C M Fowler

List of Publications by Year
in descending order

55 papers	2,017 citations	279487 23 h-index	243296 44 g-index
61 all docs	61 docs citations	61 times ranked	1593 citing authors

#	ARTICLE	IF	CITATIONS
1	The Space Physics Environment Data Analysis System (SPEDAS). Space Science Reviews, 2019, 215, 9.	3.7	332
2	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
3	MAVEN observations of the response of Mars to an interplanetary coronal mass ejection. Science, 2015, 350, aad0210.	6.0	166
4	Dayside electron temperature and density profiles at Mars: First results from the MAVEN Langmuir probe and waves instrument. Geophysical Research Letters, 2015, 42, 8846-8853.	1.5	116
5	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
6	Early MAVEN Deep Dip campaign reveals thermosphere and ionosphere variability. Science, 2015, 350, aad0459.	6.0	90
7	Flows, Fields, and Forces in the Marsâ€Solar Wind Interaction. Journal of Geophysical Research: Space Physics, 2017, 122, 11,320.	0.8	64
8	Ion Densities in the Nightside Ionosphere of Mars: Effects of Electron Impact Ionization. Geophysical Research Letters, 2017, 44, 11248-11256.	1.5	64
9	The first in situ electron temperature and density measurements of the Martian nightside ionosphere. Geophysical Research Letters, 2015, 42, 8854-8861.	1.5	62
10	Enhanced O₂⁺ loss at Mars due to an ambipolar electric field from electron heating. Journal of Geophysical Research: Space Physics, 2016, 121, 4668-4678.	0.8	48
11	Dust observations at orbital altitudes surrounding Mars. Science, 2015, 350, aad0398.	6.0	41
12	MAVEN Observations of Solar Windâ€Driven Magnetosonic Waves Heating the Martian Dayside Ionosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 4129-4149.	0.8	40
13	Electron energetics in the Martian dayside ionosphere: Model comparisons with MAVEN data. Journal of Geophysical Research: Space Physics, 2016, 121, 7049-7066.	0.8	38
14	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
15	Using Magnetic Topology to Probe the Sources of Mars' Nightside Ionosphere. Geophysical Research Letters, 2018, 45, 12,190.	1.5	36
16	Mars' Ionopause: A Matter of Pressures. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028145.	0.8	35
17	Neutral density response to solar flares at Mars. Geophysical Research Letters, 2015, 42, 8986-8992.	1.5	33
18	Photoelectrons and solar ionizing radiation at Mars: Predictions versus MAVEN observations. Journal of Geophysical Research: Space Physics, 2016, 121, 8859-8870.	0.8	33

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19	Solar Wind Induced Waves in the Skies of Mars: Ionospheric Compression, Energization, and Escape Resulting From the Impact of Ultralow Frequency Magnetosonic Waves Generated Upstream of the Martian Bow Shock. Journal of Geophysical Research: Space Physics, 2018, 123, 7241-7256.	0.8	32
20	Ionospheric plasma density variations observed at Mars by MAVEN/LPW. Geophysical Research Letters, 2015, 42, 8862-8869.	1.5	32
21	Electric and magnetic variations in the nearâ€Mars environment. Journal of Geophysical Research: Space Physics, 2017, 122, 8536-8559.	0.8	30
22	MAVEN observations of electronâ€induced whistler mode waves in the Martian magnetosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 9717-9731.	0.8	27
23	Invertedâ€V Electron Acceleration Events Concurring With Localized Auroral Observations at Mars by MAVEN. Geophysical Research Letters, 2020, 47, e2020GL087414.	1.5	26
24	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.	0.8	21
25	Modeling Windâ€Driven Ionospheric Dynamo Currents at Mars: Expectations for InSight Magnetic Field Measurements. Geophysical Research Letters, 2019, 46, 5083-5091.	1.5	20
26	Localized Heating of the Martian Topside Ionosphere Through the Combined Effects of Magnetic Pumping by Largeâ€Scale Magnetosonic Waves and Pitch Angle Diffusion by Whistler Waves. Geophysical Research Letters, 2020, 47, e2019GL086408.	1.5	17
27	Inâ€Situ Measurements of Electron Temperature and Density in Mars' Dayside Ionosphere. Geophysical Research Letters, 2021, 48, e2021GL093623.	1.5	17
28	In Situ Measurements of Thermal Ion Temperature in the Martian Ionosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029531.	0.8	17
29	MAVEN Observations of Ionospheric Irregularities at Mars. Geophysical Research Letters, 2017, 44, 10,845.	1.5	16
30	Inâ€Situ Measurements of Ion Density in the Martian Ionosphere: Underlying Structure and Variability Observed by the MAVENâ€STATIC Instrument. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	16
31	Magnetic Reconnection in the Ionosphere of Mars: The Role of Collisions. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028036.	0.8	14
32	Kinetic Modeling of Langmuir Probes in Space and Application to the MAVEN Langmuir Probe and Waves Instrument. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028956.	0.8	14
33	Characterizing Average Electron Densities in the Martian Dayside Upper Ionosphere. Journal of Geophysical Research E: Planets, 2019, 124, 76-93.	1.5	13
34	Correlations between enhanced electron temperatures and electric field wave power in the Martian ionosphere. Geophysical Research Letters, 2018, 45, 493-501.	1.5	9
35	The Modulation of Solar Wind Hydrogen Deposition in the Martian Atmosphere by Foreshock Phenomena. Journal of Geophysical Research: Space Physics, 2019, 124, 7086-7097.	0.8	9
36	Spectral Analysis of Accelerated Electron Populations at Mars. Journal of Geophysical Research: Space Physics, 2019, 124, 8056-8065.	0.8	9

