

Bernard F Whiting

List of Publications by Year in descending order

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75
papers

6,465
citations

126907

33
h-index

91884

69
g-index

77
all docs

77
docs citations

77
times ranked

5809
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. <i>Nature Photonics</i> , 2013, 7, 613-619.	31.4	825
2	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2018, 21, 3.	26.7	808
3	Black holes, gravitational waves and fundamental physics: a roadmap. <i>Classical and Quantum Gravity</i> , 2019, 36, 143001.	4.0	451
4	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2020, 23, 3.	26.7	447
5	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. <i>Living Reviews in Relativity</i> , 2016, 19, 1.	26.7	427
6	Near-Field Radiative Heat Transfer between Macroscopic Planar Surfaces. <i>Physical Review Letters</i> , 2011, 107, 014301.	7.8	300
7	Black hole evaporation without information loss. <i>Classical and Quantum Gravity</i> , 1994, 11, 621-647.	4.0	282
8	Self-force via a Green's function decomposition. <i>Physical Review D</i> , 2003, 67, .	4.7	258
9	Charged black hole in a grand canonical ensemble. <i>Physical Review D</i> , 1990, 42, 3376-3385.	4.7	233
10	Mode stability of the Kerr black hole. <i>Journal of Mathematical Physics</i> , 1989, 30, 1301-1305.	1.1	206
11	Action Principle and Partition Function for the Gravitational Field in Black-Hole Topologies. <i>Physical Review Letters</i> , 1988, 61, 1336-1339.	7.8	163
12	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. <i>Astrophysical Journal</i> , 2021, 909, 218.	4.5	144
13	First law of binary black hole mechanics in general relativity and post-Newtonian theory. <i>Physical Review D</i> , 2012, 85, .	4.7	120
14	High-order post-Newtonian fit of the gravitational self-force for circular orbits in the Schwarzschild geometry. <i>Physical Review D</i> , 2010, 81, .	4.7	113
15	Newtonian gravity measurements impose constraints on unification theories. <i>Nature</i> , 1981, 291, 636-638.	27.8	105
16	Thermodynamic ensembles and gravitation. <i>Classical and Quantum Gravity</i> , 1990, 7, 1433-1444.	4.0	93
17	Self-force of a scalar field for circular orbits about a Schwarzschild black hole. <i>Physical Review D</i> , 2003, 67, .	4.7	90
18	SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGO'S FIFTH AND VIRGO'S FIRST SCIENCE RUN. <i>Astrophysical Journal</i> , 2010, 715, 1453-1461.	4.5	90

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19	Post-Newtonian and numerical calculations of the gravitational self-force for circular orbits in the Schwarzschild geometry. <i>Physical Review D</i> , 2010, 81, .	4.7	86
20	Long gravitational-wave transients and associated detection strategies for a network of terrestrial interferometers. <i>Physical Review D</i> , 2011, 83, .	4.7	70
21	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017, 529, 1600209.	2.4	69
22	Approximate Killing vectors on S^2 . <i>Physical Review D</i> , 2007, 76, .	4.7	64
23	Prompt gravity signal induced by the 2011 Tohoku-Oki earthquake. <i>Nature Communications</i> , 2016, 7, 13349.	12.8	61
24	Finding high-order analytic post-Newtonian parameters from a high-precision numerical self-force calculation. <i>Physical Review D</i> , 2014, 89, .	4.7	60
25	Scalar field self-force effects on orbits about a Schwarzschild black hole. <i>Physical Review D</i> , 2004, 70, .	4.7	57
26	Reconstruction of black hole metric perturbations from the Weyl curvature. <i>Physical Review D</i> , 2002, 66, .	4.7	53
27	Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B. <i>Astrophysical Journal</i> , 2017, 841, 89.	4.5	52
28	Phase Effects in the Diffraction of Light: Beyond the Grating Equation. <i>Physical Review Letters</i> , 2005, 95, 013901.	7.8	51
29	Transient gravity perturbations induced by earthquake rupture. <i>Geophysical Journal International</i> , 2015, 201, 1416-1425.	2.4	47
30	Hamiltonian spacetime dynamics with a spherical null-dust shell. <i>Physical Review D</i> , 1998, 57, 2279-2298.	4.7	43
31	Hamiltonian thermodynamics of the Schwarzschild black hole. <i>Physical Review D</i> , 1995, 51, 5583-5599.	4.7	42
32	How effective is machine learning to detect long transient gravitational waves from neutron stars in a real search?. <i>Physical Review D</i> , 2019, 100, .	4.7	38
33	Density of states for the gravitational field in black-hole topologies. <i>Physical Review D</i> , 1987, 36, 3614-3625.	4.7	37
34	Experimental mathematics meets gravitational self-force. <i>Physical Review D</i> , 2015, 92, .	4.7	31
35	Metric reconstruction from Weyl scalars. <i>Classical and Quantum Gravity</i> , 2005, 22, S589-S604.	4.0	29
36	Linewidth-broadened Fabry-Pérot cavities within future gravitational wave detectors. <i>Classical and Quantum Gravity</i> , 2004, 21, S1031-S1036.	4.0	28

