

SUPPORTING INFORMATION

Circular Dichroism and UV-Vis absorption spectroscopic monitoring of production of chiral silver nanoparticles templated by guanosine 5'-monophosphate.

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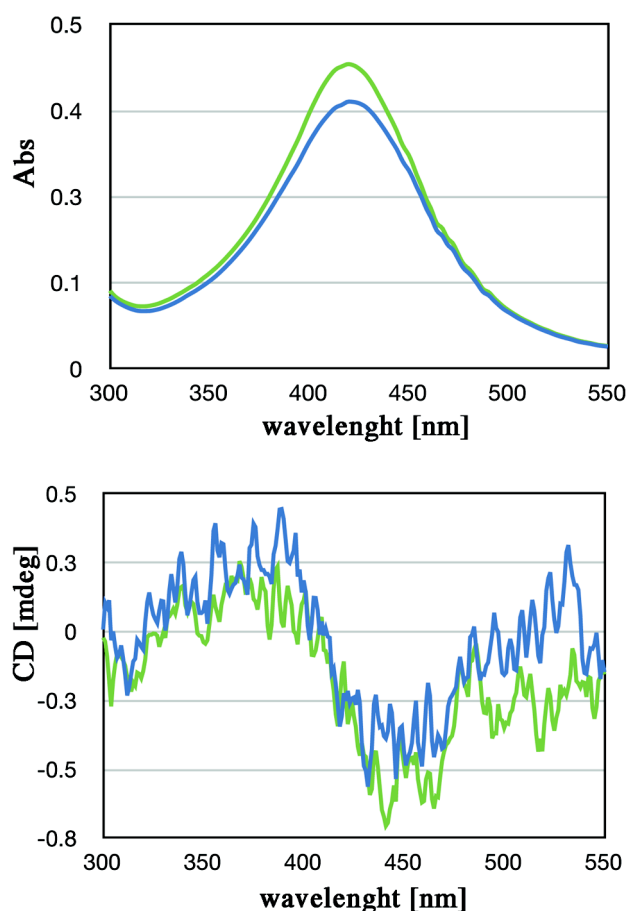


Figure S1. After 10 days the CD-UV spectrum of the crude sample in basic condition (green line) and in neutral condition (blue line) are shown. The colloidal solution, randomly diluted, showed the SPR bands shifted up to 420 nm and the CD response of the chiral NPs shown a crossover at ≈ 415 nm.

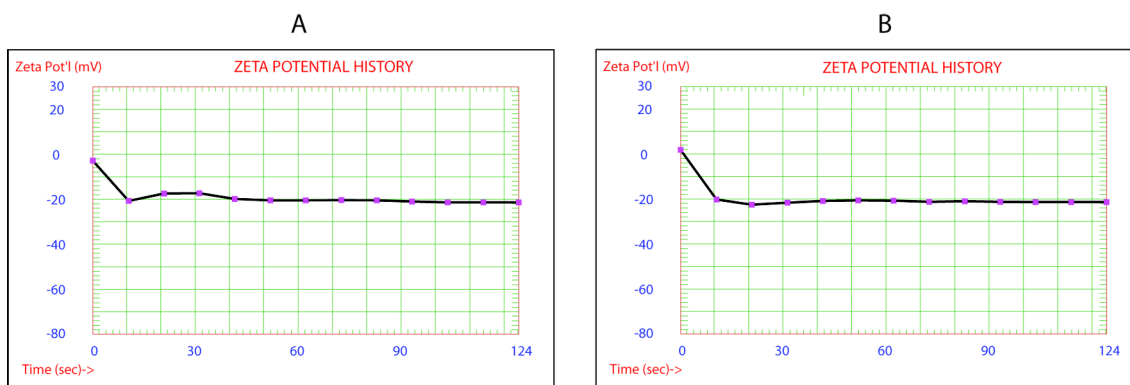


Figure S2. The ζ -potential recorded for the crude sample (A) and (B) after 10 days. For the all the samples the value increased up to -21 mV. After the first 10 days, the electrokinetic potential in colloidal systems (ζ -potential) have shown the stability of colloidal dispersions.

