

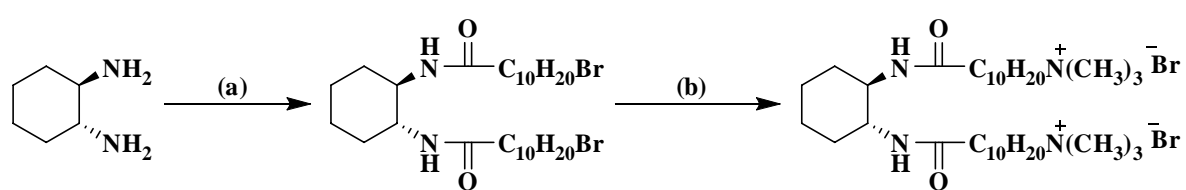
Electronic Supplementary Information (ESI)

Thymidine-functionalized silica nanotubes for selective recognition and separation of oligoadenosine

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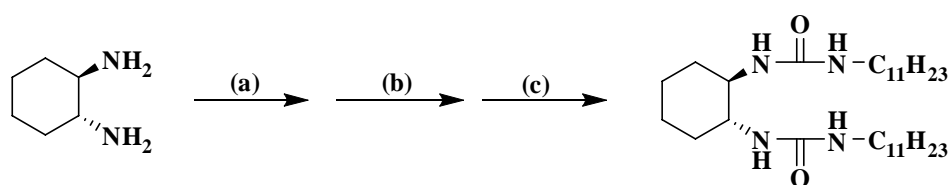
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(a) 11-bromoundecanoic acid, DCC, DMAP, THF

