

Kathy Law

List of Publications by Year in descending order

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120
papers

8,392
citations

57631

44
h-index

58464

82
g-index

158
all docs

158
docs citations

158
times ranked

7309
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of shipping emissions on air pollution and pollutant deposition over the Barents Sea. <i>Environmental Pollution</i> , 2022, 298, 118832.	3.7	5
2	Arctic observations and sustainable development goals – Contributions and examples from ERA-PLANET iCUPE data. <i>Environmental Science and Policy</i> , 2022, 132, 323-336.	2.4	6
3	Differences in Ozone and Particulate Matter Between Ground Level and 20m Aloft are Frequent During Wintertime Surface-Based Temperature Inversions in Fairbanks, Alaska. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	8
4	Model evaluation of short-lived climate forcers for the Arctic Monitoring and Assessment Programme: a multi-species, multi-model study. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 5775-5828.	1.9	15
5	Overview: Integrative and Comprehensive Understanding on Polar Environments (iCUPE) – concept and initial results. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 8551-8592.	1.9	26
6	Overview paper: New insights into aerosol and climate in the Arctic. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 2527-2560.	1.9	134
7	Flaring emissions in Africa: Distribution, evolution and comparison with current inventories. <i>Atmospheric Environment</i> , 2019, 199, 423-434.	1.9	21
8	Fostering multidisciplinary research on interactions between chemistry, biology, and physics within the coupled cryosphere-atmosphere system. <i>Elementa</i> , 2019, 7, .	1.1	6
9	Raman lidars for a better understanding of pollution in the Arctic System (PARCS). <i>EPJ Web of Conferences</i> , 2018, 176, 04005.	0.1	0
10	Comparison of Distributions of Atmospheric Gas Admixture Concentrations Measured by Remote and In Situ Instruments over the Russian Sector of the Arctic. <i>Atmospheric and Oceanic Optics</i> , 2018, 31, 626-634.	0.6	1
11	Local Arctic Air Pollution: A Neglected but Serious Problem. <i>Earth's Future</i> , 2018, 6, 1385-1412.	2.4	96
12	Current and Future Arctic Aerosols and Ozone From Remote Emissions and Emerging Local Sources – Modeled Source Contributions and Radiative Effects. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 12,942.	1.2	21
13	Local Arctic air pollution: Sources and impacts. <i>Ambio</i> , 2017, 46, 453-463.	2.8	52
14	Quantifying black carbon deposition over the Greenland ice sheet from forest fires in Canada. <i>Geophysical Research Letters</i> , 2017, 44, 7965-7974.	1.5	41
15	Cross-polar transport and scavenging of Siberian aerosols containing black carbon during the 2012 ACCESS summer campaign. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 10969-10995.	1.9	24
16	Summertime observations of elevated levels of ultrafine particles in the high Arctic marine boundary layer. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 5515-5535.	1.9	62
17	MERLIN: A French-German Space Lidar Mission Dedicated to Atmospheric Methane. <i>Remote Sensing</i> , 2017, 9, 1052.	1.8	88
18	Improvements to the WRF-Chem 3.5.1 model for quasi-hemispheric simulations of aerosols and ozone in the Arctic. <i>Geoscientific Model Development</i> , 2017, 10, 3661-3677.	1.3	26

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19	Air pollution impacts due to petroleum extraction in the Norwegian Sea during the ACCESS aircraft campaign. <i>Elementa</i> , 2017, 5, .	1.1	12
20	Air quality and radiative impacts of Arctic shipping emissions in the summertime in northern Norway: from the local to the regional scale. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 2359-2379.	1.9	56
21	Ship emissions measurement in the Arctic by plume intercepts of the Canadian Coast Guard icebreaker <i>Amundsen</i> from the <i>Polar 6</i> aircraft platform. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 7899-7916.	1.9	32
22	Multi-model evaluation of short-lived pollutant distributions over east Asia during summer 2008. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 10765-10792.	1.9	17
23	Analysis of the latitudinal variability of tropospheric ozone in the Arctic using the large number of aircraft and ozonesonde observations in early summer 2008. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 13341-13358.	1.9	10
24	Quantifying Emerging Local Anthropogenic Emissions in the Arctic Region: The ACCESS Aircraft Campaign Experiment. <i>Bulletin of the American Meteorological Society</i> , 2016, 2016, 441-460.	1.7	2
25	Transport of anthropogenic and biomass burning aerosols from Europe to the Arctic during spring 2008. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 3831-3850.	1.9	25
26	Tropospheric ozone and its precursors from the urban to the global scale from air quality to short-lived climate forcer. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 8889-8973.	1.9	942
27	Multi-model study of chemical and physical controls on transport of anthropogenic and biomass burning pollution to the Arctic. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 3575-3603.	1.9	83
28	Biomass burning influence on high-latitude tropospheric ozone and reactive nitrogen in summer 2008: a multi-model analysis based on POLMIP simulations. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 6047-6068.	1.9	43
29	The POLARCAT Model Intercomparison Project (POLMIP): overview and evaluation with observations. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 6721-6744.	1.9	62
30	Current model capabilities for simulating black carbon and sulfate concentrations in the Arctic atmosphere: a multi-model evaluation using a comprehensive measurement data set. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 9413-9433.	1.9	145
31	Evaluating the climate and air quality impacts of short-lived pollutants. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 10529-10566.	1.9	365
32	Quantifying Emerging Local Anthropogenic Emissions in the Arctic Region: The ACCESS Aircraft Campaign Experiment. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 441-460.	1.7	60
33	State of the Climate in 2013. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, S1-S279.	1.7	138
34	Arctic Air Pollution: New Insights from POLARCAT-IPY. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 1873-1895.	1.7	107
35	Summertime tropospheric ozone assessment over the Mediterranean region using the thermal infrared IASI/MetOp sounder and the WRF-Chem model. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 10119-10131.	1.9	73
36	Transport of aerosol to the Arctic: analysis of CALIOP and French aircraft data during the spring 2008 POLARCAT campaign. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 8235-8254.	1.9	33

