

Supplementary Information

Sub-100-nm Nanoparticle Arrays with Perfect Ordering and Tunable and Uniform Dimensions Fabricated by Combining Nanoimprinting with Ultrathin Alumina Membrane Technique

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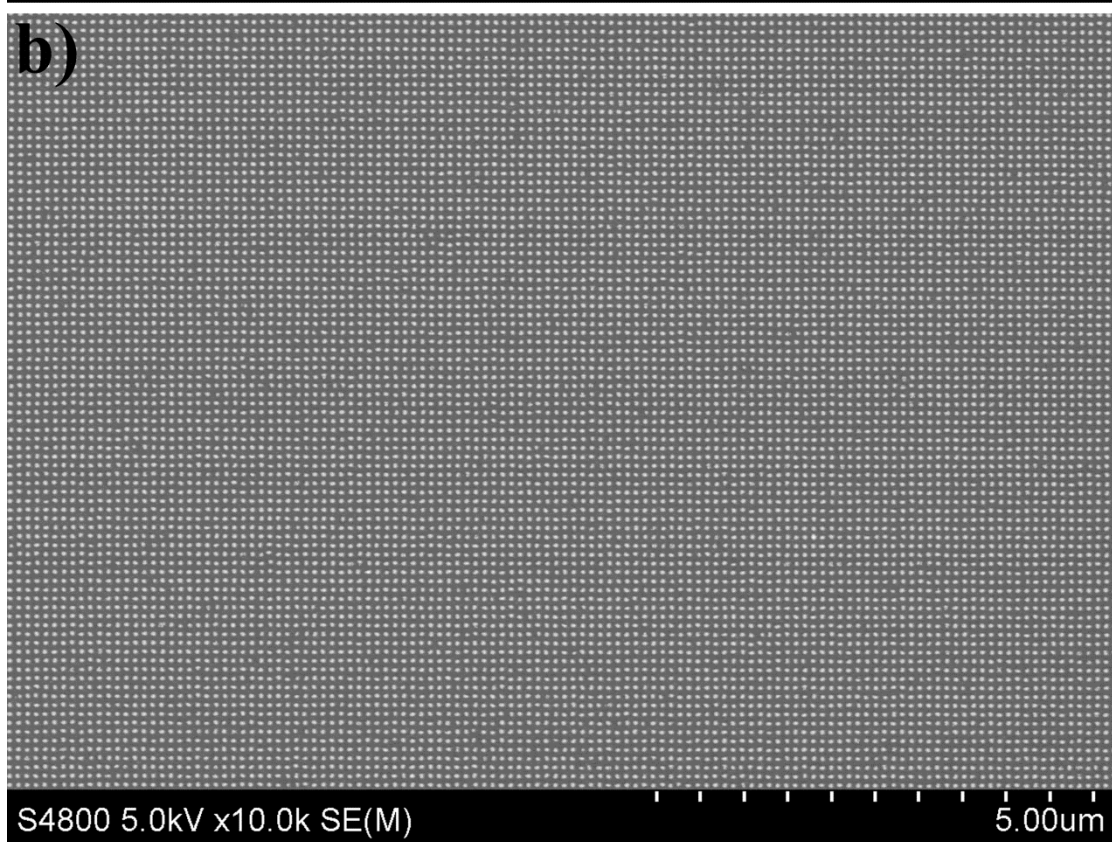
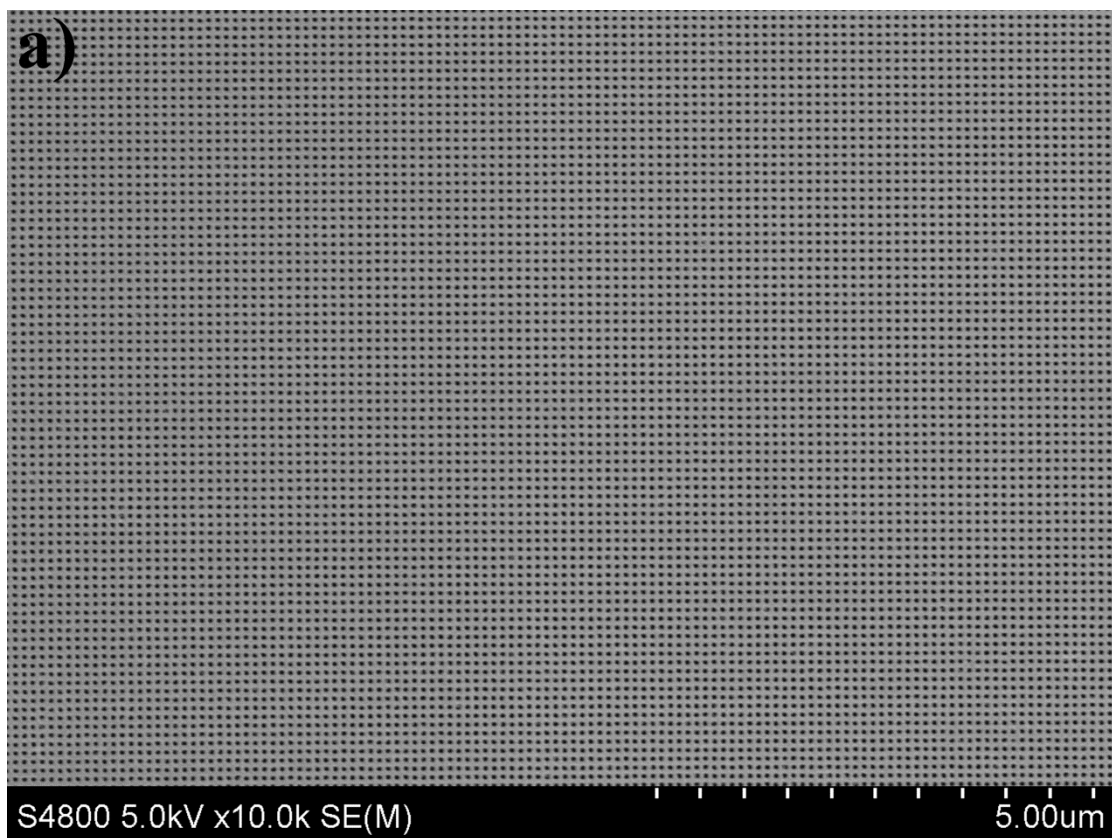


