Gurbax Lakhina

List of Publications by Citations

231 papers	5,263 citations	40 h-index	60 g-index
249 ext. papers	5,833 ext. citations	2.6 avg, IF	5.78 L-index

#	Paper	IF	Citations
231	The extreme magnetic storm of 1– September 1859. *Journal of Geophysical Research*, **2003**, 108,		339
230	Generation of electron-acoustic waves in the magnetosphere. *Planetary and Space Science*, **2001**, 49, 107-114	2	174
229	Prompt penetration electric fields (PPEFs) and their ionospheric effects during the great magnetic storm of 30–31 October 2003. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		137
228	Some basic concepts of wave-particle interactions in collisionless plasmas. *Reviews of Geophysics*, **1997**, 35, 491-501	23.1	130
227	Electron acoustic solitary waves with non-thermal distribution of electrons. *Nonlinear Processes in Geophysics*, **2004**, 11, 275-279	2.9	110
226	Ion- and electron-acoustic solitons in two-electron temperature space plasmas. *Physics of Plasmas*, **2008**, 15, 062903	2.1	102
225	A brief review of ‘solar flare effects’ on the ionosphere. *Radio Science*, **2009**, 44, n/a-n/a	1.4	94
224	Properties of dayside outer zone chorus during HILDCAA events: Loss of energetic electrons. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		93
223	Magnetosheath and heliosheath mirror mode structures, interplanetary magnetic decreases, and linear magnetic decreases: Differences and distinguishing features. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		91
222	Study of nonlinear ion- and electron-acoustic waves in multi-component space plasmas. *Nonlinear Processes in Geophysics*, **2008**, 15, 903-913	2.9	87
221	Solitary waves observed in the auroral zone: the Cluster multi-spacecraft perspective. *Nonlinear Processes in Geophysics*, **2004**, 11, 183-196	2.9	77
220	Plasma waves in the dayside polar cap boundary layer: Bipolar and monopolar electric pulses and whistler mode waves. *Geophysical Research Letters*, **1998**, 25, 4117-4120	4.9	77
219	Nonlinear Alfvén waves, discontinuities, proton perpendicular acceleration, and magnetic holes/decreases in interplanetary space and the magnetosphere: intermediate shocks?. *Nonlinear Processes in Geophysics*, **2005**, 12, 321-336	2.9	73
218	Extremely intense ELF magnetosonic waves: A survey of polar observations. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 964-977	2.6	69
217	Broadband electrostatic noise due to nonlinear electron-acoustic waves. *Advances in Space Research*, **2001**, 28, 1643-1648	2.4	67
216	Energetic electron (>10 keV) microburst precipitation, ~5–15 s X-ray pulsations, chorus, and wave-particle interactions: A review. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 2296-2312	2.6	59
215	On the generation of solitary waves observed by Cluster in the near-Earth magnetosheath. *Nonlinear Processes in Geophysics*, **2005**, 12, 181-193	2.9	59

214	Plasmaspheric hiss properties: Observations from Polar. *Journal of Geophysical Research: Space Physics*, **2015**, 120, 414-431	2.6	58
213	Gas-dynamic description of electrostatic solitons. *Journal of Plasma Physics*, **2004**, 70, 237-250	2.7	57
212	Geomagnetic storms: historical perspective to modern view. *Geoscience Letters*, **2016**, 3,	3.5	56
211	Anomalous width variation of rarefactive ion acoustic solitary waves in the context of auroral plasmas. *Nonlinear Processes in Geophysics*, **2004**, 11, 219-228	2.9	56
210	Ion acoustic solitons and supersolitons in a magnetized plasma with nonthermal hot electrons and Boltzmann cool electrons. *Physics of Plasmas*, **2014**, 21, 082304	2.1	55
209	Generation mechanism for electron acoustic solitary waves. *Physics of Plasmas*, **2007**, 14, 052305	2.1	55
208	Electron acoustic solitons in the Earth's magnetotail. *Nonlinear Processes in Geophysics*, **2004**, 11, 215-218	2.9	55
207	Ion acoustic solitons/double layers in two-ion plasma revisited. *Physics of Plasmas*, **2014**, 21, 062311	2.1	53
206	Electron acoustic solitary waves in the Earth□ magnetotail region. *Advances in Space Research*, **2009**, 43, 1945-1949	2.4	52
205	Necessary conditions for the generation of acoustic solitons in magnetospheric and space plasmas with hot ions. *Astrophysics and Space Sciences Transactions*, **2007**, 3, 15-20		52
204	Ion-acoustic supersolitons in the presence of non-thermal electrons. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 23, 274-281	3.7	50
203	Ion- and electron-acoustic solitons and double layers in multi-component space plasmas. *Advances in Space Research*, **2011**, 47, 1558-1567	2.4	50
202	Phase-steepened Alfv□ waves, proton perpendicular energization and the creation of magnetic holes and magnetic decreases: The ponderomotive force. *Geophysical Research Letters*, **2002**, 29, 86-1-86-4	4.9	50
201	Furthering our understanding of electrostatic solitary waves through Cluster multispacecraft observations and theory. *Advances in Space Research*, **2008**, 41, 1666-1676	2.4	48
200	Electron acoustic solitary waves with kappa-distributed electrons. *Physica Scripta*, **2011**, 84, 025507	2.6	47
199	Existence domains of dust-acoustic solitons and supersolitons. *Physics of Plasmas*, **2013**, 20, 083705	2.1	46
198	A mechanism for electrostatic solitary structures in the Earth's magnetosheath. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		46
197	Alfv□ic Solitons in Ultrarelativistic Electron-Positron Plasmas. *Astrophysics and Space Science*, **1997**, 253, 97-106	1.6	46

