Leonardo Gualtieri

List of Publications by Year
in descending order

125 papers	7,550 citations	47006 47 h-index	53230 85 g-index
127 all docs	127 docs citations	127 times ranked	4438 citing authors

#	Article	IF	Citations
1	Testing general relativity with present and future astrophysical observations. Classical and Quantum Gravity, 2015, 32, 243001.	4.0	943
2	Black holes, gravitational waves and fundamental physics: a roadmap. Classical and Quantum Gravity, 2019, 36, 143001.	4.0	451
3	Spontaneous Scalarization of Black Holes and Compact Stars from a Gauss-Bonnet Coupling. Physical Review Letters, 2018, 120, 131104.	7.8	391
4	Inconsistency of interacting, multi-graviton theories. Nuclear Physics B, 2001, 597, 127-171.	2.5	217
5	Black-Hole Bombs and Photon-Mass Bounds. Physical Review Letters, 2012, 109, 131102.	7.8	190
6	Perturbations of slowly rotating black holes: Massive vector fields in the Kerr metric. Physical Review D, 2012, 86, .	4.7	157
7	Testing the black hole 'no-hair' hypothesis. Classical and Quantum Gravity, 2016, 33, 174001.	4.0	156
8	Gravitational wave asteroseismology reexamined. Physical Review D, 2004, 70, .	4.7	154
9	Perturbed black holes in Einstein-dilaton-Gauss-Bonnet gravity: Stability, ringdown, and gravitational-wave emission. Physical Review D, 2016, 94, .	4.7	152
10	Comment on "Kerr Black Holes as Particle Accelerators to Arbitrarily High Energy" Physical Review Letters, 2009, 103, 239001.	7.8	150
11	Gravitational signature of Schwarzschild black holes in dynamical Chern-Simons gravity. Physical Review D, 2010, 81, .	4.7	133
12	Equation-of-state-independent relations in neutron stars. Physical Review D, 2013, 88, .	4.7	133
13	Black holes and binary mergers in scalar Gauss-Bonnet gravity: Scalar field dynamics. Physical Review D, 2019, 99, .	4.7	131
14	Stability of scalarized black hole solutions in scalar-Gauss-Bonnet gravity. Physical Review D, 2019, 99, .	4.7	121
15	Floating and Sinking: The Imprint of Massive Scalars around Rotating Black Holes. Physical Review Letters, 2011, 107, 241101.	7.8	120
16	Quasi-normal modes and gravitational wave astronomy. General Relativity and Gravitation, 2008, 40, 945-970.	2.0	117
17	Rotating black holes in Einstein-dilaton-Gauss-Bonnet gravity with finite coupling. Physical Review D, 2015, 92, .	4.7	117
18	Tidal deformations of a spinning compact object. Physical Review D, 2015, 92, .	4.7	110

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19	Relativistic models of magnetars: the twisted torus magnetic field configuration. Monthly Notices of the Royal Astronomical Society, 2009, 397, 913-924.	4.4	108
20	Hawking emission of gravitons in higher dimensions: non-rotating black holes. Journal of High Energy Physics, 2006, 2006, 021-021.	4.7	105
21	Self-interactions and spontaneous black hole scalarization. Physical Review D, 2019, 99, .	4.7	104
22	Black Hole Particle Emission in Higher-Dimensional Spacetimes. Physical Review Letters, 2006, 96, 071301.	7.8	95
23	Probing Planckian Corrections at the Horizon Scale with LISA Binaries. Physical Review Letters, 2018, 120, 081101.	7.8	95
24	3D superconformal theories from Sasakian seven-manifolds: new non-trivial evidences for. Nuclear Physics B, 2000, 577, 547-608.	2.5	94
25	Numerical simulations of single and binary black holes in scalar-tensor theories: Circumventing the no-hair theorem. Physical Review D, 2013, 87, .	4.7	87
26	Structure and deformations of strongly magnetized neutron stars with twisted-torus configurations. Monthly Notices of the Royal Astronomical Society, 2010, 406, 2540-2548.	4.4	85
27	Tidal Love numbers of a slowly spinning neutron star. Physical Review D, 2015, 92, .	4.7	84
28	New horizons for fundamental physics with LISA. Living Reviews in Relativity, 2022, 25, .	26.7	82
29	Relativistic models of magnetars: structure and deformations. Monthly Notices of the Royal Astronomical Society, 2008, 385, 2080-2096.	4.4	77
30	Non-radial oscillation modes as a probe of density discontinuities in neutron stars. Monthly Notices of the Royal Astronomical Society, 2003, 338, 389-400.	4.4	76
31	Perturbations of Schwarzschild black holes in dynamical Chern-Simons modified gravity. Physical Review D, 2009, 80, .	4.7	76
32	Gravitational energy loss in high energy particle collisions: Ultrarelativistic plunge into a multidimensional black hole. Physical Review D, 2004, 69, .	4.7	73
33	N = 8 gaugings revisited: an exhaustive classification. Nuclear Physics B, 1998, 532, 245-279.	2.5	67
34	Gravitoelectromagnetic Perturbations of Kerr-Newman Black Holes: Stability and Isospectrality in the Slow-Rotation Limit. Physical Review Letters, 2013, 110, 241103.	7.8	65
35	Exploring New Physics Frontiers Through Numerical Relativity. Living Reviews in Relativity, 2015, 18, 1.	26.7	64
36	TESTING GRAVITY WITH QUASI-PERIODIC OSCILLATIONS FROM ACCRETING BLACK HOLES: THE CASE OF THE EINSTEINâ€“DILATONâ€“GAUSSâ€“BONNET THEORY. Astrophysical Journal, 2015, 801, 115.	4.5	63

