Konstantinos Papadopoulos

List of Publications by Year
in descending order

147 papers	4,310 citations	117625 34 h-index	133252 59 g-index
150 all docs	150 docs citations	150 times ranked	1863 citing authors

#	Article	IF	Citations
1	Single Domain Nanoparticle Transmitters. , 2019, , .		1
2	Ferrite based antennae for launching AlfvÃ©n waves. Review of Scientific Instruments, 2019, 90, 083505.	1.3	2
3	The Effect of Plasma Releases on Equatorial Spread Fâ€”a Simulation Study. Frontiers in Astronomy and Space Sciences, 2019, 6, .	2.8	2
4	Neurocognitive effects of umami: association with eating behavior and food choice. Neuropsychopharmacology, 2018, 43, 2009-2016.	5.4	17
5	Simulations of the Generation of Energetic Electrons and the Formation of Descending Artificial Plasma Layers During HF Heating at Arecibo. Journal of Geophysical Research: Space Physics, 2018, 123, 10,301.	2.4	3
6	Vlasov simulations of electron acceleration by radio frequency heating near the upper hybrid layer. Physics of Plasmas, 2017, 24, 102904.	1.9	9
7	Pitch angle scattering of relativistic electrons near electromagnetic ion cyclotron resonances in diverging magnetic fields. Plasma Physics and Controlled Fusion, 2017, 59, 104003.	2.1	3
8	Generation of shear AlfvÃ©n waves by repetitive electron heating. Journal of Geophysical Research: Space Physics, 2016, 121, 567-577.	2.4	2
9	Ion-acoustic shocks with self-regulated ion reflection and acceleration. Physics of Plasmas, 2016, 23, .	1.9	18
10	Generation of whistler waves by continuous HF heating of the upper ionosphere. Radio Science, 2016, 51, 1188-1198.	1.6	16
11	Simulations of ionospheric turbulence produced by HF heating near the upper hybrid layer. Radio Science, 2016, 51, 704-717.	1.6	11
12	HF wave propagation and induced ionospheric turbulence in the magnetic equatorial region. Journal of Geophysical Research: Space Physics, 2016, 121, 2727-2742.	2.4	13
13	Generation of ELF waves during HF heating of the ionosphere at midlatitudes. Radio Science, 2016, 51, 962-971.	1.6	8
14	Numerical study of anomalous absorption of O mode waves on magnetic fieldâ€aligned striations. Geophysical Research Letters, 2015, 42, 2603-2611.	4.0	10
15	Studies of the ionospheric turbulence excited by the fourth gyroharmonic at HAARP. Journal of Geophysical Research: Space Physics, 2015, 120, 6646-6660.	2.4	12
16	Incidence angle dependence of Langmuir turbulence and artificial ionospheric layers driven by high-power HF-heating. Journal of Plasma Physics, 2015, 81, .	2.1	15
17	Ionspheric modifcations using mobile, high power HF transmitters based on TPM technology. , 2015, , .		1
18	Enhanced loss of magnetic-mirror-trapped fast electrons by a shear AlfvÃ©n wave. Physics of Plasmas, 2014, 21, 055705.	1.9	2

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19	Generation and detection of super small striations by F region HF heating. Journal of Geophysical Research: Space Physics, 2014, 119, 6000-6011.	2.4	21
20	Simulation of the March 9, 1995 Substorm and Initial Comparison to Data. Geophysical Monograph Series, 2013, , 237-245.	0.1	13
21	Artificial ducts caused by HF heating of the ionosphere by HAARP. Journal of Geophysical Research, 2012, 117, .	3.3	36
22	Numerical modeling of artificial ionospheric layers driven by highâ€power HF heating. Journal of Geophysical Research, 2012, 117, .	3.3	32
23	Generation of ELF and ULF electromagnetic waves by modulated heating of the ionospheric F2 region. Journal of Geophysical Research, 2012, 117, .	3.3	18
24	Attenuation of whistler waves through conversion to lower hybrid waves in the lowâ€altitude ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	18
25	EVIDENCE FOR THE OSCILLATING TWO STREAM INSTABILITY AND SPATIAL COLLAPSE OF LANGMUIR WAVES IN A SOLAR TYPE III RADIO BURST. Astrophysical Journal Letters, 2012, 747, L1.	8.3	58
26	Scattering of Magnetic Mirror Trapped Fast Electrons by a Shear AlfvÃ©n Wave. Physical Review Letters, 2012, 108, 105002.	7.8	11
27	HF-driven currents in the polar ionosphere. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	25
28	First demonstration of HF-driven ionospheric currents. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	21
29	First demonstration of HF-driven ionospheric currents. , 2011, , .		0
30	HF-driven currents in the polar ionosphere. , 2011, , .		1
31	Focusing of HF radio-waves by ionospheric ducts. Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 1674-1680.	1.6	9
32	Modeling pitch angle scattering of radiation belt particles by the injection of low frequency waves with F-region HF-driven ionospheric currents. , 2011, , .		0
33	Generation of shear AlfvÃ©n waves by a rotating magnetic field source: Three-dimensional simulations. Physics of Plasmas, 2011, 18, .	1.9	13
34	10.1063/1.3562118.1. , 2011, , .		0
35	Generation of whistler waves by a rotating magnetic field source. Physics of Plasmas, 2010, 17, .	1.9	31
36	Model for artificial ionospheric duct formation due to HF heating. Geophysical Research Letters, 2010, 37, .	4.0	32

