P W Valek

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3505677/publications.pdf

Version: 2024-02-01

114	4,026	117453	133063
papers	citations	34 h-index	59 g-index

118	118	118	1790
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Global Observations of the Interstellar Interaction from the Interstellar Boundary Explorer (IBEX). Science, 2009, 326, 959-962.	6.0	461
2	The Interstellar Boundary Explorer High Energy (IBEX-Hi) Neutral Atom Imager. Space Science Reviews, 2009, 146, 75-103.	3.7	226
3	The Jovian Auroral Distributions Experiment (JADE) on the Juno Mission to Jupiter. Space Science Reviews, 2017, 213, 547-643.	3.7	187
4	The Two Wide-angle Imaging Neutral-atom Spectrometers (TWINS) NASA Mission-of-Opportunity. Space Science Reviews, 2009, 142, 157-231.	3.7	170
5	Magnetospheric Science Objectives of the Juno Mission. Space Science Reviews, 2017, 213, 219-287.	3.7	163
6	Jupiterâ€™s magnetosphere and aurorae observed by the Juno spacecraft during its first polar orbits. Science, 2017, 356, 826-832.	6.0	109
7	The Comprehensive Inner Magnetosphereâ€Ionosphere Model. Journal of Geophysical Research: Space Physics, 2014, 119, 7522-7540.	0.8	106
8	The Solar Wind Around Pluto (SWAP) Instrument Aboard New Horizons. Space Science Reviews, 2008, 140, 261-313.	3.7	102
9	Medium energy neutral atom (MENA) imager for the IMAGE mission. Space Science Reviews, 2000, 91, 113-154.	3.7	90
10	Juno observations of energetic charged particles over Jupiter's polar regions: Analysis of monodirectional and bidirectional electron beams. Geophysical Research Letters, 2017, 44, 4410-4418.	1.5	90
11	Diverse Plasma Populations and Structures in Jupiter's Magnetotail. Science, 2007, 318, 217-220.	6.0	80
12	Discrete and broadband electron acceleration in Jupiterâ€™s powerful aurora. Nature, 2017, 549, 66-69.	13.7	79
13	Response of Jupiter's auroras to conditions in the interplanetary medium as measured by the Hubble Space Telescope and Juno. Geophysical Research Letters, 2017, 44, 7643-7652.	1.5	68
14	First medium energy neutral atom (MENA) Images of Earth's magnetosphere during substorm and storm-time. Geophysical Research Letters, 2001, 28, 1147-1150.	1.5	61
15	Electron beams and loss cones in the auroral regions of Jupiter. Geophysical Research Letters, 2017, 44, 7131-7139.	1.5	61
16	Plutoâ€™s interaction with its space environment: Solar wind, energetic particles, and dust. Science, 2016, 351, aad9045.	6.0	60
17	Morphology of the UV aurorae Jupiter during Juno's first perijove observations. Geophysical Research Letters, 2017, 44, 4463-4471.	1.5	54
18	Jupiter's Aurora Observed With HST During Juno Orbits 3 to 7. Journal of Geophysical Research: Space Physics, 2018, 123, 3299-3319.	0.8	53

