

Fig. S1. XRD patterns of LMTAO:  $x\text{Cr}^{3+}$  and LMTGO:  $x\text{Cr}^{3+}$

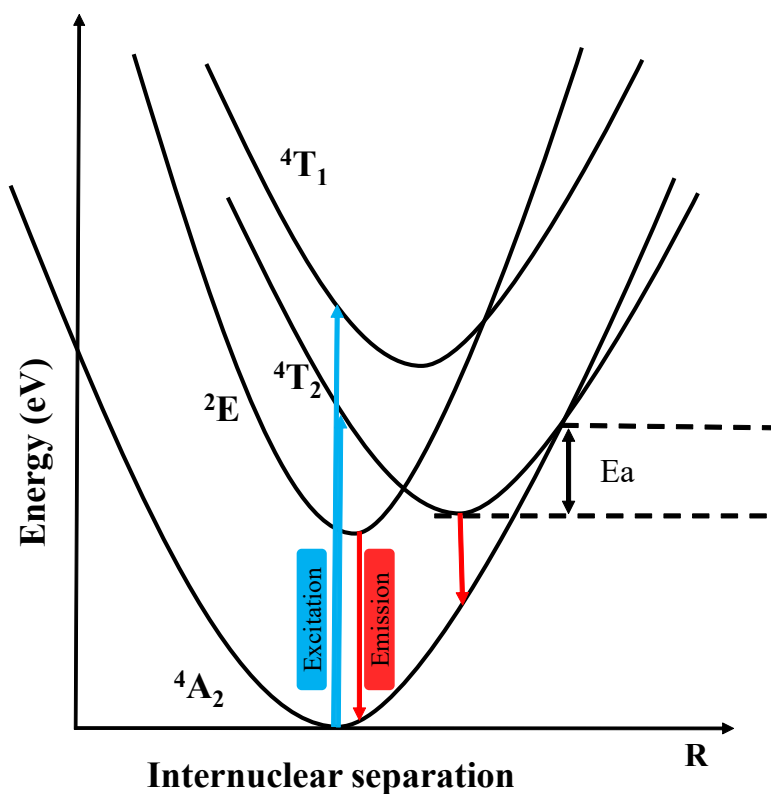


Fig. S2. The configurational coordinate diagram for  $\text{Cr}^{3+}$  ions in  $\text{Li}_2\text{Mg}_3\text{TiO}_6 \cdot \text{Cr}^{3+}$  phosphors.