

Gerhard Haerendel

List of Publications by Year in descending order

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151
papers

6,728
citations

50170

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66788

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152
all docs

152
docs citations

152
times ranked

2750
citing authors

#	ARTICLE	IF	CITATIONS
1	Auroral Arcs: The Fracture Theory Revisited. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028194.	0.8	5
2	Results of the Electron Drift Instrument on Cluster. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029313.	0.8	1
3	The Onset of a Substorm and the Mating Instability. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029492.	0.8	6
4	Expanding Auroral Loops. Journal of Geophysical Research: Space Physics, 2019, 124, 8629-8636.	0.8	1
5	Experiments With Plasmas Artificially Injected Into Near-Earth Space. Frontiers in Astronomy and Space Sciences, 2019, 6, .	1.1	14
6	Reconnection Mediated by Magnetic Fractures and the Solar Flare. Astrophysical Journal, 2018, 855, 95.	1.6	1
7	Shock aurora: Field-aligned discrete structures moving along the dawnside oval. Journal of Geophysical Research: Space Physics, 2017, 122, 3145-3162.	0.8	9
8	Field-parallel Acceleration: Comment on the Paper "Electric Currents on the Flare Ribbons: Observations and Standard Model" by Janvier et al. (2014, ApJ, 788, 60). Astrophysical Journal, 2017, 847, 143.	1.6	2
9	Evidence for Field-parallel Electron Acceleration in Solar Flares. Astrophysical Journal, 2017, 847, 113.	1.6	5
10	Stop layer: a flow braking mechanism in space and support from a lab experiment. Plasma Physics and Controlled Fusion, 2016, 58, 064001.	0.9	7
11	High-molecular-weight organic matter in the particles of comet 67P/Churyumov-Gerasimenko. Nature, 2016, 538, 72-74.	13.7	124
12	COMET 67P/CHURYUMOV-GERASIMENKO: CLOSE-UP ON DUST PARTICLE FRAGMENTS. Astrophysical Journal Letters, 2016, 816, L32.	3.0	84
13	Flow bursts, breakup arc, and substorm current wedge. Journal of Geophysical Research: Space Physics, 2015, 120, 2796-2807.	0.8	6
14	Substorm onset: Current sheet avalanche and stop layer. Journal of Geophysical Research: Space Physics, 2015, 120, 1697-1714.	0.8	14
15	The nonmagnetic nucleus of comet 67P/Churyumov-Gerasimenko. Science, 2015, 349, aaa5102.	6.0	52
16	M-I coupling scales and energy dumping. Geophysical Research Letters, 2014, 41, 1846-1853.	1.5	3
17	Role and origin of the poleward Alfvénic arc. Journal of Geophysical Research: Space Physics, 2014, 119, 2945-2962.	0.8	15
18	Dayside auroral hiss observed at South Pole Station. Journal of Geophysical Research: Space Physics, 2013, 118, 1220-1230.	0.8	7

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19	Auroral Generators: A Survey. Geophysical Monograph Series, 2013, , 347-354.	0.1	5
20	Birth and life of auroral arcs embedded in the evening auroral oval convection: A critical comparison of observations with theory. Journal of Geophysical Research, 2012, 117, .	3.3	16
21	Magnetosphere-ionosphere coupling and scale breaking of a plasma cloud in the magnetosphere. Journal of Geophysical Research, 2012, 117, .	3.3	5
22	SOLAR AURORAS. Astrophysical Journal, 2012, 749, 166.	1.6	17
23	A tool for characterizing and evaluating Type II auroral arcs. Journal of Geophysical Research, 2012, 117, .	3.3	5
24	Alfvén: magnetosphere-ionosphere connection explorers. Experimental Astronomy, 2012, 33, 445-489.	1.6	9
25	Six auroral generators: A review. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	38
26	A DROPLET MODEL OF QUIESCENT PROMINENCE DOWNFLOWS. Astrophysical Journal, 2011, 731, 82.	1.6	21
27	Magnetic fractures or reconnection of type II. Proceedings of the International Astronomical Union, 2010, 6, 56-61.	0.0	1
28	Equatorward moving arcs and substorm onset. Journal of Geophysical Research, 2010, 115, .	3.3	25
29	Towards a European vision for space exploration: Recommendations of the Space Advisory Group of the European Commission. Space Policy, 2010, 26, 109-112.	0.8	3
30	Small and meso-scale properties of a substorm onset auroral arc. Journal of Geophysical Research, 2010, 115, .	3.3	29
31	CHROMOSPHERIC EVAPORATION VIA ALFVÉN WAVES. Astrophysical Journal, 2009, 707, 903-915.	1.6	22
32	ESSC-ESF Position Paper "Science-Driven Scenario for Space Exploration: Report from the European Space Sciences Committee (ESSC). Astrobiology, 2009, 9, 23-41.	1.5	13
33	Auroral arc and oval electrodynamics in the Harang region. Journal of Geophysical Research, 2009, 114, .	3.3	19
34	Poleward arcs of the auroral oval during substorms and the inner edge of the plasma sheet. Journal of Geophysical Research, 2009, 114, .	3.3	30
35	Auroral arcs as current transformers. Journal of Geophysical Research, 2008, 113, .	3.3	14
36	Auroral arcs as sites of magnetic stress release. Journal of Geophysical Research, 2007, 112, .	3.3	48