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37	On the Growth and Development of Nonâ€Linear Kelvinâ€"Helmholtz Instability at Mars: MAVEN Observations. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029224.	0.8	9
38	Marsâ€™ plasma system. Scientific potential of coordinated multipoint missions: â€œThe next generationâ€. Experimental Astronomy, 2022, 54, 641-676.	1.6	9
39	Ion Heating in the Martian Ionosphere. Journal of Geophysical Research: Space Physics, 2017, 122, 10,612.	0.8	8
40	Low Electron Temperatures Observed at Mars by MAVEN on Dayside Crustal Magnetic Field Lines. Journal of Geophysical Research: Space Physics, 2019, 124, 7629-7637.	0.8	8
41	The Statistical Characteristics of Smallâ€Scale Ionospheric Irregularities Observed in the Martian Ionosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 5874-5893.	0.8	8
42	The Penetration of Draped Magnetic Field Into the Martian Upper Ionosphere and Correlations With Upstream Solar Wind Dynamic Pressure. Journal of Geophysical Research: Space Physics, 2019, 124, 3021-3035.	0.8	8
43	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
44	MAVEN Observations of Low Frequency Steepened Magnetosonic Waves and Associated Heating of the Martian Nightside Ionosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029615.	0.8	8
45	First Detection of Kilometerâ€Scale Density Irregularities in the Martian Ionosphere. Geophysical Research Letters, 2020, 47, e2020GL090906.	1.5	7
46	Ionospheric Electron Densities at Mars: Comparison of Mars Express Ionospheric Sounding and MAVEN Local Measurements. Journal of Geophysical Research: Space Physics, 2017, 122, 12,393.	0.8	6
47	MAVEN Case Studies of Plasma Dynamics in Lowâ€Altitude Crustal Magnetic Field at Mars 1: Dayside Ion Spikes Associated With Radial Crustal Magnetic Fields. Journal of Geophysical Research: Space Physics, 2019, 124, 1239-1261.	0.8	6
48	Subsolar Electron Temperatures in the Lower Martian Ionosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027597.	0.8	6
49	The Structure of the Martian Quasiâ€Perpendicular Supercritical Shock as Seen by MAVEN. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028938.	0.8	6
50	MOSAIC: A Satellite Constellation to Enable Groundbreaking Mars Climate System Science and Prepare for Human Exploration. Planetary Science Journal, 2021, 2, 211.	1.5	6
51	The Effects of Different Drivers on the Induced Martian Magnetosphere Boundary: A Case Study of September 2017. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028105.	0.8	5
52	The Influence of Magnetic Field Topology and Orientation on the Distribution of Thermal Electrons in the Martian Magnetotail. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028130.	0.8	3
53	Carbon Ion Fluxes at Mars: First Results of Tailward Flows From MAVENâ€STATIC. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	3
54	Microâ€Scale Plasma Instabilities in the Interaction Region of the Solar Wind and the Martian Upper Atmosphere. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	2

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55	Bipolar Electric Field Pulses in the Martian Magnetosheath and Solar Wind; Their Implication and Impact Accessed by System Scale Size. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	0