Giles D Hammond

List of Publications by Citations

94 papers	17,101 citations	47 h-index	100 g-index
100 ext. papers	20,031 ext. citations	6.4 avg, IF	5.4 L-index

#	Paper	IF	Citations
94	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. *Physical Review Letters*, **2016**, 116, 241103	7.4	2136
93	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. *Astrophysical Journal Letters*, **2017**, 848, L13	7.9	1614
92	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. *Physical Review Letters*, **2017**, 118, 221101	7.4	1609
91	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. *Classical and Quantum Gravity*, **2010**, 27, 173001	3.3	869
90	GW170817: Measurements of Neutron Star Radii and Equation of State. *Physical Review Letters*, **2018**, 121, 161101	7.4	867
89	Tests of General Relativity with GW150914. *Physical Review Letters*, **2016**, 116, 221101	7.4	837
88	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. *Astrophysical Journal Letters*, **2017**, 851, L35	7.9	809
87	Characterization of the LIGO detectors during their sixth science run. *Classical and Quantum Gravity* , **2015**, 32, 115012	3.3	790
86	The Einstein Telescope: a third-generation gravitational wave observatory. *Classical and Quantum Gravity*, **2010**, 27, 194002	3.3	675
85	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. *Nature Photonics*, **2013**, 7, 613-619	33.9	572
84	A gravitational wave observatory operating beyond the quantum shot-noise limit. *Nature Physics*, **2011**, 7, 962-965	16.2	554
83	Properties of the Binary Black Hole Merger GW150914. *Physical Review Letters*, **2016**, 116, 241102	7.4	515
82	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. *Astrophysical Journal Letters*, **2016**, 818, L22	7.9	512
81	A gravitational-wave standard siren measurement of the Hubble constant. *Nature*, **2017**, 551, 85-88	50.4	413
80	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. *Physical Review Letters*, **2016**, 116, 131103	7.4	328
79	An upper limit on the stochastic gravitational-wave background of cosmological origin. *Nature*, **2009**, 460, 990-4	50.4	267
78	Scientific objectives of Einstein Telescope. *Classical and Quantum Gravity*, **2012**, 29, 124013	3.3	256

77	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. *Astrophysical Journal Letters*, **2016**, 833, L1	7.9	209
76	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. *Physical Review Letters*, **2016**, 116, 131102	7.4	188
75	Measurement of the Earth tides with a MEMS gravimeter. *Nature*, **2016**, 531, 614-7	50.4	153
74	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. *Astrophysical Journal*, **2010**, 713, 671-685	4.7	140
73	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. *Physical Review Letters*, **2017**, 118, 121101	7.4	137
72	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. *Astrophysical Journal Letters*, **2017**, 851, L16	7.9	133
71	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STAR–BLACK HOLE MERGERS FROM ADVANCED LIGO'S FIRST OBSERVING RUN. *Astrophysical Journal Letters*, **2016**, 832, L21	7.9	130
70	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. *Astrophysical Journal Letters*, **2017**, 850, L39	7.9	127
69	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. *Astrophysical Journal*, **2014**, 785, 119	4.7	109
68	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. *Astrophysical Journal* , **2017**, 839, 12	4.7	107
67	Update on quadruple suspension design for Advanced LIGO. *Classical and Quantum Gravity*, **2012**, 29, 235004	3.3	97
66	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. *Astrophysical Journal*, **2010**, 722, 1504-1513	4.7	95
65	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	4.7	94
64	Directional limits on persistent gravitational waves using LIGO S5 science data. *Physical Review Letters*, **2011**, 107, 271102	7.4	85
63	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	4.7	79
62	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. *Astrophysical Journal*, **2011**, 737, 93	4.7	75
61	Effects of waveform model systematics on the interpretation of GW150914. *Classical and Quantum Gravity*, **2017**, 34, 104002	3.3	74
60	Improved upper limits on the stochastic gravitational-wave background from 2009-2010 LIGO and Virgo data. *Physical Review Letters*, **2014**, 113, 231101	7.4	74

59	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. *Physical Review Letters*, **2017**, 118, 121102	7.4	65
58	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. *Physical Review Letters*, **2018**, 120, 201102	7.4	60
57	Constraints on cosmic strings from the LIGO-Virgo gravitational-wave detectors. *Physical Review Letters*, **2014**, 112, 131101	7.4	59
56	The characterization of Virgo data and its impact on gravitational-wave searches. *Classical and Quantum Gravity*, **2012**, 29, 155002	3.3	59
55	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. *Astrophysical Journal*, **2015**, 813, 39	4.7	58
54	New constraints on short-range forces coupling mass to intrinsic spin. *Physical Review Letters*, **2007**, 98, 081101	7.4	58
53	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. *Astrophysical Journal, Supplement Series*, **2012**, 203, 28	8	57
52	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	4.7	54
51	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. *Astrophysical Journal* , **2012**, 755, 2	4.7	53
50	Seismic isolation for Advanced LIGO. *Classical and Quantum Gravity*, **2002**, 19, 1591-1597	3.3	52
49	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. *Astrophysical Journal, Supplement Series*, **2014**, 211, 7	8	51
48	On the Progenitor of Binary Neutron Star Merger GW170817. *Astrophysical Journal Letters*, **2017**, 850, L40	7.9	50
47	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. *Astrophysical Journal Letters*, **2011**, 734, L35	7.9	47
46	The basic physics of the binary black hole merger GW150914. *Annalen Der Physik*, **2017**, 529, 1600209	2.6	45
45	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	4.7	42
44	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. *Astrophysical Journal*, **2009**, 701, L68-L74	4.7	40
43	SUPPLEMENT: □OCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914□(2016, ApJL, 826, L13). *Astrophysical Journal, Supplement Series*, **2016**, 225, 8	8	38
42	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	4.7	35

