Electronic Supplementary Material (ESI) for CrystEngComm

Supporting Information

Synthesis, structures and properties of the first series of Sr^{II}-M^{II} (M = Cu, Co, Ni and Zn) coordination polymers based on pyridine-2,5-dicarboxylic acid

Yanmei Chen, **Shixiong She**, **Qian Gao**, **Dandan Gao**, **Derong Wang**, **Yahong Li**,* **Wei Liu and Wu Li**

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

Sr(1)-O(2)#1	2.4948(16)	Sr(1)-O(5)#4	2.7077(17)
Sr(1)-O(1)#2	2.5371(16)	Sr(1)-O(5)	2.7259(17)
Sr(1)-O(3)#3	2.5635(17)	Sr(1)-N(1)	2.7260(19)
Sr(1)-O(1)	2.5722(16)		
O(2)#1-Sr(1)-O(1)#2	103.39(5)	O(1)#2-Sr(1)-N(1)	126.25(5)
O(2)#1-Sr(1)-O(3)#3	77.59(6)	O(3)#3-Sr(1)-N(1)	74.72(5)
O(1)#2-Sr(1)-O(3)#3	155.73(6)	O(1)-Sr(1)-N(1)	61.49(5)
O(2)#1-Sr(1)-O(1)	143.06(6)	O(5)#4-Sr(1)-N(1)	141.32(5)
O(1)#2-Sr(1)-O(1)	67.16(6)	O(5)-Sr(1)-N(1)	88.42(5)
O(3)#3-Sr(1)-O(1)	126.04(6)	O(2)#1-Sr(1)-O(4)#5	73.30(5)
O(2)#1-Sr(1)-O(5)#4	81.61(5)	O(1)#2-Sr(1)-O(4)#5	72.52(5)
O(1)#2-Sr(1)-O(5)#4	85.21(5)	O(3)#3-Sr(1)-O(4)#5	129.37(5)
O(3)#3-Sr(1)-O(5)#4	70.84(5)	O(1)-Sr(1)-O(4)#5	69.81(5)
O(1)-Sr(1)-O(5)#4	130.15(5)	O(5)#4-Sr(1)-O(4)#5	140.99(5)
O(2)#1-Sr(1)-O(5)	146.03(5)	O(5)-Sr(1)-O(4)#5	140.56(5)
O(1)#2-Sr(1)-O(5)	89.30(5)	N(1)-Sr(1)-O(4)#5	75.99(5)
O(3)#3-Sr(1)-O(5)	78.33(6)	Sr(1)#4-O(5)-Sr(1)	111.99(6)
O(1)-Sr(1)-O(5)	70.90(5)	O(2)#1-Sr(1)-N(1)	107.77(6)
O(5)#4-Sr(1)-O(5)	68.01(6)		
Symmetry transformations used to generate equivalent atoms: #1 x,y+1,z; #2 -x+1,-y+1,-z+1; #3 -x,-y+1,-z; #4 -x,-y+1,-z+1; #5 -x+1,-y+1,-z; #6 x,y-1,z.			

Table S2 Hydrogen bonds for complex **1** [Å and °]

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
O(5)-H(5A)...O(4)#7	0.85	1.89	2.735(2)	173.3
O(5)-H(5A)...O(3)#7	0.85	2.53	3.057(2)	121.5
O(5)-H(5B)...O(4)#8	0.85	2.39	3.113(2)	142.7
O(5)-H(5B)...O(2)#9	0.85	2.53	3.099(2)	124.7
Symmetry transformations used to generate equivalent atoms: #1 x,y+1,z; #2 -x+1,-y+1,-z+1; #3 -x,-y+1,-z; #4 -x,-y+1,-z+1; #5 -x+1,-y+1,-z; #6 x,y-1,z; #7 x,y,z+1; #8 -x,-y,-z; #9 x-1,y,z.				

Table S3 Selected bond lengths [Å] and angle [°] for complex **2**

Cu(1)-O(5)#1	1.9479(14)	Sr(2)-O(11)	2.5579(17)
Cu(1)-N(2)#1	1.9791(16)	Sr(2)-O(12)	2.6244(18)
Cu(1)-O(7)#2	2.3698(17)	Sr(2)-O(4)#3	2.6725(15)
Sr(2)-O(8)	2.5095(15)	Sr(2)-O(3)#3	2.6828(16)
Sr(2)-O(10)	2.5469(18)	Sr(2)-O(9)	2.7394(18)
Sr(2)-O(3)	2.5485(14)		
O(1)-Cu(1)-O(5)#1	172.71(7)	O(4)#3-Sr(2)-O(3)#3	48.72(4)
O(1)-Cu(1)-N(1)	83.64(6)	O(8)-Sr(2)-O(9)	72.30(5)
O(5)#1-Cu(1)-N(1)	96.48(6)	O(10)-Sr(2)-O(9)	77.77(6)
O(1)-Cu(1)-N(2)#1	95.39(7)	O(3)-Sr(2)-O(9)	77.05(5)
O(5)#1-Cu(1)-N(2)#1	83.47(6)	O(11)-Sr(2)-O(9)	138.94(6)
N(1)-Cu(1)-N(2)#1	172.02(7)	O(12)-Sr(2)-O(9)	146.08(5)
O(1)-Cu(1)-O(7)#2	100.15(6)	O(4)#3-Sr(2)-O(9)	103.70(5)
O(5)#1-Cu(1)-O(7)#2	87.14(6)	O(3)#3-Sr(2)-O(9)	74.16(5)
N(1)-Cu(1)-O(7)#2	91.41(6)	O(8)-Sr(2)-C(7)#3	158.90(5)
N(2)#1-Cu(1)-O(7)#2	96.55(6)	O(10)-Sr(2)-C(7)#3	82.65(6)
O(8)-Sr(2)-O(10)	91.14(6)	O(3)-Sr(2)-C(7)#3	95.80(5)
O(8)-Sr(2)-O(3)	81.31(5)	O(11)-Sr(2)-C(7)#3	123.50(6)
O(10)-Sr(2)-O(3)	154.83(6)	O(12)-Sr(2)-C(7)#3	87.43(6)
O(8)-Sr(2)-O(11)	74.55(6)	O(4)#3-Sr(2)-C(7)#3	24.31(4)
O(10)-Sr(2)-O(11)	79.37(6)	O(3)#3-Sr(2)-C(7)#3	24.76(4)
O(3)-Sr(2)-O(11)	120.85(5)	O(9)-Sr(2)-C(7)#3	86.66(5)
O(8)-Sr(2)-O(12)	110.85(6)	O(8)-Sr(2)-Sr(2)#3	113.75(4)
O(10)-Sr(2)-O(12)	134.33(6)	O(10)-Sr(2)-Sr(2)#3	131.53(5)

O(3)-Sr(2)-O(12)	70.38(5)	O(3)-Sr(2)-Sr(2)#3	37.24(3)
O(11)-Sr(2)-O(12)	69.54(6)	O(11)-Sr(2)-Sr(2)#3	145.37(5)
O(8)-Sr(2)-O(4)#3	161.21(5)	O(12)-Sr(2)-Sr(2)#3	76.34(4)
O(10)-Sr(2)-O(4)#3	70.11(6)	O(4)#3-Sr(2)-Sr(2)#3	81.21(4)
O(3)-Sr(2)-O(4)#3	116.18(5)	O(3)#3-Sr(2)-Sr(2)#3	35.09(3)
O(11)-Sr(2)-O(4)#3	99.90(6)	O(9)-Sr(2)-Sr(2)#3	72.03(4)
O(12)-Sr(2)-O(4)#3	82.96(6)	Sr(2)-O(3)-Sr(2)#3	107.68(5)
O(8)-Sr(2)-O(3)#3	141.04(5)	O(11)-Sr(2)-O(3)#3	143.95(6)
O(10)-Sr(2)-O(3)#3	100.62(5)	O(12)-Sr(2)-O(3)#3	86.97(6)
O(3)-Sr(2)-O(3)#3	72.32(5)		
Symmetry transformations used to generate equivalent atoms: #1 -x,-y+1,-z; #2 x-1,y,z; #3 -x+1,-y+2,-z+1; #4 x+1,y,z.			

Table S4 Hydrogen bonds for complex **2** [Å and °]

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
O(9)--H(9A)..O(12)#1	0.85	2.29	3.057(2)	151
O(9)--H(9B)..O(7)	0.85	1.97	2.800(2)	165
O(10)--H(10A)..O(6)#5	0.85	2.03	2.879(2)	174
O(10)--H(10B)..O(2)#6	0.85	2.01	2.840(2)	166
O(11)--H(11A)..O(5)#2	0.85	2.40	3.230(2)	165
O(11)--H(11A)..O(6)#2	0.85	2.32	3.015(2)	139
O(11)--H(11B)..O(6)#7	0.85	1.99	2.811(2)	162
O(12)--H(12A)..O(9)#3	0.85	1.97	2.815(2)	175
O(12)--H(12B)..O(2)#7	0.85	1.94	2.793(2)	173
C(10)--H(10)..O(4)#4	0.93	2.50	3.193(2)	132
Symmetry transformations used to generate equivalent atoms: #1 1+x,y,z; #2 -x,1-y,-z; #3 1-x,2-y,1-z; #4 1-x,1-y,1-z; #5 1-x,1-y,-z; #6 1+x,1+y,z; #7 x,1+y,z;				

