Electronic Supplementary Information (ESI)

Controlled synthesis, structures and properties of one-, two-, and three-dimensional lanthanide coordination polymers based on (8-quinolyloxy)acetate

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Fig. S1 A 3D supramolecular network constructed by π···π stacking attractions in **1**.

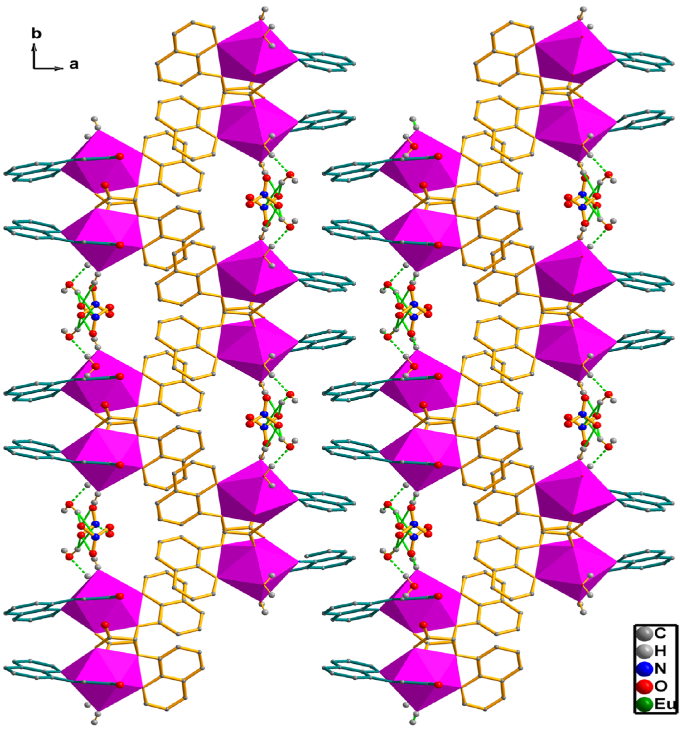


Fig. S2 A 3D supramolecular network constructed by π···π stacking attractions in **3**.

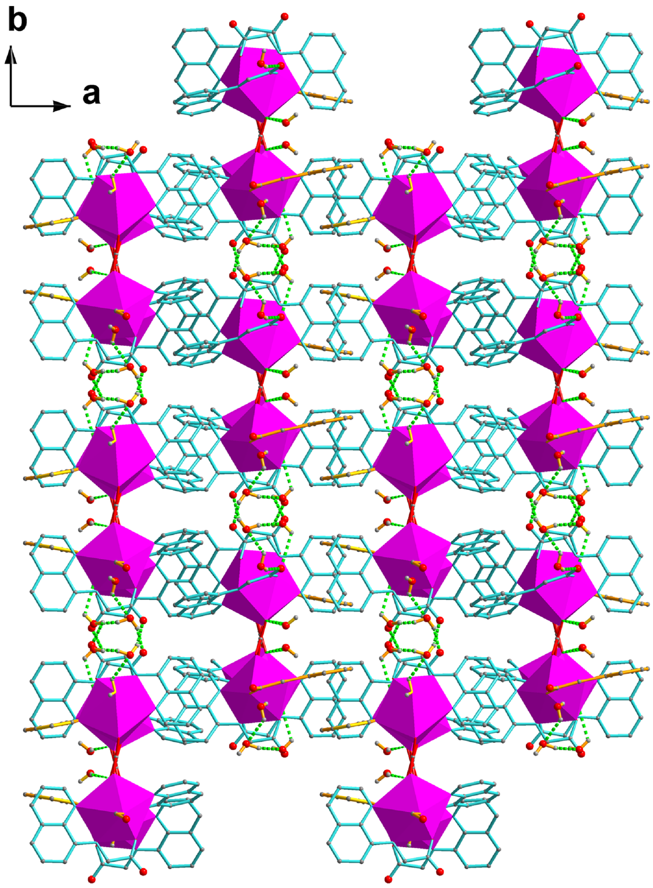


Fig. S3 A 3D supramolecular network constructed by π···π stacking attractions in **5**.

