Darius Ceburnis

List of Publications by Citations

134 papers	7,000 citations	43 h-index	82 g-index
155 ext. papers	8,016 ext. citations	7.3 avg, IF	5.23 L-index

#	Paper	IF	Citations
134	Biogenically driven organic contribution to marine aerosol. *Nature*, **2004**, 431, 676-80	50.4	761
133	Primary submicron marine aerosol dominated by insoluble organic colloids and aggregates. *Geophysical Research Letters*, **2008**, 35,	4.9	329
132	Minimizing light absorption measurement artifacts of the Aethalometer: evaluation of five correction algorithms. *Atmospheric Measurement Techniques*, **2010**, 3, 457-474	4	326
131	Important source of marine secondary organic aerosol from biogenic amines. *Environmental Science & Technology*, **2008**, 42, 9116-21	10.3	295
130	Advances in characterization of size-resolved organic matter in marine aerosol over the North Atlantic. *Journal of Geophysical Research*, **2004**, 109,		287
129	Organic aerosol components derived from 25 AMS data sets across Europe using a consistent ME-2 based source apportionment approach. *Atmospheric Chemistry and Physics*, **2014**, 14, 6159-6176	6.8	232
128	EUCAARI ion spectrometer measurements at 12 European sites analysis of new particle formation events. *Atmospheric Chemistry and Physics*, **2010**, 10, 7907-7927	6.8	204
127	Seasonal characteristics of the physicochemical properties of North Atlantic marine atmospheric aerosols. *Journal of Geophysical Research*, **2007**, 112,		173
126	Surface tension prevails over solute effect in organic-influenced cloud droplet activation. *Nature*, **2017**, 546, 637-641	50.4	162
125	Global scale emission and distribution of sea-spray aerosol: Sea-salt and organic enrichment. *Atmospheric Environment*, **2010**, 44, 670-677	5.3	161
124	A combined organic-inorganic sea-spray source function. *Geophysical Research Letters*, **2008**, 35,	4.9	156
123	Molecular-scale evidence of aerosol particle formation via sequential addition of HIO. *Nature*, **2016**, 537, 532-534	50.4	155
122	Primary and Secondary Organic Marine Aerosol and Oceanic Biological Activity: Recent Results and New Perspectives for Future Studies. *Advances in Meteorology*, **2010**, 2010, 1-10	1.7	149
121	Elemental and organic carbon in PM₁₀: a one year measurement campaign within the European Monitoring and Evaluation Programme EMEP. *Atmospheric Chemistry and Physics*, **2007**, 7, 5711-5725	6.8	146
120	Wind speed dependent size-resolved parameterization for the organic mass fraction of sea spray aerosol. *Atmospheric Chemistry and Physics*, **2011**, 11, 8777-8790	6.8	130
119	Conifer needles as biomonitors of atmospheric heavy metal deposition: comparison with mosses and precipitation, role of the canopy. *Atmospheric Environment*, **2000**, 34, 4265-4271	5.3	121
118	Contribution of feldspar and marine organic aerosols to global ice nucleating particle concentrations. *Atmospheric Chemistry and Physics*, **2017**, 17, 3637-3658	6.8	107

117	Detecting high contributions of primary organic matter to marine aerosol: A case study. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	100
116	Primary marine organic aerosol: A dichotomy of low hygroscopicity and high CCN activity. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	100
115	Study of water-soluble atmospheric humic matter in urban and marine environments. *Atmospheric Research*, **2008**, 87, 1-12	5.4	97
114	Quantification of the carbonaceous matter origin in submicron marine aerosol by ¹³C and ¹⁴C isotope analysis. *Atmospheric Chemistry and Physics*, **2011**, 11, 8593-8606	6.8	96
113	A sea spray aerosol flux parameterization encapsulating wave state. *Atmospheric Chemistry and Physics*, **2014**, 14, 1837-1852	6.8	88
112	On the effect of wind speed on submicron sea salt mass concentrations and source fluxes. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		84
111	Marine aerosol chemistry gradients: Elucidating primary and secondary processes and fluxes. *Geophysical Research Letters*, **2008**, 35, n/a-n/a	4.9	82
110	Significant enhancement of aerosol optical depth in marine air under high wind conditions. *Geophysical Research Letters*, **2008**, 35,	4.9	82
109	Is chlorophyll-a the best surrogate for organic matter enrichment in submicron primary marine aerosol?. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 4964-4973	4.4	78
108	Primary and secondary marine organic aerosols over the North Atlantic Ocean during the MAP experiment. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		77
107	Global Modeling of the Oceanic Source of Organic Aerosols. *Advances in Meteorology*, **2010**, 2010, 1-16	1.7	74
106	Marine and Terrestrial Organic Ice-Nucleating Particles in Pristine Marine to Continentally Influenced Northeast Atlantic Air Masses. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 6196-6212	4.4	72
105	Evidence of a natural marine source of oxalic acid and a possible link to glyoxal. *Journal of Geophysical Research*, **2011**, 116,		72
104	Variation of the mixing state of Saharan dust particles with atmospheric transport. *Atmospheric Environment*, **2010**, 44, 3135-3146	5.3	64
103	Characteristic features of air ions at Mace Head on the west coast of Ireland. *Atmospheric Research*, **2008**, 90, 278-286	5.4	62
102	Investigation of absolute metal uptake efficiency from precipitation in moss. *Science of the Total Environment*, **1999**, 226, 247-53	10.2	61
101	Major component composition of urban PM10 and PM2.5 in Ireland. *Atmospheric Research*, **2005**, 78, 149-165	5.4	60
100	Connecting marine productivity to sea-spray via nanoscale biological processes: Phytoplankton Dance or Death Disco?. *Scientific Reports*, **2015**, 5, 14883	4.9	58

