Giles D Hammond

List of Publications by Year
in descending order

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100	22,826	38742 50	42399 92
papers	citations	h-index	g-index

100	100	100	13038
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A MEMS gravimeter with multi-axis gravitational sensitivity. , 2022, , .		2
2	A Simulation Study of the Temperature Sensitivity and Impact of Fabrication Tolerances on the Performance of a Geometric Anti-Spring Based MEMS Gravimeter. , 2022, , .		1
3	Dual-band single-pixel telescope. Optics Express, 2020, 28, 18180.	3.4	14
4	Improved fused silica fibres for the advanced LIGO monolithic suspensions. Classical and Quantum Gravity, 2019, 36, 185018.	4.0	6
5	Microelectromechanical system gravimeters as a new tool for gravity imaging. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170291.	3.4	11
6	Prospects for Detecting Gravitational Waves at 5ÂHz with Ground-Based Detectors. Physical Review Letters, 2018, 120, 141102.	7.8	47
7	A High Stability Optical Shadow Sensor With Applications for Precision Accelerometers. IEEE Sensors Journal, 2018, 18, 4108-4116.	4.7	14
8	Upper limits on the mechanical loss of silicate bonds in a silicon tuning fork oscillator. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2186-2191.	2.1	4
9	Development of a pulling machine to produce micron diameter fused silica fibres for use in prototype advanced gravitational wave detectors. Classical and Quantum Gravity, 2018, 35, 165004.	4.0	0
10	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	7.8	1,473
11	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.	7.8	85
12	MEMS gravity sensors for imaging density anomalies. , 2018, , .		1
13	Effects of waveform model systematics on the interpretation of GW150914. Classical and Quantum Gravity, 2017, 34, 104002.	4.0	98
14	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121101.	7.8	194
15	Directional Limits on Persistent Gravitational Waves from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121102.	7.8	84
16	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. Astrophysical Journal, 2017, 839, 12.	4.5	131
17	The basic physics of the binary black hole merger GW150914. Annalen Der Physik, 2017, 529, 1600209.	2.4	69
18	Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data. Astrophysical Journal, 2017, 847, 47.	4.5	46

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19	A gravitational-wave standard siren measurement of the Hubble constant. Nature, 2017, 551, 85-88.	27.8	674
20	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. Astrophysical Journal Letters, 2017, 848, L13.	8.3	2,314
21	Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B. Astrophysical Journal, 2017, 841, 89.	4.5	52
22	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. Physical Review Letters, 2017, 118, 151102.	7.8	24
23	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 851, L16.	8.3	189
24	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated withÂGW170817. Astrophysical Journal Letters, 2017, 850, L39.	8.3	156
25	Effects of transients in LIGO suspensions on searches for gravitational waves. Review of Scientific Instruments, 2017, 88, 124501.	1.3	6
26	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. Physical Review Letters, 2017, 118, 221101.	7.8	1,987
27	On the Progenitor of Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 850, L40.	8.3	73
28	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	8.3	968
29	Coatings and surface treatments for enhanced performance suspensions for future gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 235012.	4.0	4
30	Sub-shot-noise shadow sensing with quantum correlations. Optics Express, 2017, 25, 21826.	3.4	14
31	Field Tests of a Portable MEMS Gravimeter. Sensors, 2017, 17, 2571.	3.8	28
32	Quantum position measurement of a shadow: beating the classical limit. , 2017, , .		0
33	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. Astrophysical Journal Letters, 2016, 833, L1.	8.3	230
34	Measurement of the Earth tides with a MEMS gravimeter. Nature, 2016, 531, 614-617.	27.8	237
35	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STARâ€“BLACK HOLE MERGERS FROM ADVANCED LIGOâ€™S FIRST OBSERVING RUN. Astrophysical Journal Letters, 2016, 832, L21.	8.3	146
36	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. Physical Review Letters, 2016, 116, 131102.	7.8	269

