	INAI	V P	AK	Z	
	The gold	d nanoparticle for i	nanotechnolo	gy	
Certificate of	Analysis				
Och timeate of	7 trialy 515				
D 1 (E 11					
Product Family		Nanopartz Gold Nanorods A12-10-980-CTAB-DIH-1-25			
Product Number Lot #		12G39-13141			
Form		Gold Colloid			
Capping Agent		CTAB			
Solution		18MEG DI Water			
Source		12G99			
SPR Peak	nm	measured	UV/VIS	988	
SPR Abs	OD	measured	UV/VIS	1.2	
LSPR Peak	nm	measured	UV/VIS	509	
LSPR Abs	OD	measured	UV/VIS	0.25	
pН		measured	Expt.	7	
Zeta Potential	mV	measured	DLS	35	
Diameter	nm	measured	TEM	10	
Length	nm	measured	TEM	59	
Aspect Ratio		calc		5.9	
Concentration	nps/mL	calc		5.0E+11	
Wt. conc. Concentration	mg/mL	calc		0.042	
Wt %	ppm %	calc		0.0042%	
Molarity	nM	calc		0.004276	
Molar Ext.	M-1cm-1	calc		1.4E+09	
CTAB	mM	measured		5	
Volume	mL	measured		25	
Date				7/8/2023	
Exp Date				1/4/2024	
Alex Schoen, Mar	nager				
Quality Control					
			Y/////////////////////////////////////	•	
Absorbance					
1.25					
1.25	<u> </u>				
1	- / "	\ 			
0.75		- 4,			
(E)					
(m) 0.5 0.5	-+ $+$				
	/				
0.25					
 	\sim		line S		