Greg Ashton

List of Publications by Citations

104 papers	34,091 citations	54 h-index	113 g-index
113 ext. papers	43,768 ext. citations	6.3 avg, IF	5.21 L-index

#	Paper	IF	Citations
104	Observation of Gravitational Waves from a Binary Black Hole Merger. *Physical Review Letters*, **2016**, 116, 061102	7.4	6108
103	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. *Physical Review Letters*, **2017**, 119, 161101	7.4	4272
102	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. *Physical Review Letters*, **2016**, 116, 241103	7.4	2136
101	Multi-messenger Observations of a Binary Neutron Star Merger. *Astrophysical Journal Letters*, **2017**, 848, L12	7.9	1935
100	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. *Astrophysical Journal Letters*, **2017**, 848, L13	7.9	1614
99	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. *Physical Review Letters*, **2017**, 118, 221101	7.4	1609
98	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. *Physical Review Letters*, **2017**, 119, 141101	7.4	1270
97	GWTC-1: A Gravitational-Wave Transient Catalog of Compact Binary Mergers Observed by LIGO and Virgo during the First and Second Observing Runs. *Physical Review X*, **2019**, 9,	9.1	1169
96	Advanced LIGO. *Classical and Quantum Gravity*, **2015**, 32, 074001	3.3	1098
95	GW170817: Measurements of Neutron Star Radii and Equation of State. *Physical Review Letters*, **2018**, 121, 161101	7.4	867
94	Tests of General Relativity with GW150914. *Physical Review Letters*, **2016**, 116, 221101	7.4	837
93	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. *Astrophysical Journal Letters*, **2017**, 851, L35	7.9	809
92	Binary Black Hole Mergers in the First Advanced LIGO Observing Run. *Physical Review X*, **2016**, 6,	9.1	723
91	GW190425: Observation of a Compact Binary Coalescence with Total Mass ~ 3.4 M ?. *Astrophysical Journal Letters*, **2020**, 892, L3	7.9	591
90	GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object. *Astrophysical Journal Letters*, **2020**, 896, L44	7.9	571
89	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. *Living Reviews in Relativity*, **2018**, 21, 3	32.5	543
88	Properties of the Binary Black Hole Merger GW150914. *Physical Review Letters*, **2016**, 116, 241102	7.4	515

87	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. *Astrophysical Journal Letters*, **2016**, 818, L22	7.9	512
86	Exploring the sensitivity of next generation gravitational wave detectors. *Classical and Quantum Gravity*, **2017**, 34, 044001	3.3	454
85	Properties of the Binary Neutron Star Merger GW170817. *Physical Review X*, **2019**, 9,	9.1	423
84	GW190521: A Binary Black Hole Merger with a Total Mass of 150 M_{?}. *Physical Review Letters*, **2020**, 125, 101102	7.4	420
83	Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo. *Astrophysical Journal Letters*, **2019**, 882, L24	7.9	381
82	GWTC-2: Compact Binary Coalescences Observed by LIGO and Virgo during the First Half of the Third Observing Run. *Physical Review X*, **2021**, 11,	9.1	311
81	Tests of general relativity with the binary black hole signals from the LIGO-Virgo catalog GWTC-1. *Physical Review D*, **2019**, 100,	4.9	258
80	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. *Physical Review D*, **2016**, 93,	4.9	253
79	Bilby: A User-friendly Bayesian Inference Library for Gravitational-wave Astronomy. *Astrophysical Journal, Supplement Series*, **2019**, 241, 27	8	217
78	GW190412: Observation of a binary-black-hole coalescence with asymmetric masses. *Physical Review D*, **2020**, 102,	4.9	212
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	Properties and Astrophysical Implications of the 150 M ? Binary Black Hole Merger GW190521. *Astrophysical Journal Letters*, **2020**, 900, L13	7.9	207
75	Tests of General Relativity with GW170817. *Physical Review Letters*, **2019**, 123, 011102	7.4	204
74	Population Properties of Compact Objects from the Second LIGO Virgo Gravitational-Wave Transient Catalog. *Astrophysical Journal Letters*, **2021**, 913, L7	7.9	194
73	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. *Physical Review Letters*, **2016**, 116, 131102	7.4	188
72	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. *Classical and Quantum Gravity*, **2016**, 33,	3.3	155
71	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. *Living Reviews in Relativity*, **2020**, 23, 3	32.5	144
70	Observation of Gravitational Waves from Two Neutron Star Black Hole Coalescences. *Astrophysical Journal Letters*, **2021**, 915, L5	7.9	142

