

Anatoly A Petrukovich

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4954363/publications.pdf>

Version: 2024-02-01

116
papers

2,965
citations

136740

32
h-index

189595

50
g-index

117
all docs

117
docs citations

117
times ranked

1156
citing authors

#	ARTICLE	IF	CITATIONS
1	Substorm dipolarization and recovery. <i>Journal of Geophysical Research</i> , 1999, 104, 24995-25000.	3.3	213
2	Multiple overshoot and rebound of a bursty bulk flow. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	153
3	Thin current sheets in collisionless plasma: Equilibrium structure, plasma instabilities, and particle acceleration. <i>Plasma Physics Reports</i> , 2011, 37, 118-160.	0.3	142
4	Two spacecraft observations of a reconnection pulse during an auroral breakup. <i>Journal of Geophysical Research</i> , 1998, 103, 47-59.	3.3	84
5	Embedded current sheets in the Earth's magnetotail. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	78
6	Oscillatory magnetic flux tube slippage in the plasma sheet. <i>Annales Geophysicae</i> , 2006, 24, 1695-1704.	0.6	71
7	Thinning and stretching of the plasma sheet. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	70
8	Low frequency eigenmodes of thin anisotropic current sheets and Cluster observations. <i>Annales Geophysicae</i> , 2009, 27, 861-868.	0.6	69
9	Cluster statistics of thin current sheets in the Earth magnetotail: Specifics of the dawn flank, proton temperature profiles and electrostatic effects. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	68
10	Origins of plasma sheet B_y . <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	63
11	Thin embedded current sheets: Cluster observations of ion kinetic structure and analytical models. <i>Annales Geophysicae</i> , 2009, 27, 4075-4087.	0.6	61
12	Plasma sheet thickness during a bursty bulk flow reversal. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	60
13	Proton velocity distribution in thin current sheets: Cluster observations and theory of transient trajectories. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	57
14	Statistical survey on the magnetic structure in magnetotail current sheets. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	55
15	Magnetic Storms in October 2003. <i>Cosmic Research</i> , 2004, 42, 489-535.	0.2	53
16	Metastability of current sheets. <i>Physics-Usppekhi</i> , 2010, 53, 933-941.	0.8	53
17	Ion resonance acceleration by dipolarization fronts: analytic theory and spacecraft observation. <i>Annales Geophysicae</i> , 2012, 30, 317-324.	0.6	53
18	Intense current sheets in the magnetotail: Peculiarities of electron physics. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 2789-2799.	0.8	51

#	ARTICLE	IF	CITATIONS
19	Substorm-associated pressure variations in the magnetotail plasma sheet and lobe. <i>Journal of Geophysical Research</i> , 1999, 104, 4501-4513.	3.3	50
20	Proton/electron temperature ratio in the magnetotail. <i>Annales Geophysicae</i> , 2011, 29, 2253-2257.	0.6	50
21	Small substorms: Solar wind input and magnetotail dynamics. <i>Journal of Geophysical Research</i> , 2000, 105, 21109-21117.	3.3	41
22	Kinetic ballooning/interchange instability in a bent plasma sheet. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	41
23	Comparison of multi-point measurements of current sheet structure and analytical models. <i>Annales Geophysicae</i> , 2008, 26, 2749-2758.	0.6	39
24	Cluster observations of $\langle i \rangle \hat{a}, \langle i \rangle B \langle i \rangle_{z} \langle i \rangle \hat{a}, \langle i \rangle x \langle i \rangle$ during growth phase magnetotail stretching intervals. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 5720-5730.	0.8	39
25	Electron pitch angle/energy distribution in the magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 7214-7227.	0.8	39
26	Flow bouncing and electron injection observed by Cluster. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 2055-2072.	0.8	38
27	Earthward electric field in the magnetotail: Cluster observations and theoretical estimates. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	37
28	Adiabatic electron heating in the magnetotail current sheet: Cluster observations and analytical models. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	37
29	Tailward and earthward flow onsets observed by Cluster in a thin current sheet. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	35
30	Flux transport, dipolarization, and current sheet evolution during a double-onset substorm. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	35
31	Earth's distant magnetotail current sheet near and beyond lunar orbit. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 8663-8680.	0.8	35
32	Magnetic factor in solar-terrestrial relations and its impact on the human body: physical problems and prospects for research. <i>Physics-Usppekhi</i> , 2016, 59, 502-510.	0.8	34
33	Profile of strong magnetic field $\langle B \rangle_{y}$ component in magnetotail current sheets. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	33
34	Are earthward bursty bulk flows convective or field-aligned?. <i>Journal of Geophysical Research</i> , 2001, 106, 21211-21215.	3.3	31
35	Dipole tilt effects in plasma sheet $\langle B \rangle_{y}$: statistical model and extreme values. <i>Annales Geophysicae</i> , 2009, 27, 1343-1352.	0.6	31
36	Statistical Properties of Subion Magnetic Holes in the Dipolarized Magnetotail: Formation, Structure, and Dynamics. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 342-359.	0.8	31

