

# Elena Belenkaya

## List of Publications by Year in descending order

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63  
papers

1,036  
citations

430874

18  
h-index

434195

31  
g-index

69  
all docs

69  
docs citations

69  
times ranked

554  
citing authors

#	ARTICLE	IF	CITATIONS
1	Can a Dynamo Mechanism Act at the Magnetopauses of Magnetic Rapidly Rotating Exoplanets?. <i>Fluids</i> , 2022, 7, 60.	1.7	0
2	Modeling of Magnetospheres of Terrestrial Exoplanets in the Habitable Zone around G-Type Stars. <i>Universe</i> , 2022, 8, 231.	2.5	1
3	Sliding Contacts in Planetary Magnetospheres. <i>Symmetry</i> , 2021, 13, 283.	2.2	1
4	Transient particle acceleration by a dawn–dusk electric field in a current sheet. <i>Physics of Plasmas</i> , 2021, 28, 042902.	1.9	0
5	A Model of Jupiter’s Current Disk Optimized for Juno and Galileo Magnetic Field Data. <i>Cosmic Research</i> , 2021, 59, 175-182.	0.6	1
6	What Density of Magnetosheath Sodium Ions Can Provide the Observed Decrease in the Magnetic Field of the “Double Magnetopause” during the First MESSENGER Flyby?. <i>Symmetry</i> , 2021, 13, 1168.	2.2	3
7	Excess of Sodium Ions Density Required to Create a Wide Current at the Hermean Magnetopause. <i>Universe</i> , 2021, 7, 355.	2.5	0
8	Axially Asymmetric Steady State Model of Jupiter’s Magnetosphere–Ionosphere Coupling. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029608.	2.4	4
9	Dynamo beyond the Heliopause: Verification from the Available Data of Voyager 2. <i>Astronomy Reports</i> , 2021, 65, 1145-1149.	0.9	0
10	Callisto in the Magnetosphere of Jupiter. <i>Solar System Research</i> , 2020, 54, 85-95.	0.7	5
11	Possibility of the Existence of Trapped Radiation near Mercury. <i>Astronomy Letters</i> , 2020, 46, 762-773.	1.0	0
12	Model of Jupiter’s Current Sheet With a Piecewise Current Density. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1843-1854.	2.4	16
13	Magnetodisc modelling in Jupiter’s magnetosphere using Juno magnetic field data and the paraboloid magnetic field model. <i>Annales Geophysicae</i> , 2019, 37, 101-109.	1.6	1
14	Calculation of the Initial Magnetic Field for Mercury’s Magnetosphere Hybrid Model. <i>Cosmic Research</i> , 2018, 56, 108-114.	0.6	2
15	Field-Aligned Currents in Saturn’s Nightside Magnetosphere: Subcorotation and Planetary Period Oscillation Components During Northern Spring. <i>Journal of Geophysical Research: Space Physics</i> , 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. <i>Physics of Plasmas</i> , 2018, 25, 092110.	1.9	1
17	The influence of kinetic effect on the MHD scalings of a thin current sheet. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 493-500.	2.4	2
18	Simulation of Mercury’s magnetosheath with a combined hybrid–paraboloid model. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8310-8326.	2.4	3

#	ARTICLE	IF	CITATIONS
19	Open and partially closed models of the solar wind interaction with outer planet magnetospheres: the case of Saturn. <i>Annales Geophysicae</i> , 2017, 35, 1293-1308.	1.6	1
20	Optimization of Saturn paraboloid magnetospheric field model parameters using Cassini equatorial magnetic field data. <i>Annales Geophysicae</i> , 2016, 34, 641-656.	1.6	4
21	Field-aligned currents in Saturn's magnetosphere: Local time dependence of southern summer currents in the dawn sector between midnight and noon. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 7785-7804.	2.4	21
22	The energy-based scaling of a thin current sheet: Case study. <i>Geophysical Research Letters</i> , 2015, 42, 9609-9616.	4.0	3
23	Field-aligned currents in Saturn's northern nightside magnetosphere: Evidence for interhemispheric current flow associated with planetary period oscillations. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 7552-7584.	2.4	70
24	Investigation of scaling properties of a thin current sheet by means of particle trajectories study. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 1633-1645.	2.4	6
25	Dynamo in the Outer Heliosheath: Necessary Conditions. <i>Solar Physics</i> , 2015, 290, 2077-2092.	2.5	4
26	Magnetospheric magnetic field modelling for the 2011 and 2012 HST Saturn aurora campaigns – implications for auroral source regions. <i>Annales Geophysicae</i> , 2014, 32, 689-704.	1.6	18
27	Polar cap response to the solar wind density jump under constant southward IMF. <i>Geomagnetism and Aeronomy</i> , 2014, 54, 702-711.	0.8	1
28	Low-latitude variations in the geomagnetic field caused by solar wind disturbances. <i>Geomagnetism and Aeronomy</i> , 2014, 54, 445-448.	0.8	0
29	The response of the high-latitude ionosphere to the solar-wind pressure jump with a southward IMF on January 10, 1997. <i>Geomagnetism and Aeronomy</i> , 2014, 54, 203-206.	0.8	3
30	Response of currents in Earth's and Saturn's dayside magnetopause to a sudden change in the solar wind density. <i>Geomagnetism and Aeronomy</i> , 2014, 54, 287-291.	0.8	1
31	Field-aligned currents in Saturn's southern nightside magnetosphere: Subcorotation and planetary period oscillation components. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 9847-9899.	2.4	87
32	Saturn's dayside ultraviolet auroras: Evidence for morphological dependence on the direction of the upstream interplanetary magnetic field. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 1994-2008.	2.4	25
33	Magnetic interconnection of Saturn's polar regions: comparison of modelling results with Hubble Space Telescope UV auroral images. <i>Annales Geophysicae</i> , 2013, 31, 1447-1458.	1.6	3
34	Stellar CME activity and its possible influence on exoplanets' environments: Importance of magnetospheric protection. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 335-346.	0.0	5
35	Accretion and Current Discs Controlled by Strong Magnetic Field. <i>International Journal of Astronomy and Astrophysics</i> , 2012, 02, 81-96.	0.5	5
36	Magnetospheric mapping of the dayside UV auroral oval at Saturn using simultaneous HST images, Cassini IMF data, and a global magnetic field model. <i>Annales Geophysicae</i> , 2011, 29, 1233-1246.	1.6	20

