Naoki Bessho

List of Publications by Year
in descending order

48 papers	1,562 citations	331538 21 h-index	302012 39 g-index
52 all docs	52 docs citations	52 times ranked	867 citing authors

#	Article	IF	Citations
1	Observation of energetic electrons within magnetic islands. Nature Physics, 2008, 4, 19-23.	6.5	238
2	Collisionless Reconnection in an Electron-Positron Plasma. Physical Review Letters, 2005, 95, 245001.	2.9	97
3	Evidence of an extended electron current sheet and its neighboring magnetic island during magnetotail reconnection. Journal of Geophysical Research, 2008, 113, .	3.3	92
4	Fast collisionless reconnection in electron-positron plasmas. Physics of Plasmas, 2007, 14, 056503.	0.7	73
5	Electron distribution functions in the diffusion region of asymmetric magnetic reconnection. Geophysical Research Letters, 2016, 43, 1828-1836.	1.5	72
6	Electron energization and mixing observed by MMS in the vicinity of an electron diffusion region during magnetopause reconnection. Geophysical Research Letters, 2016, 43, 6036-6043.	1.5	67
7	Spatiotemporal evolution of electron characteristics in the electron diffusion region of magnetic reconnection: Implications for acceleration and heating. Geophysical Research Letters, 2015, 42, 2586-2593.	1.5	60
8	Electron energization and structure of the diffusion region during asymmetric reconnection. Geophysical Research Letters, 2016, 43, 2405-2412.	1.5	60
9	Multispacecraft observations of the electron current sheet, neighboring magnetic islands, and electron acceleration during magnetotail reconnection. Physics of Plasmas, 2009, 16, .	0.7	57
10	Electron distribution functions in the electron diffusion region of magnetic reconnection: Physics behind the fine structures. Geophysical Research Letters, 2014, 41, 8688-8695.	1.5	55
11	Electron diffusion region during magnetopause reconnection with an intermediate guide field: Magnetospheric multiscale observations. Journal of Geophysical Research: Space Physics, 2017, 122, 5235-5246.	0.8	52
12	On the electron diffusion region in asymmetric reconnection with a guide magnetic field. Geophysical Research Letters, 2016, 43, 2359-2364.	1.5	50
13	Observational Evidence of Magnetic Reconnection in the Terrestrial Bow Shock Transition Region. Geophysical Research Letters, 2019, 46, 562-570.	1.5	47
14	Magnetic Reconnection in a Quasiâ€Parallel Shock: Twoâ€Dimensional Local Particleâ€inâ€Cell Simulation. Geophysical Research Letters, 2019, 46, 9352-9361.	1.5	36
15	Structure of the Current Sheet in the 11 July 2017 Electron Diffusion Region Event. Journal of Geophysical Research: Space Physics, 2019, 124, 1173-1186.	0.8	34
16	Highly structured electron anisotropy in collisionless reconnection exhausts. Geophysical Research Letters, 2014, 41, 5389-5395.	1.5	33
17	Electron Diffusion Regions in Magnetotail Reconnection Under Varying Guide Fields. Geophysical Research Letters, 2019, 46, 6230-6238.	1.5	33
18	Lower-Hybrid Drift Waves Driving Electron Nongyrotropic Heating and Vortical Flows in a Magnetic Reconnection Layer. Physical Review Letters, 2020, 125, 025103.	2.9	29

