

Gonzalo J Olmo

List of Publications by Year in descending order

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150
papers

6,434
citations

57758

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154
docs citations

154
times ranked

1324
citing authors

#	ARTICLE	IF	CITATIONS
1	PALATINI APPROACH TO MODIFIED GRAVITY: $f(R)$ THEORIES AND BEYOND. International Journal of Modern Physics D, 2011, 20, 413-462.	2.1	592
2	Post-Newtonian constraints on $f(R)$ cosmologies in metric and Palatini formalism. Physical Review D, 2005, 72, .	4.7	337
3	The Gravity Lagrangian According to Solar System Experiments. Physical Review Letters, 2005, 95, 261102.	7.8	290
4	Limit to general relativity in $f(R)$ theories of gravity. Physical Review D, 2007, 75, .	4.7	223
5	Born-Infeld inspired modifications of gravity. Physics Reports, 2018, 727, 1-129.	25.6	195
6	Metric-Palatini gravity unifying local constraints and late-time cosmic acceleration. Physical Review D, 2012, 85, .	4.7	172
7	Coupling matter in modified gravity. Physical Review D, 2018, 98, .	4.7	164
8	Stellar structure models in modified theories of gravity: Lessons and challenges. Physics Reports, 2020, 876, 1-75.	25.6	157
9	Wormholes supported by hybrid metric-Palatini gravity. Physical Review D, 2012, 86, .	4.7	155
10	Hybrid Metric-Palatini Gravity. Universe, 2015, 1, 199-238.	2.5	147
11	Palatini $f(R)$ cosmologies in Palatini gravity. Physical Review D, 2011, 84, .	4.7	110
12	Bouncing cosmologies in Palatini gravity. Physical Review D, 2011, 84, .	4.7	110
13	Geonic black holes and remnants in Eddington-inspired Born-Infeld gravity. European Physical Journal C, 2014, 74, 2804.	3.9	110
14	Wormholes and nonsingular spacetimes in Palatini gravity. Physical Review D, 2011, 84, .	4.7	110
15	Violation of the Equivalence Principle in Modified Theories of Gravity. Physical Review Letters, 2007, 98, 061101.	7.8	108
16	Covariant effective action for loop quantum cosmology à la Palatini. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 030-030.	5.4	97
17	HYBRID MODIFIED GRAVITY UNIFYING LOCAL TESTS, GALACTIC DYNAMICS AND LATE-TIME COSMIC ACCELERATION. International Journal of Modern Physics D, 2013, 22, 1342006.	2.1	90
18	Observable traces of non-metricity: New constraints on metric-affine gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 780, 294-299.	4.1	90

#	ARTICLE	IF	CITATIONS
19	Cosmology of hybrid metric-Palatini $f(X)$ -gravity. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 011-011.	5.4	89
20	Reissner-Nordström black holes in extended Palatini theories. Physical Review D, 2012, 86, .	4.7	86
21	The trivial role of torsion in projective invariant theories of gravity with non-minimally coupled matter fields. Classical and Quantum Gravity, 2017, 34, 235003.	4.0	86
22	Nonsingular Black Holes in $\mathcal{AE}'(R)$ Theories. Universe, 2015, 1, 173-185.	2.5	85
23	Hydrogen atom in Palatini theories of gravity. Physical Review D, 2008, 77, .	4.7	81
24	The virial theorem and the dark matter problem in hybrid metric-Palatini gravity. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 024-024.	5.4	81
25	Mapping Ricci-based theories of gravity into general relativity. Physical Review D, 2018, 97, .	4.7	78
26	Galactic rotation curves in hybrid metric-Palatini gravity. Astroparticle Physics, 2013, 50-52, 65-75.	4.3	77
27	Isotropic and anisotropic bouncing cosmologies in Palatini gravity. Physical Review D, 2010, 82, .	4.7	73
28	Geodesic completeness in a wormhole spacetime with horizons. Physical Review D, 2015, 92, .	4.7	72
29	Hamiltonian formulation of Palatini $f(R)$ gravity. Physical Review D, 2015, 92, .	4.7	71
30	Dynamical aspects of generalized Palatini theories of gravity. Physical Review D, 2009, 80, .	4.7	66
31	Born-Infeld gravity and its functional extensions. Physical Review D, 2014, 90, .	4.7	64
32	Reexamination of polytropic spheres in Palatini $f(R)$ gravity. Physical Review D, 2015, 92, .	4.7	63
33	What is a singular black hole beyond general relativity?. Physical Review D, 2017, 95, .	4.7	61
34	Shadows and optical appearance of black bounces illuminated by a thin accretion disk. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 036.	5.4	57
35	Mapping nonlinear gravity into General Relativity with nonlinear electrodynamics. European Physical Journal C, 2018, 78, 866.	3.9	55
36	Nonsingular black holes in quadratic Palatini gravity. European Physical Journal C, 2012, 72, 1.	3.9	51

