

Supplementary Material

Structures and photoluminescence properties of four cadmium(II) coordination polymers synthesized by rigid ligands and N-Donor Ligands

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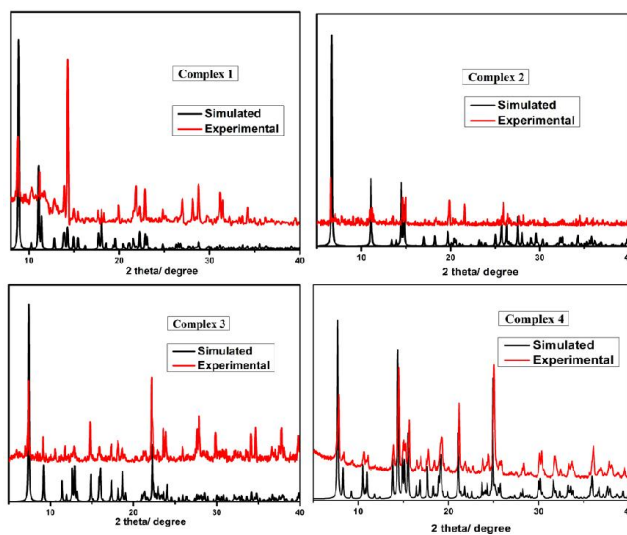
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(1) Table S1. Selected bond lengths (Å) and angles (°) for 1-4.