196	Low-frequency electrostatic noise due to velocity shear instabilities in the regions of magnetospheric flow boundaries. *Journal of Geophysical Research*, **1987**, 92, 12161		46
195	An extreme coronal mass ejection and consequences for the magnetosphere and Earth. *Geophysical Research Letters*, **2014**, 41, 287-292	4.9	45
194	Relationship between discontinuities, magnetic holes, magnetic decreases, and nonlinear Alfvén waves: Ulysses observations over the solar poles. *Geophysical Research Letters*, **2002**, 29, 23-1	4.9	45
193	Ion acoustic double layers and solitons in auroral plasma. *Planetary and Space Science*, **1991**, 39, 1343-1350		44
192	Pitch angle transport of electrons due to cyclotron interactions with the coherent chorus subelements. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		42
191	Low frequency solitons and double layers in a magnetized plasma with two temperature electrons. *Physics of Plasmas*, **2012**, 19, 122308	2.1	40
190	Properties of obliquely propagating chorus. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		39
189	Electrostatic solitary structures in presence of non-thermal electrons and a warm electron beam on the auroral field lines. *Physics of Plasmas*, **2011**, 18, 122306	2.1	39
188	Heliospheric plasma sheet (HPS) impingement onto the magnetosphere as a cause of relativistic electron dropouts (REDs) via coherent EMIC wave scattering with possible consequences for climate change mechanisms. *Journal of Geophysical Research: Space Physics*, **2016**, 121, 10,130-10,156	2.6	39
187	Quasi-coherent chorus properties: 1. Implications for wave-particle interactions. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		38
186	Ion-acoustic double layers and solitons in multispecies auroral beam-plasmas. *Planetary and Space Science*, **1992**, 40, 1055-1062	2	37
185	A Review of Alfvénic Turbulence in High-Speed Solar Wind Streams: Hints From Cometary Plasma Turbulence. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 2458-2492	2.6	35
184	Effect of ion temperature on ion-acoustic solitary waves in a magnetized plasma in presence of superthermal electrons. *Physics of Plasmas*, **2013**, 20, 012306	2.1	35
183	The January 10, 1997 auroral hot spot, horseshoe aurora and first substorm: A CME loop?. *Geophysical Research Letters*, **1998**, 25, 3047-3050	4.9	35
182	Generation of a d.c. field by nonlinear electromagnetic waves in relativistic plasmas. *Astrophysics and Space Science*, **1981**, 79, 25-36	1.6	35
181	No electrostatic supersolitons in two-component plasmas. *Physics of Plasmas*, **2014**, 21, 062303	2.1	34
180	Electron acoustic solitons in the presence of an electron beam and superthermal electrons. *Nonlinear Processes in Geophysics*, **2011**, 18, 627-634	2.9	33
179	Arbitrary amplitude dust-acoustic double layers in a non-thermal plasma. *Journal of Plasma Physics*, **2006**, 72, 43	2.7	32