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37	Comment: An Apparent Controversy in Auroral Physics. <i>Eos</i> , 2007, 88, 134.	0.1	2
38	Exploration needs cooperation. <i>Space Research Today</i> , 2007, 169, 32-34.	1.0	1
39	ROMAP: Rosetta Magnetometer and Plasma Monitor. <i>Space Science Reviews</i> , 2007, 128, 221-240.	3.7	68
40	Cosima – High Resolution Time-of-Flight Secondary Ion Mass Spectrometer for the Analysis of Cometary Dust Particles onboard Rosetta. <i>Space Science Reviews</i> , 2007, 128, 823-867.	3.7	139
41	Commonalities Between Ionosphere and Chromosphere. <i>Space Science Reviews</i> , 2007, 124, 317-331.	3.7	8
42	Cluster observes formation of high-beta plasma blobs. <i>Annales Geophysicae</i> , 2004, 22, 2391-2401.	0.6	4
43	ALADYN: A method to investigate auroral arc electrodynamics from satellite data. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	9
44	The European White Paper on space: enough support for basic science?. <i>Space Policy</i> , 2004, 20, 73-77.	0.8	1
45	Shock aurora: FAST and DMSP observations. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	94
46	Equator-S observation of reconnection coupled to surface waves. <i>Advances in Space Research</i> , 2002, 29, 1129-1134.	1.2	11
47	Conditions for auroral particle acceleration. <i>Advances in Space Research</i> , 2002, 30, 1763-1774.	1.2	2
48	The magnetopause at high time resolution: Structure and lower-hybrid waves. <i>Geophysical Research Letters</i> , 2001, 28, 681-684.	1.5	5
49	Title is missing!. <i>Surveys in Geophysics</i> , 2001, 22, 101-130.	2.1	38
50	Evidence for an extended reconnection line at the dayside magnetopause. <i>Earth, Planets and Space</i> , 2001, 53, 619-625.	0.9	14
51	Compressional Pc5 type pulsations in the morningside plasma sheet. <i>Annales Geophysicae</i> , 2001, 19, 311-320.	0.6	22
52	Auroral acceleration in astrophysical plasmas. <i>Physics of Plasmas</i> , 2001, 8, 2365-2370.	0.7	16
53	Reconnection. , 2001, , 1007-1033.		3
54	The Electron Drift Instrument on Cluster: overview of first results. <i>Annales Geophysicae</i> , 2001, 19, 1273-1288.	0.6	89

