

Gianluigi Bodo

List of Publications by Year in descending order

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126
papers

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134
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134
docs citations

134
times ranked

2594
citing authors

#	ARTICLE	IF	CITATIONS
1	Current-driven kink instabilities in relativistic jets: dissipation properties. Monthly Notices of the Royal Astronomical Society, 2022, 510, 2391-2406.	1.6	6
2	Making Fanaroff-Riley I radio sources. Astronomy and Astrophysics, 2022, 659, A139.	2.1	9
3	Modelling X-shaped radio galaxies: Dynamical and emission signatures from the Back-flow model. Astronomy and Astrophysics, 2022, 662, A5.	2.1	9
4	Simulating the dynamics and synchrotron emission from relativistic jets – II. Evolution of non-thermal electrons. Monthly Notices of the Royal Astronomical Society, 2021, 505, 2267-2284.	1.6	20
5	Numerical study of the Kelvin-Helmholtz instability and its effect on synthetic emission from magnetized jets. Astronomy and Astrophysics, 2021, 649, A150.	2.1	14
6	On the impact of the numerical method on magnetic reconnection and particle acceleration – I. The MHD case. Monthly Notices of the Royal Astronomical Society, 2021, 508, 2771-2783.	1.6	5
7	Kink-driven magnetic reconnection in relativistic jets: consequences for X-ray polarimetry of BL Lacs. Monthly Notices of the Royal Astronomical Society, 2021, 501, 2836-2847.	1.6	28
8	Simulating the dynamics and non-thermal emission of relativistic magnetized jets I. Dynamics. Monthly Notices of the Royal Astronomical Society, 2020, 499, 681-701.	1.6	37
9	On magnetic helicity generation and transport in a nonlinear dynamo driven by a helical flow. Journal of Plasma Physics, 2020, 86, .	0.7	4
10	Particle-Gas Hybrid Schemes in the PLUTO Code. Journal of Physics: Conference Series, 2020, 1623, 012007.	0.3	2
11	The different flavors of extragalactic jets: The role of relativistic flow deceleration. Astronomy and Astrophysics, 2020, 642, A69.	2.1	13
12	Zero Net Flux MRI Turbulence in Disks: Sustainment Scheme and Magnetic Prandtl Number Dependence. Astrophysical Journal, 2020, 904, 47.	1.6	11
13	A constrained transport method for the solution of the resistive relativistic MHD equations. Monthly Notices of the Royal Astronomical Society, 2019, 486, 4252-4274.	1.6	15
14	Linear stability analysis of magnetized relativistic rotating jets. Monthly Notices of the Royal Astronomical Society, 2019, 485, 2909-2921.	1.6	20
15	Making Faranoff-Riley I radio sources. Astronomy and Astrophysics, 2019, 621, A132.	2.1	19
16	Recollimation shocks and radiative losses in extragalactic relativistic jets. Astronomy and Astrophysics, 2018, 609, A122.	2.1	19
17	A Particle Module for the PLUTO Code. II. Hybrid Framework for Modeling Nonthermal Emission from Relativistic Magnetized Flows. Astrophysical Journal, 2018, 865, 144.	1.6	61
18	Linear wave propagation for resistive relativistic magnetohydrodynamics. Physics of Plasmas, 2018, 25, .	0.7	6

