I Y Vasko

List of Publications by Year in descending order

80 papers	1,794 citations	218381 26 h-index	329751 37 g-index
84 all docs	84 docs citations	84 times ranked	886 citing authors

#	Article	IF	Citations
1	Electron magnetosonic waves and sub-ion magnetic holes in the magnetotail plasma. Physics of Plasmas, 2022, 29, .	0.7	3
2	Kinetic-scale Current Sheets in the Solar Wind at 1 au: Scale-dependent Properties and Critical Current Density. Astrophysical Journal Letters, 2022, 926, L19.	3.0	14
3	Core Electron Heating by Triggered Ion Acoustic Waves in the Solar Wind. Astrophysical Journal Letters, 2022, 927, L15.	3.0	7
4	Multisatellite Observations of Ion Holes in the Earth's Plasma Sheet. Geophysical Research Letters, 2022, 49, .	1.5	9
5	Kinetic-scale Current Sheets in Near-Sun Solar Wind: Properties, Scale-dependent Features and Reconnection Onset. Astrophysical Journal, 2022, 929, 58.	1.6	7
6	Ionâ€Acoustic Waves in a Quasiâ€Perpendicular Earth's Bow Shock. Geophysical Research Letters, 2022, 49, .	1.5	11
7	Configuration of the Earthâ€™s Magnetotail Current Sheet. Geophysical Research Letters, 2021, 48, e2020GL092153.	1.5	14
8	Nonlinear Ion-acoustic Waves, Ion Holes, and Electron Holes in the Near-Sun Solar Wind. Astrophysical Journal, 2021, 911, 89.	1.6	21
9	Magnetosphereâ€Ionosphere Coupling of Precipitated Electrons in Diffuse Aurora Driven by Time Domain Structures. Geophysical Research Letters, 2021, 48, e2021GL092655.	1.5	8
10	Solar Wind Discontinuity Transformation at the Bow Shock. Astrophysical Journal, 2021, 913, 142.	1.6	11
11	Electrostatic Solitary Waves in the Earth's Bow Shock: Nature, Properties, Lifetimes, and Origin. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029357.	0.8	20
12	Realistic Electron Diffusion Rates and Lifetimes Due to Scattering by Electron Holes. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029380.	0.8	9
13	Triggered Ion-acoustic Waves in the Solar Wind. Astrophysical Journal Letters, 2021, 919, L2.	3.0	15
14	Generation of High-frequency Whistler Waves in the Earthâ€™s Quasi-perpendicular Bow Shock. Astrophysical Journal Letters, 2021, 919, L17.	3.0	12
15	The dynamics of electron holes in current sheets. Physics of Plasmas, 2021, 28, 012902.	0.7	1
16	Spacecraft Observations and Theoretical Understanding of Slow Electron Holes. Physical Review Letters, 2021, 127, 165101.	2.9	11
17	Kinetic-scale Current Sheets in the Solar Wind at 1 au: Properties and the Necessary Condition for Reconnection. Astrophysical Journal Letters, 2021, 923, L19.	3.0	10
18	On quasi-parallel whistler waves in the solar wind. Physics of Plasmas, 2020, 27, .	0.7	21

