

Supporting Information

Preparation, characterization, and properties of PMMA-doped polymer film materials: study the effect of terbium ion on luminescent and lifetime enhancement

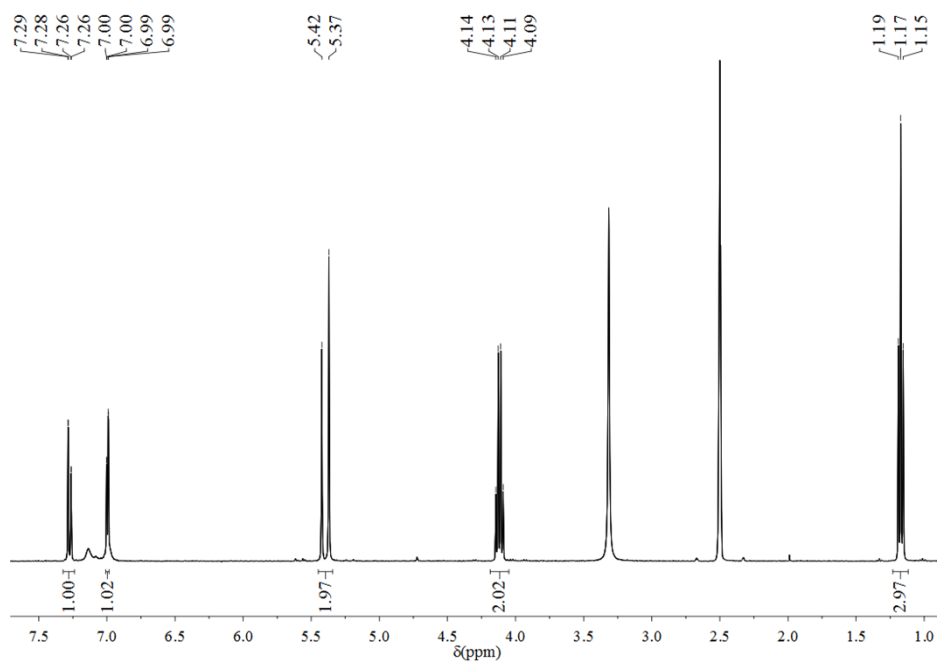
Hui-Jie Zhang,^a Rui-Qing Fan,^{*a} Xin-Ming Wang,^a Ping Wang,^a Yu-Lei Wang^b and Yu-Lin Yang^{*a}

^aDepartment of Chemistry, Harbin Institute of Technology, Harbin 150001, P. R. of China

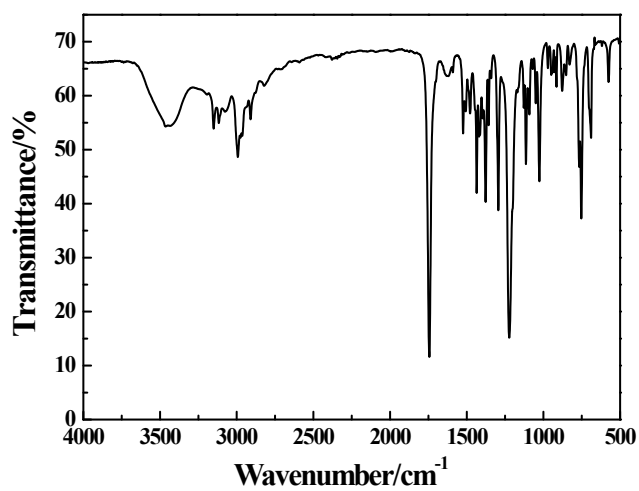
^bNational Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, Harbin 150080, P. R. of China

Index

	Content	Page No.
Figure S1	¹ H NMR spectrum (<i>d</i> ₆ -DMSO) and IR spectrum of L' ligand.	1
Figure S2	The PXRD pattern of coordination polymer 1 with the relevant simulated pattern.	2
Figure S3	Excitation spectra of coordination polymer 1 in the solid-state and in DMF solution at 298 K.	3
Figure S4	Emission spectrum of L' ligand.	4
Figure S5	(a) The decay curve of coordination polymer 1 in the solid-state; (b) The decay curve of coordination polymer 1 in DMF solution at 298 K.	5
Figure S6	Excitation spectra of coordination polymer 1 at different concentrations.	6
Figure S7	The trend of luminescence intensity in different Tb-doped concentrations.	7



(a)



(b)

Fig. S1 ¹H NMR spectrum (*d*₆-DMSO) and IR spectrum of **L'** ligand.

