

Daniela Grasso

List of Publications by Year in descending order

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papers

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citations

331259

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77
all docs

77
docs citations

77
times ranked

567
citing authors

#	ARTICLE	IF	CITATIONS
1	Gyrofluid analysis of electron \hat{v}_e effects on collisionless reconnection. Journal of Plasma Physics, 2022, 88, .	0.7	7
2	Coexistence of Plasmoid and Kelvin-Helmholtz Instabilities in Collisionless Plasma Turbulence. Astrophysical Journal, 2022, 929, 62.	1.6	5
3	Impact of electron temperature anisotropy on the collisionless tearing mode instability in the presence of a strong guide field. Physics of Plasmas, 2021, 28, .	0.7	1
4	Asymmetry effects driving secondary instabilities in two-dimensional collisionless magnetic reconnection. Physics of Plasmas, 2020, 27, .	0.7	6
5	Coherent magnetic structures in self-organized plasmas. Plasma Physics and Controlled Fusion, 2019, 61, 044003.	0.9	15
6	Physics conditions for robust control of tearing modes in a rotating tokamak plasma. Plasma Physics and Controlled Fusion, 2018, 60, 014044.	0.9	5
7	Lagrangian Coherent Structures as a new frame to investigate the particle transport in highly chaotic magnetic systems. Journal of Physics: Conference Series, 2018, 1125, 012008.	0.3	3
8	Magnetic island suppression by electron-cyclotron current drive as converse of a forced reconnection problem. Journal of Plasma Physics, 2018, 84, .	0.7	6
9	A reduced Landau-gyrofluid model for magnetic reconnection driven by electron inertia. Journal of Plasma Physics, 2018, 84, .	0.7	11
10	Coherent transport structures in magnetized plasmas. I. Theory. Physics of Plasmas, 2018, 25, .	0.7	12
11	Coherent transport structures in magnetized plasmas. II. Numerical results. Physics of Plasmas, 2018, 25, .	0.7	9
12	Structure and computation of two-dimensional incompressible extended MHD. Physics of Plasmas, 2017, 24, .	0.7	10
13	Magnetohydrodynamics modelling successfully predicts new helical states in reversed-field pinch fusion plasmas. Nuclear Fusion, 2017, 57, 116029.	1.6	28
14	Test-electron analysis of the magnetic reconnection topology. Physics of Plasmas, 2017, 24, .	0.7	7
15	Open problems of magnetic island control by electron cyclotron current drive. Journal of Plasma Physics, 2016, 82, .	0.7	8
16	Variational integrators for reduced magnetohydrodynamics. Journal of Computational Physics, 2016, 321, 435-458.	1.9	16
17	Visco-resistive plasmoid instability. Physics of Plasmas, 2016, 23, .	0.7	30
18	Hamiltonian magnetic reconnection with parallel electron heat flux dynamics. Journal of Plasma Physics, 2015, 81, .	0.7	12

