

# C M Fowler

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8823359/publications.pdf>

Version: 2024-02-01

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	Marsâ€™ plasma system. Scientific potential of coordinated multipoint missions: â€œThe next generationâ€•. <i>Experimental Astronomy</i> , 2022, 54, 641-676.	1.6	9
2	Carbon Ion Fluxes at Mars: First Results of Tailward Flows From MAVENâ€™STATIC. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	3
3	Microâ€™scale Plasma Instabilities in the Interaction Region of the Solar Wind and the Martian Upper Atmosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	2
4	Inâ€™situ Measurements of Ion Density in the Martian Ionosphere: Underlying Structure and Variability Observed by the MAVENâ€™STATIC Instrument. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	16
5	Bipolar Electric Field Pulses in the Martian Magnetosheath and Solar Wind; Their Implication and Impact Accessed by System Scale Size. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	0
6	The Effects of Different Drivers on the Induced Martian Magnetosphere Boundary: A Case Study of September 2017. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028105.	0.8	5
7	The Influence of Magnetic Field Topology and Orientation on the Distribution of Thermal Electrons in the Martian Magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028130.	0.8	3
8	Kinetic Modeling of Langmuir Probes in Space and Application to the MAVEN Langmuir Probe and Waves Instrument. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028956.	0.8	14
9	Inâ€™situ Measurements of Electron Temperature and Density in Mars' Dayside Ionosphere. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093623.	1.5	17
10	The Structure of the Martian Quasiâ€™perpendicular Supercritical Shock as Seen by MAVEN. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028938.	0.8	6
11	On the Growth and Development of Nonâ€™linear Kelvinâ€™Helmholtz Instability at Mars: MAVEN Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029224.	0.8	9
12	MAVEN Observations of Low Frequency Steepened Magnetosonic Waves and Associated Heating of the Martian Nightside Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029615.	0.8	8
13	MOSAIC: A Satellite Constellation to Enable Groundbreaking Mars Climate System Science and Prepare for Human Exploration. <i>Planetary Science Journal</i> , 2021, 2, 211.	1.5	6
14	In Situ Measurements of Thermal Ion Temperature in the Martian Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029531.	0.8	17
15	Magnetic Reconnection in the Ionosphere of Mars: The Role of Collisions. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028036.	0.8	14
16	Mars' Ionopause: A Matter of Pressures. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028145.	0.8	35
17	First Detection of Kilometerâ€™scale Density Irregularities in the Martian Ionosphere. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL090906.	1.5	7
18	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. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086408.	1.5	17

#	ARTICLE	IF	CITATIONS
19	Subsolar Electron Temperatures in the Lower Martian Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027597.	0.8	6
20	Inverted- $\nabla V$ Electron Acceleration Events Concurring With Localized Auroral Observations at Mars by MAVEN. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087414.	1.5	26
21	The Modulation of Solar Wind Hydrogen Deposition in the Martian Atmosphere by Foreshock Phenomena. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 7086-7097.	0.8	9
22	Modeling Wind-Driven Ionospheric Dynamo Currents at Mars: Expectations for InSight Magnetic Field Measurements. <i>Geophysical Research Letters</i> , 2019, 46, 5083-5091.	1.5	20
23	Spectral Analysis of Accelerated Electron Populations at Mars. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 8056-8065.	0.8	9
24	Low Electron Temperatures Observed at Mars by MAVEN on Dayside Crustal Magnetic Field Lines. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 7629-7637.	0.8	8
25	The Statistical Characteristics of Small-Scale Ionospheric Irregularities Observed in the Martian Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 5874-5893.	0.8	8
26	The Penetration of Draped Magnetic Field Into the Martian Upper Ionosphere and Correlations With Upstream Solar Wind Dynamic Pressure. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 3021-3035.	0.8	8
27	MAVEN Case Studies of Plasma Dynamics in Low-Altitude Crustal Magnetic Field at Mars 1: Dayside Ion Spikes Associated With Radial Crustal Magnetic Fields. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1239-1261.	0.8	6
28	The Space Physics Environment Data Analysis System (SPEDAS). <i>Space Science Reviews</i> , 2019, 215, 9.	3.7	332
29	Electron Temperature Response to Solar Forcing in the Low-Latitude Martian Ionosphere. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 3082-3094.	1.5	8
30	Characterizing Average Electron Densities in the Martian Dayside Upper Ionosphere. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 76-93.	1.5	13
31	Correlations between enhanced electron temperatures and electric field wave power in the Martian ionosphere. <i>Geophysical Research Letters</i> , 2018, 45, 493-501.	1.5	9
32	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. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 7241-7256.	0.8	32
33	Using Magnetic Topology to Probe the Sources of Mars' Nightside Ionosphere. <i>Geophysical Research Letters</i> , 2018, 45, 12,190.	1.5	36
34	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.	1.1	216
35	MAVEN Observations of Solar Wind-Driven Magnetosonic Waves Heating the Martian Dayside Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 4129-4149.	0.8	40
36	Martian Electron Temperatures in the Subsolar Region: MAVEN Observations Compared to a One-Dimensional Model. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 5960-5973.	0.8	21

