M K Elrod

List of Publications by Year
in descending order

50	2,255	218381	214527
papers	citations	26 h-index	47 g-index

52	52	52	1442
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Martian nonmigrating atmospheric tides in the thermosphere and ionosphere at solar minimum. Icarus, 2023, 393, 114767.	1.1	2
2	Neutral Composition and Horizontal Variations of the Martian Upper Atmosphere From MAVEN NGIMS. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	4
3	Influence of Magnetic Fields on Precipitating Solar Wind Hydrogen at Mars. Geophysical Research Letters, 2022, 49, .	1.5	4
4	Precipitating Solar Wind Hydrogen as Observed by the MAVEN Spacecraft: Distribution as a Function of Column Density, Altitude, and Solar Zenith Angle. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006725.	1.5	4
5	Latitudinal and Seasonal Asymmetries of the Helium Bulge in the Martian Upper Atmosphere. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006976.	1.5	8
6	In Situ Measurements of Thermal Ion Temperature in the Martian Ionosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029531.	0.8	17
7	Ionization Efficiency in the Dayside Ionosphere of Mars: Structure and Variability. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006923.	1.5	5
8	Structural and Compositional Changes in the Upper Atmosphere Related to the PEDEâ€2018 Dust Event on Mars as Observed by MAVEN NGIMS. Geophysical Research Letters, 2020, 47, e2019GL084378.	1.5	38
9	Effects of the 10 September 2017 Solar Flare on the Density and Composition of the Thermosphere of Mars. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028518.	0.8	5
10	Hydrogen escape from Mars is driven by seasonal and dust storm transport of water. Science, 2020, 370, 824-831.	6.0	66
11	First Detection of Kilometerâ€Scale Density Irregularities in the Martian Ionosphere. Geophysical Research Letters, 2020, 47, e2020GL090906.	1.5	7
12	Tidal Wave-Driven Variability in the Mars Ionosphere-Thermosphere System. Atmosphere, 2020, 11, 521.	1.0	14
13	Atmospheric Escape Processes and Planetary Atmospheric Evolution. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027639.	0.8	58
14	Mars Upper Atmospheric Responses to the 10 September 2017 Solar Flare: A Global, Timeâ€Dependent Simulation. Geophysical Research Letters, 2019, 46, 9334-9343.	1.5	19
15	Ionâ€Neutral Coupling in the Upper Atmosphere of Mars: A Dominant Driver of Topside Ionospheric Structure. Journal of Geophysical Research: Space Physics, 2019, 124, 3786-3798.	0.8	18
16	Large amplitude perturbations in the martian exosphere seen in MAVEN NGIMS data. Icarus, 2019, 331, 110-115.	1.1	13
17	Mars's Dayside Upper Ionospheric Composition Is Affected by Magnetic Field Conditions. Journal of Geophysical Research: Space Physics, 2019, 124, 3100-3109.	0.8	26
18	First In Situ Evidence of Mars Nonthermal Exosphere. Geophysical Research Letters, 2019, 46, 4144-4150.	1.5	7

