Ricardo Hueso

List of Publications by Year
in descending order

147	4,798	87888	123424
papers	citations	38 h-index	61 g-index

183	183	183	2915
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In Situ exploration of the giant planets. Experimental Astronomy, 2022, 54, 975-1013.	3.7	5
2	Ice giant system exploration within ESAâ€™s Voyage 2050. Experimental Astronomy, 2022, 54, 1015-1025.	3.7	4
3	Constraints on the structure and seasonal variations of Tritonâ€™s atmosphere from the 5 October 2017 stellar occultation and previous observations. Astronomy and Astrophysics, 2022, 659, A136.	5.1	8
4	Convective storms in closed cyclones in Jupiter's South Temperate Belt: (I) observations. Icarus, 2022, 380, 114994.	2.5	5
5	The dynamic atmospheric and aeolian environment of Jezero crater, Mars. Science Advances, 2022, 8, .	10.3	47
6	Evolution of a dark vortex on Neptune with transient secondary features. Icarus, 2022, 387, 115123.	2.5	3
7	Convective storms in closed cyclones in Jupiter: (II) numerical modeling. Icarus, 2022, 386, 115169.	2.5	2
8	Science Goals and Mission Objectives for the Future Exploration of Ice Giants Systems: A Horizon 2061 Perspective. Space Science Reviews, 2021, 217, 1.	8.1	11
9	A Longâ€Term Study of Mars Mesospheric Clouds Seen at Twilight Based on Mars Express VMC Images. Geophysical Research Letters, 2021, 48, e2020GL092188.	4.0	5
10	An Extremely Elongated Cloud Over Arsia Mons Volcano on Mars: I. Life Cycle. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006517.	3.6	9
11	Midsummer Atmospheric Changes in Saturnâ€™s Northern Hemisphere from the Hubble OPAL Program. Planetary Science Journal, 2021, 2, 47.	3.6	4
12	Jupiterâ€™s Great Red Spot: Strong Interactions With Incoming Anticyclones in 2019. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006686.	3.6	12
13	The Mars Environmental Dynamics Analyzer, MEDA. A Suite of Environmental Sensors for the Mars 2020 Mission. Space Science Reviews, 2021, 217, 48.	8.1	57
14	Interaction of Saturnâ€™s Hexagon With Convective Storms. Geophysical Research Letters, 2021, 48, e2021GL092461.	4.0	1
15	Jupiter's third largest and longest-lived oval: Color changes and dynamics. Icarus, 2021, 361, 114394.	2.5	4
16	The Surface Energy Budget at Gale Crater During the First 2500 Sols of the Mars Science Laboratory Mission. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006804.	3.6	16
17	Observations and numerical modelling of a convective disturbance in a large-scale cyclone in Jupiterâ€™s South Temperate Belt. Icarus, 2020, 336, 113475.	2.5	15
18	Saturn atmospheric dynamics one year after Cassini: Long-lived features and time variations in the drift of the Hexagon. Icarus, 2020, 336, 113429.	2.5	13

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19	Characterization of a local dust storm on Mars with REMS/MSL measurements and MARCI/MRO images. Icarus, 2020, 338, 113521.	2.5	9
20	A complex storm system in Saturnâ€™s north polar atmosphere in 2018. Nature Astronomy, 2020, 4, 180-187.	10.1	13
21	Mars 2020 Mission Overview. Space Science Reviews, 2020, 216, 1.	8.1	239
22	Convective storms and atmospheric vertical structure in Uranus and Neptune. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190476.	3.4	11
23	Multilayer hazes over Saturnâ€™s hexagon from Cassini ISS limb images. Nature Communications, 2020, 11, 2281.	12.8	6
24	A Longâ€Lived Sharp Disruption on the Lower Clouds of Venus. Geophysical Research Letters, 2020, 47, e2020GL087221.	4.0	17
25	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. Icarus, 2020, 347, 113814.	2.5	22
26	Ice Giant Systems: The scientific potential of orbital missions to Uranus and Neptune. Planetary and Space Science, 2020, 191, 105030.	1.7	39
27	Fragmentation modelling of the 2019 August impact on Jupiter. Monthly Notices of the Royal Astronomical Society, 2020, 493, 4622-4630.	4.4	6
28	Virtual European Solar & Planetary Access (VESPA): A Planetary Science Virtual Observatory Cornerstone. Data Science Journal, 2020, 19, .	1.3	7
29	The 2018 Martian Global Dust Storm Over the South Polar Region Studied With MEx/VMC. Geophysical Research Letters, 2019, 46, 10330-10337.	4.0	12
30	Morphology and Dynamics of Venus's Middle Clouds With Akatsuki/IR1. Geophysical Research Letters, 2019, 46, 2399-2407.	4.0	10
31	Atmospheric Dynamics and Vertical Structure of Uranus and Neptuneâ€™s Weather Layers. Space Science Reviews, 2019, 215, 1.	8.1	22
32	Venus Cloud Winds and Mean Albedo Variability From Atmospheric Waves. Journal of Geophysical Research E: Planets, 2019, 124, 2681-2685.	3.6	0
33	Meteorological pressure at Gale crater from a comparison of REMS/MSL data and MCD modelling: Effect of dust storms. Icarus, 2019, 317, 591-609.	2.5	10
34	Analysis of Neptuneâ€™s 2017 bright equatorial storm. Icarus, 2019, 321, 324-345.	2.5	25
35	A New Dark Vortex on Neptune. Astronomical Journal, 2018, 155, 117.	4.7	22
36	A planetary-scale disturbance in a long living three vortex coupled system in Saturn's atmosphere. Icarus, 2018, 302, 499-513.	2.5	14

