

Supplementary information:

**Construction on HPLC-SERS Hyphenated System for Continuous
Separation and Detection Based on Paper Substrates**

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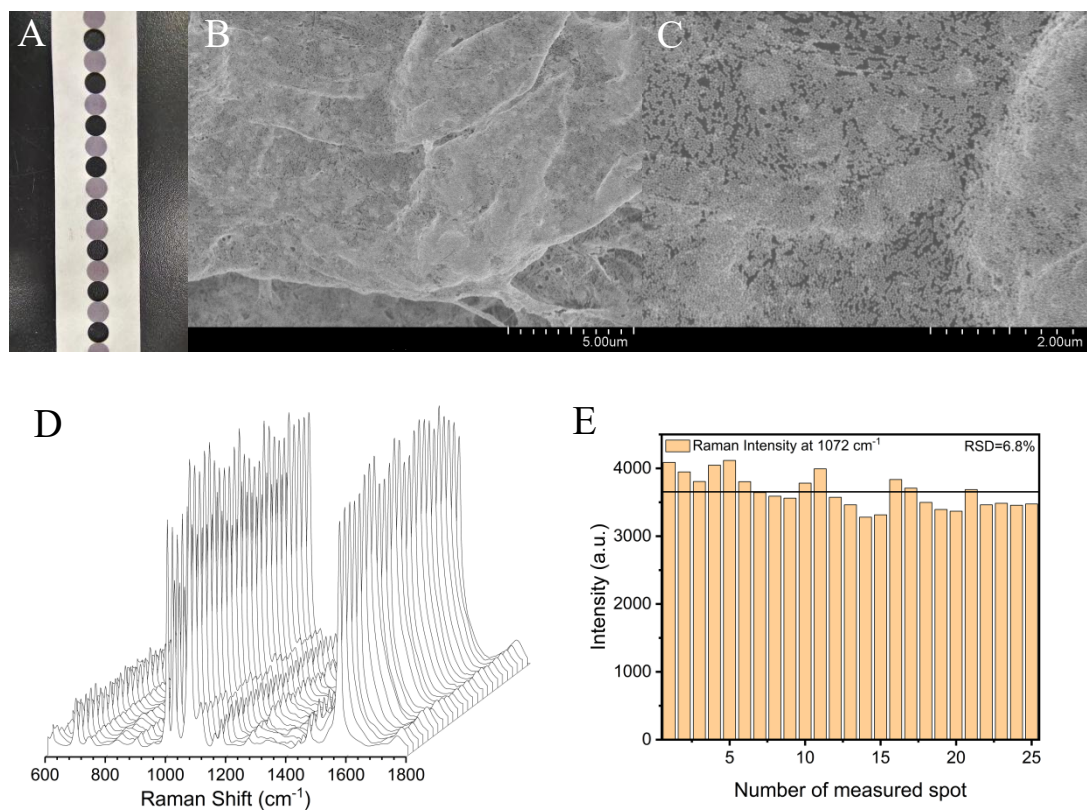


Fig. S1 Photograph (A) and SEM images (B, C) of the paper substrate; (D) SERS spectra of thiophenol (TP) from 25 selected spots on the paper substrate; (E) Comparison of SERS intensity of TP at 1072 cm⁻¹.

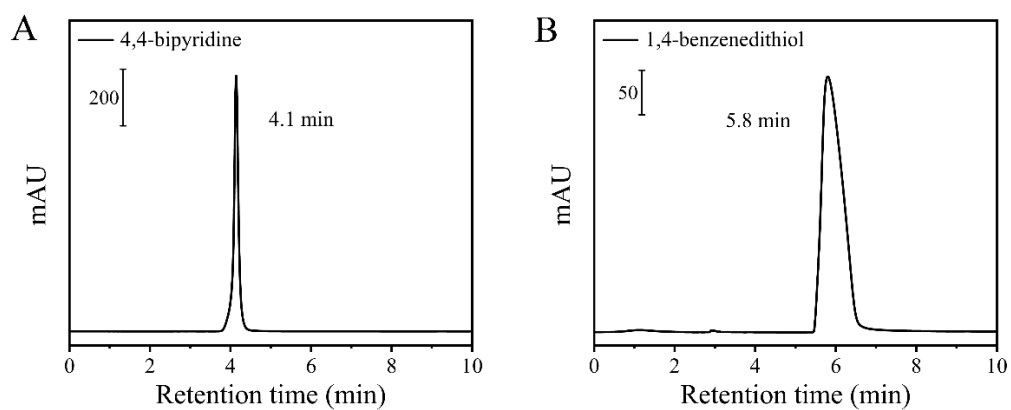


Fig. S2 Chromatograms of 10^{-3} mol·L⁻¹ 4,4'-bipyridine (A) and 1,4-benzenedithiol (B).