Table S5 Selected bond lengths [Å] and angle [°] for complex **3**

Sr(1)-O(3)#1	2.4768(18)	Sr(1)-O(5)	2.7071(17)
Sr(1)-O(11B)	2.508(15)	Sr(1)-O(6)	2.726(2)
Sr(1)-O(9B)	2.571(7)	Co(1)-O(13)	2.051(2)
Sr(1)-O(2)#2	2.5775(19)	Co(1)-O(14)	2.051(2)
Sr(1)-O(9)	2.604(7)	Co(1)-O(5)	2.0731(17)
Sr(1)-O(10)	2.610(3)	Co(1)-O(1)	2.0806(18)
Sr(1)-O(12)	2.619(2)	Co(1)-N(2)	2.151(2)
Sr(1)-O(11)	2.706(19)	Co(1)-N(1)	2.155(2)
O(3)#1-Sr(1)-O(11B)	98.3(4)	O(10)-Sr(1)-O(12)	69.87(8)
O(3)#1-Sr(1)-O(9B)	159.44(16)	O(3)#1-Sr(1)-O(11)	107.7(4)
O(11B)-Sr(1)-O(9B)	91.3(4)	O(11B)-Sr(1)-O(11)	9.5(7)
O(3)#1-Sr(1)-O(2)#2	89.82(7)	O(9B)-Sr(1)-O(11)	82.0(4)
O(11B)-Sr(1)-O(2)#2	68.9(4)	O(2)#2-Sr(1)-O(11)	68.5(4)
O(9B)-Sr(1)-O(2)#2	76.7(2)	O(9)-Sr(1)-O(11)	95.6(4)
O(3)#1-Sr(1)-O(9)	155.0(2)	O(10)-Sr(1)-O(11)	139.6(4)
O(11B)-Sr(1)-O(9)	105.1(4)	O(12)-Sr(1)-O(11)	146.9(4)
O(9B)-Sr(1)-O(9)	16.67(17)	O(3)#1-Sr(1)-O(5)	127.45(6)
O(2)#2-Sr(1)-O(9)	90.6(3)	O(11B)-Sr(1)-O(5)	72.8(4)
O(3)#1-Sr(1)-O(10)	84.94(9)	O(9B)-Sr(1)-O(5)	72.76(15)
O(11B)-Sr(1)-O(10)	142.1(4)	O(2)#2-Sr(1)-O(5)	129.67(6)
O(9B)-Sr(1)-O(10)	76.4(2)	O(9)-Sr(1)-O(5)	69.14(19)
O(2)#2-Sr(1)-O(10)	73.47(8)	O(10)-Sr(1)-O(5)	133.44(8)
O(9)-Sr(1)-O(10)	71.29(19)	O(12)-Sr(1)-O(5)	79.36(6)
O(3)#1-Sr(1)-O(12)	85.78(7)	O(11)-Sr(1)-O(5)	68.4(4)
O(11B)-Sr(1)-O(12)	147.8(4)	O(3)#1-Sr(1)-O(6)	79.61(6)
O(9B)-Sr(1)-O(12)	95.7(3)	O(11B)-Sr(1)-O(6)	76.2(4)
O(2)#2-Sr(1)-O(12)	143.32(8)	O(9B)-Sr(1)-O(6)	120.51(16)
O(9)-Sr(1)-O(12)	79.0(3)	O(2)#2-Sr(1)-O(6)	141.49(8)
O(5)-Co(1)-O(1)	92.54(7)	O(9)-Sr(1)-O(6)	114.1(2)
O(13)-Co(1)-N(2)	87.57(8)	O(10)-Sr(1)-O(6)	140.79(8)

O(14)-Co(1)-N(2)	86.95(10)	O(12)-Sr(1)-O(6)	73.21(8)
O(5)-Co(1)-N(2)	77.50(7)	O(11)-Sr(1)-O(6)	79.6(4)
O(1)-Co(1)-N(2)	169.95(7)	O(5)-Sr(1)-O(6)	47.85(5)
O(13)-Co(1)-N(1)	85.79(8)	O(13)-Co(1)-O(14)	172.00(12)
O(14)-Co(1)-N(1)	90.92(9)	O(13)-Co(1)-O(5)	91.25(8)
O(5)-Co(1)-N(1)	169.40(8)	O(14)-Co(1)-O(5)	93.25(10)
O(1)-Co(1)-N(1)	77.55(7)	O(13)-Co(1)-O(1)	94.03(8)
N(2)-Co(1)-N(1)	112.48(8)	O(14)-Co(1)-O(1)	92.37(10)
Symmetry transformations used to generate equivalent atoms: #1 x,y,z+1 #2 -x+1,-y+1,-z+1 #3 x,y,z-1			

Table S6 Hydrogen bonds for complex **3** [Å and °]

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
O(9)-H(9A)...O(15)	0.822(10)	2.03(4)	2.779(12)	152(8)
O(9)-H(9B)...O(1)	0.821(10)	2.33(8)	2.844(8)	121(8)
O(9B)-H(9C)...O(1)#2	0.822(10)	2.250(19)	3.006(10)	153(2)
O(9B)-H(9D)...O(1)	0.823(10)	1.942(16)	2.761(7)	173(7)
O(10)-H(10A)...O(7)#4	0.819(10)	1.977(14)	2.730(3)	153(2)
O(10)-H(10B)...O(15)	0.816(10)	2.45(2)	3.250(14)	167(4)
O(10)-H(10B)...O(15B)	0.816(10)	1.75(2)	2.539(17)	161(4)
O(11)-H(11A)...O(12)#5	0.821(10)	2.35(3)	2.94(2)	129(4)
O(11)-H(11B)...O(15)#2	0.824(10)	2.27(3)	2.94(2)	139(3)
O(11B)-H(11C)...O(12)#5	0.821(10)	2.34(3)	2.949(16)	131(4)
O(11B)-H(11D)...O(15B)#5	0.821(10)	2.52(6)	3.25(3)	148(9)
O(11B)-H(11D)...O(10)#5	0.821(10)	2.55(3)	3.187(16)	135(3)
O(12)-H(12A)...O(4)#6	0.820(10)	1.959(13)	2.769(3)	169(4)
O(12)-H(12B)...O(6)#7	0.823(10)	1.971(15)	2.773(3)	164(4)
O(13)-H(13C)...O(4)#6	0.821(10)	1.922(12)	2.736(3)	171(3)
O(13)-H(13D)...O(8)#6	0.823(10)	1.838(11)	2.659(3)	175(3)
O(14)-H(14C)...O(4)#8	0.812(10)	1.975(16)	2.767(3)	165(4)
O(14)-H(14D)...O(8)#8	0.813(10)	1.893(15)	2.693(3)	167(5)
O(15)-H(15A)...O(15)#9	0.82	1.95	2.64(2)	141.0
O(15)-H(15A)...O(9)#9	0.82	1.98	2.514(17)	122.2
O(15)-H(15B)...O(11)#2	0.82	2.17	2.94(2)	156.8
O(15B)-H(15C)...O(9B)#9	0.82	2.03	2.754(19)	147.0
O(15B)-H(15D)...O(8)#4	0.82	2.21	2.837(19)	132.9
C(12)-H(12)...O(8)	0.93	2.50	2.821(3)	100.2
Symmetry transformations used to generate equivalent atoms: #1 x,y,z+1 #2 -x+1,-y+1,-z+1 #3 x,y,z-1 #4 x,y+1,z+1 #5 x+1,y,z #6 -x,-y,-z #7 -x,-y,-z+1 #8 -x+1,-y,-z #9 -x,-y+1,-z+1				

Table S7 Selected bond lengths [Å] and angle [°] for complex **4**

Sr(1)-O(4)#1	2.466(2)	Sr(1)-O(5)	2.833(2)
Sr(1)-O(4)#2	2.466(2)	Ni(1)-N(1)	2.028(2)
Sr(1)-O(2)#3	2.5652(19)	Ni(1)-N(1)#6	2.028(2)
Sr(1)-O(2)	2.5652(19)	Ni(1)-O(1)	2.0434(18)
Sr(1)-O(5)#4	2.622(2)	Ni(1)-O(1)#6	2.0434(18)
Sr(1)-O(5)#5	2.622(2)	Ni(1)-O(6)#6	2.096(2)
Sr(1)-O(5)#3	2.833(2)	Ni(1)-O(6)	2.096(2)
O(4)#1-Sr(1)-O(4)#2	77.82(14)	N(1)-Ni(1)-O(1)	80.33(8)
O(4)#1-Sr(1)-O(2)#3	129.00(7)	N(1)#6-Ni(1)-O(1)	99.67(8)
O(4)#2-Sr(1)-O(2)#3	84.10(8)	N(1)-Ni(1)-O(1)#6	99.67(8)
O(4)#1-Sr(1)-O(2)	84.10(8)	N(1)#6-Ni(1)-O(1)#6	80.33(8)
O(4)#2-Sr(1)-O(2)	129.00(7)	O(1)-Ni(1)-O(1)#6	180.00(8)
O(2)#3-Sr(1)-O(2)	140.46(10)	N(1)-Ni(1)-O(6)#6	88.77(9)
O(4)#1-Sr(1)-O(5)#4	154.88(7)	N(1)#6-Ni(1)-O(6)#6	91.23(9)
O(4)#2-Sr(1)-O(5)#4	102.54(8)	O(1)-Ni(1)-O(6)#6	90.11(8)
O(2)#3-Sr(1)-O(5)#4	75.51(6)	O(1)#6-Ni(1)-O(6)#6	89.89(8)
O(2)-Sr(1)-O(5)#4	76.25(7)	N(1)-Ni(1)-O(6)	91.23(9)

O(4)#1-Sr(1)-O(5)#5	102.54(8)	N(1)#6-Ni(1)-O(6)	88.77(9)
O(4)#2-Sr(1)-O(5)#5	154.88(7)	O(1)-Ni(1)-O(6)	89.89(8)
O(2)#3-Sr(1)-O(5)#5	76.25(7)	O(1)#6-Ni(1)-O(6)	90.11(8)
O(2)-Sr(1)-O(5)#5	75.51(6)	O(6)#6-Ni(1)-O(6)	180.00(9)
O(5)#4-Sr(1)-O(5)#5	87.67(9)	Sr(1)#4-O(5)-Sr(1)	111.39(7)
O(4)#1-Sr(1)-O(5)#3	62.43(7)	O(4)#2-Sr(1)-O(5)	62.43(7)
O(4)#2-Sr(1)-O(5)#3	90.28(7)	O(2)#3-Sr(1)-O(5)	122.20(6)
O(2)#3-Sr(1)-O(5)#3	70.50(6)	O(2)-Sr(1)-O(5)	70.50(6)
O(2)-Sr(1)-O(5)#3	122.20(6)	O(5)#4-Sr(1)-O(5)	68.61(7)
O(5)#4-Sr(1)-O(5)#3	142.10(6)	O(5)#5-Sr(1)-O(5)	142.10(6)
O(5)#5-Sr(1)-O(5)#3	68.61(7)	O(5)#3-Sr(1)-O(5)	145.78(8)
O(4)#1-Sr(1)-O(5)	90.28(7)	N(1)-Ni(1)-N(1)#6	180.00(11)
Symmetry transformations used to generate equivalent atoms: #1 -x+1/2,y-1/2,-z+1/2; #2 x+1/2,y-1/2,z; #3 -x+1,y,-z+1/2; #4 -x+1,-y,-z+1; #5 x,-y,z-1/2; #6 -x+1/2,-y+1/2,-z; #7 x-1/2,y+1/2,z.			

