

# Sebastien Lg HeÃ

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

1,916  
citations

218381

26  
h-index

276539

41  
g-index

67  
all docs

67  
docs citations

67  
times ranked

1551  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cassini Plasma Interaction Simulations Revealing the Cassini Ion Wake Characteristics: Implications for In-Situ Data Analyses and Ion Temperature Estimates. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029026.	0.8	0
2	Flash-over propagation simulation upon spacecrafts solar panels. <i>Journal of Applied Physics</i> , 2021, 130, 223302.	1.1	2
3	Multiscale Modeling of Dust Charging in Simulated Lunar Environment Conditions. <i>IEEE Transactions on Plasma Science</i> , 2019, 47, 3710-3716.	0.6	10
4	Spacecraft Worst Case Surface Charging: On the Importance of Measuring the Electron Emission Yield Under Representative Environmental Conditions. <i>IEEE Transactions on Plasma Science</i> , 2019, 47, 3790-3795.	0.6	3
5	Detecting exoplanets with FAST?. <i>Research in Astronomy and Astrophysics</i> , 2019, 19, 023.	0.7	11
6	ExPRES: an Exoplanetary and Planetary Radio Emissions Simulator. <i>Astronomy and Astrophysics</i> , 2019, 627, A30.	2.1	26
7	Coupled Fluid-Kinetic Numerical Method to Model Spacecraft Charging in LEO. <i>IEEE Transactions on Plasma Science</i> , 2018, 46, 651-658.	0.6	1
8	Numerical modelling of the Luna-Glob lander electric charging on the lunar surface with SPIS-DUST. <i>Planetary and Space Science</i> , 2018, 156, 62-70.	0.9	16
9	The LatHyS database for planetary plasma environment investigations: Overview and a case study of data/model comparisons. <i>Planetary and Space Science</i> , 2018, 150, 13-21.	0.9	10
10	Reply to comment "On the hydrogen escape: Comment to variability of the hydrogen in the Martian upper atmosphere as simulated by a 3D atmosphere-exosphere coupling by J.-Y. Chaufray et al." by V. Krasnopolsky, <i>Icarus</i> , 281, 262. <i>Icarus</i> , 2018, 301, 132-135.	1.1	2
11	Science data visualization in planetary and heliospheric contexts with 3DView. <i>Planetary and Space Science</i> , 2018, 150, 111-130.	0.9	18
12	Effects of the Crustal Magnetic Fields and Changes in the IMF Orientation on the Magnetosphere of Mars: MAVEN Observations and LatHyS Results. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 5315-5333.	0.8	21
13	The SPASE Data Model: A Metadata Standard for Registering, Finding, Accessing, and Using Heliophysics Data Obtained From Observations and Modeling. <i>Space Weather</i> , 2018, 16, 1899-1911.	1.3	18
14	Jupiter decametric arcs observed by Juno/Waves compared to ExPRES simulations. <i>Geophysical Research Letters</i> , 2017, 44, 9225-9232.	1.5	22
15	Detection of Jupiter decametric emissions controlled by Europa and Ganymede with Voyager/PRA and Cassini/RPWS. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 9228-9247.	0.8	20
16	A Study of Solar Orbiter Spacecraft Plasma Interactions Effects on Electric Field and Particle Measurements. <i>IEEE Transactions on Plasma Science</i> , 2017, 45, 2578-2587.	0.6	3
17	Lunar dust simulant charging and transport under UV irradiation in vacuum: Experiments and numerical modeling. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 103-116.	0.8	10
18	Severe Geostationary Environments: Numerical Estimation of Spacecraft Surface Charging from Flight Data. <i>Journal of Spacecraft and Rockets</i> , 2016, 53, 304-316.	1.3	12

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19	Marsâ€solar wind interaction: LatHyS, an improved parallel 3â€ multispecies hybrid model. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 6378-6399.	0.8	54
20	Imaging Jupiterâ€™s radiation belts down to 127 MHz with LOFAR. <i>Astronomy and Astrophysics</i> , 2016, 587, A3.	2.1	17
21	3D magnetospheric parallel hybrid multi-grid method applied to planetâ€™plasma interactions. <i>Journal of Computational Physics</i> , 2016, 309, 295-313.	1.9	15
22	SPIS 5: New Modeling Capabilities and Methods for Scientific Missions. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 2789-2798.	0.6	15
23	New SPIS Capabilities to Simulate Dust Electrostatic Charging, Transport, and Contamination of Lunar Probes. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 2799-2807.	0.6	20
24	Variability of the hydrogen in the martian upper atmosphere as simulated by a 3D atmosphereâ€™exosphere coupling. <i>Icarus</i> , 2015, 245, 282-294.	1.1	77
25	Auroral Processes at the Giant Planets: Energy Deposition, Emission Mechanisms, Morphology and Spectra. <i>Space Science Reviews</i> , 2015, 187, 99-179.	3.7	86
26	Three-dimensional Martian ionosphere model: II. Effect of transport processes due to pressure gradients. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 1614-1636.	1.5	51
27	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.	0.9	56
28	Joining the yellow hub: Uses of the Simple Application Messaging Protocol in Space Physics analysis tools. <i>Astronomy and Computing</i> , 2014, 7-8, 62-70.	0.8	6
29	Multi-instrument study of the Jovian radio emissions triggered by solar wind shocks and inferred magnetospheric subcorotation rates. <i>Planetary and Space Science</i> , 2014, 99, 136-148.	0.9	36
30	Fast and slow frequency-drifting millisecond bursts in Jovian decametric radio emissions. <i>Astronomy and Astrophysics</i> , 2014, 568, A53.	2.1	21
31	Evolution of the Io footprint brightness I: Far-UV observations. <i>Planetary and Space Science</i> , 2013, 88, 64-75.	0.9	32
32	How could the Io footprint disappear?. <i>Planetary and Space Science</i> , 2013, 89, 102-110.	0.9	10
33	Evolution of the Io footprint brightness II: Modeling. <i>Planetary and Space Science</i> , 2013, 88, 76-85.	0.9	23
34	The multiple spots of the Ganymede auroral footprint. <i>Geophysical Research Letters</i> , 2013, 40, 4977-4981.	1.5	31
35	Threeâ€dimensional Martian ionosphere model: I. The photochemical ionosphere below 180 km. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 2105-2123.	1.5	118
36	Satellite-Induced Electron Acceleration and Related Auroras. <i>Geophysical Monograph Series</i> , 2013, , 295-304.	0.1	8

