

Supporting Information

Biologically-inspired water-swelling-driven fabrication of centimetre-level metallic nanogaps

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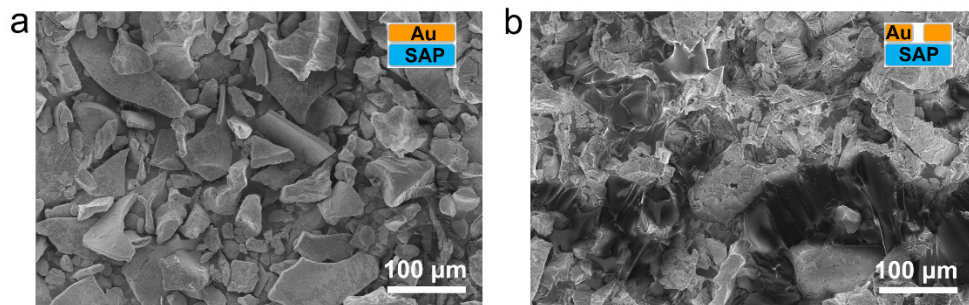


Figure S1. SEM characterization results. (a) SEM image of the Au/SAP structures before dropping deionized water. (b) SEM image of the Au-Gap/SAP structures after dropping deionized water.

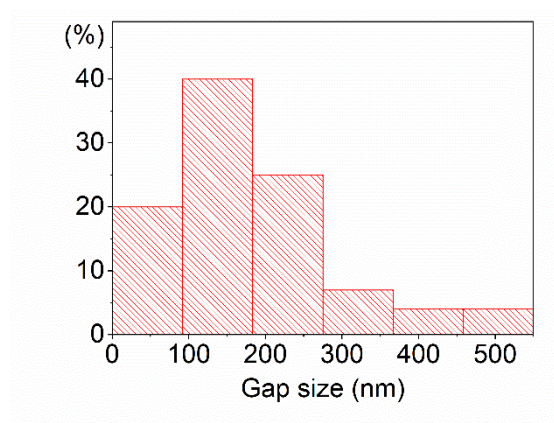


Figure S2. Statistical size distribution of 100 randomly-selected Au gaps.

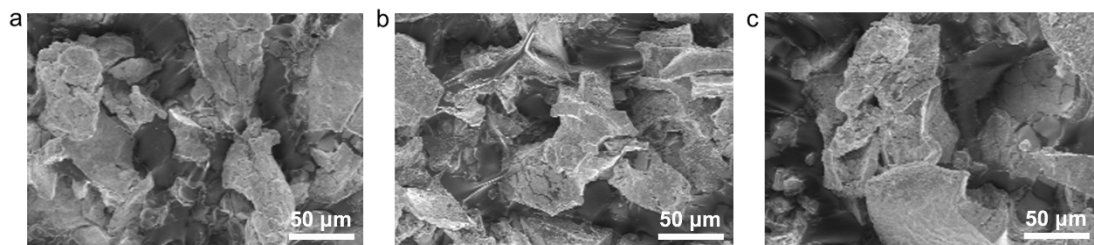


Figure S3. SEM characterization results of the gap structures. **(a)** SEM image corresponding to Figure 5a. **(b)** SEM image corresponding to Figure 5b. **(c)** SEM image corresponding to Figure 5f.

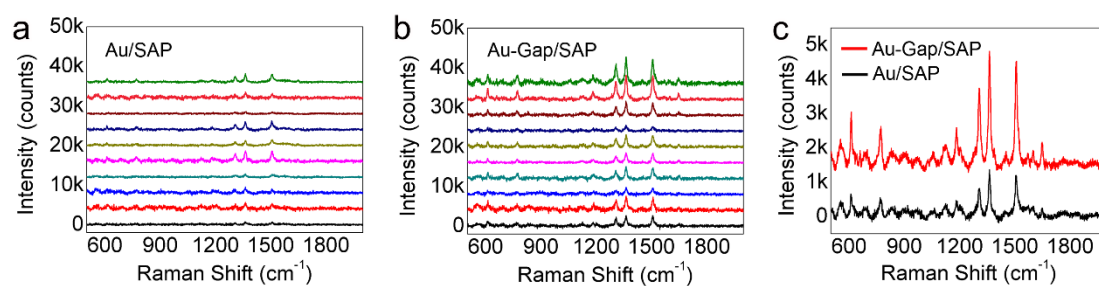


Figure S4. SERS effect of the Au-Gap/SAP structures. **(a)** SERS spectra of R6g molecules randomly collected from 10 different sites on the as-deposited large-area Au/SAP structures. **(b)** SERS spectra of R6g molecules randomly collected from 10 different sites on the large-area water-swelling-driven Au-Gap/SAP structures. **(c)** Average spectral intensity of the 10 SERS spectra shown in a and b, respectively.