Enrico Barausse

List of Publications by Year
in descending order

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115 papers	9,834 citations	31976 53 h-index	36028 97 g-index
125 all docs	125 docs citations	125 times ranked	4330 citing authors

#	Article	IF	Citations
1	Soliton boson stars, Q-balls and the causal Buchdahl bound. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 032.	5.4	19
2	Gravitational waves and kicks from the merger of unequal mass, highly compact boson stars. Physical Review D, 2022, 105, .	4.7	31
3	No Evidence of Kinetic Screening in Simulations of Merging Binary Neutron Stars beyond General Relativity. Physical Review Letters, 2022, 128, 091103.	7.8	27
4	UV completions, fixing the equations, and nonlinearities in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>k</mml:mi></mml:math> -essence. Physical Review D, 2022, 105, .	4.7	19
5	Theory-agnostic reconstruction of potential and couplings from quasinormal modes. Physical Review D, 2022, 105, .	4.7	15
6	Massive Black-Hole Mergers. , 2022, , 851-883.		0
7	Landscape of massive black-hole spectroscopy with LISA and the Einstein Telescope. Physical Review D, 2022, 105, .	4.7	19
8	New horizons for fundamental physics with LISA. Living Reviews in Relativity, 2022, 25, .	26.7	82
9	The TianQin project: Current progress on science and technology. Progress of Theoretical and Experimental Physics, 2021, 2021, .	6.6	129
10	Modeling gravitational waves from exotic compact objects. Physical Review D, 2021, 103, .	4.7	15
11	Detectable Environmental Effects in GW190521-like Black-Hole Binaries with LISA. Physical Review Letters, 2021, 126, 101105.	7.8	34
12	K-dynamics: well-posed 1+1 evolutions in K-essence. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 072.	5.4	20
13	Dynamics of Screening in Modified Gravity. Physical Review Letters, 2021, 126, 091102.	7.8	23
14	Degenerate HoÅ™ava gravity. Classical and Quantum Gravity, 2021, 38, 105007.	4.0	1
15	Relation between general relativity and a class of HoÅ™ava gravity theories. Physical Review D, 2021, 103, .	4.7	11
16	Black holes in ultraviolet-complete HoÅ™ava gravity. Physical Review D, 2021, 103, .	4.7	5
17	Kinetic screening in nonlinear stellar oscillations and gravitational collapse. Physical Review D, 2021, 104, .	4.7	26
18	New binary pulsar constraints on Einstein-Ã¦ther theory after GW170817. Classical and Quantum Gravity, 2021, 38, 195003.	4.0	18

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19	Effect of data gaps on the detectability and parameter estimation of massive black hole binaries with LISA. Physical Review D, 2021, 104, .	4.7	17
20	Unveiling the gravitational universe at Î¼-Hz frequencies. Experimental Astronomy, 2021, 51, 1333-1383.	3.7	88
21	EHT tests of the strong-field regime of general relativity. Classical and Quantum Gravity, 2021, 38, 21LT01.	4.0	38
22	Divergences in gravitational-wave emission and absorption from extreme mass ratio binaries. Physical Review D, 2021, 104, .	4.7	3
23	Dynamical chameleon neutron stars: Stability, radial oscillations, and scalar radiation in spherical symmetry. Physical Review D, 2021, 104, .	4.7	12
24	Discriminating between different scenarios for the formation and evolution of massive black holes with LISA. Physical Review D, 2021, 104, .	4.7	7
25	Massive Black-Hole Mergers. , 2021, , 1-33.		2
26	Separating astrophysics and geometry in black hole images. Physical Review D, 2021, 104, .	4.7	24
27	Bayesian metric reconstruction with gravitational wave observations. Physical Review D, 2020, 102, .	4.7	28
28	Ultra-high-energy cosmic rays and neutrinos from tidal disruptions by massive black holes (Corrigendum). Astronomy and Astrophysics, 2020, 636, C3.	5.1	8
29	Prospects for fundamental physics with LISA. General Relativity and Gravitation, 2020, 52, 1.	2.0	198
30	Spin-Induced Black Hole Spontaneous Scalarization. Physical Review Letters, 2020, 125, 231101.	7.8	120
31	Science with the TianQin observatory: Preliminary result on extreme-mass-ratio inspirals. Physical Review D, 2020, 102, .	4.7	40
32	Gravitational-wave Detection and Parameter Estimation for Accreting Black-hole Binaries and Their Electromagnetic Counterpart. Astrophysical Journal, 2020, 892, 90.	4.5	33
33	Tests of general relativity with stellar-mass black hole binaries observed by LISA. Physical Review D, 2020, 101, .	4.7	26
34	Peculiar acceleration of stellar-origin black hole binaries: Measurement and biases with LISA. Physical Review D, 2020, 101, .	4.7	39
35	Numerical investigation of plasma-driven superradiant instabilities. Classical and Quantum Gravity, 2020, 37, 175006.	4.0	25
36	Foreground cleaning and template-free stochastic background extraction for LISA. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 021-021.	5.4	44

