

# Michael Mendillo

## List of Publications by Year in descending order

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120  
papers

4,354  
citations

76326

40  
h-index

123424

61  
g-index

122  
all docs

122  
docs citations

122  
times ranked

2719  
citing authors

#	ARTICLE	IF	CITATIONS
1	The ionosphere of Mars from solar minimum to solar maximum: Dayside electron densities from MAVEN and Mars Global Surveyor radio occultations. <i>Icarus</i> , 2023, 393, 114508.	2.5	7
2	The Martian ionosphere at solar minimum: Empirical model validation using MAVEN ROSE data. <i>Icarus</i> , 2023, 393, 114609.	2.5	0
3	Mars's plasma system. Scientific potential of coordinated multipoint missions: "The next generation". <i>Experimental Astronomy</i> , 2022, 54, 641-676.	3.7	9
4	Jupiter's Enigmatic Ionosphere: Electron Density Profiles From the Pioneer, Voyager, and Galileo Radio Occultation Experiments. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	3.6	3
5	Long-Term Observations and Physical Processes in the Moon's Extended Sodium Tail. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006671.	3.6	7
6	On the Altitude Patterns of Photo-Chemical Equilibrium in the Martian Ionosphere: A Special Role for Electron Temperature. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, .	2.4	3
7	Mesospheric Gravity Wave Momentum Flux Associated With a Large Thunderstorm Complex. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD033381.	3.3	4
8	Mars' Ionopause: A Matter of Pressures. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028145.	2.4	35
9	The ionosphere of Venus: Strongest control by photo-chemical-equilibrium in the solar system, with implications for exospheric temperatures. <i>Icarus</i> , 2020, 349, 113870.	2.5	2
10	The future of the ionosphere (according to us!). , 2020, , 313-315.		0
11	Simultaneous Observations of SAR Arc and Its Ionospheric Response at Subauroral Conjugate Points (L <sub>A</sub> ≈ 2.5) During the St. Patrick's Day Storm in 2015. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027321.	2.4	6
12	SIMBIO-SYS: Scientific Cameras and Spectrometer for the BepiColombo Mission. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	47
13	The MAVEN Radio Occultation Science Experiment (ROSE). <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	26
14	Modeling Stable Auroral Red (SAR) Arcs at Geomagnetic Conjugate Points: Implications for Hemispheric Asymmetries in Heat Fluxes. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 6330-6342.	2.4	8
15	First Conjugate Observations of Medium-Scale Traveling Ionospheric Disturbances (MSTIDs) in the Europe-Africa Longitude Sector. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 2213-2222.	2.4	18
16	First Ground-Based Conjugate Observations of Stable Auroral Red (SAR) Arcs. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 4658-4671.	2.4	12
17	The ionospheres of planets and exoplanets. <i>Astronomy and Geophysics</i> , 2019, 60, 1.25-1.30.	0.2	3
18	Atmospheric Waves and Their Possible Effect on the Thermal Structure of Saturn's Thermosphere. <i>Geophysical Research Letters</i> , 2019, 46, 2372-2380.	4.0	20

