Manuel LÃ³pez-Puertas

List of Publications by Year
in descending order

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225	9,301	44069	62596
papers	citations	48 h-index	80 g-index

259	259	259	4784
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	MIPAS: an instrument for atmospheric and climate research. Atmospheric Chemistry and Physics, 2008, 8, 2151-2188.	4.9	596
2	Assessment of the quality of the Version 1.07 temperatureâ€versusâ€pressure profiles of the middle atmosphere from TIMED/SABER. Journal of Geophysical Research, 2008, 113, .	3.3	369
3	Retrieval of mesospheric and lower thermospheric kinetic temperature from measurements of CO215 Âµm Earth Limb Emission under non-LTE conditions. Geophysical Research Letters, 2001, 28, 1391-1394.	4.0	241
4	Observed temporal evolution of global mean age of stratospheric air for the 2002 to 2010 period. Atmospheric Chemistry and Physics, 2012, 12, 3311-3331.	4.9	181
5	SABER observations of mesospheric temperatures and comparisons with falling sphere measurements taken during the 2002 summer MaCWAVE campaign. Geophysical Research Letters, 2004, 31, .	4.0	174
6	MIPAS level 2 operational analysis. Atmospheric Chemistry and Physics, 2006, 6, 5605-5630.	4.9	174
7	Ground-based detection of an extended helium atmosphere in the Saturn-mass exoplanet WASP-69b. Science, 2018, 362, 1388-1391.	12.6	174
8	The CARMENES search for exoplanets around M dwarfs. Astronomy and Astrophysics, 2018, 612, A49.	5.1	173
9	Short- and medium-term atmospheric constituent effects of very large solar proton events. Atmospheric Chemistry and Physics, 2008, 8, 765-785.	4.9	156
10	Composition changes after the "Halloween" solar proton event: the High Energy Particle Precipitation in the Atmosphere (HEPPA) model versus MIPAS data intercomparison study. Atmospheric Chemistry and Physics, 2011, 11, 9089-9139.	4.9	145
11	Observation of NOxenhancement and ozone depletion in the Northern and Southern Hemispheres after the October-November 2003 solar proton events. Journal of Geophysical Research, 2005, 110, .	3.3	132
12	Downward transport of upper atmospheric NOxinto the polar stratosphere and lower mesosphere during the Antarctic 2003 and Arctic 2002/2003 winters. Journal of Geophysical Research, 2005, 110, .	3.3	131
13	The natural thermostat of nitric oxide emission at 5.3 Î¼m in the thermosphere observed during the solar storms of April 2002. Geophysical Research Letters, 2003, 30, .	4.0	123
14	Detection of Heâ€ I Î»10830 â„« absorption on HD 189733 b with CARMENES high-resolution transmission spectroscopy. Astronomy and Astrophysics, 2018, 620, A97.	5.1	120
15	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. Nature, 2019, 568, 517-520.	27.8	111
16	CO measurements from the ACE-FTS satellite instrument: data analysis and validation using ground-based, airborne and spaceborne observations. Atmospheric Chemistry and Physics, 2008, 8, 2569-2594.	4.9	107
17	Martian dust storm impact on atmospheric H2O and D/H observed by ExoMars Trace Gas Orbiter. Nature, 2019, 568, 521-525.	27.8	107
18	LARGE ABUNDANCES OF POLYCYCLIC AROMATIC HYDROCARBONS IN TITAN'S UPPER ATMOSPHERE. Astrophysical Journal, 2013, 770, 132.	4.5	106

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19	Energy transport in the thermosphere during the solar storms of April 2002. Journal of Geophysical Research, 2005, 110, .	3.3	105
20	Global distribution of mean age of stratospheric air from MIPAS SF₆ measurements. Atmospheric Chemistry and Physics, 2008, 8, 677-695.	4.9	105
21	The CARMENES search for exoplanets around M dwarfs. Astronomy and Astrophysics, 2018, 609, A117.	5.1	103
22	Observations of infrared radiative cooling in the thermosphere on daily to multiyear timescales from the TIMED/SABER instrument. Journal of Geophysical Research, 2010, 115, .	3.3	102
