Radovan Krejci

List of Publications by Year
in descending order

113 papers	5,771 citations	81900 39 h-index	102487 66 g-index
177 all docs	177 docs citations	177 times ranked	5706 citing authors

#	Article	IF	Citations
1	General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) â€“ integrating aerosol research from nano to global scales. Atmospheric Chemistry and Physics, 2011, 11, 13061-13143.	4.9	278
2	The VAMOS Ocean-Cloud-Atmosphere-Land Study Regional Experiment (VOCALS-REx): goals, platforms, and field operations. Atmospheric Chemistry and Physics, 2011, 11, 627-654.	4.9	272
3	Transport of biomass burning smoke to the upper troposphere by deep convection in the equatorial region. Geophysical Research Letters, 2001, 28, 951-954.	4.0	234
4	Explaining global surface aerosol number concentrations in terms of primary emissions and particle formation. Atmospheric Chemistry and Physics, 2010, 10, 4775-4793.	4.9	212
5	Arctic aerosol life cycle: linking aerosol size distributions observed between 2000 and 2010 with air mass transport and precipitation at Zeppelin station, Ny-Ã…lesund, Svalbard. Atmospheric Chemistry and Physics, 2013, 13, 3643-3660.	4.9	212
6	A review of sea-spray aerosol source functions using a large global set of sea salt aerosol concentration measurements. Atmospheric Chemistry and Physics, 2014, 14, 1277-1297.	4.9	192
7	Airborne measurements of the spatial distribution of aerosol chemical composition across Europe and evolution of the organic fraction. Atmospheric Chemistry and Physics, 2010, 10, 4065-4083.	4.9	184
8	Black carbon measurements in the boundary layer over western and northern Europe. Atmospheric Chemistry and Physics, 2010, 10, 9393-9414.	4.9	155
9	Application of the variability-size relationship to atmospheric aerosol studies: estimating aerosol lifetimes and ages. Atmospheric Chemistry and Physics, 2002, 2, 133-145.	4.9	127
10	South East Pacific atmospheric composition and variability sampled along 20Â° S during VOCALS-REx. Atmospheric Chemistry and Physics, 2011, 11, 5237-5262.	4.9	119
11	Major changes in forest carbon and nitrogen cycling caused by declining sulphur deposition. Global Change Biology, 2011, 17, 3115-3129.	9.5	119
12	Global analysis of continental boundary layer new particle formation based on long-term measurements. Atmospheric Chemistry and Physics, 2018, 18, 14737-14756.	4.9	113
13	Hygroscopic growth of aerosol particles in the marine boundary layer over the Pacific and Southern Oceans during the First Aerosol Characterization Experiment (ACE 1). Journal of Geophysical Research, 1998, 103, 16535-16545.	3.3	112
14	Amazon boundary layer aerosol concentration sustained by vertical transport during rainfall. Nature, 2016, 539, 416-419.	27.8	112
15	Aircraft observations of the upper tropospheric fine particle aerosol in the Northern and Southern Hemispheres at midlatitudes. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	110
16	Sulfur isotope dynamics in two central european watersheds affected by high atmospheric deposition of SOx. Geochimica Et Cosmochimica Acta, 2000, 64, 367-383.	3.9	106
17	Enhancement of the aerosol direct radiative effect by semi-volatile aerosol components: airborne measurements in North-Western Europe. Atmospheric Chemistry and Physics, 2010, 10, 8151-8171.	4.9	105
18	Arctic sea ice melt leads to atmospheric new particle formation. Scientific Reports, 2017, 7, 3318.	3.3	101

