

Seth Claudepierre

List of Publications by Year in descending order

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137
papers

7,733
citations

53751

45
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56687

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148
all docs

148
docs citations

148
times ranked

2047
citing authors

#	ARTICLE	IF	CITATIONS
1	Normal and Reversed Boomerang Stripes on Electron Pitch Angle Distributions: Solar Wind Dynamic Pressure Effect. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	3
2	Statistical Characteristics of Energetic Electron Pitch Angle Distributions in the Van Allen Probe Era: 1. Butterfly Distributions With Flux Peaks at Preferred Pitch Angles. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	3
3	Electron Scattering by Very Low Frequency and Low Frequency Waves From Ground Transmitters in the Earth's Inner Radiation Belt and Slot Region. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	4
4	Modeling the Dynamic Variability of Sub-Relativistic Outer Radiation Belt Electron Fluxes Using Machine Learning. <i>Space Weather</i> , 2022, 20, .	1.3	13
5	Collaborative Research Activities of the Arase and Van Allen Probes. <i>Space Science Reviews</i> , 2022, 218, .	3.7	10
6	Removing Orbital Variations From Low Altitude Particle Data: Method and Application. <i>Space Weather</i> , 2021, 19, e2020SW002638.	1.3	3
7	RBSP-ECT Combined Pitch Angle Resolved Electron Flux Data Product. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028637.	0.8	11
8	Van Allen Probe Observations of Disappearance, Recovery and Patchiness of Plasmaspheric Hiss Following Two Consecutive Interplanetary Shocks: First Results. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028873.	0.8	3
9	Origin of Electron Boomerang Stripes: Statistical Study. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093377.	1.5	6
10	Characterization and Calibration of High-Energy Electron Instruments Onboard the Arase Satellite. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029110.	0.8	2
11	Superposed Epoch Analysis of Dispersionless Particle Injections Inside Geosynchronous Orbit. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029546.	0.8	9
12	Preliminary Statistical Comparisons of Spin-Averaged Electron Data From Arase and Van Allen Probes Instruments. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028929.	0.8	8
13	Global Survey of Electron Precipitation due to Hiss Waves in the Earth's Plasmasphere and Plumes. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029644.	0.8	23
14	Observational Evidence of the Excitation of Magnetosonic Waves by an He ⁺⁺ Ion Ring Distribution. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029532.	0.8	4
15	Can Earth's Magnetotail Plasma Sheet Produce a Source of Relativistic Electrons for the Radiation Belts?. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095495.	1.5	11
16	A Tale of Two Radiation Belts: The Energy Dependence of Self-Limiting Electron Space Radiation. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095779.	1.5	13
17	On the Similarity and Repeatability of Fast Radiation Belt Loss: Role of the Last Closed Drift Shell. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029957.	0.8	10
18	The Magnetic Electron Ion Spectrometer: A Review of On-Orbit Sensor Performance, Data, Operations, and Science. <i>Space Science Reviews</i> , 2021, 217, 80.	3.7	18