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37	The Cauchy problem in hybrid metric-Palatini $f(X)$ -gravity. International Journal of Geometric Methods in Modern Physics, 2014, 11, 1450042.	2.0	49
38	Revising the Predictions of Inflation for the Cosmic Microwave Background Anisotropies. Physical Review Letters, 2009, 103, 061301.	7.8	47
39	Brane-world and loop cosmology from a gravity-matter coupling perspective. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 740, 73-79.	4.1	47
40	Classical resolution of black hole singularities via wormholes. European Physical Journal C, 2016, 76, 1.	3.9	47
41	Junction conditions in Palatini $f(R)$ gravity. Classical and Quantum Gravity, 2020, 37, 215002.	4.0	47
42	Importance of torsion and invariant volumes in Palatini theories of gravity. Physical Review D, 2013, 88, .	4.7	46
43	Correspondence between modified gravity and general relativity with scalar fields. Physical Review D, 2019, 99, .	4.7	45
44	Nonsingular black holes, wormholes, and de Sitter cores from anisotropic fluids. Physical Review D, 2017, 96, .	4.7	44
45	Metric-affine $f(R)$ gravity. Physical Review D, 2018, 97, .	4.7	40
46	Born-Infeld $f(R)$ gravity. Physical Review D, 2018, 97, .	4.7	40
47	Semiclassical geons as solitonic black hole remnants. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 011-011.	5.4	38
48	Minimum main sequence mass in quadratic Palatini $f(R)$ gravity. Physical Review D, 2013, 87, .	4.7	38
49	Infrared lessons for ultraviolet gravity: the case of massive gravity and Born-Infeld. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 004-004.	5.4	37
50	NONSINGULAR CHARGED BLACK HOLES IN PALATINI GRAVITY. International Journal of Modern Physics D, 2012, 21, 1250067.	2.1	36
51	Revising the observable consequences of slow-roll inflation. Physical Review D, 2010, 81, .	4.7	35
52	Crystal clear lessons on the microstructure of spacetime and modified gravity. Physical Review D, 2015, 91, .	4.7	34
53	Global monopole in Palatini $f(R)$ gravity. Physical Review D, 2019, 99, .	4.7	33
54	Thick brane in $f(R)$ gravity with Palatini dynamics. European Physical Journal C, 2015, 75, 1.	3.9	31