Table S8 Hydrogen bonds for complex **4** [Å and °]

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
O(5)-H(5B)...O(1)#9	0.85	1.90	2.723(3)	162.6
O(5)-H(5A)...O(4)#2	0.85	2.16	2.764(3)	127.6
O(5)-H(5A)...O(3)#2	0.85	2.53	3.375(3)	174.4
O(6)-H(6B)...O(3)#10	0.85	1.89	2.736(3)	176.6
O(6)-H(6A)...O(7)#10	0.85	1.92	2.761(4)	170.4
O(7)-H(7A)...O(3)#11	0.85	1.88	2.728(4)	178.3
O(7)-H(7B)...O(8)#12	0.85	2.27	2.898(4)	131.3
O(8)-H(8)...O(7)	0.87	1.90	2.727(6)	158.0
C(2)-H(2)...O(1)#9	0.93	2.59	3.504(3)	168.4
C(5)-H(5)...O(4)	0.93	2.39	2.721(3)	100.6
Symmetry transformations used to generate equivalent atoms: #1 -x+1/2,y-1/2,-z+1/2; #2 x+1/2,y-1/2,z; #3 -x+1,y,-z+1/2; #4 -x+1,-y,-z+1; #5 x,-y,z-1/2; #6 -x+1/2,-y+1/2,-z; #7 x-1/2,y+1/2,z; #8 -x+1,-y,-z; #9 x,-y,z+1/2; #10 -x+1/2,-y+1/2,-z+1; #11 -x,y,-z+3/2; #12 -x,-y,-z+2.				

Table S9 Selected bond lengths [Å] and angle [°] for complex **5**

Sr(1)-O(7)#1	2.531(3)	Sr(1)-O(6)#3	2.694(3)
Sr(1)-O(7)	2.531(3)	Sr(1)-O(9)#4	2.858(5)
Sr(1)-O(8)	2.582(4)	Ni(1)-O(1)#5	2.019(3)
Sr(1)-O(9)	2.649(4)	Ni(1)-O(1)#5	2.019(3)
Sr(1)-O(6)	2.678(3)	Ni(1)-N(1)#5	2.023(3)
Sr(1)-O(6)#1	2.678(3)	Ni(1)-O(5)#5	2.083(3)
Sr(1)-O(6)#2	2.694(3)	Ni(1)-O(5)	2.083(3)
O(7)#1-Sr(1)-O(7)	118.41(15)	O(7)-Sr(1)-O(9)#4	120.79(8)
O(7)#1-Sr(1)-O(8)	70.58(8)	O(8)-Sr(1)-O(9)#4	130.01(15)
O(7)-Sr(1)-O(8)	70.58(8)	O(9)-Sr(1)-O(9)#4	124.81(12)
O(7)#1-Sr(1)-O(9)	73.23(9)	O(6)-Sr(1)-O(9)#4	62.73(9)
O(7)-Sr(1)-O(9)	73.23(9)	O(6)#1-Sr(1)-O(9)#4	62.73(9)
O(8)-Sr(1)-O(9)	105.18(14)	O(6)#2-Sr(1)-O(9)#4	69.88(9)
O(7)#1-Sr(1)-O(6)	136.37(10)	O(6)#3-Sr(1)-O(9)#4	69.88(9)
O(7)-Sr(1)-O(6)	74.89(10)	O(1)#5-Ni(1)-O(1)#5	0.00(16)
O(8)-Sr(1)-O(6)	76.94(11)	O(1)#5-Ni(1)-O(1)	180.00(15)
O(9)-Sr(1)-O(6)	145.03(6)	O(1)#5-Ni(1)-O(1)	180.00(15)
O(7)#1-Sr(1)-O(6)#1	74.89(10)	O(1)#5-Ni(1)-N(1)#5	80.72(12)
O(7)-Sr(1)-O(6)#1	136.37(10)	O(1)#5-Ni(1)-N(1)#5	80.72(12)
O(8)-Sr(1)-O(6)#1	76.94(11)	O(1)-Ni(1)-N(1)#5	99.28(12)
O(9)-Sr(1)-O(6)#1	145.03(6)	O(1)#5-Ni(1)-N(1)	99.28(12)
O(6)-Sr(1)-O(6)#1	69.92(12)	O(1)#5-Ni(1)-N(1)	99.28(12)
O(7)#1-Sr(1)-O(6)#2	71.95(9)	O(1)-Ni(1)-N(1)	80.72(12)
O(7)-Sr(1)-O(6)#2	131.97(10)	N(1)#5-Ni(1)-N(1)	180.00(19)
O(8)-Sr(1)-O(6)#2	142.46(7)	O(1)#5-Ni(1)-O(5)#5	88.45(13)
O(9)-Sr(1)-O(6)#2	65.38(10)	O(1)#5-Ni(1)-O(5)#5	88.45(13)

O(6)-Sr(1)-O(6)#2	132.53(5)	O(1)-Ni(1)-O(5)#5	91.55(13)
O(6)#1-Sr(1)-O(6)#2	91.33(8)	N(1)#5-Ni(1)-O(5)#5	86.27(12)
O(7)#1-Sr(1)-O(6)#3	131.97(10)	N(1)-Ni(1)-O(5)#5	93.73(12)
O(7)-Sr(1)-O(6)#3	71.95(9)	O(1)#5-Ni(1)-O(5)	91.55(13)
O(8)-Sr(1)-O(6)#3	142.46(7)	O(1)#5-Ni(1)-O(5)	91.55(13)
O(9)-Sr(1)-O(6)#3	65.38(10)	O(1)-Ni(1)-O(5)	88.45(13)
O(6)-Sr(1)-O(6)#3	91.33(8)	N(1)#5-Ni(1)-O(5)	93.73(12)
O(6)#1-Sr(1)-O(6)#3	132.53(5)	N(1)-Ni(1)-O(5)	86.27(12)
O(6)#2-Sr(1)-O(6)#3	69.45(12)	O(5)#5-Ni(1)-O(5)	180.00(16)
O(7)#1-Sr(1)-O(9)#4	120.79(8)	Sr(1)-O(6)-Sr(1)#4	103.01(10)
Sr(1)-O(9)-Sr(1)#3	99.48(13)		
Symmetry transformations used to generate equivalent atoms: #1 x,-y+1/2,z; #2 x-1/2,-y+1/2,-z+1/2; #3 x-1/2,y,-z+1/2; #4 x+1/2,y,-z+1/2; #5 -x,-y+1,-z.			

Table S10 Hydrogen bonds for complex **5** [Å and °]

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
O(5)-H(5A)...O(3)#6	0.85	1.86	2.713(4)	177.4
O(5)-H(5B)...O(3)#4	0.85	1.94	2.748(4)	159.7
O(6)-H(6A)...O(10)	0.85	1.93	2.764(5)	168.4
O(6)-H(6B)...O(4)	0.85	1.92	2.751(4)	167.2
O(7)-H(7A)...O(1)#5	0.85	1.98	2.830(4)	176.6
O(7)-H(7B)...O(4)#3	0.85	1.92	2.737(4)	159.9
O(8)-H(8A)...O(2)#5	0.85	2.00	2.838(5)	168.2
O(9)-H(9A)...O(10)#7	0.85	1.93	2.766(4)	168.5
O(10)-H(10A)...O(3)#4	0.85	2.20	3.035(5)	169.6
O(10)-H(10A)...O(4)#4	0.85	2.44	2.968(5)	120.5
O(10)-H(10B)...O(2)#5	0.85	2.08	2.925(5)	172.6
O(10)-H(10B)...O(1)#5	0.85	2.60	3.123(5)	121.2
O(11)-H(11B)...O(12)	0.85	2.29	3.14(5)	172.2
C(5)-H(5)...O(4)	0.93	2.42	2.741(5)	100.0
Symmetry transformations used to generate equivalent atoms: #1 x,-y+1/2,z; #2 x-1/2,-y+1/2,-z+1/2; #3 x-1/2,y,-z+1/2; #4 x+1/2,y,-z+1/2; #5 -x,-y+1,-z; #6 -x+1/2,-y+1,z-1/2; #7 x-1,y,z.				

Table S11 Selected bond lengths [Å] and angle [°] for complex **6**

Sr(1)-O(2)	2.5088(19)	Sr(2)-O(20)	2.603(4)
Sr(1)-O(16)	2.569(3)	Sr(2)-O(5)	2.6216(18)
Sr(1)-O(14)	2.581(2)	Sr(2)-O(10)#1	2.643(2)
Sr(1)-O(13)	2.586(3)	Sr(2)-O(6)	2.720(2)
Sr(1)-O(11)#1	2.587(2)	Sr(2)-O(19)	2.856(3)
Sr(1)-O(15)	2.589(3)	Ni(1)-O(5)	2.0479(18)
Sr(1)-O(12)#2	2.6271(19)	Ni(1)-N(1)	2.054(2)
Sr(1)-O(11)#2	2.733(2)	Ni(1)-O(1)	2.0547(18)
Sr(2)-O(17)	2.492(3)	Ni(1)-N(3)	2.059(2)
Sr(2)-O(20B)	2.526(9)	Ni(1)-O(9)	2.0714(19)
Sr(2)-O(7)#4	2.526(2)	Ni(1)-N(2)	2.084(2)
Sr(2)-O(18)	2.586(3)		
O(2)-Sr(1)-O(16)	105.65(8)	O(7)#4-Sr(2)-O(5)	84.92(7)
O(2)-Sr(1)-O(14)	74.16(8)	O(18)-Sr(2)-O(5)	149.65(8)
O(16)-Sr(1)-O(14)	73.75(10)	O(20)-Sr(2)-O(5)	137.13(11)
O(2)-Sr(1)-O(13)	94.23(8)	O(17)-Sr(2)-O(10)#1	152.67(8)
O(16)-Sr(1)-O(13)	135.61(10)	O(20B)-Sr(2)-O(10)#1	100.4(4)
O(14)-Sr(1)-O(13)	74.26(9)	O(7)#4-Sr(2)-O(10)#1	80.42(7)
O(2)-Sr(1)-O(11)#1	86.36(7)	O(18)-Sr(2)-O(10)#1	72.64(9)
O(16)-Sr(1)-O(11)#1	143.12(10)	O(20)-Sr(2)-O(10)#1	119.83(15)
O(14)-Sr(1)-O(11)#1	142.73(7)	O(5)-Sr(2)-O(10)#1	82.24(6)
O(13)-Sr(1)-O(11)#1	75.91(8)	O(17)-Sr(2)-O(6)	133.19(9)
O(2)-Sr(1)-O(15)	90.64(9)	O(20B)-Sr(2)-O(6)	83.5(4)

