David Walker

List of Publications by Year
in descending order

69 papers	3,842 citations	279487 23 h-index	118652 62 g-index
70 all docs	70 docs citations	70 times ranked	1488 citing authors

#	Article	IF	Citations
1	DARN/SuperDARN. Space Science Reviews, 1995, 71, 761-796.	3.7	990
2	A decade of the Super Dual Auroral Radar Network (SuperDARN): scientific achievements, new techniques and future directions. Surveys in Geophysics, 2007, 28, 33-109.	2.1	554
3	Field line resonances associated with MHD waveguides in the magnetosphere. Geophysical Research Letters, 1992, 19, 441-444.	1.5	298
4	Stare auroral radar observations of Pc 5 geomagnetic pulsations. Journal of Geophysical Research, 1979, 84, 3373-3388.	3.3	286
5	The Kelvin-Helmholtz instability in the low-latitude boundary layer. Planetary and Space Science, 1981, 29, 1119-1133.	0.9	170
6	Spatial and temporal behavior of ULF pulsations observed by the Goose Bay HF Radar. Journal of Geophysical Research, 1992, 97, 12187-12202.	3.3	165
7	STARE and GEOS 2 observations of a storm time Pc 5 ULF pulsation. Journal of Geophysical Research, 1982, 87, 9135-9146.	3.3	128
8	Energetics of long period resonant hydromagnetic waves. Geophysical Research Letters, 1980, 7, 745-748.	1.5	126
9	The theory of whistler propagation. Reviews of Geophysics, 1976, 14, 629-638.	9.0	79
10	Modelling of Pc5 pulsation structure in the magnetosphere. Planetary and Space Science, 1980, 28, 213-223.	0.9	78
11	HF radar observations of Pc5 ULF pulsations driven by the solar wind. Geophysical Research Letters, 2002, 29, 8-1-8-4.	1.5	69
12	Theory of magnetospheric standing hydromagnetic waves with large azimuthal wave number: 1. Coupled magnetosonic and AlfvÃ©n waves. Journal of Geophysical Research, 1987, 92, 10039-10045.	3.3	58
13	The relationship between ULF geomagnetic pulsations and ionospheric Doppler oscillations: Derivation of a model. Journal of Geophysical Research, 1988, 93, 14656-14664.	3.3	52
14	A case study of plasma processes in the dayside cleft. Journal of Geophysical Research, 1986, 91, 3130-3144.	3.3	49
15	Plasma Waves in the Magnetosphere. , 1993, , .		43
16	Accurate approximate formulae for toroidal standing hydromagnetic oscillations in a dipolar geomagnetic field. Planetary and Space Science, 1984, 32, 1119-1124.	0.9	39
17	Statistics of occurrence of hydromagnetic oscillations in the Pc5 range observed by the STARE auroral radar. Planetary and Space Science, 1981, 29, 293-305.	0.9	38
18	Resonance region of a PC5 micropulsation examined by a dual auroral radar system. Nature, 1978, 273, 646-649.	13.7	35

#	Article	IF	Citations
19	Geos 2 plasma drift velocity measurements associated with a storm time Pc5 pulsation. Geophysical Research Letters, 1983, 10, 757-760.	1.5	30
20	Excitation of magnetohydrodynamic cavities in the magnetosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 1998, 60, 1279-1293.	0.6	29
21	Excitation of field line resonances by MHD waves originating in the solar wind. Journal of Geophysical Research, 2002, 107, SMP 38-1-SMP 38-14.	3.3	28
22	Use of hydromagnetic waves to map geomagnetic field lines. Journal of Geophysical Research, 1981, 86, 11251-11257.	3.3	25
23	Properties of electromagnetic waves in ferrites. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1985, 399, 217-241.	1.5	24
24	Formation of whistler ducts. Planetary and Space Science, 1978, 26, 375-379.	0.9	23
25	Theory of magnetospheric standing hydromagnetic waves with large azimuthal wave number: 2. Eigenmodes of the magnetosonic and AlfvÃ©n oscillations. Journal of Geophysical Research, 1987, 92, 10046-10052.	3.3	22
26	Global modeling of Pi 2 pulsations. Journal of Geophysical Research, 1997, 102, 14343-14354.	3.3	22
27	Poloidal ULF oscillations in the dayside magnetosphere: a Cluster study. Annales Geophysicae, 2005, 23, 2679-2686.	0.6	21
28	Excitation of field line resonances by sources outside the magnetosphere. Annales Geophysicae, 2005, 23, 3375-3388.	0.6	21
29	Strong flow bursts in the nightside ionosphere during extremely quiet solar wind conditions. Geophysical Research Letters, 1998, 25, 881-884.	1.5	20
30	Reflection and transmission at the boundary between two counterstreaming MHD plasmas â€“ active boundaries or negative-energy waves?. Journal of Plasma Physics, 2000, 63, 203-219.	0.7	20
31	The phase velocity, ray velocity, and group velocity surfaces for a magneto-ionic medium. Journal of Plasma Physics, 1977, 17, 467-486.	0.7	19
32	A statistical correlation of Pc5 pulsations and solar wind pressure oscillations. Advances in Space Research, 2006, 38, 1763-1771.	1.2	19
33	The theory of the guiding of radio waves in the upper ionosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 1966, 28, 747-767.	0.9	18
34	Determination of the fluctuation level of ionospheric irregularities from radar backscatter measurements. Radio Science, 1987, 22, 689-705.	0.8	18
35	Simultaneous observations of omega band related phenomena in both hemispheres. Journal of Atmospheric and Solar-Terrestrial Physics, 1991, 53, 309-317.	0.9	17
36	Theory of magnetospheric standing hydromagnetic waves with large azimuthal wave number: 4. Standing waves in the ring current region. Journal of Geophysical Research, 1996, 101, 27133-27147.	3.3	17

