

NANOPARTz™

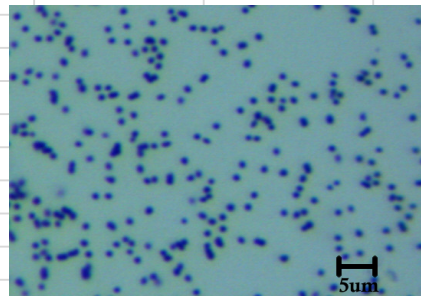
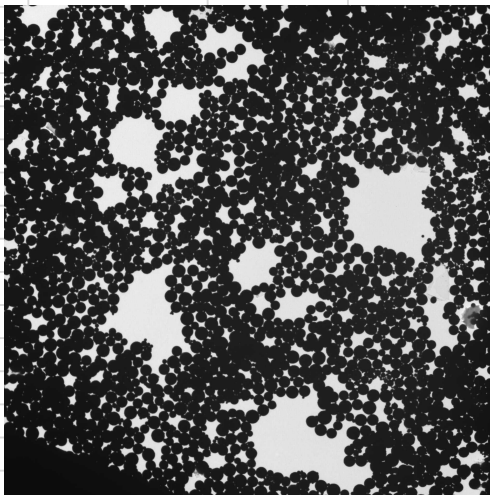
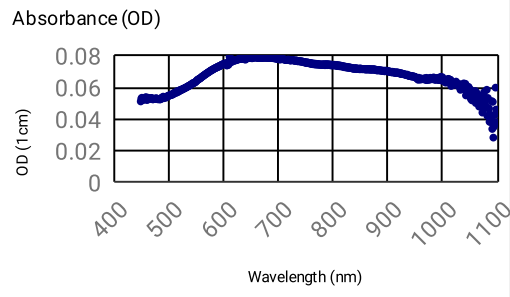
The gold nanoparticle for nanotechnology

Certificate of Analysis

Product Family	Accurate Spherical Gold Nanoparticles			
Product Number	A11-1000-CIT-DIH-1-10			
Lot #	SPEC			
Form	Spherical Gold Nanoparticles			
Capping Agent	Citrate			
Solution	18MEG DI Water			
Source	11Y173			
Diameter	nm	measured	Dark Field	1000
SPR Abs	OD	measured	UV/VIS	0.07
PDI	stddev/size	measured	Dark Field	10%
SPR Peak	nm	measured	UV/VIS	615
pH		measured	Orion	7
Zeta Potential	mV	measured	DLS	-38
Concentration	nps/mL	calc		3.47E+06
Wt. conc.	mg/mL	calc		0.07
ppm		calc		70
Wt. %	%	calc		0.0070%
Molarity	uM	calc		5.79E-09
Molar Ext.	M-1cm-1	calc		1.21E+13
Citrate	mM	measured		5
Volume	mL	measured		10

Date 10/4/2019
Exp Date 4/1/2020

Alex Schoen, Manager
Quality Control



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4:09:04 PM 9/7/2019

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RV=100.0kV
Direct Mag: 2900x