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19	Propagation of Chorus Waves Generated in Minimum- B Pockets. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL096478.	1.5	0
20	Multiharmonic Toroidal Standing Alfvén Waves in the Midnight Sector Observed During a Geomagnetically Quiet Period. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027370.	0.8	10
21	Particle Dynamics in the Earth's Radiation Belts: Review of Current Research and Open Questions. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA026735.	0.8	81
22	Very-Low-Frequency transmitters bifurcate energetic electron belt in near-earth space. <i>Nature Communications</i> , 2020, 11, 4847.	5.8	35
23	Origin of Electron Boomerang Stripes: Localized ULF Wave-Particle Interactions. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087960.	1.5	13
24	Global Survey of Plasma Sheet Electron Precipitation due to Whistler Mode Chorus Waves in Earth's Magnetosphere. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088798.	1.5	28
25	A Short-lived Three-Belt Structure for sub-MeV Electrons in the Van Allen Belts: Time Scale and Energy Dependence. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028031.	0.8	6
26	Why Are There so Few Reports of High-Energy Electron Drift Resonances? Role of Radial Phase Space Density Gradients. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA027924.	0.8	8
27	Dynamic Properties of Particle Injections Inside Geosynchronous Orbit: A Multisatellite Case Study. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028215.	0.8	4
28	Specifying High-Altitude Electrons Using Low-Altitude LEO Systems: The SHELLS Model. <i>Space Weather</i> , 2020, 18, e2019SW002402.	1.3	25
29	Simulations of Electron Flux Oscillations as Observed by MagEIS in Response to Broadband ULF Waves. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA027798.	0.8	11
30	Simultaneous Observations of Localized and Global Drift-Resonance. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088019.	1.5	12
31	Electron Microburst Size Distribution Derived With AeroCube-6. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027651.	0.8	26
32	Lifetimes of Relativistic Electrons as Determined From Plasmaspheric Hiss Scattering Rates Statistics: Effects of ω_p/ω_{ce} and Wave Frequency Dependence on Geomagnetic Activity. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088052.	1.5	16
33	Direct Evidence of the Pitch Angle Scattering of Relativistic Electrons Induced by EMIC Waves. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL085637.	1.5	18
34	Comparison of Long-Term Lightning Activity and Inner Radiation Belt Electron Flux Perturbations. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027763.	0.8	3
35	Empirically Estimated Electron Lifetimes in the Earth's Radiation Belts: Van Allen Probe Observations. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086053.	1.5	33
36	Rapid Outer Radiation Belt Flux Dropouts and Fast Acceleration During the March 2015 and 2013 Storms: The Role of Ultra-Low Frequency Wave Transport From a Dynamic Outer Boundary. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027179.	0.8	30

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37	Empirically Estimated Electron Lifetimes in the Earth's Radiation Belts: Comparison With Theory. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086056.	1.5	44
38	Pitch Angle Dependence of Electron and Ion Flux Changes During Local Magnetic Dipolarization Inside Geosynchronous Orbit. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027543.	0.8	8
39	Simulation of Prompt Acceleration of Radiation Belt Electrons During the 16 July 2017 Storm. <i>Geophysical Research Letters</i> , 2019, 46, 7222-7229.	1.5	13
40	Remote Detection of Drift Resonance Between Energetic Electrons and Ultralow Frequency Waves: Multisatellite Coordinated Observation by Arase and Van Allen Probes. <i>Geophysical Research Letters</i> , 2019, 46, 11642-11651.	1.5	16
41	RBSPâ€œECT Combined Spinâ€œAveraged Electron Flux Data Product. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 9124-9136.	0.8	34
42	The March 2015 Superstorm Revisited: Phase Space Density Profiles and Fast ULF Wave Diffusive Transport. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1143-1156.	0.8	21
43	Plasmaspheric hiss waves generate a reversed energy spectrum of radiation belt electrons. <i>Nature Physics</i> , 2019, 15, 367-372.	6.5	66
44	Properties of Whistler Mode Waves in Earth's Plasmasphere and Plumes. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1035-1051.	0.8	37
45	Characterization and Evolution of Radiation Belt Electron Energy Spectra Based on the Van Allen Probes Measurements. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 4217-4232.	0.8	25
46	A Revised Look at Relativistic Electrons in the Earth's Inner Radiation Zone and Slot Region. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 934-951.	0.8	32
47	Contribution of ULF Wave Activity to the Global Recovery of the Outer Radiation Belt During the Passage of a Highâ€œSpeed Solar Wind Stream Observed in September 2014. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1660-1678.	0.8	14
48	Outer Van Allen Radiation Belt Response to Interacting Interplanetary Coronal Mass Ejections. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1927-1947.	0.8	14
49	Globalâ€œScale ULF Waves Associated With SSC Accelerate Magnetospheric Ultrarelativistic Electrons. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1525-1538.	0.8	48
50	Comparison of Van Allen Probes Energetic Electron Data With Corresponding GOESâ€œ15 Measurements: 2012â€œ2018. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 9924-9942.	0.8	16
51	The Response of Earth's Electron Radiation Belts to Geomagnetic Storms: Statistics From the Van Allen Probes Era Including Effects From Different Storm Drivers. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1013-1034.	0.8	84
52	Quantitative Evaluation of Radial Diffusion and Local Acceleration Processes During GEM Challenge Events. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 1938-1952.	0.8	86
53	The Global Statistical Response of the Outer Radiation Belt During Geomagnetic Storms. <i>Geophysical Research Letters</i> , 2018, 45, 3783-3792.	1.5	66
54	Reply to 'The dynamics of Van Allen belts revisited'. <i>Nature Physics</i> , 2018, 14, 103-104.	6.5	14

