

# NANOPARTz™

The gold nanoparticle for nanotechnology

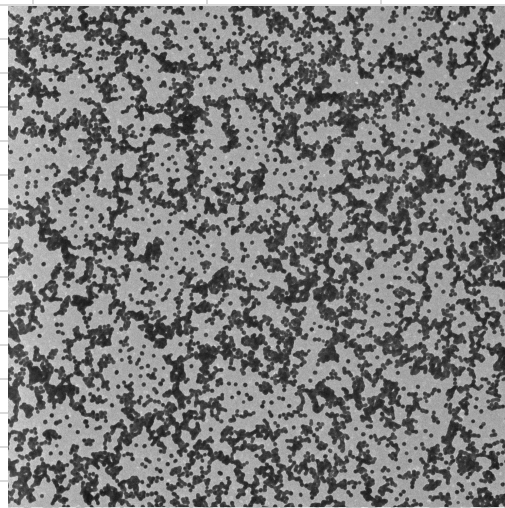
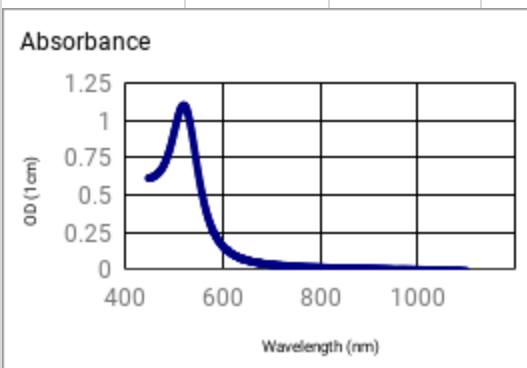
## Certificate of Analysis

Product Family	Accurate Spherical Gold Nanoparticles
Product Number	A11-35-NPC-DIH-Bulk
Lot #	11H50
Form	Gold Colloid
Capping Agent	Nanopartz Carboxylic Acid
Solution	18MEG DI Water
Source	11H50

Diameter	nm	measured average	TEM, UVVIS	35
SPR Abs	OD	measured	UV/VIS	1
PDI	stddev/size	measured	TEM	10%
SPR Peak	nm	measured	UV/VIS	525
pH		measured	Orion	7
Zeta Potential	mV	measured	DLS	-37
Concentration	nps/mL	calc		1.16E+11
Wt. conc.	mg/mL	calc		0.05
ppm		calc		50
Wt. %	%	calc		0.0050%
Molarity	uM	calc		1.93E-04
Molar Ext.	M-1cm-1	calc		5.18E+09

Date	8/20/2018
Exp Date	2/16/2019

Alex Schoen, Manager  
Quality Control



11H50-1.jpg  
Cal: 0.02110 um/pix  
2.09.10 PM 1/12/2018

500 um  
HV:10.0kV  
Dil:1000x Mag: 30000x  
AEC Camera System