

Supplementary Material

Magnetic and Optical Properties of New Novel Lanthanide (III) Complexes Based on Schiff Base and β -Diketonate Ligands

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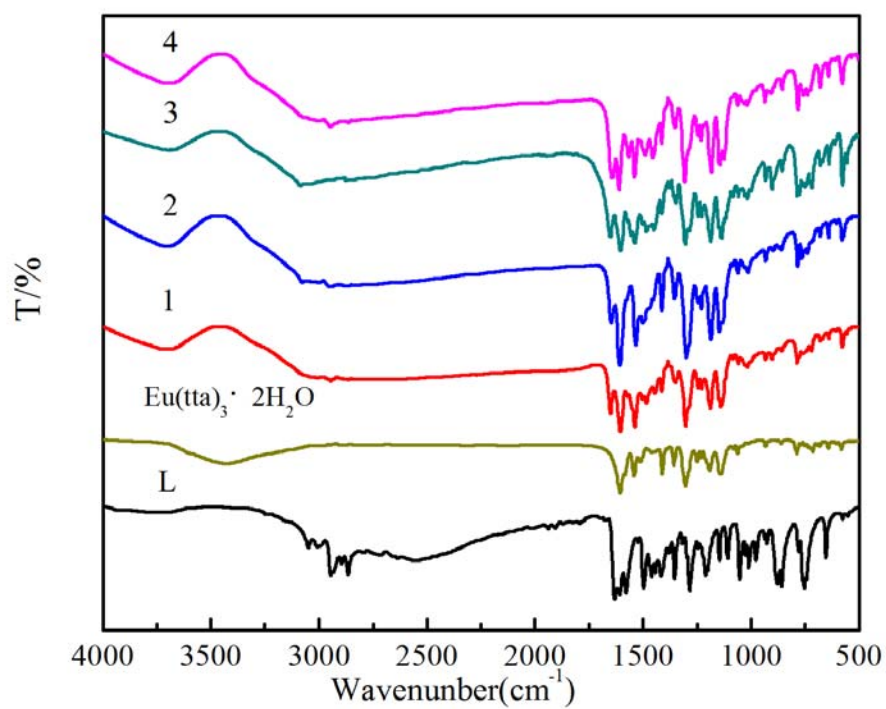