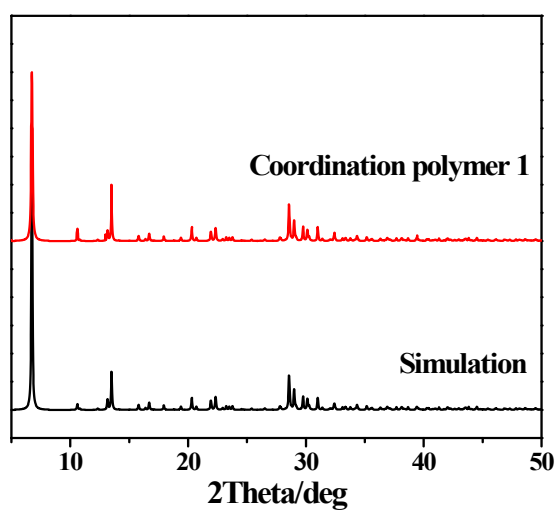


Fig. S2 The PXRD pattern of coordination polymer **1** with the relevant simulated pattern.

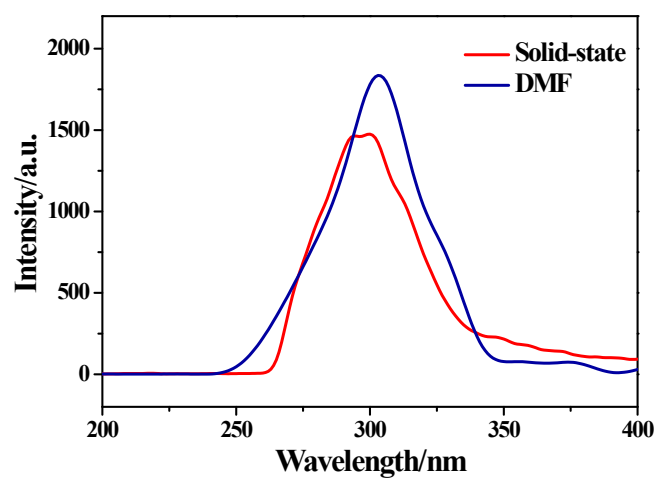


Fig. S3 Excitation spectra of coordination polymer **1** in the solid-state and in DMF solution at 298 K.

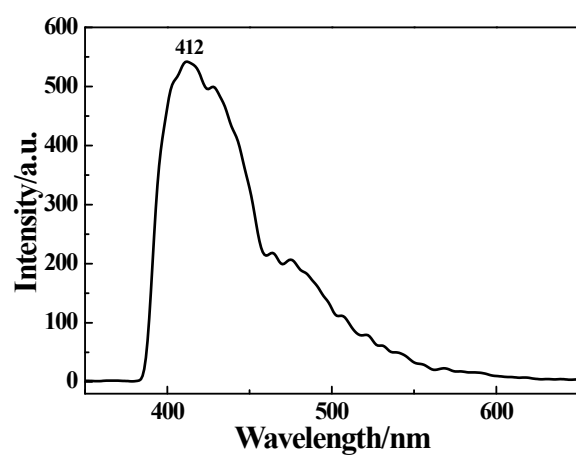


Fig. S4 Emission spectrum of L' ligand.

