J Manuel Urrutia

List of Publications by Year in Descending Order

69 papers	873 citations	16 h-index	24 g-index
75 ext. papers	942 ext. citations	2.6 avg, IF	4.21 L-index

#	Paper	IF	Citations
69	Helicons in uniform fields. II. Poynting vector and angular momenta. *Physics of Plasmas*, **2018**, 25, 032112	2.1	6
68	Helicons in uniform fields. I. Wave diagnostics with hodograms. *Physics of Plasmas*, **2018**, 25, 032111	2.1	5
67	Whistler modes in highly nonuniform magnetic fields. II. Propagation in three dimensions. *Physics of Plasmas*, **2018**, 25, 082109	2.1	4
66	Whistler modes in highly nonuniform magnetic fields. I. Propagation in two-dimensions. *Physics of Plasmas*, **2018**, 25, 082108	2.1	4
65	Whistler modes in highly nonuniform magnetic fields. III. Propagation near mirror and cusp fields. *Physics of Plasmas*, **2018**, 25, 082110	2.1	3
64	New properties of whistler modes. *Geophysical Research Letters*, **2017**, 44, 2113-2119	4.9	3
63	Comparison of electric dipole and magnetic loop antennas for exciting whistler modes. *Physics of Plasmas*, **2016**, 23, 082120	2.1	9
62	Trivelpiece-Gould modes in a uniform unbounded plasma. *Physics of Plasmas*, **2016**, 23, 092103	2.1	9
61	Helicon waves in uniform plasmas. IV. Bessel beams, Gendrin beams, and helicons. *Physics of Plasmas*, **2016**, 23, 052112	2.1	13
60	Magnetic antenna excitation of whistler modes. III. Group and phase velocities of wave packets. *Physics of Plasmas*, **2015**, 22, 072109	2.1	4
59	Magnetic antenna excitation of whistler modes. IV. Receiving antennas and reciprocity. *Physics of Plasmas*, **2015**, 22, 072110	2.1	6
58	Helicon modes in uniform plasmas. I. Low m modes. *Physics of Plasmas*, **2015**, 22, 092111	2.1	13
57	Helicon waves in uniform plasmas. II. High m numbers. *Physics of Plasmas*, **2015**, 22, 092112	2.1	12
56	Helicons in Unbounded Plasmas. *Physical Review Letters*, **2015**, 114, 205005	7.4	31
55	Helicon modes in uniform plasmas. III. Angular momentum. *Physics of Plasmas*, **2015**, 22, 092113	2.1	9
54	Magnetic antenna excitation of whistler modes. I. Basic properties. *Physics of Plasmas*, **2014**, 21, 122107	2.1	16
53	Magnetic antenna excitation of whistler modes. II. Antenna arrays. *Physics of Plasmas*, **2014**, 21, 122108	2.1	13

52	Magnetic dipole discharges. I. Basic properties. *Physics of Plasmas*, **2013**, 20, 083503	2.1	7
51	Magnetic dipole discharges. II. Cathode and anode spot discharges and probe diagnostics. *Physics of Plasmas*, **2013**, 20, 083504	2.1	5
50	Measurements of Helicity and Reconnection in Electron MHD Plasmas. *Geophysical Monograph Series*, **2013**, 179-186	1.1	1
49	Oscillating plasma bubbles. II. Pulsed experiments. *Physics of Plasmas*, **2012**, 19, 082106	2.1	8
48	Oscillating plasma bubbles. III. Internal electron sources and sinks. *Physics of Plasmas*, **2012**, 19, 082107	2.1	7
47	Oscillating plasma bubbles. I. Basic properties and instabilities. *Physics of Plasmas*, **2012**, 19, 082105	2.1	18
46	Whistler Modes in Highly Nonuniform Magnetic Fields. *IEEE Transactions on Plasma Science*, **2011**, 39, 2458-2459	1.3	2
45	Positively Biased Probes in Magnetized Plasmas. *Contributions To Plasma Physics*, **2011**, 51, 560-566	1.4	1
44	Nonlinear electron magnetohydrodynamic physics. VII. Magnetic loop antenna in a field-free plasma. *Physics of Plasmas*, **2009**, 16, 022103	2.1	8
43	Nonlinear electron magnetohydrodynamic physics. VI. Magnetic loop antenna across the ambient field. *Physics of Plasmas*, **2009**, 16, 022102	2.1	3
42	Whistler Spheromaks. *IEEE Transactions on Plasma Science*, **2008**, 36, 1170-1171	1.3	1
41	Nonlinear electron magnetohydrodynamics physics. V. Triggered whistler emissions. *Physics of Plasmas*, **2008**, 15, 062110	2.1	3
40	Nonlinear electron magnetohydrodynamics physics. II. Wave propagation and wave-wave interactions. *Physics of Plasmas*, **2008**, 15, 042308	2.1	9
39	Nonlinear electron magnetohydrodynamics physics. I. Whistler spheromaks, mirrors, and field reversed configurations. *Physics of Plasmas*, **2008**, 15, 042307	2.1	12
38	Nonlinear electron magnetohydrodynamics physics. III. Electron energization. *Physics of Plasmas*, **2008**, 15, 042309	2.1	7
37	Nonlinear electron magnetohydrodynamics physics. IV. Whistler instabilities. *Physics of Plasmas*, **2008**, 15, 062109	2.1	12
36	Whistler instability in an electron-magnetohydrodynamic spheromak. *Physical Review Letters*, **2007**, 99, 265005	7.4	14
35	Whistler modes with wave magnetic fields exceeding the ambient field. *Physical Review Letters*, **2006**, 96, 095004	7.4	18

