Mario Novello

List of Publications by Year
in descending order

69 papers	2,089 citations	516710 16 h-index	243625 44 g-index
70 all docs	70 docs citations	70 times ranked	945 citing authors

#	Article	IF	Citations
1	Bouncing cosmologies. Physics Reports, 2008, 463, 127-213.	25.6	598
2	Geometrical aspects of light propagation in nonlinear electrodynamics. Physical Review D, 2000, 61, .	4.7	193
3	Nonlinear electrodynamics and the acceleration of the Universe. Physical Review D, 2004, 69, .	4.7	152
4	Nonlinear electrodynamics and FRW cosmology. Physical Review D, 2002, 65, .	4.7	121
5	Artificial Black Holes. , 2002, , .		113
6	Light propagation in non-linear electrodynamics. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 482, 134-140.	4.1	100
7	Nonlinear photons in the universe. Physical Review D, 1979, 20, 377-383.	4.7	88
8	Cosmological effects of nonlinear electrodynamics. Classical and Quantum Gravity, 2007, 24, 3021-3036.	4.0	86
9	GEOMETRIZED INSTANTONS AND THE CREATION OF THE UNIVERSE. International Journal of Modern Physics D, 1992, 01, 641-677.	2.1	68
10	Geodesic motion and confinement in GÃ¶del's universe. Physical Review D, 1983, 27, 779-788.	4.7	50
11	Effective electromagnetic geometry. Physical Review D, 2001, 63, .	4.7	45
12	Analogue black holes in flowing dielectrics. Classical and Quantum Gravity, 2003, 20, 859-871.	4.0	42
13	Gordon metric revisited. Physical Review D, 2012, 86, .	4.7	34
14	The connection between general observers and Lanczos potential. General Relativity and Gravitation, 1987, 19, 1251-1265.	2.0	33
15	Geometric scalar theory of gravity. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 014-014.	5.4	25
16	ON A GEOMETRICAL DESCRIPTION OF QUANTUM MECHANICS. International Journal of Geometric Methods in Modern Physics, 2011, 08, 87-98.	2.0	20
17	Minimal closed set of observables in the theory of cosmological perturbations. Physical Review D, 1995, 51, 450-461.	4.7	19
18	Spin-2 field theory in curved spacetime in the Fierz representation. Classical and Quantum Gravity, 2002, 19, 5335-5351.	4.0	16

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19	Hidden geometries in nonlinear theories: a novel aspect of analogue gravity. Classical and Quantum Gravity, 2011, 28, 245008.	4.0	15
20	Beyond analog gravity: the case of exceptional dynamics. Classical and Quantum Gravity, 2011, 28, 145022.	4.0	15
21	Cosmic repulsion. Physics Letters, Section A: General, Atomic and Solid State Physics, 1982, 90, 347-348.	2.1	14
22	Synchronized frames for Gï¿½del's universe. General Relativity and Gravitation, 1993, 25, 137-164.	2.0	14
23	CYCLIC MAGNETIC UNIVERSE. International Journal of Modern Physics A, 2009, 24, 5639-5658.	1.5	14
24	Minimal closed set of observables in the theory of cosmological perturbations. II. Vorticity and gravitational waves. Physical Review D, 1995, 52, 730-742.	4.7	13
25	Geometrizing Relativistic Quantum Mechanics. Foundations of Physics, 2010, 40, 1885-1901.	1.3	12
26	Cosmology in geometric scalar gravity. Physical Review D, 2014, 90, .	4.7	11
27	Dragged metrics. General Relativity and Gravitation, 2013, 45, 1005-1019.	2.0	10
28	A proposal for the origin of the anomalous magnetic moment. International Journal of Modern Physics A, 2014, 29, 1450075.	1.5	10
29	Gravitational baryogenesis without CPT violation. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 076-076.	5.4	9
30	Gravitationally self-induced phase transition. Physica A: Statistical Mechanics and Its Applications, 1990, 168, 1073-1081.	2.6	8
31	Quantization of Spin-Two Field in Terms of Fierz Variables - The Linear Case -. , 1992, 40, 195-209.		8
32	Chiral symmetry breaking as a geometrical process. International Journal of Modern Physics A, 2014, 29, 1450145.	1.5	8
33	The Cosmological Constant and a Scalar Field Coupled non Minimally to Gravity. International Journal of Theoretical Physics, 2020, 59, 1-9.	1.2	8
34	Minimal closed set of observables in the theory of cosmological perturbations. III. Quantum treatment. Physical Review D, 1996, 54, 2578-2588.	4.7	7
35	Constructing Dirac linear fermions in terms of non-linear Heisenberg spinors. Europhysics Letters, 2007, 80, 41001.	2.0	7
36	A spinor theory of gravity and the cosmological framework. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 018-018.	5.4	7