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37	VESPA: A community-driven Virtual Observatory in Planetary Science. Planetary and Space Science, 2018, 150, 65-85.	1.7	28
38	The Planetary Virtual Observatory and Laboratory (PVOL) and its integration into the Virtual European Solar and Planetary Access (VESPA). Planetary and Space Science, 2018, 150, 22-35.	1.7	25
39	Virtual Planetary Space Weather Services offered by the Europlanet H2020 Research Infrastructure. Planetary and Space Science, 2018, 150, 50-59.	1.7	13
40	Scientific rationale for Uranus and Neptune in situ explorations. Planetary and Space Science, 2018, 155, 12-40.	1.7	69
41	Limb clouds and dust on Mars from images obtained by the Visual Monitoring Camera (VMC) onboard Mars Express. Icarus, 2018, 299, 194-205.	2.5	23
42	A systematic search of sudden pressure drops on Gale crater during two Martian years derived from MSL/REMS data. Icarus, 2018, 299, 308-330.	2.5	33
43	Nightside Winds at the Lower Clouds of Venus with Akatsuki/IR2: Longitudinal, Local Time, and Decadal Variations from Comparison with Previous Measurements. Astrophysical Journal, Supplement Series, 2018, 239, 29.	7.7	21
44	A Seasonally Recurrent Annular Cyclone in Mars Northern Latitudes and Observations of a Companion Vortex. Journal of Geophysical Research E: Planets, 2018, 123, 3020-3034.	3.6	11
45	Detectability of possible space weather effects on Mars upper atmosphere and meteor impacts in Jupiter and Saturn with small telescopes. Journal of Space Weather and Space Climate, 2018, 8, A57.	3.3	2
46	Seasonal Deposition and Lifting of Dust on Mars as Observed by the Curiosity Rover. Scientific Reports, 2018, 8, 17576.	3.3	36
47	The Rich Dynamics of Jupiterâ€™s Great Red Spot from JunoCam: Juno Images. Astronomical Journal, 2018, 156, 162.	4.7	19
48	Small impacts on the giant planet Jupiter. Astronomy and Astrophysics, 2018, 617, A68.	5.1	18
49	A New, Long-lived, Jupiter Mesoscale Wave Observed at Visible Wavelengths. Astronomical Journal, 2018, 156, 79.	4.7	14
50	Jupiterâ€™s Mesoscale Waves Observed at 5 Î¼m by Ground-based Observations and Juno JIRAM. Astronomical Journal, 2018, 156, 67.	4.7	17
51	Neptune long-lived atmospheric features in 2013â€“2015 from small (28-cm) to large (10-m) telescopes. Icarus, 2017, 295, 89-109.	2.5	21
52	Jupiter cloud morphology and zonal winds from groundâ€based observations before and during Juno's first perijove. Geophysical Research Letters, 2017, 44, 4669-4678.	4.0	21
53	A planetaryâ€scale disturbance in the most intense Jovian atmospheric jet from JunoCam and groundâ€based observations. Geophysical Research Letters, 2017, 44, 4679-4686.	4.0	35
54	Venus's winds and temperatures during the MESSENGER's flyby: An approximation to a threeâ€dimensional instantaneous state of the atmosphere. Geophysical Research Letters, 2017, 44, 3907-3915.	4.0	18