23	Errors in Sounding of the Atmosphere using Broadband Emission Radiometry (SABER) kinetic temperature caused by nonâ€localâ€thermodynamicâ€equilibrium model parameters. Journal of Geophysical Research, 2008, 113, .	3.3	99
24	EChO. Experimental Astronomy, 2012, 34, 311-353.	3.7	98
25	NOMAD, an Integrated Suite of Three Spectrometers for the ExoMars Trace Gas Mission: Technical Description, Science Objectives and Expected Performance. Space Science Reviews, 2018, 214, 1.	8.1	95
26	On the distribution of CO₂ and CO in the mesosphere and lower thermosphere. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5700-5718.	3.3	90
27	Retrieval of stratospheric NOxfrom 5.3 and 6.2 Î¼m nonlocal thermodynamic equilibrium emissions measured by Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) on Envisat. Journal of Geophysical Research, 2005, 110, .	3.3	84
28	A non-LTE radiative transfer model for infrared bands in the middle atmosphere. I. Theoretical basis and application to CO2 15 Î¼m bands. Journal of Atmospheric and Solar-Terrestrial Physics, 1986, 48, 729-748.	0.9	80
29	Evidence for dynamical coupling from the lower atmosphere to the thermosphere during a major stratospheric warming. Geophysical Research Letters, 2010, 37, .	4.0	80
30	Carbon monoxide distributions from the upper troposphere to the mesosphere inferred from 4.7 Î¼m non-local thermal equilibrium emissions measured by MIPAS on Envisat. Atmospheric Chemistry and Physics, 2009, 9, 2387-2411.	4.9	77
31	Science objectives and performances of NOMAD, a spectrometer suite for the ExoMars TGO mission. Planetary and Space Science, 2015, 119, 233-249.	1.7	77
32	Mesospheric and stratospheric NO_y produced by energetic particle precipitation during 2002â€“2012. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4429-4446.	3.3	75
33	Altitude distribution of vibrationally excited states of atmospheric hydroxyl at levels v = 2 to v = 7. Planetary and Space Science, 1987, 35, 1029-1038.	1.7	71
34	Northern Hemisphere atmospheric influence of the solar proton events and ground level enhancement in January 2005. Atmospheric Chemistry and Physics, 2011, 11, 6153-6166.	4.9	71
35	HNO3, N2O5, and ClONO2enhancements after the October-November 2003 solar proton events. Journal of Geophysical Research, 2005, 110, .	3.3	69
36	Ten years of MIPAS measurements with ESA Level 2 processor V6 â€“ Part 1: Retrieval algorithm and diagnostics of the products. Atmospheric Measurement Techniques, 2013, 6, 2419-2439.	3.1	66

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37	Validation of NO₂ and NO from the Atmospheric Chemistry Experiment (ACE). Atmospheric Chemistry and Physics, 2008, 8, 5801-5841.	4.9	64
38	Water vapor distributions measured with the Michelson Interferometer for Passive Atmospheric Sounding on board Envisat (MIPAS/Envisat). Journal of Geophysical Research, 2005, 110, .	3.3	63
39	Satellite observations of ozone in the upper mesosphere. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5803-5821.	3.3	63
40	Neutral atmospheric composition between 60 and 220 km: A theoretical model for mid-latitudes. Planetary and Space Science, 1986, 34, 723-743.	1.7	62
41	A non-LTE radiative transfer model for infrared bands in the middle atmosphere. II. CO2 (2.7 and 4.3 Î¼m) and water vapour (6.3 Î¼m) bands and N2(1) and O2(1) vibrational levels. Journal of Atmospheric and Solar-Terrestrial Physics, 1986, 48, 749-764.	0.9	60
42	Nonâ€local thermodynamic equilibrium studies of the 15â€Î¼m bands of CO₂ for atmospheric remote sensing. Journal of Geophysical Research, 1993, 98, 14955-14977.	3.3	60
43	GRANADA: A Generic RAdiative traNsfer AnD non-LTE population algorithm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1771-1817.	2.3	60
44	CARMENES: an overview six months after first light. Proceedings of SPIE, 2016, , .	0.8	59