178	Dromion solutions for nonlinear electron acoustic waves in space plasmas. *Nonlinear Processes in Geophysics*, **2002**, 9, 463-475	2.9	32
177	Broadband plasma waves in the boundary layers. *Journal of Geophysical Research*, **2000**, 105, 27791-27831		32
176	Electron acoustic waves in a magnetized plasma with kappa distributed ions. *Physics of Plasmas*, **2012**, 19, 082314	2.1	31
175	Interplanetary Shocks, Magnetopause Boundary Layers and Dayside Auroras: The Importance of a Very Small Magnetospheric Region. *Surveys in Geophysics*, **2001**, 22, 101-130	7.6	31
174	Obliquely propagating ion-acoustic solitons and supersolitons in four-component auroral plasmas. *Advances in Space Research*, **2016**, 57, 813-820	2.4	30
173	A review of nonlinear fluid models for ion-and electron-acoustic solitons and double layers: Application to weak double layers and electrostatic solitary waves in the solar wind and the lunar wake. *Physics of Plasmas*, **2018**, 25, 080501	2.1	30
172	Generation of electrostatic solitary waves in the plasma sheet boundary layer. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		29
171	Some characteristics of intense geomagnetic storms and their energy budget. *Journal of Geophysical Research*, **2005**, 110,		29
170	Electromagnetic cyclotron waves in the dayside subsolar outer magnetosphere generated by enhanced solar wind pressure: EMIC wave coherency. *Journal of Geophysical Research: Space Physics* , **2015**, 120, 7536-7551	2.6	28
169	Mirror mode structures and ELF plasma waves in the Giacobini-Zinner magnetosheath. *Nonlinear Processes in Geophysics*, **1999**, 6, 229-234	2.9	28
168	Effect of excess superthermal hot electrons on finite amplitude ion-acoustic solitons and supersolitons in a magnetized auroral plasma. *Physics of Plasmas*, **2015**, 22, 102305	2.1	27
167	Dayside ELF electromagnetic wave survey: A Polar statistical study of chorus and hiss. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		27
166	Existence domains of arbitrary amplitude nonlinear structures in two-electron temperature space plasmas. I. Low-frequency ion-acoustic solitons. *Physics of Plasmas*, **2012**, 19, 072320	2.1	26
165	Small amplitude electron acoustic solitary waves in a magnetized superthermal plasma. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 22, 1322-1330	3.7	25
164	Ion temperature anisotropy instabilities in planetary magnetosheaths. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 785-793	2.6	25
163	Parametric analysis of positive amplitude electron acoustic solitary waves in a magnetized plasma and its application to boundary layers. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		25
162	The physics of space weather/solar-terrestrial physics (STP): what we know now and what the current and future challenges are. *Nonlinear Processes in Geophysics*, **2020**, 27, 75-119	2.9	24
161	Energetic particle cross-field diffusion: Interaction with Magnetic Decreases (MDs). *Nonlinear Processes in Geophysics*, **1999**, 6, 235-242	2.9	24

160	Spiky parallel electrostatic ion cyclotron and ion acoustic waves. *Nonlinear Processes in Geophysics*, **2002**, 9, 25-29	2.9	23
159	Electromagnetic and ?B-effects on the modified two-stream instability. *Nuclear Fusion*, **1973**, 13, 913-917	3.3	23
158	Occurrence of electrostatic solitary waves in the lunar wake. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 9134-9147	2.6	22
157	Alfvẽ modes in dusty cometary and planetary plasmas. *Planetary and Space Science*, **1996**, 44, 129-135	2	22
156	Generation of ULF waves in the polar cusp region by velocity shear-driven kinetic Alfvẽ modes. *Astrophysics and Space Science*, **1990**, 165, 153-161	1.6	22
155	Generation of Weak Double Layers and Low-Frequency Electrostatic Waves in the Solar Wind. *Solar Physics*, **2015**, 290, 3033-3049	2.6	21
154	Rapid evolution of magnetic decreases (MDs) and discontinuities in the solar wind: ACE and Cluster. *Geophysical Research Letters*, **2005**, 32,	4.9	21
153	Broadband plasma waves observed in the polar cap boundary layer: Polar. *Journal of Geophysical Research*, **1998**, 103, 17351-17366		21
152	Low-frequency plasma turbulence during solar wind-comet interaction. *Astrophysics and Space Science*, **1987**, 133, 203-218	1.6	21
151	Existence domains of slow and fast ion-acoustic solitons in two-ion space plasmas. *Physics of Plasmas*, **2015**, 22, 032313	2.1	20
150	Magnetic field turbulence, electron heating, magnetic holes, proton cyclotron waves, and the onsets of bipolar pulse (electron hole) events: a possible unifying scenario. *Nonlinear Processes in Geophysics*, **2003**, 10, 27-35	2.9	20
149	A kinetic theory of driven reconnection in the Earth's magnetotail. *Journal of Geophysical Research*, **1992**, 97, 2961-2972		20
148	Nonresonant low-frequency instabilities in multibeam plasmas: Applications to cometary environments and plasma sheet boundary layers. *Journal of Geophysical Research*, **1991**, 96, 7905		20
147	Electron acoustic solitary waves in a magnetized plasma with nonthermal electrons and an electron beam. *Physics of Plasmas*, **2016**, 23, 082310	2.1	20
146	Existence domain of electrostatic solitary waves in the lunar wake. *Physics of Plasmas*, **2018**, 25, 032302	2.1	19
145	Mirror instability upstream of the termination shock (TS) and in the heliosheath. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2011**, 73, 1398-1404	2	19
144	Nonlinear evolution of Alfvẽic wave packets. *Geophysical Research Letters*, **1998**, 25, 2377-2380	4.9	19
143	Oblique solitary Alfvẽ modes in relativistic electron-positron plasmas. *Astrophysics and Space Science*, **1996**, 240, 215-224	1.6	19