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19	Electron heating in the exhaust of magnetic reconnection with negligible guide field. Journal of Geophysical Research: Space Physics, 2016, 121, 2104-2130.	0.8	27
20	On the role of separatrix instabilities in heating the reconnection outflow region. Physics of Plasmas, 2018, 25, .	0.7	27
21	In-plane electric fields in magnetic islands during collisionless magnetic reconnection. Physics of Plasmas, 2012, 19, 112902.	0.7	23
22	Magnetic reconnection and kinetic waves generated in the Earth's quasi-parallel bow shock. Physics of Plasmas, 2020, 27, .	0.7	21
23	Solitary Magnetic Structures at Quasiâ€Parallel Collisionless Shocks: Formation. Geophysical Research Letters, 2021, 48, e2020GL090800.	1.5	21
24	The effect of reconnection electric field on crescent and U-shaped distribution functions in asymmetric reconnection with no guide field. Physics of Plasmas, 2017, 24, .	0.7	20
25	The physical foundation of the reconnection electric field. Physics of Plasmas, 2018, 25, .	0.7	20
26	Twoâ€scale ion meandering caused by the polarization electric field during asymmetric reconnection. Geophysical Research Letters, 2016, 43, 7831-7839.	1.5	19
27	MMS Measurements of the Vlasov Equation: Probing the Electron Pressure Divergence Within Thin Current Sheets. Geophysical Research Letters, 2019, 46, 7862-7872.	1.5	19
28	Energy Conversion and Partition in the Asymmetric Reconnection Diffusion Region. Journal of Geophysical Research: Space Physics, 2018, 123, 8185-8205.	0.8	17
29	Structures in the terms of the Vlasov equation observed at Earthâ€™s magnetopause. Nature Physics, 2021, 17, 1056-1065.	6.5	15
30	Effect of the Reconnection Electric Field on Electron Distribution Functions in the Diffusion Region of Magnetotail Reconnection. Geophysical Research Letters, 2018, 45, 12,142.	1.5	14
31	Fast magnetic reconnection in low-density electron-positron plasmas. Physics of Plasmas, 2010, 17, .	0.7	13
32	Strong reconnection electric fields in shock-driven turbulence. Physics of Plasmas, 2022, 29, .	0.7	13
33	Electron acceleration by parallel and perpendicular electric fields during magnetic reconnection without guide field. Journal of Geophysical Research: Space Physics, 2015, 120, 9355-9367.	0.8	12
34	Ion-scale Current Structures in Short Large-amplitude Magnetic Structures. Astrophysical Journal, 2020, 898, 121.	1.6	12
35	Population Mixing in Asymmetric Magnetic Reconnection with a Guide Field. Physical Review Letters, 2017, 118, 145101.	2.9	11
36	Lower-hybrid drift waves and their interaction with plasmas in a 3D symmetric reconnection simulation with zero guide field. Physics of Plasmas, 2021, 28, .	0.7	9

#	Article	IF	Citations
37	Parallel electron heating in the magnetospheric inflow region. Geophysical Research Letters, 2017, 44, 4384-4392.	1.5	8
38	Effects of the guide field on electron distribution functions in the diffusion region of asymmetric reconnection. Physics of Plasmas, 2019, 26, .	0.7	8
39	Lowerâ€Hybrid Wave Structures and Interactions With Electrons Observed in Magnetotail Reconnection Diffusion Regions. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	8
40	Lowerâ€Hybridâ€Drift Vortices in the Electronâ€Scale Magnetic Reconnection Layer. Geophysical Research Letters, 2020, 47, e2020GL090726.	1.5	6
41	A statistical study of three-second foreshock ULF waves observed by the Magnetospheric Multiscale mission. Physics of Plasmas, 2021, 28, .	0.7	6
42	Whistler waves generated by nongyrotropic and gyrotropic electron beams during asymmetric guide field reconnection. Physics of Plasmas, 2022, 29, .	0.7	6
43	Ion Behaviors in the Reconnection Diffusion Region of a Corrugated Magnetotail Current Sheet. Geophysical Research Letters, 2019, 46, 5014-5020.	1.5	5
44	A Case Study of Nonresonant Mode 3â€s ULF Waves Observed by MMS. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028557.	0.8	5
45	A New Look at the Electron Diffusion Region in Asymmetric Magnetic Reconnection. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028456.	0.8	4
46	Fast Reconnection in Low-density Hydrogen and Pair Plasmas. Plasma and Fusion Research, 2010, 5, S2017-S2017.	0.3	4
47	Particleâ€inâ€cell simulation study of the impact of ion cyclotron waves on auroral kilometric radiation. Journal of Geophysical Research, 2007, 112, .	3.3	2
48	Electron-scale temperature gradients in kinetic equilibrium: MMS observations and Vlasovâ€“Maxwell solutions. Physics of Plasmas, 2021, 28, .	0.7	2