(b) TMA, THF/DMF

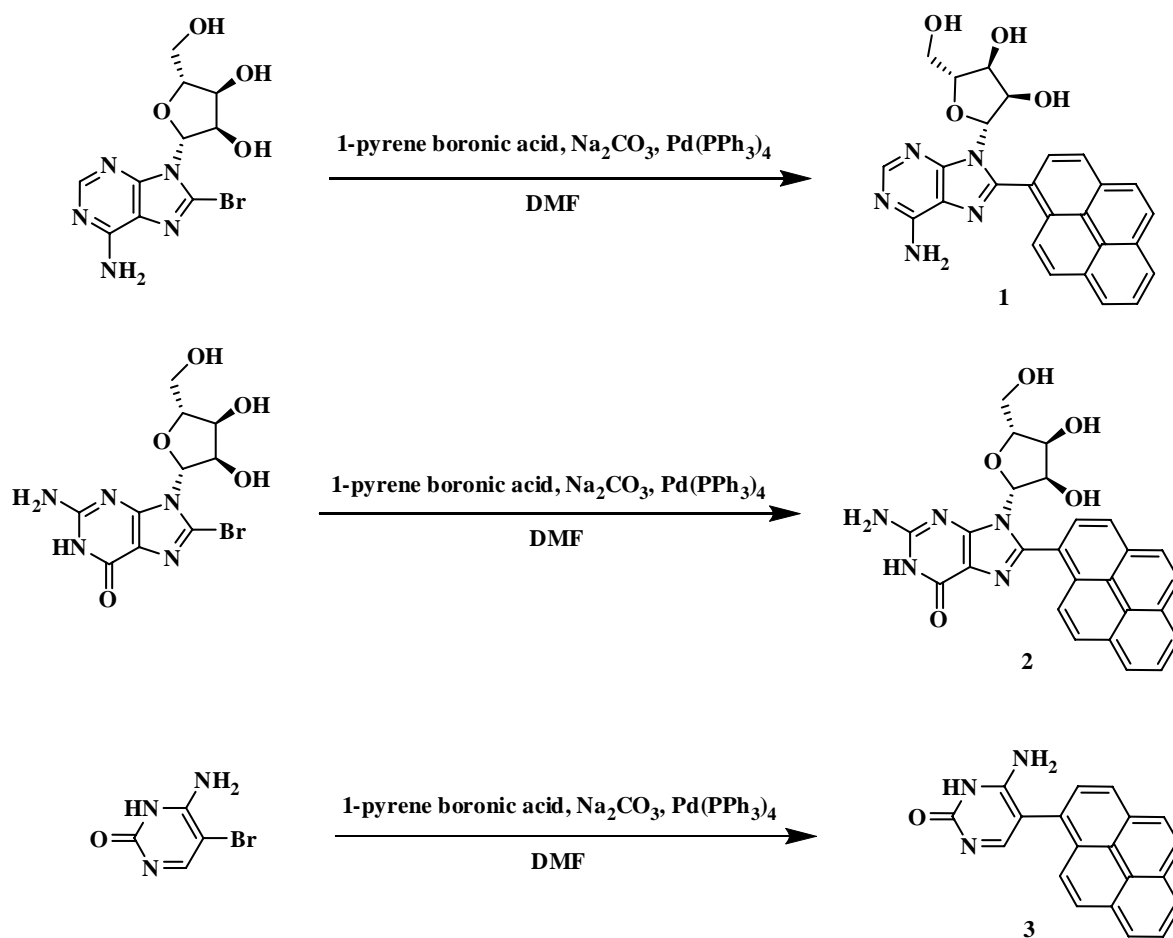


(a) dodecylisocyanate, toluene

(b) DCM

(c) diethylether

Scheme S1. Synthetic routes of organogelators **9** and **10**.



Scheme S2. Synthetic routes for compounds 1-3 as guest molecules.

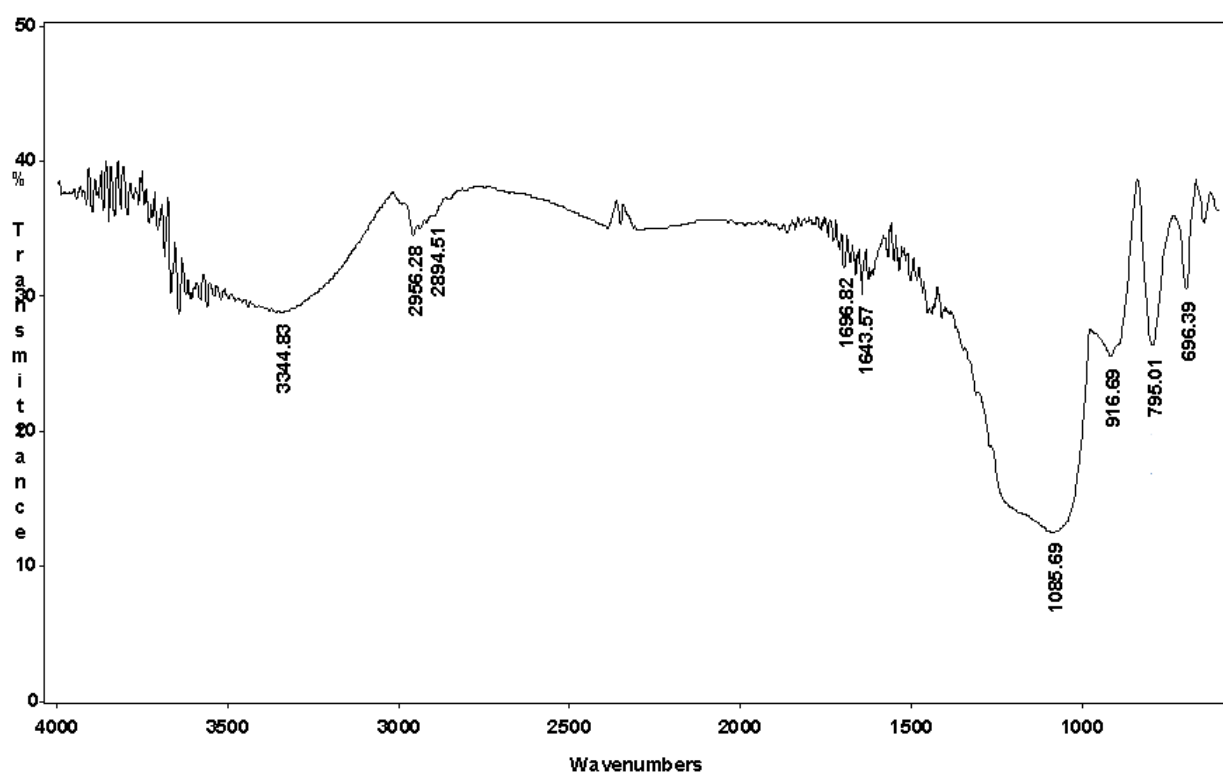


Fig. S1 FT-IR spectrum of CNTs after attachment of the chloropropyl silane group.

