Supporting Information

A new strategy for highly efficient single-drop microextraction with liquid-gas compound pendant drop

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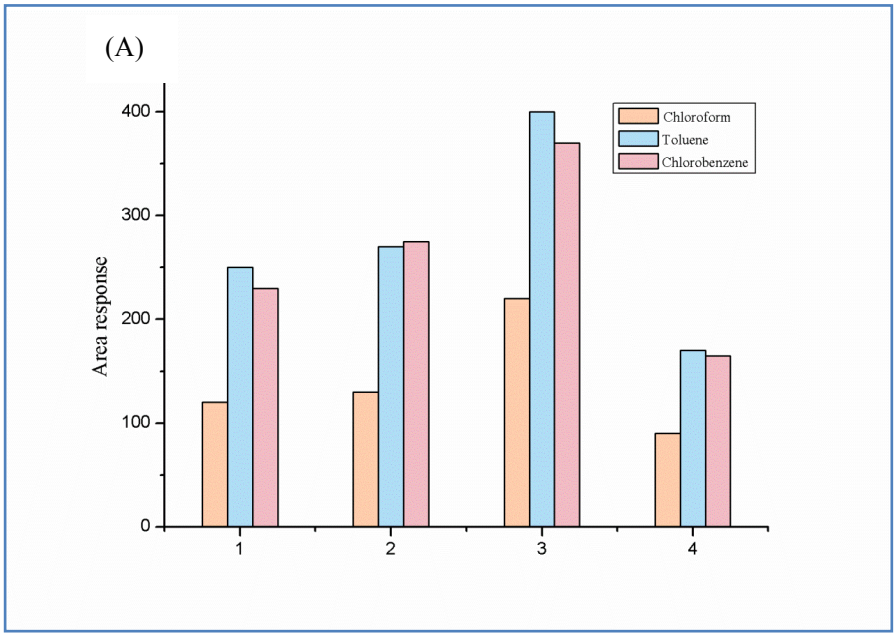
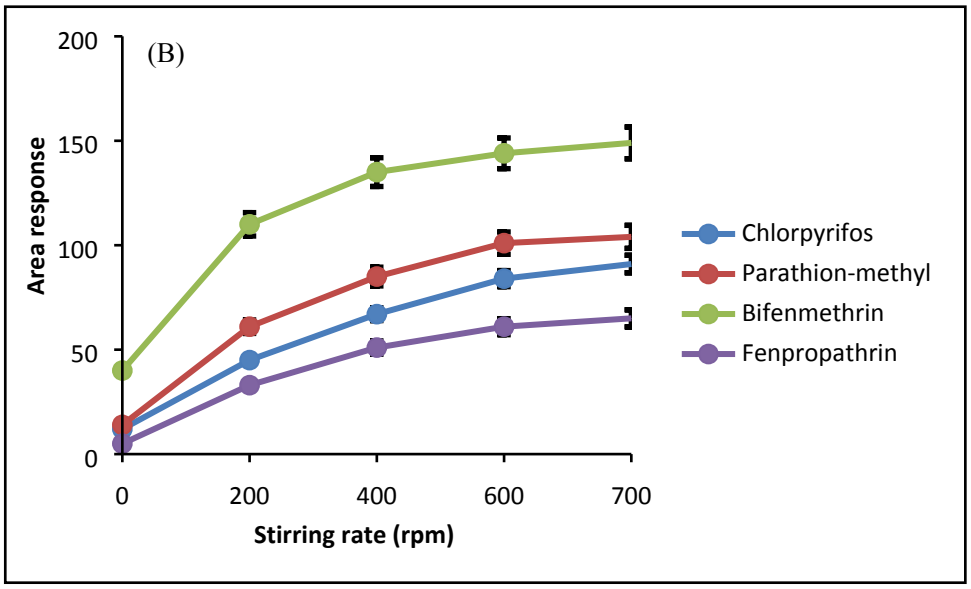
GC/MS conditions: The mass spectrometric detector was operated in the electron ionization (EI) mode with an ionizing energy of 70eV; the ion source temperature of 230 °C, and a quadrupole temperature of 150 °C. Date acquisition was carried out in the selected ion monitoring (SIM) mode with a solvent delay of 4min. Each compound was confirmed by its retention time and the identification of four selected ions and was quantified on the basis of the peak area using the quantitative ions.

