

David Garfinkle

List of Publications by Year in descending order

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79
papers

2,096
citations

186265

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45
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79
all docs

79
docs citations

79
times ranked

1162
citing authors

#	ARTICLE	IF	CITATIONS
1	Gravitational wave memory and the wave equation. <i>Classical and Quantum Gravity</i> , 2022, 39, 135010.	4.0	5
2	Can Thorne-Żytkow objects source GW190814-type events?. <i>Physical Review D</i> , 2022, 105, .	4.7	3
3	A non-trivial PT-symmetric continuum Hamiltonian and its eigenstates and eigenvalues. <i>Journal of Mathematical Physics</i> , 2022, 63, .	1.1	1
4	A numerical stability analysis of mean curvature flow of noncompact hypersurfaces with type-II curvature blowup. <i>Nonlinearity</i> , 2021, 34, 6539-6560.	1.4	1
5	Electric field of a charge in the vicinity of a higher dimensional black hole. <i>Physical Review D</i> , 2021, 103, .	4.7	3
6	Dynamical attractors in contracting spacetimes dominated by kinetically coupled scalar fields. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 030.	5.4	3
7	Cosmological initial data for numerical relativity. <i>Physical Review D</i> , 2020, 102, .	4.7	5
8	A no-boundary method for numerical relativity. <i>Classical and Quantum Gravity</i> , 2020, 37, 045015.	4.0	1
9	Spike behavior in the approach to spacetime singularities. <i>Physical Review D</i> , 2020, 102, .	4.7	7
10	Hair loss in parity violating gravity. <i>Classical and Quantum Gravity</i> , 2019, 36, 115004.	4.0	17
11	Black hole entropy without microstates. <i>Classical and Quantum Gravity</i> , 2019, 36, 087002.	4.0	0
12	White holes in Einstein-aether theory. <i>Classical and Quantum Gravity</i> , 2018, 35, 035006.	4.0	7
13	The shape of the orbit in FLRW spacetimes. <i>Journal of Physics Communications</i> , 2018, 2, 111001.	1.2	2
14	The memory effect for particle scattering in even spacetime dimensions. <i>Classical and Quantum Gravity</i> , 2017, 34, 145015.	4.0	32
15	Do spikes persist in a quantum treatment of spacetime singularities?. <i>Physical Review D</i> , 2017, 95, .	4.7	9
16	Gravitational wave memory in Λ CDM cosmology. <i>Classical and Quantum Gravity</i> , 2017, 34, 215002.	4.0	33
17	A selection rule for transitions in PT-symmetric quantum theory. <i>AIP Advances</i> , 2017, 7, .	1.3	5
18	Numerical relativity beyond astrophysics. <i>Reports on Progress in Physics</i> , 2017, 80, 016901.	20.1	5

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19	A simple estimate of gravitational wave memory in binary black hole systems. <i>Classical and Quantum Gravity</i> , 2016, 33, 177001.	4.0	7
20	Gravitational wave memory in de Sitter spacetime. <i>Physical Review D</i> , 2016, 94, .	4.7	32
21	Resolving a gravitational wave memory paradox. <i>General Relativity and Gravitation</i> , 2015, 47, 1.	2.0	1
22	The 1965 Penrose singularity theorem. <i>Classical and Quantum Gravity</i> , 2015, 32, 124008.	4.0	119
23	Neutrino Radiation Showing a Christodoulou Memory Effect in General Relativity. <i>Annales Henri Poincare</i> , 2015, 16, 801-839.	1.7	22
24	Gravitational waves and their memory in general relativity. <i>Journal of Differential Geometry</i> , 2015, 20, 75-97.	1.0	2
25	Examination of a simple example of gravitational wave memory. <i>Physical Review D</i> , 2014, 90, .	4.7	30
26	Perturbative and gauge invariant treatment of gravitational wave memory. <i>Physical Review D</i> , 2014, 89, .	4.7	88
27	Summary of session B3 at GR20/Amaldi10. <i>General Relativity and Gravitation</i> , 2014, 46, 1.	2.0	0
28	Killing-Yano tensors in spaces admitting a hypersurface orthogonal Killing vector. <i>Journal of Mathematical Physics</i> , 2013, 54, 032501.	1.1	3
29	Summation by parts methods for spherical harmonic decompositions of the wave equation in any dimensions. <i>Classical and Quantum Gravity</i> , 2013, 30, 145003.	4.0	7
30	An electromagnetic analogue of gravitational wave memory. <i>Classical and Quantum Gravity</i> , 2013, 30, 195009.	4.0	114
31	Nonperturbative analysis of the evolution of cosmological perturbations through a nonsingular bounce. <i>Physical Review D</i> , 2013, 88, .	4.7	52
32	Non-astrophysical numerical relativity. <i>Classical and Quantum Gravity</i> , 2012, 29, 240301.	4.0	0
33	Gravitational collapse of thick domain walls. <i>Classical and Quantum Gravity</i> , 2012, 29, 095015.	4.0	2
34	Numerical simulations of singular spacetimes. <i>Classical and Quantum Gravity</i> , 2012, 29, 244003.	4.0	1
35	On field theory thermalization from gravitational collapse. <i>Journal of High Energy Physics</i> , 2012, 2012, 1.	4.7	67
36	SPIKY MIXMASTER DYNAMICS. , 2012, , .		0

