Harri Kokkola

List of Publications by Year
in descending order

78 papers	3,114 citations	147726 31 h-index	189801 50 g-index
152 all docs	152 docs citations	152 times ranked	3879 citing authors

#	Article	IF	Citations
1	Dependency of the impacts of geoengineering on the stratospheric sulfur injection strategy â€“ PartÂ1: Intercomparison of modal and sectional aerosol modules. Atmospheric Chemistry and Physics, 2022, 22, 93-118.	1.9	12
2	The effect of marine ice-nucleating particles on mixed-phase clouds. Atmospheric Chemistry and Physics, 2022, 22, 3763-3778.	1.9	2
3	Technical note: Parameterising cloud base updraft velocity of marine stratocumuli. Atmospheric Chemistry and Physics, 2022, 22, 4523-4537.	1.9	5
4	Changes in urban air pollution after a shift in anthropogenic activity analysed with ensemble learning, competitive learning and unsupervised clustering. Atmospheric Pollution Research, 2022, 13, 101393.	1.8	3
5	Insect Herbivory Caused Plant Stress Emissions Increases the Negative Radiative Forcing of Aerosols. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	3
6	Biomass burning aerosols in most climate models are too absorbing. Nature Communications, 2021, 12, 277.	5.8	84
7	AeroCom phase III multi-model evaluation of the aerosol life cycle and optical properties using ground- and space-based remote sensing as well as surface in situ observations. Atmospheric Chemistry and Physics, 2021, 21, 87-128.	1.9	96
8	Precipitation enhancement in stratocumulus clouds through airborne seeding: sensitivity analysis by UCLALES-SALSA. Atmospheric Chemistry and Physics, 2021, 21, 1035-1048.	1.9	10
9	Observations on aerosol optical properties and scavenging during cloud events. Atmospheric Chemistry and Physics, 2021, 21, 1683-1695.	1.9	3
10	Comparing the Radiative Forcings of the Anthropogenic Aerosol Emissions From Chile and Mexico. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033364.	1.2	3
11	Significance of the organic aerosol driven climate feedback in the boreal area. Nature Communications, 2021, 12, 5637.	5.8	38
12	Aerosol absorption in global models from AeroCom phase III. Atmospheric Chemistry and Physics, 2021, 21, 15929-15947.	1.9	27
13	Evaluation of aerosol and cloud properties in three climate models using MODIS observations and its corresponding COSP simulator, as well as their application in aerosolâ€“cloud interactions. Atmospheric Chemistry and Physics, 2020, 20, 1607-1626.	1.9	12
14	Effects of black carbon mitigation on Arctic climate. Atmospheric Chemistry and Physics, 2020, 20, 5527-5546.	1.9	15
15	A global modelâ€“measurement evaluation of particle light scattering coefficients at elevated relative humidity. Atmospheric Chemistry and Physics, 2020, 20, 10231-10258.	1.9	19
16	In-cloud scavenging scheme for sectional aerosol modules â€“ implementation in the framework of the Sectional Aerosol module for Large Scale Applications version 2.0 (SALSA2.0) global aerosol module. Geoscientific Model Development, 2020, 13, 6215-6235.	1.3	8
17	Modelling mixed-phase clouds with the large-eddy model UCLALESâ€“SALSA. Atmospheric Chemistry and Physics, 2020, 20, 11639-11654.	1.9	4
18	Aerosol Effect on the Cloud Phase of Lowâ€Level Clouds Over the Arctic. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7886-7899.	1.2	12