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19	Atmospheric Tides at High Latitudes in the Martian Upper Atmosphere Observed by MAVEN and MRO. Journal of Geophysical Research: Space Physics, 2019, 124, 2943-2953.	0.8	24
20	Electron Temperature Response to Solar Forcing in the Lowâ€Latitude Martian Ionosphere. Journal of Geophysical Research E: Planets, 2019, 124, 3082-3094.	1.5	8
21	Thermospheric Expansion Associated With Dust Increase in the Lower Atmosphere on Mars Observed by MAVEN/NGIMS. Geophysical Research Letters, 2018, 45, 2901-2910.	1.5	27
22	First Evidence of Persistent Nighttime Temperature Structures in the Neutral Thermosphere of Mars. Geophysical Research Letters, 2018, 45, 8819-8825.	1.5	7
23	Variability of Martian Turbopause Altitudes. Journal of Geophysical Research E: Planets, 2018, 123, 2939-2957.	1.5	30
24	Thermal Structure of the Martian Upper Atmosphere From MAVEN NGIMS. Journal of Geophysical Research E: Planets, 2018, 123, 2842-2867.	1.5	91
25	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.	1.1	216
26	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.	1.5	26
27	Ionizing Electrons on the Martian Nightside: Structure and Variability. Journal of Geophysical Research: Space Physics, 2018, 123, 4349-4363.	0.8	35
28	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.	1.5	24
29	The Mars Topside Ionosphere Response to the X8.2 Solar Flare of 10 September 2017. Geophysical Research Letters, 2018, 45, 8005-8013.	1.5	38
30	NANOGRAIN DENSITY OUTSIDE SATURNâ€™S A RING. Astrophysical Journal Letters, 2017, 834, L6.	3.0	3
31	Longitudinal structures in Mars' upper atmosphere as observed by MAVEN/NGIMS. Journal of Geophysical Research: Space Physics, 2017, 122, 1258-1268.	0.8	32
32	Photochemical escape of oxygen from Mars: First results from MAVEN in situ data. Journal of Geophysical Research: Space Physics, 2017, 122, 3815-3836.	0.8	106
33	Nightside ionosphere of Mars: Composition, vertical structure, and variability. Journal of Geophysical Research: Space Physics, 2017, 122, 4712-4725.	0.8	46
34	MAVEN NGIMS observations of atmospheric gravity waves in the Martian thermosphere. Journal of Geophysical Research: Space Physics, 2017, 122, 2310-2335.	0.8	88
35	He bulge revealed: He and CO₂ diurnal and seasonal variations in the upper atmosphere of Mars as detected by MAVEN NGIMS. Journal of Geophysical Research: Space Physics, 2017, 122, 2564-2573.	0.8	52
36	Marsâ€™ atmospheric history derived from upper-atmosphere measurements of ³⁸ Ar/ ³⁶ Ar. Science, 2017, 355, 1408-1410.	6.0	183

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37	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.	0.8	124
38	MAVEN observations of dayside peak electron densities in the ionosphere of Mars. Journal of Geophysical Research: Space Physics, 2017, 122, 891-906.	0.8	33
39	MAVEN Observations of Ionospheric Irregularities at Mars. Geophysical Research Letters, 2017, 44, 10,845.	1.5	16
40	Ion Densities in the Nightside Ionosphere of Mars: Effects of Electron Impact Ionization. Geophysical Research Letters, 2017, 44, 11248-11256.	1.5	64
41	Global distribution and parameter dependences of gravity wave activity in the Martian upper thermosphere derived from MAVEN/NGIMS observations. Journal of Geophysical Research: Space Physics, 2017, 122, 2374-2397.	0.8	66
42	Simultaneous observations of atmospheric tides from combined in situ and remote observations at Mars from the MAVEN spacecraft. Journal of Geophysical Research E: Planets, 2016, 121, 594-607.	1.5	48
43	Photoelectrons and solar ionizing radiation at Mars: Predictions versus MAVEN observations. Journal of Geophysical Research: Space Physics, 2016, 121, 8859-8870.	0.8	33
44	Structure and composition of the neutral upper atmosphere of Mars from the MAVEN NGIMS investigation. Geophysical Research Letters, 2015, 42, 8951-8957.	1.5	168
45	Changes in the thermosphere and ionosphere of Mars from Viking to MAVEN. Geophysical Research Letters, 2015, 42, 9071-9079.	1.5	20
46	Comparison of model predictions for the composition of the ionosphere of Mars to MAVEN NGIMS data. Geophysical Research Letters, 2015, 42, 8966-8976.	1.5	25
47	MAVEN observations of the response of Mars to an interplanetary coronal mass ejection. Science, 2015, 350, aad0210.	6.0	166
48	Early MAVEN Deep Dip campaign reveals thermosphere and ionosphere variability. Science, 2015, 350, aad0459.	6.0	90
49	Seasonal variations in Saturn's plasma between the main rings and Enceladus. Journal of Geophysical Research, 2012, 117, .	3.3	27
50	Neutral H₂and H₂⁺ions in the Saturnian magnetosphere. Journal of Geophysical Research, 2011, 116, .	3.3	22