Mauricio Bellini

List of Publications by Year
in descending order

109 papers	753 citations	623734 14 h-index	713466 21 g-index
110 all docs	110 docs citations	110 times ranked	162 citing authors

#	Article	IF	Citations
1	Gravitational waves from the birth of the universe with extended General Relativity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 825, 136901.	4.1	7
2	New preinflation. Physics of the Dark Universe, 2021, 31, 100773.	4.9	4
3	Quantum thermodynamics in the interior of a Schwarzschild black-hole. Physica Scripta, 2021, 96, 065304.	2.5	3
4	Ricci flow in general relativity: dynamics of gluon fields on an arbitrary curved background from unified spinor fields. Physica Scripta, 2021, 96, 065301.	2.5	4
5	Were strong inflaton field fluctuations the cause of the big bang?. International Journal of Modern Physics D, 2021, 30, .	2.1	4
6	General relativity with boundary terms: collapse without final singularity. European Physical Journal Plus, 2021, 136, 1.	2.6	1
7	Extended General Relativity: Gravitational waves from an isotropic and homogeneous collapse. Physics of the Dark Universe, 2021, 34, 100895.	4.9	12
8	Extended General Relativity: (3+1)-anyons in a preinflationary cosmological model. European Physical Journal C, 2021, 81, 1.	3.9	2
9	Waves of spaceâ€"time from a collapsing compact object. Physics of the Dark Universe, 2020, 27, 100424.	4.9	1
10	Fermionic origin of dark energy in the inflationary universe from unified spinor fields. Physica Scripta, 2020, 95, 035303.	2.5	4
11	Quantum magnetic monopoles at the Planck era from unified spinor fields. Physics of the Dark Universe, 2020, 30, 100693.	4.9	2
12	Spaceâ€"time waves from a collapsing universe with a gravitational attractor. Physics of the Dark Universe, 2020, 30, 100703.	4.9	0
13	Large scales spaceâ€"time waves from inflation with time dependent cosmological parameter. Physics of the Dark Universe, 2020, 30, 100670.	4.9	0
14	Quantum thermodynamics in the interior of a Reissnerâ€"NordstrÃ¶m black-hole. Physics of the Dark Universe, 2020, 30, 100710.	4.9	2
15	Space-time waves from a collapse with a time-dependent cosmological parameter. European Physical Journal Plus, 2020, 135, 1.	2.6	1
16	Particle-antiparticle duality from an extra timelike dimension. European Physical Journal C, 2019, 79, 1.	3.9	1
17	Exponential collapse with variable time scale driven by a scalar field. Physics of the Dark Universe, 2019, 26, 100395.	4.9	0
18	Geometrization of gravito-electromagnetic interactions from boundary conditions in the variational principle. European Physical Journal C, 2019, 79, 1.	3.9	2

