

Fig.S1 Rietveld refinements results of $\text{Ca}_{3-x}\text{Sr}_x\text{Y}_{1.99}\text{Ge}_3\text{O}_{12}:0.01\text{Cr}^{3+}$ ($x=0, 0.05, 0.07, 0.10$).

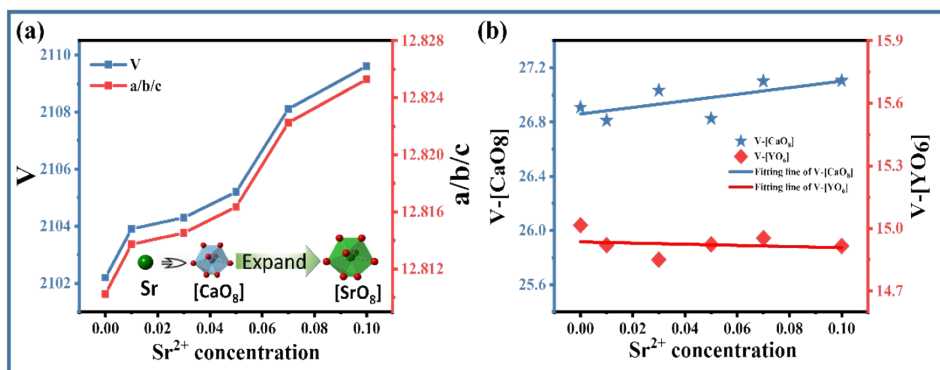


Fig.S2 The cell volume V and cell parameter $a/b/c$ of $\text{Ca}_{3-x}\text{Sr}_x\text{Y}_{1.99}\text{Ge}_3\text{O}_{12}:0.01\text{Cr}^{3+}$ ($x=0, 0.05, 0.07, 0.10$); (b) the volume of $[\text{CaO}_8]$ and $[\text{YO}_6]$.

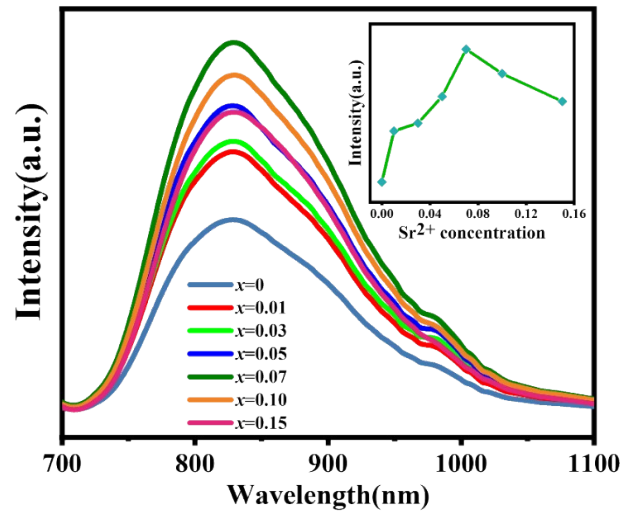


Fig.S3 Emission spectra of $\text{Ca}_{3-x}\text{Sr}_x\text{Y}_{1.99}\text{Ge}_3\text{O}_{12}:0.01\text{Cr}^{3+}$ ($\lambda_{\text{ex}}=475$ nm).