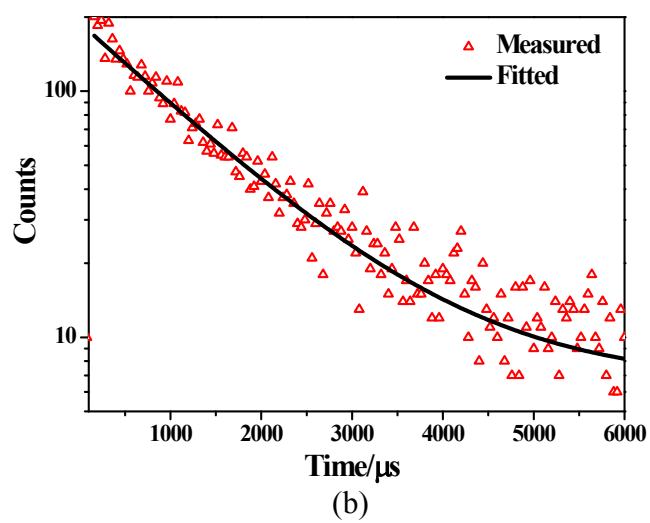
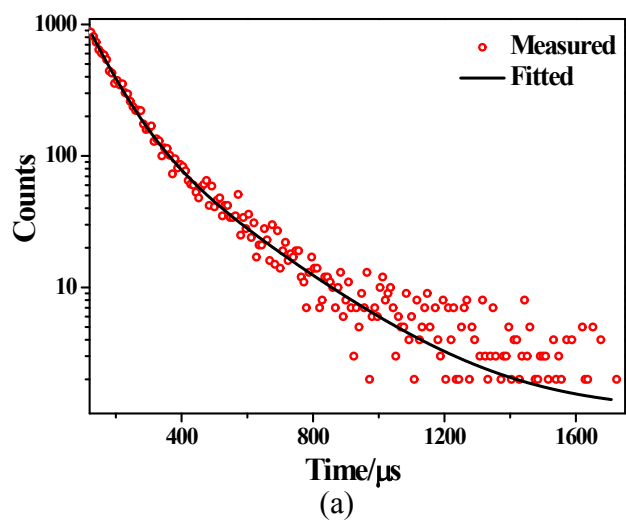


Fig. S5 (a) The decay curve of coordination polymer **1** in the solid-state; (b) The decay curve of coordination polymer **1** in DMF solution at 298 K.

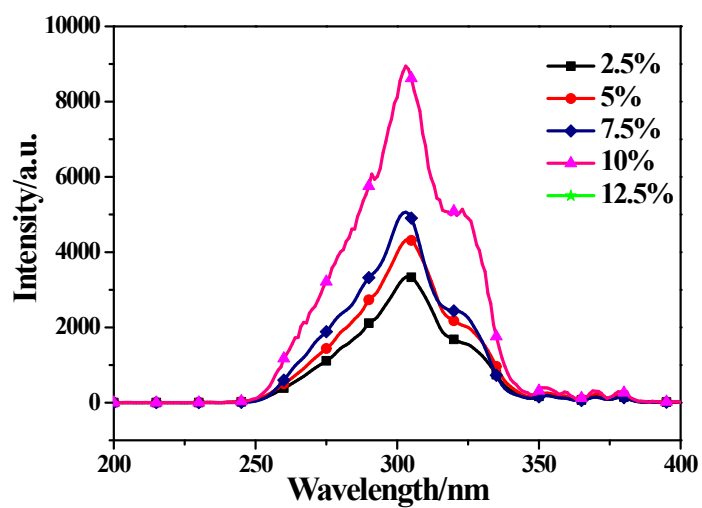


Fig. S6 Excitation spectra of coordination polymer **1** at different concentrations.

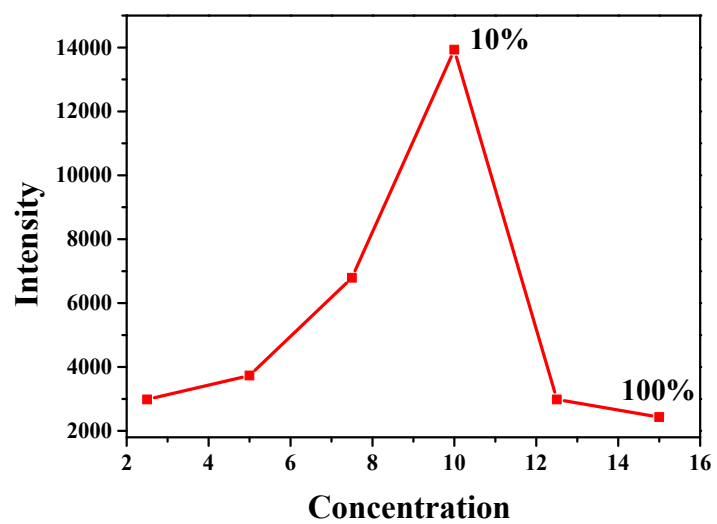


Fig. S7 The trend of luminescence intensity in different Tb-doped concentrations.