Rumi Nakamura

List of Publications by Citations

455 papers	16,521 citations	64 h-index	108 g-index
475 ext. papers	18,194 ext. citations	3.7 avg, IF	6.05 L-index

#	Paper	IF	Citations
455	The THEMIS Fluxgate Magnetometer. *Space Science Reviews*, **2008**, 141, 235-264	7.5	900
454	The Magnetospheric Multiscale Magnetometers. *Space Science Reviews*, **2016**, 199, 189-256	7.5	670
453	Structure and dynamics of magnetic reconnection for substorm onsets with Geotail observations. *Journal of Geophysical Research*, **1998**, 103, 4419-4440		445
452	Electron-scale measurements of magnetic reconnection in space. *Science*, **2016**, 352, aaf2939	33.3	418
451	Motion of the dipolarization front during a flow burst event observed by Cluster. *Geophysical Research Letters*, **2002**, 29, 3-1-3-4	4.9	308
450	The FIELDS Instrument Suite on MMS: Scientific Objectives, Measurements, and Data Products. *Space Science Reviews*, **2016**, 199, 105-135	7.5	292
449	Multisatellite observations of the outer zone electron variation during the November 3–4, 1993, magnetic storm. *Journal of Geophysical Research*, **1997**, 102, 14123-14140		245
448	Spatial scale of high-speed flows in the plasma sheet observed by Cluster. *Geophysical Research Letters*, **2004**, 31, n/a-n/a	4.9	240
447	Earthward flow bursts, auroral streamers, and small expansions. *Journal of Geophysical Research*, **2001**, 106, 10791-10802		226
446	Magnetic field investigation of the Venus plasma environment: Expected new results from Venus Express. *Planetary and Space Science*, **2006**, 54, 1336-1343	2	208
445	Current sheet structure near magnetic X-line observed by Cluster. *Geophysical Research Letters*, **2003**, 30,	4.9	205
444	Kinetic structure of the sharp injection/dipolarization front in the flow-braking region. *Geophysical Research Letters*, **2009**, 36,	4.9	202
443	Bursty bulk flows and dipolarization in MHD simulations of magnetotail reconnection. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		199
442	Local structure of the magnetotail current sheet: 2001 Cluster observations. *Annales Geophysicae*, **2006**, 24, 247-262	2	185
441	Current sheet flapping motion and structure observed by Cluster. *Geophysical Research Letters*, **2003**, 30,	4.9	159
440	Multiple-spacecraft observation of a narrow transient plasma jet in the Earth's plasma sheet. *Geophysical Research Letters*, **2000**, 27, 851-854	4.9	145
439	Electric current and magnetic field geometry in flapping magnetotail current sheets. *Annales Geophysicae*, **2005**, 23, 1391-1403	2	142

438	Substorm Current Wedge Revisited. *Space Science Reviews*, **2015**, 190, 1-46	7.5	141
437	Multiple overshoot and rebound of a bursty bulk flow. *Geophysical Research Letters*, **2010**, 37,	4.9	139
436	Electron-scale dynamics of the diffusion region during symmetric magnetic reconnection in space. *Science*, **2018**, 362, 1391-1395	33.3	139
435	Joint observations by Cluster satellites of bursty bulk flows in the magnetotail. *Journal of Geophysical Research*, **2006**, 111,		136
434	Particle acceleration in dipolarization events. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 1960-1971	2.6	125
433	A statistical and event study of magnetotail dipolarization fronts. *Annales Geophysicae*, **2011**, 29, 1537-1547	2	117
432	Energetic electron acceleration in the downstream reconnection outflow region. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		117
431	Evolution of dipolarization in the near-Earth current sheet induced by Earthward rapid flux transport. *Annales Geophysicae*, **2009**, 27, 1743-1754	2	115
430	Cluster observation of a bifurcated current sheet. *Geophysical Research Letters*, **2003**, 30,	4.9	115
429	Recent advances in understanding substorm dynamics. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	112
428	Flow bursts and auroral activations: Onset timing and foot point location. *Journal of Geophysical Research*, **2001**, 106, 10777-10789		112
427	The Double Star magnetic field investigation: instrument design, performance and highlights of the first year's observations. *Annales Geophysicae*, **2005**, 23, 2713-2732	2	103
426	Rapid flux transport in the central plasma sheet. *Journal of Geophysical Research*, **2001**, 106, 301-313		101
425	Transient and localized processes in the magnetotail: a review. *Annales Geophysicae*, **2008**, 26, 955-1006	2	100
424	Orientation and propagation of current sheet oscillations. *Geophysical Research Letters*, **2004**, 31, n/a-n/a	4.9	100
423	Particle and field signatures during pseudobreakup and major expansion onset. *Journal of Geophysical Research*, **1994**, 99, 207		99
422	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, n/a-n/a		98
421	Survey of large-amplitude flapping motions in the midtail current sheet. *Annales Geophysicae*, **2006**, 24, 2015-2024	2	98

420	New high temporal and spatial resolution measurements by SAMPEX of the precipitation of relativistic electrons. *Advances in Space Research*, **1996**, 18, 171-186	2.4	97
419	Fast flow during current sheet thinning. *Geophysical Research Letters*, **2002**, 29, 55-1-55-4	4.9	96
418	Dynamics of thin current sheets associated with magnetotail reconnection. *Journal of Geophysical Research*, **2006**, 111,		93
417	A wavy twisted neutral sheet observed by CLUSTER. *Geophysical Research Letters*, **2002**, 29, 5-1-5-4	4.9	89
416	Magnetic reconnection in the near Venusian magnetotail. *Science*, **2012**, 336, 567-70	33.3	87
415	Coalescence of magnetic flux ropes in the ion diffusion region of magnetic reconnection. *Nature Physics*, **2016**, 12, 263-267	16.2	85
414	Multi-spacecraft observation of plasma dipolarization/injection in the inner magnetosphere. *Annales Geophysicae*, **2007**, 25, 801-814	2	82
413	Solar wind control of the radial distance of the magnetic reconnection site in the magnetotail. *Journal of Geophysical Research*, **2005**, 110,		82
412	Can flow bursts penetrate into the inner magnetosphere?. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	80
411	Ion-scale secondary flux ropes generated by magnetopause reconnection as resolved by MMS. *Geophysical Research Letters*, **2016**, 43, 4716-4724	4.9	80
410	Equatorward and poleward expansion of the auroras during auroral substorms. *Journal of Geophysical Research*, **1993**, 98, 5743-5759		79
409	Thin Current Sheets in the Magnetotail Observed by Cluster. *Space Science Reviews*, **2006**, 122, 29-38	7.5	74
408	SAMPEX observations of precipitation bursts in the outer radiation belt. *Journal of Geophysical Research*, **2000**, 105, 15875-15885		73
407	Dynamics of thin current sheets: Cluster observations. *Annales Geophysicae*, **2007**, 25, 1365-1389	2	72
406	Geotail encounter with reconnection diffusion region in the Earth's magnetotail: Evidence of multiple X lines collisionless reconnection?. *Journal of Geophysical Research*, **2004**, 109,		72
405	Electron scale structures and magnetic reconnection signatures in the turbulent magnetosheath. *Geophysical Research Letters*, **2016**, 43, 5969-5978	4.9	72
404	Embedded current sheets in the Earth's magnetotail. *Journal of Geophysical Research*, **2011**, 116,		71
403	Little or no solar wind enters Venus' atmosphere at solar minimum. *Nature*, **2007**, 450, 654-6	50.4	70

