

Investigating the Cellular Uptake of Model Nanoplastics by Single Cell ICP-MS

Domenico Cassano¹, Alessia Bogni¹, Rita La Spina¹, Douglas Gilliland¹, and Jessica Ponti^{1,*}

¹ European Commission, Joint Research Centre (JRC), Ispra, Italy

* Correspondence: jessica.ponti@ec.europa.eu

Supporting Information

Figure S1

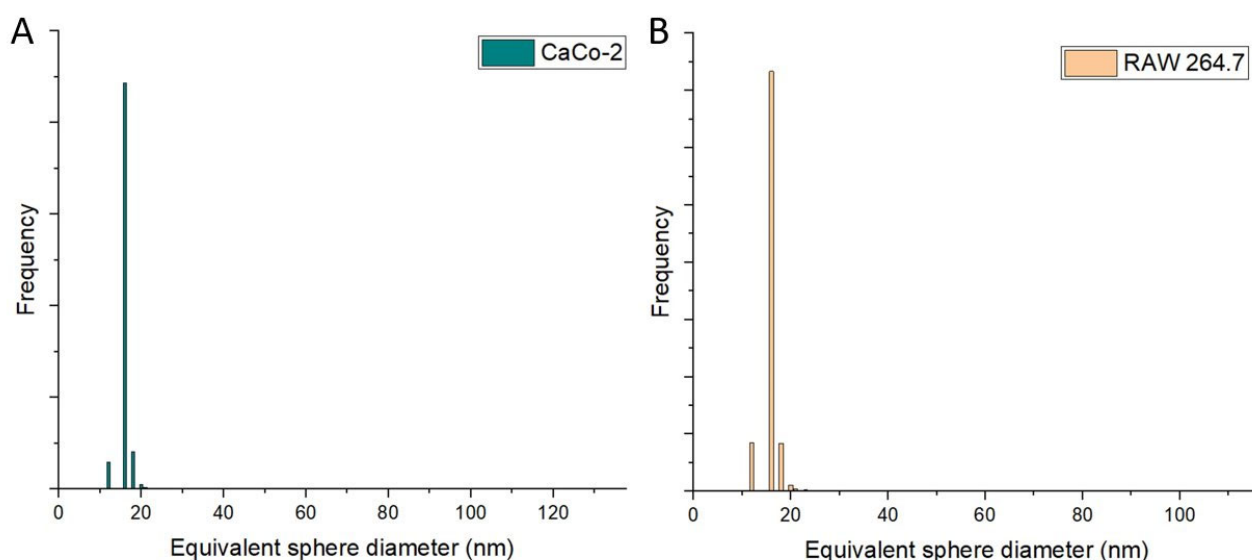


Figure S1. Equivalent sphere diameter of control CaCo-2 (A) and RAW 264.7 (B) cells. The distributions are almost identical and are likely arising from background noise of scICP-MS instrument.

