

# Luiz F Ziebell

## List of Publications by Year in descending order

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130  
papers

1,533  
citations

331670

21  
h-index

414414

32  
g-index

131  
all docs

131  
docs citations

131  
times ranked

511  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonlinear development of weak beam-plasma instability. <i>Physics of Plasmas</i> , 2001, 8, 3982-3995.	1.9	72
2	Electromagnetic cyclotron-loss-cone instability associated with weakly relativistic electrons. <i>Journal of Plasma Physics</i> , 1982, 28, 503-525.	2.1	67
3	Two-dimensional nonlinear dynamics of beam-plasma instability. <i>Plasma Physics and Controlled Fusion</i> , 2008, 50, 085011.	2.1	59
4	PLASMA EMISSION BY NONLINEAR ELECTROMAGNETIC PROCESSES. <i>Astrophysical Journal</i> , 2015, 806, 237.	4.5	58
5	Langmuir Turbulence and Suprathermal Electrons. <i>Space Science Reviews</i> , 2012, 173, 459-489.	8.1	55
6	Electromagnetic weak turbulence theory revisited. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	50
7	Cross-effect on electron cyclotron and lower hybrid current drive in tokamak plasmas. <i>Nuclear Fusion</i> , 1987, 27, 579-587.	3.5	44
8	Electron cyclotron emission from tokamak plasmas with mildly superthermal electrons. <i>Physics of Fluids</i> , 1980, 23, 1336.	1.4	41
9	PLASMA EMISSION BY WEAK TURBULENCE PROCESSES. <i>Astrophysical Journal Letters</i> , 2014, 795, L32.	8.3	38
10	Two-dimensional time evolution of beam-plasma instability in the presence of binary collisions. <i>Astronomy and Astrophysics</i> , 2016, 586, A19.	5.1	38
11	Asymmetric Solar Wind Electron Superthermal Distributions. <i>Astrophysical Journal</i> , 2008, 677, 676-682.	4.5	37
12	Spontaneous emission of electromagnetic radiation in turbulent plasmas. <i>Physics of Plasmas</i> , 2014, 21, 010701.	1.9	35
13	Excitation of whistler waves by reflected auroral electrons. <i>Planetary and Space Science</i> , 1983, 31, 499-507.	1.7	29
14	Dynamics of Langmuir wave decay in two dimensions. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	29
15	NONLINEAR EVOLUTION OF BEAM-PLASMA INSTABILITY IN INHOMOGENEOUS MEDIUM. <i>Astrophysical Journal</i> , 2011, 727, 16.	4.5	27
16	SOLAR WIND STRAHL BROADENING BY SELF-GENERATED PLASMA WAVES. <i>Astrophysical Journal Letters</i> , 2013, 769, L30.	8.3	26
17	Particle-in-cell and Weak Turbulence Simulations of Plasma Emission. <i>Astrophysical Journal</i> , 2019, 871, 74.	4.5	25
18	Weak turbulence theory for collisional plasmas. <i>Physical Review E</i> , 2016, 93, 033203.	2.1	24

