Luke E Moore

List of Publications by Year
in descending order

54	1,166	304743	414414
papers	citations	22 h-index	32 g-index

60	60	60	797
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Chemical interactions between Saturnâ€™s atmosphere and its rings. Science, 2018, 362, .	12.6	73
2	Numerical simulations of ion and electron temperatures in the ionosphere of Mars: Multiple ions and diurnal variations. Icarus, 2014, 227, 78-88.	2.5	60
3	Latitudinal variations in Saturn's ionosphere: Cassini measurements and model comparisons. Journal of Geophysical Research, 2010, 115, .	3.3	55
4	Response of Saturn's auroral ionosphere to electron precipitation: Electron density, electron temperature, and electrical conductivity. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	50
5	Magnetosphereâ€“atmosphere coupling at Saturn: 1 â€“ Response of thermosphere and ionosphere to steady state polar forcing. Icarus, 2012, 221, 481-494.	2.5	50
6	Solar primary and secondary ionization at Saturn. Journal of Geophysical Research, 2009, 114, .	3.3	48
7	Cassini radio occultations of Saturn's ionosphere: Model comparisons using a constant water flux. Geophysical Research Letters, 2006, 33, .	4.0	46
8	In situ collection of dust grains falling from Saturnâ€™s rings into its atmosphere. Science, 2018, 362, .	12.6	44
9	Plasma temperatures in Saturn's ionosphere. Journal of Geophysical Research, 2008, 113, .	3.3	41
10	How to process radio occultation data: 1. From time series of frequency residuals to vertical profiles of atmospheric and ionospheric properties. Planetary and Space Science, 2014, 101, 77-88.	1.7	38
11	Saturn ring rain: Model estimates of water influx into Saturnâ€™s atmosphere. Icarus, 2015, 245, 355-366.	2.5	35
12	First Ionospheric Results From the MAVEN Radio Occultation Science Experiment (ROSE). Journal of Geophysical Research: Space Physics, 2018, 123, 4171-4180.	2.4	35
13	Heating of Jupiterâ€™s upper atmosphere above the Great Red Spot. Nature, 2016, 536, 190-192.	27.8	32
14	Are plasma depletions in Saturn's ionosphere a signature of time-dependent water input?. Geophysical Research Letters, 2007, 34, .	4.0	29
15	Conjugate observations of Saturnâ€™s northern and southern <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si22.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mi mathvariant="normal">H</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow><mml:mrow><mml:mo>+</mml:mo></mml:mrow></mml:msubsup></mml:mrow></mml:math> aurorae. Icarus, 2014, 229, 214-220.	2.5	29
16	Models of Saturn's Equatorial Ionosphere Based on In Situ Data From Cassini's Grand Finale. Geophysical Research Letters, 2018, 45, 9398-9407.	4.0	26
17	The MAVEN Radio Occultation Science Experiment (ROSE). Space Science Reviews, 2020, 216, 1.	8.1	26
18	Response of Saturn's ionosphere to solar radiation: Testing parameterizations for thermal electron heating and secondary ionization processes. Planetary and Space Science, 2009, 57, 1699-1705.	1.7	25

