

Massimo Giovannini

List of Publications by Year in descending order

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149
papers

3,834
citations

147786

31
h-index

155644

55
g-index

150
all docs

150
docs citations

150
times ranked

1135
citing authors

#	ARTICLE	IF	CITATIONS
1	THE MAGNETIZED UNIVERSE. International Journal of Modern Physics D, 2004, 13, 391-502.	2.1	336
2	Primordial hypermagnetic fields and the triangle anomaly. Physical Review D, 1998, 57, 2186-2206.	4.7	284
3	Production and detection of relic gravitons in quintessential inflationary models. Physical Review D, 1999, 60, .	4.7	185
4	Cosmology of codimension-two braneworlds. Journal of High Energy Physics, 2003, 2003, 048-048.	4.7	127
5	Gravitational wave constraints on post-inflationary phases stiffer than radiation. Physical Review D, 1998, 58, .	4.7	118
6	Spikes in the relic graviton background from quintessential inflation. Classical and Quantum Gravity, 1999, 16, 2905-2913.	4.0	93
7	Gauge-invariant fluctuations of scalar branes. Physical Review D, 2001, 64, .	4.7	83
8	Primordial hypermagnetic knots. Physical Review D, 2000, 61, .	4.7	67
9	Variation of the gauge couplings during inflation. Physical Review D, 2001, 64, .	4.7	67
10	Cosmic microwave background polarization, Faraday rotation, and stochastic gravitational-wave backgrounds. Physical Review D, 1997, 56, 3198-3206.	4.7	65
11	Magnetized CMB observables: A dedicated numerical approach. Physical Review D, 2008, 77, .	4.7	64
12	The thermal history of the plasma and high-frequency gravitons. Classical and Quantum Gravity, 2009, 26, 045004.	4.0	63
13	Magnetized CMB anisotropies. Classical and Quantum Gravity, 2006, 23, R1-R44.	4.0	60
14	Faraday rotation, stochastic magnetic fields, and CMB maps. Physical Review D, 2008, 78, .	4.7	60
15	Hypermagnetic knots, Chern-Simons waves, and the baryon asymmetry. Physical Review D, 2000, 61, .	4.7	59
16	Tight coupling expansion and fully inhomogeneous magnetic fields. Physical Review D, 2006, 74, .	4.7	57
17	Magnetogenesis and the dynamics of internal dimensions. Physical Review D, 2000, 62, .	4.7	54
18	THEORETICAL TOOLS FOR CMB PHYSICS. International Journal of Modern Physics D, 2005, 14, 363-510.	2.1	52

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19	Magnetized initial conditions for CMB anisotropies. <i>Physical Review D</i> , 2004, 70, .	4.7	51
20	Localization of metric fluctuations on scalar branes. <i>Physical Review D</i> , 2002, 65, .	4.7	50
21	Low-scale quintessential inflation. <i>Physical Review D</i> , 2003, 67, .	4.7	50
22	Entropy perturbations and large-scale magnetic fields. <i>Classical and Quantum Gravity</i> , 2006, 23, 4991-5025.	4.0	49
23	Magnetogenesis, spectator fields and CMB signatures. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2008, 659, 661-668.	4.1	47
24	Thick branes and Gauss-Bonnet self-interactions. <i>Physical Review D</i> , 2001, 64, .	4.7	46
25	Stochastic backgrounds of relic gravitons, Λ CDM paradigm and the stiff ages. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2008, 668, 44-50.	4.1	44
26	Magnetized birefringence and CMB polarization. <i>Physical Review D</i> , 2005, 71, .	4.7	41
27	Stochastic backgrounds of relic gravitons: a theoretical appraisal. <i>PMC Physics A</i> , 2010, 4, .	9.1	40
28	Estimating relic magnetic fields from CMB temperature correlations. <i>Physical Review D</i> , 2009, 79, .	4.7	36
29	Scalar normal modes of higher-dimensional gravitating kinks. <i>Classical and Quantum Gravity</i> , 2003, 20, 1063-1076.	4.0	33
30	Anomalous magnetohydrodynamics. <i>Physical Review D</i> , 2013, 88, .	4.7	33
31	Gauge field localization on Abelian vortices in six dimensions. <i>Physical Review D</i> , 2002, 66, .	4.7	31
32	Transfer matrices for magnetized CMB anisotropies. <i>Physical Review D</i> , 2006, 73, .	4.7	31
33	Primordial backgrounds of relic gravitons. <i>Progress in Particle and Nuclear Physics</i> , 2020, 112, 103774.	14.4	30
34	Big bang nucleosynthesis, matter-antimatter regions, extra relativistic species, and relic gravitational waves. <i>Physical Review D</i> , 2002, 66, .	4.7	29
35	Parameter dependence of magnetized CMB observables. <i>Physical Review D</i> , 2009, 79, .	4.7	29
36	Electric-magnetic duality and the conditions of inflationary magnetogenesis. <i>Journal of Cosmology and Astroparticle Physics</i> , 2010, 2010, 003-003.	5.4	29

