Tomoaki Hori

List of Publications by Year
in descending order

91	1,714	430874 18	330143 37
papers	citations	h-index	g-index

97	97	97	1559
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Space Physics Environment Data Analysis System (SPEDAS). Space Science Reviews, 2019, 215, 9.	8.1	332
2	The ERG Science Center. Earth, Planets and Space, 2018, 70, .	2.5	124
3	Review of the accomplishments of mid-latitude Super Dual Auroral Radar Network (SuperDARN) HF radars. Progress in Earth and Planetary Science, 2019, 6, .	3.0	114
4	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
5	Measurements of geomagnetically induced current in a power grid in Hokkaido, Japan. Space Weather, 2009, 7, .	3.7	65
6	Average profile of ion flow and convection electric field in the near-Earth plasma sheet. Geophysical Research Letters, 2000, 27, 1623-1626.	4.0	58
7	Penetration of the convection and overshielding electric fields to the equatorial ionosphere during a quasiperiodic DP 2 geomagnetic fluctuation event. Journal of Geophysical Research, 2010, 115, .	3.3	55
8	Preonset time sequence of auroral substorms: Coordinated observations by allâ€sky imagers, satellites, and radars. Journal of Geophysical Research, 2010, 115, .	3.3	51
9	Wire Probe Antenna (WPT) and Electric Field Detector (EFD) of Plasma Wave Experiment (PWE) aboard the Arase satellite: specifications and initial evaluation results. Earth, Planets and Space, 2017, 69, .	2.5	49
10	Penetration of MeV electrons into the mesosphere accompanying pulsating aurorae. Scientific Reports, 2021, 11, 13724.	3.3	37
11	The Energization and Radiation in Geospace (ERG) Project. Geophysical Monograph Series, 0, , 103-116.	0.1	33
12	Propagation of large amplitude ionospheric disturbances with velocity dispersion observed by the SuperDARN Hokkaido radar after the 2011 off the Pacific coast of Tohoku Earthquake. Earth, Planets and Space, 2011, 63, 891-896.	2.5	32
13	The Distant Magnetotail: Its Structure, IMF Dependence, and Thermal Properties. Geophysical Monograph Series, 0, , 1-19.	0.1	32
14	Inter-University upper Atmosphere Global Observation Network (IUGONET). Data Science Journal, 2013, 12, WDS179-WDS184.	1.3	32
15	Magnetotail behavior during storm time â€œsawtooth injectionsâ€• Journal of Geophysical Research, 2004, 109, .	3.3	31
16	Storm-time convection electric field in the near-Earth plasma sheet. Journal of Geophysical Research, 2005, 110, .	3.3	29
17	Structure of the distant magnetotail and its dependence on the IMF By component: GEOTAIL observations. Advances in Space Research, 1997, 20, 949-959.	2.6	27
18	Photoelectron flows in the polar wind during geomagnetically quiet periods. Journal of Geophysical Research, 2012, 117, .	3.3	26

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19	Response of the Ionosphereâ€Plasmasphere Coupling to the September 2017 Storm: What Erodes the Plasmasphere so Severely?. Space Weather, 2019, 17, 861-876.	3.7	25
20	Direct measurements of the Poynting flux associated with convection electric fields in the magnetosphere. Journal of Geophysical Research, 2010, 115, .	3.3	18
21	Long-term variation in the upper atmosphere as seen in the geomagnetic solar quiet daily variation. Earth, Planets and Space, 2014, 66, .	2.5	18
22	Auroral fragmentation into patches. Journal of Geophysical Research: Space Physics, 2014, 119, 8249-8261.	2.4	18
23	Approximate forms of daytime ionospheric conductance. Journal of Geophysical Research: Space Physics, 2014, 119, 10,397.	2.4	17
24	Role of Ducting in Relativistic Electron Loss by Whistlerâ€Mode Wave Scattering. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029851.	2.4	17
25	Response of largeâ€scale ionospheric convection to substorm expansion onsets: A case study. Journal of Geophysical Research, 2008, 113, .	3.3	16
26	Remote Detection of Drift Resonance Between Energetic Electrons and Ultralow Frequency Waves: Multisatellite Coordinated Observation by Arase and Van Allen Probes. Geophysical Research Letters, 2019, 46, 11642-11651.	4.0	16
27	Transport and loss of the inner plasma sheet electrons: THEMIS observations. Journal of Geophysical Research, 2011, 116, .	3.3	15
28	Effect of R2â€FAC development on the ionospheric electric field pattern deduced by a global ionospheric potential solver. Journal of Geophysical Research, 2012, 117, .	3.3	15
29	Characteristics of Seasonal Variation and Solar Activity Dependence of the Geomagnetic Solar Quiet Daily Variation. Journal of Geophysical Research: Space Physics, 2017, 122, 10,796.	2.4	13
30	Evening Side EMIC Waves and Related Proton Precipitation Induced by a Substorm. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029091.	2.4	13
31	A powerful tool for browsing quick-look data in solar-terrestrial physics: â€œConjunction Event Finderâ€. Earth, Planets and Space, 2011, 63, e1-e4.	2.5	12
32	Magnetospheric responses to the passage of the interplanetary shock on 24 November 2008. Journal of Geophysical Research, 2012, 117, .	3.3	11
33	Theory, modeling, and integrated studies in the Arase (ERG) project. Earth, Planets and Space, 2018, 70, .	2.5	11
34	Cusp and Nightside Auroral Sources of O⁺ in the Plasma Sheet. Journal of Geophysical Research: Space Physics, 2019, 124, 10036-10047.	2.4	10
35	Investigation of Smallâ€Scale Electron Density Irregularities Observed by the Arase and Van Allen Probes Satellites Inside and Outside the Plasmasphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA027917.	2.4	10
36	Collaborative Research Activities of the Arase and Van Allen Probes. Space Science Reviews, 2022, 218, .	8.1	10