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37	Perception of Synthetic and Natural Speech by Adults with Visual Impairments. Journal of Visual Impairment and Blindness, 2009, 103, 403-414.	0.7	4
38	Control of the energetic proton flux in the inner radiation belt by artificial means. Journal of Geophysical Research, 2009, 114, .	3.3	16
39	Penetration of ELF currents and electromagnetic fields into the Earth's equatorial ionosphere. Journal of Geophysical Research, 2009, 114, .	3.3	6
40	Helicon waves in the magnetotail. Journal of Geophysical Research, 2009, 114, .	3.3	0
41	Generation of controlled radiation sources in the atmosphere using a dual femtosecond /nanosecond laser pulse. Journal of Applied Physics, 2008, 103, .	2.5	43
42	Formation of artificial ionospheric ducts. Geophysical Research Letters, 2008, 35, .	4.0	58
43	Numerical study of mode conversion between lower hybrid and whistler waves on shortâ€scale density striations. Journal of Geophysical Research, 2008, 113, .	3.3	29
44	Particle-In-cell simulation of resonant-cavity-enhanced extraordinary transmission through sub-wavelength plasmonic structure. , 2007, , .		0
45	Generation and evolution of intense ion cyclotron turbulence by artificial plasma cloud in the magnetosphere. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	16
46	Enhanced ionospheric ELF/VLF generation efficiency by multiple timescale modulated heating. Geophysical Research Letters, 2007, 34, .	4.0	25
47	A global MHD simulation of an event with a quasi-steady northward IMF component. Annales Geophysicae, 2007, 25, 1345-1358.	1.6	10
48	Reply to comment on â€œThe magnetic response of the ionosphere to pulsed HF heatingâ€•by M. T. Rietveld and P. Stubbe. Geophysical Research Letters, 2006, 33, .	4.0	0
49	An interhemispheric model of artificial ionospheric ducts. Radio Science, 2006, 41, n/a-n/a.	1.6	23
50	Relationship between the ionospheric conductance, field aligned current, and magnetopause geometry: Global MHD simulations. Planetary and Space Science, 2005, 53, 873-879.	1.7	15
51	Global MHD simulations of the strongly driven magnetosphere: Modeling of the transpolar potential saturation. Journal of Geophysical Research, 2005, 110, .	3.3	49
52	The magnetic response of the ionosphere to pulsed HF heating. Geophysical Research Letters, 2005, 32, .	4.0	31
53	Effect of anomalous electron heating on the transpolar potential in the LFM global MHD model. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	24
54	Global and multi-scale features of solar wind-magnetosphere coupling: From modeling to forecasting. Geophysical Research Letters, 2004, 31, .	4.0	41