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19	Collapse driven by a scalar field without final singularity. Physics of the Dark Universe, 2019, 23, 100251.	4.9	3
20	Relativistic quantum geometry from a 5D geometrical vacuum: Gravitational waves from preinflation. Physics of the Dark Universe, 2019, 25, 100309.	4.9	4
21	Emission of primordial bosonic radiation during inflation. Canadian Journal of Physics, 2019, 97, 192-197.	1.1	7
22	Towards unified spinor fields: confinement of gravitons on a de Sitter background. Canadian Journal of Physics, 2019, 97, 1154-1160.	1.1	5
23	Inflationary expansion of the universe with variable timescale. European Physical Journal C, 2019, 79, 1.	3.9	8
24	The Heisenberg spinor field classification and its interplay with the Lounestoâ€™s classification. European Physical Journal C, 2019, 79, 1.	3.9	3
25	Large-scales solitonic back-reaction behavior in power-law inflation and its relationship with dark energy. Physics of the Dark Universe, 2019, 24, 100273.	4.9	1
26	Quantum thermodynamics in a static de Sitter space-time and initial state of the universe. European Physical Journal C, 2019, 79, 1.	3.9	1
27	Traversable wormhole magnetic monopoles from Dymnikova metric. European Physical Journal Plus, 2019, 134, 1.	2.6	8
28	Gravitons emission during pre-inflation from unified spinor fields. European Physical Journal Plus, 2018, 133, 1.	2.6	4
29	Inflationary gravitational waves from unified spinor fields. European Physical Journal Plus, 2018, 133, 1.	2.6	9
30	Gravito-magnetic monopoles in traversable wormholes from WIMT. Physics of the Dark Universe, 2017, 15, 47-52.	4.9	4
31	Mass density of the Earth from a gravito-electromagnetic 5D vacuum. Canadian Journal of Physics, 2017, 95, 1242-1245.	1.1	0
32	Pre-inflation: Origin of the Universe from a topological phase transition. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 771, 227-229.	4.1	15
33	Large scale solitonic back-reaction effects in pre-inflation. Physics of the Dark Universe, 2017, 17, 10-12.	4.9	2
34	Origin of time before inflation from a topological phase transition. Physics of the Dark Universe, 2017, 17, 22-24.	4.9	2
35	Charged and Electromagnetic Fields from Relativistic Quantum Geometry. Universe, 2016, 2, 13.	2.5	4
36	Absorption of charged particles in a Reissner-NordstrÃ¶m black-hole: entropy evolution from relativistic quantum geometry. Astrophysics and Space Science, 2016, 361, 1.	1.4	3

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37	Geometric back-reaction in pre-inflation from relativistic quantum geometry. European Physical Journal C, 2016, 76, 1.	3.9	8
38	Gravitational waves and magnetic monopoles during inflation with WeitzenbÃ¶ck torsion. Physics of the Dark Universe, 2016, 13, 121-125.	4.9	1
39	Inflationary back-reaction effects from Relativistic Quantum Geometry. Physics of the Dark Universe, 2016, 11, 64-67.	4.9	11
40	Gravitational waves from a Weyl-Integrable manifold: A new formalism. Physics of the Dark Universe, 2016, 13, 1-6.	4.9	5
41	Towards relativistic quantum geometry. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 751, 565-571.	4.1	39
42	WIMT in GullstrÃndâ€“PainlevÃ© and Reissnerâ€“NordstrÃ¶m metrics: induced stable gravito-magnetic monopoles. European Physical Journal C, 2015, 75, 1.	3.9	6
43	Quantized gravito-magnetic charges from WIMT: cosmological consequences. Canadian Journal of Physics, 2015, 93, 445-448.	1.1	4
44	Inflation as a white hole explosion from a 5D vacuum. Canadian Journal of Physics, 2015, 93, 678-681.	1.1	0
45	Dyonic Reissner-NordstrÃ¶m black hole: extended Dirac quantization from 5D invariants. Astrophysics and Space Science, 2015, 359, 1.	1.4	1
46	Discrete modes in gravitational waves from the big-bang. Astrophysics and Space Science, 2015, 357, 1.	1.4	31
47	Gravito-magnetic currents in the inflationary universe from WIMT. European Physical Journal C, 2014, 74, 1.	3.9	7
48	New Developments in Cosmology and Gravitation from Extended Theories of General Relativity. Advances in High Energy Physics, 2014, 2014, 1-1.	1.1	0
49	Perihelion advances for the orbits of Mercury, Earth, and Pluto from extended theory of general relativity (ETGR). Canadian Journal of Physics, 2014, 92, 1709-1713.	1.1	2
50	Present accelerated expansion of the universe from new Weyl-integrable gravity approach. European Physical Journal C, 2014, 74, 1.	3.9	12
51	The primordial explosion of a false white hole from a 5D vacuum. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 728, 244-249.	4.1	5
52	Scalar fluctuations of the scalar metric during inflation from a non-perturbative 5D large-scale repulsive gravity model. European Physical Journal C, 2013, 73, 1.	3.9	1
53	Induced Matter Theory of gravity from a WeitzenbÃ¶ck 5D vacuum and pre-big bang collapse of the universe. European Physical Journal C, 2013, 73, 1.	3.9	8
54	Primordial Dark Energy from a Condensate of Spinors in a 5D Vacuum. Advances in High Energy Physics, 2013, 2013, 1-7.	1.1	0

