Alex Glocer

List of Publications by Year in descending order

84 papers	3,454 citations	159585 30 h-index	149698 56 g-index
98 all docs	98 docs citations	98 times ranked	2864 citing authors

#	Article	IF	Citations
1	The Endurance Rocket Mission. Space Science Reviews, 2022, 218, .	8.1	2
2	Estimating Maximum Extent of Auroral Equatorward Boundary Using Historical and Simulated Surface Magnetic Field Data. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028284.	2.4	10
3	What sustained multi-disciplinary research can achieve: The space weather modeling framework. Journal of Space Weather and Space Climate, 2021, 11, 42.	3.3	32
4	New Developments in the Comprehensive Inner Magnetosphereâ€Ionosphere Model. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028987.	2.4	8
5	Recreating the Horizontal Magnetic Field at Colaba During the Carrington Event With Geospace Simulations. Space Weather, 2021, 19, e2020SW002585.	3.7	8
6	Electron Energy Interplay in the Geomagnetic Trap Below the Auroral Acceleration Region. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028811.	2.4	7
7	Depleted Plasma Densities in the Ionosphere of Venus Near Solar Minimum From Parker Solar Probe Observations of Upper Hybrid Resonance Emission. Geophysical Research Letters, 2021, 48, e2020GL092243.	4.0	7
8	Impacts of Ionospheric Ions on Magnetic Reconnection and Earth's Magnetosphere Dynamics. Reviews of Geophysics, 2021, 59, e2020RG000707.	23.0	26
9	On formation flying in low earth mirrored orbits â€" A case study. Acta Astronautica, 2021, 184, 142-149.	3.2	3
10	The Precipitated Electrons in the Region of Diffuse Aurora Driven by Ionosphereâ€Thermosphere Collisional Processes. Geophysical Research Letters, 2021, 48, e2021GL094583.	4.0	6
11	The Key Role of Cold Ionospheric Ions As a Source of Hot Magnetospheric Plasma and As a Driver of the Dynamics of Substorms and Storms. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	3
12	Quantification of Cold-Ion Beams in a Magnetic Reconnection Jet. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	4
13	Impact of space weather on climate and habitability of terrestrial-type exoplanets. International Journal of Astrobiology, 2020, 19, 136-194.	1.6	125
14	A Case Study on the Origin of Nearâ€Earth Plasma. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028205.	2.4	23
15	The Formation of Electron Heat Flux in the Region of Diffuse Aurora. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028175.	2.4	13
16	How Magnetically Conjugate Atmospheres and the Magnetosphere Participate in the Formation of Lowâ€Energy Electron Precipitation in the Region of Diffuse Aurora. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028057.	2.4	7
17	The Contribution of N⁺ Ions to Earth's Polar Wind. Geophysical Research Letters, 2020, 47, e2020GL089321.	4.0	8
18	Atmospheric Escape Processes and Planetary Atmospheric Evolution. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027639.	2.4	58

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19	The Space Environment and Atmospheric Joule Heating of the Habitable Zone Exoplanet TOI 700 d. Astrophysical Journal, 2020, 897, 101.	4.5	9
20	Pitch Angle Scattering of Subâ€MeV Relativistic Electrons by Electromagnetic Ion Cyclotron Waves. Journal of Geophysical Research: Space Physics, 2019, 124, 5610-5626.	2.4	41
21	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
22	Ionospheric Ambipolar Electric Fields of Mars and Venus: Comparisons Between Theoretical Predictions and Direct Observations of the Electric Potential Drop. Geophysical Research Letters, 2019, 46, 1168-1176.	4.0	21
23	Wave-induced particle precipitation into the ionosphere from the inner magnetosphere. , 2019, , .		0
24	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
25	Collisionless relaxation of the ion ring distribution in space plasma. Planetary and Space Science, 2019, 165, 75-84.	1.7	0
26	Energy Dissipation in the Upper Atmospheres of TRAPPIST-1 Planets. Astrophysical Journal Letters, 2018, 856, L11.	8.3	19
27	Geomagnetic Storms: First-Principles Models for Extreme Geospace Environment. , 2018, , 231-258.		3
28	The Unknown Hydrogen Exosphere: Space Weather Implications. Space Weather, 2018, 16, 205-215.	3.7	20
29	An Energetic Electron Flux Dropout Due to Magnetopause Shadowing on 1 June 2013. Journal of Geophysical Research: Space Physics, 2018, 123, 1178-1190.	2.4	16
30	Reply to Comments by Tsurutani et al. on â€œModeling Extreme â€˜Carrington-Typeâ€™ Space Weather Events Using Three-Dimensional Global MHD Simulationsâ€• Journal of Geophysical Research: Space Physics, 2018, 123, 1393-1395.	2.4	2
31	New Results From Galileo's First Flyby of Ganymede: Reconnectionâ€Driven Flows at the Lowâ€Latitude Magnetopause Boundary, Crossing the Cusp, and Icy Ionospheric Escape. Geophysical Research Letters, 2018, 45, 3382-3392.	4.0	20
32	Including Kinetic Ion Effects in the Coupled Global Ionospheric Outflow Solution. Journal of Geophysical Research: Space Physics, 2018, 123, 2851-2871.	2.4	21
33	A hybrid electrostatic retarding potential analyzer for the measurement of plasmas at extremely high energy resolution. Review of Scientific Instruments, 2018, 89, 113306.	1.3	7
34	Exoplanet Modulation of Stellar Coronal Radio Emission. Astronomical Journal, 2018, 156, 202.	4.7	8
35	Magnetosphere dynamics during the 14ÂNovember 2012 storm inferred from TWINS, AMPERE, Van Allen Probes, and BATS-R-USâ€“CRCM. Annales Geophysicae, 2018, 36, 107-124.	1.6	8
36	How Hospitable Are Space Weather Affected Habitable Zones? The Role of Ion Escape. Astrophysical Journal Letters, 2017, 836, L3.	8.3	185

