Greg Ashton

List of Publications by Year
in descending order

112 papers	52,461 citations	19608 61 h-index	24179 110 g-index
113 all docs	113 docs citations	113 times ranked	16393 citing authors

#	Article	IF	Citations
1	Observation of Gravitational Waves from a Binary Black Hole Merger. Physical Review Letters, 2016, 116, 061102.	2.9	8,753
2	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. Physical Review Letters, 2017, 119, 161101.	2.9	6,413
3	Multi-messenger Observations of a Binary Neutron Star Merger[*]. Astrophysical Journal Letters, 2017, 848, L12.	3.0	2,805
4	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	2.9	2,701
5	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. Astrophysical Journal Letters, 2017, 848, L13.	3.0	2,314
6	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, .	2.8	2,022
7	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. Physical Review Letters, 2017, 118, 221101.	2.9	1,987
8	Advanced LIGO. Classical and Quantum Gravity, 2015, 32, 074001.	1.5	1,929
9	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. Physical Review Letters, 2017, 119, 141101.	2.9	1,600
10	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	2.9	1,473
11	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	2.9	1,224
12	GWTC-2: Compact Binary Coalescences Observed by LIGO and Virgo during the First Half of the Third Observing Run. Physical Review X, 2021, 11, .	2.8	1,097
13	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.	3.0	1,090
14	GW190425: Observation of a Compact Binary Coalescence with Total MassÂâˆ¼Â3.4 M_{âŠ™}. Astrophysical Journal Letters, 2020, 892, L3.	3.0	1,049
15	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	3.0	968
16	Binary Black Hole Mergers in the First Advanced LIGO Observing Run. Physical Review X, 2016, 6, .	2.8	898
17	GW190521: A Binary Black Hole Merger with a Total Mass of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>150</mml:mn><mml:mtext>â€‰</mml:mtext><mml:mtext>â€‰</mml:mtext><mml:msub> stretchy="false">âŠ™</mml:mo></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2020, 125, 101102.	2.9	836
18	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	8.2	808

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19	Exploring the sensitivity of next generation gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 044001.	1.5	735
20	Properties of the Binary Neutron Star Merger GW170817. Physical Review X, 2019, 9, .	2.8	728
21	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	2.9	673
22	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.	3.0	633
23	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.	3.0	566
24	Bilby: A User-friendly Bayesian Inference Library for Gravitational-wave Astronomy. Astrophysical Journal, Supplement Series, 2019, 241, 27.	3.0	526
25	Population Properties of Compact Objects from the Second LIGOâ€“Virgo Gravitational-Wave Transient Catalog. Astrophysical Journal Letters, 2021, 913, L7.	3.0	514
26	Tests of general relativity with the binary black hole signals from the LIGO-Virgo catalog GWTC-1. Physical Review D, 2019, 100, .	1.6	470
27	Observation of Gravitational Waves from Two Neutron Starâ€“Black Hole Coalescences. Astrophysical Journal Letters, 2021, 915, L5.	3.0	453
28	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	8.2	447
29	Properties and Astrophysical Implications of the 150 M_{âŠ™} Binary Black Hole Merger GW190521. Astrophysical Journal Letters, 2020, 900, L13.	3.0	406
30	GW190412: Observation of a binary-black-hole coalescence with asymmetric masses. Physical Review D, 2020, 102, .	1.6	394
31	Tests of General Relativity with GW170817. Physical Review Letters, 2019, 123, 011102.	2.9	370
32	Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog. Physical Review D, 2021, 103, .	1.6	338
33	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. Physical Review D, 2016, 93, .	1.6	315
34	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. Physical Review Letters, 2016, 116, 131102.	2.9	269
35	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. Astrophysical Journal Letters, 2016, 833, L1.	3.0	230
36	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. Classical and Quantum Gravity, 2016, 33, 134001.	1.5	225

