Hiroshi Hasegawa

List of Publications by Year
in descending order

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128	4,659	101384	118652
papers	citations	36 h-index	62 g-index

158	158	158	2129
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multi-scale evolution of Kelvinâ€“Helmholtz waves at the Earth's magnetopause during southward IMF periods. Physics of Plasmas, 2022, 29, .	0.7	8
2	Multi-scale observations of the magnetopause Kelvinâ€“Helmholtz waves during southward IMF. Physics of Plasmas, 2022, 29, .	0.7	12
3	Transport Path of Coldâ€Dense Plasmas in the Dusk Magnetotail Plasma Sheet: MMS Observations. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	3
4	Spatial Scales of the Velocity Shear Layer and Kelvinâ€Helmholtz Waves on the Magnetopause: First Statistical Results. Geophysical Research Letters, 2022, 49, .	1.5	0
5	Dayside Transient Phenomena and Their Impact on the Magnetosphere and Ionosphere. Space Science Reviews, 2022, 218, .	3.7	35
6	Magnetic Field Annihilation in a Magnetotail Electron Diffusion Region With Electronâ€Scale Magnetic Island. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	6
7	Twoâ€Dimensional Velocity of the Magnetic Structure Observed on July 11, 2017 by the Magnetospheric Multiscale Spacecraft. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028705.	0.8	7
8	Energy Transfer Between Hot Protons and Electromagnetic Ion Cyclotron Waves in Compressional Pc5 Ultraâ€Low Frequency Waves. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028912.	0.8	6
9	Microscale Processes Determining Macroscale Evolution of Magnetic Flux Tubes along Earthâ€™s Magnetopause. Astrophysical Journal, 2021, 914, 26.	1.6	6
10	Pre-flight Calibration and Near-Earth Commissioning Results of the Mercury Plasma Particle Experiment (MPPE) Onboard MMO (Mio). Space Science Reviews, 2021, 217, 1.	3.7	32
11	Fast Crossâ€Scale Energy Transfer During Turbulent Magnetic Reconnection. Geophysical Research Letters, 2021, 48, e2021GL093524.	1.5	13
12	20ÂYears of Cluster Observations: The Magnetopause. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029362.	0.8	3
13	Reconstruction of the Electron Diffusion Region With Inertia and Compressibility Effects. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029841.	0.8	7
14	Electron Inflow Velocities and Reconnection Rates at Earth's Magnetopause and Magnetosheath. Geophysical Research Letters, 2020, 47, e2020GL089082.	1.5	23
15	Decay of Kelvinâ€Helmholtz Vortices at the Earth's Magnetopause Under Pure Southward IMF Conditions. Geophysical Research Letters, 2020, 47, e2020GL087574.	1.5	10
16	On the Ubiquity of Magnetic Reconnection Inside Flux Transfer Eventâ€Like Structures at the Earth's Magnetopause. Geophysical Research Letters, 2020, 47, e2019GL086726.	1.5	20
17	Latitudinal Dependence of the Kelvinâ€Helmholtz Instability and Beta Dependence of Vortexâ€Induced Highâ€Guide Field Magnetic Reconnection. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027333.	0.8	7
18	Generation of Turbulence in Kelvinâ€Helmholtz Vortices at the Earth's Magnetopause: Magnetospheric Multiscale Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027595.	0.8	15

