	-N $+$ N $+$ N $+$	V = P	$\Delta D^{-}$	7'M	
		A C		<u> </u>	
	The gold	d nanoparticle for	nanotechnolo	gy	
Certificate of	Analysis				
Och timeate of	7 triary 515				
Product Family		Nanopartz Gold Nanorods			
Product Number		A12-70-650-CTAB-DIH-1-25			
Lot #		12G79-1312			
Form		Gold Colloid			
Capping Agent		СТАВ			
Solution		18MEG DI W	Vater		
Source		12G147			
SPR Peak	nm	measured	UV/VIS	640	
SPR Abs	OD	measured	UV/VIS	1.1	
LSPR Peak	nm	measured	UV/VIS	560	
LSPR Abs	OD	measured	UV/VIS	1.1	
pH		measured	Expt.	7	
Zeta Potential	mV	measured	DLS	37	
Diameter	nm	measured	TEM	75	
Length	nm	measured	TEM	120	
Aspect Ratio		calc		1.6	
Concentration	nps/mL	calc		6.8E+09	
Wt. conc.	mg/mL	calc		0.055	
Concentration	ppm	calc		55	
Wt %	%	calc		0.0055%	
Molarity	nM	calc		0.011	
Molar Ext.	M-1cm-1	calc		9.7E+10	
CTAB	mM	measured		5	
Volume	mL	measured		25	
Date				7/9/2023	
Exp Date				1/5/2024	
Alex Schoen, Mai	nager Quality C	control			
Absorbance					
1.25					
1			20	e deed	
0.75			0	2508	6
(E) 0.73	<b>\</b>				
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_	75 750 9:	25			
	Wavelength (nm)	120147	.jpg .932039 nm/pix 48 99112/29/2016		
		Ca1: 0	. 933039 nm/pix	100 nm WWm120.0kV Direct Mag: 686	