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37	Lower tropospheric ozone at northern midlatitudes: Changing seasonal cycle. <i>Geophysical Research Letters</i> , 2013, 40, 1631-1636.	1.5	95
38	Tropospheric ozone over Siberia in spring 2010: remote influences and stratospheric intrusion. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2013, 65, 19688.	0.8	12
39	Pollution transport from North America to Greenland during summer 2008. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 3825-3848.	1.9	34
40	A Lagrangian model of air-mass photochemistry and mixing using a trajectory ensemble: the Cambridge Tropospheric Trajectory model of Chemistry And Transport (CiTTYCAT) version 4.2. <i>Geoscientific Model Development</i> , 2012, 5, 193-221.	1.3	24
41	Long-term changes in lower tropospheric baseline ozone concentrations at northern mid-latitudes. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 11485-11504.	1.9	260
42	Assimilation of IASI satellite CO fields into a global chemistry transport model for validation against aircraft measurements. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 4493-4512.	1.9	23
43	Anthropogenic and forest fire pollution aerosol transported to the Arctic: observations from the POLARCAT-France spring campaign. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 6437-6454.	1.9	33
44	Analysis of IASI tropospheric O ₃ data over the Arctic during POLARCAT campaigns in 2008. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 7371-7389.	1.9	29
45	Source identification and airborne chemical characterisation of aerosol pollution from long-range transport over Greenland during POLARCAT summer campaign 2008. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10097-10123.	1.9	52
46	In situ measurements of tropical cloud properties in the West African Monsoon: upper tropospheric ice clouds, Mesoscale Convective System outflow, and subvisual cirrus. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 5569-5590.	1.9	59
47	Tropospheric ozone production related to West African city emissions during the 2006 wet season AMMA campaign. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 6349-6366.	1.9	5
48	In situ observations of new particle formation in the tropical upper troposphere: the role of clouds and the nucleation mechanism. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 9983-10010.	1.9	66
49	Physical and chemical properties of pollution aerosol particles transported from North America to Greenland as measured during the POLARCAT summer campaign. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10947-10963.	1.9	30
50	In-situ observation of Asian pollution transported into the Arctic lowermost stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10975-10994.	1.9	49
51	Emission sources contributing to tropospheric ozone over Equatorial Africa during the summer monsoon. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 13395-13419.	1.9	13
52	Impact of deep convection in the tropical tropopause layer in West Africa: in-situ observations and mesoscale modelling. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 201-214.	1.9	18
53	Atmospheric composition of West Africa: highlights from the AMMA international program. <i>Atmospheric Science Letters</i> , 2011, 12, 13-18.	0.8	21
54	The West African climate system: a review of the AMMA model inter-comparison initiatives. <i>Atmospheric Science Letters</i> , 2011, 12, 116-122.	0.8	57