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37	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. Physical Review Letters, 2016, 116, 131103.	7.8	466
38	SUPPLEMENT: â€œLOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914â€•(2016, ApJL, 826, L13). Astrophysical Journal, Supplement Series, 2016, 225, 8.	7.7	44
39	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	7.8	1,224
40	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	7.8	673
41	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	7.8	2,701
42	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.	8.3	633
43	Indium joints for cryogenic gravitational wave detectors. Classical and Quantum Gravity, 2015, 32, 245013.	4.0	5
44	The next detectors for gravitational wave astronomy. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1.	5.1	23
45	Low-temperature mechanical dissipation of thermally evaporated indium film for use in interferometric gravitational wave detectors. Classical and Quantum Gravity, 2015, 32, 115014.	4.0	3
46	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	4.0	1,029
47	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. Astrophysical Journal, 2015, 813, 39.	4.5	66
48	Enhanced characteristics of fused silica fibers using laser polishing. Classical and Quantum Gravity, 2014, 31, 105006.	4.0	15
49	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. Astrophysical Journal, Supplement Series, 2014, 211, 7.	7.7	57
50	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. Physical Review Letters, 2014, 112, 131101.	7.8	68
51	Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009â€“2010 LIGO and Virgo Data. Physical Review Letters, 2014, 113, 231101.	7.8	86
52	Thermal noise, suspensions and new materials. , 2014, , .		1
53	Advanced technologies for future ground-based, laser-interferometric gravitational wave detectors. Journal of Modern Optics, 2014, 61, S10-S45.	1.3	4
54	Experimental results for nulling the effective thermal expansion coefficient of fused silica fibres under a static stress. Classical and Quantum Gravity, 2014, 31, 065010.	4.0	12

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55	Design of a speed meter interferometer proof-of-principle experiment. Classical and Quantum Gravity, 2014, 31, 215009.	4.0	29
56	A measurement of noise created by fluctuating electrostatic charges on dielectric surfaces using a torsion balance. Classical and Quantum Gravity, 2014, 31, 175007.	4.0	4
57	Implementation of an $mathcal{F}$-statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. Classical and Quantum Gravity, 2014, 31, 165014.	4.0	34
58	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. Astrophysical Journal, 2014, 785, 119.	4.5	125
59	The NINJA-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. Classical and Quantum Gravity, 2014, 31, 115004.	4.0	42
60	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	31.4	825
61	Investigation of mechanical losses of thin silicon flexures at low temperatures. Classical and Quantum Gravity, 2013, 30, 115008.	4.0	25
62	Reducing the suspension thermal noise of advanced gravitational wave detectors. Classical and Quantum Gravity, 2012, 29, 124009.	4.0	21
63	Status of the AEI 10 m prototype. Classical and Quantum Gravity, 2012, 29, 145005.	4.0	4
64	Update on quadruple suspension design for Advanced LIGO. Classical and Quantum Gravity, 2012, 29, 235004.	4.0	123
65	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. Astrophysical Journal, Supplement Series, 2012, 203, 28.	7.7	62
66	The characterization of Virgo data and its impact on gravitational-wave searches. Classical and Quantum Gravity, 2012, 29, 155002.	4.0	73
67	The AEI 10 m Prototype Interferometer frequency control using the reference cavity and its angular control. Journal of Physics: Conference Series, 2012, 363, 012012.	0.4	1
68	SEARCH FOR GRAVITATIONAL WAVES ASSOCIATED WITH GAMMA-RAY BURSTS DURING LIGO SCIENCE RUN 6 AND VIRGO SCIENCE RUNS 2 AND 3. Astrophysical Journal, 2012, 760, 12.	4.5	104
69	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. Astrophysical Journal, 2012, 755, 2.	4.5	60
70	A study of the fracture mechanisms in pristine silica fibres utilising high speed imaging techniques. Journal of Non-Crystalline Solids, 2012, 358, 1699-1709.	3.1	15
71	Scientific objectives of Einstein Telescope. Classical and Quantum Gravity, 2012, 29, 124013.	4.0	355
72	Design of the 10 m AEI prototype facility for interferometry studies. Applied Physics B: Lasers and Optics, 2012, 106, 551-557.	2.2	13