#	Article	IF	Citations
19	Two Wideâ€Angle Imaging Neutralâ€Atom Spectrometers and Interstellar Boundary Explorer energetic neutral atom imaging of the 5 April 2010 substorm. Journal of Geophysical Research, 2012, 117, .	3.3	51
20	Diverse Electron and Ion Acceleration Characteristics Observed Over Jupiter's Main Aurora. Geophysical Research Letters, 2018, 45, 1277-1285.	1.5	49
21	In Situ Observations Connected to the Io Footprint Tail Aurora. Journal of Geophysical Research E: Planets, 2018, 123, 3061-3077.	1.5	48
22	Comparison of TWINS images of lowâ€altitude emission of energetic neutral atoms with DMSP precipitating ion fluxes. Journal of Geophysical Research, 2010, 115, .	3.3	43
23	Magnetospheric ion influence on magnetic reconnection at the duskside magnetopause. Geophysical Research Letters, 2016, 43, 1435-1442.	1.5	42
24	Precipitating Electron Energy Flux and Characteristic Energies in Jupiter's Main Auroral Region as Measured by Juno/JEDI. Journal of Geophysical Research: Space Physics, 2018, 123, 7554-7567.	0.8	42
25	Energetic particle signatures of magnetic fieldâ€aligned potentials over Jupiter's polar regions. Geophysical Research Letters, 2017, 44, 8703-8711.	1.5	41
26	Ring current dynamics in moderate and strong storms: Comparative analysis of TWINS and IMAGE/HENA data with the Comprehensive Ring Current Model. Journal of Geophysical Research, 2010, 115, .	3.3	39
27	Evolution of lowâ€altitude and ring current ENA emissions from a moderate magnetospheric storm: Continuous and simultaneous TWINS observations. Journal of Geophysical Research, 2010, 115, .	3.3	39
28	THE NEW HORIZONS SOLAR WIND AROUND PLUTO (SWAP) OBSERVATIONS OF THE SOLAR WIND FROM 11â€“33 au. Astrophysical Journal, Supplement Series, 2016, 223, 19.	3.0	39
29	Generation of the Jovian hectometric radiation: First lessons from Juno. Geophysical Research Letters, 2017, 44, 4439-4446.	1.5	38
30	Energy Flux and Characteristic Energy of Electrons Over Jupiter's Main Auroral Emission. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027693.	0.8	37
31	Accelerated flows at Jupiter's magnetopause: Evidence for magnetic reconnection along the dawn flank. Geophysical Research Letters, 2017, 44, 4401-4409.	1.5	36
32	Survey of Ion Properties in Jupiter's Plasma Sheet: Juno JADEâ€Ÿ Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027696.	0.8	36
33	Plasma measurements in the Jovian polar region with Juno/JADE. Geophysical Research Letters, 2017, 44, 7122-7130.	1.5	35
34	A new view of Jupiter's auroral radio spectrum. Geophysical Research Letters, 2017, 44, 7114-7121.	1.5	35
35	Spatial Distribution and Properties of 0.1â€“100ÂkeV Electrons in Jupiter's Polar Auroral Region. Geophysical Research Letters, 2017, 44, 9199-9207.	1.5	34
36	Filling and emptying of the plasma sheet: Remote observations with 1-70 keV energetic neutral atoms. Geophysical Research Letters, 2002, 29, 36-1-36-4.	1.5	32