O(16)-Sr(1)-O(15)	72.28(12)	O(7)#4-Sr(2)-O(6)	125.10(7)
O(14)-Sr(1)-O(15)	137.12(11)	O(18)-Sr(2)-O(6)	129.81(9)
O(13)-Sr(1)-O(15)	148.00(11)	O(20)-Sr(2)-O(6)	102.90(13)
O(11)#1-Sr(1)-O(15)	72.86(10)	O(5)-Sr(2)-O(6)	48.75(5)
O(2)-Sr(1)-O(12)#2	150.20(7)	O(10)#1-Sr(2)-O(6)	67.49(6)
O(16)-Sr(1)-O(12)#2	72.97(9)	O(17)-Sr(2)-O(19)	66.53(10)
O(14)-Sr(1)-O(12)#2	77.04(7)	O(20B)-Sr(2)-O(19)	75.8(3)
O(13)-Sr(1)-O(12)#2	70.46(7)	O(7)#4-Sr(2)-O(19)	125.30(9)
O(11)#1-Sr(1)-O(12)#2	112.97(6)	O(18)-Sr(2)-O(19)	142.03(10)
O(15)-Sr(1)-O(12)#2	116.08(8)	O(20)-Sr(2)-O(19)	71.50(13)
O(2)-Sr(1)-O(11)#2	160.35(6)	O(5)-Sr(2)-O(19)	68.30(8)
O(16)-Sr(1)-O(11)#2	84.03(8)	O(10)#1-Sr(2)-O(19)	136.75(8)
O(14)-Sr(1)-O(11)#2	125.40(7)	O(6)-Sr(2)-O(19)	69.28(8)
O(13)-Sr(1)-O(11)#2	90.18(9)	O(5)-Ni(1)-N(1)	92.62(8)
O(11)#1-Sr(1)-O(11)#2	76.15(7)	O(5)-Ni(1)-O(1)	95.95(8)
O(15)-Sr(1)-O(11)#2	75.83(9)	N(1)-Ni(1)-O(1)	79.40(8)
O(12)#2-Sr(1)-O(11)#2	48.65(6)	O(5)-Ni(1)-N(3)	169.54(8)
O(17)-Sr(2)-O(20B)	99.8(4)	N(1)-Ni(1)-N(3)	93.17(9)
O(17)-Sr(2)-O(7)#4	72.64(8)	O(1)-Ni(1)-N(3)	93.68(8)
O(20B)-Sr(2)-O(7)#4	147.6(3)	O(5)-Ni(1)-O(9)	91.03(7)
O(17)-Sr(2)-O(18)	95.34(12)	N(1)-Ni(1)-O(9)	94.47(8)
O(20B)-Sr(2)-O(18)	74.9(3)	O(1)-Ni(1)-O(9)	170.89(8)
O(7)#4-Sr(2)-O(18)	74.52(8)	N(3)-Ni(1)-O(9)	79.83(8)
O(17)-Sr(2)-O(20)	77.12(17)	O(5)-Ni(1)-N(2)	79.19(8)
O(20B)-Sr(2)-O(20)	23.4(3)	N(1)-Ni(1)-N(2)	171.49(9)
O(7)#4-Sr(2)-O(20)	131.88(13)	O(1)-Ni(1)-N(2)	98.98(8)
O(18)-Sr(2)-O(20)	72.01(12)	N(3)-Ni(1)-N(2)	95.27(8)
O(17)-Sr(2)-O(5)	99.59(10)	O(9)-Ni(1)-N(2)	88.06(8)
O(20B)-Sr(2)-O(5)	127.4(3)	Ni(1)-O(5)-Sr(2)	146.29(9)
Sr(1)#6-O(11)-Sr(1)#2	103.85(7)		
Symmetry transformations used to generate equivalent atoms: #1 x-1,y,z; #2 -x+1,-y,-z+1; #3 -x,-y,-z+1; #4 x-1/2,-y+1/2,z+1/2; #5 x+1/2,-y+1/2,z-1/2; #6 x+1,y,z.			

Table S12 Hydrogen bonds for complex **6** [Å and °]

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
O(13)-H(13A)...O(21)	0.860(10)	1.831(13)	2.686(4)	172(4)
O(13)-H(13B)...O(14)#2	0.857(10)	2.43(3)	3.091(4)	135(3)
O(14)-H(14A)...O(12)	0.85	1.93	2.773(3)	171.7
O(14)-H(14B)...O(6)#7	0.85	1.91	2.761(3)	176.5
O(15)-H(15A)...O(6)#4	0.85	2.58	3.295(3)	142.9
O(15)-H(15B)...O(13)#3	0.85	2.15	2.993(5)	172.2
O(16)-H(16A)...O(10)#4	0.842(10)	1.97(3)	2.717(3)	147(5)
O(16)-H(16B)...O(22)#8	0.841(10)	2.223(13)	3.043(5)	165(4)
O(17)-H(17A)...O(4)#9	0.854(10)	1.884(10)	2.733(3)	172(2)
O(17)-H(17B)...O(8)#4	0.860(10)	1.938(16)	2.730(4)	153(3)
O(18)-H(18A)...O(4)#1	0.839(10)	2.007(10)	2.791(3)	155.0(19)
O(18)-H(18B)...O(22)#10	0.842(10)	2.117(18)	2.881(5)	151(3)
O(19)-H(19A)...O(9)	0.851(10)	2.52(3)	3.239(4)	143(4)
O(19)-H(19B)...O(3)#9	0.850(10)	2.117(13)	2.960(4)	172(5)
O(20)-H(20B)...O(8)#11	0.848(10)	2.083(19)	2.914(6)	167(6)
O(20)-H(20A)...O(21)#11	0.846(10)	1.96(2)	2.779(5)	163(6)
O(20)-H(20B)...O(8)#11	0.848(10)	2.083(19)	2.914(6)	167(6)
O(20B)-H(20C)...O(21)#11	0.849(10)	2.11(3)	2.929(11)	161(8)
O(20B)-H(20D)...O(22)#10	0.851(10)	1.93(7)	2.699(11)	149(13)
O(21)-H(21A)...O(1)	0.851(10)	1.942(11)	2.784(3)	170(4)
O(21)-H(21B)...O(3)#12	0.857(10)	1.884(16)	2.700(4)	159(4)
O(22)-H(22A)...O(3)	0.85	1.93	2.692(4)	149.2
O(22)-H(22B)...O(8)#4	0.85	2.23	2.982(6)	147.7
C(19)-H(19)...O(12)	0.93	2.46	2.783(3)	100.3

C(17)-H(17)...O(1)#6	0.93	2.52	3.199(3)	130.4
Symmetry transformations used to generate equivalent atoms: #1 x-1,y,z; #2 -x+1,-y,-z+1; #3 -x,-y,-z+1; #4 x-1/2,-y+1/2,z+1/2; #5 x+1/2,-y+1/2,z-1/2; #6 x+1,y,z; #7 x+1/2,-y+1/2,z+1/2; #8 -x+1/2,y-1/2,-z+3/2; #9 -x+1,-y+1,-z+1; #10 -x,-y+1,-z+1; #11 -x+1/2,y+1/2,-z+1/2; #12 x-1/2,-y+1/2,z-1/2.				

Table S13 Selected bond lengths [Å] and angle [°] for complex **7**

Zn(1)-O(7)#1	1.996(3)	Sr(1)-O(2)#3	2.573(3)
Zn(1)-O(1)	2.031(3)	Sr(1)-O(8)#4	2.573(3)
Zn(1)-N(1)	2.036(3)	Sr(1)-O(12)	2.657(5)
Zn(1)-O(5)	2.043(3)	Sr(1)-O(10)	2.675(4)
Zn(1)-N(2)	2.081(3)	Sr(1)-O(13)	2.686(4)
Sr(1)-O(4)	2.561(3)	Sr(1)-O(9)	2.804(4)
Sr(1)-O(6)#2	2.564(3)	Sr(1)-O(11)	2.812(5)
O(7)#1-Zn(1)-O(1)	107.09(12)	O(6)#2-Sr(1)-O(10)	72.96(11)
O(7)#1-Zn(1)-N(1)	104.79(12)	O(2)#3-Sr(1)-O(10)	125.91(12)
O(1)-Zn(1)-N(1)	80.81(11)	O(8)#4-Sr(1)-O(10)	70.19(11)
O(7)#1-Zn(1)-O(5)	96.86(12)	O(12)-Sr(1)-O(10)	108.06(16)
O(1)-Zn(1)-O(5)	156.01(12)	O(4)-Sr(1)-O(13)	85.30(11)
N(1)-Zn(1)-O(5)	94.47(11)	O(6)#2-Sr(1)-O(13)	136.01(11)
O(7)#1-Zn(1)-N(2)	99.07(11)	O(2)#3-Sr(1)-O(13)	87.74(10)
O(1)-Zn(1)-N(2)	94.66(12)	O(8)#4-Sr(1)-O(13)	74.19(10)
N(1)-Zn(1)-N(2)	156.01(12)	O(12)-Sr(1)-O(13)	66.75(14)
O(5)-Zn(1)-N(2)	80.08(11)	O(10)-Sr(1)-O(13)	143.53(12)
O(4)-Sr(1)-O(6)#2	79.74(10)	O(4)-Sr(1)-O(9)	71.37(10)
O(4)-Sr(1)-O(2)#3	136.59(9)	O(6)#2-Sr(1)-O(9)	74.73(10)
O(6)#2-Sr(1)-O(2)#3	76.04(10)	O(2)#3-Sr(1)-O(9)	67.79(10)
O(4)-Sr(1)-O(8)#4	75.69(11)	O(8)#4-Sr(1)-O(9)	125.64(11)
O(6)#2-Sr(1)-O(8)#4	138.82(9)	O(12)-Sr(1)-O(9)	112.77(13)
O(2)#3-Sr(1)-O(8)#4	142.24(11)	O(10)-Sr(1)-O(9)	139.07(14)
O(4)-Sr(1)-O(12)	141.60(11)	O(13)-Sr(1)-O(9)	61.29(12)
O(6)#2-Sr(1)-O(12)	138.66(11)	O(4)-Sr(1)-O(11)	139.15(12)
O(2)#3-Sr(1)-O(12)	70.64(11)	O(6)#2-Sr(1)-O(11)	83.99(12)
O(8)#4-Sr(1)-O(12)	71.78(12)	O(2)#3-Sr(1)-O(11)	73.01(11)
O(4)-Sr(1)-O(10)	78.70(14)	O(8)#4-Sr(1)-O(11)	93.49(12)
O(13)-Sr(1)-O(11)	130.15(15)	O(12)-Sr(1)-O(11)	63.53(15)
O(9)-Sr(1)-O(11)	138.74(11)	O(10)-Sr(1)-O(11)	60.70(16)
Symmetry transformations used to generate equivalent atoms: #1 -x-1,-y+1,-z; #2 -x+1/2,y-1/2,-z+1/2; #3 x+1/2,-y+1/2,z+1/2; #4 -x,-y+1,-z; #5 x-1/2,-y+1/2,z-1/2; #6 -x+1/2,y+1/2,-z+1/2.			

