

Impacts of Differentially Shaped Silver Nanoparticles with Increasingly Complex Hydrophobic Thiol Surface Coatings in Small-Scale Laboratory Microcosms

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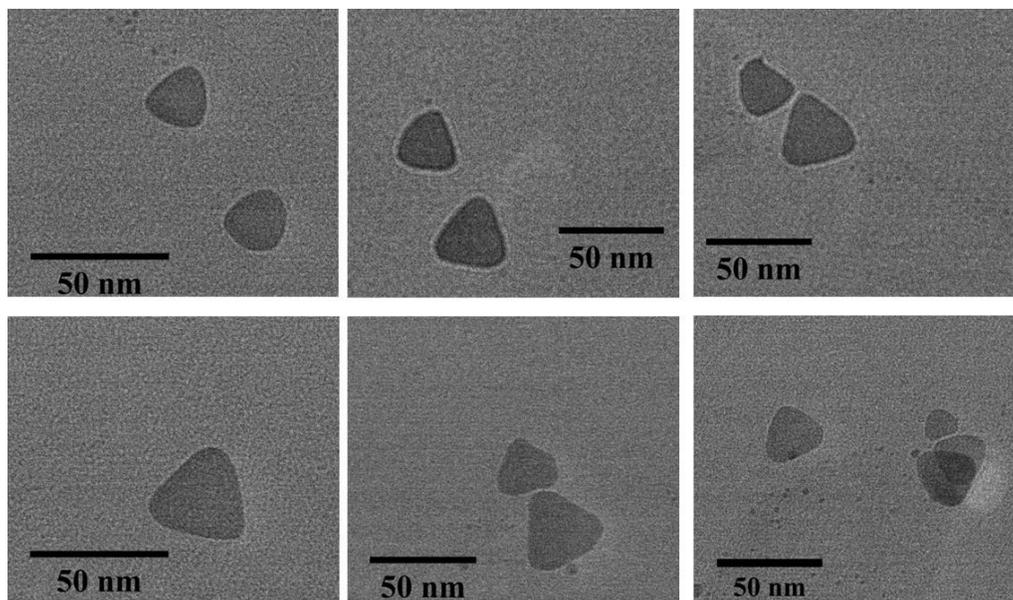


Figure S1. Representative TEM distribution and histogram analysis of hybrid lipid-coated AgNPLs. TEM scale bar is 50 nm.

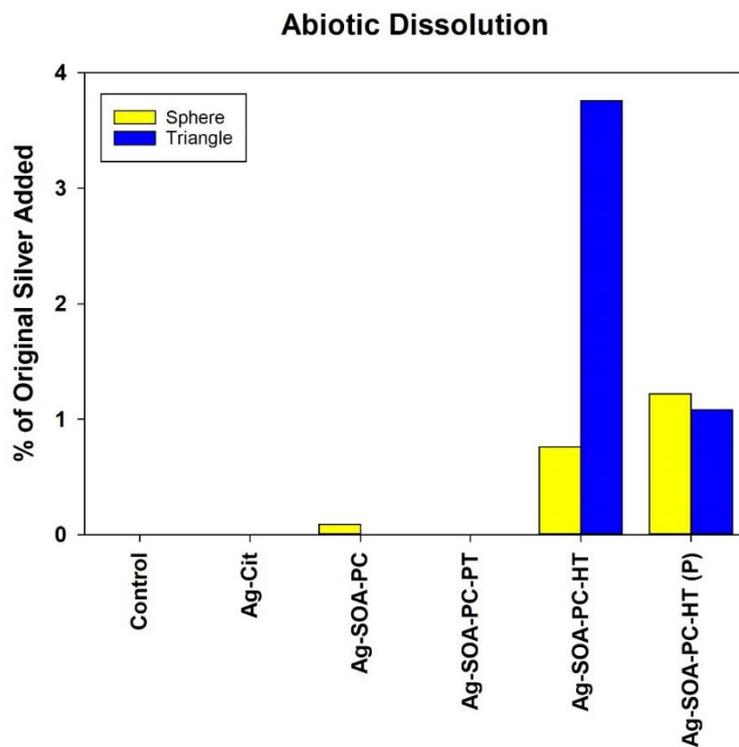


Figure S2: Percentage of original 0.5 mg Ag/L added to each flask found in the microcosm media as dissolved Ag⁺ after 7 days without organisms present in the flasks. None of the measured amounts are significantly different than the control (no AgNPs present).

