

Enhanced upconversion luminescence in $\text{LuPO}_4:\text{Ln}^{3+}$ phosphors via optical-inert ions doping

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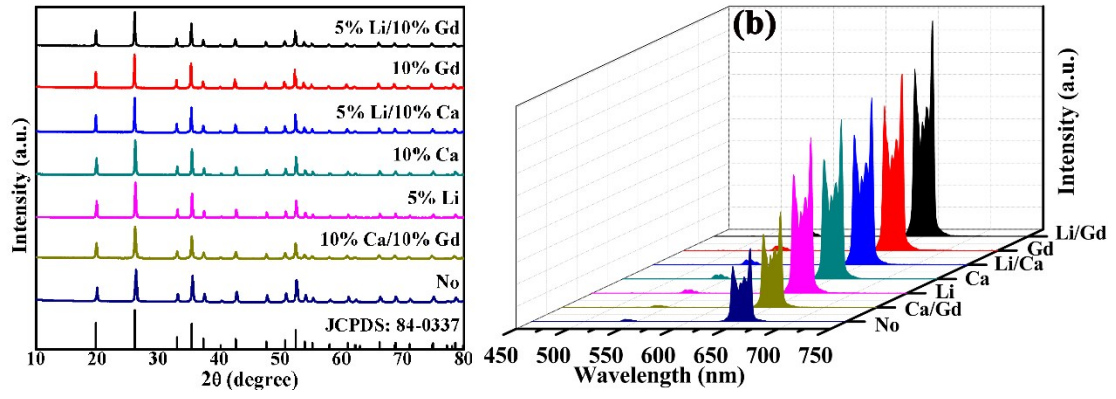


Fig. S1 (a) XRD patterns and (b) UC emission spectra of 5% Li^+ , 10% Ca^{2+} , 10% Gd^{3+} single-, co- or tri-doped $\text{LuPO}_4:20\%\text{Yb}^{3+}/1\%\text{Ho}^{3+}$ (“No” represents $\text{LuPO}_4:20\%\text{Yb}^{3+}/1\%\text{Ho}^{3+}$) samples.