

# Davide Grassi

## List of Publications by Year in descending order

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119  
papers

3,887  
citations

117625

34  
h-index

144013

57  
g-index

131  
all docs

131  
docs citations

131  
times ranked

3081  
citing authors

#	ARTICLE	IF	CITATIONS
1	The organic-rich surface of comet 67P/Churyumov-Gerasimenko as seen by VIRTIS/Rosetta. <i>Science</i> , 2015, 347, aaa0628.	12.6	293
2	Jupiter's interior and deep atmosphere: The initial pole-to-pole passes with the Juno spacecraft. <i>Science</i> , 2017, 356, 821-825.	12.6	229
3	The Planetary Fourier Spectrometer (PFS) onboard the European Mars Express mission. <i>Planetary and Space Science</i> , 2005, 53, 963-974.	1.7	151
4	The Atmospheric Chemistry Suite (ACS) of Three Spectrometers for the ExoMars 2016 Trace Gas Orbiter. <i>Space Science Reviews</i> , 2018, 214, 1.	8.1	119
5	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. <i>Nature</i> , 2019, 568, 517-520.	27.8	111
6	South-polar features on Venus similar to those near the north pole. <i>Nature</i> , 2007, 450, 637-640.	27.8	110
7	The Surface Composition and Temperature of Asteroid 21 Lutetia As Observed by Rosetta/VIRTIS. <i>Science</i> , 2011, 334, 492-494.	12.6	110
8	Martian dust storm impact on atmospheric H <sub>2</sub> O and D/H observed by ExoMars Trace Gas Orbiter. <i>Nature</i> , 2019, 568, 521-525.	27.8	107
9	Exposed water ice on the nucleus of comet 67P/Churyumov-Gerasimenko. <i>Nature</i> , 2016, 529, 368-372.	27.8	104
10	EChO. <i>Experimental Astronomy</i> , 2012, 34, 311-353.	3.7	98
11	JIRAM, the Jovian Infrared Auroral Mapper. <i>Space Science Reviews</i> , 2017, 213, 393-446.	8.1	91
12	Clusters of cyclones encircling Jupiter's poles. <i>Nature</i> , 2018, 555, 216-219.	27.8	90
13	First detection of hydroxyl in the atmosphere of Venus. <i>Astronomy and Astrophysics</i> , 2008, 483, L29-L33.	5.1	86
14	Water vapor near the cloud tops of Venus from Venus Express/VIRTIS dayside data. <i>Icarus</i> , 2012, 217, 561-569.	2.5	74
15	Water and carbon dioxide distribution in the 67P/Churyumov-Gerasimenko coma from VIRTIS-M infrared observations. <i>Astronomy and Astrophysics</i> , 2016, 589, A45.	5.1	62
16	Seasonal exposure of carbon dioxide ice on the nucleus of comet 67P/Churyumov-Gerasimenko. <i>Science</i> , 2016, 354, 1563-1566.	12.6	61
17	Investigation of air temperature on the nightside of Venus derived from VIRTIS-H on board Venus-Express. <i>Icarus</i> , 2012, 217, 640-647.	2.5	59
18	The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets. <i>Planetary and Space Science</i> , 2014, 104, 122-140.	1.7	56