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37	Monitoring the Morphology of M87* in 2009â€“2017 with the Event Horizon Telescope. Astrophysical Journal, 2020, 901, 67.	4.5	51
38	Massive Black Hole Merger Rates: The Effect of Kiloparsec Separation Wandering and Supernova Feedback. Astrophysical Journal, 2020, 904, 16.	4.5	47
39	Well-posed Cauchy formulation for Einstein-Ã¦ther theory. Classical and Quantum Gravity, 2019, 36, 165007.	4.0	15
40	Science with the TianQin observatory: Preliminary results on massive black hole binaries. Physical Review D, 2019, 100, .	4.7	64
41	Testing modified gravity at cosmological distances with LISA standard sirens. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 024-024.	5.4	129
42	Black Holes in General Relativity and Beyond. Proceedings (mdpi), 2019, 17, .	0.2	2
43	Neutron star sensitivities in HoÅ™ava gravity after GW170817. Physical Review D, 2019, 100, .	4.7	12
44	Science with the TianQin observatory: Preliminary results on testing the no-hair theorem with ringdown signals. Physical Review D, 2019, 100, .	4.7	51
45	Constraints on HoÅ™ava gravity from binary black hole observations. Physical Review D, 2019, 99, .	4.7	37
46	Black holes, gravitational waves and fundamental physics: a roadmap. Classical and Quantum Gravity, 2019, 36, 143001.	4.0	451
47	Post-Newtonian evolution of massive black hole triplets in galactic nuclei â€“ IV. Implications for LISA. Monthly Notices of the Royal Astronomical Society, 2019, 486, 4044-4060.	4.4	91
48	Post-Newtonian phase accuracy requirements for stellar black hole binaries with LISA. Physical Review D, 2019, 99, .	4.7	20
49	A multimessenger study of the Milky Wayâ€™s stellar disc and bulge with LISA,Gaia, and LSST. Monthly Notices of the Royal Astronomical Society, 2019, 483, 5518-5533.	4.4	49
50	Post-Newtonian evolution of massive black hole triplets in galactic nuclei â€“ II. Survey of the parameter space. Monthly Notices of the Royal Astronomical Society, 2018, 477, 3910-3926.	4.4	47
51	Ultra-high-energy cosmic rays and neutrinos from tidal disruptions by massive black holes. Astronomy and Astrophysics, 2018, 616, A179.	5.1	54
52	Post-Newtonian evolution of massive black hole triplets in galactic nuclei â€“ III. A robust lower limit to the nHz stochastic background of gravitational waves. Monthly Notices of the Royal Astronomical Society, 2018, 477, 2599-2612.	4.4	52
53	The stochastic gravitational-wave background in the absence of horizons. Classical and Quantum Gravity, 2018, 35, 20LT01.	4.0	43
54	Gravitational wave searches for ultralight bosons with LIGO and LISA. Physical Review D, 2017, 96, .	4.7	190

