Leigh Fletcher

List of Publications by Year
in descending order

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222 papers	7,781 citations	50273 46 h-index	74160 75 g-index
251 all docs	251 docs citations	251 times ranked	3727 citing authors

#	Article	IF	Citations
1	JUpiter ICy moons Explorer (JUICE): An ESA mission to orbit Ganymede and to characterise the Jupiter system. Planetary and Space Science, 2013, 78, 1-21.	1.7	455
2	The NEMESIS planetary atmosphere radiative transfer and retrieval tool. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 1136-1150.	2.3	415
3	A chemical survey of exoplanets with ARIEL. Experimental Astronomy, 2018, 46, 135-209.	3.7	249
4	Phosphine on Jupiter and Saturn from Cassini/CIRS. Icarus, 2009, 202, 543-564.	2.5	153
5	Optimal estimation retrievals of the atmospheric structure and composition of HDâ€ƒ189733b from secondary eclipse spectroscopy. Monthly Notices of the Royal Astronomical Society, 2012, 420, 170-182.	4.4	144
6	Methane and its isotopologues on Saturn from Cassini/CIRS observations. Icarus, 2009, 199, 351-367.	2.5	143
7	Oxygen compounds in Titan's stratosphere as observed by Cassini CIRS. Icarus, 2007, 186, 354-363.	2.5	127
8	Vertical profiles of HCN, HC3N, and C2H2 in Titan's atmosphere derived from Cassini/CIRS data. Icarus, 2007, 186, 364-384.	2.5	121
9	A Gemini ground-based transmission spectrum of WASP-29b: a featureless spectrum from 515 to 720Ânm. Monthly Notices of the Royal Astronomical Society, 2013, 428, 3680-3692.	4.4	119
10	The optical transmission spectrum of the hot Jupiter HAT-P-32b: clouds explain the absence of broad spectral features?. Monthly Notices of the Royal Astronomical Society, 2013, 436, 2974-2988.	4.4	109
11	Latitudinal variations of HCN, HC3N, and C2N2 in Titan's stratosphere derived from Cassini CIRS data. Icarus, 2006, 181, 243-255.	2.5	105
12	Temperature and Composition of Saturn's Polar Hot Spots and Hexagon. Science, 2008, 319, 79-81.	12.6	103
13	Transit spectroscopy with James Webb Space Telescope: systematics, starspots and stitching. Monthly Notices of the Royal Astronomical Society, 2015, 448, 2546-2561.	4.4	99
14	Deep winds beneath Saturnâ€™s upper clouds from a seasonal long-lived planetary-scale storm. Nature, 2011, 475, 71-74.	27.8	98
15	EChO. Experimental Astronomy, 2012, 34, 311-353.	3.7	98
16	Characteristics of Titan's stratospheric aerosols and condensate clouds from Cassini CIRS far-infrared spectra. Icarus, 2007, 191, 223-235.	2.5	95
17	Mid-infrared mapping of Jupiterâ€™s temperatures, aerosol opacity and chemical distributions with IRTF/TEXES. Icarus, 2016, 278, 128-161.	2.5	89
18	Saturn's north polar cyclone and hexagon at depth revealed by Cassini/VIMS. Planetary and Space Science, 2009, 57, 1671-1681.	1.7	85

