Oliver Kirner

List of Publications by Year
in descending order

46 papers	1,205 citations	471509 17 h-index	414414 32 g-index
81 all docs	81 docs citations	81 times ranked	1880 citing authors

#	Article	IF	Citations
1	Challenge of modelling GLORIA observations of upper troposphereâ€“lowermost stratosphere trace gas and cloud distributions at high latitudes: a case study with state-of-the-art models. Atmospheric Chemistry and Physics, 2022, 22, 2843-2870.	4.9	0
2	Pollution trace gases C₂H₆, C₂H₂, HCOOH, and PAN in the North Atlantic UTLS: observations and simulations. Atmospheric Chemistry and Physics, 2021, 21, 8213-8232.	4.9	6
3	Mountain-wave-induced polar stratospheric clouds and their representation in the global chemistry model ICON-ART. Atmospheric Chemistry and Physics, 2021, 21, 9515-9543.	4.9	10
4	The Michelson Interferometer for Passive Atmospheric Sounding global climatology of BrONO₂ 2002â€“2012: a test for stratospheric bromine chemistry. Atmospheric Chemistry and Physics, 2021, 21, 18433-18464.	4.9	1
5	On the role of trend and variability in the hydroxyl radical (OH) in the global methane budget. Atmospheric Chemistry and Physics, 2020, 20, 13011-13022.	4.9	18
6	Pollution trace gas distributions and their transport in the Asian monsoon upper troposphere and lowermost stratosphere during the StratoClim campaign 2017. Atmospheric Chemistry and Physics, 2020, 20, 14695-14715.	4.9	8
7	Projecting ozone hole recovery using an ensemble of chemistryâ€“climate models weighted by model performance and independence. Atmospheric Chemistry and Physics, 2020, 20, 9961-9977.	4.9	16
8	Ultraviolet Radiation modelling using output from the Chemistry Climate Model Initiative. , 2019, 19, 10087-10110.		5
9	Unusual chlorine partitioning in the 2015/16 Arctic winter lowermost stratosphere: observations and simulations. Atmospheric Chemistry and Physics, 2019, 19, 8311-8338.	4.9	10
10	Clear-sky ultraviolet radiation modelling using output from the Chemistry Climate Model Initiative. Atmospheric Chemistry and Physics, 2019, 19, 10087-10110.	4.9	22
11	Inter-model comparison of global hydroxyl radical (OH) distributions and their impact on atmospheric methane over the 2000â€“2016 period. Atmospheric Chemistry and Physics, 2019, 19, 13701-13723.	4.9	52
12	The effect of atmospheric nudging on the stratospheric residual circulation in chemistryâ€“climate models. Atmospheric Chemistry and Physics, 2019, 19, 11559-11586.	4.9	27
13	Stratospheric ozone loss over the Eurasian continent induced by the polar vortex shift. Nature Communications, 2018, 9, 206.	12.8	69
14	Case study of ozone anomalies over northern Russia in the 2015/2016 winter: measurements and numerical modelling. Annales Geophysicae, 2018, 36, 1495-1505.	1.6	13
15	Comparison of ECHAM5/MESSy Atmospheric Chemistry (EMAC) simulations of the Arctic winter 2009/2010 and 2010/2011 with Envisat/MIPAS and Aura/MLS observations. Atmospheric Chemistry and Physics, 2018, 18, 8873-8892.	4.9	15
16	Validation of Atmospheric Numerical Models Based on Satellite Measurements of Ozone Columns. Russian Meteorology and Hydrology, 2018, 43, 161-167.	1.3	1
17	Ozone Temporal Variability in the Subarctic Region: Comparison of Satellite Measurements with Numerical Simulations. Izvestiya - Atmospheric and Oceanic Physics, 2018, 54, 32-38.	0.9	1
18	The representation of solar cycle signals in stratospheric ozone â€“ PartÂ 2: Analysis of global models. Atmospheric Chemistry and Physics, 2018, 18, 11323-11343.	4.9	18

