Supporting Information

"Microwave-assisted green synthesis of silver nanoparticles using orange peel extract."

GA Kahrilas, LM Wally, SJ Fredrick, M Hiskey, AL Prieto, and JE Owens

We present data for batch-to-batch variation of silver nanoparticles (AgNPs) synthesized with orange peel extract. These samples were prepared in the CEM microwave for 15 min. The relative standard deviation (as a measure of precision) is provided and is, in most cases, less than 20%.
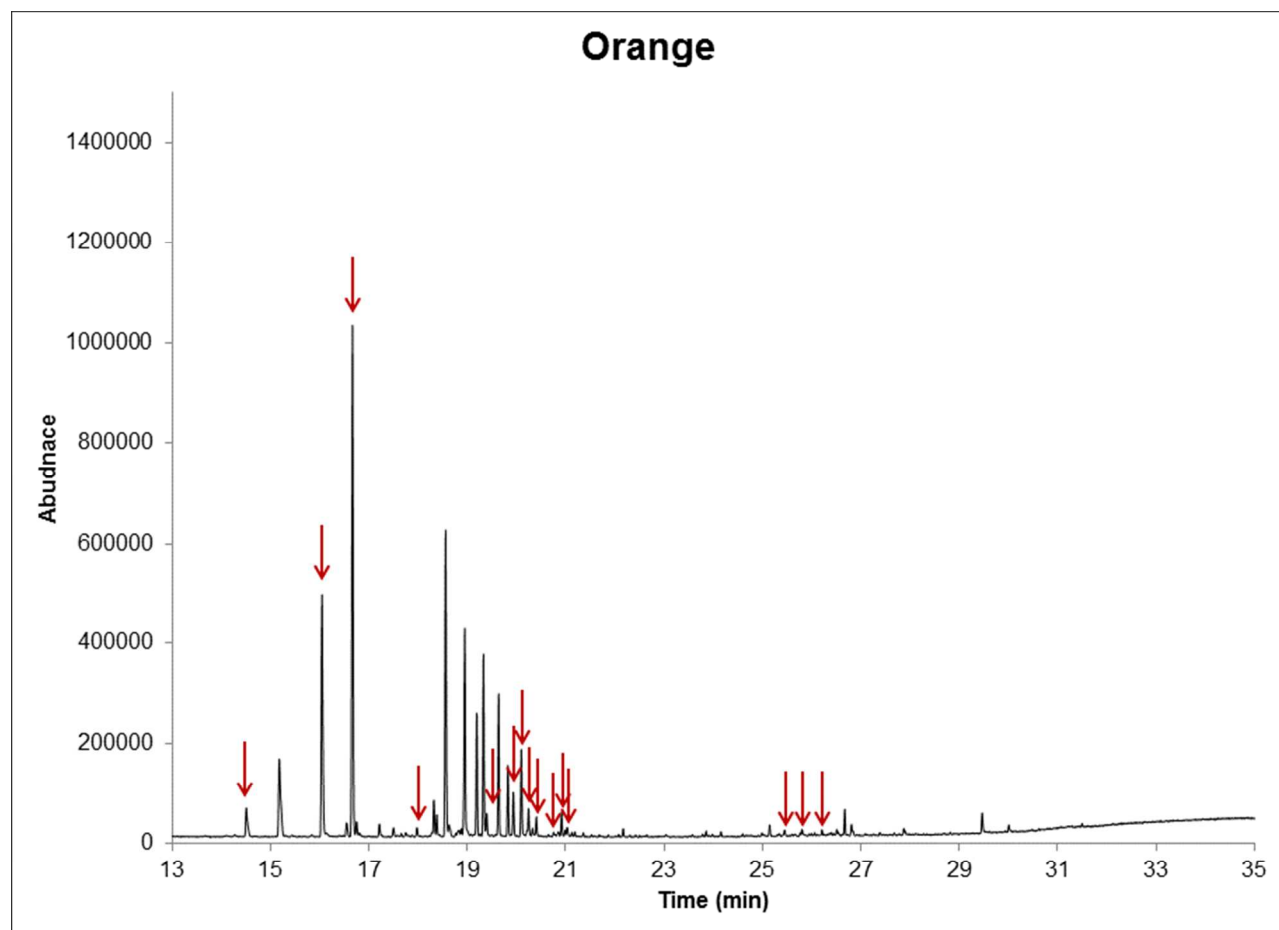
Table S1: Indicators of batch-to-batch variation for AgNPs synthesized with orange peel extract in the CEM microwave for 15 min (temperature may vary)

