Darius Ceburnis

List of Publications by Year
in descending order

127 papers	8,793 citations	50276 46 h-index	51608 86 g-index
155 all docs	155 docs citations	155 times ranked	6464 citing authors

#	ARTICLE	IF	CITATIONS
1	Biogenically driven organic contribution to marine aerosol. Nature, 2004, 431, 676-680.	27.8	890
2	Minimizing light absorption measurement artifacts of the Aethalometer: evaluation of five correction algorithms. Atmospheric Measurement Techniques, 2010, 3, 457-474.	3.1	409
3	Primary submicron marine aerosol dominated by insoluble organic colloids and aggregates. Geophysical Research Letters, 2008, 35, .	4.0	380
4	Important Source of Marine Secondary Organic Aerosol from Biogenic Amines. Environmental Science & Technology, 2008, 42, 9116-9121.	10.0	349
5	Advances in characterization of size-resolved organic matter in marine aerosol over the North Atlantic. Journal of Geophysical Research, 2004, 109, .	3.3	322
6	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.	4.9	308
7	EUCAARI ion spectrometer measurements at 12 European sites â€“ analysis of new particle formation events. Atmospheric Chemistry and Physics, 2010, 10, 7907-7927.	4.9	248
8	Molecular-scale evidence of aerosol particle formation via sequential addition of HIO3. Nature, 2016, 537, 532-534.	27.8	237
9	Surface tension prevails over solute effect in organic-influenced cloud droplet activation. Nature, 2017, 546, 637-641.	27.8	232
10	Global scale emission and distribution of sea-spray aerosol: Sea-salt and organic enrichment. Atmospheric Environment, 2010, 44, 670-677.	4.1	196
11	Seasonal characteristics of the physicochemical properties of North Atlantic marine atmospheric aerosols. Journal of Geophysical Research, 2007, 112, .	3.3	189
12	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.	4.9	177
13	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.	1.6	175
14	A combined organicâ€inorganic seaâ€spray source function. Geophysical Research Letters, 2008, 35, .	4.0	173
15	Wind speed dependent size-resolved parameterization for the organic mass fraction of sea spray aerosol. Atmospheric Chemistry and Physics, 2011, 11, 8777-8790.	4.9	150
16	Contribution of feldspar and marine organic aerosols to global ice nucleating particle concentrations. Atmospheric Chemistry and Physics, 2017, 17, 3637-3658.	4.9	144
17	Conifer needles as biomonitors of atmospheric heavy metal deposition: comparison with mosses and precipitation, role of the canopy. Atmospheric Environment, 2000, 34, 4265-4271.	4.1	134
18	Primary marine organic aerosol: A dichotomy of low hygroscopicity and high CCN activity. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	118

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19	Study of water-soluble atmospheric humic matter in urban and marine environments. Atmospheric Research, 2008, 87, 1-12.	4.1	115
20	Quantification of the carbonaceous matter origin in submicron marine aerosol by ¹³C and ¹⁴C isotope analysis. Atmospheric Chemistry and Physics, 2011, 11, 8593-8606.	4.9	114
21	Detecting high contributions of primary organic matter to marine aerosol: A case study. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	113
22	A sea spray aerosol flux parameterization encapsulating wave state. Atmospheric Chemistry and Physics, 2014, 14, 1837-1852.	4.9	113
23	On the effect of wind speed on submicron sea salt mass concentrations and source fluxes. Journal of Geophysical Research, 2012, 117, .	3.3	107
24	Marine and Terrestrial Organic Iceâ€Nucleating Particles in Pristine Marine to Continentally Influenced Northeast Atlantic Air Masses. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6196-6212.	3.3	98
25	Marine aerosol chemistry gradients: Elucidating primary and secondary processes and fluxes. Geophysical Research Letters, 2008, 35, .	4.0	93
26	Significant enhancement of aerosol optical depth in marine air under high wind conditions. Geophysical Research Letters, 2008, 35, .	4.0	93
27	Global Modeling of the Oceanic Source of Organic Aerosols. Advances in Meteorology, 2010, 2010, 1-16.	1.6	93
28	Is chlorophyllâ€<i>a</i> the best surrogate for organic matter enrichment in submicron primary marine aerosol?. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4964-4973.	3.3	89
29	Evidence of a natural marine source of oxalic acid and a possible link to glyoxal. Journal of Geophysical Research, 2011, 116, .	3.3	86
30	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.	3.3	85
31	Variation of the mixing state of Saharan dust particles with atmospheric transport. Atmospheric Environment, 2010, 44, 3135-3146.	4.1	82
32	Characteristic features of air ions at Mace Head on the west coast of Ireland. Atmospheric Research, 2008, 90, 278-286.	4.1	77
33	Characterization of urban aerosol in Cork city (Ireland) using aerosol mass spectrometry. Atmospheric Chemistry and Physics, 2013, 13, 4997-5015.	4.9	75
34	Connecting marine productivity to sea-spray via nanoscale biological processes: Phytoplankton Dance or Death Disco?. Scientific Reports, 2015, 5, 14883.	3.3	75
35	Transfer of labile organic matter and microbes from the ocean surface to the marine aerosol: an experimental approach. Scientific Reports, 2017, 7, 11475.	3.3	75
36	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.	4.9	74

