

Bianca M Dinelli

List of Publications by Year in descending order

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118
papers

2,864
citations

172457

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155
docs citations

155
times ranked

1950
citing authors

#	ARTICLE	IF	CITATIONS
1	Level 2 processor and auxiliary data for ESA Version 8 final full mission analysis of MIPAS measurements on ENVISAT. Atmospheric Measurement Techniques, 2022, 15, 1871-1901.	3.1	2
2	The SPARC Water Vapor Assessment II: assessment of satellite measurements of upper tropospheric humidity. Atmospheric Measurement Techniques, 2022, 15, 3377-3400.	3.1	4
3	Stability of the Jupiter Southern Polar Vortices Inspected Through Vorticity Using Juno/JIRAM Data. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	3
4	On the clouds and ammonia in Jupiter's upper troposphere from Juno JIRAM reflectivity observations. Monthly Notices of the Royal Astronomical Society, 2021, 503, 4892-4907.	4.4	5
5	Oscillations and Stability of the Jupiter Polar Cyclones. Geophysical Research Letters, 2021, 48, e2021GL094235.	4.0	11
6	A Preliminary Study of Magnetosphere-Ionosphere-Thermosphere Coupling at Jupiter: Juno Multi-Instrument Measurements and Modeling Tools. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029469.	2.4	11
7	Morphology of the Auroral Tail of Io, Europa, and Ganymede From JIRAM L-Band Imager. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029450.	2.4	15
8	The ESA MIPAS/Envisat level2-v8 dataset: 10 years of measurements retrieved with ORM v8.22. Atmospheric Measurement Techniques, 2021, 14, 7975-7998.	3.1	5
9	Phosgene distribution derived from MIPAS ESA v8 data: intercomparisons and trends. Atmospheric Measurement Techniques, 2021, 14, 7959-7974.	3.1	2
10	Juno/JIRAM: Planning and commanding activities. Advances in Space Research, 2020, 65, 598-615.	2.6	5
11	Turbulence Power Spectra in Regions Surrounding Jupiter's South Polar Cyclones From Juno/JIRAM. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006096.	3.6	8
12	Two-Year Observations of the Jupiter Polar Regions by JIRAM on Board Juno. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006098.	3.6	24
13	FORUM Earth Explorer 9: Characteristics of Level 2 Products and Synergies with IASI-NG. Remote Sensing, 2020, 12, 1496.	4.0	13
14	On the Spatial Distribution of Minor Species in Jupiter's Troposphere as Inferred From Juno JIRAM Data. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006206.	3.6	14
15	FORUM: Unique Far-Infrared Satellite Observations to Better Understand How Earth Radiates Energy to Space. Bulletin of the American Meteorological Society, 2020, 101, E2030-E2046.	3.3	40
16	JUNO/JIRAM's view of Jupiter's H ₃ ⁺ emissions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180406.	3.4	10
17	H ₃ ⁺ characteristics in the Jupiter atmosphere as observed at limb with Juno/JIRAM. Icarus, 2019, 329, 132-139.	2.5	11
18	The SPARC water vapour assessment II: profile-to-profile comparisons of stratospheric and lower mesospheric water vapour data sets obtained from satellites. Atmospheric Measurement Techniques, 2019, 12, 2693-2732.	3.1	13