99	Aerosol properties associated with air masses arriving into the North East Atlantic during the 2008 Mace Head EUCAARI intensive observing period: an overview. *Atmospheric Chemistry and Physics*, **2010**, 10, 8413-8435	6.8	56
98	Characterization of urban aerosol in Cork city (Ireland) using aerosol mass spectrometry. *Atmospheric Chemistry and Physics*, **2013**, 13, 4997-5015	6.8	55
97	Submicron NE Atlantic marine aerosol chemical composition and abundance: Seasonal trends and air mass categorization. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 11,850-11,863	4.4	51
96	Lessons learnt from the first EMEP intensive measurement periods. *Atmospheric Chemistry and Physics*, **2012**, 12, 8073-8094	6.8	48
95	Aerosol analysis and forecast in the European Centre for Medium-Range Weather Forecasts Integrated Forecast System: 3. Evaluation by means of case studies. *Journal of Geophysical Research* , **2011**, 116,		46
94	Transfer of labile organic matter and microbes from the ocean surface to the marine aerosol: an experimental approach. *Scientific Reports*, **2017**, 7, 11475	4.9	45
93	Primary emissions versus secondary formation of fine particulate matter in the most polluted city (Shijiazhuang) in North China. *Atmospheric Chemistry and Physics*, **2019**, 19, 2283-2298	6.8	43
92	Antarctic sea ice region as a source of biogenic organic nitrogen in aerosols. *Scientific Reports*, **2017** , 7, 6047	4.9	43
91	Light-absorbing carbon in Europe measurement and modelling, with a focus on residential wood combustion emissions. *Atmospheric Chemistry and Physics*, **2013**, 13, 8719-8738	6.8	43
90	Summertime Primary and Secondary Contributions to Southern Ocean Cloud Condensation Nuclei. *Scientific Reports*, **2018**, 8, 13844	4.9	43
89	Geochemistry of PM₁₀ over Europe during the EMEP intensive measurement periods in summer´2012 and winter´2013. *Atmospheric Chemistry and Physics*, **2016**, 16, 6107-6129	6.8	42
88	Nitrogenated and aliphatic organic vapors as possible drivers for marine secondary organic aerosol growth. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		42
87	On the representativeness of coastal aerosol studies to open ocean studies: Mace Head a case study. *Atmospheric Chemistry and Physics*, **2009**, 9, 9635-9646	6.8	39
86	Nanoparticles in boreal forest and coastal environment: a comparison of observations and implications of the nucleation mechanism. *Atmospheric Chemistry and Physics*, **2010**, 10, 7009-7016	6.8	37
85	Light backscattering and scattering by nonspherical sea-salt aerosols. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2003**, 79-80, 577-597	2.1	35
84	Volcanic sulphate and arctic dust plumes over the North Atlantic Ocean. *Atmospheric Environment*, **2009**, 43, 4968-4974	5.3	33
83	Do anthropogenic, continental or coastal aerosol sources impact on a marine aerosol signature at Mace Head?. *Atmospheric Chemistry and Physics*, **2014**, 14, 10687-10704	6.8	32
82	In-stack emissions of heavy metals estimated by moss biomonitoring method and snow-pack analysis. *Atmospheric Environment*, **2002**, 36, 1465-1474	5.3	32