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19	A Particle Module for the PLUTO Code. I. An Implementation of the MHD-PIC Equations. <i>Astrophysical Journal</i> , 2018, 859, 13.	1.6	45
20	Nonlinear Transverse Cascade and Sustenance of MRI Turbulence in Keplerian Disks with an Azimuthal Magnetic Field. <i>Astrophysical Journal</i> , 2017, 845, 70.	1.6	12
21	Magnetic Helicities and Dynamo Action in Magneto-rotational Turbulence. <i>Astrophysical Journal</i> , 2017, 843, 86.	1.6	4
22	3D relativistic MHD numerical simulations of X-shaped radio sources. <i>Astronomy and Astrophysics</i> , 2017, 606, A57.	2.1	22
23	Making Faranoff-Riley I radio sources. <i>Astronomy and Astrophysics</i> , 2016, 596, A12.	2.1	49
24	Linear stability analysis of magnetized jets: the rotating case. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 462, 3031-3052.	1.6	18
25	A fluid-particle hybrid framework for the PLUTO code: applications to non-thermal emission in jets.. <i>Journal of Physics: Conference Series</i> , 2016, 719, 012023.	0.3	4
26	MHD simulations of three-dimensional resistive reconnection in a cylindrical plasma column. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 462, 2970-2979.	1.6	23
27	Astrophysical fluid simulations of thermally ideal gases with non-constant adiabatic index: numerical implementation. <i>Astronomy and Astrophysics</i> , 2015, 580, A110.	2.1	20
28	FULLY CONVECTIVE MAGNETO-ROTATIONAL TURBULENCE IN LARGE ASPECT-RATIO SHEARING BOXES. <i>Astrophysical Journal</i> , 2015, 799, 20.	1.6	7
29	GLOBAL PROPERTIES OF FULLY CONVECTIVE ACCRETION DISKS FROM LOCAL SIMULATIONS. <i>Astrophysical Journal</i> , 2015, 808, 141.	1.6	2
30	Linear and non-linear evolution of current-carrying highly magnetized jets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 442, 2228-2239.	1.6	8
31	ON THE CONVERGENCE OF MAGNETOROTATIONAL TURBULENCE IN STRATIFIED ISOTHERMAL SHEARING BOXES. <i>Astrophysical Journal Letters</i> , 2014, 787, L13.	3.0	30
32	Effects of entropy generation in jet-launching discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 428, 3151-3163.	1.6	26
33	Linear stability analysis of magnetized relativistic jets: the non-rotating case. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 434, 3030-3046.	1.6	50
34	FULLY CONVECTIVE MAGNETOROTATIONAL TURBULENCE IN STRATIFIED SHEARING BOXES. <i>Astrophysical Journal Letters</i> , 2013, 771, L23.	3.0	11
35	Revisiting linear dynamics of non-axisymmetric perturbations in weakly magnetized accretion discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 435, 2552-2567.	1.6	35
36	THE PLUTO CODE FOR ADAPTIVE MESH COMPUTATIONS IN ASTROPHYSICAL FLUID DYNAMICS. <i>Astrophysical Journal</i> , Supplement Series, 2012, 198, 7.	3.0	366

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37	MAGNETOROTATIONAL TURBULENCE IN STRATIFIED SHEARING BOXES WITH PERFECT GAS EQUATION OF STATE AND FINITE THERMAL DIFFUSIVITY. <i>Astrophysical Journal</i> , 2012, 761, 116.	1.6	25
38	Approximate Harten-Lax-van Leer Riemann solvers for relativistic magnetohydrodynamics. , 2012, , 219-226.		2
39	SYMMETRIES, SCALING LAWS, AND CONVERGENCE IN SHEARING-BOX SIMULATIONS OF MAGNETO-ROTATIONAL INSTABILITY DRIVEN TURBULENCE. <i>Astrophysical Journal</i> , 2011, 739, 82.	1.6	40
40	High-order conservative finite difference GLM MHD schemes for cell-centered MHD. <i>Journal of Computational Physics</i> , 2010, 229, 5896-5920.	1.9	104
41	High-resolution 3D relativistic MHD simulations of jets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 402, 7-12.	1.6	127
42	Linear coupling of modes in two-dimensional radially stratified astrophysical discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 401, 901-912.	1.6	16
43	Acoustic waves in a stratified atmosphere. <i>Astronomy and Astrophysics</i> , 2010, 520, A100.	2.1	10
44	Time-dependent MHD shocks and line intensity ratios in the jet: a focus on cooling function and numerical resolution. <i>Astronomy and Astrophysics</i> , 2009, 507, 581-588.	2.1	15
45	On the magnetization of jet-launching discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 400, 820-834.	1.6	59
46	A five-wave Harten-Lax-van Leer Riemann solver for relativistic magnetohydrodynamics. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 393, 1141-1156.	1.6	102
47	TeV variability in blazars: how fast can it be?. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2009, 393, L16-L20.	1.2	42
48	High Resolution 3D Relativistic MHD Simulations of Jets. <i>Proceedings of the International Astronomical Union</i> , 2009, 5, 254-255.	0.0	0
49	Aerodynamic sound generation by turbulence in shear flows. <i>Springer Proceedings in Physics</i> , 2009, , 867-870.	0.1	0
50	Parameter Study in Disk Jet Systems. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , 2009, , 497-502.	0.3	0
51	Aspect Ratio Dependence in Magnetorotational Instability Shearing Box Simulations. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , 2009, , 77-82.	0.3	0
52	On the linear theory of Kelvin-Helmholtz instabilities of relativistic magnetohydrodynamic planar flows. <i>Astronomy and Astrophysics</i> , 2008, 490, 493-500.	2.1	34
53	Aspect ratio dependence in magnetorotational instability shearing box simulations. <i>Astronomy and Astrophysics</i> , 2008, 487, 1-5.	2.1	77
54	Formation of dynamical structures in relativistic jets: the FRI case. <i>Astronomy and Astrophysics</i> , 2008, 488, 795-806.	2.1	89