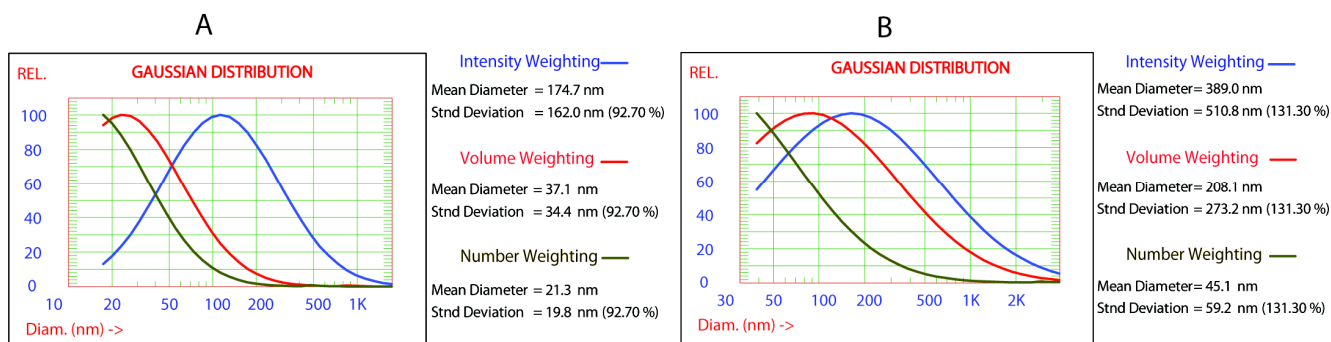


Figure S3. Dynamic light scattering size distribution graph for the crude samples (buffered, A, and unbuffered, B) after 10 days.

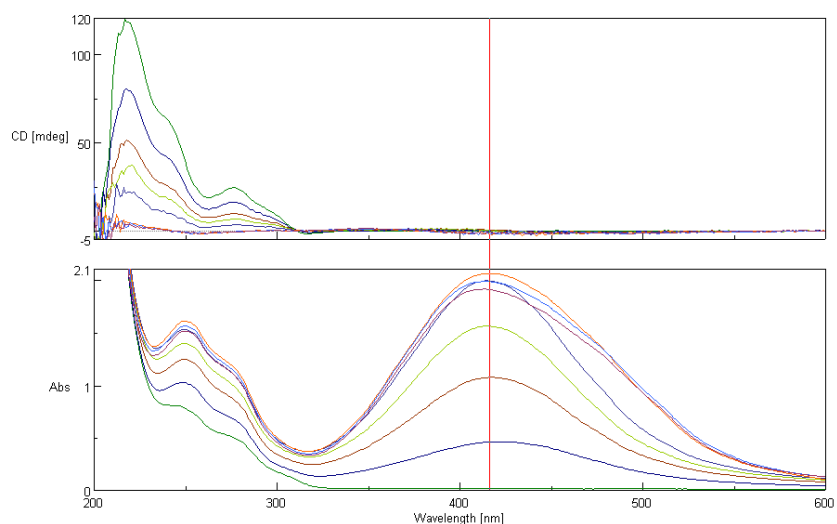


Figure S4. The complex $\text{Ag}^+/\text{GMP}=3,5:1$ was titrated with NaBH_4 [10^{-3}M]. Increasing the molar ratio Ag^+/GMP the narrow SPR band shifts to red with a broad band. With increasing particles size and in presence of agglomeration of silver NPs, the colloidal solution appears in orange color.