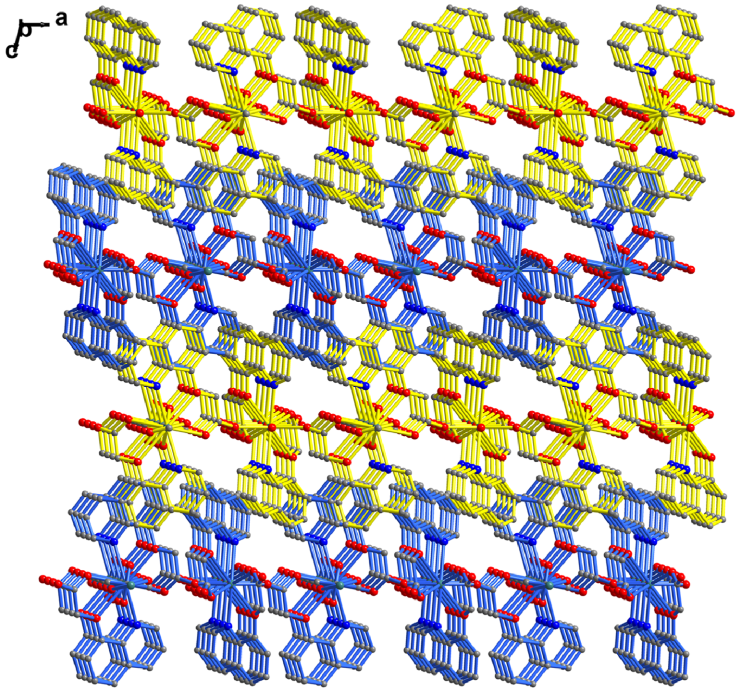


Fig. S4 Schematic representation of 8-connected 3D framework in **7.**

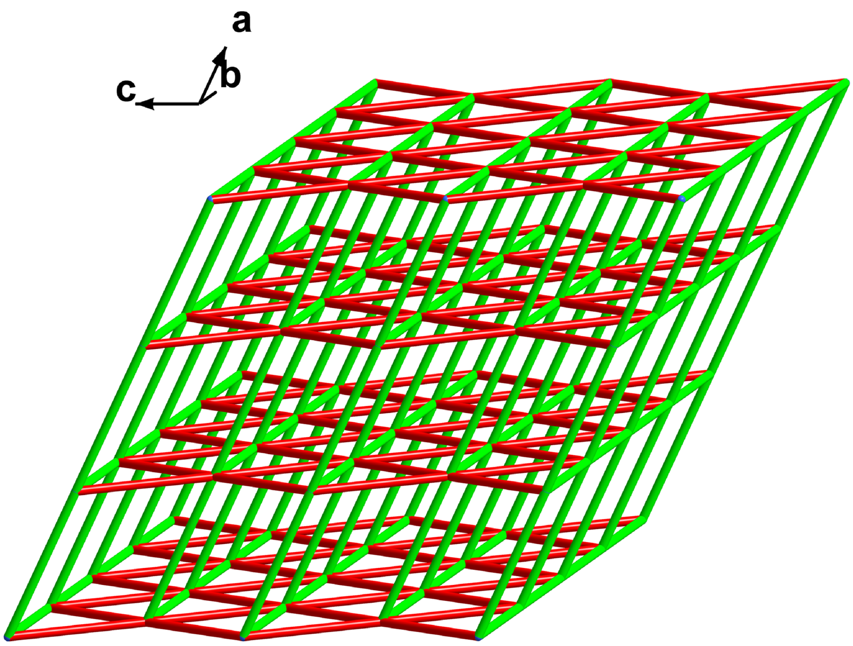
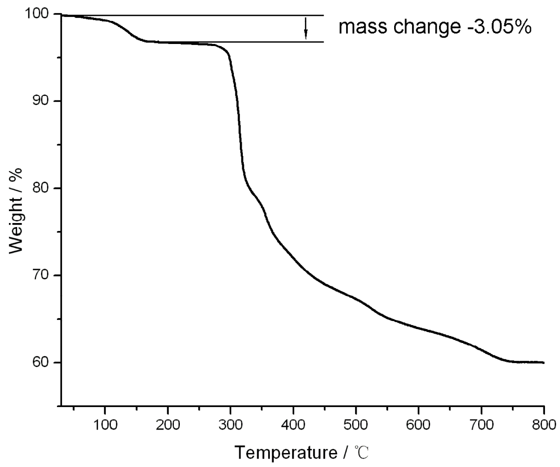
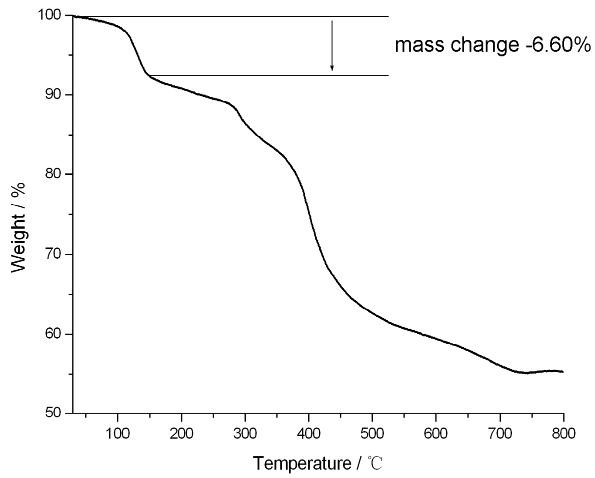


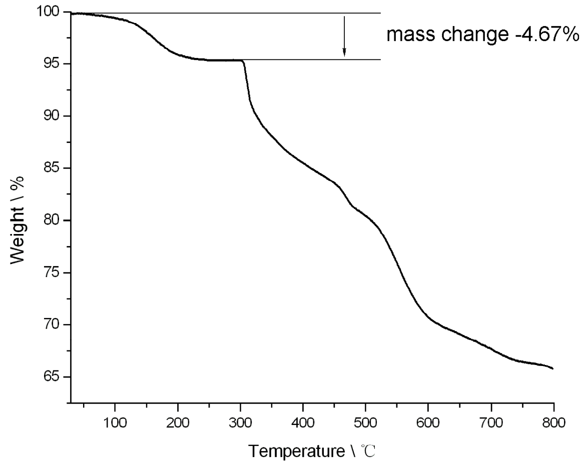
Fig. S5 TGA curves for compounds **1**, **3** and **5**.