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19	Effects of dust-charge fluctuation on the damping of Alfvén waves in dusty plasmas. <i>Physics of Plasmas</i> , 2005, 12, 052109.	1.9	23
20	Effect of electron thermal anisotropy on the kinetic cross-field streaming instability. <i>Journal of Plasma Physics</i> , 1984, 32, 159-178.	2.1	22
21	The dispersion relations of dispersive Alfvén waves in superthermal plasmas. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 9334-9356.	2.4	21
22	Obliquely propagating electromagnetic waves in magnetized kappa plasmas. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	21
23	Power dependence of electron cyclotron wave damping in tokamak plasmas. <i>Physics of Fluids</i> , 1987, 30, 438.	1.4	20
24	Electron-cyclotron heating of a tokamak reactor with the extraordinary mode. <i>Physics of Fluids</i> , 1986, 29, 803.	1.4	18
25	Effect of superthermal electrons on Alfvén wave propagation in the dusty plasmas of solar and stellar winds. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	18
26	A purely growing electromagnetic mode operative in the geomagnetic tail. <i>Journal of Geophysical Research</i> , 1992, 97, 141-151.	3.3	17
27	Generation of harmonic Langmuir mode by beam-plasma instability. <i>Physics of Plasmas</i> , 2002, 9, 96-110.	1.9	17
28	On the dimensionally correct kinetic theory of turbulence for parallel propagation. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	16
29	The general dielectric tensor for bi-kappa magnetized plasmas. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	15
30	Langmuir condensation by spontaneous scattering off electrons in two dimensions. <i>Plasma Physics and Controlled Fusion</i> , 2012, 54, 055012.	2.1	14
31	Ion firehose instability in plasmas with plasma particles described by product bi-kappa distributions. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	14
32	Ion-cyclotron instability in plasmas described by product-bi-kappa distributions. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	14
33	Ray tracing studies on auroral kilometric radiation in finite width auroral cavities. <i>Journal of Geophysical Research</i> , 1994, 99, 8905.	3.3	13
34	Unified formulation for inhomogeneity-driven instabilities in the lower-hybrid range. <i>Physical Review E</i> , 2002, 65, 036407.	2.1	13
35	Mode coupling of low frequency electromagnetic waves in magnetized dusty plasmas. <i>Physics of Plasmas</i> , 2005, 12, 082102.	1.9	13
36	Pitch angle diffusion of newborn ions due to intrinsic turbulence in the solar wind. <i>Journal of Geophysical Research</i> , 1990, 95, 17075-17083.	3.3	12

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37	Electrostatic waves in a Maxwellian dusty plasma with variable charge on dust particles. Brazilian Journal of Physics, 2006, 36, 759-771.	1.4	12
38	Two-dimensional quasilinear beam-plasma instability in inhomogeneous media. Plasma Physics and Controlled Fusion, 2011, 53, 085004.	2.1	12
39	Transition from thermal to turbulent equilibrium with a resulting electromagnetic spectrum. Physics of Plasmas, 2014, 21, .	1.9	12
40	PLASMA EMISSION BY COUNTER-STREAMING ELECTRON BEAMS. Astrophysical Journal, 2016, 818, 61.	4.5	12
41	Collisional damping rates for plasma waves. Physics of Plasmas, 2016, 23, .	1.9	12
42	Electron cyclotron absorption for oblique propagation in loss-cone plasmas. Journal of Plasma Physics, 1988, 39, 431-446.	2.1	11
43	Kilometric radio waves generated along auroral field lines observed by ground facilities: A theoretical model. Journal of Geophysical Research, 1991, 96, 1495-1501.	3.3	11
44	Self-consistent pitch angle diffusion of newborn ions. Journal of Geophysical Research, 1991, 96, 5469-5478.	3.3	11
45	Quasi-linear evolution of electron cyclotron absorption by an RF-generated extended tail in tokamak plasmas. Plasma Physics and Controlled Fusion, 1993, 35, 511-529.	2.1	11
46	Two-dimensional Hall-MHD simulation of current sheet dynamics during substorm growth phase. Journal of Geophysical Research, 1997, 102, 26979-26991.	3.3	11
47	Effect of charged dust particles on the ion cyclotron and firehose instabilities. Journal of Geophysical Research, 2007, 112, .	3.3	11
48	Decay of beam-driven Langmuir wave into ion-acoustic turbulence in two dimensions. Plasma Physics and Controlled Fusion, 2009, 51, 095011.	2.1	11
49	Two-dimensional nonlinear dynamics of bidirectional beam-plasma instability. Journal of Geophysical Research, 2009, 114, .	3.3	11
50	Ionospheric ion-acoustic enhancements by turbulent counterstreaming electron beam-plasma interaction. Journal of Geophysical Research, 2010, 115, .	3.3	11
51	Dispersion relation for electrostatic waves in plasmas with isotropic and anisotropic Kappa distributions for electrons and ions. Journal of Plasma Physics, 2017, 83, .	2.1	11
52	The dispersion relation and the dielectric tensor of inhomogeneous magnetized plasmas. Journal of Plasma Physics, 1989, 42, 165-175.	2.1	10
53	Pitch angle and velocity diffusions of newborn ions by turbulence in the solar wind. Journal of Geophysical Research, 1990, 95, 21203-21211.	3.3	10
54	Quasilinear evolution of cyclotron maser instability. Physical Review E, 1995, 51, 4908-4916.	2.1	10

