Supporting Information

Dose Dependent Distribution and Aggregation of Gold Nanoparticles within Human Lung Adeno-carcinoma Cells

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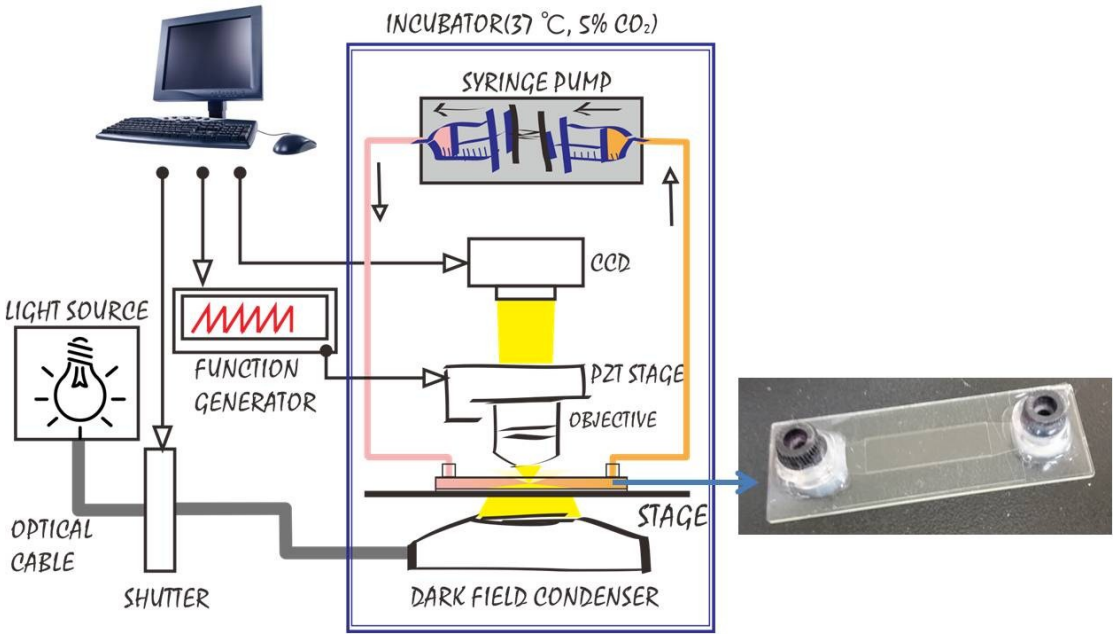