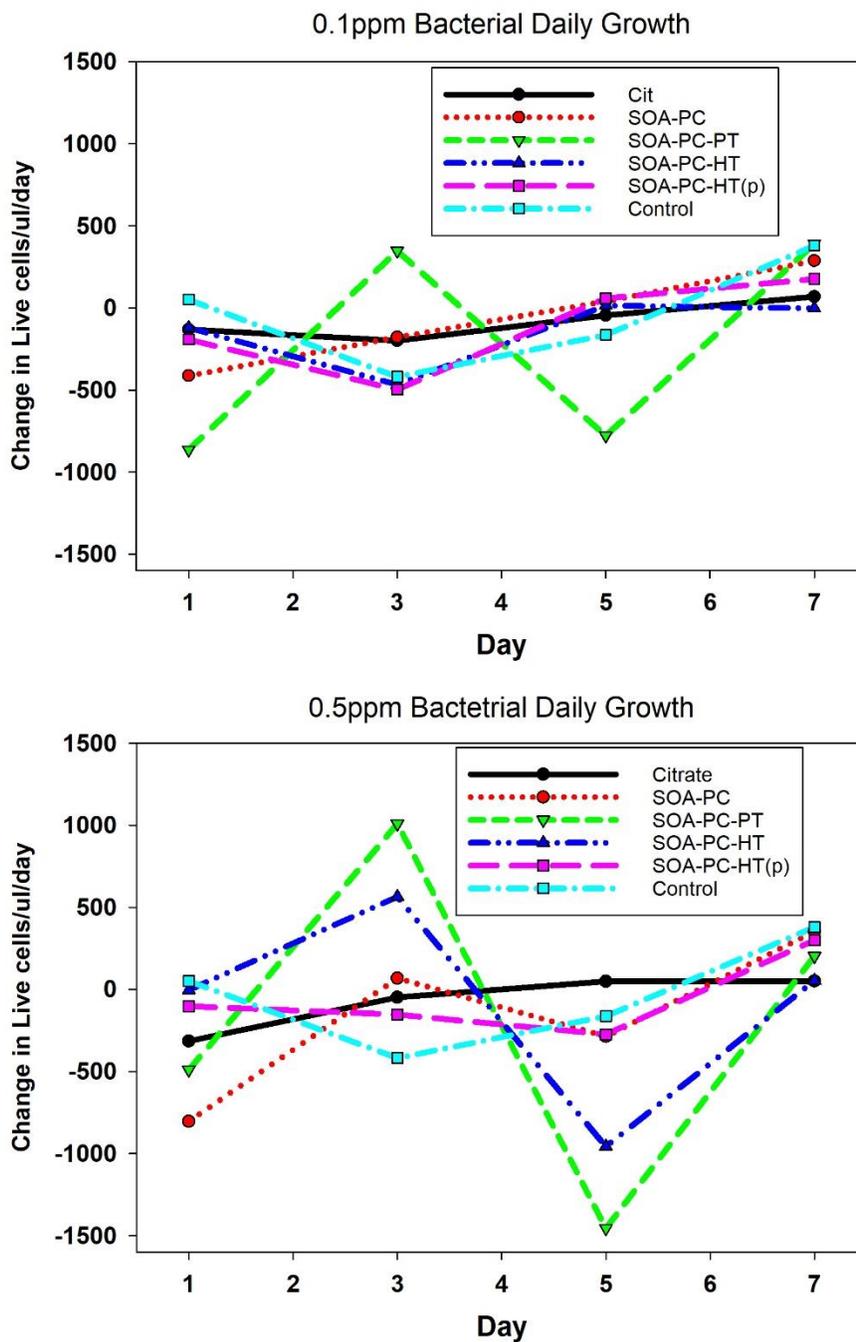


Figure S3: Bacterial growth represented as the change in the number of live cells over the 7-day experiment for spherical AgNPs with varying surface chemistries at 0.1 and at 0.5 mg Ag/L