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19	DC and Lowâ€Frequency Electric Field Measurements on the Parker Solar Probe. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027980.	0.8	24
20	Superthin current sheets supported by anisotropic electrons. Physics of Plasmas, 2020, 27, 082904.	0.7	4
21	Potential Evidence of Lowâ€Energy Electron Scattering and Ionospheric Precipitation by Time Domain Structures. Geophysical Research Letters, 2020, 47, e2020GL089138.	1.5	14
22	Multisatellite MMS Analysis of Electron Holes in the Earth's Magnetotail: Origin, Properties, Velocity Gap, and Transverse Instability. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028066.	0.8	31
23	Ionosphere Feedback to Electron Scattering by Equatorial Whistler Mode Waves. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028373.	0.8	12
24	On the Nature and Origin of Bipolar Electrostatic Structures in the Earth's Bow Shock. Frontiers in Physics, 2020, 8, .	1.0	24
25	A model of the current sheet in the Earth's magnetotail. Physics of Plasmas, 2020, 27, .	0.7	3
26	Kinetic Models of Tangential Discontinuities in the Solar Wind. Astrophysical Journal, 2020, 891, 86.	1.6	17
27	Shock Drift Acceleration of Ions in an Interplanetary Shock Observed by MMS. Astrophysical Journal Letters, 2020, 891, L26.	3.0	6
28	Ion Nongyrotropy in Solar Wind Discontinuities. Astrophysical Journal Letters, 2020, 889, L23.	3.0	5
29	Contribution of Anisotropic Electron Current to the Magnetotail Current Sheet as a Function of Location and Plasma Conditions. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027251.	0.8	12
30	Electrostatic Turbulence and Debye-scale Structures in Collisionless Shocks. Astrophysical Journal Letters, 2020, 889, L9.	3.0	34
31	The Electromagnetic Signature of Outward Propagating Ion-scale Waves. Astrophysical Journal, 2020, 899, 74.	1.6	23
32	Large-amplitude, Wideband, Doppler-shifted, Ion Acoustic Waves Observed on the Parker Solar Probe. Astrophysical Journal, 2020, 901, 107.	1.6	19
33	Statistical Study of Whistler Waves in the Solar Wind at 1 au. Astrophysical Journal, 2019, 878, 41.	1.6	69
34	Nonlinear Evolution of the Whistler Heat Flux Instability. Astrophysical Journal, 2019, 882, 81.	1.6	36
35	Kinetic Properties of Solar Wind Discontinuities at 1 AU Observed by ARTEMIS. Journal of Geophysical Research: Space Physics, 2019, 124, 3858-3870.	0.8	22
36	Ion Anisotropy in Earth's Magnetotail Current Sheet: Multicomponent Ion Population. Journal of Geophysical Research: Space Physics, 2019, 124, 3454-3467.	0.8	11

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37	Whistler Fan Instability Driven by Strahl Electrons in the Solar Wind. Astrophysical Journal Letters, 2019, 871, L29.	3.0	62
38	On the Kinetic Nature of Solar Wind Discontinuities. Geophysical Research Letters, 2019, 46, 1185-1194.	1.5	27
39	Whistler Wave Generation by Halo Electrons in the Solar Wind. Astrophysical Journal Letters, 2019, 870, L6.	3.0	53
40	Electron-acoustic solitary waves in the Earth's inner magnetosphere. Physics of Plasmas, 2018, 25, .	0.7	45
41	Nonlinear Electrostatic Steepening of Whistler Waves: The Guiding Factors and Dynamics in Inhomogeneous Systems. Geophysical Research Letters, 2018, 45, 2168-2176.	1.5	27
42	Two-dimensional self-similar plasma equilibria. Physics of Plasmas, 2018, 25, .	0.7	6
43	Simultaneous Observations of Lower Band Chorus Emissions at the Equator and Microburst Precipitating Electrons in the Ionosphere. Geophysical Research Letters, 2018, 45, 511-516.	1.5	54
44	Reply to Comment by Nishimura Et Al.. Journal of Geophysical Research: Space Physics, 2018, 123, 2071.	0.8	2
45	Direct Observation of Electron Distributions inside Millisecond Duration Electron Holes. Physical Review Letters, 2018, 121, 135102.	2.9	32
46	Simultaneous Multispacecraft Probing of Electron Phase Space Holes. Geophysical Research Letters, 2018, 45, 11,513.	1.5	35
47	Electrostatic Steepening of Whistler Waves. Physical Review Letters, 2018, 120, 195101.	2.9	27
48	Scattering by the broadband electrostatic turbulence in the space plasma. Physics of Plasmas, 2018, 25, .	0.7	24
49	Three dimensional analytical model of dipolarizing flux bundles. Physics of Plasmas, 2018, 25, .	0.7	2
50	3D Magnetic Holes in Collisionless Plasmas. Plasma Physics Reports, 2018, 44, 729-737.	0.3	1
51	Dynamics of Intense Currents in the Solar Wind. Astrophysical Journal, 2018, 859, 95.	1.6	18
52	Solitary Waves Across Supercritical Quasiâ€Perpendicular Shocks. Geophysical Research Letters, 2018, 45, 5809-5817.	1.5	43
53	Evolution of electron phase space holes in inhomogeneous magnetic fields. Geophysical Research Letters, 2017, 44, 2105-2112.	1.5	7
54	Diffusive scattering of electrons by electron holes around injection fronts. Journal of Geophysical Research: Space Physics, 2017, 122, 3163-3182.	0.8	46

