Michael Denton

List of Publications by Year
in descending order

89 papers	3,269 citations	147801 31 h-index	168389 53 g-index
90 all docs	90 docs citations	90 times ranked	2008 citing authors

#	Article	IF	Citations
1	Differences between CME-driven storms and CIR-driven storms. Journal of Geophysical Research, 2006, 111, .	3.3	443
2	Geomagnetic storms driven by ICME- and CIR-dominated solar wind. Journal of Geophysical Research, 2006, 111, .	3.3	199
3	Bulk plasma properties at geosynchronous orbit. Journal of Geophysical Research, 2005, 110, .	3.3	135
4	A statistical look at plasmaspheric drainage plumes. Journal of Geophysical Research, 2008, 113, .	3.3	110
5	Energetic electron precipitation during high-speed solar wind stream driven storms. Journal of Geophysical Research, 2011, 116, .	3.3	110
6	Magnetospheric and auroral activity during the 18 April 2002 sawtooth event. Journal of Geophysical Research, 2006, 111, .	3.3	100
7	Solar wind turbulence and shear: A superposedâ€epoch analysis of corotating interaction regions at 1 AU. Journal of Geophysical Research, 2010, 115, .	3.3	89
8	Effect of plasmaspheric drainage plumes on solar-wind/magnetosphere coupling. Geophysical Research Letters, 2006, 33, .	4.0	88
9	Relativisticâ€electron dropouts and recovery: A superposed epoch study of the magnetosphere and the solar wind. Journal of Geophysical Research, 2009, 114, .	3.3	85
10	Magnetosphere preconditioning under northward IMF: Evidence from the study of coronal mass ejection and corotating interaction region geoeffectiveness. Journal of Geophysical Research, 2006, 111, .	3.3	72
11	Substorms during the 10â€“11 August 2000 sawtooth event. Journal of Geophysical Research, 2006, 111, .	3.3	69
12	Magnetic field at geosynchronous orbit during highâ€speed streamâ€driven storms: Connections to the solar wind, the plasma sheet, and the outer electron radiation belt. Journal of Geophysical Research, 2010, 115, .	3.3	64
13	Estimating the effects of ionospheric plasma on solar wind/magnetosphere coupling via mass loading of dayside reconnection: Ionâ€plasmaâ€sheet oxygen, plasmaspheric drainage plumes, and the plasma cloak. Journal of Geophysical Research: Space Physics, 2013, 118, 5695-5719.	2.4	63
14	Particle precipitation during ICMEâ€driven and CIRâ€driven geomagnetic storms. Journal of Geophysical Research, 2008, 113, .	3.3	56
15	Superposed epoch analysis of highâ€speedâ€stream effects at geosynchronous orbit: Hot plasma, cold plasma, and the solar wind. Journal of Geophysical Research, 2008, 113, .	3.3	56
16	Effects of whistler mode hiss waves in March 2013. Journal of Geophysical Research: Space Physics, 2017, 122, 7433-7462.	2.4	50
17	Magnetosphere response to highâ€speed solar wind streams: A comparison of weak and strong driving and the importance of extended periods of fast solar wind. Journal of Geophysical Research, 2012, 117, .	3.3	44
18	An empirical model of electron and ion fluxes derived from observations at geosynchronous orbit. Space Weather, 2015, 13, 233-249.	3.7	44