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37	Scalar and tensor inhomogeneities from dimensional decoupling. Physical Review D, 1997, 55, 595-608.	4.7	28
38	Semi-analytical approach to magnetized temperature autocorrelations. PMC Physics A, 2007, 1, .	9.1	28
39	Zero modes of six-dimensional Abelian vortices. Classical and Quantum Gravity, 2002, 19, 3357-3385.	4.0	26
40	Assigning quantum-mechanical initial conditions to cosmological perturbations. Classical and Quantum Gravity, 2003, 20, 5455-5473.	4.0	24
41	Static dilaton solutions and singularities in six dimensional warped compactification with higher derivatives. Physical Review D, 2001, 63, .	4.7	23
42	Generalized CMB initial conditions with pre-equality magnetic fields. Physical Review D, 2008, 77, .	4.7	23
43	Hanbury Brown-Twiss interferometry and second-order correlations of inflaton quanta. Physical Review D, 2011, 83, .	4.7	23
44	Fluctuations of inflationary magnetogenesis. Physical Review D, 2013, 87, .	4.7	23
45	Dynamical backreaction of relic gravitons. Physical Review D, 2006, 73, .	4.7	22
46	Gravitating multidefects from higher dimensions. Physical Review D, 2007, 75, .	4.7	22
47	Large-scale magnetic fields, curvature fluctuations, and the thermal history of the Universe. Physical Review D, 2007, 76, .	4.7	21
48	Magnetized completion of the $\hat{\Lambda}$ CDM paradigm. Physical Review D, 2008, 77, .	4.7	21
49	V -mode polarization of the cosmic microwave background. Physical Review D, 2009, 80, .	4.7	21
50	Secondary graviton spectra and waterfall-like fields. Physical Review D, 2010, 82, .	4.7	21
51	The refractive index of relic gravitons. Classical and Quantum Gravity, 2016, 33, 125002.	4.0	21
52	Relic gravitons, dominant energy condition, and bulk viscous stresses. Physical Review D, 1999, 59, .	4.7	20
53	Inflationary susceptibilities, duality, and large-scale magnetic field generation. Physical Review D, 2013, 88, .	4.7	20
54	Post-inflationary phases stiffer than radiation and Palatini formulation. Classical and Quantum Gravity, 2019, 36, 235017.	4.0	20

