		V = P			
	The gold	l nanoparticle for r	nanotechnolo	gy	
Certificate of	Analysis				
Product Family		Nanopartz G	⊥ old Nanobin	vramids	
Product Number		Nanopartz Gold Nanobipyramids A1B-808-CIT-DIH-1-5			
Lot #		SPEC			
Form		Gold Colloid			
Capping Agent		Citrate			
Solution		18MEG DI W	/ater		
Source		Y1P2			
CDD Dook		man and mand	UV/VIS	819	
SPR Peak SPR Abs	nm OD	measured	UV/VIS UV/VIS	1	
LSPR Peak		measured	UV/VIS UV/VIS	523	
LSPR Peak LSPR Abs	nm OD	measured measured	UV/VIS UV/VIS	0.3	
pH	OD	measured	Expt.	7	
Zeta Potential	mV	measured	DLS	-32	
Diameter	nm	measured	TEM	40	
Length	nm	measured	TEM	125	
Aspect Ratio		calc		3.1	
Concentration	nps/mL	calc		4.0E+10	
Wt. conc.	mg/mL	calc		0.050	
Concentration	ppm	calc		50	
Wt %	%	calc		0.0050%	
Molarity	nM	calc		0.067	
Molar Ext.	M-1cm-1	calc		1.5E+10	
Citrate	mM	measured		5	
Volume	mL	measured		5	
Date				12/10/2023	
Exp Date				3/9/2024	
Ехр Баге				3/9/2024	
Alex Schoen, Mar	nager Quality C	ontrol			
Absorbance					
1.25					
1					
1	 				
0.75					
(E)					
0.5	$\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$				
0 3.3	/ \				
0.25					
0					
400 6	00 800 1	000			