

Satoshi Kasahara

List of Publications by Year in descending order

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87
papers

1,792
citations

331538

21
h-index

302012

39
g-index

100
all docs

100
docs citations

100
times ranked

1458
citing authors

#	ARTICLE	IF	CITATIONS
1	Geospace exploration project ERG. Earth, Planets and Space, 2018, 70, .	0.9	201
2	Pulsating aurora from electron scattering by chorus waves. Nature, 2018, 554, 337-340.	13.7	149
3	The ERG Science Center. Earth, Planets and Space, 2018, 70, .	0.9	124
4	Cluster observations of energetic electrons and electromagnetic fields within a reconnecting thin current sheet in the Earth's magnetotail. Journal of Geophysical Research, 2008, 113, .	3.3	109
5	Medium-energy particle experimentsâ€™ electron analyzer (MEP-e) for the exploration of energization and radiation in geospace (ERG) mission. Earth, Planets and Space, 2018, 70, .	0.9	57
6	Transient internally driven aurora at Jupiter discovered by Hisaki and the Hubble Space Telescope. Geophysical Research Letters, 2015, 42, 1662-1668.	1.5	53
7	Weakening of Jupiter's main auroral emission during January 2014. Geophysical Research Letters, 2016, 43, 988-997.	1.5	50
8	Cassini observations of ion and electron beams at Saturn and their relationship to infrared auroral arcs. Journal of Geophysical Research, 2012, 117, .	3.3	47
9	Medium-energy particle experimentsâ€™ ion mass analyzer (MEP-i) onboard ERG (Arase). Earth, Planets and Space, 2017, 69, .	0.9	47
10	Asymmetric distribution of reconnection jet fronts in the Jovian nightside magnetosphere. Journal of Geophysical Research: Space Physics, 2013, 118, 375-384.	0.8	45
11	Low-energy particle experimentsâ€™ ion mass analyzer (LEPi) onboard the ERG (Arase) satellite. Earth, Planets and Space, 2018, 70, .	0.9	39
12	Penetration of MeV electrons into the mesosphere accompanying pulsating aurorae. Scientific Reports, 2021, 11, 13724.	1.6	37
13	Properties of Jupiter's magnetospheric turbulence observed by the Galileo spacecraft. Journal of Geophysical Research: Space Physics, 2015, 120, 2477-2493.	0.8	35
14	Magnetic reconnection in the Jovian tail: X-line evolution and consequent plasma sheet structures. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	34
15	Rotational modulation and local time dependence of Saturn's infrared H ₃ ⁺ auroral intensity. Journal of Geophysical Research, 2012, 117, .	3.3	33
16	The Energization and Radiation in Geospace (ERG) Project. Geophysical Monograph Series, 0, , 103-116.	0.1	33
17	Thin current sheets in the Jovian magnetotail. Planetary and Space Science, 2014, 96, 133-145.	0.9	32
18	High-energy electron experiments (HEP) aboard the ERG (Arase) satellite. Earth, Planets and Space, 2018, 70, .	0.9	29

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19	Long-term modulations of Saturn's auroral radio emissions by the solar wind and seasonal variations controlled by the solar ultraviolet flux. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 7019-7035.	0.8	28
20	Superfast precipitation of energetic electrons in the radiation belts of the Earth. <i>Nature Communications</i> , 2022, 13, 1611.	5.8	27
21	Significance of Wave-Particle Interaction Analyzer for direct measurements of nonlinear wave-particle interactions. <i>Annales Geophysicae</i> , 2013, 31, 503-512.	0.6	25
22	Cassini VIMS observations of latitudinal and hemispheric variations in Saturn's infrared auroral intensity. <i>Icarus</i> , 2011, 216, 367-375.	1.1	23
23	Field-aligned beams and reconnection in the jovian magnetotail. <i>Icarus</i> , 2012, 217, 55-65.	1.1	21
24	Software-type Wave-Particle Interaction Analyzer on board the Arase satellite. <i>Earth, Planets and Space</i> , 2018, 70, .	0.9	21
25	Comprehensive Observations of Substorm-Enhanced Plasmaspheric Hiss Generation, Propagation, and Dissipation. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086040.	1.5	21
26	Cusp type electrostatic analyzer for measurements of medium energy charged particles. <i>Review of Scientific Instruments</i> , 2006, 77, 123303.	0.6	18
27	Acceleration of ions in the Jupiter magnetotail: Particle resonant interaction with dipolarization fronts. <i>Planetary and Space Science</i> , 2013, 82-83, 134-148.	0.9	18
28	Ion hole formation and nonlinear generation of electromagnetic ion cyclotron waves: THEMIS observations. <i>Geophysical Research Letters</i> , 2017, 44, 8730-8738.	1.5	18
29	Geospace exploration project: Arase (ERG). <i>Journal of Physics: Conference Series</i> , 2017, 869, 012095.	0.3	17
30	Deformation of Electron Pitch Angle Distributions Caused by Upper Band Chorus Observed by the Arase Satellite. <i>Geophysical Research Letters</i> , 2018, 45, 7996-8004.	1.5	17
31	Role of Ducting in Relativistic Electron Loss by Whistler-Mode Wave Scattering. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029851.	0.8	17
32	Magnetic Reconnection and Associated Transient Phenomena Within the Magnetospheres of Jupiter and Saturn. <i>Space Science Reviews</i> , 2015, 187, 181-227.	3.7	16
33	High-resolution detection of 100keV electrons using avalanche photodiodes. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2008, 594, 50-55.	0.7	15
34	Ion Energies Dominating Energy Density in the Inner Magnetosphere: Spatial Distributions and Composition, Observed by Arase/MEP. <i>Geophysical Research Letters</i> , 2018, 45, 12,153-12,162.	1.5	15
35	JUXTA: A new probe of X-ray emission from the Jupiter system. <i>Advances in Space Research</i> , 2013, 51, 1605-1621.	1.2	14
36	Drift-Bounce Resonance Between Pc5 Pulsations and Ions at Multiple Energies in the Nightside Magnetosphere: Arase and MMS Observations. <i>Geophysical Research Letters</i> , 2018, 45, 7277-7286.	1.5	14