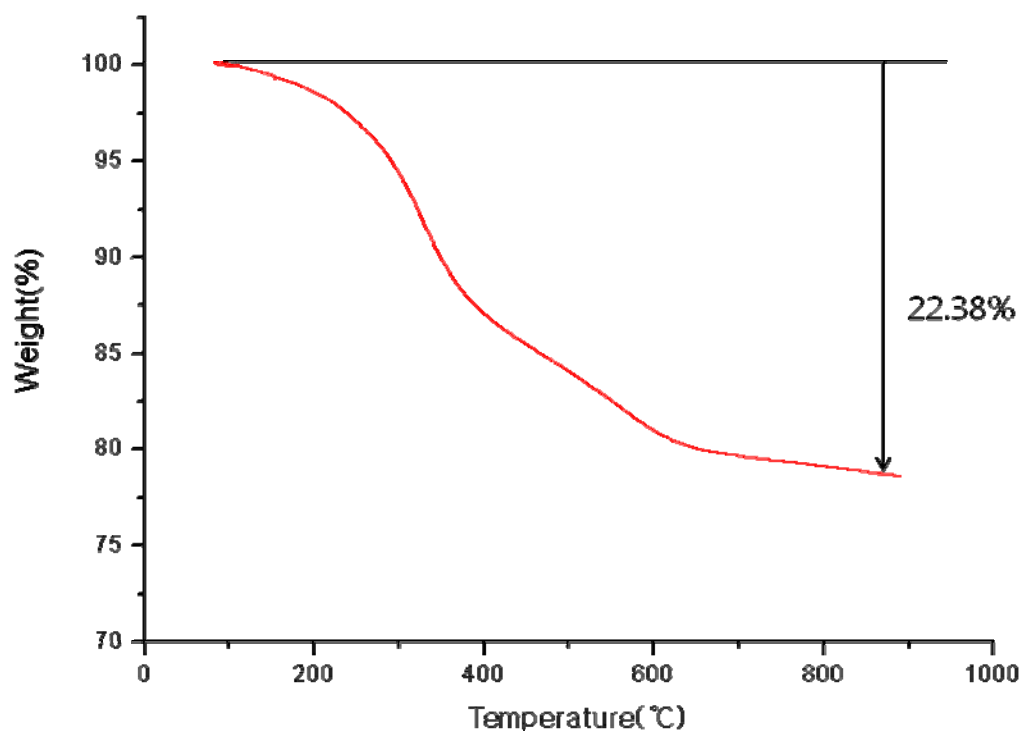


Fig. S2 TGA data of the chloropropyl silane group attached SNTs after remove template.

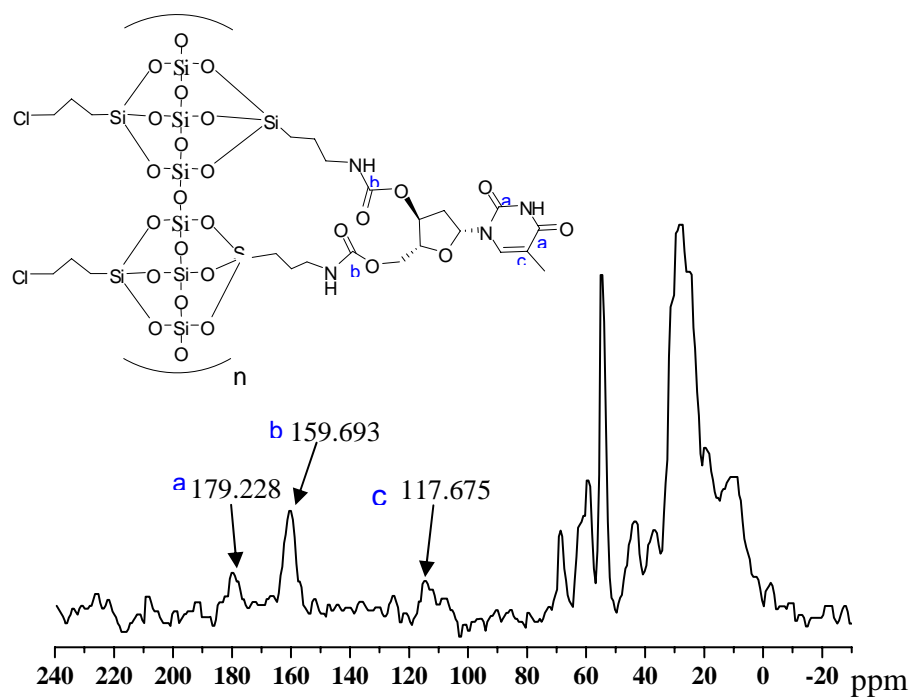


Fig. S3 ¹³C CP/MAS of T-SNTs.