#	ARTICLE	IF	CITATIONS
37	Formation of current density profile in tilted current sheets. <i>Annales Geophysicae</i> , 2008, 26, 3669-3676.	0.6	29
38	Asymmetric thin current sheets in the Earth's magnetotail. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	28
39	Thin current sheets with strong bell-shape guide field: Cluster observations and models with beams. <i>Annales Geophysicae</i> , 2014, 32, 1349-1360.	0.6	28
40	Plasma sheet structure during strongly northward IMF. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	27
41	The structure of strongly tilted current sheets in the Earth magnetotail. <i>Annales Geophysicae</i> , 2014, 32, 133-146.	0.6	27
42	Hot electrons as tracers of large-scale structure of magnetotail current sheets. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	26
43	Ionospheric response to oscillatory flow braking in the magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 1529-1544.	0.8	25
44	Profiles of electron temperature and $\frac{dV}{dz}$ along Earth's magnetotail. <i>Annales Geophysicae</i> , 2013, 31, 1109-1114.	0.6	25
45	Time delay of interplanetary magnetic field penetration into Earth's magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 3406-3414.	0.8	25
46	EVIDENCE FOR QUASI-ADIABATIC MOTION OF CHARGED PARTICLES IN STRONG CURRENT SHEETS IN THE SOLAR WIND. <i>Astrophysical Journal</i> , 2017, 834, 34.	1.6	25
47	Thin current sheets in the presence of a guiding magnetic field in Earth's magnetosphere. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	24
48	The Sun and heliosphere explorer "the Interhelioprobe mission. <i>Geomagnetism and Aeronomy</i> , 2016, 56, 781-841.	0.2	23
49	Extended geomagnetic storm forecast ahead of available solar wind measurements. <i>Space Weather</i> , 2012, 10, .	1.3	20
50	Period and damping factor of P_2 pulsations during oscillatory flow braking in the magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 4512-4520.	0.8	20
51	Short-duration convection bays and localized interplanetary magnetic field structures on November 28, 1995. <i>Journal of Geophysical Research</i> , 1998, 103, 23593-23609.	3.3	17
52	Response of the midtail electric field to enhanced solar wind energy input. <i>Journal of Geophysical Research</i> , 1999, 104, 17299-17310.	3.3	17
53	Cluster vision of the magnetotail current sheet on a macroscale. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	17
54	Simultaneous Remote Observations of Intense Reconnection Effects by DMSP and MMS Spacecraft During a Storm Time Substorm. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 10891-10909.	0.8	17