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19	Saturnâ€™s tropospheric composition and clouds from Cassini/VIMS 4.6â€“5.1Î¼m nightside spectroscopy. Icarus, 2011, 214, 510-533.	2.5	84
20	Depth of a strong jovian jet from a planetary-scale disturbance driven by storms. Nature, 2008, 451, 437-440.	27.8	82
21	Characterising Saturn's vertical temperature structure from Cassini/CIRS. Icarus, 2007, 189, 457-478.	2.5	80
22	Semi-annual oscillations in Saturnâ€™s low-latitude stratospheric temperatures. Nature, 2008, 453, 196-199.	27.8	77
23	Hydrogen Dimers in Giant-planet Infrared Spectra. Astrophysical Journal, Supplement Series, 2018, 235, 24.	7.7	77
24	DETERMINATION OF THE MINIMUM MASSES OF HEAVY ELEMENTS IN THE ENVELOPES OF JUPITER AND SATURN. Astrophysical Journal, 2009, 696, 1348-1354.	4.5	76
25	Thermal Structure and Dynamics of Saturnâ€™s Northern Springtime Disturbance. Science, 2011, 332, 1413-1417.	12.6	75
26	CLOUDS ON THE HOT JUPITER HD189733b: CONSTRAINTS FROM THE REFLECTION SPECTRUM. Astrophysical Journal, 2014, 786, 154.	4.5	74
27	Neptune's atmospheric composition from AKARI infrared spectroscopy. Astronomy and Astrophysics, 2010, 514, A17.	5.1	73
28	Detection of hydrogen sulfide above the clouds in Uranusâ€™s atmosphere. Nature Astronomy, 2018, 2, 420-427.	10.1	71
29	Scientific rationale for Uranus and Neptune in situ explorations. Planetary and Space Science, 2018, 155, 12-40.	1.7	69
30	Mapping potential vorticity dynamics on saturn: Zonal mean circulation from Cassini and Voyager data. Planetary and Space Science, 2009, 57, 1682-1698.	1.7	68
31	Telling twins apart: exo-Earths and Venuses with transit spectroscopy. Monthly Notices of the Royal Astronomical Society, 2016, 458, 2657-2666.	4.4	67
32	Global and temporal variations in hydrocarbons and nitriles in Titan's stratosphere for northern winter observed by Cassini/CIRS. Icarus, 2008, 193, 595-611.	2.5	65
33	Neptuneâ€™s global circulation deduced from multi-wavelength observations. Icarus, 2014, 237, 211-238.	2.5	64
34	Seasonal change on Saturn from Cassini/CIRS observations, 2004â€“2009. Icarus, 2010, 208, 337-352.	2.5	63
35	The origin and evolution of Saturnâ€™s 2011â€“2012 stratospheric vortex. Icarus, 2012, 221, 560-586.	2.5	63
36	Constraining the atmosphere of GJ 1214b using an optimal estimation technique. Monthly Notices of the Royal Astronomical Society, 2013, 434, 2616-2628.	4.4	61

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37	Mid-infrared spectroscopy of Uranus from the Spitzer Infrared Spectrometer: 1. Determination of the mean temperature structure of the upper troposphere and stratosphere. Icarus, 2014, 243, 494-513.	2.5	56
38	The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets. Planetary and Space Science, 2014, 104, 122-140.	1.7	56
39	Retrievals of atmospheric variables on the gas giants from ground-based mid-infrared imaging. Icarus, 2009, 200, 154-175.	2.5	54
40	Mid-infrared spectroscopy of Uranus from the Spitzer infrared spectrometer: 2. Determination of the mean composition of the upper troposphere and stratosphere. Icarus, 2014, 243, 471-493.	2.5	53
41	The first submillimeter observation of CO in the stratosphere of Uranus. Astronomy and Astrophysics, 2014, 562, A33.	5.1	52
42	Dynamics of Saturn's South Polar Vortex. Science, 2008, 319, 1801-1801.	12.6	50
43	Saturn's south polar vortex compared to other large vortices in the Solar System. Icarus, 2009, 202, 240-248.	2.5	50
44	Thermal structure and composition of Jupiterâ€™s Great Red Spot from high-resolution thermal imaging. Icarus, 2010, 208, 306-328.	2.5	50
45	Less absorbed solar energy and more internal heat for Jupiter. Nature Communications, 2018, 9, 3709.	12.8	50
46	Scientific rationale for Saturn×³s in situ exploration. Planetary and Space Science, 2014, 104, 29-47.	1.7	49
47	Neptune at summer solstice: Zonal mean temperatures from ground-based observations, 2003â€“2007. Icarus, 2014, 231, 146-167.	2.5	48
48	THE IMPACT OF A LARGE OBJECT ON JUPITER IN 2009 JULY. Astrophysical Journal Letters, 2010, 715, L155-L159.	8.3	47
49	Instrumental methods for professional and amateur collaborations in planetary astronomy. Experimental Astronomy, 2014, 38, 91-191.	3.7	47
50	Probable detection of hydrogen sulphide (H2S) in Neptuneâ€™s atmosphere. Icarus, 2019, 321, 550-563.	2.5	46
51	How Well Do We Understand the Belt/Zone Circulation of Giant Planet Atmospheres?. Space Science Reviews, 2020, 216, 30.	8.1	45
52	Uranus Pathfinder: exploring the origins and evolution of Ice Giant planets. Experimental Astronomy, 2012, 33, 753-791.	3.7	44
53	The origin of nitrogen on Jupiter and Saturn from the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si70.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>15</mml:mn></mml:mrow></mml:msup></mml:mrow></mml:math>N/<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si71.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>14</mml:mn></mml:	2.5	44
54	Water and Volatiles in the Outer Solar System. Space Science Reviews, 2017, 212, 835-875.	8.1	44