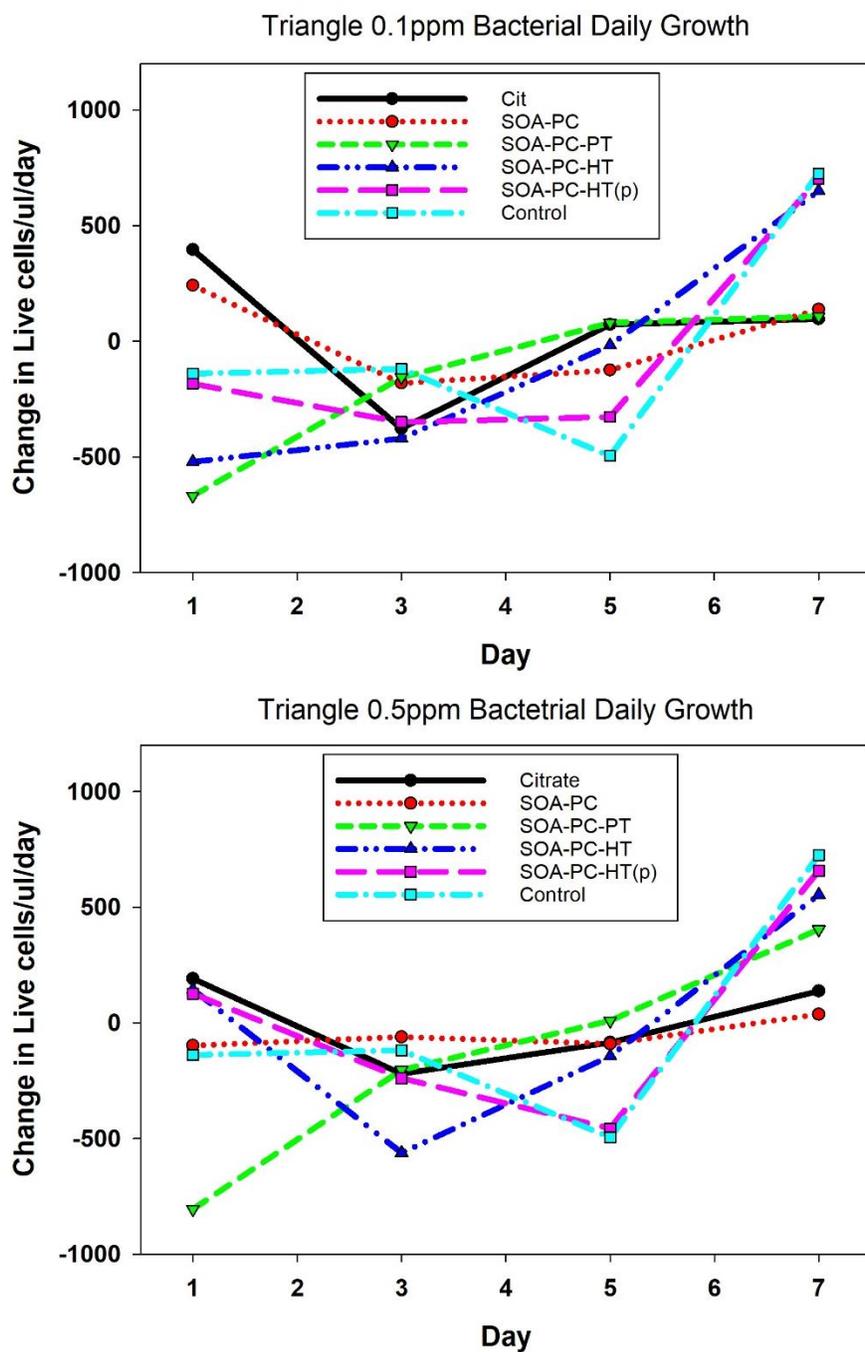


Figure S4: Bacterial growth represented as the change in the number of live cells over the 7-day experiment for triangular AgNPs with varying surface chemistries at 0.1 and at 0.5 mg Ag/L.