Fig. S1 Infrared spectra of complexes **1-4**, Eu(tta)₃·2H₂O and H₂L

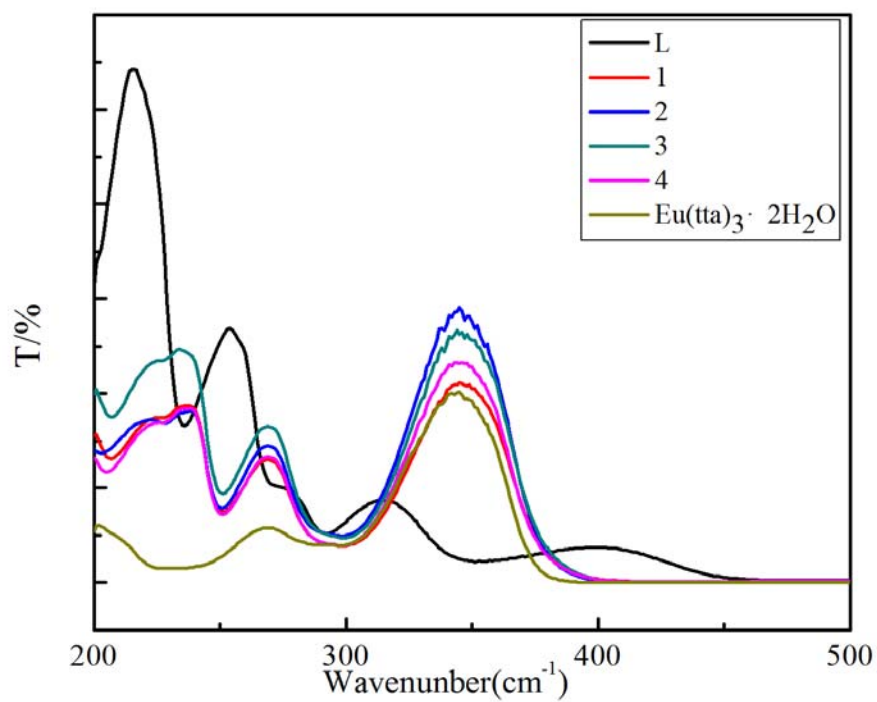


Fig. S2 UV spectra of complexes **1-4**, Eu(tta)₃·2H₂O and H₂L

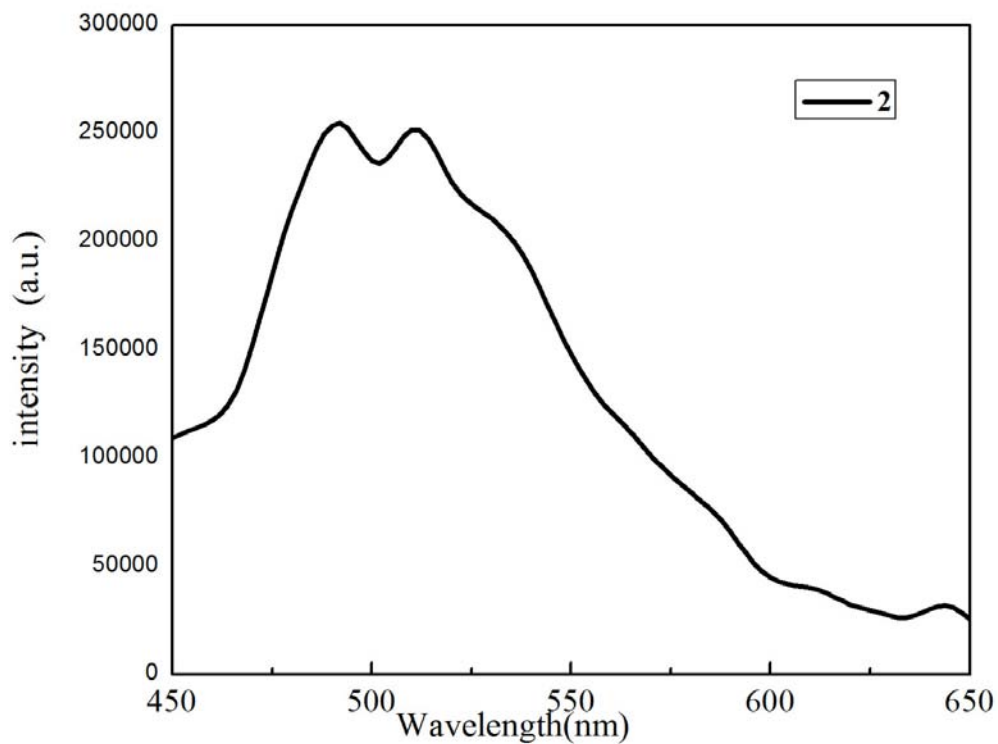


Fig. S3 Phosphorescence spectrum of complex 2

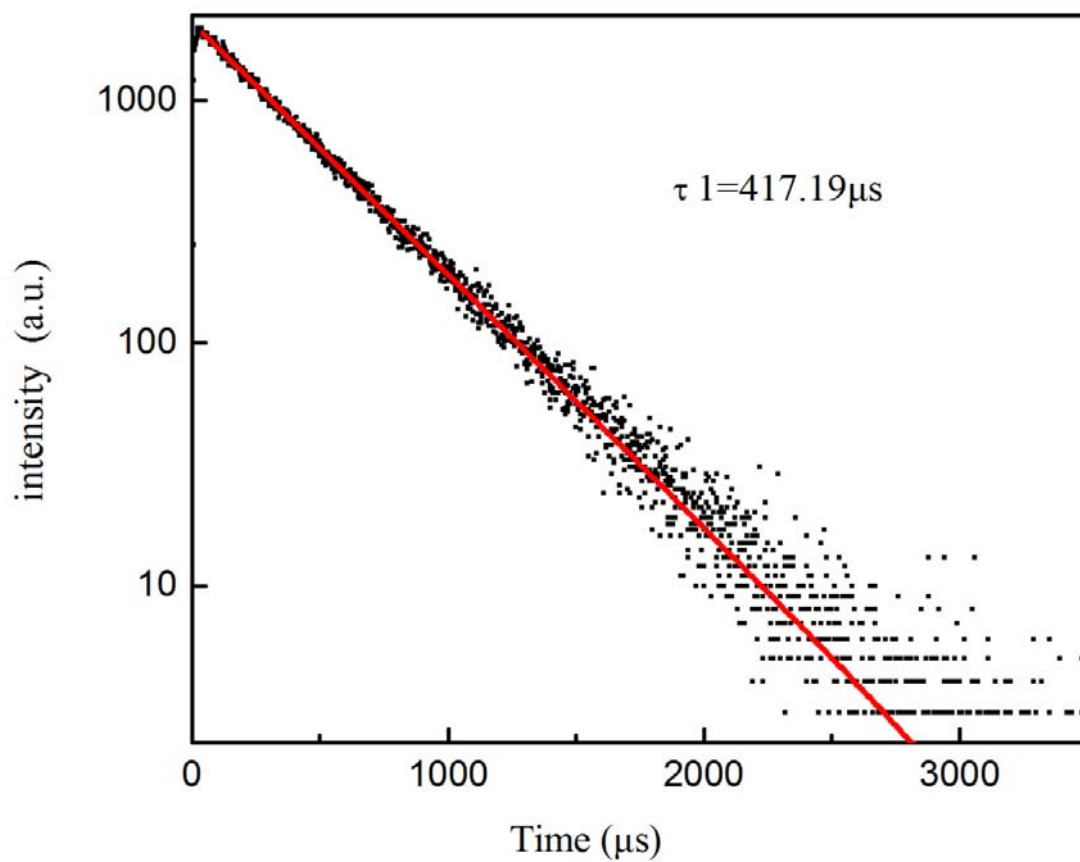


Fig. S4 Luminescence decay profiles for complex 1 in solid state

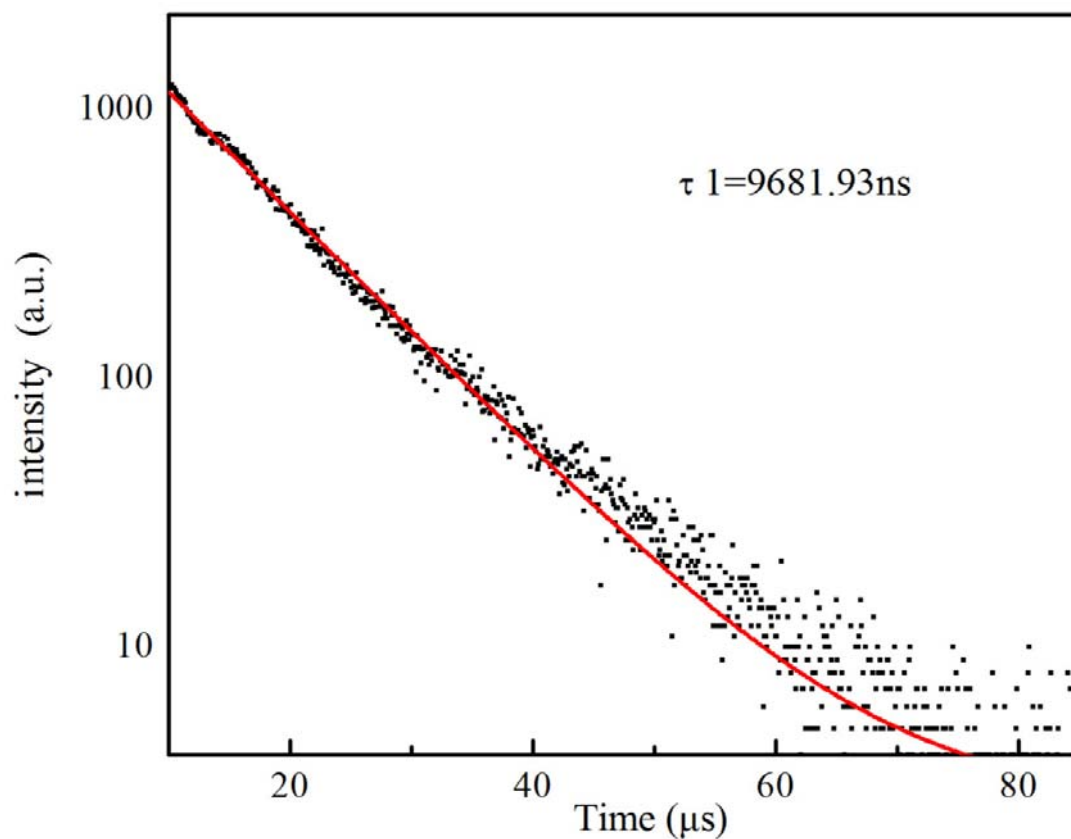


Fig. S5 Luminescence decay profiles for complex **4** in solid state

Table S1. Selected bond lengths (Å) and angles (deg.) for complexes **3** and **4**.

Complex 3			
Bond	Length[Å]	Bond	Length [Å]
Dy(1)–O(1)	2.251(3)	Dy(1)–O(6)	2.268(3)
Dy(1)–O(2)	2.353(3)	Dy(1)–O(8)	2.358(4)
Dy(1)–O(7)	2.364(3)	Dy(1)–O(4)	2.370(3)
Dy(1)–O(3)	2.434(3)	Dy(1)–O(1)	2.465(3)
Bonds	Angle [°]	Bonds	Angle [°]
O8–Dy–O4	158.42(11)		
Complex 4			
Bond	Length[Å]	Bond	Length [Å]
Yb(1)–O(3)	2.213(5)	Yb(1)–O(5)	2.221(5)
Yb(1)–O(2)	2.301(6)	Yb(1)–O(7)	2.317(5)
Yb(1)–O(6)	2.323(5)	Yb(1)–O(4)	2.326(5)
Yb(1)–O(8)	2.395(5)	Yb(1)–O(1)	2.437(5)
Bonds	Angle [°]	Bonds	Angle [°]
O8–Yb–O4	158.35(18)		