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55	Van Allen Probes Observations of Second Harmonic Poloidal Standing Alfvén Waves. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 611-637.	0.8	41
56	Van Allen Probes observation of plasmaspheric hiss modulated by injected energetic electrons. <i>Annales Geophysicae</i> , 2018, 36, 781-791.	0.6	7
57	The Outer Radiation Belt Response to the Storm Time Development of Seed Electrons and Chorus Wave Activity During CME and CIR Driven Storms. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 10,139.	0.8	29
58	Rapid Loss of Relativistic Electrons by EMIC Waves in the Outer Radiation Belt Observed by Arase, Van Allen Probes, and the PWING Ground Stations. <i>Geophysical Research Letters</i> , 2018, 45, 12,720.	1.5	25
59	Evidence of Microbursts Observed Near the Equatorial Plane in the Outer Van Allen Radiation Belt. <i>Geophysical Research Letters</i> , 2018, 45, 8044-8053.	1.5	20
60	Global Radiation Belt Modeling: Combined MHD, Ring Current and Test-Particle Simulations. , 2018, , .		0
61	Modeling the Depletion and Recovery of the Outer Radiation Belt During a Geomagnetic Storm: Combined MHD and Test Particle Simulations. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 5590-5609.	0.8	47
62	Diagnosis of ULF Wave-Particle Interactions With Megaelectron Volt Electrons: The Importance of Ultrahigh-Resolution Energy Channels. <i>Geophysical Research Letters</i> , 2018, 45, 10,883.	1.5	11
63	Van Allen Probes Observation of a Fundamental Poloidal Standing Alfvén Wave Event Related to Giant Pulsations. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 4574-4593.	0.8	24
64	An Empirical Model of Radiation Belt Electron Pitch Angle Distributions Based On Van Allen Probes Measurements. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 3493-3511.	0.8	41
65	Determining the Mode, Frequency, and Azimuthal Wave Number of ULF Waves During a HSS and Moderate Geomagnetic Storm. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 6457-6477.	0.8	23
66	Explaining the apparent impenetrable barrier to ultra-relativistic electrons in the outer Van Allen belt. <i>Nature Communications</i> , 2018, 9, 1844.	5.8	30
67	Nonlinear Drift Resonance Between Charged Particles and Ultralow Frequency Waves: Theory and Observations. <i>Geophysical Research Letters</i> , 2018, 45, 8773-8782.	1.5	20
68	Van Allen Probes observations of prompt MeV radiation belt electron acceleration in nonlinear interactions with VLF chorus. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 324-339.	0.8	85
69	A multispacecraft event study of Pc5 ultralow-frequency waves in the magnetosphere and their external drivers. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 5132-5147.	0.8	24
70	The hidden dynamics of relativistic electrons (0.7-1.5 MeV) in the inner zone and slot region. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 3127-3144.	0.8	38
71	Investigating the source of near-relativistic and relativistic electrons in Earth's inner radiation belt. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 695-710.	0.8	48
72	Multipoint Observations of Energetic Particle Injections and Substorm Activity During a Conjunction Between Magnetospheric Multiscale (MMS) and Van Allen Probes. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 11,481.	0.8	42