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19	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.	2.5	5
20	The Advanced Infra-Red WAter Vapour Estimator (AIRWAVE) version 2: algorithm evolution, dataset description and performance improvements. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 371-388.	3.1	4
21	Lee wave detection over the Mediterranean Sea using the Advanced Infra-Red WAter Vapour Estimator (AIRWAVE) total column water vapour (TCWV) dataset. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 6683-6693.	3.1	0
22	Clusters of cyclones encircling Jupiter's poles. <i>Nature</i> , 2018, 555, 216-219.	27.8	90
23	Differences in ozone retrieval in MIPAS channels A and AB: a spectroscopic issue. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 4707-4723.	3.1	10
24	Concurrent ultraviolet and infrared observations of the north Jovian aurora during Juno's first perijove. <i>Icarus</i> , 2018, 312, 145-156.	2.5	18
25	Juno observations of spot structures and a split tail in Io-induced aurorae on Jupiter. <i>Science</i> , 2018, 361, 774-777.	12.6	53
26	First Estimate of Wind Fields in the Jupiter Polar Regions From JIRAM's Juno Images. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1511-1524.	3.6	24
27	ITCZ trend analysis via Geodesic P-spline smoothing of the AIRWAVE TCWV and cloud frequency datasets. <i>Atmospheric Research</i> , 2018, 214, 228-238.	4.1	6
28	Validation of the Advanced Infra-Red Water Vapour Estimator (AIRWAVE) Total Column Water Vapour using Satellite and Radiosonde products. <i>Annals of Geophysics</i> , 2018, 61, .	1.0	4
29	JIRAM, the Jovian Infrared Auroral Mapper. <i>Space Science Reviews</i> , 2017, 213, 393-446.	8.1	91
30	Infrared observations of Jovian aurora from Juno's first orbits: Main oval and satellite footprints. <i>Geophysical Research Letters</i> , 2017, 44, 5308-5316.	4.0	30
31	Preliminary results on the composition of Jupiter's troposphere in hot spot regions from the JIRAM/Juno instrument. <i>Geophysical Research Letters</i> , 2017, 44, 4615-4624.	4.0	20
32	Preliminary JIRAM results from Juno polar observations: 2. Analysis of the Jupiter southern H ₃ ⁺ emissions and comparison with the north aurora. <i>Geophysical Research Letters</i> , 2017, 44, 4633-4640.	4.0	20
33	Preliminary JIRAM results from Juno polar observations: 1. Methodology and analysis applied to the Jovian northern polar region. <i>Geophysical Research Letters</i> , 2017, 44, 4625-4632.	4.0	18
34	Characterization of the white ovals on Jupiter's southern hemisphere using the first data by the Juno/JIRAM instrument. <i>Geophysical Research Letters</i> , 2017, 44, 4660-4668.	4.0	15
35	Preliminary JIRAM results from Juno polar observations: 3. Evidence of diffuse methane presence in the Jupiter auroral regions. <i>Geophysical Research Letters</i> , 2017, 44, 4641-4648.	4.0	13
36	Analysis of IR-bright regions of Jupiter in JIRAM-Juno data: Methods and validation of algorithms. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 202, 200-209.	2.3	8

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37	CO concentration in the upper stratosphere and mesosphere of Titan from VIMS dayside limb observations at 4.7 μm . Icarus, 2017, 293, 119-131.	2.5	5
38	The SPARC water vapor assessment II: intercomparison of satellite and ground-based microwave measurements. Atmospheric Chemistry and Physics, 2017, 17, 14543-14558.	4.9	13
39	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. Atmospheric Measurement Techniques, 2017, 10, 1111-1137.	3.1	24
40	Merged ozone profiles from four MIPAS processors. Atmospheric Measurement Techniques, 2017, 10, 1511-1518.	3.1	3
41	A strategy for the measurement of CO ₂ distribution in the stratosphere. Atmospheric Measurement Techniques, 2016, 9, 5853-5867.	3.1	1
42	Errors induced by different approximations in handling horizontal atmospheric inhomogeneities in MIPAS/ENVISAT retrievals. Atmospheric Measurement Techniques, 2016, 9, 5499-5508.	3.1	4
43	Phosgene in the UTLS: seasonal and latitudinal variations from MIPAS observations. Atmospheric Measurement Techniques, 2016, 9, 4655-4663.	3.1	7
44	Mapping of hydrocarbons and H ₃ ⁺ emissions at Jupiter's north pole using Galileo/NIMS data. Geophysical Research Letters, 2016, 43, 11,558.	4.0	7
45	CHIMTEA ² Chemical Impact of Thunderstorms on Earth's Atmosphere. Springer Earth System Sciences, 2016, , 1-14.	0.2	5
46	Total column water vapour from along track scanning radiometer series using thermal infrared dual view ocean cloud free measurements: The Advanced Infra-Red Water Vapour Estimator (AIRWAVE) algorithm. Remote Sensing of Environment, 2016, 172, 1-14.	11.0	13
47	Synergy between middle infrared and millimeter-wave limb sounding of atmospheric temperature and minor constituents. Atmospheric Measurement Techniques, 2016, 9, 2267-2289.	3.1	8
48	Lagrangian analysis of microphysical and chemical processes in the Antarctic stratosphere: a case study. Atmospheric Chemistry and Physics, 2015, 15, 6651-6665.	4.9	3
49	The ozone climate change initiative: Comparison of four Level-2 processors for the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). Remote Sensing of Environment, 2015, 162, 316-343.	11.0	20
50	WACCM climate chemistry sensitivity to sprite perturbations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6958-6970.	3.3	16
51	Past changes in the vertical distribution of ozone ⁴⁴ Part 1: Measurement techniques, uncertainties and availability. Atmospheric Measurement Techniques, 2014, 7, 1395-1427.	3.1	67
52	Performance study and analysis method for a new-generation MIPAS experiment. Optics Express, 2014, 22, 27769.	3.4	0
53	JIRAM, the Jovian Infrared Auroral Mapper. , 2014, , 271-324.		4
54	Comparison of the MIPAS products obtained by four different level 2 processors. Annals of Geophysics, 2014, 56, .	1.0	6

