Ted Jacobson

List of Publications by Year
in descending order

76 papers	8,207 citations	81900 39 h-index	88630 70 g-index
77 all docs	77 docs citations	77 times ranked	3039 citing authors

#	Article	IF	Citations
1	Thermodynamics of Spacetime: The Einstein Equation of State. Physical Review Letters, 1995, 75, 1260-1263.	7.8	1,644
2	Gravity with a dynamical preferred frame. Physical Review D, 2001, 64, .	4.7	673
3	On black hole entropy. Physical Review D, 1994, 49, 6587-6598.	4.7	539
4	Nonequilibrium Thermodynamics of Spacetime. Physical Review Letters, 2006, 96, 121301.	7.8	380
5	Black hole entropy and higher curvature interactions. Physical Review Letters, 1993, 70, 3684-3687.	7.8	322
6	Lorentz violation at high energy: Concepts, phenomena, and astrophysical constraints. Annals of Physics, 2006, 321, 150-196.	2.8	308
7	Hawking spectrum and high frequency dispersion. Physical Review D, 1996, 54, 1568-1586.	4.7	282
8	Black holes in Einstein-aether and HoÅ™ava-Lifshitz gravity. Physical Review D, 2011, 83, .	4.7	190
9	Overspinning a Black Hole with a Test Body. Physical Review Letters, 2009, 103, 141101.	7.8	162
10	Spinning Black Holes as Particle Accelerators. Physical Review Letters, 2010, 104, 021101.	7.8	162
11	Entanglement Equilibrium and the Einstein Equation. Physical Review Letters, 2016, 116, 201101.	7.8	160
12	TeV astrophysics constraints on Planck scale Lorentz violation. Physical Review D, 2002, 66, .	4.7	155
13	Extended HoÅ™ava gravity and Einstein-aether theory. Physical Review D, 2010, 81, .	4.7	154
14	Trans-Planckian Redshifts and the Substance of the Space-Time River. Progress of Theoretical Physics Supplement, 1999, 136, 1-17.	0.1	149
15	Horizon Entropy. Foundations of Physics, 2003, 33, 323-348.	1.3	149
16	General relativity without the metric. Physical Review Letters, 1989, 63, 2325-2328.	7.8	147
17	Post-Newtonian parameters and constraints on Einstein-aether theory. Physical Review D, 2006, 73, .	4.7	146
18	Increase of black hole entropy in higher curvature gravity. Physical Review D, 1995, 52, 3518-3528.	4.7	144

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19	Black hole radiation in the presence of a short distance cutoff. Physical Review D, 1993, 48, 728-741.	4.7	141
20	Black hole lasers. Physical Review D, 1999, 59, .	4.7	137
21	Black holes in Einstein-aether theory. Classical and Quantum Gravity, 2006, 23, 5643-5660.	4.0	130
22	The left-handed spin connection as a variable for canonical gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1987, 196, 39-42.	4.1	111
23	Spacetime approach to force-free magnetospheres. Monthly Notices of the Royal Astronomical Society, 2014, 445, 2500-2534.	4.4	101
24	Spherical solutions in Einstein-aether theory: static aether and stars. Classical and Quantum Gravity, 2006, 23, 5625-5642.	4.0	98
25	Static post-Newtonian equivalence of general relativity and gravity with a dynamical preferred frame. Physical Review D, 2004, 69, .	4.7	96
26	A new characterization of half-flat solutions to Einstein's equation. Communications in Mathematical Physics, 1988, 115, 631-648.	2.2	82
27	Neutron stars in Einstein-aether theory. Physical Review D, 2007, 76, .	4.7	74
28	Black hole entropy and Lorentz-diffeomorphism Noether charge. Physical Review D, 2015, 92, .	4.7	74
29	Numerical simulations of gravitational collapse in Einstein-aether theory. Physical Review D, 2007, 76, .	4.7	68
30	On the origin of the outgoing black hole modes. Physical Review D, 1996, 53, 7082-7088.	4.7	66
31	Generally covariant model of a scalar field with high frequency dispersion and the cosmological horizon problem. Physical Review D, 2001, 63, .	4.7	65
32	Lorentz violation and perpetual motion. Physical Review D, 2007, 75, .	4.7	65
33	A Positive-Energy Theorem for Einstein-Aether and HoÅ™ava Gravity. Physical Review Letters, 2011, 107, 191102.	7.8	62
34	On horizon structure of bimetric spacetimes. Classical and Quantum Gravity, 2012, 29, 065009.	4.0	53
35	Exact solutions to force-free electrodynamics in black hole backgrounds. Classical and Quantum Gravity, 2013, 30, 195012.	4.0	52
36	Coupling the inflaton to an expanding aether. Physical Review D, 2010, 82, .	4.7	49

