Ryuho Kataoka

List of Publications by Year
in descending order

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132 papers	3,433 citations	172457 29 h-index	182427 51 g-index
139 all docs	139 docs citations	139 times ranked	2502 citing authors

#	Article	IF	Citations
1	Major geomagnetic storms (Dstâ‰ˆ â^'100 nT) generated by corotating interaction regions. Journal of Geophysical Research, 2006, 111, .	3.3	159
2	Ring current ions and radiation belt electrons during geomagnetic storms driven by coronal mass ejections and corotating interaction regions. Geophysical Research Letters, 2005, 32, .	4.0	153
3	Geomagnetically induced currents: Science, engineering, and applications readiness. Space Weather, 2017, 15, 828-856.	3.7	149
4	Energetic electron precipitation associated with pulsating aurora: EISCAT and Van Allen Probe observations. Journal of Geophysical Research: Space Physics, 2015, 120, 2754-2766.	2.4	133
5	Magnetohydrodynamic simulation of interplanetary propagation of multiple coronal mass ejections with internal magnetic flux rope (SUSANOOâ€CME). Space Weather, 2016, 14, 56-75.	3.7	133
6	Highâ€speed solar wind with southward interplanetary magnetic field causes relativistic electron flux enhancement of the outer radiation belt via enhanced condition of whistler waves. Geophysical Research Letters, 2013, 40, 4520-4525.	4.0	117
7	Flux enhancement of radiation belt electrons during geomagnetic storms driven by coronal mass ejections and corotating interaction regions. Space Weather, 2006, 4, n/a-n/a.	3.7	110
8	Flux enhancement of the outer radiation belt electrons after the arrival of stream interaction regions. Journal of Geophysical Research, 2008, 113, .	3.3	107
9	Pileup accident hypothesis of magnetic storm on 17 March 2015. Geophysical Research Letters, 2015, 42, 5155-5161.	4.0	100
10	Ground-based instruments of the PWING project to investigate dynamics of the inner magnetosphere at subauroral latitudes as a part of the ERG-ground coordinated observation network. Earth, Planets and Space, 2017, 69, .	2.5	74
11	Relation between fine structure of energy spectra for pulsating aurora electrons and frequency spectra of whistler mode chorus waves. Journal of Geophysical Research: Space Physics, 2015, 120, 7728-7736.	2.4	73
12	Diffuse and Pulsating Aurora. Space Science Reviews, 2020, 216, 1.	8.1	69
13	Inner heliosphere MHD modeling system applicable to space weather forecasting for the other planets. Space Weather, 2014, 12, 187-204.	3.7	68
14	Saturation of StellarWinds from Young Suns. Publication of the Astronomical Society of Japan, 2013, 65, .	2.5	67
15	Measurements of geomagnetically induced current in a power grid in Hokkaido, Japan. Space Weather, 2009, 7, .	3.7	65
16	Threeâ€dimensional MHD modeling of the solar wind structures associated with 13 December 2006 coronal mass ejection. Journal of Geophysical Research, 2009, 114, .	3.3	62
17	Evolution of the outer radiation belt during the November 1993 storms driven by corotating interaction regions. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	59
18	Downstream structures of interplanetary fast shocks associated with coronal mass ejections. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	47