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37	Investigation of absolute metal uptake efficiency from precipitation in moss. Science of the Total Environment, 1999, 226, 247-253.	8.0	70
38	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.	3.3	65
39	Major component composition of urban PM10 and PM2.5 in Ireland. Atmospheric Research, 2005, 78, 149-165.	4.1	64
40	Antarctic sea ice region as a source of biogenic organic nitrogen in aerosols. Scientific Reports, 2017, 7, 6047.	3.3	63
41	Summertime Primary and Secondary Contributions to Southern Ocean Cloud Condensation Nuclei. Scientific Reports, 2018, 8, 13844.	3.3	63
42	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.	4.9	61
43	Extreme air pollution from residential solid fuel burning. Nature Sustainability, 2018, 1, 512-517.	23.7	59
44	Lessons learnt from the first EMEP intensive measurement periods. Atmospheric Chemistry and Physics, 2012, 12, 8073-8094.	4.9	58
45	Summertime and wintertime atmospheric processes of secondary aerosol in Beijing. Atmospheric Chemistry and Physics, 2020, 20, 3793-3807.	4.9	55
46	Geochemistry of PM₁₀ over Europe during the EMEP intensive measurement periods in summerÂ2012 and winterÂ2013. Atmospheric Chemistry and Physics, 2016, 16, 6107-6129.	4.9	54
47	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, .	3.3	53
48	Light-absorbing carbon in Europe â€“ measurement and modelling, with a focus on residential wood combustion emissions. Atmospheric Chemistry and Physics, 2013, 13, 8719-8738.	4.9	51
49	A European aerosol phenomenology -4: Harmonized concentrations of carbonaceous aerosol at 10 regional background sites across Europe. Atmospheric Environment, 2016, 144, 133-145.	4.1	50
50	On the representativeness of coastal aerosol studies to open ocean studies: Mace Head â€“ a case study. Atmospheric Chemistry and Physics, 2009, 9, 9635-9646.	4.9	44
51	Nitrogenated and aliphatic organic vapors as possible drivers for marine secondary organic aerosol growth. Journal of Geophysical Research, 2012, 117, .	3.3	44
52	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.	4.9	42
53	Do anthropogenic, continental or coastal aerosol sources impact on a marine aerosol signature at Mace Head?. Atmospheric Chemistry and Physics, 2014, 14, 10687-10704.	4.9	42
54	Light backscattering and scattering by nonspherical sea-salt aerosols. Journal of Quantitative Spectroscopy and Radiative Transfer, 2003, 79-80, 577-597.	2.3	41