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55	Results of the preparatory study "PREMIER Analysis of Campaign Data" Annals of Geophysics, 2014, , .	1.0	1
56	Validation of minor species of the MIPAS2D database. Annals of Geophysics, 2014, , .	1.0	1
57	An unidentified emission in Titan's upper atmosphere. Geophysical Research Letters, 2013, 40, 1489-1493.	4.0	44
58	LARGE ABUNDANCES OF POLYCYCLIC AROMATIC HYDROCARBONS IN TITAN'S UPPER ATMOSPHERE. Astrophysical Journal, 2013, 770, 132.	4.5	106
59	Ten years of MIPAS measurements with ESA Level 2 processor V6 " Part 1: Retrieval algorithm and diagnostics of the products. Atmospheric Measurement Techniques, 2013, 6, 2419-2439.	3.1	66
60	Measurement of the Arctic UTLS composition in presence of clouds using millimetre-wave heterodyne spectroscopy. Atmospheric Measurement Techniques, 2013, 6, 2683-2701.	3.1	6
61	Position error in profiles retrieved from MIPAS observations with a 1-D algorithm. Atmospheric Measurement Techniques, 2013, 6, 419-429.	3.1	5
62	The global picture of the atmospheric composition provided by MIPAS on Envisat. , 2012, , .		3
63	Extreme ozone depletion in the 2010"2011 Arctic winter stratosphere as observed by MIPAS/ENVISAT using a 2-D tomographic approach. Atmospheric Chemistry and Physics, 2012, 12, 9149-9165.	4.9	59
64	Retrieving cloud geometrical extents from MIPAS/ENVISAT measurements with a 2-D tomographic approach. Optics Express, 2011, 19, 20704.	3.4	4
65	Monthly mean vertical profiles of pressure, temperature and water vapour volume mixing ratio in the polar stratosphere and low mesosphere from a multi-year set of MIPAS-ENVISAT limb-scanning measurements. Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 2237-2271.	1.6	11
66	Analysis of Titan CH ₄ 3.3µm upper atmospheric emission as measured by Cassini/VIMS. Icarus, 2011, 214, 571-583.	2.5	22
67	Distribution of HCN in Titan's upper atmosphere from Cassini/VIMS observations at 3µm. Icarus, 2011, 214, 584-595.	2.5	30
68	Jupiter's hot spots: Quantitative assessment of the retrieval capabilities of future IR spectro-imagers. Planetary and Space Science, 2010, 58, 1265-1278.	1.7	18
69	The MIPAS2D database of MIPAS/ENVISAT measurements retrieved with a multi-target 2-dimensional tomographic approach. Atmospheric Measurement Techniques, 2010, 3, 355-374.	3.1	46
70	Two-dimensional tomographic retrieval of MIPAS/ENVISAT measurements of ozone and related species. International Journal of Remote Sensing, 2010, 31, 477-483.	2.9	11
71	Impact of temperature field inhomogeneities on the retrieval of atmospheric species from MIPAS IR limb emission spectra. Atmospheric Measurement Techniques, 2010, 3, 1487-1507.	3.1	28
72	Seeking sprite-induced signatures in remotely sensed middle atmosphere NO ₂ : latitude and time variations. Plasma Sources Science and Technology, 2009, 18, 034014.	3.1	21