#	Article	IF	Citations
19	STATISTICAL STUDY OF STRONG AND EXTREME GEOMAGNETIC DISTURBANCES AND SOLAR CYCLE CHARACTERISTICS. Astrophysical Journal, 2015, 806, 272.	4.5	46
20	East Asian observations of low-latitude aurora during the Carrington magnetic storm. Publication of the Astronomical Society of Japan, 0, , .	2.5	44
21	Solar cycle variations of outer radiation belt and its relationship to solar wind structure dependences. Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 77-87.	1.6	39
22	Probability of occurrence of extreme magnetic storms. Space Weather, 2013, 11, 214-218.	3.7	39
23	Geomagnetically induced currents during intense storms driven by coronal mass ejections and corotating interacting regions. Journal of Geophysical Research, 2008, 113, .	3.3	35
24	Modeling geomagnetically induced currents in Hokkaido, Japan. Advances in Space Research, 2010, 46, 1087-1093.	2.6	35
25	Visualization of rapid electron precipitation via chorus element waveâ€“particle interactions. Nature Communications, 2019, 10, 257.	12.8	35
26	EVOLUTION OF CORONAL MASS EJECTION MORPHOLOGY WITH INCREASING HELIOCENTRIC DISTANCE. II. IN SITU OBSERVATIONS. Astrophysical Journal, 2011, 732, 117.	4.5	34
27	Multiple time-scale beats in aurora: precise orchestration via magnetospheric chorus waves. Scientific Reports, 2020, 10, 3380.	3.3	33
28	The Nebula Winter: The united view of the snowball Earth, mass extinctions, and explosive evolution in the late Neoproterozoic and Cambrian periods. Gondwana Research, 2014, 25, 1153-1163.	6.0	31
29	S-transform view of geomagnetically induced currents during geomagnetic superstorms. Geophysical Research Letters, 2006, 33, .	4.0	30
30	Pulsating aurora beyond the ultraâ€lowâ€frequency range. Journal of Geophysical Research, 2012, 117, .	3.3	30
31	Multiscale temporal variations of pulsating auroras: Onâ€off pulsation and a few Hz modulation. Journal of Geophysical Research: Space Physics, 2014, 119, 3514-3527.	2.4	30
32	Magnetic field investigation of Mercury's magnetosphere and the inner heliosphere by MMO/MGF. Planetary and Space Science, 2010, 58, 279-286.	1.7	29
33	Statistical identification of solar wind origins of magnetic impulse events. Journal of Geophysical Research, 2003, 108, .	3.3	27
34	Generation of fieldâ€aligned current (FAC) and convection through the formation of pressure regimes: Correction for the concept of Dungey's convection. Journal of Geophysical Research: Space Physics, 2016, 121, 8695-8711.	2.4	27
35	Extreme geomagnetically induced currents. Progress in Earth and Planetary Science, 2016, 3, .	3.0	27
36	Global simulation study for the time sequence of events leading to the substorm onset. Journal of Geophysical Research: Space Physics, 2017, 122, 6210-6239.	2.4	26

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37	On-orbit operations and offline data processing of CALET onboard the ISS. Astroparticle Physics, 2018, 100, 29-37.	4.3	26
38	Magnetosphere inflation during the recovery phase of geomagnetic storms as an excellent magnetic confinement of killer electrons. Geophysical Research Letters, 2008, 35, .	4.0	24
39	Average profiles of the solar wind and outer radiation belt during the extreme flux enhancement of relativistic electrons at geosynchronous orbit. Annales Geophysicae, 2008, 26, 1335-1339.	1.6	24
40	Microscopic Observations of Pulsating Aurora Associated With Chorus Element Structures: Coordinated Arase Satelliteâ€PWING Observations. Geophysical Research Letters, 2018, 45, 12,125.	4.0	24
41	Formation of the Sunâ€aligned arc region and the void (polar slot) under the nullâ€separator structure. Journal of Geophysical Research: Space Physics, 2017, 122, 4102-4116.	2.4	23
42	Stereoscopic determination of all-sky altitude map of aurora using two ground-based Nikon DSLR cameras. Annales Geophysicae, 2013, 31, 1543-1548.	1.6	22
43	Air shower simulation for WASAVIES: warning system for aviation exposure to solar energetic particles. Radiation Protection Dosimetry, 2014, 161, 274-278.	0.8	21
44	Radiation dose forecast of WASAVIES during groundâ€level enhancement. Space Weather, 2014, 12, 380-386.	3.7	21
45	Radiation Dose Nowcast for the Ground Level Enhancement on 10â€“11 September 2017. Space Weather, 2018, 16, 917-923.	3.7	21
46	Magnetosheath variations during the storm main phase on 20 November 2003: Evidence for solar wind density control of energy transfer to the magnetosphere. Geophysical Research Letters, 2005, 32, .	4.0	20
47	Cosmic ray modulation and radiation dose of aircrews during the solar cycle 24/25. Space Weather, 2017, 15, 589-605.	3.7	20
48	Real Time and Automatic Analysis Program for WASAVIES: Warning System for Aviation Exposure to Solar Energetic Particles. Space Weather, 2018, 16, 924-936.	3.7	20
49	Traveling convection vortices induced by solar wind tangential discontinuities. Journal of Geophysical Research, 2002, 107, SMP 22-1-SMP 22-12.	3.3	19
50	Transient response of the Earth's magnetosphere to a localized density pulse in the solar wind: Simulation of traveling convection vortices. Journal of Geophysical Research, 2004, 109, .	3.3	19
51	Hilbertâ€Huang Transform of geomagnetic pulsations at auroral expansion onset. Journal of Geophysical Research, 2009, 114, .	3.3	19
52	Estimating the solar wind conditions during an extreme geomagnetic storm: a case study of the event that occurred on March 13â€“14, 1989. Earth, Planets and Space, 2015, 67, .	2.5	18
53	Inclined Zenith Aurora over Kyoto on 17 September 1770: Graphical Evidence of Extreme Magnetic Storm. Space Weather, 2017, 15, 1314-1320.	3.7	18
54	The earliest drawings of datable auroras and a two-tail comet from the Syriac Chronicle of ZÅ«qnÄ«n. Publication of the Astronomical Society of Japan, 2017, 69, .	2.5	18