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37	Solar wind pressure effects on Jupiter decametric radio emissions independent of Io. Planetary and Space Science, 2012, 70, 114-125.	0.9	30
38	Planetary and exoplanetary low frequency radio observations from the Moon. Planetary and Space Science, 2012, 74, 156-166.	0.9	68
39	A global hybrid model for Mercury's interaction with the solar wind: Case study of the dipole representation. Journal of Geophysical Research, 2012, 117, .	3.3	43
40	Comment on "Jovian slow-drift shadow events" by T. Koshida et al.. Journal of Geophysical Research, 2012, 117, .	3.3	0
41	Mars exospheric thermal and non-thermal components: Seasonal and local variations. Icarus, 2012, 221, 682-693.	1.1	51
42	Uranus Pathfinder: exploring the origins and evolution of Ice Giant planets. Experimental Astronomy, 2012, 33, 753-791.	1.6	44
43	Alfvén: magnetosphere-ionosphere connection explorers. Experimental Astronomy, 2012, 33, 445-489.	1.6	9
44	Natural radio emission of Jupiter as interferences for radar investigations of the icy satellites of Jupiter. Planetary and Space Science, 2012, 61, 32-45.	0.9	35
45	Comparative study of the power transferred from satellite-magnetosphere interactions to auroral emissions. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	35
46	Size and amplitude of Langmuir waves in the solar wind. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	9
47	Model of the Jovian magnetic field topology constrained by the Io auroral emissions. Journal of Geophysical Research, 2011, 116, .	3.3	100
48	Longitudinal modulation of hot electrons in the Io plasma torus. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	27
49	Modeling the radio signature of the orbital parameters, rotation, and magnetic field of exoplanets. Astronomy and Astrophysics, 2011, 531, A29.	2.1	75
50	Landau and Non-Landau Linear Damping: Physics of the Dissipation. Transport Theory and Statistical Physics, 2011, 40, 419-424.	0.4	2
51	Lead angles and emitting electron energies of Io-controlled decameter radio arcs. Planetary and Space Science, 2010, 58, 1188-1198.	0.9	36
52	Explanation of dominant oblique radio emission at Jupiter and comparison to the terrestrial case. Planetary and Space Science, 2010, 58, 1414-1422.	0.9	20
53	Power transmission and particle acceleration along the Io flux tube. Journal of Geophysical Research, 2010, 115, .	3.3	83
54	Growth of the Langmuir cavity eigenmodes in the solar wind. Journal of Geophysical Research, 2010, 115, .	3.3	11

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55	Radio goniopolarimetry: Dealing with multiple or 1-D extended sources. Radio Science, 2010, 45, n/a-n/a.	0.8	3
56	How to improve the diagnosis of kinetic energy in 1D PIC codes. Journal of Computational Physics, 2009, 228, 6670-6681.	1.9	4
57	Electric potential jumps in the Io-Jupiter flux tube. Planetary and Space Science, 2009, 57, 23-33.	0.9	36
58	Landau and non-Landau linear damping: Physics of the dissipation. Physics of Plasmas, 2009, 16, .	0.7	9
59	Effect of electric potential structures on Jovian S&Cburst morphology. Geophysical Research Letters, 2009, 36, .	1.5	27
60	Generation of the jovian radio decametric arcs from the Io Flux Tube. Journal of Geophysical Research, 2008, 113, .	3.3	40
61	Modeling of Io&CJupiter decameter arcs, emission beaming and energy source. Geophysical Research Letters, 2008, 35, .	1.5	61
62	Modeling of Saturn kilometric radiation arcs and equatorial shadow zone. Journal of Geophysical Research, 2008, 113, .	3.3	52
63	Modelling the Io&Crelated DAM emission by modifying the beaming angle. Journal of Geophysical Research, 2008, 113, .	3.3	19
64	Existence of non-Landau solutions for Langmuir waves. Physics of Plasmas, 2008, 15, 052310.	0.7	17
65	Jovian S&Cburst generation by Alfv&Cn waves. Journal of Geophysical Research, 2007, 112, .	3.3	39
66	Io&CJupiter interaction, millisecond bursts and field-aligned potentials. Planetary and Space Science, 2007, 55, 89-99.	0.9	48
67	A model of the Jovian internal field derived from in-situ and auroral constraints. , 0, , .		2