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55	Dispersion function for plasmas with loss-cone distributions in an inhomogeneous magnetic field. <i>Physical Review E</i> , 1997, 55, 5859-5873.	2.1	10
56	Mode-coupling of low-frequency electromagnetic waves in dusty plasmas with temperature anisotropy. <i>Physics of Plasmas</i> , 2007, 14, 022104.	1.9	10
57	Obliquely propagating Alfvén waves in a Maxwellian dusty plasma. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 015011.	2.1	10
58	The Dielectric Tensor for Magnetized Dusty Plasmas with Superthermal Plasma Populations and Dust Particles of Different Sizes. <i>Brazilian Journal of Physics</i> , 2011, 41, 258-274.	1.4	10
59	Electron cyclotron wave damping for oblique propagation in hot plasmas. <i>Nuclear Fusion</i> , 1986, 26, 1537-1542.	3.5	9
60	Inhomogeneity effects on the absorption of electromagnetic high-frequency waves by magnetized Maxwellian plasmas. <i>Journal of Plasma Physics</i> , 1990, 43, 335-356.	2.1	9
61	Quasilinear analysis of loss-cone driven weakly relativistic electron cyclotron maser instability. <i>Physics of Plasmas</i> , 1995, 2, 1285-1295.	1.9	8
62	Current drive by EC waves in the presence of magnetic islands and transport. <i>Plasma Physics and Controlled Fusion</i> , 2008, 50, 095002.	2.1	8
63	A new formulation for the dielectric tensor for magnetized dusty plasmas with variable charge on the dust particles. <i>Brazilian Journal of Physics</i> , 2008, 38, .	1.4	8
64	Ion firehose instability in a dusty plasma considering product-bi-kappa distributions for the plasma particles. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	8
65	Propagation and amplification of auroral kilometric radiation in finite width auroral cavities. <i>Journal of Geophysical Research</i> , 1992, 97, 19299-19310.	3.3	7
66	Maser-beam instability of Bernstein waves. <i>Physics of Plasmas</i> , 2000, 7, 4720-4728.	1.9	7
67	Generation of quasi-isotropic electron population during nonlinear beam-plasma interaction. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	7
68	On the influence of the shape of kappa distributions of ions and electrons on the ion-cyclotron instability. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	7
69	Development of pitch angle anisotropy and velocity diffusion of pickup ion shell distribution by solar wind turbulence. <i>Journal of Geophysical Research</i> , 1990, 95, 17085-17094.	3.3	6
70	Dispersion relation and the dielectric tensor for magnetized plasmas with inhomogeneous magnetic field. <i>Physical Review E</i> , 1995, 51, 2407-2424.	2.1	6
71	Quasi-linear effects on the absorption of electron cyclotron waves by lower hybrid produced electron tails in tokamak plasmas. <i>Plasma Physics and Controlled Fusion</i> , 1996, 38, 375-388.	2.1	6
72	Effects of radial particle diffusion on the electron cyclotron absorption coefficient in tokamak plasmas in the presence of lower hybrid waves. <i>Plasma Physics and Controlled Fusion</i> , 1999, 41, 525-540.	2.1	6