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55	The size, shape, density and ring of the dwarf planet Haumea from a stellar occultation. Nature, 2017, 550, 219-223.	27.8	179
56	Stationary waves and slowly moving features in the night upper clouds of Venus. Nature Astronomy, 2017, 1, .	10.1	35
57	Temporal and spatial variations of the absolute reflectivity of Jupiter and Saturn from 0.38 to 1.7Î¼m with PlanetCam-UPV/EHU. Astronomy and Astrophysics, 2017, 607, A72.	5.1	13
58	Interferometry of binary stars using polymer optical fibres. European Journal of Physics, 2017, 38, 045704.	0.6	3
59	Teaching stellar interferometry with polymer optical fibers. , 2017, , .		0
60	PlanetCam UPV/EHU: A Two-channel Lucky Imaging Camera for Solar System Studies in the Spectral Range 0.38â€“1.7Î¼m. Publications of the Astronomical Society of the Pacific, 2016, 128, 035002.	3.1	23
61	Giant Planet Observations with the James Webb Space Telescope. Publications of the Astronomical Society of the Pacific, 2016, 128, 018005.	3.1	29
62	Potential vorticity of the south polar vortex of Venus. Journal of Geophysical Research E: Planets, 2016, 121, 574-593.	3.6	6
63	VENUS CLOUD MORPHOLOGY AND MOTIONS FROM GROUND-BASED IMAGES AT THE TIME OF THE AKATSUKI ORBIT INSERTION^{â^—}. Astrophysical Journal Letters, 2016, 833, L7.	8.3	16
64	An enduring rapidly moving storm as a guide to Saturnâ€™s Equatorial jetâ€™s complex structure. Nature Communications, 2016, 7, 13262.	12.8	21
65	The Hera Saturn entry probe mission. Planetary and Space Science, 2016, 130, 80-103.	1.7	26
66	Spatial distribution of jovian clouds, hazes and colors from Cassini ISS multi-spectral images. Icarus, 2016, 267, 34-50.	2.5	9
67	The EChO science case. Experimental Astronomy, 2015, 40, 329-391.	3.7	31
68	Dynamics of Saturn's polar regions. Journal of Geophysical Research E: Planets, 2015, 120, 155-176.	3.6	40
69	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
70	Instantaneous three-dimensional thermal structure of the South Polar Vortex of Venus. Icarus, 2015, 245, 16-31.	2.5	18
71	Instrumental methods for professional and amateur collaborations in planetary astronomy. Experimental Astronomy, 2014, 38, 91-191.	3.7	47
72	Scientific rationale for Saturn×³s in situ exploration. Planetary and Space Science, 2014, 104, 29-47.	1.7	49

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73	The Aula EspaZio Gela and the Master of Space Science and Technology in the Universidad del PaÃs Vasco (University of the Basque Country). European Journal of Engineering Education, 2014, 39, 518-526.	2.3	16
74	The longâ€term steady motion of Saturn's hexagon and the stability of its enclosed jet stream under seasonal changes. Geophysical Research Letters, 2014, 41, 1425-1431.	4.0	43
75	A daylight experiment for teaching stellar interferometry. American Journal of Physics, 2014, 82, 649-653.	0.7	10
76	A model of scattered thermal radiation for Venus from 3 to. Planetary and Space Science, 2013, 81, 65-73.	1.7	11
77	Atmospheric dynamics of Saturnâ€™s 2010 giant storm. Nature Geoscience, 2013, 6, 525-529.	12.9	26
78	Limb imaging of the Venus O₂ visible nightglow with the Venus Monitoring Camera. Geophysical Research Letters, 2013, 40, 2539-2543.	4.0	7
79	A chaotic long-lived vortex at the southern pole of Venus. Nature Geoscience, 2013, 6, 254-257.	12.9	32
80	Impact flux on Jupiter: From superbolides to large-scale collisions. Astronomy and Astrophysics, 2013, 560, A55.	5.1	29
81	Colors of Jupiter's large anticyclones and the interaction of a Tropical Red Oval with the Great Red Spot in 2008. Journal of Geophysical Research E: Planets, 2013, 118, 2537-2557.	3.6	15
82	Jupiterâ€™s zonal winds and their variability studied with small-size telescopes. Astronomy and Astrophysics, 2013, 554, A74.	5.1	14
83	PlanetCam UPV/EHU: a simultaneous visible and near infrared lucky-imaging camera to study solar system objects. , 2012, , .		4
84	EChO. Experimental Astronomy, 2012, 34, 311-353.	3.7	98
85	Ground-based observations of the long-term evolution and death of Saturnâ€™s 2010 Great White Spot. Icarus, 2012, 220, 561-576.	2.5	36
86	Solar migrating atmospheric tides in the winds of the polar region of Venus. Icarus, 2012, 220, 958-970.	2.5	28
87	Assessing the long-term variability of Venus winds at cloud level from VIRTISâ€“Venus Express. Icarus, 2012, 217, 585-598.	2.5	67
88	Episodic bright and dark spots on Uranus. Icarus, 2012, 220, 6-22.	2.5	39
89	Long-term evolution of the aerosol debris cloud produced by the 2009 impact on Jupiter. Icarus, 2011, 214, 462-476.	2.5	13
90	Saturnâ€™s zonal wind profile in 2004â€“2009 from Cassini ISS images and its long-term variability. Icarus, 2011, 215, 62-74.	2.5	88