Replicate #	Temp (°C)	λ_{max}	Absorbance (AU)	Normalized Absorbance[1]	Norm. Abs. / Mass (g) of $AgNO_3$	Peak Width at Half-Maximum
1	75.0	416	2.02	2.02	91.5	131
2	100.	416	1.28	2.57	110	193
3	90.0	428	1.40	2.80	105	180
4	90.0	425	1.51	3.03	122	188
5	90.0	420	1.62	1.62	70.4	149
Mean	89.0	421	1.57	2.41	99.8	168
Std Dev	8.94	5.39	0.284	0.578	19.7	26.9
RSD, %	10.1	1.28	18.1	24.0	19.8	16.0

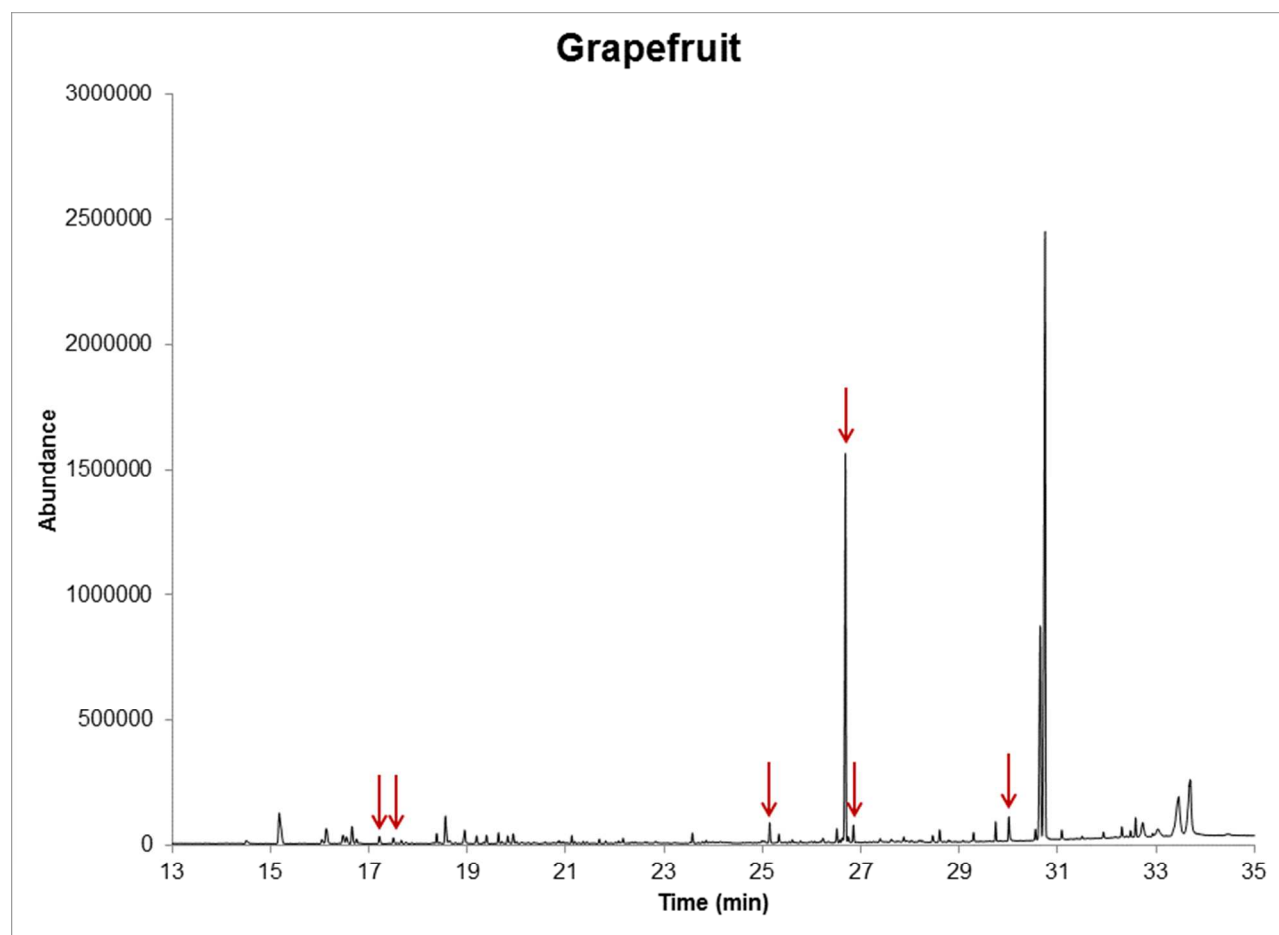[1]Sample replicates 2, 3, and 4 exceed the 2 AU limit of the UV-Vis spectrophotometer. These samples were diluted in a 1:1 ratio with 18 MΩ DI water and re-analyzed.

