

Supporting Information

**Bright electrospun white $\text{Y}_2\text{Zr}_2\text{O}_7$: $\text{Tm}^{3+}/\text{Dy}^{3+}$
nanotubes with excellent thermal quenching
resistance and ultralow color shift**

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Formula	Y₂Zr₂O₇: 5%Dy/7%Tm	Y₂Zr₂O₇: 5%Dy/1%Tm
Space group	Fd-3 m	Fd-3 m
Cell parameters	a=5.205328Å	a=5.205152Å
	b=5.205328Å	b=5.205152Å
	c=5.205328Å	c=5.205152Å
	$\alpha=\gamma=\beta=90^\circ$	$\alpha=\gamma=\beta=90^\circ$
Cell volume	141.041Å	141.026Å
R_{wp}	3.6%	5.14%
R_p	2.87%	3.77%
X²	1.756	4.226

Table S1 Crystallographic and structural refinement data of Y₂Zr₂O₇: 5%Dy/7%Tm
and Y₂Zr₂O₇: 5%Dy/1%Tm nanotubes.

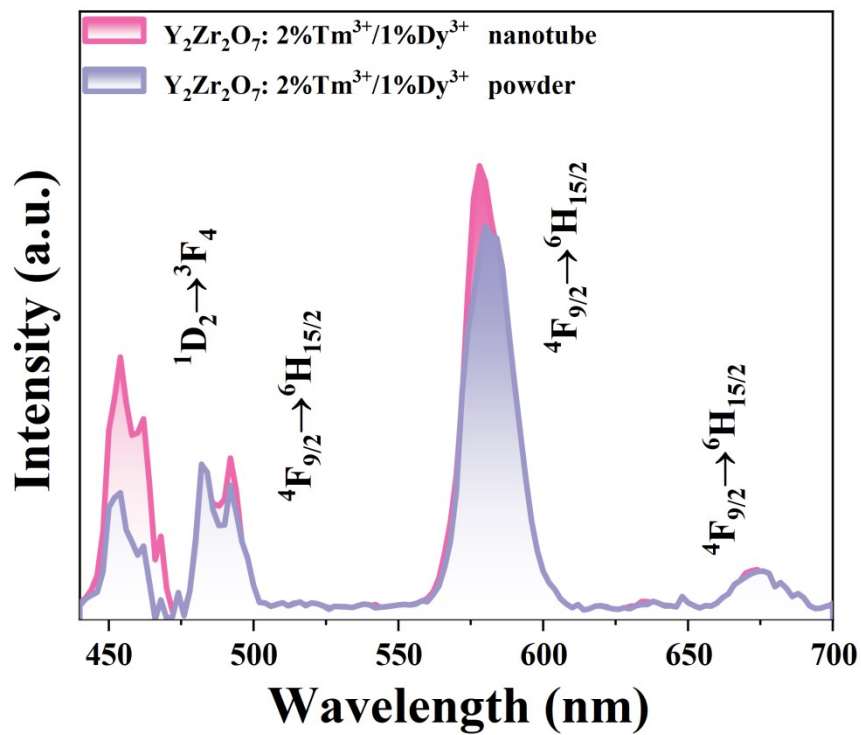


Fig. S1. Emission spectra of Y₂Zr₂O₇: 2%Tm/1%Dy nanotubes and Y₂Zr₂O₇:

2%Tm/1%Dy powder.

Fig. S2. The corresponding CIE chromaticity diagrams of YZO: 2%Tm/1%Dy nanotubes and powders under 365 nm excitation with temperature changes.