Bryan Barr

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4900542/publications.pdf

Version: 2024-02-01

279	71,660	98	266
papers	citations	h-index	g-index
285	285	285	18414
all docs	docs citations	times ranked	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	The Einstein Telescope: a third-generation gravitational wave observatory. Classical and Quantum Gravity, 2010, 27, 194002.	1.5	1,211
13	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
14	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
15	GW190425: Observation of a Compact Binary Coalescence with Total MassÂâ^¼Â3.4 M _⊙ . Astrophysical Journal Letters, 2020, 892, L3.	3.0	1,049
16	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	1.5	1,029
17	LIGO: the Laser Interferometer Gravitational-Wave Observatory. Reports on Progress in Physics, 2009, 72, 076901.	8.1	971
18	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	3.0	968

#	Article	IF	Citations
19	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. Classical and Quantum Gravity, 2010, 27, 173001.	1.5	956
20	Binary Black Hole Mergers in the First Advanced LIGO Observing Run. Physical Review X, 2016, 6, .	2.8	898
21	GW190521: A Binary Black Hole Merger with a Total Mass of <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>150</mml:mn><mml:mtext>â€%</mml:mtext> c/mml:mtext> â€% c/mml:mtext> c/mml:m</mml:mrow></mml:math>	ml an text>	∢n ≋ark :msub∋
22	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	15.6	825
23	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
24	Exploring the sensitivity of next generation gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 044001.	1.5	735
25	Properties of the Binary Neutron Star Merger GW170817. Physical Review X, 2019, 9, .	2.8	728
26	A gravitational wave observatory operating beyond the quantum shot-noise limit. Nature Physics, 2011, 7, 962-965.	6.5	716
27	A gravitational-wave standard siren measurement of the Hubble constant. Nature, 2017, 551, 85-88.	13.7	674
28	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	2.9	673
29	Sensitivity studies for third-generation gravitational wave observatories. Classical and Quantum Gravity, 2011, 28, 094013.	1.5	644
30	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.	3.0	633
31	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
32	Population Properties of Compact Objects from the Second LIGO–Virgo Gravitational-Wave Transient Catalog. Astrophysical Journal Letters, 2021, 913, L7.	3.0	514
33	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
34	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. Physical Review Letters, 2016, 116, 131103.	2.9	466
35	Observation of Gravitational Waves from Two Neutron Star–Black Hole Coalescences. Astrophysical Journal Letters, 2021, 915, L5.	3.0	453
36	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

#	Article	IF	Citations
37	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, $2016,19,1.$	8.2	427
38	Properties and Astrophysical Implications of the 150 M _⊙ Binary Black Hole Merger GW190521. Astrophysical Journal Letters, 2020, 900, L13.	3.0	406
39	GW190412: Observation of a binary-black-hole coalescence with asymmetric masses. Physical Review D, 2020, 102, .	1.6	394
40	Tests of General Relativity with GW170817. Physical Review Letters, 2019, 123, 011102.	2.9	370
41	Scientific objectives of Einstein Telescope. Classical and Quantum Gravity, 2012, 29, 124013.	1.5	355
42	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
43	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. Physical Review D, 2016, 93, .	1.6	315
44	An upper limit on the stochastic gravitational-wave background of cosmological origin. Nature, 2009, 460, 990-994.	13.7	303
45	The third generation of gravitational wave observatories and their science reach. Classical and Quantum Gravity, 2010, 27, 084007.	1.5	287
46	Sensitivity of the Advanced LIGO detectors at the beginning of gravitational wave astronomy. Physical Review D, 2016, 93, .	1.6	286
47	The GEO 600 gravitational wave detector. Classical and Quantum Gravity, 2002, 19, 1377-1387.	1.5	284
48	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. Physical Review Letters, 2016, 116, 131102.	2.9	269
49	Detector description and performance for the first coincidence observations between LIGO and GEO. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 517, 154-179.	0.7	259
50	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. Astrophysical Journal Letters, 2016, 833, L1.	3.0	230
51	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. Classical and Quantum Gravity, 2016, 33, 134001.	1.5	225
52	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. Astrophysical Journal Letters, 2016, 826, L13.	3.0	210
53	Search for the isotropic stochastic background using data from Advanced LIGO's second observing run. Physical Review D, 2019, 100, .	1.6	200
54	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. Physical Review Letters, 2017, 118, 121101.	2.9	194

