

# Anatoli Petrukovich

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

61 papers	1,847 citations	27 h-index	42 g-index
64 ext. papers	2,005 ext. citations	2.5 avg, IF	4.62 L-index

#	Paper	IF	Citations
61	Electric current and magnetic field geometry in flapping magnetotail current sheets. <i>Annales Geophysicae</i> , <b>2005</b> , 23, 1391-1403	2	142
60	Thin current sheets in collisionless plasma: Equilibrium structure, plasma instabilities, and particle acceleration. <i>Plasma Physics Reports</i> , <b>2011</b> , 37, 118-160	1.2	119
59	New mechanism for electron heating in shocks. <i>Physical Review Letters</i> , <b>1993</b> , 70, 1259-1262	7.4	107
58	Transient and localized processes in the magnetotail: a review. <i>Annales Geophysicae</i> , <b>2008</b> , 26, 955-1006	2	100
57	Low frequency eigenmodes of thin anisotropic current sheets and Cluster observations. <i>Annales Geophysicae</i> , <b>2009</b> , 27, 861-868	2	64
56	Oscillatory magnetic flux tube slippage in the plasma sheet. <i>Annales Geophysicae</i> , <b>2006</b> , 24, 1695-1704	2	62
55	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> , <b>2011</b> , 116, n/a-n/a		59
54	Thin embedded current sheets: Cluster observations of ion kinetic structure and analytical models. <i>Annales Geophysicae</i> , <b>2009</b> , 27, 4075-4087	2	58
53	Thinning and stretching of the plasma sheet. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112, n/a-n/a		58
52	Current Sheets in the Earth Magnetotail: Plasma and Magnetic Field Structure with Cluster Project Observations. <i>Space Science Reviews</i> , <b>2015</b> , 188, 311-337	7.5	56
51	Origins of plasma sheet By. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		56
50	Proton velocity distribution in thin current sheets: Cluster observations and theory of transient trajectories. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115, n/a-n/a		52
49	Statistical survey on the magnetic structure in magnetotail current sheets. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		49
48	Ion resonance acceleration by dipolarization fronts: analytic theory and spacecraft observation. <i>Annales Geophysicae</i> , <b>2012</b> , 30, 317-324	2	47
47	Proton/electron temperature ratio in the magnetotail. <i>Annales Geophysicae</i> , <b>2011</b> , 29, 2253-2257	2	44
46	Intense current sheets in the magnetotail: Peculiarities of electron physics. <i>Journal of Geophysical Research: Space Physics</i> , <b>2013</b> , 118, 2789-2799	2.6	41
45	Cluster observations of $B_z/\bar{B}$ during growth phase magnetotail stretching intervals. <i>Journal of Geophysical Research: Space Physics</i> , <b>2013</b> , 118, 5720-5730	2.6	37

44	Comparison of multi-point measurements of current sheet structure and analytical models. <i>Annales Geophysicae</i> , <b>2008</b> , 26, 2749-2758	2	37
43	Small substorms: Solar wind input and magnetotail dynamics. <i>Journal of Geophysical Research</i> , <b>2000</b> , 105, 21109-21117		36
42	Electron pitch angle/energy distribution in the magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , <b>2014</b> , 119, 7214-7227	2.6	34
41	Earthward electric field in the magnetotail: Cluster observations and theoretical estimates. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	34
40	Tailward and earthward flow onsets observed by Cluster in a thin current sheet. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114, n/a-n/a		33
39	The analytic properties of the flapping current sheets in the earth magnetotail. <i>Planetary and Space Science</i> , <b>2010</b> , 58, 1215-1229	2	32
38	Profile of strong magnetic field By component in magnetotail current sheets. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		31
37	Adiabatic electron heating in the magnetotail current sheet: Cluster observations and analytical models. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		31
36	Earth's distant magnetotail current sheet near and beyond lunar orbit. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 8663-8680	2.6	28
35	Dipole tilt effects in plasma sheet $B_y$ : statistical model and extreme values. <i>Annales Geophysicae</i> , <b>2009</b> , 27, 1343-1352	2	28
34	Formation of current density profile in tilted current sheets. <i>Annales Geophysicae</i> , <b>2008</b> , 26, 3669-3676	2	27
33	Multiscale Currents Observed by MMS in the Flow Braking Region. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 1260-1278	2.6	27
32	Ionospheric response to oscillatory flow braking in the magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , <b>2013</b> , 118, 1529-1544	2.6	24
31	Thin current sheets with strong bell-shape guide field: Cluster observations and models with beams. <i>Annales Geophysicae</i> , <b>2014</b> , 32, 1349-1360	2	24
30	Hot electrons as tracers of large-scale structure of magnetotail current sheets. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	23
29	The structure of strongly tilted current sheets in the Earth magnetotail. <i>Annales Geophysicae</i> , <b>2014</b> , 32, 133-146	2	22
28	Profiles of electron temperature and $B_z$ along Earth's magnetotail. <i>Annales Geophysicae</i> , <b>2013</b> , 31, 1109-1114	2	22
27	Asymmetric thin current sheets in the Earth's magnetotail. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,	4.9	22

