

Angus Bell

List of Publications by Year in descending order

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124
papers

49,607
citations

13865

67
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18647

119
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124
all docs

124
docs citations

124
times ranked

17334
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of Gravitational Waves from a Binary Black Hole Merger. Physical Review Letters, 2016, 116, 061102.	7.8	8,753
2	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. Physical Review Letters, 2017, 119, 161101.	7.8	6,413
3	Multi-messenger Observations of a Binary Neutron Star Merger [*] . Astrophysical Journal Letters, 2017, 848, L12.	8.3	2,805
4	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	7.8	2,701
5	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
6	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
7	Advanced LIGO. Classical and Quantum Gravity, 2015, 32, 074001.	4.0	1,929
8	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. Physical Review Letters, 2017, 119, 141101.	7.8	1,600
9	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	7.8	1,473
10	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	7.8	1,224
11	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.	8.3	1,090
12	GW190425: Observation of a Compact Binary Coalescence with Total Mass $\hat{A}^{\sim} 3.4 M_{\odot}$. Astrophysical Journal Letters, 2020, 892, L3.	8.3	1,049
13	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	4.0	1,029
14	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	8.3	968
15	GW190521: A Binary Black Hole Merger with a Total Mass of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 150 \langle \text{mml:mn} \rangle \langle \text{mml:mtext} \rangle \hat{A}^{\sim} \langle \text{mml:mtext} \rangle \hat{A}^{\sim} \langle \text{mml:mtext} \rangle \hat{A}^{\sim} \langle \text{mml:mtext} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:stretchy}="false" \rangle \hat{A}^{\sim} \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. Physical Review Letters, 2020, 125, 161102.	8.3	836
16	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	31.4	825
17	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	26.7	808
18	Exploring the sensitivity of next generation gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 044001.	4.0	735

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19	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , 2016, 116, 241102.	7.8	673
20	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , 2016, 818, L22.	8.3	633
21	Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo. <i>Astrophysical Journal Letters</i> , 2019, 882, L24.	8.3	566
22	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , 2016, 116, 131103.	7.8	466
23	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2020, 23, 3.	26.7	447
24	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. <i>Living Reviews in Relativity</i> , 2016, 19, 1.	26.7	427
25	Properties and Astrophysical Implications of the 150 M_{\odot} Binary Black Hole Merger GW190521. <i>Astrophysical Journal Letters</i> , 2020, 900, L13.	8.3	406
26	Tests of General Relativity with GW170817. <i>Physical Review Letters</i> , 2019, 123, 011102.	7.8	370
27	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. <i>Physical Review D</i> , 2016, 93, .	4.7	315
28	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , 2016, 116, 131102.	7.8	269
29	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. <i>Astrophysical Journal Letters</i> , 2016, 833, L1.	8.3	230
30	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. <i>Classical and Quantum Gravity</i> , 2016, 33, 134001.	4.0	225
31	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. <i>Astrophysical Journal Letters</i> , 2016, 826, L13.	8.3	210
32	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121101.	7.8	194
33	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 851, L16.	8.3	189
34	A guide to LIGO's Virgo detector noise and extraction of transient gravitational-wave signals. <i>Classical and Quantum Gravity</i> , 2020, 37, 055002.	4.0	188
35	Search for gravitational waves from low mass compact binary coalescence in LIGO's sixth science run and Virgo's science runs 2 and 3. <i>Physical Review D</i> , 2012, 85, .	4.7	185
36	First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binary Black-hole Merger GW170814. <i>Astrophysical Journal Letters</i> , 2019, 876, L7.	8.3	179

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37	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. <i>Physical Review Letters</i> , 2018, 120, 091101.	7.8	166
38	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L39.	8.3	156
39	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STAR-BLACK HOLE MERGERS FROM ADVANCED LIGO'S FIRST OBSERVING RUN. <i>Astrophysical Journal Letters</i> , 2016, 832, L21.	8.3	146
40	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. <i>Astrophysical Journal</i> , 2021, 909, 218.	4.5	144
41	Parameter estimation for compact binary coalescence signals with the first generation gravitational-wave detector network. <i>Physical Review D</i> , 2013, 88, .	4.7	132
42	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , 2017, 839, 12.	4.5	131
43	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. <i>Astrophysical Journal</i> , 2014, 785, 119.	4.5	125
44	Update on quadruple suspension design for Advanced LIGO. <i>Classical and Quantum Gravity</i> , 2012, 29, 235004.	4.0	123
45	Search for Substellar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. <i>Physical Review Letters</i> , 2019, 123, 161102.	7.8	119
46	Model comparison from LIGO-Virgo data on GW170817's binary components and consequences for the merger remnant. <i>Classical and Quantum Gravity</i> , 2020, 37, 045006.	4.0	109
47	All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run. <i>Physical Review D</i> , 2012, 85, .	4.7	107
48	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> , 2012, 760, 12.	4.5	104
49	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , 2017, 34, 104002.	4.0	98
50	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal</i> , 2019, 875, 160.	4.5	97
51	Effects of data quality vetoes on a search for compact binary coalescences in Advanced LIGO's first observing run. <i>Classical and Quantum Gravity</i> , 2018, 35, 065010.	4.0	94
52	Search for gravitational waves from binary black hole inspiral, merger, and ringdown in LIGO-Virgo data from 2009-2010. <i>Physical Review D</i> , 2013, 87, .	4.7	92
53	Einstein@Home all-sky search for periodic gravitational waves in LIGO S5 data. <i>Physical Review D</i> , 2013, 87, .	4.7	91
54	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. <i>Astrophysical Journal</i> , 2011, 737, 93.	4.5	89

