

AgustÃ- n SÃ;nchez-Lavega

List of Publications by Year in descending order

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113
papers

3,443
citations

117625

34
h-index

182427

51
g-index

123
all docs

123
docs citations

123
times ranked

1494
citing authors

#	ARTICLE	IF	CITATIONS
1	Scientific goals for the observation of Venus by VIRTIS on ESA/Venus express mission. Planetary and Space Science, 2007, 55, 1653-1672.	1.7	155
2	Saturn's Zonal Winds at Cloud Level. Icarus, 2000, 147, 405-420.	2.5	132
3	Variable winds on Venus mapped in three dimensions. Geophysical Research Letters, 2008, 35, .	4.0	119
4	Morphology of the cloud tops as observed by the Venus Express Monitoring Camera. Icarus, 2012, 217, 682-701.	2.5	99
5	Deep winds beneath Saturn's upper clouds from a seasonal long-lived planetary-scale storm. Nature, 2011, 475, 71-74.	27.8	98
6	The Atmospheric Dynamics of Venus. Space Science Reviews, 2017, 212, 1541-1616.	8.1	95
7	Saturn's zonal wind profile in 2004-2009 from Cassini ISS images and its long-term variability. Icarus, 2011, 215, 62-74.	2.5	88
8	Depth of a strong jovian jet from a planetary-scale disturbance driven by storms. Nature, 2008, 451, 437-440.	27.8	82
9	A strong decrease in Saturn's equatorial jet at cloud level. Nature, 2003, 423, 623-625.	27.8	74
10	The Merger of Two Giant Anticyclones in the Atmosphere of Jupiter. Icarus, 2001, 149, 491-495.	2.5	69
11	Six years of Venus winds at the upper cloud level from UV, visible and near infrared observations from VIRTIS on Venus Express. Planetary and Space Science, 2015, 113-114, 78-99.	1.7	69
12	Scientific rationale for Uranus and Neptune in situ explorations. Planetary and Space Science, 2018, 155, 12-40.	1.7	69
13	Assessing the long-term variability of Venus winds at cloud level from VIRTIS on Venus Express. Icarus, 2012, 217, 585-598.	2.5	67
14	Characterization of mesoscale gravity waves in the upper and lower clouds of Venus from VEX's VIRTIS images. Journal of Geophysical Research, 2008, 113, .	3.3	60
15	The jovian anticyclone BAII. Circulation and interaction with the zonal jets. Icarus, 2009, 203, 499-515.	2.5	54
16	A three-dimensional model of moist convection for the giant planets II: Saturn's water and ammonia moist convective storms. Icarus, 2004, 172, 255-271.	2.5	52
17	Morphology and dynamics of Venus oxygen airglow from Venus Express/Visible and Infrared Thermal Imaging Spectrometer observations. Journal of Geophysical Research, 2008, 113, .	3.3	52
18	Distribution of the O ₂ infrared nightglow observed with VIRTIS on board Venus Express. Geophysical Research Letters, 2008, 35, .	4.0	50

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19	Instrumental methods for professional and amateur collaborations in planetary astronomy. <i>Experimental Astronomy</i> , 2014, 38, 91-191.	3.7	47
20	The Onset and Growth of the 2018 Martian Global Dust Storm. <i>Geophysical Research Letters</i> , 2019, 46, 6101-6108.	4.0	47
21	The dynamic atmospheric and aeolian environment of Jezero crater, Mars. <i>Science Advances</i> , 2022, 8, .	10.3	47
22	A strong vortex in Saturn's South Pole. <i>Icarus</i> , 2006, 184, 524-531.	2.5	46
23	Saturn's cloud morphology and zonal winds before the Cassini encounter. <i>Icarus</i> , 2004, 170, 519-523.	2.5	45
24	Large-Scale Storms in Saturn's Atmosphere During 1994. <i>Science</i> , 1996, 271, 631-634.	12.6	44
25	The South Equatorial Belt of Jupiter, I: Its Life Cycle. <i>Icarus</i> , 1996, 121, 1-17.	2.5	44
26	The long-term steady motion of Saturn's hexagon and the stability of its enclosed jet stream under seasonal changes. <i>Geophysical Research Letters</i> , 2014, 41, 1425-1431.	4.0	43
27	Venus Upper Clouds and the UV Absorber From MESSENGER/MASCS Observations. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 145-162.	3.6	41
28	The international outer planets watch atmospheres node database of giant-planet images. <i>Planetary and Space Science</i> , 2010, 58, 1152-1159.	1.7	40
29	A model for large-scale convective storms in Jupiter. <i>Journal of Geophysical Research</i> , 2002, 107, 5-1.	3.3	39
30	Episodic bright and dark spots on Uranus. <i>Icarus</i> , 2012, 220, 6-22.	2.5	39
31	Saturn Atmospheric Structure and Dynamics. , 2009, , 113-159.		38
32	The Planetary Laboratory for Image Analysis (PLIA). <i>Advances in Space Research</i> , 2010, 46, 1120-1138.	2.6	37
33	Venus's major cloud feature as an equatorially trapped wave distorted by the wind. <i>Geophysical Research Letters</i> , 2015, 42, 705-711.	4.0	36
34	Seasonal Deposition and Lifting of Dust on Mars as Observed by the Curiosity Rover. <i>Scientific Reports</i> , 2018, 8, 17576.	3.3	36
35	A planetary-scale disturbance in the most intense Jovian atmospheric jet from JunoCam and ground-based observations. <i>Geophysical Research Letters</i> , 2017, 44, 4679-4686.	4.0	35
36	Stationary waves and slowly moving features in the night upper clouds of Venus. <i>Nature Astronomy</i> , 2017, 1, .	10.1	35