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37	Scalar, electromagnetic, and gravitational perturbations of Kerr-Newman black holes in the slow-rotation limit. Physical Review D, 2013, 88, .	4.7	60
38	Tensor-multi-scalar theories: relativistic stars and 3 + 1 decomposition. Classical and Quantum Gravity, 2015, 32, 204001.	4.0	58
39	Gravitational waves from extreme mass-ratio inspirals in dynamical Chern-Simons gravity. Physical Review D, 2011, 83, .	4.7	57
40	Perturbative approach to the structure of rapidly rotating neutron stars. Physical Review D, 2005, 72, .	4.7	52
41	Evolution of a proto-neutron star with a nuclear many-body equation of state: Neutrino luminosity and gravitational wave frequencies. Physical Review D, 2017, 96, .	4.7	52
42	Numerical relativity for D dimensional space-times: Head-on collisions of black holes and gravitational wave extraction. Physical Review D, 2010, 82, .	4.7	51
43	Numerical relativity for D dimensional axially symmetric space-times: Formalism and code tests. Physical Review D, 2010, 81, .	4.7	51
44	NR/HEP: roadmap for the future. Classical and Quantum Gravity, 2012, 29, 244001.	4.0	50
45	Parametrized ringdown spin expansion coefficients: A data-analysis framework for black-hole spectroscopy with multiple events. Physical Review D, 2020, 101, .	4.7	49
46	M-theory on AdS4 Ã— M111: the complete Osp(2|4) Ã— SU(3) Ã— SU(2) spectrum from harmonic analysis. Nuclear Physics B, 1999, 560, 617-682.	2.5	47
47	Neutron star tidal disruption in mixed binaries: The imprint of the equation of state. Physical Review D, 2010, 81, .	4.7	47
48	Constraining the equation of state of nuclear matter with gravitational wave observations: Tidal deformability and tidal disruption. Physical Review D, 2013, 88, .	4.7	47
49	Quasinormal modes of rotating black holes in Einstein-dilaton Gauss-Bonnet gravity: The first order in rotation. Physical Review D, 2021, 103, .	4.7	47
50	A semi-relativistic model for tidal interactions in BHâ€"NS coalescing binaries. Classical and Quantum Gravity, 2009, 26, 125004.	4.0	46
51	Rotating protoneutron stars: Spin evolution, maximum mass, and I-Love-Q relations. Physical Review D, 2014, 90, .	4.7	45
52	The structure of multiplets in AdS4 and the complete Osp(3|4)Ã—SU(3) spectrum of M-theory on AdS4Ã—N0,1,0. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 471, 27-38.	4.1	43
53	Electromagnetism and hidden vector fields in modified gravity theories: Spontaneous and induced vectorization. Physical Review D, 2019, 99, .	4.7	42
54	Equilibrium configurations of fluids and their stability in higher dimensions. Classical and Quantum Gravity, 2006, 23, 7151-7198.	4.0	40