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55	Design and development of the advanced LIGO monolithic fused silica suspension. <i>Classical and Quantum Gravity</i> , 2012, 29, 035003.	4.0	88
56	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015–2017 LIGO Data. <i>Astrophysical Journal</i> , 2019, 879, 10.	4.5	88
57	Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009–2010 LIGO and Virgo Data. <i>Physical Review Letters</i> , 2014, 113, 231101.	7.8	86
58	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018, 120, 201102.	7.8	85
59	Directional Limits on Persistent Gravitational Waves from Advanced LIGO’s First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121102.	7.8	84
60	Implementation and testing of the first prompt search for gravitational wave transients with electromagnetic counterparts. <i>Astronomy and Astrophysics</i> , 2012, 539, A124.	5.1	84
61	Search for Substellar-Mass Ultracompact Binaries in Advanced LIGO’s First Observing Run. <i>Physical Review Letters</i> , 2018, 121, 231103.	7.8	77
62	First low-latency LIGO+Virgo search for binary inspirals and their electromagnetic counterparts. <i>Astronomy and Astrophysics</i> , 2012, 541, A155.	5.1	75
63	The characterization of Virgo data and its impact on gravitational-wave searches. <i>Classical and Quantum Gravity</i> , 2012, 29, 155002.	4.0	73
64	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L40.	8.3	73
65	Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs. <i>Astrophysical Journal</i> , 2019, 883, 149.	4.5	72
66	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. <i>Astrophysical Journal</i> , 2019, 875, 161.	4.5	71
67	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017, 529, 1600209.	2.4	69
68	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. <i>Physical Review Letters</i> , 2014, 112, 131101.	7.8	68
69	First Search for Nontensorial Gravitational Waves from Known Pulsars. <i>Physical Review Letters</i> , 2018, 120, 031104.	7.8	68
70	Laser cooling of trapped ytterbium ions using a four-level optical-excitation scheme. <i>Physical Review A</i> , 1991, 44, R20-R23.	2.5	67
71	All-sky search for periodic gravitational waves in the full S5 LIGO data. <i>Physical Review D</i> , 2012, 85, .	4.7	66
72	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. <i>Astrophysical Journal</i> , 2015, 813, 39.	4.5	66

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73	Directed search for continuous gravitational waves from the Galactic center. <i>Physical Review D</i> , 2013, 88, .	4.7	65
74	SUPPLEMENT: "THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914" (2016, <i>ApJL</i> , 833, L1). <i>Astrophysical Journal, Supplement Series</i> , 2016, 227, 14.	7.7	63
75	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. <i>Astrophysical Journal, Supplement Series</i> , 2012, 203, 28.	7.7	62
76	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO. <i>Astrophysical Journal</i> , 2019, 875, 122.	4.5	61
77	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. <i>Astrophysical Journal</i> , 2012, 755, 2.	4.5	60
78	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. <i>Astrophysical Journal, Supplement Series</i> , 2014, 211, 7.	7.7	57
79	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. <i>Astrophysical Journal Letters</i> , 2011, 734, L35.	8.3	55
80	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> , 2017, 841, 89.	4.5	52
81	Search for gravitational waves from intermediate mass binary black holes. <i>Physical Review D</i> , 2012, 85, .	4.7	48
82	Silicon-Based Optical Mirror Coatings for Ultrahigh Precision Metrology and Sensing. <i>Physical Review Letters</i> , 2018, 120, 263602.	7.8	47
83	Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data. <i>Astrophysical Journal</i> , 2017, 847, 47.	4.5	46
84	Laser cooling of trapped Yb+. <i>Applied Physics B, Photophysics and Laser Chemistry</i> , 1990, 50, 13-17.	1.5	44
85	SUPPLEMENT: "LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914" (2016, <i>ApJL</i> , 826, L13). <i>Astrophysical Journal, Supplement Series</i> , 2016, 225, 8.	7.7	44
86	Upper limits on a stochastic gravitational-wave background using LIGO and Virgo interferometers at 600-1000 Hz. <i>Physical Review D</i> , 2012, 85, .	4.7	43
87	The NINJA-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. <i>Classical and Quantum Gravity</i> , 2014, 31, 115004.	4.0	42
88	Amorphous Silicon with Extremely Low Absorption: Beating Thermal Noise in Gravitational Astronomy. <i>Physical Review Letters</i> , 2018, 121, 191101.	7.8	40
89	Optical comb generator as an efficient short-pulse source. <i>Optics Letters</i> , 1996, 21, 534.	3.3	39
90	A magneto-optical trap for chromium with population repumping via intercombination lines. <i>Europhysics Letters</i> , 1999, 45, 156-161.	2.0	37

