Luca Comisso

List of Publications by Year
in descending order

44 papers	1,101 citations	430874 18 h-index	395702 33 g-index
46 all docs	46 docs citations	46 times ranked	1180 citing authors

#	Article	IF	Citations
1	Coexistence of Plasmoid and Kelvin–Helmholtz Instabilities in Collisionless Plasma Turbulence. Astrophysical Journal, 2022, 929, 62.	4.5	5
2	Magnetic reconnection as a mechanism for energy extraction from rotating black holes. Physical Review D, 2021, 103, .	4.7	25
3	Pitch-Angle Anisotropy Controls Particle Acceleration and Cooling in Radiative Relativistic Plasma Turbulence. Physical Review Letters, 2021, 127, 255102.	7.8	17
4	Generalized magnetofluid connections in a curved spacetime. Physical Review D, 2020, 102, .	4.7	8
5	Hard Synchrotron Spectra from Magnetically Dominated Plasma Turbulence. Astrophysical Journal Letters, 2020, 895, L40.	8.3	20
6	Turbulent Model of Crab Nebula Radiation. Astrophysical Journal, 2020, 896, 147.	4.5	9
7	Interpreting Crab Nebula's synchrotron spectrum: two acceleration mechanisms. Monthly Notices of the Royal Astronomical Society, 2019, 489, 2403-2416.	4.4	27
8	Scalings pertaining to current sheet disruption mediated by the plasmoid instability. Physics of Plasmas, 2019, 26, 092112.	1.9	10
9	Gravitational electromotive force in magnetic reconnection around Schwarzschild black holes. Physical Review D, 2019, 99, .	4.7	7
10	The Interplay of Magnetically Dominated Turbulence and Magnetic Reconnection in Producing Nonthermal Particles. Astrophysical Journal, 2019, 886, 122.	4.5	91
11	Magnetohydrodynamic Turbulence in the Plasmoid-mediated Regime. Astrophysical Journal, 2018, 854, 103.	4.5	39
12	A maximum entropy principle for inferring the distribution of 3D plasmoids. Physics of Plasmas, 2018, 25, .	1.9	9
13	Physics conditions for robust control of tearing modes in a rotating tokamak plasma. Plasma Physics and Controlled Fusion, 2018, 60, 014044.	2.1	5
14	Particle Acceleration in Relativistic Plasma Turbulence. Physical Review Letters, 2018, 121, 255101.	7.8	118
15	Role of the Plasmoid Instability in Magnetohydrodynamic Turbulence. Physical Review Letters, 2018, 121, 165101.	7.8	58
16	Magnetic island suppression by electron cyclotron current drive as converse of a forced reconnection problem. Journal of Plasma Physics, 2018, 84, .	2.1	6
17	Nonlinear resistivity for magnetohydrodynamical models. Physics of Plasmas, 2017, 24, 042120.	1.9	9
18	Relativistic Magnetic Reconnection in Kerr Spacetime. Physical Review Letters, 2017, 118, 055101.	7.8	13

#	Article	IF	Citations
19	Plasmoid Instability in Forming Current Sheets. Astrophysical Journal, 2017, 850, 142.	4.5	58
20	Plasmoid Instability in Evolving Current Sheets and Onset of Fast Reconnection. Astrophysical Journal, 2017, 849, 75.	4.5	66
21	Magnetic connections in curved spacetime. Physical Review D, 2017, 96, .	4.7	6
22	Fluid moments of the nonlinear Landau collision operator. Physics of Plasmas, 2016, 23, .	1.9	8
23	General theory of the plasmoid instability. Physics of Plasmas, 2016, 23, .	1.9	113
24	Open problems of magnetic island control by electron cyclotron current drive. Journal of Plasma Physics, 2016, 82, .	2.1	8
25	Visco-resistive plasmoid instability. Physics of Plasmas, 2016, 23, .	1.9	30
26	On the value of the reconnection rate. Journal of Plasma Physics, 2016, 82, .	2.1	55
27	Phase diagrams of forced magnetic reconnection in Taylor's model. Journal of Plasma Physics, 2015, 81, .	2.1	9
28	Generalized magnetofluid connections in pair plasmas. Physics of Plasmas, 2015, 22, .	1.9	13
29	Generalized Magnetofluid Connections in Relativistic Magnetohydrodynamics. Physical Review Letters, 2015, 114, 115003.	7.8	30
30	Extended theory of the Taylor problem in the plasmoid-unstable regime. Physics of Plasmas, 2015, 22, .	1.9	35
31	Nonlinear 2-D effects in the control of magnetic Islands by ECCD. AIP Conference Proceedings, 2014, , .	0.4	3
32	Thermal-Inertial Effects on Magnetic Reconnection in Relativistic Pair Plasmas. Physical Review Letters, 2014, 113, 045001.	7.8	44
33	Numerical comparison between a gyrofluid and gyrokinetic model investigating collisionless magnetic reconnection. Physics of Plasmas, 2014, 21, .	1.9	5
34	Nonlinear response of magnetic islands to localized electron cyclotron current injection. Physics of Plasmas, 2014, 21, .	1.9	23
35	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.	1.3	3
36	Formation of plasmoid chains in fusion relevant plasmas. Journal of Physics: Conference Series, 2014, 561, 012004.	0.4	8

#	Article	IF	Citations
37	Gyro-induced acceleration of magnetic reconnection. Physics of Plasmas, 2013, 20, .	1.9	36
38	Fast gyrofluid reconnection in high temperature plasmas. Journal of Physics: Conference Series, 2012, 401, 012005.	0.4	2
39	Magnetic island evolution under the action of electron cyclotron current drive. Journal of Physics: Conference Series, 2012, 401, 012002.	0.4	0
40	Numerical investigation of a compressible gyrofluid model for collisionless magnetic reconnection. Physics of Plasmas, 2012, 19, .	1.9	20
41	Magnetic reconnection controlled by external current drive. Plasma Physics and Controlled Fusion, 2011, 53, 054012.	2.1	8
42	Nonlinear and Diamagnetic Effects in a Neoclassical Model of Magnetic Reconnection. , 2011, , .		2
43	Two-dimensional effects in the problem of tearing modes control by electron cyclotron current drive. Nuclear Fusion, 2010, 50, 125002.	3.5	18
44	Nonlinear response of a neoclassical four-field magnetic reconnection model to localized current drive. Physics of Plasmas, 2010, 17, 052509.	1.9	15