A far-red emission \((\text{Ca, Sr})_{14}\text{Zn}_6\text{GaO}_{35}:\text{Mn}^{4+}\) phosphor for potential application in plant-growth LEDs

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SI (a), (b), (c), (d) and (e) show the SEM images of Ca$_{14-x}$Sr$_x$Zn$_6$Ga$_9.85$O$_{35}$:0.15Mn$^{4+}$ ($x=0$, 0.2, 0.4, 0.6 and 0.8) samples sintered at 1220°C by the solid state reaction, respectively.