69	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
68	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. *Astrophysical Journal Letters*, **2017**, 850, L39	7.9	127
67	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. *Physical Review Letters*, **2018**, 120, 091101	7.4	120
66	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. *Astrophysical Journal* , **2017**, 839, 12	4.7	107
65	Observing gravitational-wave transient GW150914 with minimal assumptions. *Physical Review D*, **2016**, 93,	4.9	94
64	Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model. *Physical Review X*, **2016**, 6,	9.1	89
63	All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data. *Physical Review D*, **2019**, 100,	4.9	81
62	Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog. *Physical Review D*, **2021**, 103,	4.9	81
61	A guide to LIGO–Virgo detector noise and extraction of transient gravitational-wave signals. *Classical and Quantum Gravity*, **2020**, 37, 055002	3.3	78
60	Directly comparing GW150914 with numerical solutions of Einstein's equations for binary black hole coalescence. *Physical Review D*, **2016**, 94,	4.9	76
59	Effects of waveform model systematics on the interpretation of GW150914. *Classical and Quantum Gravity*, **2017**, 34, 104002	3.3	74
58	Model comparison from LIGO–Virgo data on GW170817's binary components and consequences for the merger remnant. *Classical and Quantum Gravity*, **2020**, 37, 045006	3.3	69
57	Search for Subsolar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. *Physical Review Letters*, **2019**, 123, 161102	7.4	68
56	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015–2017 LIGO Data. *Astrophysical Journal*, **2019**, 879, 10	4.7	63
55	Bayesian inference for compact binary coalescences with bilby: validation and application to the first LIGO–Virgo gravitational-wave transient catalogue. *Monthly Notices of the Royal Astronomical Society*, **2020**, 499, 3295-3319	4.3	62
54	Effects of data quality vetoes on a search for compact binary coalescences in Advanced LIGO's first observing run. *Classical and Quantum Gravity*, **2018**, 35, 065010	3.3	62
53	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. *Physical Review Letters*, **2018**, 120, 201102	7.4	60
52	All-sky search for periodic gravitational waves in the O1 LIGO data. *Physical Review D*, **2017**, 96,	4.9	54

51	First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data. *Physical Review D*, **2017**, 96,	4.9	54
50	SUPPLEMENT: THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914 (2016, ApJL, 833, L1). *Astrophysical Journal, Supplement Series*, **2016**, 227, 14	8	52
49	First Search for Nontensorial Gravitational Waves from Known Pulsars. *Physical Review Letters*, **2018**, 120, 031104	7.4	50
48	On the Progenitor of Binary Neutron Star Merger GW170817. *Astrophysical Journal Letters*, **2017**, 850, L40	7.9	50
47	Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. *Physical Review Letters*, **2018**, 121, 231103	7.4	49
46	Neutron Star Extreme Matter Observatory: A kilohertz-band gravitational-wave detector in the global network. *Publications of the Astronomical Society of Australia*, **2020**, 37,	5.5	47
45	Search for gravitational waves from Scorpius X-1 in the first Advanced LIGO observing run with a hidden Markov model. *Physical Review D*, **2017**, 95,	4.9	47
44	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. *Astrophysical Journal*, **2021**, 909, 218	4.7	46
43	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO. *Astrophysical Journal*, **2019**, 875, 122	4.7	45
42	First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data. *Physical Review D*, **2017**, 96,	4.9	39
41	Massively parallel Bayesian inference for transient gravitational-wave astronomy. *Monthly Notices of the Royal Astronomical Society*, **2020**, 498, 4492-4502	4.3	39
40	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
39	Rotational evolution of the Vela pulsar during the 2016 glitch. *Nature Astronomy*, **2019**, 3, 1143-1148	12.1	33
38	Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data. *Physical Review D*, **2015**, 91,	4.9	32
37	Statistical characterization of pulsar glitches and their potential impact on searches for continuous gravitational waves. *Physical Review D*, **2017**, 96,	4.9	29
36	Results of the deepest all-sky survey for continuous gravitational waves on LIGO S6 data running on the Einstein@Home volunteer distributed computing project. *Physical Review D*, **2016**, 94,	4.9	29
35	Gravitational waves or deconfined quarks: What causes the premature collapse of neutron stars born in short gamma-ray bursts?. *Physical Review D*, **2020**, 101,	4.9	24
34	A Fermi Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run. *Astrophysical Journal*, **2019**, 871, 90	4.7	22

