

A Simplified Electrospray Ionization Source based on Electrostatic Field Induction for Mass Spectrometric Analysis of Droplet Samples

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Electronic Supplementary Information

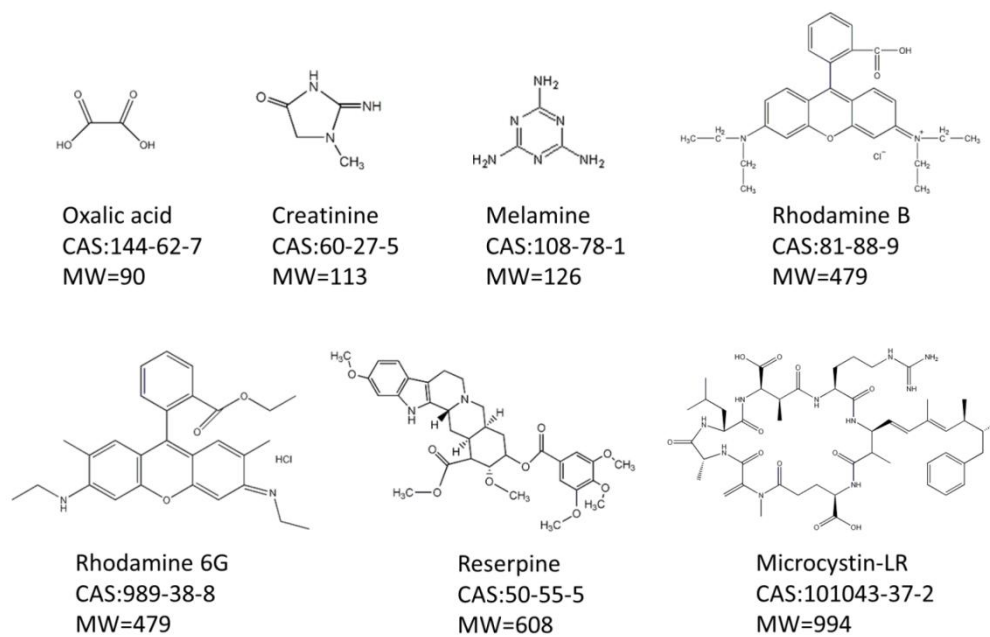


Fig. S1 Chemical structures of the compounds investigated in this study.