45	ALMA Discovery of Dust Belts around Proxima Centauri. Astrophysical Journal Letters, 2017, 850, L6.	8.3	59
46	A blind test retrieval experiment for infrared limb emission spectrometry. Journal of Geophysical Research, 2003, 108, .	3.3	57
47	Validation of MIPAS-ENVISAT NO₂ operational data. Atmospheric Chemistry and Physics, 2007, 7, 3261-3284.	4.9	57
48	SABER observations of mesospheric ozone during NH late winter 2002â€“2009. Geophysical Research Letters, 2009, 36, .	4.0	57
49	Multiple water band detections in the CARMENES near-infrared transmission spectrum of HD 189733 b. Astronomy and Astrophysics, 2019, 621, A74.	5.1	57
50	Analysis of the upper atmosphere CO₂(v₂) vibrational temperatures retrieved from ATMOS/Spacelab 3 observations. Journal of Geophysical Research, 1992, 97, 20469-20478.	3.3	55
51	Experimental evidence of perturbed odd hydrogen and chlorine chemistry after the October 2003 solar proton events. Journal of Geophysical Research, 2005, 110, .	3.3	55
52	HEPPA-II modelâ€“measurement intercomparison project: EPP indirect effects during the dynamically perturbed NH winter 2008â€“2009. Atmospheric Chemistry and Physics, 2017, 17, 3573-3604.	4.9	55
53	Kinetic temperature and carbon dioxide from broadband infrared limb emission measurements taken from the TIMED/SABER instrument. Advances in Space Research, 2009, 43, 15-27.	2.6	53
54	Non-local thermodynamic equilibrium in general circulation models of the Martian atmosphere 1. Effects of the local thermodynamic equilibrium approximation on thermal cooling and solar heating. Journal of Geophysical Research, 1998, 103, 16799-16811.	3.3	52

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55	An enhanced HNO3second maximum in the Antarctic midwinter upper stratosphere 2003. Journal of Geophysical Research, 2005, 110, .	3.3	52
56	Local thermodynamic equilibrium of carbon dioxide in the upper atmosphere. Geophysical Research Letters, 1992, 19, 589-592.	4.0	49
57	A new non-LTE retrieval method for atmospheric parameters from mipas-envisat emission spectra. Advances in Space Research, 2001, 27, 1099-1104.	2.6	49
58	Retrieval of stratospheric ozone profiles from MIPAS/ENVISAT limb emission spectra: a sensitivity study. Atmospheric Chemistry and Physics, 2006, 6, 2767-2781.	4.9	49
59	Modelling the Heâ€¯I triplet absorption at 10 830 â„« in the atmosphere of HD 209458 b. Astronomy and Astrophysics, 2020, 636, A13.	5.1	49
60	Global observations of thermospheric temperature and nitric oxide from MIPAS spectra at 5.3Î¼m. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	46
61	The CARMENES search for exoplanets around M dwarfs. Astronomy and Astrophysics, 2018, 609, L5.	5.1	46
62	Non-LTE Infrared Emissions of CO2 in the Atmosphere of Venus. Icarus, 2000, 147, 11-25.	2.5	45
63	Optimized spectral microwindows for data analysis of the Michelson Interferometer for Passive Atmospheric Sounding on the Environmental Satellite. Applied Optics, 2000, 39, 5531.	2.1	45
64	Modelling of atmospheric mid-infrared radiative transfer: the AMIL2DA algorithm intercomparison experiment. Journal of Quantitative Spectroscopy and Radiative Transfer, 2003, 78, 381-407.	2.3	45
65	Validation of Thermosphere Ionosphere Mesosphere Energetics and Dynamics/Sounding of the Atmosphere using Broadband Emission Radiometry (TIMED/SABER) v1.07 ozone at 9.6 Î¼m in altitude range 15â€“70 km. Journal of Geophysical Research, 2009, 114, .	3.3	45
66	An unidentified emission in Titan's upper atmosphere. Geophysical Research Letters, 2013, 40, 1489-1493.	4.0	44
67	Energetic particle precipitation: A major driver of the ozone budget in the Antarctic upper stratosphere. Geophysical Research Letters, 2016, 43, 3554-3562.	4.0	42
68	A review of CO2 and CO abundances in the middle atmosphere. Geophysical Monograph Series, 2000, , 83-100.	0.1	41