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55	On the efficiency of ELF/VLF generation using HF heating of the auroral electrojet. Plasma Physics Reports, 2003, 29, 561-565.	0.9	49
56	Phase transition-like behavior of magnetospheric substorms: Global MHD simulation results. Journal of Geophysical Research, 2003, 108, .	3.3	18
57	Effects of the solar wind electric field and ionospheric conductance on the cross polar cap potential: Results of global MHD modeling. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	54
58	Combining global and multi-scale features in a description of the solar wind-magnetosphere coupling. Annales Geophysicae, 2003, 21, 1913-1929.	1.6	21
59	Global and multiscale aspects of magnetospheric dynamics in local-linear filters. Journal of Geophysical Research, 2002, 107, SMP 15-1.	3.3	20
60	Comparing ground magnetic field perturbations from global MHD simulations with magnetometer data for the 10 January 1997 magnetic storm event. Journal of Geophysical Research, 2002, 107, SMP 11-1-SMP 11-10.	3.3	14
61	Demonstration of Sub-Millimeter Radiation Generation from Static Field by a Superluminous Ionization front in Semiconductor Capacitor Array. , 2002, , 27-32.		1
62	Modeling ionospheric absorption modified by anomalous heating during substorms. Geophysical Research Letters, 2001, 28, 487-490.	4.0	2
63	Three-dimensional MHD simulations of the steady state magnetosphere with northward interplanetary magnetic field. Journal of Geophysical Research, 2001, 106, 275-287.	3.3	19
64	Three-dimensional MHD simulations of the Earth's magnetosphere on Feb 9-10 1995 for northward interplanetary magnetic field and comparison of the lobe field with Geotail observations. Geophysical Research Letters, 2001, 28, 3835-3838.	4.0	1
65	Substorms as nonequilibrium transitions of the magnetosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2001, 63, 1399-1406.	1.6	30
66	Gamma ray flashes by plasma effects in the middle atmosphere. Physics of Plasmas, 2001, 8, 4954-4959.	1.9	6
67	Conversion of Electrostatic to Electromagnetic Waves by Superluminous Ionization Fronts. Physical Review Letters, 2001, 86, 2806-2809.	7.8	55
68	Modeling substorm dynamics of the magnetosphere: From self-organization and self-organized criticality to nonequilibrium phase transitions. Physical Review E, 2001, 65, 016116.	2.1	76
69	Miniature photoconducting capacitor array as a source for tunable THz radiation. Review of Scientific Instruments, 2000, 71, 2380-2385.	1.3	5
70	Diffraction model of ionospheric irregularity-induced heater-wave pattern detected on the WIND satellite. Geophysical Research Letters, 2000, 27, 317-320.	4.0	4
71	Phase transition-like behavior of the magnetosphere during substorms. Journal of Geophysical Research, 2000, 105, 12955-12974.	3.3	90
72	Generation of tunable far-infrared radiation by the interaction of a superluminous ionizing front with an electrically biased photoconductor. Applied Physics Letters, 1999, 74, 1669-1671.	3.3	40

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73	ELF emission generated by the HAARP HF-heater using varying frequency and polarization. Radiophysics and Quantum Electronics, 1999, 42, 639-646.	0.5	14
74	Spatio-temporal development of the filaments due to the thermal self-focusing instability near the critical surface in ionospheric plasmas. Radiophysics and Quantum Electronics, 1999, 42, 589-600.	0.5	2
75	The physics of substorms as revealed by the ISTP. Physics and Chemistry of the Earth, Part C: Solar, Terrestrial and Planetary Science, 1999, 24, 189-202.	0.2	13
76	MHD simulations of the response of high-latitude potential patterns and polar cap Boundaries to sudden southward turnings of the interplanetary magnetic field. Geophysical Research Letters, 1999, 26, 967-970.	4.0	38
77	Spatiotemporal activity of magnetic storms. Journal of Geophysical Research, 1999, 104, 12239-12250.	3.3	29
78	Evidence for Langmuir envelope solitons in solar type III burst source regions. Journal of Geophysical Research, 1999, 104, 28279-28293.	3.3	30
79	Generation of tunable bandwidth-controllable terahertz radiation. , 1999, 3795, 477.		0
80	Spectrum of red sprites. Journal of Atmospheric and Solar-Terrestrial Physics, 1998, 60, 907-915.	1.6	30
81	The thermal self-focusing instability near the critical surface in the high-latitude ionosphere. Journal of Geophysical Research, 1998, 103, 2231-2237.	3.3	53
82	Simulation of the March 9, 1995, substorm: Auroral brightening and the onset of lobe reconnection. Geophysical Research Letters, 1998, 25, 3039-3042.	4.0	67
83	An overview of the impact of the January 10-11 1997 magnetic cloud on the magnetosphere via global MHD simulation. Geophysical Research Letters, 1998, 25, 2537-2540.	4.0	63
84	Model of red sprites due to intracloud fractal lightning discharges. Radio Science, 1998, 33, 1655-1668.	1.6	22
85	Global MHD Simulation of Actual Magnetospheric Substorm Events. Astrophysics and Space Science Library, 1998, , 645-650.	2.7	1
86	Effects of Northward Turnings on the Initiation of Substorms in Global MHD Simulations. Astrophysics and Space Science Library, 1998, , 287-290.	2.7	1
87	Coupling between Local and Global Activity during the Substorm Expansion Phase: Results from MHD Simulations and Comparison to Observations. Astrophysics and Space Science Library, 1998, , 169-174.	2.7	1
88	Model of red sprite optical spectra. Geophysical Research Letters, 1997, 24, 833-836.	4.0	12
89	Comment on â€œHigh altitude discharges and gamma-ray flashes: A manifestation of runaway breakdownâ€•by Yuri Taranenko and Robert Roussel-DuprÃ©. Geophysical Research Letters, 1997, 24, 2643-2644.	4.0	4
90	Red sprites: Lightning as a fractal antenna. Geophysical Research Letters, 1997, 24, 3169-3172.	4.0	62