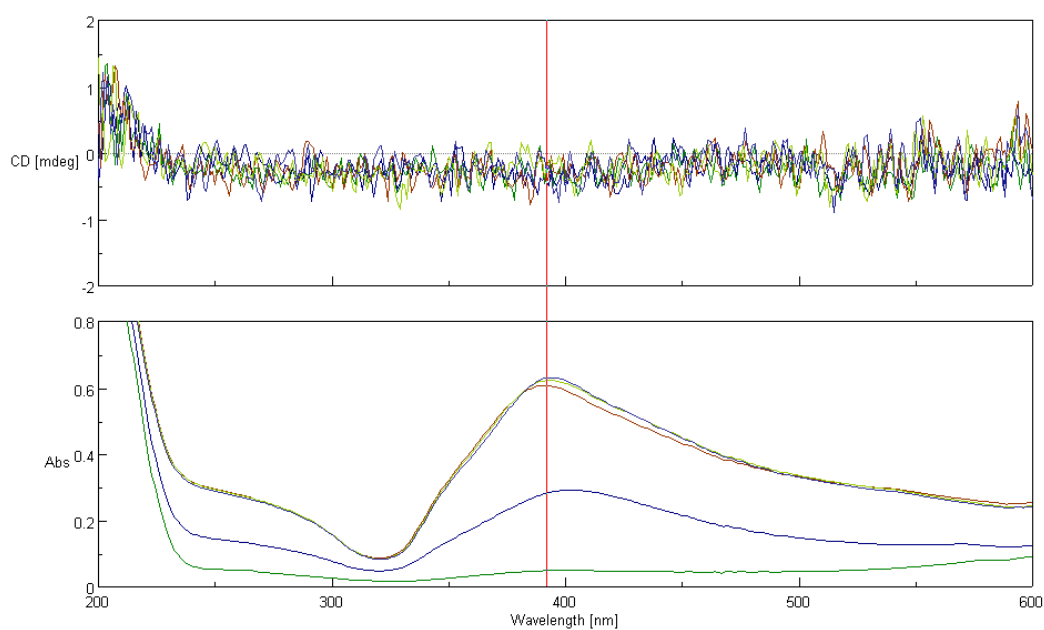


Figure S5. Generation of “naked” AgNPs. 2mL of AgNO_3 was titrated with NaBH_4 [10^{-3}M] ($4 \times 0.5\text{mL}$). The solution appears in light brown color.

