David J Southwood

List of Publications by Year
in descending order

88	7,987	66315	53190
papers	citations	42 h-index	85 g-index

94	94	94	2201
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	How a Realistic Magnetosphere Alters the Polarizations of Surface, Fast Magnetosonic, and AlfvÃ©n Waves. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	10
2	Discovery of AlfvÃ©n Waves Planetward of Saturn's Rings. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028473.	0.8	4
3	Magnetopause ripples going against the flow form azimuthally stationary surface waves. Nature Communications, 2021, 12, 5697.	5.8	17
4	Evaluating the Ionospheric Mass Source for Jupiter's Magnetosphere: An Ionospheric Outflow Model for the Auroral Regions. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027727.	0.8	2
5	An Improbable Collaboration. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028407.	0.8	1
6	Saturn's Auroral Fieldâ€Aligned Currents: Observations From the Northern Hemisphere Dawn Sector During Cassini's Proximal Orbits. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027683.	0.8	3
7	Currents Associated With Saturn's Intraâ€D Ring Azimuthal Field Perturbations. Journal of Geophysical Research: Space Physics, 2019, 124, 5675-5691.	0.8	4
8	Saturn's Planetary Period Oscillations During the Closest Approach of Cassini's Ringâ€Grazing Orbits. Geophysical Research Letters, 2018, 45, 4692-4700.	1.5	9
9	Fieldâ€Aligned Currents in Saturn's Magnetosphere: Observations From the Fâ€Ring Orbits. Journal of Geophysical Research: Space Physics, 2018, 123, 3806-3821.	0.8	20
10	Saturnâ€™s magnetic field revealed by the Cassini Grand Finale. Science, 2018, 362, .	6.0	108
11	Discovery of Atmosphericâ€Windâ€Driven Electric Currents in Saturn's Magnetosphere in the Gap Between Saturn and its Rings. Geophysical Research Letters, 2018, 45, 10,068.	1.5	18
12	Stagnation of Saturn's auroral emission at noon. Journal of Geophysical Research: Space Physics, 2017, 122, 6078-6087.	0.8	7
13	Norway's most celebrated scientist. Astronomy and Geophysics, 2017, 58, 5.28-5.31.	0.1	1
14	Highâ€latitude circulation in giant planet magnetospheres. Journal of Geophysical Research: Space Physics, 2016, 121, 5394-5403.	0.8	13
15	Saturn's quasiperiodic magnetohydrodynamic waves. Geophysical Research Letters, 2016, 43, 11,102.	1.5	16
16	Reply to the comment by Cowley et al. on â€œMagnetic phase structure of Saturn's 10.7â€‰h oscillationsâ€• Journal of Geophysical Research: Space Physics, 2015, 120, 5691-5693.	0.8	0
17	Magnetic phase structure of Saturn's 10.7â€‰h oscillations. Journal of Geophysical Research: Space Physics, 2015, 120, 2631-2648.	0.8	6
18	From the Carrington Storm to the Dungey Magnetosphere. Thirty Years of Astronomical Discovery With UKIRT, 2015, , 253-271.	0.3	4

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19	Saturn's dynamic magnetotail: A comprehensive magnetic field and plasma survey of plasmoids and traveling compression regions and their role in global magnetospheric dynamics. Journal of Geophysical Research: Space Physics, 2014, 119, 5465-5494.	0.8	69
20	The origin of Saturn's magnetic periodicities: Northern and southern current systems. Journal of Geophysical Research: Space Physics, 2014, 119, 1563-1571.	0.8	55
21	Theory and Observation of Magnetosheath Waves. Geophysical Monograph Series, 2013, , 147-158.	0.1	12
22	The Formation of Slow Mode Fronts in the Magnetosheath. Geophysical Monograph Series, 2013, , 109-114.	0.1	8
23	When international partnerships go wrong. Nature, 2012, 488, 451-453.	13.7	1
24	Planetary period oscillations in Saturn's magnetosphere: Evolution of magnetic oscillation properties from southern summer to postâ€equinox. Journal of Geophysical Research, 2012, 117, .	3.3	88
25	Direct evidence of differences in magnetic rotation rate between Saturn's northern and southern polar regions. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	41
26	The source of Saturn's periodic radio emission. Journal of Geophysical Research, 2009, 114, .	3.3	43
27	Warping of Saturn's magnetospheric and magnetotail current sheets. Journal of Geophysical Research, 2008, 113, .	3.3	148
28	Origin of Saturn's aurora: Simultaneous observations by Cassini and the Hubble Space Telescope. Journal of Geophysical Research, 2008, 113, .	3.3	127
29	The Variable Rotation Period of the Inner Region of Saturn's Plasma Disk. Science, 2007, 316, 442-445.	6.0	223
30	Saturnian magnetospheric dynamics: Elucidation of a camshaft model. Journal of Geophysical Research, 2007, 112, .	3.3	121
31	Cassini Magnetometer Observations During Saturn Orbit Insertion. Science, 2005, 307, 1266-1270.	6.0	211
32	Dynamical consequences of two modes of centrifugal instability in Jupiter's outer magnetosphere. Journal of Geophysical Research, 2005, 110, .	3.3	140
33	The Cassini Magnetic Field Investigation. Space Science Reviews, 2004, 114, 331-383.	3.7	434
34	First evidence of IMF control of Jovian magnetospheric boundary locations: Cassini and Galileo magnetic field measurements compared. Planetary and Space Science, 2003, 51, 891-898.	0.9	21
35	Reanalysis of Saturn's magnetospheric field data view of spin-periodic perturbations. Journal of Geophysical Research, 2003, 108, .	3.3	56
36	How can Saturn impose its rotation period in a noncorotating magnetosphere?. Journal of Geophysical Research, 2003, 108, .	3.3	73

