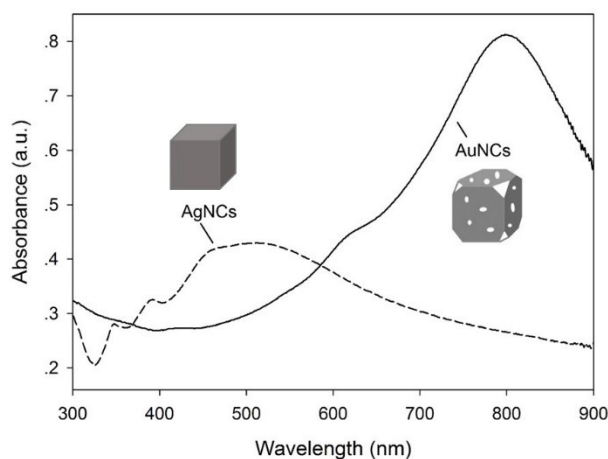
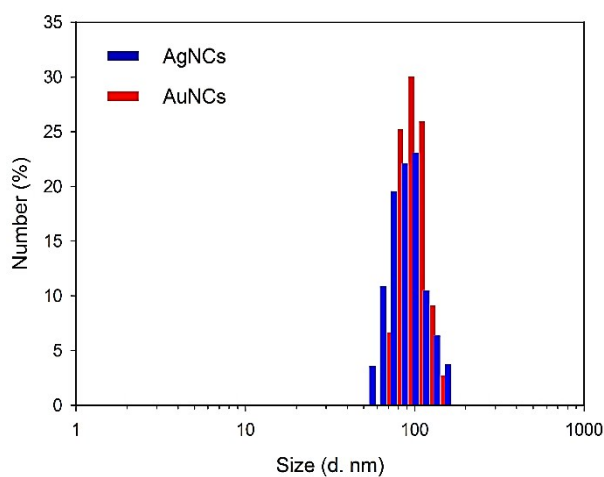


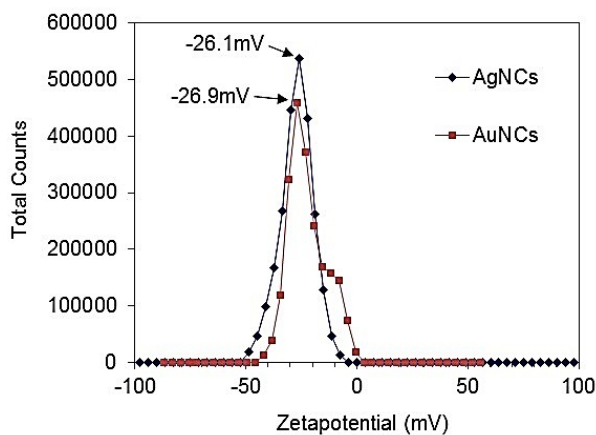
## Supporting Figures



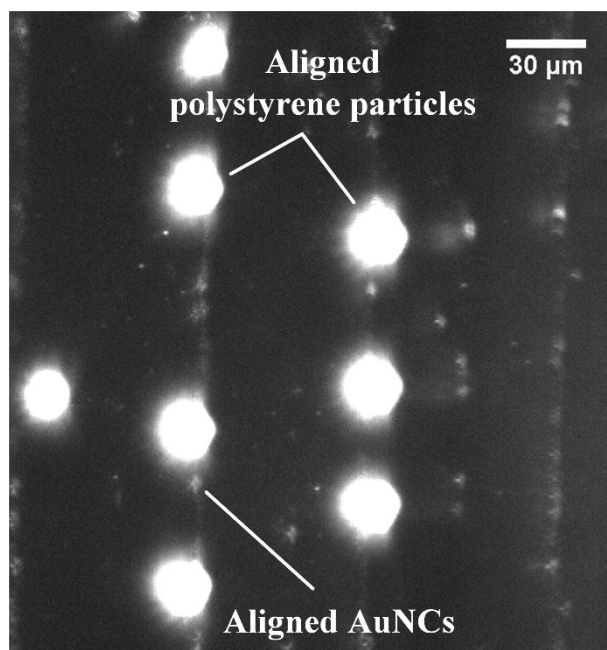
**Figure S1.** The absorption spectrum of the AgNCs (dashed line) and the AuNCs (solid line) measured by the UV-Vis-NIR spectroscopy.