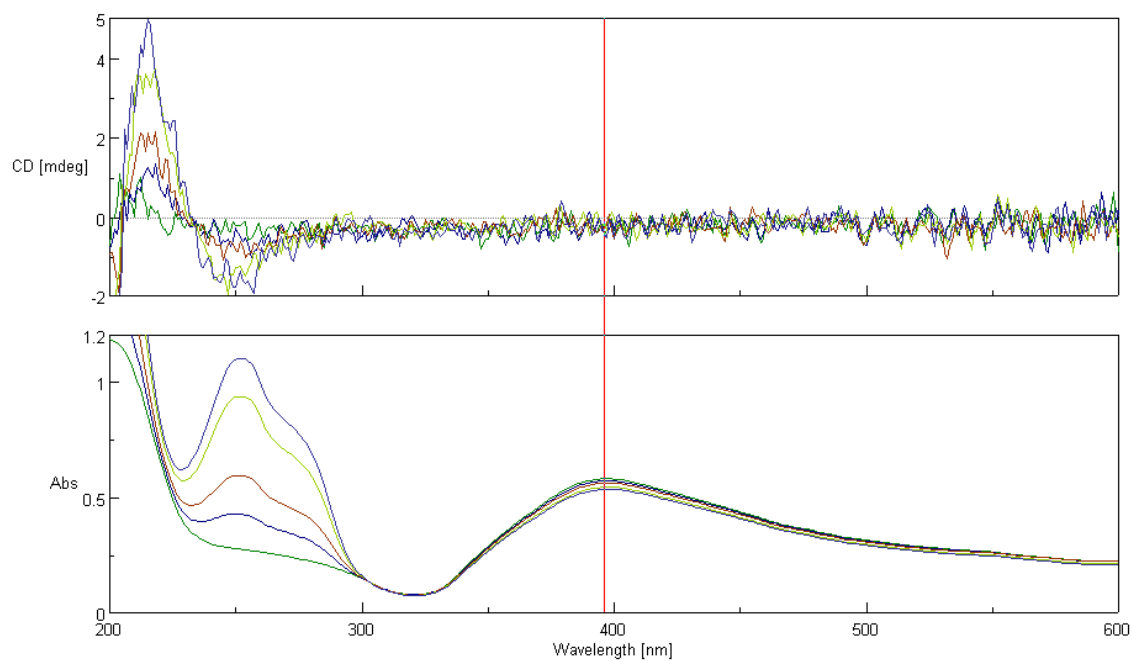


Figure S6. After generation of “naked” AgNPs, the colloidal solution was titrated with 5'-GMP [10^{-3} M] (4×0.5 mL) without the emergence of the induced chiral signal in correspondence of the SPR.

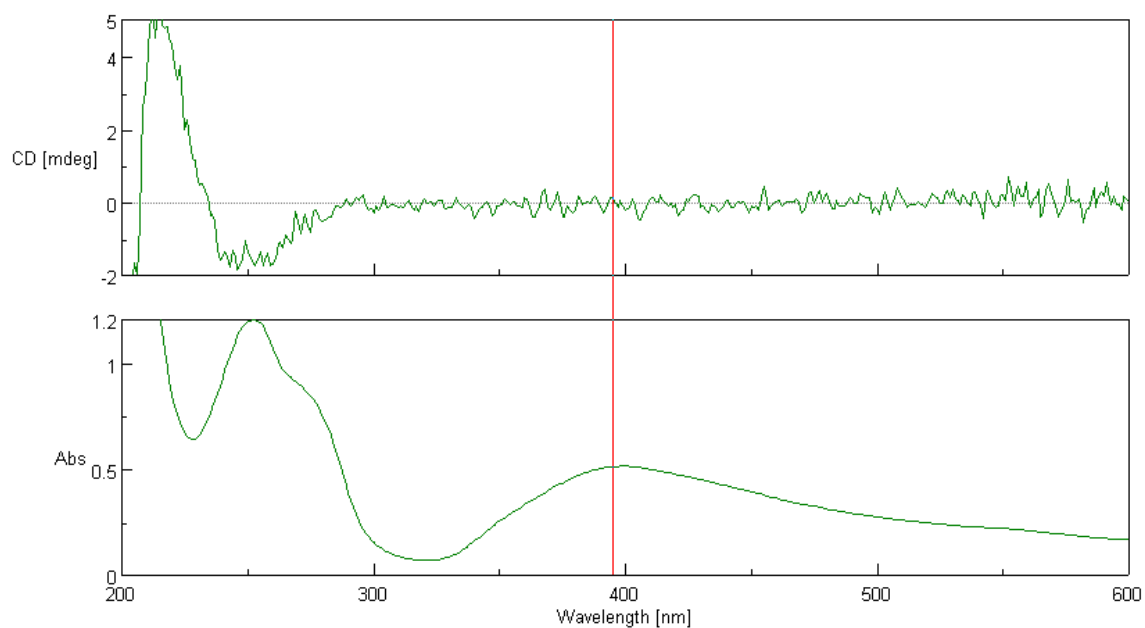


Figure S7. The “naked” AgNPs titrated with GMP do not show any chiral optical signal after 90 minutes.

