	Т	he gold nanop	article for nano	technology		
Certificate	of Analys	sis				
Product Family		Accurate Sr	pherical Cold	Nanonarticles		
Product Number		Accurate Spherical Gold I A11-25-CIT-DIH-1-25		Nanoparticles		
Lot #		11M551-13				
Form		Gold Colloid				
Capping Agent		Citrate	-			
Solution		18MEG DI Water				
Source		11K329				
Diameter	nm	measured average	TEM, UVVIS	25		
SPR Abs	OD	measured	UV/VIS	1.1		
PDI	stddev/size	measured	TEM	7%		
SPR Peak	nm	measured	UV/VIS	521		
рН		measured	Orion	7		
Zeta Potential	mV	measured	DLS	-30		
Concentration	nps/mL	calc		3.49E+11		
Wt. conc.	mg/mL	calc		0.06		
ppm		calc		55		
Wt. %	%	calc		0.0055%		
Molarity	uM	calc		5.82E-04		
Molar Ext.	M-1cm-1	calc		1.89E+09		
Citrate	mM	measured		3		
Volume	mL	measured		25		
Data				4/44/0004		
Date				1/11/2024		
Exp Date				7/9/2024		
Alex Schoen, M						
Quality Control						
Absorbance				***		
1.25					24	
1					*	
€ 0.75					8	
5						
					**	
0.25				t		
0						
400	600 800	1000			*	
	Wavelengt					