Table S14 Hydrogen bonds for complex **7** [Å and °]

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
O(9)-H(9A)...O(12)#2	0.85	2.31	2.819(6)	119.2
O(9)-H(9B)...O(1)#3	0.85	2.04	2.812(5)	151.3
O(10)-H(10B)...O(7)#4	0.85	2.01	2.845(5)	165.5
O(10)-H(10B)...O(8)#4	0.85	2.58	3.019(5)	113.2
O(10)-H(10A)...O(12)#7	0.85	2.14	2.843(6)	139.3
O(11)-H(11A)...O(3)#8	0.85	1.98	2.818(6)	170.3
O(11)-H(11B)...O(6)#9	0.85	2.42	3.227(6)	157.6
O(13)-H(13A)...O(5)	0.85	2.05	2.880(5)	163.9
O(13)-H(13B)...O(4)#6	0.85	2.03	2.858(5)	166.0
C(9)-H(9)...O(11)#6	0.93	2.55	3.434(6)	159.8
C(5)-H(5)...O(4)	0.93	2.46	2.777(5)	99.9
C(10)-H(10)...O(3)#10	0.93	2.42	3.140(5)	134.5
Symmetry transformations used to generate equivalent atoms: #1 -x-1,-y+1,-z; #2 -x+1/2,y-1/2,-z+1/2; #3 x+1/2,-y+1/2,z+1/2; #4 -x,-y+1,-z; #5 x-1/2,-y+1/2,z-1/2; #6 -x+1/2,y+1/2,-z+1/2; #7 -x+3/2,y-1/2,-z+1/2; #8 -x+3/2,y+1/2,-z+1/2; #9 x+1,y,z; #10 x-1,y+1,z.				

Table S15 Selected bond lengths [Å] and angle [°] for complex **8**

Sr(1)-O(13')	2.504(6)	Sr(2)-O(21)	2.615(2)
Sr(1)-O(13)	2.503(7)	Sr(2)-O(8)#2	2.631(2)
Sr(1)-O(3)	2.510(2)	Sr(2)-O(19)	2.634(3)
Sr(1)-O(10)#1	2.550(2)	Sr(2)-O(17)	2.697(2)
Sr(1)-O(14)	2.647(3)	Sr(2)-O(18)	2.709(2)
Sr(1)-O(15)	2.653(2)	Sr(2)-O(16)	2.796(2)
Sr(1)-O(17)	2.658(2)	Sr(2)-O(7)#2	2.808(2)
Sr(1)-O(16)	2.664(2)	N(2)-Zn(1)	2.168(3)
Sr(1)-O(18)	2.743(2)	N(3)-Zn(1)	2.171(3)
N(1)-C(1)	1.340(4)	Zn(1)-O(5)	2.088(2)
N(1)-C(5)	1.341(4)	Zn(1)-O(9)	2.115(2)
N(1)-Zn(1)	2.186(2)	O(7)-Sr(2)#3	2.808(2)
O(1)-Zn(1)	2.079(2)	O(8)-Sr(2)#3	2.631(2)
Sr(2)-O(20)	2.554(2)	O(10)-Sr(1)#4	2.550(2)
Sr(2)-O(22)	2.608(2)		
O(13')-Sr(1)-O(13)	12.5(4)	O(21)-Sr(2)-O(8)#2	75.93(7)
O(13')-Sr(1)-O(3)	90.7(3)	O(20)-Sr(2)-O(19)	77.45(9)
O(13)-Sr(1)-O(3)	78.2(3)	O(22)-Sr(2)-O(19)	139.64(9)
O(13')-Sr(1)-O(10)#1	74.0(5)	O(21)-Sr(2)-O(19)	73.44(8)
O(13)-Sr(1)-O(10)#1	75.2(5)	O(8)#2-Sr(2)-O(19)	119.07(8)
O(3)-Sr(1)-O(10)#1	86.02(8)	O(20)-Sr(2)-O(17)	141.27(8)
O(13')-Sr(1)-O(14)	73.0(4)	O(22)-Sr(2)-O(17)	116.18(7)
O(13)-Sr(1)-O(14)	82.8(4)	O(21)-Sr(2)-O(17)	142.67(7)
O(3)-Sr(1)-O(14)	144.37(8)	O(8)#2-Sr(2)-O(17)	73.19(7)
O(10)#1-Sr(1)-O(14)	117.85(8)	O(19)-Sr(2)-O(17)	104.17(8)
O(13')-Sr(1)-O(15)	76.4(4)	O(20)-Sr(2)-O(18)	79.65(8)
O(13)-Sr(1)-O(15)	72.4(4)	O(22)-Sr(2)-O(18)	127.38(7)
O(3)-Sr(1)-O(15)	78.04(8)	O(21)-Sr(2)-O(18)	139.19(7)
O(10)#1-Sr(1)-O(15)	146.11(9)	O(8)#2-Sr(2)-O(18)	138.53(7)
O(14)-Sr(1)-O(15)	67.53(8)	O(19)-Sr(2)-O(18)	69.80(7)
O(13')-Sr(1)-O(17)	148.7(5)	O(17)-Sr(2)-O(18)	65.51(7)
O(13)-Sr(1)-O(17)	147.9(4)	O(20)-Sr(2)-O(16)	82.19(8)
O(3)-Sr(1)-O(17)	96.98(8)	O(22)-Sr(2)-O(16)	69.18(7)
O(10)#1-Sr(1)-O(17)	136.56(7)	O(21)-Sr(2)-O(16)	141.40(7)
O(14)-Sr(1)-O(17)	83.49(9)	O(8)#2-Sr(2)-O(16)	104.36(7)
O(15)-Sr(1)-O(17)	75.61(8)	O(19)-Sr(2)-O(16)	131.76(8)
O(13')-Sr(1)-O(16)	121.1(2)	O(17)-Sr(2)-O(16)	67.90(6)
O(13)-Sr(1)-O(16)	132.7(2)	O(18)-Sr(2)-O(16)	63.73(6)
O(3)-Sr(1)-O(16)	138.31(8)	O(20)-Sr(2)-O(7)#2	140.30(8)
O(10)#1-Sr(1)-O(16)	78.76(7)	O(22)-Sr(2)-O(7)#2	117.49(7)
O(14)-Sr(1)-O(16)	75.47(8)	O(21)-Sr(2)-O(7)#2	71.18(7)
O(15)-Sr(1)-O(16)	131.82(8)	O(8)#2-Sr(2)-O(7)#2	47.75(7)
O(17)-Sr(1)-O(16)	70.42(7)	O(19)-Sr(2)-O(7)#2	72.76(8)
O(13')-Sr(1)-O(18)	145.2(5)	O(17)-Sr(2)-O(7)#2	72.63(7)
O(13)-Sr(1)-O(18)	139.2(4)	O(18)-Sr(2)-O(7)#2	112.79(7)
O(3)-Sr(1)-O(18)	73.53(8)	O(16)-Sr(2)-O(7)#2	137.48(7)
O(10)#1-Sr(1)-O(18)	74.06(7)	O(1)-Zn(1)-O(5)	113.44(10)
O(14)-Sr(1)-O(18)	135.77(8)	O(1)-Zn(1)-O(9)	85.12(9)
O(15)-Sr(1)-O(18)	127.64(8)	O(5)-Zn(1)-O(9)	157.53(9)
O(17)-Sr(1)-O(18)	65.56(6)	O(1)-Zn(1)-N(2)	91.86(9)
O(16)-Sr(1)-O(18)	65.04(7)	O(5)-Zn(1)-N(2)	77.69(9)
O(20)-Sr(2)-O(22)	71.86(8)	O(9)-Zn(1)-N(2)	89.64(9)
O(20)-Sr(2)-O(21)	75.62(8)	O(1)-Zn(1)-N(3)	157.98(9)
O(22)-Sr(2)-O(21)	74.02(8)	O(5)-Zn(1)-N(3)	87.44(9)
O(20)-Sr(2)-O(8)#2	140.57(8)	O(9)-Zn(1)-N(3)	76.38(9)
O(22)-Sr(2)-O(8)#2	74.44(7)	N(2)-Zn(1)-N(3)	99.77(10)
O(9)-Zn(1)-N(1)	99.51(9)	O(1)-Zn(1)-N(1)	77.17(9)

N(2)-Zn(1)-N(1)	164.95(10)	O(5)-Zn(1)-N(1)	97.06(9)
N(3)-Zn(1)-N(1)	94.01(10)		
Symmetry transformations used to generate equivalent atoms: #1 -x,y-1/2,-z+1/2 #2 -x+1/2,-y+1,z-1/2 #3 -x+1/2,-y+1,z+1/2 #4 -x,y+1/2,-z+1/2			

Table S16 Hydrogen bonds for complex **8** [Å and °]