#	Article	IF	Citations
37	Pluto's interaction with the solar wind. Journal of Geophysical Research: Space Physics, 2016, 121, 4232-4246.	0.8	32
38	Method to Derive Ion Properties From Juno JADE Including Abundance Estimates for O⁺ and S²⁺. Journal of Geophysical Research: Space Physics, 2020, 125, e2018JA026169.	0.8	31
39	Evolution of CIR storm on 22 July 2009. Journal of Geophysical Research, 2012, 117, .	3.3	30
40	Jovian bow shock and magnetopause encounters by the Juno spacecraft. Geophysical Research Letters, 2017, 44, 4506-4512.	1.5	30
41	A heavy ion and proton radiation belt inside of Jupiter's rings. Geophysical Research Letters, 2017, 44, 5259-5268.	1.5	28
42	Simulation and TWINS observations of the 22 July 2009 storm. Journal of Geophysical Research, 2010, 115, .	3.3	26
43	Junoâ€UVS approach observations of Jupiter's auroras. Geophysical Research Letters, 2017, 44, 7668-7675.	1.5	25
44	Crossâ€scale observations of the 2015 St. Patrick's day storm: THEMIS, Van Allen Probes, and TWINS. Journal of Geophysical Research: Space Physics, 2017, 122, 368-392.	0.8	25
45	Plasma environment at the dawn flank of Jupiter's magnetosphere: Juno arrives at Jupiter. Geophysical Research Letters, 2017, 44, 4432-4438.	1.5	24
46	TWINS stereoscopic imaging of multiple peaks in the ring current. Journal of Geophysical Research: Space Physics, 2015, 120, 368-383.	0.8	22
47	Diffuse Auroral Electron and Ion Precipitation Effects on RCMâ€E Comparisons With Satellite Data During the 17 March 2013 Storm. Journal of Geophysical Research: Space Physics, 2019, 124, 4194-4216.	0.8	22
48	Oxygenâ€hydrogen differentiated observations from TWINS: The 22 July 2009 storm. Journal of Geophysical Research: Space Physics, 2013, 118, 3377-3393.	0.8	21
49	Observation and interpretation of energetic ion conics in Jupiter's polar magnetosphere. Geophysical Research Letters, 2017, 44, 4419-4425.	1.5	21
50	The Acceleration of Electrons to High Energies Over the Jovian Polar Cap via Whistler Mode Waveâ€Particle Interactions. Journal of Geophysical Research: Space Physics, 2018, 123, 7523-7533.	0.8	21
51	Whistler Mode Waves Associated With Broadband Auroral Electron Precipitation at Jupiter. Geophysical Research Letters, 2018, 45, 9372-9379.	1.5	21
52	Magnetotail Reconnection at Jupiter: A Survey of Juno Magnetic Field Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027486.	0.8	21
53	The Role and Contributions of Energetic Neutral Atom (ENA) Imaging in Magnetospheric Substorm Research. Space Science Reviews, 2003, 109, 155-182.	3.7	20
54	Comparative analysis of low-altitude ENA emissions in two substorms. Journal of Geophysical Research: Space Physics, 2013, 118, 724-731.	0.8	20

#	Article	IF	Citations
55	Juno observations of largeâ€scale compressions of Jupiter's dawnside magnetopause. Geophysical Research Letters, 2017, 44, 7559-7568.	1.5	20
56	TWINS energetic neutral atom observations of localâ€timeâ€dependent ring current anisotropy. Journal of Geophysical Research, 2012, 117, .	3.3	19
57	Large magnetic storms as viewed by TWINS: A study of the differences in the medium energy ENA composition. Journal of Geophysical Research: Space Physics, 2014, 119, 2819-2835.	0.8	19
58	Observation of Electron Conics by Juno: Implications for Radio Generation and Acceleration Processes. Geophysical Research Letters, 2018, 45, 9408-9416.	1.5	19
59	Global view of inner magnetosphere composition during storm time. Journal of Geophysical Research: Space Physics, 2013, 118, 7074-7084.	0.8	18
60	Global images of trapped ring current ions during main phase of 17 March 2015 geomagnetic storm as observed by TWINS. Journal of Geophysical Research: Space Physics, 2016, 121, 6509-6525.	0.8	18
61	Comparing Electron Energetics and UV Brightness in Jupiter's Northern Polar Region During Juno Perijove 5. Geophysical Research Letters, 2019, 46, 19-27.	1.5	18
62	Technique for increasing dynamic range of space-borne ion composition instruments. Review of Scientific Instruments, 2005, 76, 103301.	0.6	17
63	Hot flow anomaly observed at Jupiter's bow shock. Geophysical Research Letters, 2017, 44, 8107-8112.	1.5	17
64	Understanding the Origin of Jupiter's Diffuse Aurora Using Juno's First Perijove Observations. Geophysical Research Letters, 2017, 44, 10,162.	1.5	17
65	First Report of Electron Measurements During a Europa Footprint Tail Crossing by Juno. Geophysical Research Letters, 2020, 47, e2020GL089732.	1.5	17
66	Jovian Highâ€Latitude Ionospheric Ions: Juno In Situ Observations. Geophysical Research Letters, 2019, 46, 8663-8670.	1.5	16
67	Survey of Jupiter's Dawn Magnetosheath Using Juno. Journal of Geophysical Research: Space Physics, 2019, 124, 9106-9123.	0.8	16
68	Chandra Observations of Jupiter's Xâ€ray Auroral Emission During Juno Apojove 2017. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006262.	1.5	16
69	Medium Energy Neutral Atom (MENA) Imager for the Image Mission. , 2000, , 113-154.		16
70	Waterâ€Group Pickup Ions From Europaâ€Genic Neutrals Orbiting Jupiter. Geophysical Research Letters, 2022, 49, .	1.5	16
71	Plasma Observations During the 7 June 2021 Ganymede Flyby From the Jovian Auroral Distributions Experiment (JADE) on Juno. Geophysical Research Letters, 2022, 49, .	1.5	16
72	Comparison of TWINS and THEMIS observations of proton pitch angle distributions in the ring current during the 29 May 2010 geomagnetic storm. Journal of Geophysical Research: Space Physics, 2013, 118, 4895-4905.	0.8	15