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91	Implementation of an F -statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. <i>Classical and Quantum Gravity</i> , 2014, 31, 165014.	4.0	34
92	A first search for coincident gravitational waves and high energy neutrinos using LIGO, Virgo and ANTARES data from 2007. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 008-008.	5.4	32
93	Search for Gravitational Waves Associated with γ -ray Bursts Detected by the Interplanetary Network. <i>Physical Review Letters</i> , 2014, 113, 011102.	7.8	32
94	Search for long-lived gravitational-wave transients coincident with long gamma-ray bursts. <i>Physical Review D</i> , 2013, 88, .	4.7	31
95	A Fermi Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run. <i>Astrophysical Journal</i> , 2019, 871, 90.	4.5	30
96	Efficient optical frequency-comb generator. <i>Optics Letters</i> , 1995, 20, 1435.	3.3	29
97	Doughnut mode magneto-optical trap. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1997, 14, 544.	2.1	29
98	Experimental test of higher-order Laguerre-Gauss modes in the 10 m Glasgow prototype interferometer. <i>Classical and Quantum Gravity</i> , 2013, 30, 035004.	4.0	29
99	Design of a speed meter interferometer proof-of-principle experiment. <i>Classical and Quantum Gravity</i> , 2014, 31, 215009.	4.0	29
100	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. <i>Astrophysical Journal</i> , 2019, 874, 163.	4.5	26
101	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. <i>Physical Review Letters</i> , 2017, 118, 151102.	7.8	24
102	Application of a Hough search for continuous gravitational waves on data from the fifth LIGO science run. <i>Classical and Quantum Gravity</i> , 2014, 31, 085014.	4.0	21
103	Optical absorption of ion-beam sputtered amorphous silicon coatings. <i>Physical Review D</i> , 2016, 93, .	4.7	20
104	All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run. <i>Classical and Quantum Gravity</i> , 2018, 35, 065009.	4.0	18
105	Optical absorption of silicon nitride membranes at 1064 nm and at 1550 nm. <i>Physical Review D</i> , 2017, 96, .	4.7	17
106	Quantum correlation measurements in interferometric gravitational-wave detectors. <i>Physical Review A</i> , 2017, 95, .	2.5	16
107	Enhanced characteristics of fused silica fibers using laser polishing. <i>Classical and Quantum Gravity</i> , 2014, 31, 105006.	4.0	15
108	Candidates for a possible third-generation gravitational wave detector: comparison of ring-Sagnac and sloshing-Sagnac speedmeter interferometers. <i>Classical and Quantum Gravity</i> , 2017, 34, 024001.	4.0	13

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109	Mapping the optical absorption of a substrate-transferred crystalline AlGaAs coating at 1.5 μ m. Classical and Quantum Gravity, 2015, 32, 105008.	4.0	12
110	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.	4.5	12
111	Generation of picosecond squeezed pulses using an all-solid-state cw mode-locked source. Physical Review A, 1998, 57, 3127-3130.	2.5	8
112	Effects of transients in LIGO suspensions on searches for gravitational waves. Review of Scientific Instruments, 2017, 88, 124501.	1.3	6
113	Bright tunable ultraviolet squeezed light. Optics Letters, 1997, 22, 531.	3.3	5
114	Quantum noise cancellation in asymmetric speed metres with balanced homodyne readout. New Journal of Physics, 2018, 20, 103040.	2.9	5
115	Anomalous optical surface absorption in nominally pure silicon samples at 1550 nm. Classical and Quantum Gravity, 2017, 34, 205013.	4.0	4
116	Progress and challenges in advanced ground-based gravitational-wave detectors. General Relativity and Gravitation, 2014, 46, 1.	2.0	2
117	Concepts and research for future detectors. General Relativity and Gravitation, 2014, 46, 1.	2.0	2
118	Trapped Yb ⁺ as a Potential Optical Frequency Standard. , 1989, , 451-452.		2
119	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
120	Experimental investigation of the limitations of polarisation optics for future gravitational wave detectors based on the polarisation Sagnac speedmeter. Classical and Quantum Gravity, 2021, 38, 195004.	4.0	1
121	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. , 2016, 19, 1.		1
122	Influence of deposition parameters on the optical absorption of amorphous silicon thin films. Physical Review Research, 2020, 2, .	3.6	1
123	Extended tunability of Ti:sapphire lasers in CW and quasi-CW operation. , 2007, , .		0
124	Upper limit to the transverse to longitudinal motion coupling of a waveguide mirror. Classical and Quantum Gravity, 2015, 32, 175005.	4.0	0