33	X-ray guided gravitational-wave search for binary neutron star merger remnants. *Physical Review D*, **2018**, 98,	4.9	22
32	Constraining the p-Mode-g-Mode Tidal Instability with GW170817. *Physical Review Letters*, **2019**, 122, 061104	7.4	22
31	Constraints on Cosmic Strings Using Data from the Third Advanced LIGO-Virgo Observing Run. *Physical Review Letters*, **2021**, 126, 241102	7.4	21
30	Hierarchical multistage MCMC follow-up of continuous gravitational wave candidates. *Physical Review D*, **2018**, 97,	4.9	19
29	Effect of timing noise on targeted and narrow-band coherent searches for continuous gravitational waves from pulsars. *Physical Review D*, **2015**, 91,	4.9	18
28	Coincident Detection Significance in Multimessenger Astronomy. *Astrophysical Journal*, **2018**, 860, 6	4.7	17
27	All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data. *Physical Review D*, **2021**, 104,	4.9	15
26	All-sky search in early O3 LIGO data for continuous gravitational-wave signals from unknown neutron stars in binary systems. *Physical Review D*, **2021**, 103,	4.9	15
25	X-Ray Afterglows of Short Gamma-Ray Bursts: Magnetar or Fireball?. *Astrophysical Journal*, **2019**, 872, 114	4.7	14
24	Multiwaveform inference of gravitational waves. *Physical Review D*, **2020**, 101,	4.9	13
23	Identification of a Local Sample of Gamma-Ray Bursts Consistent with a Magnetar Giant Flare Origin. *Astrophysical Journal Letters*, **2021**, 907, L28	7.9	12
22	Searches for Continuous Gravitational Waves from Young Supernova Remnants in the Early Third Observing Run of Advanced LIGO and Virgo. *Astrophysical Journal*, **2021**, 921, 80	4.7	10
21	A semicoherent glitch-robust continuous-gravitational-wave search method. *Physical Review D*, **2018**, 98,	4.9	10
20	Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data. *Physical Review D*, **2022**, 105,	4.9	9
19	A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs. *Astrophysical Journal*, **2020**, 893, 100	4.7	9
18	Gravitational wave detection without boot straps: A Bayesian approach. *Physical Review D*, **2019**, 100,	4.9	8
17	Standard-siren Cosmology Using Gravitational Waves from Binary Black Holes. *Astrophysical Journal* , **2021**, 908, 215	4.7	8
16	Faster search for long gravitational-wave transients: GPU implementation of the transient $ newcommand{F}{mathcal{F}}boldsymbol{ F}$ -statistic. *Classical and Quantum Gravity*, **2018**, 35, 205003	3.3	8

15	Implications of the Occurrence of Glitches in Pulsar Free Precession Candidates. *Physical Review Letters*, **2017**, 118, 261101	7.4	7
14	Current observations are insufficient to confidently associate the binary black hole merger GW190521 with AGN J124942.3+344929. *Classical and Quantum Gravity*,	3.3	7
13	On the free-precession candidate PSR B1828-11: Evidence for increasing deformation. *Monthly Notices of the Royal Astronomical Society*, **2017**, stx060	4.3	6
12	Interpreting the X-ray afterglows of gamma-ray bursts with radiative losses and millisecond magnetars. *Monthly Notices of the Royal Astronomical Society*, **2020**, 499, 5986-5992	4.3	6
11	PyFstat: a Python package for continuous gravitational-wave data analysis. *Journal of Open Source Software*, **2021**, 6, 3000	5.2	6
10	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO–Virgo Run O3a. *Astrophysical Journal*, **2021**, 915, 86	4.7	6
9	Characterizing Astrophysical Binary Neutron Stars with Gravitational Waves. *Astrophysical Journal Letters*, **2020**, 902, L12	7.9	5
8	The astrophysical odds of GW151216. *Monthly Notices of the Royal Astronomical Society*, **2020**, 498, 1905-1910	4.3	5
7	Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGO–Virgo's Third Observing Run. *Astrophysical Journal*, **2021**, 923, 14	4.7	4
6	Neutron star merger remnants: Braking indices, gravitational waves, and the equation of state **2019**,		3
5	B ilby-MCMC: an MCMC sampler for gravitational-wave inference. *Monthly Notices of the Royal Astronomical Society*,	4.3	3
4	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO–Virgo Run O3b. *Astrophysical Journal*, **2022**, 928, 186	4.7	1
3	Prospects of Gravitational Wave Detections from Common Envelope Evolution with LISA. *Astrophysical Journal*, **2021**, 919, 128	4.7	0
2	Low-efficiency long gamma-ray bursts: a case study with AT2020blt. *Monthly Notices of the Royal Astronomical Society*, **2022**, 512, 1391-1399	4.3	0
1	Advances in our understanding of the free precession candidate PSR B1828-11. *Proceedings of the International Astronomical Union*, **2017**, 13, 307-308	0.1	