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55	Reexamination of the Power Spectrum in De Sitter Inflation. <i>Physical Review Letters</i> , 2008, 101, 171301.	7.8	30
56	Palatini actions and quantum gravity phenomenology. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 018-018.	5.4	30
57	Ricci-Based Gravity theories and their impact on Maxwell and nonlinear electromagnetic models. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	30
58	Big bounce and future time singularity resolution in Bianchi I cosmologies: The projective invariant Nih-Yan case. <i>Physical Review D</i> , 2021, 103, .	4.7	30
59	Microscopic wormholes and the geometry of entanglement. <i>European Physical Journal C</i> , 2014, 74, 1.	3.9	29
60	Impact of curvature divergences on physical observers in a wormhole spacetime with horizons. <i>Classical and Quantum Gravity</i> , 2016, 33, 115007.	4.0	29
61	New scalar compact objects in Ricci-based gravity theories. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 044-044.	5.4	28
62	Dynamical generation of wormholes with charged fluids in quadratic Palatini gravity. <i>Physical Review D</i> , 2014, 90, .	4.7	27
63	Black holes in five-dimensional Palatini gravity. <i>Physical Review D</i> , 2014, 90, 044007.	4.7	27
64	Little Rip, Λ CDM and singular dark energy cosmology from Born-Infeld gravity. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2014, 734, 36-40.	4.1	27
65	Light ring images of double photon spheres in black hole and wormhole spacetimes. <i>Physical Review D</i> , 2022, 105, .	4.7	27
66	Palatini wormholes and energy conditions from the prism of general relativity. <i>European Physical Journal C</i> , 2017, 77, 776.	3.9	26
67	Structure and stability of traversable thin-shell wormholes in Palatini gravity. <i>Physical Review D</i> , 2014, 90, 044007.	4.7	24
68	Short-distance contribution to the spectrum of Hawking radiation. <i>Physical Review D</i> , 2007, 76, .	4.7	23
69	Semiclassical geons at particle accelerators. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 010-010.	5.4	23
70	On gravitational waves in Born-Infeld inspired non-singular cosmologies. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 029-029.	5.4	23
71	Hawking Radiation by Kerr Black Holes and Conformal Symmetry. <i>Physical Review Letters</i> , 2010, 105, 211305.	7.8	22
72	Planck scale physics and topology change through an exactly solvable model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2014, 731, 163-167.	4.1	22

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73	Double shadows of reflection-asymmetric wormholes supported by positive energy thin-shells. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 066.	5.4	22
74	Scalar geons in Born-Infeld gravity. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 031-031.	5.4	21
75	Cascading dust inflation in Born-Infeld gravity. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 046-046.	5.4	20
76	Rotating black holes in Eddington-inspired Born-Infeld gravity: an exact solution. <i>Journal of Cosmology and Astroparticle Physics</i> , 2020, 2020, 058-058.	5.4	20
77	Classical resolution of black hole singularities in arbitrary dimension. <i>Physical Review D</i> , 2015, 92, .	4.7	19
78	Tensor perturbations in a general class of Palatini theories. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 026-026.	5.4	19
79	Remarks on the renormalization of primordial cosmological perturbations. <i>Physical Review D</i> , 2011, 84, .	4.7	18
80	Braneworld solutions for modified theories of gravity with nonconstant curvature. <i>Physical Review D</i> , 2015, 91, .	4.7	18
81	Robustness of braneworld scenarios against tensorial perturbations. <i>Classical and Quantum Gravity</i> , 2015, 32, 215011.	4.0	18
82	Absorption by black hole remnants in metric-affine gravity. <i>Physical Review D</i> , 2019, 100, .	4.7	18
83	Metric-affine bumblebee gravity: classical aspects. <i>European Physical Journal C</i> , 2021, 81, 1.	3.9	18
84	Two-point functions with an invariant Planck scale and thermal effects. <i>Physical Review D</i> , 2008, 77, .	4.7	17
85	Geodesically complete BTZ-type solutions of 2+1 Born-Infeld gravity. <i>Classical and Quantum Gravity</i> , 2017, 34, 045006.	4.0	17
86	The quantum, the geon and the crystal. <i>International Journal of Modern Physics D</i> , 2015, 24, 1542013.	2.1	16
87	Geometric inequivalence of metric and Palatini formulations of General Relativity. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020, 802, 135275.	4.1	16
88	Parameterized nonrelativistic limit of stellar structure equations in Ricci-based gravity theories. <i>Physical Review D</i> , 2021, 104, .	4.7	16
89	Inflation, quantum fields, and CMB anisotropies. <i>General Relativity and Gravitation</i> , 2009, 41, 2301-2306.	2.0	15
90	Accelerated observers and the notion of singular spacetime. <i>Classical and Quantum Gravity</i> , 2018, 35, 055010.	4.0	15

