**Supplementary Table S1.** Parameters of the LC-MS/MS method for carbonyl determination.

| Mobile phase | A: water | B: acetonitrile |
|--------------|----------|-----------------|
| Flow         | 0.3 mL/min |
| Gradient     | 0 min 55% B, 15% B; 10 min 55% B; 15 min 100% B; 18 min 100% B; 18.5 min 55% B; 25 min 55% B |
| Injection    | 5 µL |

**MS/MS**
- Negative ionisation mode
- Cone: 75 V
- Capillary: 3.5 kV
- Desolvation temperature: 320 °C
- MS/MS operated in selective reaction monitoring mode (SRM)

**SRM parameters**

| Compound                  | Transition Q1 (m/z) | Transition Q2 (m/z) | Collision energy (V) |
|---------------------------|---------------------|---------------------|----------------------|
| Formaldehyde-DNPH         | 209>151             | 209>163             | 5                    |
| Acetaldehyde-DNPH         | 223>151             | 223>163             | 7                    |
| Acrolein-DNPH             | 235>158             | 235>163             | 9                    |
| Acetone-DNPH              | 237>207             | 237>151             | 8                    |
| Propionaldehyde-DNPH      | 237>163             | 237>152             | 9                    |
| Crotonaldehyde-DNPH       | 249>172             | 249>163             | 10                   |
| 2-Butanone-DNPH           | 251>152             | 251>221             | 10                   |
| Butyraldehyde-DNPH        | 251>221             | 251>163             | 8                    |
| Acetaldehyde-D4-DNPH      | 227>151             | 227>163             | 7                    |
| Acetone-D6-DNPH           | 243>213             | 243>151             | 8                    |
| Cyclopentanone-D4-DNPH    | 267>237             | 267>219             | 12                   |

1 Transition Q1 was used for the quantification of the compounds.
**Supplementary Figure S1.** Relative composition of carbonyl emissions generated by A) device A with 0.25 Ω coil (recommended 30-70 W), B) device A with 0.5 Ω coil (recommended 15-30 W), C) device B with 0.15 Ω coil (recommended 30-70 W) and D) device B with 0.5 Ω coil (recommended 15-40 W).

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