

Continuous flow synthesis of small silver nanoparticles *via* process intensification and hydrogen reduction

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Supporting Information

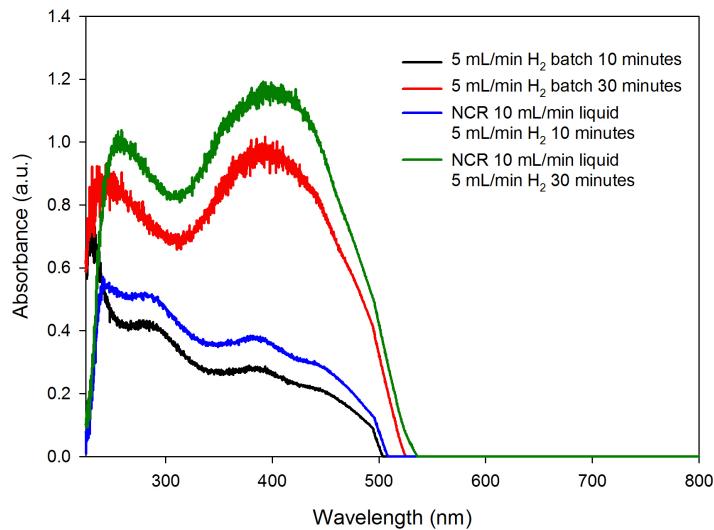


Figure S1 - UV-Vis absorption spectra comparing batch to a recirculating narrow-channel reactor after 10 and 30 minutes at same hydrogen flow rate for a 200 mL reagent volume

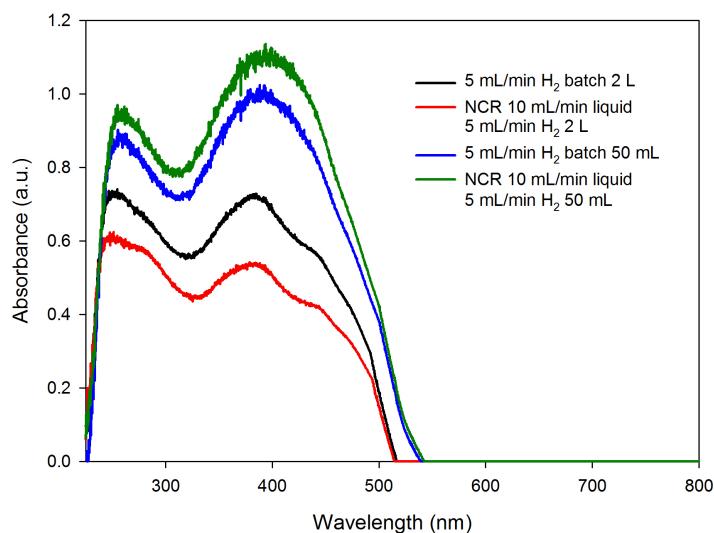


Figure S2 - UV-Vis absorption spectra comparing batch to narrow-channel reactor after 30 minutes at same hydrogen flow rate for 50 mL and 2 L reagent volume

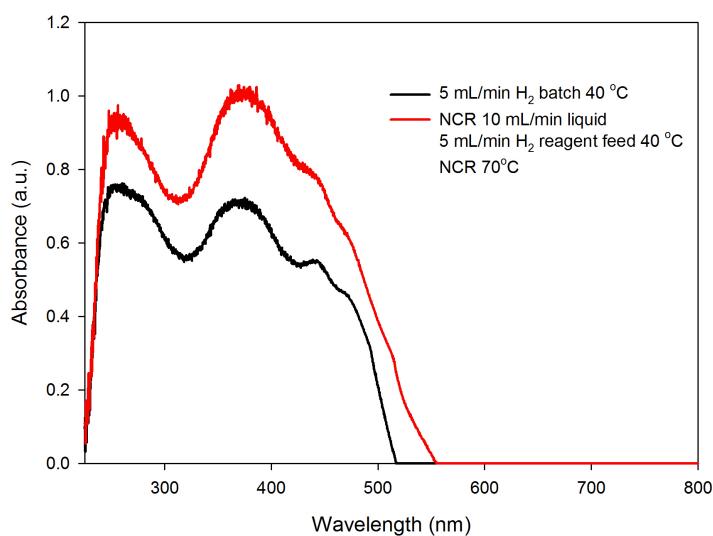


Figure S3 - UV-Vis spectra comparing optical properties of colloidal silver solution after 120 minutes between a batch reaction at 40 °C and a recirculating NCR experiment with a reagent feed solution temperature of 40 °C and an NCR temperature of 70 °C