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55	Nonlinear Landau resonance with localized wave pulses. Journal of Geophysical Research: Space Physics, 2017, 122, 5519-5527.	0.8	10
56	Electronâ€acoustic solitons and double layers in the inner magnetosphere. Geophysical Research Letters, 2017, 44, 4575-4583.	1.5	62
57	Electron holes in the outer radiation belt: Characteristics and their role in electron energization. Journal of Geophysical Research: Space Physics, 2017, 122, 120-135.	0.8	30
58	Pulsating auroras produced by interactions of electrons and time domain structures. Journal of Geophysical Research: Space Physics, 2017, 122, 8604-8616.	0.8	17
59	Hot Ion Flows in the Distant Magnetotail: ARTEMIS Observations From Lunar Orbit to â^¼â^’200ÂR_E. Journal of Geophysical Research: Space Physics, 2017, 122, 9898-9909.	0.8	14
60	Evolution of electron phase space holes in inhomogeneous plasmas. Physics of Plasmas, 2017, 24, .	0.7	10
61	Nearâ€relativistic electron acceleration by Landau trapping in time domain structures. Geophysical Research Letters, 2016, 43, 508-514.	1.5	35
62	Electron holes in inhomogeneous magnetic field: Electron heating and electron hole evolution. Physics of Plasmas, 2016, 23, .	0.7	24
63	Kinetic models of sub-ion cylindrical magnetic hole. Physics of Plasmas, 2016, 23, .	0.7	10
64	Upper limit of electron fluxes generated by kinetic AlfvÃ©n waves in Maxwellian plasma. Journal of Geophysical Research: Space Physics, 2016, 121, 8361-8373.	0.8	3
65	Magnetospheric Multiscale Satellite Observations of Parallel Electron Acceleration in Magnetic Field Reconnection by Fermi Reflection from Time Domain Structures. Physical Review Letters, 2016, 116, 145101.	2.9	45
66	Effects of electron pressure anisotropy on current sheet configuration. Physics of Plasmas, 2016, 23, .	0.7	15
67	Magnetic field depression within electron holes. Geophysical Research Letters, 2015, 42, 2123-2129.	1.5	32
68	Earth's distant magnetotail current sheet near and beyond lunar orbit. Journal of Geophysical Research: Space Physics, 2015, 120, 8663-8680.	0.8	35
69	Kinetic model of force-free current sheets with non-uniform temperature. Physics of Plasmas, 2015, 22, .	0.7	20
70	Thermal electron acceleration by electric field spikes in the outer radiation belt: Generation of fieldâ€aligned pitch angle distributions. Journal of Geophysical Research: Space Physics, 2015, 120, 8616-8632.	0.8	29
71	Time domain structures: What and where they are, what they do, and how they are made. Geophysical Research Letters, 2015, 42, 3627-3638.	1.5	121
72	Current sheets with inhomogeneous plasma temperature: Effects of polarization electric field and 2D solutions. Physics of Plasmas, 2015, 22, .	0.7	13

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73	Formation of a quasi-one-dimensional current sheet in the laboratory experiment and in the Earthâ€™s magnetotail. Plasma Physics Reports, 2015, 41, 71-87.	0.3	9
74	Current Sheets in the Earth Magnetotail: Plasma and Magnetic Field Structure with Cluster Project Observations. Space Science Reviews, 2015, 188, 311-337.	3.7	69
75	Two-dimensional MHD model of the Jovian magnetodisk. Cosmic Research, 2015, 53, 341-353.	0.2	1
76	Formation of the high-energy ion population in the earth's magnetotail: spacecraft observations and theoretical models. Annales Geophysicae, 2014, 32, 1233-1246.	0.6	11
77	Thin current sheets with strong bell-shape guide field: Cluster observations and models with beams. Annales Geophysicae, 2014, 32, 1349-1360.	0.6	28
78	The structure of strongly tilted current sheets in the Earth magnetotail. Annales Geophysicae, 2014, 32, 133-146.	0.6	27
79	The structure of the Venusian current sheet. Planetary and Space Science, 2014, 96, 81-89.	0.9	16
80	Kinetic models of two-dimensional plane and axially symmetric current sheets: Group theory approach. Physics of Plasmas, 2013, 20, .	0.7	27