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19	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
20	Methods for the analysis of data from the Planetary Fourier Spectrometer on the Mars Express Mission. <i>Planetary and Space Science</i> , 2005, 53, 1017-1034.	1.7	51
21	Evidence for Mg-rich carbonates on Mars from a 3.9 $\mu$ m absorption feature. <i>Icarus</i> , 2009, 203, 58-65.	2.5	49
22	Spatial variability of carbon monoxide in Venus' mesosphere from Venus Express/Visible and Infrared Thermal Imaging Spectrometer measurements. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	48
23	Interpretation of combined infrared, submillimeter, and millimeter thermal flux data obtained during the Rosetta fly-by of Asteroid (21) Lutetia. <i>Icarus</i> , 2012, 221, 395-404.	2.5	47
24	Venus Atmospheric Thermal Structure and Radiative Balance. <i>Space Science Reviews</i> , 2018, 214, 1.	8.1	47
25	Calibration of the Planetary Fourier Spectrometer short wavelength channel. <i>Planetary and Space Science</i> , 2005, 53, 975-991.	1.7	43
26	Calibration of the Planetary Fourier Spectrometer long wavelength channel. <i>Planetary and Space Science</i> , 2005, 53, 993-1007.	1.7	43
27	Thermal structure of Venusian nighttime mesosphere as observed by VIRTIS on Venus Express. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	41
28	Planetary Fourier spectrometer data analysis: Fast radiative transfer models. <i>Planetary and Space Science</i> , 2005, 53, 1035-1042.	1.7	40
29	The planetary fourier spectrometer (PFS) onboard the European Venus Express mission. <i>Planetary and Space Science</i> , 2006, 54, 1298-1314.	1.7	39
30	Ice Giant Systems: The scientific potential of orbital missions to Uranus and Neptune. <i>Planetary and Space Science</i> , 2020, 191, 105030.	1.7	39
31	Planetary space weather: scientific aspects and future perspectives. <i>Journal of Space Weather and Space Climate</i> , 2016, 6, A31.	3.3	38
32	Metabolic effect of berberine-silymarin association: A meta-analysis of randomized, double-blind, placebo-controlled clinical trials. <i>Phytotherapy Research</i> , 2019, 33, 862-870.	5.8	37
33	Towards a Global Unified Model of Europa's Tenuous Atmosphere. <i>Space Science Reviews</i> , 2018, 214, 1.	8.1	36
34	Analysis of non-LTE emissions at in the Martian atmosphere as observed by PFS/Mars Express and SWS/ISO. <i>Planetary and Space Science</i> , 2005, 53, 1079-1087.	1.7	35
35	The thermal structure of the Venus atmosphere: Intercomparison of Venus Express and ground based observations of vertical temperature and density profiles. <i>Icarus</i> , 2017, 294, 124-155.	2.5	34
36	The current weather and climate of Mars: 12 years of atmospheric monitoring by the Planetary Fourier Spectrometer on Mars Express. <i>Icarus</i> , 2021, 353, 113406.	2.5	34

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37	Cyclostrophic winds from the Visible and Infrared Thermal Imaging Spectrometer temperature sounding: A preliminary analysis. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	33
38	Water clouds and dust aerosols observations with PFS MEX at Mars. <i>Planetary and Space Science</i> , 2005, 53, 1065-1077.	1.7	32
39	Retrieval of air temperature profiles in the Venusian mesosphere from VIRTIS-EM data: Description and validation of algorithms. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	32
40	The Venus nighttime atmosphere as observed by the VIRTIS-EM instrument. Average fields from the complete infrared data set. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 837-849.	3.6	32
41	The comparative exploration of the ice giant planets with twin spacecraft: Unveiling the history of our Solar System. <i>Planetary and Space Science</i> , 2014, 104, 93-107.	1.7	31
42	The EChO science case. <i>Experimental Astronomy</i> , 2015, 40, 329-391.	3.7	31
43	No statistical evidence of lightning in Venus night-side atmosphere from VIRTIS-Venus Express Visible observations. <i>Icarus</i> , 2016, 277, 395-400.	2.5	30
44	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
45	Characterization of dust activity on Mars from MY27 to MY32 by PFS-MEX observations. <i>Icarus</i> , 2018, 310, 32-47.	2.5	28
46	Experimental CO <sub>2</sub> absorption coefficients at high pressure and high temperature. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013, 117, 21-28.	2.3	27
47	BepiColombo Science Investigations During Cruise and Flybys at the Earth, Venus and Mercury. <i>Space Science Reviews</i> , 2021, 217, 1.	8.1	25
48	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
49	Two-Year Observations of the Jupiter Polar Regions by JIRAM on Board Juno. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006098.	3.6	24
50	Infrared observations of Io from Juno. <i>Icarus</i> , 2020, 341, 113607.	2.5	23
51	PFS-MEX observation of ices in the residual south polar cap of Mars. <i>Planetary and Space Science</i> , 2005, 53, 1089-1095.	1.7	22
52	The Martian atmosphere above great volcanoes: Early planetary Fourier spectrometer observations. <i>Planetary and Space Science</i> , 2005, 53, 1053-1064.	1.7	22
53	The Martian atmosphere in the region of the great volcanoes: Mariner 9 IRIS data revisited. <i>Planetary and Space Science</i> , 2001, 49, 977-992.	1.7	21
54	IRIS Mariner 9 data revisited: water and dust daily cycles. <i>Planetary and Space Science</i> , 2001, 49, 1331-1346.	1.7	20

