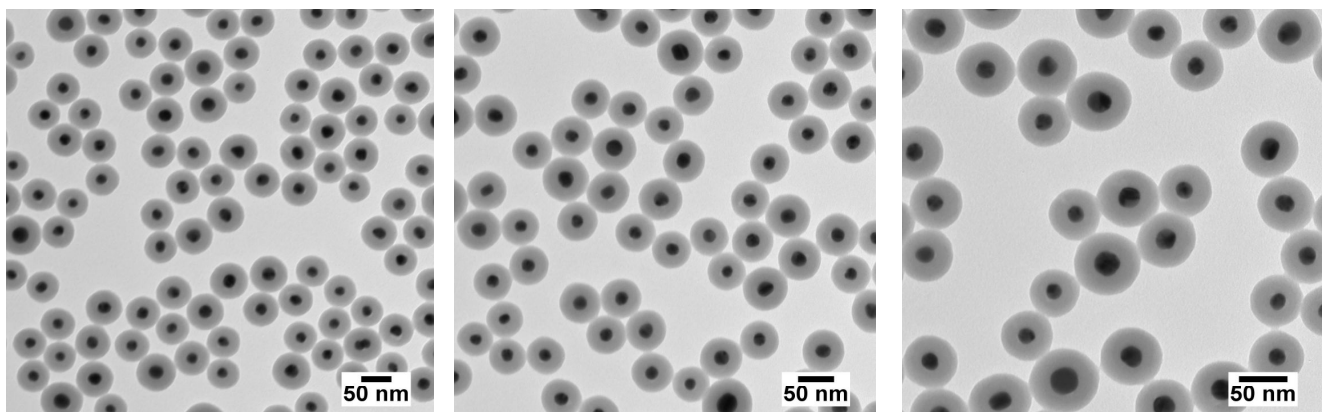


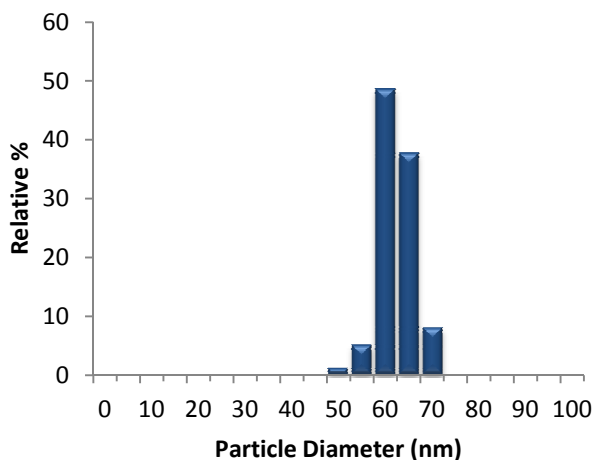
Silica Shelled 20 nm NanoXact™ Gold

Lot Number: CLF0582

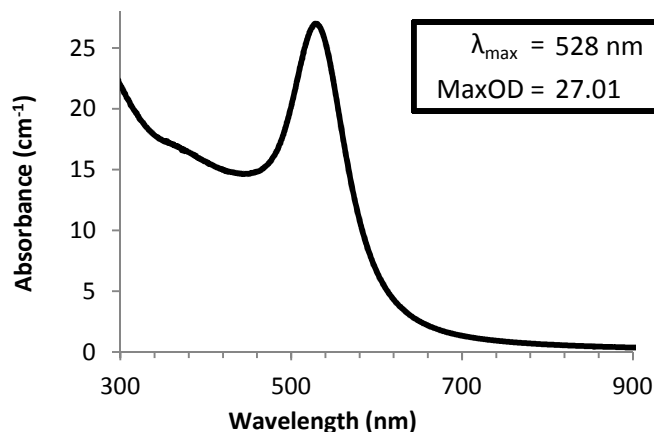
Total Diameter (TEM):	59.8 ± 3.7 nm	Mass Concentration (Au):	1.09 mg/mL		
Coefficient of Variation:	6.2 %	Hydrodynamic Diameter:	86.1 nm		
Core Diameter (TEM):	20.3 ± 2.2 nm	Zeta Potential:	-53.9 mV		
Shell Thickness (TEM):	19.8 nm	Zeta pH:	7.06	Zeta Solvent:	Milli-Q H2O
Surface Area (Calc'd):	5.2 m ² /g	Particle Surface:	Silanol		
Particle Concentration:	1.3E+13 particles/mL	Solvent:	Ethanol		



Size Distribution



Optical Properties



Characterization Instrumentation

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

Shake vigorously before use. Bath sonicate if needed. Storage: 4-8 °C. DO NOT FREEZE.