A large-scale and flexible SERS substrate based on sliver decorated nano-cone arrays and its applications for pesticide residue detection

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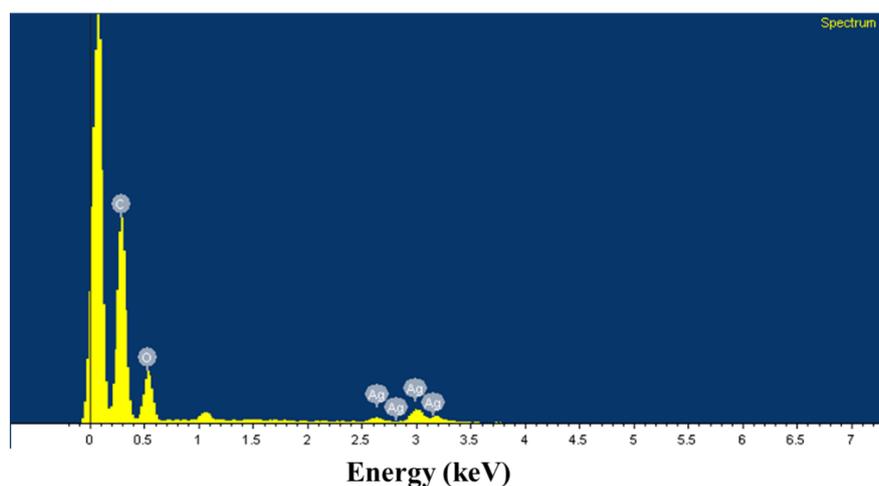
1. EDS results of Ag@R-SERS substrate

Fig. S1 EDS spectrum of Ag@R-SERS substrate

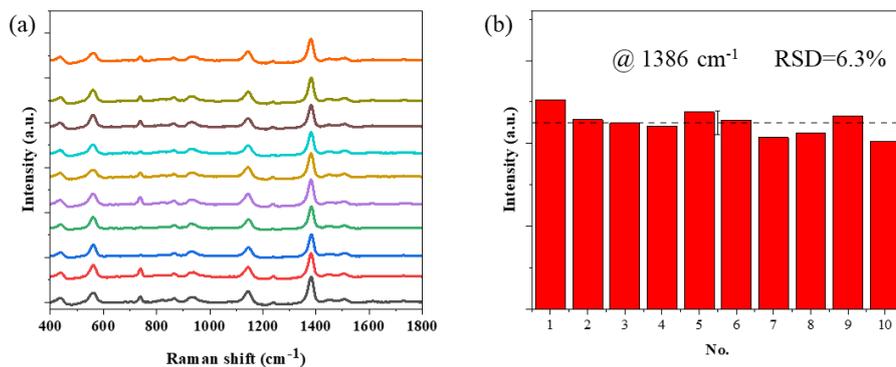2. SERS spectra of thiram detected on Ag@R-SERS substrate

Fig. S2 (a) SERS spectra of thiram detected on Ag@R-SERS substrate. (b) Corresponding intensities (red-bar), mean value (dash-line), and standard deviation (scale-bar) of characteristic peak at 1386 cm^{-1}.

3. Comparisons of reported SERS substrate in substrate properties, set-up types, and LDL or LOD

Table S1 Comparisons of thiram SERS detection in reported literatures

SERS substrate	set-up type	Sample	LOD or LDL (ppm)
Au nanodendrites[31]	portable	apple juice	2.4
AuNP on cotton fabrics[32]	portable	juice	0.5,0.9
Au@Ag on PDMS-assisted paper[33]	portable	orange peel	0.5
AuNP on bacterial cellulose[34]	portable	apple peel	0.98
AuAg alloyed NPs on paper filters[35]	portable	standard solution	1.2
PMMA/Ag NPs/graphene[36]	bench-top	apple juice	0.24
Ag nanocubes on filter paper[37]	bench-top	apple peel	0.2

LDL: lowest detectable level