Christoph Knote

List of Publications by Year
in descending order

73 papers	3,771 citations	159585 30 h-index	138484 58 g-index
131 all docs	131 docs citations	131 times ranked	4671 citing authors

#	Article	IF	Citations
1	Role of Upwind Precipitation in Transboundary Pollution and Secondary Aerosol Formation: A Case Study during the KORUS-AQ Field Campaign. Journal of Applied Meteorology and Climatology, 2022, 61, 159-174.	1.5	0
2	Evaluation of convective cloud microphysics in numerical weather prediction models with dual-wavelength polarimetric radar observations: methods and examples. Atmospheric Measurement Techniques, 2022, 15, 1033-1054.	3.1	3
3	Contrasting roles of clouds as a sink and source of aerosols: A quantitative assessment using WRF-Chem over East Asia. Atmospheric Environment, 2022, 277, 119073.	4.1	5
4	Observational constraints on methane emissions from Polish coal mines using a ground-based remote sensing network. Atmospheric Chemistry and Physics, 2022, 22, 5859-5876.	4.9	10
5	Sensitivity of Air Pollution Exposure and Disease Burden to Emission Changes in China Using Machine Learning Emulation. GeoHealth, 2022, 6, .	4.0	13
6	Carbon Monoxide in Optically Thick Wildfire Smoke: Evaluating TROPOMI Using CU Airborne SOF Column Observations. ACS Earth and Space Chemistry, 2022, 6, 1799-1812.	2.7	6
7	Late-spring and summertime tropospheric ozone and NO₂ in western Siberia and the Russian Arctic: regional model evaluation and sensitivities. Atmospheric Chemistry and Physics, 2021, 21, 4677-4697.	4.9	11
8	Quantifying Nitrous Oxide Emissions in the U.S. Midwest: A Topâ€Down Study Using High Resolution Airborne Inâ€Situ Observations. Geophysical Research Letters, 2021, 48, e2020GL091266.	4.0	8
9	Regional Policies Targeting Residential Solid Fuel and Agricultural Emissions Can Improve Air Quality and Public Health in the Greater Bay Area and Across China. GeoHealth, 2021, 5, e2020GH000341.	4.0	9
10	Statistical Emulation of Winter Ambient Fine Particulate Matter Concentrations From Emission Changes in China. GeoHealth, 2021, 5, e2021GH000391.	4.0	12
11	Estimating Upper Silesian coal mine methane emissions from airborne in situ observations and dispersion modeling. Atmospheric Chemistry and Physics, 2021, 21, 8791-8807.	4.9	18
12	Seasonal distribution and drivers of surface fine particulate matter and organic aerosol over the Indo-Gangetic Plain. Atmospheric Chemistry and Physics, 2021, 21, 10881-10909.	4.9	15
13	Large Air Quality and Public Health Impacts due to Amazonian Deforestation Fires in 2019. GeoHealth, 2021, 5, e2021GH000429.	4.0	16
14	Air Pollution From Forest and Vegetation Fires in Southeast Asia Disproportionately Impacts the Poor. GeoHealth, 2021, 5, e2021GH000418.	4.0	31
15	Impact of the 2019/2020 Australian Megafires on Air Quality and Health. GeoHealth, 2021, 5, e2021GH000454.	4.0	16
16	Overview: Fusion of radar polarimetry and numerical atmospheric modelling towards an improved understanding of cloud and precipitation processes. Atmospheric Chemistry and Physics, 2021, 21, 17291-17314.	4.9	18
17	Biomass burning nitrogen dioxide emissions derived from space with TROPOMI: methodology and validation. Atmospheric Measurement Techniques, 2021, 14, 7929-7957.	3.1	27
18	Assessing costs of Indonesian fires and the benefits of restoring peatland. Nature Communications, 2021, 12, 7044.	12.8	26