69	The solar proton events in 2012 as observed by MIPAS. Geophysical Research Letters, 2013, 40, 2339-2343.	4.0	41
70	Increasing carbon dioxide concentration in the upper atmosphere observed by SABER. Geophysical Research Letters, 2015, 42, 7194-7199.	4.0	41
71	Middle atmospheric changes caused by the January and March 2012 solar proton events. Atmospheric Chemistry and Physics, 2014, 14, 1025-1038.	4.9	40
72	Carbon dioxide 4.3â€Î¼m emission in the Earth's atmosphere: A comparison between Nimbus 7 SAMS measurements and nonâ€local thermodynamic equilibrium radiative transfer calculations. Journal of Geophysical Research, 1989, 94, 13045-13068.	3.3	39

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73	A non-local thermodynamic equilibrium radiative transfer model for infrared emissions in the atmosphere of Mars: 1. Theoretical basis and nighttime populations of vibrational levels. Journal of Geophysical Research, 1994, 99, 13093.	3.3	39
74	Validation of measurements of carbon monoxide from the improved stratospheric and mesospheric sounder. Journal of Geophysical Research, 1996, 101, 9929-9955.	3.3	39
75	About the increase of HNO₃ in the stratopause region during the Halloween 2003 solar proton event. Geophysical Research Letters, 2008, 35, .	4.0	39
76	Hemispheric distributions and interannual variability of NO_y produced by energetic particle precipitation in 2002â€“2012. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,565.	3.3	39
77	Ozone loss driven by nitrogen oxides and triggered by stratospheric warmings can outweigh the effect of halogens. Journal of Geophysical Research, 2007, 112, .	3.3	38
78	Rotational temperatures of Venus upper atmosphere as measured by SOIR on board Venus Express. Planetary and Space Science, 2015, 113-114, 347-358.	1.7	38
79	CARMENES: high-resolution spectra and precise radial velocities in the red and infrared. , 2018, , .		37
80	Antarctic polar descent and planetary wave activity observed in ISAMS CO from April to July 1992. Geophysical Research Letters, 2000, 27, 665-668.	4.0	36
81	Non-local thermodynamic equilibrium model for H2O 6.3 and 2.7-Î¼m bands in the middle atmosphere. Journal of Geophysical Research, 1995, 100, 9131.	3.3	35
82	Remote sensing of the middle atmosphere with MIPAS. , 2003, , .		35
83	Analysis of non-LTE emissions at in the Martian atmosphere as observed by PFS/Mars Express and SWS/ISO. Planetary and Space Science, 2005, 53, 1079-1087.	1.7	35
84	Radiative Energy Balance of CO2 Non-LTE Infrared Emissions in the Martian Atmosphere. Icarus, 1995, 114, 113-129.	2.5	34
85	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
86	Ground-based mesospheric temperatures at mid-latitude derived from O2 and OH airglow SATI data: Comparison with SABER measurements. Journal of Atmospheric and Solar-Terrestrial Physics, 2007, 69, 2379-2390.	1.6	33
87	Model simulations of stratospheric ozone loss caused by enhanced mesospheric NO_x during Arctic Winter 2003/2004. Atmospheric Chemistry and Physics, 2008, 8, 5279-5293.	4.9	33
88	JUPITER AS AN EXOPLANET: UV TO NIR TRANSMISSION SPECTRUM REVEALS HAZES, A Na LAYER, AND POSSIBLY STRATOSPHERIC H ₂ O-ICE CLOUDS. Astrophysical Journal Letters, 2015, 801, L8.	8.3	33
89	Distinguishing between Wet and Dry Atmospheres of TRAPPIST-1 e and f. Astrophysical Journal, 2020, 901, 126.	4.5	33
90	Non local thermodynamic equilibrium (LTE) atmospheric limb emission at 4.6 Î¼m: 1. An update of the CO2non-LTE radiative transfer model. Journal of Geophysical Research, 1998, 103, 8499-8513.	3.3	32

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91	NOyfrom Michelson Interferometer for Passive Atmospheric Sounding on Environmental Satellite during the Southern Hemisphere polar vortex split in September/October 2002. Journal of Geophysical Research, 2005, 110, .	3.3	32