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55	The martian atmosphere in the region of Hellas basin as observed by the planetary Fourier spectrometer (PFS-MEX). <i>Planetary and Space Science</i> , 2007, 55, 1346-1357.	1.7	20
56	PFS/MEX observations of the condensing CO <sub>2</sub> south polar cap of Mars. <i>Icarus</i> , 2008, 197, 386-402.	2.5	20
57	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
58	Preliminary JIRAM results from Juno polar observations: 2. Analysis of the Jupiter southern H <sub>3</sub> <sup>+</sup> emissions and comparison with the north aurora. <i>Geophysical Research Letters</i> , 2017, 44, 4633-4640.	4.0	20
59	Similarities and Differences of Global Dust Storms in MY 25, 28, and 34. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006104.	3.6	20
60	Kinetic Simulations of the Jovian Energetic Ion Circulation around Ganymede. <i>Astrophysical Journal</i> , 2020, 900, 74.	4.5	20
61	Solar energetic particle interactions with the Venusian atmosphere. <i>Annales Geophysicae</i> , 2016, 34, 595-608.	1.6	19
62	Jupiter's hot spots: Quantitative assessment of the retrieval capabilities of future IR spectro-imagers. <i>Planetary and Space Science</i> , 2010, 58, 1265-1278.	1.7	18
63	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
64	Evidence for Multiple Ferrel-Like Cells on Jupiter. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095651.	4.0	18
65	Moist convection drives an upscale energy transfer at Jovian high latitudes. <i>Nature Physics</i> , 2022, 18, 357-361.	16.7	18
66	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
67	Carbon dioxide opacity of the Venus <sup>3</sup> atmosphere. <i>Planetary and Space Science</i> , 2014, 103, 347-354.	1.7	17
68	Infrared Observations of Ganymede From the Jovian InfraRed Auroral Mapper on Juno. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006508.	3.6	16
69	PFS for Mars Express: A new approach to study Martian atmosphere. <i>Advances in Space Research</i> , 2002, 29, 131-142.	2.6	15
70	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
71	Serendipitous infrared observations of Europa by Juno/JIRAM. <i>Icarus</i> , 2019, 328, 1-13.	2.5	15
72	Morphology of the Auroral Tail of Io, Europa, and Ganymede From JIRAM L <sup>1</sup> Band Imager. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029450.	2.4	15

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73	Multiple-wavelength sensing of Jupiter during the Juno mission's first perijove passage. <i>Geophysical Research Letters</i> , 2017, 44, 4607-4614.	4.0	14
74	On the Spatial Distribution of Minor Species in Jupiter's Troposphere as Inferred From Juno JIRAM Data. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006206.	3.6	14
75	Spatial variability, composition and thickness of the seasonal north polar cap of Mars in mid-spring. <i>Planetary and Space Science</i> , 2007, 55, 1328-1345.	1.7	13
76	Removal of atmospheric features in near infrared spectra by means of principal component analysis and target transformation on Mars: I. Method. <i>Icarus</i> , 2015, 253, 51-65.	2.5	13
77	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
78	Jupiter's Equatorial Plumes and Hot Spots: Spectral Mapping from Gemini/TEXES and Juno/MWR. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006399.	3.6	13
79	IRIS Mariner 9 data revisited:. <i>Planetary and Space Science</i> , 2000, 48, 569-576.	1.7	12
80	IRIS Mariner 9 data revisited:. <i>Planetary and Space Science</i> , 2000, 48, 577-598.	1.7	12
81	Martian winter atmosphere at north high latitudes: Mariner 9 IRIS data revisited. <i>Advances in Space Research</i> , 2002, 29, 151-156.	2.6	11
82	The light curve of asteroid 2867 Steins measured by VIRTIS-M during the Rosetta fly-by. <i>Planetary and Space Science</i> , 2010, 58, 1066-1076.	1.7	11
83	H3+ characteristics in the Jupiter atmosphere as observed at limb with Juno/JIRAM. <i>Icarus</i> , 2019, 329, 132-139.	2.5	11
84	Oscillations and Stability of the Jupiter Polar Cyclones. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094235.	4.0	11
85	Results of measurements with the Planetary Fourier Spectrometer onboard Mars Express: Clouds and dust at the end of southern summer. A comparison with OMEGA images. <i>Cosmic Research</i> , 2006, 44, 305-316.	0.6	10
86	Tracking the edge of the south seasonal polar cap of Mars. <i>Planetary and Space Science</i> , 2007, 55, 1319-1327.	1.7	10
87	Martian atmosphere as observed by VIRTIS-M on Rosetta spacecraft. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	10
88	Water vapour abundance in Martian atmosphere from revised Mariner 9 IRIS data. <i>Advances in Space Research</i> , 2002, 29, 157-162.	2.6	9
89	A Martian PFS average spectrum: Comparison with ISO SWS. <i>Planetary and Space Science</i> , 2005, 53, 1043-1052.	1.7	9
90	Validation of the IPSL Venus GCM Thermal Structure with Venus Express Data. <i>Atmosphere</i> , 2019, 10, 584.	2.3	9