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19	An improved empirical model of electron and ion fluxes at geosynchronous orbit based on upstream solar wind conditions. Space Weather, 2016, 14, 511-523.	3.7	42
20	The superdense plasma sheet in the magnetosphere during high-speed-stream-driven storms: Plasma transport timescales. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1045-1058.	1.6	41
21	Electron loss rates from the outer radiation belt caused by the filling of the outer plasmasphere: The calm before the storm. Journal of Geophysical Research, 2009, 114, .	3.3	40
22	Modification of midlatitude ionospheric parameters in the F2 layer by persistent highâ€speed solar wind streams. Space Weather, 2009, 7, .	3.7	40
23	Exploring the cross correlations and autocorrelations of the ULF indices and incorporating the ULF indices into the systems science of the solar windâ€driven magnetosphere. Journal of Geophysical Research: Space Physics, 2014, 119, 4307-4334.	2.4	40
24	Free energy to drive equatorial magnetosonic wave instability at geosynchronous orbit. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	38
25	Analyzing electric field morphology through data-model comparisons of the Geospace Environment Modeling Inner Magnetosphere/Storm Assessment Challenge events. Journal of Geophysical Research, 2006, 111, .	3.3	37
26	Global view of refilling of the plasmasphere. Geophysical Research Letters, 2007, 34, .	4.0	37
27	Observations and Fokkerâ€Planck Simulations of the Lâ€Shell, Energy, and Pitch Angle Structure of Earth's Electron Radiation Belts During Quiet Times. Journal of Geophysical Research: Space Physics, 2019, 124, 1125-1142.	2.4	37
28	Statistics of plasma fluxes at geosynchronous orbit over more than a full solar cycle. Space Weather, 2007, 5, n/a-n/a.	3.7	36
29	Superposed epoch analysis of dense plasma access to geosynchronous orbit. Annales Geophysicae, 2005, 23, 2519-2529.	1.6	35
30	The plasma environment inside geostationary orbit: A Van Allen Probes HOPE survey. Journal of Geophysical Research: Space Physics, 2017, 122, 9207-9227.	2.4	34
31	A densityâ€temperature description of the outer electron radiation belt during geomagnetic storms. Journal of Geophysical Research, 2010, 115, .	3.3	31
32	Probing the relationship between electromagnetic ion cyclotron waves and plasmaspheric plumes near geosynchronous orbit. Journal of Geophysical Research, 2010, 115, .	3.3	31
33	Longâ€lived plasmaspheric drainage plumes: Where does the plasma come from?. Journal of Geophysical Research: Space Physics, 2014, 119, 6496-6520.	2.4	31
34	NO EVIDENCE FOR HEATING OF THE SOLAR WIND AT STRONG CURRENT SHEETS. Astrophysical Journal Letters, 2011, 739, L61.	8.3	30
35	Key features of >30 keV electron precipitation during high speed solar wind streams: A superposed epoch analysis. Journal of Geophysical Research, 2012, 117, .	3.3	30
36	The trailing edges of highâ€speed streams at 1â€‰AU. Journal of Geophysical Research: Space Physics, 2016, 121, 6107-6140.	2.4	29

