## **Supporting Information**

## Latex Particle Template Lift-up Guided Gold Wire-Networks Via Evaporation Lithography

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Figure S1. Schematic illustration (top and side views) of the dimensions of micro- (ab) and nanowells (cd) on patterned silicon wafer used for the dry deposition of 5  $\mu$ m and 1  $\mu$ m sized latex particles.



Figure S2. Large area dry deposition of 2D monolayer of latex particles onto a patterned silicon wafer in a square array arrangement for, (a) 5  $\mu$ m and (b) 1  $\mu$ m sized latex particles.



Figure S3. Large area latex particle lift-up of a 2D monolayer of latex particles on a glass substrate, (a) 5  $\mu$ m and (b) 1  $\mu$ m sized latex particles.



Figure S4. Optical micrograph of gold microwire network fabricated at room temperature (25 C).



Figure S5. Optical image of gold nano-pattern fabricated from evaporation lithography by exploiting  $1\mu m$  size latex particles. The dark patches represent the leftover debris of latex particles after oxygen plasma treatment.