402	How typical are atypical current sheets?. *Geophysical Research Letters*, **2005**, 32,	4.9	70
401	Cluster observations of an ion-scale current sheet in the magnetotail under the presence of a guide field. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		69
400	A multisatellite study of a pseudo-substorm onset in the near-Earth magnetotail. *Journal of Geophysical Research*, **1993**, 98, 19355-19367		69
399	Midday auroral breakup.. *Journal of Geomagnetism and Geoelectricity*, **1989**, 41, 371-387		69
398	Structure of the Hall current system in the vicinity of the magnetic reconnection site. *Journal of Geophysical Research*, **2003**, 108,		68
397	Three-dimensional structure of magnetic reconnection in the magnetotail from Geotail observations. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 1667-1678	2.6	66
396	Magnetic turbulence in the plasma sheet. *Journal of Geophysical Research*, **2004**, 109,		65
395	Reconstruction of the magnetotail current sheet structure using multi-point Cluster measurements. *Planetary and Space Science*, **2005**, 53, 237-243	2	65
394	Currents and associated electron scattering and bouncing near the diffusion region at Earth's magnetopause. *Geophysical Research Letters*, **2016**, 43, 3042-3050	4.9	65
393	Low frequency eigenmodes of thin anisotropic current sheets and Cluster observations. *Annales Geophysicae*, **2009**, 27, 861-868	2	64
392	Electron flat-top distributions around the magnetic reconnection region. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		64
391	Active Spacecraft Potential Control Investigation. *Space Science Reviews*, **2016**, 199, 515-544	7.5	63
390	Dipolarization fronts in the magnetotail plasma sheet. *Planetary and Space Science*, **2011**, 59, 517-525	2	63
389	Oscillatory magnetic flux tube slippage in the plasma sheet. *Annales Geophysicae*, **2006**, 24, 1695-1704	2	62
388	Magnetospheric Multiscale Observations of the Electron Diffusion Region of Large Guide Field Magnetic Reconnection. *Physical Review Letters*, **2016**, 117, 015001	7.4	60
387	Magnetospheric location of the equatorward prebreakup arc. *Journal of Geophysical Research*, **2012**, 117,		59
386	Cluster statistics of thin current sheets in the Earth magnetotail: Specifics of the dawn flank, proton temperature profiles and electrostatic effects. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		59
385	Electron acceleration signatures in the magnetotail associated with substorms. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		59

384	Electron jet of asymmetric reconnection. *Geophysical Research Letters*, **2016**, 43, 5571-5580	4.9	59
383	Thin embedded current sheets: Cluster observations of ion kinetic structure and analytical models. *Annales Geophysicae*, **2009**, 27, 4075-4087	2	58
382	Thinning and stretching of the plasma sheet. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		58
381	Observations of kinetic ballooning/interchange instability signatures in the magnetotail. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	57
380	Current Sheets in the Earth Magnetotail: Plasma and Magnetic Field Structure with Cluster Project Observations. *Space Science Reviews*, **2015**, 188, 311-337	7.5	56
379	The fluxgate magnetometer of the BepiColombo Mercury Planetary Orbiter. *Planetary and Space Science*, **2010**, 58, 287-299	2	56
378	Study of near-Earth reconnection events with Cluster and Double Star. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		56
377	Plasma sheet thickness during a bursty bulk flow reversal. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		54
376	MMS Observation of Magnetic Reconnection in the Turbulent Magnetosheath. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 11,442-11,467	2.6	53
375	Pressure and entropy changes in the flow-braking region during magnetic field dipolarization. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		53
374	Proton velocity distribution in thin current sheets: Cluster observations and theory of transient trajectories. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		52
373	Turbulence Heating ObserveR Satellite mission proposal. *Journal of Plasma Physics*, **2016**, 82,	2.7	51
372	Energetic particle injections to geostationary orbit: Relationship to flow bursts and magnetospheric state. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		51
371	Hemispheric asymmetry of the magnetic field wrapping pattern in the Venusian magnetotail. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	51
370	Magnetospheric Multiscale Satellites Observations of Parallel Electric Fields Associated with Magnetic Reconnection. *Physical Review Letters*, **2016**, 116, 235102	7.4	50
369	Substorm growth and expansion onset as observed with ideal ground-spacecraft THEMIS coverage. *Journal of Geophysical Research*, **2011**, 116,		50
368	Magnetospheric Multiscale observations of large-amplitude, parallel, electrostatic waves associated with magnetic reconnection at the magnetopause. *Geophysical Research Letters*, **2016**, 43, 5626-5634	4.9	49
367	Two substorm intensifications compared: Onset, expansion, and global consequences. *Journal of Geophysical Research*, **1998**, 103, 15-27		49

366	Double Star/Cluster observation of neutral sheet oscillations on 5 August 2004. *Annales Geophysicae*, **2005**, 23, 2909-2914	2	48
365	Hermean Magnetosphere-Solar Wind Interaction. *Space Science Reviews*, **2007**, 132, 529-550	7.5	47
364	Substorm and convection bay compared: Auroral and magnetotail dynamics during convection bay. *Journal of Geophysical Research*, **2001**, 106, 18843-18855		46
363	Two distinct substorm onsets. *Journal of Geophysical Research*, **2001**, 106, 13105-13118		46
362	How Accurately Can We Measure the Reconnection Rate for the MMS Diffusion Region Event of 11 July 2017?. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 9130-9149	2.6	46
361	Do BBFs contribute to inner magnetosphere dipolarizations: Concurrent Cluster and Double Star observations. *Geophysical Research Letters*, **2006**, 33,	4.9	45
360	Rapid flux transport and plasma sheet reconfiguration. *Journal of Geophysical Research*, **2001**, 106, 8381-8390		45
359	Substorms, Storms, and the Near-Earth Tail.. *Journal of Geomagnetism and Geoelectricity*, **1996**, 48, 177-185		45
358	Transient electron precipitation during oscillatory BBF braking: THEMIS observations and theoretical estimates. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 3065-3076	2.6	44
357	Proton/electron temperature ratio in the magnetotail. *Annales Geophysicae*, **2011**, 29, 2253-2257	2	44
356	The Electron Drift Instrument for MMS. *Space Science Reviews*, **2016**, 199, 283-305	7.5	42
355	Electron-Scale Quadrants of the Hall Magnetic Field Observed by the Magnetospheric Multiscale spacecraft during Asymmetric Reconnection. *Physical Review Letters*, **2017**, 118, 175101	7.4	42
354	Metastability of current sheets. *Physics-Uspekhi*, **2010**, 53, 933-941	2.8	42
353	Geoeffective jets impacting the magnetopause are very common. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 3240-3253	2.6	42
352	Turbulent mass transfer caused by vortex induced reconnection in collisionless magnetospheric plasmas. *Nature Communications*, **2017**, 8, 1582	17.4	41
351	Intense current sheets in the magnetotail: Peculiarities of electron physics. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 2789-2799	2.6	41
350	Surface waves and field line resonances: A THEMIS case study. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		41
349	ON ELECTRON-SCALE WHISTLER TURBULENCE IN THE SOLAR WIND. *Astrophysical Journal Letters*, **2016**, 827, L8	7.9	41

348	Magnetic Reconnection, Turbulence, and Particle Acceleration: Observations in the Earth's Magnetotail. *Geophysical Research Letters*, **2018**, 45, 3338-3347	4.9	40
347	Relativistic electron precipitation enhancements near the outer edge of the radiation belt. *Geophysical Research Letters*, **1995**, 22, 1129-1132	4.9	40
346	Multi-scale magnetic field intermittence in the plasma sheet. *Annales Geophysicae*, **2003**, 21, 1955-1964	2	39
345	Multispacecraft analysis of dipolarization fronts and associated whistler wave emissions using MMS data. *Geophysical Research Letters*, **2016**, 43, 7279-7286	4.9	38
344	Observation of double layer in the separatrix region during magnetic reconnection. *Geophysical Research Letters*, **2014**, 41, 4851-4858	4.9	38
343	The magnetosphere of Mercury and its solar wind environment: Open issues and scientific questions. *Advances in Space Research*, **2006**, 38, 604-609	2.4	38
342	Cluster observations of Bz/ during growth phase magnetotail stretching intervals. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 5720-5730	2.6	37
341	Two types of tangential magnetopause current sheets: Cluster observations and theory. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		37
340	The BepiColombo mission: An outstanding tool for investigating the Hermean environment. *Planetary and Space Science*, **2010**, 58, 40-60	2	37
339	Comparison of multi-point measurements of current sheet structure and analytical models. *Annales Geophysicae*, **2008**, 26, 2749-2758	2	37
338	Localized fast flow disturbance observed in the plasma sheet and in the ionosphere. *Annales Geophysicae*, **2005**, 23, 553-566	2	37
337	Plasma flow and magnetic field characteristics near the midtail neutral sheet. *Journal of Geophysical Research*, **1994**, 99, 23591		37
336	Cluster observations of a field aligned current at the dawn flank of a bursty bulk flow. *Annales Geophysicae*, **2007**, 25, 1405-1415	2	37
335	Magnetotail reconnection onset caused by electron kinetics with a strong external driver. *Nature Communications*, **2020**, 11, 5049	17.4	37
334	A direct examination of the dynamics of dipolarization fronts using MMS. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 4335-4347	2.6	36
333	MMS Multipoint electric field observations of small-scale magnetic holes. *Geophysical Research Letters*, **2016**, 43, 5953-5959	4.9	36
332	Flow bouncing and electron injection observed by Cluster. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 2055-2072	2.6	36
331	The THEMIS Fluxgate Magnetometer **2009**, 235-264		36