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37	The 2009–2010 fade of Jupiter's South Equatorial Belt: Vertical cloud structure models and zonal winds from visible imaging. <i>Icarus</i> , 2012, 217, 256-271.	2.5	33
38	A systematic search of sudden pressure drops on Gale crater during two Martian years derived from MSL/REMS data. <i>Icarus</i> , 2018, 299, 308-330.	2.5	33
39	Clouds and Aerosols in Saturn's Atmosphere. , 2009, , 161-179.		33
40	A chaotic long-lived vortex at the southern pole of Venus. <i>Nature Geoscience</i> , 2013, 6, 254-257.	12.9	32
41	Jupiter's polar clouds and waves from Cassini and HST images: 1993–2006. <i>Icarus</i> , 2008, 194, 173-185.	2.5	31
42	Giant Planet Observations with the James Webb Space Telescope. <i>Publications of the Astronomical Society of the Pacific</i> , 2016, 128, 018005.	3.1	29
43	Glory revealed in disk-integrated photometry of Venus. <i>Astronomy and Astrophysics</i> , 2014, 566, L1.	5.1	28
44	Jupiter's 24° N highest speed jet: Vertical structure deduced from nonlinear simulations of a large-amplitude natural disturbance. <i>Icarus</i> , 2005, 176, 272-282.	2.5	27
45	Phase dispersion relation of the 5-micron hot spot wave from a long-term study of Jupiter in the visible. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	27
46	A disturbance in Jupiter's high-speed North temperate jet during 1990. <i>Icarus</i> , 1991, 94, 92-97.	2.5	26
47	Atmospheric dynamics of Saturn's 2010 giant storm. <i>Nature Geoscience</i> , 2013, 6, 525-529.	12.9	26
48	Saturn's Great White Spots. <i>Chaos</i> , 1994, 4, 341-353.	2.5	26
49	The Planetary Virtual Observatory and Laboratory (PVOL) and its integration into the Virtual European Solar and Planetary Access (VESPA). <i>Planetary and Space Science</i> , 2018, 150, 22-35.	1.7	25
50	Analysis of Neptune's 2017 bright equatorial storm. <i>Icarus</i> , 2019, 321, 324-345.	2.5	25
51	An extremely high-altitude plume seen at Mars' morning terminator. <i>Nature</i> , 2015, 518, 525-528.	27.8	24
52	PlanetCam UPV/EHU: A Two-channel Lucky Imaging Camera for Solar System Studies in the Spectral Range 0.38–1.7 μ m. <i>Publications of the Astronomical Society of the Pacific</i> , 2016, 128, 035002.	3.1	23
53	Cloud morphology and dynamics in Saturn's northern polar region. <i>Icarus</i> , 2018, 299, 117-132.	2.5	23
54	Limb clouds and dust on Mars from images obtained by the Visual Monitoring Camera (VMC) onboard Mars Express. <i>Icarus</i> , 2018, 299, 194-205.	2.5	23