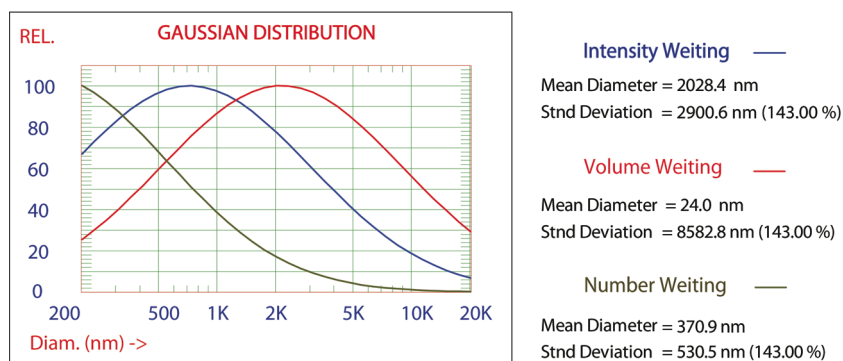


Figure S8. Dynamic light scattering size distribution graph for the colloidal solution of “naked” AgNPs.

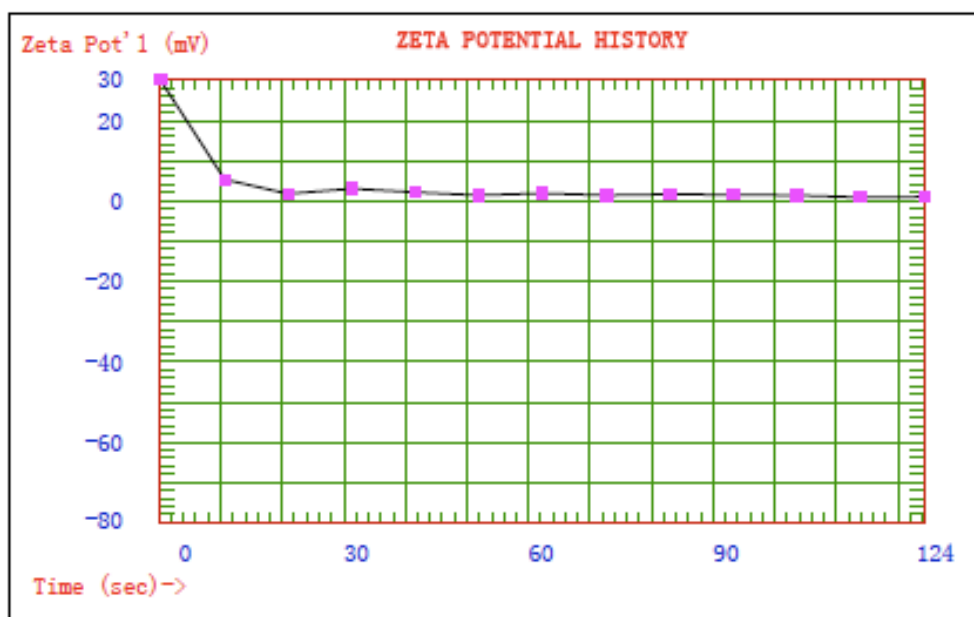


Figure S9. The ζ -potential recorded for the colloidal solution of “naked” AgNPs.

