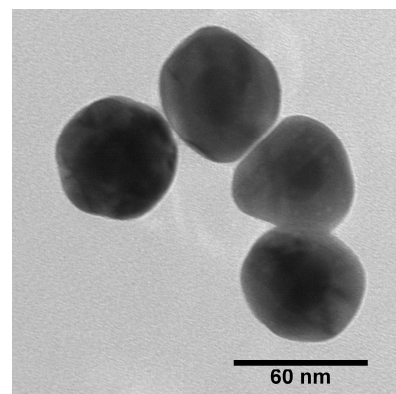
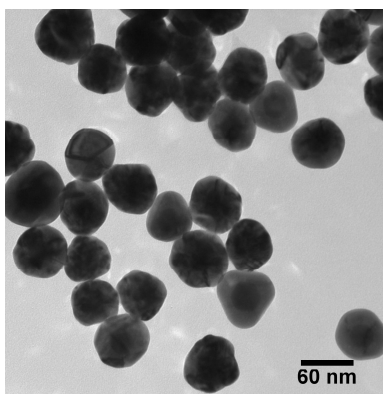
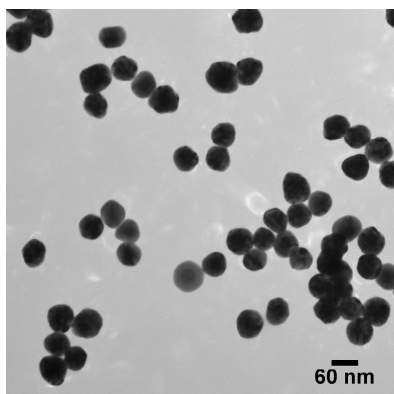
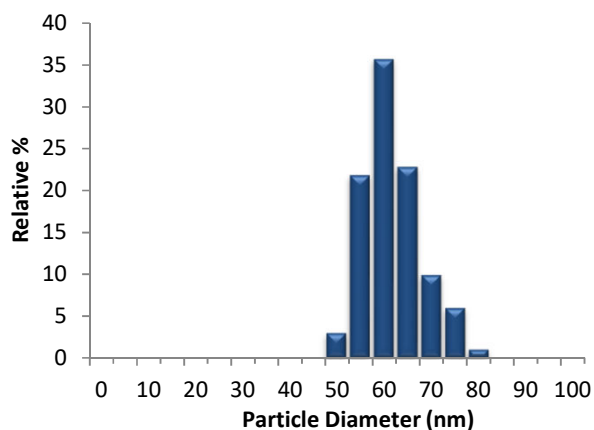
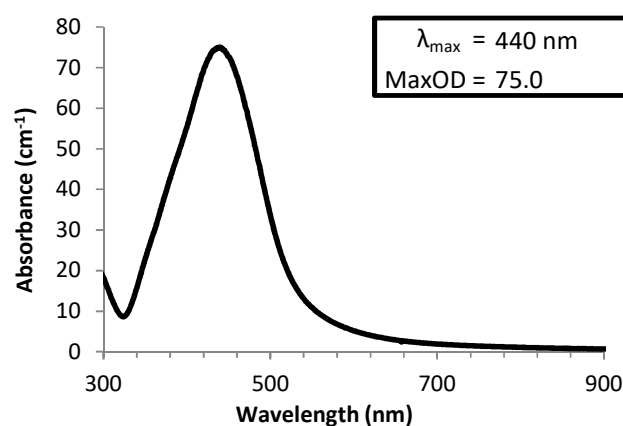


60 nm Silver Shelled Gold Nanospheres, Citrate, NanoXact™

Product Number: BMCH60

Lot Number: JRO0097

Total Diameter ± Std.Dev (TEM):	59 ± 6 nm	Hydrodynamic Diameter:	64 nm
Coefficient of Variation:	10.1 %	Zeta Potential:	-49 mV
Core Diameter ± Std.Dev (TEM):	30 ± 3 nm	pH of Solution:	7.2
Shell Thickness (Calc'd):	15 nm	Particle Surface:	Bare (Citrate)
Surface Area (Calc'd):	8.5 m ² /g	Solvent:	Aqueous 2mM Sodium Citrate
Particle Concentration (Calc'd):	8.0E+11 particles/mL	Mass Concentration (Ag)	0.80 mg/mL
Total Mass Conc. (Au/Ag):	1.04 mg/mL	Mass Concentration (Au):	0.24 mg/mL


Size Distribution

Optical Properties


Characterization Instrumentation

Diameter and Size Statistics:	JEOL 1010 Transmission Electron Microscope; Image J
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

Storage: 2-8 °C away from light. DO NOT FREEZE.