#	ARTICLE	IF	CITATIONS
55	The Distribution of Two Flapping Types of Magnetotail Current Sheet: Implication for the Flapping Mechanism. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 7413-7423.	0.8	17
56	The Substorm Onset Location Controversy. <i>Space Science Reviews</i> , 2006, 122, 81-87.	3.7	16
57	Statistics of intense dawnâ€dusk currents in the Earth's magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 3804-3820.	0.8	15
58	Formation of sub-ion scale filamentary force-free structures in the vicinity of reconnection region. <i>Plasma Physics and Controlled Fusion</i> , 2016, 58, 054002.	0.9	15
59	Kinetic models of magnetic flux ropes observed in the Earth magnetosphere. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	14
60	Plasma-F experiment onboard the Spectr-R satellite. <i>Cosmic Research</i> , 2013, 51, 73-77.	0.2	13
61	Charged particle acceleration by intermittent electromagnetic turbulence. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	12
62	Double power-law spectra of energetic electrons in the Earth magnetotail. <i>Annales Geophysicae</i> , 2013, 31, 91-106.	0.6	12
63	Antisunward structure of thin current sheets in the Earth's magnetotail: Implications of quasiâ€adiabatic theory. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 4308-4318.	0.8	12
64	Twoâ€dimensional configuration of the magnetotail current sheet: THEMIS observations. <i>Geophysical Research Letters</i> , 2015, 42, 3662-3667.	1.5	12
65	Cluster Observations of a Dispersive Flapping Event of Magnetotail Current Sheet. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 5571-5579.	0.8	12
66	Global View of Current Sheet Thinning: Plasma Pressure Gradients and Largeâ€Scale Currents. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 264-278.	0.8	12
67	Contribution of Anisotropic Electron Current to the Magnetotail Current Sheet as a Function of Location and Plasma Conditions. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027251.	0.8	12
68	Interball-tail observations of vertical plasma motions in the magnetotail. <i>Annales Geophysicae</i> , 2002, 20, 321-327.	0.6	11
69	Formation of the high-energy ion population in the earth's magnetotail: spacecraft observations and theoretical models. <i>Annales Geophysicae</i> , 2014, 32, 1233-1246.	0.6	11
70	On the increasing oscillation period of flows at the tailward retreating flux pileup region during dipolarization. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 6603-6611.	0.8	10
71	On application of stochastic differential equations for simulation of nonlinear waveâ€particle resonant interactions. <i>Physics of Plasmas</i> , 2021, 28, .	0.7	10
72	Two spacecraft observation of plasma sheet convection jet during continuous external driving. <i>Geophysical Research Letters</i> , 1999, 26, 177-180.	1.5	9

#	ARTICLE	IF	CITATIONS
73	Formation of self-organized shear structures in thin current sheets. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4802-4824.	0.8	9
74	Formation of a quasi-one-dimensional current sheet in the laboratory experiment and in the Earth's magnetotail. <i>Plasma Physics Reports</i> , 2015, 41, 71-87.	0.3	9
75	Geomagnetic storm forecasting service StormFocus: 5 years online. <i>Journal of Space Weather and Space Climate</i> , 2018, 8, A22.	1.1	9
76	Current Sheet in a non-Maxwellian collisionless plasma: Self-consistent theory, simulation, and comparison with spacecraft observations. <i>Plasma Physics Reports</i> , 2010, 36, 841-858.	0.3	8
77	Thermodynamics of the Magnetotail Current Sheet Thinning. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028969.	0.8	8
78	Clustering of Fast Coronal Mass Ejections during Solar Cycles 23 and 24 and the Implications for CME-CME Interactions. <i>Astrophysical Journal</i> , 2020, 899, 47.	1.6	8
79	Small-amplitude bipolar flows in the near-Earth tail. <i>Geophysical Research Letters</i> , 1999, 26, 2909-2912.	1.5	7
80	Some aspects of magnetosphere-ionosphere relations. <i>Physics-Uspekh</i> , 2015, 58, 606-611.	0.8	7
81	Model of Solar Wind in the Heliosphere at Low and High Latitudes. <i>Plasma Physics Reports</i> , 2018, 44, 80-91.	0.3	7
82	Detailed Regression Model of Plasma Sheet B_y . <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 2872-2883.	0.8	7
83	Structure of Current Sheets with Quasi-Adiabatic Dynamics of Particles in the Solar Wind. <i>Cosmic Research</i> , 2018, 56, 462-470.	0.2	7
84	Spatial Scales and Plasma Properties of the Distant Magnetopause: Evidence for Selective Ion and Electron Transport. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 5027-5041.	0.8	7
85	Magnetohydrodynamic Modeling of the Solar Wind Key Parameters and Current Sheets in the Heliosphere: Radial and Solar Cycle Evolution. <i>Astrophysical Journal</i> , 2020, 892, 12.	1.6	7
86	Low Frequency Magnetic Fluctuations in the Earth's Plasma Sheet. , 2005, , 145-177.		6
87	Current sheet flapping in the near-Earth magnetotail: peculiarities of propagation and parallel currents. <i>Annales Geophysicae</i> , 2016, 34, 739-750.	0.6	6
88	Hall Effect in Laboratory and Space Current Sheets. <i>Plasma Physics Reports</i> , 2018, 44, 1126-1134.	0.3	6
89	Acceleration of plasma in current sheet during substorm dipolarizations in the Earth's magnetotail: Comparison of different mechanisms. <i>Physics of Plasmas</i> , 2019, 26, 042901.	0.7	6
90	Comparison of the Flank Magnetopause at Near-Earth and Lunar Distances: MMS and ARTEMIS Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028406.	0.8	6