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55	Geodesic Models of Quasi-periodic-oscillations as Probes of Quadratic Gravity. Astrophysical Journal, 2017, 843, 25.	4.5	40
56	Post-Newtonian spin-tidal couplings for compact binaries. Physical Review D, 2018, 98, .	4.7	39
57	Detecting fundamental fields with LISA observations of gravitational waves from extreme mass-ratio inspirals. Nature Astronomy, 2022, 6, 464-470.	10.1	39
58	Impact of high-order tidal terms on binary neutron-star waveforms. Physical Review D, 2018, 98, .	4.7	38
59	Detecting Scalar Fields with Extreme Mass Ratio Inspirals. Physical Review Letters, 2020, 125, 141101.	7.8	38
60	Coupling of radial and axial nonradial oscillations of compact stars: Gravitational waves from first-order differential rotation. Physical Review D, 2006, 73, .	4.7	37
61	Osp (calN|4) supermultiplets as conformal superfields on partial AdS 4 and the generic form of calN = 2, d = 3 gauge theories. Classical and Quantum Gravity, 2000, 17, 55-92.	4.0	33
62	Light scalar field constraints from gravitational-wave observations of compact binaries. Physical Review D, 2012, 85, .	4.7	33
63	Non-semisimple gaugings of D = 5, ? = 8 supergravity and FDAs. Classical and Quantum Gravity, 2001, 18, 395-413.	4.0	32
64	Gravitational signals emitted by a point mass orbiting a neutron star: A perturbative approach. Physical Review D, 2001, 64, .	4.7	32
65	NonlinearN-parameter spacetime perturbations: Gauge transformations. Physical Review D, 2004, 70, .	4.7	32
66	Head-on collisions of unequal mass black holes inD=5dimensions. Physical Review D, 2011, 83, .	4.7	32
67	Towards numerical relativity in scalar Gauss-Bonnet gravity: $3+1$ decomposition beyond the small-coupling limit. Physical Review D, 2020, 101, .	4.7	31
68	Oscillations of hot, young neutron stars: Gravitational wave frequencies and damping times. Physical Review D, 2011, 84, .	4.7	30
69	Transformation of the multipolar components of gravitational radiation under rotations and boosts. Physical Review D, 2008, 78, .	4.7	29
70	Magnetic tidal Love numbers clarified. Physical Review D, 2018, 98, .	4.7	28
71	Gravitational waves and higher dimensions: Love numbers and Kaluza-Klein excitations. Physical Review D, 2019, 100, .	4.7	28
72	Tidal interaction in compact binaries: A post-Newtonian affine framework. Physical Review D, 2012, 85, .	4.7	27

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73	Accretion in strong field gravity with eXTP. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	27
74	On the validity of the adiabatic approximation in compact binary inspirals. Physical Review D, 2012, 86, .	4.7	25
75	Two-parameter nonlinear spacetime perturbations: gauge transformations and gauge invariance. Classical and Quantum Gravity, 2003, 20, 535-556.	4.0	24
76	Rotational effects on the oscillation frequencies of newly born proto-neutron stars. Monthly Notices of the Royal Astronomical Society, 2004, 350, 763-768.	4.4	24
77	Quasinormal modes of superfluid neutron stars. Physical Review D, 2014, 90, .	4.7	24
78	Coupling of radial and nonradial oscillations of relativistic stars: Gauge-invariant formalism. Physical Review D, 2005, 71, .	4.7	23
79	Dissipation in relativistic superfluid neutron stars. Monthly Notices of the Royal Astronomical Society, 2013, 428, 1518-1536.	4.4	23
80	An exotic theory of massless spin-2 fields in three dimensions. Classical and Quantum Gravity, 2001, 18, 1485-1502.	4.0	22
81	From micro to macro and back: probing near-horizon quantum structures with gravitational waves. Classical and Quantum Gravity, 2019, 36, 167001.	4.0	22
82	New approach to the study of quasinormal modes of rotating stars. Physical Review D, 2007, 76, .	4.7	21
83	Structure, deformations and gravitational wave emission of magnetars. Classical and Quantum Gravity, 2011, 28, 114014.	4.0	21
84	Constraining black holes with light boson hair and boson stars using epicyclic frequencies and quasiperiodic oscillations. Physical Review D, 2017, 95, .	4.7	20
85	Quark matter imprint on gravitational waves from oscillating stars. General Relativity and Gravitation, 2007, 39, 1323-1330.	2.0	19
86	Dynamics of black holes in de Sitter spacetimes. Physical Review D, 2012, 85, .	4.7	19
87	Black holes in Einstein-GauÃŸ-Bonnet-dilaton theory. Proceedings of the International Astronomical Union, 2016, 12, 265-272.	0.0	18
88	THE RETURN OF THE MEMBRANE PARADIGM? BLACK HOLES AND STRINGS IN THE WATER TAP. International Journal of Modern Physics D, 2008, 17, 505-511.	2.1	17
89	A New Method to Constrain Neutron Star Structure from Quasi-periodic Oscillations. Astrophysical Journal, 2020, 899, 139.	4.5	17
90	Higher-dimensional puncture initial data. Physical Review D, 2011, 84, .	4.7	15