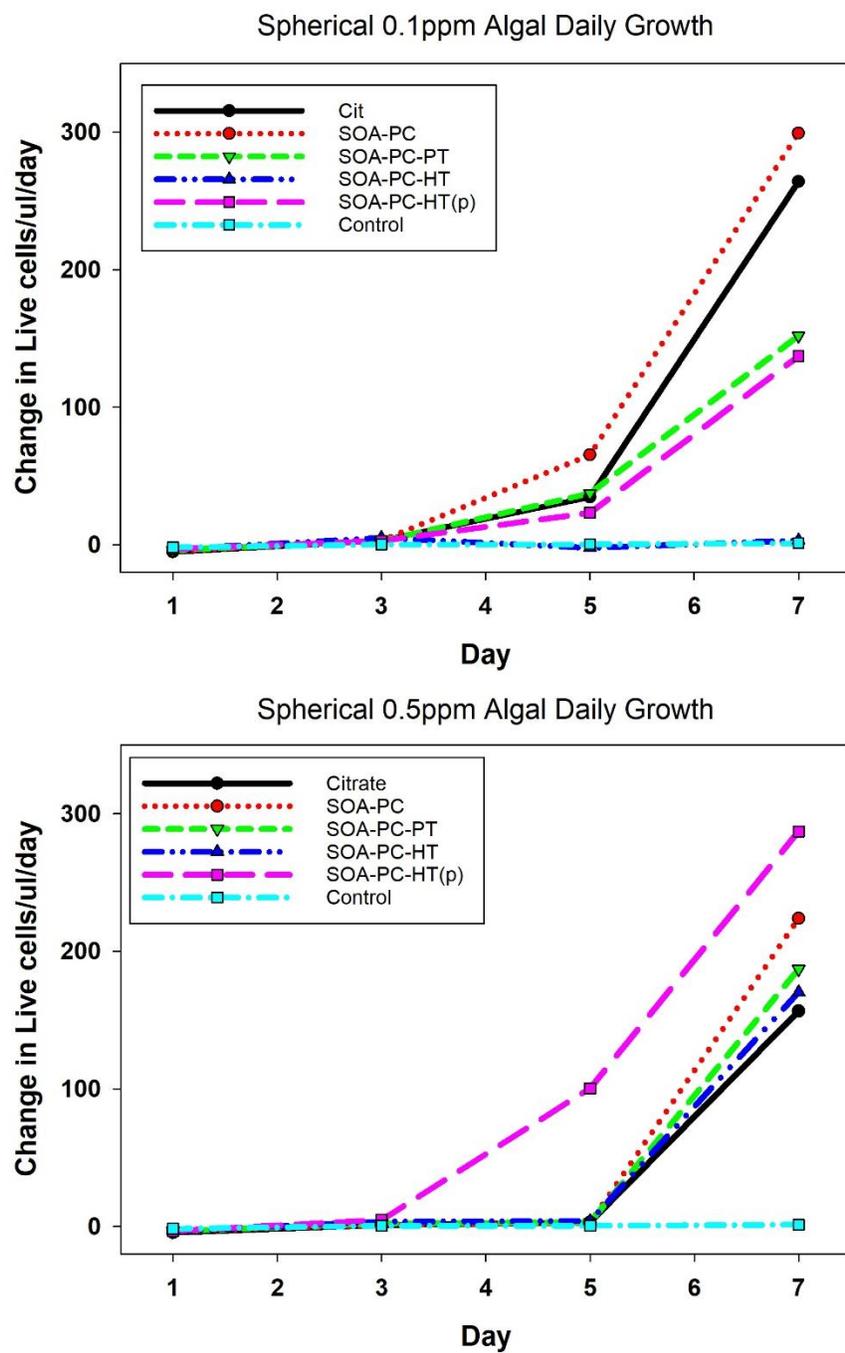


Figure S5: Change in the number of live algal cells following exposure to spherical AgNPs at 0.1 and 0.5 mg Ag/L over the 7-day experimental period.