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37	Nonstationary dark energy around a black hole. <i>Physical Review D</i> , 2011, 83, .	4.7	4
38	Gravitational collapse of k-essence. <i>Journal of High Energy Physics</i> , 2011, 2011, 1.	4.7	27
39	How extreme are extreme black holes?. <i>Classical and Quantum Gravity</i> , 2011, 28, 175005.	4.0	4
40	A Positive-Energy Theorem for Einstein-Aether and Hořava Gravity. <i>Physical Review Letters</i> , 2011, 107, 191102.	7.8	62
41	Killing tensors and symmetries. <i>Classical and Quantum Gravity</i> , 2010, 27, 095004.	4.0	9
42	Examining gravitational collapse with test scalar fields. <i>Classical and Quantum Gravity</i> , 2010, 27, 165019.	4.0	6
43	The motion of galaxy clusters in inhomogeneous cosmologies. <i>Classical and Quantum Gravity</i> , 2010, 27, 065002.	4.0	8
44	Linear stability analysis and the speed of gravitational waves in dynamical Chern-Simons modified gravity. <i>Physical Review D</i> , 2010, 82, .	4.7	24
45	The Parallelometer: a mechanical device to study curvature. <i>Canadian Journal of Physics</i> , 2009, 87, 615-617.	1.1	1
46	Spikes in the mixmaster regime of G^2 cosmologies. <i>Physical Review D</i> , 2009, 79, .	4.7	45
47	Comments on Bonañura's "Mass ³ -type slicing conditions in long-term black hole evolutions. <i>Classical and Quantum Gravity</i> , 2008, 25, 075007.	4.0	20
48	The modeling of degenerate neck pinch singularities in Ricci flow by Bryant solitons. <i>Journal of Mathematical Physics</i> , 2008, 49, 073505.	1.1	10
49	Evolution to a smooth universe in an ekpyrotic contracting phase with $w > 1$. <i>Physical Review D</i> , 2008, 78, .	4.7	73
50	Numerical simulations of general gravitational singularities. <i>Classical and Quantum Gravity</i> , 2007, 24, S295-S306.	4.0	26
51	Numerical simulations of gravitational collapse in Einstein-aether theory. <i>Physical Review D</i> , 2007, 76, .	4.7	68
52	Inhomogeneous spacetimes as a dark energy model. <i>Classical and Quantum Gravity</i> , 2006, 23, 4811-4818.	4.0	58
53	The need for dark matter in galaxies. <i>Classical and Quantum Gravity</i> , 2006, 23, 1391-1392.	4.0	8
54	Well-posedness of the scale-invariant tetrad formulation of the vacuum Einstein equations. <i>Classical and Quantum Gravity</i> , 2005, 22, 2679-2686.	4.0	7

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55	Numerical simulations of stiff fluid gravitational singularities. <i>Physical Review D</i> , 2005, 72, .	4.7	9
56	The fine structure of Gowdy spacetimes. <i>Classical and Quantum Gravity</i> , 2004, 21, S219-S231.	4.0	7
57	Numerical Simulations of Generic Singularities. <i>Physical Review Letters</i> , 2004, 93, 161101.	7.8	100
58	High velocity spikes in Gowdy spacetimes. <i>Physical Review D</i> , 2003, 67, .	4.7	18
59	Harmonic coordinate method for simulating generic singularities. <i>Physical Review D</i> , 2002, 65, .	4.7	161
60	Perturbations of an exact solution for (2+1)-dimensional critical collapse. <i>Physical Review D</i> , 2002, 66, .	4.7	15
61	Numerical evolution of Brill waves. <i>Physical Review D</i> , 2001, 63, .	4.7	44
62	Exact solution for (2+1)-dimensional critical collapse. <i>Physical Review D</i> , 2001, 63, .	4.7	39
63	Generalized entropy and Noether charge. <i>Classical and Quantum Gravity</i> , 2000, 17, 3317-3323.	4.0	32
64	Existence, uniqueness and other properties of the BCT (minimal strain lapse and shift) gauge. <i>Classical and Quantum Gravity</i> , 2000, 17, 3899-3904.	4.0	4
65	Symmetry-seeking spacetime coordinates. <i>Classical and Quantum Gravity</i> , 1999, 16, 4111-4123.	4.0	31
66	Metrics with distributional curvature. <i>Classical and Quantum Gravity</i> , 1999, 16, 4101-4109.	4.0	24
67	Choptuik scaling in six dimensions. <i>Physical Review D</i> , 1999, 60, .	4.7	19
68	Numerical simulations of Gowdy spacetimes on $S^2 \times S^1 \times \mathbb{R}$. <i>Physical Review D</i> , 1999, 60, .	4.7	16
69	Phenomenology of the Gowdy universe on $T^3 \times \mathbb{R}$. <i>Physical Review D</i> , 1998, 57, 4767-4777.	4.7	54
70	Scaling of curvature in subcritical gravitational collapse. <i>Physical Review D</i> , 1998, 58, .	4.7	59
71	Ricci fall-off in static and stationary, globally hyperbolic, non-singular spacetimes. <i>Classical and Quantum Gravity</i> , 1997, 14, 139-151.	4.0	16
72	New algorithm for Mixmaster dynamics. <i>Classical and Quantum Gravity</i> , 1997, 14, L29-L36.	4.0	48

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73	Detection of computer generated gravitational waves in numerical cosmologies. General Relativity and Gravitation, 1995, 27, 511-527.	2.0	4
74	Traveling waves on a magnetic universe. Physical Review D, 1992, 45, 1188-1191.	4.7	12
75	Black string traveling waves. Physical Review D, 1992, 46, 4286-4288.	4.7	51
76	Corrections to the thin-wall approximation in general relativity. Physical Review D, 1990, 41, 1889-1894.	4.7	47
77	Dynamics of domain walls and strings. Physical Review D, 1990, 42, 343-348.	4.7	41
78	Cosmic-string traveling waves. Physical Review D, 1990, 42, 1960-1963.	4.7	70
79	What is the relation between $\hat{\Gamma}$ and $\hat{\Gamma}/4$ for a cosmic string?. Physical Review D, 1988, 37, 2086-2091.	4.7	29