

Appendix S4. The extraction medium was analysed using an atomic absorption spectrometer (AAS) with a detection limit of $<0.003 \mu\text{g Au/ml}$. The spectrometer used was an AAnalyst 800 (Perkin-Elmer, Norwalk, USA) equipped with a graphite furnace and a gold hollow cathode lamp. Absorption of gold was measured at 242.8 nm and the spectral bandwidth was 0.7 nm. Samples were analysed using Zeeman background correction. Samples were diluted in 0.5 M nitric acid and 20 μl of each sample was injected, together with a matrix modifier (0.005 mg palladium + 0.003 mg magnesium nitrate). Standard samples (0 (blank sample)- 0.05 ppm gold) were prepared by diluting the gold standard solution in 0.5 M nitric acid.