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55	Discovery of 1ÂHz Range Modulation of Isolated Proton Aurora at Subauroral Latitudes. Geophysical Research Letters, 2018, 45, 1209-1217.	4.0	18
56	Dynamic variations of a convection flow reversal in the subauroral postmidnight sector as seen by the SuperDARN Hokkaido HF radar. Geophysical Research Letters, 2007, 34, .	4.0	17
57	What caused the rapid recovery of the Carrington storm?. Earth, Planets and Space, 2015, 67, .	2.5	17
58	COMPARISON OF COSMIC-RAY ENVIRONMENTS ON EARTH, MOON, MARS AND IN SPACECRAFT USING PHITS. Radiation Protection Dosimetry, 2018, 180, 146-149.	0.8	17
59	Groundâ€based ELF/VLF chorus observations at subauroral latitudesâ€”VLFâ€CHAIN Campaign. Journal of Geophysical Research: Space Physics, 2014, 119, 7363-7379.	2.4	16
60	Interplanetary particle transport simulation for warning system for aviation exposure to solar energetic particles. Earth, Planets and Space, 2015, 67, .	2.5	16
61	Relativistic electron precipitation at International Space Station: Space weather monitoring by Calorimetric Electron Telescope. Geophysical Research Letters, 2016, 43, 4119-4125.	4.0	16
62	Characteristics and Performance of the CALorimetric Electron Telescope (CALET) Calorimeter for Gamma-Ray Observations. Astrophysical Journal, Supplement Series, 2018, 238, 5.	7.7	16
63	Turbulent microstructures and formation of folds in auroral breakup arc. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	14
64	Snowball Earth events driven by starbursts of the Milky Way Galaxy. New Astronomy, 2013, 21, 50-62.	1.8	14
65	A direct link between chorus emissions and pulsating aurora on timescales from milliseconds to minutes: A case study at subauroral latitudes. Journal of Geophysical Research: Space Physics, 2015, 120, 9617-9631.	2.4	14
66	Historical space weather monitoring of prolonged aurora activities in Japan and in China. Space Weather, 2017, 15, 392-402.	3.7	14
67	Dawnside Wedge Current System Formed During Intense Geomagnetic Storms. Journal of Geophysical Research: Space Physics, 2018, 123, 9093-9109.	2.4	14
68	Evidence for the resonator of inertial AlfvÃ©n waves in the cusp topside ionosphere. Journal of Geophysical Research, 2005, 110, .	3.3	13
69	Ground-based multispectral high-speed imaging of flickering aurora. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	13
70	Observed correlation between pulsating aurora and chorus waves at Syowa Station in Antarctica: A case study. Journal of Geophysical Research, 2012, 117, .	3.3	13
71	Fine scale structures of pulsating auroras in the early recovery phase of substorm using groundâ€based EMCCD camera. Journal of Geophysical Research, 2012, 117, .	3.3	13
72	Global MHD simulation of magnetospheric response of preliminary impulse to large and sudden enhancement of the solar wind dynamic pressure. Earth, Planets and Space, 2015, 67, .	2.5	13