142	Effect of hot ion temperature on obliquely propagating ion-acoustic solitons and double layers in an auroral plasma. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 1338-1346	3.7	18
141	Existence domains of arbitrary amplitude nonlinear structures in two-electron temperature space plasmas. II. High-frequency electron-acoustic solitons. *Physics of Plasmas*, **2012**, 19, 122301	2.1	18
140	Extreme changes in the dayside ionosphere during a Carrington-type magnetic storm. *Journal of Space Weather and Space Climate*, **2012**, 2, A05	2.5	18
139	Alfvén wave instabilities and ring current during solar wind-comet interaction. *Astrophysics and Space Science*, **1988**, 143, 329-338	1.6	17
138	Comment on "Storming the Bastille: the effect of electric fields on the ionospheric F-layer" by Rishbeth et al. (2010). *Annales Geophysicae*, **2013**, 31, 145-150	2	16
137	Supermagnetic Storms: Hazard to Society. *Geophysical Monograph Series*, **2012**, 267-278	1.1	16
136	Stability of solar wind double ion streams. *Journal of Geophysical Research*, **1976**, 81, 2135-2139		16
135	LARGE-AMPLITUDE, CIRCULARLY POLARIZED, COMPRESSIVE, OBLIQUELY PROPAGATING ELECTROMAGNETIC PROTON CYCLOTRON WAVES THROUGHOUT THE EARTH'S MAGNETOSHEATH: LOW PLASMA β CONDITIONS. *Astrophysical Journal*, **2014**, 793, 6	4.7	15
134	Two sources of dayside intense, quasi-coherent plasmaspheric hiss: A new mechanism for the slot region?. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 1643-1657	2.6	15
133	Electrostatic solitary waves in current layers: from Cluster observations during a super-substorm to beam experiments at the LAPD. *Nonlinear Processes in Geophysics*, **2009**, 16, 431-442	2.9	15
132	Helicon modes driven by ionospheric O+ ions in the plasma sheet region. *Geophysical Research Letters*, **1997**, 24, 1463-1466	4.9	15
131	Comment on Comment on the abundances of rotational and tangential discontinuities in the solar wind by M. Neugebauer. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		15
130	Reply to comment by S.-I. Akasofu and Y. Kamide on The extreme magnetic storm of 1 2 September 1859 *Journal of Geophysical Research*, **2005**, 110,		15
129	The Effect of Dust Grain Temperature and Dust Streaming on Electrostatic Solitary Structures in a Non-Thermal Plasma. *Physica Scripta*, **2004**, T113, 135-140	2.6	15
128	Coupling of electrostatic ion cyclotron and ion acoustic waves in the solar wind. *Physics of Plasmas*, **2016**, 23, 082901	2.1	15
127	Existence domains of electrostatic solitary structures in the solar wind plasma. *Physics of Plasmas*, **2016**, 23, 062902	2.1	15
126	Magnetic decrease formation from . *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		14
125	Parallel electric field structures associated with the low-frequency oscillations in the auroral plasma. *Earth, Planets and Space*, **2006**, 58, 1227-1232	2.9	14