26	Plasma sheet structure during strongly northward IMF. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		21
25	Time delay of interplanetary magnetic field penetration into Earth's magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 3406-3414	2.6	20
24	Statistical Properties of Sub-Ion Magnetic Holes in the Dipolarized Magnetotail: Formation, Structure, and Dynamics. <i>Journal of Geophysical Research: Space Physics</i> , <b>2019</b> , 124, 342-359	2.6	20
23	Statistics of intense dawn-dusk currents in the Earth's magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 3804-3820	2.6	13
22	Formation of sub-ion scale filamentary force-free structures in the vicinity of reconnection region. <i>Plasma Physics and Controlled Fusion</i> , <b>2016</b> , 58, 054002	2	13
21	Magnetotail Reconnection. <i>Astrophysics and Space Science Library</i> , <b>2016</b> , 277-313	0.3	11
20	The Distribution of Two Flapping Types of Magnetotail Current Sheet: Implication for the Flapping Mechanism. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 7413-7423	2.6	11
19	Radial distribution of magnetic field in earth magnetotail current sheet. <i>Planetary and Space Science</i> , <b>2014</b> , 103, 273-285	2	10
18	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> , <b>2020</b> , 125, e2019JA027251	2.6	9
17	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> , <b>2017</b> , 122, 10891-10909	2.6	8
16	Global View of Current Sheet Thinning: Plasma Pressure Gradients and Large-Scale Currents. <i>Journal of Geophysical Research: Space Physics</i> , <b>2019</b> , 124, 264-278	2.6	7
15	Cluster Observations of a Dispersive Flapping Event of Magnetotail Current Sheet. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 5571-5579	2.6	7
14	Acceleration of plasma in current sheet during substorm dipolarizations in the Earth's magnetotail: Comparison of different mechanisms. <i>Physics of Plasmas</i> , <b>2019</b> , 26, 042901	2.1	5
13	Detailed Regression Model of Plasma Sheet By. <i>Journal of Geophysical Research: Space Physics</i> , <b>2018</b> , 123, 2872-2883	2.6	4
12	Current sheet flapping in the near-Earth magnetotail: peculiarities of propagation and parallel currents. <i>Annales Geophysicae</i> , <b>2016</b> , 34, 739-750	2	4
11	Foreshock waves as observed in energetic ion flux. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 4895-4904	2.6	3
10	Oscillations of energetic ions flux near the Earth's bow shock. <i>Journal of Geophysical Research: Space Physics</i> , <b>2015</b> , 120, 4700-4710	2.6	3
9	Thermodynamics of the Magnetotail Current Sheet Thinning. <i>Journal of Geophysical Research: Space Physics</i> , <b>2021</b> , 126, e2020JA028969	2.6	3

8	Spatial Scales and Plasma Properties of the Distant Magnetopause: Evidence for Selective Ion and Electron Transport. <i>Journal of Geophysical Research: Space Physics</i> , <b>2019</b> , 124, 5027-5041	2.6	2
7	Energetic particle measurements onboard Spectr-R with MEP-2. <i>Cosmic Research</i> , <b>2013</b> , 51, 90-95	0.6	2
6	Relationship between electron field-aligned anisotropy and dawn-dusk magnetic field: Nine years of Cluster observations in the Earth magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , <b>2017</b> , 122, 9294-9305	2.6	2
5	Comparison of the Flank Magnetopause at Near-Earth and Lunar Distances: MMS and ARTEMIS Observations. <i>Journal of Geophysical Research: Space Physics</i> , <b>2020</b> , 125, e2020JA028406	2.6	1
4	On application of stochastic differential equations for simulation of nonlinear wave-particle resonant interactions. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 092904	2.1	1
3	Electron magnetosonic waves and sub-ion magnetic holes in the magnetotail plasma. <i>Physics of Plasmas</i> , <b>2022</b> , 29, 012902	2.1	0
2	Detailed Structure of Very High-Earth Bow Shock. <i>Journal of Geophysical Research: Space Physics</i> , <b>2021</b> , 126, e2020JA029004	2.6	0
1	Charged particle scattering in dipolarized magnetotail. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 102901	2.1	0