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19	Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. Atmospheric Chemistry and Physics, 2018, 18, 8409-8438.	4.9	128
20	Revisiting the Mystery of Recent Stratospheric Temperature Trends. Geophysical Research Letters, 2018, 45, 9919-9933.	4.0	51
21	Diurnal variations of BrONO₂ observed by MIPAS-B at midlatitudes and in the Arctic. Atmospheric Chemistry and Physics, 2017, 17, 14631-14643.	4.9	3
22	An assessment of the climatological representativeness of IAGOS-CARIBIC trace gas measurements using EMAC model simulations. Atmospheric Chemistry and Physics, 2017, 17, 2775-2794.	4.9	6
23	Denitrification, dehydration and ozone loss during the 2015/2016 Arctic winter. Atmospheric Chemistry and Physics, 2017, 17, 12893-12910.	4.9	35
24	Study of Ozone Layer Variability near St. Petersburg on the Basis of SBUV Satellite Measurements and Numerical Simulation (2000â€“2014). Izvestiya - Atmospheric and Oceanic Physics, 2017, 53, 911-917.	0.9	2
25	An emission module for ICON-ART 2.0: implementation and simulations of acetone. Geoscientific Model Development, 2017, 10, 2471-2494.	3.6	16
26	Comparison of XCO abundances from the Total Carbon Column Observing Network and the Network for the Detection of Atmospheric Composition Change measured in Karlsruhe. Atmospheric Measurement Techniques, 2016, 9, 2223-2239.	3.1	17
27	Errors induced by different approximations in handling horizontal atmospheric inhomogeneities in MIPAS/ENVISAT retrievals. Atmospheric Measurement Techniques, 2016, 9, 5499-5508.	3.1	4
28	Earth System Chemistry integrated Modelling (ESCiMo) with the Modular Earth Submodel System (MESSy) versionÂ2.51. Geoscientific Model Development, 2016, 9, 1153-1200.	3.6	208
29	Comparing data obtained from ground-based measurements of the total contents of O3, HNO3,HCl, and NO2 and from their numerical simulation. Izvestiya - Atmospheric and Oceanic Physics, 2016, 52, 57-65.	0.9	14
30	Chemistryâ€“Climate Interactions of Stratospheric and Mesospheric Ozone in EMAC Long-Term Simulations with Different Boundary Conditions for CO₂, CH₄, N₂O, and ODS. Atmosphere - Ocean, 2015, 53, 140-152.	1.6	9
31	Annual cycle and long-term trend of the methane total column in the atmosphere over the St. Petersburg region. Izvestiya - Atmospheric and Oceanic Physics, 2015, 51, 431-438.	0.9	7
32	Partitioning and budget of inorganic and organic chlorine species observed by MIPAS-B and TELIS in the Arctic in March 2011. Atmospheric Chemistry and Physics, 2015, 15, 8065-8076.	4.9	13
33	Contribution of liquid, NAT and ice particles to chlorine activation and ozone depletion in Antarctic winter and spring. Atmospheric Chemistry and Physics, 2015, 15, 2019-2030.	4.9	29
34	Analysis of methane total column variations in the atmosphere near St. Petersburg using ground-based measurements and simulations. Izvestiya - Atmospheric and Oceanic Physics, 2015, 51, 177-185.	0.9	11
35	Chlorine nitrate in the atmosphere over St. Petersburg. Izvestiya - Atmospheric and Oceanic Physics, 2015, 51, 49-56.	0.9	9
36	Impact of acetone (photo)oxidation on HOxproduction in the UT/LMS based on CARIBIC passenger aircraft observations and EMAC simulations. Geophysical Research Letters, 2014, 41, 3289-3297.	4.0	14

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37	The photolysis module JVAL-14, compatible with the MESSy standard, and the JVal PreProcessor (JVPP). Geoscientific Model Development, 2014, 7, 2653-2662.	3.6	55
38	Radiative and dynamical contributions to past and future Arctic stratospheric temperature trends. Atmospheric Chemistry and Physics, 2014, 14, 1679-1688.	4.9	26
39	The MIPAS HOCl climatology. Atmospheric Chemistry and Physics, 2012, 12, 1965-1977.	4.9	19
40	Diurnal variations of reactive chlorine and nitrogen oxides observed by MIPAS-B inside the January 2010 Arctic vortex. Atmospheric Chemistry and Physics, 2012, 12, 6581-6592.	4.9	32
41	Observed and simulated time evolution of HCl, ClONO₂, and HF total column abundances. Atmospheric Chemistry and Physics, 2012, 12, 3527-3556.	4.9	72
42	Simulation of polar stratospheric clouds in the chemistry-climate-model EMAC via the submodel PSC. Geoscientific Model Development, 2011, 4, 169-182.	3.6	53
43	First remote sensing measurements of ClOOCl along with ClO and ClONO₂ in activated and deactivated Arctic vortex conditions using new ClOOCl IR absorption cross sections. Atmospheric Chemistry and Physics, 2010, 10, 931-945.	4.9	33
44	HOCl chemistry in the Antarctic Stratospheric Vortex 2002, as observed with the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). Atmospheric Chemistry and Physics, 2009, 9, 1817-1829.	4.9	14
45	Evaluation of CLaMS, KASIMA and ECHAM5/MESSy1 simulations in the lower stratosphere using observations of Odin/SMR and ILAS/ILAS-II. Atmospheric Chemistry and Physics, 2009, 9, 5759-5783.	4.9	7
46	A model study of the January 2006 low total ozone episode over Western Europe and comparison with ozone sonde data. Atmospheric Chemistry and Physics, 2009, 9, 6429-6451.	4.9	3