Robert F Pfaff

List of Publications by Year
in descending order

92	3,770	172457	133252
papers	citations	29 h-index	59 g-index

97	97	97	2234
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Resonant AlfvÃ©n Waves in the Lower Auroral Ionosphere: Evidence for the Nonlinear Evolution of the Ionospheric Feedback Instability. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	3
2	Dual Sounding Rocket and C/NOFS Satellite Observations of DC Electric Fields and Plasma Density in the Equatorial Eâ€•and Fâ€Region Ionosphere at Sunset. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	4
3	A Study of Postâ€Sunset Spreadâ€F Initiation During the 2013 EVEX Campaign. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	1
4	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, .	2.4	2
5	Imaging Low-Energy Ion Outflow in the Auroral Zone. Frontiers in Astronomy and Space Sciences, 2022, 9, .	2.8	1
6	Lower-thermosphereâ€“ionosphere (LTI) quantities: current status of measuring techniques and models. Annales Geophysicae, 2021, 39, 189-237.	1.6	25
7	The Vector Electric Field Investigation (VEFI) on the C/NOFS Satellite. Space Science Reviews, 2021, 217, 1.	8.1	3
8	Lowâ€Latitude Whistlerâ€Wave Spectra and Polarization From VEFI and CINDI Payloads on C/NOFS Satellite. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027074.	2.4	1
9	Daytime Dynamo Electrodynamics With Spiral Currents Driven by Strong Winds Revealed by Vapor Trails and Sounding Rocket Probes. Geophysical Research Letters, 2020, 47, e2020GL088803.	4.0	12
10	The Beam Plasma Interactions Experiment: An Active Experiment Using Pulsed Electron Beams. Frontiers in Astronomy and Space Sciences, 2020, 7, .	2.8	13
11	Ion Cyclotron Resonant Absorption Lines in ELF Hiss Power Spectral Density in the Lowâ€Latitude Ionosphere. Geophysical Research Letters, 2020, 47, e2019GL086315.	4.0	4
12	Coordinated Satellite Observations of the Very Low Frequency Transmission Through the Ionospheric D Layer at Low Latitudes, Using Broadband Radio Emissions From Lightning. Journal of Geophysical Research: Space Physics, 2018, 123, 2926-2952.	2.4	8
13	Partially Ionized Plasmas in Astrophysics. Space Science Reviews, 2018, 214, 1.	8.1	102
14	Ionospheric storm effects and equatorial plasma irregularities during the 17â€“18 March 2015 event. Journal of Geophysical Research: Space Physics, 2016, 121, 9146-9163.	2.4	33
15	Automated identification of discrete, lightningâ€generated, multipleâ€dispersed whistler waves in C/NOFSâ€VEFI very low frequency observations. Radio Science, 2016, 51, 1547-1569.	1.6	4
16	VISIONS remote observations of a spatially-structured filamentary source of energetic neutral atoms near the polar cap boundary during an auroral substorm. Advances in Space Research, 2015, 56, 2097-2105.	2.6	7
17	A dayside plasma depletion observed at midlatitudes during quiet geomagnetic conditions. Geophysical Research Letters, 2015, 42, 967-974.	4.0	19
18	Inner magnetospheric electron temperature and spacecraft potential estimated from concurrent Polar upper hybrid frequency and relative potential measurements. Journal of Geophysical Research: Space Physics, 2014, 119, 8046-8062.	2.4	3

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19	A method to estimate whistler wave vector from polarization using threeâ€component electric field data. Radio Science, 2014, 49, 131-145.	1.6	6
20	Ram/Wake and Surface Layer Effects on DC Electric Field Measurements in LEO. IEEE Transactions on Plasma Science, 2013, 41, 3459-3470.	1.3	1
21	Ion-neutral coupling during deep solar minimum. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 103, 138-146.	1.6	10
22	Equatorial zonal plasma drifts measured by the C/NOFS satellite during the 2008â€“2011 solar minimum. Journal of Geophysical Research: Space Physics, 2013, 118, 3891-3897.	2.4	37
23	Attenuation of lightningâ€produced sferics in the Earthâ€ionosphere waveguide and lowâ€latitude ionosphere. Journal of Geophysical Research: Space Physics, 2013, 118, 3692-3699.	2.4	19
24	Exploring the role of ionospheric drivers during the extreme solar minimum of 2008. Annales Geophysicae, 2013, 31, 2147-2156.	1.6	21
25	Equatorial ionosphere semiannual oscillation investigated from Schumann resonance measurements on board the C/NOFS satellite. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,045.	3.3	1
26	Measurements of Thermal Ion Drift Velocity and Temperature Using Planar Sensors. Geophysical Monograph Series, 2013, , 61-71.	0.1	67
27	USING SCHUMANN RESONANCE MEASUREMENTS FOR CONSTRAINING THE WATER ABUNDANCE ON THE GIANT PLANETSâ€”IMPLICATIONS FOR THE SOLAR SYSTEM'S FORMATION. Astrophysical Journal, 2012, 750, 85.	4.5	11
28	Detection of ionospheric AlfvÃ©n resonator signatures in the equatorial ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	21
29	Images of bottomside irregularities observed at topside altitudes. Journal of Geophysical Research, 2012, 117, .	3.3	6
30	The Near-Earth Plasma Environment. Space Science Reviews, 2012, 168, 23-112.	8.1	31
31	A Review of Low Frequency Electromagnetic Wave Phenomena Related to Tropospheric-Ionospheric Coupling Mechanisms. Space Science Reviews, 2012, 168, 551-593.	8.1	33
32	The Near-Earth Plasma Environment. Space Sciences Series of ISSI, 2012, , 23-112.	0.0	3
33	Satellite observations of Schumann resonances in the Earth's ionosphere. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	47
34	C/NOFS measurements of magnetic perturbations in the low-latitude ionosphere during magnetic storms. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	21
35	Topside equatorial ionospheric density and composition during and after extreme solar minimum. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	45
36	Science of opportunity: Heliophysics on the FASTSAT mission and STP-S26. , 2011, , .		6