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91	Explaining the dynamics of the ultra-relativistic third Van Allen radiation belt. <i>Nature Physics</i> , 2016, 12, 978-983.	6.5	97
92	Imprints of impulse-excited hydromagnetic waves on electrons in the Van Allen radiation belts. <i>Geophysical Research Letters</i> , 2015, 42, 6199-6204.	1.5	40
93	Source and seed populations for relativistic electrons: Their roles in radiation belt changes. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 7240-7254.	0.8	215
94	The effects of geomagnetic storms on electrons in Earth's radiation belts. <i>Geophysical Research Letters</i> , 2015, 42, 9176-9184.	1.5	67
95	Near-Earth injection of MeV electrons associated with intense dipolarization electric fields: Van Allen Probes observations. <i>Geophysical Research Letters</i> , 2015, 42, 6170-6179.	1.5	62
96	Kinetic Alfvén waves and particle response associated with a shock-induced, global ULF perturbation of the terrestrial magnetosphere. <i>Geophysical Research Letters</i> , 2015, 42, 9203-9212.	1.5	29
97	A background correction algorithm for Van Allen Probes MagEIS electron flux measurements. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 5703-5727.	0.8	78
98	On the use of drift echoes to characterize on-orbit sensor discrepancies. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 2076-2087.	0.8	8
99	Internal Charging Hazards in Near-Earth Space During Solar Cycle 24 Maximum: Van Allen Probes Measurements. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 3070-3074.	0.6	4
100	Van Allen Probes show that the inner radiation zone contains no MeV electrons: ECT/MagEIS data. <i>Geophysical Research Letters</i> , 2015, 42, 1283-1289.	1.5	109
101	Modeling inward diffusion and slow decay of energetic electrons in the Earth's outer radiation belt. <i>Geophysical Research Letters</i> , 2015, 42, 987-995.	1.5	87
102	Energetic electron injections deep into the inner magnetosphere associated with substorm activity. <i>Geophysical Research Letters</i> , 2015, 42, 2079-2087.	1.5	112
103	Global storm time depletion of the outer electron belt. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 2543-2556.	0.8	45
104	Unraveling the drivers of the storm time radiation belt response. <i>Geophysical Research Letters</i> , 2015, 42, 3076-3084.	1.5	90
105	An empirically observed pitch angle diffusion eigenmode in the Earth's electron belt near $L [*] <i>L</i> = 5.0. Geophysical Research Letters, 2014, 41, 251-258.$	1.5	10
106	Characteristics of pitch angle distributions of hundreds of keV electrons in the slot region and inner radiation belt. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 9543-9557.	0.8	41
107	On the cause and extent of outer radiation belt losses during the 30 September 2012 dropout event. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 1530-1540.	0.8	110
108	Competing source and loss mechanisms due to wave-particle interactions in Earth's outer radiation belt during the 30 September to 3 October 2012 geomagnetic storm. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 1960-1979.	0.8	103