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55	European aerosol phenomenology â˘ 8: Harmonised source apportionment of organic aerosol using 22 Year-long ACSM/AMS datasets. Environment International, 2022, 166, 107325.	10.0	41
56	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.	4.1	37
57	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.	2.3	37
58	Volcanic sulphate and arctic dust plumes over the North Atlantic Ocean. Atmospheric Environment, 2009, 43, 4968-4974.	4.1	37
59	Stable isotopes measurements reveal dual carbon pools contributing to organic matter enrichment in marine aerosol. Scientific Reports, 2016, 6, 36675.	3.3	37
60	Growth rates during coastal and marine new particle formation in western Ireland. Journal of Geophysical Research, 2010, 115, .	3.3	36
61	A statistical analysis of North East Atlantic (submicron) aerosol size distributions. Atmospheric Chemistry and Physics, 2011, 11, 12567-12578.	4.9	35
62	Model evaluation of marine primary organic aerosol emission schemes. Atmospheric Chemistry and Physics, 2012, 12, 8553-8566.	4.9	34
63	Stable carbon fractionation in size-segregated aerosol particles produced by controlled biomass burning. Journal of Aerosol Science, 2015, 79, 86-96.	3.8	34
64	Simultaneous Detection of Alkylamines in the Surface Ocean and Atmosphere of the Antarctic Sympagic Environment. ACS Earth and Space Chemistry, 2019, 3, 854-862.	2.7	34
65	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.	4.9	34
66	In-stack emissions of heavy metals estimated by moss biomonitoring method and snow-pack analysis. Atmospheric Environment, 2002, 36, 1465-1474.	4.1	33
67	Estimation of metal uptake efficiencies from precipitation in mosses in Lithuania. Chemosphere, 1999, 38, 445-455.	8.2	32
68	Sea-spray regulates sulfate cloud droplet activation over oceans. Npj Climate and Atmospheric Science, 2020, 3, .	6.8	32
69	Characterization of Primary Organic Aerosol from Domestic Wood, Peat, and Coal Burning in Ireland. Environmental Science & Technology, 2017, 51, 10624-10632.	10.0	31
70	Elucidating carbonaceous aerosol sources by the stable carbon Î´13CTC ratio in size-segregated particles. Atmospheric Research, 2015, 158-159, 1-12.	4.1	30
71	extended study of atmospheric heavy metal deposition in lithuania based on moss analysis. Environmental Monitoring and Assessment, 1997, 47, 135-152.	2.7	29
72	Global relevance of marine organic aerosol as ice nucleating particles. Atmospheric Chemistry and Physics, 2018, 18, 11423-11445.	4.9	29

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73	Presenting SAPUSS: Solving Aerosol Problem by Using Synergistic Strategies in Barcelona, Spain. Atmospheric Chemistry and Physics, 2013, 13, 8991-9019.	4.9	27
74	Sea spray as an obscured source for marine cloud nuclei. Nature Geoscience, 2022, 15, 282-286.	12.9	27
75	Atmospheric Pb and Cd input into the Baltic Sea: a new estimate based on measurements. Marine Chemistry, 2000, 71, 297-307.	2.3	26
76	Chemical nature and sources of fine particles in urban Beijing: Seasonality and formation mechanisms. Environment International, 2020, 140, 105732.	10.0	26
77	Effects of NH3 and alkaline metals on the formation of particulate sulfate and nitrate in wintertime Beijing. Science of the Total Environment, 2020, 717, 137190.	8.0	26
78	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, .	7.1	25
79	The EyjafjallajÃ¶kull ash plume â€“ Part I: Physical, chemical and optical characteristics. Atmospheric Environment, 2012, 48, 129-142.	4.1	24
80	Sources and atmospheric processing of size segregated aerosol particles revealed by stable carbon isotope ratios and chemical speciation. Environmental Pollution, 2018, 240, 286-296.	7.5	24
81	Top-down and bottom-up aerosolâ€“cloud closure: towards understanding sources of uncertainty in deriving cloud shortwave radiative flux. Atmospheric Chemistry and Physics, 2017, 17, 9797-9814.	4.9	21
82	Shipborne measurements of Antarctic submicron organic aerosols: an NMR perspective linking multiple sources and bioregions. Atmospheric Chemistry and Physics, 2020, 20, 4193-4207.	4.9	21
83	Bistable effect of organic enrichment on sea spray radiative properties. Geophysical Research Letters, 2013, 40, 6395-6398.	4.0	20
84	The EMEP Intensive Measurement Period campaign, 2008â€“2009: characterizing carbonaceous aerosol at nine rural sites in Europe. Atmospheric Chemistry and Physics, 2019, 19, 4211-4233.	4.9	20
85	Concentrations and fluxes of aerosol particles during the LAPBIAT measurement campaign at VÃ¤rriÃ¶ field station. Atmospheric Chemistry and Physics, 2007, 7, 3683-3700.	4.9	19
86	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.	4.9	19
87	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.	4.9	18
88	Apportionment of urban aerosol sources in Cork (Ireland) by synergistic measurement techniques. Science of the Total Environment, 2014, 493, 197-208.	8.0	18
89	The EyjafjallajÃ¶kull ash plume â€“ Part 2: Simulating ash cloud dispersion with REMOTE. Atmospheric Environment, 2012, 48, 143-151.	4.1	17
90	Study of Emissions from Domestic Solid-Fuel Stove Combustion in Ireland. Energy & Fuels, 2021, 35, 4966-4978.	5.1	17

