## Arrayed Nanopore Silver Thin Films for Surface-enhanced Raman

## Scattering

Weiwei Zhang<sup>a,b</sup>, Qingkun Tian<sup>a</sup>, Zhanghua Chen<sup>a</sup>, Cuicui Zhao<sup>a</sup>, Haishuai Chai<sup>a</sup>, Qiong Wu<sup>a</sup>, Wengang Li<sup>c</sup>, Xinhua Chen<sup>d</sup>, Yida Deng<sup>e\*</sup>, Yujun Song<sup>a\*</sup>

<sup>a</sup> Centre for Modern Physics Technology, School of Mathematics and Physics, School

of Civil and Resources Engineering, University of Science and Technology, Beijing.

Xueyuan Road 30, Haidian District, 100083, Beijing, China.

<sup>b</sup> Shunde Graduate School, University of Science and Technology Beijing, Daliang Zhihui Road 2, Shunde Distinct, 528399, Foshan, China

<sup>c</sup> Xiangan Affiliated Hospital, Xiamen University. Siming North Road 422, Siming District, 361005, Xiamen, Fujian, China.

<sup>d</sup> Department of Hepatobiliary and Pancreatic Surgery, the First Affiliated Hospital, School of Medicine, Zhejiang University, Key Laboratory of Combined Multi-organ Transplantation, Ministry of Public Health, Hangzhou 310003, China.

<sup>e</sup> Tianjin Key Laboratory of Composite and Functional Materials, School of Materials Science and Engineering, Tianjin University. Weijin Road 92, Nankai District, Tianjin, 300350, China.

\*E-mail: Yujun Song, songyj@ustb.edu.cn;

Yida Deng, yida.deng@tju.edu.cn



**Fig. S1** (a) Absorption spectra of PMMA-based silver nanoporous films. The silver film thickness was 90 nm, and nanopore diameters were (i) 50 nm, (ii) 70 nm, and (iii) 90 nm; (b) Absorption spectrum of the PMMA film.