

**Mass Spectrometry-based Metabolomics to Assess Uptake of Silver Nanoparticles by  
*Arabidopsis thaliana***

**Supplemental Information**

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## **Supplemental Information**

**Table S1:** Composition of  $\frac{1}{4}$  strength Hoagland's solution: Macro and micro elements

<b>Component</b>	<b>Concentration</b>
<b>Potassium nitrate</b>	1.25 mM
<b>Calcium nitrate</b>	1.25 mM
<b>Monopotassium phosphate</b>	0.25 mM
<b>Magnesium sulfate</b>	0.50 mM
<b>Iron chelate</b>	72 $\mu$ M
<b>Boric Acid</b>	12 $\mu$ M
<b>Manganese(II) nitrate</b>	2.3 $\mu$ M
<b>Zinc sulfate heptahydrate</b>	0.20 $\mu$ M
<b>Copper sulfate pentahydrate</b>	0.08 $\mu$ M
<b>Sodium molybdate dihydrate</b>	0.02 $\mu$ M

**Figure S1:** *Arabidopsis* growth set-up in Hoagland's Solution



**Table S2:** Instrument and method limit of detection (LOD) and limit of quantification (LOQ).

	<b>LOD</b> $^{107}\text{Ag}$	<b>LOQ</b> $^{107}\text{Ag}$
Instrumental (ng/mL)	0.01	0.03
Method (ng/mg)	0.04	0.13

**Table S3:** Total silver concentration (ng/mL) in Hoagland's solution treatments after 24 hours of plant exposure, determined using ICP/MS.

Time	24 hours	$^{107}\text{Ag}$
Treatment	Average ± Std dev	
Control	2.93 ± 0.18	
$\text{AgNO}_3$	737.13 ± 3.16	
AgNP Citrate	750.79 ± 1.96	
AgNP PVP	979.21 ± 4.12	