124	Nonlinear low frequency electrostatic structures in a magnetized two-component auroral plasma. *Physics of Plasmas*, **2016**, 23, 032309	2.1	14
123	Critical Issues on Magnetic Reconnection in Space Plasmas. *Space Science Reviews*, **2005**, 116, 497-521	7.5	13
122	Evolution of electron beam generated waves resulting in transverse ion heating and filamentation of the plasma. *Journal of Geophysical Research*, **2001**, 106, 21165-21181		13
121	Collisionless tearing modes in the presence of shear flow. *Astrophysics and Space Science*, **1983**, 89, 293-300	1.6	13
120	Plasmaspheric Hiss: Coherent and Intense. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 10,009-10,029	2.6	13
119	Supergeomagnetic Storms: Past, Present, and Future **2018**, 157-185		12
118	Comment on "Modeling Extreme "Carrington-Type" Space Weather Events Using Three-Dimensional Global MHD Simulations" by C. M. Ngwira, A. Pulkkinen, M. M. Kuznetsova, and A. Glocer. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 1388-1392	2.6	12
117	Some theoretical models for solitary structures of boundary layer waves. *Nonlinear Processes in Geophysics*, **2003**, 10, 65-73	2.9	12
116	Non-linear high-frequency waves in the magnetosphere **2003**, 61, 1209-1214		12
115	Large-amplitude low-frequency electromagnetic waves in pulsar magnetospheres. *Astrophysics and Space Science*, **1990**, 174, 143-150	1.6	12
114	Coherent generation mechanism for auroral kilometric radiation. *Journal of Geophysical Research*, **1985**, 90, 2785		12
113	Lower-Band "Monochromatic" Chorus Riser Subelement/Wave Packet Observations. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2020JA028090	2.6	12
112	Arbitrary amplitude slow electron-acoustic solitons in three-electron temperature space plasmas. *Physics of Plasmas*, **2015**, 22, 062307	2.1	11
111	Electrostatic waves driven by electron beam in lunar wake plasma. *Physics of Plasmas*, **2018**, 25, 052902	2.1	11
110	Nonlinear low-frequency structures in the auroral plasma in the presence of an oxygen beam including charge separation. *Physics of Plasmas*, **2010**, 17, 022903	2.1	11
109	Nonlinear electromagnetic waves and spherical arc-polarized waves in space plasmas. *Plasma Physics and Controlled Fusion*, **1997**, 39, A237-A250	2	11
108	Magnetic stabilization of transverse plasma instabilities". *Journal of Plasma Physics*, **1971**, 5, 467-474	2.7	11
107	Linear electrostatic waves in two-temperature electron–positron plasmas. *Journal of Plasma Physics*, **2012**, 78, 621-628	2.7	10

106	An explanation for high-frequency broadband electrostatic noise in the Earth's magnetosphere. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a		10
105	The effects of plasma sheet boundary flow and plasma mantle flow on the ion tearing instability. *Journal of Geophysical Research*, **1988**, 93, 8591		10
104	Regulation of solar wind heat flux by ordinary mode instability. *Solar Physics*, **1977**, 52, 153-162	2.6	10
103	Arbitrary amplitude fast electron-acoustic solitons in three-electron component space plasmas. *Physics of Plasmas*, **2016**, 23, 062302	2.1	10
102	Kinetic Alfvén waves generated by ion beam and velocity shear in the Earth's magnetosphere. *Physics of Plasmas*, **2019**, 26, 022901	2.1	9
101	Theoretical analysis of Poynting flux and polarization for ELF-VLF electromagnetic waves in the Earth's magnetosphere. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 7695-7702	2.6	9
100	Arbitrary amplitude solitary waves in plasmas with dust grains of opposite polarity and non-thermal ions. *Journal of Plasma Physics*, **2010**, 76, 441-451	2.7	9
99	Association of Alfvén waves and proton cyclotron waves with electrostatic bipolar pulses: magnetic hole events observed by Polar. *Nonlinear Processes in Geophysics*, **2004**, 11, 205-213	2.9	9
98	Ion and electron heating in the earth's bow shock region. *Journal of Plasma Physics*, **1977**, 17, 133-138	2.7	9
97	Magnetic Decreases (MDs) and mirror modes: two different plasma ‐changing mechanisms. *Nonlinear Processes in Geophysics*, **2010**, 17, 467-479	2.9	8
96	Generation of kinetic Alfvén waves by velocity shear instability on auroral field lines. *Advances in Space Research*, **2008**, 41, 1688-1694	2.4	8
95	Dromion solutions for an electron acoustic wave and its application to space observations **2000**, 55, 693-698		8
94	On the ion-tearing instability of forced current sheets. *Journal of Geophysical Research*, **1993**, 98, 17409		8
93	Ballooning instability of the Earth's plasma sheet region in the presence of parallel flow. *Journal of Geophysical Research*, **1990**, 95, 10441		8
92	Electromagnetic instabilities in non-uniform anisotropic plasmas. *Journal of Plasma Physics*, **1973**, 10, 249-263	2.7	8
91	Broadband electrostatic noise and low-frequency waves in the Earth magnetosphere. *Advances in Space Research*, **2009**, 43, 1940-1944	2.4	7
90	A generation mechanism for the polar cap boundary layer broadband plasma waves. *Journal of Geophysical Research*, **1999**, 104, 279-291		7
89	Solar wind-magnetosphere-ionosphere coupling and chaotic dynamics. *Surveys in Geophysics*, **1994**, 15, 703-754	7.6	7