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19	Pan-Arctic aerosol number size distributions: seasonality and transport patterns. Atmospheric Chemistry and Physics, 2017, 17, 8101-8128.	4.9	99
20	Organosulfates and organic acids in Arctic aerosols: speciation, annual variation and concentration levels. Atmospheric Chemistry and Physics, 2014, 14, 7807-7823.	4.9	89
21	Changes in aerosol properties during spring-summer period in the Arctic troposphere. Atmospheric Chemistry and Physics, 2008, 8, 445-462.	4.9	86
22	Overview of the synoptic and pollution situation over Europe during the EUCAARI-LONGREX field campaign. Atmospheric Chemistry and Physics, 2011, 11, 1065-1082.	4.9	79
23	Explicit Simulation of Aerosol Physics in a Cloud-Resolving Model: Aerosol Transport and Processing in the Free Troposphere. Journals of the Atmospheric Sciences, 2006, 63, 682-696.	1.7	76
24	Quantitative measurement of the microphysical and optical properties of cirrus clouds with four different in situ probes: Evidence of small ice crystals. Geophysical Research Letters, 2002, 29, XXX-XXX.	4.0	75
25	Cirrus cloud occurrence as function of ambient relative humidity: a comparison of observations obtained during the INCA experiment. Atmospheric Chemistry and Physics, 2003, 3, 1807-1816.	4.9	74
26	Microphysical explanation of the RHâ€dependent water affinity of biogenic organic aerosol and its importance for climate. Geophysical Research Letters, 2017, 44, 5167-5177.	4.0	74
27	Vertical and horizontal distributions of the aerosol number concentration and size distribution over the northern Indian Ocean. Journal of Geophysical Research, 2001, 106, 28629-28641.	3.3	72
28	Differing Mechanisms of New Particle Formation at Two Arctic Sites. Geophysical Research Letters, 2021, 48, e2020GL091334.	4.0	70
29	A new aerosol wet removal scheme for the Lagrangian particle model FLEXPART v10. Geoscientific Model Development, 2017, 10, 1447-1466.	3.6	68
30	Arctic smoke â€“ aerosol characteristics during a record smoke event in the European Arctic and its radiative impact. Atmospheric Chemistry and Physics, 2007, 7, 3035-3053.	4.9	65
31	A global analysis of climate-relevant aerosol properties retrieved from the network of Global Atmosphere Watch (GAW) near-surface observatories. Atmospheric Measurement Techniques, 2020, 13, 4353-4392.	3.1	65
32	Single particle analysis of ice crystal residuals observed in orographic wave clouds over Scandinavia during INTACC experiment. Atmospheric Chemistry and Physics, 2006, 6, 1977-1990.	4.9	62
33	Frequent nucleation events at the high altitude station of Chacaltaya (5240Âm a.s.l.), Bolivia. Atmospheric Environment, 2015, 102, 18-29.	4.1	59
34	In situ laboratory sea spray production during the Marine Aerosol Production 2006 cruise on the northeastern Atlantic Ocean. Journal of Geophysical Research, 2010, 115, .	3.3	58
35	CCN production by new particle formation in the free troposphere. Atmospheric Chemistry and Physics, 2017, 17, 1529-1541.	4.9	52
36	Artificial primary marine aerosol production: a laboratory study with varying water temperature, salinity, and succinic acid concentration. Atmospheric Chemistry and Physics, 2012, 12, 10709-10724.	4.9	51