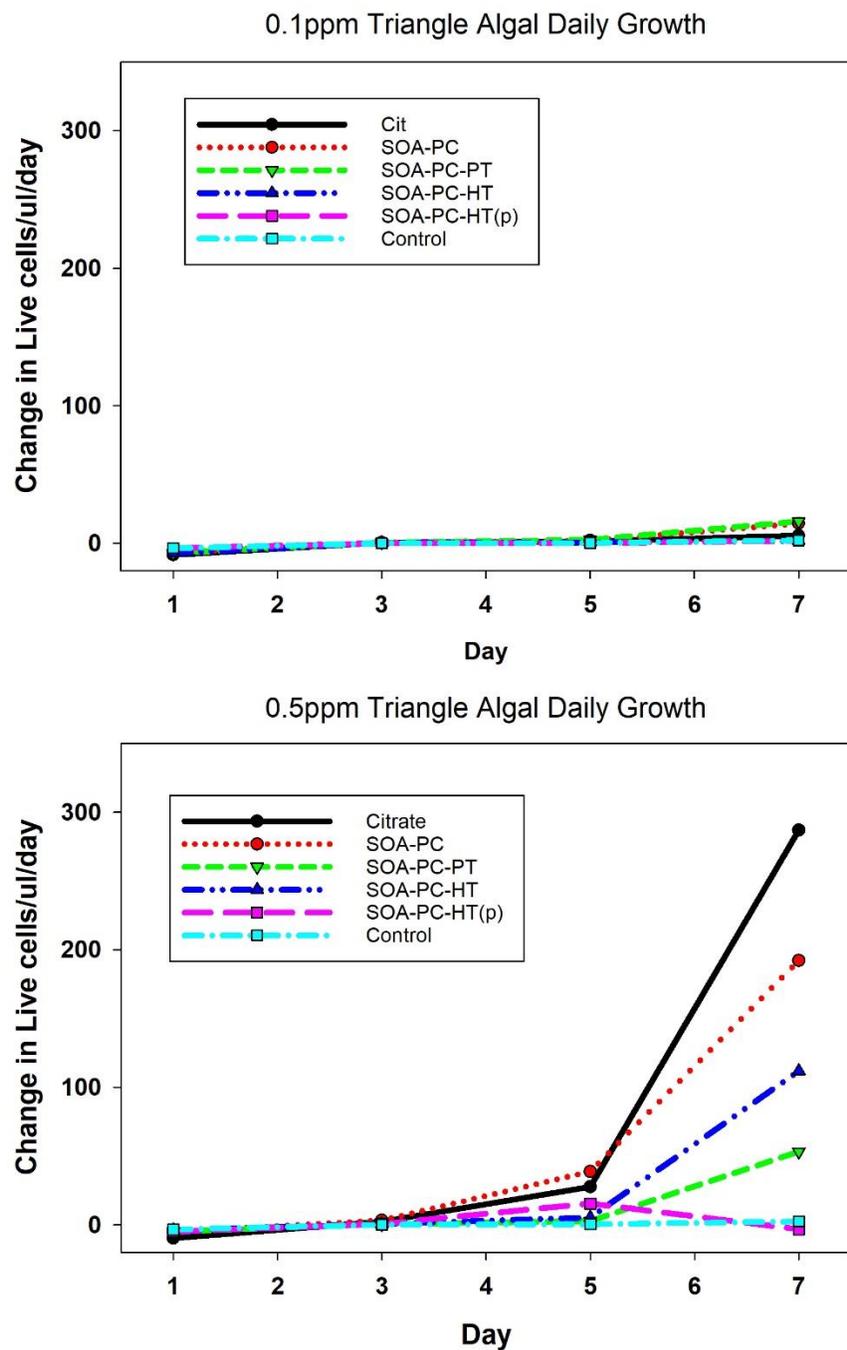


Figure S6: Change in the number of live algal cells following exposure to triangular AgNPs at 0.1 and 0.5 mg Ag/L over the 7-day experimental period.

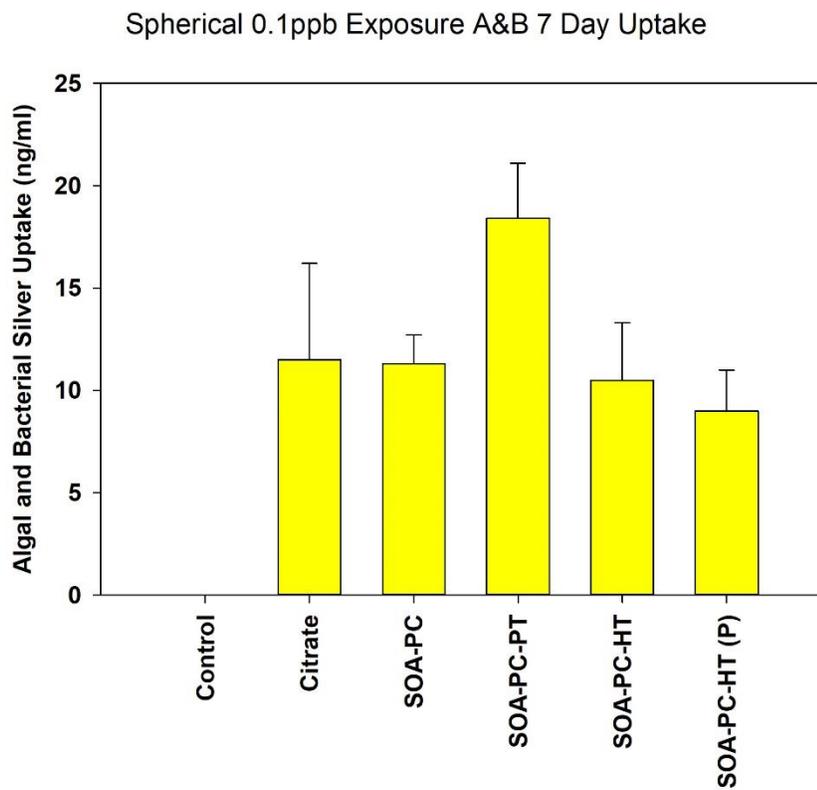
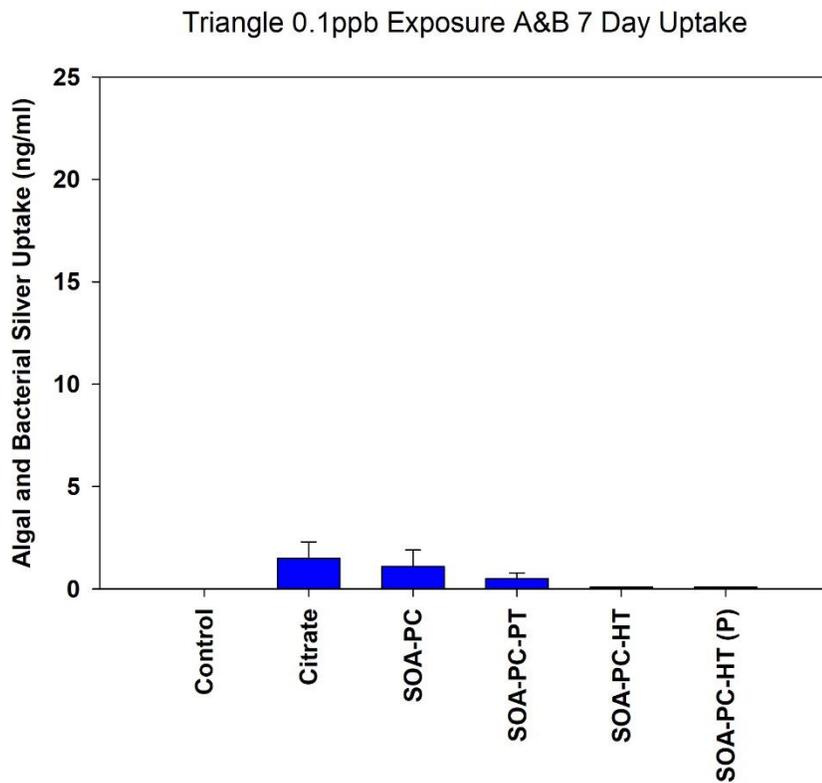


Figure S7: Silver uptake in algal and bacterial cells following 7 day exposure to 0.1 mg Ag/L of lipid coated triangular and spherical nanoparticles with varying surface chemistries.