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55	INFLATIONARY DARK ENERGY FROM A CONDENSATE OF SPINORS IN A 5D VACUUM. International Journal of Modern Physics D, 2013, 22, 1342028.	2.1	1
56	Seminal magnetic fields from inflato-electromagnetic inflation. European Physical Journal C, 2012, 72, 1.	3.9	4
57	Gravitational waves during inflation from a 5D large-scale repulsive gravity model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 717, 17-24.	4.1	4
58	Quantum origin of pre-big-bang collapse from induced matter theory of gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 709, 309-312.	4.1	3
59	Dirac equation in a de Sitter expansion for massive neutrinos from modern Kaluzaâ€“Klein theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 709, 404-407.	4.1	2
60	Particles and gravitons creation after inflation from a 5D vacuum. European Physical Journal Plus, 2011, 126, 1.	2.6	1
61	Super-exponential inflation from a dynamical foliation of a 5D vacuum state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 703, 107-112.	4.1	3
62	Pre-big bang collapsing universe from modern Kaluzaâ€“Klein theory of gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 705, 283-286.	4.1	4
63	Dirac equation for massive neutrinos in a Schwarzschildâ€“de Sitter spacetime from a 5D vacuum. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 705, 535-538.	4.1	3
64	Analytical treatment of SUSY Quasi-normal modes inÂaÂnon-rotating Schwarzschild black hole. European Physical Journal C, 2011, 71, 1.	3.9	2
65	Fierzâ€“Pauli equation for massive gravitons from Induced Matter theory of gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 696, 183-185.	4.1	3
66	Semiclassical gravitoelectromagnetic inflation in a Lorentz gauge: Seminal inflaton fluctuations and electromagnetic fields from a 5D vacuum state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 685, 1-7.	4.1	5
67	Primordial SdS universe from a 5D vacuum: scalar field fluctuations on Schwarzschild and Hubble horizons. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 020-020.	5.4	7
68	Coupled inflaton and electromagnetic fields from Gravitoelectromagnetic Inflation with Lorentz and Feynman gauges. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 001-001.	5.4	5
69	The seed of magnetic monopoles in the early inflationary universe from a 5D vacuum state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 674, 143-145.	4.1	4
70	Primordial large-scale electromagnetic fields from gravitoelectromagnetic inflation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 674, 152-159.	4.1	6
71	Extended general relativity: Large-scale antigravity and short-scale gravity with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mi>Ï‰</mml:mi><mml:mo>=</mml:mo><mml:mo>âˆ’</mml:mo><mml:mn>1</mml:mn></mml:math> from five-dimensional vacuum. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 679, 306-310.	4.1	10
72	A confirmation of agreement of different approaches forÂscalarÂgauge-invariant metric perturbations during inflation. European Physical Journal C, 2009, 60, 297.	3.9	6