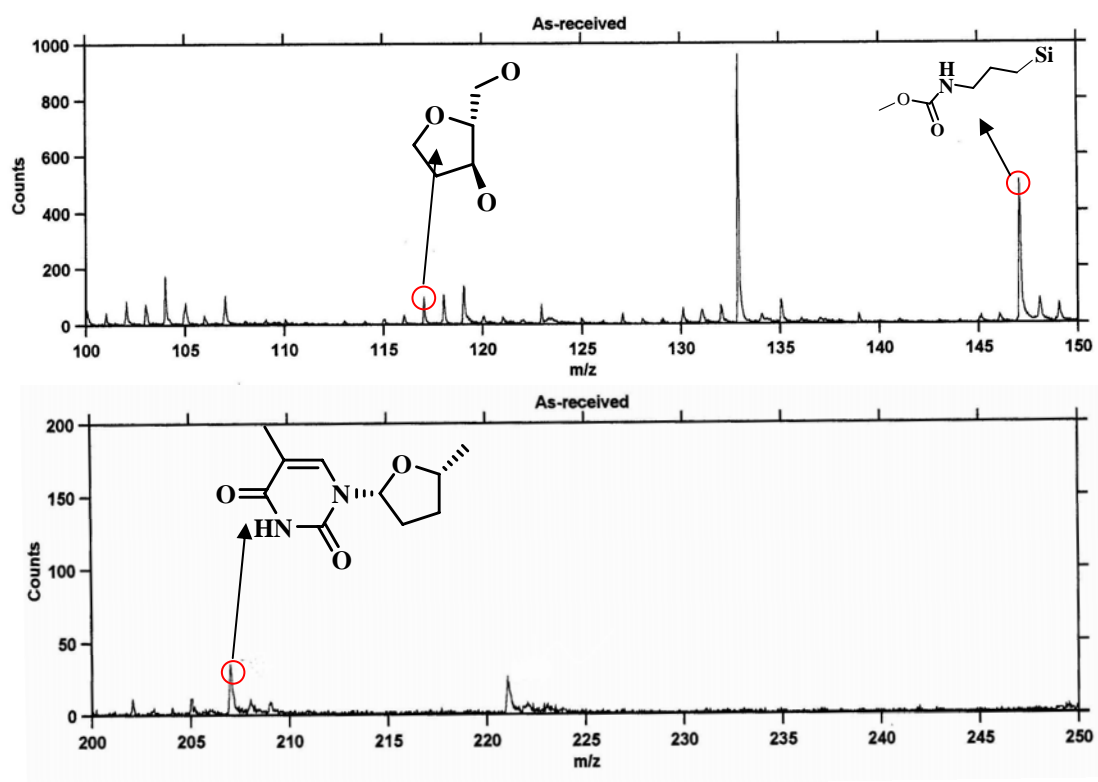


Fig. S4 TOF-SIMS spectra of T-SNTs.

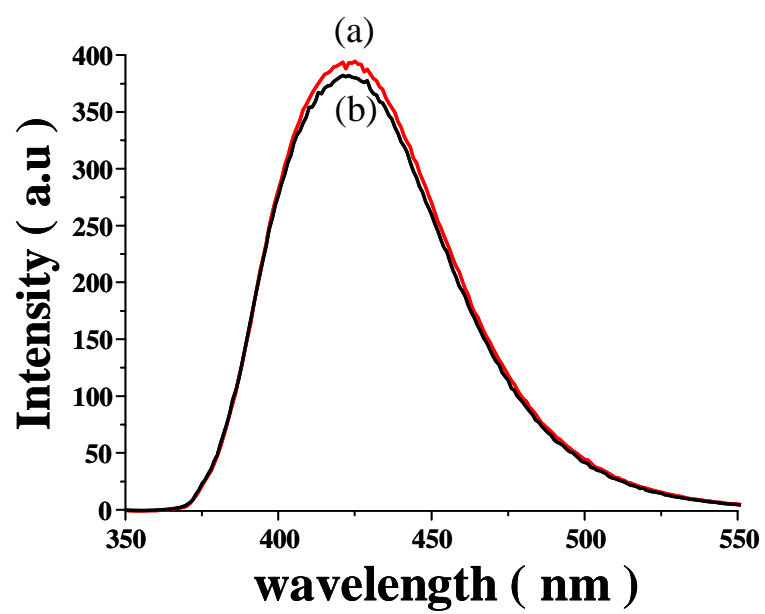


Fig. S5 Fluorescence spectra change of adenosine derivative **1** (2.5×10^{-6} M) (a) before and (b) after addition of **SNTs** (0.25mg) in aqueous solution (pH 7.4).