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37	Occurrence characteristics and lowest speed limit of subauroral polarization stream (SAPS) observed by the SuperDARN Hokkaido East radar. Earth, Planets and Space, 2015, 67, .	2.5	9
38	Omega band pulsating auroras observed onboard THEMIS spacecraft and on the ground. Journal of Geophysical Research: Space Physics, 2015, 120, 5524-5544.	2.4	9
39	Substormâ€Associated Ionospheric Flow Fluctuations During the 27 March 2017 Magnetic Storm: SuperDARNâ€Arase Conjunction. Geophysical Research Letters, 2018, 45, 9441-9449.	4.0	9
40	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
41	A substorm-associated drift echo of energetic protons observed by Geotail: Radial density gradient structure. Geophysical Research Letters, 2003, 30, .	4.0	8
42	Plasma transport from multicomponent approach. Geophysical Research Letters, 2005, 32, .	4.0	8
43	Evolution of negative SIâ€induced ionospheric flows observed by SuperDARN King Salmon HF radar. Journal of Geophysical Research, 2012, 117, .	3.3	8
44	Statistical study of auroral fragmentation into patches. Journal of Geophysical Research: Space Physics, 2015, 120, 6207-6217.	2.4	8
45	Propagation and evolution of electric fields associated with solar wind pressure pulses based on spacecraft and groundâ€based observations. Journal of Geophysical Research: Space Physics, 2017, 122, 8446-8461.	2.4	8
46	Statistical Properties of Molecular Ions in the Ring Current Observed by the Arase (ERG) Satellite. Geophysical Research Letters, 2019, 46, 8643-8651.	4.0	8
47	Strong Diffusion of Energetic Electrons by Equatorial Chorus Waves in the Midnightâ€toâ€Dawn Sector. Geophysical Research Letters, 2019, 46, 12685-12692.	4.0	8
48	Plasma and Field Observations in the Magnetospheric Source Region of a Stable Auroral Red (SAR) Arc by the Arase Satellite on 28 March 2017. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028068.	2.4	8
49	Azimuthal auroral expansion associated with fast flows in the near-Earth plasma sheet: Coordinated observations of the THEMIS all-sky imagers and multiple spacecraft. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	7
50	IMF-By dependence of transient ionospheric flow perturbation associated with sudden impulses: SuperDARN observations. Earth, Planets and Space, 2015, 67, .	2.5	7
51	Arase Observation of the Source Region of Auroral Arcs and Diffuse Auroras in the Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027310.	2.4	7
52	Multiâ€Event Analysis of Plasma and Field Variations in Source of Stable Auroral Red (SAR) Arcs in Inner Magnetosphere During Nonâ€Stormâ€Time Substorms. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029081.	2.4	7
53	Localized electron density enhancements in the high-altitude polar ionosphere and their relationships with storm-enhanced density (SED) plumes and polar tongues of ionization (TOI). Annales Geophysicae, 2011, 29, 367-375.	1.6	6
54	Reduction of the fieldâ€aligned potential drop in the polar cap during large geomagnetic storms. Journal of Geophysical Research: Space Physics, 2013, 118, 4864-4874.	2.4	6

