

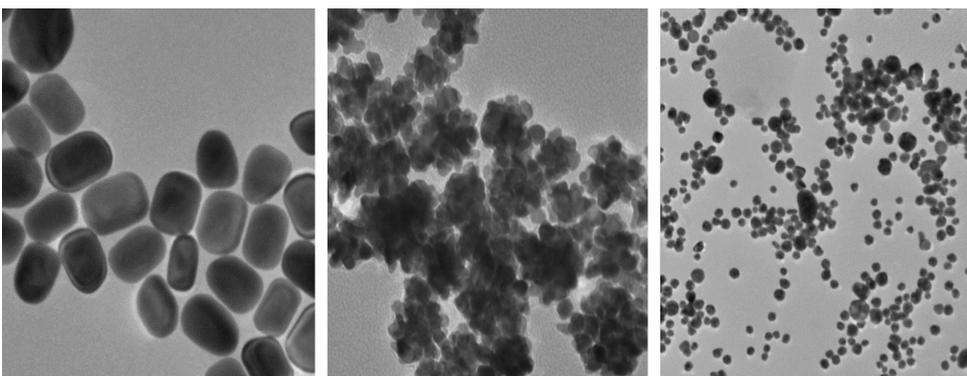
# GOLD NANO PARTICLES

## Gold Nanoparticles

### Description

Gold is one of the first metals to have been discovered; the history of its study and application spans at least several thousand years. Gold nanoparticles absorb and scatter light with extraordinary efficiency. Their strong interaction with light with the electrons on the metal surface causes the optical and electronic property of GNP to be much different than identically sized non-plasmonic nanoparticles. This optoelectronic property of GNP is a function of several parameters like particle size, shape, and the local refractive index near the particle surface etc.

Gold nanoparticles are versatile materials with a broad range of applications in a variety of fields. Researchers have coated gold particles with nucleic acid and protein for various applications. Gold nanoparticles have been in active use in the identification of chemical and biological agents. The range of applications for gold nanoparticles is growing rapidly day by day.



### Applications

- ↘ As an anti-biotic, anti-fungal, and anti-microbial agent
- ↘ In nanowires and catalyst applications
- ↘ In therapeutic agent delivery
- ↘ To connect resistors, conductors, and other elements of an electronic chip
- ↘ In photodynamic therapy - When light is applied to a tumor containing gold nanoparticles, the particles rapidly heat up, killing tumor cells
- ↘ In various sensors, e.g. colorimetric sensor with gold nanoparticles can identify if foods are suitable for consumption
- ↘ As substrates to enable the measurement of vibrational energies of chemical bonds in surface enhanced Raman spectroscopy
- ↘ The scattered colors of gold nanoparticles are currently used for biological imaging applications
- ↘ Gold nanoparticles are quite dense, thus allowing them to be used as probes for transmission electron microscopy

Cat. No.	Product Description	Size(nm)	Shape	₹
GCC-GNS01-25	Gold Nanoparticles, 0.01% Au, 25 mL	20	Spherical, Monodisperse	8,253.00
GCC-GNS01-50	Gold Nanoparticles, 20 nm, 0.01% Au, 50 mL			12,163.60
GCC-GNS02-25	Gold Nanoparticles, 0.01% Au, 25 mL	40	Spherical, Monodisperse	7,621.00
GCC-GNS02-50	Gold Nanoparticles, 40 nm, 0.01% Au, 50 mL			11,890.00
GCC-GNR01-25	Gold Nanorod, 0.01% Au, 25 mL	Diameter 20 nm, Length 40 nm	Rod	8,253.00
GCC-GNR01-50	Gold Nanorod, 0.01% Au, 50 mL			12,563.60
GCC-GNR02-25	Gold Nanorod, 0.01% Au, 20 mL	Diameter 20 nm, Length 80 nm	Rod	7,821.00
GCC-GNR01-50	Gold Nanorods, 0.01% Au, 20 mL			12,890.00
GCC-GNF01-25	Gold Nanoflower, 0.01% Au, 25 mL	40 nm	Nanoflower	9,350.00
GCC-GNF01-50	Gold Nanoflower, 0.01% Au, 50 mL			12,950.00