Electronic Supplementary Material (ESI) for Analytical Methods.

Supplementary Information

Facile fabrication of large-area and cost-effective PDMS-SERS substrate by sandpaper template-assisted lithography

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Table S1. Different curing time corresponding to the tensile displacement and tensile strength

Curing time/h	Displacement/mm	tensile strength /MPa
6	38.32	0.52±0.04
9	50.07	0.93±0.02
12	58.60	0.94±0.02
15	52.01	1.16±0.03
18	54.18	1.78±0.03

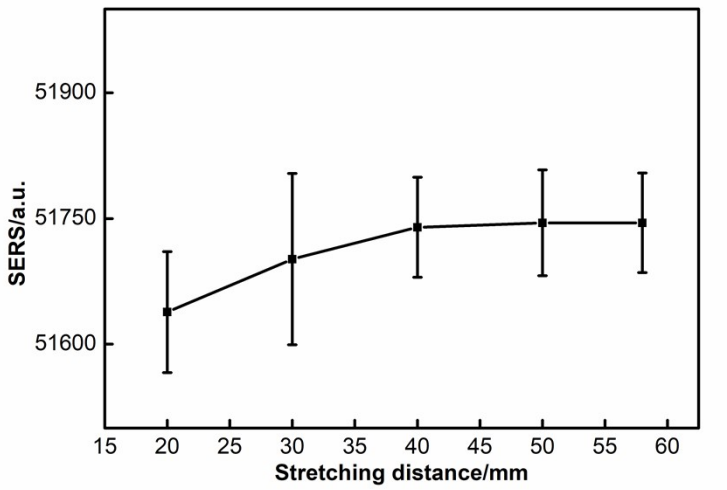

Fig. S1 SERS performance after the length of the SMPS substrate was stretched from 20 mm to different lengths (30mm, 40mm, 50mm, 58mm). 20 μL R6G (100 nM) was used as the SERS probe Laser power: 10 mW. Integration time: 10 s. Objective: 50×.

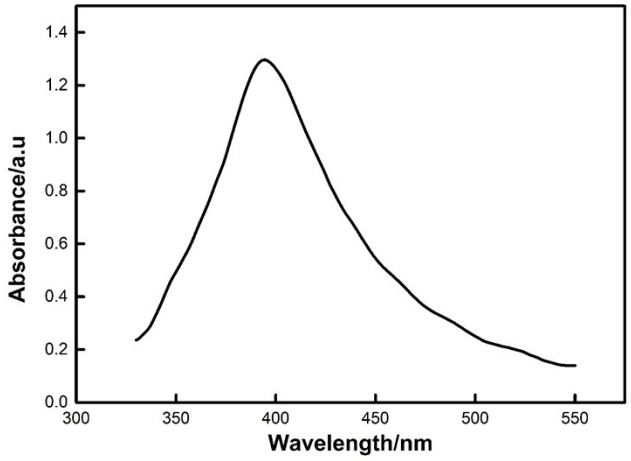

Fig. S2 UV–Vis spectra of the prepared Ag NPs.

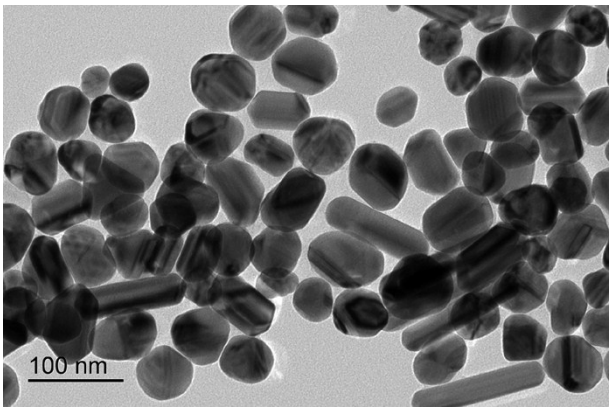

Fig. S3 TEM image of the prepared Ag NPs.

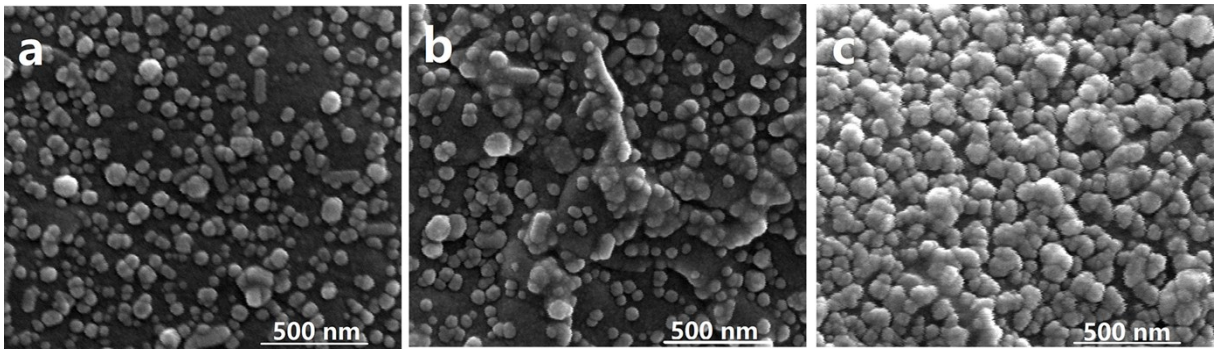

Fig. S4 SEM images of different rounds of Ag NPs deposited on the SMPS substrate. a-c represented one, two and three rounds of Ag NPs deposition, respectively.

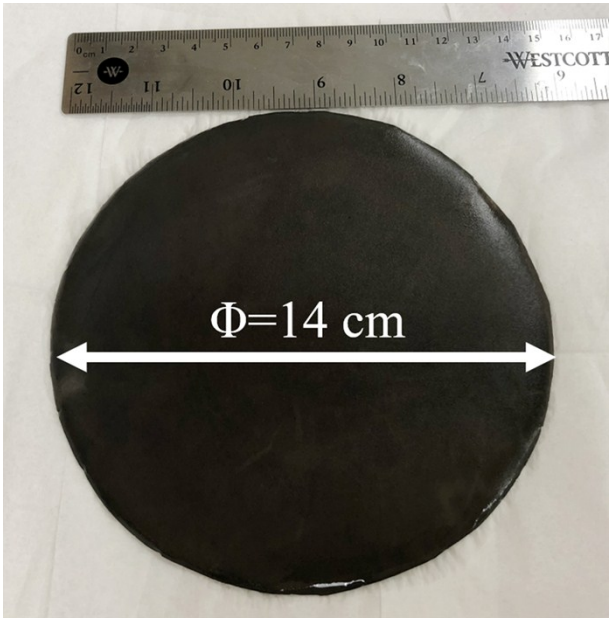

Fig. S5 Photos of Statistic of the circular structure SMPS substrates with 14 cm diameter.