

Supporting Information

Plasmonic nanopillar array embedded microfluidic chips: an in-situ SERS monitoring platform

Yingqi Zhao^a, Yong-Lai Zhang^{*a,b}, Jian-An Huang^a, Zhenyu Zhang^a, Xianfeng Chen^{*a}, Wenjun Zhang^{*a}

a Center of Super-Diamond and Advanced Films (COSDAF) and Department of Physics and Materials Science, City University of Hong Kong, Hong Kong SAR;

E-mail: apwjzh@cityu.edu.hk, xianfeng_chen@hotmail.com

b State Key Laboratory on Integrated Optoelectronics, College of Electronic Science and Engineering, Jilin University, 2699 Qianjin Street, Changchun 130012, China;

E-mail: yonglaizhang@jlu.edu.cn

Nano-sphere lithography was used to define the Au mask for the etching of silicon nanopillars. Fig. S1 shows an array of closely packed polystyrene nanospheres, corresponding to the Step c in Fig. 1. Fig. S2 shows a Au film with a pattern of ordered nano holes, corresponding to the Step f in Fig. 1.

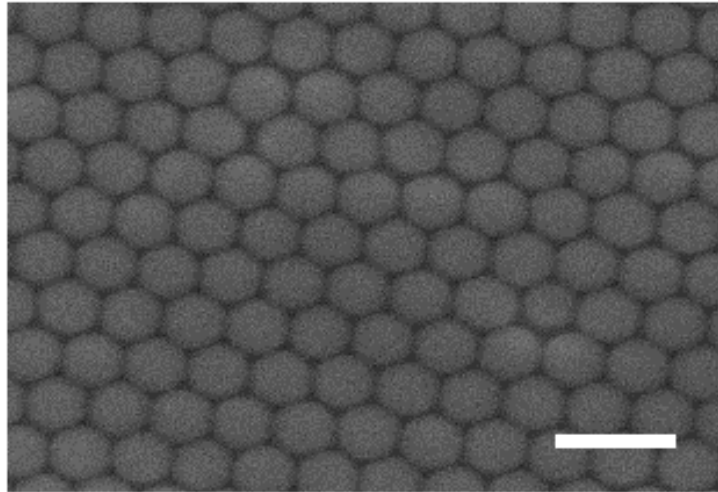


Fig. S1 SEM image of an array of closely packed polystyrene nanospheres. The scale bar is 500 nm.

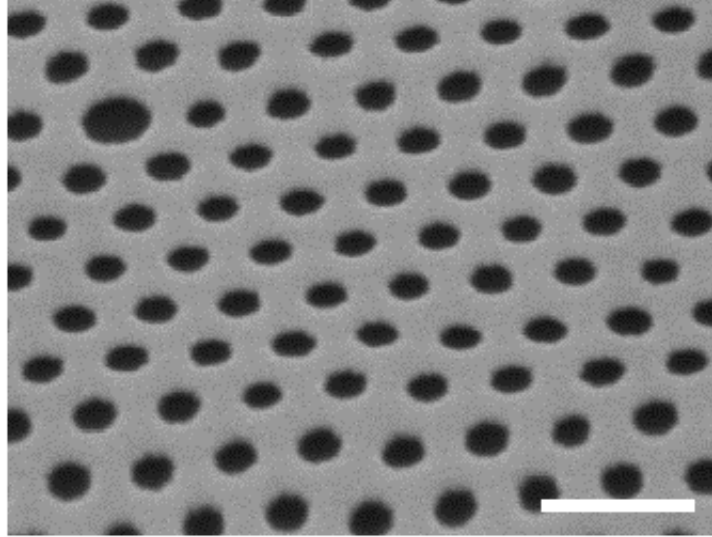


Fig. S2 SEM image of Au nano holes on the surface of a silicon wafer. The scale bar is 500 nm.