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
O(14)-H(14A)...O(7)#1	0.85	2.13	2.953(4)	164.2
O(14)-H(14B)...O(12)#5	0.85	2.14	2.972(3)	164.5
O(15)-H(15A)...O(11)#5	0.96	1.81	2.750(3)	167.7
O(15)-H(15B)...O(24)#6	0.85	2.49	3.305(4)	161.8
O(16)-H(16A)...O(9)#1	0.85	1.92	2.758(3)	166.8
O(16)-H(16B)...O(24)	0.85	2.05	2.877(3)	165.3
O(17)-H(17A)...O(15)#7	0.85	1.92	2.764(3)	169.8
O(17)-H(17B)...O(4)#7	0.85	1.84	2.687(3)	177.7
O(18)-H(18A)...O(11)#8	0.85	1.94	2.762(3)	161.3
O(18)-H(18B)...O(6)#8	0.85	2.00	2.805(3)	156.7
O(19)-H(19A)...O(12)#9	0.85	2.08	2.912(4)	164.9
O(19)-H(19B)...O(11)#8	0.85	2.36	3.111(4)	148.3
O(19)-H(19B)...O(23)#8	0.85	2.53	3.118(4)	127.5
O(20)-H(20A)...O(6)#8	0.85	2.01	2.793(4)	153.8
O(20)-H(20B)...O(2)#1	0.85	2.02	2.870(4)	173.1
O(21)-H(21A)...O(12)#9	0.85	1.90	2.741(3)	172.4
O(21)-H(21B)...O(8)#10	0.85	2.03	2.774(3)	145.3
O(22)-H(22A)...O(21)#11	0.85	2.08	2.852(3)	150.1
O(22)-H(22B)...O(2)#1	0.85	2.21	2.921(3)	141.6
O(23)-H(23A)...O(4)	0.85	1.87	2.686(4)	161.5
O(23)-H(23B)...O(8)#12	0.85	2.07	2.894(4)	163.5
O(24)-H(24A)...O(23)#7	0.85	1.90	2.745(4)	176.7
O(24)-H(24B)...O(7)#1	0.85	1.95	2.778(4)	163.7
C(19)-H(19)...O(11)	0.93	2.46	2.783(4)	100.1
D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
Symmetry transformations used to generate equivalent atoms: #1 -x,y-1/2,-z+1/2 #2 -x+1/2,-y+1,z-1/2 #3 -x+1/2,-y+1,z+1/2 #4 -x,y+1/2,-z+1/2 #5 x-1/2,-y+3/2,-z #6 -x-1/2,y+1/2,z #7 -x,-y+1,-z #8 -x+1/2,y-1/2,z #9 x,y-1,z #10 x-1/2,y-1,-z+1/2 #11 -x,-y,-z #12 x-1/2,y,-z+1/2				

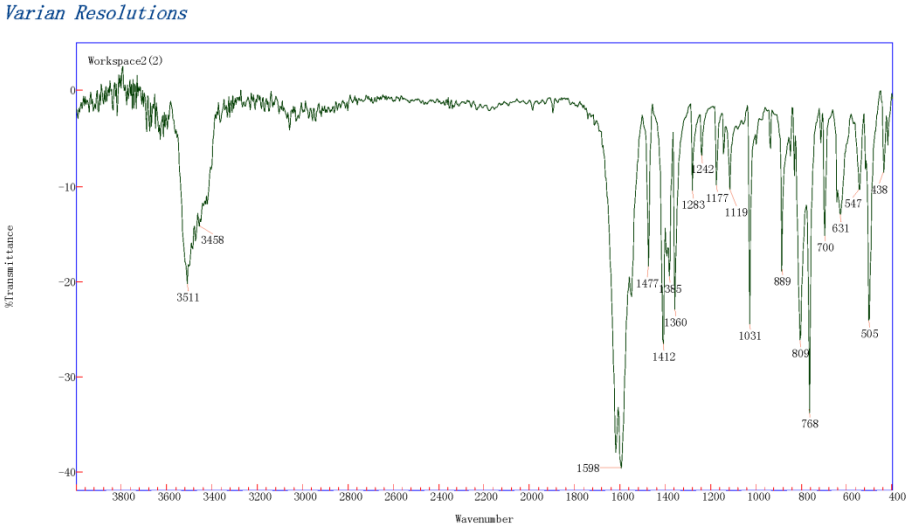

Fig. S1. The IR spectrum of complex **1**.

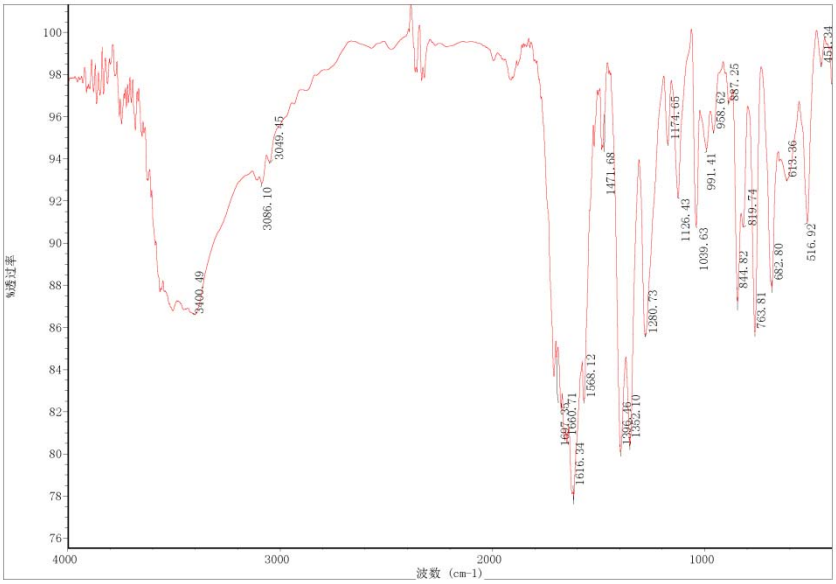

Fig. S2. The IR spectrum of complex **2**.

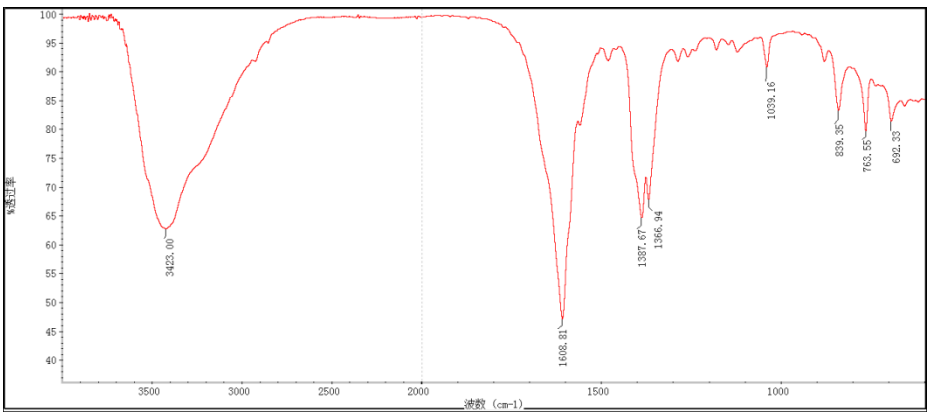

Fig. S3. The IR spectrum of complex **3**.

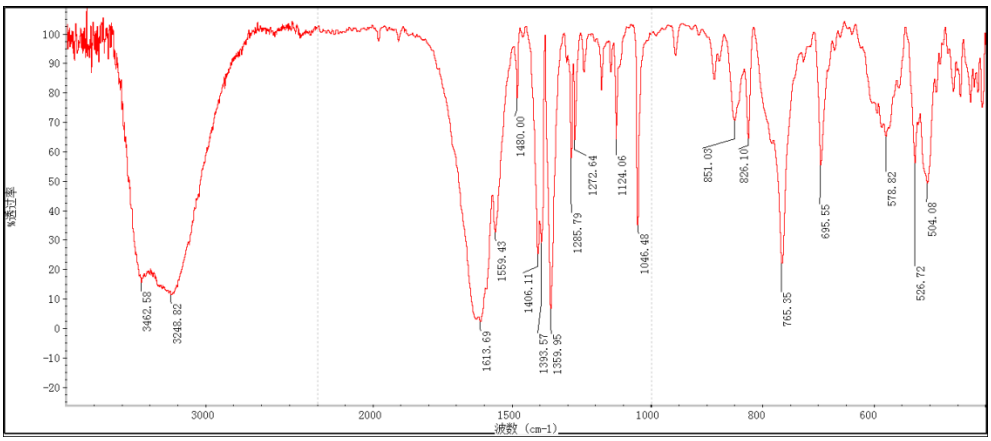

Fig. S4. The IR spectrum of complex **4**.

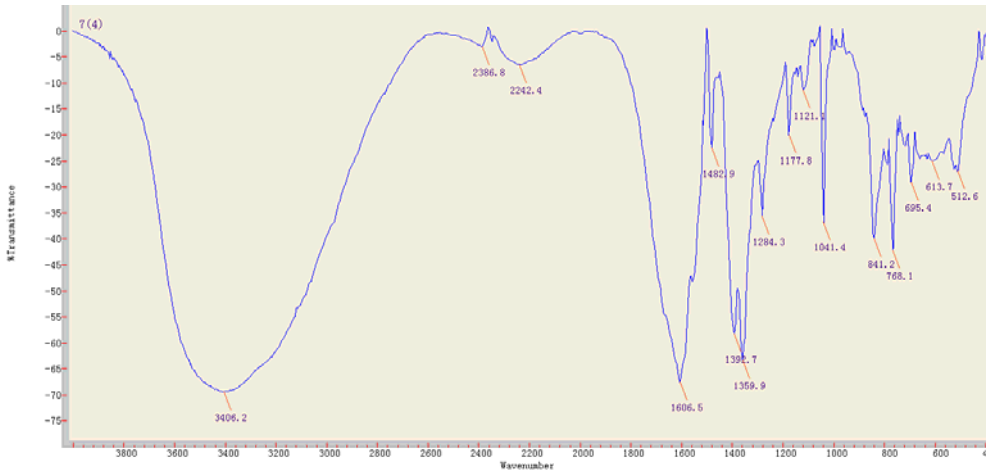

Fig. S5. The IR spectrum of complex **5**.