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19	The global aerosolâ€“climate model ECHAM6.3â€“HAM2.3 â€“ Part 2: Cloud evaluation, aerosol radiative forcing, and climate sensitivity. Geoscientific Model Development, 2019, 12, 3609-3639.	1.3	44
20	Implementation of the sectional aerosol module SALSA2.0 into the PALM model system 6.0: model development and first evaluation. Geoscientific Model Development, 2019, 12, 1403-1422.	1.3	31
21	The global aerosolâ€“climate model ECHAM6.3â€“HAM2.3 â€“ Part 1: Aerosol evaluation. Geoscientific Model Development, 2019, 12, 1643-1677.	1.3	103
22	Correction of Model Reduction Errors in Simulations. SIAM Journal of Scientific Computing, 2018, 40, B305-B327.	1.3	12
23	Resolving nanoparticle growth mechanisms from size- and time-dependent growth rate analysis. Atmospheric Chemistry and Physics, 2018, 18, 1307-1323.	1.9	28
24	The chemistryâ€“climate model ECHAM6.3-HAM2.3-MOZ1.0. Geoscientific Model Development, 2018, 11, 1695-1723.	1.3	51
25	SALSA2.0: The sectional aerosol module of the aerosolâ€“chemistryâ€“climate model ECHAM6.3.0-HAM2.3-MOZ1.0. Geoscientific Model Development, 2018, 11, 3833-3863.	1.3	52
26	Isoprene-derived secondary organic aerosol in the global aerosolâ€“chemistryâ€“climate model ECHAM6.3.0â€“HAM2.3â€“MOZ1.0. Geoscientific Model Development, 2018, 11, 3235-3260.	1.3	30
27	Aerosolâ€“fog interaction and the transition to well-mixed radiation fog. Atmospheric Chemistry and Physics, 2018, 18, 7827-7840.	1.9	78
28	Summertime Aerosol Radiative Effects and Their Dependence on Temperature over the Southeastern USA. Atmosphere, 2018, 9, 180.	1.0	8
29	Assessment of cloud-related fine-mode AOD enhancements based on AERONET SDA product. Atmospheric Chemistry and Physics, 2017, 17, 5991-6001.	1.9	17
30	Radiative and climate effects of stratospheric sulfur geoengineering using seasonally varying injection areas. Atmospheric Chemistry and Physics, 2017, 17, 6957-6974.	1.9	26
31	UCLALESâ€“SALSA v1.0: a large-eddy model with interactive sectional microphysics for aerosol, clouds and precipitation. Geoscientific Model Development, 2017, 10, 169-188.	1.3	39
32	Effect of aerosol concentration and absorbing aerosol on the radiation fog life cycle. Atmospheric Environment, 2016, 133, 26-33.	1.9	47
33	Evaluation of observed and modelled aerosol lifetimes using radioactive tracers of opportunity and an ensemble of 19 global models. Atmospheric Chemistry and Physics, 2016, 16, 3525-3561.	1.9	75
34	What controls the vertical distribution of aerosol? Relationships between process sensitivity in HadGEM3â€“UKCA and inter-model variation from AeroCom Phase II. Atmospheric Chemistry and Physics, 2016, 16, 2221-2241.	1.9	82
35	Radiative and climate impacts of a large volcanic eruption during stratospheric sulfur geoengineering. Atmospheric Chemistry and Physics, 2016, 16, 305-323.	1.9	40
36	Retrieval of aerosol optical depth from surface solar radiation measurements using machine learning algorithms, non-linear regression and a radiative transfer-based look-up table. Atmospheric Chemistry and Physics, 2016, 16, 8181-8191.	1.9	21

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37	From nuclear power to coal power: Aerosolâ€induced health and radiative effects. Journal of Geophysical Research D: Atmospheres, 2015, 120, 12631-12643.	1.2	2
38	Direct radiative effect by brown carbon over the Indo-Gangetic Plain. Atmospheric Chemistry and Physics, 2015, 15, 12731-12740.	1.9	24
39	Geographical and diurnal features of amineâ€enhanced boundary layer nucleation. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9606-9624.	1.2	37
40	MATCH-SALSA â€“ Multi-scale Atmospheric Transport and CHemistry model coupled to the SALSA aerosol microphysics model â€“ Part 1: Model description and evaluation. Geoscientific Model Development, 2015, 8, 171-189.	1.3	46
41	Integration of prognostic aerosolâ€“cloud interactions in a chemistry transport model coupled offline to a regional climate model. Geoscientific Model Development, 2015, 8, 1885-1898.	1.3	8
42	Climate impacts of changing aerosol emissions since 1996. Geophysical Research Letters, 2014, 41, 4711-4718.	1.5	30
43	Reallocation in modal aerosol models: impacts on predicting aerosol radiative effects. Geoscientific Model Development, 2014, 7, 161-174.	1.3	11
44	Modelling artificial sea salt emission in large eddy simulations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140051.	1.6	6
45	Estimating atmospheric nucleation rates from size distribution measurements: Analytical equations for the case of size dependent growth rates. Journal of Aerosol Science, 2014, 69, 13-20.	1.8	18
46	The AeroCom evaluation and intercomparison of organic aerosol in global models. Atmospheric Chemistry and Physics, 2014, 14, 10845-10895.	1.9	363
47	Global modelling of direct and indirect effects of sea spray aerosol using a source function encapsulating wave state. Atmospheric Chemistry and Physics, 2014, 14, 11731-11752.	1.9	33
48	Chemical composition, main sources and temporal variability of PM₁ aerosols in southern African grassland. Atmospheric Chemistry and Physics, 2014, 14, 1909-1927.	1.9	81
49	A global process-based study of marine CCN trends and variability. Atmospheric Chemistry and Physics, 2014, 14, 13631-13642.	1.9	6
50	The role of low volatile organics on secondary organic aerosol formation. Atmospheric Chemistry and Physics, 2014, 14, 1689-1700.	1.9	64
51	Intercomparison and evaluation of global aerosol microphysical properties among AeroCom models of a range of complexity. Atmospheric Chemistry and Physics, 2014, 14, 4679-4713.	1.9	148
52	Climate and air quality trade-offs in altering ship fuel sulfur content. Atmospheric Chemistry and Physics, 2013, 13, 12059-12071.	1.9	35
53	Correction of approximation errors with Random Forests applied to modelling of cloud droplet formation. Geoscientific Model Development, 2013, 6, 2087-2098.	1.3	15
54	Evaluation of the sectional aerosol microphysics module SALSA implementation in ECHAM5-HAM aerosol-climate model. Geoscientific Model Development, 2012, 5, 845-868.	1.3	59

