

SUPPORTING INFORMATION

GSAG:Ce scintillator: Material optimization and intrinsic bottlenecks

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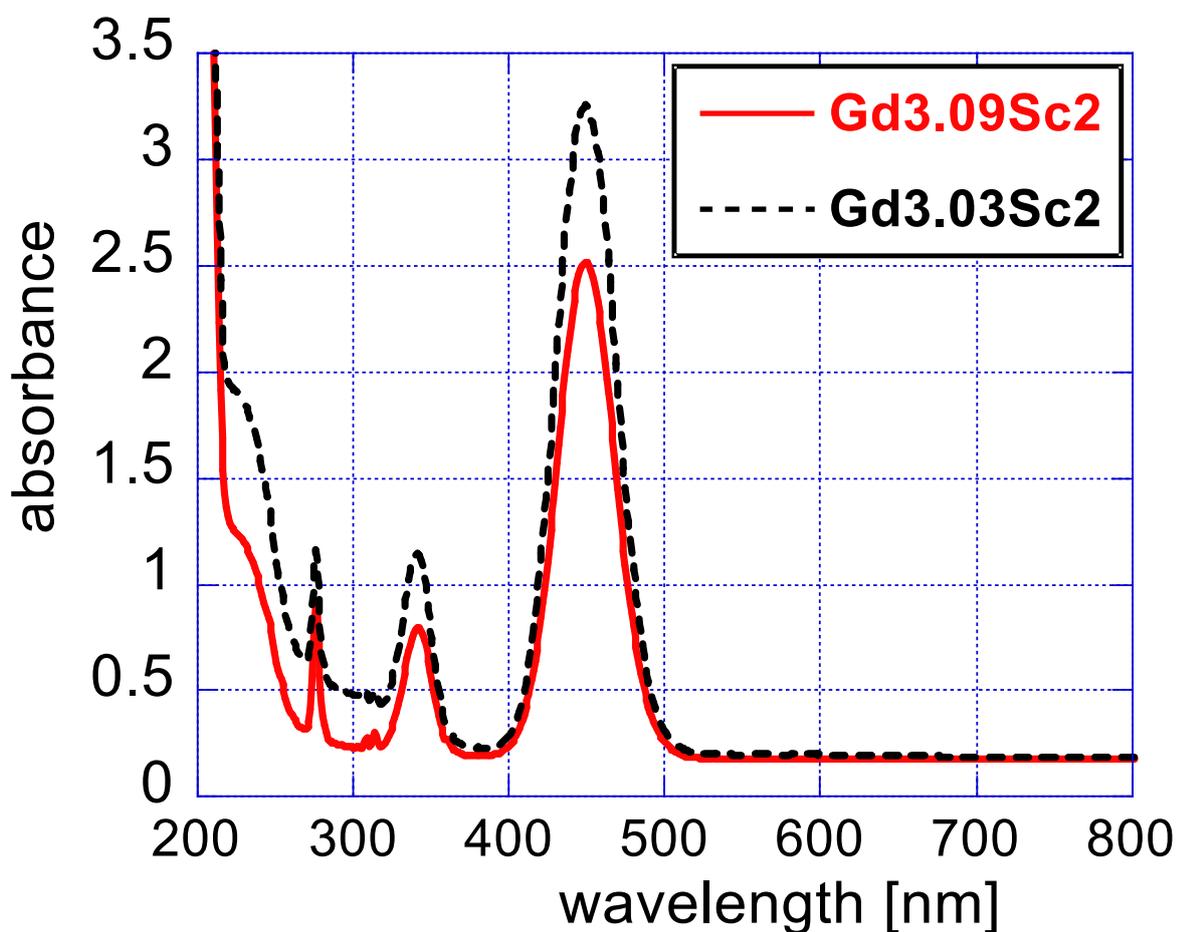


Fig.S1 Absorption spectra of Gd₃Sc₂ and Gd₃Ga_{2.7} samples annealed at 1200 °C for 12 hours in air.