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91	The self-focusing instability in the presence of density irregularities in the ionosphere. Journal of Geophysical Research, 1996, 101, 2453-2460.	3.3	19
92	Runaway electrons in the atmosphere in the presence of a magnetic field. Radio Science, 1996, 31, 1541-1554.	1.6	34
93	Comment on â€œCan gamma radiation be produced in the electrical environment above thunderstormsâ€• Geophysical Research Letters, 1996, 23, 2283-2284.	4.0	7
94	Direct Cerenkov excitation of waveguide modes by a mobile ionospheric heater. Radio Science, 1996, 31, 859-867.	1.6	8
95	Breakdown of magnetic insulation in semiconductor plasmas. IEEE Transactions on Plasma Science, 1996, 24, 1095-1100.	1.3	0
96	Prediction of magnetic storms by nonlinear models. Geophysical Research Letters, 1996, 23, 2899-2902.	4.0	121
97	Switch opening time reduction in high power photoconducting semiconductor switches. Optics Communications, 1996, 124, 443-447.	2.1	9
98	Electronmagnetohydrodynamic response of a plasma to an external current pulse. Physics of Plasmas, 1996, 3, 1484-1494.	1.9	27
99	Collisionless Breakdown of Magnetic Insulation in Plasmas. Physical Review Letters, 1996, 76, 3120-3123.	7.8	1
100	Global and local geospace modeling in ISTP. Space Science Reviews, 1995, 71, 671-690.	8.1	3
101	On the physics of high altitude lightning. Geophysical Research Letters, 1995, 22, 85-88.	4.0	49
102	Alpha particle heating at comet-solar wind interaction regions. Journal of Geophysical Research, 1995, 100, 7891.	3.3	7
103	Remote photometry of the atmosphere using microwave breakdown. Journal of Geophysical Research, 1994, 99, 10387.	3.3	6
104	Hybrid simulations of whistler waves generation and current closure by a pulsed tether in the ionosphere. Geophysical Research Letters, 1994, 21, 1015-1018.	4.0	11
105	Cerenkov excitation of whistler/helicon waves by ionospheric HF heating. Geophysical Research Letters, 1994, 21, 1767-1770.	4.0	10
106	Modulational instability of lower hybrid waves at the magnetopause. Journal of Geophysical Research, 1994, 99, 23735.	3.3	15
107	Is the magnetosphere a lens for MHD waves?. Geophysical Research Letters, 1993, 20, 2809-2812.	4.0	20
108	Lower hybrid turbulence at cometary bow wave and acceleration of cometary protons. Journal of Geophysical Research, 1993, 98, 1325-1331.	3.3	21