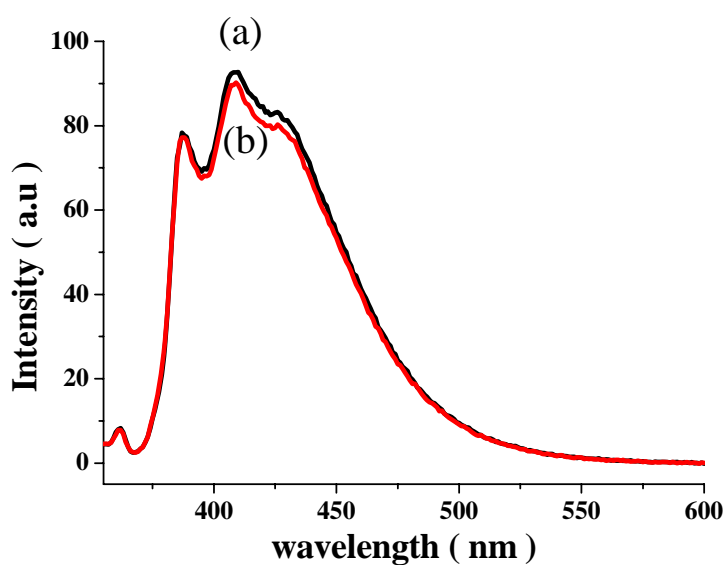


Fig. S6 Fluorescence spectra of cytosine derivative **3** (2.5×10^{-6} M) (a) before and (b) after addition of **T-SNTs** (0.25 mg) in aqueous solution (pH 7.4).

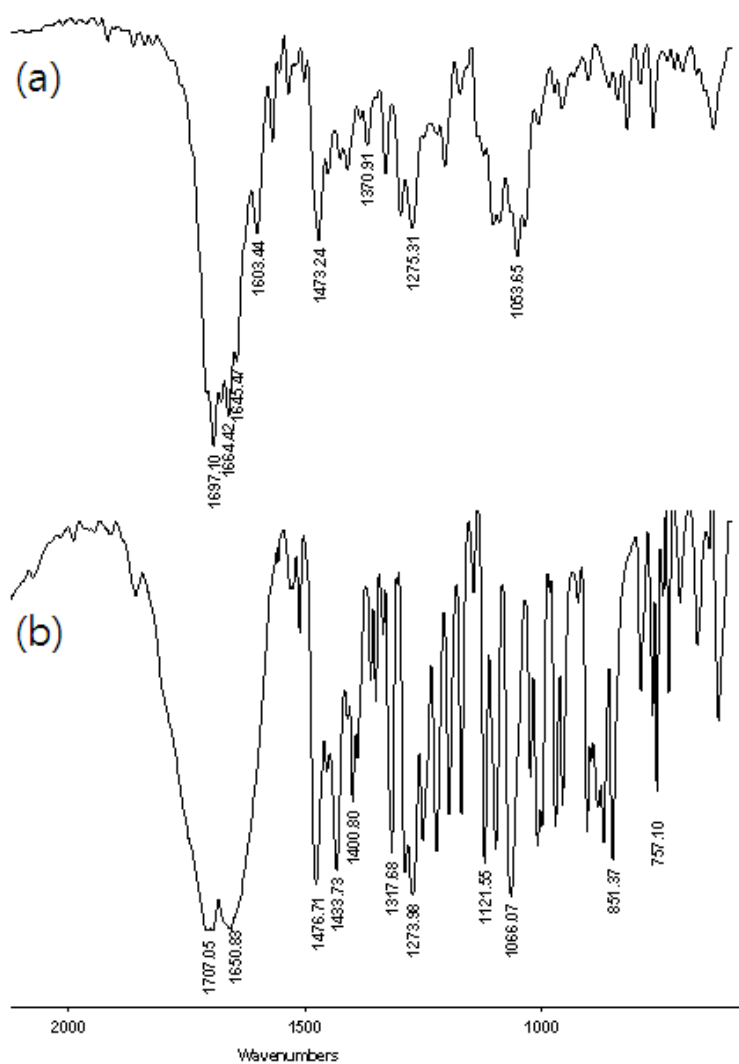


Fig. S7 FT-IR spectra of T-SNTs in (a) the presence and (b) the absence of adenosine.