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55	Shock-Capturing Schemes in Computational MHD. Lecture Notes in Physics, 2008, , 71-101.	0.3	5
56	PLUTO: A Numerical Code for Computational Astrophysics. Astrophysical Journal, Supplement Series, 2007, 170, 228-242.	3.0	1,126
57	MHD simulations of jet acceleration from Keplerian accretion disks. Astronomy and Astrophysics, 2007, 469, 811-828.	2.1	164
58	On the efficiency of particle acceleration by rotating magnetospheres in AGN. Astronomy and Astrophysics, 2007, 470, 395-400.	2.1	43
59	Stability and nonlinear adjustment of vortices in Keplerian flows. Astronomy and Astrophysics, 2007, 475, 51-61.	2.1	17
60	MHD SIMULATIONS OF JET ACCELERATION: THE ROLE OF DISK RESISTIVITY. , 2007, , .		0
61	An HLLC Riemann solver for relativistic flows â€” II. Magnetohydrodynamics. Monthly Notices of the Royal Astronomical Society, 2006, 368, 1040-1054.	1.6	116
62	An HLLC Riemann solver for relativistic flows – I. Hydrodynamics. Monthly Notices of the Royal Astronomical Society, 2005, 364, 126-136.	1.6	155
63	Relativistic MHD Simulations of Jets with Toroidal Magnetic Fields. Space Science Reviews, 2005, 121, 21-31.	3.7	13
64	Spiral density wave generation by vortices in Keplerian flows. Astronomy and Astrophysics, 2005, 437, 9-22.	2.1	35
65	Time-dependent MHD shocks and line emission: the case of the DG Tau jet. Astronomy and Astrophysics, 2005, 442, 549-554.	2.1	16
66	The Piecewise Parabolic Method for Multidimensional Relativistic Fluid Dynamics. Astrophysical Journal, Supplement Series, 2005, 160, 199-219.	3.0	162
67	Heating groups and clusters of galaxies: The role of AGN jets. Astronomy and Astrophysics, 2005, 429, 399-415.	2.1	51
68	Kelvin-Helmholtz instability for relativistic fluids. Physical Review E, 2004, 70, 036304.	0.8	44
69	Vortices and waves in planar and disk flows. AIP Conference Proceedings, 2004, , .	0.3	0
70	On the MHD Acceleration of Astrophysical Jets. Astrophysics and Space Science, 2004, 293, 99-106.	0.5	8
71	Entrainment and Deceleration of Relativistic Jets. Astrophysics and Space Science, 2004, 293, 149-155.	0.5	8
72	Astrophysical Jet Simulations: Comparing Different Numerical Methods. Astrophysics and Space Science, 2004, 293, 199-207.	0.5	8