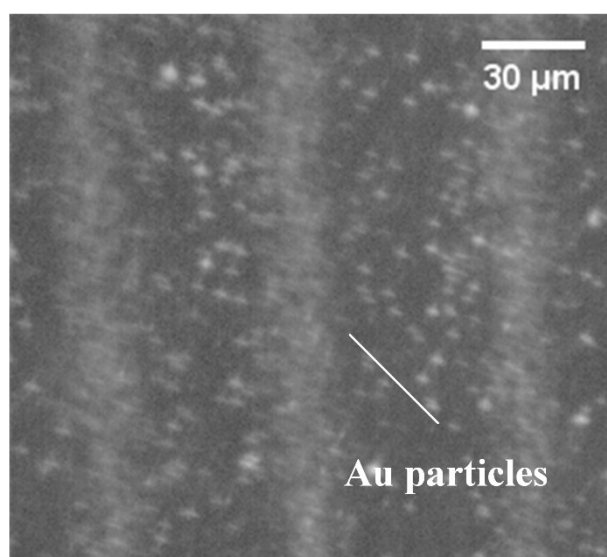
**Figure S2.** The size distribution of the AgNCs and AuNCs characterized by dynamic light scattering.



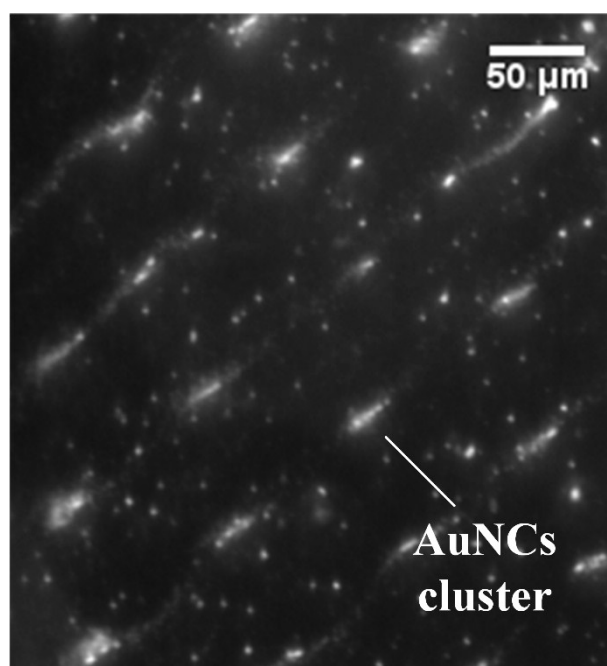
**Figure S3.** The zeta potential distribution of the AgNCs and AuNCs characterized by phase analysis light scattering.



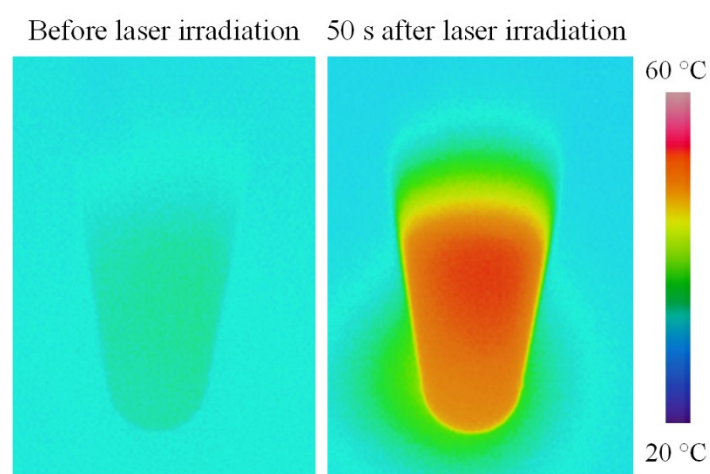
**Figure S4.** AuNCs are trapped at the same plane with polystyrene particles.



**Figure S5.** Au particles are patterned by the acoustic radiation force when increasing the input power to 180 mW.



**Figure S6.** In one-dimensional SSAWs field, the AuNCs are aggregated by the secondary acoustic radiation force, forming a “pearl chain”.



**Figure S7.** When the AuNCs are exposed to laser irradiation (2 W/cm<sup>2</sup>), temperature increases dramatically.