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55	Stratospheric passenger flights are likely an inefficient geoengineering strategy. Environmental Research Letters, 2012, 7, 034021.	2.2	6
56	The regional aerosol-climate model REMO-HAM. Geoscientific Model Development, 2012, 5, 1323-1339.	1.3	19
57	Brightening of the global cloud field by nitric acid and the associated radiative forcing. Atmospheric Chemistry and Physics, 2012, 12, 7625-7633.	1.9	10
58	Surfactant effects in global simulations of cloud droplet activation. Geophysical Research Letters, 2012, 39, .	1.5	51
59	Effect of aerosol size distribution changes on AOD, CCN and cloud droplet concentration: Case studies from Erfurt and Melpitz, Germany. Journal of Geophysical Research, 2012, 117, .	3.3	14
60	Direct and indirect effects of sea spray geoengineering and the role of injected particle size. Journal of Geophysical Research, 2012, 117, .	3.3	49
61	Partitioning of semivolatile surface-active compounds between bulk, surface and gas phase. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	27
62	A simple representation of surface active organic aerosol in cloud droplet formation. Atmospheric Chemistry and Physics, 2011, 11, 4073-4083.	1.9	48
63	Comprehensively accounting for the effect of giant CCN in cloud activation parameterizations. Atmospheric Chemistry and Physics, 2010, 10, 2467-2473.	1.9	106
64	Roadside aerosol study using hygroscopic, organic and volatility TDMAs: Characterization and mixing state. Atmospheric Environment, 2010, 44, 976-986.	1.9	30
65	Aerosol climate feedback due to decadal increases in Southern Hemisphere wind speeds. Geophysical Research Letters, 2010, 37, .	1.5	65
66	Aerosol microphysics modules in the framework of the ECHAM5 climate model â€" intercomparison under stratospheric conditions. Geoscientific Model Development, 2009, 2, 97-112.	1.3	59
67	Sensitivity of aerosol concentrations and cloud properties to nucleation and secondary organic distribution in ECHAM5-HAM global circulation model. Atmospheric Chemistry and Physics, 2009, 9, 1747-1766.	1.9	153
68	SALSA â€" a Sectional Aerosol module for Large Scale Applications. Atmospheric Chemistry and Physics, 2008, 8, 2469-2483.	1.9	110
69	Technical note: Analytical formulae for the critical supersaturations and droplet diameters of CCN containing insoluble material. Atmospheric Chemistry and Physics, 2008, 8, 1985-1988.	1.9	9
70	The effects of increasing atmospheric ozone on biogenic monoterpene profiles and the formation of secondary aerosols. Atmospheric Environment, 2007, 41, 4877-4887.	1.9	51
71	Cloud formation of particles containing humic-like substances. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	52
72	The influence of nitric acid on the cloud processing of aerosol particles. Atmospheric Chemistry and Physics, 2006, 6, 1627-1634.	1.9	8

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73	Parameterization of the nitric acid effect on CCN activation. Atmospheric Chemistry and Physics, 2005, 5, 879-885.	1.9	18
74	Soluble trace gas effect on cloud condensation nuclei activation: Influence of initial equilibration on cloud model results. Journal of Geophysical Research, 2005, 110, .	3.3	12
75	Growth of upper tropospheric aerosols due to uptake of HNO₃. Atmospheric Chemistry and Physics, 2004, 4, 549-556.	1.9	3
76	KÃ¶hler theory for a polydisperse droplet population in the presence of a soluble trace gas, and an application to stratospheric STS droplet growth. Atmospheric Chemistry and Physics, 2003, 3, 2139-2146.	1.9	16
77	On the formation of radiation fogs under heavily polluted conditions. Atmospheric Chemistry and Physics, 2003, 3, 581-589.	1.9	25
78	Optimal noise control in a carpentry plant. Applied Acoustics, 2000, 61, 37-43.	1.7	4