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	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
2	Saturn's Weatherâ€Driven Aurorae Modulate Oscillations in the Magnetic Field and Radio Emissions. Geophysical Research Letters, 2022, 49, .	4.0	9
3	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
4	The Spatial Distribution and Temperature of Mercury's Potassium Exosphere. Planetary Science Journal, 2022, 3, 87.	3.6	3
5	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
6	Quick-look estimates of ionospheric properties from radio occultation data. Advances in Space Research, 2021, 68, 2038-2049.	2.6	1
7	Global upper-atmospheric heating on Jupiter by the polar aurorae. Nature, 2021, 596, 54-57.	27.8	16
8	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
9	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
10	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
11	The MAVEN Radio Occultation Science Experiment (ROSE). Space Science Reviews, 2020, 216, 1.	8.1	26
12	The Rapid Imaging Planetary Spectrograph: Observations of Mercuryâ€™s Sodium Exosphere in Twilight. Planetary Science Journal, 2020, 1, 4.	3.6	5
13	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
14	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
15	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
16	Plasma Transport in Saturn's Lowâ€Latitude Ionosphere: Cassini Data. Journal of Geophysical Research: Space Physics, 2019, 124, 4881-4888.	2.4	3
17	Atmospheric Waves and Their Possible Effect on the Thermal Structure of Saturn's Thermosphere. Geophysical Research Letters, 2019, 46, 2372-2380.	4.0	20
18	Observations of the chemical and thermal response of â€˜ring rainâ€™ on Saturnâ€™s ionosphere. Icarus, 2019, 322, 251-260.	2.5	22

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19	The Ion Composition of Saturn's Equatorial Ionosphere as Observed by Cassini. Geophysical Research Letters, 2019, 46, 6315-6321.	4.0	22
20	First Ionospheric Results From the MAVEN Radio Occultation Science Experiment (ROSE). Journal of Geophysical Research: Space Physics, 2018, 123, 4171-4180.	2.4	35
21	Comparative ionospheres: Terrestrial and giant planets. Icarus, 2018, 303, 34-46.	2.5	4
22	Saturnâ€™s Ionosphere. , 2018, , 196-223.		3
23	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
24	Chemical interactions between Saturnâ€™s atmosphere and its rings. Science, 2018, 362, .	12.6	73
25	In situ collection of dust grains falling from Saturnâ€™s rings into its atmosphere. Science, 2018, 362, .	12.6	44
26	Ring Shadowing Effects on Saturn's Ionosphere: Implications for Ring Opacity and Plasma Transport. Geophysical Research Letters, 2018, 45, 10,084.	4.0	17
27	Material Flux From the Rings of Saturn Into Its Atmosphere. Geophysical Research Letters, 2018, 45, 10,093.	4.0	25
28	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
29	Identification of Jupiterâ€™s magnetic equator through H3+ ionospheric emission. Nature Astronomy, 2018, 2, 773-777.	10.1	17
30	The Great Cold Spot in Jupiter's upper atmosphere. Geophysical Research Letters, 2017, 44, 3000-3008.	4.0	7
31	Variability of Jupiter's IR H₃⁺ aurorae during Juno approach. Geophysical Research Letters, 2017, 44, 4513-4522.	4.0	14
32	Redetection of the Ionospheric Signature of Saturn's â€œRing Rainâ€• Geophysical Research Letters, 2017, 44, 11,762.	4.0	16
33	Comparative aeronomy: Molecular ionospheres at Earth and Mars. Journal of Geophysical Research: Space Physics, 2016, 121, 10,269-10,288.	2.4	7
34	Heating of Jupiterâ€™s upper atmosphere above the Great Red Spot. Nature, 2016, 536, 190-192.	27.8	32
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><mml:mrow><mml:mo>+</mml:mo></mml:mrow></mml:msubsup></mml:mrow></mml:math> temperature, density and emission with Saturn local time and planetary period oscillation. Icarus, 2016, 263, 44-55.	2.5	18
36	Saturn ring rain: Model estimates of water influx into Saturnâ€™s atmosphere. Icarus, 2015, 245, 355-366.	2.5	35

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37	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
38	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
39	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
40	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
41	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
42	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
43	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
44	Latitudinal variations in Saturn's ionosphere: Cassini measurements and model comparisons. Journal of Geophysical Research, 2010, 115, .	3.3	55
45	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
46	Solar primary and secondary ionization at Saturn. Journal of Geophysical Research, 2009, 114, .	3.3	48
47	Upper Atmosphere and Ionosphere of Saturn. , 2009, , 181-201.		25
48	Plasma temperatures in Saturn's ionosphere. Journal of Geophysical Research, 2008, 113, .	3.3	41
49	Are plasma depletions in Saturn's ionosphere a signature of time-dependent water input?. Geophysical Research Letters, 2007, 34, .	4.0	29
50	Day-to-day variability of theElayer. Journal of Geophysical Research, 2006, 111, .	3.3	22
51	Cassini radio occultations of Saturn's ionosphere: Model comparisons using a constant water flux. Geophysical Research Letters, 2006, 33, .	4.0	46
52	Effects of ring shadowing on the detection of electrostatic discharges at Saturn. Geophysical Research Letters, 2005, 32, .	4.0	20
53	Ionospheric contribution to Saturn's inner plasmasphere. Journal of Geophysical Research, 2005, 110, .	3.3	7
54	Upper atmospheres of the giant planets. , 0, , 175-200.		0