

Supplementary material for the article:

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Supplementary file

One-step synthesis of amino-functionalized up-converting NaYF₄:Yb,Er nanoparticles for *in vitro* cell imaging

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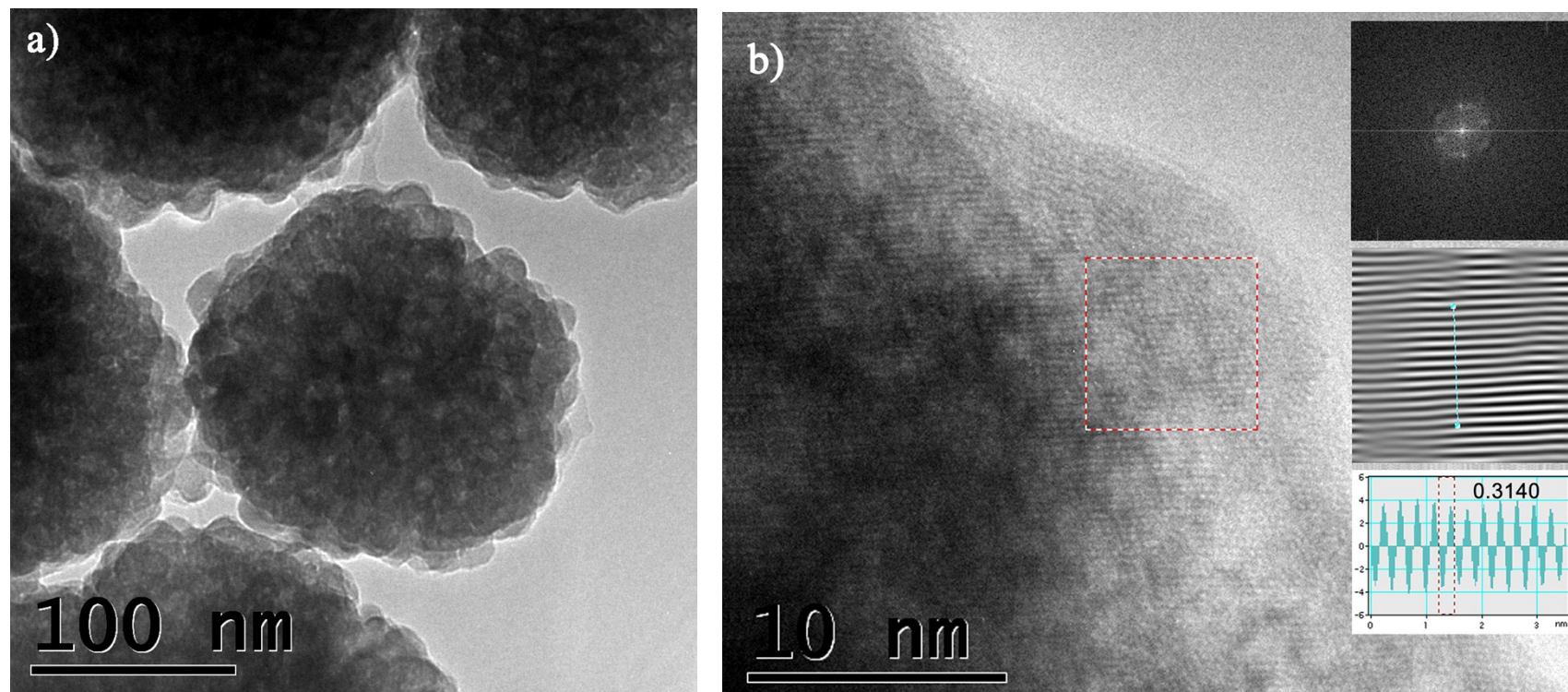


Fig. S1. TEM (a) and HRTEM (b) images of amino modified NaYF₄:Yb,Er UCNPs. Corresponding FFT/IFFT given as insets in b, confirms that much smaller crystallites notable at the particles surfaces (a) revealed periodic array of cubic α phase, (111) plane with d value of 3.140 Å

