

Supporting Information

**Title: Hydrothermal synthesis and enhanced photoluminescence of Tb³⁺ in
Ce³⁺/Tb³⁺ doped KGdF₄ nanocrystals**

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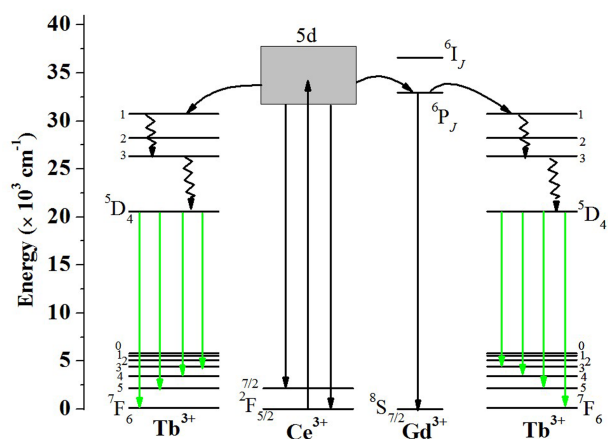


Fig. S1 Schematic energy level diagram and luminescent mechanism in $\text{Ce}^{3+}/\text{Tb}^{3+}$ co-doped KGdF_4 .

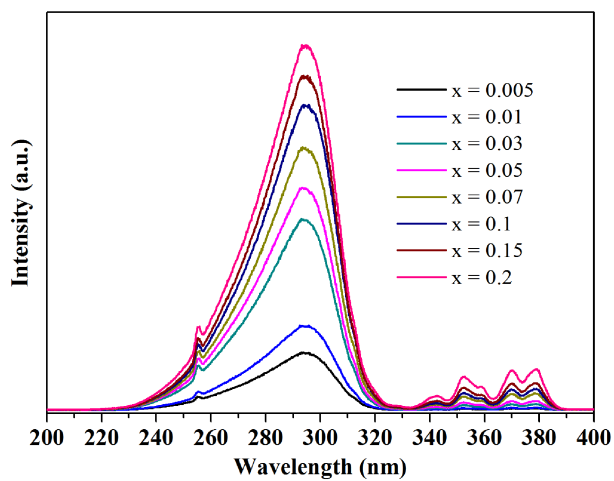


Fig. S2 PLE spectra of $\text{KGd}_{0.8-x}\text{Ce}_{0.2}\text{Tb}_x\text{F}_4$.

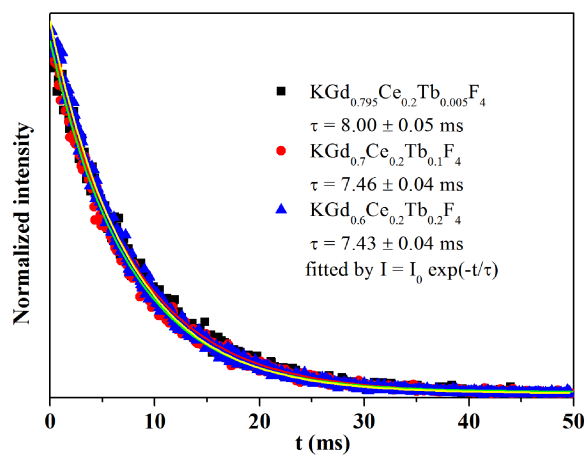


Fig. S3 Representative luminescence decay curves of $\text{KGd}_{0.8-x}\text{Ce}_{0.2}\text{Tb}_x\text{F}_4$.