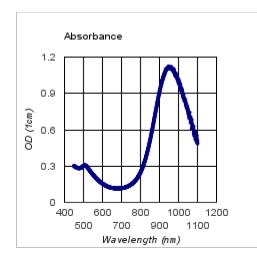


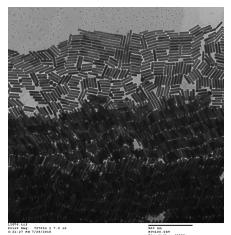
The gold nanoparticle for nanotechnology

Certificate of Analysis

Product Family Product Number Lot # Form Capping Agent Solution		Nanopartz Gold Nanorodz A12-10-950-CTAB 12G76 Gold Colloid CTAB 18MEG DI Water		
SPR Peak	nm	measured	UV/VIS	940
SPR Abs	OD	measured	UV/VIS	1
LSPR Peak	nm	measured	UV/VIS	513
LSPR Abs	OD	measured	UV/VIS	0.2
pН		measured	Expt.	4
Zeta Potential	mV	measured	DLS	20
Diameter	nm	measured	TEM	10
Length	nm	measured	TEM	55
Aspect Ratio		calc		5.5
Concentration	nps/mL	calc		4.5E+11
Concentration	mg/mL	calc		0.035
CTAB	mM	measured		5
Date				1/4/2017
Exp Date				7/3/2017

Alex Schoen, Manager Quality Control





500 nm HV=100.0kV Direct Mag: 49000x AMT Camera System