

Supporting information

Tunable multicolor and bright white emission in PEG modified β -NaGdF₄ nanocrystals by systematic introduction of Ce³⁺ and Mn²⁺/Ln³⁺

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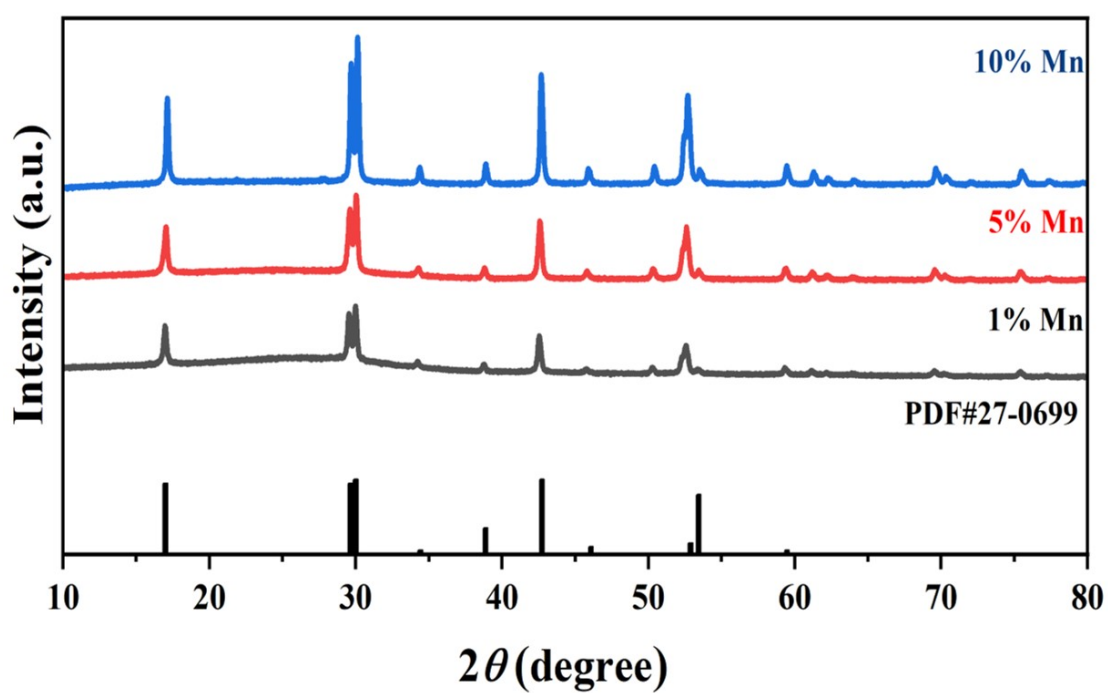


Fig. S1 The XRD patterns of 1%, 5% and 10% Mn²⁺ doping of NaGdF₄:20%Ce³⁺ NPs and the standard card of hexagonal phase NaGdF₄ crystal.

