

Sub-10 nm BaYF₅:Yb³⁺,Er³⁺ core-shell nanoparticles with intense 1.53 μm fluorescence for polymer-based waveguide amplifiers

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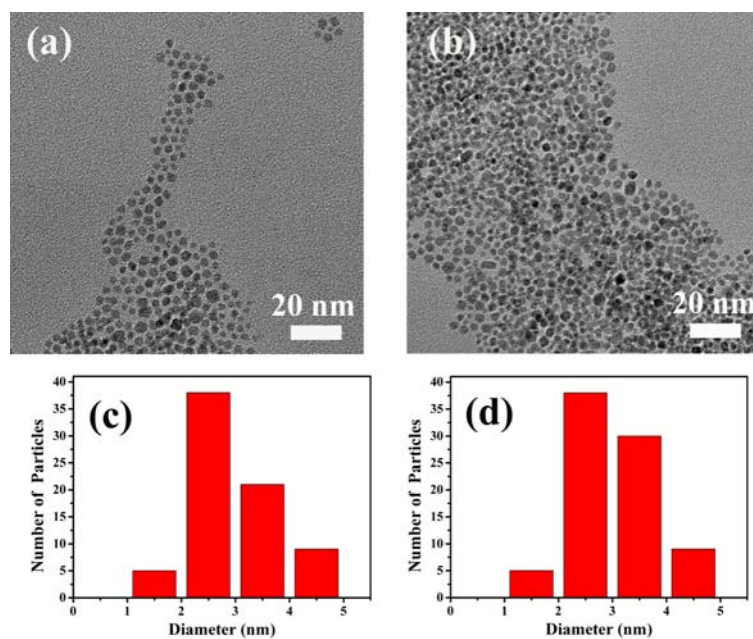


Fig. S1 TEM of the $\text{BaYF}_5:x\text{Yb}^{3+}, 2\%\text{Er}^{3+}$ ((a, c) $x=10\%$ and (b, d) 30%) together with calculated histograms.

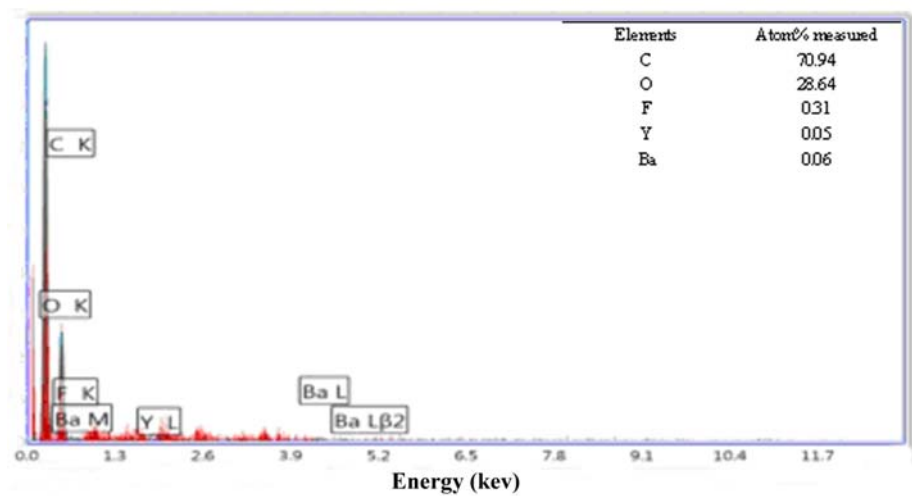


Fig. S2 One EDX spectrum of the BaYF₅ NPs (0.3wt%)-doped polymer waveguide.