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19	Effects of Fluctuating Magnetic Field on the Growth of the Kelvinâ€Helmholtz Instability at the Earth's Magnetopause. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027515.	0.8	21
20	Polynomial Reconstruction of the Reconnection Magnetic Field Observed by Multiple Spacecraft. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027481.	0.8	38
21	Magnetic Reconnection Inside a Flux Rope Induced by Kelvinâ€Helmholtz Vortices. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027665.	0.8	26
22	Characteristics of the Flank Magnetopause: MMS Results. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027623.	0.8	24
23	Magnetic Reconnection Inside a Flux Transfer Eventâ€Like Structure in Magnetopause Kelvinâ€Helmholtz Waves. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027527.	0.8	10
24	Electron Vorticity Indicative of the Electron Diffusion Region of Magnetic Reconnection. Geophysical Research Letters, 2019, 46, 6287-6296.	1.5	23
25	Fourâ€Spacecraft Measurements of the Shape and Dimensionality of Magnetic Structures in the Nearâ€Earth Plasma Environment. Journal of Geophysical Research: Space Physics, 2019, 124, 6850-6868.	0.8	7
26	Evolution of Turbulence in the Kelvinâ€“Helmholtz Instability in the Terrestrial Magnetopause. Atmosphere, 2019, 10, 561.	1.0	8
27	Structure of the Current Sheet in the 11 July 2017 Electron Diffusion Region Event. Journal of Geophysical Research: Space Physics, 2019, 124, 1173-1186.	0.8	34
28	Dimensionality, Coordinate System and Reference Frame for Analysis of In-Situ Space Plasma and Field Data. Space Science Reviews, 2019, 215, 1.	3.7	46
29	Crescentâ€Shaped Electron Distributions at the Nonreconnecting Magnetopause: Magnetospheric Multiscale Observations. Geophysical Research Letters, 2019, 46, 3024-3032.	1.5	17
30	Reconstruction of the Electron Diffusion Region of Magnetotail Reconnection Seen by the MMS Spacecraft on 11 July 2017. Journal of Geophysical Research: Space Physics, 2019, 124, 122-138.	0.8	25
31	Determining Lâ€Mâ€N Current Sheet Coordinates at the Magnetopause From Magnetospheric Multiscale Data. Journal of Geophysical Research: Space Physics, 2018, 123, 2274-2295.	0.8	38
32	Magnetic Reconnection at a Thin Current Sheet Separating Two Interlaced Flux Tubes at the Earth's Magnetopause. Journal of Geophysical Research: Space Physics, 2018, 123, 1779-1793.	0.8	35
33	Identifying 3â€Ð Vortex Structures At/Around the Magnetopause Using a Tetrahedral Satellite Configuration. Journal of Geophysical Research: Space Physics, 2018, 123, 10,158.	0.8	6
34	Direct measurements of two-way wave-particle energy transfer in a collisionless space plasma. Science, 2018, 361, 1000-1003.	6.0	36
35	Measurement of the Magnetic Reconnection Rate in the Earth's Magnetotail. Journal of Geophysical Research: Space Physics, 2018, 123, 9150-9168.	0.8	50
36	Observations of Kelvinâ€Helmholtz Waves in the Earth's Magnetotail Near the Lunar Orbit. Journal of Geophysical Research: Space Physics, 2018, 123, 3836-3847.	0.8	13

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37	Seasonal and Solar Wind Control of the Reconnection Line Location on the Earth's Dayside Magnetopause. Journal of Geophysical Research: Space Physics, 2018, 123, 7498-7512.	0.8	10
38	Reconstruction of the electron diffusion region observed by the Magnetospheric Multiscale spacecraft: First results. Geophysical Research Letters, 2017, 44, 4566-4574.	1.5	27
39	MAVEN observations of a giant ionospheric flux rope near Mars resulting from interaction between the crustal and interplanetary draped magnetic fields. Journal of Geophysical Research: Space Physics, 2017, 122, 828-842.	0.8	21
40	Mass and Energy Transfer Across the Earth's Magnetopause Caused by Vortexâ€Induced Reconnection. Journal of Geophysical Research: Space Physics, 2017, 122, 11,505.	0.8	35
41	Electron dynamics surrounding the X line in asymmetric magnetic reconnection. Journal of Geophysical Research: Space Physics, 2017, 122, 7396-7413.	0.8	20
42	Turbulent mass transfer caused by vortex induced reconnection in collisionless magnetospheric plasmas. Nature Communications, 2017, 8, 1582.	5.8	63
43	Spatial dimensions of the electron diffusion region in anti-parallel magnetic reconnection. Annales Geophysicae, 2016, 34, 357-367.	0.6	17
44	Currents and associated electron scattering and bouncing near the diffusion region at Earth's magnetopause. Geophysical Research Letters, 2016, 43, 3042-3050.	1.5	81
45	Decay of mesoscale flux transfer events during quasiâ€continuous spatially extended reconnection at the magnetopause. Geophysical Research Letters, 2016, 43, 4755-4762.	1.5	28
46	MAVEN observations of magnetic flux ropes with a strong field amplitude in the Martian magnetosheath during the ICME passage on 8 March 2015. Geophysical Research Letters, 2016, 43, 4816-4824.	1.5	14
47	MAVEN observations of partially developed Kelvinâ€Helmholtz vortices at Mars. Geophysical Research Letters, 2016, 43, 4763-4773.	1.5	38
48	Thick escaping magnetospheric ion layer in magnetopause reconnection with MMS observations. Geophysical Research Letters, 2016, 43, 6028-6035.	1.5	1
49	Reconstruction of the electron diffusion region. Journal of Geophysical Research: Space Physics, 2016, 121, 4279-4290.	0.8	26
50	Signatures of complex magnetic topologies from multiple reconnection sites induced by Kelvinâ€Helmholtz instability. Journal of Geophysical Research: Space Physics, 2016, 121, 9926-9939.	0.8	35
51	Reconnection guide field and quadrupolar structure observed by MMS on 16 October 2015 at 1307 UT. Journal of Geophysical Research: Space Physics, 2016, 121, 9880-9887.	0.8	10
52	Jupiter's Xâ€ray and EUV auroras monitored by Chandra, XMMâ€Newton, and Hisaki satellite. Journal of Geophysical Research: Space Physics, 2016, 121, 2308-2320.	0.8	34
53	Shift of the magnetopause reconnection line to the winter hemisphere under southward IMF conditions: Geotail and MMS observations. Geophysical Research Letters, 2016, 43, 5581-5588.	1.5	17
54	Motion of the MMS spacecraft relative to the magnetic reconnection structure observed on 16 October 2015 at 1307ÂUT. Geophysical Research Letters, 2016, 43, 5589-5596.	1.5	36