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19	First Ionospheric Results From the MAVEN Radio Occultation Science Experiment (ROSE). <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 4171-4180.	2.4	35
20	Atomic oxygen ions as ionospheric biomarkers on exoplanets. <i>Nature Astronomy</i> , 2018, 2, 287-291.	10.1	9
21	Space Weather Nowcasting for Areas Denied Locations: Testing All-Sky Imaging Applications at Geomagnetic Conjugate Points. <i>Space Weather</i> , 2018, 16, 47-56.	3.7	6
22	Comparative ionospheres: Terrestrial and giant planets. <i>Icarus</i> , 2018, 303, 34-46.	2.5	4
23	All-sky-imaging capabilities for ionospheric space weather research using geomagnetic conjugate point observing sites. <i>Advances in Space Research</i> , 2018, 61, 1636-1651.	2.6	31
24	Loss of the Martian atmosphere to space: Present-day loss rates determined from MAVEN observations and integrated loss through time. <i>Icarus</i> , 2018, 315, 146-157.	2.5	216
25	Flares at Earth and Mars: An Ionospheric Escape Mechanism?. <i>Space Weather</i> , 2018, 16, 1042-1056.	3.7	10
26	Mars Initial Reference Ionosphere (MIRI) Model: Updates and Validations Using MAVEN, MEX, and MRO Data Sets. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 5674-5683.	2.4	12
27	MAVEN and the total electron content of the Martian ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 3526-3537.	2.4	12
28	Characterization of a Double Mesospheric Bore Over Europe. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 9738-9750.	2.4	20
29	The First Use of Coordinated Ionospheric Radio and Optical Observations Over Italy: Convergence of High- and Low-Latitude Storm-Induced Effects. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 11,794.	2.4	7
30	The Total Electron Content of the Martian Ionosphere From MRO/SHARAD Observations. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2182-2192.	3.6	9
31	Sources of Ionospheric Variability at Mars. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 9670-9684.	2.4	40
32	SAR arcs we have seen: Evidence for variability in stable auroral red arcs. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 245-262.	2.4	27
33	Reply to comment by Kil et al. on "The night when the auroral and equatorial ionospheres converged". <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 10,608-10,613.	2.4	2
34	Comparative aeronomy: Molecular ionospheres at Earth and Mars. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 10,269-10,288.	2.4	7
35	A stable auroral red (SAR) arc with multiple emission features. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 10,564.	2.4	12
36	Interpreting Mars ionospheric anomalies over crustal magnetic field regions using a 2D ionospheric model. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 766-777.	2.4	46

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37	Why the Viking descent probes found only one ionospheric layer at Mars. <i>Geophysical Research Letters</i> , 2015, 42, 7359-7365.	4.0	9
38	All-sky imaging of transglobal thermospheric gravity waves generated by the March 2011 Tohoku Earthquake. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 10,992.	2.4	19
39	The equivalent slab thickness of Mars' ionosphere: Implications for thermospheric temperature. <i>Geophysical Research Letters</i> , 2015, 42, 3560-3568.	4.0	8
40	MAVEN and the Mars Initial Reference Ionosphere model. <i>Geophysical Research Letters</i> , 2015, 42, 9080-9086.	4.0	15
41	The night when the auroral and equatorial ionospheres converged. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 8085-8095.	2.4	24
42	Numerical simulations of ion and electron temperatures in the ionosphere of Mars: Multiple ions and diurnal variations. <i>Icarus</i> , 2014, 227, 78-88.	2.5	60
43	Are ionospheric storms the same during different solar cycles?. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 6795-6805.	2.4	6
44	Variability in ionospheric total electron content at Mars. <i>Planetary and Space Science</i> , 2013, 86, 117-129.	1.7	16
45	The composition of Mars' topside ionosphere: Effects of hydrogen. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 2681-2693.	2.4	61
46	Imaging space weather over Europe. <i>Space Weather</i> , 2013, 11, 69-78.	3.7	13
47	Imaging magnetospheric boundaries at ionospheric heights. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 7294-7305.	2.4	14
48	A new semiempirical model of the peak electron density of the Martian ionosphere. <i>Geophysical Research Letters</i> , 2013, 40, 5361-5365.	4.0	37
49	Comet Giacobini-Zinner: Comparison of a Post-Encounter Image with In-Situ and Groundbased Observations. <i>Special Publications</i> , 2013, , 880-883.	0.0	0
50	Escape rates and variability constraints for high-energy sodium sources at Mercury. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	27
51	All-sky imaging observations of conjugate medium-scale traveling ionospheric disturbances in the American sector. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	32
52	Response of Saturn's auroral ionosphere to electron precipitation: Electron density, electron temperature, and electrical conductivity. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	50
53	Modeling Mars' ionosphere with constraints from same-day observations by Mars Global Surveyor and Mars Express. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	72
54	The Appearance of the Medicean Moons in 17 <sup>th</sup> Century Charts and Books—How Long Did It Take?. <i>Proceedings of the International Astronomical Union</i> , 2010, 6, 33-41.	0.0	0