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91	The atmospheric influence, size and possible asteroidal nature of the July 2009 Jupiter impactor. Icarus, 2011, 211, 587-602.	2.5	29
92	Dynamics of Jupiterâ€™s equatorial region at cloud top level from Cassini and HST images. Icarus, 2011, 211, 1242-1257.	2.5	24
93	Thermal Structure and Dynamics of Saturnâ€™s Northern Springtime Disturbance. Science, 2011, 332, 1413-1417.	12.6	75
94	Deep winds beneath Saturnâ€™s upper clouds from a seasonal long-lived planetary-scale storm. Nature, 2011, 475, 71-74.	27.8	98
95	The science of EChO. Proceedings of the International Astronomical Union, 2010, 6, 359-370.	0.0	5
96	JUPITER AFTER THE 2009 IMPACT: HUBBLE SPACE TELESCOPE IMAGING OF THE IMPACT-GENERATED DEBRIS AND ITS TEMPORAL EVOLUTION. Astrophysical Journal Letters, 2010, 715, L150-L154.	8.3	36
97	FIRST EARTH-BASED DETECTION OF A SUPERBOLIDE ON JUPITER. Astrophysical Journal Letters, 2010, 721, L129-L133.	8.3	28
98	A long-lived cyclone in Saturnâ€™s atmosphere: Observations and models. Icarus, 2010, 209, 665-681.	2.5	17
99	The Planetary Laboratory for Image Analysis (PLIA). Advances in Space Research, 2010, 46, 1120-1138.	2.6	37
100	The international outer planets watch atmospheres node database of giant-planet images. Planetary and Space Science, 2010, 58, 1152-1159.	1.7	40
101	A strong high altitude narrow jet detected at Saturn's equator. Geophysical Research Letters, 2010, 37, .	4.0	20
102	THE IMPACT OF A LARGE OBJECT ON JUPITER IN 2009 JULY. Astrophysical Journal Letters, 2010, 715, L155-L159.	8.3	47
103	Dynamics and Clouds in Jupiter Equatorial Zone. Thirty Years of Astronomical Discovery With UKIRT, 2010, , 449-449.	0.3	0
104	Venus Spectrophotometry During the MESSENGER Mission Fly-By. Thirty Years of Astronomical Discovery With UKIRT, 2010, , 455-455.	0.3	0
105	The jovian anticyclone BAI. Motions and interaction with the GRS from observations and non-linear simulations. Icarus, 2009, 203, 486-498.	2.5	26
106	The jovian anticyclone BAIII. Aerosol properties and color change. Icarus, 2009, 203, 516-530.	2.5	29
107	Kronos: exploring the depths of Saturn with probes and remote sensing through an international mission. Experimental Astronomy, 2009, 23, 947-976.	3.7	10
108	Vertical shears in Saturn's eastward jets at cloud level. Icarus, 2009, 201, 818-820.	2.5	18