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55	The application of new methane line absorption data to Gemini-N/NIFS and KPNO/FTS observations of Uranusâ€™ near-infrared spectrum. Icarus, 2012, 220, 369-382.	2.5	43
56	Moist convection and the 2010â€“2011 revival of Jupiterâ€™s South Equatorial Belt. Icarus, 2017, 286, 94-117.	2.5	40
57	Seasonal stratospheric photochemistry on Uranus and Neptune. Icarus, 2018, 307, 124-145.	2.5	40
58	Jupiterâ€™s ammonia distribution derived from VLA maps at 3â€“37ÂGHz. Icarus, 2019, 322, 168-191.	2.5	40
59	On the potential of the EChO mission to characterize gas giant atmospheres. Monthly Notices of the Royal Astronomical Society, 2013, 430, 1188-1207.	4.4	39
60	Ideas for Citizen Science in Astronomy. Annual Review of Astronomy and Astrophysics, 2015, 53, 247-278.	24.3	39
61	Ice Giant Systems: The scientific potential of orbital missions to Uranus and Neptune. Planetary and Space Science, 2020, 191, 105030.	1.7	39
62	Seasonal evolution of Saturnâ€™s polar temperatures and composition. Icarus, 2015, 250, 131-153.	2.5	38
63	OSS (Outer Solar System): a fundamental and planetary physics mission to Neptune, Triton and the Kuiper Belt. Experimental Astronomy, 2012, 34, 203-242.	3.7	37
64	Disruption of Saturnâ€™s quasi-periodic equatorial oscillation by the great northern storm. Nature Astronomy, 2017, 1, 765-770.	10.1	37
65	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
66	Seasonal variations of temperature, acetylene and ethane in Saturnâ€™s atmosphere from 2005 to 2010, as observed by Cassini-CIRS. Icarus, 2013, 225, 257-271.	2.5	36
67	A hexagon in Saturnâ€™s northern stratosphere surrounding the emerging summertime polar vortex. Nature Communications, 2018, 9, 3564.	12.8	36
68	The meridional phosphine distribution in Saturn's upper troposphere from Cassini/CIRS observations. Icarus, 2007, 188, 72-88.	2.5	35
69	Meridional distribution of CH3C2H and C4H2 in Saturnâ€™s stratosphere from CIRS/Cassini limb and nadir observations. Icarus, 2010, 209, 682-695.	2.5	35
70	Jovian temperature and cloud variability during the 2009â€“2010 fade of the South Equatorial Belt. Icarus, 2011, 213, 564-580.	2.5	34
71	Neptune and Triton: Essential pieces of the Solar System puzzle. Planetary and Space Science, 2014, 104, 108-121.	1.7	34
72	CHANGING CHARACTERISTICS OF JUPITER'S LITTLE RED SPOT. Astronomical Journal, 2008, 135, 2446-2452.	4.7	33

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73	Saturn's emitted power. Journal of Geophysical Research, 2010, 115, .	3.3	33
74	A multi-wavelength study of the 2009 impact on Jupiter: Comparison of high resolution images from Gemini, Keck and HST. Icarus, 2010, 210, 722-741.	2.5	32
75	CONSTRAINING THE ATMOSPHERIC COMPOSITION OF THE DAY-NIGHT TERMINATORS OF HD 189733b: ATMOSPHERIC RETRIEVAL WITH AEROSOLS. Astrophysical Journal, 2014, 789, 14.	4.5	32
76	Cloud structure and composition of Jupiterâ€™s troposphere from 5-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si8.gif" overflow="scroll"><mml:mrow><mml:mi mathvariant="normal">Î¼</mml:mi></mml:mrow></mml:math>m Cassini VIMS spectroscopy. Icarus, 2015, 257, 457-470.	2.5	32
77	Seasonal variability of Saturnâ€™s tropospheric temperatures, winds and para-H2 from Cassini far-IR spectroscopy. Icarus, 2016, 264, 137-159.	2.5	32
78	ELUSIVE ETHYLENE DETECTED IN SATURN'S NORTHERN STORM REGION. Astrophysical Journal, 2012, 760, 24.	4.5	31
79	The EChO science case. Experimental Astronomy, 2015, 40, 329-391.	3.7	31
80	Meridional variations in stratospheric acetylene and ethane in the southern hemisphere of the saturnian atmosphere as determined from Cassini/CIRS measurements. Icarus, 2007, 190, 556-572.	2.5	30
81	Sub-millimetre spectroscopy of Saturnâ€™s trace gases fromHerschel/SPIRE. Astronomy and Astrophysics, 2012, 539, A44.	5.1	30
82	New Observations and Modeling of Jupiter's Quasiâ€Quadrennial Oscillation. Journal of Geophysical Research E: Planets, 2017, 122, 2719-2744.	3.6	30
83	Saturn's latitudinal C2H2 and C2H6 abundance profiles from Cassini/CIRS and ground-based observations. Icarus, 2009, 202, 249-259.	2.5	29
84	The atmospheric influence, size and possible asteroidal nature of the July 2009 Jupiter impactor. Icarus, 2011, 211, 587-602.	2.5	29
85	Impact flux on Jupiter: From superbolides to large-scale collisions. Astronomy and Astrophysics, 2013, 560, A55.	5.1	29
86	Giant Planet Observations with the James Webb Space Telescope. Publications of the Astronomical Society of the Pacific, 2016, 128, 018005.	3.1	29
87	FIRST EARTH-BASED DETECTION OF A SUPERBOLIDE ON JUPITER. Astrophysical Journal Letters, 2010, 721, L129-L133.	8.3	28
88	Multispectral imaging observations of Neptuneâ€™s cloud structure with Gemini-North. Icarus, 2011, 216, 141-158.	2.5	28
89	Vertical wind shear in Neptuneâ€™s upper atmosphere explained with a modified thermal wind equation. Icarus, 2018, 311, 317-339.	2.5	27
90	First ALMA Millimeter-wavelength Maps of Jupiter, with a Multiwavelength Study of Convection. Astronomical Journal, 2019, 158, 139.	4.7	27

