Supporting Information

Preparation of $Y_3Ga_5O_{12}:Pr^{3+}$ nanotubes with a single-crystal structure via single-nozzle electrospinning for temperature sensing applications

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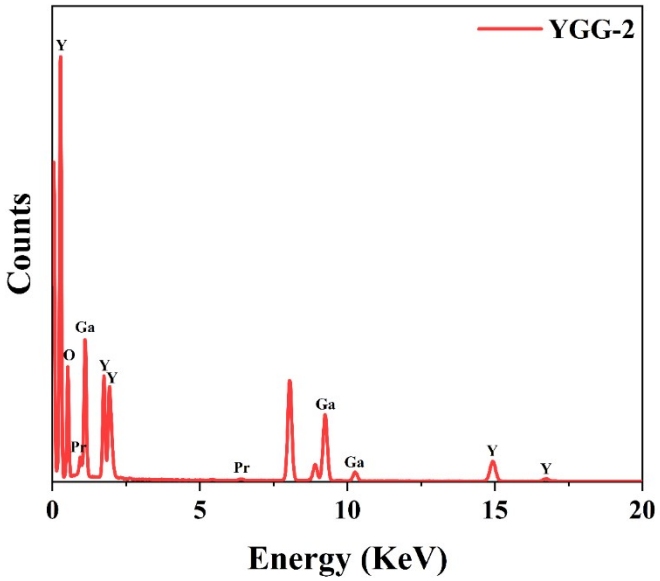

Fig. S1. EDS pattern of YGG-2 nanotubes.

Table S1. Rietveld refinement results of XRD patterns of the $Y_3Ga_5O_{12}:Pr^{3+}$ nanotubes.

Formula	**YGG-1**	**YGG-2**	**YGG-3**	**YGG-4**
Radiation type	Cu Kα_1 radiation with $\lambda = 1.5406\,\mathring{A}$ Cu Kα_2 radiation with $\lambda = 1.5444\,\mathring{A}$	Cu Kα_1 radiation with $\lambda = 1.5406\,\mathring{A}$ Cu Kα_2 radiation with $\lambda = 1.5444\,\mathring{A}$	Cu Kα_1 radiation with $\lambda = 1.5406\,\mathring{A}$ Cu Kα_2 radiation with $\lambda = 1.5444\,\mathring{A}$	Cu Kα_1 radiation with $\lambda = 1.5406\,\mathring{A}$ Cu Kα_2 radiation with $\lambda = 1.5444\,\mathring{A}$
2θ range	10-75°	10-75°	10-75°	10-75°
Phase structure	cubic crystal structure	cubic crystal structure	cubic crystal structure	cubic crystal structure
Space group	$Ia-3d$	$Ia-3d$	$Ia-3d$	$Ia-3d$
Cell parameters	$a = 12.410284\,\mathring{A}$	$a = 12.400273\,\mathring{A}$	$a = 12.400867\,\mathring{A}$	$a = 12.416867\,\mathring{A}$
	$b = 12.410284\,\mathring{A}$	$b = 12.400273\,\mathring{A}$	$b = 12.400867\,\mathring{A}$	$b = 12.416867\,\mathring{A}$
	$c = 12.410284\,\mathring{A}$	$c = 12.400273\,\mathring{A}$	$c = 12.400867\,\mathring{A}$	$c = 12.416867\,\mathring{A}$
	$\alpha = \beta = \gamma = 90°$	$\alpha = \beta = \gamma = 90°$	$\alpha = \beta = \gamma = 90°$	$\alpha = \beta = \gamma = 90°$
	$V = 1911.372\,\mathring{A}^3$	$V = 1906.750\,\mathring{A}^3$	$V = 1907.024\,\mathring{A}^3$	$V = 1914.415\,\mathring{A}^3$
Reliability factors	$\chi^2 = 1.832$	$\chi^2 = 1.896$	$\chi^2 = 1.908$	$\chi^2 = 1.922$
	$R_{wp} = 3.42\%$	$R_{wp} = 3.55\%$	$R_{wp} = 3.60\%$	$R_{wp} = 3.56\%$
	$R_p = 2.69\%$	$R_p = 2.70\%$	$R_p = 2.75\%$	$R_p = 3.00\%$