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55	Stochastic and Resolvable Gravitational Waves from Ultralight Bosons. Physical Review Letters, 2017, 119, 131101.	7.8	151
56	About gravitational-wave generation by a three-body system. Classical and Quantum Gravity, 2017, 34, 215004.	4.0	13
57	Science with the space-based interferometer LISA. V. Extreme mass-ratio inspirals. Physical Review D, 2017, 95, .	4.7	344
58	The nightmare scenario: measuring the stochastic gravitational wave background from stalling massive black hole binaries with pulsar timing arrays. Monthly Notices of the Royal Astronomical Society, 2017, 470, 4547-4556.	4.4	32
59	Selection bias in dynamically measured supermassive black hole samples: scaling relations and correlations between residuals in semi-analytic galaxy formation models. Monthly Notices of the Royal Astronomical Society, 2017, 468, 4782-4791.	4.4	27
60	Prospects for observing extreme-mass-ratio inspirals with LISA. Journal of Physics: Conference Series, 2017, 840, 012021.	0.4	58
61	Science with the space-based interferometer eLISA. III: probing the expansion of the universe using gravitational wave standard sirens. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 002-002.	5.4	167
62	THE FINAL SPIN FROM BINARY BLACK HOLES IN QUASI-CIRCULAR ORBITS. Astrophysical Journal Letters, 2016, 825, L19.	8.3	147
63	Effect of cosmological evolution on Solar System constraints and on the scalarization of neutron stars in massless scalar-tensor theories. Physical Review D, 2016, 94, .	4.7	48
64	Gravitational waves from the remnants of the first stars. Monthly Notices of the Royal Astronomical Society: Letters, 2016, 460, L74-L78.	3.3	118
65	Spectroscopy of Kerr Black Holes with Earth- and Space-Based Interferometers. Physical Review Letters, 2016, 117, 101102.	7.8	148
66	Post-Newtonian evolution of massive black hole triplets in galactic nuclei â€“ I. Numerical implementation and tests. Monthly Notices of the Royal Astronomical Society, 2016, 461, 4419-4434.	4.4	54
67	Science with the space-based interferometer eLISA: Supermassive black hole binaries. Physical Review D, 2016, 93, .	4.7	321
68	Slowly rotating black holes in Einstein-Ã¦ther theory. Physical Review D, 2016, 93, .	4.7	70
69	Theory-Agnostic Constraints on Black-Hole Dipole Radiation with Multiband Gravitational-Wave Astrophysics. Physical Review Letters, 2016, 116, 241104.	7.8	135
70	Electromagnetic outflows in a class of scalar-tensor theories: Binary neutron star coalescence. Physical Review D, 2015, 91, .	4.7	21
71	Post-Newtonian constraints on Lorentz-violating gravity theories with a MOND phenomenology. Physical Review D, 2015, 91, .	4.7	29
72	Gravitation-Wave Emission in Shift-Symmetric Horndeski Theories. Physical Review Letters, 2015, 115, 211105.	7.8	43

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73	THE COEVOLUTION OF NUCLEAR STAR CLUSTERS, MASSIVE BLACK HOLES, AND THEIR HOST GALAXIES. Astrophysical Journal, 2015, 812, 72.	4.5	140
74	Massive Black Hole Science with eLISA. Journal of Physics: Conference Series, 2015, 610, 012001.	0.4	20
75	Environmental Effects for Gravitational-wave Astrophysics. Journal of Physics: Conference Series, 2015, 610, 012044.	0.4	59
76	Testing general relativity with present and future astrophysical observations. Classical and Quantum Gravity, 2015, 32, 243001.	4.0	943
77	THE IMPRINT OF MASSIVE BLACK HOLE MERGERS ON THE CORRELATION BETWEEN NUCLEAR STAR CLUSTERS AND THEIR HOST GALAXIES. Astrophysical Journal Letters, 2015, 806, L8.	8.3	51
78	Projected constraints on scalarization with gravitational waves from neutron star binaries. Physical Review D, 2014, 90, .	4.7	76
79	Strong Binary Pulsar Constraints on Lorentz Violation in Gravity. Physical Review Letters, 2014, 112, 161101.	7.8	128
80	Can environmental effects spoil precision gravitational-wave astrophysics?. Physical Review D, 2014, 89, .	4.7	321
81	Constraints on Einstein-Ã†ther theory and HoÅ™ava gravity from binary pulsar observations. Physical Review D, 2014, 89, .	4.7	161
82	Dynamical scalarization of neutron stars in scalar-tensor gravity theories. Physical Review D, 2014, 89, .	4.7	144
83	Publisherâ€™s Note: Constraints on Einstein-Ã†ther theory and HoÅ™ava gravity from binary pulsar observations [Phys. Rev. D89, 084067 (2014)]. Physical Review D, 2014, 90, .	4.7	42
84	Black holes in Lorentz-violating gravity theories. Classical and Quantum Gravity, 2013, 30, 244010.	4.0	85
85	Slowly rotating black holes in HoÅ™ava-Lifshitz gravity. Physical Review D, 2013, 87, .	4.7	78
86	Neutron-star mergers in scalar-tensor theories of gravity. Physical Review D, 2013, 87, .	4.7	195
87	Post-Newtonian approach to black hole-fluid systems. Physical Review D, 2013, 88, .	4.7	5
88	Modeling multipolar gravitational-wave emission from small mass-ratio mergers. Physical Review D, 2012, 85, .	4.7	63
89	Prototype effective-one-body model for nonprecessing spinning inspiral-merger-ringdown waveforms. Physical Review D, 2012, 86, .	4.7	192
90	No-Go Theorem for Slowly Rotating Black Holes in HoÅ™ava-Lifshitz Gravity. Physical Review Letters, 2012, 109, 181101.	7.8	43