(1)

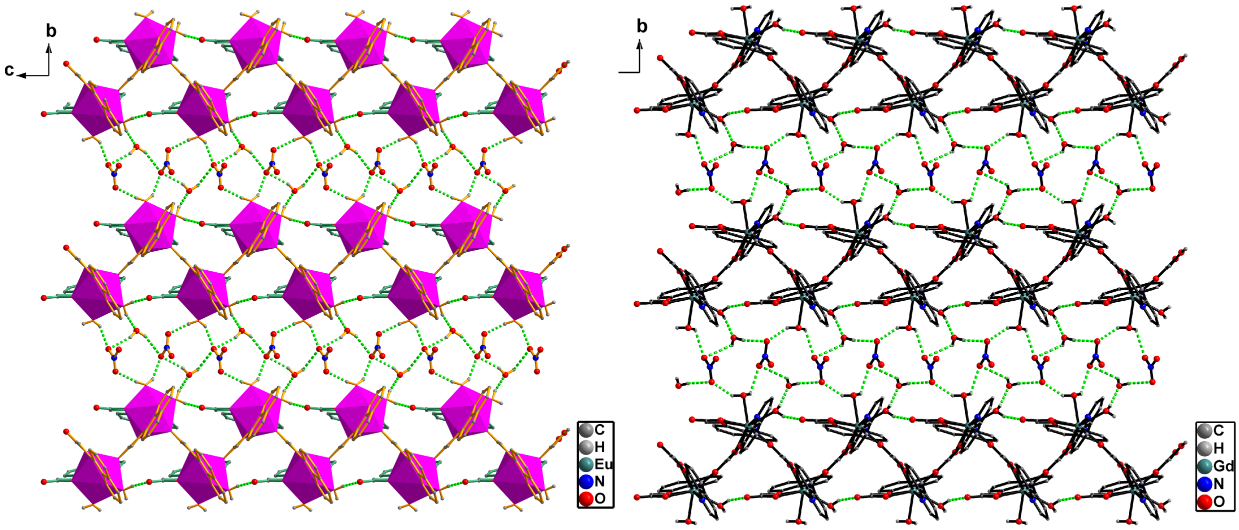


(3)



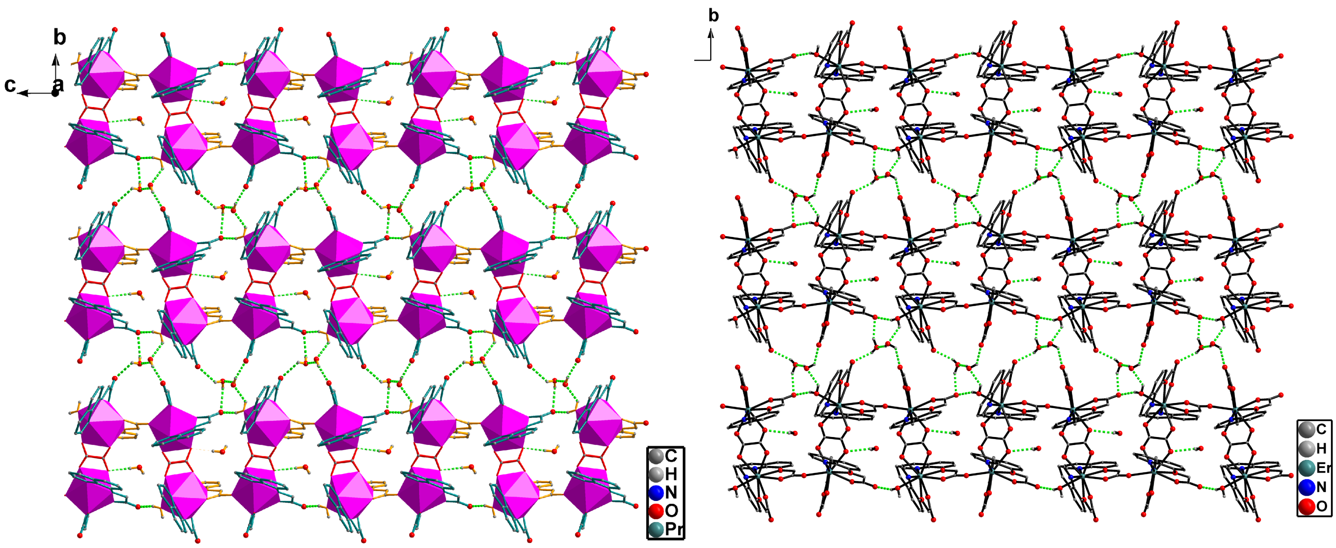
(5)

Fig. S6 The H-bonding schemes in compounds **1**(a) and **2**(b).



(a) **(b)**

Fig. S7 The H-bonding patterns in compounds **3**(a) and **4**(b).



(a) **(b)**

Table S1. Distances (Å) and angles (°) of hydrogen bonds for compounds **1 - 5.**