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37	Magnetometer measurements from the Cassini Earth swing-by. Journal of Geophysical Research, 2001, 106, 30109-30128.	3.3	17
38	A new perspective concerning the influence of the solar wind on the Jovian magnetosphere. Journal of Geophysical Research, 2001, 106, 6123-6130.	3.3	148
39	Relationships between phase structure and energy flux in magnetohydrodynamic waves in the magnetosphere. Journal of Geophysical Research, 2000, 105, 27701-27706.	3.3	6
40	Frequency doubling in ultralow frequency wave signals. Journal of Geophysical Research, 1997, 102, 27151-27158.	3.3	13
41	Absence of an internal magnetic field at Callisto. Nature, 1997, 387, 262-264.	13.7	51
42	Troitskaya honored for crucial role in ULF wave research. Eos, 1996, 77, 417.	0.1	0
43	Mirror instability II: The mechanism of nonlinear saturation. Journal of Geophysical Research, 1996, 101, 17365-17371.	3.3	131
44	Rapid energy dissipation and variability of the loâ€“Jupiter electrodynamic circuit. Nature, 1996, 379, 323-325.	13.7	114
45	Discovery of Ganymede's magnetic field by the Galileo spacecraft. Nature, 1996, 384, 537-541.	13.7	348
46	Solar wind interaction with small bodies: 1. Whistler wing signatures near Galileo's closest approach to Gaspra and Ida. Advances in Space Research, 1995, 16, 47-57.	1.2	14
47	Solar wind interaction with small bodies: 2. What can Galileo's detection of magnetic rotations tell us about Gaspra and Ida. Advances in Space Research, 1995, 16, 59-68.	1.2	23
48	Galileo flybys of earth: The nature of the distant shock. Advances in Space Research, 1995, 16, 197-204.	1.2	3
49	Magnetosheath flow near the subsolar magnetopause: Zwan-Wolf and Southwood-Kivelson theories reconciled. Geophysical Research Letters, 1995, 22, 3275-3278.	1.5	48
50	Null fields in the outer Jovian magnetosphere: Ulysses observations. Geophysical Research Letters, 1994, 21, 405-408.	1.5	21
51	Correlations between magnetic field and electron density observations during the inbound Ulysses Jupiter flyby. Planetary and Space Science, 1993, 41, 919-930.	0.9	16
52	Vortex motion in the ionosphere and nonlinear transport. Journal of Geophysical Research, 1993, 98, 11459-11466.	3.3	10
53	On the form of the flow in the magnetosheath. Journal of Geophysical Research, 1992, 97, 2873-2879.	3.3	78
54	Magnetic Field Studies of the Solar Wind Interaction with Venus from the Galileo Flyby. Science, 1991, 253, 1518-1522.	6.0	20