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19	Phase diagrams of forced magnetic reconnection in Taylor's model. Journal of Plasma Physics, 2015, 81, .	0.7	9
20	Detection of magnetic barriers in a chaotic domain: first application of finite time Lyapunov exponent method to a magnetic confinement configuration. Plasma Physics and Controlled Fusion, 2015, 57, 085004.	0.9	16
21	Extended theory of the Taylor problem in the plasmoid-unstable regime. Physics of Plasmas, 2015, 22, .	0.7	35
22	The deceiving \hat{I}^2 : On the equilibrium dependent dynamics of nonlinear magnetic islands. Physics of Plasmas, 2014, 21, 102514.	0.7	7
23	Nonlinear 2-D effects in the control of magnetic Islands by ECCD. AIP Conference Proceedings, 2014, , .	0.3	3
24	Numerical comparison between a gyrofluid and gyrokinetic model investigating collisionless magnetic reconnection. Physics of Plasmas, 2014, 21, .	0.7	5
25	Nonlinear response of magnetic islands to localized electron cyclotron current injection. Physics of Plasmas, 2014, 21, .	0.7	23
26	Linear stability analysis of collisionless reconnection in the presence of an equilibrium flow aligned with the guide field. European Physical Journal D, 2014, 68, 1.	0.6	3
27	Formation of plasmoid chains in fusion relevant plasmas. Journal of Physics: Conference Series, 2014, 561, 012004.	0.3	8
28	Gyro-induced acceleration of magnetic reconnection. Physics of Plasmas, 2013, 20, .	0.7	36
29	Inertial magnetic reconnection effects on the electron dynamics in a three-dimensional configuration. Journal of Physics: Conference Series, 2012, 401, 012019.	0.3	1
30	Fast gyrofluid reconnection in high temperature plasmas. Journal of Physics: Conference Series, 2012, 401, 012005.	0.3	2
31	Ion diamagnetic effects in gyrofluid collisionless magnetic reconnection. Journal of Physics: Conference Series, 2012, 401, 012008.	0.3	3
32	Magnetic island evolution under the action of electron cyclotron current drive. Journal of Physics: Conference Series, 2012, 401, 012002.	0.3	0
33	Numerical investigation of a compressible gyrofluid model for collisionless magnetic reconnection. Physics of Plasmas, 2012, 19, .	0.7	20
34	Numerical investigation of a three-dimensional four field model for collisionless magnetic reconnection. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 2085-2094.	1.7	5
35	Asymmetric tearing mode in the presence of viscosity. Physics of Plasmas, 2011, 18, 112108.	0.7	16
36	Barriers in the transition to global chaos in collisionless magnetic reconnection. II. Field line spectroscopy. Physics of Plasmas, 2011, 18, .	0.7	9

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37	Barriers in the transition to global chaos in collisionless magnetic reconnection. I. Ridges of the finite time Lyapunov exponent field. <i>Physics of Plasmas</i> , 2011, 18, .	0.7	23
38	Electron response in gyrofluid simulations of magnetic reconnection. <i>Journal of Physics: Conference Series</i> , 2010, 260, 012015.	0.3	0
39	Barriers to field line transport in 3D magnetic configurations. <i>Journal of Physics: Conference Series</i> , 2010, 260, 012012.	0.3	3
40	Gyrofluid simulations of collisionless reconnection in the presence of diamagnetic effects. <i>Journal of Physics: Conference Series</i> , 2010, 260, 012020.	0.3	9
41	ASYMMETRY EFFECTS IN VISCORESISTIVE MAGNETIC RECONNECTION. , 2010, , .		0
42	Nonlinear processes in Hamiltonian reconnection. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2010, 15, 2-9.	1.7	8
43	Hamiltonian four-field model for magnetic reconnection: nonlinear dynamics and extension to three dimensions with externally applied fields. <i>Nuclear Fusion</i> , 2010, 50, 034007.	1.6	34
44	Electron response to collisionless magnetic reconnection. <i>Physics of Plasmas</i> , 2010, 17, 042104.	0.7	10
45	Nonlinear gyrofluid simulations of collisionless reconnection. <i>Physics of Plasmas</i> , 2010, 17, 082312.	0.7	23
46	Coupling between reconnection and Kelvin-Helmholtz instabilities in collisionless plasmas. <i>Nonlinear Processes in Geophysics</i> , 2009, 16, 241-249.	0.6	14
47	Hamiltonian formulation and analysis of a collisionless fluid reconnection model. <i>Plasma Physics and Controlled Fusion</i> , 2008, 50, 085014.	0.9	54
48	Nonlinear Collisionless Magnetic Reconnection. , 2008, , .		0
49	Stable and unstable invariant manifolds in a partially chaotic magnetic configuration generated by nonlinear reconnection. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	21
50	Critical $\hat{\nu}^2$ for stability of viscoresistive tearing modes. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	15
51	NONLINEAR DYNAMICS OF A HAMILTONIAN FOUR-FIELD MODEL FOR MAGNETIC RECONNECTION IN COLLISIONLESS PLASMAS. , 2008, , .		1
52	Secondary instabilities in two- and three-dimensional magnetic reconnection in fusion relevant plasmas. <i>Physics of Plasmas</i> , 2007, 14, 055703.	0.7	23
53	Effect of sheared flow on magnetic islands. <i>Physics of Plasmas</i> , 2007, 14, 022302.	0.7	12
54	Resistive stability of a plasma with runaway electrons. <i>Physics of Plasmas</i> , 2007, 14, .	0.7	28

