

NANOPARTz™

The gold nanoparticle for nanotechnology

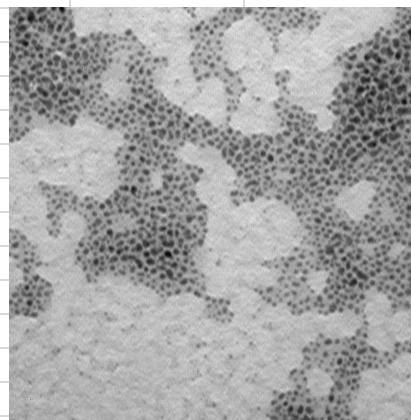
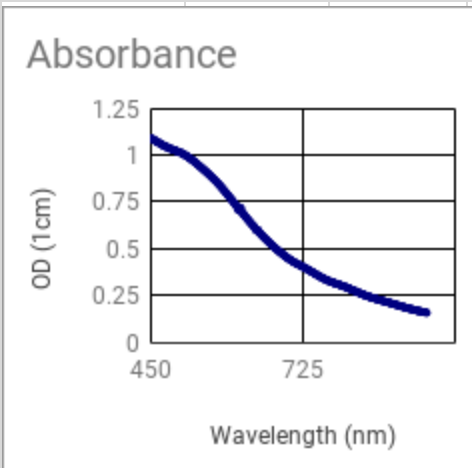
Certificate of Analysis

Product Family	Accurate Spherical Gold Nanoparticles
Product Number	A11-3-NPC-DIH-Bulk
Lot #	Y5908
Form	Gold Colloid
Capping Agent	NPC
Solution	18MEG DI Water
Source	SPA229N

Diameter	nm	measured	TEM	3.0
SPR Abs	OD	measured	UV/VIS	1.2
PDI	stddev/size	measured	TEM	50%
SPR Peak	nm	measured	UV/VIS	509
pH		measured	Orion	9
Zeta Potential	mV	measured	DLS	-35
Concentration	nps/mL	calc		2.21E+14
Wt. conc.	mg/mL	calc		0.06
ppm		calc		60
Wt. %	%	calc		0.0060%
Molarity	uM	calc		3.68E-01
Molar Ext.	M-1cm-1	calc		3.26E+06

Date	8/17/2018
Exp Date	2/13/2019

Alex Schoen, Manager
Quality Control



SPA219 105000x-1.114
Cal: 0.134517 nm/pix
11:00:48 a 07/15/11

20 nm
HV=80.0kV
Direct Mag: 105000x