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73	Radiation dose of aircrews during a solar proton event without ground-level enhancement. Annales Geophysicae, 2015, 33, 75-78.	1.6	13
74	Compound auroral micromorphology: ground-based high-speed imaging. Earth, Planets and Space, 2015, 67, 23.	2.5	13
75	Fast modulations of pulsating proton aurora related to subpacket structures of Pc1 geomagnetic pulsations at subauroral latitudes. Geophysical Research Letters, 2016, 43, 7859-7866.	4.0	13
76	Cooperatives Roles of Dynamics and Topology in Generating the Magnetosphereâ€Ionosphere Disturbances: Case of the Theta Aurora. Journal of Geophysical Research: Space Physics, 2018, 123, 9991.	2.4	13
77	Reproduction of Ground Magnetic Variations During the SC and the Substorm From the Global Simulation and Biotâ€Savart's Law. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027172.	2.4	13
78	Extreme geomagnetic activities: a statistical study. Earth, Planets and Space, 2020, 72, .	2.5	13
79	SuperDARN Hokkaido radar observation of westward flow enhancement in subauroral latitudes. Annales Geophysicae, 2009, 27, 1695-1699.	1.6	12
80	Anomalous ¹⁰Be spikes during the Maunder Minimum: Possible evidence for extreme space weather in the heliosphere. Space Weather, 2012, 10, .	3.7	12
81	Variations of nitric oxide in the mesosphere and lower thermosphere over Antarctica associated with a magnetic storm in April 2012. Geophysical Research Letters, 2014, 41, 2568-2574.	4.0	12
82	Unusual rainbow and white rainbow: A new auroral candidate in oriental historical sources. Publication of the Astronomical Society of Japan, 2016, 68, .	2.5	12
83	Development of Magnetic Topology During the Growth Phase of the Substorm Inducing the Onset of the Nearâ€Earth Neutral Line. Journal of Geophysical Research: Space Physics, 2019, 124, 5158-5183.	2.4	12
84	Space weather benchmarks on Japanese society. Earth, Planets and Space, 2021, 73, .	2.5	12
85	Spatial-temporal characteristics of flickering aurora as seen by high-speed EMCCD imaging observations. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	11
86	High-speed stereoscopy of aurora. Annales Geophysicae, 2016, 34, 41-44.	1.6	11
87	Search for GeV Gamma-Ray Counterparts of Gravitational Wave Events by CALET. Astrophysical Journal, 2018, 863, 160.	4.5	10
88	Small-Scale Dynamic Aurora. Space Science Reviews, 2021, 217, 17.	8.1	10
89	PSTEP: project for solarâ€“terrestrial environment prediction. Earth, Planets and Space, 2021, 73, .	2.5	10
90	Modeling of Diffuse Auroral Emission at Mars: Contribution of MeV Protons. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	10

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91	HELICAL LENGTHS OF MAGNETIC CLOUDS FROM THE MAGNETIC FLUX CONSERVATION. Astrophysical Journal, 2010, 710, 456-461.	4.5	9
92	Predicting Radiation Dose on Aircraft From Solar Energetic Particles. Space Weather, 2011, 9, .	3.7	9
93	Substructures with luminosity modulation and horizontal oscillation in pulsating patch: Principal component analysis application to pulsating aurora. Journal of Geophysical Research: Space Physics, 2016, 121, 2360-2373.	2.4	9
94	Transient ionization of the mesosphere during auroral breakup: Arase satellite and ground-based conjugate observations at Syowa Station. Earth, Planets and Space, 2019, 71, .	2.5	9
95	Groundâ€based observations of nitric oxide in the mesosphere and lower thermosphere over Antarctica in 2012â€“2013. Journal of Geophysical Research: Space Physics, 2014, 119, 7745-7761.	2.4	8
96	First evidence of patchy flickering aurora modulated by multiâ€ion electromagnetic ion cyclotron waves. Geophysical Research Letters, 2017, 44, 3963-3970.	4.0	8
97	Solar 27-day rotational period detected in wide-area lightning activity in Japan. Annales Geophysicae, 2017, 35, 583-588.	1.6	8
98	Magnetosphereâ€Ionosphere Convection Under the Due Northward IMF. Journal of Geophysical Research: Space Physics, 2019, 124, 6812-6832.	2.4	8
99	Fan-shaped aurora as seen from Japan during a great magnetic storm on February 11, 1958. Journal of Space Weather and Space Climate, 2019, 9, A16.	3.3	8
100	Electromagnetic energy deposition rate in the polar upper thermosphere derived from the EISCAT Svalbard radar and CUTLASS Finland radar observations. Annales Geophysicae, 2007, 25, 2393-2403.	1.6	7
101	Quasi-periodic rapid motion of pulsating auroras. Polar Science, 2016, 10, 183-191.	1.2	7
102	Solar rotational cycle in lightning activity in Japan during the 18â€“19th centuries. Annales Geophysicae, 2018, 36, 633-640.	1.6	7
103	Direct Comparison Between Magnetospheric Plasma Waves and Polar Mesosphere Winter Echoes in Both Hemispheres. Journal of Geophysical Research: Space Physics, 2019, 124, 9626-9639.	2.4	7
104	A Peculiar ICME Event in August 2018 Observed With the Global Muon Detector Network. Space Weather, 2021, 19, e2020SW002531.	3.7	7
105	Transient production of F-region irregularities associated with TCV passage. Annales Geophysicae, 2003, 21, 1531-1541.	1.6	6
106	Explosive volcanic eruptions triggered by cosmic rays: Volcano as a bubble chamber. Gondwana Research, 2011, 19, 1054-1061.	6.0	6
107	Ionization of protoplanetary disks by galactic cosmic rays, solar protons, and supernova remnants. Geoscience Frontiers, 2017, 8, 247-252.	8.4	6
108	A watercolor painting of northern lights seen above Japan on 11 February 1958. Journal of Space Weather and Space Climate, 2019, 9, A28.	3.3	6