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37	Bayesian inference for compact binary coalescences with <scp>bilby</scp>: validation and application to the first LIGOâ€“Virgo gravitational-wave transient catalogue. Monthly Notices of the Royal Astronomical Society, 2020, 499, 3295-3319.	1.6	213
38	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 851, L16.	3.0	189
39	A guide to LIGOâ€“Virgo detector noise and extraction of transient gravitational-wave signals. Classical and Quantum Gravity, 2020, 37, 055002.	1.5	188
40	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. Physical Review Letters, 2018, 120, 091101.	2.9	166
41	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated withÂGW170817. Astrophysical Journal Letters, 2017, 850, L39.	3.0	156
42	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. Astrophysical Journal, 2021, 909, 218.	1.6	144
43	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. Astrophysical Journal, 2017, 839, 12.	1.6	131
44	Observing gravitational-wave transient GW150914 with minimal assumptions. Physical Review D, 2016, 93, .	1.6	119
45	Search for Subsolar Mass Ultracompact Binaries in Advanced LIGOâ€™s Second Observing Run. Physical Review Letters, 2019, 123, 161102.	2.9	119
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, .	1.3	114
47	Model comparison from LIGOâ€“Virgo data on GW170817â€™s binary components and consequences for the merger remnant. Classical and Quantum Gravity, 2020, 37, 045006.	1.5	109
48	Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model. Physical Review X, 2016, 6, .	2.8	106
49	Massively parallel Bayesian inference for transient gravitational-wave astronomy. Monthly Notices of the Royal Astronomical Society, 2020, 498, 4492-4502.	1.6	105
50	Directly comparing GW150914 with numerical solutions of Einsteinâ€™s equations for binary black hole coalescence. Physical Review D, 2016, 94, .	1.6	102
51	All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data. Physical Review D, 2019, 100, .	1.6	102
52	Effects of waveform model systematics on the interpretation of GW150914. Classical and Quantum Gravity, 2017, 34, 104002.	1.5	98
53	Effects of data quality vetoes on a search for compact binary coalescences in Advanced LIGOâ€™s first observing run. Classical and Quantum Gravity, 2018, 35, 065010.	1.5	94
54	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015â€“2017 LIGO Data. Astrophysical Journal, 2019, 879, 10.	1.6	88

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55	Constraints on Cosmic Strings Using Data from the Third Advanced LIGOâ€"Virgo Observing Run. Physical Review Letters, 2021, 126, 241102.	2.9	87
56	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.	2.9	85
57	Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2018, 121, 231103.	2.9	77
58	On the Progenitor of Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 850, L40.	3.0	73
59	First Search for Nontensorial Gravitational Waves from Known Pulsars. Physical Review Letters, 2018, 120, 031104.	2.9	68
60	All-sky search for periodic gravitational waves in the O1 LIGO data. Physical Review D, 2017, 96, .	1.6	64
61	SUPPLEMENT: â€œTHE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914â€•(2016, ApJL, 833, L1). Astrophysical Journal, Supplement Series, 2016, 227, 14.	3.0	63
62	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO[*]. Astrophysical Journal, 2019, 875, 122.	1.6	61
63	First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data. Physical Review D, 2017, 96, .	1.6	60
64	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, .	1.6	59
65	Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGOâ€"Virgoâ€™s Third Observing Run. Astrophysical Journal, 2021, 923, 14.	1.6	59
66	Rotational evolution of the Vela pulsar during the 2016 glitch. Nature Astronomy, 2019, 3, 1143-1148.	4.2	58
67	First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data. Physical Review D, 2017, 96, .	1.6	47
68	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.	1.6	46
69	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, .	1.6	43
70	All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data. Physical Review D, 2021, 104, .	1.6	42
71	Statistical characterization of pulsar glitches and their potential impact on searches for continuous gravitational waves. Physical Review D, 2017, 96, .	1.6	41
72	Nested sampling for physical scientists. Nature Reviews Methods Primers, 2022, 2, .	11.8	40

