

# Giles D Hammond

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Dual-band single-pixel telescope. <i>Optics Express</i> , <b>2020</b> , 28, 18180-18188	3.3	10
93	Improved fused silica fibres for the advanced LIGO monolithic suspensions. <i>Classical and Quantum Gravity</i> , <b>2019</b> , 36, 185018	3.3	4
92	Microelectromechanical system gravimeters as a new tool for gravity imaging. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2018</b> , 376,	3	5
91	Prospects for Detecting Gravitational Waves at 5Hz with Ground-Based Detectors. <i>Physical Review Letters</i> , <b>2018</b> , 120, 141102	7.4	33
90	A High Stability Optical Shadow Sensor With Applications for Precision Accelerometers. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 4108-4116	4	7
89	Upper limits on the mechanical loss of silicate bonds in a silicon tuning fork oscillator. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2018</b> , 382, 2186-2191	2.3	3
88	MEMS gravity sensors for imaging density anomalies <b>2018</b> ,		1
87	Development of a pulling machine to produce micron diameter fused silica fibres for use in prototype advanced gravitational wave detectors. <i>Classical and Quantum Gravity</i> , <b>2018</b> , 35, 165004	3.3	
86	GW170817: Measurements of Neutron Star Radii and Equation of State. <i>Physical Review Letters</i> , <b>2018</b> , 121, 161101	7.4	867
85	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , <b>2018</b> , 120, 201102	7.4	60
84	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , <b>2017</b> , 34, 104002	3.3	74
83	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , <b>2017</b> , 118, 121101	7.4	137
82	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , <b>2017</b> , 118, 121102	7.4	65
81	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , <b>2017</b> , 839, 12	4.7	107
80	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , <b>2017</b> , 529, 1600209	2.6	45
79	Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data. <i>Astrophysical Journal</i> , <b>2017</b> , 847, 47	4.7	35
78	A gravitational-wave standard siren measurement of the Hubble constant. <i>Nature</i> , <b>2017</b> , 551, 85-88	50.4	413

77	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 848, L13	7.9	1614
76	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> , <b>2017</b> , 841, 89	4.7	42
75	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. <i>Physical Review Letters</i> , <b>2017</b> , 118, 151102	7.4	18
74	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 851, L16	7.9	133
73	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 850, L39	7.9	127
72	Effects of transients in LIGO suspensions on searches for gravitational waves. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 124501	1.7	4
71	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. <i>Physical Review Letters</i> , <b>2017</b> , 118, 221101	7.4	1609
70	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 850, L40	7.9	50
69	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 851, L35	7.9	809
68	Coatings and surface treatments for enhanced performance suspensions for future gravitational wave detectors. <i>Classical and Quantum Gravity</i> , <b>2017</b> , 34, 235012	3.3	2
67	Sub-shot-noise shadow sensing with quantum correlations. <i>Optics Express</i> , <b>2017</b> , 25, 21826-21840	3.3	11
66	Field Tests of a Portable MEMS Gravimeter. <i>Sensors</i> , <b>2017</b> , 17,	3.8	17
65	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STARBLACK HOLE MERGERS FROM ADVANCED LIGO'S FIRST OBSERVING RUN. <i>Astrophysical Journal Letters</i> , <b>2016</b> , 832, L21	7.9	130
64	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , <b>2016</b> , 116, 131102	7.4	188
63	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , <b>2016</b> , 116, 131103	7.4	328
62	SUPPLEMENT: LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914[(2016, ApJL, 826, L13). <i>Astrophysical Journal, Supplement Series</i> , <b>2016</b> , 225, 8	8	38
61	Tests of General Relativity with GW150914. <i>Physical Review Letters</i> , <b>2016</b> , 116, 221101	7.4	837
60	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , <b>2016</b> , 116, 241102	7.4	515