	D-H...A	d (D-H)	d (H...A)	d (D...A)	∠ (DHA)	Symmetry equivalent operators
1	O(1w)-H(1w)...O(9)	0.86	2.04	2.800(12)	146.0	
	O(1w)-H(2w)...O(9)	0.85	2.40	3.042(13)	132.3	*x, -y+1/2, z+1/2*
	O(2w)-H(3w)...O(9)	0.84	2.08	2.806(10)	145.0	*x, -y+1/2, z+1/2*
	O(2w)-H(4w)...O(8)	0.84	1.92	2.748(8)	170.9	
	O(3w)-H(5w)...O(6)	0.85	1.89	2.701(6)	159.2	*x, y, z+1*
	O(3w)-H(6w)...O(1w)	0.85	1.88	2.716(8)	167.5	*x, -y+1/2, z+1/2*
2	O(1w)-H(2w)...O(7)	0.86	2.21	3.055(13)	168.1	
	O(1w)-H(2w)...O(9)	0.86	2.41	3.085(15)	136.4	*x, -y+3/2, z–1/2*
	O(2w)-H(3w)...O(9)	0.85	2.33	2.809(12)	116.3	*x, -1+y, z*
	O(2w)-H(4w)...O(7)	0.92	1.95	2.741(11)	143.0	*x,1/2-y,1/2+z*
	O(3w)-H(5w)...O(6)	0.85	1.92	2.721(8)	156.0	*x, y, -1+z*
	O(3w)-H(6w)...O(1w)	0.85	1.93	2.693(10)	149.0	*x,1/2-y,-1/2+z*
3	O(1w)–H(1w)...O(9)	0.85	1.88	2.711(8)	163.7	*x*, *y*, 1+*z*
	O(1w)–H(2w)...O(2w)	0.85	2.14	2.667(9)	119.7	*x*, *y*, 1+*z*
	O(2w)–H(3w)...O(3w)	0.83	2.04	2.762(11)	144.8	
	O(2w)–H(4w)...O(12)	0.82	1.94	2.718(10)	157.0	*x*,1/2-*y*,-1/2+*z*
	O(3w)–H(5w)...O(9)	0.82	2.39	2.881(10)	118.8	
	O(4w)–H(7w)...O(16)	0.85	2.21	2.993(10)	152.4	*x*, 3/2-*y*, -1/2+*z*
	O(3w)–H(6w)...O(6)	0.82	2.42	2.739(10)	104.0	*x*,1/2-*y*, -1/2+*z*
4	O(1w)-H(1w)…O(3w)	0.85	2.01	2.673(10)	134.3	x,1/2-y,1/2+z
	O(1w)-H(2w)…O(9)	0.85	1.93	2.732(10)	157.5	x,y,1+z
	O(2w)-H(3w)…O(6)	0.85	2.07	2.754(13)	136.9	
	O(2w)-H(4w)…O(9)	0.85	2.07	2.868(12)	156.1	x,1/2-y,1/2+z
	O(3w)-H(5w)...O(2w)	0.85	1.93	2.761(13)	164.5	

	O(3w)-H(6w)...O(12)	0.85	2.07	2.718(13)	132.8	
	O(4w)-H(8w)...O(14)	0.85	2.31	2.988(15)	136.3	
5	O(1w)–H(1w)…O(2w)	0.85	2.21	2.987(5)	152.1	
	O(2w) –H(4w)…O(3)	0.85	1.98	2.823(5)	171.5	x, y-1, z
	O(2w) –H(3w)…O(7)	0.85	2.27	3.046(5)	152.5	
	O(3w)–H(5w)…O(3)	0.85	1.99	2.832(7)	175.4	x, y-1, z

Table S2. Selected bond angles (°) of compounds **1 - 7.**

1			
O(3)#1-Eu(1)-O(5)	142.23(15)	O(2w)- Eu(1)- N(1)	84.00(16)
O(3)#1-Eu(1)-O(2)	78.40(14)	O(3w)- Eu(1)- N(1)	75.03(14)
O(5)-Eu(1)-O(2)	79.96(14)	N(2)- Eu(1)- N(1)	149.91(14)
O(3)#1-Eu(1)–O(2w)	139.07(15)	O(3) #1- Eu(1)- O(1)	73.48(14)
O(5)-Eu(1)- O(2w)	73.65(15)	O(5) -Eu(1)-O(1)	69.16(13)
O(2)- Eu(1)-O(2 w)	139.64(15)	O(2)- Eu(1)- O(1)	62.87(12)
O(3) #1-Eu(1)-O(3w)	69.73(15)	O(2w)- Eu(1)- O(1)	130.18(14)
O(5)- Eu(1)- O(3w)	139.29(14)	O(3w)- Eu(1)- O(1)	125.31(13)
O(2)- Eu(1)- O(3w)	140.53(14)	N(2)- Eu(1)- O(1)	133.87(13)
O(2w)-Eu(1)- O(3w)	69.51(14)	N(1)- Eu(1)- O(1)	60.92(13)
O(3)#1 –Eu(1)-N(2)	79.61(15)	O(3)#1- Eu(1)- O(4)	133.28(14)
O(5) –Eu(1)- N(2)	123.86(14)	O(5)- Eu(10- O(4)	62.89(13)
O(2)- Eu(1)- N(2)	75.58(14)	O(2)- Eu(1)- O(4)	68.45(13)
O(2w)- Eu(1)- N(2)	94.36(16)	O(2w) -Eu(1) -O(4)	72.46(15)
O(3w)- Eu(1)- N(2)	76.29(15)	O(3w)- Eu(1)- O(4)	119.15(13)
O(3) #1- Eu(1)- N(1)	82.12(15)	N(2)- Eu(1)- O(4)	61.23(13)
O(5)- Eu(1)- N(1)	84.61(15)	N(1)- Eu(1)- O(4)	143.84(13)
O(2) -Eu(1)- N(1)	123.61(14)	O(1)- Eu(1)- O(4)	115.54(11)
2			
O(3)#1- Gd(1)-O(5)	142.3(2)	O(2w)- Gd(1)- N(2)	94.3(2)
O(3) #1-Gd(1)- O(2)	78.2(2)	O(3w)- Gd(1)- N(2)	75.6(2)
O(5)- Gd(1)- O(2)	80.2(2)	N(1)- Gd(1)- N(2)	149.7(2)
O(3)#1–Gd(1)-O(2w)	139.2(2)	O(3)#1- Gd(1)- O(1)	73.35(19)
O(5)- Gd(1)- O(2w)	73.6(2)	O(5)- Gd(1)- O(1)	69.31(19)
O(2)- Gd(1)- O(2w)	139.59(19)	O(2)- Gd(1)-O(1)	62.98(18)

