

Article

Hairy Fluorescent Nanospheres Based on Polyelectrolyte Brush for Highly Sensitive Determination of Cu(II)

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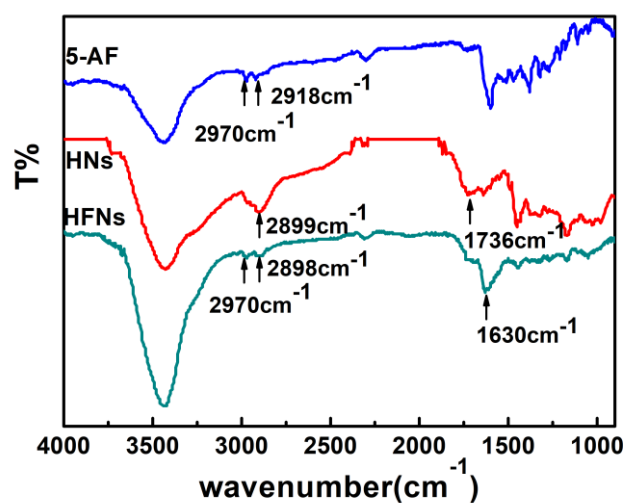


Figure S1. FTIR absorption spectra of 5-AF, hairy nanospheres and hairy fluorescent nanospheres

Surface functionalization of HNs and 5-AF were characterized with Fourier transform infrared spectroscopy (As shown in the figure s1). For 5-aminofluorescein, there is O-H stretching vibration at 3600-3100 cm^{-1} and C=C exists at 2000-1650 cm^{-1} with broad frequency absorption. For HNs, the C=O group is at 1736 cm^{-1} and the obvious hydroxyl polymerization signal exists at 3200-2500 cm^{-1} . The energy band near 1630 cm^{-1} corresponds to the bending of the amine NH, the stretching vibration of NH at 3650-3200 cm^{-1} and the internal vibration of the amide bond at about 1380 cm^{-1} , which indicates successful coupling for 5-AF.