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91	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
92	Turbulence Power Spectra in Regions Surrounding Jupiter's South Polar Cyclones From Juno/JIRAM. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006096.	3.6	8
93	Mapping Io's Surface Composition With Juno/JIRAM. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006522.	3.6	8
94	Simultaneous observations of the Martian atmosphere by Planetary Fourier Spectrometer on Mars Express and Miniature Thermal Emission Spectrometer on Mars Exploration Rover. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	7
95	Properties of a Martian local dust storm in Atlantis Chaos from OMEGA/MEX data. <i>Icarus</i> , 2018, 300, 1-11.	2.5	7
96	The science of EChO. <i>Proceedings of the International Astronomical Union</i> , 2010, 6, 359-370.	0.0	5
97	Characterization of Mesoscale Waves in the Jupiter NEB by Jupiter InfraRed Auroral Mapper on board Juno. <i>Astronomical Journal</i> , 2018, 156, 246.	4.7	5
98	Juno/JIRAM: Planning and commanding activities. <i>Advances in Space Research</i> , 2020, 65, 598-615.	2.6	5
99	Preliminary estimation of the detection possibilities of Ganymede's water vapor environment with MAJIS. <i>Planetary and Space Science</i> , 2020, 191, 105004.	1.7	5
100	On the clouds and ammonia in Jupiter's upper troposphere from Juno JIRAM reflectivity observations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 503, 4892-4907.	4.4	5
101	Temperature dependence of collisional induced absorption (CIA) bands of CO <sub>2</sub> with implications for Venus's atmosphere. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2018, 204, 242-249.	2.3	4
102	Ice giant system exploration within ESA's Voyage 2050. <i>Experimental Astronomy</i> , 2022, 54, 1015-1025.	3.7	4
103	JIRAM, the Jovian Infrared Auroral Mapper. , 2014, , 271-324.		4
104	ACS/TIRVIM: Calibration and first results. , 2018, , .		4
105	First observations of the planetary Fourier spectrometer at Mars. <i>Advances in Space Research</i> , 2005, 36, 1074-1083.	2.6	3
106	Thermal structure of the Martian atmosphere retrieved from the IR spectrometry in the 15 $\mu$ m CO <sub>2</sub> band: input to MIRA. <i>Advances in Space Research</i> , 2005, 35, 8-13.	2.6	3
107	Tidal variations in the Martian lower atmosphere inferred from Mars Express Planetary Fourier Spectrometer temperature data. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	3
108	Retrieval of Venus' cloud parameters from VIRTIS nightside spectra in the latitude band 25°-55°N. <i>Planetary and Space Science</i> , 2017, 144, 16-31.	1.7	3

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109	Drug Induced Liver Injury (DILI) due to variability in monacolin K content in Red Yeast Rice (RYR): An expert opinion. <i>European Journal of Integrative Medicine</i> , 2020, 37, 101164.	1.7	3
110	Global maps of Venus nightside mean infrared thermal emissions obtained by VIRTIS on Venus Express. <i>Icarus</i> , 2020, 343, 113683.	2.5	3
111	Stability of the Jupiter Southern Polar Vortices Inspected Through Vorticity Using Juno/JIRAM Data. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	3.6	3
112	PFS: an effective instrument for the study of martian environment. <i>Advances in Space Research</i> , 2004, 34, 1696-1701.	2.6	2
113	Scientific goals and technical challenges of the MAJIS imaging spectrometer for the JUICE mission. , 2019, , .		2
114	Acute and Long Term Effects of a Nutraceutical Combination on Lipid Profile, Glucose Metabolism and Vascular Function in Patients with Dyslipidaemia with and Without Cigarette Smoking. <i>High Blood Pressure and Cardiovascular Prevention</i> , 2021, 28, 483-491.	2.2	2
115	Metabolic effect of berberine&#x2013;silymarin association: A meta-analysis of randomized, double-blind, placebo-controlled clinical trials. , 2019, 33, 862.		1
116	A software simulator for the Planetary Fourier Spectrometer on board the Mars express mission. <i>Advances in Space Research</i> , 2002, 29, 169-174.	2.6	0
117	The impact of Martian aerosols on the retrieval of temperature profiles from PFS measurements. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2009, 110, 1908-1925.	2.3	0
118	Preparing EChO space mission: laboratory simulation of planetary atmospheres. , 2014, , .		0
119	Atmospheric Physics and Atmospheres of Solar-System Bodies. <i>Astrophysics and Space Science Library</i> , 2018, , 135-199.	2.7	0