# Michael Mendillo

List of Publications by Year
in descending order



| 120 | 4,354 | 76322 | 123420 |
|---|---|---|---|
| papers | citations | 40 h-index | 61 g-index |

| 122 | 122 | 122 | 2719 |
|---|---|---|---|
| all docs | docs citations | times ranked | 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. Icarus, 2023, 393, 114508. | 2.5 | 7 |
| 2 | The Martian ionosphere at solar minimum: Empirical model validation using MAVEN ROSE data. Icarus, 2023, 393, 114609. | 2.5 | 0 |
| 3 | Marsâ€™ plasma system. Scientific potential of coordinated multipoint missions: â€œThe next generationâ€. Experimental Astronomy, 2022, 54, 641-676. | 3.7 | 9 |
| 4 | 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 |
| 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 | On the Altitude Patterns of Photoâ€Chemicalâ€Equilibrium in the Martian Ionosphere: A Special Role for Electron Temperature. Journal of Geophysical Research: Space Physics, 2021, 126, . | 2.4 | 3 |
| 7 | Mesospheric Gravity Wave Momentum Flux Associated With a Large Thunderstorm Complex. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033381. | 3.3 | 4 |
| 8 | Mars' Ionopause: A Matter of Pressures. Journal of Geophysical Research: Space Physics, 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. Icarus, 2020, 349, 113870. | 2.5 | 2 |
| 10 | The future of the ionosphere (according to usâ€¦). , 2020, , 313-315. | | 0 |
| 11 | Simultaneous Observations of SAR Arc and Its Ionospheric Response at Subauroral Conjugate Points (LÂâ‰ƒÂ2.5) During the St. Patrick's Day Storm in 2015. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027321. | 2.4 | 6 |
| 12 | SIMBIO-SYS: Scientific Cameras and Spectrometer for the BepiColombo Mission. Space Science Reviews, 2020, 216, 1. | 8.1 | 47 |
| 13 | The MAVEN Radio Occultation Science Experiment (ROSE). Space Science Reviews, 2020, 216, 1. | 8.1 | 26 |
| 14 | Modeling Stable Auroral Red (SAR) Arcs at Geomagnetic Conjugate Points: Implications for Hemispheric Asymmetries in Heat Fluxes. Journal of Geophysical Research: Space Physics, 2019, 124, 6330-6342. | 2.4 | 8 |
| 15 | First Conjugate Observations of Mediumâ€Scale Traveling Ionospheric Disturbances (MSTIDs) in the Europeâ€Africa Longitude Sector. Journal of Geophysical Research: Space Physics, 2019, 124, 2213-2222. | 2.4 | 18 |
| 16 | First Groundâ€Based Conjugate Observations of Stable Auroral Red (SAR) Arcs. Journal of Geophysical Research: Space Physics, 2019, 124, 4658-4671. | 2.4 | 12 |
| 17 | The ionospheres of planets and exoplanets. Astronomy and Geophysics, 2019, 60, 1.25-1.30. | 0.2 | 3 |
| 18 | Atmospheric Waves and Their Possible Effect on the Thermal Structure of Saturn's Thermosphere. Geophysical Research Letters, 2019, 46, 2372-2380. | 4.0 | 20 |