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73	Retrieval of atmospheric H ¹⁵ NO ₃ /H ¹⁴ NO ₃ isotope ratio profile from MIPAS/ENVISAT limb-scanning measurements. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	9
74	Technical Note: Measurement of the tropical UTLS composition in presence of clouds using millimetre-wave heterodyne spectroscopy. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 1191-1207.	4.9	15
75	Seeking sprite-induced signatures in remotely sensed middle atmosphere NO ₂ . <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	40
76	JIRAM, the Image Spectrometer in the Near Infrared on Board the Juno Mission to Jupiter. <i>Astrobiology</i> , 2008, 8, 613-622.	3.0	17
77	Assessment of the horizontal resolution of retrieval products derived from MIPAS observations. <i>Optics Express</i> , 2007, 15, 10458.	3.4	9
78	MARC: A code for the retrieval of atmospheric parameters from millimeter-wave limb measurements. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2007, 105, 476-491.	2.3	33
79	Retrieval of minor constituents in a cloudy atmosphere with remote-sensing millimetre-wave measurements. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2007, 133, 163-170.	2.7	9
80	GMTR: Two-dimensional geo-fit multitarget retrieval model for Michelson Interferometer for Passive Atmospheric Sounding/Environmental Satellite observations. <i>Applied Optics</i> , 2006, 45, 716.	2.1	67
81	MIPAS level 2 operational analysis. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 5605-5630.	4.9	174
82	Multi-target retrieval (MTR): the simultaneous retrieval of pressure, temperature and volume mixing ratio profiles from limb-scanning atmospheric measurements. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2004, 84, 141-157.	2.3	32
83	First results of MIPAS/ENVISAT with operational Level 2 code. <i>Advances in Space Research</i> , 2004, 33, 1012-1019.	2.6	51
84	MIPAS-ENVISAT limb-sounding measurements: trade-off study for improvement of horizontal resolution. <i>Applied Optics</i> , 2004, 43, 5814.	2.1	19
85	Comparison of measurements made with two different instruments of the same atmospheric vertical profile. <i>Applied Optics</i> , 2003, 42, 6465.	2.1	24
86	Level 2 near-real-time analysis of MIPAS measurements on ENVISAT. , 2003, , .		4
87	Geo-fit approach to the analysis of limb-scanning satellite measurements. , 2002, 4539, 369.		0
88	Discrete representation and resampling in limb-sounding measurements. <i>Applied Optics</i> , 2001, 40, 1261.	2.1	5
89	Geo-fit approach to the analysis of limb-scanning satellite measurements. <i>Applied Optics</i> , 2001, 40, 1872.	2.1	72
90	Optimized forward model and retrieval scheme for MIPAS near-real-time data processing. <i>Applied Optics</i> , 2000, 39, 1323.	2.1	188

