David Garfinkle

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9295737/publications.pdf

Version: 2024-02-01

79	2,096	186265	233421
papers	citations	28	45
		h-index	g-index

79	79	79	1162
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Harmonic coordinate method for simulating generic singularities. Physical Review D, 2002, 65, .	4.7	161
2	The 1965 Penrose singularity theorem. Classical and Quantum Gravity, 2015, 32, 124008.	4.0	119
3	An electromagnetic analogue of gravitational wave memory. Classical and Quantum Gravity, 2013, 30, 195009.	4.0	114
4	Numerical Simulations of Generic Singularities. Physical Review Letters, 2004, 93, 161101.	7.8	100
5	Perturbative and gauge invariant treatment of gravitational wave memory. Physical Review D, 2014, 89, .	4.7	88
6	Evolution to a smooth universe in an ekpyrotic contracting phase with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>w</mml:mi><mml:mo>></mml:mo><mml:mn>1</mml:mn></mml:math>. Physical Review D, 2008, 78, .	4.7	73
7	Cosmic-string traveling waves. Physical Review D, 1990, 42, 1960-1963.	4.7	70
8	Numerical simulations of gravitational collapse in Einstein-aether theory. Physical Review D, 2007, 76, .	4.7	68
9	On field theory thermalization from gravitational collapse. Journal of High Energy Physics, 2012, 2012, 1.	4.7	67
10	A Positive-Energy Theorem for Einstein-Aether and HoÅ™ava Gravity. Physical Review Letters, 2011, 107, 191102.	7.8	62
11	Scaling of curvature in subcritical gravitational collapse. Physical Review D, 1998, 58, .	4.7	59
12	Inhomogeneous spacetimes as a dark energy model. Classical and Quantum Gravity, 2006, 23, 4811-4818.	4.0	58
13	Phenomenology of the Gowdy universe onT3Ã—R. Physical Review D, 1998, 57, 4767-4777.	4.7	54
14	Nonperturbative analysis of the evolution of cosmological perturbations through a nonsingular bounce. Physical Review D, 2013, 88, .	4.7	52
15	Black string traveling waves. Physical Review D, 1992, 46, 4286-4288.	4.7	51
16	New algorithm for Mixmaster dynamics. Classical and Quantum Gravity, 1997, 14, L29-L36.	4.0	48
17	Corrections to the thin-wall approximation in general relativity. Physical Review D, 1990, 41, 1889-1894.	4.7	47
18	Spikes in the mixmaster regime of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>G</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>cosmologies. Physical Review D, 2009, 79, .	4.7	45

#	Article	IF	Citations
19	Numerical evolution of Brill waves. Physical Review D, 2001, 63, .	4.7	44
20	Dynamics of domain walls and strings. Physical Review D, 1990, 42, 343-348.	4.7	41
21	Exact solution for (2+1)-dimensional critical collapse. Physical Review D, 2001, 63, .	4.7	39
22	Gravitational wave memory in Î›CDM cosmology. Classical and Quantum Gravity, 2017, 34, 215002.	4.0	33
23	Generalized entropy and Noether charge. Classical and Quantum Gravity, 2000, 17, 3317-3323.	4.0	32
24	Gravitational wave memory in de Sitter spacetime. Physical Review D, 2016, 94, .	4.7	32
25	The memory effect for particle scattering in even spacetime dimensions. Classical and Quantum Gravity, 2017, 34, 145015.	4.0	32
26	Symmetry-seeking spacetime coordinates. Classical and Quantum Gravity, 1999, 16, 4111-4123.	4.0	31
27	Examination of a simple example of gravitational wave memory. Physical Review D, 2014, 90, .	4.7	30
28	What is the relation betweenÎ”Ï†andÎ¼for a cosmic string?. Physical Review D, 1988, 37, 2086-2091.	4.7	29
29	Gravitational collapse of k-essence. Journal of High Energy Physics, 2011, 2011, 1.	4.7	27
30	Numerical simulations of general gravitational singularities. Classical and Quantum Gravity, 2007, 24, S295-S306.	4.0	26
31	Metrics with distributional curvature. Classical and Quantum Gravity, 1999, 16, 4101-4109.	4.0	24
32	Linear stability analysis and the speed of gravitational waves in dynamical Chern-Simons modified gravity. Physical Review D, 2010, 82, .	4.7	24
33	Neutrino Radiation Showing a Christodoulou Memory Effect in General Relativity. Annales Henri Poincare, 2015, 16, 801-839.	1.7	22
34	Comments on Bonaâ€“MassÃ³-type slicing conditions in long-term black hole evolutions. Classical and Quantum Gravity, 2008, 25, 075007.	4.0	20
35	Choptuik scaling in six dimensions. Physical Review D, 1999, 60, .	4.7	19
36	High velocity spikes in Gowdy spacetimes. Physical Review D, 2003, 67, .	4.7	18

