Supporting Information

***Title*:**

Solid-Solution Modulation Strategy in Trivalent Bismuth-Doped Gallate Phosphors for Single Substrate Tunable Emission

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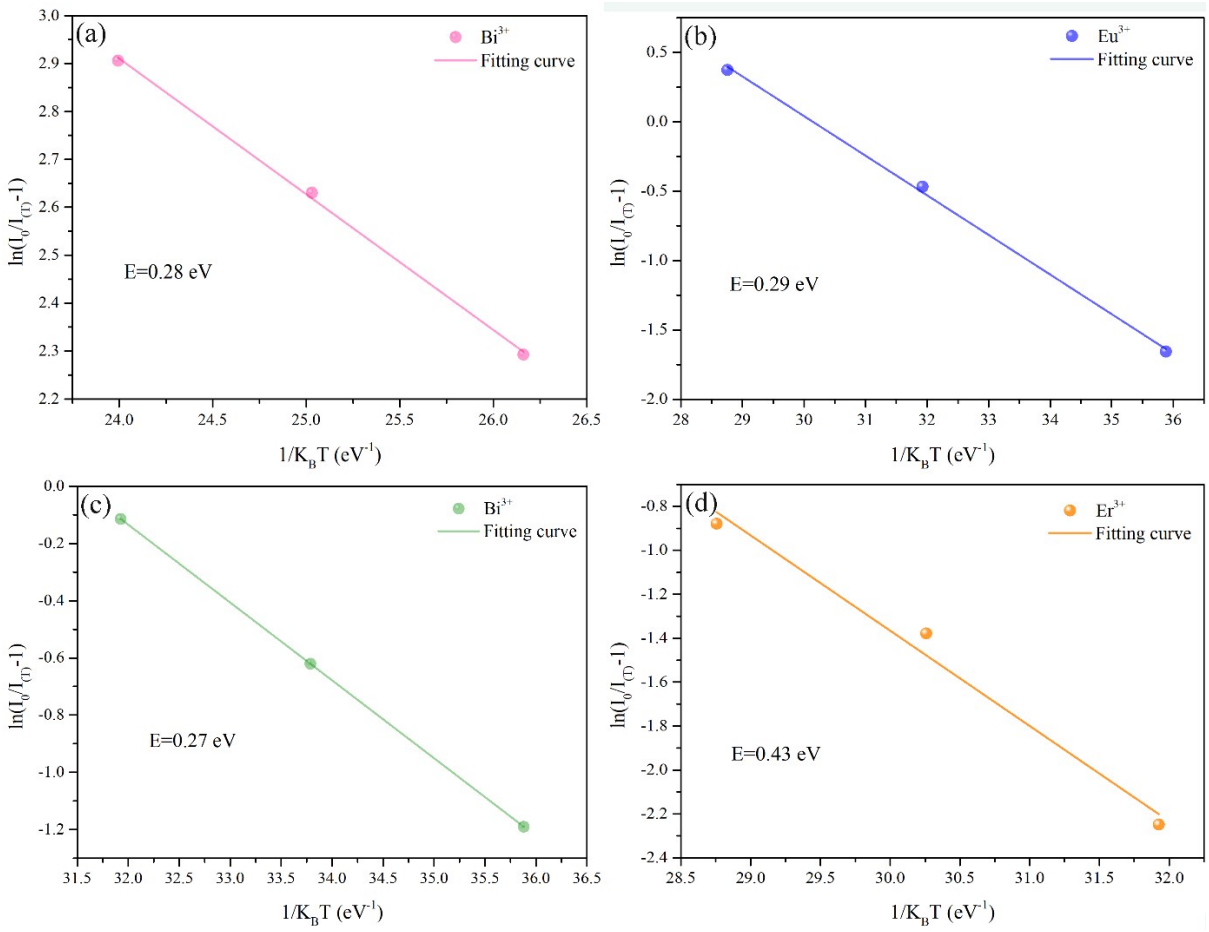

Figure S1. Thermal quenching activation energy fitting diagram of (a) Bi^{3+}, (b) Eu^{3+} in $SLGF_0$:0.01Bi^{3+},0.01Eu^{3+}, and (c) Bi^{3+}, (d) Er^{3+} in $SLGF_{0.6}$:0.01Bi^{3+},0.01Er^{3+}.

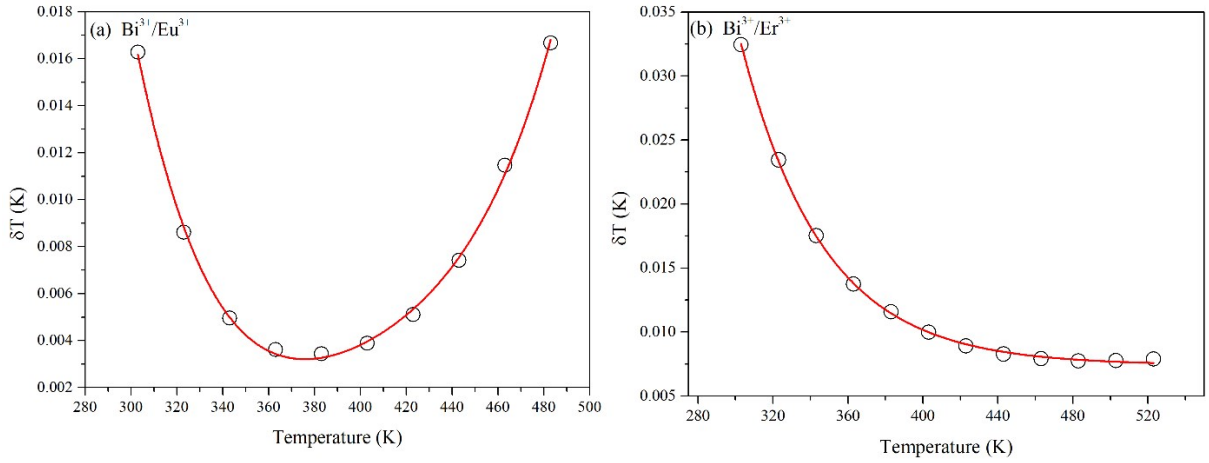

Figure S2. The temperature resolution of (a) $SLGF_0$:0.01Bi^{3+},0.01Eu^{3+}phosphors, (b) $SLGF_{0.6}$:0.01Bi^{3+},0.01Er^{3+} phosphors.

Table S1. Correlated data for Crystallography and Refinement Results for $SLGF_{0.2}$:0.01Bi^{3+} Samples.

Parameter	Sr_3GaO_4F standard crystal	$SLGF_{0.2}$:0.01Bi^{3+}
Space group	Pbcn(60)	I4/mcm
a (Å)	6.7819	6.8982
b (Å)	6.7819	6.8982
c (Å)	11.3662	11.2900
α=β=γ (deg)	90	90
V ($Å^3$)	522.78	537.236
Units (Z)	4	4
R_p %	-	9.12
R_{wp} %	-	11.96
χ	-	2.686

Table S2. CIE chromaticity coordinates corresponding to the points in Fig. 3 (d)

x in $Sr_{1.985+x}La_{1-x}GaO_{5-x}F_x$	CIE x	CIE y
0	0.2091	0.2495
0.05	0.1964	0.2187
0.1	0.1846	0.2012
0.2	0.1726	0.1635
0.4	0.165	0.137
0.6	0.1579	0.1063
0.8	0.1557	0.0925