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

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|---|---|---|---|
| 37 | Why the Viking descent probes found only one ionospheric layer at Mars. Geophysical Research Letters, 2015, 42, 7359-7365. | 4.0 | 9 |
| 38 | Allâ€sky imaging of transglobal thermospheric gravity waves generated by the March 2011 Tohoku Earthquake. Journal of Geophysical Research: Space Physics, 2015, 120, 10,992. | 2.4 | 19 |
| 39 | The equivalent slab thickness of Mars' ionosphere: Implications for thermospheric temperature. Geophysical Research Letters, 2015, 42, 3560-3568. | 4.0 | 8 |
| 40 | MAVEN and the Mars Initial Reference Ionosphere model. Geophysical Research Letters, 2015, 42, 9080-9086. | 4.0 | 15 |
| 41 | The night when the auroral and equatorial ionospheres converged. Journal of Geophysical Research: Space Physics, 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. Icarus, 2014, 227, 78-88. | 2.5 | 60 |
| 43 | Are ionospheric storms the same during different solar cycles?. Journal of Geophysical Research: Space Physics, 2013, 118, 6795-6805. | 2.4 | 6 |
| 44 | Variability in ionospheric total electron content at Mars. Planetary and Space Science, 2013, 86, 117-129. | 1.7 | 16 |
| 45 | The composition of Mars' topside ionosphere: Effects of hydrogen. Journal of Geophysical Research: Space Physics, 2013, 118, 2681-2693. | 2.4 | 61 |
| 46 | Imaging space weather over Europe. Space Weather, 2013, 11, 69-78. | 3.7 | 13 |
| 47 | Imaging magnetospheric boundaries at ionospheric heights. Journal of Geophysical Research: Space Physics, 2013, 118, 7294-7305. | 2.4 | 14 |
| 48 | A new semiempirical model of the peak electron density of the Martian ionosphere. Geophysical Research Letters, 2013, 40, 5361-5365. | 4.0 | 37 |
| 49 | Comet Giacobini-Zinner: Comparison of a Post-Encounter Image with In-Situ and Groundbased Observations. Special Publications, 2013, , 880-883. | 0.0 | 0 |
| 50 | Escape rates and variability constraints for highâ€energy sodium sources at Mercury. Journal of Geophysical Research, 2012, 117, . | 3.3 | 27 |
| 51 | All-sky imaging observations of conjugate medium-scale traveling ionospheric disturbances in the American sector. Journal of Geophysical Research, 2011, 116, . | 3.3 | 32 |
| 52 | 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 |
| 53 | Modeling Mars' ionosphere with constraints from same-day observations by Mars Global Surveyor and Mars Express. Journal of Geophysical Research, 2011, 116, n/a-n/a. | 3.3 | 72 |
| 54 | The Appearance of the Medicean Moons in 17<sup>th</sup>Century Charts and Booksâ€"How Long Did It Take?. Proceedings of the International Astronomical Union, 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. Geophysical Research Letters, 2010, 37, . | 4.0 | 80 |
| 56 | Latitudinal variations in Saturn's ionosphere: Cassini measurements and model comparisons. Journal of Geophysical Research, 2010, 115, . | 3.3 | 55 |
| 57 | The sodium tail of the Moon. Icarus, 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. Earth, Moon and Planets, 2009, 105, 107-113. | 0.6 | 6 |
| 59 | Day-by-day modelling of the ionospheric F2-layer for year 2002. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 848-856. | 1.6 | 24 |
| 60 | Brightening of 630.0 nm equatorial spreadâ€F airglow depletions. Journal of Geophysical Research, 2009, 114, . | 3.3 | 39 |
| 61 | Evidence of mesospheric gravityâ€waves generated by orographic forcing in the troposphere. Geophysical Research Letters, 2009, 36, . | 4.0 | 48 |
| 62 | Solar primary and secondary ionization at Saturn. Journal of Geophysical Research, 2009, 114, . | 3.3 | 48 |
| 63 | Solar System Ionospheres. Space Science Reviews, 2008, 139, 235-265. | 8.1 | 48 |
| 64 | Imaging the sources and full extent of the sodium tail of the planet Mercury. Geophysical Research Letters, 2008, 35, . | 4.0 | 35 |
| 65 | Plasma temperatures in Saturn's ionosphere. Journal of Geophysical Research, 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. Journal of Geophysical Research, 2008, 113, . | 3.3 | 66 |
| 67 | Manâ€made space weather. Space Weather, 2008, 6, . | 3.7 | 32 |
| 68 | Are plasma depletions in Saturn's ionosphere a signature of time-dependent water input?. Geophysical Research Letters, 2007, 34, . | 4.0 | 29 |
| 69 | A very bright SAR arc: implications for extreme magnetosphere-ionosphere coupling. Annales Geophysicae, 2007, 25, 2593-2608. | 1.6 | 42 |
| 70 | The sources of sodium escaping from Io revealed by spectral high definition imaging. Nature, 2007, 448, 330-332. | 27.8 | 20 |
| 71 | Equatorial spread Fâ€related airglow depletions at Arecibo and conjugate observations. Journal of Geophysical Research, 2007, 112, . | 3.3 | 44 |
| 72 | Characterization of exceptionally strong mesospheric wave events using all-sky and zenith airglow observations. Journal of Geophysical Research, 2006, 111, . | 3.3 | 25 |

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

| # | Article | IF | Citations |
|---|---|---|---|
| 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 |

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