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91	Measurement of the isotopic ratio distribution of HD ₁₆ O and H ₂ ¹⁶ O in the 20-38 km altitude range from far-infrared spectra. <i>Geophysical Research Letters</i> , 1997, 24, 2003-2006.	4.0	11
92	The impact of comet Shoemaker-Levy 9 on the jovian ionosphere and aurorae. <i>Planetary and Space Science</i> , 1997, 45, 1237-1250.	1.7	5
93	UKIRT Observations of the Impact and Consequences of Comet Shoemaker-Levy 9 on Jupiter. <i>Icarus</i> , 1997, 126, 107-125.	2.5	24
94	New Assignments for the Infrared Spectrum of H ₃ ⁺ . <i>Journal of Molecular Spectroscopy</i> , 1997, 181, 142-150.	1.2	41
95	Ab initio ro-vibrational levels of H ₃ ⁺ beyond the Born-Oppenheimer approximation. <i>Chemical Physics Letters</i> , 1995, 232, 295-300.	2.6	57
96	On the determination of potential energy surfaces of spectroscopic accuracy. <i>Computational and Theoretical Chemistry</i> , 1995, 341, 133-140.	1.5	9
97	High-resolution far-infrared ft spectroscopy of the stratosphere. <i>Rendiconti Lincei</i> , 1995, 6, 95-110.	2.2	2
98	Asymmetric adiabatic correction to the rotation-vibration levels of H ₂ D ⁺ and D ₂ H ⁺ . <i>Journal of Chemical Physics</i> , 1995, 102, 9322-9326.	3.0	30
99	Spectroscopically determined Born-Oppenheimer and adiabatic surfaces for H ₃ ⁺ , H ₂ D ⁺ , D ₂ H ⁺ , and D ₃ ⁺ . <i>Journal of Chemical Physics</i> , 1995, 103, 10433-10438.	3.0	38
100	The effect of the impact of comet Shoemaker Levy-9 on Jupiter's aurorae. <i>Geophysical Research Letters</i> , 1995, 22, 1629-1632.	4.0	17
101	A Spectroscopically Determined Potential Energy Surface for H ₃ ⁺ . <i>Journal of Molecular Spectroscopy</i> , 1994, 163, 71-79.	1.2	40
102	Hyperfine Structure Analysis of Arsine in the Ground, v ₂ = 1, and v ₄ = 1 States. <i>Journal of Molecular Spectroscopy</i> , 1993, 157, 413-418.	1.2	5
103	Infrared spectroscopy and equilibrium structure of H ₂ O+(X ¹ Σ ⁺ g). <i>Journal of Chemical Physics</i> , 1992, 97, 5977-5987.	3.0	58
104	Hyperfine structure analysis of stibine in the ground and in the v ₄ = 1 states. <i>Journal of Molecular Spectroscopy</i> , 1992, 153, 307-315.	1.2	12
105	Bands of H ₃ ⁺ up to 4 ¹ / ₂ : Rovibrational transitions from first principles calculations. <i>Journal of Molecular Spectroscopy</i> , 1992, 153, 718-725.	1.2	50
106	Measurement of stratospheric distributions of H ₂ ¹⁶ O, H ₂ ¹⁸ O, H ₂ ¹⁷ O, and HD ¹⁶ O from far infrared spectra. <i>Journal of Geophysical Research</i> , 1991, 96, 7509-7514.	3.3	25
107	Intercomparison of stratospheric water vapor profiles obtained during the Balloon Intercomparison Campaign. <i>Journal of Atmospheric Chemistry</i> , 1990, 10, 159-179.	3.2	13
108	Balloon Intercomparison Campaigns: Results of remote sensing measurements of HCl. <i>Journal of Atmospheric Chemistry</i> , 1990, 10, 237-272.	3.2	29

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109	Observation and analysis of the ν_2 band of NH_3 . Journal of Chemical Physics, 1989, 90, 5910-5917.	3.0	36
110	Difference frequency laser spectroscopy of the ν_2 fundamental band of NH_2 . Journal of Chemical Physics, 1989, 90, 5918-5923.	3.0	26
111	The mixing ratio of the stratospheric hydroxyl radical from far infrared emission measurements. Journal of Geophysical Research, 1989, 94, 11049-11058.	3.3	40
112	Infrared spectroscopy of the ν_2 band of H_2O^+ . Journal of Molecular Spectroscopy, 1988, 127, 1-11.	1.2	53
113	Infrared spectroscopy of carboanions. IV. The ν_2 electronic transition of C^- . Journal of Chemical Physics, 1988, 89, 129-137.	3.0	63
114	Submillimeter measurement of stratospheric chlorine monoxide. Journal of Geophysical Research, 1988, 93, 7063-7068.	3.3	17
115	Comparison of measured and calculated high-resolution spectra of far-infra-red stratospheric emission. Il Nuovo Cimento Della Societ� Italiana Di Fisica C, 1985, 8, 631-646.	0.2	8
116	Precise Measurements on Optical Bistability and Passive Q-Switch in a CO_2 Laser with Saturable Absorber. , 1984, , 317-324.		1
117	Submillimeter detection of stratospheric OH and further line assignments in the stratospheric emission spectrum. Journal of Infrared, Millimeter and Terahertz Waves, 1983, 4, 475-488.	0.6	18
118	Optical bistability of a CO_2 laser with intracavity saturable absorber: Experiment and model. Optics Communications, 1983, 44, 277-282.	2.1	39