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37	Mercury's magnetospheric magnetic field after the first two MESSENGER flybys. <i>Icarus</i> , 2010, 209, 23-39.	2.5	110
38	IMF dependence of Saturn's auroras: modelling study of HST and Cassini data from 12–15 February 2008. <i>Annales Geophysicae</i> , 2010, 28, 1559-1570.	1.6	12
39	Magnetospheres of planets with an intrinsic magnetic field. <i>Physics-Uspekhi</i> , 2009, 52, 765-788.	2.2	17
40	Ring current asymmetry during a magnetic storm. <i>Geomagnetism and Aeronomy</i> , 2008, 48, 747-758.	0.8	9
41	Paraboloid model of Mercury's magnetosphere. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	59
42	Dependence of the open-closed field line boundary in Saturn's ionosphere on both the IMF and solar wind dynamic pressure: comparison with the UV auroral oval observed by the HST. <i>Annales Geophysicae</i> , 2008, 26, 159-166.	1.6	23
43	Magnetic field of the transition current system: dawn-dusk asymmetry. <i>Annales Geophysicae</i> , 2007, 25, 1899-1911.	1.6	4
44	Magnetopause mapping to the ionosphere for northward IMF. <i>Annales Geophysicae</i> , 2007, 25, 2615-2625.	1.6	5
45	Selection of parameters for the Saturn's magnetospheric model based on the pioneer 11 data. <i>Geomagnetism and Aeronomy</i> , 2007, 47, 29-36.	0.8	1
46	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. <i>Annales Geophysicae</i> , 2007, 25, 1215-1226.	1.6	15
47	A global magnetic model of Saturn's magnetosphere and a comparison with Cassini SOI data. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	44
48	Magnetic field influence on aurorae and the Jovian plasma disk radial structure. <i>Annales Geophysicae</i> , 2006, 24, 973-988.	1.6	4
49	Saturn's aurora in the January 2004 events. <i>Annales Geophysicae</i> , 2006, 24, 1649-1663.	1.6	18
50	Definition of Saturn's magnetospheric model parameters for the Pioneer 11 flyby. <i>Annales Geophysicae</i> , 2006, 24, 1145-1156.	1.6	19
51	Transition current systems in the Earth's and Saturn's magnetospheres. <i>Geomagnetism and Aeronomy</i> , 2006, 46, 555-562.	0.8	3
52	Transpolar aurora: time evolution, associated convection patterns, and a possible cause. <i>Annales Geophysicae</i> , 2005, 23, 1917-1930.	1.6	12
53	Modeling of the Jovian Magnetosphere. <i>Annales Geophysicae</i> , 2005, 23, 809-826.	1.6	72
54	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

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55	Magnetic Storms in October 2003. Cosmic Research, 2004, 42, 489-535.	0.6	53
56	Field-aligned current distribution in the transition current system. Journal of Geophysical Research, 2004, 109, .	3.3	11
57	Modelling of the electromagnetic field in the interplanetary space and in the Earth's magnetosphere. Space Science Reviews, 2003, 107, 7-26.	8.1	37
58	Dynamic model of the magnetosphere: Case study for January 9-12, 1997. Journal of Geophysical Research, 2001, 106, 25683-25693.	3.3	55
59	Currents at the subsolar low shear magnetopause. Journal of Geophysical Research, 2001, 106, 25437-25450.	3.3	7
60	Title is missing!. Astrophysics and Space Science, 2001, 277, 289-292.	1.4	2
61	Reconnection modes for near-radial interplanetary magnetic field. Journal of Geophysical Research, 1998, 103, 26487-26494.	3.3	16
62	Generation of the magnetic field at the magnetopauses of the rapidly rotating planets. Journal of Geophysical Research, 1996, 101, 41-47.	3.3	7
63	Electric fields and field-aligned current generation in the magnetosphere. Journal of Geophysical Research, 1993, 98, 4041-4051.	3.3	22