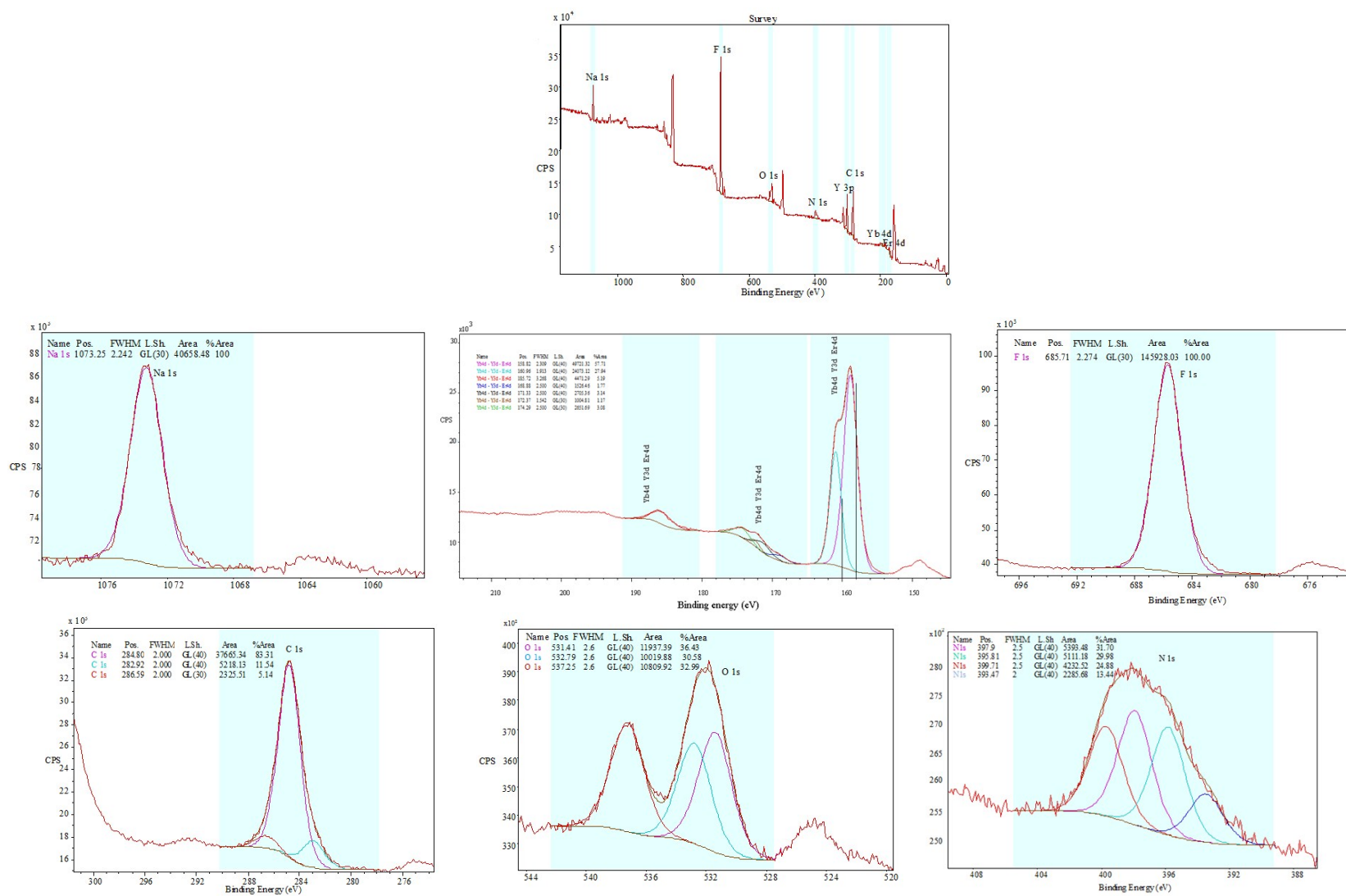


Fig. S2. XPS spectrum of amino-functionalized NaYF₄:Yb,Er UCNPs: survey spectrum and fine-scan spectra of Na 1s, Y 3d, Yb 4d, Er 4d, F 1s and decomposed ones of C 1s, O 1s and N 1s.

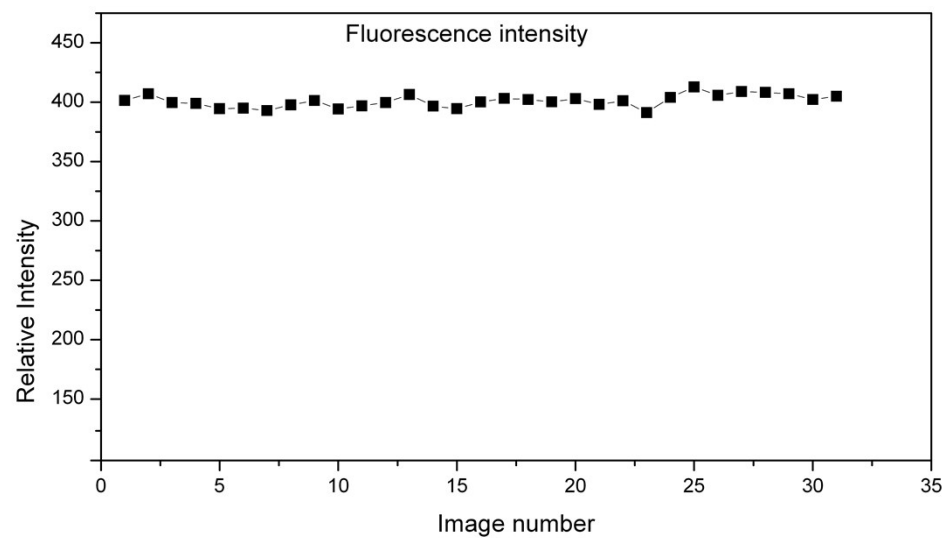


Fig. S3. Photostability of amino-functionalized up-converting NaYF₄:Yb,Er nanoparticles. The emission intensity was traced during 1h