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	FAST satellite observations of large-amplitude solitary structures. Geophysical Research Letters, 1998, 25, 2041-2044.	4.0	504
2	ICE, the electric field experiment on DEMETER. Planetary and Space Science, 2006, 54, 456-471.	1.7	294
3	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
4	FAST satellite observations of electric field structures in the auroral zone. Geophysical Research Letters, 1998, 25, 2025-2028.	4.0	248
5	FAST satellite wave observations in the AKR source region. Geophysical Research Letters, 1998, 25, 2061-2064.	4.0	177
6	The electric field instrument on the polar satellite. Space Science Reviews, 1995, 71, 583-596.	8.1	168
7	Solitary potential structures associated with ion and electron beams near 1REaltitude. Journal of Geophysical Research, 1999, 104, 28709-28717.	3.3	103
8	Partially Ionized Plasmas in Astrophysics. Space Science Reviews, 2018, 214, 1.	8.1	102
9	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
10	The auroral current circuit and field-aligned currents observed by FAST. Geophysical Research Letters, 1998, 25, 2033-2036.	4.0	84
11	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
12	Spatial structure and gradients of ion beams observed by FAST. Geophysical Research Letters, 1998, 25, 2021-2024.	4.0	79
13	C/NOFS observations of deep plasma depletions at dawn. Geophysical Research Letters, 2009, 36, .	4.0	72
14	Electron modulation and ion cyclotron waves observed by FAST. Geophysical Research Letters, 1998, 25, 2045-2048.	4.0	68
15	Measurements of Thermal Ion Drift Velocity and Temperature Using Planar Sensors. Geophysical Monograph Series, 2013, , 61-71.	0.1	67
16	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
17	The FAST Satellite Fields Instrument. Space Science Reviews, 2001, 98, 67-91.	8.1	57
18	Langmuir Probe Measurements in the Ionosphere. Geophysical Monograph Series, 0, , 23-35.	0.1	53

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19	Satellite observations of Schumann resonances in the Earth's ionosphere. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	47
20	SEEK-2 (Sporadic-<i>E</i> Experiment over Kyushu 2) â^' Project Outline, and Significance. Annales Geophysicae, 2005, 23, 2295-2305.	1.6	45
21	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
22	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
23	Lowâ€altitude image striations associated with bottomside equatorial spread F: Observations and theory. Journal of Geophysical Research, 1984, 89, 2955-2961.	3.3	40
24	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
25	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
26	Initial FAST observations of acceleration processes in the cusp. Geophysical Research Letters, 1998, 25, 2037-2040.	4.0	33
27	A Review of Low Frequency Electromagnetic Wave Phenomena Related to Tropospheric-Ionospheric Coupling Mechanisms. Space Science Reviews, 2012, 168, 551-593.	8.1	33
28	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
29	Electric field measurements above and within a sporadic-E layer. Geophysical Research Letters, 1998, 25, 1769-1772.	4.0	32
30	The Near-Earth Plasma Environment. Space Science Reviews, 2012, 168, 23-112.	8.1	31
31	An Overview of the Fast Auroral SnapshoT (FAST) Satellite. Space Science Reviews, 2001, 98, 1-32.	8.1	28
32	Lightning-induced plasma turbulence andÂion heating in equatorial ionosphericÂdepletions. Nature Geoscience, 2008, 1, 101-105.	12.9	27
33	Electric and magnetic field measurements inside a highâ€velocity neutral beam undergoing ionization. Journal of Geophysical Research, 1991, 96, 9703-9718.	3.3	26
34	Downdrafting plasma flow in equatorial bubbles. Journal of Geophysical Research, 1994, 99, 11507.	3.3	26
35	Polar observations of electron density distribution in the Earthâ€™s magnetosphere. 1. Statistical results. Annales Geophysicae, 2002, 20, 1711-1724.	1.6	26
36	Interpretation of the electric fields measured in an ionospheric critical ionization velocity experiment. Journal of Geophysical Research, 1991, 96, 9719-9733.	3.3	25

