

# AgustÃ-n SÃ;nchez-Lavega

## List of Publications by Year in descending order

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Version: 2024-02-01

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  | In Situ exploration of the giant planets. <i>Experimental Astronomy</i> , 2022, 54, 975-1013.   | 3.7  | 5         |
| 2  | Convective storms in closed cyclones in Jupiter's South Temperate Belt: (I) observations. <i>Icarus</i> , 2022, 380, 114994.  | 2.5  | 5         |
| 3  | 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         |
| 4  | The dynamic atmospheric and aeolian environment of Jezero crater, Mars. <i>Science Advances</i> , 2022, 8, .  | 10.3 | 47        |
| 5  | Convective storms in closed cyclones in Jupiter: (II) numerical modeling. <i>Icarus</i> , 2022, 386, 115169.  | 2.5  | 2         |
| 6  | 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         |
| 7  | 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        |
| 8  | 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         |
| 9  | 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         |
| 10 | Midsummer Atmospheric Changes in Saturn's Northern Hemisphere from the Hubble OPAL Program. <i>Planetary Science Journal</i> , 2021, 2, 47.   | 3.6  | 4         |
| 11 | 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        |
| 12 | Interaction of Saturn's Hexagon With Convective Storms. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092461.  | 4.0  | 1         |
| 13 | Jupiter's third largest and longest-lived oval: Color changes and dynamics. <i>Icarus</i> , 2021, 361, 114394.  | 2.5  | 4         |
| 14 | 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        |
| 15 | 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         |
| 16 | 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         |
| 17 | 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        |
| 18 | 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         |

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|----|---|------|-----------|
| 19 | A complex storm system in Saturn's north polar atmosphere in 2018. <i>Nature Astronomy</i> , 2020, 4, 180-187.  | 10.1 | 13        |
| 20 | Color and aerosol changes in Jupiter after a North Temperate Belt disturbance. <i>Icarus</i> , 2020, 352, 114031.   | 2.5  | 17        |
| 21 | 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        |
| 22 | Multilayer hazes over Saturn's hexagon from Cassini ISS limb images. <i>Nature Communications</i> , 2020, 11, 2281.   | 12.8 | 6         |
| 23 | A Long-Lived Sharp Disruption on the Lower Clouds of Venus. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087221.  | 4.0  | 17        |
| 24 | 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        |
| 25 | 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        |
| 26 | 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         |
| 27 | New cloud morphologies discovered on the Venus's night during Akatsuki. <i>Icarus</i> , 2019, 333, 177-182.   | 2.5  | 20        |
| 28 | The Onset and Growth of the 2018 Martian Global Dust Storm. <i>Geophysical Research Letters</i> , 2019, 46, 6101-6108.  | 4.0  | 47        |
| 29 | Morphology and Dynamics of Venus's Middle Clouds With Akatsuki/IR1. <i>Geophysical Research Letters</i> , 2019, 46, 2399-2407.  | 4.0  | 10        |
| 30 | 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         |
| 31 | Atmospheric Dynamics and Vertical Structure of Uranus and Neptune's Weather Layers. <i>Space Science Reviews</i> , 2019, 215, 1.  | 8.1  | 22        |
| 32 | 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        |
| 33 | 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         |
| 34 | Analysis of Neptune's 2017 bright equatorial storm. <i>Icarus</i> , 2019, 321, 324-345.   | 2.5  | 25        |
| 35 | A New Dark Vortex on Neptune. <i>Astronomical Journal</i> , 2018, 155, 117.   | 4.7  | 22        |
| 36 | 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        |

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|----|---|-----|-----------|
| 37 | 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        |
| 38 | 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        |
| 39 | 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        |
| 40 | Scientific rationale for Uranus and Neptune in situ explorations. <i>Planetary and Space Science</i> , 2018, 155, 12-40.  | 1.7 | 69        |
| 41 | Cloud morphology and dynamics in Saturn's northern polar region. <i>Icarus</i> , 2018, 299, 117-132.  | 2.5 | 23        |
| 42 | 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        |
| 43 | 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        |
| 44 | 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        |
| 45 | 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        |
| 46 | Seasonal Deposition and Lifting of Dust on Mars as Observed by the Curiosity Rover. <i>Scientific Reports</i> , 2018, 8, 17576.   | 3.3 | 36        |
| 47 | The Great Saturn Storm of 2010–2011. , 2018, , 377-416.   |     | 9         |
| 48 | The Rich Dynamics of Jupiter's Great Red Spot from JunoCam: Juno Images. <i>Astronomical Journal</i> , 2018, 156, 162.  | 4.7 | 19        |
| 49 | A New, Long-lived, Jupiter Mesoscale Wave Observed at Visible Wavelengths. <i>Astronomical Journal</i> , 2018, 156, 79.   | 4.7 | 14        |
| 50 | Jupiter's Mesoscale Waves Observed at 5 $\frac{1}{4}$ $\mu$ m by Ground-based Observations and Juno JIRAM. <i>Astronomical Journal</i> , 2018, 156, 67.   | 4.7 | 17        |
| 51 | 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        |
| 52 | 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        |
| 53 | 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        |
| 54 | 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        |