0.1 ppm Spherical Daphnia Mortality

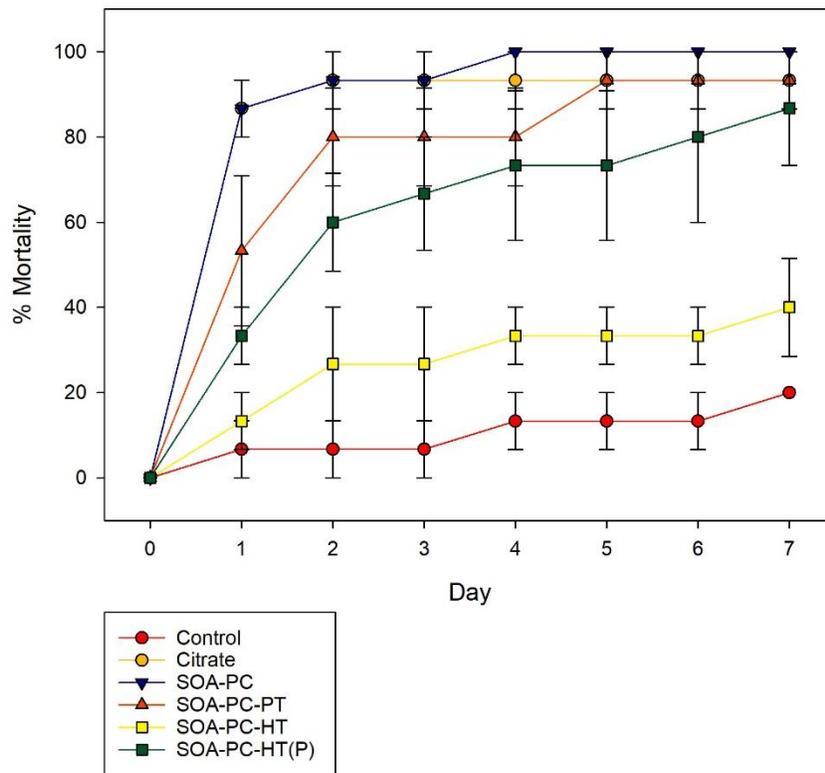


Figure S8: Daily mortality rate (%) for daphnids exposed to AgNSs at 0.1 mg Ag/L over the 7-day experimental period.

Triangular 0.1ppm Daphnia

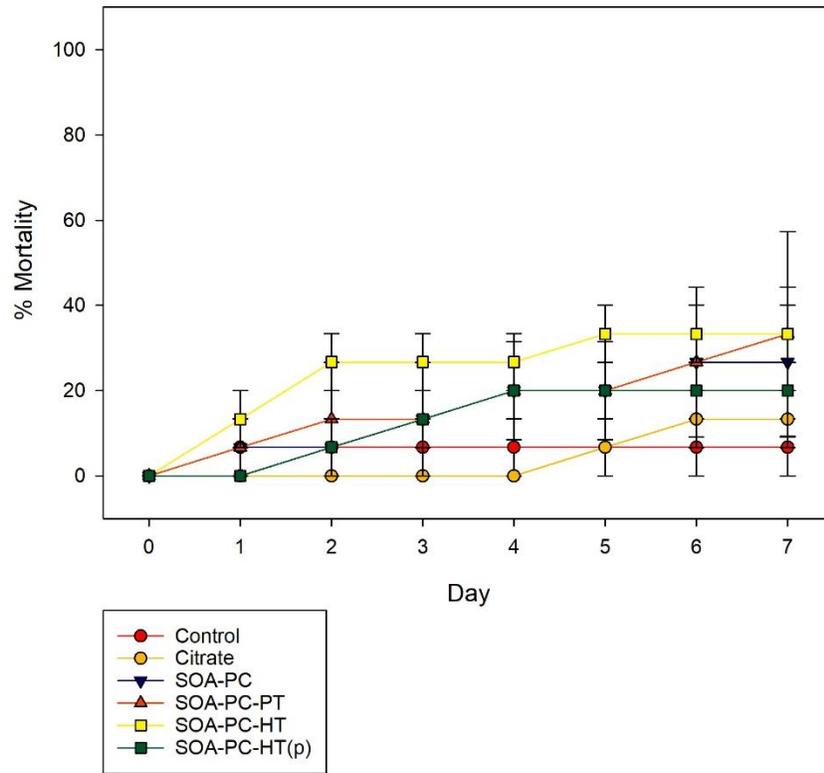


Figure S9: Daily mortality rate (%) for daphnids exposed to AgNPLs at 0.1 mg Ag/L over the 7-day experimental period.

