Giles D Hammond

List of Publications by Year
in descending order

100 papers	22,826 citations	50 h-index	92 g-index
100 all docs	100 docs citations	100 times ranked	13038 citing authors

38742

42399

#	Article	IF	Citations
1	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	7.8	2,701
2	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
3	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
4	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	7.8	1,473
5	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	7.8	1,224
6	The Einstein Telescope: a third-generation gravitational wave observatory. Classical and Quantum Gravity, 2010, 27, 194002.	4.0	1,211
7	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	4.0	1,029
8	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	8.3	968
9	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
10	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	31.4	825
11	A gravitational wave observatory operating beyond the quantum shot-noise limit. Nature Physics, 2011, 7, 962-965.	16.7	716
12	A gravitational-wave standard siren measurement of the Hubble constant. Nature, 2017, 551, 85-88.	27.8	674
13	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	7.8	673
14	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.	8.3	633
15	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. Physical Review Letters, 2016, 116, 131103.	7.8	466
16	Scientific objectives of Einstein Telescope. Classical and Quantum Gravity, 2012, 29, 124013.	4.0	355
17	An upper limit on the stochastic gravitational-wave background of cosmological origin. Nature, 2009, 460, 990-994.	27.8	303
18	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. Physical Review Letters, 2016, 116, 131102.	7.8	269

#	Article	IF	Citations
19	Measurement of the Earth tides with a MEMS gravimeter. Nature, 2016, 531, 614-617.	27.8	237
20	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. Astrophysical Journal Letters, 2016, 833, L1.	8.3	230
21	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121101.	7.8	194
22	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
23	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated withÂGW170817. Astrophysical Journal Letters, 2017, 850, L39.	8.3	156
24	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. Astrophysical Journal, 2010, 713, 671-685.	4.5	155
25	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
26	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. Astrophysical Journal, 2017, 839, 12.	4.5	131
27	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. Astrophysical Journal, 2014, 785, 119.	4.5	125
28	Update on quadruple suspension design for Advanced LIGO. Classical and Quantum Gravity, 2012, 29, 235004.	4.0	123
29	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. Astrophysical Journal, 2010, 722, 1504-1513.	4.5	104
30	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
31	Effects of waveform model systematics on the interpretation of GW150914. Classical and Quantum Gravity, 2017, 34, 104002.	4.0	98
32	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. Physical Review Letters, 2011, 107, 271102.	7.8	94
33	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
34	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. Astrophysical Journal, 2011, 737, 93.	4.5	89
35	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
36	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.	7.8	85

#	ARTICLE	IF	CITATIONS
37	Directional Limits on Persistent Gravitational Waves from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121102.	7.8	84
38	The characterization of Virgo data and its impact on gravitational-wave searches. Classical and Quantum Gravity, 2012, 29, 155002.	4.0	73
39	On the Progenitor of Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 850, L40.	8.3	73
40	The basic physics of the binary black hole merger GW150914. Annalen Der Physik, 2017, 529, 1600209.	2.4	69
41	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. Physical Review Letters, 2014, 112, 131101.	7.8	68
42	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. Astrophysical Journal, 2015, 813, 39.	4.5	66
43	New Constraints on Short-Range Forces Coupling Mass to Intrinsic Spin. Physical Review Letters, 2007, 98, 081101.	7.8	65
44	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. Astrophysical Journal, Supplement Series, 2012, 203, 28.	7.7	62
45	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
46	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. Astrophysical Journal, 2012, 755, 2.	4.5	60
47	Seismic isolation for Advanced LIGO. Classical and Quantum Gravity, 2002, 19, 1591-1597.	4.0	59
48	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. Astrophysical Journal, Supplement Series, 2014, 211, 7.	7.7	57
49	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. Astrophysical Journal Letters, 2011, 734, L35.	8.3	55
50	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
51	Prospects for Detecting Gravitational Waves at 5ÂHz with Ground-Based Detectors. Physical Review Letters, 2018, 120, 141102.	7.8	47
52	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
53	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. Astrophysical Journal, 2009, 701, L68-L74.	4.5	45
54	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