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91	The Hera Saturn entry probe mission. Planetary and Space Science, 2016, 130, 80-103.	1.7	26
92	Latitudinal variation in the abundance of methane (CH4) above the clouds in Neptune's atmosphere from VLT/MUSE Narrow Field Mode Observations. Icarus, 2019, 331, 69-82.	2.5	26
93	Time variability of Neptuneâ€™s horizontal and vertical cloud structure revealed by VLT/SINFONI and Gemini/NIFS from 2009 to 2013. Icarus, 2016, 271, 418-437.	2.5	25
94	Latitudinal variability in Jupiterâ€™s tropospheric disequilibrium species: GeH4, AsH3 and PH3. Icarus, 2017, 289, 254-269.	2.5	25
95	High-resolution UV/Optical/IR Imaging of Jupiter in 2016â€“2019. Astrophysical Journal, Supplement Series, 2020, 247, 58.	7.7	25
96	MEANDERING SHALLOW ATMOSPHERIC JET AS A MODEL OF SATURNÊ¼S NORTH-POLAR HEXAGON. Astrophysical Journal Letters, 2015, 806, L18.	8.3	24
97	Atmospheric chemistry on Uranus and Neptune. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190477.	3.4	24
98	Evolution of stratospheric chemistry in the Saturn storm beacon region. Icarus, 2015, 261, 149-168.	2.5	23
99	Microwave observations reveal the deep extent and structure of Jupiterâ€™s atmospheric vortices. Science, 2021, 374, 968-972.	12.6	23
100	Strong jet and a new thermal wave in Saturn's equatorial stratosphere. Geophysical Research Letters, 2008, 35, .	4.0	22
101	NEW INSIGHTS ON SATURN'S FORMATION FROM ITS NITROGEN ISOTOPIC COMPOSITION. Astrophysical Journal Letters, 2014, 796, L28.	8.3	22
102	Line-by-line analysis of Neptuneâ€™s near-IR spectrum observed with Gemini/NIFS and VLT/CRIRES. Icarus, 2014, 227, 37-48.	2.5	22
103	Thermal imaging of Uranus: Upper-tropospheric temperatures one season after Voyager. Icarus, 2015, 260, 94-102.	2.5	22
104	Jupiterâ€™s auroral-related stratospheric heating and chemistry I: Analysis of Voyager-IRIS and Cassini-CIRS spectra. Icarus, 2017, 292, 182-207.	2.5	22
105	Ice Giant Circulation Patterns: Implications for Atmospheric Probes. Space Science Reviews, 2020, 216, 21.	8.1	22
106	Cycles of activity in the Jovian atmosphere. Geophysical Research Letters, 2017, 44, 4725-4729.	4.0	21
107	Jupiter's North Equatorial Belt expansion and thermal wave activity ahead of Juno's arrival. Geophysical Research Letters, 2017, 44, 7140-7148.	4.0	21
108	Jupiterâ€™s auroral-related stratospheric heating and chemistry II: Analysis of IRTF-TEXES spectra measured in December 2014. Icarus, 2018, 300, 305-326.	2.5	21