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73	Numerical Simulations of the Interaction of Jets with the Intracluster Medium. <i>Astrophysics and Space Science</i> , 2004, 293, 247-254.	0.5	1
74	Numerical Simulations of the Interaction of Jets with the Intracluster Medium. , 2004, , 247-254.		1
75	Entrainment and Deceleration of Relativistic Jets. , 2004, , 149-155.		0
76	A version of PPM for multidimensional relativistic hydrodynamics. <i>New Astronomy Reviews</i> , 2003, 47, 581-583.	5.2	5
77	Deceleration of relativistic jets. <i>New Astronomy Reviews</i> , 2003, 47, 557-559.	5.2	7
78	Amplification of MHD waves in swirling astrophysical flows. <i>Astronomy and Astrophysics</i> , 2003, 408, 401-408.	2.1	8
79	X-ray emission from expanding cocoons. <i>Astronomy and Astrophysics</i> , 2003, 402, 949-962.	2.1	31
80	Swirling astrophysical flows â€“ efficient amplifiers of AlfvÃ©n waves!?. <i>Astronomy and Astrophysics</i> , 2003, 399, 421-431.	2.1	11
81	On the origin of X-shaped radio-sources: New insights from the properties of their host galaxies. <i>Astronomy and Astrophysics</i> , 2002, 394, 39-45.	2.1	70
82	EVN Observations of GRS 1915+105. <i>Astrophysics and Space Science</i> , 2001, 276, 111-112.	0.5	2
83	Acoustic waves in a stratified atmosphere. <i>Astronomy and Astrophysics</i> , 2001, 370, 1088-1091.	2.1	5
84	Spatial aspect of wave transformations in astrophysical flows. <i>Astronomy and Astrophysics</i> , 2001, 374, 337-347.	2.1	17
85	A kinematical study of R aquarii jet features. <i>Astronomical and Astrophysical Transactions</i> , 1999, 17, 321-331.	0.2	1
86	The bulk kinetic power of the jets of GRS 1915+105. <i>Monthly Notices of the Royal Astronomical Society</i> , 1999, 303, L37-L40.	1.6	23
87	BeppoSAX observations of low power radio galaxies: possible detection of obscured nuclei. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1999, 69, 463-466.	0.5	0
88	Linear Mechanism of Wave Emergence from Vortices in Smooth Shear Flows. <i>Physical Review Letters</i> , 1997, 79, 3178-3181.	2.9	84
89	Kelvin-Helmholtz Instabilities and the Emission Knots in Herbig-Haro Jets. <i>Symposium - International Astronomical Union</i> , 1997, 182, 335-342.	0.1	1
90	Numerical simulations of supersonic jets: The cocoon emission. <i>Lecture Notes in Physics</i> , 1996, , 275-283.	0.3	2