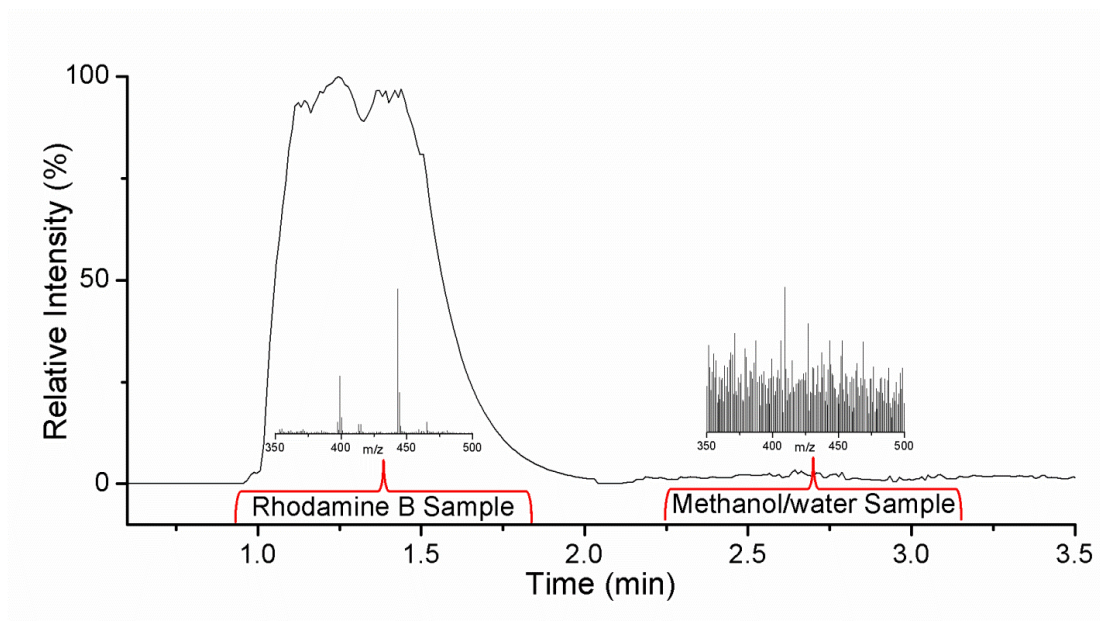


Fig. S2 The extracted ion chromatogram of rhodamine B cation (m/z 443). The corresponding mass spectra are shown in inserts. Rhodamine B sample and blank sample of methanol/water(1/1, v/v) are detected respectively using EFISI source. Two new fused silica capillaries with same length were used here, to exclude the possible remains in silica capillaries.

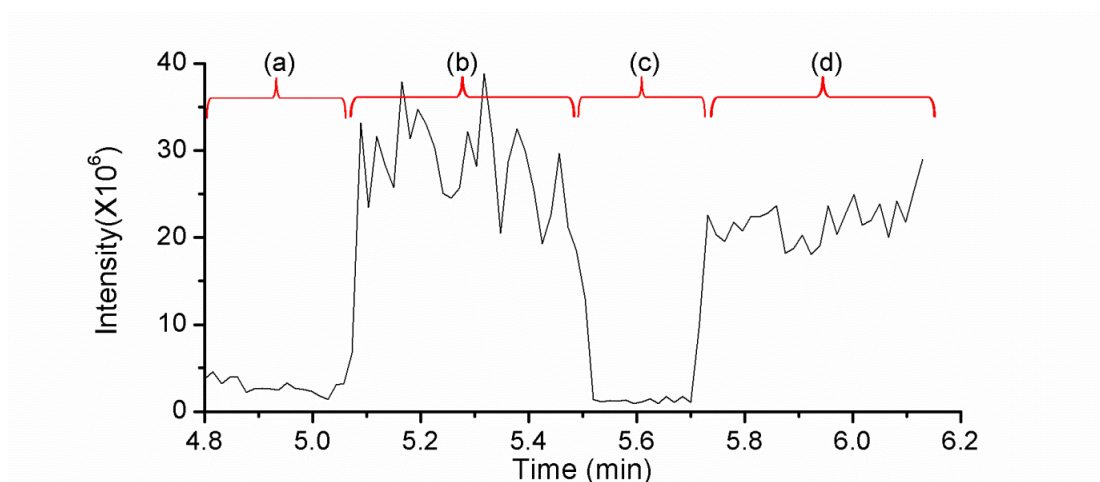


Fig. S3 Total ion chromatogram when an additional conductive material (needle) was placed (a) near the droplet or (c) near the needle tip and (b&d) when it was removed.