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37	On the Magnetic Protection of the Atmosphere of Proxima Centauri b. Astrophysical Journal Letters, 2017, 844, L13.	8.3	107
38	Growth and nonlinear saturation of electromagnetic ion cyclotron waves in multiâ€ion species magnetospheric plasma. Journal of Geophysical Research: Space Physics, 2017, 122, 6469-6484.	2.4	10
39	Electron Drift Resonance in the MHDâ€Coupled Comprehensive Inner Magnetosphereâ€Ionosphere Model. Journal of Geophysical Research: Space Physics, 2017, 122, 12,006.	2.4	12
40	Photoelectrons in the quiet polar wind. Journal of Geophysical Research: Space Physics, 2017, 122, 6708-6726.	2.4	25
41	Electric Mars: A large transâ€terminator electric potential drop on closed magnetic field lines above Utopia Planitia. Journal of Geophysical Research: Space Physics, 2017, 122, 2260-2271.	2.4	16
42	CCMC Modeling of Magnetic Reconnection in Electron Diffusion Region Events. Proceedings of the International Astronomical Union, 2017, 13, 142-146.	0.0	1
43	Simulation of a rapid dropout event for highly relativistic electrons with the RBE model. Journal of Geophysical Research: Space Physics, 2016, 121, 4092-4102.	2.4	19
44	Convective growth of electromagnetic ion cyclotron waves from realistic ring current ion distributions. Journal of Geophysical Research: Space Physics, 2016, 121, 10,966.	2.4	14
45	Prebiotic chemistry and atmospheric warming of early Earth by an active young Sun. Nature Geoscience, 2016, 9, 452-455.	12.9	213
46	Ionosphereâ€magnetosphere energy interplay in the regions of diffuse aurora. Journal of Geophysical Research: Space Physics, 2016, 121, 6661-6673.	2.4	8
47	The electric wind of Venus: A global and persistent â€œpolar windâ€â€like ambipolar electric field sufficient for the direct escape of heavy ionospheric ions. Geophysical Research Letters, 2016, 43, 5926-5934.	4.0	31
48	Communityâ€wide validation of geospace model local Kâ€index predictions to support model transition to operations. Space Weather, 2016, 14, 469-480.	3.7	27
49	Extended magnetohydrodynamics with embedded particleâ€inâ€cell simulation of Ganymede's magnetosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 1273-1293.	2.4	78
50	Separator reconnection at the magnetopause for predominantly northward and southward IMF: Techniques and results. Journal of Geophysical Research: Space Physics, 2016, 121, 140-156.	2.4	34
51	The role of the Hall effect in the global structure and dynamics of planetary magnetospheres: Ganymede as a case study. Journal of Geophysical Research: Space Physics, 2015, 120, 5377-5392.	2.4	35
52	Electron distribution function formation in regions of diffuse aurora. Journal of Geophysical Research: Space Physics, 2015, 120, 9891-9915.	2.4	40
53	The twoâ€way relationship between ionospheric outflow and the ring current. Journal of Geophysical Research: Space Physics, 2015, 120, 4338-4353.	2.4	33
54	The early Earth under a superflare and super-CME attack: prospects for life. Proceedings of the International Astronomical Union, 2015, 11, 409-415.	0.0	2