Table S1. Retention times and selected ions of pesticides

Pesticide	t_R (min)	Selected ions (m/z)	Quantitative ion (m/z)	Molecular weight
Parathion-methyl	7.414	79, 109, 125, 263	109	263.2
Chlorpyrifos	7.730	97, 197, 286, 314	97	350.5
Bifenthrin	9.372	141, 165, 181, 422	181	422.9
Fenpropathrin	9.461	91, 181, 265, 334	181	349.4

Figure S1. The influence of several variables on the liquid-gas CPD microextraction: (A) organic solvent (toluene, chlorobenzene and chloroform), (B) stirring rate (0-700rpm), and (C) extraction time (0-240s). Experimental conditions: 1 µL drop of chlorobenzene containing 1 µL air bubble, and 25 °C.





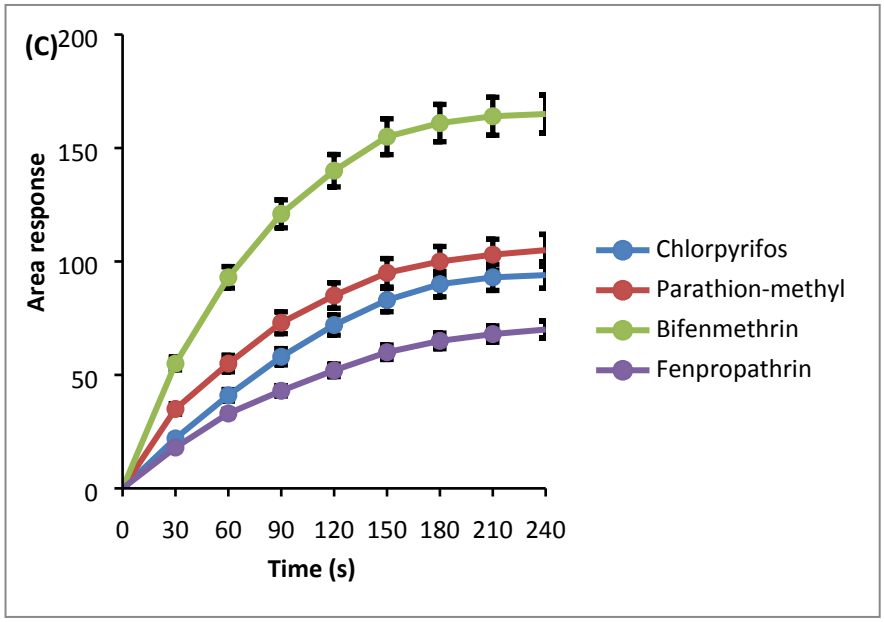
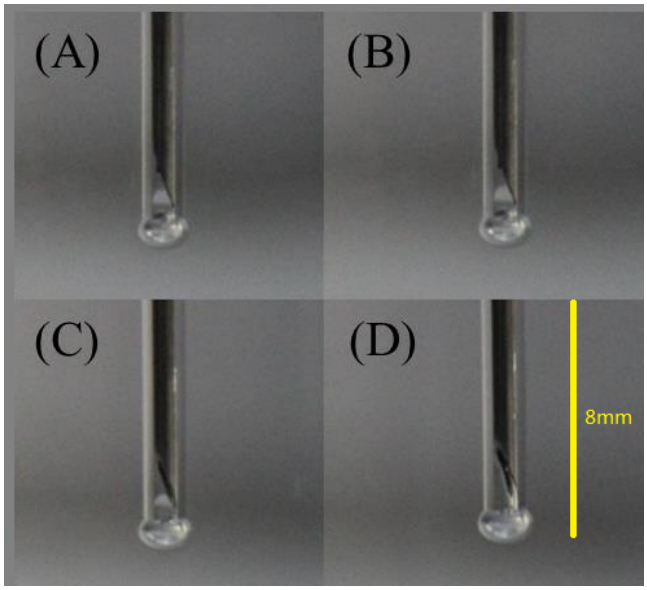


Figure S2. Photograph of a 1 μL drop of chlorobenzene containing 1 μL air bubble in (A) 5% NaCl solution (m/v), (B) 10% NaCl solution (m/v), (C) 20% NaCl solution (m/v), and (D) 30% NaCl solution (m/v).


(A)
(B)
(C)
(D)
8mm