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55	A New Dark Vortex on Neptune. <i>Astronomical Journal</i> , 2018, 155, 117.	4.7	22
56	Atmospheric Dynamics and Vertical Structure of Uranus and Neptune's Weather Layers. <i>Space Science Reviews</i> , 2019, 215, 1.	8.1	22
57	Strong increase in dust devil activity at Gale crater on the third year of the MSL mission and suppression during the 2018 Global Dust Storm. <i>Icarus</i> , 2020, 347, 113814.	2.5	22
58	No Hexagonal Wave around Saturn's Southern Pole. <i>Icarus</i> , 2002, 160, 216-219.	2.5	21
59	Neptune long-lived atmospheric features in 2013–2015 from small (28-cm) to large (10-m) telescopes. <i>Icarus</i> , 2017, 295, 89-109.	2.5	21
60	Jupiter cloud morphology and zonal winds from ground-based observations before and during Juno's first perijove. <i>Geophysical Research Letters</i> , 2017, 44, 4669-4678.	4.0	21
61	Overview of useful spectral regions for Venus: An update to encourage observations complementary to the Akatsuki mission. <i>Icarus</i> , 2017, 288, 235-239.	2.5	21
62	Nightside Winds at the Lower Clouds of Venus with Akatsuki/IR2: Longitudinal, Local Time, and Decadal Variations from Comparison with Previous Measurements. <i>Astrophysical Journal, Supplement Series</i> , 2018, 239, 29.	7.7	21
63	New cloud morphologies discovered on the Venus's night during Akatsuki. <i>Icarus</i> , 2019, 333, 177-182.	2.5	20
64	Saturn's tropospheric particles phase function and spatial distribution from Cassini ISS 2010–11 observations. <i>Icarus</i> , 2016, 277, 1-18.	2.5	19
65	Haze and cloud structure of Saturn's North Pole and Hexagon Wave from Cassini/ISS imaging. <i>Icarus</i> , 2018, 305, 284-300.	2.5	19
66	The Rich Dynamics of Jupiter's Great Red Spot from JunoCam: Juno Images. <i>Astronomical Journal</i> , 2018, 156, 162.	4.7	19
67	Instantaneous three-dimensional thermal structure of the South Polar Vortex of Venus. <i>Icarus</i> , 2015, 245, 16-31.	2.5	18
68	Venus's winds and temperatures during the MESSENGER's flyby: An approximation to a three-dimensional instantaneous state of the atmosphere. <i>Geophysical Research Letters</i> , 2017, 44, 3907-3915.	4.0	18
69	Ground-based imaging of Jovian cloud morphologies and motions. <i>Icarus</i> , 1988, 76, 533-557.	2.5	17
70	Jupiter's Mesoscale Waves Observed at 5 1/4m by Ground-based Observations and Juno JIRAM. <i>Astronomical Journal</i> , 2018, 156, 67.	4.7	17
71	Color and aerosol changes in Jupiter after a North Temperate Belt disturbance. <i>Icarus</i> , 2020, 352, 114031.	2.5	17
72	A Long-Lived Sharp Disruption on the Lower Clouds of Venus. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087221.	4.0	17

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73	Dust particle size, shape and optical depth during the 2018/MY34 martian global dust storm retrieved by MSL Curiosity rover Navigation Cameras. <i>Icarus</i> , 2021, 354, 114021.	2.5	17
74	The Aula Espazio Gela and the Master of Space Science and Technology in the Universidad del País Vasco (University of the Basque Country). <i>European Journal of Engineering Education</i> , 2014, 39, 518-526.	2.3	16
75	VENUS CLOUD MORPHOLOGY AND MOTIONS FROM GROUND-BASED IMAGES AT THE TIME OF THE AKATSUKI ORBIT INSERTION. <i>Astrophysical Journal Letters</i> , 2016, 833, L7.	8.3	16
76	The Surface Energy Budget at Gale Crater During the First 2500 Sols of the Mars Science Laboratory Mission. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006804.	3.6	16
77	Observations and numerical modelling of a convective disturbance in a large-scale cyclone in Jupiter's South Temperate Belt. <i>Icarus</i> , 2020, 336, 113475.	2.5	15
78	Jupiter's zonal winds and their variability studied with small-size telescopes. <i>Astronomy and Astrophysics</i> , 2013, 554, A74.	5.1	14
79	A planetary-scale disturbance in a long living three vortex coupled system in Saturn's atmosphere. <i>Icarus</i> , 2018, 302, 499-513.	2.5	14
80	A New, Long-lived, Jupiter Mesoscale Wave Observed at Visible Wavelengths. <i>Astronomical Journal</i> , 2018, 156, 79.	4.7	14
81	A system of circumpolar waves in Jupiter's stratosphere. <i>Geophysical Research Letters</i> , 1998, 25, 4043-4046.	4.0	13
82	A complex storm system in Saturn's north polar atmosphere in 2018. <i>Nature Astronomy</i> , 2020, 4, 180-187.	10.1	13
83	Temporal and spatial variations of the absolute reflectivity of Jupiter and Saturn from 0.38 to 1.7 μm with PlanetCam-UPV/EHU. <i>Astronomy and Astrophysics</i> , 2017, 607, A72.	5.1	13
84	The 2018 Martian Global Dust Storm Over the South Polar Region Studied With MEx/VMC. <i>Geophysical Research Letters</i> , 2019, 46, 10330-10337.	4.0	12
85	Jupiter's Great Red Spot: Strong Interactions With Incoming Anticyclones in 2019. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006686.	3.6	12
86	A model of scattered thermal radiation for Venus from 3 to. <i>Planetary and Space Science</i> , 2013, 81, 65-73.	1.7	11
87	A Seasonally Recurrent Annular Cyclone in Mars Northern Latitudes and Observations of a Companion Vortex. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 3020-3034.	3.6	11
88	Convective storms and atmospheric vertical structure in Uranus and Neptune. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190476.	3.4	11
89	Shallow water simulations of Saturn's giant storms at different latitudes. <i>Icarus</i> , 2017, 286, 241-260.	2.5	10
90	Morphology and Dynamics of Venus's Middle Clouds With Akatsuki/IR1. <i>Geophysical Research Letters</i> , 2019, 46, 2399-2407.	4.0	10

