

Daniel R Weimer

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7786108/publications.pdf>

Version: 2024-02-01

119
papers

5,712
citations

101384

36
h-index

79541

73
g-index

131
all docs

131
docs citations

131
times ranked

2193
citing authors

#	ARTICLE	IF	CITATIONS
1	Testing the electrodynamic method to derive height-integrated ionospheric conductances. <i>Annales Geophysicae</i> , 2021, 39, 31-51.	0.6	3
2	Comparison of a Neutral Density Model With the SET HASDM Density Database. <i>Space Weather</i> , 2021, 19, e2021SW002888.	1.3	4
3	Improved Neutral Density Predictions Through Machine Learning Enabled Exospheric Temperature Model. <i>Space Weather</i> , 2021, 19, .	1.3	6
4	A Third Generation Field-Aligned Current Model. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027249.	0.8	7
5	Improving Neutral Density Predictions Using Exospheric Temperatures Calculated on a Geodesic, Polyhedral Grid. <i>Space Weather</i> , 2020, 18, e2019SW002355.	1.3	18
6	Atmospheric Escape Processes and Planetary Atmospheric Evolution. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027639.	0.8	58
7	Interhemispheric Asymmetries in the Ground Magnetic Response to Interplanetary Shocks: The Role of Shock Impact Angle. <i>Space Weather</i> , 2020, 18, e2019SW002427.	1.3	11
8	Validity Study of the Swarm Horizontal Cross-Track Ion Drift Velocities in the High-Latitude Ionosphere. <i>Earth and Space Science</i> , 2019, 6, 411-432.	1.1	20
9	Derivation of Hemispheric Ionospheric Current Functions From Ground-Level Magnetic Fields. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 3149-3161.	0.8	1
10	How Might the Thermosphere and Ionosphere React to an Extreme Space Weather Event?. , 2018, , 513-539.		4
11	Correlations Between the Thermosphere's Semiannual Density Variations and Infrared Emissions Measured With the SABER Instrument. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 8850-8864.	0.8	11
12	Field-Aligned current response to solar indices. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 5798-5815.	0.8	10
13	Conjugate observations of electromagnetic ion cyclotron waves associated with traveling convection vortex events. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 7336-7352.	0.8	7
14	Associating ground magnetometer observations with current or voltage generators. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 7130-7141.	0.8	17
15	Linear response of field-aligned currents to the interplanetary electric field. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8502-8515.	0.8	11
16	Intercalibration of neutral density measurements for mapping the thermosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 5975-5990.	0.8	26
17	Community-wide validation of geospace model local K-index predictions to support model transition to operations. <i>Space Weather</i> , 2016, 14, 469-480.	1.3	27
18	GEM-CEDAR challenge: Poynting flux at DMSP and modeled Joule heat. <i>Space Weather</i> , 2016, 14, 113-135.	1.3	20

#	ARTICLE	IF	CITATIONS
19	Validation of an operational product to determine L1 to Earth propagation time delays. <i>Space Weather</i> , 2016, 14, 93-112.	1.3	14
20	High correlations between temperature and nitric oxide in the thermosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 5998-6009.	0.8	21
21	The two-way relationship between ionospheric outflow and the ring current. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4338-4353.	0.8	33
22	Quantitative maps of geomagnetic perturbation vectors during substorm onset and recovery. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 1197-1214.	0.8	10
23	Conjugate observations of traveling convection vortices associated with transient events at the magnetopause. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 2015-2035.	0.8	18
24	An autonomous adaptive low-power instrument platform (AAL-PIP) for remote high-latitude geospace data collection. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , 2014, 3, 211-227.	0.6	26
25	Energy coupling during the August 2011 magnetic storm. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 1219-1232.	0.8	41
26	Low latitude thermospheric responses to magnetic storms. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 3866-3876.	0.8	18
27	An empirical model of ground-level geomagnetic perturbations. <i>Space Weather</i> , 2013, 11, 107-120.	1.3	45
28	Geomagnetic response to solar wind dynamic pressure impulse events at high-latitude conjugate points. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 6055-6071.	0.8	19
29	Community-wide validation of geospace model ground magnetic field perturbation predictions to support model transition to operations. <i>Space Weather</i> , 2013, 11, 369-385.	1.3	136
30	MHD Simulation of Magnetospheric Transport at the Mesoscale. <i>Geophysical Monograph Series</i> , 2013, , 229-240.	0.1	29
31	Anomalously low geomagnetic energy inputs during 2008 solar minimum. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	22
32	Thermospheric basis functions for improved dynamic calibration of semi-empirical models. <i>Space Weather</i> , 2012, 10, .	1.3	17
33	CEDAR Electrodynamics Thermosphere Ionosphere (ETI) Challenge for systematic assessment of ionosphere/thermosphere models: Electron density, neutral density, NmF2, and hmF2 using space based observations. <i>Space Weather</i> , 2012, 10, .	1.3	65
34	Modeling studies of the impact of high-speed streams and co-rotating interaction regions on the thermosphere-ionosphere. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	50
35	Geospace Environment Modeling 2008-2009 Challenge: Ground magnetic field perturbations. <i>Space Weather</i> , 2011, 9, .	1.3	71
36	Predicting global average thermospheric temperature changes resulting from auroral heating. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	29

