

Supplementary Information

Highly reliable all-fiber temperature sensor based on fluorescence intensity ratio (FIR) technique in $\text{Er}^{3+}/\text{Yb}^{3+}$ co-doped NaYF_4 phosphors

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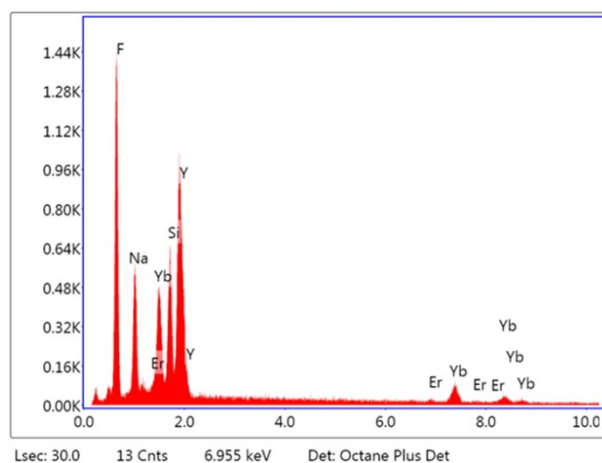


Figure S1. Energy dispersive X-ray spectrum of $\text{Er}^{3+}/\text{Yb}^{3+}$ codoped NPs.

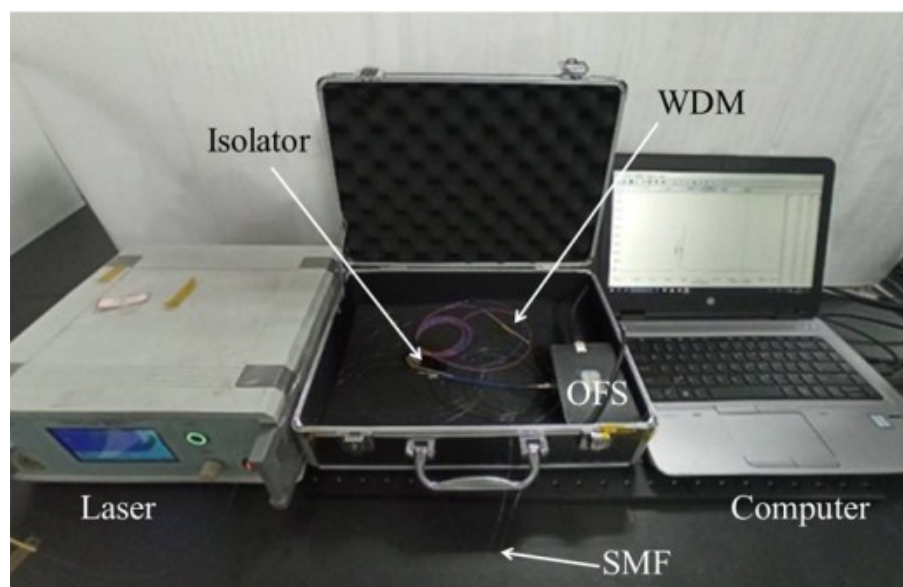


Figure S2. A photograph of the portable all-fiber temperature sensing system.

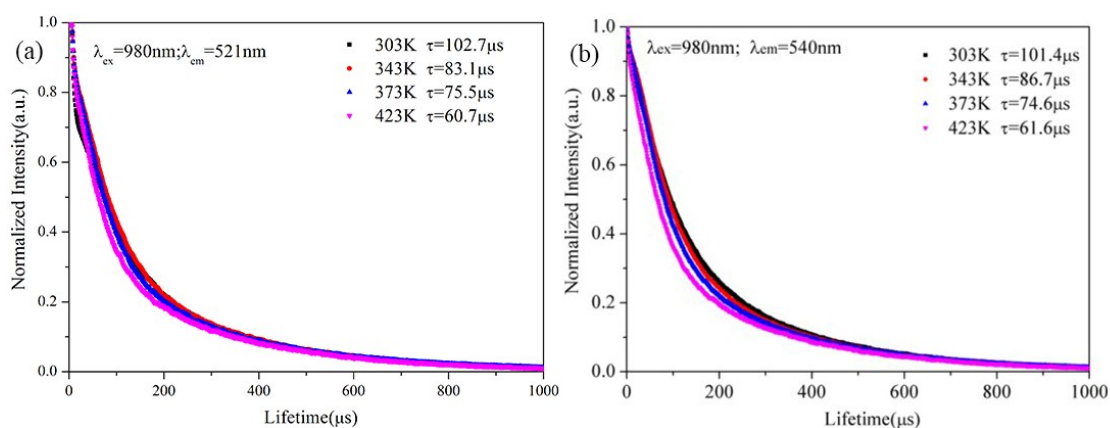


Figure S3. Fluorescence decay curves of 521nm (a) and 540nm (b) upconversion emissions at different temperature.

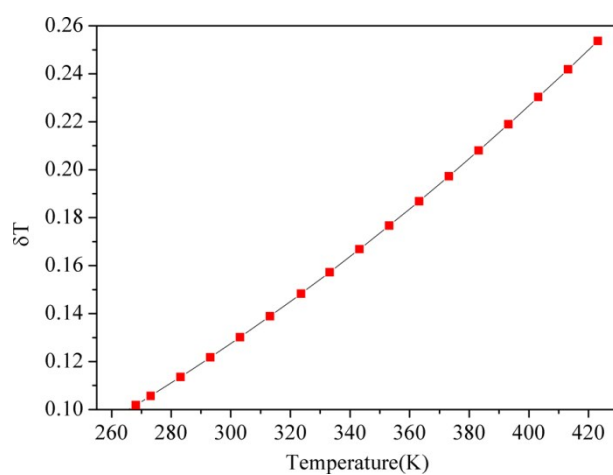


Figure S4. δT as a function of absolute temperature T .