Electronic Supplementary Information

Transparent organic/inorganic nanocomposite for tunable full-color upconversion

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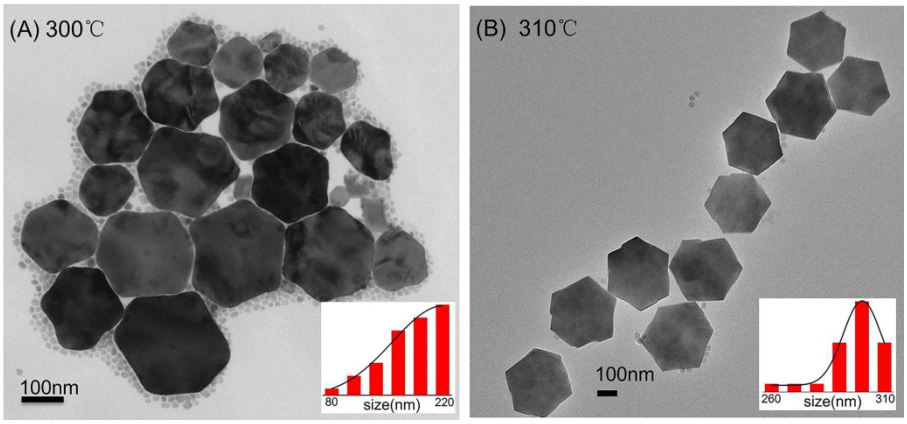

Fig. S1 Typical TEM images of $NaYF_4$:20%Yb, 1%Er nanoparticles synthesized at two different temperatures. The corresponding size distributions are shown as insets in (A-B).

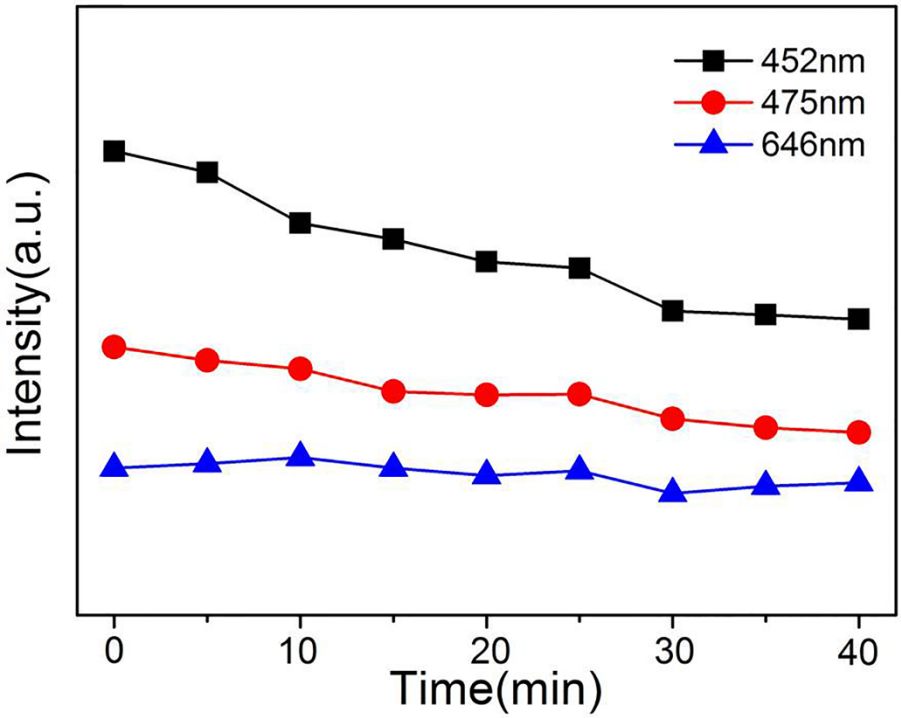

Fig. S2 Upconversion emission intensity as a function of time for a composite containing 1 wt% $NaYF_4$:20%Yb, 1%Tm nanoparticles under continuous excitation by a 980nm laser diode (530 mW).

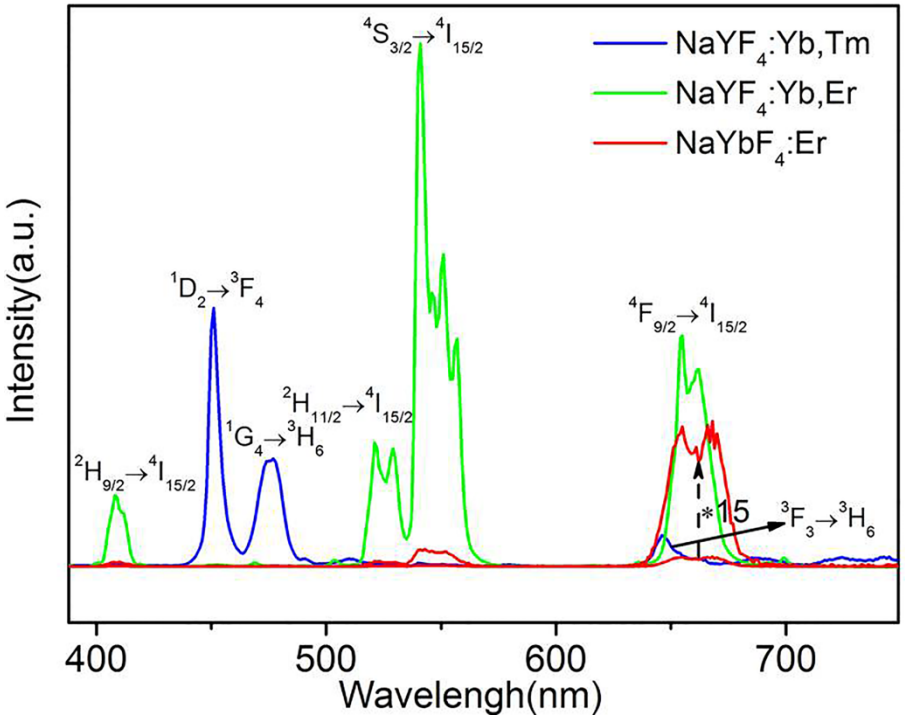

Fig. S3 Upconversion emission spectra of composites containing 1 wt% $NaYbF_4$:1%Er (red), $NaYF_4$:20%Yb, 1%Er (green) and $NaYF_4$:20%Yb, 1%Tm (blue) nanoparticles at same excitation density by a 980 nm laser.