

Bertrand Bonfond

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3599425/publications.pdf>

Version: 2024-02-01

121
papers

3,927
citations

94433

37
h-index

155660

55
g-index

149
all docs

149
docs citations

149
times ranked

1089
citing authors

#	ARTICLE	IF	CITATIONS
1	Variability of Jupiter's Main Auroral Emission and Satellite Footprints Observed With HST During the Galileo Era. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	2.4	2
2	A Comprehensive Set of Juno In Situ and Remote Sensing Observations of the Ganymede Auroral Footprint. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	8
3	Jupiter's X-ray and UV Dark Polar Region. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	6
4	Jupiter. , 2021, , 108-122.		0
5	Morphology of Jupiter's Polar Auroral Bright Spot Emissions via Juno's UVS Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028586.	2.4	5
6	A Statistical Survey of Low-Frequency Magnetic Fluctuations at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028387.	2.4	5
7	Variation of Jupiter's Aurora Observed by Hisaki/EXCEED: 4. Quasi-Periodic Variation. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028575.	2.4	3
8	Jupiter System Observatory at Sun-Jupiter Lagrangian Point One. , 2021, 53, .		0
9	Are Dawn Storms Jupiter's Auroral Substorms?. <i>AGU Advances</i> , 2021, 2, e2020AV000275.	5.4	25
10	Detection of a Bolide in Jupiter's Atmosphere With Juno UVS. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091797.	4.0	9
11	Simultaneous Observation of an Auroral Dawn Storm With the Hubble Space Telescope and Juno. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028717.	2.4	6
12	Variability and Hemispheric Symmetry of the Pedersen Conductance in the Jovian Aurora. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028949.	2.4	1
13	Ultralow-Frequency Waves in Driving Jovian Aurorae Revealed by Observations From HST and Juno. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091579.	4.0	13
14	Detection and Characterization of Circular Expanding UV Emissions Observed in Jupiter's Polar Auroral Regions. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028971.	2.4	4
15	How Jupiter's unusual magnetospheric topology structures its aurora. <i>Science Advances</i> , 2021, 7, .	10.3	31
16	A sublimated water atmosphere on Ganymede detected from Hubble Space Telescope observations. <i>Nature Astronomy</i> , 2021, 5, 1043-1051.	10.1	24
17	Revealing the source of Jupiter's x-ray auroral flares. <i>Science Advances</i> , 2021, 7, .	10.3	25
18	Jupiter's Double-Arc Aurora as a Signature of Magnetic Reconnection: Simultaneous Observations From HST and Juno. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093964.	4.0	3

#	ARTICLE	IF	CITATIONS
19	Jupiter's X-ray aurora during UV dawn storms and injections as observed by XMM-Newton, Hubble, and Hisaki. Monthly Notices of the Royal Astronomical Society, 2021, 507, 1216-1228.	4.4	7
20	Meridional Variations of $C_{2H_{2}}$ in Jupiter's Stratosphere From Juno UVS Observations. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006928.	3.6	5
21	A Preliminary Study of Magnetosphere-Ionosphere-Thermosphere Coupling at Jupiter: Juno Multi-Instrument Measurements and Modeling Tools. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029469.	2.4	11
22	Morphology of the Auroral Tail of Io, Europa, and Ganymede From JIRAM Band Imager. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029450.	2.4	15
23	Simultaneous UV Images and High-Latitude Particle and Field Measurements During an Auroral Dawn Storm at Jupiter. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029679.	2.4	3
24	Local Time Dependence of Jupiter's Polar Auroral Emissions Observed by Juno UVS. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006954.	3.6	9
25	Proton Acceleration by Io's Alfvénic Interaction. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027314.	2.4	18
26	A New Framework to Explain Changes in Io's Footprint Tail Electron Fluxes. Geophysical Research Letters, 2020, 47, e2020GL089267.	4.0	25
27	Six Pieces of Evidence Against the Corotation Enforcement Theory to Explain the Main Aurora at Jupiter. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028152.	2.4	23
28	Wave-Particle Interactions Associated With Io's Auroral Footprint: Evidence of Alfvén, Ion Cyclotron, and Whistler Modes. Geophysical Research Letters, 2020, 47, e2020GL088432.	4.0	34
29	Reconnection- and Dipolarization-Driven Auroral Dawn Storms and Injections. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027663.	2.4	27
30	Possible Transient Luminous Events Observed in Jupiter's Upper Atmosphere. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006659.	3.6	13
31	Spatial Distribution of the Pedersen Conductance in the Jovian Aurora From Juno UVS Spectral Images. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028142.	2.4	19
32	Energetic Particles and Acceleration Regions Over Jupiter's Polar Cap and Main Aurora: A Broad Overview. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027699.	2.4	47
33	Energy Flux and Characteristic Energy of Electrons Over Jupiter's Main Auroral Emission. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027693.	2.4	37
34	Alfvénic Acceleration Sustains Ganymede's Footprint Tail Aurora. Geophysical Research Letters, 2020, 47, e2019GL086527.	4.0	25
35	Juno UVS Observation of the Io Footprint During Solar Eclipse. Journal of Geophysical Research: Space Physics, 2019, 124, 5184-5199.	2.4	19
36	Auroral Beads at Saturn and the Driving Mechanism: Cassini Proximal Orbits. Astrophysical Journal Letters, 2019, 885, L16.	8.3	10

