

Supporting materials for

2D and 3D lanthanide coordination polymers constructed from benzimidazole-5,6-dicarboxylic acid and sulfate anions bridged secondary building units

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Table S1. Selected bond lengths for 1, 2, and 4

	1(La)	2(Pr)	4(Gd)
Ln(1)-O(2)	2.536(8)	2.500(5)	2.420(4)
Ln(1)-O(3)	2.490(8)	2.449(6)	2.363(4)
Ln(1)-O(4C)	2.479(8)	2.440(6)	2.320(4)
Ln(1)-O(5)	2.458(8)	2.422(6)	2.372(4)
Ln(1)-O(6B)	2.430(8)	2.381(6)	2.380(4)
Ln(1)-O(8)	2.546(8)	2.510(6)	2.433(4)
Ln(1)-O(9)	2.576(8)	2.541(6)	2.438(4)
Ln(1)-O(12A)	2.559(8)	2.508(6)	2.504(4)
Ln(2)-O(1A)	2.674(9)	2.630(6)	2.417(4)
Ln(2)-O(2A)	2.608(8)	2.571(6)	2.663(4)
Ln(2)-O(7)	2.534(9)	2.486(6)	2.562(4)
Ln(2)-O(8)	2.710(8)	2.683(6)	2.489(4)
Ln(2)-O(9)	2.703(9)	2.673(6)	2.583(4)
Ln(2)-O(10A)	2.499(8)	2.454(6)	2.376(4)
Ln(2)-O(12)	2.649(8)	2.624(6)	2.623(4)
Ln(2)-O(13)	2.559(9)	2.530(6)	2.473(4)
Ln(2)-O(14)	2.546(9)	2.506(6)	2.445(4)
Ln(2)-O(15)	2.552(9)	2.519(6)	2.437(4)

Symmetry codes: A: -x+1, -y+2, -z; B: -x, -y+1, -z; C: -x+1, -y+1, -z.

Table S2. Selected bond lengths for 5, 6, and 8

	5(Eu)	6(Tb)	8(Er)
Ln(1)-O(1)	2.395(12)	2.383(12)	2.374(10)
Ln(1)-O(2)	2.554(9)	2.542(9)	2.504(10)
Ln(1)-O(2A)	2.379(9)	2.361(9)	2.348(10)
Ln(1)-O(3A)	2.245(8)	2.226(9)	2.198(9)
Ln(1)-O(4B)	2.322(9)	2.304(10)	2.291(10)
Ln(1)-O(5)	2.370(16)	2.35(2)	2.318(19)
Ln(1)-O(6A)	2.394(12)	2.368(13)	2.332(12)
Ln(1)-N(1C)	2.546(9)	2.531(10)	2.508(10)

Symmetry codes: A: -x+1, -y+1, -z+1; B: x, -y+1/2, z-1/2; C: -x+2, -y+1, -z+1.

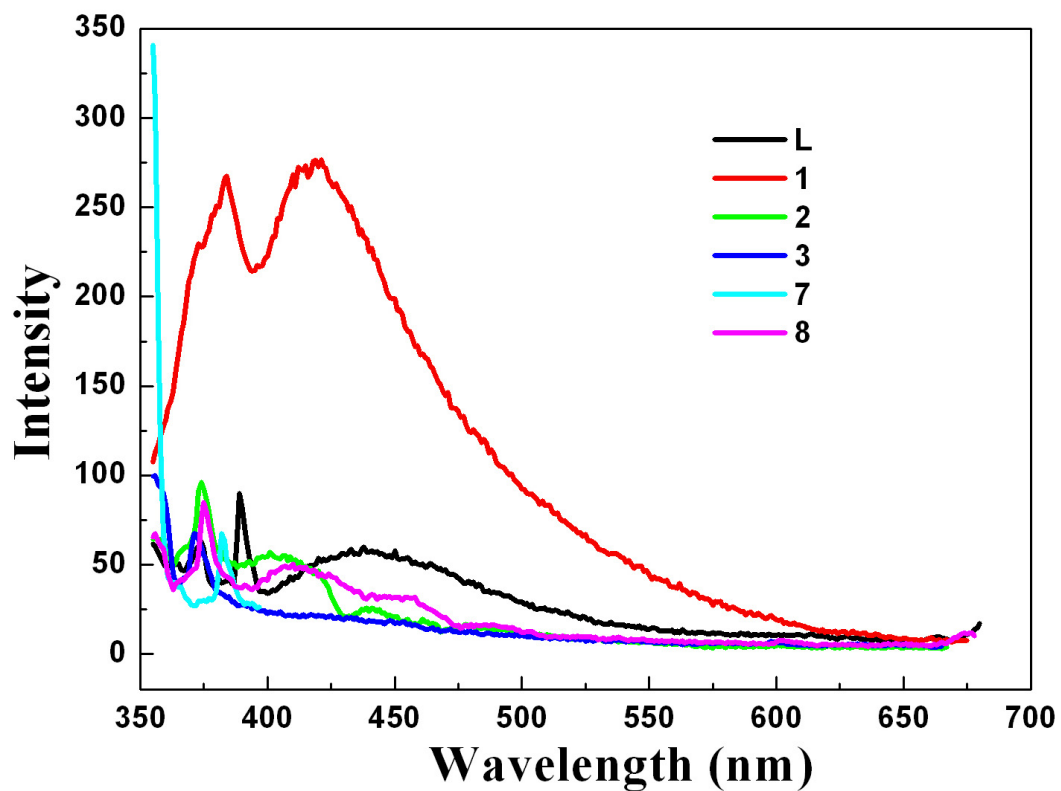


Fig. S1 Solid-state emission spectra of complexes 1, 2, 3, 7, 8, and H₃bidc (L) at room temperature.