0.5 ppm Spherical Daphnia Mortality

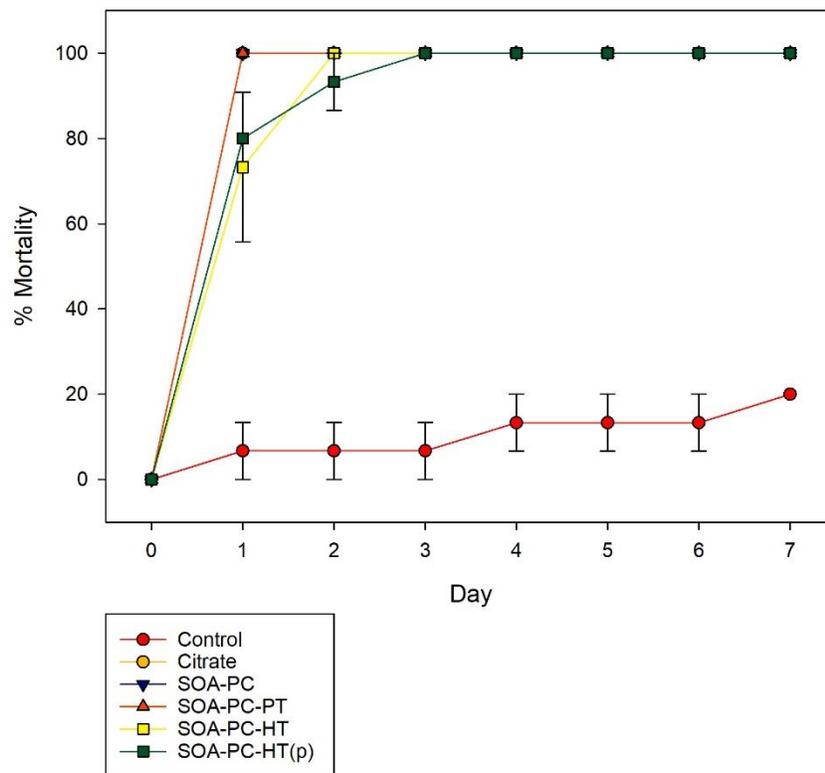


Figure S10: Daily mortality rate (%) for daphnids exposed to AgNSs at 0.5 mg Ag/L over the 7-day experimental period.

Triangle 0.5 ppm Daphnia Mortality

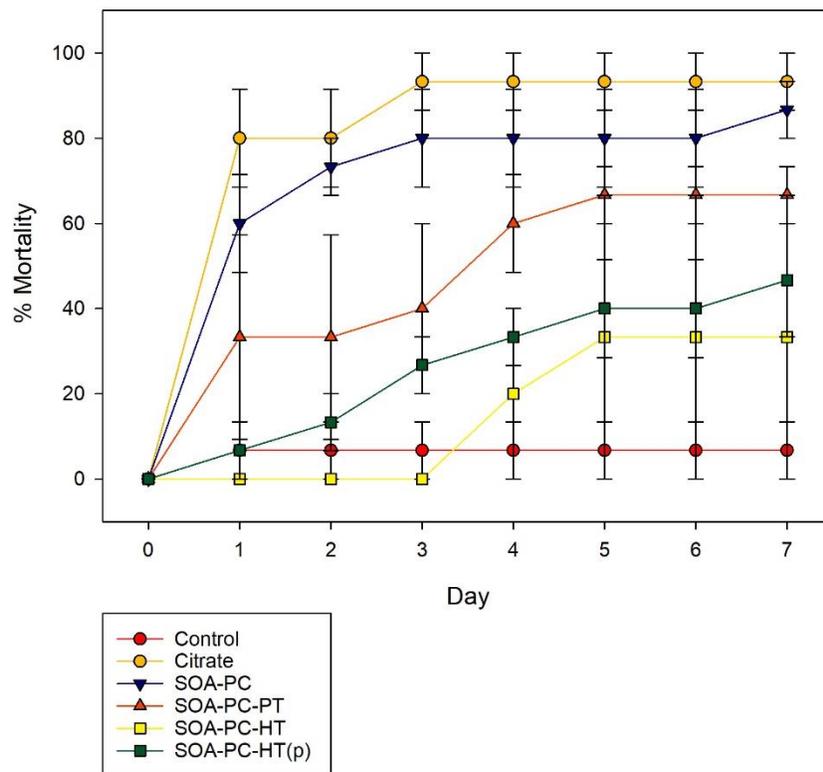


Figure S11: Daily mortality rate (%) for daphnids exposed to AgNPLs at 0.5 mg Ag/L over the 7-day experimental period.