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109	Colour and tropospheric cloud structure of Jupiter from MUSE/VLT: Retrieving a universal chromophore. Icarus, 2020, 338, 113589.	2.5	21
110	Uranusâ€™ cloud particle properties and latitudinal methane variation from IRTF SpeX observations. Icarus, 2013, 223, 684-698.	2.5	20
111	CHANGES TO SATURN'S ZONAL-MEAN TROPOSPHERIC THERMAL STRUCTURE AFTER THE 2010-2011 NORTHERN HEMISPHERE STORM. Astrophysical Journal, 2014, 786, 92.	4.5	20
112	From Voyager-IRIS to Cassini-CIRS: Interannual variability in Saturnâ€™s stratosphere?. Icarus, 2014, 233, 281-292.	2.5	20
113	Line positions and intensities of the phosphine (PH3) Pentad near 4.5Î¼m. Journal of Molecular Spectroscopy, 2014, 298, 11-23.	1.2	20
114	Assessing the long-term variability of acetylene and ethane in the stratosphere of Jupiter. Icarus, 2018, 305, 301-313.	2.5	20
115	Further seasonal changes in Uranusâ€™ cloud structure observed by Gemini-North and UKIRT. Icarus, 2012, 218, 47-55.	2.5	19
116	The transit spectra of Earth and Jupiter. Icarus, 2014, 242, 172-187.	2.5	19
117	Equatorial Oscillation and Planetary Wave Activity in Saturn's Stratosphere Through the Cassini Epoch. Journal of Geophysical Research E: Planets, 2018, 123, 246-261.	3.6	19
118	Infrared Characterization of Jupiter's Equatorial Disturbance Cycle. Geophysical Research Letters, 2018, 45, 10,987.	4.0	19
119	Rotational Light Curves of Jupiter from Ultraviolet to Mid-infrared and Implications for Brown Dwarfs and Exoplanets. Astronomical Journal, 2019, 157, 89.	4.7	19
120	The aftermath of the July 2009 impact on Jupiter: Ammonia, temperatures and particulates from Gemini thermal infrared spectroscopy. Icarus, 2011, 211, 568-586.	2.5	18
121	3D Modeling of interactions between Jupiterâ€™s ammonia clouds and large anticyclones. Icarus, 2014, 232, 141-156.	2.5	18
122	Reanalysis of Uranusâ€™ cloud scattering properties from IRTF/SpeX observations using a self-consistent scattering cloud retrieval scheme. Icarus, 2015, 250, 462-476.	2.5	18
123	Spectral analysis of Uranusâ€™ 2014 bright storm with VLT/SINFONI. Icarus, 2016, 264, 72-89.	2.5	18
124	Jupiter's auroral-related stratospheric heating and chemistry III: Abundances of C2H4, CH3C2H, C4H2 and C6H6 from Voyager-IRIS and Cassini-CIRS. Icarus, 2019, 328, 176-193.	2.5	18
125	Evidence for Multiple Ferrelâ€Like Cells on Jupiter. Geophysical Research Letters, 2021, 48, e2021GL095651.	4.0	18
126	The depth of Jupiterâ€™s Great Red Spot constrained by Juno gravity overflights. Science, 2021, 374, 964-968.	12.6	18

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127	Hazy Blue Worlds: A Holistic Aerosol Model for Uranus and Neptune, Including Dark Spots. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	18
128	Uranusâ€™ cloud structure and seasonal variability from Gemini-North and UKIRT observations. Icarus, 2011, 212, 339-350.	2.5	17
129	Jupiterâ€™s Mesoscale Waves Observed at 5 Î¼m by Ground-based Observations and Juno JIRAM. Astronomical Journal, 2018, 156, 67.	4.7	17
130	Identification of Jupiterâ€™s magnetic equator through H3+ ionospheric emission. Nature Astronomy, 2018, 2, 773-777.	10.1	17
131	A brightening of Jupiterâ€™s auroral 7.8-Î¼m CH4 emission during a solar-wind compression. Nature Astronomy, 2019, 3, 607-613.	10.1	17
132	Jupiterâ€™s Atmospheric Variability from Long-term Ground-based Observations at 5 Î¼m. Astronomical Journal, 2019, 158, 130.	4.7	17
133	Fluctuations in Jupiterâ€™s equatorial stratospheric oscillation. Nature Astronomy, 2021, 5, 71-77.	10.1	17
134	Jupiter's Temperate Belt/Zone Contrasts Revealed at Depth by Juno Microwave Observations. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006858.	3.6	17
135	Equatorial winds on Saturn and the stratosphericÂoscillation. Nature Geoscience, 2011, 4, 750-752.	12.9	16
136	Latitudinal variation of upper tropospheric NH3 on Saturn derived from Cassini/CIRS far-infrared measurements. Planetary and Space Science, 2012, 73, 347-363.	1.7	16
137	Constraining the depth of Saturnâ€™s zonal winds by measuring thermal and gravitational signals. Icarus, 2014, 239, 260-272.	2.5	16
138	The Deep Composition of Uranus and Neptune from In Situ Exploration and Thermochemical Modeling. Space Science Reviews, 2020, 216, 1.	8.1	16
139	New upper limits for hydrogen halides on Saturn derived from Cassini-CIRS data. Icarus, 2006, 185, 466-475.	2.5	15
140	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
141	D/H Ratios on Saturn and Jupiter from Cassini CIRS. Astronomical Journal, 2017, 154, 178.	4.7	15
142	Jupiterâ€™s para-H 2 distribution from SOFIA/FORCAST and Voyager/IRIS 17â€“37ÂÂµm spectroscopy. Icarus, 2017, 286, 223-240.	2.5	15
143	The H ₃ ⁺ ionosphere of Uranus: decades-long cooling and local-time morphology. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180408.	3.4	15
144	Herschel map of Saturnâ€™s stratospheric water, delivered by the plumes of Enceladus. Astronomy and Astrophysics, 2019, 630, A87.	5.1	15

