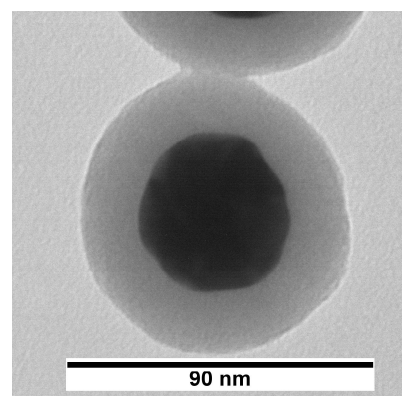
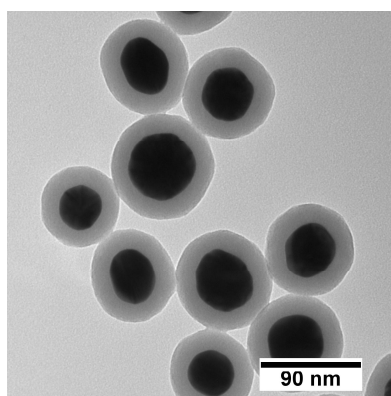
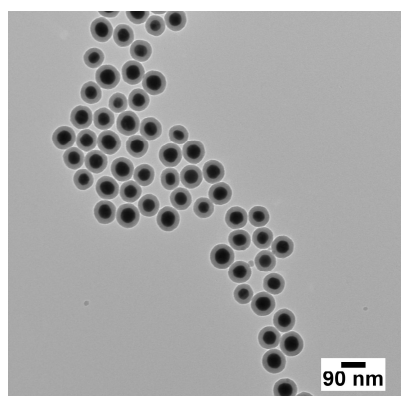
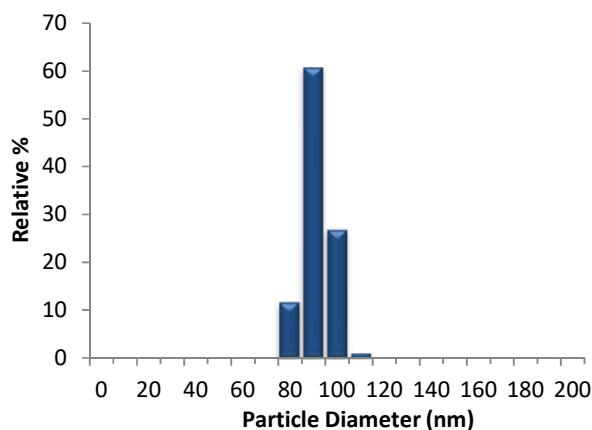
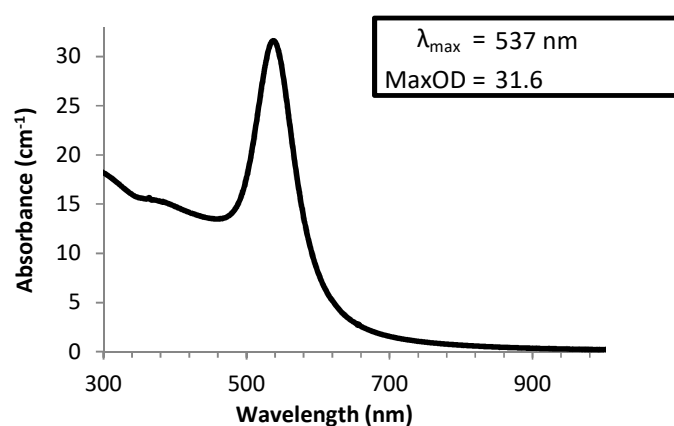


# Silica Shelled 50 nm Gold Nanospheres, NanoXact™

**Product Number: AUSH50**
**Lot Number: SAM0067**

<b>Total Diameter ± Std.Dev (TEM):</b>	86 ± 5 nm	<b>Hydrodynamic Diameter:</b>	125 nm
<b>Coefficient of Variation:</b>	6.2 %	<b>Zeta Potential:</b>	-21 mV
<b>Core Diameter ± Std.Dev (TEM):</b>	51 ± 5 nm	<b>Zeta pH: 8.9</b>	<b>Zeta Solvent: Milli-Q H2O</b>
<b>Shell Thickness (TEM):</b>	18 nm	<b>Particle Surface:</b>	Silanol
<b>Surface Area (Calc'd):</b>	12.2 m <sup>2</sup> /g	<b>Solvent:</b>	Ethanol
<b>Particle Concentration (Calc'd):</b>	7.5E+11 particles/mL	<b>Mass Concentration (Au):</b>	0.99 mg/mL


**Size Distribution**

**Optical Properties**


### Characterization Instrumentation

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

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

To minimize ethanol evaporation, store in a cool place, minimize bottle head space and cap tightly.