

On-Line Supporting Information

Study of Cytotoxic and Therapeutic Effects of Stable and Purified Silver Nanoparticles on Tumor Cells

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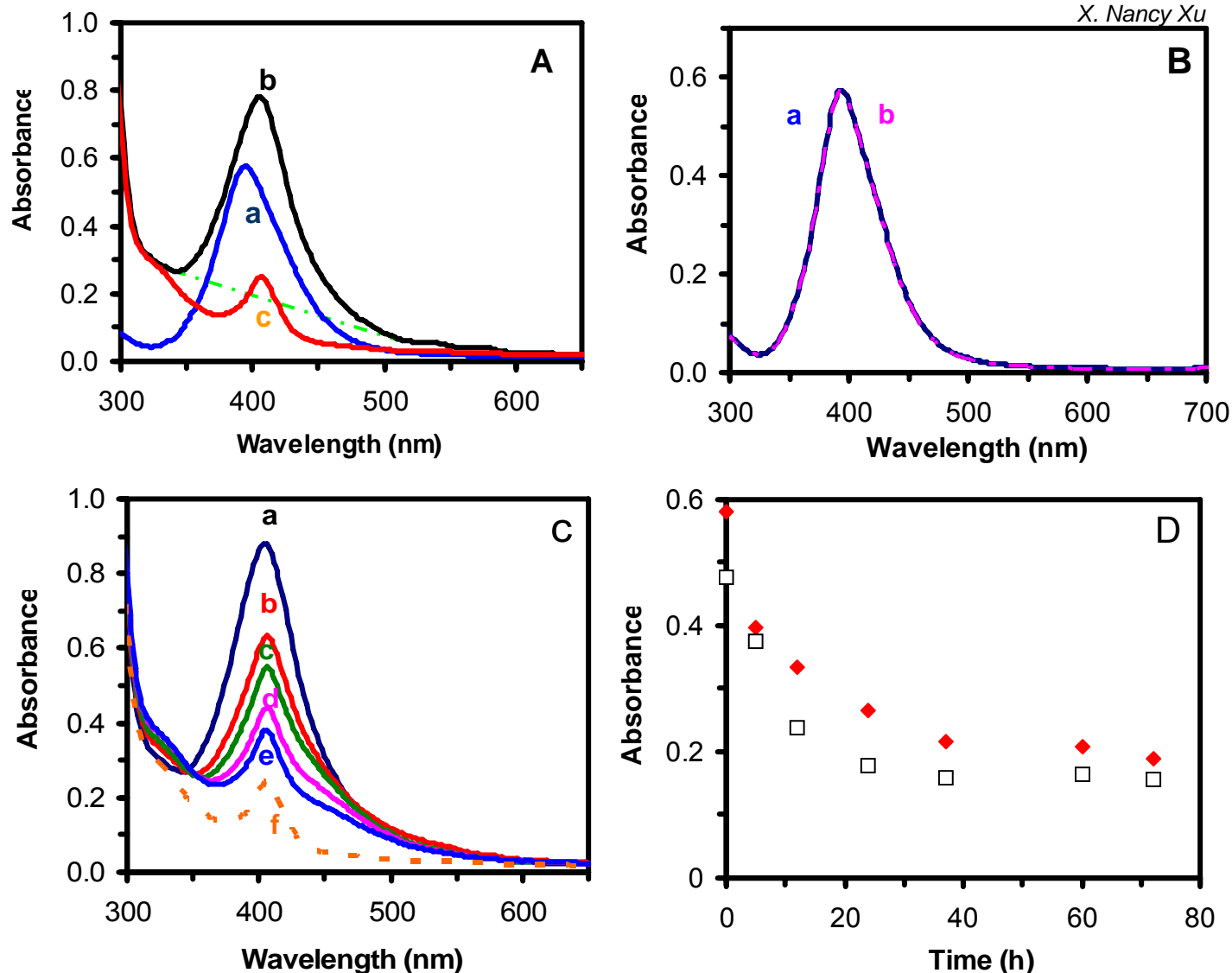


Figure 1S: Study of Ag NPs dispersed in nanopure DI water and cell culture medium using an ensemble method (UV-vis absorption spectroscopy):

- (A) UV-vis absorption spectra of 0.46 nM Ag NPs well-dispersed in: (a) nanopure water and (b) the medium for 1.5 h show absorbance of 0.575 at λ_{\max} of 394 nm and 0.530 at λ_{\max} of 406 nm, respectively. (c) Uv-vis spectrum of the medium alone shows absorbance of 0.156 at λ_{\max} of 406 nm.
- (B) UV-vis absorption spectra of 0.46 nM Ag NPs in nanopure DI water show peak absorbance of 0.575 of 394 nm at (a) 0 and 72 h.
- (C) UV-vis absorption spectra of 0.46 nM Ag NPs in the medium show absorbance of 0.582, 0.398., 0.333, 0.265, 0.216, 0.208, and 0.189 with λ_{\max} of 406 nm at (a) 5 min, (b) 12, (c) 24, (d) 48, and (e) 72 h, respectively. (f) Uv-vis spectrum of the medium alone with absorbance of 0.156 at λ_{\max} of 406 nm for 72 h.
- (D) Plots of peak absorbance of (a) 0.23 nM and (b) 0.46 nM Ag NPs in the medium versus incubation time, show that absorbance of Ag NPs decreases over time, and reaches equilibrium at ~40 h. The peak absorbance of Ag NPs in (A-D) was calculated by subtracting the based-line from the peak absorbance using a well-known based-line subtraction method, as illustrated in (A-b: green dashed line).