List of Tables

Charger (Working Gas)	Seed (Polarity)	Aerosol flow [L/Min]	Working Gas flow [mL/Min]	Charging probabilities for particles with mobility equivalent diameter [nm]							
				2.7	3.3	4.1	5.5	6.9	8.2	10.0	12.0
Torch (N2)	Ag(-)	2.5	100	0.0121	0.0166	0.0257	0.0330	0.0628	0.0825	0.1059	0.1290
Torch (N2)	Ag(+)	2.5	100		0.0080	0.0185	0.0193	0.0177	0.0241	0.0194	0.0287
Torch (N2)	Ag(-)	5.0	100			0.0245	0.0332	0.0435	0.0552	0.0679	0.0870
Torch (N2)	Ag(-)	8.0	100			0.0247	0.0348	0.0462	0.0592	0.0800	0.0899
Torch (Air)	Ag(-)	2.5	100	0.0101	0.0147	0.0171	0.0284	0.0318	0.0465	0.0710	0.0877
Torch (Air)	Ag(+)	2.5	100		0.0089	0.0150	0.0176	0.0238	0.0311	0.0408	0.0518
Torch (Air)	Ag(-)	5.0	100			0.0240	0.0300	0.0400	0.0491	0.0665	0.0844
Torch (Air)	Ag(-)	8.0	100			0.0202	0.0276	0.0361	0.0451	0.0591	0.0729
Torch (He)	Ag(-)	2.5	180	0.0094	0.0125	0.0185	0.0269	0.0304	0.0541	0.0699	0.0838
Torch (He)	Ag(+)	2.5	180		0.0122	0.0219	0.0247	0.0312	0.0381	0.0692	0.0827
Torch (He)	Ag(-)	5.0	180			0.0199	0.0222	0.0291	0.0358	0.0490	0.0627
Torch (He)	Ag(-)	8.0	180			0.0109	0.0118	0.0213	0.0211	0.0255	0.0118
Americium	Ag(-)	2.5		0.0091	0.0152	0.0183	0.0257	0.0316	0.0423	0.0544	0.0673
Americium	Ag(+)	2.5			0.0136	0.0207	0.0234	0.0290	0.0351	0.0315	0.0399
Americium	Ag(-)	5.0				0.0090	0.0085	0.0133	0.0192	0.0267	0.0402
Americium	Ag(-)	8.0				0.0109	0.0093	0.0158	0.0214	0.0306	0.0392
X-Ray	Ag(-)	2.5		0.0128	0.0166	0.0176	0.0255	0.0335	0.0408	0.0524	0.0699
X-Ray	Ag(+)	2.5			0.0083	0.0150	0.0184	0.0257	0.0322	0.0438	0.0453
X-Ray	Ag(-)	5.0				0.0010	0.0124	0.0172	0.0214	0.0336	0.0452
X-Ray	Ag(-)	8.0				0.0074	0.0106	0.0197	0.0328	0.0434	0.0435

Table S1: Aerosol flow dependent charging efficiency measurements for different neutralizers with negatively (-) and positively (+) charged silver (Ag) seeds. In addition the investigated working gas and aerosol flow conditions for the Plasma charger (Torch) are listed.

Charger (Working Gas)	Seed (Polarity)	Aerosol flow [L/Min]	Working Gas flow [mL/Min]	Charging probabilities for particles with mobility equivalent diameter [nm]						
				2.6	3.8	5.1	6.4	7.5	9.2	11.0
Torch (N2)	NaCl(-)	2.5	180	0.0113	0.0217	0.0371	0.0547	0.0787	0.0956	0.1304
Torch (Air)	NaCl(-)	2.5	100	0.0141	0.0187	0.0298	0.0430	0.0555	0.0817	0.1082
Torch (He)	NaCl(-)	2.5	180	0.0114	0.0100	0.0177	0.0311	0.0419	0.0559	0.0729
Americium	NaCl(-)	2.5		0.0215	0.0162	0.0241	0.0299	0.0407	0.0542	0.0649
Americium	NaCl(+)	2.5		0.0158	0.0095	0.0149	0.0174	0.0273	0.0381	0.0514
X-Ray	NaCl(-)	2.5		0.0053	0.0145	0.0217	0.0323	0.0406		
X-Ray	NaCl(+)	2.5		0.0067	0.0077	0.0158	0.0212	0.0269		

Table S2: Aerosol flow dependent charging efficiency measurements for different neutralizers with negatively (-) and positively (+) charged sodium chloride (NaCl) seeds. In addition the investigated working gas and aerosol flow conditions for the Plasma charger (Torch) are listed.