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|----|---|------|-----------|
| 55 | 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        |
| 56 | The Atmospheric Dynamics of Venus. <i>Space Science Reviews</i> , 2017, 212, 1541-1616.   | 8.1  | 95        |
| 57 | 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         |
| 58 | Shallow water simulations of Saturn's giant storms at different latitudes. <i>Icarus</i> , 2017, 286, 241-260.  | 2.5  | 10        |
| 59 | Stationary waves and slowly moving features in the night upper clouds of Venus. <i>Nature Astronomy</i> , 2017, 1, .  | 10.1 | 35        |
| 60 | Temporal and spatial variations of the absolute reflectivity of Jupiter and Saturn from 0.38 to 1.7 $\mu\text{m}$ with PlanetCam-UPV/EHU. <i>Astronomy and Astrophysics</i> , 2017, 607, A72.                     | 5.1  | 13        |
| 61 | A large active wave trapped in Jupiter's equator. <i>Astronomy and Astrophysics</i> , 2016, 586, A154.  | 5.1  | 9         |
| 62 | PlanetCam UPV/EHU: A Two-channel Lucky Imaging Camera for Solar System Studies in the Spectral Range 0.38–1.7 $\mu\text{m}$ . <i>Publications of the Astronomical Society of the Pacific</i> , 2016, 128, 035002. | 3.1  | 23        |
| 63 | 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        |
| 64 | 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        |
| 65 | 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        |
| 66 | Six years of Venus winds at the upper cloud level from UV, visible and near infrared observations from VIRTIS on Venus Express. <i>Planetary and Space Science</i> , 2015, 113-114, 78-99.                        | 1.7  | 69        |
| 67 | An extremely high-altitude plume seen at Mars' morning terminator. <i>Nature</i> , 2015, 518, 525-528.  | 27.8 | 24        |
| 68 | 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        |
| 69 | Instantaneous three-dimensional thermal structure of the South Polar Vortex of Venus. <i>Icarus</i> , 2015, 245, 16-31.   | 2.5  | 18        |
| 70 | Instrumental methods for professional and amateur collaborations in planetary astronomy. <i>Experimental Astronomy</i> , 2014, 38, 91-191.  | 3.7  | 47        |
| 71 | 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        |
| 72 | 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        |

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|----|---|------|-----------|
| 73 | Glory revealed in disk-integrated photometry of Venus. <i>Astronomy and Astrophysics</i> , 2014, 566, L1.   | 5.1  | 28        |
| 74 | A model of scattered thermal radiation for Venus from 3 to. <i>Planetary and Space Science</i> , 2013, 81, 65-73.   | 1.7  | 11        |
| 75 | Atmospheric dynamics of Saturn's 2010 giant storm. <i>Nature Geoscience</i> , 2013, 6, 525-529.   | 12.9 | 26        |
| 76 | A chaotic long-lived vortex at the southern pole of Venus. <i>Nature Geoscience</i> , 2013, 6, 254-257.   | 12.9 | 32        |
| 77 | Jupiter's zonal winds and their variability studied with small-size telescopes. <i>Astronomy and Astrophysics</i> , 2013, 554, A74.                               | 5.1  | 14        |
| 78 | PlanetCam UPV/EHU: a simultaneous visible and near infrared lucky-imaging camera to study solar system objects. , 2012, , .                                       |      | 4         |
| 79 | Assessing the long-term variability of Venus winds at cloud level from VIRTIS's Venus Express. <i>Icarus</i> , 2012, 217, 585-598.                                | 2.5  | 67        |
| 80 | Morphology of the cloud tops as observed by the Venus Express Monitoring Camera. <i>Icarus</i> , 2012, 217, 682-701.  | 2.5  | 99        |
| 81 | 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        |
| 82 | Episodic bright and dark spots on Uranus. <i>Icarus</i> , 2012, 220, 6-22.  | 2.5  | 39        |
| 83 | Saturn's zonal wind profile in 2004-2009 from Cassini ISS images and its long-term variability. <i>Icarus</i> , 2011, 215, 62-74.                                 | 2.5  | 88        |
| 84 | Deep winds beneath Saturn's upper clouds from a seasonal long-lived planetary-scale storm. <i>Nature</i> , 2011, 475, 71-74.                                      | 27.8 | 98        |
| 85 | The Planetary Laboratory for Image Analysis (PLIA). <i>Advances in Space Research</i> , 2010, 46, 1120-1138.  | 2.6  | 37        |
| 86 | 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        |
| 87 | 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         |
| 88 | The jovian anticyclone BAll. Circulation and interaction with the zonal jets. <i>Icarus</i> , 2009, 203, 499-515.   | 2.5  | 54        |
| 89 | Saturn Atmospheric Structure and Dynamics. , 2009, , 113-159.   |      | 38        |
| 90 | Clouds and Aerosols in Saturn's Atmosphere. , 2009, , 161-179.  |      | 33        |