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73	Passing to an effective 4D phantom cosmology from 5D vacuum theory of gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 660, 107-112.	4.1	3
74	Geometrical origin of entropy during inflation from the STM theory of gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 669, 1-3.	4.1	4
75	Inflation from the bang of a white hole induced from a 6D vacuum state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 648, 19-27.	4.1	1
76	Gravitational waves during inflation in presence of a decaying cosmological parameter from a 5D vacuum theory of gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 649, 343-348.	4.1	6
77	Gauge invariant metric fluctuations in the early universe from STM theory of gravity: Nonperturbative formalism. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 652, 233-237.	4.1	1
78	Stochastic gravitoelectromagnetic inflation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 642, 302-310.	4.1	17
79	Gauge-invariant metric fluctuations from NKK theory of gravity: de Sitter expansion. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 632, 6-12.	4.1	10
80	Decaying cosmological parameter in the early universe from NKK theory of gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 632, 610-616.	4.1	13
81	Inflaton and metric fluctuations in the early universe from a 5D vacuum state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 635, 243-246.	4.1	5
82	Cosmological expansion governed by a scalar field from a 5D vacuum. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 637, 16-20.	4.1	1
83	Gravitoelectromagnetic inflation from a 5D vacuum state: A new formalism. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 638, 314-319.	4.1	35
84	Scalar metric fluctuations in spaceâ€“time matter inflation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 640, 126-134.	4.1	2
85	Quintessential inflation from a variable cosmological constant in a 5D vacuum. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 641, 125-129.	4.1	11
86	Space-time matter inflation. Journal of Mathematical Physics, 2006, 47, 042502.	1.1	9
87	De Sitter inflationary expansion from a noncompact KK theory: a nonperturbative quantum (scalar) field formalism. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 609, 187-193.	4.1	20
88	Noncompact KK theory of gravity: Stochastic treatment for a nonperturbative inflaton field in a de Sitter expansion. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 619, 208-218.	4.1	16
89	Single field inflationary models with non-compact Kaluzaâ€“Klein theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 581, 1-8.	4.1	36
90	Noncompact Kaluzaâ€“Klein theory and inflationary cosmology: a complete formalism. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 596, 116-122.	4.1	20

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91	Fresh Inflation from Five-Dimensional Vacuum State. General Relativity and Gravitation, 2003, 35, 35-41.	2.0	1
92	Inflationary cosmology from STM theory of gravity. Nuclear Physics B, 2003, 660, 389-400.	2.5	34
93	Fresh inflation with increasing cosmological parameter. Physical Review D, 2003, 67, .	4.7	7
94	Letter: Thermodynamical Properties of Metric Fluctuations During Inflation. General Relativity and Gravitation, 2002, 34, 1483-1489.	2.0	2
95	Fresh Inflation with Nonminimally Coupled Inflaton Field. General Relativity and Gravitation, 2002, 34, 1953-1961.	2.0	6
96	Baryogenesis in Fresh Inflation. General Relativity and Gravitation, 2002, 34, 2127-2134.	2.0	0
97	Coarse-grained field wave function in stochastic inflation. Nuclear Physics B, 2001, 604, 441-451.	2.5	5
98	LETTER: Warm Inflation: Towards a Realistic COBE Data Power Spectrum for Matter and Metric Thermal Coupled Fluctuations. General Relativity and Gravitation, 2001, 33, 2081-2091.	2.0	0
99	Warm Inflation and Scalar Perturbations of the Metric. General Relativity and Gravitation, 2001, 33, 127-143.	2.0	2
100	Decoherence of gauge-invariant metric fluctuations during inflation. Physical Review D, 2001, 64, .	4.7	5
101	Fresh inflation and decoherence of super Hubble fluctuations. Physical Review D, 2001, 64, .	4.7	7
102	Inflation and nonequilibrium thermodynamics for the fluctuations in the infrared sector. Physical Review D, 2001, 63, .	4.7	0
103	Fresh inflation: A warm inflationary model from a zero temperature initial state. Physical Review D, 2001, 63, .	4.7	19
104	Warm inflation with backreaction: a stochastic approach. Classical and Quantum Gravity, 2000, 17, 145-151.	4.0	8
105	Gauge-invariant fluctuations of the metric in stochastic inflation. Physical Review D, 2000, 61, .	4.7	6
106	Towards a theory of warm inflation of the Universe. Classical and Quantum Gravity, 1999, 16, 2393-2402.	4.0	18
107	Primordial fluctuations in the warm inflation scenario with a more realistic coarse-grained field. Nuclear Physics B, 1999, 563, 245-258.	2.5	26
108	Warm inflation and classicality conditions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 428, 31-36.	4.1	29

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109	Power spectrum of the primordial scalar field fluctuations in the warm inflation scenario. Physical Review D, 1998, 58, .	4.7	20