88	Nonlinear propagation of Alfvn waves in cometary plasmas. *Astrophysics and Space Science*, **1987**, 139, 275-279	1.6	7
87	Tearing modes in the magnetopause current sheet. *Astrophysics and Space Science*, **1983**, 97, 421-426	1.6	7
86	Satellite drag effects due to uplifted oxygen neutrals during super magnetic storms. *Nonlinear Processes in Geophysics*, **2017**, 24, 745-750	2.9	7
85	Comment on Effects of electron temperature anisotropy on proton mirror instability evolution by Ahmadi et al. (2016). *Journal of Geophysical Research: Space Physics*, **2017**, 122, 745-747	2.6	6
84	CROSS-FIELD DIFFUSION OF ENERGETIC (100 keV to 2 MeV) PROTONS IN INTERPLANETARY SPACE. *Astrophysical Journal*, **2013**, 778, 180	4.7	6
83	Low-latitude geomagnetic response to the interplanetary conditions during very intense magnetic storms. *Advances in Space Research*, **2009**, 43, 1575-1587	2.4	6
82	Arbitrary amplitude Langmuir solitons in a relativistic electronpositron plasma. *Journal of Plasma Physics*, **2012**, 78, 175-180	2.7	6
81	Electrostatic solitary waves in a magnetized dusty plasma. *Physics of Plasmas*, **2008**, 15, 113701	2.1	6
80	Localized Multi-Dimensional Coherent Structures in Space and Laboratory Plasmas. *Physica Scripta*, **2004**, T107, 176	2.6	6
79	Low-frequency instabilities due to energetic oxygen ions. *Journal of Plasma Physics*, **2004**, 70, 613-623	2.7	6
78	Source of bursty radio emissions from Uranus. *Geophysical Research Letters*, **1988**, 15, 1149-1152	4.9	6
77	Instability near proton-cyclotron harmonics due to anti-loss cone proton distributions. *Astrophysics and Space Science*, **1980**, 68, 175-182	1.6	6
76	Drift Instabilities in Nonuniform Streaming Plasmas. *Physical Review A*, **1973**, 7, 319-327	2.6	6
75	Low Frequency Nonlinear Waves in the Auroral Plasma. *Physica Scripta*, **2001**, T98, 137	2.6	6
74	Electrostatic Solitary Structures in Space Plasmas: Soliton Perspective. *Plasma*, **2021**, 4, 681-731	1.7	6
73	Low Frequency (f Journal of Geophysical Research: Space Physics, **2019**, 124, 10063-10084	2.6	6
72	Do nonlinear waves evolve in a universal manner in dusty and other plasma environments?. *Journal of Plasma Physics*, **2014**, 80, 825-832	2.7	5
71	Response of the low latitude geomagnetic field to the major proton event of November 2001. *Advances in Space Research*, **2005**, 36, 2434-2439	2.4	5