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91	Static quantum corrections to the Schwarzschild spacetime. <i>Journal of Physics: Conference Series</i> , 2006, 33, 457-462.	0.4	14
92	Black Hole Radiance, Short Distances, and TeV Gravity. <i>Physical Review Letters</i> , 2006, 97, 041302.	7.8	14
93	Nonsingular electrovacuum solutions with dynamically generated cosmological constant. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2013, 726, 870-875.	4.1	14
94	Nonsingular Black Holes in Palatini Extensions of General Relativity. <i>Springer Proceedings in Physics</i> , 2016, , 183-219.	0.2	14
95	Born-Infeld gravity: Constraints from light-by-light scattering and an effective field theory perspective. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021, 820, 136479.	4.1	14
96	Boson stars in Palatini $f(R)$ gravity. <i>Classical and Quantum Gravity</i> , 2021, 38, 194003.	4.0	14
97	Stellar structure equations in extended Palatini gravity. <i>Physical Review D</i> , 2012, 86, .	4.7	13
98	Melvin universe in Born-Infeld gravity. <i>Physical Review D</i> , 2015, 91, .	4.7	13
99	Nonlinear $f(R)$ -models in the Eddington-inspired Born-Infeld gravity. <i>Physical Review D</i> , 2020, 101, .	4.7	13
100	Radiative corrections in metric-affine bumblebee model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022, 826, 136932.	4.1	12
101	New light rings from multiple critical curves as observational signatures of black hole mimickers. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022, 829, 137045.	4.1	12
102	Spontaneous Lorentz symmetry breaking and one-loop effective action in the metric-affine bumblebee gravity. <i>Journal of Cosmology and Astroparticle Physics</i> , 2022, 2022, 018.	5.4	12
103	Insensitivity of Hawking radiation to an invariant Planck-scale cutoff. <i>Physical Review D</i> , 2009, 80, .	4.7	11
104	Small and hollow magnetic monopoles. <i>Physical Review D</i> , 2018, 98, .	4.7	11
105	Multicenter solutions in Eddington-inspired Born-Infeld gravity. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	11
106	Conformally invariant proper time with general non-metricity. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	10
107	Acceleration radiation and the Planck scale. <i>Physical Review D</i> , 2008, 77, .	4.7	9
108	Black hole formation from a null fluid in extended Palatini gravity. <i>Physical Review D</i> , 2012, 86, .	4.7	9

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109	A generalized Weyl structure with arbitrary non-metricity. <i>European Physical Journal C</i> , 2019, 79, 1.	3.9	9
110	Acceleration radiation, transition probabilities and trans-Planckian physics. <i>New Journal of Physics</i> , 2010, 12, 095017.	2.9	7
111	Astrophysical constraints and insights on extended relativistic gravity. <i>Astrophysics and Space Science</i> , 2015, 357, 1.	1.4	7
112	Charged BTZ-type solutions in Eddington-inspired Born-Infeld gravity. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 025.	5.4	7
113	Weak-field regime of the generalized hybrid metric-Palatini gravity. <i>Physical Review D</i> , 2021, 104, .	4.7	7
114	Some recent results on Ricci-based gravity theories. <i>International Journal of Modern Physics D</i> , 2022, 31, .	2.1	7
115	Particles and energy fluxes from a conformal field theory perspective. <i>Physical Review D</i> , 2004, 70, .	4.7	6
116	Cosmology in Palatini theories of gravity. , 2012, , .		6
117	Geons in Palatini Theories of Gravity. <i>Fundamental Theories of Physics</i> , 2017, , 161-190.	0.3	6
118	Inflation, renormalization, and CMB anisotropies. <i>Journal of Physics: Conference Series</i> , 2010, 229, 012058.	0.4	5
119	Novel connection between lump-like structures and quantum mechanics. <i>European Physical Journal Plus</i> , 2018, 133, 1.	2.6	5
120	INFLATION, QUANTUM FIELDS, AND CMB ANISOTROPIES. <i>International Journal of Modern Physics D</i> , 2009, 18, 2329-2335.	2.1	4
121	New Phenomenology for Palatini $f(R)$ Theories: Non-singular Universes. , 2010, , .		4
122	Introduction to Palatini Theories of Gravity and Nonsingular Cosmologies. , 0, , .		4
123	Non-Riemannian geometry: towards new avenues for the physics of modified gravity. <i>Journal of Physics: Conference Series</i> , 2015, 600, 012041.	0.4	4
124	Geometric aspects of charged black holes in Palatini theories. <i>Journal of Physics: Conference Series</i> , 2015, 600, 012042.	0.4	4
125	M-theory, graphene-branes and superconducting wormholes. <i>International Journal of Geometric Methods in Modern Physics</i> , 2017, 14, 1750167.	2.0	4
126	Singularity-Free and Cosmologically Viable Born-Infeld Gravity with Scalar Matter. <i>Symmetry</i> , 2021, 13, 2108.	2.2	4