330	Small substorms: Solar wind input and magnetotail dynamics. *Journal of Geophysical Research*, **2000**, 105, 21109-21117		36
329	Magnetospheric ion influence on magnetic reconnection at the duskside magnetopause. *Geophysical Research Letters*, **2016**, 43, 1435-1442	4.9	36
328	Drift waves, intense parallel electric fields, and turbulence associated with asymmetric magnetic reconnection at the magnetopause. *Geophysical Research Letters*, **2017**, 44, 2978-2986	4.9	35
327	Asymmetry in the current sheet and secondary magnetic flux ropes during guide field magnetic reconnection. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		35
326	Kinetic ballooning/interchange instability in a bent plasma sheet. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		35
325	Dynamics and waves near multiple magnetic null points in reconnection diffusion region. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		35
324	Observations of an active thin current sheet. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		35
323	Electron pitch angle/energy distribution in the magnetotail. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 7214-7227	2.6	34
322	Reconstruction of the reconnection rate from Cluster measurements: First results. *Journal of Geophysical Research*, **2005**, 110,		34
321	Drifts of auroral structures and magnetospheric electric fields. *Journal of Geophysical Research*, **1987**, 92, 11241		34
320	Global observations of magnetospheric high- poloidal waves during the 22 June 2015 magnetic storm. *Geophysical Research Letters*, **2017**, 44, 3456-3464	4.9	33
319	Energy limits of electron acceleration in the plasma sheet during substorms: A case study with the Magnetospheric Multiscale (MMS) mission. *Geophysical Research Letters*, **2016**, 43, 7785-7794	4.9	33
318	Tailward and earthward flow onsets observed by Cluster in a thin current sheet. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		33
317	A comparative study of dipolarization fronts at MMS and Cluster. *Geophysical Research Letters*, **2016**, 43, 6012-6019	4.9	32
316	Hall magnetohydrodynamic effects for three-dimensional magnetic reconnection with finite width along the direction of the current. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		32
315	Multi-instrument observations of the ionospheric counterpart of a bursty bulk flow in the near-Earth plasma sheet. *Annales Geophysicae*, **2004**, 22, 1061-1075	2	32
314	Kink mode oscillation of the current sheet. *Geophysical Research Letters*, **2003**, 30,	4.9	32
313	An Electron-Scale Current Sheet Without Bursty Reconnection Signatures Observed in the Near-Earth Tail. *Geophysical Research Letters*, **2018**, 45, 4542-4549	4.9	31

312	MMS Examination of FTEs at the Earth's Subsolar Magnetopause. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 1224-1241	2.6	31
311	Flux transport, dipolarization, and current sheet evolution during a double-onset substorm. *Journal of Geophysical Research*, **2011**, 116,		31
310	Adiabatic electron heating in the magnetotail current sheet: Cluster observations and analytical models. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		31
309	Observation of repeated intense near-Earth reconnection on closed field lines with Cluster, Double Star, and other spacecraft. *Geophysical Research Letters*, **2007**, 34,	4.9	31
308	Bursty Bulk Flow Driven Turbulence in the Earth's Plasma Sheet. *Space Science Reviews*, **2006**, 122, 301-311	4.5	31
307	The strange physics of low frequency mirror mode turbulence in the high temperature plasma of the magnetosheath. *Nonlinear Processes in Geophysics*, **2004**, 11, 647-657	2.9	31
306	Measurement of the Magnetic Reconnection Rate in the Earth's Magnetotail. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 9150-9168	2.6	31
305	Stopping flow bursts and their role in the generation of the substorm current wedge. *Geophysical Research Letters*, **2014**, 41, 1106-1112	4.9	30
304	Response of the inner magnetosphere and the plasma sheet to a sudden impulse. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		30
303	Statistical analysis of earthward flow bursts in the inner plasma sheet during substorms. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		29
302	Flow burst-induced Kelvin-Helmholtz waves in the terrestrial magnetotail. *Geophysical Research Letters*, **2007**, 34,	4.9	29
301	Multi-scale observations of magnetotail flux transport during IMF-northward non-substorm intervals. *Annales Geophysicae*, **2007**, 25, 1709-1720	2	29
300	A statistical study of compressional waves in the tail current sheet. *Journal of Geophysical Research*, **2003**, 108,		29
299	Earth's distant magnetotail current sheet near and beyond lunar orbit. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 8663-8680	2.6	28
298	Oscillatory flow braking in the magnetotail: THEMIS statistics. *Geophysical Research Letters*, **2013**, 40, 2505-2510	4.9	28
297	Electric structure of dipolarization fronts associated with interchange instability in the magnetotail. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 6019-6025	2.6	28
296	Comparative magnetotail flapping: an overview of selected events at Earth, Jupiter and Saturn. *Annales Geophysicae*, **2013**, 31, 817-833	2	28
295	Are earthward bursty bulk flows convective or field-aligned?. *Journal of Geophysical Research*, **2001**, 106, 21211-21215		28

294	Changes in the distant tail configuration during geomagnetic storms. *Journal of Geophysical Research*, **1997**, 102, 9587-9601		27
293	Reconstruction of a bipolar magnetic signature in an earthward jet in the tail: Flux rope or 3D guide-field reconnection?. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		27
292	Formation of current density profile in tilted current sheets. *Annales Geophysicae*, **2008**, 26, 3669-3676	2	27
291	Magnetopause erosion during the 17 March 2015 magnetic storm: Combined field-aligned currents, auroral oval, and magnetopause observations. *Geophysical Research Letters*, **2016**, 43, 2396-2404	4.9	27
290	Multiscale Currents Observed by MMS in the Flow Braking Region. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 1260-1278	2.6	27
289	Mass and Energy Transfer Across the Earth's Magnetopause Caused by Vortex-Induced Reconnection. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 11,505-11,522	2.6	26
288	The Scientific Foundations of Forecasting Magnetospheric Space Weather. *Space Science Reviews*, **2017**, 212, 1221-1252	7.5	26
287	Two states of magnetotail dipolarization fronts: A statistical study. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 1096-1108	2.6	26
286	Observations of plasma vortices in the vicinity of flow-braking: a case study. *Annales Geophysicae*, **2009**, 27, 3009-3017	2	26
285	Substorm expansion triggered by a sudden impulse front propagating from the dayside magnetopause. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		26
284	Magnetic field investigation of Mercury's magnetosphere and the inner heliosphere by MMO/MGF. *Planetary and Space Science*, **2010**, 58, 279-286	2	26
283	Spectral scaling in the turbulent Earth's plasma sheet revisited. *Nonlinear Processes in Geophysics*, **2007**, 14, 535-541	2.9	26
282	Flow shear near the boundary of the plasma sheet observed by Cluster and Geotail. *Journal of Geophysical Research*, **2004**, 109,		26
281	Structure of the Current Sheet in the 11 July 2017 Electron Diffusion Region Event. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 1173-1186	2.6	25
280	Force balance at the magnetopause determined with MMS: Application to flux transfer events. *Geophysical Research Letters*, **2016**, 43, 11,941-11,947	4.9	25
279	Substorms, tail flows and plasmoids. *Advances in Space Research*, **1997**, 20, 961-971	2.4	25
278	Observations of electrostatic solitary waves associated with reconnection by Geotail and Cluster. *Advances in Space Research*, **2006**, 37, 1373-1381	2.4	25
277	The relationship between pulsating auroras observed from the ground and energetic electrons and plasma density measured at geosynchronous orbit. *Journal of Geophysical Research*, **1995**, 100, 23935		25