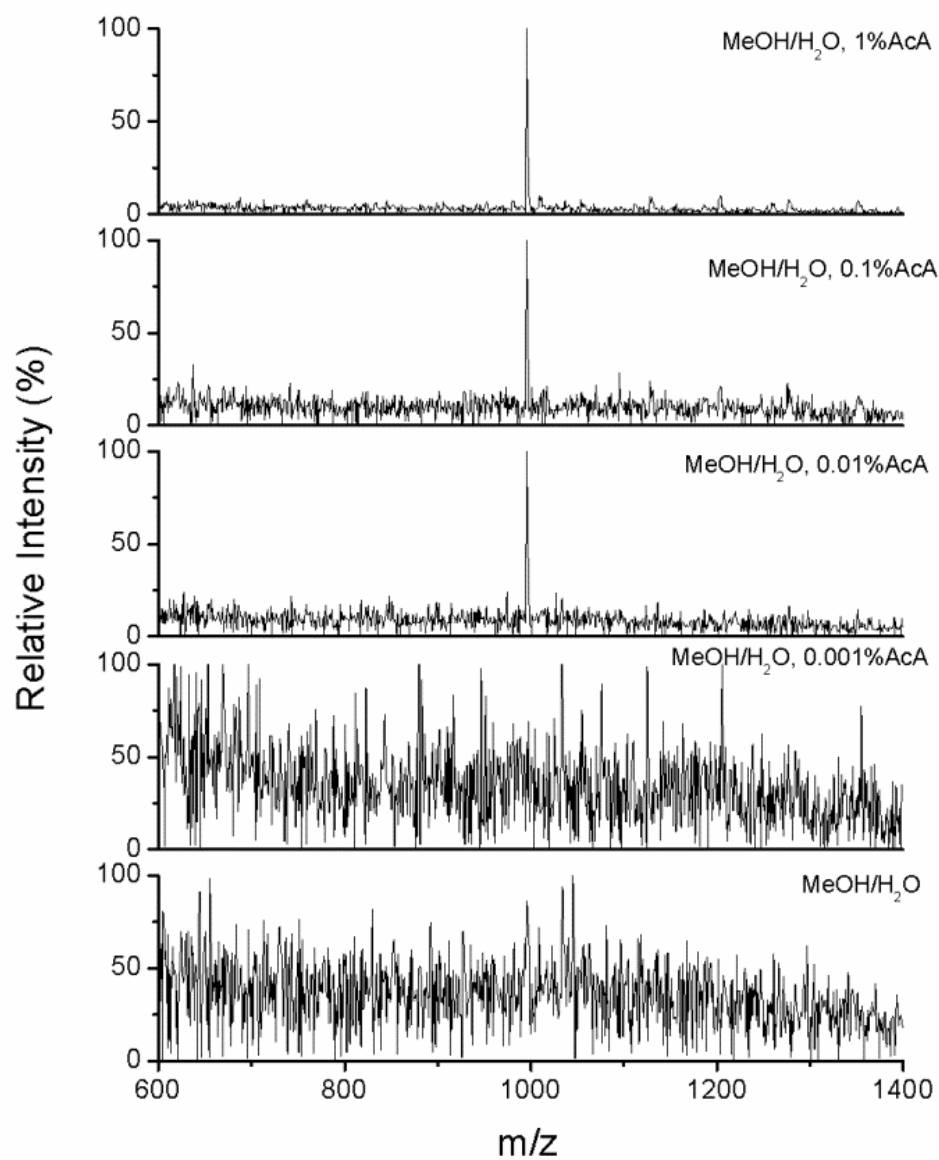


Fig. S4 Typical EFISI mass spectra of 62.5 μ g/L microcystin-LR dissolved in different solvent.