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55	Transient internally driven aurora at Jupiter discovered by Hisaki and the Hubble Space Telescope. Geophysical Research Letters, 2015, 42, 1662-1668.	1.5	53
56	Dual-spacecraft reconstruction of a three-dimensional magnetic flux rope at the Earth's magnetopause. Annales Geophysicae, 2015, 33, 169-184.	0.6	13
57	Can magnetopause reconnection drive Saturn's magnetosphere?. Geophysical Research Letters, 2014, 41, 1862-1868.	1.5	25
58	Formation processes of flux ropes downstream from Martian crustal magnetic fields inferred from Gradâ€Shafranov reconstruction. Journal of Geophysical Research: Space Physics, 2014, 119, 7947-7962.	0.8	22
59	Reconstruction of an evolving magnetic flux rope in the solar wind: Decomposing spatial and temporal variations from singleâ€spacecraft data. Journal of Geophysical Research: Space Physics, 2014, 119, 97-114.	0.8	10
60	The plasma depletion layer in Saturn's magnetosheath. Journal of Geophysical Research: Space Physics, 2014, 119, 121-130.	0.8	15
61	The spatial structure of Martian magnetic flux ropes recovered by the Gradâ€Shafranov reconstruction technique. Journal of Geophysical Research: Space Physics, 2014, 119, 1262-1271.	0.8	20
62	Multiscale studies of the three-dimensional dayside X-line. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 99, 32-40.	0.6	17
63	Electron acceleration to relativistic energies at a strong quasi-parallel shock wave. Nature Physics, 2013, 9, 164-167.	6.5	62
64	Asymmetry of magnetosheath flows and magnetopause shape during low AlfvÃ©n Mach number solar wind. Journal of Geophysical Research: Space Physics, 2013, 118, 1089-1100.	0.8	49
65	In situobservations of high-Mach number collisionless shocks in space plasmas. Plasma Physics and Controlled Fusion, 2013, 55, 124035.	0.9	7
66	Threeâ€dimensional magnetic flux rope structure formed by multiple sequential Xâ€line reconnection at the magnetopause. Journal of Geophysical Research: Space Physics, 2013, 118, 1904-1911.	0.8	48
67	Axis and velocity determination for quasi twoâ€dimensional plasma/field structures from Faraday's law: A second look. Journal of Geophysical Research: Space Physics, 2013, 118, 2073-2086.	0.8	8
68	Bursty magnetic reconnection at Saturn's magnetopause. Geophysical Research Letters, 2013, 40, 1027-1031.	1.5	73
69	Plasma transport induced by kinetic AlfvÃ©n wave turbulence. Physics of Plasmas, 2012, 19, .	0.7	13
70	Spatial distribution of rolled up Kelvin-Helmholtz vortices at Earth's dayside and flank magnetopause. Annales Geophysicae, 2012, 30, 1025-1035.	0.6	59
71	Inner plasma structure of the lowâ€latitude reconnection layer. Journal of Geophysical Research, 2012, 117, .	3.3	9
72	Magnetic flux rope formation within a magnetosheath hot flow anomaly. Journal of Geophysical Research, 2012, 117, .	3.3	21