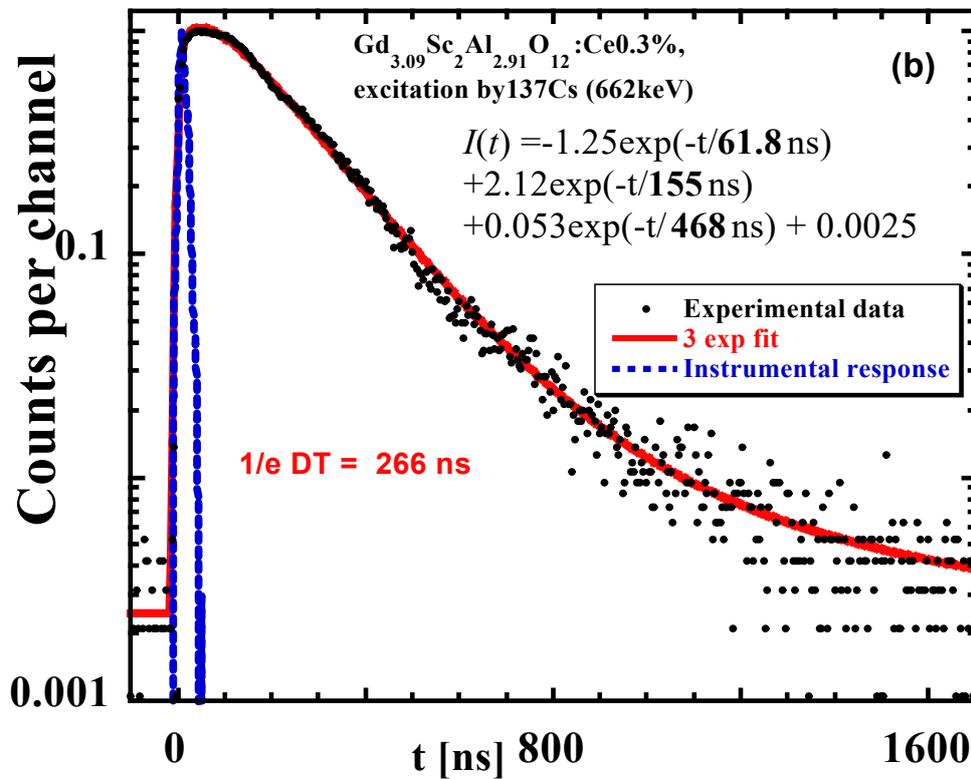
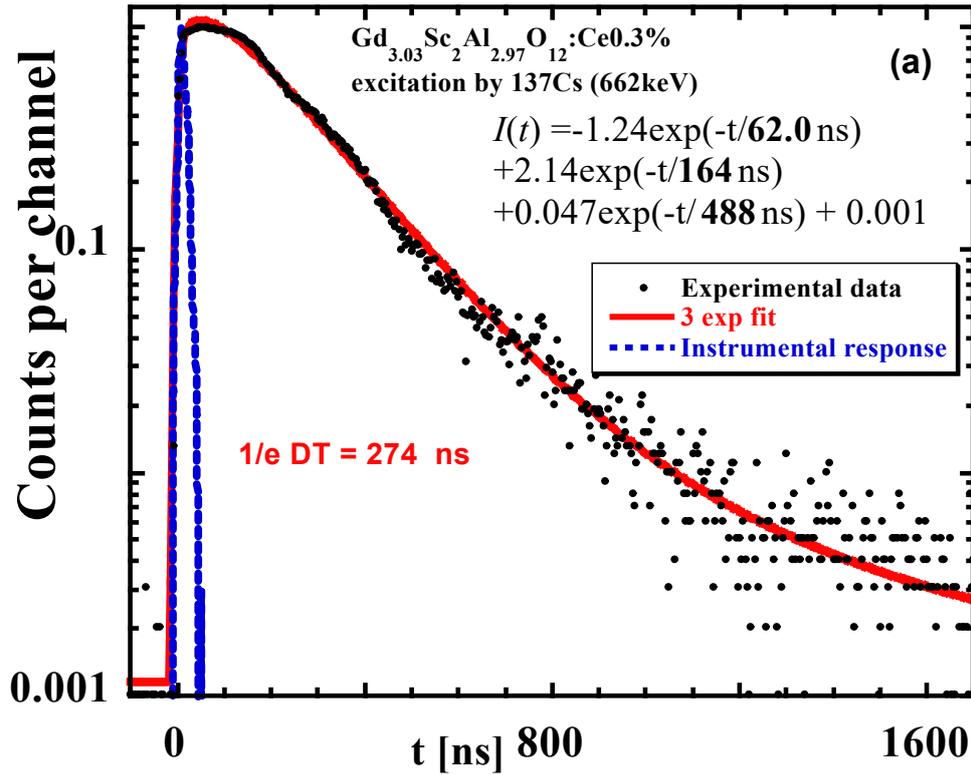


Fig. 2 Spectrally unresolved scintillation decay of (a) $\text{Gd}_{3.03}\text{Sc}_2$ and (b) $\text{Gd}_{3.09}\text{Sc}_2$ samples. Red line is convolution of instrumental response and function $I(t)$ in the figure.