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37	In situ observations of ions and magnetic field around Phobos: the mass spectrum analyzer (MSA) for the Martian Moons eXploration (MMX) mission. <i>Earth, Planets and Space</i> , 2021, 73, .	0.9	14
38	Electron Intensity Measurements by the Cluster/RAPID/IES Instrument in Earth's Radiation Belts and Ring Current. <i>Space Weather</i> , 2019, 17, 553-566.	1.3	13
39	Evening Side EMIC Waves and Related Proton Precipitation Induced by a Substorm. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029091.	0.8	13
40	Variability of the minimum detectable energy of an APD as an electron detector. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2012, 664, 282-288.	0.7	12
41	Data processing in Software-type Waveâ€“Particle Interaction Analyzer onboard the Arase satellite. <i>Earth, Planets and Space</i> , 2018, 70, .	0.9	12
42	Escape of high-energy oxygen ions through magnetopause reconnection under northward IMF. <i>Annales Geophysicae</i> , 2008, 26, 3955-3966.	0.6	12
43	Simultaneous entry of oxygen ions originating from the Sun and Earth into the inner magnetosphere during magnetic storms. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	11
44	A Case for Electron-Astrophysics. <i>Experimental Astronomy</i> , 0, , 1.	1.6	11
45	Cusp and Nightside Auroral Sources of O ⁺ in the Plasma Sheet. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 10036-10047.	0.8	10
46	Investigation of Smallâ€“Scale Electron Density Irregularities Observed by the Arase and Van Allen Probes Satellites Inside and Outside the Plasmasphere. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA027917.	0.8	10
47	Collaborative Research Activities of the Arase and Van Allen Probes. <i>Space Science Reviews</i> , 2022, 218, .	3.7	10
48	Substormâ€“Associated Ionospheric Flow Fluctuations During the 27 March 2017 Magnetic Storm: SuperDARNâ€“Arase Conjunction. <i>Geophysical Research Letters</i> , 2018, 45, 9441-9449.	1.5	9
49	Giant Pulsations Excited by a Steep Earthward Gradient of Proton Phase Space Density: Arase Observation. <i>Geophysical Research Letters</i> , 2018, 45, 6773-6781.	1.5	9
50	A noise attenuation method for medium-energy electron measurements in the radiation belt. <i>Advances in Space Research</i> , 2009, 43, 792-801.	1.2	8
51	Statistical Properties of Molecular Ions in the Ring Current Observed by the Arase (ERG) Satellite. <i>Geophysical Research Letters</i> , 2019, 46, 8643-8651.	1.5	8
52	Strong Diffusion of Energetic Electrons by Equatorial Chorus Waves in the Midnightâ€“toâ€“Dawn Sector. <i>Geophysical Research Letters</i> , 2019, 46, 12685-12692.	1.5	8
53	Plasma and Field Observations in the Magnetospheric Source Region of a Stable Auroral Red (SAR) Arc by the Arase Satellite on 28 March 2017. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028068.	0.8	8
54	Preliminary Statistical Comparisons of Spinâ€“Averaged Electron Data From Arase and Van Allen Probes Instruments. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028929.	0.8	8