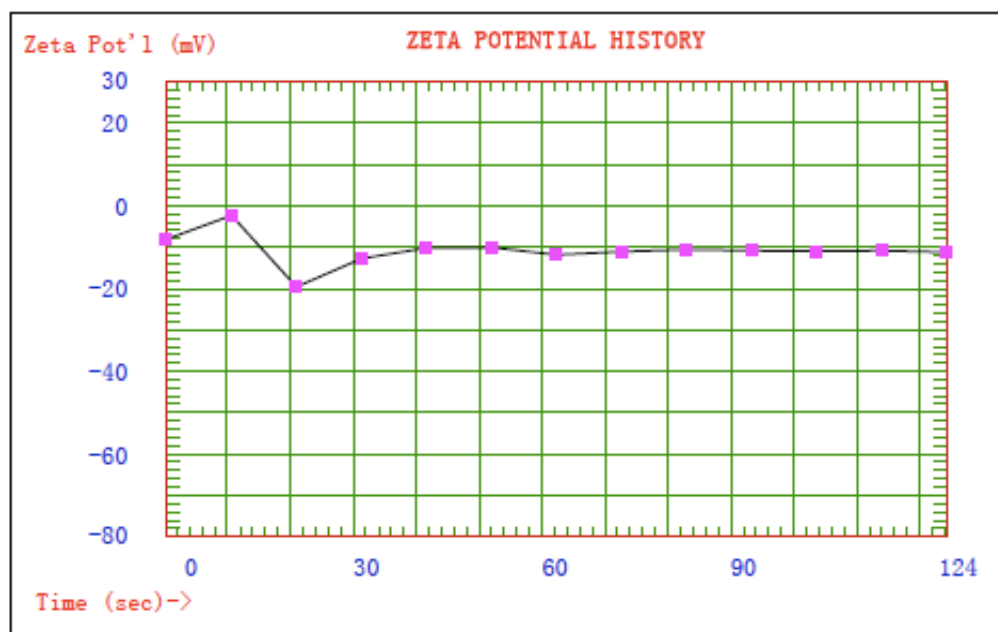


Figure S10. The ζ -potential recorded for the colloidal solution of “naked” AgNPs with 5'-GMP added after the metal reduction.

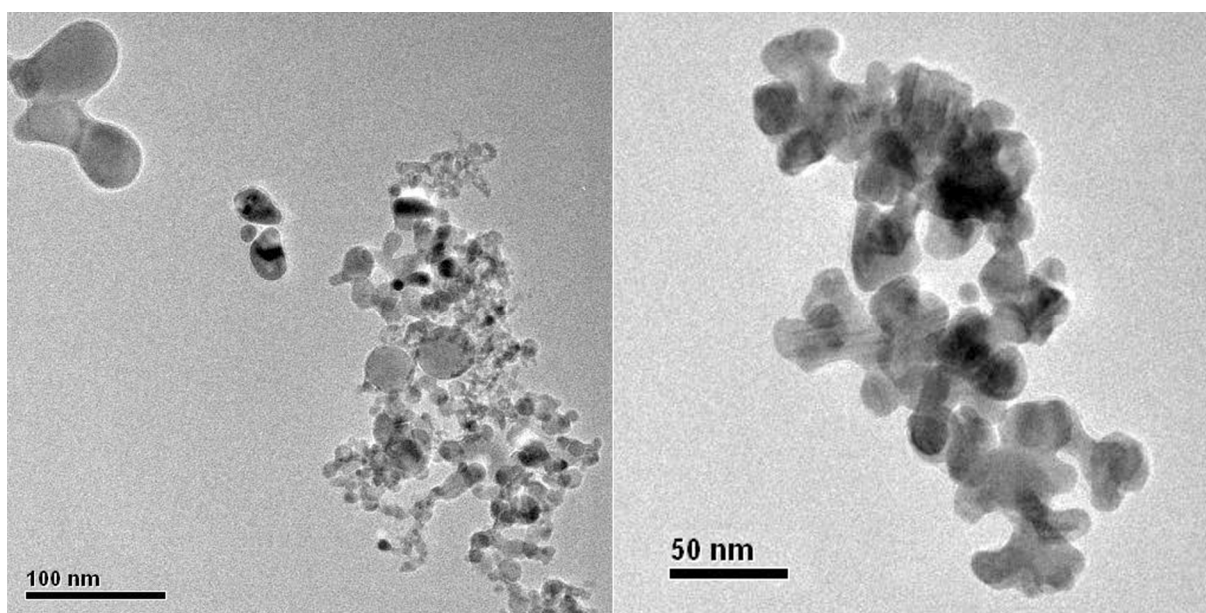


Figure S11. TEM micrographs showing the “naked” AgNPs. NPs are polydispersed and fused each other.