276	Lower Hybrid Drift Waves and Electromagnetic Electron Space-Phase Holes Associated With Dipolarization Fronts and Field-Aligned Currents Observed by the Magnetospheric Multiscale Mission During a Substorm. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 12,236-12,257	2.6	24
275	MMS Observation of Asymmetric Reconnection Supported by 3-D Electron Pressure Divergence. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 1806	2.6	24
274	Ionospheric response to oscillatory flow braking in the magnetotail. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 1529-1544	2.6	24
273	Small and meso-scale properties of a substorm onset auroral arc. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		24
272	THEMIS observations of duskside compressional Pc5 waves. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		24
271	Wavelet analysis of magnetic turbulence in the Earth□s plasma sheet. *Physics of Plasmas*, **2004**, 11, 1333-1338	2.1	24
270	A large southward magnetic field of □3.5 nT in the January 10, 1995, plasmoid. *Journal of Geophysical Research*, **1998**, 103, 4441-4451		24
269	Field-aligned current signatures in the near-tail region: 2. Coupling between the region 1 and the region 2 systems. *Journal of Geophysical Research*, **1990**, 95, 18913		24
268	Multispacecraft observations and modeling of the 22/23 June 2015 geomagnetic storm. *Geophysical Research Letters*, **2016**, 43, 7311-7318	4.9	23
267	In situ observations of multistage electron acceleration driven by magnetic reconnection. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 6320-6331	2.6	23
266	Hot electrons as tracers of large-scale structure of magnetotail current sheets. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	23
265	Compressional waves in the Earth's neutral sheet. *Annales Geophysicae*, **2004**, 22, 303-315	2	23
264	Transient, small-scale field-aligned currents in the plasma sheet boundary layer during storm time substorms. *Geophysical Research Letters*, **2016**, 43, 4841-4849	4.9	23
263	On the role of separatrix instabilities in heating the reconnection outflow region. *Physics of Plasmas* , **2018**, 25, 122902	2.1	23
262	The structure of strongly tilted current sheets in the Earth magnetotail. *Annales Geophysicae*, **2014**, 32, 133-146	2	22
261	Profiles of electron temperature and <I>B</I>_z along Earth's magnetotail. *Annales Geophysicae*, **2013**, 31, 1109-1114	2	22
260	Transition from substorm growth to substorm expansion phase as observed with a radial configuration of ISTP and Cluster spacecraft. *Annales Geophysicae*, **2005**, 23, 2183-2198	2	22
259	Plasma flow channels with ULF waves observed by Cluster and Double Star. *Annales Geophysicae*, **2005**, 23, 2929-2935	2	22

258	Geotail observations of a fast tailward flow at X GSM = 15 RE. *Journal of Geophysical Research*, **1998**, 103, 23543-23550		22
257	Multi-scale structures of turbulent magnetic reconnection. *Physics of Plasmas*, **2016**, 23, 052116	2.1	22
256	A telescopic and microscopic examination of acceleration in the June 2015 geomagnetic storm: Magnetospheric Multiscale and Van Allen Probes study of substorm particle injection. *Geophysical Research Letters*, **2016**, 43, 6051-6059	4.9	21
255	Intense Electric Fields and Electron-Scale Substructure Within Magnetotail Flux Ropes as Revealed by the Magnetospheric Multiscale Mission. *Geophysical Research Letters*, **2018**, 45, 8783-8792	4.9	21
254	Interaction of Magnetic Flux Ropes Via Magnetic Reconnection Observed at the Magnetopause. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 10,436-10,447	2.6	21
253	Observation of multiple sub-cavities adjacent to single separatrix. *Geophysical Research Letters*, **2013**, 40, 2511-2517	4.9	21
252	Fast tailward flows in the plasma sheet boundary layer during a substorm on 9 March 2008: THEMIS observations. *Journal of Geophysical Research*, **2011**, 116,		21
251	Properties of a bifurcated current sheet observed on 29 August 2001. *Annales Geophysicae*, **2004**, 22, 2535-2540	2	21
250	Plasma sheet structure during strongly northward IMF. *Journal of Geophysical Research*, **2003**, 108,		21
249	Coordinated studies of the geospace environment using Cluster, satellite and ground-based data: an interim review. *Annales Geophysicae*, **2005**, 23, 2129-2170	2	21
248	A case study of Kelvin–Helmholtz vortices on both flanks of the Earth's magnetotail. *Planetary and Space Science*, **2011**, 59, 502-509	2	20
247	Magnetospheric quasi-static response to the dynamic magnetosheath: A THEMIS case study. *Geophysical Research Letters*, **2008**, 35,	4.9	20
246	Large Field Events in the Distant Magnetotail During Magnetic Storms. *Journal of Geomagnetism and Geoelectricity*, **1996**, 48, 561-575		20
245	Mirror mode structures ahead of dipolarization front near the neutral sheet observed by Cluster. *Geophysical Research Letters*, **2016**, 43, 8853-8858	4.9	20
244	MMS Study of the Structure of Ion-Scale Flux Ropes in the Earth's Cross-Tail Current Sheet. *Geophysical Research Letters*, **2019**, 46, 6168-6177	4.9	19
243	Correlation of core field polarity of magnetotail flux ropes with the IMF By: Reconnection guide field dependency. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 2933-2944	2.6	19
242	Ion and electron dynamics in the ion-electron decoupling region of magnetic reconnection with Geotail observations. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 7703-7713	2.6	19
241	SAMPEX observations of storm-associated electron flux variations in the outer radiation belt. *Journal of Geophysical Research*, **1998**, 103, 26261-26269		19

240	ECLAT Cluster Spacecraft Magnetotail Plasma Region Identifications (2001–2009). *Dataset Papers in Science*, **2014**, 2014, 1-13		19
239	Optimized merging of search coil and fluxgate data for MMS. *Geoscientific Instrumentation, Methods and Data Systems*, **2016**, 5, 521-530	1.5	18
238	The Properties of Lion Roars and Electron Dynamics in Mirror Mode Waves Observed by the Magnetospheric MultiScale Mission. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 93-103	2.6	18
237	Period and damping factor of Pi2 pulsations during oscillatory flow braking in the magnetotail. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 4512-4520	2.6	18
236	Flapping current sheet with superposed waves seen in space and on the ground. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 10,078	2.6	18
235	Multi-point observations of the inner boundary of the plasma sheet during geomagnetic disturbances. *Geophysical Research Letters*, **2008**, 35,	4.9	18
234	Retreat and reformation of X-line during quasi-continuous tailward-of-the-cusp reconnection under northward IMF. *Geophysical Research Letters*, **2008**, 35,	4.9	18
233	Global and local disturbances in the magnetotail during reconnection. *Annales Geophysicae*, **2007**, 25, 1025-1035	2	18
232	High-beta plasma blobs in the morningside plasma sheet. *Annales Geophysicae*, **1999**, 17, 1592-1601	2	18
231	A model of so-called "Zebra" emissions in solar flare radio burst continua. *Annales Geophysicae*, **2011**, 29, 1673-1682	2	18
230	The BepiColombo Planetary Magnetometer MPO-MAG: What Can We Learn from the Hermean Magnetic Field?. *Space Science Reviews*, **2021**, 217, 1	7.5	18
229	A statistical analysis of Pi2-band waves in the plasma sheet and their relation to magnetospheric drivers. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 6167-6175	2.6	17
228	Magnetosheath High-Speed Jets: Internal Structure and Interaction With Ambient Plasma. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 10,157-10,175	2.6	17
227	Statistical study of the magnetopause motion: First results from THEMIS. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		17
226	Multipoint in situ and ground-based observations during auroral intensifications. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		17
225	Interinstrument calibration using magnetic field data from the flux-gate magnetometer (FGM) and electron drift instrument (EDI) onboard Cluster. *Geoscientific Instrumentation, Methods and Data Systems*, **2014**, 3, 1-11	1.5	16
224	Increases in plasma sheet temperature with solar wind driving during substorm growth phases. *Geophysical Research Letters*, **2014**, 41, 8713-8721	4.9	16
223	Mode conversion between Alfvén and slow waves observed in the magnetotail by THEMIS. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	16