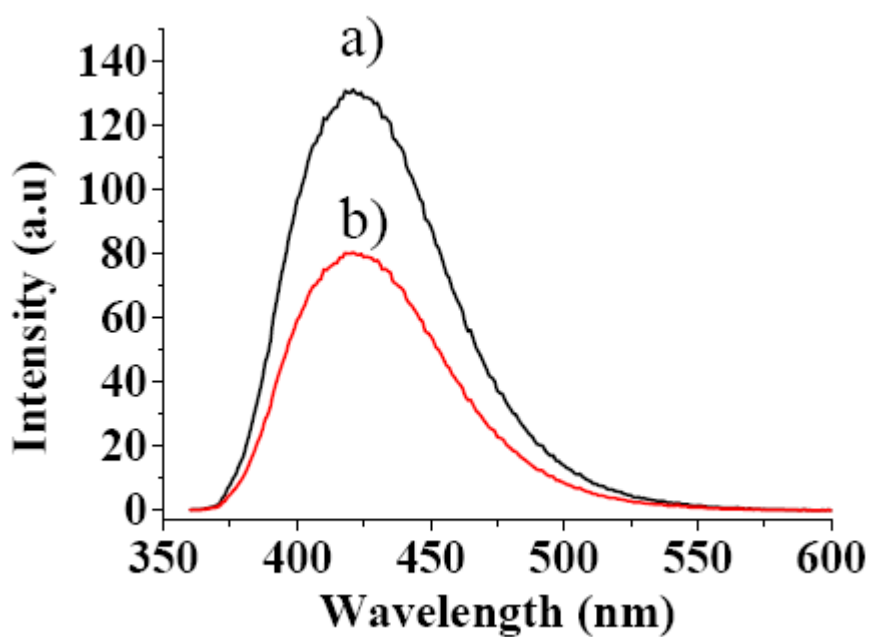


Fig. S8 Fluorescence spectra change of adenosine derivative **1** (2.5×10^{-6} M) (a) before and (b) after addition of **T-SPs** (0.25mg) in aqueous solution (pH 7.4).

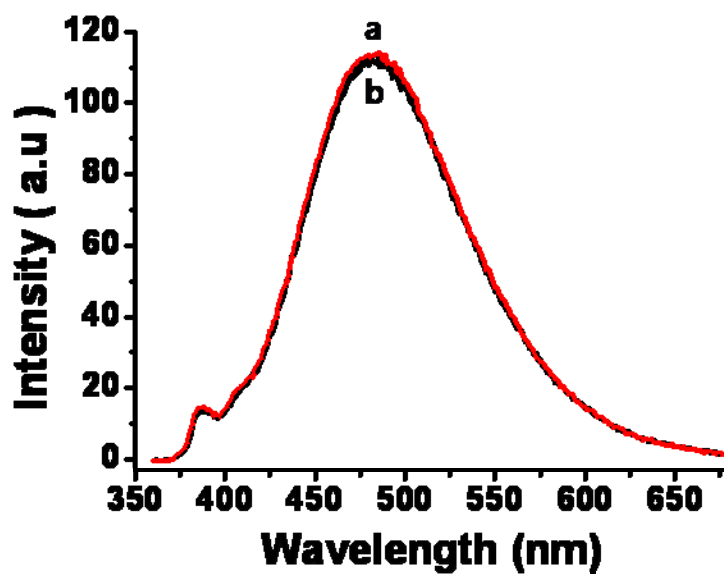


Fig. S9 Fluorescence spectra change of guanosine derivative **2** (2.5×10^{-6} M) (a) before and (b) after addition of **T-SPs** (0.25mg) in aqueous solution (pH 7.4).