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37	Monitoring D-region variability from lightning measurements. , 2011, , .		3
38	VLF and HF plasma waves associated with spread-F plasma depletions observed on the C/NOFS satellite. , 2011, , .		1
39	Initial Studies with the Lightning Detector on the C/NOFS Satellite, and Cross Validation with WWLLN. Journal of Atmospheric and Oceanic Technology, 2011, 28, 1423-1435.	1.3	4
40	A Review of Low Frequency Electromagnetic Wave Phenomena Related to Tropospheric-Ionospheric Coupling Mechanisms. Space Sciences Series of ISSI, 2011, , 551-593.	0.0	5
41	Observations of DC electric fields in the lowâ€latitude ionosphere and their variations with local time, longitude, and plasma density during extreme solar minimum. Journal of Geophysical Research, 2010, 115, .	3.3	65
42	C/NOFS observations of deep plasma depletions at dawn. Geophysical Research Letters, 2009, 36, .	4.0	72
43	Lightning-induced plasma turbulence andÂion heating in equatorial ionosphericÂdepletions. Nature Geoscience, 2008, 1, 101-105.	12.9	27
44	Lightningâ€induced lowerâ€hybrid turbulence and trapped Extremely Low Frequency (ELF) electromagnetic waves observed in deep equatorial plasma density depletions during intense magnetic storms. Journal of Geophysical Research, 2008, 113, .	3.3	6
45	Imaging radar observations of Farley Buneman waves during the JOULE II experiment. Annales Geophysicae, 2008, 26, 1837-1850.	1.6	17
46	Energetics and structure of the lower E region associated with sporadic E layer. Annales Geophysicae, 2008, 26, 2929-2936.	1.6	1
47	ICE, the electric field experiment on DEMETER. Planetary and Space Science, 2006, 54, 456-471.	1.7	294
48	SEEK-2 (Sporadic-<i>E</i> Experiment over Kyushu 2) â˜† Project Outline, and Significance. Annales Geophysicae, 2005, 23, 2295-2305.	1.6	45
49	Electric field measurements of DC and long wavelength structures associated with sporadic-<i>E</i> layers and QP radar echoes. Annales Geophysicae, 2005, 23, 2319-2334.	1.6	20
50	Simultaneous optical, CUTLASS HF radar, and FAST spacecraft observations: signatures of boundary layer processes in the cusp. Annales Geophysicae, 2004, 22, 511-525.	1.6	19
51	Electric Field, Magnetic Field, and Density Measurements on the Active Plasma Experiment Sounding Rocket. Journal of Spacecraft and Rockets, 2004, 41, 521-532.	1.9	14
52	Polar observations of electron density distribution in the Earthâ€™s magnetosphere. 2. Density profiles. Annales Geophysicae, 2002, 20, 1725-1735.	1.6	19
53	FAST observations of discrete electrostatic waves in association with down-going ion beams in the auroral zone. Journal of Geophysical Research, 2002, 107, SMP 12-1.	3.3	24
54	Polar observations of electron density distribution in the Earthâ€™s magnetosphere. 1. Statistical results. Annales Geophysicae, 2002, 20, 1711-1724.	1.6	26