#	ARTICLE	IF	CITATIONS
37	The Mars Topside Ionosphere Response to the X8.2 Solar Flare of 10 September 2017. <i>Geophysical Research Letters</i> , 2018, 45, 8005-8013.	1.5	38
38	Photochemical escape of oxygen from Mars: First results from MAVEN in situ data. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 3815-3836.	0.8	106
39	Electric and magnetic variations in the near-Mars environment. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8536-8559.	0.8	30
40	Ionospheric Electron Densities at Mars: Comparison of Mars Express Ionospheric Sounding and MAVEN Local Measurements. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 12,393.	0.8	6
41	Flows, Fields, and Forces in the Mars-Solar Wind Interaction. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 11,320.	0.8	64
42	MAVEN Observations of Ionospheric Irregularities at Mars. <i>Geophysical Research Letters</i> , 2017, 44, 10,845.	1.5	16
43	Ion Densities in the Nightside Ionosphere of Mars: Effects of Electron Impact Ionization. <i>Geophysical Research Letters</i> , 2017, 44, 11248-11256.	1.5	64
44	Ion Heating in the Martian Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 10,612.	0.8	8
45	MAVEN observations of electron-induced whistler mode waves in the Martian magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 9717-9731.	0.8	27
46	Photoelectrons and solar ionizing radiation at Mars: Predictions versus MAVEN observations. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 8859-8870.	0.8	33
47	Electron energetics in the Martian dayside ionosphere: Model comparisons with MAVEN data. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 7049-7066.	0.8	38
48	Enhanced $O^{2+}$ loss at Mars due to an ambipolar electric field from electron heating. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 4668-4678.	0.8	48
49	The first in situ electron temperature and density measurements of the Martian nightside ionosphere. <i>Geophysical Research Letters</i> , 2015, 42, 8854-8861.	1.5	62
50	Dayside electron temperature and density profiles at Mars: First results from the MAVEN Langmuir probe and waves instrument. <i>Geophysical Research Letters</i> , 2015, 42, 8846-8853.	1.5	116
51	Neutral density response to solar flares at Mars. <i>Geophysical Research Letters</i> , 2015, 42, 8986-8992.	1.5	33
52	MAVEN observations of the response of Mars to an interplanetary coronal mass ejection. <i>Science</i> , 2015, 350, aad0210.	6.0	166
53	Dust observations at orbital altitudes surrounding Mars. <i>Science</i> , 2015, 350, aad0398.	6.0	41
54	Early MAVEN Deep Dip campaign reveals thermosphere and ionosphere variability. <i>Science</i> , 2015, 350, aad0459.	6.0	90

#	ARTICLE	IF	CITATIONS
55	Ionospheric plasma density variations observed at Mars by MAVEN/LPW. Geophysical Research Letters, 2015, 42, 8862-8869.	1.5	32