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91	The Origin of Filaments in the Interstellar Medium. <i>Astrophysical Journal</i> , 1996, 470, L49-L52.	1.6	36
92	On the cyclo-synchrotron cross-section. <i>Monthly Notices of the Royal Astronomical Society</i> , 1996, 280, 1094-1100.	1.6	1
93	Phenomenology and Modelling of Large-Scale Jets. , 1996, , 607-642.		6
94	On the Nonlinear Evolution of Magnetohydrodynamic Kelvin-Helmholtz Instabilities. <i>Astrophysical Journal</i> , 1996, 456, 708.	1.6	69
95	Radio Jets and the Formation of Active Galaxies: Accretion Avalanches on the Torus by the Effect of a Large-Scale Magnetic Field. <i>Astrophysical Journal</i> , 1996, 461, 115.	1.6	109
96	On the Stability of Magnetized Rotating Jets: The Nonaxisymmetric Modes. <i>Astrophysical Journal</i> , 1996, 470, 797.	1.6	30
97	Fractal Properties of Extragalactic Jets: Evidence of Turbulence?. , 1996, , 463-464.		0
98	3-D Simulations of Kelvin-Helmholtz Instabilities in Supersonic Jets. , 1996, , 453-454.		0
99	Numerical simulations of supersonic directed flows in astrophysical plasmas. <i>AIP Conference Proceedings</i> , 1995, , .	0.3	0
100	The velocity of the emitting plasma of the superluminal galactic source GRS 1915+105. <i>Astrophysical Journal</i> , 1995, 441, L69.	1.6	13
101	A Simple Mhd Model for One-Sided Jets. <i>Symposium - International Astronomical Union</i> , 1994, 159, 360-360.	0.1	0
102	Kelvinâ€™Helmholtz instabilities in radiating flows. <i>Physics of Fluids A, Fluid Dynamics</i> , 1993, 5, 405-411.	1.6	9
103	Radiative instability in synchrotron-emitting plasmas. <i>Astrophysical Journal</i> , 1993, 414, 112.	1.6	6
104	Nonlinear Evolution of Radiative Unstable Modes in Extragalactic Jets. <i>Astrophysics and Space Science Library</i> , 1993, , 403-404.	1.0	0
105	Diamagnetic effects in synchrotron sources. <i>Monthly Notices of the Royal Astronomical Society</i> , 1992, 255, 694-700.	1.6	10
106	Radiative acceleration by synchrotron sources. <i>Astrophysical Journal</i> , 1992, 401, 87.	1.6	3
107	Non-linear Filaments Evolution in Radio Sources. , 1992, , 548-550.		0
108	Radiative Unstable Modes in Astrophysical Jets. , 1992, , 596-597.		0

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109	Radiative Acceleration of Blobs in AGN. , 1992, , 502-509.		0
110	The finite-amplitude behavior of the Joule mode under astrophysical conditions. Astrophysical Journal, 1991, 370, 398.	1.6	2
111	Filaments Evolution in Extended Radio Sources. Symposium - International Astronomical Union, 1990, 140, 457-458.	0.1	0
112	Acceleration by synchrotron absorption and superluminal sources. Astrophysical Journal, 1990, 362, L1.	1.6	10
113	2D Flux Tube in Radiative Equilibrium. , 1989, , 571-581.		5
114	On the stability of magnetized rotating jets - The axisymmetric case. Astrophysical Journal, 1989, 341, 631.	1.6	41
115	On the stability of anisotropic astrophysical jets. Monthly Notices of the Royal Astronomical Society, 1988, 234, 539-567.	1.6	11
116	Finite amplitude stability of a plane shear layer. Geophysical and Astrophysical Fluid Dynamics, 1988, 43, 333-347.	0.4	0
117	The equilibrium structure of a thin magnetic flux tube. III - The effects of molecular CO absorption. Astrophysical Journal, 1988, 333, 925.	1.6	5
118	Current-driven magnetohydrodynamic thermal instabilities in sheared fields. Astrophysical Journal, 1987, 313, 432.	1.6	10
119	On the thermal instability of galactic and cluster halos. Astrophysical Journal, 1987, 319, 632.	1.6	57
120	Magnetohydrodynamic thermal instabilities in cool inhomogeneous atmospheres. Astrophysical Journal, 1985, 291, 798.	1.6	10
121	The equilibrium structure of thin magnetic flux tubes. I. Astrophysical Journal, 1985, 298, 181.	1.6	9
122	On magnetohydrodynamic thermal instabilities in magnetic flux tubes. Astrophysical Journal, 1985, 299, 769.	1.6	4
123	Features of the Wave-Like Distortion in Some RS CVn Binaries. Astrophysics and Space Science Library, 1983, , 395-398.	1.0	3
124	MHD Thermal Instabilities in Cool Inhomogeneous Atmospheres. Astrophysics and Space Science Library, 1983, , 621-623.	1.0	0
125	Propagation of microwaves in pulsar magnetospheres. Astrophysics and Space Science, 1981, 80, 261-266.	0.5	1
126	Bending of electromagnetic beams and head-tail radio sources. Monthly Notices of the Royal Astronomical Society, 1981, 196, 481-489.	1.6	3