Daphnia Uptake 0.1ppm exposure

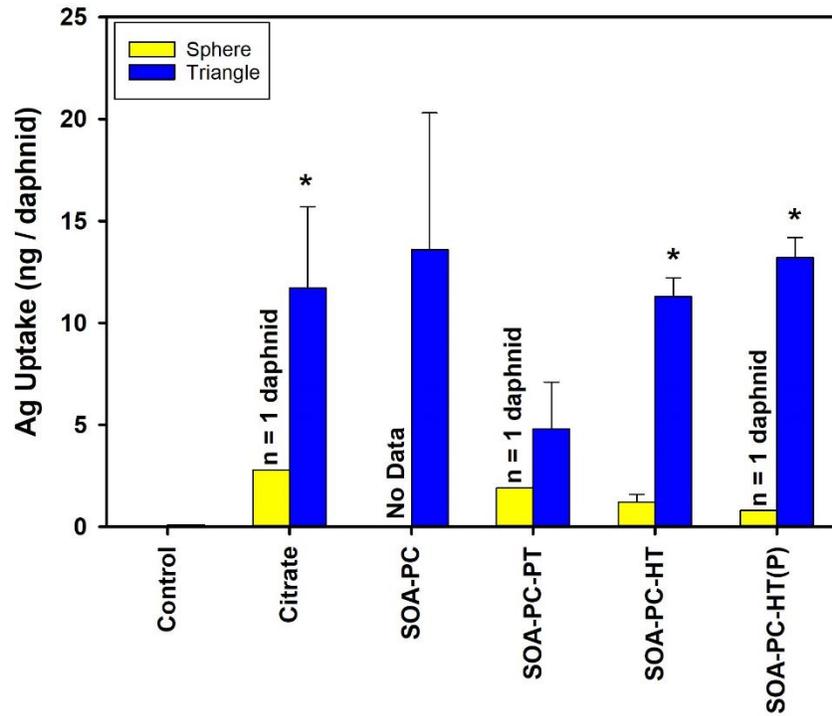


Figure S12: Silver uptake by *Daphnia* surviving the 7-day exposure as determined by ICP-MS. Asterisk indicates significance relative to control daphnid silver content.

Zebrafish 0.5ppm hatching

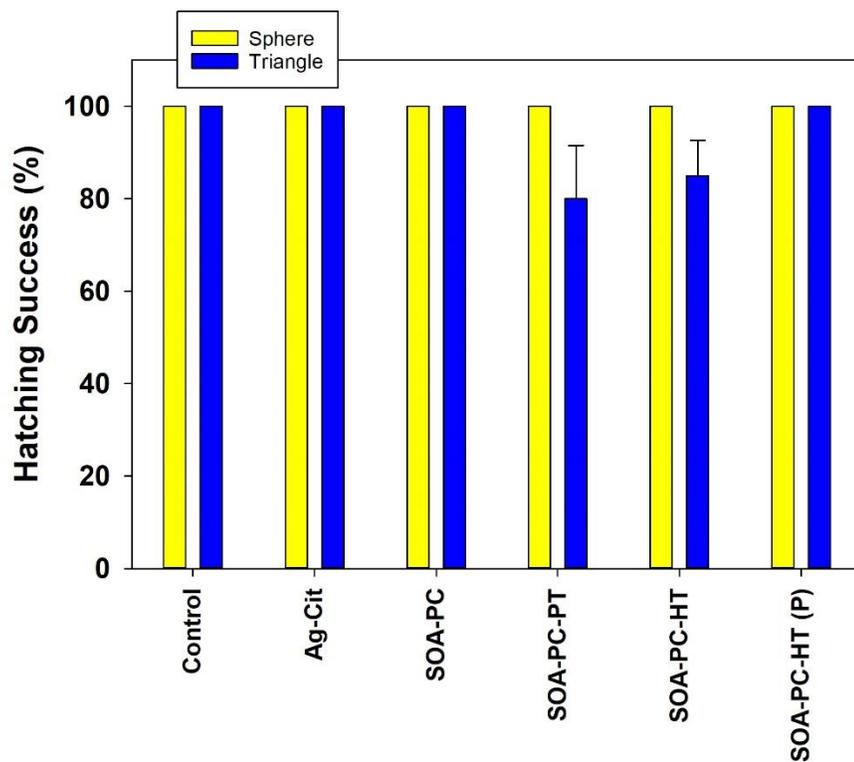


Figure S13: Hatching rate for zebrafish embryos exposed to spherical or triangular AgNPs at 0.5 mg Ag/L over the 7-day experimental period.