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55	Cluster EDI convection measurements across the high-latitude plasma sheet boundary at midnight. <i>Annales Geophysicae</i> , 2001, 19, 1669-1681.	0.6	24
56	The UV aurora and ionospheric flows during flux transfer events. <i>Annales Geophysicae</i> , 2001, 19, 179-188.	0.6	27
57	Outstanding issues in understanding the dynamics of the inner plasma sheet and ring current during storms and substorms. <i>Advances in Space Research</i> , 2000, 25, 2379-2388.	1.2	19
58	EQUATOR-S: The mission and first coordinated measurements with GEOTAIL. <i>Advances in Space Research</i> , 2000, 25, 1277-1286.	1.2	4
59	Extended magnetic reconnection at the Earth's magnetopause from detection of bi-directional jets. <i>Nature</i> , 2000, 404, 848-850.	13.7	212
60	Physics of Mass Loaded Plasmas. <i>Space Science Reviews</i> , 2000, 94, 429-671.	3.7	123
61	Magnetospheric lion roars. <i>Annales Geophysicae</i> , 2000, 18, 406-410.	0.6	22
62	A survey of magnetopause FTEs and associated flow bursts in the polar ionosphere. <i>Annales Geophysicae</i> , 2000, 18, 416-435.	0.6	58
63	Rosetta lander in situ characterization of a comet nucleus. <i>Acta Astronautica</i> , 1999, 45, 389-395.	1.7	25
64	Origin and dynamics of thin auroral arcs. <i>Advances in Space Research</i> , 1999, 23, 1637-1645.	1.2	21
65	First ELF wave measurements with the Equator-S magnetometer. <i>Advances in Space Research</i> , 1999, 24, 77-80.	1.2	7
66	Flow braking and the substorm current wedge. <i>Journal of Geophysical Research</i> , 1999, 104, 19895-19903.	3.3	218
67	A flux transfer event observed at the magnetopause by the Equator-S spacecraft and in the ionosphere by the CUTLASS HF radar. <i>Annales Geophysicae</i> , 1999, 17, 707-711.	0.6	61
68	<i>Introduction&/i>: The Equator-S mission. <i>Annales Geophysicae</i> , 1999, 17, 1499-1502.	0.6	6
69	EDI electron time-of-flight measurements on Equator-S. <i>Annales Geophysicae</i> , 1999, 17, 1513-1520.	0.6	6
70	The magnetic field experiment onboard Equator-S and its scientific possibilities. <i>Annales Geophysicae</i> , 1999, 17, 1521-1527.	0.6	33
71	Waveform and packet structure of lion roars. <i>Annales Geophysicae</i> , 1999, 17, 1528-1534.	0.6	82
72	Dynamics and local boundary properties of the dawn-side magnetopause under conditions observed by Equator-S. <i>Annales Geophysicae</i> , 1999, 17, 1535-1559.	0.6	6

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73	Identification of magnetosheath mirror modes in Equator-S magnetic field data. <i>Annales Geophysicae</i> , 1999, 17, 1560-1573.	0.6	50
74	Magnetopause boundary structure deduced from the high-time resolution particle experiment on the Equator-S spacecraft. <i>Annales Geophysicae</i> , 1999, 17, 1574-1581.	0.6	1
75	High-beta plasma blobs in the morningside plasma sheet. <i>Annales Geophysicae</i> , 1999, 17, 1592-1601.	0.6	23
76	Substorm observations in the early morning sector with Equator-S and Geotail. <i>Annales Geophysicae</i> , 1999, 17, 1602-1610.	0.6	8
77	Testing electric field models using ring current ion energy spectra from the Equator-S ion composition (ESIC) instrument. <i>Annales Geophysicae</i> , 1999, 17, 1611-1621.	0.6	39
78	Mirror mode structures observed in the dawn-side magnetosheath by Equator-S. <i>Geophysical Research Letters</i> , 1999, 26, 2159-2162.	1.5	62
79	The Age of NGC 6426, a Metal-poor Globular Cluster in the Galactic Halo. <i>Astronomical Journal</i> , 1999, 117, 3059-3065.	1.9	12
80	EDI convection measurements at 5 \times 6 R. <i>Annales Geophysicae</i> , 1999, 17, 1503.	0.6	1
81	Reflection and transmission of Alfvén waves at the auroral acceleration region. <i>Geophysical Research Letters</i> , 1998, 25, 277-280.	1.5	66
82	Azimuthal pressure gradient as driving force of substorm currents. <i>Geophysical Research Letters</i> , 1998, 25, 959-962.	1.5	54
83	Reply [to "Comment on "Braking of high-speed flows in the near-Earth Tail" by K. Shiokawa, W. Baumjohann, and G. Haerendel]. <i>Geophysical Research Letters</i> , 1998, 25, 3503-3503.	1.5	0
84	Opening address of the cospar president to the cospar colloquium on magnetospheric research with advanced techniques. <i>COSPAR Colloquia Series</i> , 1998, 9, 3-5.	0.2	0
85	New Wavelength Determinations of Mid-Infrared Fine-Structure Lines by Infrared Space Observatory Short Wavelength Spectrometer. <i>Astrophysical Journal</i> , 1997, 487, 962-966.	1.6	58
86	Sedimentation of barium ions from the CRRES G-9 release. <i>Geophysical Research Letters</i> , 1997, 24, 763-766.	1.5	0
87	Braking of high-speed flows in the near-Earth tail. <i>Geophysical Research Letters</i> , 1997, 24, 1179-1182.	1.5	422
88	THE ELECTRON DRIFT INSTRUMENT FOR CLUSTER. <i>Space Science Reviews</i> , 1997, 79, 233-269.	3.7	72
89	ASPI experiment: measurements of fields and waves on board the INTERBALL-1 spacecraft. <i>Annales Geophysicae</i> , 1997, 15, 514-527.	0.6	104
90	Optical and radar observations of the motion of auroral arcs. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1996, 58, 57-69.	0.9	39