92	An observational and theoretical study of the longitudinal variation in neutral temperature induced by aurora heating in the lower thermosphere. Journal of Geophysical Research: Space Physics, 2013, 118, 7410-7425.	2.4	32
93	Methane on Mars: New insights into the sensitivity of CH4 with the NOMAD/ExoMars spectrometer through its first in-flight calibration. Icarus, 2019, 321, 671-690.	2.5	32
94	Evidence for an OH(Ï…) excitation mechanism of CO24.3 Î¼m nighttime emission from SABER/TIMED measurements. Journal of Geophysical Research, 2004, 109, .	3.3	31
95	Validation of nitric acid retrieved by the IMK-IAA processor from MIPAS/ENVISAT measurements. Atmospheric Chemistry and Physics, 2007, 7, 721-738.	4.9	31
96	The EChO science case. Experimental Astronomy, 2015, 40, 329-391.	3.7	31
97	Expected performances of the NOMAD/ExoMars instrument. Planetary and Space Science, 2016, 124, 94-104.	1.7	31
98	Distribution of HCN in Titanâ€™s upper atmosphere from Cassini/VIMS observations at 3Î¼m. Icarus, 2011, 214, 584-595.	2.5	30
99	On the quality of MIPAS kinetic temperature in the middle atmosphere. Atmospheric Chemistry and Physics, 2012, 12, 6009-6039.	4.9	30
100	MIPAS temperature from the stratosphere to the lower thermosphere: Comparison of vM21 with ACE-FTS, MLS, OSIRIS, SABER, SOFIE and lidar measurements. Atmospheric Measurement Techniques, 2014, 7, 3633-3651.	3.1	30
101	The Stratospheric and Mesospheric NOy in the 2002â€“2004 Polar Winters as measured by MIPAS/ENVISAT. Space Science Reviews, 2007, 125, 403-416.	8.1	29
102	A non-local thermodynamic equilibrium radiative transfer model for infrared emissions in the atmosphere of Mars: 2. Daytime populations of vibrational levels. Journal of Geophysical Research, 1994, 99, 13117.	3.3	28
103	Modelling of non-LTE limb spectra of i.r. ozone bands for the MIPAS space experiment. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 59, 405-422.	2.3	28
104	Cross-validation of MIPAS/ENVISAT and GPS-RO/CHAMP temperature profiles. Journal of Geophysical Research, 2004, 109, .	3.3	27
105	Modelling the He I triplet absorption at 10 830 â„« in the atmospheres of HD 189733 b and GJ 3470 b. Astronomy and Astrophysics, 2021, 647, A129.	5.1	27
106	Nonlocal thermodynamic equilibrium vibrational, rotational, and spin state distribution of NO(Î½= 0, 1,) Tj ETQq0 0 0 rgBT /Overlock 10	3.3	26
107	Vibrationally excited ozone in the middle atmosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 202-212.	1.6	26
108	Fast forward radiative transfer modeling of 4.3Î¼m nonlocal thermodynamic equilibrium effects for infrared temperature sounders. Geophysical Research Letters, 2007, 34, .	4.0	26

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109	Mesospheric N₂O enhancements as observed by MIPAS on Envisat during the polar winters in 2002â€“2004. Atmospheric Chemistry and Physics, 2008, 8, 5787-5800.	4.9	26
110	Radiative and energetic constraints on the global annual mean atomic oxygen concentration in the mesopause region. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5796-5802.	3.3	26
111	Optical and radiometric models of the NOMAD instrument part I: the UVIS channel. Optics Express, 2015, 23, 30028.	3.4	26
112	Optical and radiometric models of the NOMAD instrument part II: the infrared channels - SO and LNO. Optics Express, 2016, 24, 3790.	3.4	25
113	Vibrational temperatures and radiative cooling of the CO₂ 15<I>Î¼</I>m bands in the middle atmosphere. Quarterly Journal of the Royal Meteorological Society, 1992, 118, 499-532.	2.7	25
114	Non local thermodynamic equilibrium (LTE) atmospheric limb emission at 4.6 Î¼m: 2. An analysis of the daytime wideband radiances as measured by UARS improved stratospheric and mesospheric sounder. Journal of Geophysical Research, 1998, 103, 8515-8530.	3.3	23
