		A	A	TM		
	—N.	ΔΝ		$RTz^{m}$		
	INA	A I A	_	11 / _		
	1	he gold nanop	article for nanot	echnology		
Certificate	of Analys	sis				
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Product Family	,	Accurate Si	phorical Cold	Nanoparticles		
Product Number		Accurate Spherical Gold A11-200-CIT-DIH-1-10		i varioparticies		
Lot #		SPEC	1-0111-1-10			
Form			old Nanoparti	cles		
Capping Agent		Citrate				
Solution		18MEG DI Water				
Source		11Y161				
Source		111101				
D'a santa		measured	TEM, DLS,	000		
Diameter	nm	average	UVVIS	200		
SPR Abs	OD	measured	UV/VIS	1.1		
PDI	stddev/size	measured	TEM	3%		
SPR Peak	nm	measured	UV/VIS	539/620		
рН		measured	Orion	7		
Zeta Potential	mV	measured	DLS	-38		
Concentration	nps/mL	calc		6.82E+08		
Wt. conc.	mg/mL	calc		0.06		
ppm	0.4	calc		55		
Wt. %	%	calc		0.0055%		
Molarity	uM	calc		1.14E-06		
Molar Ext.	M-1cm-1	calc		9.67E+11		
Citrate Volume	mM mL	measured		10		
volume	IIIL	measured		10		
Date				10/4/2019		
Exp Date				4/1/2020		
Alex Schoen, N	/lanager					
Quality Control						
				0000		
Absorbance (OD)				1 1 1 1 1 Y	1, 1, 1, 1	<b>,</b>
1.25	<del>                                     </del>	<del>                                     </del>		YYY	white has been a second	
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0.75	<del>/                                    </del>	+	. 4	TOO TO	T Y Y	
0.5					1 1 744	1
0.5						
0.25						
0						
	0, 0, 0,	0, 0, 0				
400 P	00,00	80 00 100	1,0			
Wavelength (nm)						