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55	Ultralightweight x-ray telescope missions: ORBIS and GEO-X. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , 2018, 4, 1.	1.0	8
56	Application of single-sided silicon strip detector to energy and charge state measurements of medium energy ions in space. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 603, 355-360.	0.7	7
57	Magnetosphere-Ionosphere Connection of Storm-Time Region 2 Field-Aligned Current and Ring Current: Arase and AMPERE Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 9545-9559.	0.8	7
58	Acceleration of Ions in Jovian Plasmoids: Does Turbulence Play a Role?. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 5056-5069.	0.8	7
59	Arase Observation of the Source Region of Auroral Arcs and Diffuse Auroras in the Inner Magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027310.	0.8	7
60	Multi-Event Analysis of Plasma and Field Variations in Source of Stable Auroral Red (SAR) Arcs in Inner Magnetosphere During Non-Storm-Time Substorms. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029081.	0.8	7
61	Development of an APD With Large Area and Thick Depletion Layer for Energetic Electron Measurements in Space. <i>IEEE Transactions on Nuclear Science</i> , 2010, 57, 1549-1555.	1.2	6
62	Data-Driven Simulation of Rapid Flux Enhancement of Energetic Electrons With an Upper-Band Whistler Burst. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028979.	0.8	6
63	Meridional Distribution of Middle-Energy Protons and Pressure-Driven Currents in the Nightside Inner Magnetosphere: Arase Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 5719-5733.	0.8	5
64	Comparative Study of Electric Currents and Energetic Particle Fluxes in a Solar Flare and Earth Magnetospheric Substorm. <i>Astrophysical Journal</i> , 2021, 923, 151.	1.6	5
65	Medium Energy Ion Mass Spectrometer Capable of Measurements of Three-Dimensional Distribution Functions in Space. <i>IEEE Transactions on Plasma Science</i> , 2008, 36, 841-847.	0.6	4
66	Contribution of Electron Pressure to Ring Current and Ground Magnetic Depression Using RAM-SCB Simulations and Arase Observations During 7 th -8 th November 2017 Magnetic Storm. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029109.	0.8	4
67	Study of an equatorward detachment of auroral arc from the oval using ground-space observations and the BATS-R-US CIMI model. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029080.	0.8	4
68	Radiation background and dose estimates for future X-ray observations in the Jovian magnetosphere. <i>Planetary and Space Science</i> , 2013, 75, 129-135.	0.9	3
69	First Simultaneous Observation of a Night Time Medium-Scale Traveling Ionospheric Disturbance From the Ground and a Magnetospheric Satellite. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029086.	0.8	3
70	Preferential Energization of Lower-Charge-State Heavier Ions in the Near-Earth Magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	3
71	Conceptual Design of an In Situ K-Ar Isochron Dating Instrument for Future Mars Rover Missions. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2016, 14, Pk_89-Pk_94.	0.1	2
72	Magnetic Field Dipolarization and Its Associated Ion Flux Variations in the Dawnside Deep Inner Magnetosphere: Arase Observations. <i>Geophysical Research Letters</i> , 2018, 45, 7942-7950.	1.5	2

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73	Energy-Resolved Detection of Precipitating Electrons of 30–100 keV by a Sounding Rocket Associated With Dayside Chorus Waves. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028477.	0.8	2
74	Low-Altitude Ion Upflow Observed by EISCAT and its Effects on Supply of Molecular Ions in the Ring Current Detected by Arase (ERG). <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028951.	0.8	2
75	Arase Observation of Simultaneous Electron Scatterings by Upper-Band and Lower-Band Chorus Emissions. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093708.	1.5	2
76	Rocket Observation of Sub-Relativistic Electrons in the Quiet Dayside Auroral Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028633.	0.8	2
77	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
78	Magnetic Field and Energetic Particle Flux Oscillations and High-Frequency Waves Deep in the Inner Magnetosphere During Substorm Dipolarization: ERG Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029095.	0.8	2
79	Spatial distributions of electromagnetic field variations and injection regions during the 20 November 2007 sawtooth event. <i>Annales Geophysicae</i> , 2009, 27, 3825-3840.	0.6	1
80	Relative Contribution of ULF Waves and Whistler-mode Chorus to the Radiation Belt Variation during the May 2017 Storm. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028972.	0.8	1
81	Magnetic Reconnection and Associated Transient Phenomena Within the Magnetospheres of Jupiter and Saturn. <i>Space Sciences Series of ISSI</i> , 2016, , 181-227.	0.0	1
82	Statistical Survey of Arase Satellite Data Sets in Conjunction With the Finnish Riometer Network. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	1
83	Signatures of Auroral Potential Structure Extending Through the Near-Equatorial Inner Magnetosphere. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	1
84	Next-Generation Plasma Particle Measurements in the Medium Energy Range: Development of Cusp Type Electrostatic Analyser and Ion Mass Spectrometer. , 2009, , .		0
85	Correction to ‘‘Cassini observations of ion and electron beams at Saturn and their relationship to infrared auroral arcs’’. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	0
86	Extremely Collimated Electron Beams in the High Latitude Magnetosphere Observed by Arase. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL090522.	1.5	0
87	Small satellites with MEMS x-ray telescopes for x-ray astronomy and solar system exploration. , 2018, , .		0