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145	Uranus in Northern Midspring: Persistent Atmospheric Temperatures and Circulations Inferred from Thermal Imaging. Astronomical Journal, 2020, 159, 45.	4.7	15
146	A New, Long-lived, Jupiter Mesoscale Wave Observed at Visible Wavelengths. Astronomical Journal, 2018, 156, 79.	4.7	14
147	The quest for H$_3^+$ at Neptune: deep burn observations with NASA IRTF iSHELL. Monthly Notices of the Royal Astronomical Society, 2018, 474, 3714-3719.	4.4	14
148	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
149	Jupiterâ€™s stratospheric hydrocarbons and temperatures after theÂJulyÂ2009 impact from VLT infrared spectroscopy. Astronomy and Astrophysics, 2010, 524, A46.	5.1	13
150	Long-term evolution of the aerosol debris cloud produced by the 2009 impact on Jupiter. Icarus, 2011, 214, 462-476.	2.5	13
151	Recovery and characterization of Neptune's near-polar stratospheric hot spot. Planetary and Space Science, 2012, 61, 161-167.	1.7	13
152	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
153	Jupiter's Equatorial Plumes and Hot Spots: Spectral Mapping from Gemini/TEXES and Juno/MWR. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006399.	3.6	13
154	A Review of the in Situ Probe Designs from Recent Ice Giant Mission Concept Studies. Space Science Reviews, 2020, 216, 1.	8.1	13
155	Constraints on the Latitudinal Profile of Jupiter's Deep Jets. Geophysical Research Letters, 2021, 48, e2021GL092912.	4.0	13
156	Ice giant system exploration in the 2020s: an introduction. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190473.	3.4	13
157	Stratospheric aftermath of the 2010 Storm on Saturn as observed by the TEXES instrument. I. Temperature structure. Icarus, 2016, 277, 196-214.	2.5	12
158	Independent evolution of stratospheric temperatures in Jupiter's northern and southern auroral regions from 2014 to 2016. Geophysical Research Letters, 2017, 44, 5345-5354.	4.0	12
159	Ammonia in Jupiter's Troposphere From Highâ€Resolution 5ÂÎ¼m Spectroscopy. Geophysical Research Letters, 2017, 44, 10,838.	4.0	12
160	Angular Dependence and Spatial Distribution of Jupiter's Centimeterâ€Wave Thermal Emission From Juno's Microwave Radiometer. Earth and Space Science, 2020, 7, e2020EA001254.	2.6	12
161	The Case for a New Frontiersâ€“Class Uranus Orbiter: System Science at an Underexplored and Unique World with a Mid-scale Mission. Planetary Science Journal, 2022, 3, 58.	3.6	12
162	Probing Saturnâ€™s tropospheric cloud with Cassini/VIMS. Icarus, 2016, 271, 400-417.	2.5	11

