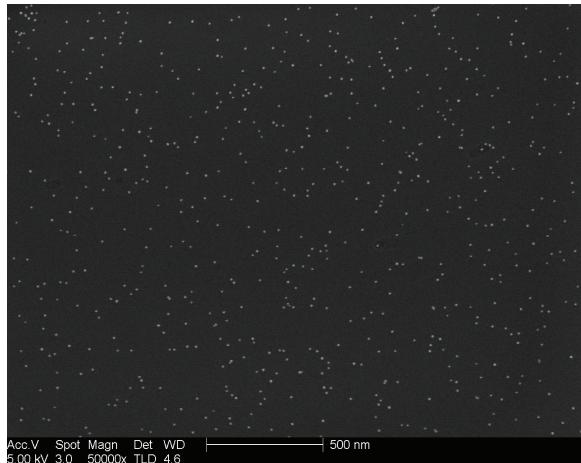


Supporting Information:

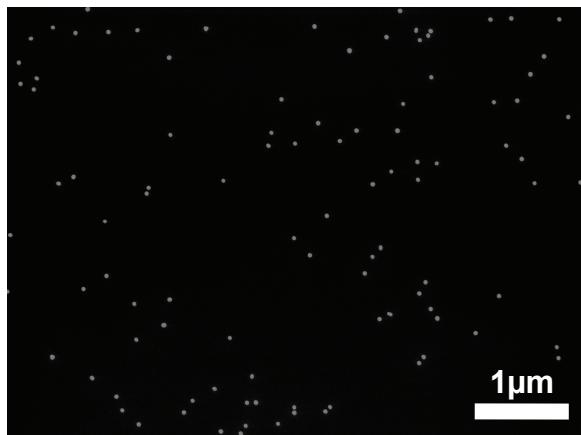
SEM micrographs showing gold-colloid deposition from 2 minute exposure of hydrogen-terminated Si(111) to 10 nm gold colloid solution containing 0.1M HF



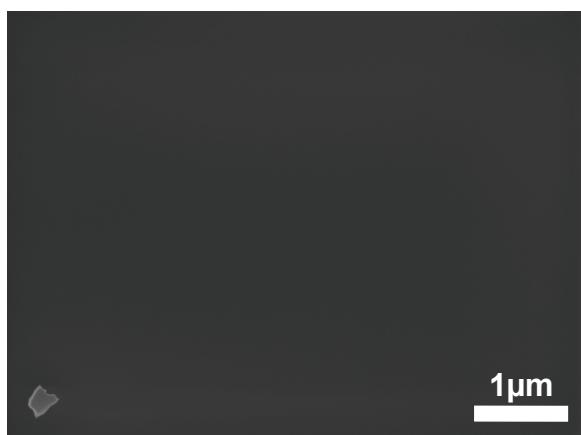
SEM micrographs showing gold-colloid deposition from 2 minute exposure of hydrogen-terminated Si(111) to 5 nm gold colloid solution containing 0.1M HF



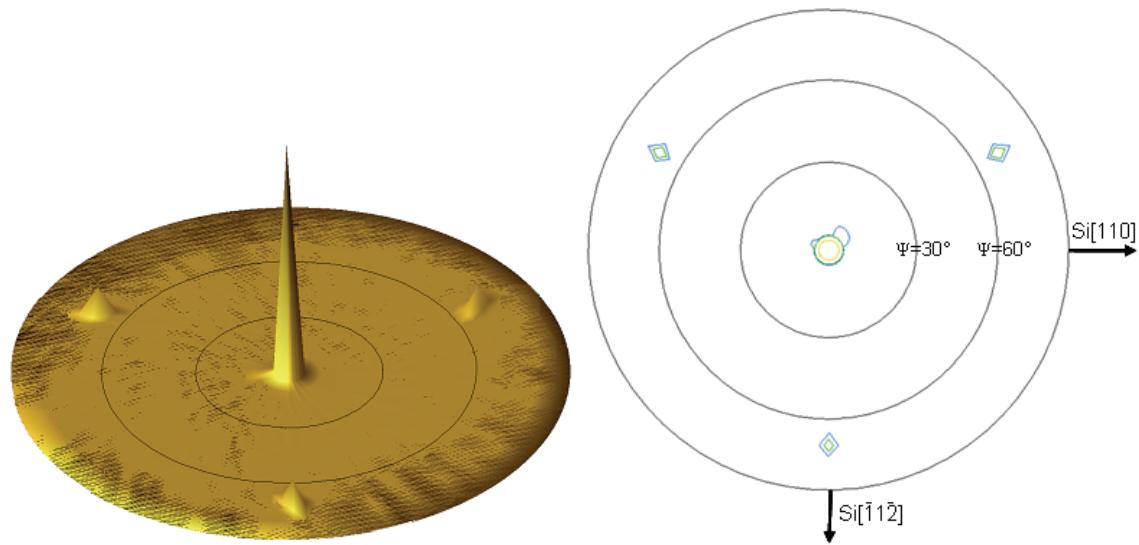
SEM micrographs showing gold-colloid deposition from 2 minute exposure of hydrogen-terminated Si(111) to 40 nm gold colloid solution containing 0.01M HCl



SEM micrographs showing lack of gold-colloid deposition from 2 minute exposure of 500nm SiO₂ on Si(100) to 40 nm gold colloid solution containing 0.01M HCl



XRD pole figure of Si{111} diffraction from the sample shown in Figure 2a and 2b



SEM images showing the reduction of the degree of GeNW epitaxy by exposure of sample to air for 60 minutes prior to GeNW growth and the subsequent improvement of epitaxy by treatment with 1M HF prior to GeNW growth



Bright-field TEM images of germanium nanowire surfaces prior to etching, after etching with an aqueous triiodide etch for 20 s, and after etching with an HCl-containing aqueous triiodide etch for 20 s.

