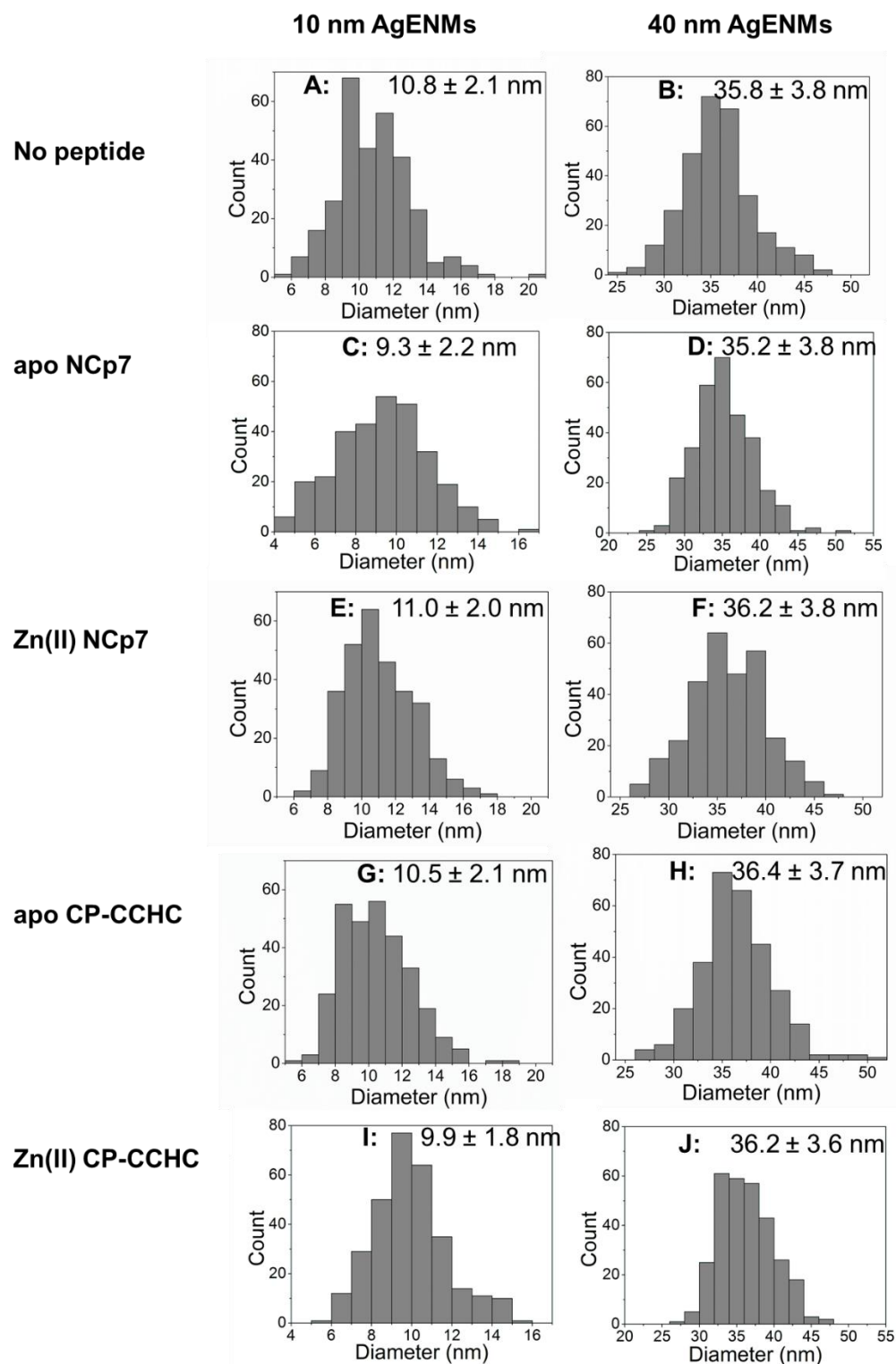


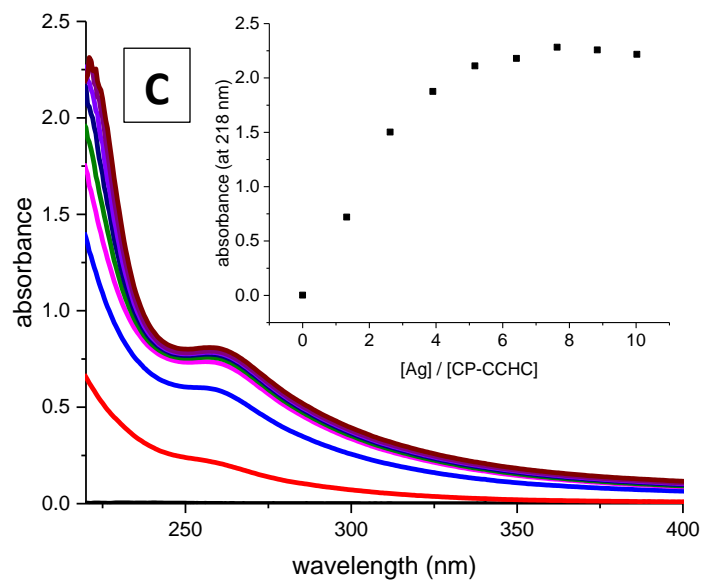
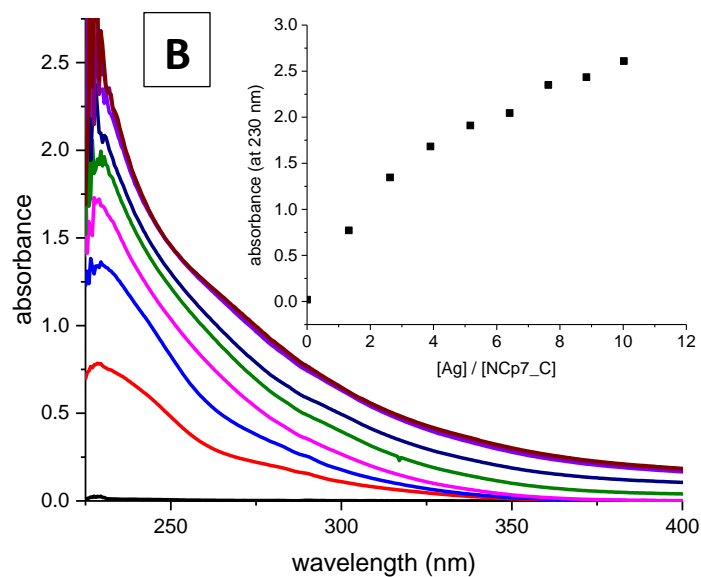
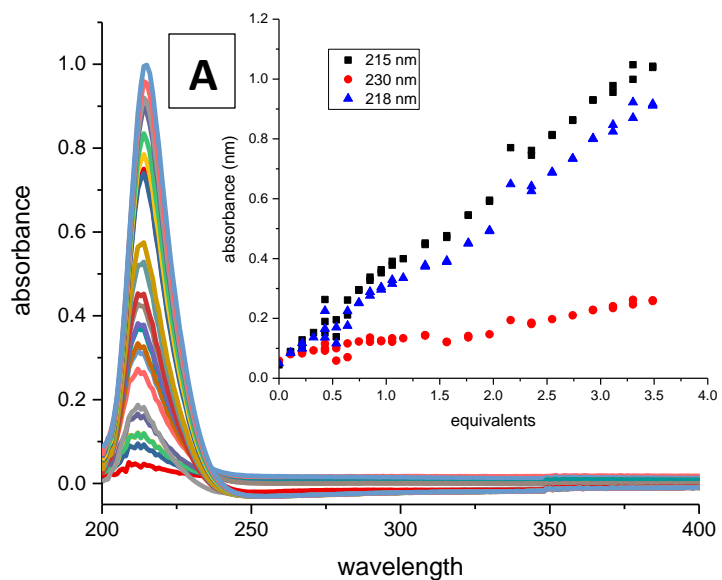
## Supplemental Materials

### Characterization of silver and silver nanoparticle interactions with zinc finger peptides

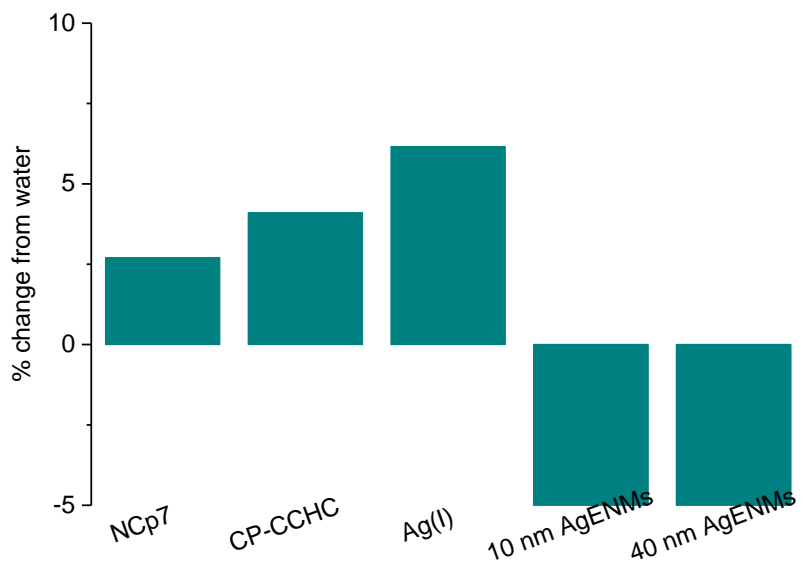
Grace Park<sup>1</sup>, Zoe N. Amaris<sup>1</sup>, Madeline K. Eiken<sup>1</sup>, Karl V. Baumgartner<sup>1</sup>, Kathryn A. Johnston<sup>2</sup>, Jasmine G. Markwordt<sup>1</sup>, Jill E. Millstone<sup>2</sup>, Kathryn E. Splan<sup>3</sup>, and Korin E. Wheeler<sup>1\*</sup>



**Figure SI.1. TEM sizing.** Samples at the right (A, C, E, G and I) all contain 10 nm AgENMs and to the left (B, D, F, H and J) contain 40 nm AgENMs. The AgENMs in the top row (A & B) have not been reacted with peptide; second row (C & D) reacted with apo-NCp7\_C; third row (E & F) reacted with Zn(II) NCp7; fourth row (G & H) reacted with apo CP-CCHC; and bottom row (I & J) reacted with Zn(II) CP-CCHC.



**Figure SI.2. Aqueous silver titrations into buffer.** Control of Ag(I) titrated into 5 mM sodium citrate buffer (A), into 60  $\mu\text{M}$  NCp7\_C in water (B) and 60  $\mu\text{M}$  CP-CCHC in water (C). The apo-peptide spectra were used as baselines to give differential absorption as Ag(I) was titrated into the sample.



**Figure SI.3. FluoZin controls.** Relative change in fluorescence of FluoZin-3 in water after each of the following was added: 20  $\mu\text{M}$  ZF peptide, 20  $\mu\text{M}$  Ag(I), 0.0187 nM 10 nm AgENMs, and 0.001165 nM 40 nm AgENMs. Samples were allowed to react with Ag(I) for 30 min before spectra were taken.