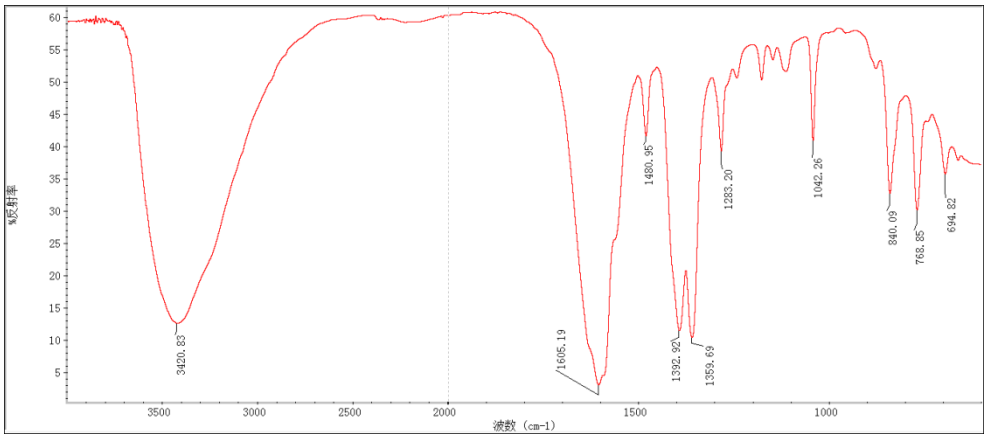

Fig. S6. The IR spectrum of complex **6**.

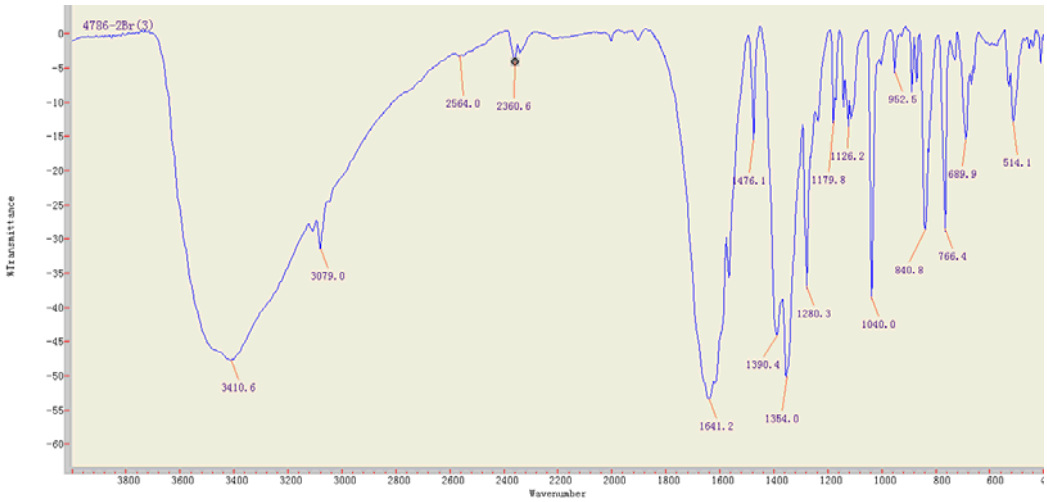

Fig. S7. The IR spectrum of complex **7**.

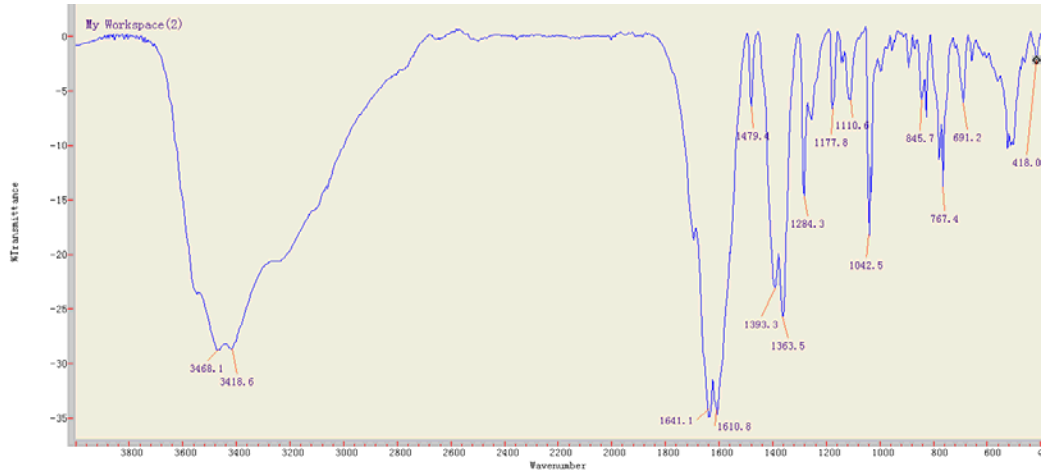

Fig. S8. The IR spectrum of complex **8**.

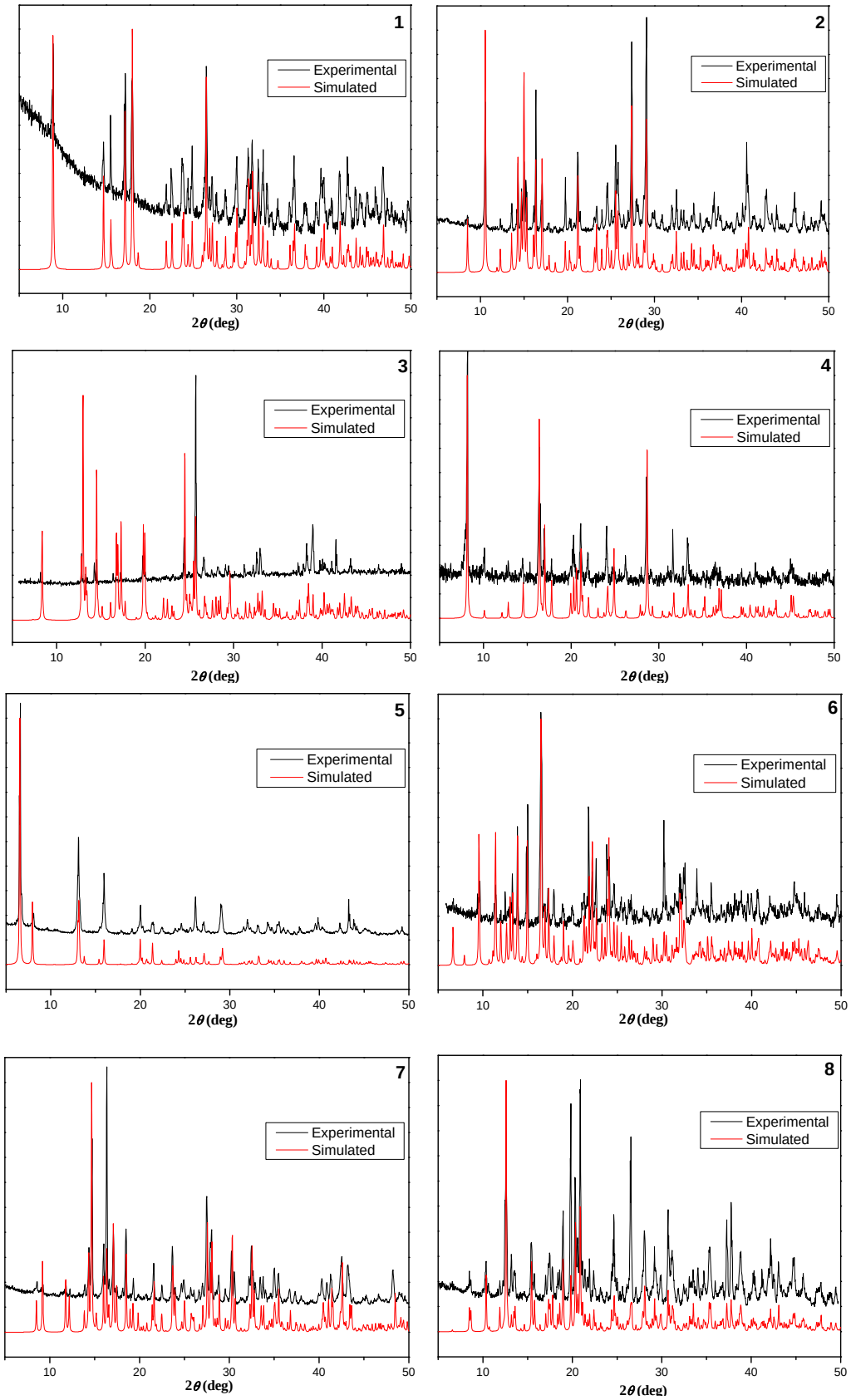

Fig. S9. The XRD spectra of complexes **1**-**8**.

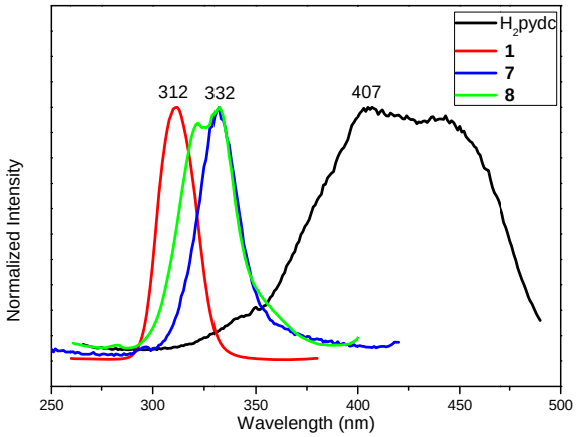

Fig. S10. The excitation spectra of H_2pydc and complexes **1**, **7** and **8** (Excitation slits = 1nm).

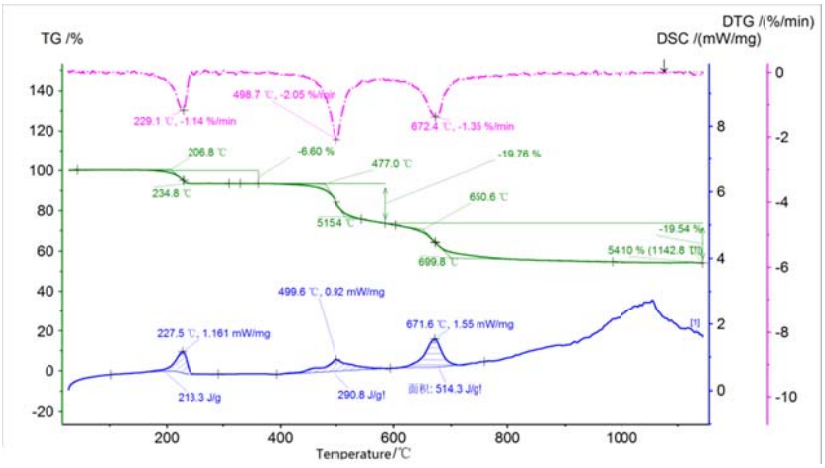

Fig. S11. The TGA curve of complex **1**.