#	Article	IF	Citations
73	Imaging the development of the cold dense plasma sheet. Geophysical Research Letters, 2015, 42, 7867-7873.	1.5	15
74	Solar Wind Properties During Juno's Approach to Jupiter: Data Analysis and Resulting Plasma Properties Utilizing a 1â€Ð Forward Model. Journal of Geophysical Research: Space Physics, 2018, 123, 2772-2786.	0.8	15
75	Suprathermal Ions in the Outer Heliosphere. Astrophysical Journal, 2019, 876, 46.	1.6	15
76	Survey of Juno Observations in Jupiter's Plasma Disk: Density. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029446.	0.8	15
77	Global observations of ring current dynamics during corotating interaction regionâ€“driven geomagnetic storms in 2008. Journal of Geophysical Research, 2010, 115, .	3.3	14
78	Localâ€timeâ€dependent lowâ€altitude ion spectra deduced from TWINS ENA images. Journal of Geophysical Research: Space Physics, 2013, 118, 2928-2950.	0.8	14
79	Shape of the terrestrial plasma sheet in the nearâ€Earth magnetospheric tail as imaged by the Interstellar Boundary Explorer. Geophysical Research Letters, 2015, 42, 2115-2122.	1.5	14
80	INTERPLANETARY MAGNETIC FIELD SECTOR FROM SOLAR WIND AROUND PLUTO (SWAP) MEASUREMENTS OF HEAVY ION PICKUP NEAR PLUTO. Astrophysical Journal Letters, 2016, 823, L30.	3.0	13
81	Jovian deep magnetotail composition and structure. Journal of Geophysical Research: Space Physics, 2017, 122, 1763-1777.	0.8	13
82	Proton Outflow Associated With Jupiter's Auroral Processes. Geophysical Research Letters, 2021, 48, .	1.5	13
83	Juno Plasma Wave Observations at Ganymede. Geophysical Research Letters, 2022, 49, .	1.5	13
84	The IBEX Background Monitor. Space Science Reviews, 2009, 146, 105-115.	3.7	12
85	Latitudinal anisotropy in ring current energetic neutral atoms. Geophysical Research Letters, 2012, 39, .	1.5	12
86	First joint in situ and global observations of the mediumâ€energy oxygen and hydrogen in the inner magnetosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 7615-7628.	0.8	12
87	The Highâ€Latitude Extension of Jupiter's Io Torus: Electron Densities Measured by Juno Waves. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029195.	0.8	12
88	A Composition Analysis Tool for the Solar Wind AroundÂPluto (SWAP) Instrument on New Horizons. Space Science Reviews, 2010, 156, 1-12.	3.7	11
89	The Generation of Upwardâ€Propagating Whistler Mode Waves by Electron Beams in the Jovian Polar Regions. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027868.	0.8	11
90	Electron Partial Density and Temperature Over Jupiter's Main Auroral Emission Using Juno Observations. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029426.	0.8	11