O(3)$^{\#1}$- Gd(1)-O(3w)	70.0(2)	O(2w)- Gd(1)-O(1)	130.43(19)
O(5)- Gd(1)-O(3w)	139.2(2)	O(3w)-Gd(1)- O(1)	125.62(18)
O(2)- Gd(1)-O(3w)	140.25(19)	N(1)- Gd(1)- O(1)	61.20(19)
O(2w)-Gd(1)-O(3w)	69.39(19)	N(2)- Gd(1)- O(1)	133.78(19)
O(3)$^{\#1}$- Gd(1)- N(1)	82.9(2)	O(3)$^{\#1}$- Gd(1)- O(4)	132.92(19)
O(5)- Gd(1)- N(1)	84.1(2)	O(5)- Gd(1)- O(4)	63.10(18)
O(2)- Gd(1)- N(1)	124.0(2)	O(2)- Gd(1)- O(4)	68.29(18)
O(2w)- Gd(1)- N(1)	83.6(2)	O(2w)-Gd(1)- O(4)	72.51(18)
O(3w)- Gd(1)- N(1)	75.5(2)	O(3w)- Gd(1)- O(4)	118.83(18)
O(3)$^{\#1}$- Gd(1)- N(2)	79.1(2)	N(1)- Gd(1)- O(4)	143.47(19)
O(5)- Gd(1)- N(2)	124.4(2)	N(2)- Gd(1)- O(4)	61.5(2)
O(2)- Gd(1)- N(2)	75.6(2)	O(1)- Gd(1)- O(4)	115.59(16)
3			
O(5)- Pr(1)-O(1W)	78.7(2)	O(11)- Pr(2)- O(8)	85.5(2)
O(5)- Pr(1)-O(2)	81.6(2)	O(11)- Pr(2)- O(3)	76.2(2)
O(1w)- Pr(1)-O(2)	143.7(2)	O(8)- Pr(2)- O(3)	144.5(2)
O(5)- Pr(1)- O(14)	138.6(2)	O(11)-Pr(2)- O(16)$^{\#1}$	139.3(2)
O(1w)- Pr(1)- O(14)	138.7(2)	O(8)- Pr(2)- O(16)$^{\#1}$	75.5(2)
O(2)- Pr(1)- O(14)	72.9 (2)	O(3)- Pr(2)- O(16)$^{\#1}$	136.4(2)
O(5)- Pr(1)- O(13)	142.4(2)	O(11)-Pr(2)- O(15)$^{\#1}$	140.9(2)
O(1w)- Pr(1)- O(13)	74.5(2)	O(8)- Pr(2)- O(15)$^{\#1}$	133.24(19)
O(2)- Pr(1)- O(13)	134.4(2)	O(3)- Pr(2)- O(15)$^{\#1}$	72.43(19)
O(14)- Pr(1)- O(13)	64.37(19)	O(16)$^{\#1}$-Pr(2)-O(15)$^{\#1}$	64.19(19)
O(5)- Pr(1)- O(4)	62.20(19)	O(11)- Pr(2)- O(10)	62.96(18)
O(1w)- Pr(1)- O(4)	75.65(19)	O(8)- Pr(2)- O(10)	72.66(19)
O(2)- Pr(1)- O(4)	68.21(18)	O(3)- Pr(2)- O(10)	71.91(19)
O(14)- Pr(1)-O(4)	131.0(2)	O(16)$^{\#1}$-Pr(2)-O(10)	138.7(2)
O(13)- Pr(1)- O(4)	132.67(18)	O(15)$^{\#1}$(-Pr(2)-O(10)	125.44(18)
O(5)- Pr(1)- O(1)	71.7(2)	O(11)- Pr(2)- N(3)	78.0(2)
O(1w)- Pr(1)- O(1)	136.16(19)	O(8)- Pr(2)- N(3)	121.9(2)
O(2)- Pr(1)- O(1)	62.26(17)	O(3)- Pr(2)- N(3)	84.1(2)
O(14)- Pr(1)- O(1)	67.7(2)	O(16)$^{\#1}$- Pr(2)- N(3)	82.0(2)
O(13)- Pr(1)- O(1)	111.68(19)	O(15)$^{\#1}$- Pr(2)- N(3)	76.1(2)
O(4)- Pr(1)- O(1)	115.34(17)	O(10)- Pr(2)- N(3)	137.72(19)
O(5)- Pr(1)- N(1)	79.3(2)	O(11)- Pr(2)- (7)	73.5(2)
O(1W)- Pr(1)- N(1)	83.4(2)	O(8)- Pr(2)- O(7)	62.32(18)
O(2)- Pr(1)- N(1)	122.43(19)	O(3)- Pr(2)- O(7)	136.40(19)
O(14)- Pr(1)- N(1)	87.4(2)	O(16)$^{\#1}$- Pr(2)- O(7)	65.8(2)

