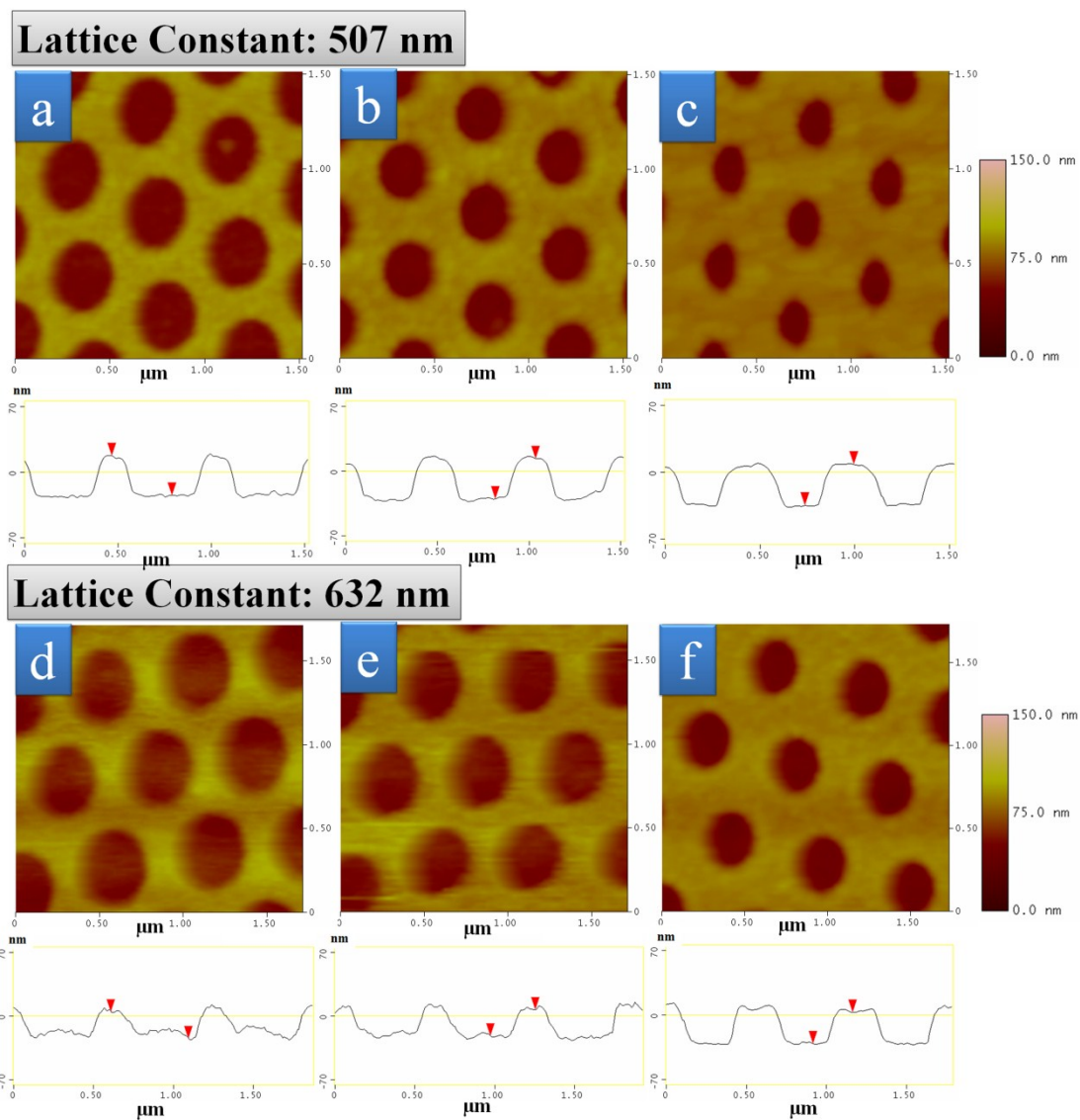


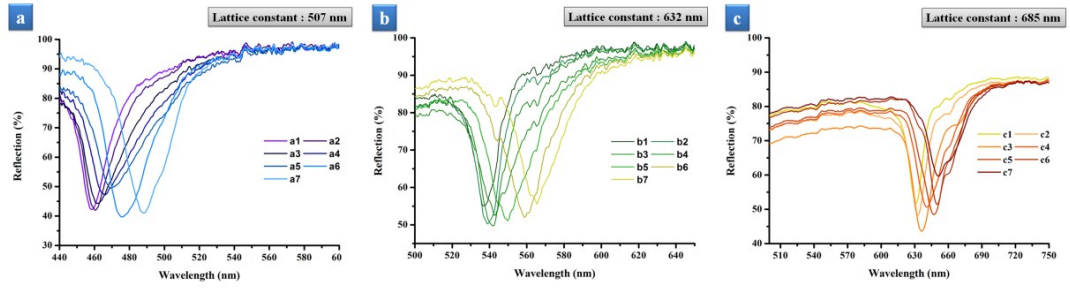
## Supporting Information

### **Graded Nanowell Arrays: Fine Plasmonic “Library” with Adjustable Spectral Range**

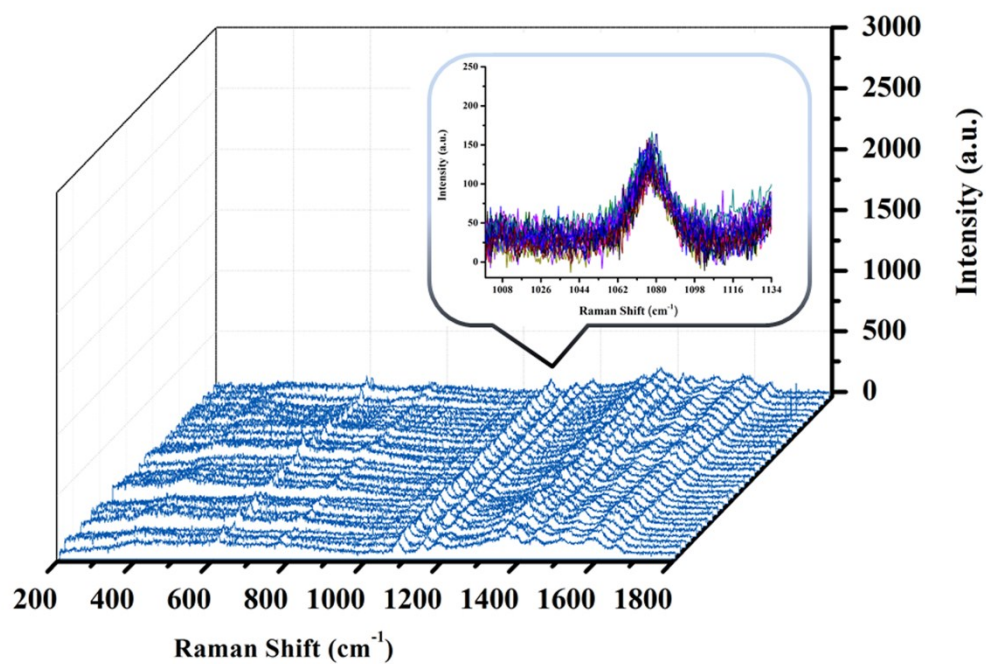
*Peihong Xue, Shengshun Ye, Hongyang Su, Shuli Wang, Jingjie Nan, Xingchi Chen, Weidong Ruan, Junhu Zhang\*, Zhanchen Cui, and Bai Yang*



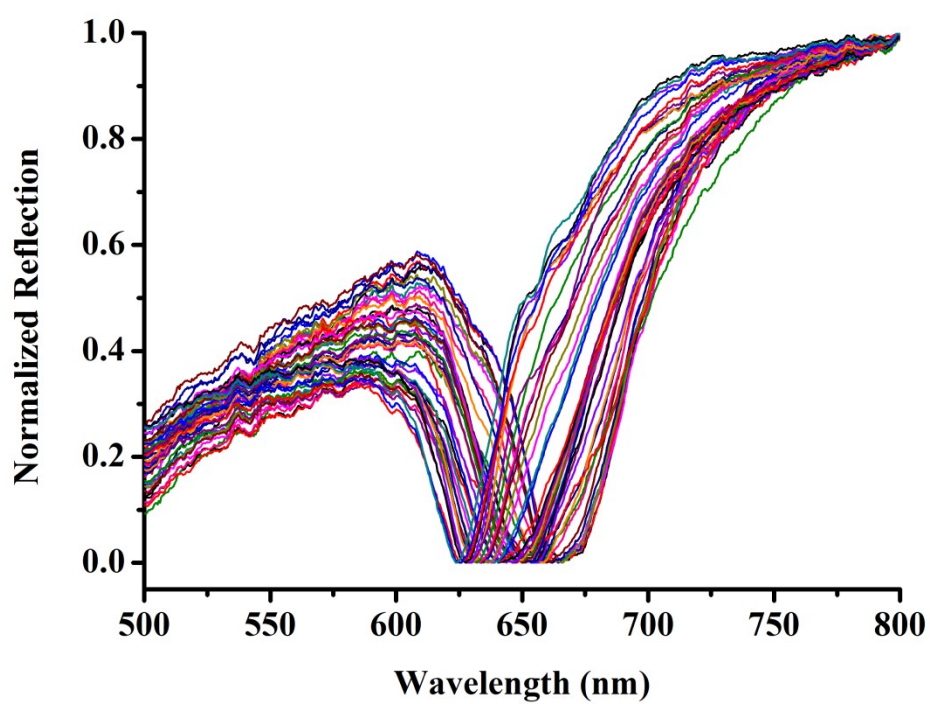
**Fig. S1** The AFM images for Ag nanowell arrays with geometric gradient with different lattice constants (a-c) 507 nm and (d-f) 632 nm along the substrate.



**Fig. S2** The measured reflectance spectra on different positions along the FPLs with the lattice constants of (a) 507 nm, (b) 632 nm, and (c) 685 nm.



**Fig. S3** The SERS gains of 30 random points with the same micro-nanostructures on one FPL. The inset is the plot to show an individual SERS peak which is the stretching of C-S at 1079 cm<sup>-1</sup>.



**Fig. S4** The normalized measured reflectance spectra of 40 continuous and homogeneous points in the range of 20 mm on FPL with the lattice constant of 685 nm, which was used to verify the plasmonic enhancement in SERS.