Martin Kaufmann

List of Publications by Year
in descending order

70	1,688	279798	345221
papers	citations	23 h-index	36 g-index

94	94	94	1093
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Radiation Monitor Extension for CMOS Imaging Instruments in Nanosatellites. IEEE Transactions on Nuclear Science, 2022, 69, 1651-1658.	2.0	2
2	Simultaneous Retrievals of Nighttime O(³P) and Total OH Densities From Satellite Observations of Meinel Band Emissions. Geophysical Research Letters, 2021, 48, .	4.0	4
3	GRIPS-HI, a novel spectral imager for ground based measurements of mesopause temperatures. TM Technisches Messen, 2021, 88, 655-660.	0.7	1
4	Intraâ€Annual Variation of Eddy Diffusion (k_{zz}) in the MLT, From SABER and SCIAMACHY Atomic Oxygen Climatologies. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035343.	3.3	4
5	AÂcomparison of OH nightglow volume emission rates as measured by SCIAMACHY and SABER. Atmospheric Measurement Techniques, 2020, 13, 3033-3042.	3.1	4
6	Thermally stable monolithic Doppler asymmetric spatial heterodyne interferometer: optical design and laboratory performance. Optics Express, 2020, 28, 19887.	3.4	8
7	Consistent Nighttime Atomic Oxygen Concentrations From O 2 Aâ€band, O(1 S) Greenâ€Line, and OH Airglow Measurements as Performed by SCIAMACHY. Geophysical Research Letters, 2019, 46, 8536-8545.	4.0	7
8	Determination of Global Mean Eddy Diffusive Transport in the Mesosphere and Lower Thermosphere From Atomic Oxygen and Carbon Dioxide Climatologies. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13519-13533.	3.3	13
9	On the assembly and calibration of a spatial heterodyne interferometer for limb sounding of the middle atmosphere. CEAS Space Journal, 2019, 11, 525-531.	2.3	7
10	Evidence of small-scale quasi-isentropic mixing in ridges of extratropical baroclinic waves. Atmospheric Chemistry and Physics, 2019, 19, 12607-12630.	4.9	23
11	Global nighttime atomic oxygen abundances from GOMOS hydroxyl airglow measurements in the mesopause region. Atmospheric Chemistry and Physics, 2019, 19, 13891-13910.	4.9	5
12	AtmoCube A1: airglow measurements in the mesosphere and lower thermosphere by spatial heterodyne interferometry. Journal of Applied Remote Sensing, 2019, 13, 1.	1.3	5
13	Analysis and correction of distortions in a spatial heterodyne spectrometer system. Applied Optics, 2019, 58, 2190.	1.8	7
14	Optical design and performance analysis of a CubeSat-sized limb sounder utilizing a spatial heterodyne spectrometer for the measurement of mesospheric temperature. , 2019, , .		0
15	System-on-module-based long-life electronics for remote sensing imaging with CubeSats in low-earth-orbits. Journal of Applied Remote Sensing, 2019, 13, 1.	1.3	5
16	Investigation on a SmallSat CMOS image sensor for atmospheric temperature measurement. , 2019, , .		6
17	Advances in the optical design of a spatial heterodyne interferometer deployed on a 6U-CubeSat for atmospheric research. , 2019, , .		0
18	Atomic Oxygen Abundance Retrieved From SCIAMACHY Hydroxyl Nightglow Measurements. Geophysical Research Letters, 2018, 45, 9314-9322.	4.0	16