Compound 1					
Cd1—O2	2.206 (11)	Cd1—O8 ⁱ	2.231 (10)	Cd1—N2	2.308 (12)
Cd1—O3	2.314 (10)	Cd1—N1	2.367 (10)	Cd1—O1	2.552 (9)
Cd2—O4	2.215 (10)	Cd2—O5 ⁱ	2.270 (10)	Cd2—N3	2.333 (12)
Cd2—O7 ⁱ	2.342 (9)	Cd2—N4	2.393 (11)	Cd2—O6 ⁱ	2.564 (10)
O8 ⁱ —Cd1—N2	87.6 (4)	O2—Cd1—O3	80.6 (4)	O8 ⁱ —Cd1—O3	105.4 (4)
N2—Cd1—O3	79.2 (4)	O2—Cd1—N1	98.6 (4)	O8 ⁱ —Cd1—N1	108.5 (4)
N2—Cd1—N1	69.2 (4)	O3—Cd1—N1	131.8 (4)	O2—Cd1—O1	53.1 (4)
O8 ⁱ —Cd1—O1	90.7 (3)	N1—Cd1—O1	88.5 (4)	O4—Cd2—N3	107.5 (4)
O5 ⁱ —Cd2—N3	95.8 (4)	O5 ⁱ —Cd2—O7 ⁱ	82.2 (3)	O4—Cd2—N4	89.0 (4)
N3—Cd2—N4	69.1 (4)	O7 ⁱ —Cd2—N4	80.2 (4)	O4—Cd2—O6 ⁱ	89.4 (4)
O5 ⁱ —Cd2—O ⁱ	54.3 (3)	N3—Cd2—O6 ⁱ	85.8 (3)	O7 ⁱ —Cd2—O6 ⁱ	126.0 (3)
Symmetry codes: (i) x+1, y, z; (ii) x-1, y, z.					
Compound 2					
Cd1—N1	2.188 (4)	Cd1—O3 ⁱ	2.281 (3)	Cd1—O4 ⁱⁱ	2.345 (3)
Cd1—O2	2.367 (3)	Cd1—O1	2.403 (3)	Cd1—O1 ⁱⁱⁱ	2.429 (3)
N1—Cd1—O3 ⁱ	88.70 (13)	N1—Cd1—O4 ⁱⁱ	92.96 (13)	O3 ⁱ —Cd1—O4 ⁱⁱ	90.90 (6)
N1—Cd1—O2	165.31 (13)	O3 ⁱ —Cd1—O2	85.30 (12)	O4 ⁱⁱ —Cd1—O2	94.61 (12)
N1—Cd1—O1	138.69 (13)	O3 ⁱ —Cd1—O1	94.10 (12)	O4 ⁱⁱ —Cd1—O1	80.20 (11)
O2—Cd1—O1	55.33 (10)	N1—Cd1—O1 ⁱⁱⁱ	89.22 (13)	O3 ⁱ —Cd1—O1 ⁱⁱⁱ	101.19 (13)
O4 ⁱⁱ —Cd1—O1 ⁱⁱⁱ	85.60 (11)	O2—Cd1—O1 ⁱⁱⁱ	78.85 (10)	O1—Cd1—O1 ⁱⁱⁱ	130.16 (9)
Symmetry codes: (i) x, -y+1/2, z-1/2; (ii) -x, -y+1, -z+1; (iii) -x, y+1/2, -z+1/2; (iv) -x, y-1/2, -z+1/2; (v) x, -y+1/2, z+1/2.					
Compound 3					
Cd1—O8	2.253 (3)	Cd1—N2	2.274 (3)	Cd1—O4 ⁱ	2.302 (3)
Cd1—O2	2.320 (2)	Cd1—O2 ⁱⁱ	2.412 (2)	Cd1—O3 ⁱ	2.519 (3)
Cd1—O1	2.629 (3)	Cd1—C8 ⁱ	2.741 (3)	N2—Cd1—O4 ⁱ	140.60 (10)
O8—Cd1—N2	108.23 (12)	O8—Cd1—O4 ⁱ	87.59 (10)	O8—Cd1—O2	91.01 (10)
N2—Cd1—O2	124.54 (10)	O4 ⁱ —Cd1—O2	89.81 (9)	O8—Cd1—O2 ⁱⁱ	167.19 (10)
N2—Cd1—O2 ⁱⁱ	83.90 (10)	O4 ⁱ —Cd1—O2 ⁱⁱ	85.27 (9)	O2—Cd1—O2 ⁱⁱ	78.35 (9)
O8—Cd1—O3 ⁱ	83.35 (11)	N2—Cd1—O3 ⁱ	91.55 (10)	O4 ⁱ —Cd1—O3 ⁱ	53.69 (9)
O2—Cd1—O3 ⁱ	143.15 (9)	O2 ⁱⁱ —Cd1—O3 ⁱ	100.82 (9)	O8—Cd1—O1	74.74 (10)
N2—Cd1—O1	82.48 (10)	O4 ⁱ —Cd1—O1	136.93 (9)	O2—Cd1—O1	52.51 (8)
O2 ⁱⁱ —Cd1—O1	103.57 (8)	O3 ⁱ —Cd1—O1	154.07 (10)		
Symmetry codes: (i) x, y-1, z; (ii) -x+1, -y, -z+1; (iii) x, y+1, z; (iv) -x+2, -y, -z.					
Compound 4					
Cd1—O1	2.278 (4)	Cd1—O5	2.352 (4)	Cd1—O3	2.354 (4)
Cd1—N2	2.356 (4)	Cd1—N1	2.381 (5)	Cd1—O4	2.445 (4)
Cd1—O2	2.631 (4)	O1—Cd1—O5	85.92 (15)	O1—Cd1—O3	136.01 (14)
O5—Cd1—O3	88.40 (14)	O1—Cd1—N2	84.99 (16)	O5—Cd1—N2	94.67 (14)
O3—Cd1—N1	87.11 (16)	O1—Cd1—N1	89.76 (16)	N2—Cd1—N1	95.86 (15)
O5—Cd1—O4	91.08 (14)	O3—Cd1—O4	53.99 (13)	N2—Cd1—O4	85.02 (15)
N1—Cd1—O4	95.07 (15)	O1—Cd1—O2	51.30 (14)	O5—Cd1—O2	85.46 (13)
O3—Cd1—O2	84.79 (12)	N1—Cd1—O2	83.30 (14)		
Symmetry codes: (i) x, -y, z-1/2; (ii) x, -y, z+1/2; (iii) x+1/2, -y+1/2, z+1/2; (iv) x-1/2, -y+1/2, z-1/2.					

(2) Figure S1 The powder XRD patterns and the simulated ones from the single-crystal diffraction data for compounds 1-4.



(3) Figure S2 Thermogravimetric analyses(TGA) of 1-4.