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91	Optical and radar observations of auroral arcs with emphasis on small-scale structures. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1996, 58, 71-83.	0.9	37
92	Studies of auroral arcs using Freja satellite and ground-based data. <i>Advances in Space Research</i> , 1996, 18, 107-110.	1.2	16
93	Auroral-arc splitting by intrusion of a new convection channel. <i>Annales Geophysicae</i> , 1996, 14, 1257.	0.6	1
94	Magnetic energy conversion in the Corona and Magnetosphere. <i>Highlights of Astronomy</i> , 1995, 10, 302-302.	0.0	0
95	Observation of electromagnetic oxygen cyclotron waves in a flickering aurora. <i>Geophysical Research Letters</i> , 1995, 22, 2465-2468.	1.5	31
96	Acceleration from Field-Aligned Potential Drops. <i>International Astronomical Union Colloquium</i> , 1994, 142, 765-774.	0.1	3
97	The Freja science mission. <i>Space Science Reviews</i> , 1994, 70, 405-419.	3.7	31
98	The Electron Beam Instrument (F6) on Freja. <i>Space Science Reviews</i> , 1994, 70, 447-463.	3.7	6
99	The TESP electron spectrometer and correlator (F7) on Freja. <i>Space Science Reviews</i> , 1994, 70, 509-540.	3.7	49
100	Freja observations of narrow inverted-V electron precipitation by the Two-Dimensional Electron Spectrometer. <i>Geophysical Research Letters</i> , 1994, 21, 1895-1898.	1.5	24
101	Signatures of energy-time dispersed electron fluxes measured by Freja. <i>Geophysical Research Letters</i> , 1994, 21, 1899-1902.	1.5	17
102	Large-scale auroral plasma density cavities observed by Freja. <i>Geophysical Research Letters</i> , 1994, 21, 1903-1906.	1.5	70
103	Electric fields derived from electron drift measurements. <i>Geophysical Research Letters</i> , 1994, 21, 1863-1866.	1.5	5
104	The Freja Project. <i>Geophysical Research Letters</i> , 1994, 21, 1823-1826.	1.5	43
105	Inverted-V events simultaneously observed with the Freja satellite and from the ground. <i>Geophysical Research Letters</i> , 1994, 21, 1891-1894.	1.5	23
106	Acceleration from field-aligned potential drops. <i>Astrophysical Journal, Supplement Series</i> , 1994, 90, 765.	3.0	67
107	On the proper motion of auroral arcs. <i>Journal of Geophysical Research</i> , 1993, 98, 6087-6099.	3.3	77
108	Anomalous plasma diffusion and the magnetopause boundary layer. <i>IEEE Transactions on Plasma Science</i> , 1992, 20, 833-842.	0.6	13

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109	Weakly damped Alfvén waves as drivers of solar chromospheric spicules. <i>Nature</i> , 1992, 360, 241-243.	13.7	70
110	Field-aligned currents in the Earth's magnetosphere. <i>Geophysical Monograph Series</i> , 1990, , 539-553.	0.1	32
111	Optical observations on the CRITAR Critical Ionization Velocity Experiment. <i>Geophysical Research Letters</i> , 1990, 17, 1601-1604.	1.5	34
112	Electric field measurement on the Akebono (EXOS-D) satellite.. <i>Journal of Geomagnetism and Geoelectricity</i> , 1990, 42, 371-384.	0.8	48
113	Magnetometer and incoherent scatter observations of an intense Ps 6 pulsation event. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1988, 50, 357-367.	0.9	23
114	Plasma Transport Near the Magnetic Cavity Surrounding Comet Halley. <i>Geophysical Research Letters</i> , 1987, 14, 673-676.	1.5	30
115	Observations and theory of the AMPTE magnetotail barium releases. <i>Journal of Geophysical Research</i> , 1987, 92, 5777-5794.	3.3	144
116	Erdmagnetismus und extraterrestrische Vorgänge. <i>Die Naturwissenschaften</i> , 1987, 74, 181-187.	0.6	0
117	Plasma waves associated with the first AMPTE magnetotail barium release. <i>Geophysical Research Letters</i> , 1986, 13, 644-647.	1.5	27
118	Dayside equatorial plane convection and IMF sector structure. <i>Journal of Geophysical Research</i> , 1986, 91, 4557-4560.	3.3	14
119	Künstliche Kometen: Dem Andenken von Professor Biermann (12. Januar 1986) gewidmet. <i>Physik Journal</i> , 1986, 42, 134-137.	0.1	4
120	The AMPTE artificial comet experiments. <i>Nature</i> , 1986, 320, 700-703.	13.7	94
121	Dynamics of the AMPTE artificial comet. <i>Nature</i> , 1986, 320, 720-723.	13.7	99
122	Ion flow at comet Halley. <i>Nature</i> , 1986, 321, 344-347.	13.7	116
123	Plasma waves associated with the AMPTE artificial comet. <i>Geophysical Research Letters</i> , 1985, 12, 851-854.	1.5	43
124	Magnetospheric convection observed between 0600 and 2100 LT: Variations with K_p . <i>Journal of Geophysical Research</i> , 1985, 90, 393-398.	3.3	67
125	Magnetospheric convection observed between 0600 and 2100 LT: Solar wind and IMF dependence. <i>Journal of Geophysical Research</i> , 1985, 90, 6370-6378.	3.3	50
126	Plasma drift measurements with the electron beam experiment on GEOS during long period pulsations on April 7, 1979. <i>Geophysical Research Letters</i> , 1983, 10, 667-670.	1.5	11

