Supporting Information

Enhanced fluorescence properties of terbium complex/poly-L-lactic acid superfine fibers sensitized by the LSPR effect of silver nanoparticles

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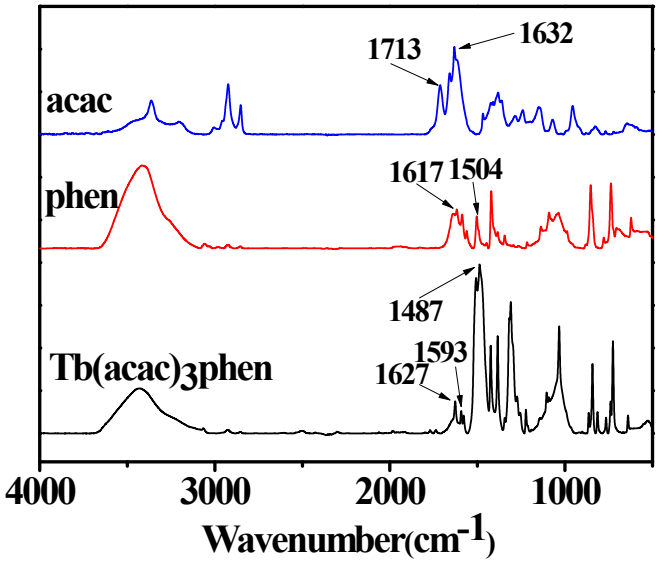

Fig. S1 FT-IR of $Tb(acac)_3phen$

FT-IR spectra of the Tb-complex particles are shown in Fig. S1. In the curve for acac, the peaks at 1632 cm^{-1} and 1713 cm^{-1} are attributed to the stretching vibration peak and saturated chain ketone of C=O group, respectively. After the reaction, the peak at 1713cm^{-1} disappear and the peak at 1632cm^{-1} shifts to 1627 cm^{-1}, indicating that Tb^{3+} ions have a coordination reaction with C=O. In the curve for phen, the peaks at 1504cm^{-1} and 1617cm^{-1} are attributed to skeleton vibrational peak of C-C and C-N, respectively. After the reaction, these two characteristic peaks blue shift to 1487 cm^{-1} and 1593 cm^{-1}, showing that bidentate coordination between two nitrogen atoms of

phen and Tb^{3+} and phen occurred.