

Igor Alekseev

List of Publications by Year in descending order

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98
docs citations

98
times ranked

1047
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling of Magnetospheres of Terrestrial Exoplanets in the Habitable Zone around G-Type Stars. Universe, 2022, 8, 231.	2.5	1
2	Sliding Contacts in Planetary Magnetospheres. Symmetry, 2021, 13, 283.	2.2	1
3	Transient particle acceleration by a dawn-dusk electric field in a current sheet. Physics of Plasmas, 2021, 28, 042902.	1.9	0
4	A Model of Jupiter's Current Disk Optimized for Juno and Galileo Magnetic Field Data. Cosmic Research, 2021, 59, 175-182.	0.6	1
5	Excess of Sodium Ions Density Required to Create a Wide Current at the Hermean Magnetopause. Universe, 2021, 7, 355.	2.5	0
6	Axially Asymmetric Steady State Model of Jupiter's Magnetosphere-Ionosphere Coupling. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029608.	2.4	4
7	The final version of the FUMILIM minimization package. Computer Physics Communications, 2020, 251, 107202.	7.5	4
8	Evolution of the Earth's Polar Outflow From Mid-Archean to Present. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027837.	2.4	10
9	Possibility of the Existence of Trapped Radiation near Mercury. Astronomy Letters, 2020, 46, 762-773.	1.0	0
10	Influence of the Earth's ring current strength on Stormer's allowed and forbidden regions of charged particle motion. Annales Geophysicae, 2019, 37, 535-547.	1.6	2
11	Model of Jupiter's Current Sheet With a Piecewise Current Density. Journal of Geophysical Research: Space Physics, 2019, 124, 1843-1854.	2.4	16
12	Magnetodisc modelling in Jupiter's magnetosphere using Juno magnetic field data and the paraboloid magnetic field model. Annales Geophysicae, 2019, 37, 101-109.	1.6	1
13	Calculation of the Initial Magnetic Field for Mercury's Magnetosphere Hybrid Model. Cosmic Research, 2018, 56, 108-114.	0.6	2
14	Partially Ionized Plasmas in Astrophysics. Space Science Reviews, 2018, 214, 1.	8.1	102
15	Field-Aligned Currents in Saturn's Nightside Magnetosphere: Subcorotation and Planetary Period Oscillation Components During Northern Spring. Journal of Geophysical Research: Space Physics, 2018, 123, 3602-3636.	2.4	24
16	Self-consistent description of the tangential-discontinuity-type current sheet, using the particle trajectory method and angular variables. Physics of Plasmas, 2018, 25, 092110.	1.9	1
17	The influence of kinetic effect on the MHD scalings of a thin current sheet. Journal of Geophysical Research: Space Physics, 2017, 122, 493-500.	2.4	2
18	Lorenz system in the thermodynamic modelling of leukaemia malignancy. Medical Hypotheses, 2017, 102, 150-155.	1.5	3

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19	Simulation of Mercury's magnetosheath with a combined hybrid-paraboloid model. Journal of Geophysical Research: Space Physics, 2017, 122, 8310-8326.	2.4	3
20	Open and partially closed models of the solar wind interaction with outer planet magnetospheres: the case of Saturn. Annales Geophysicae, 2017, 35, 1293-1308.	1.6	1
21	Field-aligned currents in Saturn's magnetosphere: Local time dependence of southern summer currents in the dawn sector between midnight and noon. Journal of Geophysical Research: Space Physics, 2016, 121, 7785-7804.	2.4	21
22	The energy-based scaling of a thin current sheet: Case study. Geophysical Research Letters, 2015, 42, 9609-9616.	4.0	3
23	Aurora at high latitudes of Ganymede. Astronomy Letters, 2015, 41, 687-692.	1.0	3
24	Field-aligned currents in Saturn's northern nightside magnetosphere: Evidence for interhemispheric current flow associated with planetary period oscillations. Journal of Geophysical Research: Space Physics, 2015, 120, 7552-7584.	2.4	70
25	Investigation of scaling properties of a thin current sheet by means of particle trajectories study. Journal of Geophysical Research: Space Physics, 2015, 120, 1633-1645.	2.4	6
26	Magnetosphere Environment from Solar System Planets/Moons to Exoplanets. Astrophysics and Space Science Library, 2015, , 189-212.	2.7	1
27	Magnetospheric magnetic field modelling for the 2011 and 2012 HST Saturn aurora campaigns – implications for auroral source regions. Annales Geophysicae, 2014, 32, 689-704.	1.6	18
28	On the large-scale structure of the tail current as measured by THEMIS. Advances in Space Research, 2014, 54, 1773-1785.	2.6	3
29	Low-latitude variations in the geomagnetic field caused by solar wind disturbances. Geomagnetism and Aeronomy, 2014, 54, 445-448.	0.8	0
30	Field-aligned currents in Saturn's southern nightside magnetosphere: Subcorotation and planetary period oscillation components. Journal of Geophysical Research: Space Physics, 2014, 119, 9847-9899.	2.4	87
31	Saturn's dayside ultraviolet auroras: Evidence for morphological dependence on the direction of the upstream interplanetary magnetic field. Journal of Geophysical Research: Space Physics, 2014, 119, 1994-2008.	2.4	25
32	Influence of the solar wind magnetic field on the Earth and Mercury magnetospheres in the paraboloidal model. Planetary and Space Science, 2013, 75, 46-55.	1.7	8
33	Energetic particle dynamics in Mercury's magnetosphere. Journal of Geophysical Research: Space Physics, 2013, 118, 1992-1999.	2.4	26
34	Stellar CME activity and its possible influence on exoplanets' environments: Importance of magnetospheric protection. Proceedings of the International Astronomical Union, 2013, 8, 335-346.	0.0	5
35	Magnetodisk-dominated magnetospheres of close orbit giant exoplanets. EAS Publications Series, 2012, 58, 233-237.	0.3	2
36	MAGNETOSPHERES OF "HOT JUPITERS": THE IMPORTANCE OF MAGNETODISKS IN SHAPING A MAGNETOSPHERIC OBSTACLE. Astrophysical Journal, 2012, 744, 70.	4.5	63