Figure S2

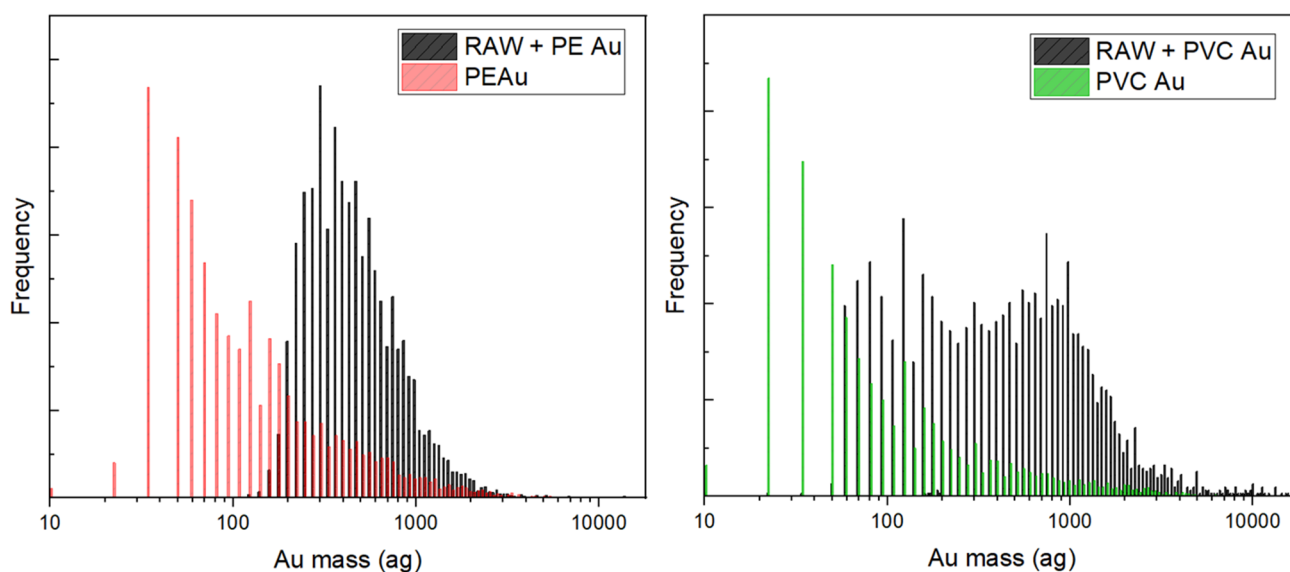


Figure S2. (left) Au mass distribution of PE Au (red) and RAW 264.7 cells incubated with PE Au for 48 hours (black) at the concentration of $1 \mu\text{g mL}^{-1}$. (right) Au mass distribution of PVC Au (green) and RAW 264.7 cells incubated with PVC Au for 48 hours (black) at the concentration of $1 \mu\text{g mL}^{-1}$.

Figure S3

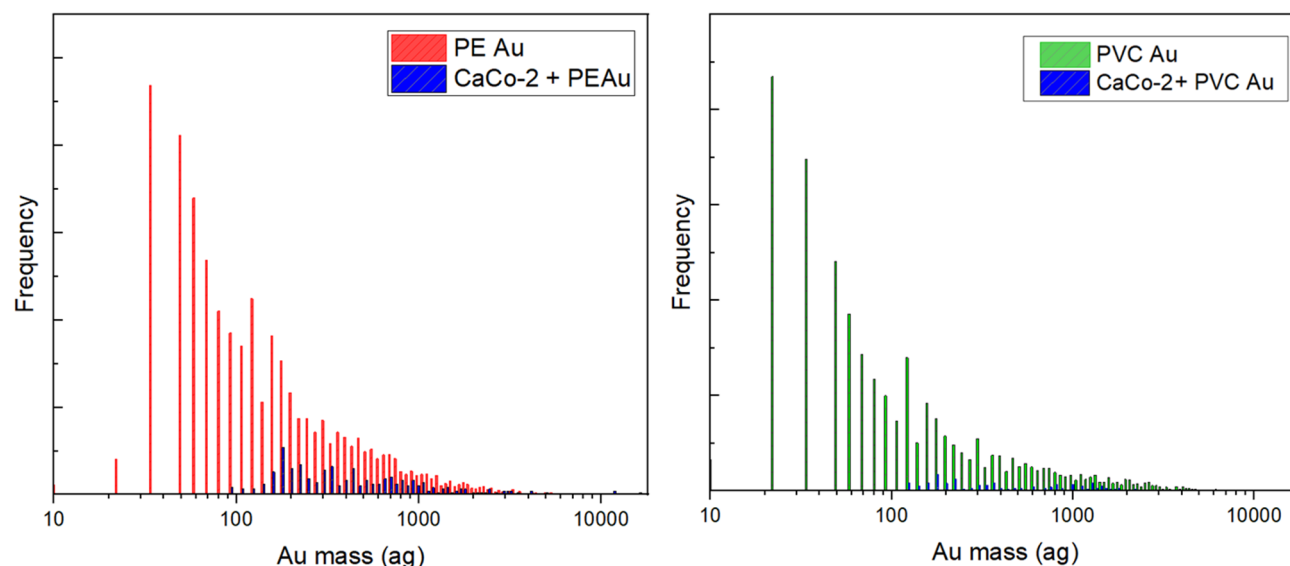


Figure S3. (left) Au mass (actograms) distribution of PE Au (red) and CaCo-2 cells incubated with PE Au for 48 hours (blue) at the concentration of $1 \mu\text{g mL}^{-1}$. (right) Au mass (actograms) distribution of PVC Au (green) and CaCo-2 cells incubated with PVC Au for 48 hours (blue) at the concentration of $1 \mu\text{g mL}^{-1}$.

