Electronic Supplementary Information

A Simple Strategy Based on Upconversion Nanoparticles for Fluorescent Resonant Energy Transfer Biosensor

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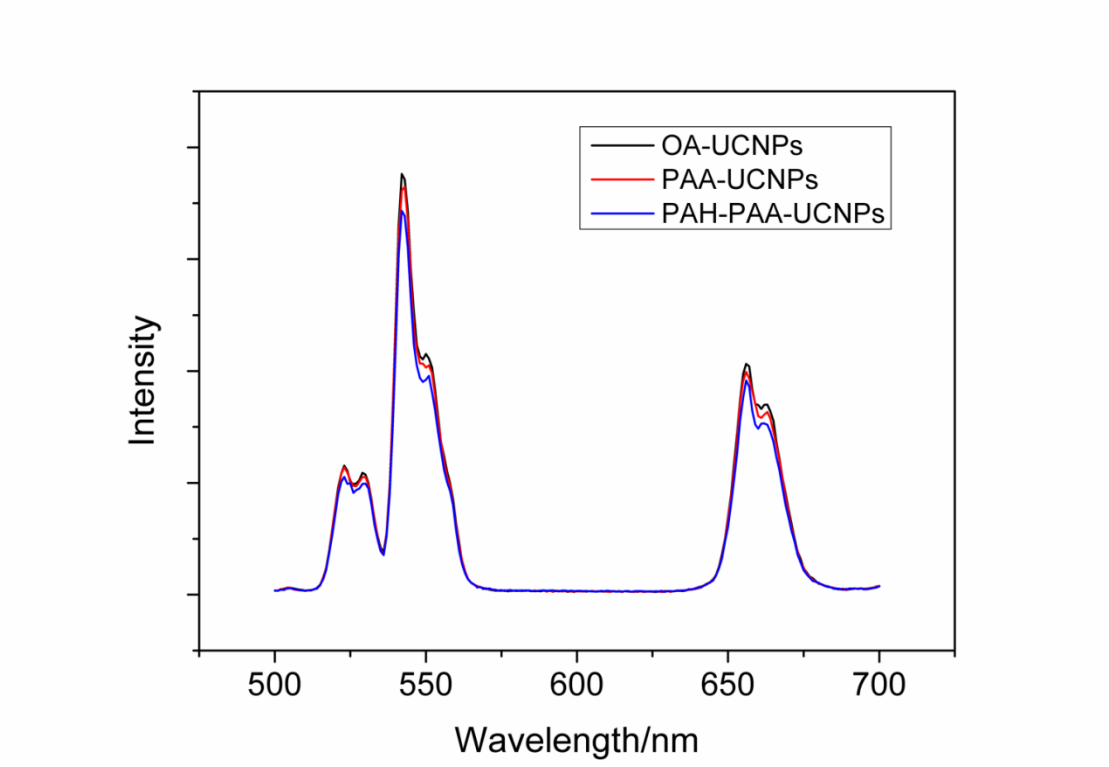

Fig. S1 The UCL spectra of as-prepared and modified nanoparticles under excitation of 980 nm.

