

# Gold nanoparticle catalyst for plasma nitridation of thin films

Z TraceUp Wed Feb 01 00.14.21 2017 [8-2] AFMHyb

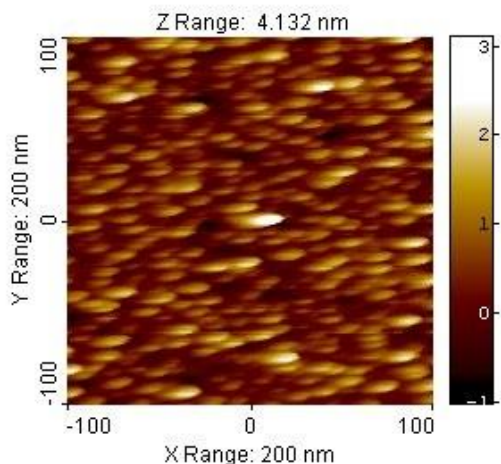


Fig.1 Non-contact AFM image of Au nanoparticles on SiO<sub>2</sub>/Si(100) after 2min. of Au deposition.

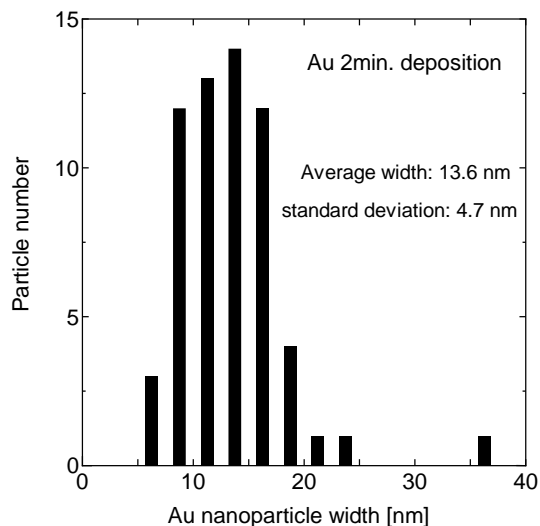


Fig.2 Size distribution of Au nanoparticles on SiO<sub>2</sub>/Si(100) after 2min. of Au deposition.

Z TraceUp Mon Feb 13 16.11.33 2017 [3-4] AFMHyb

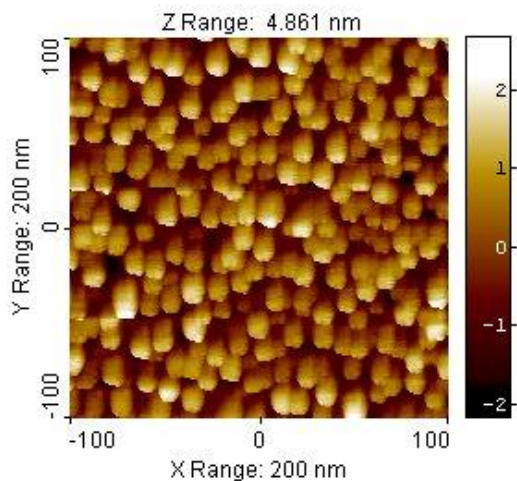


Fig.3 Non-contact AFM image of Au nanoparticles on SiO<sub>2</sub>/Si(100) after 1min. of nitrogen plasma exposure on 2min. of Au deposited surface.

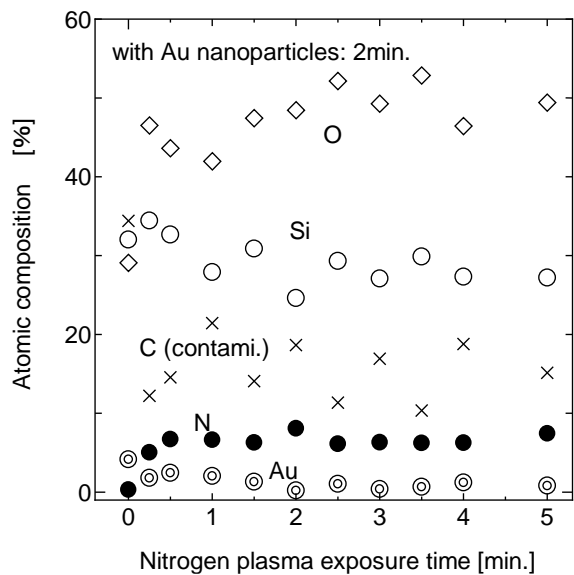


Fig.4 Nitrogen plasma exposure time dependence of atomic compositions with XPS analysis of Au nanoparticle deposited for 2 min.

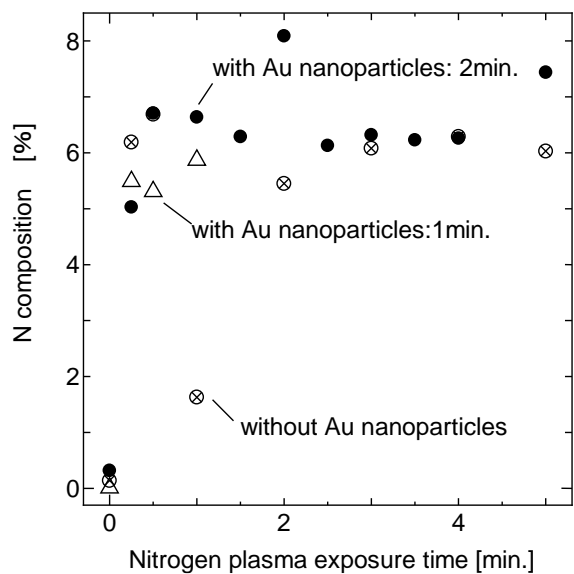


Fig.5 Nitrogen plasma exposure time dependence of nitrogen compositions with XPS analysis of the samples with and without Au nanoparticles.