O(13)- Pr(1)- N(1)	71.8(2)	O(15)#1- Pr(2)- O(7)	115.89(18)
O(4)- Pr(1) –N(1)	138.8(2)	O(10)- Pr(2)-O(7)	118.49(18)
O(1)- Pr(1)- N(1)	60.21(19)	N(3)- Pr(2)- O(7)	59.6(2)
O(5)- Pr(1)- N(2)	121.5(2)	O(11)- Pr(2)- N(4)	123.4(2)
O(1w)- Pr(1)- N(2)	77.7(2)	O(8)- Pr(2)- N(4)	76.0(2)
O(2)- Pr(1)- N(2)	87.2 (2)	O(3)- Pr(2)- N(4)	88.91(19)
O(14)- Pr(1)- N(2)	89.7(2)	O(16)#1- Pr(2)- N(4)	86.8(2)
O(13)- Pr(1)- N(2)	77.8(2)	O(15)#1- Pr(2)- N(4)	79.0(2)
O(4)- Pr(1)- N(2)	60.4(2)	O(10)- Pr(2)- N(4)	60.50(19)
O(1)- Pr(1) –N(2)	145.79(19)	N(3)- Pr(2)- N(4)	155.1(2)
N(1)- Pr(1)- N(2)	147.5(2)	O(7)- Pr(2)- N(4)	134.13(19)
4			
O(5)- Er(1)-O(1w)	78.8(3)	O(11)-Er(2)- O(8)	85.4(2)
O(5)- Er(1)- O(2)	81.7(2)	O(11)- Er(2)- O(3)	76.2(2)
O(1w)- Er(1)- O(2)	143.4(2)	O(8)- Er(2)- O(3)	144.4(2)
O(5)- Er(1)- O(16)	138.1(3)	O(11)- Er(2)- O(14)#1	139.0(3)
O(1w)- Er(1)- O(16)	139.4(2)	O(8)-Er(2)- O(14)#1	75.5(2)
O(2) –Er(1)- O(16)	72.3(2)	O(3)- Er(2)- O(13)#1	140.8(2)
O(5)- Er(1)- O(15)	141.9(2)	O(8)- Er(2)- O(13)#1	133.5(2)
O(1w)- Er(1)- O(15)	74.6(2)	O(3)-Er(2)- O(13)#1	72.3(2)
O(2)- Er(1)- O(15)	134.7(2)	O(8)- Er(2)- O(13)#1	64.5(2)
O(16)- Er(1)-O(15)	65.1(2)	O(14)#1 Er(2)-O(13)#1	63.3(2)
O(5)- Er(1)- O(4)	62.7(2)	O(8)- Er(2)- O(10)	72.9(2)
O(1w)- Er(1)-O(4)	75.2(2)	O(3)-Er(2)- O(10)	71.7(2)
O(2)- Er(1)-O(4)	68.4(2)	O(14) #1- Er(2)-O(10)	138.8(2)
O(16)- Er(1)-O(4)	130.6(2)	O(13) #1- Er(2)- O(10)	124.9(2)
O(15)- Er(1)-O(4)	132.7(2)	O(11)- Er(2)- N(3)	78.1(2)
O(5)- Er(1)- O(1)	71.2(2)	O(8)- Er(2)- N(3)	122.2(3)
O(1w)- Er(1)- O(1)	136.4(2)	O(3)- Er(2)- N(3)	83.7(2)
O(2)- Er(1)- O(1)	62.1(2)	O(14)#1- Er(2)- N(3)	82.0(3)
O(16)- Er(1)- O(1)	67.7(2)	O(13)#1- Er(2)- N(3)	75.9(3)
O(15)- Er(1)- O(1)	111.8(2)	O(10)- Er(2)- N(3)	137.8(2)
O(4)- Er(1)- N(1)	78.6(3)	O(11)- Er(2)- O(7)	72.7(2)
O(1w)- Er(1)-N(1)	82.8(2)	O(8)- Er(2)- O(7)	62.3(2)
O(2)- Er(1)-N(1)	88.6(3)	O(3)- Er(2)- O(7)	135.9(2)
O(16)- Er(1)-N(1)	71.5(2)	O(14)#1- Er(2)- O(7)	66.3(2)
O(15)- Er(1)-N(1)	138.2(2)	O(13)#1- Er(2)- O(7)	116.7(2)
O(16)- Er(1)-N(1)	61.0(2)	O(10)- Er(2)- O(7)	118.3(2)