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55	Aerosols in the tropical and subtropical UT/LS: in-situ measurements of submicron particle abundance and volatility. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5573-5592.	1.9	59
56	IASI carbon monoxide validation over the Arctic during POLARCAT spring and summer campaigns. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10655-10678.	1.9	65
57	Air mass origins influencing TTL chemical composition over West Africa during 2006 summer monsoon. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10753-10770.	1.9	26
58	Emission location dependent ozone depletion potentials for very short-lived halogenated species. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 12025-12036.	1.9	38
59	An introduction to the SCOUT-AMMA stratospheric aircraft, balloons and sondes campaign in West Africa, August 2006: rationale and roadmap. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 2237-2256.	1.9	58
60	Cross-hemispheric transport of central African biomass burning pollutants: implications for downwind ozone production. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 3027-3046.	1.9	58
61	Airborne measurements of aerosol optical properties related to early spring transport of mid-latitude sources into the Arctic. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5011-5030.	1.9	54
62	Impact of West African Monsoon convective transport and lightning NO _x production upon the upper tropospheric composition: a multi-model study. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5719-5738.	1.9	57
63	Chemical and aerosol characterisation of the troposphere over West Africa during the monsoon period as part of AMMA. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 7575-7601.	1.9	93
64	More ozone over North America. <i>Nature</i> , 2010, 463, 307-308.	13.7	13
65	Global Chemistry Simulations in the AMMA Multimodel Intercomparison Project. <i>Bulletin of the American Meteorological Society</i> , 2010, 91, 611-624.	1.7	21
66	Toward a novel high-resolution modeling approach for the study of chemical evolution of pollutant plumes during long-range transport. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	12
67	Estimation of mixing in the troposphere from Lagrangian trace gas reconstructions during long-range pollution plume transport. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	37
68	Wildfire smoke in the Siberian Arctic in summer: source characterization and plume evolution from airborne measurements. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 9315-9327.	1.9	120
69	CO emission and export from Asia: an analysis combining complementary satellite measurements (MOPITT, SCIAMACHY and ACE-FTS) with global modeling. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 5187-5204.	1.9	58
70	Lagrangian analysis of low altitude anthropogenic plume processing across the North Atlantic. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 7737-7754.	1.9	48
71	Arctic Air Pollution: Origins and Impacts. <i>Science</i> , 2007, 315, 1537-1540.	6.0	440
72	Processes influencing ozone levels in Alaskan forest fire plumes during long-range transport over the North Atlantic. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	182

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73	Establishing Lagrangian connections between observations within air masses crossing the Atlantic during the International Consortium for Atmospheric Research on Transport and Transformation experiment. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	60
74	International Consortium for Atmospheric Research on Transport and Transformation (ICARTT): North America to Europe-Overview of the 2004 summer field study. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	222
75	Modelling the effects of mixing processes on the composition of the free troposphere using a three-dimensional chemical transport model. <i>Environmental Modelling and Software</i> , 2004, 19, 391-399.	1.9	1
76	Rainfall parameterization in an off-line chemical transport model. <i>Atmospheric Science Letters</i> , 2004, 5, 82-88.	0.8	4
77	Using GOME NO ₂ and satellite data to examine regional differences in TOMCAT model performance. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 1895-1912.	1.9	45
78	Transport and mixing between airmasses in cold frontal regions during Dynamics and Chemistry of Frontal Zones (DCFZ). <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	36
79	Fresh air in the 21st century?. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	192
80	Radiative forcing in the 21st century due to ozone changes in the troposphere and the lower stratosphere. <i>Journal of Geophysical Research</i> , 2003, 108, n/a-n/a.	3.3	153
81	Intercomparison of tropospheric ozone models: Ozone transport in a complex tropopause folding event. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	54
82	Modelling the impacts of aircraft traffic on the chemical composition of the upper troposphere. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2003, 217, 237-243.	0.7	2
83	Characterising the effect of large-scale model resolution upon calculated OH production using MOZIC data. <i>Geophysical Research Letters</i> , 2002, 29, 55-1.	1.5	11
84	The impact of meteorology on the interannual growth rate of atmospheric methane. <i>Geophysical Research Letters</i> , 2002, 29, 8-1-8-4.	1.5	48
85	Potential for photochemical ozone formation in the troposphere over the North Atlantic as derived from aircraft observations during ACSOE. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 14-1-ACH 14-14.	3.3	41
86	Stratosphere-troposphere exchange: Chemical sensitivity to mixing. <i>Journal of Geophysical Research</i> , 2001, 106, 4717-4731.	3.3	30
87	A comparison of large-scale atmospheric sulphate aerosol models (COSAM): overview and highlights. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2001, 53, 615-645.	0.8	62
88	Vertical distributions of sulfur species simulated by large scale atmospheric models in COSAM: Comparison with observations. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2001, 53, 646-672.	0.8	20
89	A comparison of scavenging and deposition processes in global models: results from the WCRP Cambridge Workshop of 1995. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2000, 52, 1025-1056.	0.8	113
90	Evaluation of a Lagrangian box model using field measurements from EASE (Eastern Atlantic Summer) Tj ETQqO 0 0 rgBT /Overlock 10 T	1.9	57