Figure S1. Large area SEM images of a) perfect UTAM and b) Au nanoparticle arrays on Si substrate.

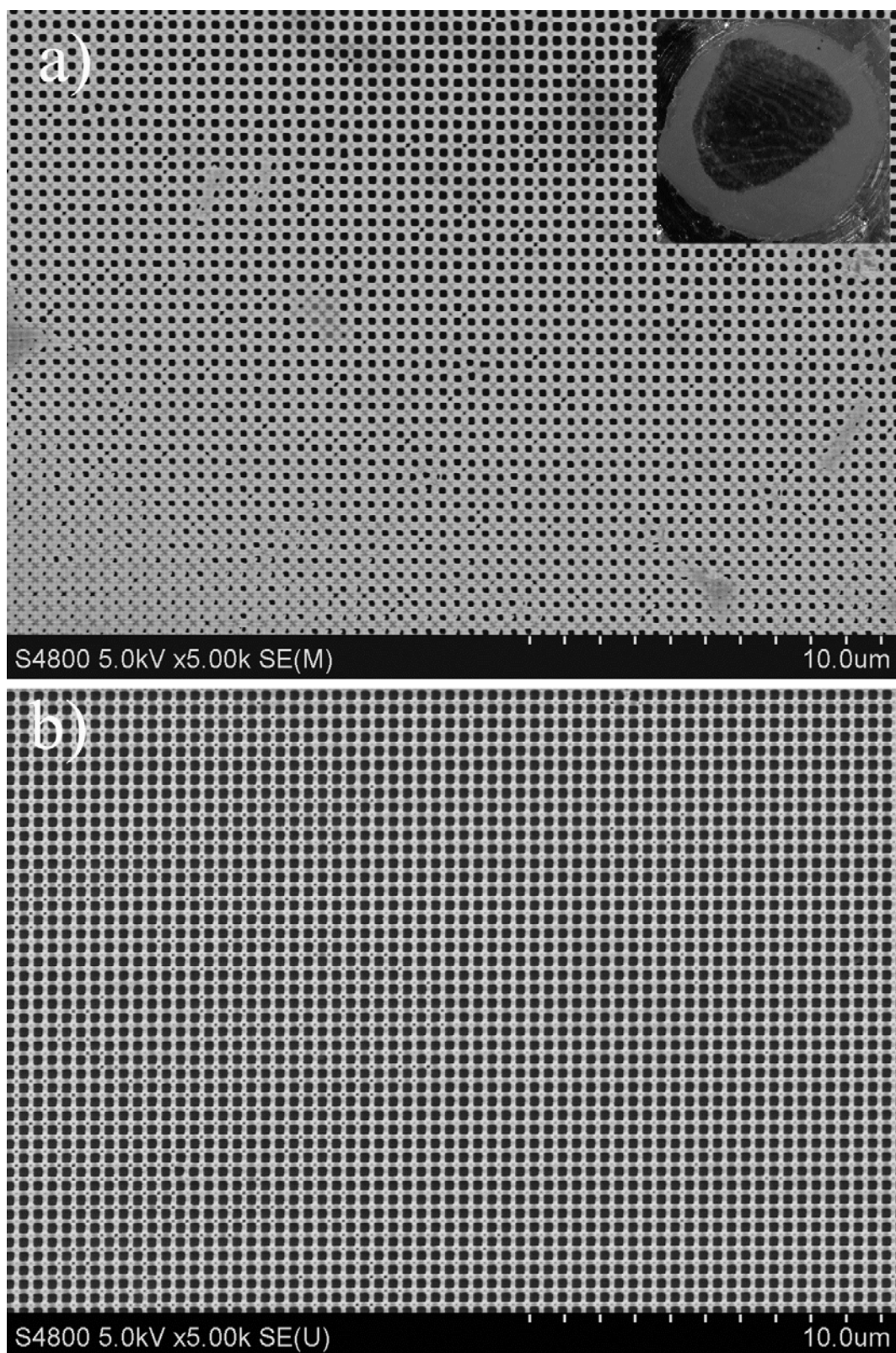


Figure S2. Top-view SEM images of UTAM prepared a) by using PMMA as supporting layer, and b) by our improved technique. The inset photo in a) shows the PMMA layer spin-coated on UTAM with the backside of Al. The periods of UTAM presented here are 400 nm, and the process of barrier layer removing and pore-widening for a) is 180 min for b) is 120 min.

