	The go	ld nanopartio	cle for nanote	chnology	
Certificate					
Product Family	,	Cubic Gold N	Nanoparticles		
Product Number		A1C-60-CIT-			
Lot #		SPEC			
Form		Gold Colloid			
Capping Agent		Citrate			
Solution		18MEG DI W	Vater		
Source		RPD241			
Edge	nm	measured	TEM	60	
SPR Abs	OD	measured	UV/VIS	1 100/	
PDI Pook	stddev/size		DLS	10%	
SPR Peak	nm	measured	UV/VIS Orion	553 7	
pH Zeta Potential	mV	measured measured	DLS	-34	
Concentration	nps/mL	calc	DLS	1.20E+10	
Wt. conc.	mg/mL	calc		0.050	
ppm	mg/mc	calc		50	
Wt. %	%	calc		0.0050%	
Molarity	pM	calc		20.0	
Molar Ext.	M-1cm-1	calc		5.00E+10	
Citrate	mM	measured		5	
Volume	mL	measured		5	
				10/00/0000	
Date				10/26/2023	
Exp Date				4/23/2024	
Alex Schoen, N	⊥ ⁄lanager Qua	lity Control			
Absorbar	nce				
1.5	1				
_ 1.0	Λ		1	124 E	
OD (1cm)	/\				
(1)	/ \				
0.5					
0.0 400	600 800	1000			
400	000 000	1000			
Wavelength (nm)		I			