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37	Note on Hartle-Hawking vacua. Physical Review D, 1994, 50, R6031-R6032.	4.7	46
38	Lattice black holes. Physical Review D, 1998, 57, 6269-6279.	4.7	45
39	Threshold configurations in the presence of Lorentz violating dispersion relations. Physical Review D, 2003, 67, .	4.7	40
40	Black Hole Entropy: Inside or Out?. International Journal of Theoretical Physics, 2005, 44, 1807-1837.	1.2	39
41	Black Hole Thermodynamics and Lorentz Symmetry. Foundations of Physics, 2010, 40, 1076-1080.	1.3	39
42	Horizon entropy and higher curvature equations of state. Physical Review D, 2012, 85, .	4.7	37
43	Cosmic alignment of the aether. Physical Review D, 2011, 83, .	4.7	36
44	Hawking radiation on a falling lattice. Physical Review D, 1999, 61, .	4.7	34
45	Holographic complexity and volume. Journal of High Energy Physics, 2018, 2018, 1.	4.7	33
46	Comment on accelerated detectors and temperature in (anti-) de Sitter spaces. Classical and Quantum Gravity, 1998, 15, 251-253.	4.0	32
47	Destroying black holes with test bodies. Journal of Physics: Conference Series, 2010, 222, 012041.	0.4	32
48	BOUNDARY UNITARITY AND THE BLACK HOLE INFORMATION PARADOX. International Journal of Modern Physics D, 2013, 22, 1342002.	2.1	31
49	Introduction to Quantum Fields in Curved Spacetime and the Hawking Effect. , 2005, , 39-89.		30
50	GRAVITATION AND VACUUM ENTANGLEMENT ENTROPY. International Journal of Modern Physics D, 2012, 21, 1242006.	2.1	30
51	Black hole entanglement entropy regularized in a freely falling frame. Physical Review D, 2007, 76, .	4.7	29
52	On the nature of black hole entropy. , 1999, , .		22
53	Two-dimensional gravity with a dynamical aether. Physical Review D, 2006, 74, .	4.7	21
54	Mechanism of stimulated Hawking radiation in a laboratory Bose-Einstein condensate. Physical Review A, 2017, 96, .	2.5	21

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55	Black hole entanglement entropy and the renormalization group. Physical Review D, 2013, 87, .	4.7	19
56	Diffeomorphism invariance and the black hole information paradox. Physical Review D, 2019, 100, .	4.7	19
57	Initial value constraints with tensor matter. Classical and Quantum Gravity, 2011, 28, 245011.	4.0	18
58	Variations on an aethereal theme. Physical Review D, 2015, 92, .	4.7	16
59	Quantum field theory on a growing lattice. Journal of High Energy Physics, 2004, 2004, 024-024.	4.7	15
60	Spacetime equilibrium at negative temperature and the attraction of gravity. International Journal of Modern Physics D, 2019, 28, 1944016.	2.1	12
61	Area deficits and the Belâ€“Robinson tensor. Classical and Quantum Gravity, 2018, 35, 085005.	4.0	11
62	Nonaxisymmetric Poynting jets. Physical Review D, 2015, 92, .	4.7	10
63	Membrane paradigm for Einstein-Gauss-Bonnet gravity. Physical Review D, 2017, 95, .	4.7	10
64	EINSTEIN-Ã†THER THEORY. , 2006, , .		10
65	Rotating black holes in Einstein-aether theory. Classical and Quantum Gravity, 2022, 39, 125001.	4.0	10
66	Random walk representations for spinor and vector propagators. Journal of Mathematical Physics, 1985, 26, 1600-1604.	1.1	9
67	Horizon surface gravity as 2D geodesic expansion. Classical and Quantum Gravity, 2008, 25, 195009.	4.0	9
68	The spin holonomy group in general relativity. Communications in Mathematical Physics, 1993, 155, 261-276.	2.2	8
69	Structure of Aristotelian electrodynamics. Physical Review D, 2015, 92, .	4.7	7
70	Phonon redshift and Hubble friction in an expanding BEC. SciPost Physics, 2021, 10, .	4.9	7
71	Blandford-Znajek process inÂvacuo and its holographic dual. Physical Review D, 2019, 99, .	4.7	6
72	EINSTEIN-Ã†THER GRAVITY: THEORY AND OBSERVATIONAL CONSTRAINTS. , 2008, , .		5

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73	Spin on a 4D Feynman Checkerboard. International Journal of Theoretical Physics, 2017, 56, 129-144.	1.2	3
74	Entropy from Carnot to Bekenstein. , 2019, , 73-87.		1
75	Horizon entropy and higher curvature equations of state. Journal of Physics: Conference Series, 2012, 405, 012031.	0.4	0
76	BLACK HOLE ENTROPY AND THE RENORMALIZATION GROUP. , 2015, , .		0