#	Article	IF	Citations
37	Hair loss in parity violating gravity. Classical and Quantum Gravity, 2019, 36, 115004.	4.0	17
38	Ricci fall-off in static and stationary, globally hyperbolic, non-singular spacetimes. Classical and Quantum Gravity, 1997, 14, 139-151.	4.0	16
39	Numerical simulations of Gowdy spacetimes onS2Ã—S1Ã—R. Physical Review D, 1999, 60, .	4.7	16
40	Perturbations of an exact solution for (2+1)-dimensional critical collapse. Physical Review D, 2002, 66, .	4.7	15
41	Traveling waves on a magnetic universe. Physical Review D, 1992, 45, 1188-1191.	4.7	12
42	The modeling of degenerate neck pinch singularities in Ricci flow by Bryant solitons. Journal of Mathematical Physics, 2008, 49, 073505.	1.1	10
43	Numerical simulations of stiff fluid gravitational singularities. Physical Review D, 2005, 72, .	4.7	9
44	Killing tensors and symmetries. Classical and Quantum Gravity, 2010, 27, 095004.	4.0	9
45	Do spikes persist in a quantum treatment of spacetime singularities?. Physical Review D, 2017, 95, .	4.7	9
46	The need for dark matter in galaxies. Classical and Quantum Gravity, 2006, 23, 1391-1392.	4.0	8
47	The motion of galaxy clusters in inhomogeneous cosmologies. Classical and Quantum Gravity, 2010, 27, 065002.	4.0	8
48	The fine structure of Gowdy spacetimes. Classical and Quantum Gravity, 2004, 21, S219-S231.	4.0	7
49	Well-posedness of the scale-invariant tetrad formulation of the vacuum Einstein equations. Classical and Quantum Gravity, 2005, 22, 2679-2686.	4.0	7
50	Summation by parts methods for spherical harmonic decompositions of the wave equation in any dimensions. Classical and Quantum Gravity, 2013, 30, 145003.	4.0	7
51	A simple estimate of gravitational wave memory in binary black hole systems. Classical and Quantum Gravity, 2016, 33, 177001.	4.0	7
52	White holes in Einstein-aether theory. Classical and Quantum Gravity, 2018, 35, 035006.	4.0	7
53	Spike behavior in the approach to spacetime singularities. Physical Review D, 2020, 102, .	4.7	7
54	Examining gravitational collapse with test scalar fields. Classical and Quantum Gravity, 2010, 27, 165019.	4.0	6

#	Article	IF	Citations
55	A selection rule for transitions in PT-symmetric quantum theory. AIP Advances, 2017, 7, .	1.3	5
56	Numerical relativity beyond astrophysics. Reports on Progress in Physics, 2017, 80, 016901.	20.1	5
57	Cosmological initial data for numerical relativity. Physical Review D, 2020, 102, .	4.7	5
58	Gravitational wave memory and the wave equation. Classical and Quantum Gravity, 2022, 39, 135010.	4.0	5
59	Detection of computer generated gravitational waves in numerical cosmologies. General Relativity and Gravitation, 1995, 27, 511-527.	2.0	4
60	Existence, uniqueness and other properties of the BCT (minimal strain lapse and shift) gauge. Classical and Quantum Gravity, 2000, 17, 3899-3904.	4.0	4
61	Nonstationary dark energy around a black hole. Physical Review D, 2011, 83, .	4.7	4
62	How extreme are extreme black holes?. Classical and Quantum Gravity, 2011, 28, 175005.	4.0	4
63	Killing-Yano tensors in spaces admitting a hypersurface orthogonal Killing vector. Journal of Mathematical Physics, 2013, 54, 032501.	1.1	3
64	Electric field of a charge in the vicinity of a higher dimensional black hole. Physical Review D, 2021, 103, .	4.7	3
65	Dynamical attractors in contracting spacetimes dominated by kinetically coupled scalar fields. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 030.	5.4	3
66	Can Thorne-Å»ytkow objects source GW190814-type events?. Physical Review D, 2022, 105, .	4.7	3
67	Gravitational collapse of thick domain walls. Classical and Quantum Gravity, 2012, 29, 095015.	4.0	2
68	The shape of the orbit in FLRW spacetimes. Journal of Physics Communications, 2018, 2, 111001.	1.2	2
69	Gravitational waves and their memory in general relativity. Journal of Differential Geometry, 2015, 20, 75-97.	1.0	2
70	The Parallelometer: a mechanical device to study curvature. Canadian Journal of Physics, 2009, 87, 615-617.	1.1	1
71	Numerical simulations of singular spacetimes. Classical and Quantum Gravity, 2012, 29, 244003.	4.0	1
72	Resolving a gravitational wave memory paradox. General Relativity and Gravitation, 2015, 47, 1.	2.0	1

#	Article	IF	Citations
73	A no-boundary method for numerical relativity. Classical and Quantum Gravity, 2020, 37, 045015.	4.0	1
74	A numerical stability analysis of mean curvature flow of noncompact hypersurfaces with type-II curvature blowup. Nonlinearity, 2021, 34, 6539-6560.	1.4	1
75	A non-trivial PT-symmetric continuum Hamiltonian and its eigenstates and eigenvalues. Journal of Mathematical Physics, 2022, 63, .	1.1	1
76	Non-astrophysical numerical relativity. Classical and Quantum Gravity, 2012, 29, 240301.	4.0	0
77	Summary of session B3 at GR20/Amaldi10. General Relativity and Gravitation, 2014, 46, 1.	2.0	0
78	Black hole entropy without microstates. Classical and Quantum Gravity, 2019, 36, 087002.	4.0	0
79	SPIKY MIXMASTER DYNAMICS. , 2012, , .		0