

Curvature-Insensitive Transparent Surface-Enhanced Raman Scattering Substrate Based on Large-Area Ag Nanoparticle-Coated Wrinkled Polystyrene/Polydimethylsiloxane Film for Reliable In Situ Detection

Figure S1

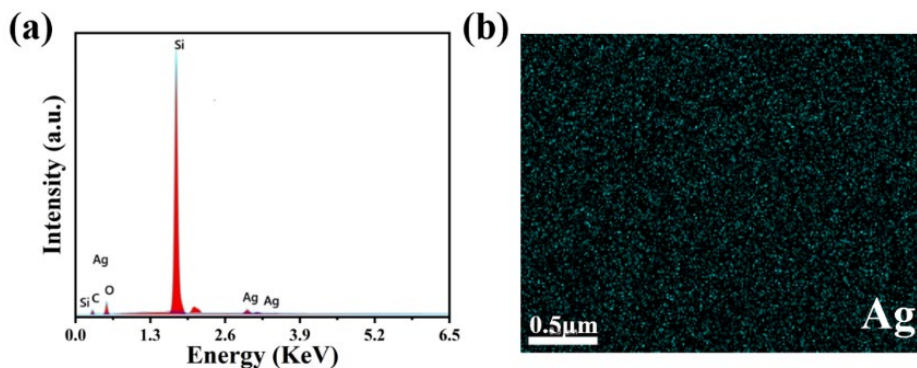


Figure S1. (a) EDS spectrum and (b) EDS mapping of Ag NP@W-PS/PDMS-60 flexible SERS substrate.

Figure S2

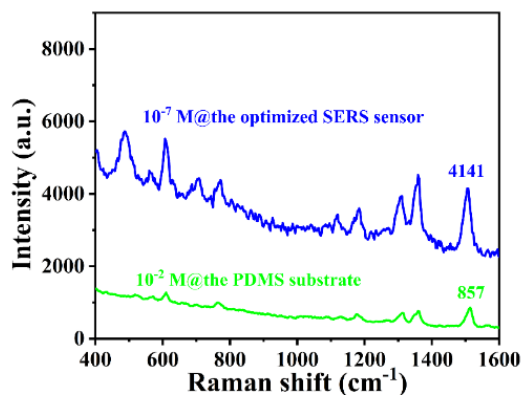


Figure S2. SERS spectra of R6G (10⁻⁷ M) collected from the Ag NP@W-PS/PDMS-60 film and Raman spectra of R6G (10⁻² M) collected from the pure PDMS film.

Table S1. Comparisons between some recent reported flexible SERS substrates.

SERS substrate	Probe analyte	AEF	Uniformity	Reproducibility	Reference
Flexible pyramid array	R6G	2.1×10^7	6.3%	4.6%	25
Open nanocavity-assisted Ag@PDMS	R6G	$\sim 10^{12}$	6.86%		29
MLA/WS/AgNPs 3D-SERS	R6G	4.35×10^7	6.12%		31
AgNCs@SiO ₂ /PMHS modified paper substrate	R6G	6.55×10^6	6.05%	9.22%	38
triangular Au/Ag nanoparticle arrays	R6G	2.13×10^8	2.3%	6.3%	39
Ag NPs@W-PDMS film	R6G	1.19×10^5	6.27%	7.3%	40
cotton SERS substrates	PATP	5.18×10^5	8.15%		41
Biomimetic flexible SERS substrates	R6G	4.2×10^5	7.3%	2.8%	42
Au NBPs@Ag/PDMS film	CV	1.5×10^7	12.7%		43
spiky gold nanostars	R6G	6.2×10^8	5.4%		44
Ag NP-coated wrinkled PS/PDMS film	R6G	4.83×10^5	7.85%	3.09%	this work