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37	Lower-thermosphereâ€“ionosphere (LTI) quantities: current status of measuring techniques and models. Annales Geophysicae, 2021, 39, 189-237.	1.6	25
38	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
39	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
40	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
41	Fast Auroral Snapshot observations of cusp electron and ion structures. Journal of Geophysical Research, 2001, 106, 25595-25600.	3.3	22
42	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
43	Detection of ionospheric AlfvÃ©n resonator signatures in the equatorial ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	21
44	Exploring the role of ionospheric drivers during the extreme solar minimum of 2008. Annales Geophysicae, 2013, 31, 2147-2156.	1.6	21
45	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
46	Rocket probe observations of electric field irregularities in the polar summer mesosphere. Geophysical Research Letters, 2001, 28, 1431-1434.	4.0	19
47	Polar observations of electron density distribution in the Earthâ€™s magnetosphere. 2. Density profiles. Annales Geophysicae, 2002, 20, 1725-1735.	1.6	19
48	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
49	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
50	A dayside plasma depletion observed at midlatitudes during quiet geomagnetic conditions. Geophysical Research Letters, 2015, 42, 967-974.	4.0	19
51	Imaging radar observations of Farley Buneman waves during the JOULE II experiment. Annales Geophysicae, 2008, 26, 1837-1850.	1.6	17
52	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
53	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
54	The Beam Plasma Interactions Experiment: An Active Experiment Using Pulsed Electron Beams. Frontiers in Astronomy and Space Sciences, 2020, 7, .	2.8	13

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55	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
56	An Overview of the Fast Auroral Snapshot (FAST) Satellite. , 2001, , 1-32.		12
57	Wavevector observations of the two-stream instability in the daytime equatorial electrojet. Geophysical Research Letters, 1997, 24, 1671-1674.	4.0	11
58	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
59	Nasa's Small Explorer Program. Physics Today, 1991, 44, 44-51.	0.3	10
60	Focusing of nonducted whistlers by the equatorial anomaly. Journal of Geophysical Research, 1995, 100, 7783.	3.3	10
61	FAST- Geotail correlative studies of magnetosphere ionosphere coupling in the nightside magnetosphere. Geophysical Research Letters, 1998, 25, 2077-2080.	4.0	10
62	Ion-neutral coupling during deep solar minimum. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 103, 138-146.	1.6	10
63	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
64	Kinetic Core Plasma Diagnostics. Geophysical Monograph Series, 0, , 105-123.	0.1	9
65	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
66	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
67	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
68	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
69	Magnetospheric multiscale and global electrodynamics missions. Geophysical Monograph Series, 1999, , 225-235.	0.1	6
70	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
71	Science of opportunity: Heliophysics on the FASTSAT mission and STP-S26. , 2011, , .		6
72	Images of bottomside irregularities observed at topside altitudes. Journal of Geophysical Research, 2012, 117, .	3.3	6

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73	A method to estimate whistler wave vector from polarization using threeâ€component electric field data. Radio Science, 2014, 49, 131-145.	1.6	6
74	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
75	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
76	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
77	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
78	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
79	Monitoring D-region variability from lightning measurements. , 2011, , .		3
80	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
81	The Near-Earth Plasma Environment. Space Sciences Series of ISSI, 2012, , 23-112.	0.0	3
82	The Vector Electric Field Investigation (VEFI) on the C/NOFS Satellite. Space Science Reviews, 2021, 217, 1.	8.1	3
83	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
84	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
85	VLF and HF plasma waves associated with spread-F plasma depletions observed on the C/NOFS satellite. , 2011, , .		1
86	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
87	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
88	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
89	Energetics and structure of the lower E region associated with sporadic E layer. Annales Geophysicae, 2008, 26, 2929-2936.	1.6	1
90	A Study of Postâ€Sunset Spreadâ€F Initiation During the 2013 EVEX Campaign. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	1

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91	Imaging Low-Energy Ion Outflow in the Auroral Zone. Frontiers in Astronomy and Space Sciences, 2022, 9, .	2.8	1
92	Wave electric field measurements in a dusty plasma in the polar summer mesosphere gathered on a NASA sounding rocket. , 0, , .		0