#	Article	IF	CITATIONS
55	Upper limits on the isotropic gravitational-wave background from Advanced LIGO and Advanced Virgoâ \in ^{Ms} third observing run. Physical Review D, 2021, 104, .	1.6	192
56	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
57	A guide to LIGO–Virgo detector noise and extraction of transient gravitational-wave signals. Classical and Quantum Gravity, 2020, 37, 055002.	1.5	188
58	Search for gravitational waves from low mass compact binary coalescence in LIGO's sixth science run and Virgo's science runs 2 and 3. Physical Review D, 2012, 85, .	1.6	185
59	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. Astrophysical Journal Letters, 2019, 876, L7.	3.0	179
60	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. Physical Review Letters, 2018, 120, 091101.	2.9	166
61	Setting upper limits on the strength of periodic gravitational waves from PSRJ1939+2134using the first science data from the GEO 600 and LIGO detectors. Physical Review D, 2004, 69, .	1.6	165
62	Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar. Astrophysical Journal, 2008, 683, L45-L49.	1.6	160
63	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated withÂGW170817. Astrophysical Journal Letters, 2017, 850, L39.	3.0	156
64	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. Astrophysical Journal, 2010, 713, 671-685.	1.6	155
65	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.	3.0	146
66	Analysis of LIGO data for gravitational waves from binary neutron stars. Physical Review D, 2004, 69, .	1.6	145
67	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
68	Implications for the Origin of GRB 070201 from LIGO Observations. Astrophysical Journal, 2008, 681, 1419-1430.	1.6	143
69	Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory. Astrophysical Journal Letters, 2017, 850, L35.	3.0	135
70	The GEO-HF project. Classical and Quantum Gravity, 2006, 23, S207-S214.	1.5	133
71	Parameter estimation for compact binary coalescence signals with the first generation gravitational-wave detector network. Physical Review D, 2013, 88, .	1.6	132
72	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. Astrophysical Journal, 2017, 839, 12.	1.6	131

#	Article	IF	CITATIONS
73	Limits on Gravitational-Wave Emission from Selected Pulsars Using LIGO Data. Physical Review Letters, 2005, 94, 181103.	2.9	130
74	Searches for periodic gravitational waves from unknown isolated sources and Scorpius X-1: Results from the second LIGO science run. Physical Review D, 2007, 76, .	1.6	128
75	Search for gravitational waves from binary inspirals in S3 and S4 LIGO data. Physical Review D, 2008, 77, .	1.6	126
76	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. Astrophysical Journal, 2014, 785, 119.	1.6	125
77	Status of the GEO600 detector. Classical and Quantum Gravity, 2006, 23, S71-S78.	1.5	123
78	Observation of a kilogram-scale oscillator near its quantum ground state. New Journal of Physics, 2009, 11, 073032.	1.2	123
79	Upper limits on gravitational wave emission from 78 radio pulsars. Physical Review D, 2007, 76, .	1.6	121
80	Searching for a Stochastic Background of Gravitational Waves with the Laser Interferometer Gravitational-Wave Observatory. Astrophysical Journal, 2007, 659, 918-930.	1.6	120
81	Search for gravitational waves from low mass binary coalescences in the first year of LIGO's S5 data. Physical Review D, 2009, 79, .	1.6	120
82	Calibration of the LIGO gravitational wave detectors in the fifth science run. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 223-240.	0.7	120
83	A cryogenic silicon interferometer for gravitational-wave detection. Classical and Quantum Gravity, 2020, 37, 165003.	1.5	120
84	Observing gravitational-wave transient GW150914 with minimal assumptions. Physical Review D, 2016, 93, .	1.6	119
85	Search for Subsolar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. Physical Review Letters, 2019, 123, 161102.	2.9	119
86	Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1. Physical Review D, 2010, 82, .	1.6	111
87	All-sky search for periodic gravitational waves in LIGO S4 data. Physical Review D, 2008, 77, .	1.6	110
88	Search for gravitational waves from galactic and extra-galactic binary neutron stars. Physical Review D, 2005, 72, .	1.6	109
89	Model comparison from LIGO–Virgo data on GW170817's binary components and consequences for the merger remnant. Classical and Quantum Gravity, 2020, 37, 045006.	1.5	109
90	First upper limits from LIGO on gravitational wave bursts. Physical Review D, 2004, 69, .	1.6	108