70	Oblique non-neutral solitary Alfvén modes in weakly nonlinear pair plasmas. *New Journal of Physics*, **2005**, 7, 94-94	2.9	5
69	Resonant electromagnetic ion-ion beam turbulence at comet P/Grigg-Skjellerup. *Journal of Geophysical Research*, **1993**, 98, 21017-21021		5
68	Electromagnetic lower hybrid instability driven by solar wind heat flux. *Astrophysics and Space Science*, **1979**, 63, 511-516	1.6	5
67	Gradients and thermal effects on ring current loss-cone instability. *Planetary and Space Science*, **1976**, 24, 609-611	2	5
66	Relativistic Streaming Effects on Electromagnetic Instability in Magnetoplasmas. *Physical Review A*, **1972**, 5, 1846-1851	2.6	5
65	A shear flow instability in plasma sheet region. *Planetary and Space Science*, **2003**, 51, 177-181	2	4
64	A parametric study of the influence of non-thermal ions on linear dust-acoustic waves in an unmagnetized dusty plasma. *Journal of Plasma Physics*, **2005**, 71, 345-358	2.7	4
63	Indo-German low-latitude project deos: plasma bubbles in the post sunset and nighttime sector. *Advances in Space Research*, **2001**, 27, 1065-1069	2.4	4
62	Origin of fine structures in solar radio bursts **1984**, 23, 343-349		4
61	A coherent radiation mechanism for type IV solar radio bursts. *Solar Physics*, **1985**, 99, 277-284	2.6	4
60	Lower hybrid wave model for aurora. *Astrophysics and Space Science*, **1985**, 117, 111-120	1.6	4
59	Proton-cyclotron instabilities in non-uniform loss-cone magnetospheric plasma. *Astrophysics and Space Science*, **1980**, 70, 467-481	1.6	4
58	Whistler instability in anti-loss-cone plasma. *Planetary and Space Science*, **1977**, 25, 598-600	2	4
57	Solar wind heating by heat conduction driven ion acoustic instability. *Solar Physics*, **1977**, 52, 471-475	2.6	4
56	Ion cyclotron instability in the solar wind. *Solar Physics*, **1978**, 57, 467-473	2.6	4
55	Low frequency streaming instabilities in magneto-plasmas. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1971**, 34, 269-270	2.3	4
54	Electromagnetic lower hybrid instability in the solar wind. *Astrophysics and Space Science*, **1985**, 111, 325-334	1.6	4
53	Nonlinear electrostatic solitary waves in electron–positron plasmas. *Journal of Plasma Physics*, **2016**, 82,	2.7	4

52	Role of ion thermal velocity in the formation and dynamics of electrostatic solitary waves in plasmas. *Physics of Plasmas*, **2019**, 26, 042112	2.1	3
51	Higher harmonic instability of electrostatic ion cyclotron waves **2019**, 92, 1		3
50	Role of helicon modes in the injection of oxygen ions in the ring current. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2001**, 63, 481-487	2	3
49	Pickup proton cyclotron turbulence at comet P/Halley. *Journal of Geophysical Research*, **1995**, 100, 3449-3454		3
48	Tearing modes at the magnetopause. *Journal of Geophysical Research*, **1996**, 101, 2707-2711		3
47	Criteria for shear flow instability in the magnetopause boundary layer region. *Earth, Moon and Planets*, **1993**, 62, 245-258	0.6	3
46	Purely growing magnetic modes in anisotropic contrastreaming plasmas. *Physical Review A*, **1982**, 25, 3419-3421	2.6	3
45	Return current instability and its effects on beam-plasma system **1974**, 3, 10-27		3
44	Generation of hiss beyond plasmapause by magnetosonic waves. *Planetary and Space Science*, **1977**, 25, 833-837	2	3
43	Drift instabilities associated with the particles in ring current and inner edge of plasma sheet. *Planetary and Space Science*, **1978**, 26, 985-992	2	3
42	Feedback stabilization of drift temperature instability. *Nuclear Fusion*, **1974**, 14, 285-287	3.3	3
41	A new class of Ion-acoustic solitons that can exist below critical Mach number. *Physica Scripta*, **2020**, 95, 105601	2.6	3
40	A theoretical model for the generation of Kinetic Alfvᾱ waves in the Earth's Magnetosphere by Ion Beam and Velocity Shear. *URSI Radio Science Bulletin*, **2019**, 2019, 17-26	0.1	3
39	Resonant instabilities of kinetic Alfvᾱ waves in the Earth's magnetosphere with superthermal electrons. *Physics of Plasmas*, **2019**, 26, 112108	2.1	3
38	Long-period magnetic disturbances or Pc5 events aboard INTERBALL-Auroral and POLAR. *Advances in Space Research*, **2006**, 37, 592-598	2.4	2
37	Role of Plasma Instabilities Driven by Oxygen Ions During Magnetic Storms and Substorms. *Geophysical Monograph Series*, **2003**, 131-141	1.1	2
36	Parametric variations of dromion solutions in auroral plasmas. *IEEE Transactions on Plasma Science*, **2004**, 32, 1367-1377	1.3	2
35	Quasielectrostatic instabilities excited by energetic oxygen ions in the ring current region. *Physics of Plasmas*, **2005**, 12, 012903	2.1	2