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55	Seasonal dependence of MSTIDs obtained from 630.0 nm airglow imaging at Arecibo. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	80
56	Latitudinal variations in Saturn's ionosphere: Cassini measurements and model comparisons. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	55
57	The sodium tail of the Moon. <i>Icarus</i> , 2009, 204, 409-417.	2.5	30
58	The Use of Small Telescopes for Spectral Imaging of Low-light-level Extended Atmospheres in the Solar System. <i>Earth, Moon and Planets</i> , 2009, 105, 107-113.	0.6	6
59	Day-by-day modelling of the ionospheric F2-layer for year 2002. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 848-856.	1.6	24
60	Brightening of 630.0 nm equatorial spread-airglow depletions. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	39
61	Evidence of mesospheric gravity-waves generated by orographic forcing in the troposphere. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	48
62	Solar primary and secondary ionization at Saturn. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	48
63	Solar System Ionospheres. <i>Space Science Reviews</i> , 2008, 139, 235-265.	8.1	48
64	Imaging the sources and full extent of the sodium tail of the planet Mercury. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	35
65	Plasma temperatures in Saturn's ionosphere. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	41
66	Physical characteristics and occurrence rates of meteoric plasma layers detected in the Martian ionosphere by the Mars Global Surveyor Radio Science Experiment. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	66
67	Man-made space weather. <i>Space Weather</i> , 2008, 6, .	3.7	32
68	Are plasma depletions in Saturn's ionosphere a signature of time-dependent water input?. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	29
69	A very bright SAR arc: implications for extreme magnetosphere-ionosphere coupling. <i>Annales Geophysicae</i> , 2007, 25, 2593-2608.	1.6	42
70	The sources of sodium escaping from Io revealed by spectral high definition imaging. <i>Nature</i> , 2007, 448, 330-332.	27.8	20
71	Equatorial spread F-related airglow depletions at Arecibo and conjugate observations. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	44
72	Characterization of exceptionally strong mesospheric wave events using all-sky and zenith airglow observations. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	25

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73	Magnetospheric influence on the Moon's exosphere. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	45
74	Day-to-day variability of the E-layer. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	22
75	Storms in the ionosphere: Patterns and processes for total electron content. <i>Reviews of Geophysics</i> , 2006, 44, .	23.0	415
76	Total electron content: Synthesis of past storm studies and needed future work. <i>Radio Science</i> , 2006, 41, .	1.6	37
77	Cassini radio occultations of Saturn's ionosphere: Model comparisons using a constant water flux. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	46
78	Effects of Solar Flares on the Ionosphere of Mars. <i>Science</i> , 2006, 311, 1135-1138.	12.6	147
79	Response of peak electron densities in the martian ionosphere to day-to-day changes in solar flux due to solar rotation. <i>Planetary and Space Science</i> , 2005, 53, 1401-1418.	1.7	63
80	Observations and modeling of the coupled latitude-altitude patterns of equatorial plasma depletions. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	43
81	Effects of ring shadowing on the detection of electrostatic discharges at Saturn. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	20
82	Ionospheric contribution to Saturn's inner plasmasphere. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	7
83	Ionospheric characteristics above Martian crustal magnetic anomalies. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	69
84	Modeling of global variations and ring shadowing in Saturn's ionosphere. <i>Icarus</i> , 2004, 172, 503-520.	2.5	82
85	Ionospheric layers of Mars and Earth. <i>Planetary and Space Science</i> , 2004, 52, 849-852.	1.7	63
86	Ionospheric effects upon a satellite navigation system at Mars. <i>Radio Science</i> , 2004, 39, n/a-n/a.	1.6	34
87	Latitude dependence of zonal plasma drifts obtained from dual-site airglow observations. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	92
88	A multidagnostic investigation of the mesospheric bore phenomenon. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	83
89	The outer limits of the lunar sodium exosphere. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	15
90	Simultaneous ionospheric variability on Earth and Mars. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	61

