	The gold	l nanoparti	icle for nand	otechnology	
Certificate	-				
Product Family		Accurate S	pherical Gol	d Nanoparticles	
Product Number		A11-1.8-CIT-DIH-1-25			
Lot #		11Y197-13723			
Form		Gold Colloid			
Capping Agent		Citrate			
Solution		18MEG DI	Water		
Source		11J245			
D : (
Diameter	nm	measured	TEM	1.8	
SPR Abs	OD atdday/aiza	measured		1.2	
PDI SPR Peak	stddev/size	measured	TEM UV/VIS	25% 495	
рН	nm	measured	Orion	495	
Zeta Potential	mV	measured	DLS	-30	
Concentration	nps/mL	calc	DLO	1.02E+15	
Wt. conc.	mg/mL	calc		0.06	
ppm		calc		60	
Wt. %	%	calc		0.0060%	
Molarity	uM	calc		1.70E+00	
Molar Ext.	M-1cm-1	calc		7.05E+05	
Citrate	mM	measured		10	
Volume	mL	measured		25	
Date				1/11/2024	
Exp Date				4/10/2024	
Alex Schoen, M	lanager				
Quality Control					
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Absorbar	nce			4. 11	and and a
1.25					
1.00	+ +				**************************************
Ê 0.75					
Ū					
L) 0.50					•
0.25					187
0.00					
400	600 800	1000			and the second