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37	Atmospheric chemistry in stereo: A new look at secondary organic aerosols from isoprene. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	49
38	Aerosol and bacterial emissions from Baltic Seawater. Atmospheric Research, 2011, 99, 1-14.	4.1	49
39	In-situ observations of aerosol particles remaining from evaporated cirrus crystals: Comparing clean and polluted air masses. Atmospheric Chemistry and Physics, 2003, 3, 1037-1049.	4.9	47
40	Humidity observations in the Arctic troposphere over Ny-Ã…lesund, Svalbard based on 15 years of radiosonde data. Atmospheric Chemistry and Physics, 2007, 7, 2721-2732.	4.9	45
41	Evolution of aerosol properties over the rain forest in Surinam, South America, observed from aircraft during the LBA-CLAIRE 98 experiment. Journal of Geophysical Research, 2003, 108, .	3.3	42
42	Aerosol transport over the Andes from the Amazon Basin to the remote Pacific Ocean: A multiyear CALIOP assessment. Journal of Geophysical Research D: Atmospheres, 2015, 120, 8411-8425.	3.3	42
43	Interactions between the atmosphere, cryosphere, and ecosystems at northern high latitudes. Atmospheric Chemistry and Physics, 2019, 19, 2015-2061.	4.9	42
44	How much of the global aerosol optical depth is found in the boundary layer and free troposphere?. Atmospheric Chemistry and Physics, 2018, 18, 7709-7720.	4.9	40
45	Source characterisation of the Central European atmospheric aerosol using multivariate statistical methods. Nuclear Instruments & Methods in Physics Research B, 1996, 109-110, 519-525.	1.4	38
46	Spatial and temporal distribution of atmospheric aerosols in the lowermost troposphere over the Amazonian tropical rainforest. Atmospheric Chemistry and Physics, 2005, 5, 1527-1543.	4.9	38
47	In-situ airborne observations of the microphysical properties of the Arctic tropospheric aerosol during late spring and summer. Tellus, Series B: Chemical and Physical Meteorology, 2022, 60, 392.	1.6	38
48	Wintertime Arctic Ocean sea water properties and primary marine aerosol concentrations. Atmospheric Chemistry and Physics, 2012, 12, 10405-10421.	4.9	37
49	Do organics contribute to small particle formation in the Amazonian upper troposphere?. Geophysical Research Letters, 2008, 35, .	4.0	36
50	Aerosol number fluxes over the Amazon rain forest during the wet season. Atmospheric Chemistry and Physics, 2009, 9, 9381-9400.	4.9	36
51	Low hygroscopic scattering enhancement of boreal aerosol and the implications for a columnar optical closure study. Atmospheric Chemistry and Physics, 2015, 15, 7247-7267.	4.9	32
52	Seawater mesocosm experiments in the <scp>A</scp>rctic uncover differential transfer of marine bacteria to aerosols. Environmental Microbiology Reports, 2015, 7, 460-470.	2.4	32
53	Influence of Biogenic Organics on the Chemical Composition of Arctic Aerosols. Global Biogeochemical Cycles, 2019, 33, 1238-1250.	4.9	32
54	Identification of topographic features influencing aerosol observations at high altitude stations. Atmospheric Chemistry and Physics, 2018, 18, 12289-12313.	4.9	31

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55	Analysis of number size distributions of tropical free tropospheric aerosol particles observed at Pico Espejo (4765 m a.s.l.), Venezuela. Atmospheric Chemistry and Physics, 2011, 11, 3319-3332.	4.9	30
56	On small particles in the Arctic summer boundary layer: observations at two different heights near Ny-Ã…lesund, Svalbard. Tellus, Series B: Chemical and Physical Meteorology, 2009, 61, 473-482.	1.6	29
57	Tropical and Boreal Forest â€“ Atmosphere Interactions: A Review. Tellus, Series B: Chemical and Physical Meteorology, 2022, 74, 24.	1.6	27
58	Multi-year statistical and modeling analysis of submicrometer aerosol number size distributions at a rain forest site in Amazonia. Atmospheric Chemistry and Physics, 2018, 18, 10255-10274.	4.9	26
59	Ground-based observation of clusters and nucleation-mode particles in the Amazon. Atmospheric Chemistry and Physics, 2018, 18, 13245-13264.	4.9	26
60	Simultaneous measurements of aerosol size distributions at three sites in the European high Arctic. Atmospheric Chemistry and Physics, 2019, 19, 7377-7395.	4.9	26
61	Single particle analysis of the accumulation mode aerosol over the northeast Amazonian tropical rain forest, Surinam, South America. Atmospheric Chemistry and Physics, 2005, 5, 3331-3344.	4.9	25
62	Aerosol-cirrus interactions: a number based phenomenon at all?. Atmospheric Chemistry and Physics, 2004, 4, 293-305.	4.9	24
63	Emission and dry deposition of accumulation mode particles in the Amazon Basin. Atmospheric Chemistry and Physics, 2010, 10, 10237-10253.	4.9	24
64	A comparison of dry and wet season aerosol number fluxes over the Amazon rain forest. Atmospheric Chemistry and Physics, 2010, 10, 3063-3079.	4.9	24
65	Long-term in situ observations of biomass burning aerosol at a high altitude station in Venezuela â€“ sources, impacts and interannual variability. Atmospheric Chemistry and Physics, 2013, 13, 9837-9853.	4.9	24
66	The seasonal characteristics of cloud condensation nuclei (CCN) in the arctic lower troposphere. Tellus, Series B: Chemical and Physical Meteorology, 2022, 70, 1513291.	1.6	24
67	Black carbon emission and transport mechanisms to the free troposphere at the La Paz/El Alto (Bolivia) metropolitan area based on the Day of Census (2012). Atmospheric Environment, 2018, 194, 158-169.	4.1	24
68	Atmospheric composition in the European Arctic and 30Âyears of the Zeppelin Observatory, Ny-Ã…lesund. Atmospheric Chemistry and Physics, 2022, 22, 3321-3369.	4.9	24
69	Observational and modelling evidence of tropical deep convective clouds as a source of midâ€tropospheric accumulation mode aerosols. Geophysical Research Letters, 2008, 35, .	4.0	23
70	Ubiquity and impact of thin mid-level clouds in the tropics. Nature Communications, 2016, 7, 12432.	12.8	21
71	Atmospheric new particle formation characteristics in the Arctic as measured at Mount Zeppelin, Svalbard, from 2016 to 2018. Atmospheric Chemistry and Physics, 2020, 20, 13425-13441.	4.9	21
72	Chemical properties of Arctic aerosol particles collected at the Zeppelin station during the aerosol transition period in May and June of 2004. Tellus, Series B: Chemical and Physical Meteorology, 2022, 60, 405.	1.6	20

