

Maya Garcia-Comas

List of Publications by Year in descending order

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69
papers

2,424
citations

236612

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docs citations

96
times ranked

2109
citing authors

#	ARTICLE	IF	CITATIONS
1	CO ₂ retrievals in the Mars daylight thermosphere from its 4.3-14m limb emission measured by OMEGA/MEx. <i>Icarus</i> , 2021, 353, 113830.	1.1	6
2	On the derivation of thermospheric temperatures from dayglow emissions on Mars. <i>Icarus</i> , 2021, 358, 114284.	1.1	2
3	IMK/IAA MIPAS temperature retrieval version 8: nominal measurements. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 4111-4138.	1.2	13
4	Improvement of Odin/SMR water vapour and temperature measurements and validation of the obtained data sets. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 5823-5857.	1.2	1
5	First Detection of a Brief Mesoscale Elevated Stratopause in Very Early Winter. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086751.	1.5	4
6	Gravity wave activity in the middle atmosphere from SATI airglow observations at northern mid-latitude: Seasonal variation and comparison with tidal and planetary wave-like activity. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2020, 206, 105329.	0.6	4
7	The SPARC water vapour assessment II: profile-to-profile comparisons of stratospheric and lower mesospheric water vapour data sets obtained from satellites. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 2693-2732.	1.2	13
8	Climatology of CH ₄ , HCN and C ₂ H ₂ in Titan's upper atmosphere from Cassini/VIMS observations. <i>Icarus</i> , 2019, 331, 83-97.	1.1	5
9	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. <i>Nature</i> , 2019, 568, 517-520.	13.7	111
10	Martian dust storm impact on atmospheric H ₂ O and D/H observed by ExoMars Trace Gas Orbiter. <i>Nature</i> , 2019, 568, 521-525.	13.7	107
11	Methane on Mars: New insights into the sensitivity of CH ₄ with the NOMAD/ExoMars spectrometer through its first in-flight calibration. <i>Icarus</i> , 2019, 321, 671-690.	1.1	32
12	Investigations of the Mars Upper Atmosphere with ExoMars Trace Gas Orbiter. <i>Space Science Reviews</i> , 2018, 214, 1.	3.7	13
13	UV Dayglow Variability on Mars: Simulation With a Global Climate Model and Comparison With SPICAM/MEx Data. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1934-1952.	1.5	13
14	Aerosols and Water Ice in Jupiter's Stratosphere from UV-NIR Ground-based Observations. <i>Astronomical Journal</i> , 2018, 156, 169.	1.9	7
15	The SPARC water vapour assessment II: comparison of stratospheric and lower mesospheric water vapour time series observed from satellites. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 4435-4463.	1.2	12
16	NOMAD, an Integrated Suite of Three Spectrometers for the ExoMars Trace Gas Mission: Technical Description, Science Objectives and Expected Performance. <i>Space Science Reviews</i> , 2018, 214, 1.	3.7	95
17	MIPAS observations of ozone in the middle atmosphere. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 2187-2212.	1.2	11
18	Semidiurnal tidal activity of the middle atmosphere at mid-latitudes derived from O ₂ atmospheric and OH(6-2) airglow SATI observations. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2017, 164, 116-126.	0.6	5

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19	Validation of the MIPAS CO ₂ volume mixing ratio in the mesosphere and lower thermosphere and comparison with WACCM simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 8345-8366.	1.2	14
20	The SPARC water vapor assessment II: intercomparison of satellite and ground-based microwave measurements. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 14543-14558.	1.9	13
21	The SPARC water vapour assessment II: comparison of annual, semi-annual and quasi-biennial variations in stratospheric and lower mesospheric water vapour observed from satellites. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 1111-1137.	1.2	24
22	Mesospheric OH layer altitude at midlatitudes: variability over the Sierra Nevada Observatory in Granada, Spain (37°N, 3°W). <i>Annales Geophysicae</i> , 2017, 35, 1151-1164.	0.6	10
23	Optical and radiometric models of the NOMAD instrument part II: the infrared channels - SO and LNO. <i>Optics Express</i> , 2016, 24, 3790.	1.7	25
24	MIPAS observations of longitudinal oscillations in the mesosphere and the lower thermosphere: climatology of odd-parity daily frequency modes. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 11019-11041.	1.9	6
25	Measurements of global distributions of polar mesospheric clouds during 2005–2012 by MIPAS/Envisat. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 6701-6719.	1.9	10
26	Expected performances of the NOMAD/ExoMars instrument. <i>Planetary and Space Science</i> , 2016, 124, 94-104.	0.9	31
27	Global distributions of CO ₂ volume mixing ratio in the middle and upper atmosphere from daytime MIPAS high-resolution spectra. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 6081-6100.	1.2	9
28	Optical and radiometric models of the NOMAD instrument part I: the UVIS channel. <i>Optics Express</i> , 2015, 23, 30028.	1.7	26
29	Vibrational–vibrational and vibrational–thermal energy transfers of CO ₂ with N ₂ from MIPAS high-resolution limb spectra. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 8002-8022.	1.2	10
30	Variability of the Martian thermosphere during eight Martian years as simulated by a ground-to-exosphere global circulation model. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 2020-2035.	1.5	67
31	Science objectives and performances of NOMAD, a spectrometer suite for the ExoMars TGO mission. <i>Planetary and Space Science</i> , 2015, 119, 233-249.	0.9	77
32	MIPAS temperature from the stratosphere to the lower thermosphere: Comparison of vM21 with ACE-FTS, MLS, OSIRIS, SABER, SOFIE and lidar measurements. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 3633-3651.	1.2	30
33	Nighttime ozone variability in the high latitude winter mesosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 13,547.	1.2	14
34	An unidentified emission in Titan's upper atmosphere. <i>Geophysical Research Letters</i> , 2013, 40, 1489-1493.	1.5	44
35	Satellite observations of ozone in the upper mesosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 5803-5821.	1.2	63
36	LARGE ABUNDANCES OF POLYCYCLIC AROMATIC HYDROCARBONS IN TITAN'S UPPER ATMOSPHERE. <i>Astrophysical Journal</i> , 2013, 770, 132.	1.6	106