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109	Nowcast and forecast of galactic cosmic ray (GCR) and solar energetic particle (SEP) fluxes in magnetosphere and ionosphere â€“ Extension of WASAVIES to Earth orbit. Journal of Space Weather and Space Climate, 2019, 9, A9.	3.3	6
110	The CALorimetric Electron Telescope (CALET) on the International Space Station: Results from the First Two Years On Orbit. Journal of Physics: Conference Series, 2019, 1181, 012003.	0.4	6
111	Formation and Release of the Harang Reversal Relating With the Substorm Onset Process. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	6
112	Reconstructing Solar Wind Profiles Associated With Extreme Magnetic Storms: A Machine Learning Approach. Geophysical Research Letters, 2021, 48, e2021GL096275.	4.0	6
113	Roles of the Mâ€I Coupling and Plasma Sheet Dissipation on the Growthâ€Phase Thinning and Subsequent Transition to the Onset. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	6
114	Plasma Waves Causing Relativistic Electron Precipitation Events at International Space Station: Lessons From Conjunction Observations With Arase Satellite. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027875.	2.4	5
115	EMICâ€Wave Driven Electron Precipitation Observed by CALET on the International Space Station. Geophysical Research Letters, 2022, 49, .	4.0	5
116	Searching for the 27-day solar rotational cycle in lightning events recorded in old diaries in Kyoto from the 17th to 18th century. Annales Geophysicae, 2017, 35, 1195-1200.	1.6	4
117	New cosmic ray observations at Syowa Station in the Antarctic for space weather study. Journal of Space Weather and Space Climate, 2021, 11, 31.	3.3	4
118	Editorial: Topical Collection on Auroral Physics. Space Science Reviews, 2021, 217, 1.	8.1	4
119	Global Simulation of the Jovian Magnetosphere: Transitional Structure From the Io Plasma Disk to the Plasma Sheet. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029232.	2.4	4
120	Periodicities and Colors of Pulsating Auroras: DSLR Camera Observations From the International Space Station. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029564.	2.4	4
121	Extreme ion heating in the dayside ionosphere in response to the arrival of a coronal mass ejection on 12 March 2012. Annales Geophysicae, 2014, 32, 831-839.	1.6	3
122	Radiation Dose During Relativistic Electron Precipitation Events at the International Space Station. Space Weather, 2020, 18, e2019SW002280.	3.7	3
123	Fineâ€Scale Visualization of Aurora in a Wide Area Using Color Digital Camera Images From the International Space Station. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027729.	2.4	3
124	Spatial Evolution of Waveâ€Particle Interaction Region Deduced From Flashâ€Type Auroras and Chorusâ€Ray Tracing. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029254.	2.4	3
125	Development of the substorm as a manifestation of convection transient. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028942.	2.4	3
126	Auroral zone over the last 3000 years. Journal of Space Weather and Space Climate, 2021, 11, 46.	3.3	3

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127	Slow Contraction of Flash Aurora Induced by an Isolated Chorus Element Ranging From Lowerâ€Band to Upperâ€Band Frequencies in the Source Region. Geophysical Research Letters, 2022, 49, .	4.0	3
128	CALET Search for Electromagnetic Counterparts of Gravitational Waves during the LIGO/Virgo O3 Run. Astrophysical Journal, 2022, 933, 85.	4.5	3
129	A Dynamical Model of the Heliosphere with the Adaptive Mesh Refinement. Journal of Physics: Conference Series, 2019, 1225, 012008.	0.4	2
130	Asymmetric Development of Auroral Surges in the Northern and Southern Hemispheres. Geophysical Research Letters, 2020, 47, e2020GL088750.	4.0	2
131	Magnetic impulse events and related PC 1 waves in the cusp and libl region observed by a ground magnetometer network. COSPAR Colloquia Series, 2002, 12, 237-241.	0.2	0
132	The CALorimetric Electron Telescope (CALET) on the International Space Station: Results from the First Two Years of Operation. EPJ Web of Conferences, 2019, 208, 13001.	0.3	0