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163	Saturnâ€™s Polar Atmosphere. , 2018, , 337-376.		11
164	Jupiter in the Ultraviolet: Acetylene and Ethane Abundances in the Stratosphere of Jupiter from Cassini Observations between 0.15 and 0.19 Î¼m. Astronomical Journal, 2020, 159, 291.	4.7	11
165	Neptune Odyssey: A Flagship Concept for the Exploration of the Neptuneâ€“Triton System. Planetary Science Journal, 2021, 2, 184.	3.6	11
166	Jupiter's Overturning Circulation: Breaking Waves Take the Place of Solid Boundaries. Geophysical Research Letters, 2021, 48, e2021GL095756.	4.0	11
167	Jupiter's Temperature Structure: A Reassessment of the Voyager Radio Occultation Measurements. Planetary Science Journal, 2022, 3, 159.	3.6	11
168	Line shape parameters of PH3 transitions in the Pentad near 4â€“5Î¼m: Self-broadened widths, shifts, line mixing and speed dependence. Journal of Molecular Spectroscopy, 2014, 302, 17-33.	1.2	10
169	Compositional Mapping of Europa Using MCMC Modeling of Near-IR VLT/SPHERE and Galileo/NIMS Observations. Planetary Science Journal, 2022, 3, 72.	3.6	10
170	Photochemical response to the variation of temperature in the 2011â^’2012 stratospheric vortex of Saturn. Astronomy and Astrophysics, 2015, 580, A55.	5.1	9
171	Detection of H₃⁺auroral emission in Jupiterâ€™s 5-micron window. Astronomy and Astrophysics, 2016, 589, A67.	5.1	9
172	The Great Saturn Storm of 2010â€“2011. , 2018, , 377-416.		9
173	Latitudinal variation of methane mole fraction above clouds in Neptune's atmosphere from VLT/MUSE-NFM: Limb-darkening reanalysis. Icarus, 2021, 357, 114277.	2.5	9
174	Spatial Variations in the Altitude of the CH₄ Homopause at Jupiterâ€™s Mid-to-high Latitudes, as Constrained from IRTF-TEXES Spectra. Planetary Science Journal, 2020, 1, 85.	3.6	9
175	Subseasonal Variation in Neptuneâ€™s Mid-infrared Emission. Planetary Science Journal, 2022, 3, 78.	3.6	9
176	Observations of upper tropospheric acetylene on Saturn: No apparent correlation with 2000km-sized thunderstorms. Planetary and Space Science, 2012, 65, 21-37.	1.7	8
177	A dispersive wave pattern on Jupiterâ€™s fastest retrograde jet at 20Â°S. Icarus, 2016, 277, 354-369.	2.5	8
178	Mapping of Jupiterâ€™s tropospheric NH 3 abundance using ground-based IRTF/TEXES observations at 5â€¯Âµm. Icarus, 2018, 314, 106-120.	2.5	8
179	Saturn's New Ribbons: Cassini Observations of Planetary Waves in Saturn's 42N Atmospheric Jet. Geophysical Research Letters, 2018, 45, 7399-7408.	4.0	7
180	Spitzerâ€™s Solar System studies of asteroids, planets and the zodiacal cloud. Nature Astronomy, 2020, 4, 940-946.	10.1	7

#	Article	IF	Citations
181	A Survey of Smallâ€Scale Waves and Waveâ€Like Phenomena in Jupiter's Atmosphere Detected by JunoCam. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006369.	3.6	7
182	Saturnâ€™s Seasonally Changing Atmosphere. , 2018, , 251-294.		6
183	Potential Vorticity of Saturn's Polar Regions: Seasonality and Instabilities. Journal of Geophysical Research E: Planets, 2019, 124, 186-201.	3.6	6
184	Longitudinal variations in the stratosphere of Uranus from the Spitzer infrared spectrometer. Icarus, 2021, 365, 114506.	2.5	6
185	The science of EChO. Proceedings of the International Astronomical Union, 2010, 6, 359-370.	0.0	5
186	Constraints on Jupiter×³s stratospheric HCl abundance and chlorine cycle from Herschel/HIFI. Planetary and Space Science, 2014, 103, 250-261.	1.7	5
187	Characterization of Mesoscale Waves in the Jupiter NEB by Jupiter InfraRed Auroral Mapper on board Juno. Astronomical Journal, 2018, 156, 246.	4.7	5
188	Constraints on Neptune's haze structure and formation from VLT observations in the H-band. Icarus, 2020, 350, 113808.	2.5	5
189	On the clouds and ammonia in Jupiterâ€™s upper troposphere from Juno JIRAM reflectivity observations. Monthly Notices of the Royal Astronomical Society, 2021, 503, 4892-4907.	4.4	5
190	In Situ exploration of the giant planets. Experimental Astronomy, 2022, 54, 975-1013.	3.7	5
191	Meridional Variations of C₂H₂ in Jupiter's Stratosphere From Juno UVS Observations. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006928.	3.6	5
192	The Effects of Waves on the Meridional Thermal Structure of Jupiterâ€™s Stratosphere. Planetary Science Journal, 2020, 1, 63.	3.6	5
193	Giant Planet Atmospheres: Dynamics and Variability from UV to Near-IR Hubble and Adaptive Optics Imaging. Remote Sensing, 2022, 14, 1518.	4.0	5
194	Exoplanet atmospheres with EChO: spectral retrievals using EChOSim. Experimental Astronomy, 2015, 40, 545-561.	3.7	4
195	Characterizing Temperature and Aerosol Variability During Jupiter's 2006â€“2007 Equatorial Zone Disturbance. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006413.	3.6	4
196	Spatial structure in Neptuneâ€™s 7.90-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e792" altimg="si54.svg"><mml:mi mathvariant="normal">Î¼</mml:mi></mml:math>m stratospheric CH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e797" altimg="si55.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msub></mml:math> emission, as measured by VLT-VISIR. Icarus, 2020, 345, 113748.	2.5	4
197	Ice giant system exploration within ESAâ€™s Voyage 2050. Experimental Astronomy, 2022, 54, 1015-1025.	3.7	4
198	SOFIA Observations of Variability in Jupiter's Para-H₂ Distribution and Subsurface Emission Characteristics of the Galilean Satellites. Planetary Science Journal, 2021, 2, 226.	3.6	4