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37	MESSENGER observations of Mercury's magnetic field structure. Journal of Geophysical Research, 2012, 117, .	3.3	109
38	Magnetospheres of the Mercury, Earth, Jupiter, and Saturn. Thirty Years of Astronomical Discovery With UKIRT, 2012, , 209-216.	0.3	0
39	Location of the Inner Edges of Astrophysical Discs Related to the Central Object. Thirty Years of Astronomical Discovery With UKIRT, 2012, , 217-226.	0.3	1
40	The magnetospheres of Mercury, Earth, and the giant planets Jupiter and Saturn. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2010, 65, 300-306.	0.4	1
41	Mercury's magnetospheric magnetic field after the first two MESSENGER flybys. Icarus, 2010, 209, 23-39.	2.5	110
42	IMF dependence of Saturn's auroras: modelling study of HST and Cassini data from 12 th –15 February 2008. Annales Geophysicae, 2010, 28, 1559-1570.	1.6	12
43	Ring current asymmetry during a magnetic storm. Geomagnetism and Aeronomy, 2008, 48, 747-758.	0.8	9
44	Paraboloid model of Mercury's magnetosphere. Journal of Geophysical Research, 2008, 113, .	3.3	59
45	Cassini observations of the variation of Saturn's ring current parameters with system size. Journal of Geophysical Research, 2007, 112, .	3.3	108
46	Magnetic field of the transition current system: dawn-dusk asymmetry. Annales Geophysicae, 2007, 25, 1899-1911.	1.6	4
47	Magnetopause mapping to the ionosphere for northward IMF. Annales Geophysicae, 2007, 25, 2615-2625.	1.6	5
48	IMF dependence of the open-closed field line boundary in Saturn's ionosphere, and its relation to the UV auroral oval observed by the Hubble Space Telescope. Annales Geophysicae, 2007, 25, 1215-1226.	1.6	15
49	A global magnetic model of Saturn's magnetosphere and a comparison with Cassini SOI data. Geophysical Research Letters, 2006, 33, .	4.0	44
50	Saturn's aurora in the January 2004 events. Annales Geophysicae, 2006, 24, 1649-1663.	1.6	18
51	Definition of Saturn's magnetospheric model parameters for the Pioneer 11 flyby. Annales Geophysicae, 2006, 24, 1145-1156.	1.6	19
52	Modeling the Dst variation during magnetic storms. Geomagnetism and Aeronomy, 2006, 46, 563-569.	0.8	4
53	Simultaneous polar aurorae and modelled convection patterns in both hemispheres. Advances in Space Research, 2006, 38, 1685-1693.	2.6	9
54	Solar Wind Control of the Magnetospheric and Auroral Dynamics. Space Science Reviews, 2006, 122, 55-68.	8.1	3

