Edward M B Thiemann

List of Publications by Year
in descending order

61	2,356	201674	206112
papers	citations	27 h-index	48 g-index

63	63	63	1383
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	The Solar Extreme Ultraviolet Monitor for MAVEN. Space Science Reviews, 2015, 195, 293-301.	8.1	174
3	MAVEN observations of the response of Mars to an interplanetary coronal mass ejection. Science, 2015, 350, aad0210.	12.6	166
4	The structure and variability of Mars dayside thermosphere from MAVEN NGIMS and IUVS measurements: Seasonal and solar activity trends in scale heights and temperatures. Journal of Geophysical Research: Space Physics, 2017, 122, 1296-1313.	2.4	124
5	The MAVEN EUVM model of solar spectral irradiance variability at Mars: Algorithms and results. Journal of Geophysical Research: Space Physics, 2017, 122, 2748-2767.	2.4	116
6	Photochemical escape of oxygen from Mars: First results from MAVEN in situ data. Journal of Geophysical Research: Space Physics, 2017, 122, 3815-3836.	2.4	106
7	The structure and variability of Mars upper atmosphere as seen in MAVEN/IUVS dayglow observations. Geophysical Research Letters, 2015, 42, 9023-9030.	4.0	95
8	Early MAVEN Deep Dip campaign reveals thermosphere and ionosphere variability. Science, 2015, 350, aad0459.	12.6	90
9	MAVEN observations of the solar cycle 24 space weather conditions at Mars. Journal of Geophysical Research: Space Physics, 2017, 122, 2768-2794.	2.4	78
10	MAVEN IUVS observation of the hot oxygen corona at Mars. Geophysical Research Letters, 2015, 42, 9009-9014.	4.0	77
11	Threeâ€dimensional structure in the Mars H corona revealed by IUVS on MAVEN. Geophysical Research Letters, 2015, 42, 9001-9008.	4.0	67
12	MAVEN measured oxygen and hydrogen pickup ions: Probing the Martian exosphere and neutral escape. Journal of Geophysical Research: Space Physics, 2017, 122, 3689-3706.	2.4	55
13	MAVEN insights into oxygen pickup ions at Mars. Geophysical Research Letters, 2015, 42, 8870-8876.	4.0	53
14	Proton cyclotron waves occurrence rate upstream from Mars observed by MAVEN: Associated variability of the Martian upper atmosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 11,113.	2.4	50
15	The Flare Irradiance Spectral Modelâ€Version 2 (FISM2). Space Weather, 2020, 18, e2020SW002588.	3.7	50
16	Retrieval of CO₂ and N₂ in the Martian thermosphere using dayglow observations by IUVS on MAVEN. Geophysical Research Letters, 2015, 42, 9040-9049.	4.0	43
17	Mars H Escape Rates Derived From MAVEN/IUVS Lyman Alpha Brightness Measurements and Their Dependence on Model Assumptions. Journal of Geophysical Research E: Planets, 2018, 123, 2192-2210.	3.6	42
18	Sources of Ionospheric Variability at Mars. Journal of Geophysical Research: Space Physics, 2017, 122, 9670-9684.	2.4	40

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19	Electron energetics in the Martian dayside ionosphere: Model comparisons with MAVEN data. Journal of Geophysical Research: Space Physics, 2016, 121, 7049-7066.	2.4	38
20	Seasonal Variability of Neutral Escape from Mars as Derived From MAVEN Pickup Ion Observations. Journal of Geophysical Research E: Planets, 2018, 123, 1192-1202.	3.6	38
21	The Mars Topside Ionosphere Response to the X8.2 Solar Flare of 10 September 2017. Geophysical Research Letters, 2018, 45, 8005-8013.	4.0	38
22	Ionizing Electrons on the Martian Nightside: Structure and Variability. Journal of Geophysical Research: Space Physics, 2018, 123, 4349-4363.	2.4	35
23	Solar Ultraviolet Irradiance Observations of the Solar Flares During the Intense September 2017 Storm Period. Space Weather, 2018, 16, 1470-1487.	3.7	34
24	Neutral density response to solar flares at Mars. Geophysical Research Letters, 2015, 42, 8986-8992.	4.0	33
25	Photoelectrons and solar ionizing radiation at Mars: Predictions versus MAVEN observations. Journal of Geophysical Research: Space Physics, 2016, 121, 8859-8870.	2.4	33
26	Observations and Modeling of the Mars Lowâ€Altitude Ionospheric Response to the 10 September 2017 Xâ€Class Solar Flare. Geophysical Research Letters, 2018, 45, 7382-7390.	4.0	30
27	Significant Space Weather Impact on the Escape of Hydrogen From Mars. Geophysical Research Letters, 2018, 45, 8844-8852.	4.0	29
28	Mars Thermospheric Variability Revealed by MAVEN EUVM Solar Occultations: Structure at Aphelion and Perihelion and Response to EUV Forcing. Journal of Geophysical Research E: Planets, 2018, 123, 2248-2269.	3.6	26
29	September 2017 Solar Flare Event: Rapid Heating of the Martian Neutral Upper Atmosphere From the Xâ€Class Flare as Observed by MAVEN. Geophysical Research Letters, 2018, 45, 8803-8810.	4.0	26
30	Rosetta photoelectron emission and solar ultraviolet flux at comet 67P. Monthly Notices of the Royal Astronomical Society, 2017, 469, S626-S635.	4.4	24
31	Martian Thermospheric Response to an X8.2 Solar Flare on 10 September 2017 as Seen by MAVEN/IUVS. Geophysical Research Letters, 2018, 45, 7312-7319.	4.0	24
32	Study of the Martian cold oxygen corona from the Oâ€‰I 130.4â€‰nm by IUVS/MAVEN. Geophysical Research Letters, 2015, 42, 9031-9039.	4.0	21
33	An Artificial Neural Network for Inferring Solar Wind Proxies at Mars. Geophysical Research Letters, 2018, 45, 10,855.	4.0	21
34	Martian Electron Temperatures in the Subsolar Region: MAVEN Observations Compared to a Oneâ€Dimensional Model. Journal of Geophysical Research: Space Physics, 2018, 123, 5960-5973.	2.4	21
35	Effects of a Solar Flare on the Martian Hot O Corona and Photochemical Escape. Geophysical Research Letters, 2018, 45, 6814-6822.	4.0	19
36	Mars Upper Atmospheric Responses to the 10 September 2017 Solar Flare: A Global, Timeâ€Dependent Simulation. Geophysical Research Letters, 2019, 46, 9334-9343.	4.0	19