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91	Comparison between global chemistry transport model results and Measurement of Ozone and Water Vapor by Airbus In-Service Aircraft (MOZAIC) data. <i>Journal of Geophysical Research</i> , 2000, 105, 1503-1525.	3.3	73
92	Uptake on fractal particles: 2. Applications. <i>Journal of Geophysical Research</i> , 2000, 105, 3917-3928.	3.3	7
93	A three-dimensional modeling study of the correlations of ²¹⁰ Pb with HNO ₃ and peroxyacetyl nitrate (PAN) at remote oceanic sites. <i>Journal of Geophysical Research</i> , 2000, 105, 1947-1956.	3.3	4
94	Modelling NO _x from lightning and its impact on global chemical fields. <i>Atmospheric Environment</i> , 1999, 33, 4477-4493.	1.9	71
95	Theoretical studies of carbon monoxide distributions, budgets and trends. <i>Chemosphere</i> , 1999, 1, 19-31.	1.2	6
96	Validation and intercomparison of wet and dry deposition schemes using ²¹⁰ Pb in a global three-dimensional off-line chemical transport model. <i>Journal of Geophysical Research</i> , 1999, 104, 23761-23784.	3.3	67
97	Greenhouse gas radiative forcing: Effects of averaging and inhomogeneities in trace gas distribution. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1998, 124, 2099-2127.	1.0	43
98	Measurement of ozone and water vapor by Airbus in-service aircraft: The MOZAIC airborne program, an overview. <i>Journal of Geophysical Research</i> , 1998, 103, 25631-25642.	3.3	468
99	Evaluation of modeled O ₃ using Measurement of Ozone by Airbus In-Service Aircraft (MOZAIC) data. <i>Journal of Geophysical Research</i> , 1998, 103, 25721-25737.	3.3	91
100	Greenhouse gas radiative forcing: Effects of averaging and inhomogeneities in trace gas distribution. , 1998, 124, 2099.		4
101	Implications of NO _y emissions from subsonic aircraft at cruise altitude. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 1997, 211, 157-168.	0.7	2
102	Evaluation and intercomparison of global atmospheric transport models using ²²² Rn and other short-lived tracers. <i>Journal of Geophysical Research</i> , 1997, 102, 5953-5970.	3.3	267
103	Results from the Intergovernmental Panel on Climatic Change Photochemical Model Intercomparison (PhotoComp). <i>Journal of Geophysical Research</i> , 1997, 102, 5979-5991.	3.3	68
104	Sensitivity of the atmospheric CH ₄ growth rate to global temperature changes observed from 1980 to 1992. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1997, 49, 409-416.	0.8	5
105	Sensitivity of the atmospheric CH ₄ growth rate to global temperature changes observed from 1980 to 1992. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1997, 49, 409-416.	0.8	24
106	Gas-phase ultraviolet absorption cross-sections and atmospheric lifetimes of several C ₂ -C ₅ alkyl nitrates. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1997, 102, 117-126.	2.0	94
107	A tropospheric ozone-lightning climate feedback. <i>Geophysical Research Letters</i> , 1996, 23, 1037-1040.	1.5	41
108	Sensitivity of the CH ₄ growth rate to changes in CH ₄ emissions from natural gas and coal. <i>Journal of Geophysical Research</i> , 1996, 101, 14387-14397.	3.3	34

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109	Further estimates of radiative forcing due to tropospheric ozone changes. <i>Geophysical Research Letters</i> , 1996, 23, 3321-3324.	1.5	32
110	Photochemical trajectory modeling studies of the North Atlantic region during August 1993. <i>Journal of Geophysical Research</i> , 1996, 101, 29269-29288.	3.3	75
111	Is methane-driven deglaciation consistent with the ice core record?. <i>Journal of Geophysical Research</i> , 1996, 101, 28627-28635.	3.3	27
112	Subsonic aircraft and ozone trends. <i>Journal of Atmospheric Chemistry</i> , 1996, 23, 89-105.	1.4	6
113	Climate and CCN. <i>Nature</i> , 1995, 375, 111-111.	13.7	2
114	Modelling the global sources and sinks of radiatively active gases. <i>Philosophical Transactions of the Royal Society: Physical and Engineering Sciences</i> , 1995, 351, 397-411.	1.0	4
115	Effect of ozone depletion on atmospheric CH ₄ and CO concentrations. <i>Nature</i> , 1994, 371, 595-597.	13.7	131
116	Indirect influence of ozone depletion on climate forcing by clouds. <i>Nature</i> , 1994, 372, 348-351.	13.7	47
117	Modeling trace gas budgets in the troposphere: 1. Ozone and odd nitrogen. <i>Journal of Geophysical Research</i> , 1993, 98, 18377-18400.	3.3	108
118	Modeling trace gas budgets in the troposphere: 2. CH ₄ and CO. <i>Journal of Geophysical Research</i> , 1993, 98, 18401-18412.	3.3	54
119	Modelling the response of tropospheric trace species to changing source gas concentrations. <i>Atmospheric Environment Part A General Topics</i> , 1991, 25, 1863-1871.	1.3	15
120	Arctic air pollution: Challenges and opportunities for the next decade. <i>Elementa</i> , 0, 4, 000104.	1.1	53