222	Evidence of the origin of the Hall magnetic field for reconnection: Hall MHD reconstruction results from Cluster observations. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		16
221	Birth and life of auroral arcs embedded in the evening auroral oval convection: A critical comparison of observations with theory. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		16
220	The role of the Hall effect in collisionless magnetic reconnection. *Advances in Space Research*, **2006**, 38, 101-111	2.4	16
219	Flow burst induced large-scale plasma sheet oscillation. *Journal of Geophysical Research*, **2004**, 109,		16
218	Compressional Pc5 type pulsations in the morningside plasma sheet. *Annales Geophysicae*, **2001**, 19, 311-320	2	16
217	Short-duration convection bays and localized interplanetary magnetic field structures on November 28, 1995. *Journal of Geophysical Research*, **1998**, 103, 23593-23609		16
216	Response of the midtail electric field to enhanced solar wind energy input. *Journal of Geophysical Research*, **1999**, 104, 17299-17310		16
215	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	2.6	16
214	Spatial dimensions of the electron diffusion region in anti-parallel magnetic reconnection. *Annales Geophysicae*, **2016**, 34, 357-367	2	15
213	Ion-Scale Kinetic Alfvén Turbulence: MMS Measurements of the Alfvén Ratio in the Magnetosheath. *Geophysical Research Letters*, **2018**, 45, 7974-7984	4.9	15
212	The structure of the Venusian current sheet. *Planetary and Space Science*, **2014**, 96, 81-89	2	15
211	Conjugate ionospheric equivalent currents during bursty bulk flows. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		15
210	A statistical survey of the magnetotail current sheet. *Advances in Space Research*, **2006**, 38, 1834-1837	2.4	15
209	Multi-scale analysis of turbulence in the Earth's current sheet. *Annales Geophysicae*, **2004**, 22, 2525-2533	2	15
208	A Statistical Study on the Properties of Dips Ahead of Dipolarization Fronts Observed by MMS. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 139-150	2.6	14
207	Near-Earth plasma sheet boundary dynamics during substorm dipolarization. *Earth, Planets and Space*, **2017**, 69, 129	2.9	14
206	Magnetospheric Multiscale analysis of intense field-aligned Poynting flux near the Earth's plasma sheet boundary. *Geophysical Research Letters*, **2017**, 44, 7106-7113	4.9	14
205	Plasma Density Estimates From Spacecraft Potential Using MMS Observations in the Dayside Magnetosphere. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 2620-2629	2.6	14

204	Determining the Mode, Frequency, and Azimuthal Wave Number of ULF Waves During a HSS and Moderate Geomagnetic Storm. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 6457-6477	2.6	14
203	Event study combining magnetospheric and ionospheric perspectives of the substorm current wedge modeling. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 9714-9728	2.6	14
202	Flux-gate magnetometer spin axis offset calibration using the electron drift instrument. *Measurement Science and Technology*, **2014**, 25, 105008	2	14
201	Giant flux ropes observed in the magnetized ionosphere at Venus. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	14
200	Cross-scale: multi-scale coupling in space plasmas. *Experimental Astronomy*, **2009**, 23, 1001-1015	1.3	14
199	Cluster vision of the magnetotail current sheet on a macroscale. *Journal of Geophysical Research*, **2005**, 110,		14
198	Multi-point observation of the high-speed flows in the plasma sheet. *Advances in Space Research*, **2005**, 36, 1444-1447	2.4	14
197	Evolution of a typical ion-scale magnetic flux rope caused by thermal pressure enhancement. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 2040-2050	2.6	13
196	Statistics of intense dawn-dusk currents in the Earth's magnetotail. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 3804-3820	2.6	13
195	Lower-Hybrid Drift Waves Driving Electron Nongyrotropic Heating and Vortical Flows in a Magnetic Reconnection Layer. *Physical Review Letters*, **2020**, 125, 025103	7.4	13
194	Formation of sub-ion scale filamentary force-free structures in the vicinity of reconnection region. *Plasma Physics and Controlled Fusion*, **2016**, 58, 054002	2	13
193	Magnetosphere-ionosphere coupling of global Pi2 pulsations. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 2717-2739	2.6	13
192	Deriving plasma densities in tenuous plasma regions, with the spacecraft potential under active control. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 9594-9616	2.6	13
191	First application of a Petschek-type reconnection model with time-varying reconnection rate to THEMIS observations. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		13
190	Solar wind-magnetosphere coupling during an isolated substorm event: A multispacecraft ISTP study. *Geophysical Research Letters*, **1997**, 24, 983-986	4.9	13
189	Magnetotail dipolarization and associated current systems observed by Cluster and Double Star. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		13
188	Relationship between ULF waves and radiation belt electrons during the March 10, 1998, storm. *Advances in Space Research*, **2002**, 30, 2163-2168	2.4	13
187	Dissipation scales in the Earth's plasma sheet estimated from Cluster measurements. *Nonlinear Processes in Geophysics*, **2005**, 12, 725-732	2.9	13

186	Observations of Particle Acceleration in Magnetic Reconnection□driven Turbulence. *Astrophysical Journal*, **2020**, 898, 154	4.7	13
185	A statistical study on the shape and position of the magnetotail neutral sheet. *Annales Geophysicae*, **2016**, 34, 303-311	2	13
184	Three-dimensional development of front region of plasma jets generated by magnetic reconnection. *Geophysical Research Letters*, **2016**, 43, 8356-8364	4.9	13
183	Electrostatic Spacecraft Potential Structure and Wake Formation Effects for Characterization of Cold Ion Beams in the Earth's Magnetosphere. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 10048-10062	2.6	13
182	Motion of reconnection region in the Earth's magnetotail. *Geophysical Research Letters*, **2015**, 42, 4685-4693	4.9	13
181	Cluster and MMS Simultaneous Observations of Magnetosheath High Speed Jets and Their Impact on the Magnetopause. *Frontiers in Astronomy and Space Sciences*, **2020**, 6,	3.8	12
180	Magnetotail energy dissipation during an auroral substorm. *Nature Physics*, **2016**, 12, 1158-1163	16.2	12
179	Three-dimensional current systems and ionospheric effects associated with small dipolarization fronts. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 3739-3757	2.6	12
178	Jet front-driven mirror modes and shocklets in the near-Earth flow-braking region. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	12
177	Auroral signatures of the plasma injection and dipolarization in the inner magnetosphere. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		12
176	The structure of an earthward propagating magnetic flux rope early in its evolution: comparison of methods. *Annales Geophysicae*, **2009**, 27, 2215-2224	2	12
175	Cluster and Double Star observations of dipolarization. *Annales Geophysicae*, **2005**, 23, 2915-2920	2	12
174	Spatial structure of plasma flow associated turbulence in the Earth's plasma sheet. *Annales Geophysicae*, **2007**, 25, 13-17	2	12
173	Ion Composition in the Inner Magnetosphere: Its Importance and Its Potential Role as a Discriminator between Storm-Time Substorms and Non-Storm Substorms. *Astrophysics and Space Science Library*, **1998**, 767-772	0.3	12
172	Study of the spacecraft potential under active control and plasma density estimates during the MMS commissioning phase. *Geophysical Research Letters*, **2016**, 43, 4858-4864	4.9	12
171	□ipper-like□periodic magnetosonic waves: Van Allen Probes, THEMIS, and magnetospheric multiscale observations. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 1600-1610	2.6	11
170	Effects of Fluctuating Magnetic Field on the Growth of the Kelvin-Helmholtz Instability at the Earth's Magnetopause. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2019JA027515	2.6	11
169	Magnetotail Reconnection. *Astrophysics and Space Science Library*, **2016**, 277-313	0.3	11

