

## Gold Nanoparticles for use in Making Monodisperse Surfaces

### Product Information:

Nanopartz™ has developed and optimized Gold Nanoparticles specifically for use in creating gold nanoparticle coated surfaces. PS Gold Nanoparticles are functionalized with a number of different ligands that can result in covalent or ionically adsorbed gold nanoparticle surfaces.

Product	Gold Mass	Volume	Storage
PS Gold Nanoparticles	Dependent on size. See specifications on website	0.25mL	Store at 4°C  (Use within 3 months)

### Important Information:

- PS Gold Nanoparticles are supplied in ETOH.
- Store Gold Nanoparticles at 4°C

### General Protocol for Nsol Gold Nanorod Resuspension and Application to glass

- Materials Needed:
  - Pipette
  - Sonicator/Vortexer
  - Solvent
  - Centrifuge or other tubing
- Centrifuge bottle to remove any nanoparticles trapped in the tube lid. 1-2 minutes at 100 rpm is sufficient.
- Add ethanol to Organic Gold Nanoparticles. Sonicate to resuspend. Depending on solvent, nanoparticles will remain suspended for 15 minutes (1500nm) to forever (1.8nm).
- To coat glass slides, add dropwise and let solvent evaporate for 1 minute.
- View under bright or dark field microscope. Adjust dilution to control density on the surface.

Observations

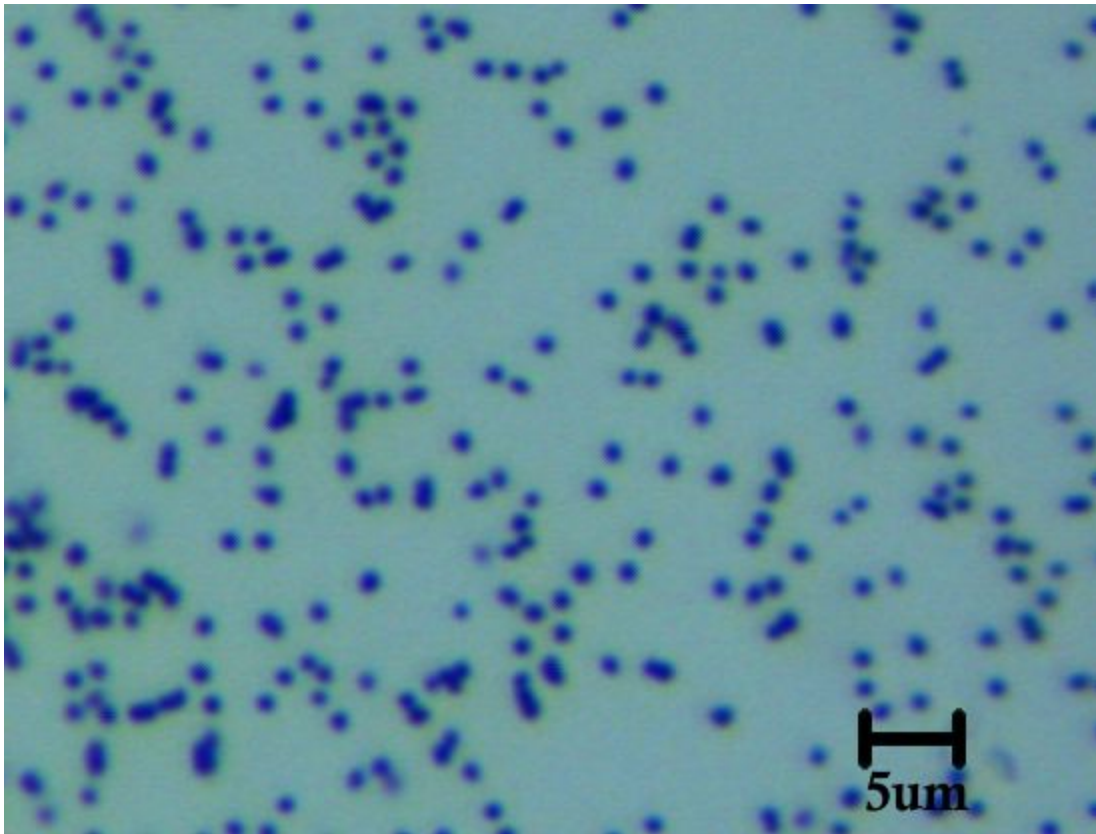


Fig. 1 shows what you can expect under a dark field microscope, 40x objective, 1000nm particles (magnified 3x).