115	Rotational and spin-orbit distributions of NO observed by MIPAS/ENVISAT during the solar storm of October/November 2003. Journal of Geophysical Research, 2005, 110, .	3.3	23
116	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
117	Enhancement of N₂O during the Octoberâ€“November 2003 solar proton events. Atmospheric Chemistry and Physics, 2008, 8, 3805-3815.	4.9	23
118	Daytime SABER/TIMED observations of water vapor in the mesosphere: retrieval approach and first results. Atmospheric Chemistry and Physics, 2009, 9, 8139-8158.	4.9	23
119	Studies of Solar Heating by CO2in the Upper Atmosphere Using a Non-LTE Model and Satellite Data. Journals of the Atmospheric Sciences, 1990, 47, 809-822.	1.7	22
120	Non-local thermodynamic equilibrium limb radiance near 10 Î¼m as measured by UARS CLAES. Journal of Geophysical Research, 1996, 101, 26577-26588.	3.3	22
121	Intercomparison of radiative transfer codes under non-local thermodynamic equilibrium conditions. Journal of Geophysical Research, 2002, 107, ACH 12-1.	3.3	22
122	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
123	Comment on â€œOrigin of the Januaryâ€“April 2004 increase in stratospheric NO2observed in northern polar latitudesâ€•by Jean-Baptiste Renard et al.. Geophysical Research Letters, 2007, 34, .	4.0	22
124	Analysis of Titan CH4 3.3Î¼m upper atmospheric emission as measured by Cassini/VIMS. Icarus, 2011, 214, 571-583.	2.5	22
125	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
126	Satellite Measurements of Middle Atmospheric Impacts by Solar Proton Events in Solar Cycle 23. Space Science Reviews, 2007, 125, 381-391.	8.1	21

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127	Measurements of water vapor distributions by the improved stratospheric and mesospheric sounder: Retrieval and validation. Journal of Geophysical Research, 1996, 101, 9907-9928.	3.3	20
128	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
129	Chemical heating rates derived from SCIAMACHY vibrationally excited OH limb emission spectra. Advances in Space Research, 2008, 41, 1914-1920.	2.6	20
130	Modeling the atmospheric limb emission of CO2 at 4.3 Î¼m in the terrestrial planets. Planetary and Space Science, 2011, 59, 988-998.	1.7	20
131	On the secular trend of CO x and CO 2 in the lower thermosphere. Journal of Geophysical Research D: Atmospheres, 2016, 121, 3634-3644.	3.3	20
132	A semi-empirical model for mesospheric and stratospheric NO_{<i>y</i>} produced by energetic particle precipitation. Atmospheric Chemistry and Physics, 2016, 16, 8667-8693.	4.9	20
133	On Longâ€Term SABER CO₂ Trends and Effects Due to Nonuniform Space and Time Sampling. Journal of Geophysical Research: Space Physics, 2018, 123, 7958-7967.	2.4	20
134	Analysis of OI-557.7 nm, NaD, OH(6-2) and nightglow emissions from ground-based observations. Journal of Atmospheric and Solar-Terrestrial Physics, 1985, 47, 1099-1110.	0.9	19
135	Rocket measurements of O2 infrared atmospheric system in the nightglow. Planetary and Space Science, 1988, 36, 459-467.	1.7	19
136	Nonâ€localâ€thermodynamicâ€equilibrium populations of the first vibrational excited state of CO in the middle atmosphere. Journal of Geophysical Research, 1993, 98, 8933-8947.	3.3	19
137	The non-LTE correction to the vibrational component of the internal partition sum for atmospheric calculations. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 59, 423-436.	2.3	19
138	Impact of January 2005 solar proton events on chlorine species. Atmospheric Chemistry and Physics, 2012, 12, 4159-4179.	4.9	19
139	Titan Science with the James Webb Space Telescope. Publications of the Astronomical Society of the Pacific, 2016, 128, 018007.	3.1	19
140	Evidence of energy-, recombination-, and photon-limited escape regimes in giant planet H/He atmospheres. Astronomy and Astrophysics, 2021, 648, L7.	5.1	19
