Nicolas Aunai

List of Publications by Year
in descending order

33	1,066	516561 16	395590 33
papers	citations	h-index	g-index

42	42	42	1164
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Smilei : A collaborative, open-source, multi-purpose particle-in-cell code for plasma simulation. Computer Physics Communications, 2018, 222, 351-373.	3.0	282
2	On the electron diffusion region in planar, asymmetric, systems. Geophysical Research Letters, 2014, 41, 8673-8680.	1.5	126
3	Currents and associated electron scattering and bouncing near the diffusion region at Earth's magnetopause. Geophysical Research Letters, 2016, 43, 3042-3050.	1.5	81
4	Electron nongyrotropy in the context of collisionless magnetic reconnection. Physics of Plasmas, 2013, 20, .	0.7	64
5	Aspects of collisionless magnetic reconnection in asymmetric systems. Physics of Plasmas, 2013, 20, .	0.7	56
6	Proton acceleration in antiparallel collisionless magnetic reconnection: Kinetic mechanisms behind the fluid dynamics. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	51
7	Cold ion demagnetization near the Xâ€line of magnetic reconnection. Geophysical Research Letters, 2016, 43, 6759-6767.	1.5	35
8	Energy budgets in collisionless magnetic reconnection: Ion heating and bulk acceleration. Physics of Plasmas, 2011, 18, .	0.7	34
9	Cold ion heating at the dayside magnetopause during magnetic reconnection. Geophysical Research Letters, 2016, 43, 58-66.	1.5	34
10	Kinetic simulation of asymmetric magnetic reconnection with cold ions. Journal of Geophysical Research: Space Physics, 2017, 122, 5290-5306.	0.8	29
11	Impacts of Ionospheric Ions on Magnetic Reconnection and Earth's Magnetosphere Dynamics. Reviews of Geophysics, 2021, 59, e2020RG000707.	9.0	26
12	Energy budget and mechanisms of cold ion heating in asymmetric magnetic reconnection. Journal of Geophysical Research: Space Physics, 2017, 122, 9396-9413.	0.8	24
13	Automated Multi-Dataset Analysis (AMDA): An on-line database and analysis tool for heliospheric and planetary plasma data. Planetary and Space Science, 2021, 201, 105214.	0.9	24
14	Comparison between hybrid and fully kinetic models of asymmetric magnetic reconnection: Coplanar and guide field configurations. Physics of Plasmas, 2013, 20, .	0.7	23
15	Mass Loading the Earth's Dayside Magnetopause Boundary Layer and Its Effect on Magnetic Reconnection. Geophysical Research Letters, 2019, 46, 6204-6213.	1.5	21
16	Simulation of Plasmaspheric Plume Impact on Dayside Magnetic Reconnection. Geophysical Research Letters, 2020, 47, e2019GL086546.	1.5	19
17	Perpendicular Current Reduction Caused by Cold Ions of Ionospheric Origin in Magnetic Reconnection at the Magnetopause: Particleâ€inâ€Cell Simulations and Spacecraft Observations. Geophysical Research Letters, 2018, 45, 10,033.	1.5	17
18	Signatures of Cold Ions in a Kinetic Simulation of the Reconnecting Magnetopause. Journal of Geophysical Research: Space Physics, 2019, 124, 2497.	0.8	14

#	Article	IF	Citations
19	Highâ€density O⁺ in Earth's outer magnetosphere and its effect on dayside magnetopause magnetic reconnection. Journal of Geophysical Research: Space Physics, 2019, 124, 10257-10269.	0.8	14
20	Asymmetric kinetic equilibria: Generalization of the BAS model for rotating magnetic profile and non-zero electric field. Physics of Plasmas, 2015, 22, .	0.7	13
21	Analyzing the Magnetopause Internal Structure: New Possibilities Offered by MMS Tested in a Case Study. Journal of Geophysical Research: Space Physics, 2018, 123, 227-241.	0.8	11
22	Massive Multiâ€Mission Statistical Study and Analytical Modeling of the Earth's Magnetopause: 2. Shape and Location. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	11
23	Massive Multiâ€Mission Statistical Study and Analytical Modeling of the Earth's Magnetopause: 1. A Gradient Boosting Based Automatic Detection of Nearâ€Earth Regions. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	8
24	First demonstration of an asymmetric kinetic equilibrium for a thin current sheet. Physics of Plasmas, 2013, 20, .	0.7	7
25	Identification of Electron Diffusion Regions with a Machine Learning Approach on MMS Data at the Earth's Magnetopause. Earth and Space Science, 2021, 8, e2020EA001530.	1.1	7
26	Full particle-in-cell simulations of kinetic equilibria and the role of the initial current sheet on steady asymmetric magnetic reconnection. Journal of Plasma Physics, 2016, 82, .	0.7	6
27	Massive Multiâ€Mission Statistical Study and Analytical Modeling of the Earth's Magnetopause: 3. An Asymmetric Non Indented Magnetopause Analytical Model. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	6
28	BV technique for investigating 1â€D interfaces. Journal of Geophysical Research: Space Physics, 2014, 119, 1709-1720.	0.8	5
29	Massive Multiâ€Mission Statistical Study and Analytical Modeling of the Earth's Magnetopause: 4. On the Nearâ€Cusp Magnetopause Indentation. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	5
30	Plasma diffusion in self-consistent fluctuations. Physics of Plasmas, 2011, 18, .	0.7	4
31	Numerical study of non-gyrotropic electron pressure effects in collisionless magnetic reconnection. Physics of Plasmas, 2021, 28, .	0.7	4
32	Orientation of the X-line in asymmetric magnetic reconnection. Journal of Plasma Physics, 2016, 82, .	0.7	3
33	Solar wind â€•magnetosphere coupling during radial interplanetary magnetic field conditions: simultaneous multiâ€point observations. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029506.	0.8	1