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109	Gravity waves in Jupiter's equatorial clouds observed by the Galileo orbiter. Icarus, 2009, 202, 358-360.	2.5	18
110	The jovian anticyclone BAII. Circulation and interaction with the zonal jets. Icarus, 2009, 203, 499-515.	2.5	54
111	Jupiter's polar clouds and waves from Cassini and HST images: 1993â€“2006. Icarus, 2008, 194, 173-185.	2.5	31
112	Depth of a strong jovian jet from a planetary-scale disturbance driven by storms. Nature, 2008, 451, 437-440.	27.8	82
113	Distribution of the O₂ infrared nightglow observed with VIRTIS on board Venus Express. Geophysical Research Letters, 2008, 35, .	4.0	50
114	Variable winds on Venus mapped in three dimensions. Geophysical Research Letters, 2008, 35, .	4.0	119
115	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
116	Characterization of mesoscale gravity waves in the upper and lower clouds of Venus from VEXâ€VIRTIS images. Journal of Geophysical Research, 2008, 113, .	3.3	60
117	The three-dimensional structure of Saturn's equatorial jet at cloud level. Icarus, 2007, 187, 510-519.	2.5	37
118	A reanalysis of Venus winds at two cloud levels from Galileo SSI images. Icarus, 2007, 190, 469-477.	2.5	60
119	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
120	A dynamic upper atmosphere of Venus as revealed by VIRTIS on Venus Express. Nature, 2007, 450, 641-645.	27.8	95
121	South-polar features on Venus similar to those near the north pole. Nature, 2007, 450, 637-640.	27.8	110
122	Cloud brightness distribution and turbulence in Venus using Galileo violet images. Icarus, 2007, 188, 305-314.	2.5	22
123	Numerical models of Saturn's long-lived anticyclones. Icarus, 2007, 191, 665-677.	2.5	20
124	Two Years of Saturn's Exploration by the Cassini Spacecraft: Atmospheric Studies. , 2007, , 303-310.		0
125	The composition of Jupiter: sign of a (relatively) late formation in a chemically evolved protosolar disc. Monthly Notices of the Royal Astronomical Society: Letters, 2006, 367, L47-L51.	3.3	122
126	Methane storms on Saturn's moon Titan. Nature, 2006, 442, 428-431.	27.8	112

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127	A strong vortex in Saturn's South Pole. Icarus, 2006, 184, 524-531.	2.5	46
128	MOIST CONVECTIVE STORMS IN THE ATMOSPHERES OF JUPITER AND SATURN Atmospheric storms in Jupiter and Saturn. , 2006, , 211-220.		1
129	Evolution of protoplanetary disks: constraints from DMÂTauri and GMÂAurigae. Astronomy and Astrophysics, 2005, 442, 703-725.	5.1	239
130	Saturn's cloud morphology and zonal winds before the Cassini encounter. Icarus, 2004, 170, 519-523.	2.5	45
131	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
132	Clouds in planetary atmospheres: A useful application of the Clausiusâ€“Clapeyron equation. American Journal of Physics, 2004, 72, 767-774.	0.7	57
133	Evolution of the Protosolar Nebula and Formation of the Giant Planets. Space Science Reviews, 2003, 106, 105-120.	8.1	13
134	A strong decrease in Saturn's equatorial jet at cloud level. Nature, 2003, 423, 623-625.	27.8	74
135	Constraining Theory and Modelling of Protoplanetary Discs. , 2003, , 281-284.		0
136	Evolution of the Protosolar Nebula and Formation of the Giant Planets. Space Sciences Series of ISSI, 2003, , 105-120.	0.0	1
137	The Role of Large Scale Jovian Storms in the Energy Balance of Jupiter. , 2003, , 369-372.		0
138	A model for large-scale convective storms in Jupiter. Journal of Geophysical Research, 2002, 107, 5-1.	3.3	39
139	A Three-Dimensional Model of Moist Convection for the Giant Planets: The Jupiter Case. Icarus, 2001, 151, 257-274.	2.5	51
140	Observations of Interactions between Giant Vortices in the Atmosphere of Jupiter: 1997â€“2000. , 2001, , 261-264.		0
141	A theoretical study of parcel stability and cloud distribution in a Jovian hot spot. Planetary and Space Science, 1999, 47, 1263-1275.	1.7	7
142	Interaction of Jovian White Ovals BC and DE in 1998 from Earth-Based Observations in the Visual Range. Icarus, 1999, 142, 116-124.	2.5	36
143	An Overview of Saturn's Equatorial Storms: 1990 - 1997. Astrophysics and Space Science, 1998, 263, 351-354.	1.4	2
144	Long-Term Evolution of Comet SL-9 Impact Features: July 1994â€“September 1996. Icarus, 1998, 131, 341-357.	2.5	17

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145	Dynamics and Interaction between a Large-Scale Vortex and the Great Red Spot in Jupiter. Icarus, 1998, 136, 14-26.	2.5	16
146	Motions in Jovian Hot Spotâ€“Plume Regions Using Voyager Images. Icarus, 1998, 136, 353-357.	2.5	10
147	A system of circumpolar waves in Jupiter's stratosphere. Geophysical Research Letters, 1998, 25, 4043-4046.	4.0	13