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73	The radiative effect of an aged, internally mixed Arctic aerosol originating from lower-latitude biomass burning. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 677.	1.6	20
74	Dimethyl Sulfideâ€Induced Increase in Cloud Condensation Nuclei in the Arctic Atmosphere. Global Biogeochemical Cycles, 2021, 35, e2021GB006969.	4.9	20
75	From a polar to a marine environment: has the changing Arctic led to a shift in aerosol light scattering properties?. Atmospheric Chemistry and Physics, 2020, 20, 13671-13686.	4.9	20
76	Detection of lightning-produced NO in the midlatitude upper troposphere during STREAM 1998. Journal of Geophysical Research, 2001, 106, 27777-27785.	3.3	19
77	Comparison of PM2.5 chemical composition and sources at a rural background site in Central Europe between 1993/1994/1995 and 2009/2010: Effect of legislative regulations and economic transformation on the air quality. Environmental Pollution, 2018, 241, 841-851.	7.5	19
78	Estimates of mass absorption cross sections of black carbon for filter-based absorption photometers in the Arctic. Atmospheric Measurement Techniques, 2021, 14, 6723-6748.	3.1	19
79	Temporal trends of bulk precipitation and stream water chemistry (1977-1997) in a small forested area, KrusnÃ© hory, northern Bohemia, Czech Republic. Hydrological Processes, 1999, 13, 2721-2741.	2.6	18
80	Microphysical and chemical characteristics of cloud droplet residuals and interstitial particles in continental stratocumulus clouds. Atmospheric Research, 2007, 86, 225-240.	4.1	17
81	Biomass burning and urban emission impacts in the Andes Cordillera region based on in situ measurements from the Chacaltaya observatory, Bolivia (5240â€‰mâ€‰a.s.l.). Atmospheric Chemistry and Physics, 2019, 19, 14805-14824.	4.9	17
82	A long-term study of cloud residuals from low-level Arctic clouds. Atmospheric Chemistry and Physics, 2021, 21, 8933-8959.	4.9	15
83	Multi-seasonal ultrafine aerosol particle number concentration measurements at the Gruvebadet observatory, Ny-Ã…lesund, Svalbard Islands. Rendiconti Lincei, 2016, 27, 59-71.	2.2	14
84	Individual Particle Characteristics, Optical Properties and Evolution of an Extreme Longâ€Range Transported Biomass Burning Event in the European Arctic (Nyâ€Ã…lesund, Svalbard Islands). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031535.	3.3	14
85	Airborne observations of aerosol microphysical properties and particle ageing processes in the troposphere above Europe. Atmospheric Chemistry and Physics, 2012, 12, 11533-11554.	4.9	13
86	Comparison between summertime and wintertime Arctic Ocean primary marine aerosol properties. Atmospheric Chemistry and Physics, 2013, 13, 4783-4799.	4.9	13
87	Identifying source regions of air masses sampled at the tropical high-altitude site of Chacaltaya using WRF-FLEXPART and cluster analysis. Atmospheric Chemistry and Physics, 2021, 21, 16453-16477.	4.9	13
88	Airborne observations of dry particle absorption and scattering properties over the northern Indian Ocean. Journal of Geophysical Research, 2002, 107, INX2 34-1.	3.3	12
89	Overview of the biosphere-aerosol-cloud-climate interactions (BACCI) studies. Tellus, Series B: Chemical and Physical Meteorology, 2008, 60, 300-317.	1.6	12
90	Primary and secondary organics in the tropical Amazonian rainforest aerosols: chiral analysis of 2-methyltetraols. Environmental Sciences: Processes and Impacts, 2014, 16, 1413.	3.5	12