81	Estimation of atmospheric trace metal emissions in Vilnius City, Lithuania, using vertical concentration gradient and road tunnel measurement data. *Atmospheric Environment*, **2002**, 36, 6001-6014	5.3	32
80	A European aerosol phenomenology -4: Harmonized concentrations of carbonaceous aerosol at 10 regional background sites across Europe. *Atmospheric Environment*, **2016**, 144, 133-145	5.3	32
79	Extreme air pollution from residential solid fuel burning. *Nature Sustainability*, **2018**, 1, 512-517	22.1	31
78	Stable isotopes measurements reveal dual carbon pools contributing to organic matter enrichment in marine aerosol. *Scientific Reports*, **2016**, 6, 36675	4.9	30
77	Light scattering properties of sea-salt aerosol particles inferred from modeling studies and ground-based measurements. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2006**, 101, 498-511	2.1	29
76	A statistical analysis of North East Atlantic (submicron) aerosol size distributions. *Atmospheric Chemistry and Physics*, **2011**, 11, 12567-12578	6.8	28
75	Model evaluation of marine primary organic aerosol emission schemes. *Atmospheric Chemistry and Physics*, **2012**, 12, 8553-8566	6.8	28
74	Stable carbon fractionation in size-segregated aerosol particles produced by controlled biomass burning. *Journal of Aerosol Science*, **2015**, 79, 86-96	4.3	27
73	Growth rates during coastal and marine new particle formation in western Ireland. *Journal of Geophysical Research*, **2010**, 115,		27
72	Estimation of metal uptake efficiencies from precipitation in mosses in Lithuania. *Chemosphere*, **1999**, 38, 445-55	8.4	27
71	Elucidating carbonaceous aerosol sources by the stable carbon 13CTC ratio in size-segregated particles. *Atmospheric Research*, **2015**, 158-159, 1-12	5.4	26
70	Summertime and wintertime atmospheric processes of secondary aerosol in Beijing. *Atmospheric Chemistry and Physics*, **2020**, 20, 3793-3807	6.8	26
69	Simultaneous Detection of Alkylamines in the Surface Ocean and Atmosphere of the Antarctic Sympagic Environment. *ACS Earth and Space Chemistry*, **2019**, 3, 854-862	3.2	23
68	extended study of atmospheric heavy metal deposition in lithuania based on moss analysis. *Environmental Monitoring and Assessment*, **1997**, 47, 135-152	3.1	23
67	Atmospheric Pb and Cd input into the Baltic Sea: a new estimate based on measurements. *Marine Chemistry*, **2000**, 71, 297-307	3.7	23
66	Presenting SAPUSS: Solving Aerosol Problem by Using Synergistic Strategies in Barcelona, Spain. *Atmospheric Chemistry and Physics*, **2013**, 13, 8991-9019	6.8	22
65	Global relevance of marine organic aerosol as ice nucleating particles. *Atmospheric Chemistry and Physics*, **2018**, 18, 11423-11445	6.8	21
64	Characterization of Primary Organic Aerosol from Domestic Wood, Peat, and Coal Burning in Ireland. *Environmental Science & Technology*, **2017**, 51, 10624-10632	10.3	20

