

Organic solvent-assisted co-precipitation synthesis of a red-emitting $\text{K}_2\text{TiF}_6:\text{Mn}$ phosphors of improved quantum efficiency and optimized morphology

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Table S1. Quantities of chemicals added to the reaction mixture to prepare $K_2TiF_6 \cdot xat.\% Mn^{4+}$ ($x = 0.05, 0.15, 0.25, 0.5$ and 1).

	Mn⁴⁺ content (at. %)				
	0.05	0.15	0.25	0.5	1.0
K_2MnF_6	0.0014 g	0.0042 g	0.0069 g	0.0139 g	0.0278 g
TiO ₂			0.1 g		
48% HF			3.0 ml		
KF			0.1452 g		
Ethanol /					
1-propanol /			1 ml		
n-butanol					

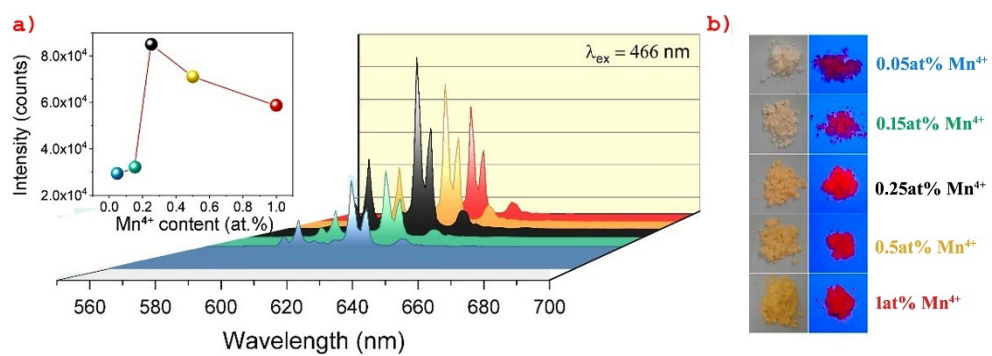


Fig. S1 Room temperature emission spectra of $K_2TiF_6-xat.\% Mn^{4+}$ ($x = 0.05, 0.15, 0.25, 0.5$ and 1) phosphors and concentration-dependent emission intensity (b). Appearance of phosphors under daylight and 365 nm UV-light excitation (c).