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55	Case study of September 24–26, 1998 magnetic storm. <i>Advances in Space Research</i> , 2005, 36, 2428-2433.	2.6	1
56	A model of Jupiter's magnetospheric magnetic field with variable magnetopause flaring. <i>Planetary and Space Science</i> , 2005, 53, 863-872.	1.7	26
57	Self-consistent modeling of the large-scale distortions in the geomagnetic field during the 24–27 September 1998 major magnetic storm. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	34
58	Transpolar aurora: time evolution, associated convection patterns, and a possible cause. <i>Annales Geophysicae</i> , 2005, 23, 1917-1930.	1.6	12
59	Modeling of the Jovian Magnetosphere. <i>Annales Geophysicae</i> , 2005, 23, 809-826.	1.6	72
60	A simple axisymmetric model of magnetosphere-ionosphere coupling currents in Jupiter's polar ionosphere. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	58
61	Magnetic Storms in October 2003. <i>Cosmic Research</i> , 2004, 42, 489-535.	0.6	53
62	Field-aligned current distribution in the transition current system. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	11
63	Title is missing!. <i>Cosmic Research</i> , 2003, 41, 359-370.	0.6	0
64	Energy flux in the Earth's magnetosphere: Storm – substorm relationship. <i>Space Science Reviews</i> , 2003, 107, 141-148.	8.1	3
65	Modelling of the electromagnetic field in the interplanetary space and in the Earth's magnetosphere. <i>Space Science Reviews</i> , 2003, 107, 7-26.	8.1	37
66	Energetics of the magnetosphere during the magnetic storm. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2003, 65, 429-446.	1.6	21
67	Modelling of the Electromagnetic Field in the Interplanetary Space and in the Earth's Magnetosphere. , 2003, , 7-26.		7
68	Dynamic model of the magnetosphere: Case study for January 9-12, 1997. <i>Journal of Geophysical Research</i> , 2001, 106, 25683-25693.	3.3	55
69	Special features of the September 24-27, 1998 storm during high solar wind dynamic pressure and northward interplanetary magnetic field. <i>Journal of Geophysical Research</i> , 2001, 106, 25695-25711.	3.3	40
70	The geotail and ring current dynamics under disturbed conditions. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2001, 63, 473-479.	1.6	6
71	Modeling of geomagnetic field during magnetic storms and comparison with observations. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2001, 63, 431-440.	1.6	38
72	A model of region 1 field-aligned currents dependent on ionospheric conductivity and solar wind parameters. <i>Journal of Geophysical Research</i> , 2000, 105, 21119-21127.	3.3	26

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73	Dynamics of the auroral electrojets and their mapping to the magnetosphere. Radiation Measurements, 1999, 30, 579-587.	1.4	5
74	Auroral electrojet dynamics during magnetic storms, connection with plasma precipitation and large-scale structure of the magnetospheric magnetic field. Annales Geophysicae, 1999, 17, 497-507.	1.6	3
75	Structure of the magnetospheric magnetic field during magnetic storms. Journal of Geophysical Research, 1999, 104, 28351-28360.	3.3	36
76	Concerning the location of magnetopause merging as a function of the magnetopause current strength. Journal of Geophysical Research, 1998, 103, 6675-6684.	3.3	42
77	Convection vortex at dayside of high latitude ionosphere. Physics and Chemistry of the Earth, 1997, 22, 691-696.	0.3	1
78	Magnetic storms and magnetotail currents. Journal of Geophysical Research, 1996, 101, 7737-7747.	3.3	180
79	Model of current sheet in the magnetosphere tail taking into account the interaction of untrapped and trapped particles. Advances in Space Research, 1995, 16, 205-208.	2.6	4
80	Magnetic field and plasma flow structure near the magnetopause. Journal of Geophysical Research, 1995, 100, 19267.	3.3	17
81	Tail current sheet dynamics in the disturbed magnetosphere. Advances in Space Research, 1993, 13, 229-233.	2.6	0
82	Electromagnetic interaction of the solar wind generator with the magnetosphere carried by field-aligned currents. Advances in Space Research, 1993, 13, 33-35.	2.6	1
83	Electric fields and field-aligned current generation in the magnetosphere. Journal of Geophysical Research, 1993, 98, 4041-4051.	3.3	22
84	Alfvén wings in the vicinity of a conducting body in a magnetized plasma. Journal of Atmospheric and Solar-Terrestrial Physics, 1991, 53, 1099-1101.	0.9	4
85	Where do field lines go in the quiet magnetosphere?. Reviews of Geophysics, 1988, 26, 782-791.	23.0	25
86	The penetration of interplanetary magnetic and electric fields into the magnetosphere.. Journal of Geomagnetism and Geoelectricity, 1986, 38, 1199-1221.	0.9	48
87	On interplanetary electric and magnetic fields. Solar Physics, 1982, 79, 385-397.	2.5	11
88	A model of a magnetic field in the geomagnetosphere. Planetary and Space Science, 1972, 20, 117-133.	1.7	69
89	What Defines the Polar Cap and Auroral Oval Diameters?. Geophysical Monograph Series, 0, , 257-262.	0.1	5