#	Article	IF	Citations
19	Global nitrous acid emissions and levels of regional oxidants enhanced by wildfires. Nature Geoscience, 2020, 13, 681-686.	12.9	51
20	On the changes in surface ozone over the twenty-first century: sensitivity to changes in surface temperature and chemical mechanisms. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190329.	3.4	18
21	Asian dust observed during KORUS-AQ facilitates the uptake and incorporation of soluble pollutants during transport to South Korea. Atmospheric Environment, 2020, 224, 117305.	4.1	21
22	Air quality and health impacts of vegetation and peat fires in Equatorial Asia during 2004â€“2015. Environmental Research Letters, 2020, 15, 094054.	5.2	30
23	The challenge of simulating the sensitivity of the Amazonian cloud microstructure to cloud condensation nuclei number concentrations. Atmospheric Chemistry and Physics, 2020, 20, 1591-1605.	4.9	4
24	Influx of African biomass burning aerosol during the Amazonian dry season through layered transatlantic transport of black carbon-rich smoke. Atmospheric Chemistry and Physics, 2020, 20, 4757-4785.	4.9	40
25	A complete transition to clean household energy can save oneâ€“quarter of the healthy life lost to particulate matter pollution exposure in India. Environmental Research Letters, 2020, 15, 094096.	5.2	15
26	Large air quality and human health impacts due to Amazon forest and vegetation fires. Environmental Research Communications, 2020, 2, 095001.	2.3	31
27	Characterization, sources and reactivity of volatile organic compounds (VOCs) in Seoul and surrounding regions during KORUS-AQ. Elementa, 2020, 8, .	3.2	44
28	CRI-HOM: A novel chemical mechanism for simulating highly oxygenated organic molecules (HOMs) in global chemistryâ€“aerosolâ€“climate models. Atmospheric Chemistry and Physics, 2020, 20, 10889-10910.	4.9	19
29	Pollutant emission reductions deliver decreased PM_{2.5}-caused mortality across China during 2015â€“2017. Atmospheric Chemistry and Physics, 2020, 20, 11683-11695.	4.9	19
30	Impact on air quality and health due to the Saddleworth Moor fire in northern England. Environmental Research Letters, 2020, 15, 074018.	5.2	8
31	Using Shortâ€Term CO/CO₂ Ratios to Assess Air Mass Differences Over the Korean Peninsula During KORUSâ€AQ. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10951-10972.	3.3	31
32	Exploring the impacts of anthropogenic emission sectors on PM_{2.5} and human health in South and East Asia. Atmospheric Chemistry and Physics, 2019, 19, 11887-11910.	4.9	55
33	New estimate of particulate emissions from Indonesian peat fires in 2015. Atmospheric Chemistry and Physics, 2019, 19, 11105-11121.	4.9	63
34	Taehwa Research Forest: a receptor site for severe domestic pollution events in Korea during 2016. Atmospheric Chemistry and Physics, 2019, 19, 5051-5067.	4.9	7
35	Source Contributions to Carbon Monoxide Concentrations During KORUSâ€AQ Based on CAMâ€chem Model Applications. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2796-2822.	3.3	21
36	Integration of airborne and ground observations of nitryl chloride in the Seoul metropolitan area and the implications on regional oxidation capacity during KORUS-AQ 2016. Atmospheric Chemistry and Physics, 2019, 19, 12779-12795.	4.9	24

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37	Meteorology influencing springtime air quality, pollution transport, and visibility in Korea. Elementa, 2019, 7, .	3.2	62
38	Aerosol characteristics and particle production in the upper troposphere over the Amazon Basin. Atmospheric Chemistry and Physics, 2018, 18, 921-961.	4.9	105
39	Residential energy use emissions dominate health impacts from exposure to ambient particulate matter in India. Nature Communications, 2018, 9, 617.	12.8	149
40	Current and Future Disease Burden From Ambient Ozone Exposure in India. GeoHealth, 2018, 2, 334-355.	4.0	17
41	Aircraft-based observations of isoprene-epoxydiol-derived secondary organic aerosol (IEPOX-SOA) in the tropical upper troposphere over the Amazon region. Atmospheric Chemistry and Physics, 2018, 18, 14979-15001.	4.9	39
42	Secondary organic aerosol production from local emissions dominates the organic aerosol budget over Seoul, South Korea, during KORUS-AQ. Atmospheric Chemistry and Physics, 2018, 18, 17769-17800.	4.9	105
43	Stringent Emission Control Policies Can Provide Large Improvements in Air Quality and Public Health in India. GeoHealth, 2018, 2, 196-211.	4.0	27
44	BEATBOX v1.0: Background Error Analysis Testbed with Box Models. Geoscientific Model Development, 2018, 11, 561-573.	3.6	2
45	Observations of Acyl Peroxy Nitrates During the Front Range Air Pollution and Photochemistry Ã‰xperiment (FRAPPÃ‰). Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,416.	3.3	14
46	Rapid cycling of reactive nitrogen in the marine boundary layer. Nature, 2016, 532, 489-491.	27.8	159
47	Airborne observations of mercury emissions from the Chicago/Gary urban/industrial area during the 2013 NOMADSS campaign. Atmospheric Environment, 2016, 145, 415-423.	4.1	8
48	Quantifying the contribution of thermally driven recirculation to a high-ozone event along the Colorado Front Range using lidar. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,377-10,390.	3.3	34
49	Assessment of the MACC reanalysis and its influence as chemical boundary conditions for regional air quality modeling in AQMEII-2. Atmospheric Environment, 2015, 115, 371-388.	4.1	59
50	Examining the effects of anthropogenic emissions on isoprene-derived secondary organic aerosol formation during the 2013 Southern Oxidant and Aerosol Study (SOAS) at the Look Rock, Tennessee ground site. Atmospheric Chemistry and Physics, 2015, 15, 8871-8888.	4.9	213
51	Chemistryâ€turbulence interactions and mesoscale variability influence the cleansing efficiency of the atmosphere. Geophysical Research Letters, 2015, 42, 10,894.	4.0	30
52	The effect of dry and wet deposition of condensable vapors on secondary organic aerosols concentrations over the continental US. Atmospheric Chemistry and Physics, 2015, 15, 1-18.	4.9	132
53	Influence of crustal dust and sea spray supermicron particle concentrations and acidity on inorganic NO₃^{â”} aerosol during the 2013 Southern Oxidant and Aerosol Study. Atmospheric Chemistry and Physics, 2015, 15, 10669-10685.	4.9	56
54	Limited effect of anthropogenic nitrogen oxides on secondary organic aerosol formation. Atmospheric Chemistry and Physics, 2015, 15, 13487-13506.	4.9	17