#	ARTICLE	IF	CITATIONS
37	On the Relation Between Jovian Aurorae and the Loading/Unloading of the Magnetic Flux: Simultaneous Measurements From Juno, Hubble Space Telescope, and Hisaki. Geophysical Research Letters, 2019, 46, 11632-11641.	4.0	32
38	Alfvén Wave Propagation in the Io Plasma Torus. Geophysical Research Letters, 2019, 46, 1242-1249.	4.0	24
39	A brightening of Jupiter's auroral 7.8- μ m CH ₄ emission during a solar-wind compression. Nature Astronomy, 2019, 3, 607-613.	10.1	17
40	In-flight Characterization and Calibration of the Juno-ultraviolet Spectrograph (Juno-UVS). Astronomical Journal, 2019, 157, 90.	4.7	18
41	Contemporaneous Observations of Jovian Energetic Auroral Electrons and Ultraviolet Emissions by the Juno Spacecraft. Journal of Geophysical Research: Space Physics, 2019, 124, 8298-8317.	2.4	22
42	Intervals of Intense Energetic Electron Beams Over Jupiter's Poles. Journal of Geophysical Research: Space Physics, 2018, 123, 1989-1999.	2.4	35
43	Diverse Electron and Ion Acceleration Characteristics Observed Over Jupiter's Main Aurora. Geophysical Research Letters, 2018, 45, 1277-1285.	4.0	49
44	Jupiter's Aurora Observed With HST During Juno Orbits 3 to 7. Journal of Geophysical Research: Space Physics, 2018, 123, 3299-3319.	2.4	53
45	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.	2.4	42
46	Evolution of the Auroral Signatures of Jupiter's Magnetospheric Injections. Journal of Geophysical Research: Space Physics, 2018, 123, 8489-8501.	2.4	11
47	Events in the Juno-UVS Data: Signature ~ 10 MeV Electron Microbursts at Jupiter. Geophysical Research Letters, 2018, 45, 12,108.	4.0	14
48	In Situ Observations Connected to the Io Footprint Tail Aurora. Journal of Geophysical Research E: Planets, 2018, 123, 3061-3077.	3.6	48
49	Concurrent ultraviolet and infrared observations of the north Jovian aurora during Juno's first perijove. Icarus, 2018, 312, 145-156.	2.5	18
50	Juno observations of spot structures and a split tail in Io-induced aurorae on Jupiter. Science, 2018, 361, 774-777.	12.6	53
51	Evidence for Auroral Emissions From Callisto's Footprint in HST UV Images. Journal of Geophysical Research: Space Physics, 2018, 123, 364-373.	2.4	23
52	In-flight characterization and calibration of the Juno-Ultraviolet Spectrograph (Juno-UVS). , 2018, , .		2
53	Similarity of the Jovian satellite footprints: Spots multiplicity and dynamics. Icarus, 2017, 292, 208-217.	2.5	23
54	Jupiter's magnetosphere and aurorae observed by the Juno spacecraft during its first polar orbits. Science, 2017, 356, 826-832.	12.6	109