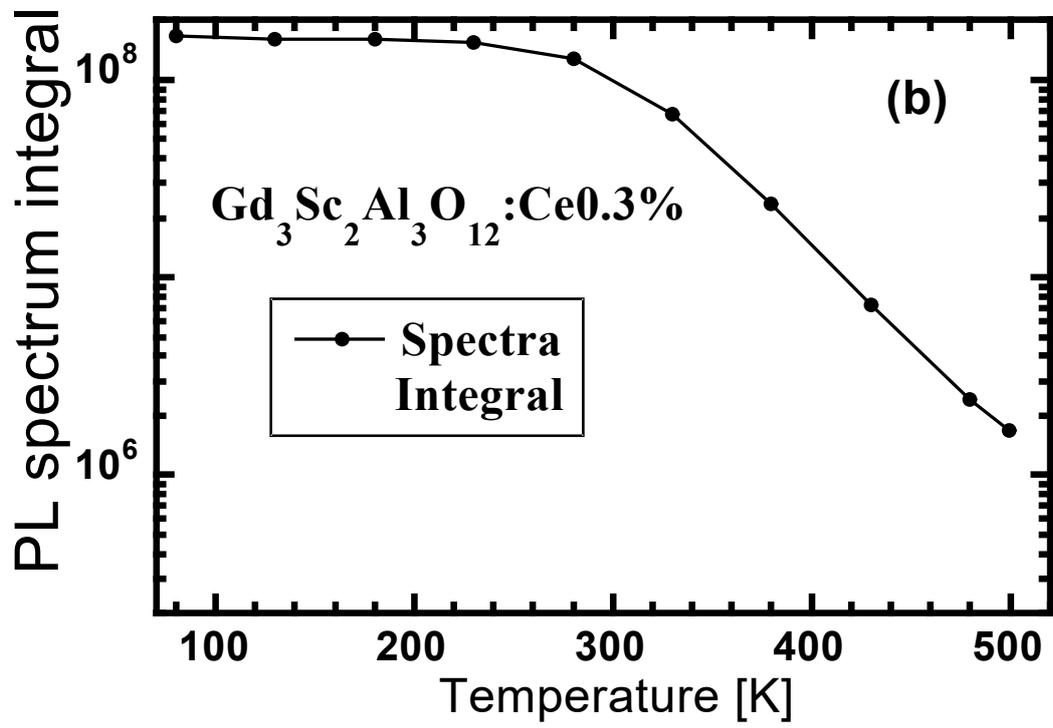
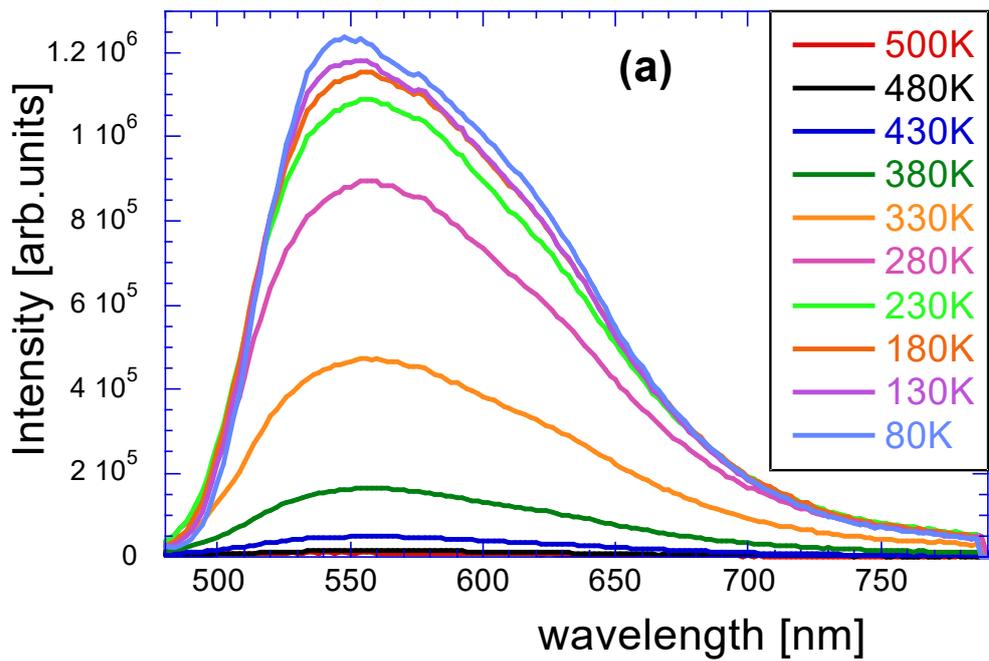


Fig. S3 (a) PL spectra of Gd_3Sc_2 - temperature dependence (exc = 450nm); (b) integral of PL spectra