41	The NINJA-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. *Classical and Quantum Gravity*, **2014**, 31, 115004	3.3	34
40	Prospects for Detecting Gravitational Waves at 5 Hz with Ground-Based Detectors. *Physical Review Letters*, **2018**, 120, 141102	7.4	33
39	Implementation of an $mathcal{F}$-statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. *Classical and Quantum Gravity*, **2014**, 31, 165014	3.3	27
38	pH-Dependent gold nanoparticle self-organization on functionalized Si/SiO2 surfaces. *Journal of Experimental Nanoscience*, **2006**, 1, 333-353	1.9	27
37	Design of a speed meter interferometer proof-of-principle experiment. *Classical and Quantum Gravity*, **2014**, 31, 215009	3.3	26
36	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	2.3	25
35	Investigation of mechanical losses of thin silicon flexures at low temperatures. *Classical and Quantum Gravity*, **2013**, 30, 115008	3.3	22
34	Reducing the suspension thermal noise of advanced gravitational wave detectors. *Classical and Quantum Gravity*, **2012**, 29, 124009	3.3	20
33	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. *Physical Review Letters*, **2017**, 118, 151102	7.4	18
32	Field Tests of a Portable MEMS Gravimeter. *Sensors*, **2017**, 17,	3.8	17
31	The next detectors for gravitational wave astronomy. *Science China: Physics, Mechanics and Astronomy*, **2015**, 58, 1	3.6	14
30	Enhanced characteristics of fused silica fibers using laser polishing. *Classical and Quantum Gravity*, **2014**, 31, 105006	3.3	14
29	A study of the fracture mechanisms in pristine silica fibres utilising high speed imaging techniques. *Journal of Non-Crystalline Solids*, **2012**, 358, 1699-1709	3.9	14
28	GAUGE: the GrAnd Unification and Gravity Explorer. *Experimental Astronomy*, **2009**, 23, 549-572	1.3	14
27	Design of the 10 m AEI prototype facility for interferometry studies. *Applied Physics B: Lasers and Optics*, **2012**, 106, 551-557	1.9	12
26	Sub-shot-noise shadow sensing with quantum correlations. *Optics Express*, **2017**, 25, 21826-21840	3.3	11
25	A preliminary study of a torsion balance based on a spherical superconducting suspension. *Measurement Science and Technology*, **1999**, 10, 508-513	2	11
24	Novel torsion balance based on a spherical superconducting suspension. *Review of Scientific Instruments*, **2004**, 75, 955-961	1.7	10

23	Dual-band single-pixel telescope. *Optics Express*, **2020**, 28, 18180-18188	3.3	10
22	Experimental results for nulling the effective thermal expansion coefficient of fused silica fibres under a static stress. *Classical and Quantum Gravity*, **2014**, 31, 065010	3.3	9
21	Low-frequency active vibration isolation for advanced LIGO **2004**, 5500, 194		8
20	A High Stability Optical Shadow Sensor With Applications for Precision Accelerometers. *IEEE Sensors Journal*, **2018**, 18, 4108-4116	4	7
19	Development of a second generation torsion balance based on a spherical superconducting suspension. *Review of Scientific Instruments*, **2008**, 79, 025103	1.7	7
18	Noise analysis of a Howland current source. *International Journal of Electronics*, **2008**, 95, 351-359	1.2	7
17	Mechanical loss of calcium fluoride at cryogenic temperatures. *Physica Status Solidi (A) Applications and Materials Science*, **2011**, 208, 2719-2723	1.6	6
16	Microelectromechanical system gravimeters as a new tool for gravity imaging. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2018**, 376,	3	5
15	Indium joints for cryogenic gravitational wave detectors. *Classical and Quantum Gravity*, **2015**, 32, 245013	3.3	5
14	Improved fused silica fibres for the advanced LIGO monolithic suspensions. *Classical and Quantum Gravity*, **2019**, 36, 185018	3.3	4
13	Effects of transients in LIGO suspensions on searches for gravitational waves. *Review of Scientific Instruments*, **2017**, 88, 124501	1.7	4
12	Advanced technologies for future ground-based, laser-interferometric gravitational wave detectors. *Journal of Modern Optics*, **2014**, 61, S10-S45	1.1	4
11	Low-temperature mechanical dissipation of thermally evaporated indium film for use in interferometric gravitational wave detectors. *Classical and Quantum Gravity*, **2015**, 32, 115014	3.3	3
10	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	2.3	3
9	Charge mitigation techniques using glow and corona discharges for advanced gravitational wave detectors. *Classical and Quantum Gravity*, **2011**, 28, 215016	3.3	3
8	Photolithographic manufacture of a superconducting levitation coil on a spherical substrate. *Precision Engineering*, **2000**, 24, 139-145	2.9	3
7	A measurement of noise created by fluctuating electrostatic charges on dielectric surfaces using a torsion balance. *Classical and Quantum Gravity*, **2014**, 31, 175007	3.3	2
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4	The Feasibility of Testing the Inverse Square Law of Gravitation at Newtonian Strength and at Mass Separations of 1 Ħm. *General Relativity and Gravitation*, **2004**, 36, 503-521	2.3	2
3	The torsion balance as a tool for geophysical prospecting. *Geophysics*, **2001**, 66, 527-534	3.1	1
2	MEMS gravity sensors for imaging density anomalies **2018**,		1
1	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	3.3	