#	ARTICLE	IF	CITATIONS
55	Response of Jupiter's auroras to conditions in the interplanetary medium as measured by the Hubble Space Telescope and Juno. <i>Geophysical Research Letters</i> , 2017, 44, 7643-7652.	4.0	68
56	Morphology of the UV aurorae Jupiter during Juno's first perijove observations. <i>Geophysical Research Letters</i> , 2017, 44, 4463-4471.	4.0	54
57	Juno's UVIS approach observations of Jupiter's auroras. <i>Geophysical Research Letters</i> , 2017, 44, 7668-7675.	4.0	25
58	Discrete and broadband electron acceleration in Jupiter's powerful aurora. <i>Nature</i> , 2017, 549, 66-69.	27.8	79
59	The tails of the satellite auroral footprints at Jupiter. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 7985-7996.	2.4	57
60	Stagnation of Saturn's auroral emission at noon. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 6078-6087.	2.4	7
61	Mechanisms of Saturn's Near-Noon Transient Aurora: In Situ Evidence From Cassini Measurements. <i>Geophysical Research Letters</i> , 2017, 44, 11,217.	4.0	10
62	Dawn Auroral Breakup at Saturn Initiated by Auroral Arcs: UVIS/Cassini Beginning of Grand Finale Phase. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 12,111.	2.4	8
63	The Ultraviolet Spectrograph on NASA's Juno Mission. <i>Space Science Reviews</i> , 2017, 213, 447-473.	8.1	109
64	Magnetospheric Science Objectives of the Juno Mission. <i>Space Science Reviews</i> , 2017, 213, 219-287.	8.1	163
65	The color ratio-intensity relation in the Jovian aurora: Hubble observations of auroral components. <i>Planetary and Space Science</i> , 2016, 131, 14-23.	1.7	13
66	Dynamics of the flares in the active polar region of Jupiter. <i>Geophysical Research Letters</i> , 2016, 43, 11,963.	4.0	19
67	Weakening of Jupiter's main auroral emission during January 2014. <i>Geophysical Research Letters</i> , 2016, 43, 988-997.	4.0	50
68	Auroral evidence of radial transport at Jupiter during January 2014. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 9972-9984.	2.4	27
69	Characteristics of north jovian aurora from STIS FUV spectral images. <i>Icarus</i> , 2016, 268, 215-241.	2.5	38
70	A multi-scale magnetotail reconnection event at Saturn and associated flows: Cassini/UVIS observations. <i>Icarus</i> , 2016, 263, 75-82.	2.5	21
71	Solar Wind and Internally Driven Dynamics: Influences on Magnetodiscs and Auroral Responses. <i>Space Sciences Series of ISSI</i> , 2016, , 51-97.	0.0	2
72	Auroral spirals at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 8633-8643.	2.4	9

#	ARTICLE	IF	CITATIONS
73	The far-ultraviolet main auroral emission at Jupiter â€œ Part 1: Dawnâ€œdusk brightness asymmetries. <i>Annales Geophysicae</i> , 2015, 33, 1203-1209.	1.6	22
74	The far-ultraviolet main auroral emission at Jupiter â€œ Part 2: Vertical emission profile. <i>Annales Geophysicae</i> , 2015, 33, 1211-1219.	1.6	12
75	Magnetosphereâ€œionosphere mapping at Jupiter: Quantifying the effects of using different internal field models. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 2584-2599.	2.4	35
76	Solar Wind and Internally Driven Dynamics: Influences on Magnetodiscs and Auroral Responses. <i>Space Science Reviews</i> , 2015, 187, 51-97.	8.1	36
77	Transient internally driven aurora at Jupiter discovered by Hisaki and the Hubble Space Telescope. <i>Geophysical Research Letters</i> , 2015, 42, 1662-1668.	4.0	53
78	Transient smallâ€œscale structure in the main auroral emission at Jupiter. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 9931-9938.	2.4	12
79	Saturn's elusive nightside polar arc. <i>Geophysical Research Letters</i> , 2014, 41, 6321-6328.	4.0	15
80	Jupiter's equatorward auroral features: Possible signatures of magnetospheric injections. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 10,068.	2.4	35
81	The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets. <i>Planetary and Space Science</i> , 2014, 104, 122-140.	1.7	56
82	Mapping the electron energy in Jupiter's aurora: Hubble spectral observations. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 9072-9088.	2.4	47
83	Magnetospheric Science Objectives of the Juno Mission. , 2014, , 39-107.		3
84	The Ultraviolet Spectrograph on NASAâ€™s Juno Mission. , 2014, , 325-351.		2
85	Hubble observations of Jupiterâ€™s northâ€œsouth conjugate ultraviolet aurora. <i>Icarus</i> , 2013, 226, 1559-1567.	2.5	20
86	Evolution of the Io footprint brightness I: Far-UV observations. <i>Planetary and Space Science</i> , 2013, 88, 64-75.	1.7	32
87	Effects of methane on giant planetâ€™s UV emissions and implications for the auroral characteristics. <i>Journal of Molecular Spectroscopy</i> , 2013, 291, 108-117.	1.2	24
88	How could the Io footprint disappear?. <i>Planetary and Space Science</i> , 2013, 89, 102-110.	1.7	10
89	Evolution of the Io footprint brightness II: Modeling. <i>Planetary and Space Science</i> , 2013, 88, 76-85.	1.7	23
90	Remote sensing of the energy of auroral electrons in Saturnâ€™s atmosphere: Hubble and Cassini spectral observations. <i>Icarus</i> , 2013, 223, 211-221.	2.5	11