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37	Validation of MIPAS IMK/IAA temperature, water vapor, and ozone profiles with MOHAVE-2009 campaign measurements. <i>Atmospheric Measurement Techniques</i> , 2012, 5, 289-320.	1.2	74
38	Impacts of the January 2005 solar particle event on noctilucent clouds and water at the polar summer mesopause. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 5633-5646.	1.9	10
39	On the quality of MIPAS kinetic temperature in the middle atmosphere. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 6009-6039.	1.9	30
40	GRANADA: A Generic RAdiative traNsfer AnD non-LTE population algorithm. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012, 113, 1771-1817.	1.1	60
41	Global observations of thermospheric temperature and nitric oxide from MIPAS spectra at 5.3 μm . <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	46
42	Modeling the atmospheric limb emission of CO ₂ at 4.3 μm in the terrestrial planets. <i>Planetary and Space Science</i> , 2011, 59, 988-998.	0.9	20
43	Analysis of Titan CH ₄ 3.3 μm upper atmospheric emission as measured by Cassini/VIMS. <i>Icarus</i> , 2011, 214, 571-583.	1.1	22
44	Distribution of HCN in Titan's upper atmosphere from Cassini/VIMS observations at 3 μm . <i>Icarus</i> , 2011, 214, 584-595.	1.1	30
45	Retrieving optical depth from shadows in orbiter images of Mars. <i>Icarus</i> , 2011, 214, 447-461.	1.1	17
46	Evidence for dynamical coupling from the lower atmosphere to the thermosphere during a major stratospheric warming. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	80
47	Optical depth and its scale-height in Valles Marineris from HRSC stereo images. <i>Earth and Planetary Science Letters</i> , 2010, 294, 534-540.	1.8	14
48	The Impact of Energetic Particle Precipitation on the Earth's Atmosphere. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , 2010, , 181-189.	0.3	1
49	Climatology of planetary wave type oscillations with periods of 2-20 days derived from O ₂ atmospheric and OH(6-2) airglow observations at mid-latitude with SATI. <i>Annales Geophysicae</i> , 2009, 27, 3645-3662.	0.6	30
50	SABER observations of mesospheric ozone during NH late winter 2002-2009. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	57
51	Measurements of polar mesospheric clouds in infrared emission by MIPAS/ENVISAT. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	15
52	Daytime SABER/TIMED observations of water vapor in the mesosphere: retrieval approach and first results. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 8139-8158.	1.9	23
53	Carbon monoxide distributions from the upper troposphere to the mesosphere inferred from 4.7 μm non-local thermal equilibrium emissions measured by MIPAS on Envisat. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 2387-2411.	1.9	77
54	Observations of atmospheric water vapor above the Tharsis volcanoes on Mars with the OMEGA/MEX imaging spectrometer. <i>Icarus</i> , 2008, 194, 53-64.	1.1	31

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55	Dust haze in Valles Marineris observed by HRSC and OMEGA on board Mars Express. Journal of Geophysical Research, 2008, 113, .	3.3	18
56	Assessment of the quality of the Version 1.07 temperature&versus&pressure profiles of the middle atmosphere from TIMED/SABER. Journal of Geophysical Research, 2008, 113, .	3.3	369
57	Errors in Sounding of the Atmosphere using Broadband Emission Radiometry (SABER) kinetic temperature caused by non&local&thermodynamic&equilibrium model parameters. Journal of Geophysical Research, 2008, 113, .	3.3	99
58	Enhancement of N<sub>2</sub&O during the October&November 2003 solar proton events. Atmospheric Chemistry and Physics, 2008, 8, 3805-3815.	1.9	23
59	Mesospheric N<sub>2</sub&O enhancements as observed by MIPAS on Envisat during the polar winters in 2002&2004. Atmospheric Chemistry and Physics, 2008, 8, 5787-5800.	1.9	26
60	O2 Atmospheric band and OH(6&2) airglow and temperature variability over Spain using SATI observations: Planetary-scale oscillations during autumn. Canadian Journal of Physics, 2007, 85, 153-172.	0.4	1
61	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.	0.6	33
62	Vibrationally excited ozone in the middle atmosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 202-212.	0.6	26
63	Retrieval of stratospheric and mesospheric O3 from high resolution MIPAS spectra at 15 and 10 μm. Advances in Space Research, 2005, 36, 943-951.	1.2	21
64	Longitudinal variations of temperature and ozone profiles observed by MIPAS during the Antarctic stratosphere sudden warming of 2002. Journal of Geophysical Research, 2005, 110, .	3.3	9
65	Tidal variations of O<sub>2</sub& Atmospheric and OH(6-2) airglow and temperature at mid-latitudes from SATI observations. Annales Geophysicae, 2005, 23, 3579-3590.	0.6	37
66	Evidence for an OH(ï...) excitation mechanism of CO24.3 μm nighttime emission from SABER/TIMED measurements. Journal of Geophysical Research, 2004, 109, .	3.3	31
67	Comparisons of MIPAS-observed temperature profiles with other satellite measurements. , 2004, , .		5
68	Remote sensing of the middle atmosphere with MIPAS. , 2003, , .		35
69	The CH4 abundance in Jupiter's upper atmosphere. Astronomy and Astrophysics, 0, , .	2.1	2