63	The Eyjafjallajökull ash plume – Part I: Physical, chemical and optical characteristics. *Atmospheric Environment*, **2012**, 48, 129-142	5.3	19
62	The seaweeds <i>Fucus vesiculosus</i> and <i>Ascophyllum nodosum</i> are significant contributors to coastal iodine emissions. *Atmospheric Chemistry and Physics*, **2013**, 13, 5255-5264	6.8	18
61	Bistable effect of organic enrichment on sea spray radiative properties. *Geophysical Research Letters*, **2013**, 40, 6395-6398	4.9	18
60	Concentrations and fluxes of aerosol particles during the LAPBIAT measurement campaign at Värriö Field station. *Atmospheric Chemistry and Physics*, **2007**, 7, 3683-3700	6.8	18
59	Sea-spray regulates sulfate cloud droplet activation over oceans. *Npj Climate and Atmospheric Science*, **2020**, 3,	8	17
58	Contrasting sources and processes of particulate species in haze days with low and high relative humidity in wintertime Beijing. *Atmospheric Chemistry and Physics*, **2020**, 20, 9101-9114	6.8	17
57	Sources and atmospheric processing of size segregated aerosol particles revealed by stable carbon isotope ratios and chemical speciation. *Environmental Pollution*, **2018**, 240, 286-296	9.3	16
56	Apportionment of urban aerosol sources in Cork (Ireland) by synergistic measurement techniques. *Science of the Total Environment*, **2014**, 493, 197-208	10.2	15
55	The Eyjafjallajökull ash plume – Part 2: Simulating ash cloud dispersion with REMOTE. *Atmospheric Environment*, **2012**, 48, 143-151	5.3	15
54	Validation of CALINE4 modelling for carbon monoxide concentrations under free-flowing and congested traffic conditions in Ireland. *International Journal of Environment and Pollution*, **2005**, 24, 104	0.7	14
53	Chemical nature and sources of fine particles in urban Beijing: Seasonality and formation mechanisms. *Environment International*, **2020**, 140, 105732	12.9	13
52	Shipborne measurements of Antarctic submicron organic aerosols: an NMR perspective linking multiple sources and bioregions. *Atmospheric Chemistry and Physics*, **2020**, 20, 4193-4207	6.8	13
51	Top-down and bottom-up aerosol–cloud closure: towards understanding sources of uncertainty in deriving cloud shortwave radiative flux. *Atmospheric Chemistry and Physics*, **2017**, 17, 9797-9814	6.8	13
50	The EMEP Intensive Measurement Period campaign, 2008–2009: characterizing carbonaceous aerosol at nine rural sites in Europe. *Atmospheric Chemistry and Physics*, **2019**, 19, 4211-4233	6.8	12
49	Characterization of volcanic ash from the 2011 Grímsvötn eruption by means of single-particle analysis. *Atmospheric Environment*, **2013**, 79, 411-420	5.3	12
48	Effect of horizontal resolution on meteorology and air-quality prediction with a regional scale model. *Atmospheric Research*, **2011**, 101, 574-594	5.4	12
47	Direct field evidence of autocatalytic iodine release from atmospheric aerosol. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	11
46	Effects of NH and alkaline metals on the formation of particulate sulfate and nitrate in wintertime Beijing. *Science of the Total Environment*, **2020**, 717, 137190	10.2	10

45	Minimizing light absorption measurement artifacts of the Aethalometer: evaluation of five correction algorithms		9
44	Seasonal variations in the sources of organic aerosol in Xi'an, Northwest China: The importance of biomass burning and secondary formation. *Science of the Total Environment*, **2020**, 737, 139666	10.2	9
43	Contribution of Water-Soluble Organic Matter from Multiple Marine Geographic Eco-Regions to Aerosols around Antarctica. *Environmental Science & Technology*, **2020**, 54, 7807-7817	10.3	8
42	Marine submicron aerosol gradients, sources and sinks. *Atmospheric Chemistry and Physics*, **2016**, 16, 12425-12439	6.8	8
41	Wintertime aerosol dominated by solid-fuel-burning emissions across Ireland: insight into the spatial and chemical variation in submicron aerosol. *Atmospheric Chemistry and Physics*, **2019**, 19, 14091-14106	6.8	8
40	Lessons learnt from the first EMEP intensive measurement periods		8
39	Aerosol hygroscopicity and its link to chemical composition in the coastal atmosphere of Mace Head: marine and continental air masses. *Atmospheric Chemistry and Physics*, **2020**, 20, 3777-3791	6.8	7
38	Impact of volcanic ash plume aerosol on cloud microphysics. *Atmospheric Environment*, **2012**, 48, 205-218	5.3	7
37	Quantification of the carbonaceous matter origin in submicron marine aerosol particles by dual carbon isotope analysis		7
36	Sophisticated Clean Air Strategies Required to Mitigate Against Particulate Organic Pollution. *Scientific Reports*, **2017**, 7, 44737	4.9	6
35	Local and regional air pollution in Ireland during an intensive aerosol measurement campaign. *Journal of Environmental Monitoring*, **2006**, 8, 479-87		6
34	Six years of surface remote sensing of stratiform warm clouds in marine and continental air over Mace Head, Ireland. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 14,538-14,557	4.4	6
33	Linking Marine Biological Activity to Aerosol Chemical Composition and Cloud-Relevant Properties Over the North Atlantic Ocean. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD032246	4.4	5
32	Biogenic and anthropogenic organic matter in aerosol over continental Europe: source characterization in the east Baltic region. *Journal of Atmospheric Chemistry*, **2012**, 69, 159-174	3.2	5
31	Marine submicron aerosol sources, sinks and chemical fluxes		5
30	Summertime Aerosol over the West of Ireland Dominated by Secondary Aerosol during Long-Range Transport. *Atmosphere*, **2019**, 10, 59	2.7	5
29	The impact of traffic on air quality in Ireland: insights from the simultaneous kerbside and suburban monitoring of submicron aerosols. *Atmospheric Chemistry and Physics*, **2020**, 20, 10513-10529	6.8	4
28	EUCAARI ion spectrometer measurements at 12 European sites □analysis of new-particle formation events		4