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55	Effects of anthropogenic emissions on aerosol formation from isoprene and monoterpenes in the southeastern United States. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 37-42.	7.1	496
56	Influence of the choice of gas-phase mechanism on predictions of key gaseous pollutants during the AQMEII phase-2 intercomparison. Atmospheric Environment, 2015, 115, 553-568.	4.1	92
57	Modeling the Radical Chemistry in an Oxidation Flow Reactor: Radical Formation and Recycling, Sensitivities, and the OH Exposure Estimation Equation. Journal of Physical Chemistry A, 2015, 119, 4418-4432.	2.5	126
58	A multi-model assessment for the 2006 and 2010 simulations under the Air Quality Model Evaluation International Initiative (AQMEII) phase 2 over North America: Part I. Indicators of the sensitivity of O3 and PM2.5 formation regimes. Atmospheric Environment, 2015, 115, 569-586.	4.1	36
59	Comparative analysis of meteorological performance of coupled chemistry-meteorology models in the context of AQMEII phase 2. Atmospheric Environment, 2015, 115, 470-498.	4.1	85
60	Evaluation of operational on-line-coupled regional air quality models over Europe and North America in the context of AQMEII phase 2. Part I: Ozone. Atmospheric Environment, 2015, 115, 404-420.	4.1	168
61	A multi-model assessment for the 2006 and 2010 simulations under the Air Quality Model Evaluation International Initiative (AQMEII) Phase 2 over North America: Part II. Evaluation of column variable predictions using satellite data. Atmospheric Environment, 2015, 115, 587-603.	4.1	25
62	Evaluation of operational online-coupled regional air quality models over Europe and North America in the context of AQMEII phase 2. Part II: Particulate matter. Atmospheric Environment, 2015, 115, 421-441.	4.1	133
63	Uncertainties of simulated aerosol optical properties induced by assumptions on aerosol physical and chemical properties: An AQMEII-2 perspective. Atmospheric Environment, 2015, 115, 541-552.	4.1	84
64	Volatility dependence of Henry's law constants of condensable organics: Application to estimate depositional loss of secondary organic aerosols. Geophysical Research Letters, 2014, 41, 4795-4804.	4.0	67
65	Simulation of semi-explicit mechanisms of SOA formation from glyoxal in aerosol in a 3-D model. Atmospheric Chemistry and Physics, 2014, 14, 6213-6239.	4.9	166
66	Effects of dust aerosols on tropospheric chemistry during a typical pre-monsoon season dust storm in northern India. Atmospheric Chemistry and Physics, 2014, 14, 6813-6834.	4.9	68
67	Novel Pathways to Form Secondary Organic Aerosols: Glyoxal SOA in WRF/Chem. Springer Proceedings in Complexity, 2014, , 149-154.	0.3	0
68	An advanced scheme for wet scavenging and liquid-phase chemistry in a regional online-coupled chemistry transport model. Atmospheric Chemistry and Physics, 2013, 13, 1177-1192.	4.9	22
69	Modeling the meteorological and chemical effects of secondary organic aerosols during an EUCAARI campaign. Atmospheric Chemistry and Physics, 2013, 13, 625-645.	4.9	66
70	Towards an online-coupled chemistry-climate model: evaluation of trace gases and aerosols in COSMO-ART. Geoscientific Model Development, 2011, 4, 1077-1102.	3.6	78
71	Changes in weather extremes: Assessment of return values using high resolution climate simulations at convection-resolving scale. Meteorologische Zeitschrift, 2010, 19, 11-23.	1.0	37
72	Leaf Area Index Specification for Use in Mesoscale Weather Prediction Systems. Monthly Weather Review, 2009, 137, 3535-3550.	1.4	14

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73	Re: Code availability. , 0, , .		0