Oliver Kirner

List of Publications by Year
in descending order

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

#	Article	IF	Citations
1	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
2	Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. Atmospheric Chemistry and Physics, 2018, 18, 8409-8438.	4.9	128
3	Observed and simulated time evolution of HCl, ClONO₂, and HF total column abundances. Atmospheric Chemistry and Physics, 2012, 12, 3527-3556.	4.9	72
4	Stratospheric ozone loss over the Eurasian continent induced by the polar vortex shift. Nature Communications, 2018, 9, 206.	12.8	69
5	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
6	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
7	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
8	Revisiting the Mystery of Recent Stratospheric Temperature Trends. Geophysical Research Letters, 2018, 45, 9919-9933.	4.0	51
9	Denitrification, dehydration and ozone loss during the 2015/2016 Arctic winter. Atmospheric Chemistry and Physics, 2017, 17, 12893-12910.	4.9	35
10	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
11	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
12	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
13	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
14	Radiative and dynamical contributions to past and future Arctic stratospheric temperature trends. Atmospheric Chemistry and Physics, 2014, 14, 1679-1688.	4.9	26
15	Clear-sky ultraviolet radiation modelling using output from the Chemistry Climate Model Initiative. Atmospheric Chemistry and Physics, 2019, 19, 10087-10110.	4.9	22
16	The MIPAS HOCl climatology. Atmospheric Chemistry and Physics, 2012, 12, 1965-1977.	4.9	19
17	The representation of solar cycle signals in stratospheric ozone â€“ PartÂ2: Analysis of global models. Atmospheric Chemistry and Physics, 2018, 18, 11323-11343.	4.9	18
18	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

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19	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
20	An emission module for ICON-ART 2.0: implementation and simulations of acetone. Geoscientific Model Development, 2017, 10, 2471-2494.	3.6	16
21	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
22	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
23	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
24	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
25	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
26	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
27	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
28	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
29	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
30	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
31	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
32	Chlorine nitrate in the atmosphere over St. Petersburg. Izvestiya - Atmospheric and Oceanic Physics, 2015, 51, 49-56.	0.9	9
33	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
34	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
35	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
36	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

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37	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
38	Ultraviolet Radiation modelling using output from the Chemistry Climate Model Initiative. , 2019, 19, 10087-10110.		5
39	Errors induced by different approximations in handling horizontal atmospheric inhomogeneities in MIPAS/ENVISAT retrievals. Atmospheric Measurement Techniques, 2016, 9, 5499-5508.	3.1	4
40	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
41	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
42	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
43	Validation of Atmospheric Numerical Models Based on Satellite Measurements of Ozone Columns. Russian Meteorology and Hydrology, 2018, 43, 161-167.	1.3	1
44	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
45	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
46	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