

Table S1. List of species measured in the oxidation of *n*-heptanol

<i>m/z</i>	Formula	Species Name	IE (eV)	
			Literature ^[1]	This work
16	CH ₄	Methane	12.61	-
18	H ₂ O	Water	12.621	-
26	C ₂ H ₂	Acetylene	11.4	11.5
28	C ₂ H ₄	Ethene	10.51	11.27
	CO	Monoxide Carbon	14.014	-
30	CH ₂ O	Formaldehyde	10.88	10.9
32	O ₂	Oxygen	12.0697	-
34	H ₂ O ₂	Hydrogen peroxide	10.58	10.65
40	C ₃ H ₄	Allene	9.69	
	C ₃ H ₄	Propyne	10.36	10.35
42	C ₃ H ₆	Propene	9.73	9.72
	CO ₂	Carbon dioxide	13.777	-
44	C ₂ H ₄ O	Acetaldehyde	10.23	10.2
	C ₂ H ₄ O	Ethenol	9.33	9.31
54	C ₄ H ₆	1,3-Butadiene	9.072	9.06
	C ₄ H ₈	1-Butene	9.55	9.55
56	C ₃ H ₆ O	2-Propenal	10.11	10.10
58	C ₃ H ₈ O	Propanal	9.96	9.94
	C ₅ H ₁₀	1-Pentene	9.49	9.47
70	C ₄ H ₆ O	2-Butenal	9.75	9.73
72	C ₄ H ₈ O	<i>n</i> -Butanal	9.82	9.79
	C ₆ H ₁₂	1-Hexene	9.44	9.42
84	C ₆ H ₁₂	<i>trans</i> -2-Hexene	8.97	8.95
	C ₅ H ₁₀ O	2-Methyltetrahydrofuran	9.22	9.21
86	C ₅ H ₁₀ O	Tetrahydropyran	9.25	9.24
	C ₅ H ₁₀ O	Pentanal	9.74	9.73
98	C ₇ H ₁₄	1-Heptene	9.38	9.33
100	C ₆ H ₁₂ O	Hexanal	9.72	9.71
110	C ₇ H ₁₆ O	<i>n</i> -Heptanol	9.84	9.83