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91	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.	0.2	16
92	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.	8.0	16
93	Effect of horizontal resolution on meteorology and air-quality prediction with a regional scale model. Atmospheric Research, 2011, 101, 574-594.	4.1	14
94	Characterization of volcanic ash from the 2011 GrÃmsvÃ¶tn eruption byÂmeans of single-particle analysis. Atmospheric Environment, 2013, 79, 411-420.	4.1	14
95	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.	4.9	14
96	Contribution of Water-Soluble Organic Matter from Multiple Marine Geographic Eco-Regions to Aerosols around Antarctica. Environmental Science & Technology, 2020, 54, 7807-7817.	10.0	13
97	Marine submicron aerosol gradients, sources and sinks. Atmospheric Chemistry and Physics, 2016, 16, 12425-12439.	4.9	12
98	Sophisticated Clean Air Strategies Required to Mitigate Against Particulate Organic Pollution. Scientific Reports, 2017, 7, 44737.	3.3	11
99	Particulate methanesulfonic acid over the central Mediterranean Sea: Source region identification and relationship with phytoplankton activity. Atmospheric Research, 2020, 237, 104837.	4.1	11
100	Linking Marine Biological Activity to Aerosol Chemical Composition and Cloudâ€Relevant Properties Over the North Atlantic Ocean. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032246.	3.3	10
101	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.	4.9	10
102	Impact of volcanic ash plume aerosol on cloud microphysics. Atmospheric Environment, 2012, 48, 205-218.	4.1	9
103	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.	4.1	9
104	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.	3.3	8
105	Local and regional air pollution in Ireland during an intensive aerosol measurement campaign. Journal of Environmental Monitoring, 2006, 8, 479.	2.1	7
106	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	7
107	Summertime Aerosol over the West of Ireland Dominated by Secondary Aerosol during Long-Range Transport. Atmosphere, 2019, 10, 59.	2.3	7
108	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.	3.3	5

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109	Background levels of black carbon over remote marine locations. Atmospheric Research, 2022, 271, 106119.	4.1	4
110	Distinct high molecular weight organic compound (HMW-OC) types in aerosol particles collected at a coastal urban site. Atmospheric Environment, 2017, 171, 118-125.	4.1	3
111	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.	4.9	3
112	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.	3.1	3
113	Phytoplankton Impact on Marine Cloud Microphysical Properties Over the Northeast Atlantic Ocean. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	3
114	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.	4.9	2
115	Cleaner air: Brightening the pollution perspective?. , 2013, , .		2
116	Seasonality of Aerosol Sources Calls for Distinct Air Quality Mitigation Strategies. Toxics, 2022, 10, 121.	3.7	2
117	Effect of instrumental particle sizing resolution on the modelling of aerosol radiative parameters. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 753-771.	2.3	1
118	Wind Speed Influences on Aerosol Optical Depth in Clean Marine Air. , 2007, , 1164-1168.		1
119	A Combined Organicâ€"Inorganic Sea-spray Source Function. , 2007, , 1083-1087.		1
120	Ground-based remote sensing profiling of aerosols and mass concentration above Mace Head, Ireland. , 2013, , .		0
121	Submicron sea salt source fluxes. , 2013, , .		0
122	Intercontinental and regional transport of air pollution monitored at Mace Head, Ireland and over Europe. , 2013, , .		0
123	A dual behavior of primary marine organics. , 2013, , .		0
124	Marine organics effect on sea-spray light scattering. , 2013, , .		0
125	Envisioning an Integrated Assessment System and Observation Network for the North Atlantic Ocean. Atmosphere, 2021, 12, 955.	2.3	0
126	Similarity Between Aerosol Physicochemical Properties at a Coastal Station and Open Ocean over the North Atlantic. , 2007, , 1098-1101.		0

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127	Chemical Fluxes in North-east Atlantic Air. , 2007, , 1064-1069.		0