A mixture of methanol and 10 mM ammonium acetate aqueous solution (v/v 60:40)

was used as the mobile phase with a system flow rate of 1 mL·min⁻¹.

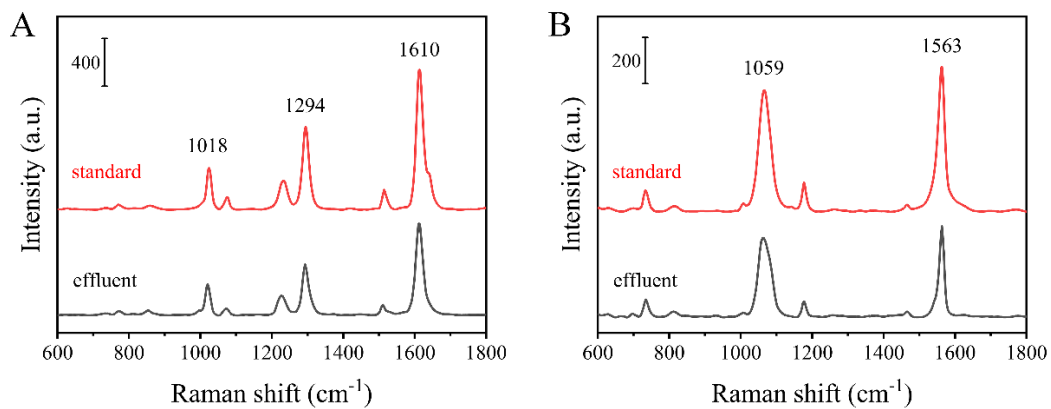


Fig. S3 (A) SERS spectra of 4,4'-bipyridine effluent and standard solution; (B) SERS spectra of 1,4-benzenedithiol effluent and standard solution.