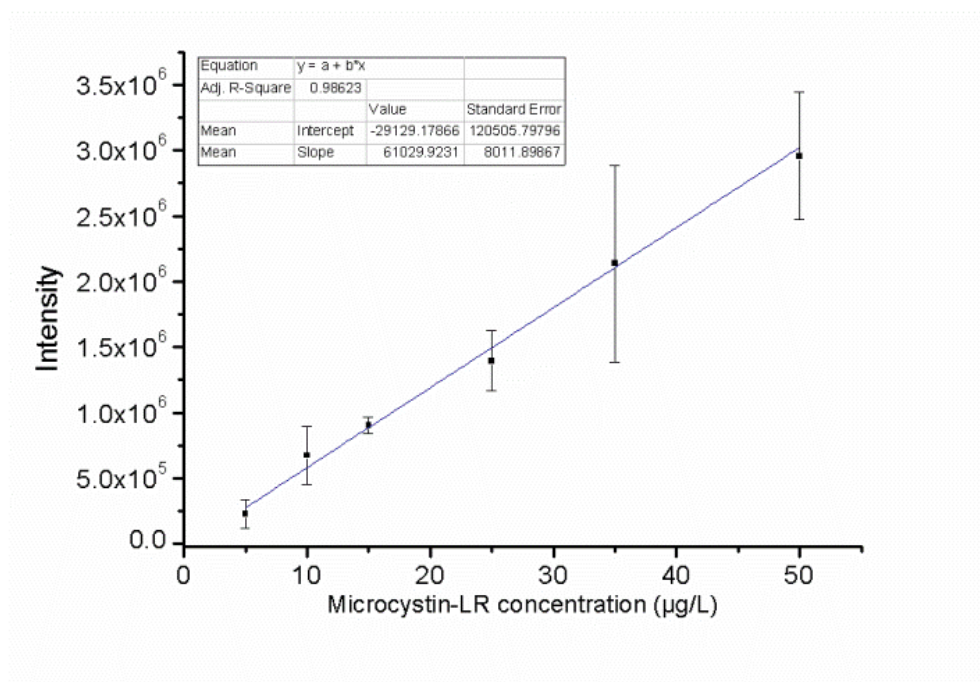


Fig. S5 Calibration between EFISI MS signal intensity of $[M+H]^+$ (m/z 995) and concentration of microcystin-LR. Microcystin-LR is dissolved in methanol/water (1/1, v/v) with 1% acetic acid. Each sample was measured 6 times. Bars are standard deviation (\pm SD, $n=6$).

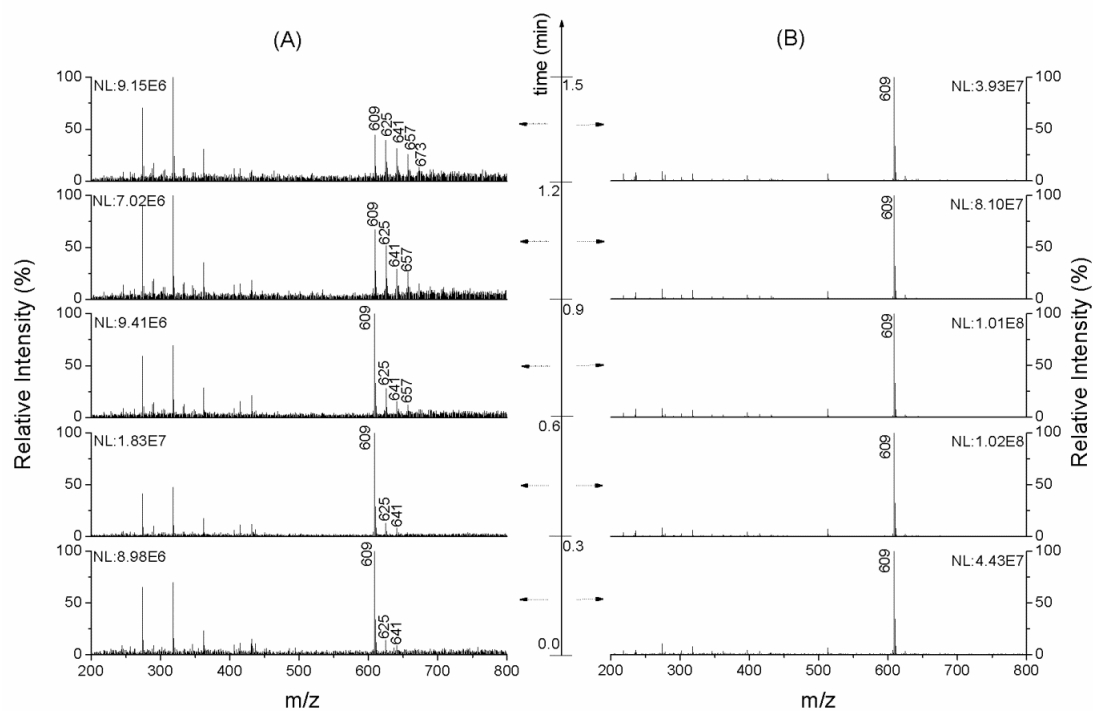


Fig. S6 The EFISI mass spectra of 25mg/L reserpine in different periods of scan time. Reserpine is dissolved in (A) methanol/water (1/1, v/v) and (B) methanol/water (1/1, v/v) with 1% acetic acid.