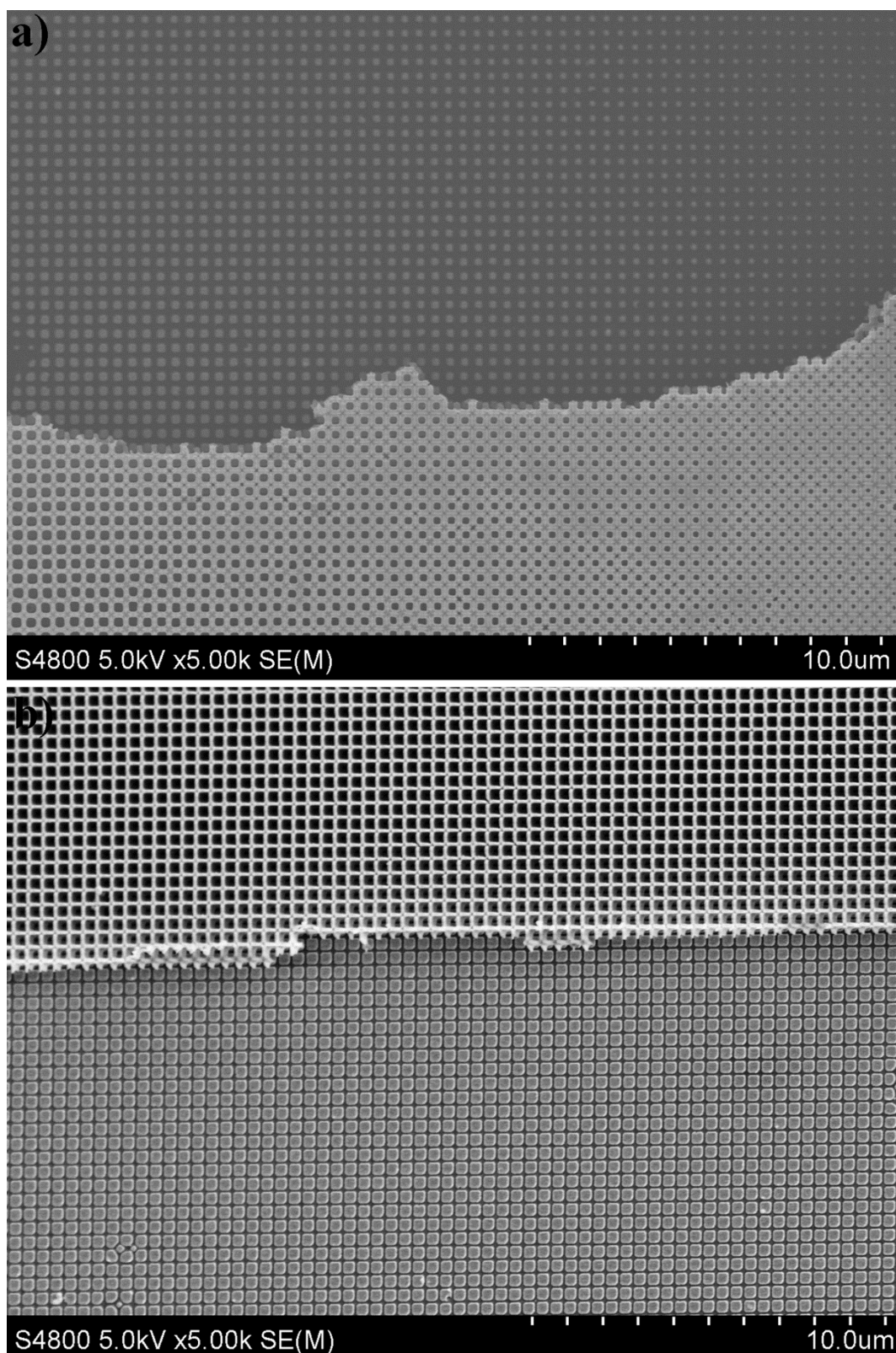


Figure S3. Top-view SEM images of Au nanoparticle arrays deposited on Si substrate a) by using PMMA as supporting layer and b) by our improved technique. Parts of UTAMs are remained intentionally. The periods are 400 nm, and the duration of barrier layer removing and pore-widening process for a) is 180 min for b) is 120 min.