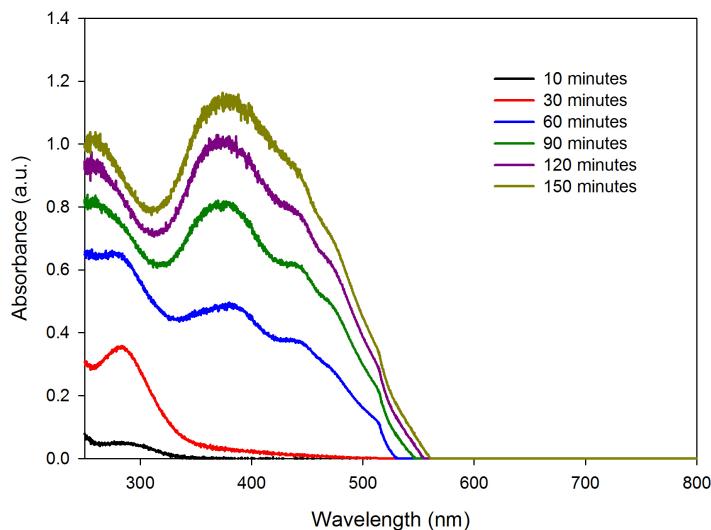


Figure S4 - Evolution of the optical properties of a colloidal silver nanoparticle solution during an NCR experiment using 0.05 %w/v NaPP with 40 °C reagent feed solution temperature and 70 °C NCR temperature

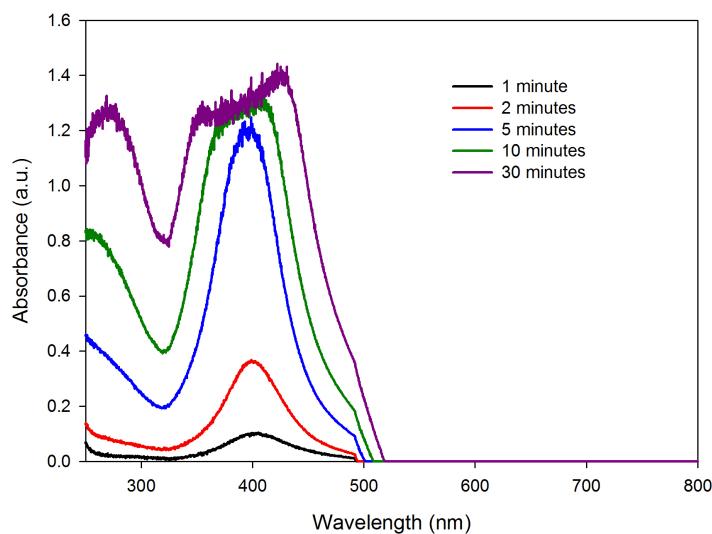


Figure S5 - UV-Vis absorption spectra of silver nanoparticles produced with 0.05 %w/v tripolyphosphate at various times from a recirculating NCR experiment with a reagent feed solution temperature and NCR temperature of 70 °C