168	Ionospheric Footprints of Detached Magnetotail Interchange Heads. *Geophysical Research Letters*, **2019**, 46, 7237-7247	4.9	11
167	Hall and finite Larmor radius effects on the dipolarization fronts associated with interchange instability. *Geophysical Research Letters*, **2015**, 42, 10,099	4.9	11
166	Dynamics of long-period ULF waves in the plasma sheet: Coordinated space and ground observations. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		11
165	On the venus bow shock compressibility. *Advances in Space Research*, **2004**, 33, 1920-1923	2.4	11
164	Solar wind control of magnetospheric energy content: Substorm quenching and multiple onsets. *Journal of Geophysical Research*, **2000**, 105, 5335-5356		11
163	Correlation studies of compressional Pc5 pulsations in space and Ps6 pulsations on the ground. *Journal of Geophysical Research*, **2001**, 106, 29797-29806		11
162	Anisotropy of the Spectral Index in Ion Scale Compressible Turbulence: MMS Observations in the Magnetosheath. *Frontiers in Physics*, **2019**, 7,	3.9	10
161	In situ observation of magnetic reconnection in the front of bursty bulk flow. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 9952-9961	2.6	10
160	On the increasing oscillation period of flows at the tailward retreating flux pileup region during dipolarization. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 6603-6611	2.6	10
159	Anharmonic oscillatory flow braking in the Earth's magnetotail. *Geophysical Research Letters*, **2015**, 42, 3700-3706	4.9	10
158	Collisionless reconnection: mechanism of self-ignition in thin plane homogeneous current sheets. *Annales Geophysicae*, **2010**, 28, 1935-1943	2	10
157	Electron dynamics in the reconnection ion diffusion region. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		10
156	Deformation and evolution of solar wind discontinuities through their interactions with the Earth's bow shock. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		10
155	Local field-aligned currents in the magnetotail and ionosphere as observed by a Cluster, Double Star, and MIRACLE conjunction. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		10
154	Neutral sheet normal direction determination. *Advances in Space Research*, **2005**, 36, 1940-1945	2.4	10
153	Dayside equatorial-plane convection and IMF sector structure. *Journal of Geophysical Research*, **1986**, 91, 4557		10
152	Alfvn waves in the near-PSBL lobe: Cluster observations. *Annales Geophysicae*, **2006**, 24, 1001-1013	2	10
151	Wave telescope technique for MMS magnetometer. *Geophysical Research Letters*, **2016**, 43, 4774-4780	4.9	10

150	Oblique Ion-Scale Magnetotail Flux Ropes Generated by Secondary Tearing Modes. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 8122-8130	2.6	10
149	In situ spacecraft observations of a structured electron diffusion region during magnetopause reconnection. *Physical Review E*, **2019**, 99, 043204	2.4	9
148	On the deviation from Maxwellian of the ion velocity distribution functions in the turbulent magnetosheath. *Journal of Plasma Physics*, **2020**, 86,	2.7	9
147	Electrostatic and electromagnetic fluctuations detected inside magnetic flux ropes during magnetic reconnection. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 9473-9482	2.6	9
146	The origin of spectral resonance structures of the ionospheric Alfvén resonator. Single high-altitude reflection or resonant cavity excitation?. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 3117-3129	2.6	9
145	Two-dimensional configuration of the magnetotail current sheet: THEMIS observations. *Geophysical Research Letters*, **2015**, 42, 3662-3667	4.9	9
144	Magnetic guide field generation in collisionless current sheets. *Annales Geophysicae*, **2010**, 28, 789-793	2	9
143	Bursts of fast magnetotail flux transport. *Advances in Space Research*, **2002**, 30, 2241-2246	2.4	9
142	Tail lobe convection observed by Cluster/EDI. *Journal of Geophysical Research*, **2003**, 108,		9
141	Sub-ion Scale Compressive Turbulence in the Solar Wind: MMS Spacecraft Potential Observations. *Astrophysical Journal, Supplement Series*, **2020**, 250, 35	8	9
140	The BepiColombo Mio Magnetometer en Route to Mercury. *Space Science Reviews*, **2020**, 216, 1	7.5	9
139	Simultaneous Remote Observations of Intense Reconnection Effects by DMSP and MMS Spacecraft During a Storm Time Substorm. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 10891-10909	2.6	8
138	Interdependencies Between the Actively Controlled Cluster Spacecraft Potential, Ambient Plasma, and Electric Field Measurements. *IEEE Transactions on Plasma Science*, **2015**, 43, 3054-3063	1.3	8
137	Higher-Order Statistics in Compressive Solar Wind Plasma Turbulence: High-Resolution Density Observations From the Magnetospheric MultiScale Mission. *Frontiers in Physics*, **2020**, 8,	3.9	8
136	Alternative interpretation of results from Kelvin-Helmholtz vortex identification criteria. *Geophysical Research Letters*, **2014**, 41, 244-250	4.9	8
135	The proton temperature anisotropy associated with bursty bulk flows in the magnetotail. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 4875-4883	2.6	8
134	Cluster as current sheet surveyor in the magnetotail. *Annales Geophysicae*, **2013**, 31, 1605-1610	2	8
133	Relativistic transformation of phase-space distributions. *Annales Geophysicae*, **2011**, 29, 1259-1265	2	8

132	Substorm topology in the ionosphere and magnetosphere during a flux rope event in the magnetotail. *Annales Geophysicae*, **2006**, 24, 735-750	2	8
131	Multi-point study of the magnetotail current sheet. *Advances in Space Research*, **2006**, 38, 85-92	2.4	8
130	Detailed analysis of low-energy electron streaming in the near-Earth neutral line region during a substorm. *Advances in Space Research*, **2006**, 37, 1382-1387	2.4	8
129	Structure of Electron-Scale Plasma Mixing Along the Dayside Reconnection Separatrix. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 8788-8803	2.6	8
128	Disturbance of the Front Region of Magnetic Reconnection Outflow Jets due to the Lower-Hybrid Drift Instability. *Physical Review Letters*, **2019**, 123, 235101	7.4	8
127	Structure, force balance, and topology of Earth's magnetopause. *Science*, **2017**, 356, 960-963	33.3	7
126	Improved Determination of Plasma Density Based on Spacecraft Potential of the Magnetospheric Multiscale Mission Under Active Potential Control. *IEEE Transactions on Plasma Science*, **2019**, 47, 3636-3647	1.2	7
125	Modulation of the substorm current wedge by bursty bulk flows: 8 September 2002 Revisited. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 4466-4482	2.6	7
124	Field-Aligned Currents Originating From the Magnetic Reconnection Region: Conjugate MMS-ARTEMIS Observations. *Geophysical Research Letters*, **2018**, 45, 5836-5844	4.9	7
123	On the propagation of blobs in the magnetotail: MHD simulations. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 5497-5505	2.6	7
122	Influence of the Ambient Electric Field on Measurements of the Actively Controlled Spacecraft Potential by MMS. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 12,019-12,030	2.6	7
121	Study of reconnection-associated multiscale fluctuations with Cluster and Double Star. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		7
120	Tailward propagation of Pi2 waves in the Earth's magnetotail lobe. *Annales Geophysicae*, **2008**, 26, 4023-4030	2	7
119	Observations of the Magnetosheath near the Nominal Tail Axis during the Geomagnetic Storm of January 25, 1993. *Journal of Geomagnetism and Geoelectricity*, **1996**, 48, 577-588		7
118	The Cosmic-Ray Composition between 2 PeV and 2 EeV Observed with the TALE Detector in Monocular Mode. *Astrophysical Journal*, **2021**, 909, 178	4.7	7
117	Ion Bernstein waves in the magnetic reconnection region. *Annales Geophysicae*, **2016**, 34, 85-89	2	7
116	Steepening of waves at the duskside magnetopause. *Geophysical Research Letters*, **2016**, 43, 7373-7380	4.9	7
115	Small Spatial-Scale Field-Aligned Currents in the Plasma Sheet Boundary Layer Surveyed by Magnetosphere Multiscale Spacecraft. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 9976-9985	2.6	7