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73	IMPALAS: Investigation of MagnetoPause Activity using Longitudinally-Aligned Satellitesâ€"a mission concept proposed for the ESA M3 2020/2022 launch. Experimental Astronomy, 2012, 33, 365-401.	1.6	0
74	Structure and Dynamics of the Magnetopause and Its Boundary Layers. Monographs on Environment Earth and Planets, 2012, 1, 71-119.	9.0	77
75	Evolution of an MHD-scale Kelvin-Helmholtz vortex accompanied by magnetic reconnection: Two-dimensional particle simulations. Journal of Geophysical Research, 2011, 116, .	3.3	49
76	Reconstruction of steady, three-dimensional, magnetohydrostatic field and plasma structures in space: Theory and benchmarking. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	9
77	Magnetopause reconnection across wide local time. Annales Geophysicae, 2011, 29, 1683-1697.	0.6	57
78	ARTEMIS Science Objectives. Space Science Reviews, 2011, 165, 59-91.	3.7	47
79	A case study of Kelvinâ€"Helmholtz vortices on both flanks of the Earth's magnetotail. Planetary and Space Science, 2011, 59, 502-509.	0.9	21
80	Extended Magnetic Reconnection across the Dayside Magnetopause. Physical Review Letters, 2011, 107, 025004.	2.9	41
81	A powerful tool for browsing quick-look data in solar-terrestrial physics: â€œConjunction Event Finderâ€• Earth, Planets and Space, 2011, 63, e1-e4.	0.9	12
82	ARTEMIS Science Objectives. , 2011, , 27-59.		4
83	Interplanetary magnetic field rotations followed from L1 to the ground: the response of the Earth's magnetosphere as seen by multi-spacecraft and ground-based observations. Annales Geophysicae, 2011, 29, 1549-1569.	0.6	7
84	In-flight Performance and Initial Results of Plasma Energy Angle and Composition Experiment (PACE) onÂSELENE (Kaguya). Space Science Reviews, 2010, 154, 265-303.	3.7	123
85	Kinetic effects on the Kelvinâ€"Helmholtz instability in ion-to-magnetohydrodynamic scale transverse velocity shear layers: Particle simulations. Physics of Plasmas, 2010, 17, .	0.7	47
86	Evidence for a flux transfer event generated by multiple Xâ€line reconnection at the magnetopause. Geophysical Research Letters, 2010, 37, .	1.5	126
87	Magnetopause expansions for quasiâ€radial interplanetary magnetic field: THEMIS and Geotail observations. Journal of Geophysical Research, 2010, 115, .	3.3	71
88	On slowly evolving Gradâ€Shafranov equilibria. Journal of Geophysical Research, 2010, 115, .	3.3	9
89	Recovery of time evolution of Gradâ€Shafranov equilibria from singleâ€spacecraft data: Benchmarking and application to a flux transfer event. Journal of Geophysical Research, 2010, 115, .	3.3	8
90	In-flight Performance and Initial Results of Plasma Energy Angle and Composition Experiment (PACE) on SELENE (Kaguya). , 2010, , 265-303.		1

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91	Mercury Ion Analyzer (MIA) onboard Mercury Magnetospheric Orbiter: MMO. Advances in Space Research, 2009, 43, 1986-1992.	1.2	5
92	Comment on â€œEvolution of Kelvinâ€Helmholtz activity on the dusk flank magnetopauseâ€•by Foullon et al.. Journal of Geophysical Research, 2009, 114, .	3.3	8
93	Boundary layer plasma flows from highâ€latitude reconnection in the summer hemisphere for northward IMF: THEMIS multiâ€point observations. Geophysical Research Letters, 2009, 36, .	1.5	4
94	Tracing solar wind plasma entry into the magnetosphere using ionâ€toâ€electron temperature ratio. Geophysical Research Letters, 2009, 36, .	1.5	24
95	Kelvinâ€Helmholtz waves at the Earth's magnetopause: Multiscale development and associated reconnection. Journal of Geophysical Research, 2009, 114, .	3.3	119
96	Observations of loss coneâ€“shaped back streaming energetic protons upstream of the Earth's bow shock. Journal of Geophysical Research, 2009, 114, .	3.3	0
97	Magnetic island formation between largeâ€scale flow vortices at an undulating postnoon magnetopause for northward interplanetary magnetic field. Journal of Geophysical Research, 2009, 114, .	3.3	40
98	Retreat and reformation of Xâ€line during quasiâ€continuous tailwardâ€ofâ€theâ€cusp reconnection under northward IMF. Geophysical Research Letters, 2008, 35, .	1.5	20
99	Transient and localized processes in the magnetotail: a review. Annales Geophysicae, 2008, 26, 955-1006.	0.6	112
100	Low-energy charged particle measurement by MAP-PACE onboard SELENE. Earth, Planets and Space, 2008, 60, 375-385.	0.9	53
101	Periodic traveling compression regions during quiet geomagnetic conditions and their association with ground Pi2. Annales Geophysicae, 2008, 26, 3341-3354.	0.6	7
102	Escape of high-energy oxygen ions through magnetopause reconnection under northward IMF. Annales Geophysicae, 2008, 26, 3955-3966.	0.6	12
103	Recovery of streamlines in the flank low-latitude boundary layer. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	21
104	Simultaneous observations of fluctuating cusp aurora and lowâ€latitude magnetopause reconnection. Journal of Geophysical Research, 2007, 112, .	3.3	7
105	Reconstruction of a bipolar magnetic signature in an earthward jet in the tail: Flux rope or 3D guideâ€field reconnection?. Journal of Geophysical Research, 2007, 112, .	3.3	32
106	Cluster observations of a field aligned current at the dawn flank of a bursty bulk flow. Annales Geophysicae, 2007, 25, 1405-1415.	0.6	43
107	Reproducing the bipolar magnetic signature at the jet leading edge by three-dimensional reconnection with nonzero guide field. Journal of Geophysical Research, 2006, 111, .	3.3	16
108	Simultaneous Geotail and Wind observations of reconnection at the subsolar and tail flank magnetopause. Geophysical Research Letters, 2006, 33, .	1.5	37