#	Article	IF	Citations
55	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
56	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
57	pH-Dependent gold nanoparticle self-organization on functionalized Si/SiO2surfaces. Journal of Experimental Nanoscience, 2006, 1, 333-353.	2.4	31
58	Design of a speed meter interferometer proof-of-principle experiment. Classical and Quantum Gravity, 2014, 31, 215009.	4.0	29
59	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
60	Field Tests of a Portable MEMS Gravimeter. Sensors, 2017, 17, 2571.	3.8	28
61	Investigation of mechanical losses of thin silicon flexures at low temperatures. Classical and Quantum Gravity, 2013, 30, 115008.	4.0	25
62	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. Physical Review Letters, 2017, 118, 151102.	7.8	24
63	The next detectors for gravitational wave astronomy. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1.	5.1	23
64	Reducing the suspension thermal noise of advanced gravitational wave detectors. Classical and Quantum Gravity, 2012, 29, 124009.	4.0	21
65	GAUGE: the GrAnd Unification and Gravity Explorer. Experimental Astronomy, 2009, 23, 549-572.	3.7	15
66	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
67	Enhanced characteristics of fused silica fibers using laser polishing. Classical and Quantum Gravity, 2014, 31, 105006.	4.0	15
68	Low-frequency active vibration isolation for advanced LIGO. , 2004, 5500, 194.		14
69	Sub-shot-noise shadow sensing with quantum correlations. Optics Express, 2017, 25, 21826.	3.4	14
70	A High Stability Optical Shadow Sensor With Applications for Precision Accelerometers. IEEE Sensors Journal, 2018, 18, 4108-4116.	4.7	14
71	Dual-band single-pixel telescope. Optics Express, 2020, 28, 18180.	3.4	14
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

#	Article	IF	Citations
73	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
74	A preliminary study of a torsion balance based on a spherical superconducting suspension. Measurement Science and Technology, 1999, 10, 508-513.	2.6	11
75	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
76	Novel torsion balance based on a spherical superconducting suspension. Review of Scientific Instruments, 2004, 75, 955-961.	1.3	10
77	Noise analysis of a Howland current source. International Journal of Electronics, 2008, 95, 351-359.	1.4	9
78	Development of a second generation torsion balance based on a spherical superconducting suspension. Review of Scientific Instruments, 2008, 79, 025103.	1.3	8
79	Mechanical loss of calcium fluoride at cryogenic temperatures. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 2719-2723.	1.8	8
80	Effects of transients in LIGO suspensions on searches for gravitational waves. Review of Scientific Instruments, 2017, 88, 124501.	1.3	6
81	Improved fused silica fibres for the advanced LIGO monolithic suspensions. Classical and Quantum Gravity, 2019, 36, 185018.	4.0	6
82	Charge mitigation techniques using glow and corona discharges for advanced gravitational wave detectors. Classical and Quantum Gravity, 2011, 28, 215016.	4.0	5
83	Indium joints for cryogenic gravitational wave detectors. Classical and Quantum Gravity, 2015, 32, 245013.	4.0	5
84	Photolithographic manufacture of a superconducting levitation coil on a spherical substrate. Precision Engineering, 2000, 24, 139-145.	3.4	4
85	Status of the AEI 10 m prototype. Classical and Quantum Gravity, 2012, 29, 145005.	4.0	4
86	Advanced technologies for future ground-based, laser-interferometric gravitational wave detectors. Journal of Modern Optics, 2014, 61, S10-S45.	1.3	4
87	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
88	Coatings and surface treatments for enhanced performance suspensions for future gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 235012.	4.0	4
89	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
90	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

#	Article	IF	Citations
91	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
92	The torsion balance as a tool for geophysical prospecting. Geophysics, 2001, 66, 527-534.	2.6	2
93	A MEMS gravimeter with multi-axis gravitational sensitivity. , 2022, , .		2
94	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
95	Thermal noise, suspensions and new materials. , 2014, , .		1
96	MEMS gravity sensors for imaging density anomalies. , 2018, , .		1
97	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
98	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
99	GRAVITATIONAL WAVE ASTRONOMY: AN EXPERIMENTAL OVERVIEW. , 2010, , .		0
100	Quantum position measurement of a shadow: beating the classical limit. , 2017, , .		0