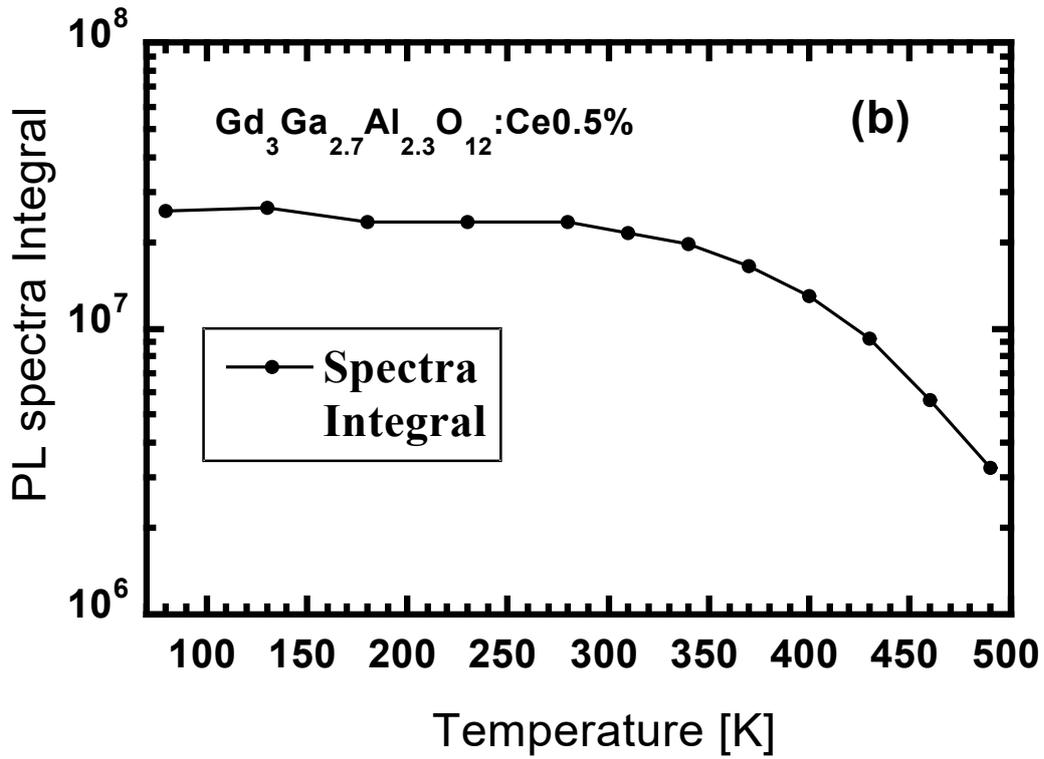
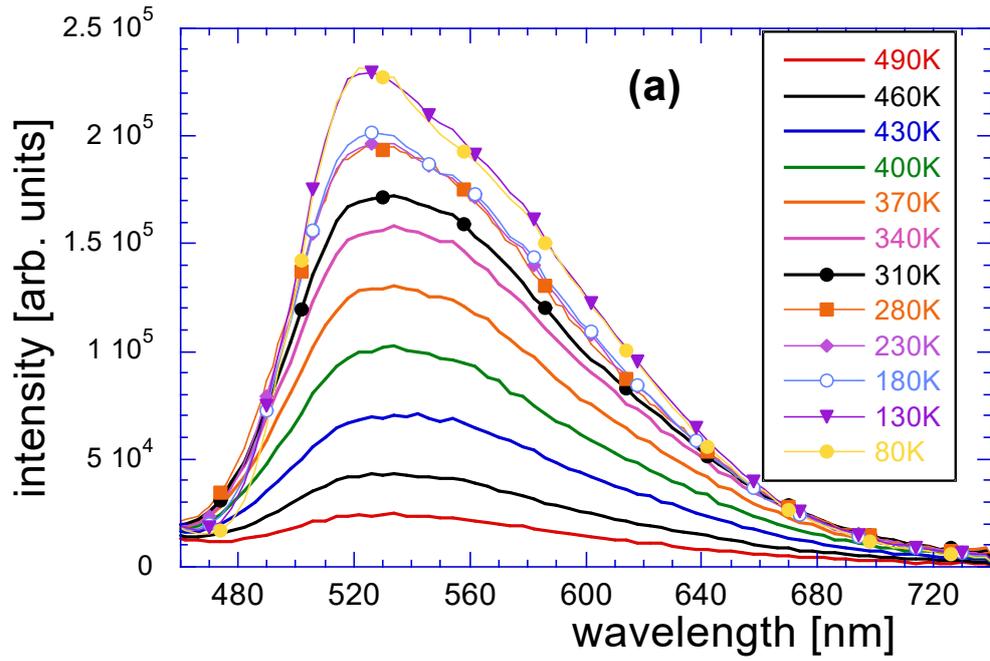


Fig. S4 (a) PL spectra of $\text{Gd}_3\text{Ga}_{2.7}$ - temperature dependence (exc = 450nm); (b) integral of PL spectra