#	ARTICLE	IF	CITATIONS
91	Signatures of magnetospheric injections in Saturn's aurora. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 1922-1933.	2.4	32
92	The multiple spots of the Ganymede auroral footprint. <i>Geophysical Research Letters</i> , 2013, 40, 4977-4981.	4.0	31
93	Auroral signatures of multiple magnetopause reconnection at Saturn. <i>Geophysical Research Letters</i> , 2013, 40, 4498-4502.	4.0	50
94	Io's volcanism controls Jupiter's radio emissions. <i>Geophysical Research Letters</i> , 2013, 40, 671-675.	4.0	19
95	Jupiter's aurora in ultraviolet and infrared: Simultaneous observations with the Hubble Space Telescope and the NASA Infrared Telescope Facility. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 2286-2295.	2.4	24
96	Auroral evidence of Io's control over the magnetosphere of Jupiter. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	111
97	Conversion from HST ACS and STIS auroral counts into brightness, precipitated power, and radiated power for H ₂ giant planets. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	60
98	Quasi-periodic polar flares at Jupiter: A signature of pulsed dayside reconnections?. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	53
99	Improved mapping of Jupiter's auroral features to magnetospheric sources. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	98
100	Nightside reconnection at Jupiter: Auroral and magnetic field observations from 26 July 1998. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	43
101	Model of the Jovian magnetic field topology constrained by the Io auroral emissions. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	100
102	Bifurcations of the main auroral ring at Saturn: ionospheric signatures of consecutive reconnection events at the magnetopause. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	69
103	Small-scale structures in Saturn's ultraviolet aurora. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	55
104	Lead angles and emitting electron energies of Io-controlled decameter radio arcs. <i>Planetary and Space Science</i> , 2010, 58, 1188-1198.	1.7	36
105	Location and spatial shape of electron beams in Io's wake. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	29
106	Auroral signatures of flow bursts released during magnetotail reconnection at Jupiter. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	32
107	On the origin of Saturn's outer auroral emission. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	44
108	Power transmission and particle acceleration along the Io flux tube. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	83

#	ARTICLE	IF	CITATIONS
109	The 3D extent of the Io UV footprint on Jupiter. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	22
110	Correction to "Equatorward diffuse auroral emissions at Jupiter: Simultaneous HST and Galileo observations". <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	2
111	Auroral footprint of Ganymede. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	44
112	The Io UV footprint: Location, inter-spot distances and tail vertical extent. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	77
113	Altitude of Saturn's aurora and its implications for the characteristic energy of precipitated electrons. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	81
114	Transient auroral features at Saturn: Signatures of energetic particle injections in the magnetosphere. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	35
115	UV Io footprint leading spot: A key feature for understanding the UV Io footprint multiplicity?. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	84
116	Auroral polar dawn spots: Signatures of internally driven reconnection processes at Jupiter's magnetotail. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	53
117	Jupiter's changing auroral location. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	41
118	Discontinuity in Jupiter's main auroral oval. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	52
119	Auroral evidence of a localized magnetic anomaly in Jupiter's northern hemisphere. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	89
120	Ultraviolet Io footprint short timescale dynamics. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	20
121	When Moons Create Aurora: The Satellite Footprints on Giant Planets. <i>Geophysical Monograph Series</i> , 0, , 133-140.	0.1	32