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73	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. Astrophysical Journal Letters, 2011, 734, L35.	8.3	55
74	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. Astrophysical Journal, 2011, 737, 93.	4.5	89
75	Mechanical loss of calcium fluoride at cryogenic temperatures. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 2719-2723.	1.8	8
76	Charge mitigation techniques using glow and corona discharges for advanced gravitational wave detectors. Classical and Quantum Gravity, 2011, 28, 215016.	4.0	5
77	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. Physical Review Letters, 2011, 107, 271102.	7.8	94
78	A gravitational wave observatory operating beyond the quantum shot-noise limit. Nature Physics, 2011, 7, 962-965.	16.7	716
79	SEARCH FOR GRAVITATIONAL-WAVE BURSTS ASSOCIATED WITH GAMMA-RAY BURSTS USING DATA FROM LIGO SCIENCE RUN 5 AND VIRGO SCIENCE RUN 1. Astrophysical Journal, 2010, 715, 1438-1452.	4.5	60
80	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. Astrophysical Journal, 2010, 722, 1504-1513.	4.5	104
81	Re-evaluation of the mechanical loss factor of hydroxide-catalysis bonds and its significance for the next generation of gravitational wave detectors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 3993-3998.	2.1	28
82	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. Astrophysical Journal, 2010, 713, 671-685.	4.5	155
83	The Einstein Telescope: a third-generation gravitational wave observatory. Classical and Quantum Gravity, 2010, 27, 194002.	4.0	1,211
84	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. Classical and Quantum Gravity, 2010, 27, 173001.	4.0	956
85	SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGO'S FIFTH AND VIRGO'S FIRST SCIENCE RUN. Astrophysical Journal, 2010, 715, 1453-1461.	4.5	90
86	GRAVITATIONAL WAVE ASTRONOMY: AN EXPERIMENTAL OVERVIEW. , 2010, , .		0
87	GAUGE: the GrAnd Unification and Gravity Explorer. Experimental Astronomy, 2009, 23, 549-572.	3.7	15
88	An upper limit on the stochastic gravitational-wave background of cosmological origin. Nature, 2009, 460, 990-994.	27.8	303
89	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. Astrophysical Journal, 2009, 701, L68-L74.	4.5	45
90	Development of a second generation torsion balance based on a spherical superconducting suspension. Review of Scientific Instruments, 2008, 79, 025103.	1.3	8

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91	Noise analysis of a Howland current source. International Journal of Electronics, 2008, 95, 351-359.	1.4	9
92	New Constraints on Short-Range Forces Coupling Mass to Intrinsic Spin. Physical Review Letters, 2007, 98, 081101.	7.8	65
93	pH-Dependent gold nanoparticle self-organization on functionalized Si/SiO2surfaces. Journal of Experimental Nanoscience, 2006, 1, 333-353.	2.4	31
94	Novel torsion balance based on a spherical superconducting suspension. Review of Scientific Instruments, 2004, 75, 955-961.	1.3	10
95	The Feasibility of Testing the Inverse Square Law of Gravitation at Newtonian Strength and at Mass Separations of 1 Î¼m. General Relativity and Gravitation, 2004, 36, 503-521.	2.0	3
96	Low-frequency active vibration isolation for advanced LIGO. , 2004, 5500, 194.		14
97	Seismic isolation for Advanced LIGO. Classical and Quantum Gravity, 2002, 19, 1591-1597.	4.0	59
98	The torsion balance as a tool for geophysical prospecting. Geophysics, 2001, 66, 527-534.	2.6	2
99	Photolithographic manufacture of a superconducting levitation coil on a spherical substrate. Precision Engineering, 2000, 24, 139-145.	3.4	4
100	A preliminary study of a torsion balance based on a spherical superconducting suspension. Measurement Science and Technology, 1999, 10, 508-513.	2.6	11