59	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. <i>Physical Review Letters</i> , <b>2016</b> , 116, 241103	7.4	2136
58	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , <b>2016</b> , 818, L22	7.9	512
57	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. <i>Astrophysical Journal Letters</i> , <b>2016</b> , 833, L1	7.9	209
56	Measurement of the Earth tides with a MEMS gravimeter. <i>Nature</i> , <b>2016</b> , 531, 614-7	50.4	153
55	Low-temperature mechanical dissipation of thermally evaporated indium film for use in interferometric gravitational wave detectors. <i>Classical and Quantum Gravity</i> , <b>2015</b> , 32, 115014	3.3	3
54	Characterization of the LIGO detectors during their sixth science run. <i>Classical and Quantum Gravity</i> , <b>2015</b> , 32, 115012	3.3	790
53	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. <i>Astrophysical Journal</i> , <b>2015</b> , 813, 39	4.7	58
52	Indium joints for cryogenic gravitational wave detectors. <i>Classical and Quantum Gravity</i> , <b>2015</b> , 32, 245013	3.3	5
51	The next detectors for gravitational wave astronomy. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2015</b> , 58, 1	3.6	14
50	A measurement of noise created by fluctuating electrostatic charges on dielectric surfaces using a torsion balance. <i>Classical and Quantum Gravity</i> , <b>2014</b> , 31, 175007	3.3	2
49	Implementation of an $F$ -statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. <i>Classical and Quantum Gravity</i> , <b>2014</b> , 31, 165014	3.3	27
48	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. <i>Astrophysical Journal</i> , <b>2014</b> , 785, 119	4.7	109
47	The NINJA-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. <i>Classical and Quantum Gravity</i> , <b>2014</b> , 31, 115004	3.3	34
46	Enhanced characteristics of fused silica fibers using laser polishing. <i>Classical and Quantum Gravity</i> , <b>2014</b> , 31, 105006	3.3	14
45	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. <i>Astrophysical Journal, Supplement Series</i> , <b>2014</b> , 211, 7	8	51
44	Constraints on cosmic strings from the LIGO-Virgo gravitational-wave detectors. <i>Physical Review Letters</i> , <b>2014</b> , 112, 131101	7.4	59
43	Improved upper limits on the stochastic gravitational-wave background from 2009-2010 LIGO and Virgo data. <i>Physical Review Letters</i> , <b>2014</b> , 113, 231101	7.4	74
42	Advanced technologies for future ground-based, laser-interferometric gravitational wave detectors. <i>Journal of Modern Optics</i> , <b>2014</b> , 61, S10-S45	1.1	4

41	Experimental results for nulling the effective thermal expansion coefficient of fused silica fibres under a static stress. <i>Classical and Quantum Gravity</i> , <b>2014</b> , 31, 065010	3-3	9
40	Design of a speed meter interferometer proof-of-principle experiment. <i>Classical and Quantum Gravity</i> , <b>2014</b> , 31, 215009	3-3	26
39	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. <i>Nature Photonics</i> , <b>2013</b> , 7, 613-619	33-9	572
38	Investigation of mechanical losses of thin silicon flexures at low temperatures. <i>Classical and Quantum Gravity</i> , <b>2013</b> , 30, 115008	3-3	22
37	Design of the 10 m AEI prototype facility for interferometry studies. <i>Applied Physics B: Lasers and Optics</i> , <b>2012</b> , 106, 551-557	1-9	12
36	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. <i>Astrophysical Journal</i> , <b>2012</b> , 755, 2	4-7	53
35	A study of the fracture mechanisms in pristine silica fibres utilising high speed imaging techniques. <i>Journal of Non-Crystalline Solids</i> , <b>2012</b> , 358, 1699-1709	3-9	14
34	Scientific objectives of Einstein Telescope. <i>Classical and Quantum Gravity</i> , <b>2012</b> , 29, 124013	3-3	256
33	Reducing the suspension thermal noise of advanced gravitational wave detectors. <i>Classical and Quantum Gravity</i> , <b>2012</b> , 29, 124009	3-3	20
32	Status of the AEI 10 m prototype. <i>Classical and Quantum Gravity</i> , <b>2012</b> , 29, 145005	3-3	2
31	Update on quadruple suspension design for Advanced LIGO. <i>Classical and Quantum Gravity</i> , <b>2012</b> , 29, 235004	3-3	97
30	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. <i>Astrophysical Journal, Supplement Series</i> , <b>2012</b> , 203, 28	8	57
29	The characterization of Virgo data and its impact on gravitational-wave searches. <i>Classical and Quantum Gravity</i> , <b>2012</b> , 29, 155002	3-3	59
28	SEARCH FOR GRAVITATIONAL WAVES ASSOCIATED WITH GAMMA-RAY BURSTS DURING LIGO SCIENCE RUN 6 AND VIRGO SCIENCE RUNS 2 AND 3. <i>Astrophysical Journal</i> , <b>2012</b> , 760, 12	4-7	94
27	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. <i>Astrophysical Journal Letters</i> , <b>2011</b> , 734, L35	7-9	47
26	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. <i>Astrophysical Journal</i> , <b>2011</b> , 737, 93	4-7	75
25	Mechanical loss of calcium fluoride at cryogenic temperatures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2011</b> , 208, 2719-2723	1-6	6
24	Charge mitigation techniques using glow and corona discharges for advanced gravitational wave detectors. <i>Classical and Quantum Gravity</i> , <b>2011</b> , 28, 215016	3-3	3