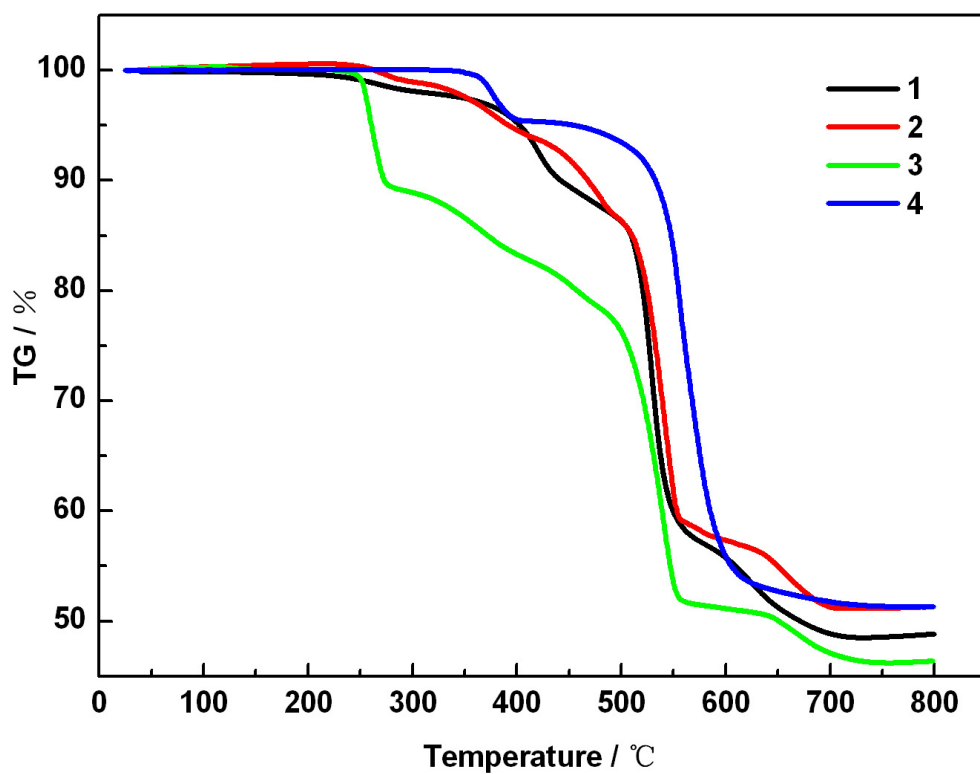


Fig. S2a Thermogravimetric analysis of complexes 1–4.

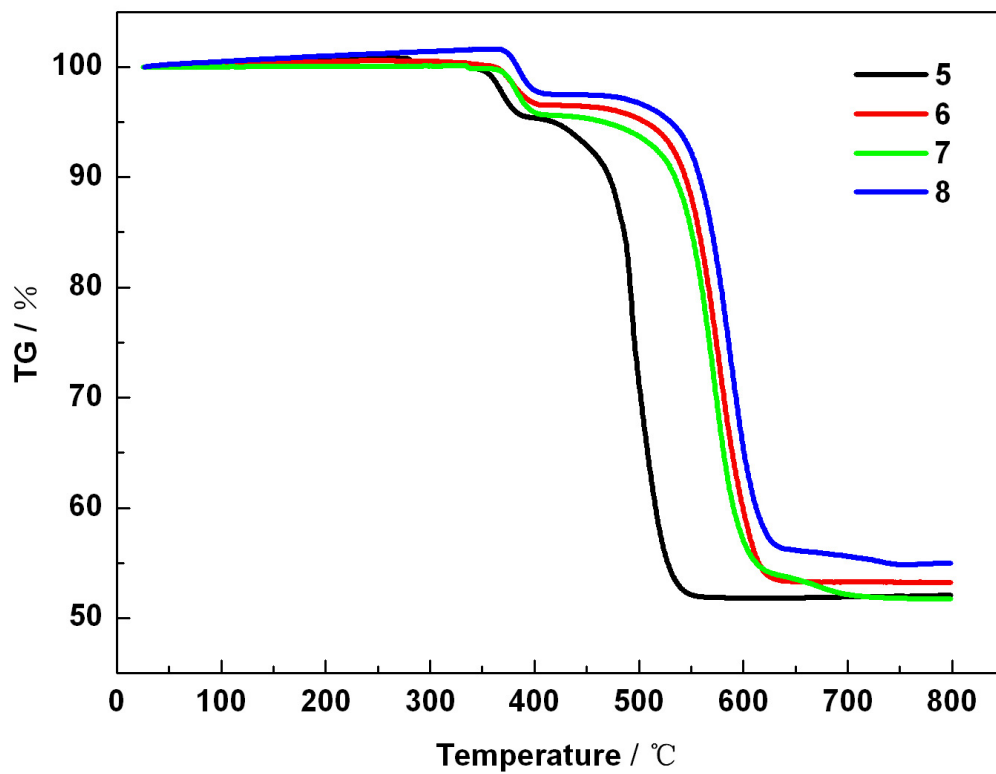


Fig. S2b Thermogravimetric analysis of complexes 5–8.