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55	Probing large-scale magnetism with the cosmic microwave background. <i>Classical and Quantum Gravity</i> , 2018, 35, 084003.	4.0	19
56	Heating up the cold bounce. <i>Classical and Quantum Gravity</i> , 2004, 21, 4209-4229.	4.0	18
57	Spectator electric fields, de Sitter spacetime, and the Schwinger effect. <i>Physical Review D</i> , 2018, 97, .	4.7	18
58	Blue spectra of Kalb-Ramond axions and fully anisotropic string cosmologies. <i>Physical Review D</i> , 1999, 59, .	4.7	17
59	Vector fluctuations from multidimensional curvature bounces. <i>Physical Review D</i> , 2004, 70, .	4.7	17
60	Interacting viscous mixtures. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2005, 622, 349-355.	4.1	17
61	Gradient expansion(s) and dark energy. <i>Journal of Cosmology and Astroparticle Physics</i> , 2005, 2005, 009-009.	5.4	17
62	Cosmological perturbations for imperfect fluids. <i>Classical and Quantum Gravity</i> , 2005, 22, 5243-5269.	4.0	17
63	Regular cosmological examples of tree-level dilaton-driven models. <i>Physical Review D</i> , 1998, 57, 7223-7234.	4.7	16
64	Kink-antikink, trapping bags and five-dimensional Gauss-Bonnet gravity. <i>Physical Review D</i> , 2006, 74, .	4.7	16
65	Cosmic polarimetry in magnetoactive plasmas. <i>Physical Review D</i> , 2009, 79, .	4.7	15
66	Backgrounds of squeezed relic photons and their spatial correlations. <i>Physical Review D</i> , 2000, 61, .	4.7	14
67	Fully anisotropic string cosmologies, Maxwell fields, and primordial shear. <i>Physical Review D</i> , 1999, 59, .	4.7	13
68	Homogeneous and isotropic big rips?. <i>Physical Review D</i> , 2005, 72, .	4.7	13
69	Inhomogeneous dusty universes and their deceleration. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2006, 634, 1-4.	4.1	13
70	Dark energy, integrated Sachs-Wolfe effect and large-scale magnetic fields. <i>Classical and Quantum Gravity</i> , 2010, 27, 105011.	4.0	13
71	Vector field localization and negative tension branes. <i>Physical Review D</i> , 2002, 65, .	4.7	12
72	Non-topological gravitating defects in five-dimensional anti-de Sitter space. <i>Classical and Quantum Gravity</i> , 2006, 23, L73-L80.	4.0	12

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73	Ohmic currents and predecoupling magnetism. <i>Physical Review D</i> , 2009, 80, .	4.7	12
74	Birefringence, CMB polarization, and magnetized B-mode. <i>Physical Review D</i> , 2009, 79, .	4.7	12
75	Weyl invariance and the conductivity of the protoinflationary plasma. <i>Physical Review D</i> , 2012, 85, .	4.7	12
76	Post-inflationary thermal histories and the refractive index of relic gravitons. <i>Physical Review D</i> , 2018, 98, .	4.7	12
77	The propagating speed of relic gravitational waves and their refractive index during inflation. <i>European Physical Journal C</i> , 2018, 78, 1.	3.9	12
78	Blue and violet graviton spectra from a dynamical refractive index. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 789, 502-507.	4.1	12
79	Magnetic knots as the origin of spikes in the gravitational wave backgrounds. <i>Physical Review D</i> , 1998, 58, .	4.7	11
80	Singularity free dilaton-driven cosmologies and pre-little-bangs. <i>Physical Review D</i> , 1999, 59, .	4.7	11
81	Circular dichroism, magnetic knots, and the spectropolarimetry of the cosmic microwave background. <i>Physical Review D</i> , 2010, 81, .	4.7	11
82	Symmetries of inflationary magnetogenesis and the plasma initial conditions. <i>Physical Review D</i> , 2012, 86, .	4.7	11
83	Cosmic backgrounds of relic gravitons and their absolute normalization. <i>Classical and Quantum Gravity</i> , 2014, 31, 225002.	4.0	11
84	Inflationary magnetogenesis, derivative couplings, and relativistic Van der Waals interactions. <i>Physical Review D</i> , 2015, 92, .	4.7	11
85	Hypermagnetic gyrotropy, inflation, and the baryon asymmetry of the Universe. <i>Physical Review D</i> , 2015, 92, .	4.7	11
86	Baryogenesis, magnetogenesis and the strength of anomalous interactions. <i>European Physical Journal C</i> , 2021, 81, 1.	3.9	11
87	Tracking curvaton(s)!. <i>Physical Review D</i> , 2004, 69, .	4.7	10
88	No-hair conjectures, primordial shear, and protoinflationary initial conditions. <i>Physical Review D</i> , 2014, 89, .	4.7	10
89	Anomalous magnetohydrodynamics in the extreme relativistic domain. <i>Physical Review D</i> , 2016, 94, .	4.7	10
90	Homogeneous magnetic fields in fully anisotropic string cosmological backgrounds. <i>Physical Review D</i> , 2000, 62, .	4.7	9