#	Article	IF	Citations
199	The temporal evolution of the July 2009 Jupiter impact cloud. Planetary and Space Science, 2013, 77, 25-39.	1.7	3
200	Exploring the diversity of Jupiter-class planets. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130064.	3.4	3
201	Galileo probe interpretation indicating a neutrally stable layer in the Jovian troposphere. Geophysical Research Letters, 2017, 44, 4008-4017.	4.0	3
202	Thermal Emission From Saturn's Polar Cyclones. Geophysical Research Letters, 2018, 45, 5312-5319.	4.0	3
203	Future Missions to the Giant Planets that Can Advance Atmospheric Science Objectives. Space Science Reviews, 2020, 216, 1.	8.1	3
204	Residual Study: Testing Jupiter Atmosphere Models Against Juno MWR Observations. Earth and Space Science, 2020, 7, e2020EA001229.	2.6	3
205	Revealing giant planet interiors beneath the cloudy veil. Nature Communications, 2020, 11, 1555.	12.8	3
206	The Long wave (11â€“16ÂÎ¼m) spectrograph for the EChO M3 Mission Candidate study. Experimental Astronomy, 2015, 40, 801-811.	3.7	2
207	Saturn's seasonal atmosphere. Astronomy and Geophysics, 2017, 58, 4.26-4.30.	0.2	2
208	Proâ€“am collaborations improve views of Jupiter. Astronomy and Geophysics, 2018, 59, 4.24-4.31.	0.2	2
209	Thermal Emission from the Uranian Ring System. Astronomical Journal, 2019, 158, 47.	4.7	2
210	Ice Giant Atmospheric Science. , 2021, 53, .		2
211	Prospects to study the Ice Giants with the ngVLA. , 2021, 53, .		1
212	The science enabled by a dedicated solar system space telescope. , 2021, 53, .		1
213	Refining Saturnâ€™s deuterium-hydrogen ratio via IRTF/TEXES spectroscopy. Astronomy and Astrophysics, 2021, 653, A66.	5.1	1
214	Potential for stratospheric Doppler windspeed measurements of Jupiter by sub-millimetre spectroscopy. Planetary and Space Science, 2010, 58, 1489-1499.	1.7	0
215	From spectra to atmospheres: solving the underconstrained retrieval problem for exoplanets. Proceedings of the International Astronomical Union, 2013, 8, 275-276.	0.0	0
216	Stirring up Saturn's poles. Nature Geoscience, 2015, 8, 503-504.	12.9	0

#	Article	IF	Citations
217	Saturnâ€™s big storm. Nature Astronomy, 2017, 1, 583-583.	10.1	0
218	Leigh Fletcherâ€”Vice-Chair, B5 Sub-Commission on Outer Planets and Satellites. Space Research Today, 2018, 201, 5-6.	0.1	0
219	A computational study of hydrogen dimers in giant-planet infrared spectra. Journal of Physics: Conference Series, 2019, 1289, 012010.	0.4	0
220	Meeting report: There's something in the air. Astronomy and Geophysics, 2020, 61, 3.20-3.25.	0.2	0
221	Water and Volatiles in the Outer Solar System. Space Sciences Series of ISSI, 2017, , 191-231.	0.0	0
222	Corrigendum to: Meeting report: There's something in the air. Astronomy and Geophysics, 2020, 61, e1-e1.	0.2	0