Fig. S1 The optical set-up

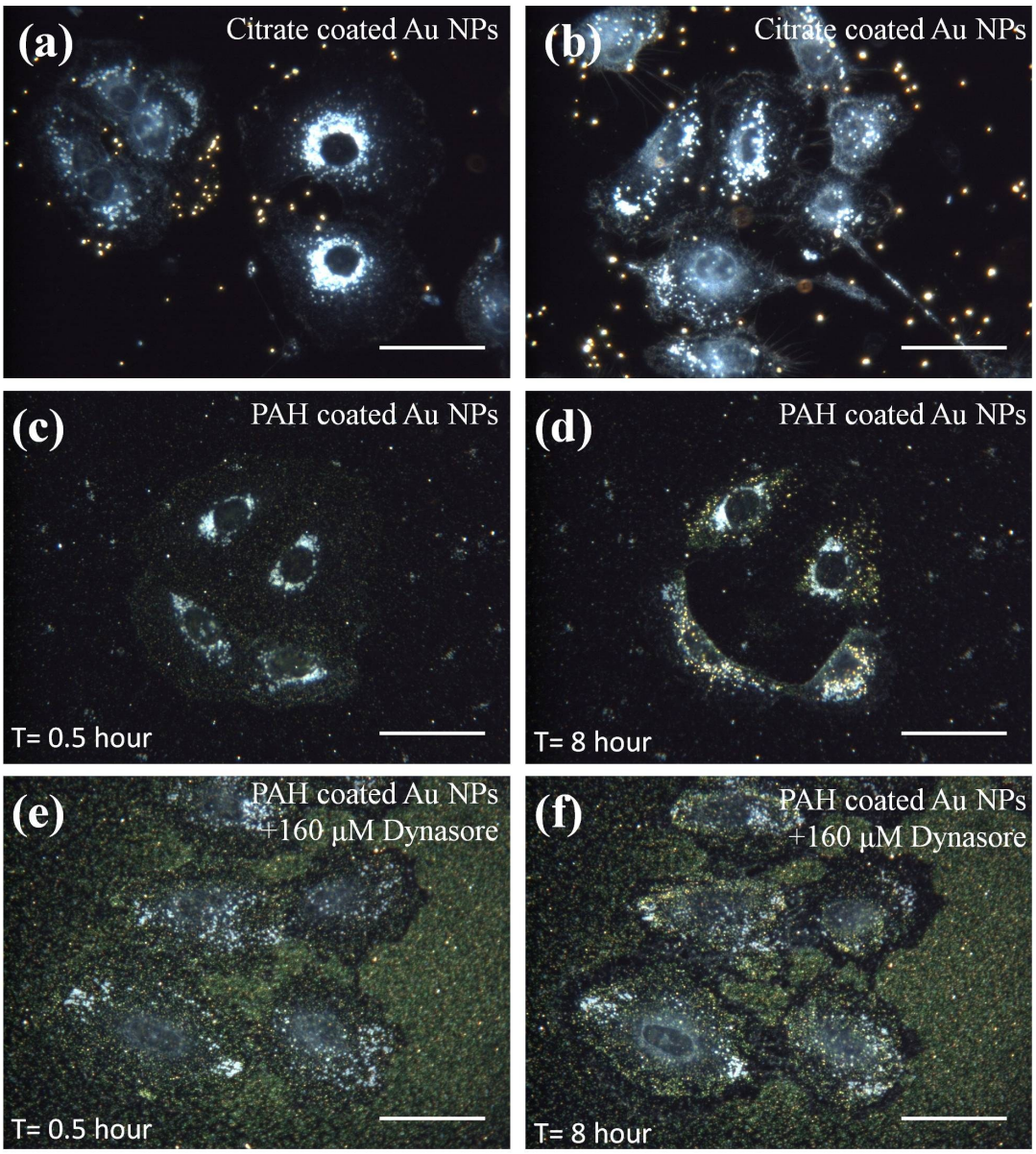


Fig. S2. (a-b) Cells treated with citrate 0.1 nM Au NPs. The yellow spots indicate the large aggregates of Au NPS. **(c)** and **(d)** show the cells treated with 0.1 nM PAH coated Au NPs while without treated any dynasore at the time t =0.5 and 8 hour, respectively. **(e)** and **(f)** shows the cells treated with 160 µM and 0.1 nM Au NPs at the time t =0.5 and 8 hour. Although some were moved toward the center of cell, there are no obvious aggregation and color change happening. It indicates that in the case of the 0.1 nM treatment, the aggregation of Au NPs was majorly caused by the dynamin dependent endocytosis. Scale bar = 40 µm.

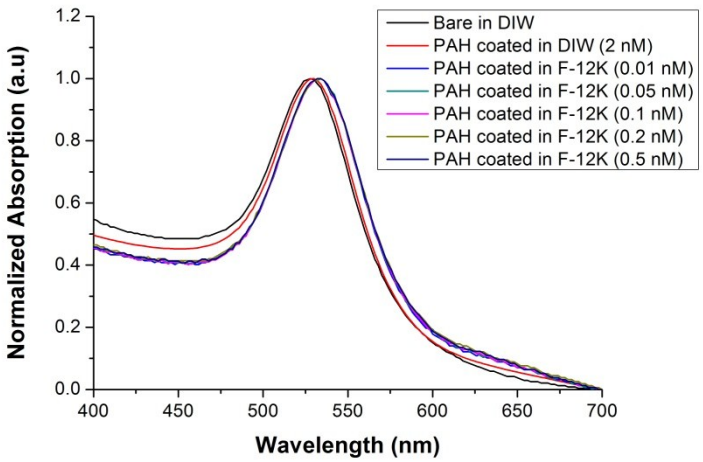
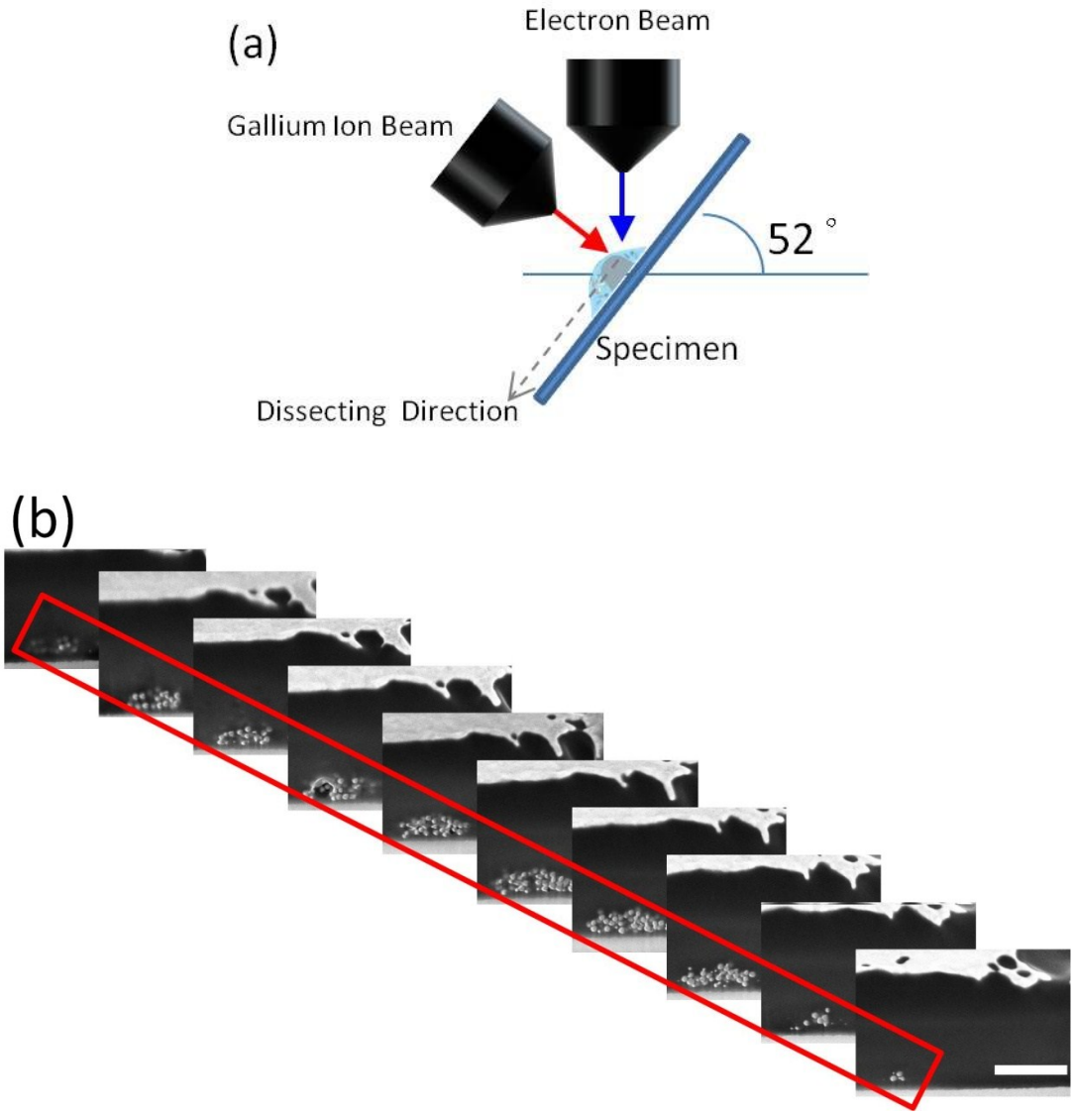