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55	Rocket probe observations of electric field irregularities in the polar summer mesosphere. Geophysical Research Letters, 2001, 28, 1431-1434.	4.0	19
56	Fast Auroral Snapshot observations of cusp electron and ion structures. Journal of Geophysical Research, 2001, 106, 25595-25600.	3.3	22
57	The FAST Satellite Fields Instrument. Space Science Reviews, 2001, 98, 67-91.	8.1	57
58	An Overview of the Fast Auroral SnapshoT (FAST) Satellite. Space Science Reviews, 2001, 98, 1-32.	8.1	28
59	An Overview of the Fast Auroral Snapshot (FAST) Satellite. , 2001, , 1-32.		12
60	Magnetospheric multiscale and global electrodynamics missions. Geophysical Monograph Series, 1999, , 225-235.	0.1	6
61	Solitary potential structures associated with ion and electron beams near 1REaltitude. Journal of Geophysical Research, 1999, 104, 28709-28717.	3.3	103
62	FAST- Geotail correlative studies of magnetosphere ionosphere coupling in the nightside magnetosphere. Geophysical Research Letters, 1998, 25, 2077-2080.	4.0	10
63	Species dependent energies in upward directed ion beams over auroral arcs as observed with FAST TEAMS. Geophysical Research Letters, 1998, 25, 2029-2032.	4.0	41
64	Characteristics of electromagnetic proton cyclotron waves along auroral field lines observed by FAST in regions of upward current. Geophysical Research Letters, 1998, 25, 2057-2060.	4.0	23
65	FAST satellite wave observations in the AKR source region. Geophysical Research Letters, 1998, 25, 2061-2064.	4.0	177
66	FAST satellite observations of electric field structures in the auroral zone. Geophysical Research Letters, 1998, 25, 2025-2028.	4.0	248
67	FAST satellite observations of large-amplitude solitary structures. Geophysical Research Letters, 1998, 25, 2041-2044.	4.0	504
68	Spatial structure and gradients of ion beams observed by FAST. Geophysical Research Letters, 1998, 25, 2021-2024.	4.0	79
69	The association of electrostatic ion cyclotron waves, ion and electron beams and field-aligned currents: FAST observations of an auroral zone crossing near midnight. Geophysical Research Letters, 1998, 25, 2053-2056.	4.0	83
70	FAST observations in the downward auroral current region: Energetic upgoing electron beams, parallel potential drops, and ion heating. Geophysical Research Letters, 1998, 25, 2017-2020.	4.0	273
71	Electron modulation and ion cyclotron waves observed by FAST. Geophysical Research Letters, 1998, 25, 2045-2048.	4.0	68
72	Electric field measurements above and within a sporadic-E layer. Geophysical Research Letters, 1998, 25, 1769-1772.	4.0	32

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73	Initial FAST observations of acceleration processes in the cusp. Geophysical Research Letters, 1998, 25, 2037-2040.	4.0	33
74	Comparison of E-region electric fields observed with a sounding rocket and a Doppler radar in the Seek Campaign. Geophysical Research Letters, 1998, 25, 1773-1776.	4.0	22
75	The auroral current circuit and field-aligned currents observed by FAST. Geophysical Research Letters, 1998, 25, 2033-2036.	4.0	84
76	ARIA II neutral flywheel-driven field-aligned currents in the postmidnight sector of the auroral oval: A case study. Journal of Geophysical Research, 1997, 102, 9749-9759.	3.3	8
77	Wavevector observations of the two-stream instability in the daytime equatorial electrojet. Geophysical Research Letters, 1997, 24, 1671-1674.	4.0	11
78	DC polarization electric field, current density, and plasma density measurements in the daytime equatorial electrojet. Geophysical Research Letters, 1997, 24, 1667-1670.	4.0	40
79	The electric field instrument on the polar satellite. Space Science Reviews, 1995, 71, 583-596.	8.1	168
80	Vertical neutral wind in the equatorial F-region deduced from electric field and ion density measurements. Journal of Atmospheric and Solar-Terrestrial Physics, 1995, 57, 645-651.	0.9	6
81	Focusing of nonducted whistlers by the equatorial anomaly. Journal of Geophysical Research, 1995, 100, 7783.	3.3	10
82	Downdrafting plasma flow in equatorial bubbles. Journal of Geophysical Research, 1994, 99, 11507.	3.3	26
83	Interpretation of the electric fields measured in an ionospheric critical ionization velocity experiment. Journal of Geophysical Research, 1991, 96, 9719-9733.	3.3	25
84	Electric and magnetic field measurements inside a highâ€velocity neutral beam undergoing ionization. Journal of Geophysical Research, 1991, 96, 9703-9718.	3.3	26
85	Nasa's Small Explorer Program. Physics Today, 1991, 44, 44-51.	0.3	10
86	Plasmaâ€depleted holes, waves, and energized particles from highâ€altitude explosive plasma perturbation experiments. Journal of Geophysical Research, 1985, 90, 4281-4298.	3.3	14
87	Lowâ€altitude image striations associated with bottomside equatorial spread F: Observations and theory. Journal of Geophysical Research, 1984, 89, 2955-2961.	3.3	40
88	Simultaneous rocket probe and radar measurements of equatorial spread Fâ€”Transitional and short wavelength results. Journal of Geophysical Research, 1982, 87, 1575-1588.	3.3	98
89	Wave electric field measurements in a dusty plasma in the polar summer mesosphere gathered on a NASA sounding rocket. , 0, , .		0
90	DEMETER Satellite Observations of Plasma Irregularities in the Topside Ionosphere at Low, Middle, and Sub-Auroral Latitudes and their Dependence on Magnetic Storms. Geophysical Monograph Series, 0, , 297-310.	0.1	9

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91	Langmuir Probe Measurements in the Ionosphere. Geophysical Monograph Series, 0, , 23-35.	0.1	53
92	Kinetic Core Plasma Diagnostics. Geophysical Monograph Series, 0, , 105-123.	0.1	9