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19	Three-dimensional tomographic reconstruction of atmospheric gravity waves in the mesosphere and lower thermosphere (MLT). Atmospheric Measurement Techniques, 2018, 11, 3161-3175.	3.1	6
20	A highly miniaturized satellite payload based on a spatial heterodyne spectrometer for atmospheric temperature measurements in the mesosphere and lower thermosphere. Atmospheric Measurement Techniques, 2018, 11, 3861-3870.	3.1	33
21	MIPAS observations of ozone in the middle atmosphere. Atmospheric Measurement Techniques, 2018, 11, 2187-2212.	3.1	11
22	A Miniaturized Limb Sounder Utilizing a Spatial Heterodyne Spectrometer for the Observation of the Molecular Oxygen Atmospheric Band. , 2018, , .		0
23	A novel CubeSat payload for airglow measurements in the mesosphere and lower thermosphere. , 2018, , .		2
24	Effective wind and temperature retrieval from Doppler asymmetric spatial heterodyne spectrometer interferograms. Applied Optics, 2018, 57, 8829.	1.8	7
25	First tomographic observations of gravity waves by the infrared limb imager GLORIA. Atmospheric Chemistry and Physics, 2017, 17, 14937-14953.	4.9	51
26	Tomographic reconstruction of atmospheric gravity wave parameters from airglow observations. Atmospheric Measurement Techniques, 2017, 10, 4601-4612.	3.1	18
27	Observations of PAN and its confinement in the Asian summer monsoon anticyclone in high spatial resolution. Atmospheric Chemistry and Physics, 2016, 16, 8389-8403.	4.9	36
28	Satellite observations of middle atmosphere gravity wave absolute momentum flux and of its vertical gradient during recent stratospheric warmings. Atmospheric Chemistry and Physics, 2016, 16, 9983-10019.	4.9	59
29	Atmospheric gravity waves observation from a lunar base. , 2016, , .		1
30	Nighttime atomic oxygen in the mesopause region retrieved from SCIAMACHY O(¹S) green line measurements and its response to solar cycle variation. Journal of Geophysical Research: Space Physics, 2015, 120, 9057-9073.	2.4	17
31	New calibration noise suppression techniques for the GLORIA limb imager. Atmospheric Measurement Techniques, 2015, 8, 3147-3161.	3.1	4
32	Level 2 processing for the imaging Fourier transform spectrometer GLORIA: derivation and validation of temperature and trace gas volume mixing ratios from calibrated dynamics mode spectra. Atmospheric Measurement Techniques, 2015, 8, 2473-2489.	3.1	30
33	Validation of first chemistry mode retrieval results from the new limb-imaging FTS GLORIA with correlative MIPAS-STR observations. Atmospheric Measurement Techniques, 2015, 8, 2509-2520.	3.1	11
34	Retrieval of three-dimensional small-scale structures in upper-tropospheric/lower-stratospheric composition as measured by GLORIA. Atmospheric Measurement Techniques, 2015, 8, 81-95.	3.1	38
35	Gimballed Limb Observer for Radiance Imaging of the Atmosphere (GLORIA) scientific objectives. Atmospheric Measurement Techniques, 2014, 7, 1915-1928.	3.1	85
36	Instrument concept of the imaging Fourier transform spectrometer GLORIA. Atmospheric Measurement Techniques, 2014, 7, 3565-3577.	3.1	82