27	Do anthropogenic or coastal aerosol sources impact on a clean marine aerosol signature at Mace Head?		4
26	Particulate methanesulfonic acid over the central Mediterranean Sea: Source region identification and relationship with phytoplankton activity. *Atmospheric Research*, **2020**, 237, 104837	5.4	4
25	Study of Emissions from Domestic Solid-Fuel Stove Combustion in Ireland. *Energy & Fuels*, **2021**, 35, 4966-4978	4.1	4
24	Identification of wintertime carbonaceous fine particulate matter (PM2.5) sources in Kaunas, Lithuania using polycyclic aromatic hydrocarbons and stable carbon isotope analysis. *Atmospheric Environment*, **2020**, 237, 117673	5.3	3
23	Distinct high molecular weight organic compound (HMW-OC) types in aerosol particles collected at a coastal urban site. *Atmospheric Environment*, **2017**, 171, 118-125	5.3	2
22	Contribution of feldspar and marine organic aerosols to global ice nucleating particle concentrations **2016**,		2
21	Cleaner air: Brightening the pollution perspective? **2013**,		2
20	Corrigendum to "Aerosol properties associated with air masses arriving into the North East Atlantic during the 2008 Mace Head EUCAARI intensive observing period: an overview" published in Atmos. Chem. Phys., 10, 8413-8435, 2010. *Atmospheric Chemistry and Physics*, **2010**, 10, 8549-8549	6.8	2
19	Wind speed dependent size-resolved parameterization for the organic enrichment of sea spray		2
18	Model evaluation of marine primary organic aerosol emission schemes		2
17	Aerosol properties associated with air masses arriving into the North East Atlantic during the 2008 Mace Head EUCAARI intensive observing period: an overview		2
16	Top-down and Bottom-up aerosol-cloud-closure: towards understanding sources of uncertainty in deriving cloud radiative flux **2017**,		1
15	Effect of instrumental particle sizing resolution on the modelling of aerosol radiative parameters. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2010**, 111, 753-771	2.1	1
14	A sea spray aerosol flux parameterization encapsulating wave state		1
13	Coastal and open ocean aerosol characteristics: investigating the representativeness of coastal aerosol sampling over the North-East Atlantic Ocean		1
12	A Combined Organic□horganic Sea-spray Source Function **2007**, 1083-1087		1
11	Nanoparticles in boreal forest and coastal environment: a comparison of observations and implications of the nucleation mechanism		1
10	Seasonal Trends of Aerosol Hygroscopicity and Mixing State in Clean Marine and Polluted Continental Air Masses Over the Northeast Atlantic. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033851	4.4	1

List of Publications

9	The impact of aerosol size-dependent hygroscopicity and mixing state on the cloud condensation nuclei potential over the north-east Atlantic. *Atmospheric Chemistry and Physics*, **2021**, 21, 8655-8675	6.8	1
8	The EMEP Intensive Measurement Period campaign, 2008–2009: Characterizing the carbonaceous aerosol at nine rural sites in Europe **2018**,		1
7	Wind Speed Influences on Aerosol Optical Depth in Clean Marine Air **2007**, 1164-1168		1
6	European Aerosol Phenomenology - 8: Harmonised Source Apportionment of Organic Aerosol using 22 Year-long ACSM/AMS Datasets. *Environment International*, **2022**, 107325	12.9	1
5	On the use of reference mass spectra for reducing uncertainty in source apportionment of solid-fuel burning in ambient organic aerosol. *Atmospheric Measurement Techniques*, **2021**, 14, 6905-6916	4	0
4	Background levels of black carbon over remote marine locations. *Atmospheric Research*, **2022**, 271, 106119	5.4	0
3	Similarity Between Aerosol Physicochemical Properties at a Coastal Station and Open Ocean over the North Atlantic **2007**, 1098-1101		
2	Chemical Fluxes in North-east Atlantic Air **2007**, 1064-1069		
1	Envisioning an Integrated Assessment System and Observation Network for the North Atlantic Ocean. *Atmosphere*, **2021**, 12, 955	2.7	