

Supplementary Material

Glass-Based LED System for Indoor Horticulture: Enhanced Plant Growth through Sm^{3+} and Tm^{3+} Co-Doped Luminescent Glasses

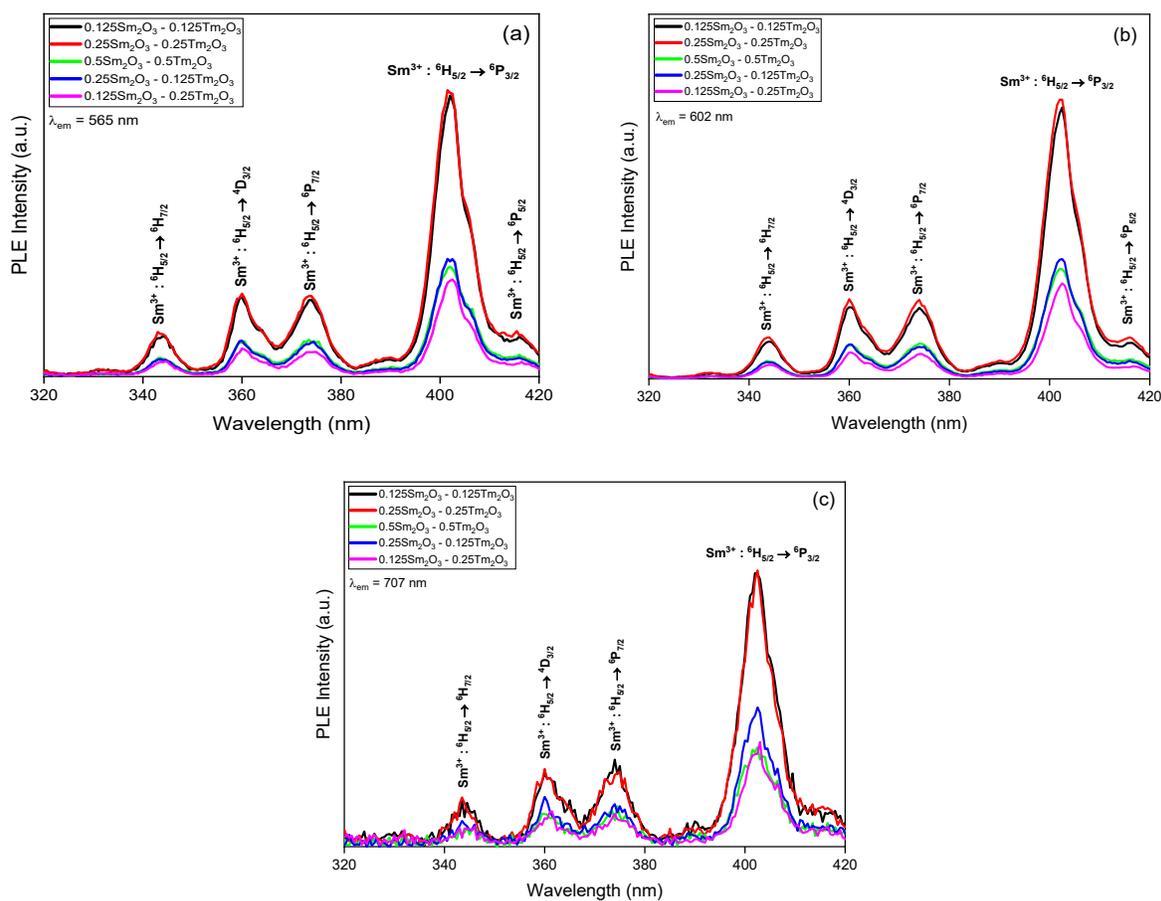


Fig. S1 PL excitation spectra of Sm^{3+} and Tm^{3+} co-doped glasses, with (a) monitoring of 565 nm, (b) 602 nm, and (c) 707 nm Sm^{3+} ion emissions.

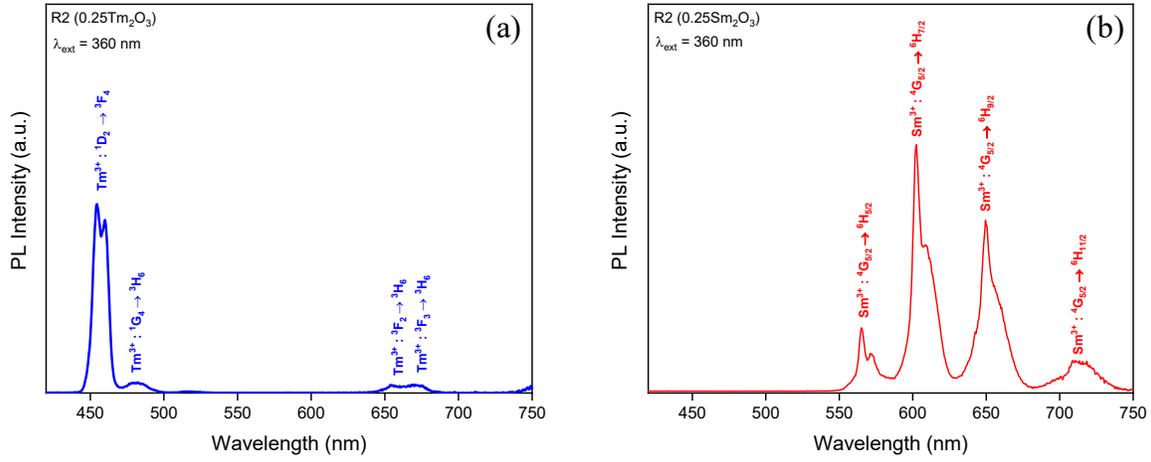


Fig. S2 PL spectra of two reference samples (R1 and R2) prepared with the same base glass composition as the Sm³⁺ and Tm³⁺ co-doped samples, except for the fact that R1 contains only 0.25 mol% Tm₂O₃ and R2 contains only 0.25 mol% Sm₂O₃ under 360 nm excitation.