

Supporting Information

Study of a color tunable long afterglow phosphor

Gd_{1.5}Y_{1.5}Ga₃Al₂O₁₂:Tb³⁺: luminescence properties and mechanism

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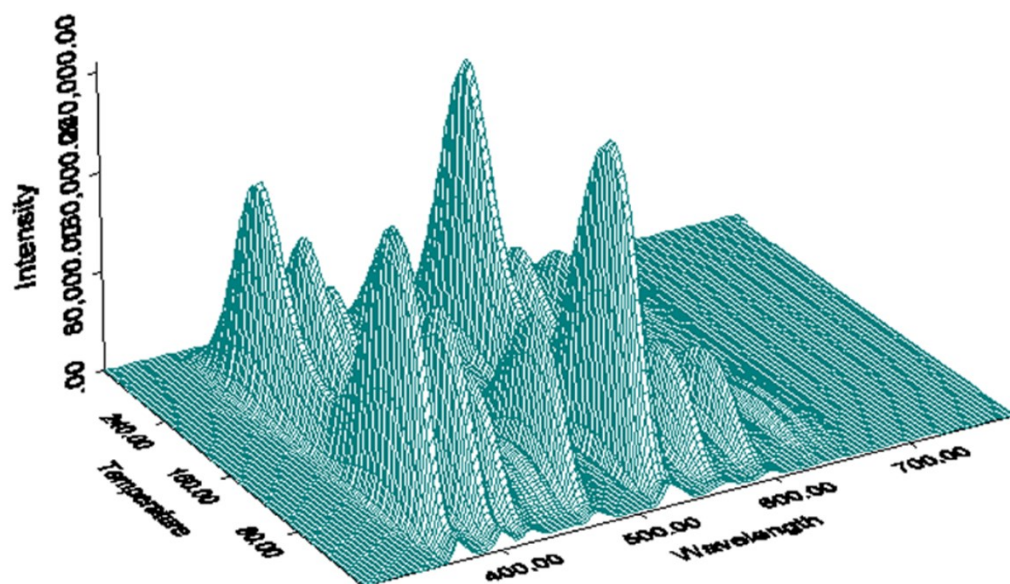


Figure S1. 3D-TL spectrum of the GYGA:0.01Tb³⁺ sample taken as an example to show the TL properties.

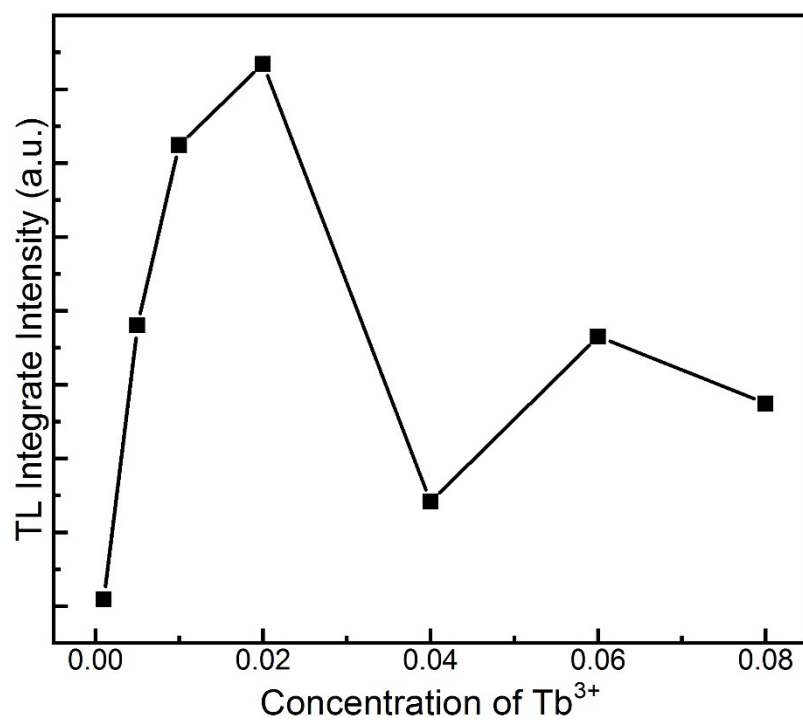


Figure S2. Integrated intensity of TL spectra of YAGG:xTb³⁺ as a function of the concentration of the dopant Tb³⁺

Table S1. CIE chromaticity coordinates (CC) of YAGG:xTb³⁺ (x = 0.001-0.08)

x	0.001	0.005	0.01	0.02	0.04	0.06	0.08
Afterglow	(0.22, 0.18)	(0.26, 0.27)	(0.30, 0.33)	(0.33, 0.43)	(0.35, 0.50)	(0.35, 0.52)	(0.37, 0.54)
PL	(0.196, 0.154)	(0.218, 0.226)	(0.236, 0.287)	(0.266, 0.392)	(0.298, 0.488)	(0.313, 0.525)	(0.322, 0.543)