114	Dissipation of Earthward Propagating Flux Rope Through Re-reconnection with Geomagnetic Field: An MMS Case Study. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 7477-7493	2.6	6
113	Low-altitude electron acceleration due to multiple flow bursts in the magnetotail. *Geophysical Research Letters*, **2014**, 41, 777-784	4.9	6
112	Simultaneous FAST and Double Star TC1 observations of broadband electrons during a storm time substorm. *Journal of Geophysical Research*, **2010**, 115,		6
111	Reconstruction of the reconnection rate from Cluster measurements: Method improvements. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		6
110	Substorms and Their Solar Wind Causes. *Space Science Reviews*, **2007**, 124, 91-101	7.5	6
109	The storm time central plasma sheet. *Annales Geophysicae*, **2002**, 20, 1737-1741	2	6
108	The Magnetospheric Multiscale Magnetometers **2017**, 189-256		6
107	Remote Sensing of the Reconnection Electric Field From In Situ Multipoint Observations of the Separatrix Boundary. *Geophysical Research Letters*, **2018**, 45, 3829-3837	4.9	6
106	Four-Spacecraft Measurements of the Shape and Dimensionality of Magnetic Structures in the Near-Earth Plasma Environment. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 6850-6868	2.6	5
105	Carriers of the Field-Aligned Currents in the Plasma Sheet Boundary Layer: An MMS Multicase Study. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 2873	2.6	5
104	Decay of Kelvin-Helmholtz Vortices at the Earth's Magnetopause Under Pure Southward IMF Conditions. *Geophysical Research Letters*, **2020**, 47, e2020GL087574	4.9	5
103	AME: A Cross-Scale Constellation of CubeSats to Explore Magnetic Reconnection in the Solar‐Terrestrial Relation. *Frontiers in Physics*, **2020**, 8,	3.9	5
102	Assessing the Time Dependence of Reconnection With Poynting's Theorem: MMS Observations. *Geophysical Research Letters*, **2018**, 45, 2886-2892	4.9	5
101	Continent-Wide R1/R2 Current System and Ohmic Losses by Broad Dipolarization-Injection Fronts. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 4064-4082	2.6	5
100	Characterizing spacecraft potential effects on measured particle trajectories. *Physics of Plasmas*, **2019**, 26, 103504	2.1	5
99	Evidence of transient reconnection in the outflow jet of primary reconnection site. *Annales Geophysicae*, **2014**, 32, 239-248	2	5
98	Conjugate observation of sharp dynamical boundary in the inner magnetosphere by Cluster and DMSP spacecraft and ground network. *Annales Geophysicae*, **2008**, 26, 2771-2780	2	5
97	Determination of reconnected flux via remote sensing. *Advances in Space Research*, **2008**, 41, 1292-1297	2.4	5

96	Cluster magnetotail observations of a tailward-travelling plasmoid at substorm expansion phase onset and field aligned currents in the plasma sheet boundary layer. *Annales Geophysicae*, **2005**, 23, 3667-3683	2	5
95	Compressional Pc5 pulsations as sloshing in the plasma sheet. *Journal of Geophysical Research*, **2000**, 105, 23287-23292		5
94	Possible coexistence of kinetic Alfvén and ion Bernstein modes in sub-ion scale compressive turbulence in the solar wind. *Physical Review Research*, **2020**, 2,	3.9	5
93	Structure of a Perturbed Magnetic Reconnection Electron Diffusion Region in the Earth's Magnetotail. *Physical Review Letters*, **2021**, 127, 215101	7.4	5
92	Estimation of the Electron Density From Spacecraft Potential During High-Frequency Electric Field Fluctuations. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2020JA027854	2.6	5
91	Dipolarization Fronts: Tangential Discontinuities? On the Spatial Range of Validity of the MHD Jump Conditions. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 9963-9975	2.6	5
90	Fast Cross-Scale Energy Transfer During Turbulent Magnetic Reconnection. *Geophysical Research Letters*, **2021**, 48, e2021GL093524	4.9	5
89	Ion Beams in the Plasma Sheet Boundary Layer: MMS Observations and Test Particle Simulations. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2019JA027113	2.6	4
88	Occurrence rate of dipolarization fronts in the plasma sheet: Cluster observations. *Annales Geophysicae*, **2017**, 35, 1015-1022	2	4
87	Two interacting X lines in magnetotail: Evolution of collision between the counterstreaming jets. *Geophysical Research Letters*, **2016**, 43, 7795-7803	4.9	4
86	On the evolution of a magnetic flux rope: Two-dimensional MHD simulation results. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 8547-8558	2.6	4
85	Ionospheric signatures of a plasma sheet rebound flow during a substorm onset. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 350-363	2.6	4
84	Ionospheric perturbations observed by the low altitude satellite DEMETER and possible relation with seismicity. *Journal of Atmospheric Electricity*, **2013**, 33, 21-29	0.1	4
83	Remote estimation of reconnection parameters in the Earth's magnetotail: model and observations. *Annales Geophysicae*, **2012**, 30, 1727-1741	2	4
82	A reconstruction method for the reconnection rate applied to Cluster magnetotail measurements. *Advances in Space Research*, **2006**, 37, 1388-1393	2.4	4
81	Substorm observations in the early morning sector with Equator-S and Geotail. *Annales Geophysicae* , **1999**, 17, 1602-1610	2	4
80	Multi-scale evolution of Kelvin–Helmholtz waves at the Earth's magnetopause during southward IMF periods. *Physics of Plasmas*, **2022**, 29, 012901	2.1	4
79	Multi-scale observations of the magnetopause Kelvin–Helmholtz waves during southward IMF. *Physics of Plasmas*, **2022**, 29, 012105	2.1	4

78	Charging time scales and magnitudes of dust and spacecraft potentials in space plasma scenarios. *Physics of Plasmas*, **2020**, 27, 103704	2.1	4
77	Current sheet flapping in the near-Earth magnetotail: peculiarities of propagation and parallel currents. *Annales Geophysicae*, **2016**, 34, 739-750	2	4
76	Statistical Characteristics of Field-Aligned Currents in the Plasma Sheet Boundary Layer. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028319	2.6	4
75	Hall Effect in Laboratory and Space Current Sheets. *Plasma Physics Reports*, **2018**, 44, 1126-1134	1.2	4
74	Asymmetric Reconnection Within a Flux Rope-Type Dipolarization Front. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2019JA027296	2.6	3
73	Electron acceleration behind a wavy dipolarization front. *Astrophysics and Space Science*, **2018**, 363, 1	1.6	3
72	Initial Results From the Active Spacecraft Potential Control Onboard Magnetospheric Multiscale Mission. *IEEE Transactions on Plasma Science*, **2017**, 45, 1847-1852	1.3	3
71	Aurora and Energetic Particle Signatures During a Substorm with Multiple Expansions. *Geophysical Monograph Series*, **2013**, 285-294	1.1	3
70	EIDOSCOPE: particle acceleration at plasma boundaries. *Experimental Astronomy*, **2012**, 33, 491-527	1.3	3
69	Observations of an auroral streamer in a double oval configuration. *Annales Geophysicae*, **2011**, 29, 701-716	1.2	3
68	Fields and flows at GEOTAIL during a moderate substorm. *Advances in Space Research*, **1997**, 20, 923-931	2.4	3
67	Ionospheric signatures during a magnetospheric flux rope event. *Annales Geophysicae*, **2008**, 26, 3967-3977	1.2	3
66	Plasma sheet oscillations and their relation to substorm development: Cluster and double star TC1 case study. *Advances in Space Research*, **2008**, 41, 1585-1592	2.4	3
65	The Double Star magnetic field investigation: Overview of instrument performance and initial results. *Advances in Space Research*, **2006**, 38, 1828-1833	2.4	3
64	The convection electrojet and the substorm electrojet. *Annales Geophysicae*, **1996**, 14, 589-592	2	3
63	Superposed Epoch Analysis of Magnetospheric Composition and Dst during Stormtime and Quiet-Time Substorms. *Astrophysics and Space Science Library*, **1998**, 773-778	0.3	3
62	Temporal and Spatial Relationships between Midtail Substorm Disturbance and Auroral Substorm Onset. *Astrophysics and Space Science Library*, **1998**, 179-182	0.3	3
61	Thermodynamics of the Magnetotail Current Sheet Thinning. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028969	2.6	3