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73	EC $\hat{A}$ LH current drive efficiency in the presence of an internal transport barrier. Plasma Physics and Controlled Fusion, 2002, 44, 2065-2090.	2.1	6
74	Simulation of asymmetric solar wind electron distributions. Physics of Plasmas, 2009, 16, .	1.9	6
75	Ion-acoustic enhancements generated by beam-plasma instability in an auroral cavity. Journal of Geophysical Research, 2011, 116, .	3.3	6
76	Solar Wind Electron Acceleration via Langmuir Turbulence. Terrestrial, Atmospheric and Oceanic Sciences, 2013, 24, 175.	0.6	6
77	Weak turbulence in dusty plasmas with collisional dust charging: Quasilinear wave-particle interaction. Physical Review E, 2015, 92, 023102.	2.1	6
78	Induced electron-cyclotron emission from inhomogeneous, anisotropic plasmas with electron population inversion. Physics of Fluids, 1983, 26, 80.	1.4	5
79	Angular and momentum distribution dependence of electron cyclotron absorption and amplification in mirror-confined plasmas. Physics of Fluids, 1986, 29, 3730.	1.4	5
80	The effective dielectric tensor for electromagnetic waves in inhomogeneous magnetized plasmas and the proper formulation in the electrostatic limit. Brazilian Journal of Physics, 2004, 34, 1211-1223.	1.4	5
81	Alfvén waves in dusty plasmas with plasma particles described by anisotropic kappa distributions. Physics of Plasmas, 2012, 19, .	1.9	5
82	Electromagnetic ion-cyclotron instability in a dusty plasma with product-bi-kappa distributions for the plasma particles. Astrophysics and Space Science, 2017, 362, 1.	1.4	5
83	Electron cyclotron wave absorption by the fast tail generated by the DC electric field in Tokamak plasmas. Plasma Physics and Controlled Fusion, 1985, 27, 1151-1161.	2.1	4
84	Quasilinear studies on lower hybrid current generation in tokamak plasmas. Plasma Physics and Controlled Fusion, 1992, 34, 533-548.	2.1	4
85	Electron-cyclotron absorption by inhomogeneous current-carrying plasmas. Journal of Plasma Physics, 1994, 52, 195-214.	2.1	4
86	The role of the RF induced electric field in the current drive by EC waves in the presence of magnetic islands. Nuclear Fusion, 2010, 50, 115009.	3.5	4
87	Kinetic theory of magnetized dusty plasmas with dust particles charged by collisional processes and by photoionization. Physics of Plasmas, 2012, 19, 093702.	1.9	4
88	An Emission Mechanism for Extragalactic Radio Jets. Astrophysical Journal, 1996, 459, 529.	4.5	4
89	Quasilinear diffusion rates of cometary ions. Physics of Fluids B, 1991, 3, 2124-2132.	1.7	3
90	Comment on "Onsager symmetry for inhomogeneous magnetized plasmas" [Phys. Plasmas 3, 4325 (1996)]. Physics of Plasmas, 1997, 4, 3091-3093.	1.9	3

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91	Interaction between lower hybrid waves and energetic ions in a tokamak system. Plasma Physics and Controlled Fusion, 2000, 42, 359-375.	2.1	3
92	Further study of flickering auroral roar emission: 2. Theory and numerical calculations. Journal of Geophysical Research, 2006, 111, .	3.3	3
93	Particle-in-cell simulations on spontaneous thermal magnetic field fluctuations. Physics of Plasmas, 2013, 20, 100702.	1.9	3
94	Generation of Suprathermal Electrons by Collective Processes in Collisional Plasma. Astrophysical Journal Letters, 2017, 849, L30.	8.3	3
95	The oblique firehose instability in a bi-kappa magnetized plasma. Physics of Plasmas, 2018, 25, .	1.9	3
96	Excitation of low frequency waves by streaming ions via anomalous cyclotron resonance. Physics of Fluids, 1978, 21, 1318.	1.4	2
97	Emission and propagation of auroral kilometric radiation in the density depletions of the auroral region. Journal of Geophysical Research, 1996, 101, 24557-24564.	3.3	2
98	Dielectric tensor for inhomogeneous plasmas in inhomogeneous magnetic field. Physics of Plasmas, 1999, 6, 4533-4541.	1.9	2
99	Excitation of Langmuir waves in interplanetary space. Journal of Geophysical Research, 2000, 105, 27369-27375.	3.3	2
100	Effects of dust charge variation on electrostatic waves in dusty plasmas with temperature anisotropy. Brazilian Journal of Physics, 2009, 39, 112-133.	1.4	2
101	Two dimensional kinetic analysis of electrostatic harmonic plasma waves. Physics of Plasmas, 2016, 23, 062310.	1.9	2
102	Weakly turbulent plasma processes in the presence of inverse power-law velocity tail population. Physics of Plasmas, 2017, 24, 112902.	1.9	2
103	On the Influence of the Shape of Kappa Distributions of Ions and Electrons on the Ion Firehose Instability. Brazilian Journal of Physics, 2019, 49, 526-538.	1.4	2
104	On the effect of electron cyclotron waves on the evolution of neoclassical tearing modes in tokamak plasmas. Plasma Physics and Controlled Fusion, 2019, 61, 065021.	2.1	2
105	Weakly turbulent plasma processes leading to plasma emission in the presence of a ring-beam electron population. Astrophysics and Space Science, 2021, 366, 1.	1.4	2
106	Stochastic diffusion of energetic ions due to lower hybrid waves. Brazilian Journal of Physics, 1998, 28, .	1.4	2
107	The threshold condition for stochastic diffusion of energetic ions due to lower hybrid waves. Brazilian Journal of Physics, 1998, 28, .	1.4	2
108	Oblique Alfvén waves in a stellar wind environment with dust particles charged by inelastic collisions and by photoionization. Monthly Notices of the Royal Astronomical Society, 2022, 512, 1795-1804.	4.4	2