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91	Gradient expansion, curvature perturbations, and magnetized plasmas. <i>Physical Review D</i> , 2011, 83, .	4.7	9
92	Compressible hydromagnetic nonlinearities in the predecoupling plasma. <i>Physical Review D</i> , 2012, 85, .	4.7	9
93	Large-scale gauge spectra and pseudoscalar couplings. <i>Physical Review D</i> , 2021, 104, .	4.7	9
94	Resonant and nonresonant amplification of massless gauge fields during an oscillating dilaton phase. <i>Physical Review D</i> , 1997, 56, 631-636.	4.7	8
95	Hedgehogs in higher dimensional gravity with curvature self-interactions. <i>Physical Review D</i> , 2001, 63, .	4.7	8
96	WHY CMB PHYSICS?. <i>International Journal of Modern Physics A</i> , 2007, 22, 2697-2894.	1.5	8
97	Time-dependent gravitating solitons in five-dimensional warped space-times. <i>Physical Review D</i> , 2007, 76, .	4.7	8
98	Last scattering, relic gravitons, and the circular polarization of the CMB. <i>Physical Review D</i> , 2010, 81, .	4.7	8
99	Reynolds numbers in the early Universe. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2012, 711, 327-331.	4.1	8
100	Bootstrapping from inflationary magnetogenesis to CMB initial conditions. <i>Classical and Quantum Gravity</i> , 2013, 30, 205017.	4.0	8
101	The first observations of wide-band interferometers and the spectra of relic gravitons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016, 759, 528-532.	4.1	8
102	Spectrum of anomalous magnetohydrodynamics. <i>Physical Review D</i> , 2016, 93, .	4.7	8
103	Stringy bounces and gradient instabilities. <i>Physical Review D</i> , 2017, 95, .	4.7	8
104	Effective energy density of relic gravitons. <i>Physical Review D</i> , 2019, 100, .	4.7	8
105	Spurious gauge-invariance of higher-order contributions to the spectral energy density of the relic gravitons. <i>International Journal of Modern Physics A</i> , 2020, 35, 2050165.	1.5	8
106	Fluid phonons, protoinflationary dynamics, and large-scale gravitational fluctuations. <i>Physical Review D</i> , 2013, 88, .	4.7	7
107	Quantum coherence of cosmological perturbations. <i>Modern Physics Letters A</i> , 2017, 32, 1750191.	1.2	7
108	Inflationary magnetogenesis in the perturbative regime. <i>Classical and Quantum Gravity</i> , 2021, 38, 135018.	4.0	7