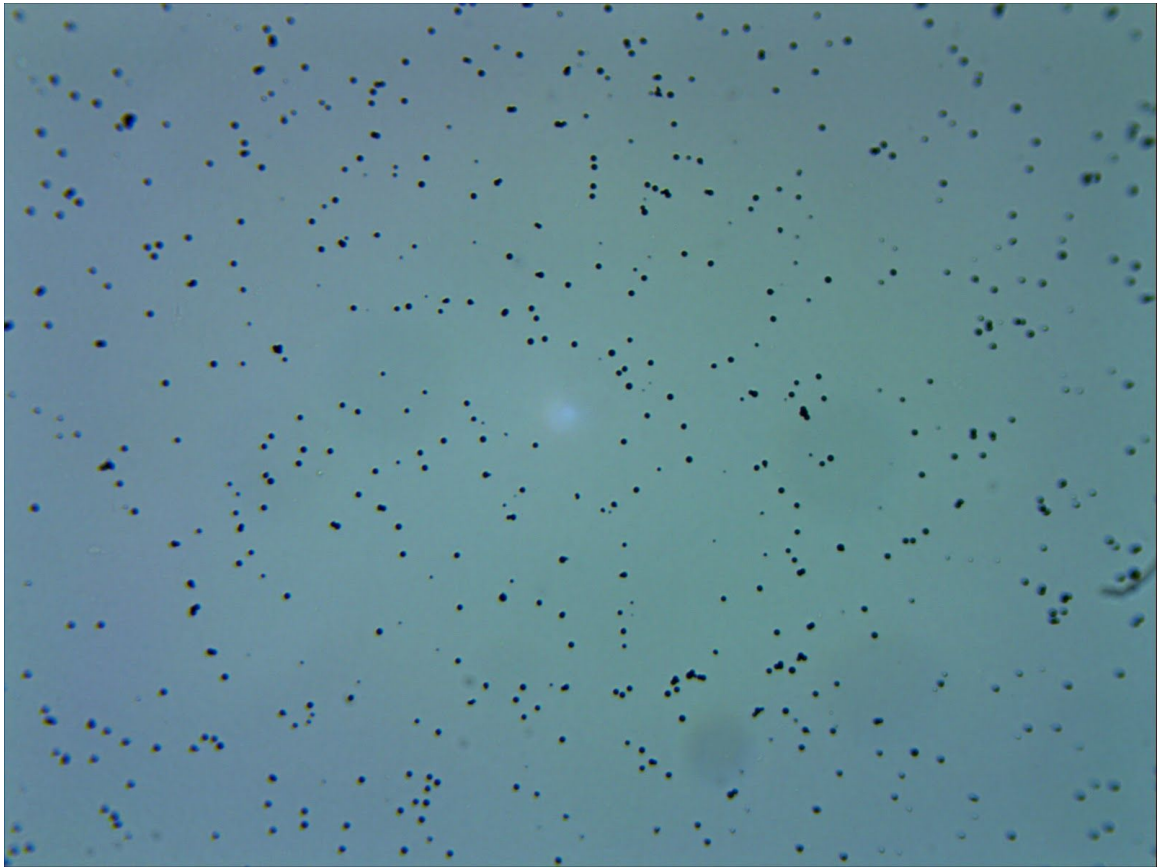
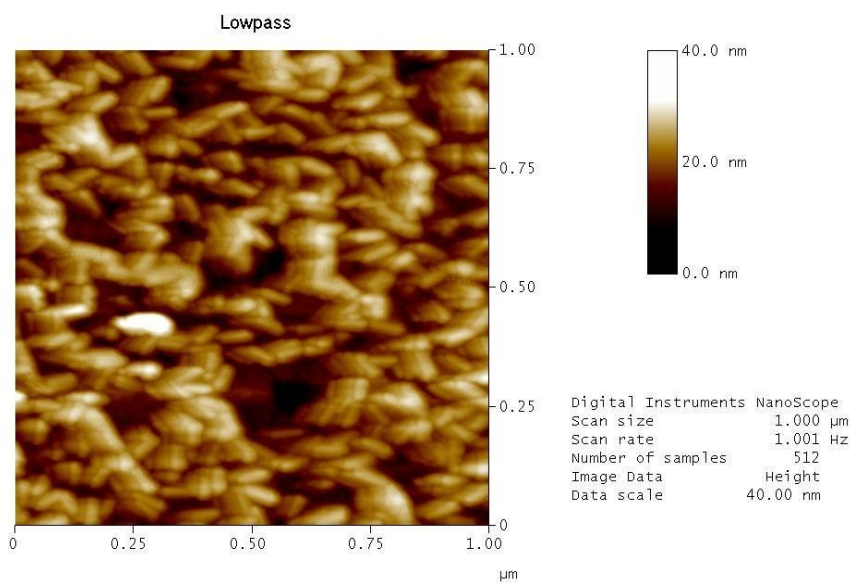


Fig. 2 shows what you can expect under a dark field microscope, 40x objective, 1500nm particles (no magnification)



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Fig. 3 AFM of Organic Gold Nanoparticles in ethanol placed dropwise on glass slide.