

Supplementary Material

Galvanic-Cell-Reaction-Driven Deposition of Large-Area Au Nanourchin Arrays for Surface-Enhanced Raman Scattering

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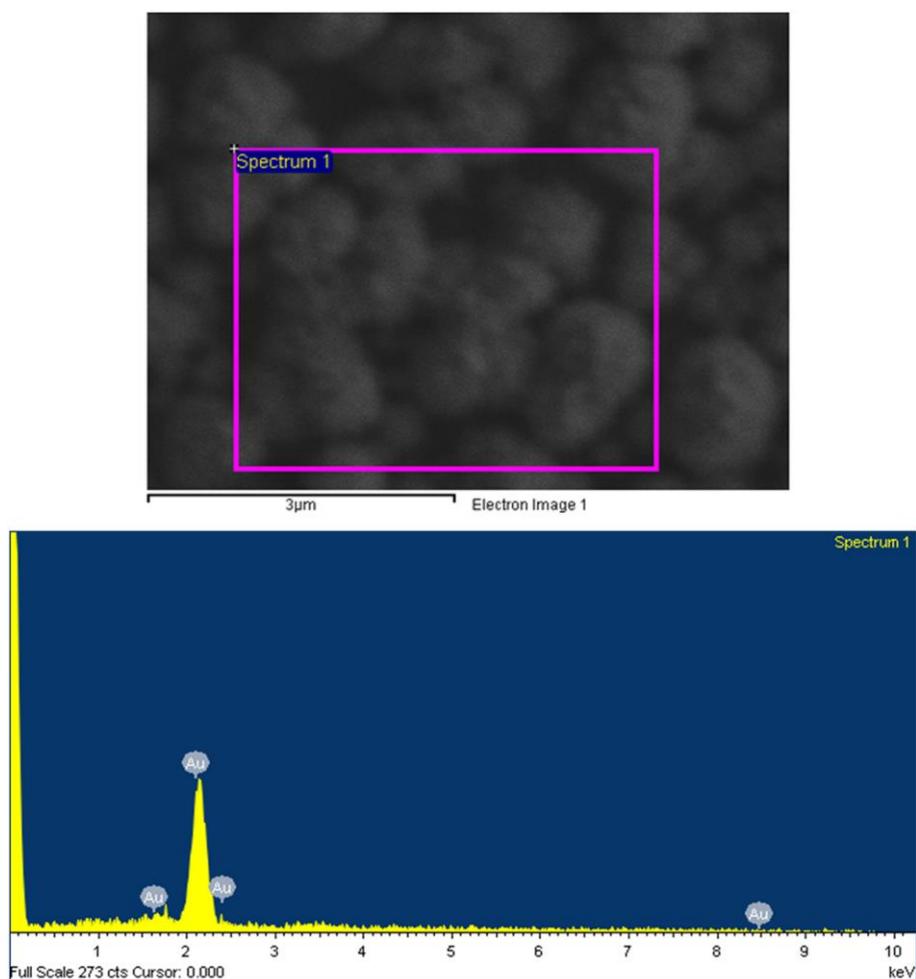


Figure S1. EDS from Au nanourchin arrays shown in Figure 2b.

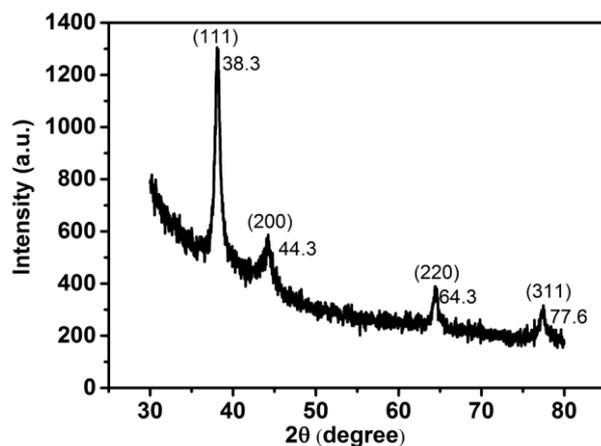


Figure S2. The XRD pattern of the as-prepared sample shown in Figure 2b.

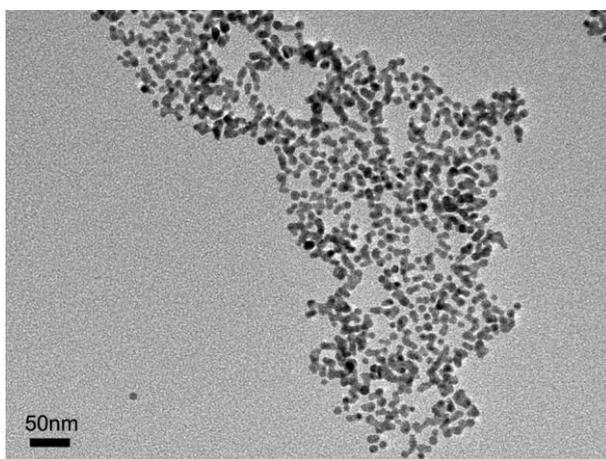


Figure S3. TEM image of the pre-prepared Ag colloidal particles.

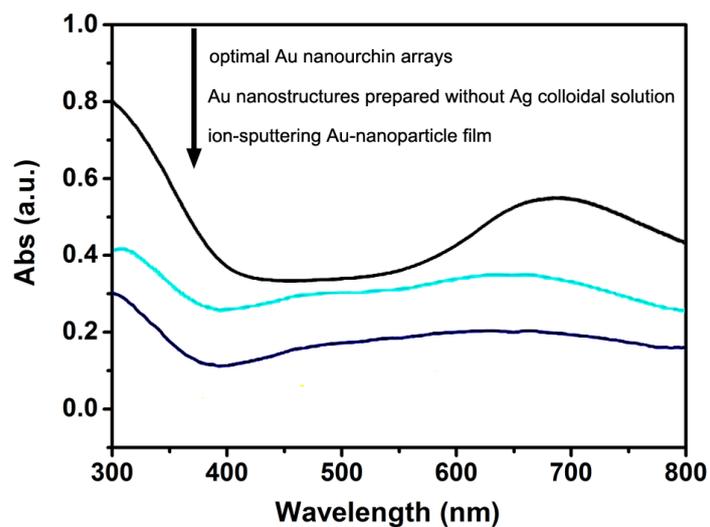


Figure S4. Absorption spectra of Au nanostructures achieved under the different experimental conditions.

Table S1. The average 611 cm⁻¹ peak intensities of R6G SERS spectra collected from 5 substrates of different batches.

| Substrate Number | 1 | 2 | 3 | 4 | 5 |
|-------------------------|----------|----------|----------|----------|----------|
| Raman | 5263 | 5120 | 6101 | 4789 | 5780 |
| Intensity | ±606 | ±525 | ±701 | ±423 | ±646 |