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37	More about scalar gravity. Physical Review D, 2016, 93, .	4.7	7
38	Extended Born-Infeld theory and the bouncing magnetic universe. Physical Review D, 2012, 85, .	4.7	6
39	Spin-2 fields from torsion: Dark energy and bouncing cosmology. Gravitation and Cosmology, 2016, 22, 1-9.	1.1	6
40	Weak and Electromagnetic Forces as a Consequence of the Self-Interaction of theÎ³Field. Physical Review D, 1973, 8, 2398-2400.	4.7	5
41	BACKWARDS TIME-TRAVEL INDUCED BY COMBINED MAGNETIC AND GRAVITATIONAL FIELDS. Modern Physics Letters A, 1992, 07, 381-386.	1.2	5
42	The gravitational mechanism to generate mass. Classical and Quantum Gravity, 2011, 28, 035003.	4.0	5
43	What is the origin of the mass of the Higgs boson?. Physical Review D, 2012, 86, .	4.7	5
44	Metric Relativity and the Dynamical Bridge: Highlights of Riemannian Geometry in Physics. Brazilian Journal of Physics, 2015, 45, 756-805.	1.4	5
45	Neutrino cosmology. Physics Letters, Section A: General, Atomic and Solid State Physics, 1976, 56, 431-433.	2.1	4
46	The radiation era in scalar-tensor cosmology. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 472, 27-32.	4.1	4
47	Toy model of a fake inflation. Physical Review D, 2006, 73, .	4.7	4
48	Theory of Gravity in Fierz Variables (The Linear Case). , 1992, 40, 173-194.		3
49	FLUCTUATIONS IN A PRIMORDIAL ANISOTROPIC ERA. International Journal of Modern Physics A, 1998, 13, 363-379.	1.5	3
50	DYNAMICAL BOSON FIELD IN THE NONLINEAR SPINOR THEORY. International Journal of Modern Physics A, 2000, 15, 2255-2268.	1.5	3
51	THE SPECTRUM OF SCALAR FLUCTUATIONS OF A BOUNCING UNIVERSE. International Journal of Modern Physics A, 2010, 25, 3095-3105.	1.5	3
52	Cosmology of a Heisenberg fluid. General Relativity and Gravitation, 2016, 48, 1.	2.0	3
53	Ghost basis for neutrino. Physics Letters, Section A: General, Atomic and Solid State Physics, 1976, 58, 75-76.	2.1	2
54	Minimal closed set of observables in the theory of cosmological perturbations. IV. The anisotropic paradigm. Physical Review D, 2000, 61, .	4.7	2

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55	Gaussian coordinate systems for the Kerr metric. Gravitation and Cosmology, 2011, 17, 230-241.	1.1	2
56	THE COSMOLOGICAL ORIGIN OF THE NAMBUâ€“JONA-LASINIO MODEL. International Journal of Modern Physics A, 2011, 26, 3781-3787.	1.5	2
57	The Quasi-Maxwellian Equations of General Relativity: Applications to Perturbation Theory. Brazilian Journal of Physics, 2014, 44, 832-894.	1.4	2
58	Analogue black holes for light rays in static dielectrics. Classical and Quantum Gravity, 2014, 31, 145007.	4.0	2
59	Repulsive gravity induced by a conformally coupled scalar field implies a bouncing radiation-dominated universe. General Relativity and Gravitation, 2017, 49, 1.	2.0	2
60	From weak interaction to gravity. International Journal of Modern Physics A, 2021, 36, 2150051.	1.5	2
61	Cosmological stability of Weyl conformal tensor. Gravitation and Cosmology, 2008, 14, 321-326.	1.1	1
62	The cosmological origins of nonlinear electrodynamics. Gravitation and Cosmology, 2017, 23, 128-130.	1.1	1
63	Is the electromagnetic field responsible for the cosmic acceleration in late times?. International Journal of Modern Physics A, 2019, 34, 1950083.	1.5	1
64	Beyond the Equivalence Principle: Gravitational Magnetic Monopoles. Gravitation and Cosmology, 2021, 27, 221-225.	1.1	1
65	Gravitational waves in singular and bouncing FLRW universes. Gravitation and Cosmology, 2009, 15, 191-198.	1.1	0
66	Reproducing gravity through spinor fields. Gravitation and Cosmology, 2011, 17, 224-229.	1.1	0
67	Geometric scalar theory of gravity beyond spherical symmetry. Physical Review D, 2017, 95, .	4.7	0
68	How can the neutrino interact with the electromagnetic field?. Chinese Physics C, 2018, 42, 013102.	3.7	0
69	Quantum e cosmos (Quantum and cosmos). Estudos Da LÃngua(gem), 2021, 19, 163-183.	0.0	0