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127	An Alfvén Wave Model of Auroral Arcs. , 1983, , 515-535.		58
128	Alfvén's Critical Velocity Effect Tested in Space. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1982, 37, 728-735.	0.7	111
129	Balloon observation of ionospheric magnesium ions. Journal of Atmospheric and Solar-Terrestrial Physics, 1981, 43, 785-788.	0.9	2
130	Gestaltbildung durch Instabilität. Die Naturwissenschaften, 1981, 68, 314-322.	0.6	3
131	Plasma acceleration at the Earth's magnetopause: evidence for reconnection. Nature, 1979, 282, 243-246.	13.7	611
132	Plasma Composition Experiment on ISEE-A. IEEE Transactions on Geoscience Electronics, 1978, 16, 266-270.	1.2	151
133	Vertical winds and turbulence over Thumba. Journal of Atmospheric and Solar-Terrestrial Physics, 1978, 40, 157-163.	0.9	27
134	The entry layer. Journal of Atmospheric and Solar-Terrestrial Physics, 1978, 40, 257-259.	0.9	18
135	Microscopic plasma processes related to reconnection. Journal of Atmospheric and Solar-Terrestrial Physics, 1978, 40, 343-353.	0.9	93
136	Plasma and Magnetic Field Characteristics of the Distant Polar Cusp near Local Noon: The Entry Layer. Journal of Geophysical Research, 1976, 81, 2883-2899.	3.3	236
137	Thermospheric observations combining chemical seeding and ground-based techniques II. Ionospheric drifts and the Sq current system. Planetary and Space Science, 1973, 21, 1237-1249.	0.9	5
138	Numerical modeling of the drift and deformation of ionospheric plasma clouds and of their interaction with other layers of the ionosphere. Journal of Geophysical Research, 1973, 78, 7389-7415.	3.3	65
139	Coordinated observations of the magnetosphere: The development of a substorm. Journal of Geophysical Research, 1972, 77, 4682-4699.	3.3	45
140	Equatorial spread F_2 : Recent observations and a new interpretation. Journal of Geophysical Research, 1972, 77, 5625-5628.	3.3	136
141	Ambipolar diffusion along magnetic field lines in the presence of an electric current. Planetary and Space Science, 1971, 19, 915-927.	0.9	12
142	Evidence for magnetic field aligned currents during the substorms of March 18, 1969. Journal of Geophysical Research, 1971, 76, 2382-2395.	3.3	48
143	Striations in ionospheric ion clouds, 1. Journal of Geophysical Research, 1971, 76, 4541-4559.	3.3	87
144	Messung elektrischer Felder in der Ionosphäre mit künstlichen Plasmawolken. Die Naturwissenschaften, 1969, 56, 545-552.	0.6	4

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145	Artificial Plasma Clouds in Space. Scientific American, 1968, 219, 80-92.	1.0	22
146	Preliminary results of electric field measurements in the auroral zone. Journal of Geophysical Research, 1968, 73, 21-26.	3.3	95
147	Motion of artificial ion clouds in the upper atmosphere. Planetary and Space Science, 1967, 15, 1-18.	0.9	182
148	Artificial strontium and barium clouds in the upper atmosphere. Planetary and Space Science, 1967, 15, 357-IN2.	0.9	65
149	On the violation of the second and third adiabatic invariants. Journal of Geophysical Research, 1966, 71, 1857.	3.3	9
150	Preliminary experiments for the study of the interplanetary medium by the release of metal vapour in the upper atmosphere. Planetary and Space Science, 1965, 13, 95-114.	0.9	34
151	Protonen im inneren Strahlungsgürtel. Fortschritte Der Physik, 1964, 12, 271-346.	1.5	22