#	ARTICLE	IF	CITATIONS
91	Formation of Multiple Current Sheets in the Heliospheric Plasma Sheet. <i>Cosmic Research</i> , 2020, 58, 411-425.	0.2	6
92	Index solar wind driving function and its semiannual variations. <i>Annales Geophysicae</i> , 2007, 25, 1465-1469.	0.6	5
93	RESONANCE Project for Studies of Wave-Particle Interactions in the Inner Magnetosphere. <i>Geophysical Monograph Series</i> , 2013, , 117-126.	0.1	5
94	Bistatic Radar Detection in the Luna-Resurs Mission. <i>Solar System Research</i> , 2018, 52, 287-300.	0.3	5
95	Charged particle scattering in dipolarized magnetotail. <i>Physics of Plasmas</i> , 2021, 28, 102901.	0.7	5
96	Modern view of the solar wind from micro to macro scales. <i>Physics-Usppekhi</i> , 2020, 63, 801-811.	0.8	4
97	ULF/ELF monochromatic oscillations observed by Prognoz-8 and -10 spacecrafts during quasiperpendicular supercritical shock crossings. <i>Annales Geophysicae</i> , 1995, 13, 573-582.	0.6	3
98	The Elusive Onset of Geomagnetic Substorms. <i>Science</i> , 2008, 321, 920-921.	6.0	3
99	Variability of magnetic field spectra in the Earth's magnetotail. <i>Nonlinear Processes in Geophysics</i> , 2009, 16, 691-698.	0.6	3
100	Oscillations of energetic ions flux near the Earth's bow shock. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4700-4710.	0.8	3
101	Heliospheric current sheet and effects of its interaction with solar cosmic rays. <i>Plasma Physics Reports</i> , 2016, 42, 749-760.	0.3	3
102	Foreshock waves as observed in energetic ion flux. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 4895-4904.	0.8	3
103	Detailed Structure of Very High Energy Earth Bow Shock. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029004.	0.8	3
104	Energetic particle measurements onboard Spectr-R with MEP-2. <i>Cosmic Research</i> , 2013, 51, 90-95.	0.2	2
105	Modeling of Magnetic Dipolarizations and Turbulence in Earth's Magnetotail as Factors of Plasma Acceleration and Transfer. <i>Cosmic Research</i> , 2018, 56, 453-461.	0.2	2
106	Influence of Oxygen Ions on the Structure of the Thin Current Sheet in the Earth's Magnetotail. <i>Geomagnetism and Aeronomy</i> , 2020, 60, 171-183.	0.2	2
107	Influence of Solar Wind Parameters on the Level of Geomagnetic Field Fluctuations. <i>Cosmic Research</i> , 2004, 42, 354-361.	0.2	1
108	PLASMA-F experiment: Three years of on-orbit operation. <i>Solar System Research</i> , 2015, 49, 580-603.	0.3	1

#	ARTICLE	IF	CITATIONS
109	Acceleration and particle transport in collisionless plasma in the process of dipolarization and nonstationary turbulence. <i>Cosmic Research</i> , 2017, 55, 417-425.	0.2	1
110	Scales in a thinning plasma sheet. , 2009, , .		0
111	Space weather today and the day after tomorrow. <i>Herald of the Russian Academy of Sciences</i> , 2015, 85, 292-294.	0.2	0
112	The Solar Wind and Heliospheric Current System in the Years of Maximum and Minimum Solar Activity. <i>Cosmic Research</i> , 2018, 56, 411-419.	0.2	0
113	Lev Matveevich Zelenyi (on his 70th birthday). <i>Physics-Uspekhi</i> , 2018, 61, 819-821.	0.8	0
114	Adiabatic Heating of Electrons in the Magnetospheric Current Sheet. <i>Plasma Physics Reports</i> , 2018, 44, 559-567.	0.3	0
115	Current Sheets with Multicomponent Plasma in Magnetospheres of Planets of the Solar System. <i>Cosmic Research</i> , 2020, 58, 426-435.	0.2	0
116	Anatolii Iserovich Neishtadt. <i>Russian Mathematical Surveys</i> , 2020, 75, 981-989.	0.2	0