23	Directional limits on persistent gravitational waves using LIGO S5 science data. <i>Physical Review Letters</i> , <b>2011</b> , 107, 271102	7.4	85
22	A gravitational wave observatory operating beyond the quantum shot-noise limit. <i>Nature Physics</i> , <b>2011</b> , 7, 962-965	16.2	554
21	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. <i>Astrophysical Journal</i> , <b>2010</b> , 713, 671-685	4.7	140
20	The Einstein Telescope: a third-generation gravitational wave observatory. <i>Classical and Quantum Gravity</i> , <b>2010</b> , 27, 194002	3.3	675
19	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. <i>Classical and Quantum Gravity</i> , <b>2010</b> , 27, 173001	3.3	869
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> , <b>2010</b> , 715, 1453-1461	4.7	79
17	SEARCH FOR GRAVITATIONAL-WAVE BURSTS ASSOCIATED WITH GAMMA-RAY BURSTS USING DATA FROM LIGO SCIENCE RUN 5 AND VIRGO SCIENCE RUN 1. <i>Astrophysical Journal</i> , <b>2010</b> , 715, 1438-1452	4.7	54
16	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. <i>Astrophysical Journal</i> , <b>2010</b> , 722, 1504-1513	4.7	95
15	Re-evaluation of the mechanical loss factor of hydroxide-catalysis bonds and its significance for the next generation of gravitational wave detectors. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2010</b> , 374, 3993-3998	2.3	25
14	GAUGE: the GrAnd Unification and Gravity Explorer. <i>Experimental Astronomy</i> , <b>2009</b> , 23, 549-572	1.3	14
13	An upper limit on the stochastic gravitational-wave background of cosmological origin. <i>Nature</i> , <b>2009</b> , 460, 990-4	50.4	267
12	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. <i>Astrophysical Journal</i> , <b>2009</b> , 701, L68-L74	4.7	40
11	Development of a second generation torsion balance based on a spherical superconducting suspension. <i>Review of Scientific Instruments</i> , <b>2008</b> , 79, 025103	1.7	7
10	Noise analysis of a Howland current source. <i>International Journal of Electronics</i> , <b>2008</b> , 95, 351-359	1.2	7
9	New constraints on short-range forces coupling mass to intrinsic spin. <i>Physical Review Letters</i> , <b>2007</b> , 98, 081101	7.4	58
8	pH-Dependent gold nanoparticle self-organization on functionalized Si/SiO <sub>2</sub> surfaces. <i>Journal of Experimental Nanoscience</i> , <b>2006</b> , 1, 333-353	1.9	27
7	Novel torsion balance based on a spherical superconducting suspension. <i>Review of Scientific Instruments</i> , <b>2004</b> , 75, 955-961	1.7	10
6	The Feasibility of Testing the Inverse Square Law of Gravitation at Newtonian Strength and at Mass Separations of 1 $\mu$ m. <i>General Relativity and Gravitation</i> , <b>2004</b> , 36, 503-521	2.3	2

5	Low-frequency active vibration isolation for advanced LIGO <b>2004</b> , 5500, 194		8
4	Seismic isolation for Advanced LIGO. <i>Classical and Quantum Gravity</i> , <b>2002</b> , 19, 1591-1597	3.3	52
3	The torsion balance as a tool for geophysical prospecting. <i>Geophysics</i> , <b>2001</b> , 66, 527-534	3.1	1
2	Photolithographic manufacture of a superconducting levitation coil on a spherical substrate. <i>Precision Engineering</i> , <b>2000</b> , 24, 139-145	2.9	3
1	A preliminary study of a torsion balance based on a spherical superconducting suspension. <i>Measurement Science and Technology</i> , <b>1999</b> , 10, 508-513	2	11