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127	Particle creation by wormholes: A 1 + 1 model. International Journal of Modern Physics D, 2020, 29, 2041009.	2.1	3
128	Black holes with electric charge in Palatini theories of gravity. , 2012, , .		2
129	Compact objects in quadratic Palatini gravity generated by a free scalar field. Physical Review D, 2022, 105, .	4.7	2
130	Determinantal Born-Infeld coupling of gravity and electromagnetism. Physical Review D, 2022, 105, .	4.7	2
131	Late-time correlators in semiclassical particle-black-hole scattering. Physical Review D, 2003, 68, .	4.7	1
132	THE ROLE OF THE PLANCK SCALE IN BLACK HOLE RADIANCE. International Journal of Modern Physics D, 2008, 17, 489-494.	2.1	1
133	Reply to "Comment on "Insensitivity of Hawking radiation to an invariant Planck-scale cutoff"™ " Physical Review D, 2010, 81, .	4.7	1
134	Non-singular Universes À la Palatini. Journal of Physics: Conference Series, 2011, 314, 012054.	0.4	1
135	Palatini approach to bouncing cosmologies and DSR-like effects. Journal of Physics: Conference Series, 2012, 360, 012034.	0.4	1
136	Birkhoff's theorem and perturbations in $f(R)$ theories. Annalen Der Physik, 2012, 524, 87-88.	2.4	1
137	Observational effects of varying speed of light in quadratic gravity cosmological models. International Journal of Geometric Methods in Modern Physics, 2018, 15, 1850084.	2.0	1
138	An infinite class of exact rotating black hole metrics of modified gravity. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 052.	5.4	1
139	HAWKING RADIATION IN THE PRESENCE OF AN INVARIANT PLANCK-SCALE CUTOFF. , 2012, , .		0
140	CHARGED BLACK HOLES IN PALATINI $f(R)$ THEORIES. , 2015, , .		0
141	NONSINGULAR BLACK HOLES IN PALATINI EXTENSIONS OF GENERAL RELATIVITY. , 2015, , .		0
142	HYBRID $f(R)$ THEORIES, LOCAL CONSTRAINTS, AND COSMIC SPEEDUP. , 2015, , .		0
143	Post-Editorial of the Special Issue "Wormholes in Space-Time: Theory and Facts" Universe, 2020, 6, 228.	2.5	0
144	SHORT DISTANCES, BLACK HOLES, AND TeV GRAVITY. , 2008, , .		0

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145	Introduction to Modified Gravity: From the Cosmic Speedup Problem to Quantum Gravity Phenomenology. , 0, , .		0
146	STATIC SPHERICALLY SYMMETRIC SOLUTIONS IN EXTENDED PALATINI GRAVITY. , 2012, , .		0
147	INFLATION, QUANTUM FIELD RENORMALIZATION, AND CMB ANISOTROPIES. , 2012, , .		0
148	AVOIDING THE BIG BANG SINGULARITY WITH PALATINI $f(R)$ THEORIES. , 2012, , .		0
149	ENRICHED PHENOMENOLOGY IN EXTENDED PALATINI THEORIES. , 2012, , .		0
150	The Palatini Approach Beyond Einstein's Gravity. Springer Proceedings in Physics, 2014, , 141-150.	0.2	0