Electronic Supporting Information (ESI)

Crystal Structure Characterizations, Optical and Photoluminescent Properties of Tunable Yellow- to Orange-Emitting Y₂(Ca,Sr)F₄S₂:Ce³⁺ Phosphors for Solid-State Lighting

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Fig. S1 The EDX spectra and SEM image of as-synthesized YCFS:Ce$^{3+}$ phosphor.
Fig. S2 (a) The XRD patterns and (b) the structural parameters of the YCFS:Ce$^{3+}$, YCSFS-$\gamma$:Ce$^{3+}$ ($\gamma = 0.1, 0.25, 0.5,$ and $0.75$), and YSFS:Ce$^{3+}$ phosphors.
Fig. S3 Decay curves of Ce$^{3+}$ emission in YCFS:Ce$^{3+}$, YCSFS-$y$:Ce$^{3+}$ ($y = 0.1, 0.25, 0.5, \text{ and } 0.75$), and YSFS:Ce$^{3+}$ phosphors excited at 440-470 nm and monitored at 553-590 nm.