Roberto Balbinot

List of Publications by Year
in descending order

41 papers	916 citations	687363 13 h-index	454955 30 g-index
41 all docs	41 docs citations	41 times ranked	442 citing authors

#	Article	IF	Citations
1	Numerical observation of Hawking radiation from acoustic black holes in atomic Boseâ€“Einstein condensates. New Journal of Physics, 2008, 10, 103001.	2.9	216
2	Nonlocal density correlations as a signature of Hawking radiation from acoustic black holes. Physical Review A, 2008, 78, .	2.5	153
3	Stability of the Schwarzschild-de Sitter model. Physical Review D, 1990, 41, 395-402.	4.7	63
4	Mass inflation: The semiclassical regime. Physical Review Letters, 1993, 70, 13-16.	7.8	57
5	Back reaction and the small-mass regime. Physical Review D, 1986, 33, 1611-1615.	4.7	55
6	Acoustic white holes in flowing atomic Boseâ€“Einstein condensates. New Journal of Physics, 2011, 13, 025007.	2.9	48
7	Backreaction in Acoustic Black Holes. Physical Review Letters, 2005, 94, 161302.	7.8	33
8	Solution of the Einstein-Strauss problem with aÎ›term. Physical Review D, 1988, 38, 2415-2418.	4.7	25
9	Hawking radiation of massive modes and undulations. Physical Review D, 2012, 86, .	4.7	24
10	Hawking radiation correlations in Bose-Einstein condensates using quantum field theory in curved space. Physical Review D, 2013, 87, .	4.7	21
11	Low frequency gray-body factors and infrared divergences: Rigorous results. Physical Review D, 2015, 91, .	4.7	16
12	Inside two-dimensional black holes. Classical and Quantum Gravity, 1994, 11, 1763-1773.	4.0	14
13	Vacuum polarization in two-dimensional static spacetimes and dimensional reduction. Physical Review D, 2002, 66, .	4.7	14
14	Matter, quantum gravity, and adiabatic phase. Physical Review D, 1990, 41, 1848-1854.	4.7	12
15	Gray-body factor and infrared divergences in 1D BEC acoustic black holes. Physical Review D, 2014, 90, .	4.7	12
16	How do Black Holes evaporate?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 136, 337-340.	4.1	11
17	Classical solutions in theN=2,D=5supergravity theory. Physical Review D, 1990, 42, 1023-1026.	4.7	11
18	Quantum bubble dynamics in the presence of gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 262, 222-226.	4.1	11

#	Article	IF	Citations
19	TESTING HAWKING PARTICLE CREATION BY BLACK HOLES THROUGH CORRELATION MEASUREMENTS. International Journal of Modern Physics D, 2010, 19, 2371-2377.	2.1	9
20	Fourth derivative gravity in the auxiliary fields representation and application to the black-hole stability. European Physical Journal Plus, 2015, 130, 1.	2.6	9
21	Scattering coefficients and gray-body factor for 1D BEC acoustic black holes: Exact results. Physical Review D, 2016, 93, .	4.7	9
22	Two-dimensional black holes and effective actions. Classical and Quantum Gravity, 2003, 20, 5439-5454.	4.0	8
23	Ramp-up of Hawking Radiation in Bose-Einstein-Condensate Analog Black Holes. Physical Review Letters, 2021, 126, 111301.	7.8	8
24	Two-dimensional black holes in accelerated frames: spacetime structure. Classical and Quantum Gravity, 1996, 13, 2457-2471.	4.0	7
25	Quantum stress tensor for extreme 2D Reissner-NordstrÃ¶m black holes. Physical Review D, 2004, 70, .	4.7	7
26	Amplifying the Hawking Signal in BECs. Advances in High Energy Physics, 2014, 2014, 1-8.	1.1	7
27	Particle production in the interiors of acoustic black holes. Physical Review D, 2019, 100, .	4.7	7
28	Depletion in Bose-Einstein condensates using quantum field theory in curved space. Physical Review A, 2007, 75, .	2.5	6
29	"Cosmological" vacuum state for a black hole immersed in an expanding Friedmann universe. Physical Review D, 1989, 40, 372-379.	4.7	5
30	Friedmann universes connected by Reissner-NordstrÃ¶m wormholes. Physical Review D, 1994, 49, 2801-2807.	4.7	5
31	Correlation patterns from massive phonons in 1+1 dimensional acoustic black holes: A toy model. Physical Review D, 2018, 98, .	4.7	5
32	Understanding Hawking Radiation from Simple Models of Atomic Bose-Einstein Condensates. Lecture Notes in Physics, 2013, , 181-219.	0.7	5
33	Quantum correlations across the horizon in acoustic and gravitational black holes. Physical Review D, 2022, 105, .	4.7	5
34	Acoustic Hawking radiation. Nature Physics, 2016, 12, 897-898.	16.7	4
35	On the stability of cauchy horizons in a black hole's nucleus. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 227, 30-33.	4.1	3
36	Scalar field in the Frolov-Markov-Mukhanov black-hole space-times. Physical Review D, 1990, 41, 1810-1814.	4.7	3

#	Article	IF	Citations
37	Correlations between a Hawking particle and its partner in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn><mml:mi mathvariant="normal">D</mml:mi></mml:mrow></mml:math> Bose-Einstein condensate analog black hole. Physical Review D, 2020, 102, .	4.7	3
38	Friedmann universes connected by Reissner-NordstrÃ¶m wormholes: Quantum effects. Physical Review D, 1995, 51, 2782-2791.	4.7	2
39	Two-dimensional black holes in accelerated frames: quantum aspects. Classical and Quantum Gravity, 1997, 14, 463-476.	4.0	2
40	Five-dimensional quantum gravity and the residual length. Physical Review D, 1986, 34, 3666-3669.	4.7	1
41	Improved model of bosonic string. Physical Review D, 1987, 36, 2589-2590.	4.7	0