Supplementary material

Nanostructured silver coating as a stationary phase for capillary gas chromatography

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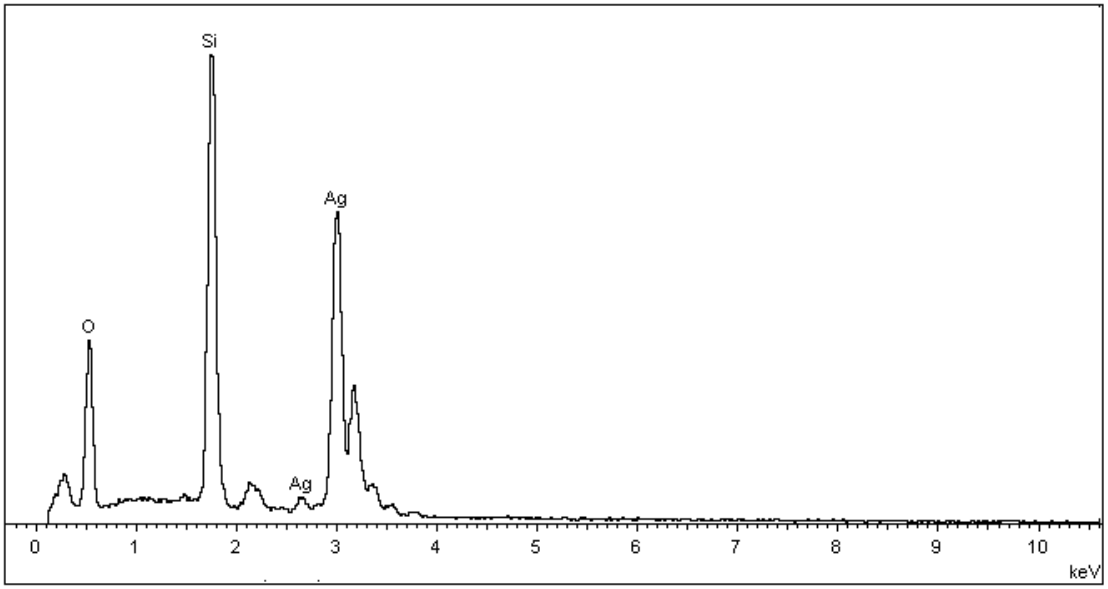

Fig. S1. The EDS spectrum of the inner surface of silver column.

Table S1 The percentage of the inner surface of silver column from EDS characterization.

elements	weight percentage (%)	atom percentage (%)
Ag	51.79	16.71
Si	23.06	28.58
O	25.15	54.71

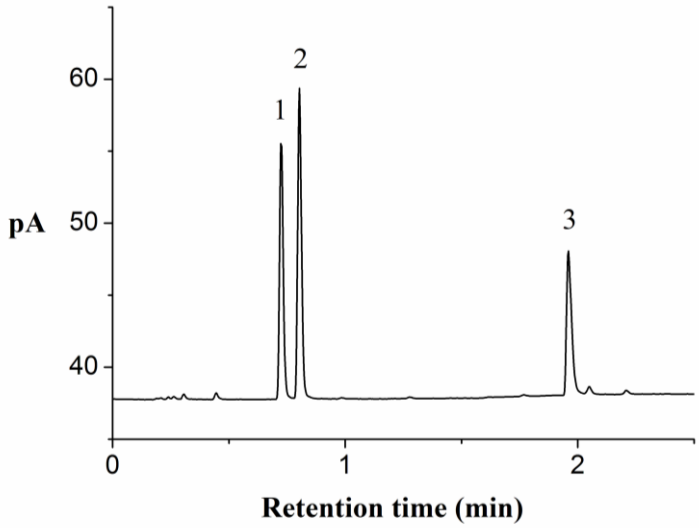

Fig. S2. The chromatogram of 1-bromoalkanes on the silver column.

Chromatographic peaks: 1-bromobutane (1), 1-bromooctane (2) and 1-bromododecane (3). Conditions: column temperature at 80 °C; the flow rate of carrier gas held at 0.5 mL min^{-1} (22 cm s^{-1}) and up to 3 mL min^{-1} at a rate of 3 mL min^{-1}; the injection volume was 0.01 μL; the injection split was 50:1.

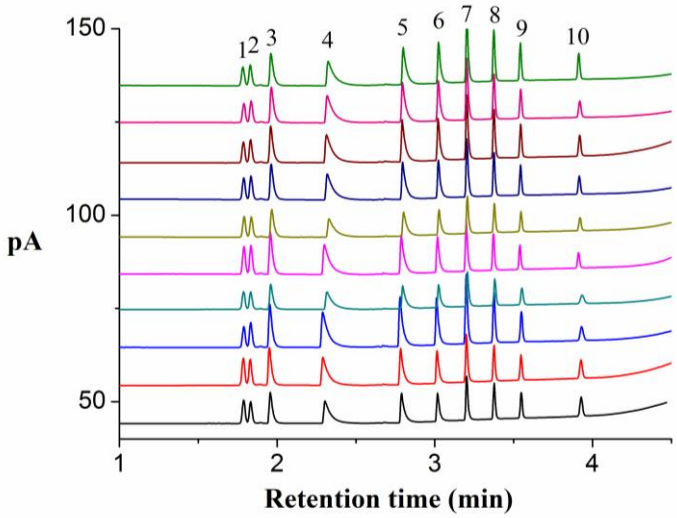

Fig. S3. Repeatability of chromatographic separation of *n*-alkanes on the silver column.

Chromatographic peaks: *n*-hexane (1), *n*-heptane (2), *n*-octane (3), *n*-nonane (4), *n*-decane (5), *n*-undecane (6), *n*-dodecane (7), *n*-tridecane (8), *n*-tetradecane (9) and *n*-hexadecane (10). Conditions: column temperature held at 31 °C for 2.5 min and up to 140 °C for 15 min at a rate of 50 °C min^{-1}; the flow rate of carrier gas held at 0.3 mL min^{-1} (15 cm s^{-1}) for 2.5 min and up to 3 mL min^{-1} at a rate of 3 mL min^{-1}; the injection volume was 0.01 μL; the injection split was 100:1.