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37	Effect of storm-time plasma pressure on the magnetic field in the inner magnetosphere. Geophysical Research Letters, 2005, 32, .	4.0	28
38	On the heating of the outer radiation belt to produce high fluxes of relativistic electrons: Measured heating rates at geosynchronous orbit for highâ€speed streamâ€driven storms. Journal of Geophysical Research, 2010, 115, .	3.3	27
39	Some Properties of the Solar Wind Turbulence at 1 AU Statistically Examined in the Different Types of Solar Wind Plasma. Journal of Geophysical Research: Space Physics, 2019, 124, 2406-2424.	2.4	27
40	High-speed solar-wind streams and geospace interactions. Astronomy and Geophysics, 2007, 48, 6.24-6.26.	0.2	24
41	Applying the cold plasma dispersion relation to whistler mode chorus waves: EMFISIS wave measurements from the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2015, 120, 1144-1152.	2.4	23
42	Preface: Unsolved problems of magnetospheric physics. Journal of Geophysical Research: Space Physics, 2016, 121, 10,783.	2.4	23
43	High-Speed Solar Wind Streams: A Call for Key Research. Eos, 2008, 89, 62.	0.1	22
44	High-speed stream driven inferences of global wave distributions at geosynchronous orbit: relevance to radiation-belt dynamics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 3351-3362.	2.1	22
45	A survey of the anisotropy of the outer electron radiation belt during high-speed-stream-driven storms. Journal of Geophysical Research, 2011, 116, .	3.3	22
46	Persistent EMIC Wave Activity Across the Nightside Inner Magnetosphere. Geophysical Research Letters, 2020, 47, e2020GL087009.	4.0	22
47	The proton and electron radiation belts at geosynchronous orbit: Statistics and behavior during highâ€speed streamâ€driven storms. Journal of Geophysical Research: Space Physics, 2016, 121, 5449-5488.	2.4	21
48	Mass Loading the Earth's Dayside Magnetopause Boundary Layer and Its Effect on Magnetic Reconnection. Geophysical Research Letters, 2019, 46, 6204-6213.	4.0	21
49	Storm-time plasma signatures observed by IMAGE/MENA and comparison with a global physics-based model. Geophysical Research Letters, 2005, 32, .	4.0	20
50	The differences between storms driven by helmet streamer CIRs and storms driven by pseudostreamer CIRs. Journal of Geophysical Research: Space Physics, 2013, 118, 5506-5521.	2.4	20
51	A statistical comparison of hot-ion properties at geosynchronous orbit during intense and moderate geomagnetic storms at solar maximum and minimum. Journal of Geophysical Research, 2006, 111, .	3.3	19
52	Observation of two distinct cold, dense ion populations at geosynchronous orbit: local time asymmetry, solar wind dependence and origin. Annales Geophysicae, 2006, 24, 3451-3465.	1.6	18
53	Compressional perturbations of the dayside magnetosphere during highâ€speedâ€streamâ€driven geomagnetic storms. Journal of Geophysical Research: Space Physics, 2016, 121, 4569-4589.	2.4	18
54	The complex nature of storm-time ion dynamics: Transport and local acceleration. Geophysical Research Letters, 2016, 43, 10,059-10,067.	4.0	17

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55	Transport of plasma sheet material to the inner magnetosphere. Geophysical Research Letters, 2007, 34, .	4.0	15
56	Density and temperature of energetic electrons in the Earth's magnetotail derived from high-latitude GPS observations during the declining phase of the solar cycle. Annales Geophysicae, 2011, 29, 1755-1763.	1.6	15
57	Case studies of the impact of highâ€speed solar wind streams on the electron radiation belt at geosynchronous orbit: Flux, magnetic field, and phase space density. Journal of Geophysical Research: Space Physics, 2013, 118, 6964-6979.	2.4	15
58	Electron number density, temperature, and energy density at GEO and links to the solar wind: A simple predictive capability. Journal of Geophysical Research: Space Physics, 2014, 119, 4556-4571.	2.4	15
59	He⁺ dominance in the plasmasphere during geomagnetically disturbed periods: 1. Observational results. Annales Geophysicae, 2002, 20, 461-470.	1.6	14
60	Ring/Shell Ion Distributions at Geosynchronous Orbit. Journal of Geophysical Research: Space Physics, 2017, 122, 12,055.	2.4	14
61	Exploration of a Composite Index to Describe Magnetospheric Activity: Reduction of the Magnetospheric State Vector to a Single Scalar. Journal of Geophysical Research: Space Physics, 2018, 123, 7384-7412.	2.4	14
62	Highâ€density O⁺ in Earth's outer magnetosphere and its effect on dayside magnetopause magnetic reconnection. Journal of Geophysical Research: Space Physics, 2019, 124, 10257-10269.	2.4	14
63	A modelling study of the latitudinal variations in the nighttime plasma temperatures of the equatorial topside ionosphere during northern winter at solar maximum. Annales Geophysicae, 2000, 18, 1435-1446.	1.6	13
64	The dayside high-latitude trough under quiet geomagnetic conditions: Radio tomography and the CTIP model. Annales Geophysicae, 2005, 23, 1199-1206.	1.6	13
65	Ionospheric response to the corotating interaction regionâ€“driven geomagnetic storm of October 2002. Journal of Geophysical Research, 2009, 114, .	3.3	13
66	On the origin of lowâ€energy electrons in the inner magnetosphere: Fluxes and pitchâ€angle distributions. Journal of Geophysical Research: Space Physics, 2017, 122, 1789-1802.	2.4	13
67	Northern Hemisphere Stratospheric Ozone Depletion Caused by Solar Proton Events: The Role of the Polar Vortex. Geophysical Research Letters, 2018, 45, 2115-2124.	4.0	13
68	Imaging the Global Distribution of Plasmaspheric Oxygen. Journal of Geophysical Research: Space Physics, 2018, 123, 2078-2103.	2.4	13
69	Statistically measuring the amount of pitch angle scattering that energetic electrons undergo as they drift across the plasmaspheric drainage plume at geosynchronous orbit. Journal of Geophysical Research: Space Physics, 2014, 119, 1814-1826.	2.4	12
70	The Evolution of the Plasma Sheet Ion Composition: Storms and Recoveries. Journal of Geophysical Research: Space Physics, 2017, 122, 12,040.	2.4	12
71	Calculation of IMAGE/MENA geometric factors and conversion of images to units of integral and differential flux. Review of Scientific Instruments, 2005, 76, 043303.	1.3	11
72	High-latitude ionospheric response to co-rotating interaction region- and coronal mass ejection-driven geomagnetic storms revealed by GPS tomography and ionosondes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 3391-3408.	2.1	11