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109	Effective field theories and inflationary magnetogenesis. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 819, 136444.	4.1	7
110	Palatini approach and large-scale magnetogenesis. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 058.	5.4	7
111	Rotational inhomogeneities from pre-big bang?. Classical and Quantum Gravity, 2005, 22, 363-378.	4.0	6
112	Violation of consistency relations and the protoinflationary transition. Physical Review D, 2014, 89, .	4.7	6
113	Scaling laws and sum rules for the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mrow} \langle \text{mml:mi} \rangle B \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ -mode polarization. Physical Review D, 2014, 89, .	4.7	6
114	Scalar modes of the relic gravitons. Physical Review D, 2015, 91, .	4.7	6
115	Glauber theory and the quantum coherence of curvature inhomogeneities. Classical and Quantum Gravity, 2017, 34, 035019.	4.0	6
116	Averaged energy conditions and bouncing universes. Physical Review D, 2017, 96, .	4.7	6
117	Polarized backgrounds of relic gravitons. Physical Review D, 2019, 99, .	4.7	6
118	Viscous cosmologies and the second law of thermodynamics. Physical Review D, 2000, 61, .	4.7	5
119	A circular polarimeter for the Cosmic Microwave Background. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 028-028.	5.4	5
120	Growth rate of matter perturbations as a probe of large-scale magnetism. Physical Review D, 2011, 84, .	4.7	5
121	Fluid phonons and inflaton quanta at the protoinflationary transition. Classical and Quantum Gravity, 2012, 29, 155003.	4.0	5
122	Uniform gradient expansions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 746, 159-163.	4.1	5
123	Statistical anisotropy from inflationary magnetogenesis. Physical Review D, 2016, 93, .	4.7	5
124	Curvature perturbations from dimensional decoupling. Classical and Quantum Gravity, 2005, 22, 2201-2219.	4.0	4
125	Multiplicity distributions in gravitational and strong interactions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 691, 274-278.	4.1	4
126	Primordial vorticity and gradient expansion. Classical and Quantum Gravity, 2012, 29, 035001.	4.0	4

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127	TensorBmode and stochastic Faraday mixing. Physical Review D, 2014, 89, .	4.7	4
128	Faraday scaling and the BICEP2 observations. Physical Review D, 2014, 90, .	4.7	4
129	Spectator Higgs field, large-scale gauge fields, and the nonminimal coupling to gravity. Physical Review D, 2017, 95, .	4.7	4
130	Quantum coherence of relic gravitons and Hanbury Brown-Twiss interferometry. Physical Review D, 2019, 99, .	4.7	4
131	The refractive index of the relic gravitons and the nHz band. European Physical Journal C, 2022, 82, 1.	3.9	4
132	Relic gravitons at intermediate frequencies and the expansion history of the Universe. Physical Review D, 2022, 105, .	4.7	4
133	Magnetic field contribution to the last electron-“photon scattering. Classical and Quantum Gravity, 2010, 27, 225016.	4.0	3
134	Magnetization of fluid phonons and large-scale curvature perturbations. Physical Review D, 2014, 90, .	4.7	3
135	Non-linear curvature inhomogeneities and backreaction for relativistic viscous fluids. Classical and Quantum Gravity, 2015, 32, 155004.	4.0	3
136	Quasiadiabatic modes from viscous inhomogeneities. Physical Review D, 2016, 93, .	4.7	3
137	Tensor to scalar ratio from single field magnetogenesis. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 771, 482-486.	4.1	3
138	Hypermagnetic knots and gravitational radiation at intermediate frequencies. Classical and Quantum Gravity, 2017, 34, 135010.	4.0	3
139	Stimulated emission of relic gravitons and their super-Poissonian statistics. Modern Physics Letters A, 2019, 34, 1950185.	1.2	3
140	Spectator stresses and CMB observables. Physical Review D, 2010, 81, .	4.7	2
141	Secondary graviton spectra, second-order correlations and Bose-“Einstein enhancement. Classical and Quantum Gravity, 2013, 30, 015009.	4.0	2
142	Viscous modes, isocurvature perturbations, and CMB initial conditions. Physical Review D, 2015, 91, .	4.7	2
143	Effective horizons, junction conditions and large-scale magnetism. European Physical Journal C, 2017, 77, 1.	3.9	2
144	Relic gravitons from stiff curvature perturbations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 810, 135801.	4.1	2

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145	Dynamical suppression of nonadiabatic modes. <i>Physical Review D</i> , 2008, 78, .	4.7	1
146	Squeezed relic photons beyond the horizon. <i>Physical Review D</i> , 2017, 96, .	4.7	1
147	Effective anisotropic stresses of the relic gravitons. <i>International Journal of Modern Physics D</i> , 2020, 29, 2050112.	2.1	1
148	Planckian hypersurfaces, inflation and bounces. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	0
149	Viscous absorption of ultra-high-frequency gravitons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022, 829, 137071.	4.1	0