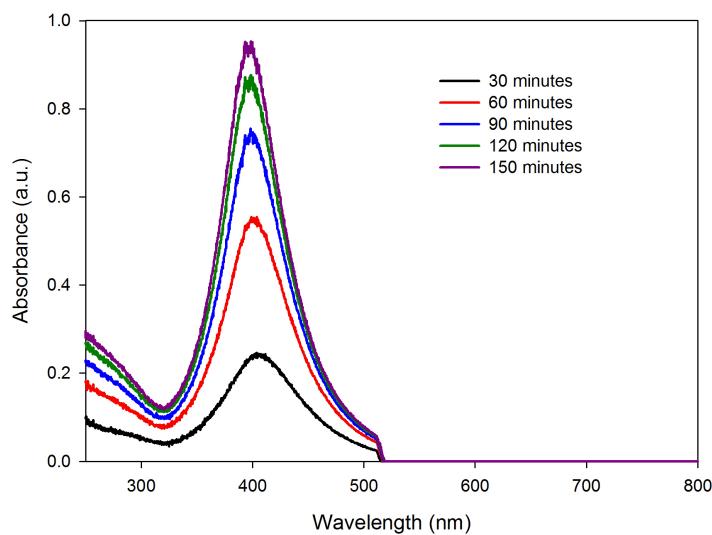


Figure S6 - UV-Vis absorption spectra of silver nanoparticles produced with 0.005 %w/v tripolyphosphate at various times from a recirculating NCR experiment with a reagent feed solution temperature and NCR temperature of 70 °C

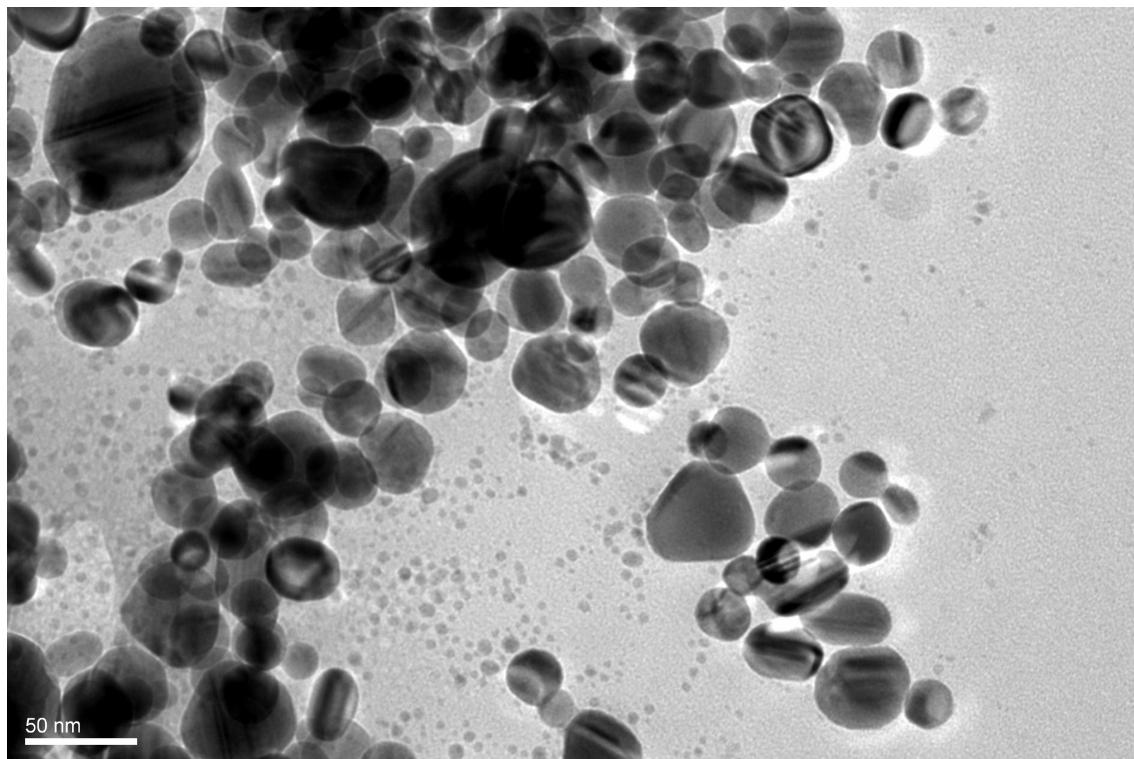


Figure S7 - TEM of silver nanoparticles produced with 0.05 %w/v NaTPP for a recirculating NCR experiment at 70 °C after 30 minutes