#	Article	IF	Citations
91	Determining the Alpha to Proton Density Ratio for the New Horizons Solar Wind Observations. Astrophysical Journal, 2018, 866, 85.	1.6	10
92	A mass analysis technique using coincidence measurements from the Interstellar Boundary Explorer-Hi (â^¼0.3â€“â^¼6â€‚keV) detector. Review of Scientific Instruments, 2008, 79, 096107.	0.6	9
93	Analytical estimate for lowâ€altitude ENA emissivity. Journal of Geophysical Research: Space Physics, 2016, 121, 1167-1191.	0.8	9
94	Composition of 1â€“128ÂkeV Magnetospheric ENAs. Journal of Geophysical Research: Space Physics, 2018, 123, 2668-2678.	0.8	8
95	Magnetosphere dynamics during the 14ÂNovember 2012 storm inferred from TWINS, AMPERE, Van Allen Probes, and BATS-R-USâ€“CRCM. Annales Geophysicae, 2018, 36, 107-124.	0.6	8
96	Outflow from the ionosphere in the vicinity of the cusp. Journal of Geophysical Research, 2002, 107, SMP 13-1-SMP 13-9.	3.3	7
97	Closed Fluxtubes and Dispersive Proton Conics at Jupiter's Polar Cap. Geophysical Research Letters, 2022, 49, .	1.5	7
98	Space applications of microelectromechanical systems: Southwest Research InstituteÂ®vacuum microprobe facility and initial vacuum test results. Review of Scientific Instruments, 2003, 74, 3874-3878.	0.6	6
99	Terrestrial Energetic Neutral Atom Emissions and the Groundâ€Based Geomagnetic Indices: Implications From IBEX Observations. Journal of Geophysical Research: Space Physics, 2019, 124, 8761-8777.	0.8	5
100	The Interstellar Boundary Explorer High Energy (IBEX-Hi) Neutral Atom Imager. , 2009, , 75-103.		5
101	Juno In Situ Observations Above the Jovian Equatorial Ionosphere. Geophysical Research Letters, 2020, 47, e2020GL087623.	1.5	5
102	Lowâ€Altitude Emission of Energetic Neutral Atoms: Multiple Interactions and Energy Loss. Journal of Geophysical Research: Space Physics, 2017, 122, 10,203-10,234.	0.8	4
103	Dynamics of a geomagnetic storm on 7â€“10 September 2015 as observed by TWINS and simulated by CIMI. Annales Geophysicae, 2018, 36, 1439-1456.	0.6	4
104	Pluto's Interaction With Energetic Heliospheric Ions. Journal of Geophysical Research: Space Physics, 2019, 124, 7413-7424.	0.8	4
105	Magnetospheric Science Objectives of the Juno Mission. , 2014, , 39-107.		3
106	Constraining the IMF at Pluto Using New Horizons SWAP Data and Hybrid Simulations. Journal of Geophysical Research: Space Physics, 2019, 124, 1568-1581.	0.8	2
107	Global ENA Imaging and In Situ Observations of Substorm Dipolarization on 10 August 2016. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027733.	0.8	2
108	Average Ring Current Response to Solar Wind Drivers: Statistical Analysis of 61ÂDays of ENA Images. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	2

#	Article	IF	Citations
109	Statistical correlation of lowâ€altitude ENA emissions with geomagnetic activity from IMAGE/MENA observations. Journal of Geophysical Research: Space Physics, 2016, 121, 2046-2066.	0.8	1
110	JUpiter magnetospheric boundary ExploreR (JUMPER). , 2018, , .		1
111	Empirical Characterization of Lowâ€Altitude Ion Flux Derived from TWINS. Journal of Geophysical Research: Space Physics, 2018, 123, 3672-3691.	0.8	1
112	The Solar Wind Around Pluto (SWAP) Instrument Aboard New Horizons. , 2009, , 261-313.		1
113	A Persistent Depletion of Plasma Ions Within Jupiter's Auroral Polar Caps. Geophysical Research Letters, 2020, 47, .	1.5	1
114	The Jovian Auroral Distributions Experiment (JADE) on the Juno Mission to Jupiter. , 2013, , 529-625.		0