#	ARTICLE	IF	CITATIONS
37	Comparison of the Hillâ€™Siscoe polar cap potential theory with the Weimer and AMIE models. Journal of Atmospheric and Solar-Terrestrial Physics, 2010, 72, 302-308.	0.6	1
38	Interplanetary field enhancements travel at the solar wind speed. Geophysical Research Letters, 2010, 37, .	1.5	8
39	Statistical maps of geomagnetic perturbations as a function of the interplanetary magnetic field. Journal of Geophysical Research, 2010, 115, .	3.3	43
40	Storm time global thermosphere: A drivenâ€™dissipative thermodynamic system. Journal of Geophysical Research, 2009, 114, .	3.3	32
41	Improved calculations of interplanetary magnetic field phase front angles and propagation time delays. Journal of Geophysical Research, 2008, 113, .	3.3	68
42	Correction to â€™Improved calculations of IMF phase-front angles and propagation time delaysâ€™. Journal of Geophysical Research, 2008, 113, n/a-n/a.	3.3	1
43	Response of the thermosphere to Joule heating and particle precipitation. Journal of Geophysical Research, 2006, 111, .	3.3	61
44	Reply to comment by Haaland et al. on â€™A new interpretation of Weimer et al.'s solar wind propagation delay techniqueâ€™. Journal of Geophysical Research, 2006, 111, .	3.3	3
45	Cusp geometry in MHD simulations. Surveys in Geophysics, 2005, 26, 387-407.	2.1	7
46	A new interpretation of Weimer et al.'s solar wind propagation delay technique. Journal of Geophysical Research, 2005, 110, .	3.3	38
47	Electron signatures of active merging sites on the magnetopause. Journal of Geophysical Research, 2005, 110, .	3.3	2
48	Improved ionospheric electrodynamic models and application to calculating Joule heating rates. Journal of Geophysical Research, 2005, 110, .	3.3	504
49	Predicting surface geomagnetic variations using ionospheric electrodynamic models. Journal of Geophysical Research, 2005, 110, .	3.3	100
50	Cusp Geometry in MHD Simulations. , 2005, , 387-407.		1
51	Multiple discrete-energy ion features in the inner magnetosphere: 9 February 1998, event. Annales Geophysicae, 2004, 22, 1297-1304.	0.6	34
52	Observed and simulated depletion layers with southward IMF. Annales Geophysicae, 2004, 22, 2151-2169.	0.6	10
53	Temporal-spatial structure of magnetic merging at the magnetopause inferred from 557.7-nm all-sky images. Annales Geophysicae, 2004, 22, 2917-2942.	0.6	4
54	Correction to â€™Predicting interplanetary magnetic field (IMF) propagation delay times using the minimum variance techniqueâ€™. Journal of Geophysical Research, 2004, 109, .	3.3	72