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55	Multipoint observations of the openâ€“closed field line boundary as observed by the Van Allen Probes and geostationary satellites during the 14 November 2012 geomagnetic storm. Journal of Geophysical Research: Space Physics, 2015, 120, 6596-6613.	2.4	7
56	Electric Mars: The first direct measurement of an upper limit for the Martian â€œpolar windâ€•electric potential. Geophysical Research Letters, 2015, 42, 9128-9134.	4.0	38
57	The global context of the 14 November 2012 storm event. Journal of Geophysical Research: Space Physics, 2015, 120, 1939-1956.	2.4	8
58	Superthermal electron magnetosphere-ionosphere coupling in the diffuse aurora in the presence of ECH waves. Journal of Geophysical Research: Space Physics, 2015, 120, 445-459.	2.4	12
59	THE INTERACTION OF VENUS-LIKE, M-DWARF PLANETS WITH THE STELLAR WIND OF THEIR HOST STAR. Astrophysical Journal, 2015, 806, 41.	4.5	65
60	Magnetosphereâ€“ionosphere energy interchange in the electron diffuse aurora. Journal of Geophysical Research: Space Physics, 2014, 119, 171-184.	2.4	47
61	The Comprehensive Inner Magnetosphereâ€“Ionosphere Model. Journal of Geophysical Research: Space Physics, 2014, 119, 7522-7540.	2.4	106
62	MAGNETOSPHERIC STRUCTURE AND ATMOSPHERIC JOULE HEATING OF HABITABLE PLANETS ORBITING M-DWARF STARS. Astrophysical Journal, 2014, 790, 57.	4.5	124
63	Modeling extreme â€œCarringtonâ€typeâ€•space weather events using threeâ€dimensional global MHD simulations. Journal of Geophysical Research: Space Physics, 2014, 119, 4456-4474.	2.4	74
64	Simulation of the 23 July 2012 extreme space weather event: What if this extremely rare CME was Earth directed?. Space Weather, 2013, 11, 671-679.	3.7	87
65	Pressure anisotropy in global magnetospheric simulations: Coupling with ring current models. Journal of Geophysical Research: Space Physics, 2013, 118, 5639-5658.	2.4	24
66	Geospace environment modeling 2008â€“2009 challenge: D_{st} index. Space Weather, 2013, 11, 187-205.	3.7	69
67	CRCM + BATSâ€“Râ€“US twoâ€way coupling. Journal of Geophysical Research: Space Physics, 2013, 118, 1635-1650.	2.4	72
68	Superthermal electron energy interchange in the ionosphereâ€“plasmasphere system. Journal of Geophysical Research: Space Physics, 2013, 118, 925-934.	2.4	7
69	Tracing magnetic separators and their dependence on IMF clock angle in global magnetospheric simulations. Journal of Geophysical Research: Space Physics, 2013, 118, 4998-5007.	2.4	36
70	Global view of inner magnetosphere composition during storm time. Journal of Geophysical Research: Space Physics, 2013, 118, 7074-7084.	2.4	18
71	Flux estimates of ions from the lunar exosphere. Geophysical Research Letters, 2012, 39, .	4.0	29
72	AMBIPOLAR ELECTRIC FIELD, PHOTOELECTRONS, AND THEIR ROLE IN ATMOSPHERIC ESCAPE FROM HOT JUPITERS. Astrophysical Journal Letters, 2012, 753, L4.	8.3	40

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73	Kinetic description of ionospheric outflows based on the exact form of Fokkerâ€Planck collision operator: Electrons. Journal of Geophysical Research, 2012, 117, .	3.3	5
74	Modeling solar zenith angle effects on the polar wind. Journal of Geophysical Research, 2012, 117, .	3.3	56
75	Adaptive numerical algorithms in space weather modeling. Journal of Computational Physics, 2012, 231, 870-903.	3.8	560
76	The effects of dynamic ionospheric outflow on the ring current. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	58
77	Rapid rebuilding of the outer radiation belt. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	31
78	Recent developments in the radiation belt environment model. Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 1435-1443.	1.6	63
79	Dynamics of ring current and electric fields in the inner magnetosphere during disturbed periods: CRCMâ€“BATSâ€Râ€US coupled model. Journal of Geophysical Research, 2010, 115, .	3.3	42
80	Integration of the radiation belt environment model into the space weather modeling framework. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1653-1663.	1.6	29
81	Modeling ionospheric outflows and their impact on the magnetosphere, initial results. Journal of Geophysical Research, 2009, 114, .	3.3	114
82	Multifluid Blockâ€Adaptiveâ€Tree Solar wind Roeâ€type Upwind Scheme: Magnetospheric composition and dynamics during geomagnetic stormsâ€”Initial results. Journal of Geophysical Research, 2009, 114, .	3.3	103
83	Polar wind outflow model: Saturn results. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	45
84	Impact of Solar Wind on the Earth Magnetosphere: Recent Progress in the Modeling of Ring Current and Radiation Belts. , 0, , .		0