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109	Reconstruction of lowâ€dimensional magnetospheric dynamics by singular spectrum analysis. Geophysical Research Letters, 1993, 20, 335-338.	4.0	104
110	Triggering the HF breakdown of the atmosphere by barium release. Geophysical Research Letters, 1993, 20, 471-474.	4.0	1
111	An empirical model relating the auroral geomagnetic activity to the interplanetary magnetic field. Geophysical Research Letters, 1993, 20, 1731-1734.	4.0	26
112	Ionization rates for atmospheric and ionospheric breakdown. Journal of Geophysical Research, 1993, 98, 17593-17596.	3.3	46
113	The flight of the tethered satellite system. Eos, 1992, 73, 321-321.	0.1	5
114	the CIV processes in the CRIT experiments. Geophysical Research Letters, 1992, 19, 605-608.	4.0	16
115	Lyapunov exponent of magnetospheric activity from AL time series. Geophysical Research Letters, 1991, 18, 1643-1646.	4.0	34
116	RF ionization of the lower ionosphere. Radio Science, 1991, 26, 1345-1360.	1.6	31
117	Ballistic crossâ€field ion beam propagation in a magnetoplasma. Physics of Fluids B, 1991, 3, 1075-1090.	1.7	5
118	On the efficiency of ionospheric ELF generation. Radio Science, 1990, 25, 1311-1320.	1.6	82
119	A current disruption mechanism in the neutral sheet: A possible trigger for substorm expansions. Geophysical Research Letters, 1990, 17, 745-748.	4.0	147
120	Lowâ€dimensional chaos in magnetospheric activity from AE time series. Geophysical Research Letters, 1990, 17, 1841-1844.	4.0	159
121	Resonance absorption of AlfvÃ©n waves at cometâ€solar wind interaction regions. Geophysical Research Letters, 1988, 15, 740-743.	4.0	21
122	Lower hybrid waves upstream of comets and their implications for the comet Halley â€œbow waveâ€• Journal of Geophysical Research, 1988, 93, 9577-9583.	3.3	26
123	Electromagnetic radiation from strong Langmuir turbulence. Physics of Fluids, 1988, 31, 2185.	1.4	48
124	Long-Range Cross-Field Ion-Beam Propagation in the Diamagnetic Regime. Physical Review Letters, 1988, 61, 94-97.	7.8	11
125	Stochastic Electron Acceleration in Obliquely Propagating Electromagnetic Waves. Physical Review Letters, 1987, 58, 2071-2074.	7.8	47
126	ELF generation in the lower ionosphere via collisional parametric decay. Journal of Geophysical Research, 1986, 91, 10097-10107.	3.3	8

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127	Active Nonlinear Ultralow-Frequency Generation in the Ionosphere. Physical Review Letters, 1986, 57, 641-644.	7.8	10
128	Ion-acoustic instabilities driven by an ion velocity ring. Journal of Plasma Physics, 1985, 34, 467-479.	2.1	11
129	Lower-hybrid instabilities driven by an ion velocity ring. Journal of Plasma Physics, 1985, 34, 445-465.	2.1	44
130	Generation of ELF/ULF waves in the ionosphere by dynamo processes. Geophysical Research Letters, 1985, 12, 279-282.	4.0	30
131	Nonlinear Waves. Eos, 1984, 65, 735.	0.1	0
132	Efficient Parametric Decay in Dissipative Media. Physical Review Letters, 1983, 51, 463-466.	7.8	28
133	The structure of perpendicular bow shocks. Journal of Geophysical Research, 1982, 87, 5081-5094.	3.3	439
134	Excitation of the earthâ€ionosphere waveguide by an ELF source in the ionosphere. Radio Science, 1982, 17, 1321-1326.	1.6	23
135	One-dimensional direct current resistivity due to strong turbulence. Physics of Fluids, 1981, 24, 832.	1.4	28
136	Strong Langmuir Turbulence in One and Two Dimensions. Physical Review Letters, 1981, 46, 346-349.	7.8	27
137	Oscillating two-stream and parametric decay instabilities in a weakly magnetized plasma. Physics of Fluids, 1980, 23, 139.	1.4	33
138	Collective radio-emission from plasmas. Space Science Reviews, 1979, 24, 511.	8.1	19
139	Nonlinear stability of solar type III radio bursts. I - Theory. Astrophysical Journal, 1979, 234, 348.	4.5	94
140	Nonlinear stability of solar type III radio bursts. II - Application to observations near 1 AU. Astrophysical Journal, 1979, 234, 683.	4.5	65
141	Lowerâ€hybridâ€drift wave turbulence in the distant magnetotail. Journal of Geophysical Research, 1978, 83, 5217-5226.	3.3	198
142	Interpretation of soliton formation and parametric instabilities. Physics of Fluids, 1975, 18, 1397.	1.4	23
143	Parallel propagation effects on the type 1 electrojet instability. Journal of Geophysical Research, 1975, 80, 141-148.	3.3	73
144	Nonthermal features of the auroral plasma due to precipitating electrons. Journal of Geophysical Research, 1974, 79, 674-677.	3.3	87

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145	EMHD response of a maguetoplasma to an external current source. , 0, , .		0
146	Investigation of 3D Energetic Particle Transport Inside Quiet-Time Magnetosphere using Particle Tracing in Global MHD Model. Geophysical Monograph Series, 0, , 307-318.	0.1	3
147	Microinstabilities and Anomalous Transport. Geophysical Monograph Series, 0, , 59-90.	0.1	64