34	Three-dimensional electron magnetohydrodynamic reconnection. IV. Instabilities, fluctuations, and emissions. *Physics of Plasmas*, **2003**, 10, 2810-2818	2.1	16
33	Three-dimensional electron magnetohydrodynamic reconnection. III. Energy conversion and electron heating. *Physics of Plasmas*, **2003**, 10, 2801-2809	2.1	10
32	Three-dimensional electron magnetohydrodynamic reconnection. II. Tilt and precession of a field-reversed configuration. *Physics of Plasmas*, **2003**, 10, 2794-2800	2.1	7
31	Three-dimensional electron magnetohydrodynamic reconnection. I. Fields, currents, and flows. *Physics of Plasmas*, **2003**, 10, 2780-2793	2.1	15
30	A new laboratory experiment on magnetic reconnection. *Physics of Plasmas*, **2002**, 9, 1925-1930	2.1	18
29	Vortices and Flux Ropes in Electron MHD Plasmas II. *Physica Scripta*, **2000**, T84, 117	2.6	7
28	Vortices and Flux Ropes in Electron MHD Plasmas I. *Physica Scripta*, **2000**, T84, 112	2.6	11
27	Electron magnetohydrodynamic turbulence in a high-beta plasma. III. Conditionally averaged multipoint fluctuation measurements. *Physics of Plasmas*, **2000**, 7, 4466-4476	2.1	10
26	Electron magnetohydrodynamic turbulence in a high-beta plasma. II. Single point fluctuation measurements. *Physics of Plasmas*, **2000**, 7, 4457-4465	2.1	6
25	Laboratory studies of magnetic vortices. III. Collisions of electron magnetohydrodynamic vortices. *Physics of Plasmas*, **2000**, 7, 519-528	2.1	28
24	Electron magnetohydrodynamic turbulence in a high-beta plasma. I. Plasma parameters and instability conditions. *Physics of Plasmas*, **2000**, 7, 4450-4456	2.1	24
23	Laboratory studies of magnetic vortices. II. Helicity reversal during reflection of a magnetic vortex at a conducting boundary. *Physics of Plasmas*, **1999**, 6, 3217-3225	2.1	1
22	Laboratory studies of magnetic vortices. II. Helicity reversal during reflection of a magnetic vortex at a conducting boundary. *Physics of Plasmas*, **1999**, 6, 4458-4466	2.1	8
21	Laboratory studies of magnetic vortices. I. Directional radiation of whistler waves based on helicity injection. *Physics of Plasmas*, **1999**, 6, 4450-4457	2.1	14
20	Laboratory studies of magnetic vortices. I. Directional radiation of whistler waves based on helicity injection. *Physics of Plasmas*, **1999**, 6, 2989-2996	2.1	3
19	Transient current collection and closure for a laboratory tether. *Geophysical Research Letters*, **1998**, 25, 733-736	4.9	8
18	Pulsed currents carried by whistlers. VIII. Current disruptions and instabilities caused by plasma erosion. *Physics of Plasmas*, **1997**, 4, 26-35	2.1	20
17	Pulsed currents carried by whistlers. IX. In situ measurements of currents disrupted by plasma erosion. *Physics of Plasmas*, **1997**, 4, 36-52	2.1	19

16	Helicity and transport in electron MHD heat pulses. *Physical Review Letters*, **1996**, 76, 1469-1472	7.4	4
15	Pulsed currents carried by whistlers. VII. Helicity and transport in heat pulses. *Physics of Plasmas*, **1996**, 3, 2599-2609	2.1	12
14	Pulsed currents carried by whistlers. VI. Nonlinear effects. *Physics of Plasmas*, **1996**, 3, 2589-2598	2.1	22
13	Pulsed currents carried by whistlers. III. Magnetic fields and currents excited by an electrode. *Physics of Plasmas*, **1995**, 2, 1100-1113	2.1	31
12	Pulsed currents carried by whistlers. IV. Electric fields and radiation excited by an electrode. *Physics of Plasmas*, **1995**, 2, 1114-1128	2.1	28
11	Pulsed currents carried by whistlers. V. Detailed new results of magnetic antenna excitation. *Physics of Plasmas*, **1995**, 2, 4083-4093	2.1	42
10	Multidimensional Fourier Analysis of a Whistler Pulse Excited by a Loop Antenna. *Geophysical Monograph Series*, **1994**, 121-124	1.1	
9	Magnetic Dipole Antennas in Moving Plasmas: a Laboratory Simulation. *Geophysical Monograph Series*, **1994**, 129-133	1.1	3
8	Inductive and space charge electric fields in a whistler wave packet. *Physical Review Letters*, **1994**, 72, 1658-1661	7.4	14
7	Three-dimensional currents of electrodynamic tethers obtained from laboratory models. *Geophysical Research Letters*, **1994**, 21, 413-416	4.9	10
6	Pulsed currents carried by whistlers. Part I: Excitation by magnetic antennas. *Physics of Fluids B*, **1993**, 5, 325-338		53
5	Modeling of induced currents from electrodynamic tethers in a laboratory plasma. *Geophysical Research Letters*, **1990**, 17, 1589-1592	4.9	15
4	Transport of current by whistler waves. *Physical Review Letters*, **1989**, 62, 272-275	7.4	27
3	Whistler wings from moving electrodes in a magnetized laboratory plasma. *Geophysical Research Letters*, **1989**, 16, 361-364	4.9	22
2	Observations of odd-half cyclotron harmonic emissions in a shell-Maxwellian laboratory plasma. *Journal of Geophysical Research*, **1983**, 88, 7086		4
1	Directional velocity analyzer for measuring electron distribution functions in plasmas. *Review of Scientific Instruments*, **1983**, 54, 1302-1310	1.7	64