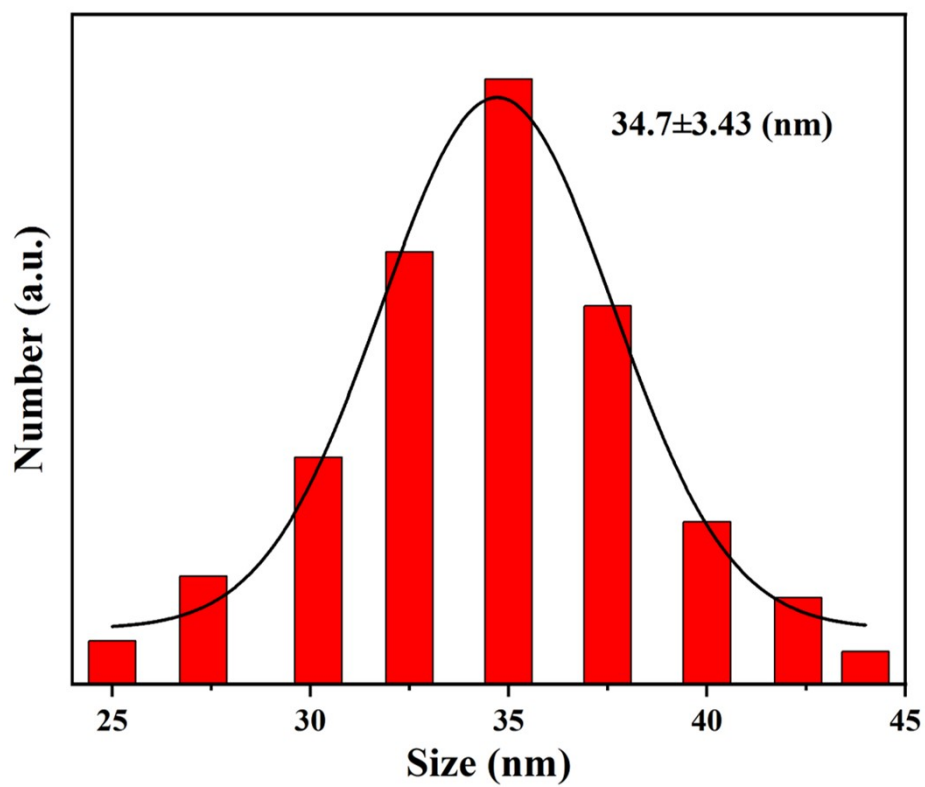


Fig. S2 The size distribution of the as-prepared 1% Mn^{2+} doping β - $\text{NaGdF}_4:20\%\text{Ce}^{3+}$ NPs based on TEM image.

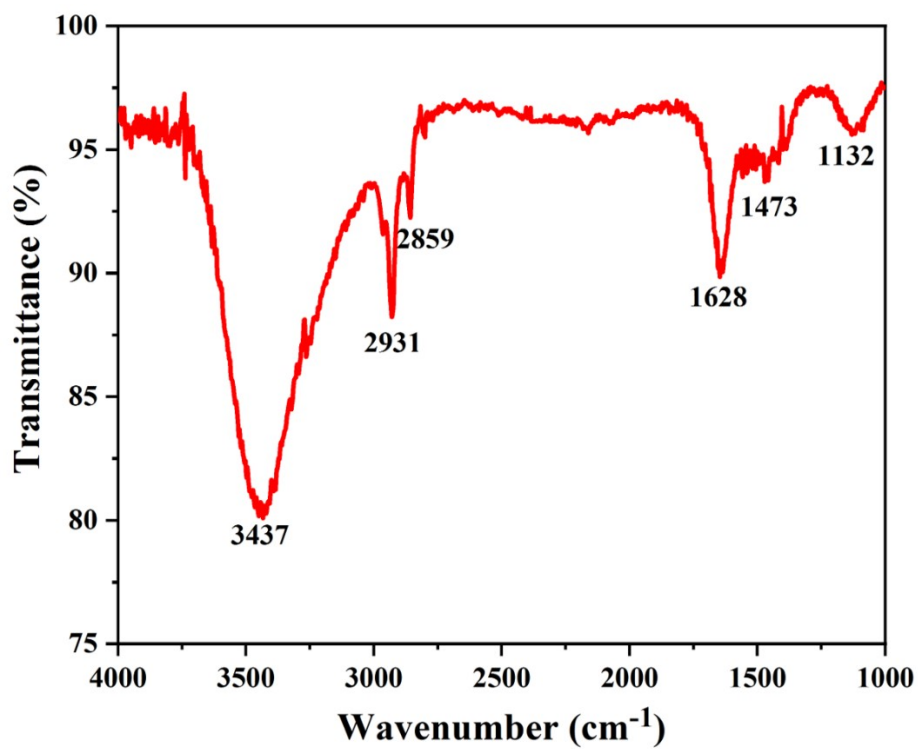


Fig. S3 FTIR spectrum of the PEG-modified 1% Mn²⁺ doping β -NaGdF₄:20%Ce³⁺ NPs