

Electronic Supplementary Information for

Control of Synthesis and Optical Properties of DNA Templat ed Silver Nanoclusters by Varying DNA Length and Sequence

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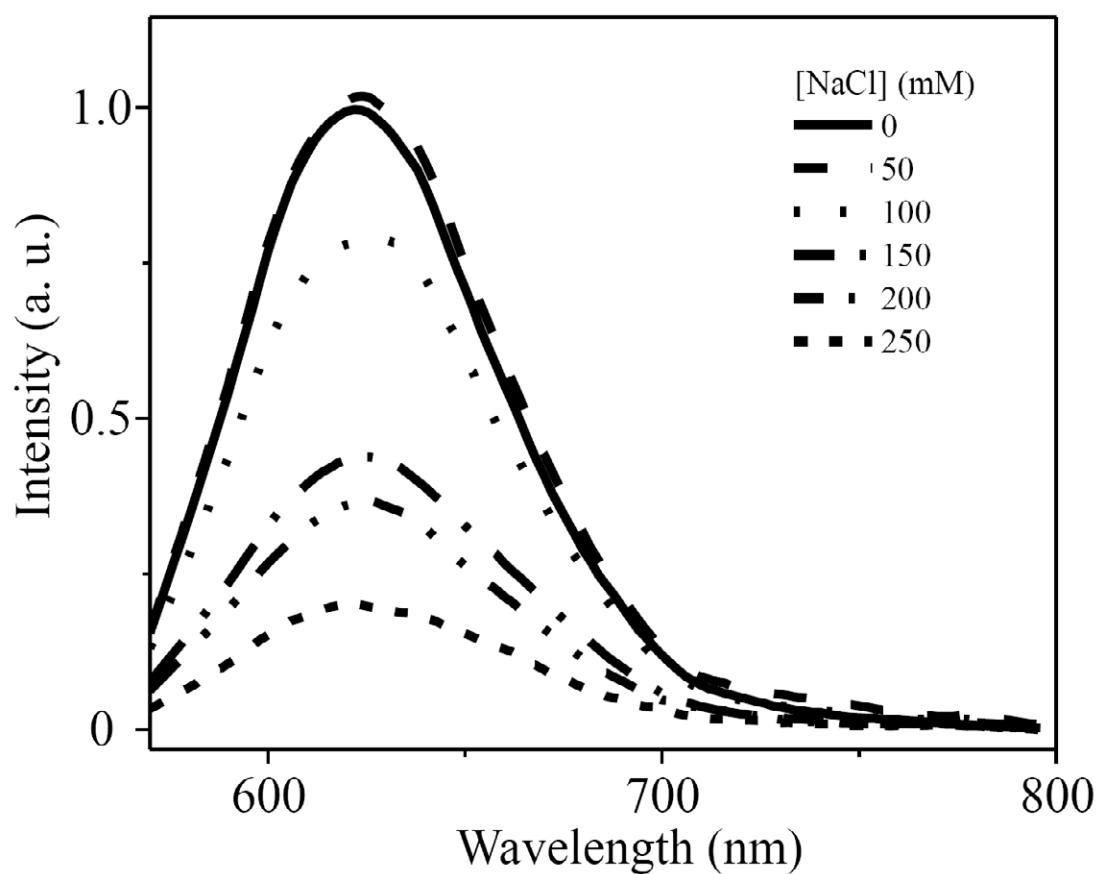


Figure S1 Effect of NaCl concentration on the fluorescence of the DNA_{TAr2}-Ag NCs.

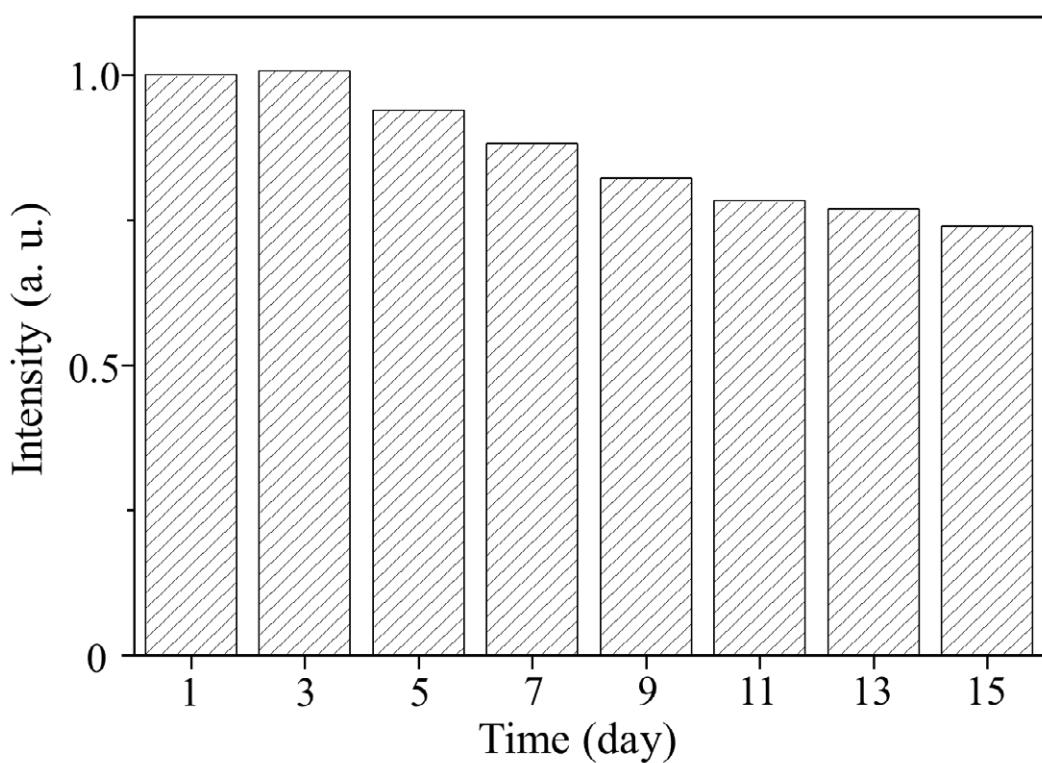


Figure S2 Stability of the DNA_{TAr2}-Ag NCs .

Table S1 CD signals of the DNA scaffolds in the absence and presence of Ag^+ ions and of the DNA-Ag NCs.

DNA	CD [wavelength (nm) / θ (mdeg)]				
	DNA _{TAr1}	DNA _{AAr1}	DNA _{TAr2}	DNA _{TAr5}	DNA _{TAr6}
Free DNA	282/2.8	281/3.2	284/3.5	292/3.7	293/3.7
DNA- Ag^+ complexes	264/-10.3	266/-9.4	261/-6.7	295/5.8	294/5.9
DNA-Ag NCs	263/-5.7	264/-2.9	264/-2.7	294/4.1	294/3.8

Table S2 Percentage recoveries of Hg^{2+} ions from real water samples, determined using the $\text{DNA}_{\text{TAr2}}\text{-Ag}$ NCs.

Sample	Spiked Hg^{2+} (nM)	Hg^{2+} detected (nM) ^a	Recovery (%)
Ground water	10.0	10.9 ± 0.9	100–118
Tap water	10.0	10.2 ± 0.4	98–106
Drinking water	10.0	10.5 ± 0.6	99–111

^a Average from five repetitive measurements.