141	Global and seasonal variations in middle atmosphere CO from UARS/ISAMS. Geophysical Research Letters, 1993, 20, 1247-1250.	4.0	18
142	Upper mesosphere temperatures in summer: WINDII observations and comparisons. Geophysical Research Letters, 1997, 24, 357-360.	4.0	18
143	Variability of NO_x in the polar middle atmosphere from October 2003 to March 2004: vertical transport vs. local production by energetic particles. Atmospheric Chemistry and Physics, 2014, 14, 7681-7692.	4.9	18
144	Non-local thermodynamic equilibrium limb radiances for the mipas instrument on Envisat-1. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 59, 377-403.	2.3	17

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145	Comparison of nighttime nitric oxide 5.3 Î¼m emissions in the thermosphere measured by MIPAS and SABER. Journal of Geophysical Research, 2007, 112, .	3.3	17
146	Retrieval of nitric oxide in the mesosphere and lower thermosphere from SCIAMACHY limb spectra. Atmospheric Measurement Techniques, 2013, 6, 2521-2531.	3.1	17
147	Comparison of nitric oxide measurements in the mesosphere and lower thermosphere from ACE-FTS, MIPAS, SCIAMACHY, and SMR. Atmospheric Measurement Techniques, 2015, 8, 4171-4195.	3.1	17
148	Non-local thermodynamic equilibrium limb radiance from O3 and CO2 in the 9â€“11 Î¼m spectral region. Journal of Quantitative Spectroscopy and Radiative Transfer, 1994, 52, 389-407.	2.3	16
149	Rapid computation of spectrally integrated non-local thermodynamic equilibrium limb emission. Journal of Geophysical Research, 1994, 99, 25761.	3.3	16
150	Retrieval of kinetic temperature and carbon dioxide abundance from nonlocal thermodynamic equilibrium limb emission measurements made by the SABER experiment on the TIMED satellite. , 2003, , .		16
151	Validation of stratospheric temperatures measured by Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) on Envisat. Journal of Geophysical Research, 2005, 110, .	3.3	16
152	Global distributions of HO2NO2as observed by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). Journal of Geophysical Research, 2007, 112, .	3.3	16
153	Global distribution of CO2in the upper mesosphere as derived from UARS/ISAMS measurements. Journal of Geophysical Research, 2000, 105, 19829-19839.	3.3	15
154	Vibrational quenching of CO2(010) by collisions with O(P3) at thermal energies: A quantum-mechanical study. Journal of Chemical Physics, 2006, 124, 164302.	3.0	15
155	Measurements of polar mesospheric clouds in infrared emission by MIPAS/ENVISAT. Journal of Geophysical Research, 2009, 114, .	3.3	15
156	Non-LTE CO limb emission at in the upper atmosphere of Venus, Mars and Earth: Observations and modeling. Planetary and Space Science, 2011, 59, 1010-1018.	1.7	14
157	Nighttime ozone variability in the high latitude winter mesosphere. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,547.	3.3	14
158	Validation of the MIPAS CO₂ volume mixing ratio in the mesosphere and lower thermosphere and comparison with WACCM simulations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8345-8366.	3.3	14
159	Evidence of non-LTE effects in mesospheric water vapor from spectrally-resolved emissions observed by CIRRIS-1A. Geophysical Research Letters, 1999, 26, 67-70.	4.0	13
160	IMK/IAA MIPAS temperature retrieval version 8: nominal measurements. Atmospheric Measurement Techniques, 2021, 14, 4111-4138.	3.1	13
161	Discriminating between hazy and clear hot-Jupiter atmospheres with CARMENES. Astronomy and Astrophysics, 2020, 643, A24.	5.1	13
162	Latitudinal and longitudinal behavior of the mesospheric OH nightglow layer as observed by the Improved Stratospheric and Mesospheric Sounder on UARS. Journal of Geophysical Research, 2001, 106, 8027-8033.	3.3	12

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