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91	Physical and Chemical Properties of Cloud Droplet Residuals and Aerosol Particles During the Arctic Ocean 2018 Expedition. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	12
92	Large seasonal and interannual variations of biogenic sulfur compounds in the Arctic atmosphere (Svalbard; 78.9Â°â€‰N, 11.9Â°â€‰E). Atmospheric Chemistry and Physics, 2021, 21, 9761-9777.	4.9	11
93	Thermal stability analysis of particles incorporated in cirrus crystals and of non-activated particles in between the cirrus crystals: comparing clean and polluted air masses. Atmospheric Chemistry and Physics, 2004, 4, 1343-1353.	4.9	10
94	New method for resolving the enantiomeric composition of 2-methyltetrols in atmospheric organic aerosols. Journal of Chromatography A, 2011, 1218, 9288-9294.	3.7	10
95	The SALTENA Experiment: Comprehensive Observations of Aerosol Sources, Formation, and Processes in the South American Andes. Bulletin of the American Meteorological Society, 2022, 103, E212-E229.	3.3	9
96	Zeppelin-led study on the onset of new particle formation in the planetary boundary layer. Atmospheric Chemistry and Physics, 2021, 21, 12649-12663.	4.9	9
97	Particle formation in the Arctic free troposphere during the ASTAR 2004 campaign: a case study on the influence of vertical motion on the binary homogeneous nucleation of H₂SO₄/H<sub>2</sub&an Atmospheric Chemistry and Physics, 2010, 10, 1105-1120.	4.9	8
98	Baltic Sea Spray Emissions: In Situ Eddy Covariance Fluxes vs. Simulated Tank Sea Spray. Atmosphere, 2021, 12, 274.	2.3	8
99	Sourceâ€"receptor relationships for heavy metals in the European atmosphere. Nuclear Instruments & Methods in Physics Research B, 1999, 150, 322-331.	1.4	6
100	Megacity and local contributions to regional air pollution: an aircraft case study over London. Atmospheric Chemistry and Physics, 2020, 20, 7193-7216.	4.9	6
101	Physical and chemical properties of aerosol particles and cloud residuals on Mt. Åreskutan in Central Sweden during summer 2014. Tellus, Series B: Chemical and Physical Meteorology, 2022, 72, 1776080.	1.6	5
102	Aerosol dynamics and dispersion of radioactive particles. Atmospheric Chemistry and Physics, 2021, 21, 5173-5193.	4.9	5
103	Transport and chemistry of isoprene and its oxidation products in deep convective clouds. Tellus, Series B: Chemical and Physical Meteorology, 2022, 73, 1979856.	1.6	5
104	A Novel Framework to Study Trace Gas Transport in Deep Convective Clouds. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001931.	3.8	4
105	The Atmospheric Aerosol over Western Greece-Six Years of Aerosol Observations at the Navarino Environmental Observatory. Atmosphere, 2021, 12, 445.	2.3	4
106	Quality assurance of environmental PIXE analysis in Prague. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 981-985.	1.4	3
107	Relationship between cloud condensation nuclei (CCN) concentration and aerosol optical depth in the Arctic region. Atmospheric Environment, 2021, , 118748.	4.1	3
108	On small particles in the Arctic summer boundary layer: observations at two different heights near Ny-Ã…lesund, Svalbard. Tellus, Series B: Chemical and Physical Meteorology, 2009, 61, .	1.6	2

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109	Changes in hygroscopic growth of atmospheric submicrometer particles during air mass subsidence events in remote marine environments. , 1996, , 824-827.		2
110	New aerosol particle formation in Amazonia. , 2013, , .		0
111	New particle formation events observed at a high altitude site Pico Espejo, Venezuela. , 2013, , .		0
112	Atmospheric aerosol variability and properties in lowermost tropical free troposphere. , 2013, , .		0
113	Measurements of hygroscopic growth of atmospheric submicrometer particles during a transect of the Pacific Ocean. , 1996, , 897-900.		0