



# NNCrystal US Corporation

## Gold NanoUrchins

### Technical Data:

Core diameter: 50-100nm (Coefficient of Variance < 12%)

Polydispersity Index (PDI): <0.2

Concentration: OD = 1

Absorption Peak: 585-570nm (Size Dependant)

Solvent: 0.1mM Phosphate-Buffered Saline

Storage: Store at 4°C. Do not freeze.

Lifetime: If stored properly the nanoparticles are stable for at least 6 months.

### Specifications for each size:

Diam. (nm)	Peak SPR (nm)	NPS/ml Wt.	Wt.Conc. (mg/ml)	Molar Ext (M-1cm-1)	Size Dispersity (+/-nm)	Particle Volume (nm <sup>3</sup> ) *	Surface Area (nm <sup>2</sup> )	Surface/Volume Ratio *	Particle Mass (g)	Molar Mass (g/mol)	Molar Conc.
50	585	3.51E+10	4.45E-02	1.72E+10	<8%	6.54E+04	7.85E+03	0.12	1.27E-15	7.64E+08	5.83E-11
60	585	1.96E+10	4.30E-02	3.07E+10	<10%	1.13E+05	1.13E+04	0.1	2.19E-15	1.32E+09	3.25E-11
70	600	1.20E+10	4.17E-02	5.03E+10	<10%	1.80E+05	1.54E+04	0.086	3.48E-15	2.10E+09	1.99E-11
80	620	7.82E+09	4.06E-02	7.70E+10	<10%	2.68E+05	2.01E+04	0.075	5.20E-15	3.13E+09	1.30E-11
90	630	5.37E+09	3.97E-02	1.12E+11	<8%	3.82E+05	2.54E+04	0.067	7.40E-15	4.46E+09	8.92E-12
100	680	3.84E+09	3.89E-02	1.57E+11	<8%	5.24E+05	3.14E+04	0.06	1.02E-14	6.11E+09	6.37E-12