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55	BIFURCATION ANALYSIS OF SEQUENCE OF MAGNETIC ISLAND EQUILIBRIA AND SPONTANEOUS GENERATION OF ZONAL FLOWS. , 2007, , .		2
56	HAMILTONIAN STRUCTURE OF A COLLISIONLESS RECONNECTION MODEL VALID FOR HIGH AND LOW $\hat{\nu}^2$ PLASMAS. , 2007, , .		3
57	Magnetic islands and spontaneous generation of zonal flows. Plasma Physics and Controlled Fusion, 2006, 48, L87-L95.	0.9	21
58	Aspects of three-dimensional magnetic reconnection. Physics of Plasmas, 2005, 12, 032309.	0.7	49
59	Developments in the theory of collisionless reconnection in magnetic configurations with a strong guide field. Nonlinear Processes in Geophysics, 2004, 11, 567-577.	0.6	12
60	Progress in the theory of magnetic reconnection phenomena. Plasma Physics and Controlled Fusion, 2004, 46, B201-B212.	0.9	8
61	Predicting the behaviour of magnetic reconnection processes in fusion burning plasma experiments. Nuclear Fusion, 2004, 44, 362-371.	1.6	8
62	Multiple States of Nonlinear Drift-Tearing Islands. Physical Review Letters, 2004, 93, 075001.	2.9	46
63	Numerical solution of a reduced model of collisionless magnetic reconnection in two and three dimensions. Computer Physics Communications, 2004, 164, 23-28.	3.0	0
64	Magnetic Reconnection: Collisionless Regimes. Physica Scripta, 2004, T107, 153.	1.2	5
65	Growth and stabilization of drift-tearing modes in weakly collisional plasmas. Nuclear Fusion, 2002, 42, 1067-1074.	1.6	22
66	Recent advances in collisionless magnetic reconnection. Plasma Physics and Controlled Fusion, 2002, 44, B389-B405.	0.9	84
67	Phase Mixing and Island Saturation in Hamiltonian Reconnection. Physical Review Letters, 2001, 86, 5051-5054.	2.9	81
68	Modelling of macroscopic magnetic islands in tokamaks. Nuclear Fusion, 2001, 41, 1207-1218.	1.6	5
69	Linear stability and mode structure of drift tearing modes. Physics of Plasmas, 2001, 8, 4306-4317.	0.7	24
70	Fast Collisionless Magnetic Reconnection: Fluid Regime and Kinetic Effects. Physica Scripta, 2001, T98, 72.	1.2	0
71	Ion Larmor radius effects in collisionless reconnection. Plasma Physics Reports, 2000, 26, 512-518.	0.3	23
72	Collisionless reconnection in instabilities and due to external forcing. Physics of Plasmas, 2000, 7, 178-184.	0.7	9

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73	Hamiltonian magnetic reconnection. Plasma Physics and Controlled Fusion, 1999, 41, 1497-1515.	0.9	71
74	Invariants and Geometric Structures in Nonlinear Hamiltonian Magnetic Reconnection. Physical Review Letters, 1998, 80, 4430-4433.	2.9	120
75	Hamiltonian Model of Magnetic Reconnection. Physica Scripta, 1998, T75, 200.	1.2	0
76	Nonlinear collisionless magnetic reconnection. Physical Review Letters, 1993, 71, 3802-3805.	2.9	189
77	Fluid equations: derivation and simulation. , 0, , .		0