#	Article	IF	Citations
37	Coherence between radar observations of magnetospheric field line resonances and discrete oscillations in the solar wind. Annales Geophysicae, 2010, 28, 47-59.	0.6	16
38	An unusual geometry of the ionospheric signature of the cusp: implications for magnetopause merging sites. Annales Geophysicae, 2002, 20, 29-40.	0.6	16
39	Coupling between waveguide modes and field line resonances. Journal of Atmospheric and Solar-Terrestrial Physics, 2000, 62, 799-813.	0.6	15
40	HF radar observations of pulsations near the magnetospheric cusp. Journal of Geophysical Research, 1986, 91, 8919-8928.	3.3	13
41	The propagation of very low-frequency radio waves in ducts in the magnetosphere. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1971, 321, 69-93.	1.5	12
42	Stare observations of an eastward propagating Pc5 pulsation with large azimuthal wavenumber. Geophysical Research Letters, 1984, 11, 259-262.	1.5	10
43	A magnetospheric substorm observed at Sanae, Antarctica. Journal of Geophysical Research, 1987, 92, 2461-2475.	3.3	10
44	Excitation of the Earthâ€“ionosphere waveguide by downgoing whistlers - II. Propagation in the magnetic meridian. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1974, 340, 375-393.	1.5	9
45	Radar observations of magnetospheric activity during extremely quiet solar wind conditions. Journal of Geophysical Research, 2002, 107, SIA 1-1.	3.3	9
46	The propagation of very low-frequency waves in ducts in the magnetosphere. II. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1972, 329, 219-231.	1.5	8
47	A Summary of the NATO ASI on Polar Cap Boundary Phenomena. , 1998, , 415-432.		8
48	The Southern Hemisphere Auroral Radar Experiment (SHARE). Antarctic Science, 1994, 6, 123-124.	0.5	7
49	Characterization of ultra low frequency (ULF) pulsations and the investigation of their possible source. Annales Geophysicae, 2009, 27, 3287-3296.	0.6	7
50	The ray velocity surface and the CMA diagram. Journal of Plasma Physics, 1977, 18, 339-346.	0.7	6
51	Pulsation Structure in the Ionosphere Derived from Auroral Radar Data. Journal of Geomagnetism and Geoelectricity, 1980, 32, SII111-SII127.	0.8	6
52	The â€œvalley effectâ€•in the interpretation of ionospheric eclipse records. Journal of Atmospheric and Solar-Terrestrial Physics, 1960, 18, 61-64.	0.9	4
53	Bearing error in VLF direction finding. Planetary and Space Science, 1975, 23, 1457-1458.	0.9	4
54	Theory of magnetospheric standing hydromagnetic waves with large azimuthal wave number: 3. Particle resonance and instability. Journal of Geophysical Research, 1994, 99, 11105.	3.3	4

#	Article	IF	Citations
55	Mapping of steady-state electric fields and convective drifts in geomagnetic fields â€“ Part 1: Elementary models. Annales Geophysicae, 2016, 34, 55-65.	0.6	4
56	Pulsation Structure in the Ionosphere Derived from Auroral Radar Data. , 1981, , 111-127.		4
57	Excitation of the earth-ionosphere waveguide by downgoing whistlersâ€”III. Wave normal not in the magnetic meridian.. Journal of Atmospheric and Solar-Terrestrial Physics, 1975, 37, 1599-1600.	0.9	3
58	Radar studies of magnetosphere dynamics. Astrophysics and Space Science, 1995, 230, 415-430.	0.5	3
59	Identification of the propagation mode of a solar wind wave associated with Pc5 pulsations in the magnetosphere. Annales Geophysicae, 2014, 32, 1217-1221.	0.6	3
60	The Quasi-Longitudinal Approximation to the Appleton-Hartree Equation. Nature, 1961, 189, 742-742.	13.7	2
61	Earth-flattening approximations in the theory of radio wave propagation near the surface of the Earth. Journal of Atmospheric and Solar-Terrestrial Physics, 1973, 35, 1323-1330.	0.9	2
62	Excitation of the Earthâ€“ionosphere waveguide by downgoing whistlers - I. Isotropic model. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1974, 340, 367-374.	1.5	2
63	Large-scale coordinated observations of Pc5 pulsation events. Annales Geophysicae, 2016, 34, 857-870.	0.6	2
64	Ray tracing in the ionosphere at VLFâ€”II. Journal of Atmospheric and Solar-Terrestrial Physics, 1968, 30, 411-421.	0.9	1
65	Mapping of steady-state electric fields and convective drifts in geomagnetic fields â€“ Part 2: The IGRF. Annales Geophysicae, 2016, 34, 67-73.	0.6	1
66	Energy exchange and wave action conservation for magnetohydrodynamic (MHD) waves in a general, slowly varying medium. Annales Geophysicae, 2014, 32, 1495-1510.	0.6	1
67	Ray tracing in the ionosphere at VLFâ€”I. Journal of Atmospheric and Solar-Terrestrial Physics, 1968, 30, 403-409.	0.9	0
68	PROFESSOR JOHN GLEDHILL, FRSSAf. Transactions of the Royal Society of South Africa, 1992, 48, 190-191.	0.8	0
69	Applications of generalized MHD ray tracing equations. , 2011, , .		0