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37	Method to search for long duration gravitational wave transients from isolated neutron stars using the generalized frequency-Hough transform. <i>Physical Review D</i> , 2018, 98, .	4.7	28
38	Half-integral conservative post-Newtonian approximations in the redshift factor of black hole binaries. <i>Physical Review D</i> , 2014, 89, .	4.7	26
39	Gauge invariant perturbations of the Schwarzschild spacetime. <i>Classical and Quantum Gravity</i> , 2017, 34, 174001.	4.0	25
40	Mode stability on the real axis. <i>Journal of Mathematical Physics</i> , 2017, 58, .	1.1	23
41	Black holes and gravitational thermodynamics. <i>Classical and Quantum Gravity</i> , 1990, 7, 15-18.	4.0	21
42	High-order half-integral conservative post-Newtonian coefficients in the redshift factor of black hole binaries. <i>Physical Review D</i> , 2014, 90, .	4.7	21
43	Normal mode simulation of prompt elastogravity signals induced by an earthquake rupture. <i>Geophysical Journal International</i> , 2019, 216, 935-947.	2.4	20
44	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. <i>Progress of Theoretical and Experimental Physics</i> , 2022, 2022, .	6.6	20
45	Earthquake Early Warning Using Future Generation Gravity Strainmeters. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 10,889.	3.4	19
46	Energy spectrum of a quantum black hole. <i>Classical and Quantum Gravity</i> , 1992, 9, 457-473.	4.0	18
47	On the existence of radiation gauges in Petrov type II spacetimes. <i>Classical and Quantum Gravity</i> , 2007, 24, 2367-2388.	4.0	18
48	Controlling unboundedness in the gravitational path integral. <i>Physical Review D</i> , 1994, 49, 907-916.	4.7	12
49	Optimal combination of signals from colocated gravitational wave interferometers for use in searches for a stochastic background. <i>Physical Review D</i> , 2004, 70, .	4.7	11
50	CONSTRAINING THE R-MODE SATURATION AMPLITUDE FROM A HYPOTHETICAL DETECTION OF R-MODE GRAVITATIONAL WAVES FROM A NEWBORN NEUTRON STAR: SENSITIVITY STUDY. <i>Astrophysical Journal</i> , 2015, 810, 27.	4.5	11
51	Sensitivity study using machine learning algorithms on simulated r -mode gravitational wave signals from newborn neutron stars. <i>Physical Review D</i> , 2019, 99, .	4.7	11
52	Hamiltonian reduction for massive fields coupled to sources. <i>Journal of Mathematical Physics</i> , 1989, 30, 1877-1892.	1.1	10
53	Gravitational self-force regularization in the Regge-Wheeler and easy gauges. <i>Physical Review D</i> , 2019, 99, .	4.7	10
54	Supergravity black holes, Love numbers, and harmonic coordinates. <i>Physical Review D</i> , 2022, 105, .	4.7	10

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55	Field quantization for accelerated frames in flat and curved space-times. <i>Physical Review D</i> , 1986, 34, 1056-1071.	4.7	9
56	Memory effect or cosmic string? Classifying gravitational-wave bursts with Bayesian inference. <i>Physical Review D</i> , 2020, 102, .	4.7	8
57	Self-force of a static electric charge near a Schwarzschild star. <i>Physical Review D</i> , 2007, 76, .	4.7	7
58	Classical tools for antipodal identification in Reissner-Nordström spacetime. <i>Classical and Quantum Gravity</i> , 2020, 37, 185006.	4.0	6
59	Compatibility Complex for Black Hole Spacetimes. <i>Communications in Mathematical Physics</i> , 2021, 384, 1585-1614.	2.2	6
60	First-order velocity memory effect from compact binary coalescing sources. <i>Physical Review D</i> , 2021, 104, .	4.7	6
61	Raising and lowering operators of spin-weighted spheroidal harmonics. <i>General Relativity and Gravitation</i> , 2016, 48, 1.	2.0	5
62	Positive Energy Functional for Massless Scalars in Rotating Black Hole Backgrounds of Maximal Ungauged Supergravity. <i>Physical Review Letters</i> , 2020, 124, 231102.	7.8	5
63	The role of gravitation in thermal physics (and thermo field theory). <i>Physica A: Statistical Mechanics and Its Applications</i> , 1989, 158, 437-447.	2.6	4
64	High-Accuracy Comparison Between the Post-Newtonian and Self-Force Dynamics of Black-Hole Binaries. , 2009, , 415-442.		4
65	RADIATION REACTION AND THE PRINCIPLE OF EQUIVALENCE. <i>International Journal of Modern Physics D</i> , 2003, 12, 1709-1713.	2.1	3
66	Identifying the singular field for self-force evaluation. <i>Classical and Quantum Gravity</i> , 2005, 22, S661-S679.	4.0	3
67	Summary of session B3: analytic approximations, perturbation methods and their applications. <i>Classical and Quantum Gravity</i> , 2008, 25, 114020.	4.0	3
68	The Relation of Solutions of Different ODEs is a Commutation Relation. <i>North-Holland Mathematics Studies</i> , 1984, 92, 561-570.	0.2	2
69	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
70	Noise Characterization for Laser Interferometer Gravitational Wave Detectors. <i>General Relativity and Gravitation</i> , 2000, 32, 411-423.	2.0	1
71	On the geometry of Petrov type II spacetimes. <i>Classical and Quantum Gravity</i> , 2021, 38, 135023.	4.0	1
72	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. , 2016, 19, 1.		1

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73	Stability of Black Holes. , 1999, , 17-32.		1
74	Connection between Einstein Equations, Nonlinear Sigma Models, and Self-Dual Yang-Mills Theory. Annals of the New York Academy of Sciences, 1986, 470, 389-389.	3.8	0
75	NEW RESULTS IN BLACK HOLE PHYSICS. International Journal of Modern Physics D, 1994, 03, 317-321.	2.1	0