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109	Kelvin-Helmholtz instability in a magnetotail flank-like geometry: Three-dimensional MHD simulations. Journal of Geophysical Research, 2006, 111, .	3.3	93
110	Grad-Shafranov reconstruction: An overview. Journal of Geophysical Research, 2006, 111, .	3.3	95
111	Single-spacecraft detection of rolled-up Kelvin-Helmholtz vortices at the flank magnetopause. Journal of Geophysical Research, 2006, 111, .	3.3	153
112	Cross-Scale Coupling Within Rolled-Up MHD-Scale Vortices and Its Effect on Large Scale Plasma Mixing Across the Magnetospheric Boundary. Space Science Reviews, 2006, 122, 3-18.	3.7	4
113	Association of Pi2 pulsations and pulsed reconnection: ground and Cluster observations in the tail lobe at 16 <i>R_E</i>. Annales Geophysicae, 2006, 24, 3433-3449.	0.6	30
114	The structure of flux transfer events recovered from Cluster data. Annales Geophysicae, 2006, 24, 603-618.	0.6	97
115	Relationship between field-aligned electron fluxes and field line topology at the tail lobe magnetopause: Geotail observations. Advances in Space Research, 2005, 36, 1772-1778.	1.2	6
116	Survey of energetic O⁺ ions near the dayside mid-latitude magnetopause with Cluster. Annales Geophysicae, 2005, 23, 1281-1294.	0.6	27
117	Characteristics of the near-tail dawn magnetopause and boundary layer. Annales Geophysicae, 2005, 23, 1481-1497.	0.6	48
118	Optimal reconstruction of magnetopause structures from Cluster data. Annales Geophysicae, 2005, 23, 973-982.	0.6	73
119	Orientation and motion of two-dimensional structures in a space plasma. Journal of Geophysical Research, 2005, 110, .	3.3	36
120	Four-spacecraft determination of magnetopause orientation, motion and thickness: comparison with results from single-spacecraft methods. Annales Geophysicae, 2004, 22, 1347-1365.	0.6	95
121	Reconstruction of two-dimensional magnetopause structures from Cluster observations: verification of method. Annales Geophysicae, 2004, 22, 1251-1266.	0.6	81
122	Transport of solar wind into Earth's magnetosphere through rolled-up Kelvinâ€“Helmholtz vortices. Nature, 2004, 430, 755-758.	13.7	562
123	Dense and stagnant ions in the low-latitude boundary region under northward interplanetary magnetic field. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	38
124	Anatomy of a flux transfer event seen by Cluster. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	85
125	Geotail observations of the dayside outer boundary region: Interplanetary magnetic field control and dawn-dusk asymmetry. Journal of Geophysical Research, 2003, 108, .	3.3	64
126	Plasma entry across the distant tail magnetopause 2. Comparison between MHD theory and observation. Journal of Geophysical Research, 2002, 107, SMP 6-1.	3.3	10

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127	Plasma entry across the distant tail magnetopause 1. Global properties and IMF dependence. Journal of Geophysical Research, 2002, 107, SMP 9-1.	3.3	19
128	Dependence of the distant tail magnetopause position on the solar wind and IMF. Advances in Space Research, 2000, 25, 1485-1488.	1.2	4