

Supplementary Table S-8. Sampling conditions

No	Analyte	Reagent concentration	Method	Concentration in the air (ppm)	Added	Sampling Time (min)	Determined in collected sample (mM)
1	CH ₃ COOH	99.9 %	Evaporation	79.3	10 μL	16	0.0647 ± 0.0026
2	CH ₃ COOH	99.9 %	Evaporation	15.9	2 μL	16	0.0229 ± 0.0013
3	HCOOH	99.9 %	Evaporation	120.3	10 μL	16	0.1074 ± 0.0114
4	HCOOH	99.9 %	Evaporation	24.0	2 μL	16	0.0490 ± 0.0036
5	NH ₄ ⁺	25 %	Evaporation	51.2	10 μL	4	0.0381 ± 0.0108
6	NH ₄ ⁺	25 %	Evaporation	51.2	10 μL	8	0.0985 ± 0.0070
7	NH ₄ ⁺	25 %	Evaporation	51.2	10 μL	16	0.1297 ± 0.0072
8	NH ₄ ⁺	0.5 %	Evaporation	1.0	10 μL	32	0.0184 ± 0.0009
9	DEA*	99.9 %	Evaporation	43.9	10 μL	4	0.0298 ± 0.0034
10	DEA	99.9 %	Evaporation	43.9	10 μL	8	0.0750 ± 0.0022
11	DEA	99.9 %	Evaporation	43.9	10 μL	16	0.0706 ± 0.0029
12	DEA	2.0 %	Evaporation	1.3	15 μL	32	0.0090 ± 0.0007
13	TEA**	99.9 %	Evaporation	32.5	10 μL	4	0.0209 ± 0.0035
14	TEA	99.9 %	Evaporation	32.5	10 μL	8	0.0577 ± 0.0037

15	TEA	99.9 %	Evaporation	32.5	10 μ L	16	0.1102 \pm 0.0038
16	TEA	2.0 %	Evaporation	1.0	15 μ L	32	0.0384 \pm 0.0042
17	K ⁺	32 mg/ L	Ultrasonic atomization	N/A***	N/A	4	0.0303 \pm 0.0020
18	K ⁺	32 mg/ L	Ultrasonic atomization	N/A	N/A	8	0.0305 \pm 0.0023
19	K ⁺	32 mg/ L	Ultrasonic atomization	N/A	N/A	16	0.0391 \pm 0.0044
20	Na ⁺	1727 mg/ L	Ultrasonic atomization	N/A	N/A	4	0.0750 \pm 0.0080
21	Na ⁺	1727 mg/ L	Ultrasonic atomization	N/A	N/A	8	0.2006 \pm 0.0104
22	Ca ²⁺	552 mg/ L	Ultrasonic atomization	N/A	N/A	4	0.0123 \pm 0.0020
23	Ca ²⁺	552 mg/ L	Ultrasonic atomization	N/A	N/A	8	0.0331 \pm 0.0024
24	BSA****	1 mg/ mL	Ultrasonic atomization	N/A	N/A	8	0.0034 \pm 0.0006
25	BSA	1 mg/ mL	Ultrasonic atomization	N/A	N/A	16	0.0076 \pm 0.0003

DEA* - Diethylamine

TEA** - Triethylamine

N/A*** - Not applicable

BSA**** - Bovine serum albumin