O(5)- Er(1)-N(2)	122.4(2)	N(7)- Er(2)- O(7)	59.9(2)
O(1w)- Er(1)- N(2)	77.4(2)	O(11)- Er(2)- N(4)	123.9(2)
O(2)- Er(1)- N(2)	87.6(2)	O(8)- Er(2)- N(4)	76.3(2)
O(16)- Er(1)- N(2)	89.3(3)	O(3)- Er(2)- N(4)	89.0(2)
O(15)- Er(1)- N(2)	77.6(2)	O(14)$^{\#1}$- Er(2)- N(4)	86.7(3)
O(4)- Er(1)- N(2)	60.8(2)	O(13)$^{\#1}$- Er(2)- N(4)	78.5(3)
O(1)- Er(1)- N(2)	145.9(2)	O(10)- Er(2)- N(4)	60.7(2)
N(1)- Er(1)- N(2)	146.7(3)	N(3)- Er(2)- N(4)	154.4(3)
		O(7)- Er(2)- N(4)	134.5(2)
5			
O(1)- Sm(1)- O(1w)	120.85(8)	O(4) - Sm(2)-O(5)	61.16(12)
O(1)-Sm(1)-O(2)	62.48(12)	O(4) - Sm(2)-O(7)	71.49(9)
O(1)- Sm(1)- O(6)	73.84(12)	O(4) - Sm(2)-N(2)	59.22(11)
O(1)- Sm(1)-N(1)	61.04(11)	O(4) - Sm(2)-O(8)$^{\#2}$	64.30(10)
O(1)-Sm(1)-O(1)$^{\#1}$	118.29(11)	O(4)-Sm(2)-O(4)$^{\#3}$	173.46(7)
O(1)-Sm(1)-O(2)$^{\#1}$	69.38(12)	O(4)-Sm(2)-O(5)$^{\#3}$	116.85(12)
O(1)-Sm(1)-O(6)$^{\#1}$	132.51(12)	O(4)-Sm(2)-O(7)$^{\#3}$	114.52(12)
O(1)- Sm(1)-N(1)$^{\#1}$	139.69(12)	O(4)-Sm(2)-N(2)$^{\#3}$	123.32(11)
O(1w)-Sm(1)-O(2)	142.54(9)	O(4)-Sm(2)-O(8)$^{\#4}$	109.36(10)
O(1w)-Sm(1)-O(6)	67.21(9)	O(5)-Sm(2)-O(7)	81.02(10)
O(1w)-Sm(1)-N(1)	74.25(8)	O(5)-Sm(2)-N(2)	119.82(12)
O(1w)-Sm(1)-O(1)$^{\#1}$	120.85(8)	O(5)-Sm(2)-O(8)$^{\#2}$	76.76(10)
O(1w)-Sm(1)-O(2)$^{\#1}$	142.54(9)	O(5)-Sm(2)-O(4)$^{\#3}$	116.85(12)
O(1w)-Sm(1)-O(6)$^{\#1}$	67.21(9)	O(5)-Sm(2)-O(5)$^{\#3}$	148.68(12)
O(1w)-Sm(1)-N(1)$^{\#1}$	74.25(8)	O(5)-Sm(2)-O(7)$^{\#3}$	129.60(10)
O(2)-Sm(1)- O(6)	80.04(12)	O(5)-Sm(2)-N(2)$^{\#3}$	71.36(12)
O(2)-Sm(1)-N(1)	123.44(12)	O(5)-Sm(2)-O(8)$^{\#4}$	75.28(12)
O(2)-Sm(1)- O(1)$^{\#1}$	69.38(12)	O(7)-Sm(2)-N(2)	73.89(11)
O(2)-Sm(1)- O(2)$^{\#1}$	74.91(12)	O(7)-Sm(2)-O(8)$^{\#2}$	136.01(12)
O(2)-Sm(1)- O(6)$^{\#1}$	142.00(13)	O(7)-Sm(2)-O(4)$^{\#3}$	114.52(9)
O(2)-Sm(1)- N(1)$^{\#1}$	83.10(12)	O(7)-Sm(2)-O(5)$^{\#3}$	129.60(12)
O(6)-Sm(1)- N(1)	87.48(12)	O(7)-Sm(2)-O(7)$^{\#3}$	53.88(9)
O(6)-Sm(1)- O(1)$^{\#1}$	132.51(12)	O(7)-Sm(2)-N(2)$^{\#3}$	71.99(11)
O(6)- Sm(1)- O(1)$^{\#1}$	132.51(12)	O(7)-Sm(2)-O(8)$^{\#4}$	151.23(11)
O(6)- Sm(1)- O(2)$^{\#1}$	142.00(13)	N(2)-Sm(2)-O(8)$^{\#2}$	85.01(11)
O(6)- Sm(1)- O(6)$^{\#1}$	134.41(12)	N(2)-Sm(2)-O(4)$^{\#3}$	123.32(11)
O(6)- Sm(1)- N(1)$^{\#1}$	80.42(12)	N(2)-Sm(2)-O(5)$^{\#3}$	71.36(12)
N(1)- Sm(1)-O(1)$^{\#1}$	83.10(12)	N(2)-Sm(2)-O(7)$^{\#3}$	71.99(12)

