103(2)
O(3)-W(4)-O(9)#1	160(2)	O(19)-W(6)-O(15B)#1	112(2)
O(5B)-W(4)-O(9)#1	75(2)	O(14)-W(6)-O(15B)#1	144(2)
O(13)-W(4)-O(9)#1	59.4(18)	O(19)-W(6)-O(23)#1	101.4(18)
O(11)-W(4)-O(9)#1	92.8(17)	O(14)-W(6)-O(23)#1	89.2(16)
O(17)-W(6)-O(8)	60(2)	O(15B)#1-W(6)-O(23)#1	74.7(19)
O(15A)#1-W(6)-O(8)	75(2)	O(19)-W(6)-O(17)	100(2)
O(19)-W(6)-O(7)#1	157.7(18)	O(14)-W(6)-O(17)	88(2)
O(14)-W(6)-O(7)#1	66.6(16)	O(15B)#1-W(6)-O(17)	95(2)
O(15B)#1-W(6)-O(7)#1	77.1(18)	O(23)#1-W(6)-O(17)	158(2)
O(23)#1-W(6)-O(7)#1	60.1(16)	O(19)-W(6)-O(15A)#1	86(2)

Symmetry transformations used to generate equivalent atoms: #1 -x,y,-z+1/2; #2 x,-y,z-1/2; #3 -x+1/2,-y-1/2,-z+1; #4 x,-y,z+1/2