60	Venus's induced magnetosphere during active solar wind conditions at BepiColombo's Venus 1 flyby. *Annales Geophysicae*, **2021**, 39, 811-831	2	3
59	Hermean Magnetosphere-Solar Wind Interaction. *Space Sciences Series of ISSI*, **2008**, 347-368	0.1	3
58	Post-mortem Plasma Cell-Free DNA Sequencing: Proof-of-Concept Study for the "Liquid Autopsy". *Scientific Reports*, **2020**, 10, 2120	4.9	2
57	Relationship between electron field-aligned anisotropy and dawn-dusk magnetic field: Nine years of Cluster observations in the Earth magnetotail. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 9294-9305	2.6	2
56	Double-peaked core field of flux ropes during magnetic reconnection. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 6374-6384	2.6	2
55	Estimating the magnetic energy inside traveling compression regions. *Annales Geophysicae*, **2009**, 27, 1969-1978	2	2
54	Flux quanta, magnetic field lines, merging □some sub-microscale relations of interest in space plasma physics. *Annales Geophysicae*, **2011**, 29, 1121-1127	2	2
53	Structure of the near-Earth plasma sheet during tailward flows. *Annales Geophysicae*, **2008**, 26, 709-724	2	2
52	Structures of magnetic null points in reconnection diffusion region: Cluster observations. *Science Bulletin*, **2008**, 53, 1880-1886	10.6	2
51	Substorms, Storms, and the Storm-Time Plasma Sheet. *Geophysical Monograph Series*, **2003**, 55-58	1.1	2
50	Correction to □EOTAIL encounter with magnetic reconnection diffusion region in the Earth's magnetotail: Evidence of multiple x-lines collisionless reconnection□*Journal of Geophysical Research*, **2004**, 109,		2
49	What is Cluster telling us about magnetotail dynamics?. *Advances in Space Research*, **2005**, 36, 1909-1915	2.4	2
48	The Hall current system revealed as a statistical significant pattern during fast flows. *Annales Geophysicae*, **2008**, 26, 3429-3437	2	2
47	Enhancements in auroral drift velocity in the dusk sector associated with a small substorm in the midnight sector.. *Journal of Geomagnetism and Geoelectricity*, **1988**, 40, 409-422		2
46	Plasma Sheet Dynamics during Substorms with Geotail Observations. *Astrophysics and Space Science Library*, **1998**, 137-142	0.3	2
45	Orientation of Solar Wind Discontinuities: Implications for Substorm Studies. *Astrophysics and Space Science Library*, **1998**, 277-281	0.3	2
44	Pick-Up Ion Cyclotron Waves Around Mercury. *Geophysical Research Letters*, **2021**, 48, e2021GL092606	4.9	2
43	Magnetosheath plasma flow model around Mercury. *Annales Geophysicae*, **2021**, 39, 563-570	2	2

42	Optimized Merging of Search Coil and Fluxgate Data for MMS **2016**,		2
41	**2016**,		2
40	Two-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	2.6	2
39	Global ENA Imaging and In Situ Observations of Substorm Dipolarization on 10 August 2016. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2019JA027733	2.6	1
38	Thick escaping magnetospheric ion layer in magnetopause reconnection with MMS observations. *Geophysical Research Letters*, **2016**, 43, 6028-6035	4.9	1
37	Substorm-Related Near-Earth Reconnection Surge: Combining Telescopic and Microscopic Views. *Geophysical Research Letters*, **2019**, 46, 6239-6247	4.9	1
36	Magnetic field topology of the plasma sheet boundary layer. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 4059-4065	2.6	1
35	Near-Earth Plasma Sheet Behavior During Substorms. *Geophysical Monograph Series*, **2013**, 213-226	1.1	1
34	Unexpected vertical current sheets in the magnetotail associated with northward IMF. *Advances in Space Research*, **2005**, 36, 1830-1834	2.4	1
33	Substorm-Associated Changes in the Particle Precipitation Pattern.. *Journal of Geomagnetism and Geoelectricity*, **1992**, 44, 1239-1249		1
32	Investigation of the homogeneity of energy conversion processes at dipolarization fronts from MMS measurements. *Physics of Plasmas*, **2022**, 29, 012906	2.1	1
31	The kinetic Alfvē-like nature of turbulent fluctuations in the Earth's magnetosheath: MMS measurement of the electron Alfvē ratio. *Physics of Plasmas*, **2022**, 29, 012308	2.1	1
30	Statistical investigation of electric field fluctuations around the lower-hybrid frequency range at dipolarization fronts in the near-earth magnetotail. *Physics of Plasmas*, **2022**, 29, 012111	2.1	1
29	Oscillations in drifts of auroral patches.. *Journal of Geomagnetism and Geoelectricity*, **1987**, 39, 609-624		1
28	Auroral Activity and Its Connection with Magnetospheric Processes. *Journal of Geomagnetism and Geoelectricity*, **1991**, 43, 353-368		1
27	Thin Current Sheet Behind the Dipolarization Front. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029518	2.6	1
26	Response of the Mid-Tail Lobe/Plasma Sheet Electric Field to Enhanced Solar Wind Energy Input: November 22, 1995 Event. *Astrophysics and Space Science Library*, **1998**, 699-702	0.3	1
25	Magnetopause Motion and Lobe Convection in the Distant Tail: Relationship to Substorm Activity. *Astrophysics and Space Science Library*, **1998**, 223-226	0.3	1

24	The Magnetospheric Multiscale Magnetometers **2016**, 199, 189		1
23	SCALE-DEPENDENT ANISOTROPY OF MAGNETIC FLUCTUATIONS IN THE EARTH'S PLASMA SHEET **2005**, 29-38		1
22	Comparison of the Flank Magnetopause at Near-Earth and Lunar Distances: MMS and ARTEMIS Observations. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2020JA028406	2.6	1
21	MMS Observations of Reconnection Separatrix Region in the Magnetotail at Different Distances From the Active Neutral X-Line. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028694	2.6	1
20	Effects in the Near-Magnetopause Magnetosheath Elicited by Large-Amplitude Alfvẽic Fluctuations Terminating in a Field and Flow Discontinuity. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 8983-9004	2.6	1
19	Acceleration of Oxygen Ions In Dipolarization Events: 2. PSBL Distributions. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029143	2.6	1
18	Acceleration of Oxygen Ions in Dipolarization Events: 1. CPS Distributions. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029184	2.6	1
17	A Study of the Solar Wind Ion and Electron Measurements From the Magnetospheric Multiscale Mission's Fast Plasma Investigation. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029784	2.6	1
16	Substorms and Their Solar Wind Causes. *Space Sciences Series of ISSI*, **2006**, 91-101	0.1	1
15	Dayside magnetopause reconnection and flux transfer events under radial interplanetary magnetic field (IMF): BepiColombo Earth-flyby observations. *Annales Geophysicae*, **2022**, 40, 217-229	2	1
14	Downward auroral currents from the reconnection Hall-region. *Annales Geophysicae*, **2011**, 29, 679-685	2	0
13	The FIELDS Instrument Suite on MMS: Scientific Objectives, Measurements, and Data Products **2017**, 105-135		0
12	The Scientific Foundations of Forecasting Magnetospheric Space Weather. *Space Sciences Series of ISSI*, **2017**, 339-370	0.1	0
11	MMS Observations of Field Line Resonances Under Disturbed Solar Wind Conditions. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028936	2.6	0
10	Wave Activity in a Dynamically Evolving Reconnection Separatrix. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028520	2.6	0
9	Magnetic Reconnection Within the Boundary Layer of a Magnetic Cloud in the Solar Wind. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029415	2.6	0
8	Radial propagation velocity of energetic particle injections according to measurements onboard the Cluster satellites. *Cosmic Research*, **2009**, 47, 22-28	0.6	
7	Plasma Sheet Expansion Observed by Cluster and Geotail. *COSPAR Colloquia Series*, **2005**, 177-185		

6	The Loading-Unloading Process in the Magnetotail During a Prolonged Steady Southward IMF Bz Period. *COSPAR Colloquia Series*, **2005**, 190-193	
5	Tail configuration during storms. *Advances in Space Research*, **2000**, 25, 1631-1638	2.4
4	Substorm-associated shrinkage of the mid-tail magnetosphere: IACG Campaign #2. *Advances in Space Research*, **2000**, 25, 1689-1696	2.4
3	GEOTAIL substorm/storm studies. *Geophysical Monograph Series*, **1999**, 47-55	1.1
2	Current Sheets in the Earth Magnetotail: Plasma and Magnetic Field Structure with Cluster Project Observations. *Space Sciences Series of ISSI*, **2016**, 331-357	0.1
1	The Electron Drift Instrument for MMS **2017**, 283-305	