The following GC/MS chromatograms of the various citrus peel extracts utilized in the microwave-assisted syntheses of silver nanoparticles (AgNPs) are provided. Arrows indicate the highest abundance of a particular compound in a given extract when compared to the other extracts. Samples that were analyzed included orange, grapefruit, tangelo, lemon, and lime extracts. Finally, a reagent blank is provided.
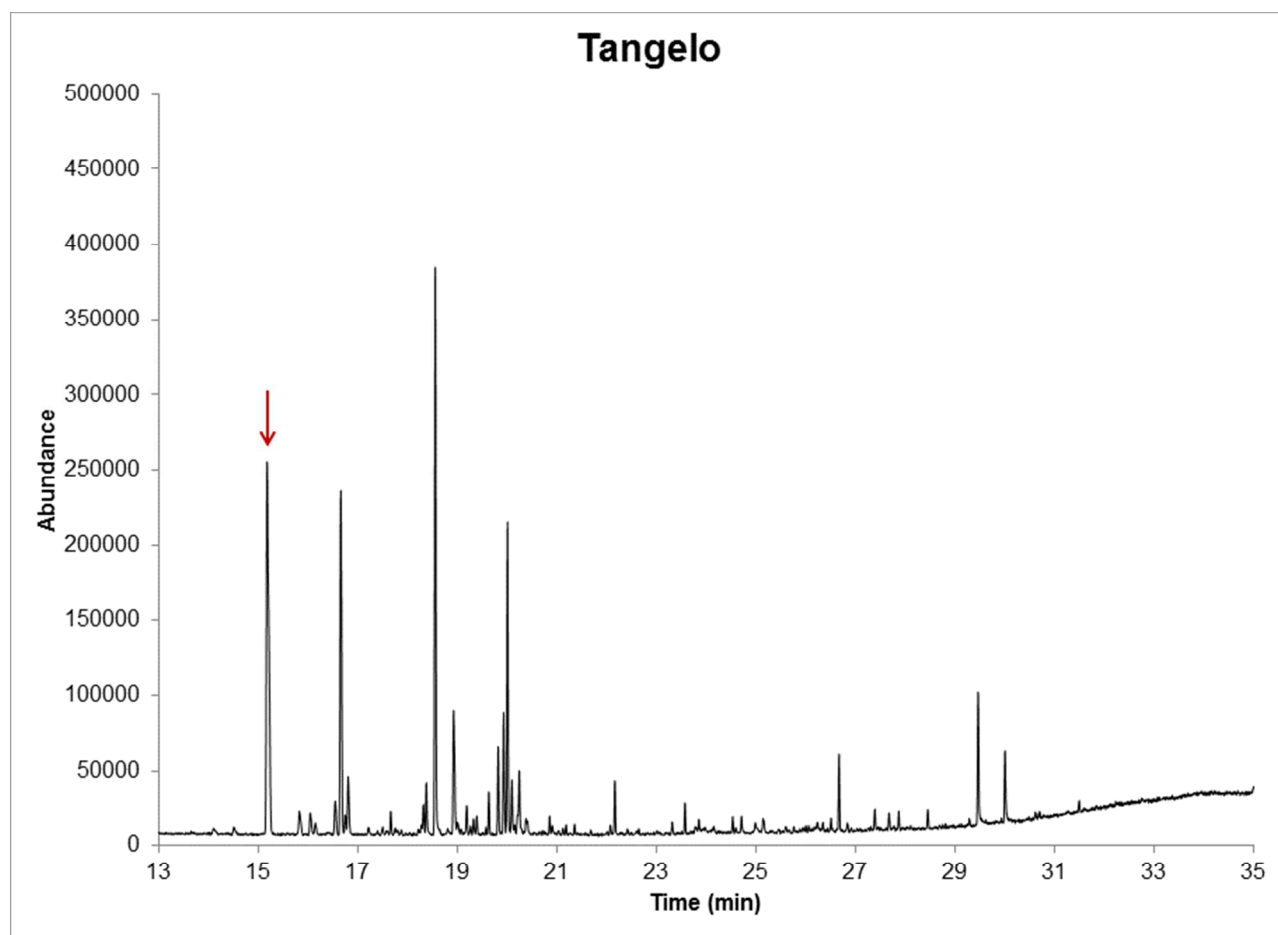