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37	Seasonal, Solar Zenith Angle, and Solar Flux Variations of O⁺ in the Topside Ionosphere of Mars. Journal of Geophysical Research: Space Physics, 2019, 124, 3125-3138.	2.4	19
38	Variations in the Ionospheric Peak Altitude at Mars in Response to Dust Storms: 13 Years of Observations From the Mars Express Radar Sounder. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006092.	3.6	19
39	The Variability of Atmospheric Deuterium Brightness at Mars: Evidence for Seasonal Dependence. Journal of Geophysical Research: Space Physics, 2017, 122, 10,811.	2.4	15
40	The Effects of Crustal Magnetic Fields and Solar EUV Flux on Ionopause Formation at Mars. Geophysical Research Letters, 2019, 46, 10257-10266.	4.0	14
41	Tidal Wave-Driven Variability in the Mars Ionosphere-Thermosphere System. Atmosphere, 2020, 11, 521.	2.3	14
42	The GOES-R EUVS model for EUV irradiance variability. Journal of Space Weather and Space Climate, 2019, 9, A43.	3.3	14
43	Seasonal Variability of Deuterium in the Upper Atmosphere of Mars. Journal of Geophysical Research: Space Physics, 2019, 124, 2152-2164.	2.4	13
44	Oneâ€Hertz Waves at Mars: MAVEN Observations. Journal of Geophysical Research: Space Physics, 2018, 123, 3460-3476.	2.4	10
45	Flares at Earth and Mars: An Ionospheric Escape Mechanism?. Space Weather, 2018, 16, 1042-1056.	3.7	10
46	Center-to-Limb Variability of Hot Coronal EUV Emissions During Solar Flares. Solar Physics, 2018, 293, 1.	2.5	9
47	Low Electron Temperatures Observed at Mars by MAVEN on Dayside Crustal Magnetic Field Lines. Journal of Geophysical Research: Space Physics, 2019, 124, 7629-7637.	2.4	8
48	Electron Temperature Response to Solar Forcing in the Lowâ€Latitude Martian Ionosphere. Journal of Geophysical Research E: Planets, 2019, 124, 3082-3094.	3.6	8
49	Vertical Thermospheric Density Profiles From EUV Solar Occultations Made by PROBA2 LYRA for Solar Cycle 24. Space Weather, 2017, 15, 1649-1660.	3.7	7
50	First Evidence of Persistent Nighttime Temperature Structures in the Neutral Thermosphere of Mars. Geophysical Research Letters, 2018, 45, 8819-8825.	4.0	7
51	Solar Extreme Ultraviolet Irradiance Uncertainties for Planetary Studies. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	7
52	Subsolar Electron Temperatures in the Lower Martian Ionosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027597.	2.4	6
53	GOES-R Series Solar X-ray and Ultraviolet Irradiance. , 2020, , 233-242.		5
54	Ionization Efficiency in the Dayside Ionosphere of Mars: Structure and Variability. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006923.	3.6	5

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55	Solar flares observed by Rosetta at comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2019, 630, A49.	5.1	4
56	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
57	Multiple Scattering Effects in the Interplanetary Medium: Evaluation Using SOHO SWAN and MAVEN EUVM Lyman Î± Measurements. Journal of Geophysical Research: Space Physics, 2019, 124, 3949-3960.	2.4	2
58	PROBA2 LYRA Occultations: Thermospheric Temperature and Composition, Sensitivity to EUV Forcing, and Comparisons With Mars. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029262.	2.4	2
59	Martian nonmigrating atmospheric tides in the thermosphere and ionosphere at solar minimum. Icarus, 2023, 393, 114767.	2.5	2
60	Radiation Testing a Very Low-Noise RHBD ASIC Electrometer. , 2010, , .		0
61	Space Weather Storm Responses at Mars: Lessons from A Weakly Magnetized Terrestrial Planet. Proceedings of the International Astronomical Union, 2016, 12, 211-217.	0.0	0