Fig. S3. UV-Vis spectra of Au NPs with different surface modification and concentration.



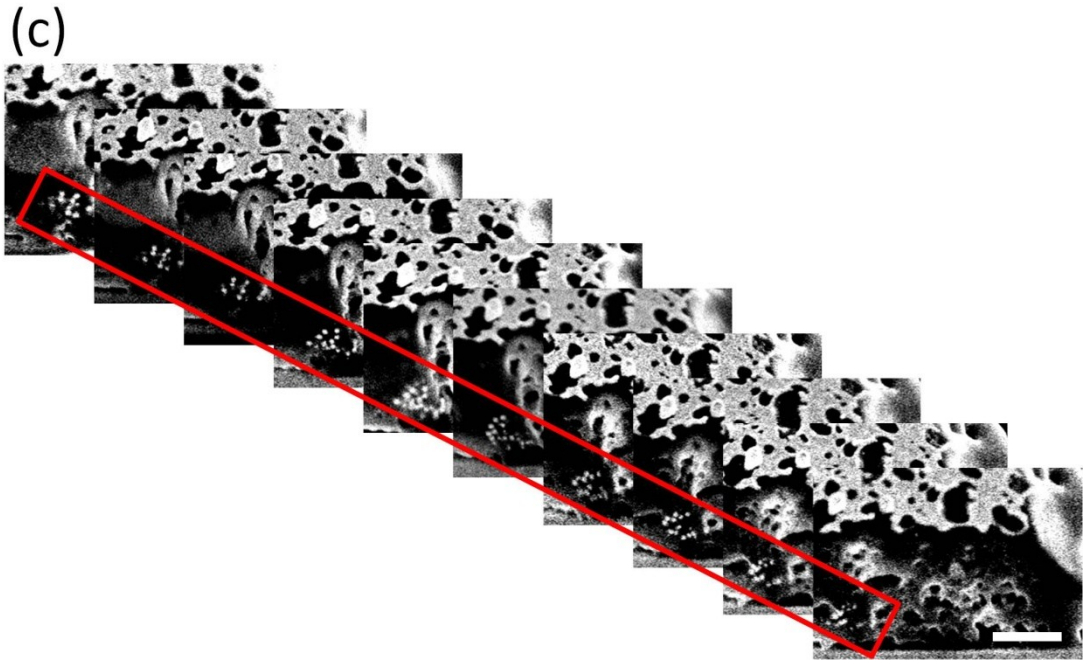


Fig. S4 (a) Illustration of the dual-beam focus ion beam (DBFIB), the angle between gallium ion beam and electron beam is 52° . Stacks of sectional and tilted SEM images of cells with Au NPs with treated dose **(b)** 0.1 and **(c)** 0.5 nM. The interval between sections is 50 nm. Scale bar =500 nm.