#	ARTICLE	IF	CITATIONS
55	Predicting interplanetary magnetic field (IMF) propagation delay times using the minimum variance technique. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	229
56	Bifurcation of the cusp: Implications for understanding boundary layers. <i>Geophysical Monograph Series</i> , 2003, , 319-328.	0.1	3
57	Responses of the openâ€‘closed field line boundary in the evening sector to IMF changes: A source mechanism for Sun-aligned arcs. <i>Journal of Geophysical Research</i> , 2003, 108, SMP 4-1.	3.3	19
58	Polar, Cluster and SuperDARN evidence for high-latitude merging during southward IMF: temporal/spatial evolution. <i>Annales Geophysicae</i> , 2003, 21, 2233-2258.	0.6	18
59	Multi-spacecraft studies in aid of space weather specification and understanding. <i>COSPAR Colloquia Series</i> , 2002, , 181-189.	0.2	0
60	Hill model of transpolar potential saturation: Comparisons with MHD simulations. <i>Journal of Geophysical Research</i> , 2002, 107, SMP 8-1.	3.3	226
61	Variable time delays in the propagation of the interplanetary magnetic field. <i>Journal of Geophysical Research</i> , 2002, 107, SMP 29-1-SMP 29-15.	3.3	101
62	Testing global storm-time electric field models using particle spectra on multiple spacecraft. <i>Journal of Geophysical Research</i> , 2002, 107, SMP 21-1-SMP 21-11.	3.3	19
63	Predictions of magnetosheath merging between IMF field lines of opposite polarity. <i>Journal of Geophysical Research</i> , 2002, 107, SMP 23-1-SMP 23-14.	3.3	18
64	Comparing a spherical harmonic model of the global electric field distribution with Astrid-2 observations. <i>Journal of Geophysical Research</i> , 2002, 107, SMP 27-1.	3.3	5
65	Flow-through magnetic reconnection. <i>Geophysical Research Letters</i> , 2002, 29, 4-1.	1.5	22
66	Consequences of a saturated convection electric field on the ring current. <i>Geophysical Research Letters</i> , 2002, 29, 62-1-62-4.	1.5	33
67	MHD properties of magnetosheath flow. <i>Planetary and Space Science</i> , 2002, 50, 461-471.	0.9	33
68	Prediction of AlfvÃ©nic turbulence near the magnetospheric sash. <i>Planetary and Space Science</i> , 2002, 50, 627-632.	0.9	1
69	Magnetospheric sash dependence on IMF direction. <i>Geophysical Research Letters</i> , 2001, 28, 1921-1924.	1.5	20
70	Global role ofEâ€‘in magnetopause reconnection: An explicit demonstration. <i>Journal of Geophysical Research</i> , 2001, 106, 13015-13022.	3.3	68
71	Maps of ionospheric field-aligned currents as a function of the interplanetary magnetic field derived from Dynamics Explorer 2 data. <i>Journal of Geophysical Research</i> , 2001, 106, 12889-12902.	3.3	167
72	Observations of simultaneous effects of merging in both hemispheres. <i>Journal of Geophysical Research</i> , 2001, 106, 24551-24577.	3.3	25

#	ARTICLE	IF	CITATIONS
73	Relation between cusp and mantle in MHD simulation. Journal of Geophysical Research, 2001, 106, 10743-10749.	3.3	22
74	An improved model of ionospheric electric potentials including substorm perturbations and application to the Geospace Environment Modeling November 24, 1996, event. Journal of Geophysical Research, 2001, 106, 407-416.	3.3	320
75	Observation of the magnetospheric "sash" and its implications relative to solar-wind/magnetospheric coupling: A multisatellite event analysis. Journal of Geophysical Research, 2001, 106, 6097-6122.	3.3	24
76	Simulations of the magnetosphere for zero interplanetary magnetic field: The ground state. Journal of Geophysical Research, 2001, 106, 29419-29434.	3.3	33
77	Response of ionospheric convection to changes in the interplanetary magnetic field: Lessons from a MHD simulation. Journal of Geophysical Research, 2001, 106, 21429-21451.	3.3	21
78	A new technique for the mapping of ionospheric field-aligned currents from satellite magnetometer data. Geophysical Monograph Series, 2000, , 381-388.	0.1	13
79	Global geometry of magnetospheric currents inferred from MHD simulations. Geophysical Monograph Series, 2000, , 41-52.	0.1	60
80	Deflected magnetosheath flow at the high-latitude magnetopause. Journal of Geophysical Research, 2000, 105, 12851-12857.	3.3	18
81	Driving dayside convection with northward IMF: Observations by a sounding rocket launched from Svalbard. Journal of Geophysical Research, 2000, 105, 5245-5263.	3.3	19
82	Modes of mesoscale magnetospheric dynamics - Dependence on IMF orientation. , 2000, , .		0
83	Substorm influence on the ionospheric electric potentials and currents. Journal of Geophysical Research, 1999, 104, 185-197.	3.3	53
84	Geoeffective interplanetary scale sizes derived from regression analysis of polar cap potentials. Journal of Geophysical Research, 1999, 104, 9989-9994.	3.3	74
85	SuperDARN-detected plasma convection vortices and the global plasma convection. Journal of Geophysical Research, 1998, 103, 11653-11663.	3.3	4
86	Identification of magnetospheric particles that travel between spacecraft and their use to help obtain magnetospheric potential distributions. Journal of Geophysical Research, 1998, 103, 93-102.	3.3	8
87	Polar observations of convection with northward interplanetary magnetic field at dayside high latitudes. Journal of Geophysical Research, 1998, 103, 29-45.	3.3	30
88	DE observations of electric field oscillations associated with an electron conic. Journal of Geophysical Research, 1998, 103, 431-438.	3.3	5
89	Observed and predicted potential distributions during the October 1995 magnetic cloud passage. Geophysical Research Letters, 1998, 25, 3023-3026.	1.5	11
90	The Magnetospheric Sash and the Cross-Tail S. Geophysical Research Letters, 1998, 25, 1605-1608.	1.5	107