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|-----|--|------|-----------|
| 91  | Jupiter's polar clouds and waves from Cassini and HST images: 1993–2006. <i>Icarus</i> , 2008, 194, 173-185.   | 2.5  | 31        |
| 92  | Depth of a strong jovian jet from a planetary-scale disturbance driven by storms. <i>Nature</i> , 2008, 451, 437-440.  | 27.8 | 82        |
| 93  | Distribution of the O <sub>2</sub> infrared nightglow observed with VIRTIS on board Venus Express. <i>Geophysical Research Letters</i> , 2008, 35, .                                     | 4.0  | 50        |
| 94  | Variable winds on Venus mapped in three dimensions. <i>Geophysical Research Letters</i> , 2008, 35, .  | 4.0  | 119       |
| 95  | Morphology and dynamics of Venus oxygen airglow from Venus Express/Visible and Infrared Thermal Imaging Spectrometer observations. <i>Journal of Geophysical Research</i> , 2008, 113, . | 3.3  | 52        |
| 96  | Characterization of mesoscale gravity waves in the upper and lower clouds of Venus from VEX–VIRTIS images. <i>Journal of Geophysical Research</i> , 2008, 113, .                         | 3.3  | 60        |
| 97  | Scientific goals for the observation of Venus by VIRTIS on ESA/Venus express mission. <i>Planetary and Space Science</i> , 2007, 55, 1653-1672.  | 1.7  | 155       |
| 98  | 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        |
| 99  | A strong vortex in Saturn's South Pole. <i>Icarus</i> , 2006, 184, 524-531.  | 2.5  | 46        |
| 100 | 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        |
| 101 | Saturn's cloud morphology and zonal winds before the Cassini encounter. <i>Icarus</i> , 2004, 170, 519-523.  | 2.5  | 45        |
| 102 | A three-dimensional model of moist convection for the giant planets II: Saturn's water and ammonia moist convective storms. <i>Icarus</i> , 2004, 172, 255-271.                          | 2.5  | 52        |
| 103 | A strong decrease in Saturn's equatorial jet at cloud level. <i>Nature</i> , 2003, 423, 623-625.   | 27.8 | 74        |
| 104 | A model for large-scale convective storms in Jupiter. <i>Journal of Geophysical Research</i> , 2002, 107, 5-1.   | 3.3  | 39        |
| 105 | No Hexagonal Wave around Saturn's Southern Pole. <i>Icarus</i> , 2002, 160, 216-219.   | 2.5  | 21        |
| 106 | The Merger of Two Giant Anticyclones in the Atmosphere of Jupiter. <i>Icarus</i> , 2001, 149, 491-495.   | 2.5  | 69        |
| 107 | Saturn's Zonal Winds at Cloud Level. <i>Icarus</i> , 2000, 147, 405-420.   | 2.5  | 132       |
| 108 | A system of circumpolar waves in Jupiter's stratosphere. <i>Geophysical Research Letters</i> , 1998, 25, 4043-4046.  | 4.0  | 13        |

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|-----|---|------|-----------|
| 109 | Large-Scale Storms in Saturn's Atmosphere During 1994. <i>Science</i> , 1996, 271, 631-634.             | 12.6 | 44        |
| 110 | The South Equatorial Belt of Jupiter, I: Its Life Cycle. <i>Icarus</i> , 1996, 121, 1-17.               | 2.5  | 44        |
| 111 | Saturn's Great White Spots. <i>Chaos</i> , 1994, 4, 341-353.  | 2.5  | 26        |
| 112 | A disturbance in Jupiter's high-speed North temperate jet during 1990. <i>Icarus</i> , 1991, 94, 92-97. | 2.5  | 26        |
| 113 | Ground-based imaging of Jovian cloud morphologies and motions. <i>Icarus</i> , 1988, 76, 533-557.       | 2.5  | 17        |