#	Article	IF	Citations
73	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.	1.6	39
74	Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data. Physical Review D, 2015, 91, .	1.6	37
75	Constraining the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math> -Modeâ€" <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>g</mml:mi></mml:math> -Mode Tidal Instability with GW170817. Physical Review Letters, 2019, 122, 061104.	2.9	36
76	Current observations are insufficient to confidently associate the binary black hole merger GW190521 with AGN J124942.3 + 344929. Classical and Quantum Gravity, 2021, 38, 235004.	1.5	36
77	Identification of a Local Sample of Gamma-Ray Bursts Consistent with a Magnetar Giant Flare Origin. Astrophysical Journal Letters, 2021, 907, L28.	3.0	33
78	Narrowband Searches for Continuous and Long-duration Transient Gravitational Waves from Known Pulsars in the LIGO-Virgo Third Observing Run. Astrophysical Journal, 2022, 932, 133.	1.6	33
79	Gravitational waves or deconfined quarks: What causes the premature collapse of neutron stars born in short gamma-ray bursts?. Physical Review D, 2020, 101, .	1.6	32
80	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, .	1.6	31
81	Hierarchical multistage MCMC follow-up of continuous gravitational wave candidates. Physical Review D, 2018, 97, .	1.6	31
82	Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data. Physical Review D, 2022, 105, .	1.6	31
83	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.	1.6	30
84	X-ray guided gravitational-wave search for binary neutron star merger remnants. Physical Review D, 2018, 98, .	1.6	28
85	Standard-siren Cosmology Using Gravitational Waves from Binary Black Holes. Astrophysical Journal, 2021, 908, 215.	1.6	28
86	Coincident Detection Significance in Multimessenger Astronomy. Astrophysical Journal, 2018, 860, 6.	1.6	27
87	<scp>Bilby</scp>-MCMC: an MCMC sampler for gravitational-wave inference. Monthly Notices of the Royal Astronomical Society, 2021, 507, 2037-2051.	1.6	25
88	Multiwaveform inference of gravitational waves. Physical Review D, 2020, 101, .	1.6	22
89	Effect of timing noise on targeted and narrow-band coherent searches for continuous gravitational waves from pulsars. Physical Review D, 2015, 91, .	1.6	20
90	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGOâ€"Virgo Run O3a. Astrophysical Journal, 2021, 915, 86.	1.6	20

#	Article	IF	Citations
91	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	1.8	20
92	X-Ray Afterglows of Short Gamma-Ray Bursts: Magnetar or Fireball?. Astrophysical Journal, 2019, 872, 114.	1.6	19
93	All-sky, all-frequency directional search for persistent gravitational waves from Advanced LIGOâ€™s and Advanced Virgoâ€™s first three observing runs. Physical Review D, 2022, 105, .	1.6	18
94	Gravitational wave detection without boot straps: A Bayesian approach. Physical Review D, 2019, 100, .	1.6	16
95	PyFstat: a Python package for continuous gravitational-wave data analysis. Journal of Open Source Software, 2021, 6, 3000.	2.0	16
96	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGOâ€"Virgo Run O3b. Astrophysical Journal, 2022, 928, 186.	1.6	15
97	Faster search for long gravitational-wave transients: GPU implementation of the transient $ ewcommand{F}{mathcal{F}}oldsymbol{ F}$ -statistic. Classical and Quantum Gravity, 2018, 35, 205003.	1.5	14
98	A semicoherent glitch-robust continuous-gravitational-wave search method. Physical Review D, 2018, 98, .	1.6	14
99	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.	1.6	14
100	Parameterised population models of transient non-Gaussian noise in the LIGO gravitational-wave detectors. Classical and Quantum Gravity, 2022, 39, 175004.	1.5	14
101	Implications of the Occurrence of Glitches in Pulsar Free Precession Candidates. Physical Review Letters, 2017, 118, 261101.	2.9	12
102	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.	1.6	12
103	Prospects of Gravitational Wave Detections from Common Envelope Evolution with LISA. Astrophysical Journal, 2021, 919, 128.	1.6	12
104	On the free-precession candidate PSR B1828-11: Evidence for increasing deformation. Monthly Notices of the Royal Astronomical Society, 0, , stx060.	1.6	10
105	The astrophysical odds of GW151216. Monthly Notices of the Royal Astronomical Society, 2020, 498, 1905-1910.	1.6	10
106	Characterizing Astrophysical Binary Neutron Stars with Gravitational Waves. Astrophysical Journal Letters, 2020, 902, L12.	3.0	9
107	An updated glitch rate law inferred from radio pulsars. Monthly Notices of the Royal Astronomical Society, 2022, 511, 3304-3319.	1.6	8
108	The use of hypermodels to understand binary neutron star collisions. Nature Astronomy, 2022, 6, 961-967.	4.2	5

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109	Neutron star merger remnants: Braking indices, gravitational waves, and the equation of state. AIP Conference Proceedings, 2019, , .	0.3	3
110	Low-efficiency long gamma-ray bursts: a case study with AT2020blt. Monthly Notices of the Royal Astronomical Society, 2022, 512, 1391-1399.	1.6	3
111	Optimized localization for gravitational waves from merging binaries. Monthly Notices of the Royal Astronomical Society, 2021, 509, 3957-3965.	1.6	2
112	Advances in our understanding of the free precession candidate PSR B1828-11. Proceedings of the International Astronomical Union, 2017, 13, 307-308.	0.0	0