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109	Transition from reactive to kinetic electromagnetic instabilities generated by ring-beam ions. Physics of Fluids B, 1991, 3, 2455-2462.	1.7	1
110	Quasilinear evolution of the weakly relativistic electron cyclotron maser instability. Physics of Plasmas, 1997, 4, 2697-2706.	1.9	1
111	A non-local synergism between electron cyclotron waves and lower hybrid waves induced by transport. Plasma Physics and Controlled Fusion, 2001, 43, 1485-1502.	2.1	1
112	Stochastic diffusion of ions due to a finite set of lower hybrid waves. Physical Review E, 2002, 66, 056409.	2.1	1
113	The dispersion relation for electrostatic fluctuations in weakly inhomogeneous plasmas. Brazilian Journal of Physics, 2004, 34, 1638-1644.	1.4	1
114	Efficiency of LH+EC current drive in tokamaks featuring an internal transport barrier. Brazilian Journal of Physics, 2005, 35, 670-679.	1.4	1
115	Efficiency of LH current drive in tokamaks featuring an internal transport barrier. Plasma Physics and Controlled Fusion, 2005, 47, 249-267.	2.1	1
116	Bremsstrahlung emission and collisional damping rate for Langmuir waves. Plasma Physics and Controlled Fusion, 2019, 61, 125008.	2.1	1
117	Langmuir Turbulence and Suprathermal Electrons. Space Sciences Series of ISSI, 2012, , 459-489.	0.0	1
118	The effective longitudinal dielectric constant for plasmas in inhomogeneous magnetic fields. Brazilian Journal of Physics, 2004, 34, 1224-1240.	1.4	1
119	Damping and mode-coupling for low-frequency electromagnetic waves in a dusty plasma with dust charge fluctuation. AIP Conference Proceedings, 2005, , .	0.4	0
120	Effect of perpendicular gradients on the amplification of Auroral Kilometric Radiation in auroral cavities with density depletions. Journal of Geophysical Research, 2008, 113, .	3.3	0
121	Radio-frequency current drive efficiency in the presence of ITBs and a dc electric field. Nuclear Fusion, 2009, 49, 055005.	3.5	0
122	Reply to comment on "The role of the RF induced electric field in the current drive by EC waves in the presence of magnetic islands". Nuclear Fusion, 2011, 51, 068002.	3.5	0
123	Perfectly conducting loop of wire moving through a uniform and stationary magnetic field. Revista Brasileira De Ensino De Fisica, 2013, 35, 01-07.	0.2	0
124	Multiple harmonics of electron waves studied using weak turbulence theory in a two-dimensional formulation. Physics of Plasmas, 2021, 28, 102302.	1.9	0
125	Stochastic diffusion of energetic ions due to incoherent lower hybrid waves. Brazilian Journal of Physics, 2003, 33, 806-812.	1.4	0
126	Effect of radial transport on the LH current drive efficiency in tokamaks featuring an internal transport barrier. Brazilian Journal of Physics, 2004, 34, .	1.4	0



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127	On the Onsager symmetry of the effective dielectric tensor for plasmas in inhomogeneous magnetic field. Brazilian Journal of Physics, 2004, 34, 1645-1650.	1.4	0
128	Tribute to Dr. Darcy Dillenburg. Brazilian Journal of Physics, 2004, 34, 1828-1829.	1.4	0
129	Electron Acceleration by Quasilinear Processes in the Presence of a Ring-beam Electron Population. Brazilian Journal of Physics, 2022, 52, 1.	1.4	0
130	Electrostatic weak turbulence theory for warm magnetized plasmas. Physics of Plasmas, 2021, 28, 122302.	1.9	0