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55	An Interactive Data Language software package to calculate ionospheric conductivity by using numerical models. Computer Physics Communications, 2014, 185, 3398-3405.	7.5	6
56	Morphologies of omega band auroras. Earth, Planets and Space, 2017, 69, .	2.5	6
57	Visualization tool for three-dimensional plasma velocity distributions (ISEE_3D) as a plug-in for SPEDAS. Earth, Planets and Space, 2017, 69, .	2.5	6
58	Active auroral arc powered by accelerated electrons from very high altitudes. Scientific Reports, 2021, 11, 1610.	3.3	6
59	Fieldâ€Aligned Lowâ€Energy O⁺ Flux Enhancements in the Inner Magnetosphere Observed by Arase. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029168.	2.4	6
60	Interuniversity Upper Atmosphere Global Observation Network (IUGONET) Meta-Database and Analysis Software. Data Science Journal, 2014, 13, PDA37-PDA43.	1.3	6
61	Convection electric field in the near-Earth tail during the super magnetic storm of November 20â€“21, 2003. Geophysical Research Letters, 2006, 33, .	4.0	5
62	Phase Space Density Analysis of Energy Transport in the Earthâ€™s Magnetotail. Space Science Reviews, 2006, 122, 69-80.	8.1	5
63	Meridional Distribution of Middleâ€Energy Protons and Pressureâ€Driven Currents in the Nightside Inner Magnetosphere: Arase Observations. Journal of Geophysical Research: Space Physics, 2019, 124, 5719-5733.	2.4	5
64	On the relationship between energy input to the ionosphere and the ion outflow flux under different solar zenith angles. Earth, Planets and Space, 2021, 73, 202.	2.5	5
65	Comparative Study of Electric Currents and Energetic Particle Fluxes in a Solar Flare and Earth Magnetospheric Substorm. Astrophysical Journal, 2021, 923, 151.	4.5	5
66	Contribution of Electron Pressure to Ring Current and Ground Magnetic Depression Using RAMâ€SCB Simulations and Arase Observations During 7â€“8 November 2017 Magnetic Storm. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029109.	2.4	4
67	A framework for estimating spherical vector fields using localized basis functions and its application to SuperDARN data processing. Earth, Planets and Space, 2020, 72, .	2.5	4
68	Study of an equatorward detachment of auroral arc from the oval using groundâ€space observations and the BATSâ€Râ€US â€“ CIMI model. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029080.	2.4	4
69	Experiments using Semantic Web technologies to connect IUGONET, ESPAS and GFZ ISDC data portals. Earth, Planets and Space, 2016, 68, .	2.5	3
70	First Simultaneous Observation of a Night Time Mediumâ€Scale Traveling Ionospheric Disturbance From the Ground and a Magnetospheric Satellite. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029086.	2.4	3
71	Preferential Energization of Lowerâ€Chargeâ€State Heavier Ions in the Nearâ€Earth Magnetotail. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	3
72	Simultaneous Observations of EMICâ€Induced Drifting Electron Holes (EDEHs) in the Earth's Radiation Belt by the Arase Satellite, Van Allen Probes, and THEMIS. Geophysical Research Letters, 2022, 49, .	4.0	3

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73	Statistical Study of Seasonal and Solar Activity Dependence of Nighttime MSTIDs Occurrence Using the SuperDARN Hokkaido Pair of Radars. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	3
74	SCâ€Associated Electric Field Variations in the Magnetosphere and Ionospheric Convective Flows. Journal of Geophysical Research: Space Physics, 2017, 122, 11,044.	2.4	2
75	Energyâ€Resolved Detection of Precipitating Electrons of 30â€“100ÂkeV by a Sounding Rocket Associated With Dayside Chorus Waves. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028477.	2.4	2
76	Lowâ€Altitude Ion Upflow Observed by EISCAT and its Effects on Supply of Molecular Ions in the Ring Current Detected by Arase (ERG). Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028951.	2.4	2
77	ISEE_Wave: interactive plasma wave analysis tool. Earth, Planets and Space, 2021, 73, .	2.5	2
78	Rocket Observation of Subâ€Relativistic Electrons in the Quiet Dayside Auroral Ionosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028633.	2.4	2
79	Characterization and Calibration of Highâ€Energy Electron Instruments Onboard the Arase Satellite. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029110.	2.4	2
80	Magnetic Field and Energetic Particle Flux Oscillations and Highâ€Frequency Waves Deep in the Inner Magnetosphere During Substorm Dipolarization: ERG Observations. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029095.	2.4	2
81	Flux Enhancements of Fieldâ€Aligned Lowâ€Energy O⁺ Ion (FALEO) in the Inner Magnetosphere: A Possible Source of Warm Plasma Cloak and Oxygen Torus. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	2
82	The Loading-Unloading Process in the Magnetotail During a Prolonged Steady Southward IMF Bz Period. COSPAR Colloquia Series, 2005, , 190-193.	0.2	1
83	Relative Contribution of ULF Waves and Whistlerâ€mode Chorus to the Radiation Belt Variation during the May 2017 Storm. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028972.	2.4	1
84	Statistical Survey of Arase Satellite Data Sets in Conjunction With the Finnish Riometer Network. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	1
85	Signatures of Auroral Potential Structure Extending Through the Nearâ€Equatorial Inner Magnetosphere. Geophysical Research Letters, 2022, 49, .	4.0	1
86	DEVELOPMENT OF STORM-TIME PROTON TOTAL ENERGY BASED ON MULTIOBSERVATION OF NOAA SATELLITES. , 0, , 105-114.		0
87	Correction to: Review of the accomplishments of mid-latitude Super Dual Auroral Radar Network (SuperDARN) HF radars. Progress in Earth and Planetary Science, 2019, 6, .	3.0	0
88	ERG observations of drift echoes during a unique period of the satellite mission. Earth, Planets and Space, 2019, 71, .	2.5	0
89	Development of remote HF wave receiver in the backlobe direction of the SuperDARN Hokkaido East radar: Initial observations. Polar Science, 2021, 28, 100669.	1.2	0
90	Sâ€“Mâ€“I COUPLING DURING THE SUPER STORM ON 20â€“21 NOVEMBER 2003. , 2009, , 237-244.		0

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91	Poleward Moving Auroral Arcs and Pc5 Oscillations. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	0