#	Article	IF	Citations
19	Material Flux From the Rings of Saturn Into Its Atmosphere. Geophysical Research Letters, 2018, 45, 10,093.	4.0	25
20	Upper Atmosphere and Ionosphere of Saturn. , 2009, , 181-201.		25
21	Day-to-day variability of theElayer. Journal of Geophysical Research, 2006, 111, .	3.3	22
22	Observations of the chemical and thermal response of â€˜ring rainâ€™ on Saturnâ€™s ionosphere. Icarus, 2019, 322, 251-260.	2.5	22
23	The Ion Composition of Saturn's Equatorial Ionosphere as Observed by Cassini. Geophysical Research Letters, 2019, 46, 6315-6321.	4.0	22
24	Peak electron densities in Saturn's ionosphere derived from the low-frequency cutoff of Saturn lightning. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	21
25	Effects of ring shadowing on the detection of electrostatic discharges at Saturn. Geophysical Research Letters, 2005, 32, .	4.0	20
26	Atmospheric Waves and Their Possible Effect on the Thermal Structure of Saturn's Thermosphere. Geophysical Research Letters, 2019, 46, 2372-2380.	4.0	20
27	Ring Shadowing Effects on Saturn's Ionosphere: Implications for Ring Opacity and Plasma Transport. Geophysical Research Letters, 2018, 45, 10,084.	4.0	17
28	Identification of Jupiterâ€™s magnetic equator through H3+ ionospheric emission. Nature Astronomy, 2018, 2, 773-777.	10.1	17
29	Redetection of the Ionospheric Signature of Saturn's â€œRing Rainâ€. Geophysical Research Letters, 2017, 44, 11,762.	4.0	16
30	How to Process Radio Occultation Data: 2. From Time Series of Twoâ€Way, Singleâ€Frequency Frequency Residuals to Vertical Profiles of Ionospheric Properties. Radio Science, 2020, 55, e2019RS007046.	1.6	16
31	Global upper-atmospheric heating on Jupiter by the polar aurorae. Nature, 2021, 596, 54-57.	27.8	16
32	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
33	Variability of Jupiter's IR H₃⁺ aurorae during Juno approach. Geophysical Research Letters, 2017, 44, 4513-4522.	4.0	14
34	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
35	Ground-based observations of Saturnâ€™s auroral ionosphere over three days: Trends in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>H</mml:mtext></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow> temperature, density and emission with Saturn local time and planetary period oscillation. Icarus, 2016, 263, 44-55.	2.5	13
36	Diurnal variation of electron density in Saturnâ€™s ionosphere: Model comparisons with Saturn Electrostatic Discharge (SED) observations. Icarus, 2012, 221, 508-516.	2.5	12

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37	Local-time averaged maps of H ₃ ⁺ emission, temperature and ion winds. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180405.	3.4	11
38	Modelling H ₃ ⁺ in planetary atmospheres: effects of vertical gradients on observed quantities. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20190067.	3.4	10
39	Saturn's Weatherâ€Driven Aurorae Modulate Oscillations in the Magnetic Field and Radio Emissions. Geophysical Research Letters, 2022, 49, .	4.0	9
40	ExoMol line lists â€“ XL. Rovibrational molecular line list for the hydronium ion (H3O+). Monthly Notices of the Royal Astronomical Society, 2020, 497, 2340-2351.	4.4	8
41	Ionospheric contribution to Saturn's inner plasmasphere. Journal of Geophysical Research, 2005, 110, .	3.3	7
42	Comparative aeronomy: Molecular ionospheres at Earth and Mars. Journal of Geophysical Research: Space Physics, 2016, 121, 10,269-10,288.	2.4	7
43	The Great Cold Spot in Jupiter's upper atmosphere. Geophysical Research Letters, 2017, 44, 3000-3008.	4.0	7
44	Longâ€Term Observations and Physical Processes in the Moon's Extended Sodium Tail. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006671.	3.6	7
45	The Rapid Imaging Planetary Spectrograph: Observations of Mercuryâ€™s Sodium Exosphere in Twilight. Planetary Science Journal, 2020, 1, 4.	3.6	5
46	Comparative ionospheres: Terrestrial and giant planets. Icarus, 2018, 303, 34-46.	2.5	4
47	Atmospheric implications of the lack of H 3 + detection at Neptune. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20200100.	3.4	4
48	Saturnâ€™s Ionosphere. , 2018, , 196-223.		3
49	Plasma Transport in Saturn's Lowâ€Latitude Ionosphere: Cassini Data. Journal of Geophysical Research: Space Physics, 2019, 124, 4881-4888.	2.4	3
50	Jupiter's Enigmatic Ionosphere: Electron Density Profiles From the Pioneer, Voyager, and Galileo Radio Occultation Experiments. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	3
51	The Spatial Distribution and Temperature of Mercury's Potassium Exosphere. Planetary Science Journal, 2022, 3, 87.	3.6	3
52	Variability of Jupiter's Main Auroral Emission and Satellite Footprints Observed With HST During the Galileo Era. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	2
53	Quick-look estimates of ionospheric properties from radio occultation data. Advances in Space Research, 2021, 68, 2038-2049.	2.6	1
54	Upper atmospheres of the giant planets. , 0, , 175-200.		0