#	ARTICLE	IF	CITATIONS
91	Polar Observations of Cusp Electrodynamics: Evolution from 2- to 4-Cell Convection Patterns. , 1998, , 157-172.		1
92	Geotail measurements compared with the motions of high-latitude auroral boundaries during two substorms. Journal of Geophysical Research, 1997, 102, 9553-9572.	3.3	18
93	How wide in magnetic local time is the cusp? An event study. Journal of Geophysical Research, 1997, 102, 4765-4776.	3.3	32
94	A flexible, IMF dependent model of high-latitude electric potentials having "Space Weather" applications. Geophysical Research Letters, 1996, 23, 2549-2552.	1.5	310
95	Reply [to "Comment on "The relationship between ionospheric convection and magnetic activity" by J.-H. Shue and D. R. Weimer]. Journal of Geophysical Research, 1996, 101, 11015-11015.	3.3	0
96	Reply [to "Comment on "Substorm time constants" by D. R. Weimer]. Journal of Geophysical Research, 1995, 100, 5719.	3.3	1
97	Models of high-latitude electric potentials derived with a least error fit of spherical harmonic coefficients. Journal of Geophysical Research, 1995, 100, 19595.	3.3	377
98	Substorm time constants. Journal of Geophysical Research, 1994, 99, 11005.	3.3	50
99	Satellite measurements through the center of a substorm surge. Journal of Geophysical Research, 1994, 99, 23639.	3.3	35
100	DE 1 and Viking observations associated with electron conical distributions. Journal of Geophysical Research, 1994, 99, 23673.	3.3	9
101	The relationship between ionospheric convection and magnetic activity. Journal of Geophysical Research, 1994, 99, 401.	3.3	41
102	Large amplitude auroral electric fields measured with DE 1. Journal of Geophysical Research, 1993, 98, 13557-13564.	3.3	35
103	Variations of the polar cap potential measured during magnetospheric substorms. Journal of Geophysical Research, 1992, 97, 3945-3951.	3.3	22
104	Magnetospheric boundary dynamics: DE 1 and DE 2 observations near the magnetopause and cusp. Journal of Geophysical Research, 1991, 96, 3505-3522.	3.3	52
105	Saturation of the auroral electrojet current and the polar cap potential. Journal of Geophysical Research, 1990, 95, 18981-18987.	3.3	43
106	Agreements between ground-based and satellite-based observations. Planetary and Space Science, 1990, 38, 1533-1540.	0.9	9
107	Polar cap potentials and the auroral electrojet indices. Planetary and Space Science, 1990, 38, 1207-1222.	0.9	47
108	Stationary auroral current oscillations resulting from the magnetospheric generator. Journal of Geophysical Research, 1988, 93, 11436-11444.	3.3	7

#	ARTICLE	IF	CITATIONS
109	The current-voltage relationship in auroral current sheets. Journal of Geophysical Research, 1987, 92, 187-194.	3.3	73
110	Velocity shears and sub-km scale irregularities in the nighttime auroral region. Geophysical Research Letters, 1986, 13, 101-104.	1.5	36
111	The theta aurora. Journal of Geophysical Research, 1986, 91, 3177-3224.	3.3	270
112	Wave and plasma observations during a compressional Pc 5 wave event August 10, 1982. Journal of Geophysical Research, 1986, 91, 6884-6898.	3.3	15
113	Electric and magnetic observations of the structure of standing waves in the magnetosphere. Journal of Geophysical Research, 1986, 91, 8895-8907.	3.3	38
114	Plasma and field observations of a Pc 5 wave event. Journal of Geophysical Research, 1986, 91, 11147-11161.	3.3	8
115	IMF B_y -dependent plasma flow and Birkeland currents in the dayside magnetosphere: 1. Dynamics Explorer observations. Journal of Geophysical Research, 1985, 90, 1577-1593.	3.3	217
116	Enhanced ion outflows measured by the DE 1 high altitude plasma instrument in the dayside plasmasphere during the recovery phase. Journal of Geophysical Research, 1985, 90, 1653-1668.	3.3	10
117	Auroral zone electric fields from DE 1 and 2 at magnetic conjunctions. Journal of Geophysical Research, 1985, 90, 7479-7494.	3.3	190
118	The Conductance of Auroral Magnetic Field Lines. Geophysical Monograph Series, 0, , 108-113.	0.1	5
119	Dayside Electrodynamic Observed by Polar with Northward IMF. Geophysical Monograph Series, 0, , 13-23.	0.1	0