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91	Meteorological pressure at Gale crater from a comparison of REMS/MSL data and MCD modelling: Effect of dust storms. <i>Icarus</i> , 2019, 317, 591-609.	2.5	10
92	Evolution of the cloud field and wind structure of Jupiter's highest speed jet during a huge disturbance. <i>Astronomy and Astrophysics</i> , 2009, 507, 513-522.	5.1	9
93	A large active wave trapped in Jupiter's equator. <i>Astronomy and Astrophysics</i> , 2016, 586, A154.	5.1	9
94	The Great Saturn Storm of 2010–2011. , 2018, , 377-416.		9
95	Characterization of a local dust storm on Mars with REMS/MSL measurements and MARCI/MRO images. <i>Icarus</i> , 2020, 338, 113521.	2.5	9
96	An Extremely Elongated Cloud Over Arsia Mons Volcano on Mars: I. Life Cycle. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006517.	3.6	9
97	Cellular patterns and dry convection in textured dust storms at the edge of Mars North Polar Cap. <i>Icarus</i> , 2022, 387, 115183.	2.5	9
98	Hazes and clouds in a singular triple vortex in Saturn's atmosphere from HST/WFC3 multispectral imaging. <i>Icarus</i> , 2019, 333, 22-36.	2.5	7
99	Potential Vorticity of Saturn's Polar Regions: Seasonality and Instabilities. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 186-201.	3.6	6
100	Multilayer hazes over Saturn's hexagon from Cassini ISS limb images. <i>Nature Communications</i> , 2020, 11, 2281.	12.8	6
101	A Long-Term Study of Mars Mesospheric Clouds Seen at Twilight Based on Mars Express VMC Images. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL092188.	4.0	5
102	In Situ exploration of the giant planets. <i>Experimental Astronomy</i> , 2022, 54, 975-1013.	3.7	5
103	Convective storms in closed cyclones in Jupiter's South Temperate Belt: (I) observations. <i>Icarus</i> , 2022, 380, 114994.	2.5	5
104	PlanetCam UPV/EHU: a simultaneous visible and near infrared lucky-imaging camera to study solar system objects. , 2012, , .		4
105	Midsummer Atmospheric Changes in Saturn's Northern Hemisphere from the Hubble OPAL Program. <i>Planetary Science Journal</i> , 2021, 2, 47.	3.6	4
106	Jupiter's third largest and longest-lived oval: Color changes and dynamics. <i>Icarus</i> , 2021, 361, 114394.	2.5	4
107	Assessing Multi-stream Radiative Transfer Schemes for the Calculation of Aerosol Radiative Forcing in the Martian Atmosphere. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2021JE006889.	3.6	4
108	Vertical Distribution of Aerosols and Hazes Over Jupiter's Great Red Spot and Its Surroundings in 2016 From HST/WFC3 Imaging. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2021JE006996.	3.6	4

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109	Using Galilean satellites' mutual orbital events as an educational tool for studies of orbital dynamics. <i>European Journal of Physics</i> , 2017, 38, 065601.	0.6	2
110	Convective storms in closed cyclones in Jupiter: (II) numerical modeling. <i>Icarus</i> , 2022, 386, 115169.	2.5	2
111	Basic orbital mechanics from simple observations of the main satellites of Saturn, Uranus and Neptune. <i>European Journal of Physics</i> , 2019, 40, 035601.	0.6	1
112	Interaction of Saturn's Hexagon With Convective Storms. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092461.	4.0	1
113	Energy Exchanges in Saturn's Polar Regions From Cassini Observations: Eddy-Zonal Flow Interactions. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	3.6	1