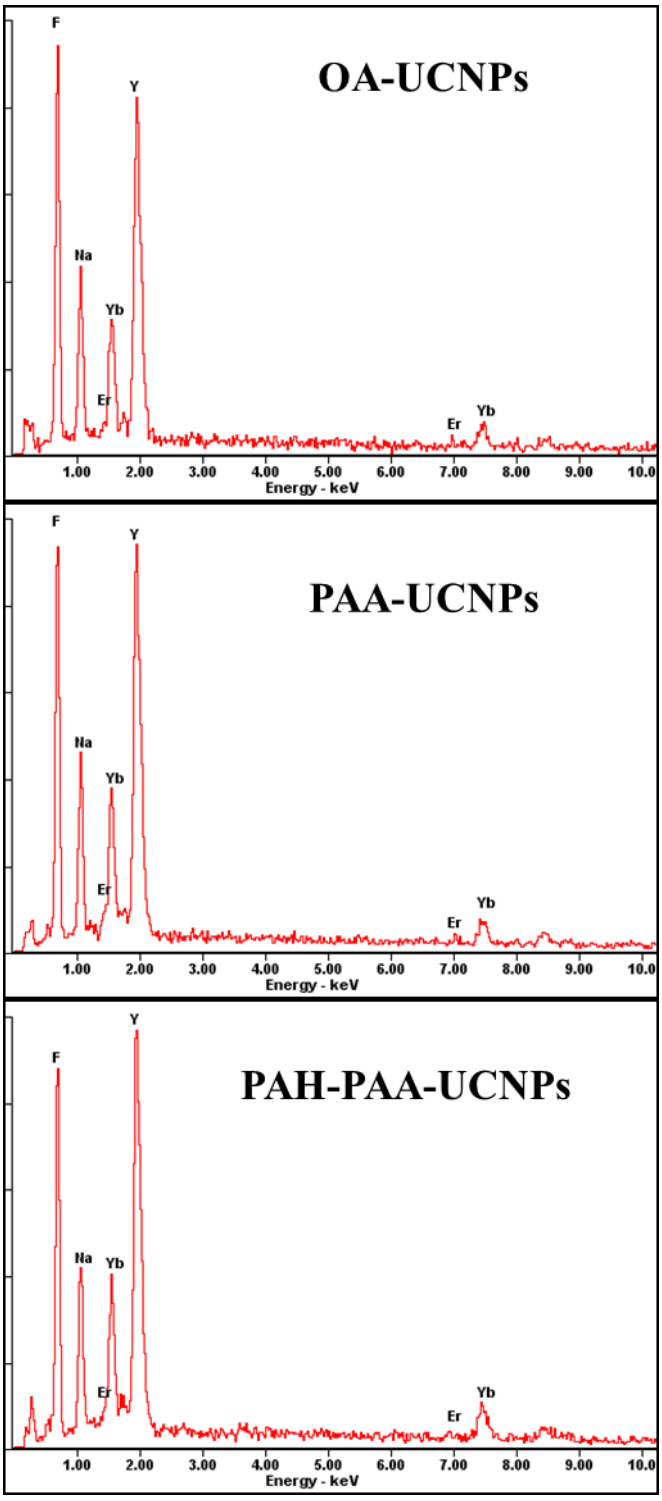

Fig. S2 EDX analysis spectra of the as-prepared and modified UCNPs.

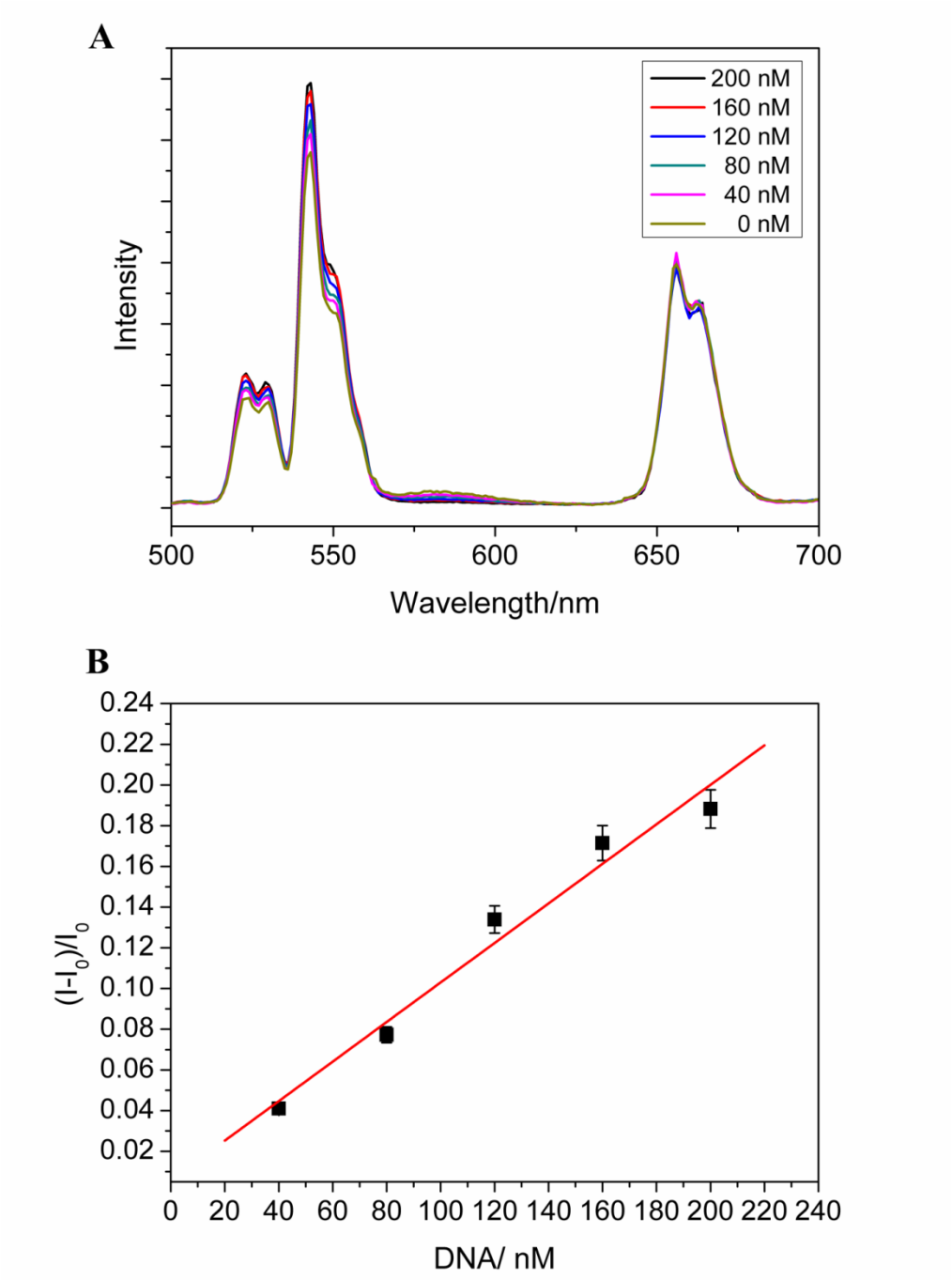

Fig. S3 UCL spectra of the sensor with various concentration of target DNA (A). The linear relationship of the relative fluorescence intensity versus the concentration of target DNA in the range from 40 to 200 nM, I_0 and I denote the relative fluorescence intensity $UCL_{510\text{-}565}/UCL_{640\text{-}680}$ before and after addition of target DNA (B).

Table S1 Determination of lysozyme level in human saliva (n=4)

Sample	1	2	3
Concentration (μM)	1.4	2.1	1.8
RSD(%)	3.4	3.5	2.9

Table S2 Determination of lysozyme level in human serum (n=4)

Sample	1	2	3
Concentration (nM)	835.2	864.6	890.4
RSD(%)	4.1	3.6	3.2