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91	Complete nonspinning effective-one-body metric at linear order in the mass ratio. Physical Review D, 2012, 85, .	4.7	108
92	Gravitational Self-Force Correction to the Binding Energy of Compact Binary Systems. Physical Review Letters, 2012, 108, 131103.	7.8	107
93	The evolution of massive black holes and their spins in their galactic hosts. Monthly Notices of the Royal Astronomical Society, 2012, 423, 2533-2557.	4.4	187
94	Testing the cosmic censorship conjecture with point particles: The effect of radiation reaction and the self-force. Physical Review D, 2011, 84, .	4.7	83
95	Extreme mass-ratio inspirals in the effective-one-body approach: Quasicircular, equatorial orbits around a spinning black hole. Physical Review D, 2011, 83, .	4.7	75
96	Extending the effective-one-body Hamiltonian of black-hole binaries to include next-to-next-to-leading spin-orbit couplings. Physical Review D, 2011, 84, .	4.7	90
97	Black holes in Einstein-aether and HoÅ™ava-Lifshitz gravity. Physical Review D, 2011, 83, .	4.7	190
98	CONSTRAINING THE QUADRUPOLE MOMENT OF STELLAR-MASS BLACK HOLE CANDIDATES WITH THE CONTINUUM FITTING METHOD. Astrophysical Journal, 2011, 731, 121.	4.5	165
99	Final stages of accretion onto non-Kerr compact objects. Physical Review D, 2011, 84, .	4.7	45
100	The importance of precession in modelling the direction of the final spin from a black-hole merger. Journal of Physics: Conference Series, 2010, 228, 012050.	0.4	2
101	Gravitational instabilities of superspinars. Physical Review D, 2010, 82, .	4.7	89
102	Improved effective-one-body Hamiltonian for spinning black-hole binaries. Physical Review D, 2010, 81, .	4.7	155
103	Test Bodies and Naked Singularities: Is the Self-Force the Cosmic Censor?. Physical Review Letters, 2010, 105, 261102.	7.8	165
104	PREDICTING THE DIRECTION OF THE FINAL SPIN FROM THE COALESCENCE OF TWO BLACK HOLES. Astrophysical Journal, 2009, 704, L40-L44.	4.5	148
105	Hamiltonian of a spinning test particle in curved spacetime. Physical Review D, 2009, 80, .	4.7	129
106	Influence of the hydrodynamic drag from an accretion torus on extreme mass-ratio inspirals. Physical Review D, 2008, 77, .	4.7	58
107	Final spin from the coalescence of two black holes. Physical Review D, 2008, 78, .	4.7	162
108	A no-go theorem for polytropic spheres in Palatini f (R) gravity. Classical and Quantum Gravity, 2008, 25, 062001.	4.0	104

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109	Perturbed Kerr Black Holes Can Probe Deviations from General Relativity. Physical Review Letters, 2008, 101, 099001.	7.8	96
110	Gravitational waves from extreme mass ratio inspirals in nonpure Kerr spacetimes. Physical Review D, 2007, 75, .	4.7	49
111	Circular and noncircular nearly horizon-skimming orbits in Kerr spacetimes. Physical Review D, 2007, 76, .	4.7	15
112	Post-Newtonian expansion for Gauss-Bonnet gravity. Physical Review D, 2007, 75, .	4.7	41
113	Relativistic dynamical friction in a collisional fluid. Monthly Notices of the Royal Astronomical Society, 2007, 382, 826-834.	4.4	32
114	EMRIs in non-pure Kerr spacetimes. AIP Conference Proceedings, 2006, , .	0.4	0
115	Effect of inhomogeneities on the luminosity distance-redshift relation: Is dark energy necessary in a perturbed universe?. Physical Review D, 2005, 71, .	4.7	89