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37	Global distribution of atomic oxygen in the mesopause region as derived from SCIAMACHY O(¹S) green line measurements. Geophysical Research Letters, 2014, 41, 6274-6280.	4.0	36
38	Satellite observations of ozone in the upper mesosphere. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5803-5821.	3.3	63
39	Role of gravity waves in the forcing of quasi twoâ€day waves in the mesosphere: An observational study. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3467-3485.	3.3	76
40	The Response of Atomic Hydrogen to Solar Radiation Changes. Springer Atmospheric Sciences, 2013, , 171-188.	0.3	6
41	Infra-red Radiative Cooling/Heating of the Mesosphere and Lower Thermosphere Due to the Small-Scale Temperature Fluctuations Associated with Gravity Waves. Springer Atmospheric Sciences, 2013, , 429-442.	0.3	0
42	GRANADA: A Generic RAdiative traNsfer AnD non-LTE population algorithm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1771-1817.	2.3	60
43	A 3-D tomographic retrieval approach with advection compensation for the air-borne limb-imager GLORIA. Atmospheric Measurement Techniques, 2011, 4, 2509-2529.	3.1	61
44	Effects of the inclusion of bending-to-stretching transitions in the non-LTE modeling of ozone vibrational temperatures. Journal of Atmospheric and Solar-Terrestrial Physics, 2010, 72, 890-899.	1.6	2
45	Towards a 3-D tomographic retrieval for the air-borne limb-imager GLORIA. Atmospheric Measurement Techniques, 2010, 3, 1647-1665.	3.1	90
46	Tomographic retrieval approach for mesoscale gravity wave observations by the PREMIER Infrared Limb-Sounder. Atmospheric Measurement Techniques, 2010, 3, 339-354.	3.1	33
47	Relative importance of ozone energy transfer processes in the middle and upper atmosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 805-815.	1.6	3
48	CRISTA-NF measurements of water vapor during the SCOUT-O3 Tropical Aircraft Campaign. Advances in Space Research, 2009, 43, 74-81.	2.6	28
49	Spectral wave analysis at the mesopause from SCIAMACHY airglow data compared to SABER temperature spectra. Annales Geophysicae, 2009, 27, 407-416.	1.6	30
50	Chemical heating rates derived from SCIAMACHY vibrationally excited OH limb emission spectra. Advances in Space Research, 2008, 41, 1914-1920.	2.6	20
51	Envisat MIPAS measurements of CFC-11: retrieval, validation, and climatology. Atmospheric Chemistry and Physics, 2008, 8, 3671-3688.	4.9	77
52	Analysis of nonlocal thermodynamic equilibrium CO 4.7Î¼m fundamental, isotopic, and hot band emissions measured by the Michelson Interferometer for Passive Atmospheric Sounding on Envisat. Journal of Geophysical Research, 2007, 112, .	3.3	23
53	Vibrationally excited ozone in the middle atmosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 202-212.	1.6	26
54	Atmospheric neutral temperature distribution at the mesopause altitude. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 1684-1697.	1.6	26

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55	Retrieval of CFC-11 and CFC-12 from Envisat MIPAS observations by means of rapid radiative transfer calculations. Advances in Space Research, 2005, 36, 915-921.	2.6	24
56	A comparison of night-time GOMOS and MIPAS ozone profiles in the stratosphere and mesosphere. Advances in Space Research, 2005, 36, 958-966.	2.6	22
57	Retrieval of stratospheric and mesospheric O3 from high resolution MIPAS spectra at 15 and 10 Î¼m. Advances in Space Research, 2005, 36, 943-951.	2.6	21
58	Atmospheric non-local thermodynamic equilibrium emissions as observed by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). Comptes Rendus Physique, 2005, 6, 848-863.	0.9	20
59	Comparisons of MIPAS/ENVISAT ozone profiles with SMR/ODIN and HALOE/UARS observations. Advances in Space Research, 2005, 36, 927-931.	2.6	9
60	Cross comparisons of O3 and NO2 measured by the atmospheric ENVISAT instruments GOMOS, MIPAS, and SCIAMACHY. Advances in Space Research, 2005, 36, 855-867.	2.6	34
61	Validation of stratospheric temperatures measured by Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) on Envisat. Journal of Geophysical Research, 2005, 110, .	3.3	16
62	A review of the scientific results from the CRISTA missions. Advances in Space Research, 2004, 34, 1715-1721.	2.6	6
63	Zonal asymmetries in middle atmosphere temperatures. Advances in Space Research, 2003, 32, 1771-1780.	2.6	7
64	Satellite observations of daytime and nighttime ozone in the mesosphere and lower thermosphere. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	51
65	Atmospheric parameters retrieved from CRISTA measurements in the upper mesosphere and lower thermosphere. , 2002, , .		1
66	The vertical and horizontal distribution of CO2densities in the upper mesosphere and lower thermosphere as measured by CRISTA. Journal of Geophysical Research, 2002, 107, CRI 10-1-CRI 10-19.	3.3	48
67	The existence of a tertiary ozone maximum in the high-latitude middle mesosphere. Geophysical Research Letters, 2001, 28, 4531-4534.	4.0	81
68	A global measurement of lower thermosphere atomic oxygen densities. Geophysical Research Letters, 2000, 27, 1387-1390.	4.0	31
69	The fine structure emission of thermospheric atomic oxygen. Advances in Space Research, 1997, 19, 595-598.	2.6	8
70	Thermospheric nitric oxide infrared emissions measured by CRISTA. Advances in Space Research, 1997, 19, 591-594.	2.6	3