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91	The application of terrestrial aeronomy groundbased instruments to planetary studies. Geophysical Monograph Series, 2002, , 329-337.	0.1	0
92	Polarization jet events and excitation of weak SAR arcs. Geophysical Research Letters, 2002, 29, 26-1.	4.0	20
93	Suppression of equatorial spreadFby sporadicE. Journal of Geophysical Research, 2002, 107, SIA 4-1-SIA 4-5.	3.3	44
94	Solar system ionospheres. Geophysical Monograph Series, 2002, , 39-54.	0.1	27
95	Monitoring the moon's transient atmosphere with an all-sky imager. Advances in Space Research, 2001, 27, 1181-1187.	2.6	17
96	The 1999 Quadrantids and the lunar Na atmosphere. Monthly Notices of the Royal Astronomical Society, 2001, 327, 244-248.	4.4	21
97	The application of GPS observations to equatorial aeronomy. Radio Science, 2000, 35, 885-904.	1.6	115
98	Equatorial F region irregularity morphology during an equinoctial month at solar minimum. Space Science Reviews, 1999, 87, 357-386.	8.1	11
99	Lunam 2000 (Lunar Atmosphere Mission). Earth, Moon and Planets, 1999, 85/86, 487-495.	0.6	0
100	The Atmosphere Of The Moon. Earth, Moon and Planets, 1999, 85/86, 271-277.	0.6	4
101	Observational Test for the Solar Wind Sputtering Origin of the Moon's Extended Sodium Atmosphere. Icarus, 1999, 137, 13-23.	2.5	67
102	Modeling an enhancement of the lunar sodium tail during the Leonid Meteor Shower of 1998. Geophysical Research Letters, 1999, 26, 1645-1648.	4.0	51
103	Discovery of the distant lunar sodium tail and its enhancement following the Leonid Meteor Shower of 1998. Geophysical Research Letters, 1999, 26, 1649-1652.	4.0	79
104	Three tails of comet Hale-Bopp. Geophysical Research Letters, 1998, 25, 225-228.	4.0	30
105	GPS phase fluctuations in the equatorial region during sunspot minimum. Radio Science, 1997, 32, 1535-1550.	1.6	96
106	Modeling the Moon's extended sodium cloud as a tool for investigating sources of transient atmospheres. Advances in Space Research, 1997, 19, 1577-1586.	2.6	18
107	Constraints on the origin of the Moon's atmosphere from observations during a lunar eclipse. Nature, 1995, 377, 404-406.	27.8	52
108	Simulations of the lunar sodium atmosphere. Journal of Geophysical Research, 1995, 100, 23271.	3.3	25

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109	A Picture of the Moon's Atmosphere. <i>Science</i> , 1993, 261, 184-186.	12.6	45
110	Imaging observations of the extended sodium atmosphere of the Moon. <i>Geophysical Research Letters</i> , 1991, 18, 2097-2100.	4.0	48
111	The extended sodium nebula of Jupiter. <i>Nature</i> , 1990, 348, 312-314.	27.8	91
112	Optical observations of the AMPTE artificial comet from the Northern Hemisphere. <i>Nature</i> , 1986, 320, 704-708.	27.8	25
113	Simulation studies of ionospheric airglow signatures of plasma depletions at the equator. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1985, 47, 885-893.	0.9	20
114	Preliminary report on the HEAO hole in the ionosphere. <i>Eos</i> , 1980, 61, 529.	0.1	21
115	Opportunity to observe a large-scale hole in the ionosphere. <i>Eos</i> , 1979, 60, 513-514.	0.1	11
116	Low frequency radio astronomy through an artificially created ionospheric window. <i>Nature</i> , 1975, 255, 42-44.	27.8	18
117	Behavior of the ionospheric $F_2$ region during the Great Solar Flare of August 7, 1972. <i>Journal of Geophysical Research</i> , 1974, 79, 665-672.	3.3	88
118	Incoherent scatter observations of the ionospheric response to a large solar flare. <i>Radio Science</i> , 1974, 9, 197-203.	1.6	57
119	Ionospheric Total Electron Content Behaviour during Geomagnetic Storms. <i>Nature: Physical Science</i> , 1971, 234, 23-24.	0.8	11
120	Midlatitude Ionospheric Dynamics and Disturbances: Introduction. <i>Geophysical Monograph Series</i> , 0, , 1-7.	0.1	5