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91	Are post-Newtonian templates faithful and effectual in detecting gravitational signals from neutron star binaries?. Physical Review D, 2002, 66, .	4.7	12
92	Relativistic r modes and shear viscosity: regularizing the continuous spectrum. Monthly Notices of the Royal Astronomical Society, 2005, 363, 121-130.	4.4	11
93	Higher dimensional numerical relativity: Code comparison. Physical Review D, 2014, 90, .	4.7	10
94	The Large Observatory for x-ray timing. Proceedings of SPIE, 2014, , .	0.8	10
95	Spin evolution of a proto-neutron star. Physical Review D, 2016, 94, .	4.7	10
96	Non-semisimple Gaugings of D = 5 N = 8 Supergravity. Fortschritte Der Physik, 2001, 49, 511.	4.4	9
97	The LOFT mission concept: a status update. Proceedings of SPIE, 2016, , .	0.8	9
98	General Relativity and its Applications. , 0, , .		9
99	Impact and detectability of spin-tidal couplings in neutron star inspirals. Physical Review D, 2022, 106, .	4.7	9
100	Gravitational waves from rotating proto-neutron stars. Classical and Quantum Gravity, 2004, 21, S515-S519.	4.0	8
101	Nonadiabatic oscillations of compact stars in general relativity. Physical Review D, 2004, 70, .	4.7	8
102	Unstable g -modes in proto-neutron stars. Classical and Quantum Gravity, 2007, 24, 5093-5102.	4.0	8
103	Numerical relativity and high energy physics: Recent developments. International Journal of Modern Physics D, 2016, 25, 1641022.	2.1	8
104	Threshold anomalies in Horavaâ€"Lifshitz-type theories. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 686, 283-287.	4.1	6
105	Hidden symmetry between rotational tidal Love numbers of spinning neutron stars. Physical Review D, 2021, 104, .	4.7	6
106	Hybrid approach to black hole perturbations from extended matter sources. Physical Review D, 2006, 73, .	4.7	5
107	Black holes in a box. Journal of Physics: Conference Series, 2010, 229, 012072.	0.4	5
108	Superradiant instability of the Kerr brane. Journal of High Energy Physics, 2015, 2015, 1.	4.7	5

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109	On the Perturbations of a Nonrotating Star Excited by a Massive Source I.: The Matching Conditions at the Surface of the Star. International Journal of Modern Physics D, 1997, 06, 323-339.	2.1	2
110	Gravitational waves from neutron stars described by modern EOS. AIP Conference Proceedings, 2005, , .	0.4	2
111	Numerical relativity in higher dimensions. Journal of Physics: Conference Series, 2010, 229, 012074.	0.4	2
112	Simulations of black holes in compactified spacetimes. Journal of Physics: Conference Series, 2011, 314, 012103.	0.4	2
113	Numerical Relativity in <i>D</i> dimensional space-times: Collisions of unequal mass black holes. Journal of Physics: Conference Series, 2011, 314, 012104.	0.4	2
114	Applications of the close-limit approximation: horizonless compact objects and scalar fields. Classical and Quantum Gravity, 2022, 39, 105005.	4.0	2
115	Relativistic astrophysics at GR20. General Relativity and Gravitation, 2014, 46, 1.	2.0	1
116	Preface by the Editors. International Journal of Modern Physics D, 2016, 25, 1602002.	2.1	1
117	Relativistic r-modes and shear viscosity. AIP Conference Proceedings, 2006, , .	0.4	0
118	BLACK HOLEâ€"NEUTRON STAR COALESCING BINARIES. International Journal of Modern Physics D, 2010, 19, 1241-1248.	2.1	0
119	PREFACE â€" NR/HEP2: Spring School on Numerical Relativity and High Energy Physics. International Journal of Modern Physics A, 2013, 28, 1302003.	1.5	0
120	Recent developments in the tidal deformability of spinning compact objects. International Journal of Modern Physics D, 2016, 25, 1641001.	2.1	0
121	Black Hole Collisions in Asymptotically de Sitter Spacetimes. Springer Proceedings in Physics, 2014, , 247-254.	0.2	0
122	ON THE VALIDITY OF THE ADIABATIC APPROXIMATION IN COMPACT BINARY INSPIRALS. , 2015, , .		0
123	Recent progress on the tidal deformability of spinning compact objects. , 2017, , .		0
124	Testing the strong field gravity regime with QPO observations. , 2017, , .		0
125	Coupling of Radial and Non-Radial Oscillations of Neutron Stars. , 2005, , 83-86.		0