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55	MHD Wave Propagation in the Magnetosheath: Recent Results.. Journal of Geomagnetism and Geoelectricity, 1991, 43, 631-644.	0.8	1
56	Ionospheric Signatures of Localized Magnetospheric Perturbations. Journal of Geomagnetism and Geoelectricity, 1991, 43, 129-140.	0.8	2
57	Magnetopause pressure pulses as a source of localized field-aligned currents in the magnetosphere. Geophysical Monograph Series, 1990, , 619-625.	0.1	3
58	Phase delays in transverse disturbances in the Earth's magnetosheath. Geophysical Research Letters, 1990, 17, 2249-2252.	1.5	8
59	Magnetospheric interchange motions. Journal of Geophysical Research, 1989, 94, 299-308.	3.3	95
60	Hydromagnetic waves and the ionosphere. Geophysical Research Letters, 1988, 15, 1271-1274.	1.5	105
61	Magnetospheric interchange instability. Journal of Geophysical Research, 1987, 92, 109-116.	3.3	120
62	Coupling of global magnetospheric MHD eigenmodes to field line resonances. Journal of Geophysical Research, 1986, 91, 4345-4351.	3.3	373
63	The effect of parallel inhomogeneity on magnetospheric hydromagnetic wave coupling. Journal of Geophysical Research, 1986, 91, 6871-6876.	3.3	93
64	Astrophysics: Plasma motion near comet cores. Nature, 1985, 317, 12-12.	13.7	0
65	Resonant ULF waves: A new interpretation. Geophysical Research Letters, 1985, 12, 49-52.	1.5	331
66	Charged particle behavior in lowâ€frequency geomagnetic pulsations: 4. Compressional waves. Journal of Geophysical Research, 1985, 90, 1486-1498.	3.3	54
67	Magnetosphere: First success for a space mission and a comet for Christmas. Nature, 1984, 312, 594-594.	13.7	6
68	Relations between polarization and the structure of ULF waves in the magnetosphere. Journal of Geophysical Research, 1984, 89, 5523-5529.	3.3	12
69	Charged particle behavior in lowâ€frequency geomagnetic pulsations: 3. Spin phase dependence. Journal of Geophysical Research, 1983, 88, 174-182.	3.3	40
70	Charged particle behavior in lowâ€frequency geomagnetic pulsations, 2. Graphical approach. Journal of Geophysical Research, 1982, 87, 1707-1710.	3.3	155
71	Alfven wave resonances in a realistic magnetospheric magnetic field geometry. Journal of Geophysical Research, 1981, 86, 4589-4596.	3.3	248
72	Charged particle behavior in lowâ€frequency geomagnetic pulsations 1. Transverse waves. Journal of Geophysical Research, 1981, 86, 5643-5655.	3.3	178

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73	Io and its plasma environment. Journal of Geophysical Research, 1980, 85, 5959-5968.	3.3	119
74	Magnetospheres of the Galilean Satellites. Science, 1979, 205, 491-493.	6.0	51
75	Evolution of ion cyclotron instability in the plasma convection system of the magnetosphere. Journal of Geophysical Research, 1979, 84, 6397-6406.	3.3	27
76	The screening of micropulsation signals by the atmosphere and ionosphere. Journal of Geophysical Research, 1976, 81, 3234-3240.	3.3	444
77	A general approach to low-frequency instability in the ring current plasma. Journal of Geophysical Research, 1976, 81, 3340-3348.	3.3	222
78	Local time variations of particle flux produced by an electrostatic field in the magnetosphere. Journal of Geophysical Research, 1975, 80, 56-65.	3.3	54
79	An approximate analytic description of plasma bulk parameters, and pitch angle anisotropy under adiabatic flow, in a dipolar magnetospheric field. Journal of Geophysical Research, 1975, 80, 2069-2073.	3.3	59
80	Note on the electric splitting of drift shells. Journal of Geophysical Research, 1975, 80, 3525-3527.	3.3	11
81	Approximations for the study of drift boundaries in the magnetosphere. Journal of Geophysical Research, 1975, 80, 3528-3534.	3.3	70
82	Effect of atmosphere and ionosphere on magnetospheric micropulsation signals. Nature, 1974, 248, 493-495.	13.7	33
83	Some features of field line resonances in the magnetosphere. Planetary and Space Science, 1974, 22, 483-491.	0.9	1,099
84	Storm-associated Pc 5 micropulsation events observed at the synchronous equatorial orbit. Journal of Geophysical Research, 1972, 77, 143-158.	3.3	77
85	Ultra low frequency waves in the magnetosphere. Space Science Reviews, 1970, 10, 672.	3.7	114
86	Bounce resonant interaction between pulsations and trapped particles. Planetary and Space Science, 1969, 17, 349-361.	0.9	265
87	The hydromagnetic stability of the magnetospheric boundary. Planetary and Space Science, 1968, 16, 587-605.	0.9	337
88	Neglected Plasma Instability involving Bounce Resonance. Nature, 1968, 219, 56-57.	13.7	4