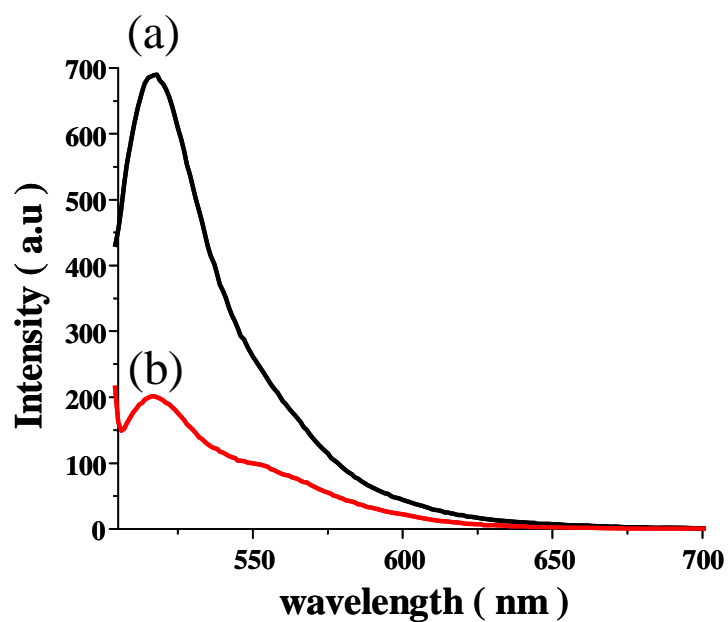


Fig. S10 Fluorescence intensity change of oligonucleotide **6** (2.5×10^{-6} M) (a) before and (b) after addition of **T-SNTs** (0.25 mg) in aqueous solution (pH 7.4).

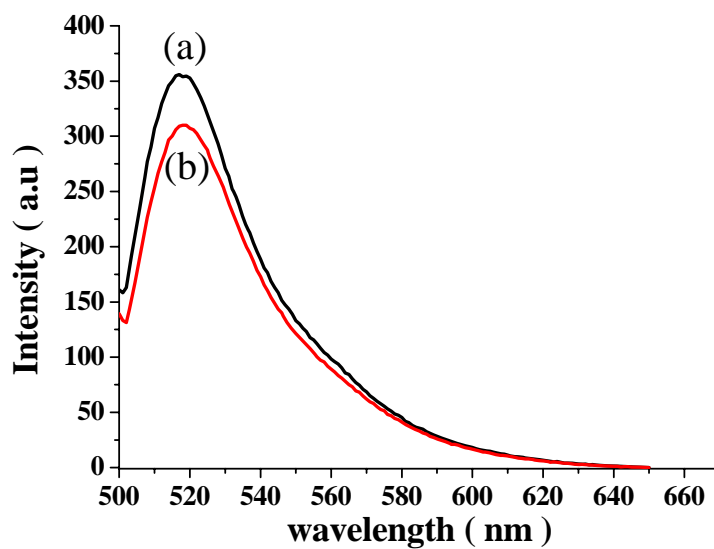


Fig. S11 Fluorescence intensity change of oligonucleotide **7** (2.5×10^{-6} M) (a) before and (b) after addition of **T-SNTs** (0.25 mg) in aqueous solution (pH 7.4).

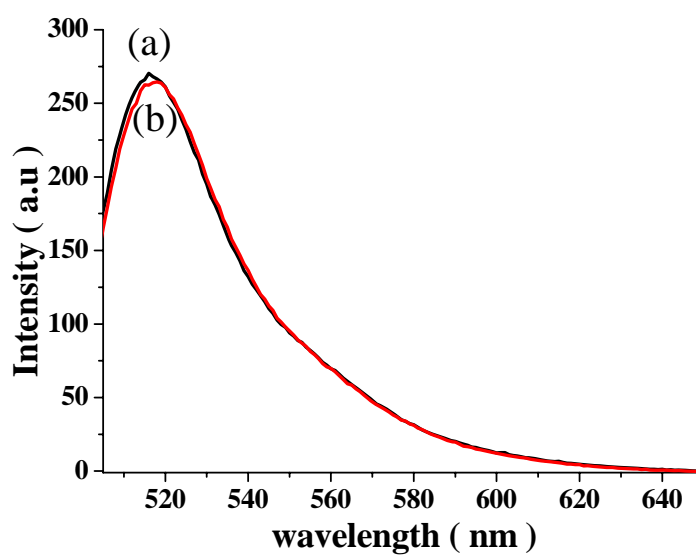


Fig. S12 Fluorescence spectra of oligonucleotide **8** (2.5×10^{-6} M) (a) before and (b) after addition of **T-SNTs** (0.25 mg) in aqueous solution (pH 7.4).