Figure S4

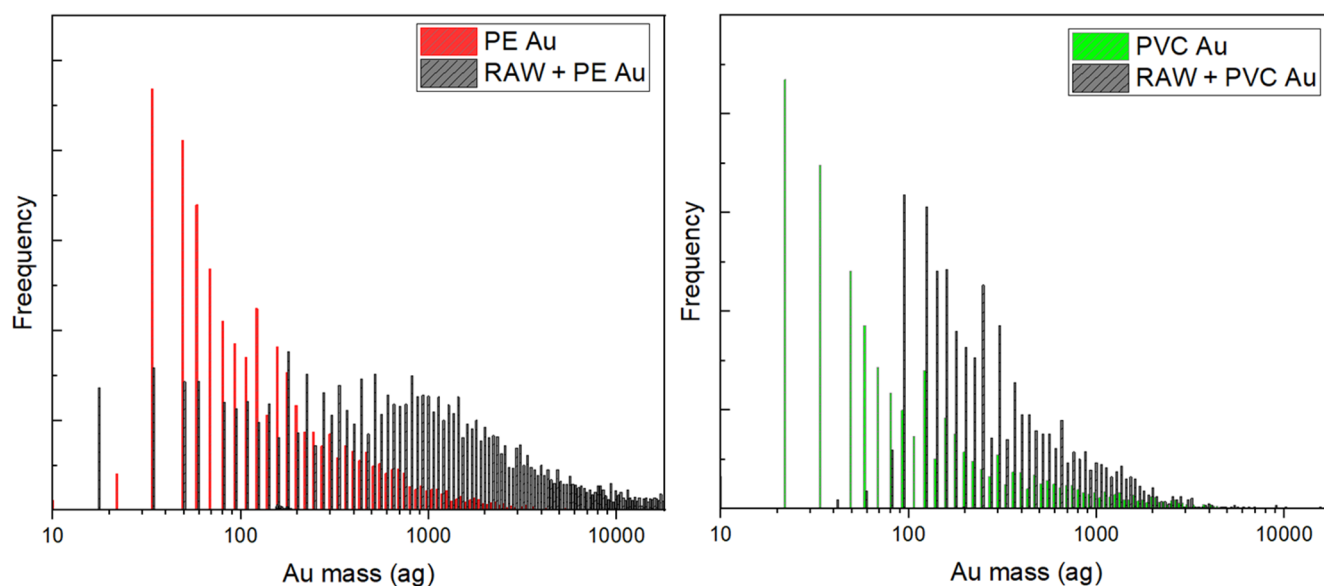


Figure S4. (left) Au mass (actograms) distribution of PE Au (red) and RAW 264.7 cells incubated with PE Au for 48 hours (black) at the concentration of $100 \mu\text{g mL}^{-1}$. (right) Au mass (actograms) distribution of PVC Au (green) and RAW 264.7 cells incubated with PVC Au for 48 hours (black) at the concentration of $100 \mu\text{g mL}^{-1}$.

Figure S5

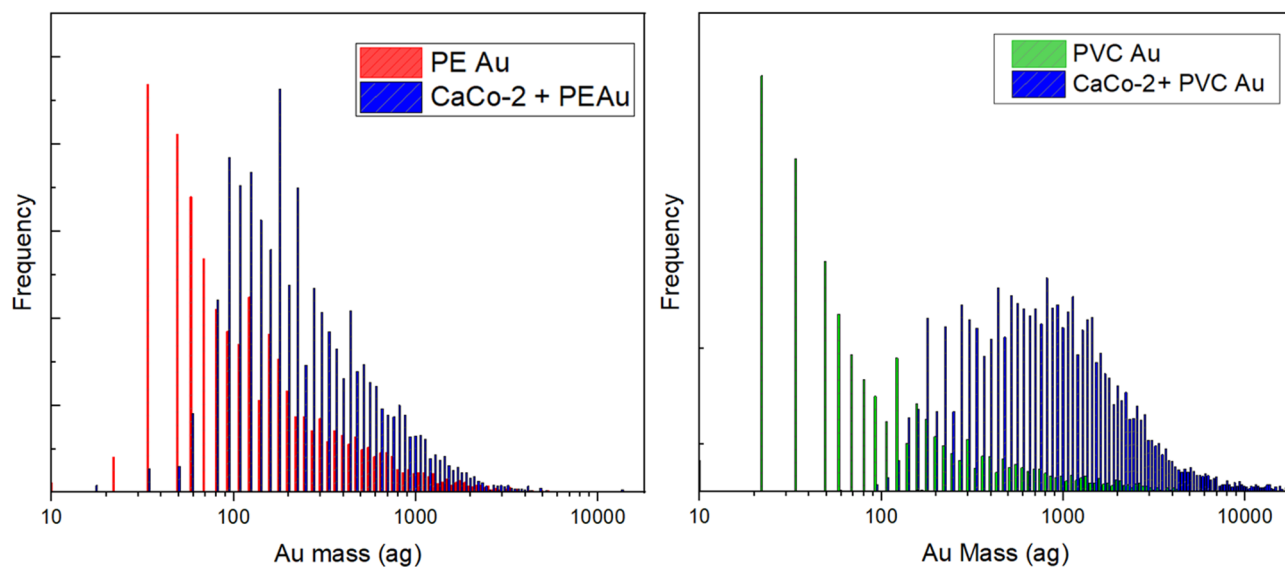


Figure S5. (left) Au mass (actograms) distribution of PE Au (red) and CaCo-2 cells incubated with PE Au for 48 hours (blue) at the concentration of $100 \mu\text{g mL}^{-1}$. (right) Au mass (actograms) distribution of PVC Au (green) and CaCo-2 cells incubated with PVC Au (blue) for 48 hours at the concentration of $100 \mu\text{g mL}^{-1}$.