N(1)- Sm(1)-O(1)$^{\#1}$	139.69(11)	N(2)-Sm(2)-N(2)$^{\#3}$	141.58(10)
N(1)- Sm(1)-O(2)$^{\#1}$	83.10(12)	N(2)-Sm(2)-O(8)$^{\#4}$	132.54(11)
N(1)- Sm(1)-O(6)$^{\#1}$	80.42(12)	O(8)$^{\#2}$-Sm(2)-O(4)$^{\#3}$	109.36(10)
N(1)- Sm(1)-N(1)$^{\#1}$	148.50(12)	O(8)$^{\#2}$-Sm(2)-O(5)$^{\#3}$	75.28(12)
O(1)$^{\#1}$- Sm(1)-O(2)$^{\#1}$	62.48(12)	O(8)$^{\#2}$-Sm(2)-O(7)$^{\#3}$	151.23(11)
O(1)$^{\#1}$- Sm(1)-O(6)$^{\#1}$	73.84(12)	O(8)$^{\#2}$-Sm(2)-N(2)$^{\#3}$	132.54(11)
O(1)$^{\#1}$- Sm(1)-N(1)$^{\#1}$	61.04(11)	O(8)$^{\#2}$-Sm(2)-O(8)$^{\#4}$	52.96(11)
O(2)$^{\#1}$- Sm(1)-O(6)$^{\#1}$	80.04(12)	O(4)$^{\#3}$-Sm(2)-O(5)$^{\#3}$	61.16(12)
O(2)$^{\#1}$- Sm(1)-N(1)$^{\#1}$	123.44(12)	O(4)$^{\#3}$-Sm(2)-O(7)$^{\#3}$	71.74(9)
O(6)$^{\#1}$- Sm(1)-N(1)$^{\#1}$	87.48(12)	O(4)$^{\#3}$-Sm(2)-N(2)$^{\#3}$	59.22(11)
O(5)$^{\#3}$-Sm(2)-O(7)$^{\#3}$	81.02(10)	O(4)$^{\#3}$-Sm(2)-O(8)$^{\#4}$	64.30(10)
O(5)$^{\#3}$-Sm(2)-N(2)$^{\#3}$	119.82(12)	O(5)$^{\#3}$-Sm(2)-O(8)$^{\#4}$	76.76(11)
O(7)$^{\#3}$-Sm(2)-N(2)$^{\#3}$	73.89(11)	O(7)$^{\#3}$-Sm(2)-O(8)$^{\#4}$	136.01(11)
N(2)$^{\#3}$-Sm(2)-O(8)$^{\#4}$	85.01(11)		
6			
O(5)- Sm(1)- O(7)	76.68(8)	O(4)- Sm(1)- O(2)	131.72(7)
O(5)- Sm(1)- O(6)	80.84(8)	O(5)- Sm(1)- O(1)	139.23(7)
O(7)- Sm(1)- O(6)	118.97(8)	O(7)- Sm(1)- O(1)	143.97(7)
O(5)- Sm(1)- O(3) $^{\#1}$	84.37(8)	O(6)- Sm(1)- O(1)	78.77(7)
O(7)- Sm(1)- O(3)$^{\#1}$	76.31(8)	O(3)$^{\#1}$- Sm(1)- O(1)	100.28(8)
O(6)- Sm(1)- O(3) $^{\#1}$	155.13(8)	O(4)- Sm(1)- O(1)	84.20(7)
O(5)- Sm(1)- O(4)	121.61(8)	O(2)- Sm(1)- O(1)	61.14(7)
O(7)- Sm(1)- O(4)	73.99(8)	O(5)- Sm(1)- N(1)	155.81(8)
O(6)- Sm(1)- O(4)	71.41(8)	O(7)- Sm(1)- N(1)	83.71(8)
O(3)$^{\#1}$- Sm(1)- O(4)	133.43(8)	O(6)- Sm(1)- N(1)	121.61(8)
O(5)- Sm(1)- O(2)	78.76(8)	O(3)$^{\#1}$- Sm(1)- N(1)	77.27(8)
O(7)- Sm(1)- O(2)	151.87(8)	O(4)- Sm(1)- N(1)	64.60(8)
O(6)- Sm(1)- O(2)	69.73(8)	O(2)- Sm(1)- N(1)	115.68(8)
O(3)$^{\#1}$- Sm(1)- O(2)	87.88(8)	O(1)- Sm(1)- N(1)	60.89(7)
7			
O(6)- Eu(1)- O(5)	76.55(10)	O(3)$^{\#1}$- Eu(1)-O(1)	99.89(10)
O(6)- Eu(1)- O(4)	80.82(10)	O(7)- Eu(1)- O(1)	84.71(9)
O(5)- Eu(1)- O(4)	118.51(10)	O(2)- Eu(1)- O(1)	61.38(8)
O(6)- Eu(1)- O(3)$^{\#1}$	84.67(10)	O(6)- Eu(1)- N(1)	155.69(10)
O(5)- Eu(1)-O(3)$^{\#1}$	76.82(10)	O(5)- Eu(1)- N(1)	83.75(10)
O(4)- Eu(1)-O(3)$^{\#1}$	155.27(10)	O(4)- Eu(1)- N(1)	121.67(10)
O(6)- Eu(1)-O(7)	121.14(10)	O(3)$^{\#1}$- Eu(1)- N(1)	77.01(10)
O(5)- Eu(1)-O(7)	73.43(10)	O(7)- Eu(1)- N(1)	64.86(10)

O(4)- Eu(1)-O(7)	71.34(10)	O(2)- Eu(1)- N(1)	115.98(10)
O(3)[#1]- Eu(1)-O(7)	133.37(10)	O(1)- Eu(1)- N(1)	60.97(9)
O(6)- Eu(1)-O(2)	78.58(10)	O(5)- Eu(1)-O(2)	151.71(9)
O(3)[#1]- Eu(1)-O(2)	87.69(10)	O(4)- Eu(1)-O(2)	69.91(9)
O(7)- Eu(1)-O(2)	132.21(9)	O(6)- Eu(1)-O(1)	139.29(9)
O(5)- Eu(1)-O(1)	144.06(9)	O(4)- Eu(1)-O(1)	78.94(9)

Symmetry transformations used to generate equivalent atoms: For **1** and **2**: #1 *x*, 1/2−y, −1/2+*z*. For **3** and **4**: #1 *x*, 3/2−*y*, −1/2+*z*. For **5**: # 1 −*x*, *y*, 1/2−*z*; #2 *x*, 1+*y*, *z*; #3 1−*x*, *y*, 1/2−*z*; #4 1−*x*, 1+*y*, 1/2−*z*. For **6** and **7**: #1 −*x*, 1/2+*y*, 1/2−*z*.