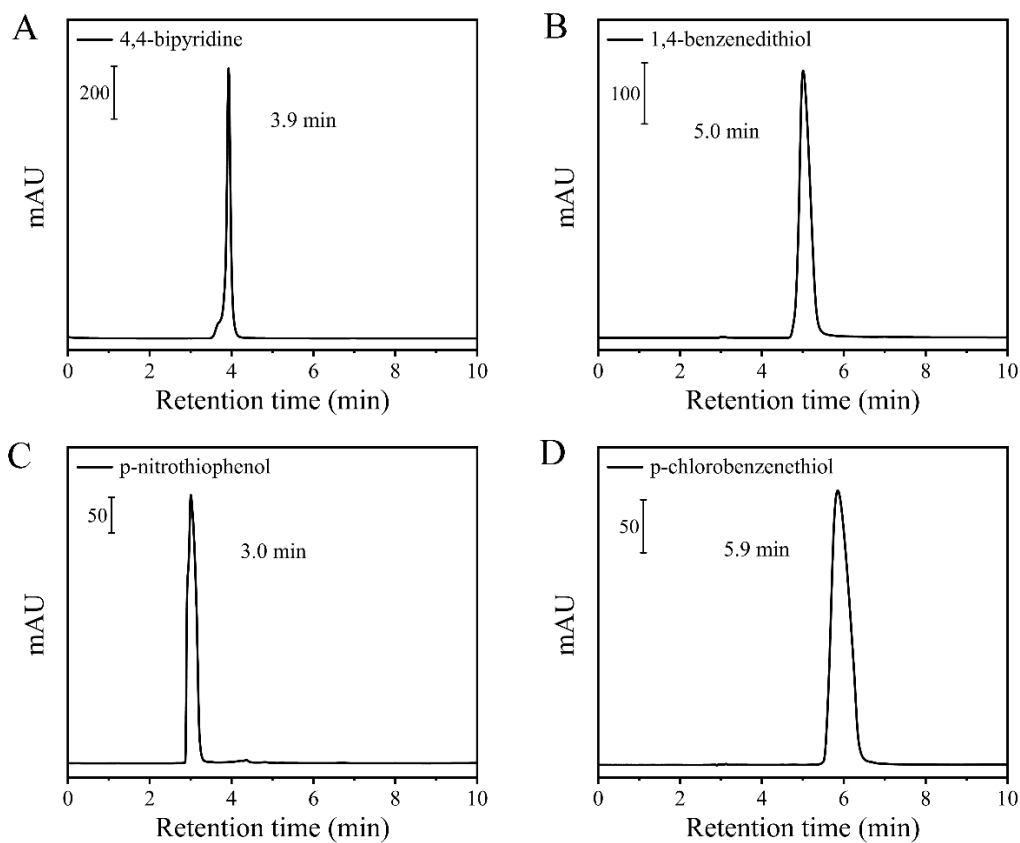


Fig. S4 Chromatograms of 10^{-3} mol·L $^{-1}$ 4,4'-bipyridine (A), 1,4-benzenedithiol (B), p-nitrothiophenol (C) and p-chlorobenzenethiol (D). A mixture of methanol and 10 mM ammonium acetate aqueous solution (v/v 65:35) was used as the mobile phase with a system flow rate of 1 mL·min $^{-1}$.

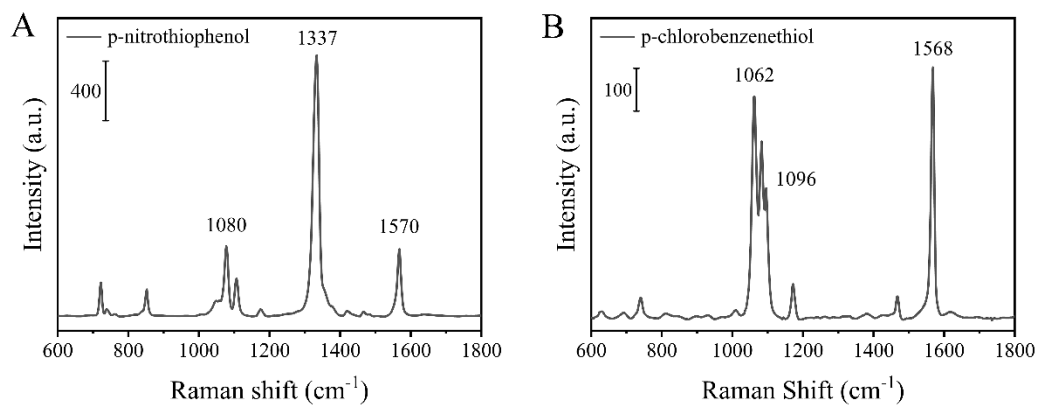


Fig. S5 SERS spectra of p-nitrothiophenol (A) and p-chlorobenzenethiol (B).

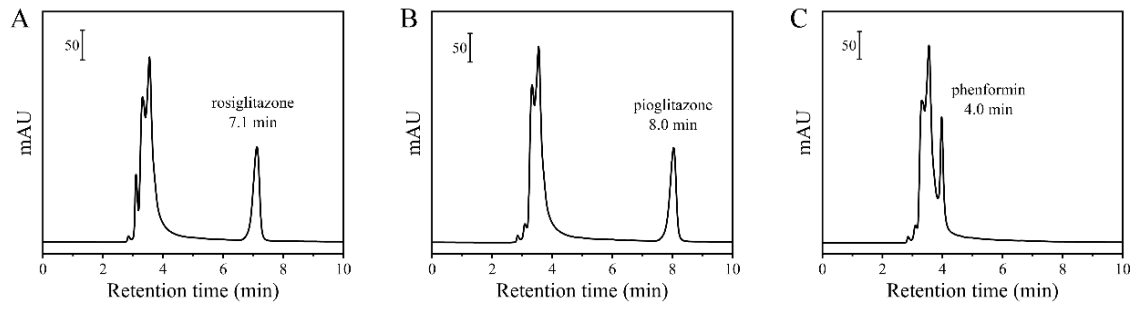


Fig. S6 Chromatograms of health products added with rosiglitazone maleate (A), pioglitazone hydrochloride (B) and phenformin hydrochloride (C), respectively.