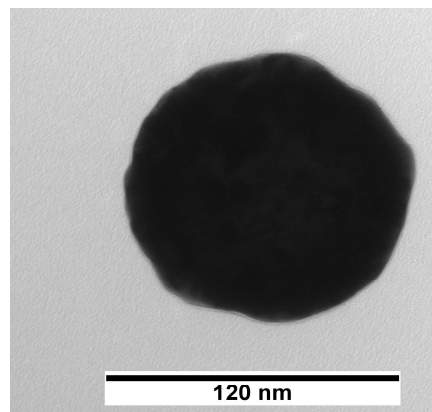
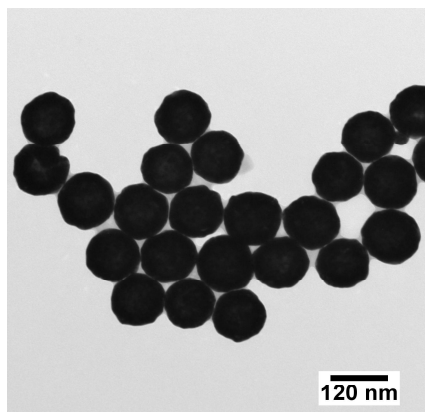
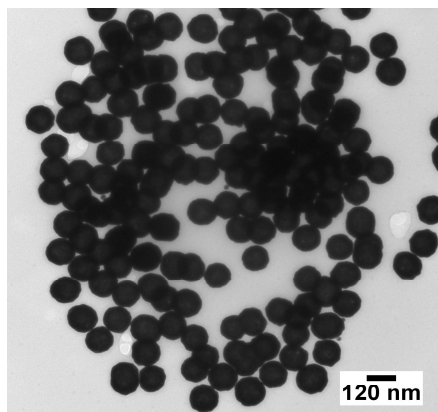


Gold Nanoshells, Peak Absorbance @ 660 nm, PVP, NanoXact™

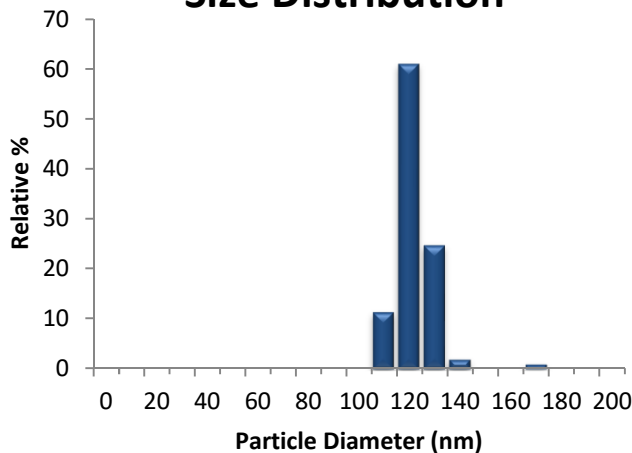
Product Number: GSPH660
Lot Number: WTJ0541

Total Diameter ± Std.Dev (TEM)* 117 ± 8 nm
Coefficient of Variation*: 6.4 %
Core Diameter ± Std.Dev (TEM)*: 78 ± 5 nm
Shell Thickness (Calc'd): 20 nm
Surface Area (Calc'd): 3.5 m²/g
Particle Concentration (Calc'd): 9.2E+10 particles/mL
% Absorbance at 660 nm: 99.1 %

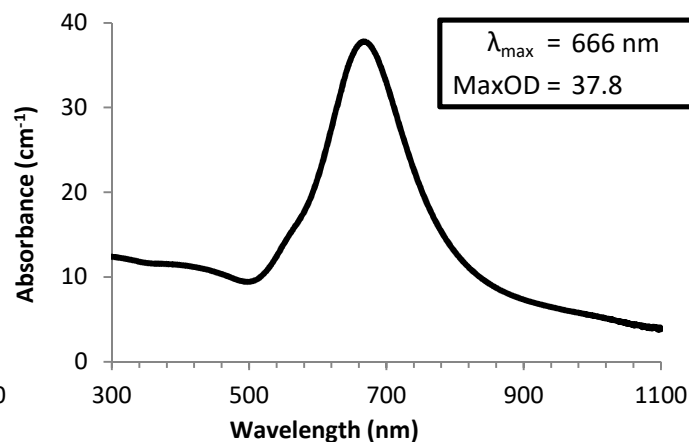
Mass Concentration (Au): 1.06 mg/mL
Hydrodynamic Diameter: 146 nm
Zeta Potential: -46 mV
pH of Solution: 5.3
Particle Surface: PVP 40 kDa (Polymer)
Solvent: USP Purified Water



Size Distribution



Optical Properties



Characterization Instrumentation

Diameter and Size Statistics:	JEOL 1010 Transmission Electron Microscope; ImageJ
Mass Concentration:	Thermo Fisher X Series 2 ICP-MS
Spectral Properties:	Agilent 8453 UV-Visible Spectrometer
Hydrodynamic Diameter/Zeta Potential:	Malvern Zetasizer Nano ZS
pH:	Horiba - Laqua Twin pH Meter

Shake vigorously before use. Bath sonicate if needed. Storage: 2-8 °C. DO NOT FREEZE.

*Particle size data is based on measurements of singlet particles only.