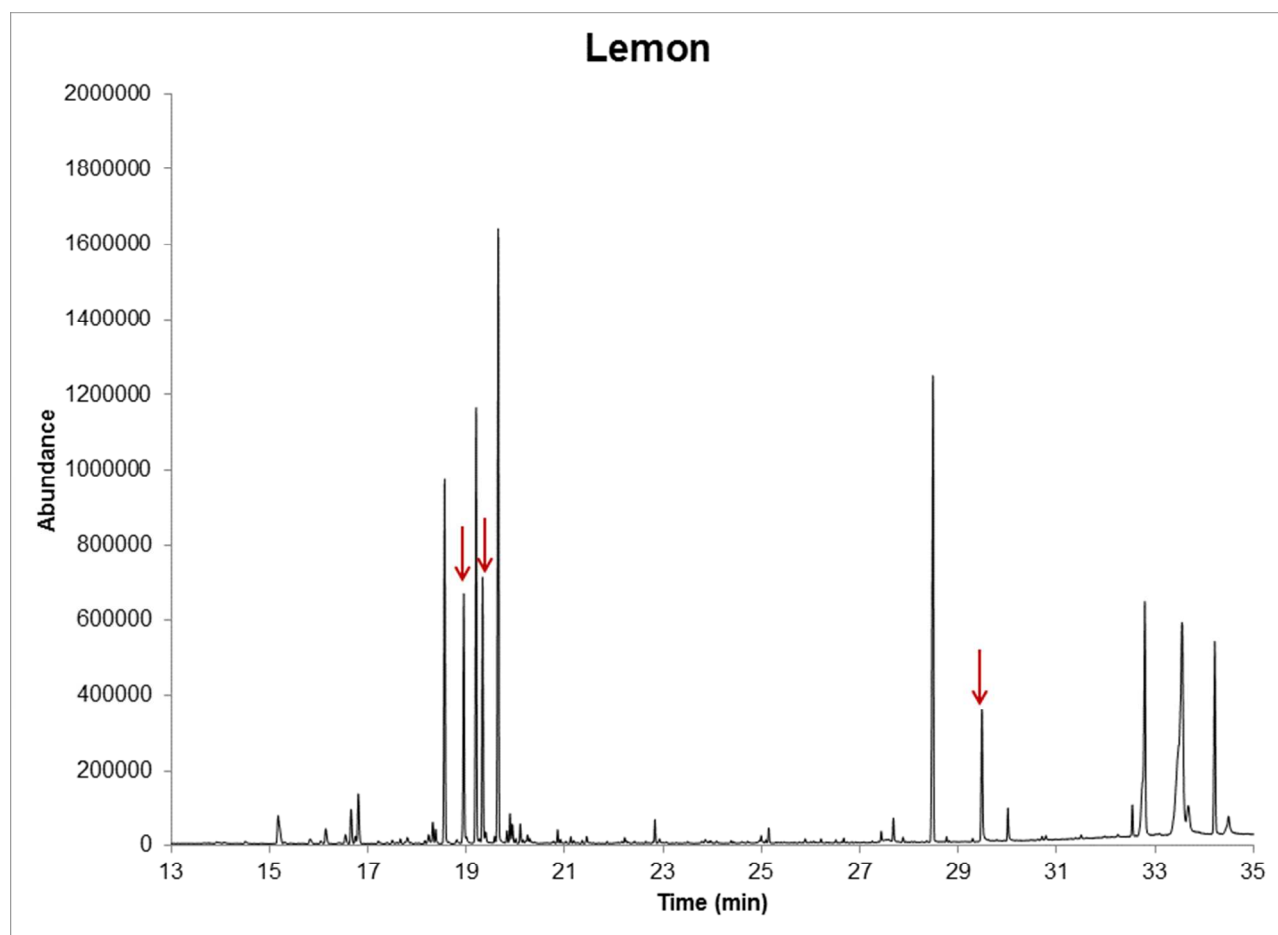**Figure S1: Orange Peel Extract**
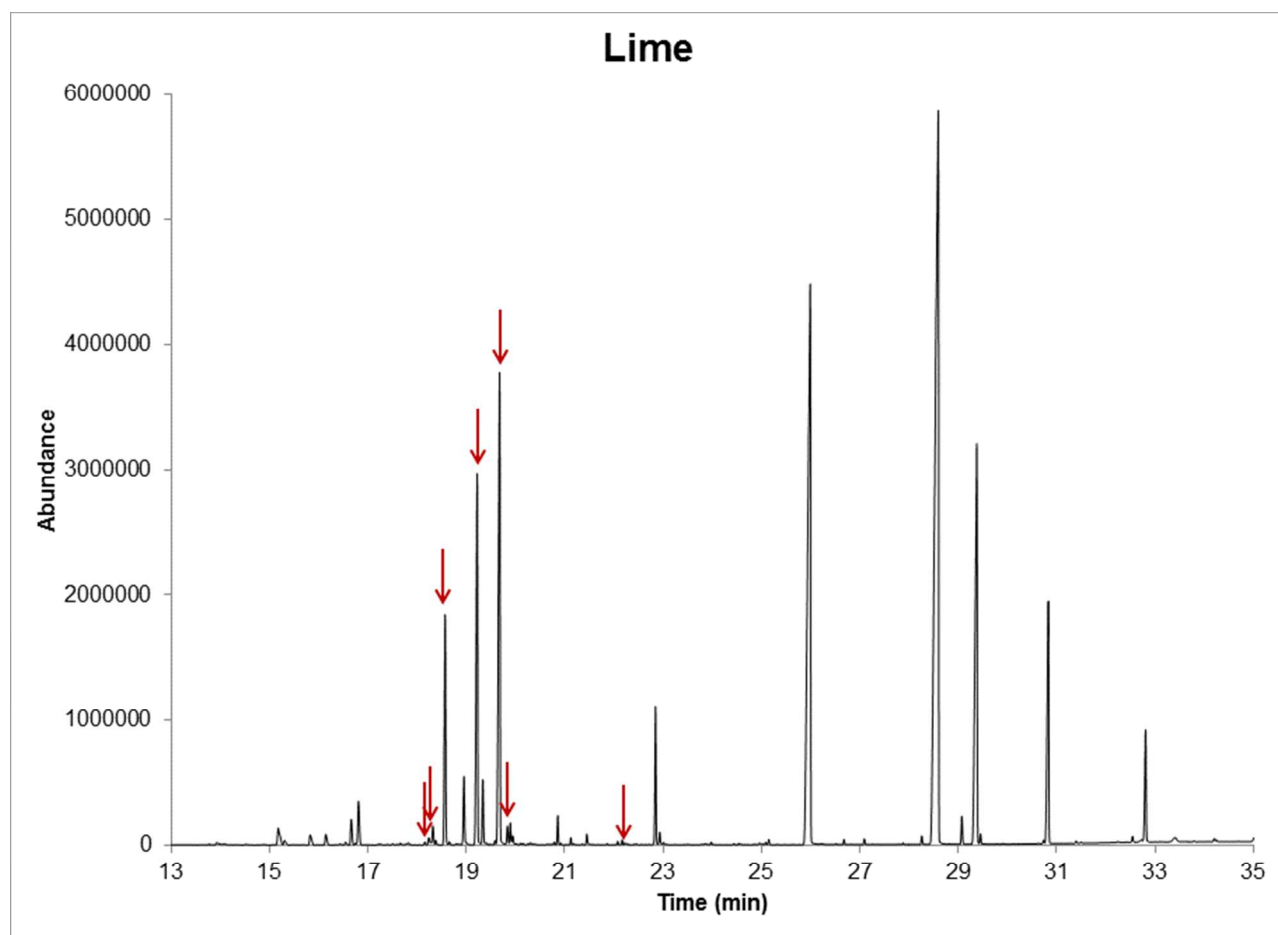
Figure S2: Grapefruit Peel Extract

Figure S3: Tangelo Peel Extract

Figure S4: Lemon Peel Extract

Figure S5: Lime Peel Extract

Figure S6: Reagent Blank