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109	Quantifying the radiation belt seed population in the 17 March 2013 electron acceleration event. <i>Geophysical Research Letters</i> , 2014, 41, 2275-2281.	1.5	107
110	Evidence for injection of relativistic electrons into the Earth's outer radiation belt via intense substorm electric fields. <i>Geophysical Research Letters</i> , 2014, 41, 1133-1141.	1.5	39
111	The role of ring current particle injections: Global simulations and Van Allen Probes observations during 17 March 2013 storm. <i>Geophysical Research Letters</i> , 2014, 41, 1126-1132.	1.5	36
112	REPAD: An empirical model of pitch angle distributions for energetic electrons in the Earth's outer radiation belt. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 1693-1708.	0.8	37
113	Prompt energization of relativistic and highly relativistic electrons during a substorm interval: Van Allen Probes observations. <i>Geophysical Research Letters</i> , 2014, 41, 20-25.	1.5	88
114	Radiation belt electron acceleration by chorus waves during the 17 March 2013 storm. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 4681-4693.	0.8	182
115	Van Allen Probes observations of direct wave-particle interactions. <i>Geophysical Research Letters</i> , 2014, 41, 1869-1875.	1.5	32
116	Peculiar pitch angle distribution of relativistic electrons in the inner radiation belt and slot region. <i>Geophysical Research Letters</i> , 2014, 41, 2250-2257.	1.5	53
117	Quantifying hiss-driven energetic electron precipitation: A detailed conjunction event analysis. <i>Geophysical Research Letters</i> , 2014, 41, 1085-1092.	1.5	36
118	Resonant scattering of energetic electrons by unusual low-frequency hiss. <i>Geophysical Research Letters</i> , 2014, 41, 1854-1861.	1.5	110
119	Gradual diffusion and punctuated phase space density enhancements of highly relativistic electrons: Van Allen Probes observations. <i>Geophysical Research Letters</i> , 2014, 41, 1351-1358.	1.5	127
120	Excitation of poloidal standing Alfvén waves through drift resonance wave-particle interaction. <i>Geophysical Research Letters</i> , 2013, 40, 4127-4132.	1.5	134
121	The Magnetic Electron Ion Spectrometer (MagEIS) Instruments Aboard the Radiation Belt Storm Probes (RBSP) Spacecraft. <i>Space Science Reviews</i> , 2013, 179, 383-421.	3.7	491
122	An unusual enhancement of low-frequency plasmaspheric hiss in the outer plasmasphere associated with substorm-injected electrons. <i>Geophysical Research Letters</i> , 2013, 40, 3798-3803.	1.5	120
123	Electron Acceleration in the Heart of the Van Allen Radiation Belts. <i>Science</i> , 2013, 341, 991-994.	6.0	463
124	Discovery of the action of a geophysical synchrotron in the Earth's Van Allen radiation belts. <i>Nature Communications</i> , 2013, 4, .	5.8	104
125	Rapid local acceleration of relativistic radiation-belt electrons by magnetospheric chorus. <i>Nature</i> , 2013, 504, 411-414.	13.7	608
126	Van Allen Probes observation of localized drift resonance between poloidal mode ultra-low frequency waves and 60 keV electrons. <i>Geophysical Research Letters</i> , 2013, 40, 4491-4497.	1.5	127

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127	Science Goals and Overview of the Radiation Belt Storm Probes (RBSP) Energetic Particle, Composition, and Thermal Plasma (ECT) Suite on NASA's Van Allen Probes Mission. <i>Space Science Reviews</i> , 2013, 179, 311-336.	3.7	463
128	Kelvin-Helmholtz instability of the magnetospheric boundary in a three-dimensional global MHD simulation during northward IMF conditions. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 5478-5496.	0.8	55
129	A Long-Lived Relativistic Electron Storage Ring Embedded in Earth's Outer Van Allen Belt. <i>Science</i> , 2013, 340, 186-190.	6.0	216
130	Science Goals and Overview of the Radiation Belt Storm Probes (RBSP) Energetic Particle, Composition, and Thermal Plasma (ECT) Suite on NASA's Van Allen Probes Mission. , 2013, , 311-336.		8
131	The Magnetic Electron Ion Spectrometer (MagEIS) Instruments Aboard the Radiation Belt Storm Probes (RBSP) Spacecraft. , 2013, , 383-421.		27
132	Dependence of the amplitude of Pc5-band magnetic field variations on the solar wind and solar activity. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	21
133	Correction to "Magnetospheric cavity modes driven by solar wind dynamic pressure fluctuations". <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	0
134	Solar wind driving of magnetospheric ULF waves: Field line resonances driven by dynamic pressure fluctuations. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	94
135	Magnetospheric cavity modes driven by solar wind dynamic pressure fluctuations. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	63
136	Solar wind driving of magnetospheric ULF waves: Pulsations driven by velocity shear at the magnetopause. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	183
137	Modelling Inner Proton Belt Variability at Energies 1 to 10MeV using BASPRO. <i>Journal of Geophysical Research: Space Physics</i> , 0, , .	0.8	2