34	Conference explores relationship between geomagnetic storms and substorms. *Eos*, **2001**, 82, 603-603	1.5	2
33	Shear flow instability near the cusp resonance in magnetopause boundary layer. *Earth, Moon and Planets*, **1994**, 64, 107-115	0.6	2
32	Linear macroscopic instabilities in space plasmas. *Physica Scripta*, **1994**, T50, 114-126	2.6	2
31	Short-wavelength drift dissipative instability in the presence of field-aligned currents. *Planetary and Space Science*, **1982**, 30, 581-585	2	2
30	Electrostatic instabilities in anti-loss-cone plasma. *Journal of Plasma Physics*, **1978**, 19, 193-199	2.7	2
29	Transverse instabilities in streaming collisional plasmas. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1970**, 32, 518-519	2.3	2
28	Space Weather Forecasting: What We Know Now and What Are the Current and Future Challenges?		2
27	Nonresonant Instability of Kinetic Alfvn Waves with Electrons. *Astrophysical Journal*, **2020**, 897, 172	4.7	2
26	Comment on irst Observation of Mesosphere Response to the Solar Wind High-Speed Streams by W. Yi et al.. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 8165-8168	2.6	2
25	An Overview of the Magnetosphere, Substorms and Geomagnetic Storms. *Thirty Years of Astronomical Discovery With UKIRT*, **2009**, 293-309	0.3	2
24	On The Propagation And Modulation Of Electrostatic Solitary Waves Observed Near The Magnetopause On Cluster **2011**,		1
23	Correction to Magnetic decrease formation from . *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		1
22	Ring current instabilities excited by the energetic oxygen ions. *Physics of Plasmas*, **2007**, 14, 092902	2.1	1
21	An observation-driven model of the equatorial ionosphere - DEOS rocket campaign study. *Advances in Space Research*, **2002**, 29, 899-905	2.4	1
20	Low-frequency instabilities driven by oxygen ion beams in plasma sheet region. *Advances in Space Research*, **2005**, 36, 1890-1894	2.4	1
19	Kinetic modulational instability of electron cyclotron waves in plasmas. *Physica Scripta*, **1988**, 37, 354-355	1.6	1
18	Role of Coulomb collisions in the equatorial F-region plasma instabilities. *Planetary and Space Science*, **1984**, 32, 635-640	2	1
17	Excitation of electromagnetic lower hybrid instability in the region of bouncing electron beams. *Journal of Earth System Science*, **1981**, 90, 27-38	1.8	1

16	Electromagnetic velocity gradient instabilities in the magnetosphere. *Astrophysics and Space Science*, **1982**, 85, 369-380	1.6	1
15	Generation of 1–30 Hz waves near the plasmapause by resonant electron-instability. *Planetary and Space Science*, **1978**, 26, 195-199	2	1
14	Explosive energy release by disruption of current sheets. *Physica Scripta*, **1998**, T74, 67-70	2.6	1
13	Kinetic Alfvén Waves in Space Plasma Environment with Electrons. *Astrophysical Journal*, **2021**, 919, 71	4.7	1
12	The Complex Space Weather Events of September 2017		1
11	Linear analysis of electrostatic waves in the lunar wake plasma. *Physica Scripta*, **2020**, 95, 045610	2.6	0
10	Nonlinear electrostatic waves in the auroral plasma. *Physica Scripta*, **2020**, 95, 075602	2.6	
9	Response to Comment on Existence domains of slow and fast ion-acoustic solitons in two-ion space plasmas [Phys. Plasmas 23, 064701 (2016)]. *Physics of Plasmas*, **2016**, 23, 064702	2.1	
8	Preface: Nonlinear waves and chaos. *Nonlinear Processes in Geophysics*, **2018**, 25, 477-479	2.9	
7	Introduction to this Special Issue "Nonlinear waves and chaos in space plasmas". *Nonlinear Processes in Geophysics*, **2014**, 21, 583-585	2.9	
6	Auroral zone plasma waves detected at polar: PCBL waves. *Advances in Space Research*, **2001**, 28, 1655-1659	2.4	
5	Sun-Earth connection: Boundary layer waves and auroras **2000**, 55, 665-683		
4	Intermediate electromagnetic turbulence at comets. *Journal of Geophysical Research*, **1999**, 104, 24863-24867		
3	Low-frequency electric field fluctuations excited by ring current protons. *Earth, Moon and Planets*, **1996**, 74, 231-242	0.6	
2	Transport phenomena in a partially lonized Lorentzian magnetoplasma. *Annals of Physics*, **1973**, 80, 42-59	2.5	
1	Multipoint Analysis of Source Regions of EMIC Waves and Rapid Growth of Subpackets. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029514	2.6	