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73	The response of the inner magnetosphere to the trailing edges of highâ€speed solarâ€wind streams. Journal of Geophysical Research: Space Physics, 2017, 122, 501-516.	2.4	11
74	Extension of an Empirical Electron Flux Model From 6 to 20 Earth Radii Using Cluster/RAPID Observations. Space Weather, 2019, 17, 778-792.	3.7	11
75	Evolution of the magnetotail energetic-electron population during high-speed-stream-driven storms: Evidence for the leakage of the outer electron radiation belt into the Earth's magnetotail. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	10
76	Solving the radiation belt riddle. Astronomy and Geophysics, 2014, 55, 6.17-6.20.	0.2	10
77	Energetic electron precipitation characteristics observed from Antarctica during a flux dropout event. Journal of Geophysical Research: Space Physics, 2013, 118, 6921-6935.	2.4	9
78	Observations and modeling of magnetic flux tube refilling of the plasmasphere at geosynchronous orbit. Journal of Geophysical Research: Space Physics, 2014, 119, 9246-9255.	2.4	9
79	Solar proton events and stratospheric ozone depletion over northern Finland. Journal of Atmospheric and Solar-Terrestrial Physics, 2018, 177, 218-227.	1.6	9
80	Radio tomographic imaging of the northern high-latitude ionosphere on a wide geographic scale. Radio Science, 2005, 40, n/a-n/a.	1.6	8
81	GPS tomography in the polar cap: comparison with ionosondes and in situ spacecraft data. GPS Solutions, 2011, 15, 79-87.	4.3	8
82	Inner magnetospheric heavy ion composition during highâ€speed streamâ€driven storms. Journal of Geophysical Research: Space Physics, 2013, 118, 4066-4079.	2.4	8
83	Solar wind dependence of ion parameters in the Earth's magnetospheric region calculated from CLUSTER observations. Annales Geophysicae, 2008, 26, 387-394.	1.6	7
84	On-orbit calibration of geostationary electron and proton flux observations for augmentation of an existing empirical radiation model. Journal of Space Weather and Space Climate, 2020, 10, 28.	3.3	5
85	Probing geospace with VLF radio signals. Astronomy and Geophysics, 2011, 52, 2.27-2.30.	0.2	4
86	The Cold Ion Population at Geosynchronous Orbit and Transport to the Dayside Magnetopause: September 2015 to February 2016. Journal of Geophysical Research: Space Physics, 2019, 124, 8685-8694.	2.4	4
87	A general Cluster data and global MHD simulation comparison. Annales Geophysicae, 2008, 26, 3411-3428.	1.6	3
88	First optical observations of energetic electron precipitation at 4278 Ã... caused by a powerful VLF transmitter. Geophysical Research Letters, 2014, 41, 2237-2242.	4.0	2
89	Training school pupils in the scientific method: student participation in an international VLF radio experiment. Physics Education, 2012, 47, 64-68.	0.5	1