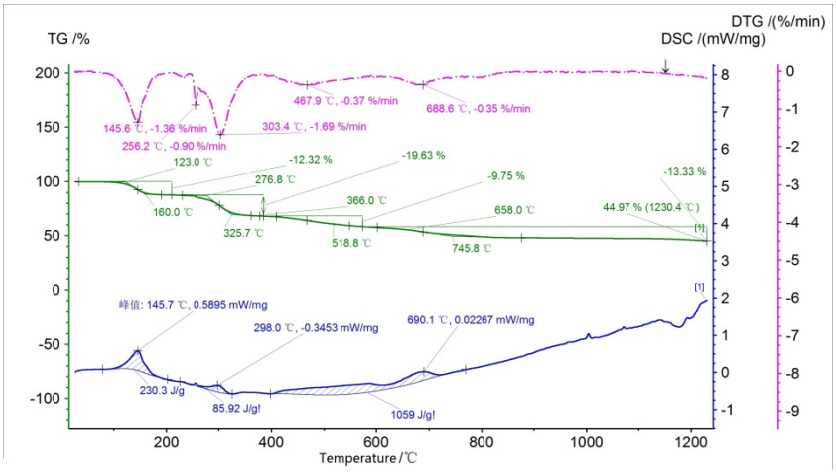

Fig. S12. The TGA curve of complex **2**.

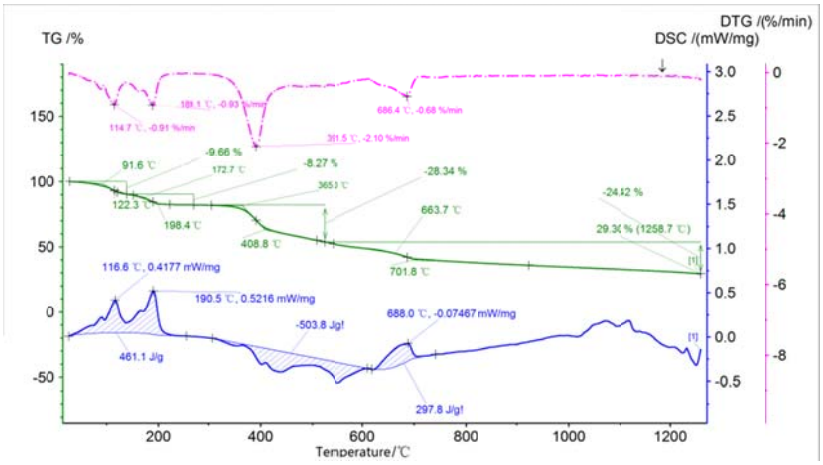

Fig. S13. The TGA curve of complex **3**.

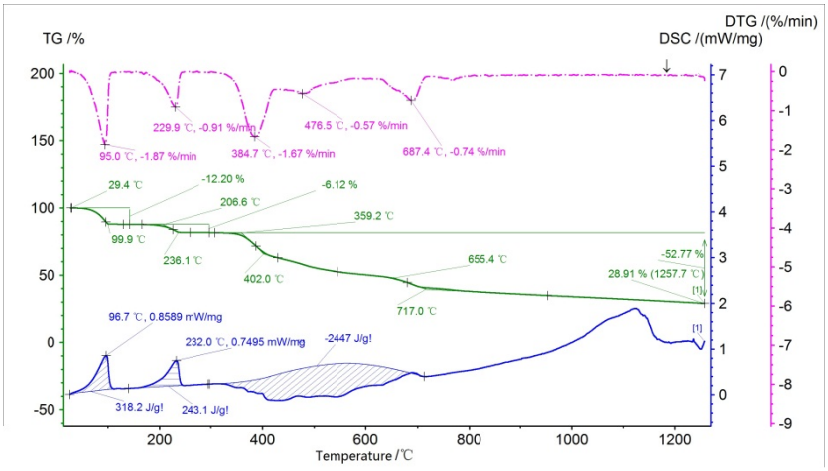

Fig. S14. The TGA curve of complex **4**.

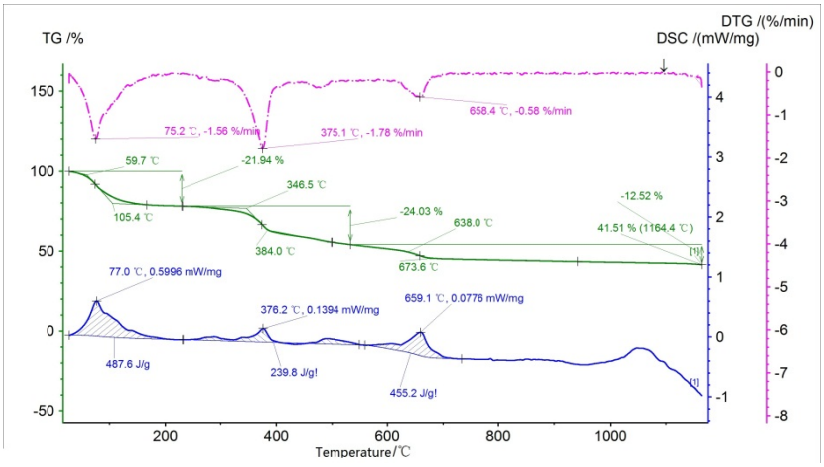

Fig. S15. The TGA curve of complex **5**.

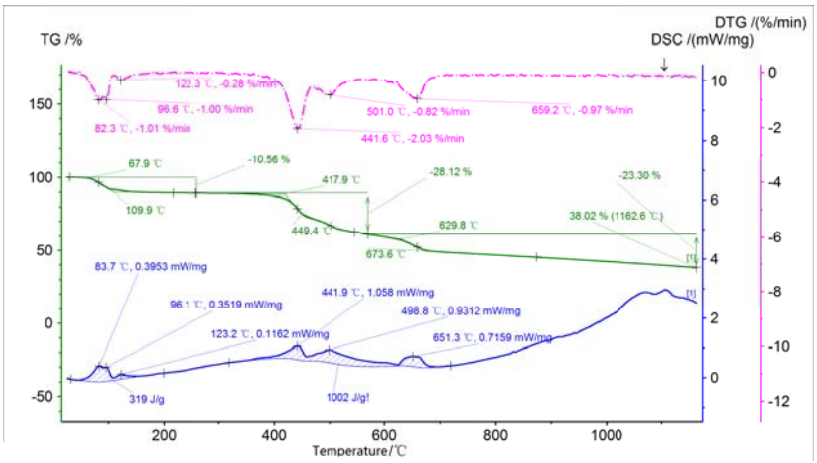

Fig. S16. The TGA curve of complex **6**.

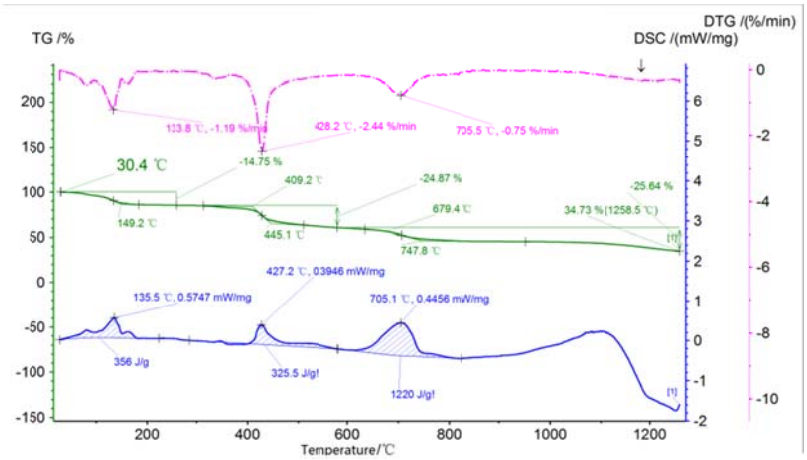

Fig. S17. The TGA curve of complex **7**.

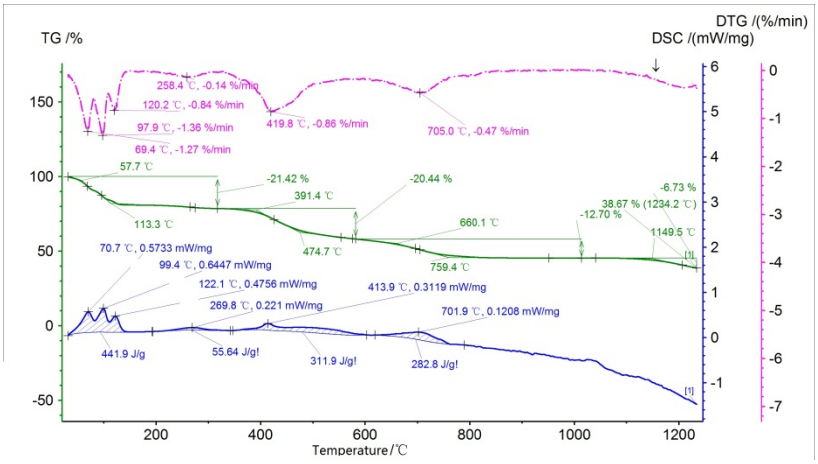

Fig. S18. The TGA curve of complex **8**.

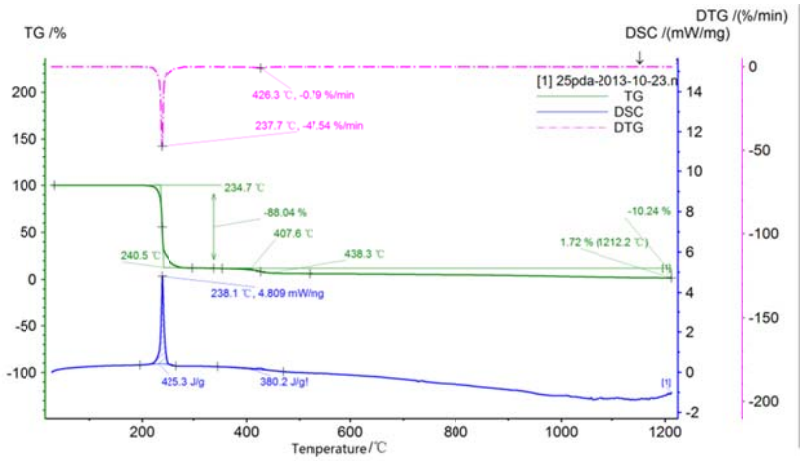

Fig. S19. The TGA curve of free H_2pydc ligand.