#	Article	IF	Citations
91	All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run. Physical Review D, 2010, 81, .	1.6	107
92	All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run. Physical Review D, 2012, 85, .	1.6	107
93	Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model. Physical Review X, 2016, 6, .	2.8	106
94	Search for gravitational waves from low mass compact binary coalescence in 186 days of LIGO's fifth science run. Physical Review D, 2009, 80, .	1.6	105
95	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. Astrophysical Journal, 2010, 722, 1504-1513.	1.6	104
96	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.	1.6	104
97	Identification and mitigation of narrow spectral artifacts that degrade searches for persistent gravitational waves in the first two observing runs of Advanced LIGO. Physical Review D, 2018, 97, .	1.6	104
98	Directly comparing GW150914 with numerical solutions of Einstein's equations for binary black hole coalescence. Physical Review D, 2016, 94, .	1.6	102
99	All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data. Physical Review D, 2019, 100, .	1.6	102
100	Effects of waveform model systematics on the interpretation of GW150914. Classical and Quantum Gravity, 2017, 34, 104002.	1.5	98
101	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. Astrophysical Journal, 2019, 875, 160.	1.6	97
102	Analysis of first LIGO science data for stochastic gravitational waves. Physical Review D, 2004, 69, .	1.6	96
103	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. Physical Review Letters, 2011, 107, 271102.	2.9	94
104	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.	1.5	94
105	Search for gravitational waves from binary black hole inspiral, merger, and ringdown in LIGO-Virgo data from 2009–2010. Physical Review D, 2013, 87, .	1.6	92
106	High-energy neutrino follow-up search of gravitational wave event GW150914 with ANTARES and IceCube. Physical Review D, 2016, 93, .	1.6	92
107	Einstein@Home all-sky search for periodic gravitational waves in LIGO S5 data. Physical Review D, 2013, 87, .	1.6	91
108	Upper limit map of a background of gravitational waves. Physical Review D, 2007, 76, .	1.6	90

#	Article	IF	Citations
109	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.	1.6	90
110	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. Astrophysical Journal, 2011, 737, 93.	1.6	89
111	Constraints on cosmic strings using data from the first Advanced LIGO observing run. Physical Review D, 2018, 97, .	1.6	88
112	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015–2017 LIGO Data. Astrophysical Journal, 2019, 879, 10.	1.6	88
113	Constraints on Cosmic Strings Using Data from the Third Advanced LIGO–Virgo Observing Run. Physical Review Letters, 2021, 126, 241102.	2.9	87
114	Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009–2010 LIGO and Virgo Data. Physical Review Letters, 2014, 113, 231101.	2.9	86
115	Status of GEO 600. Classical and Quantum Gravity, 2004, 21, S417-S423.	1.5	85
116	Search for gravitational waves from binary black hole inspiral, merger, and ringdown. Physical Review D, 2011, 83, .	1.6	85
117	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.	2.9	85
118	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. Physical Review Letters, 2017, 118, 121102.	2.9	84
119	Implementation and testing of the first prompt search forÂgravitational wave transients with electromagnetic counterparts. Astronomy and Astrophysics, 2012, 539, A124.	2.1	84
120	All-Sky LIGO Search for Periodic Gravitational Waves in the Early Fifth-Science-Run Data. Physical Review Letters, 2009, 102, 111102.	2.9	83
121	Einstein@Home search for periodic gravitational waves in LIGO S4 data. Physical Review D, 2009, 79, .	1.6	83
122	Search for gravitational waves from primordial black hole binary coalescences in the galactic halo. Physical Review D, 2005, 72, .	1.6	79
123	Search for gravitational-wave bursts in the first year of the fifth LIGO science run. Physical Review D, 2009, 80, .	1.6	79
124	Search for gravitational-wave bursts in LIGO data from the fourth science run. Classical and Quantum Gravity, 2007, 24, 5343-5369.	1.5	78
125	Einstein@Home search for periodic gravitational waves in early S5 LIGO data. Physical Review D, 2009, 80, .	1.6	78
126	Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. Physical Review Letters, 2018, 121, 231103.	2.9	77

#	Article	IF	CITATIONS
127	Improving astrophysical parameter estimation via offline noise subtraction for Advanced LIGO. Physical Review D, 2019, 99, .	1.6	77
128	First all-sky upper limits from LIGO on the strength of periodic gravitational waves using the Hough transform. Physical Review D, 2005, 72, .	1.6	75
129	Search for gravitational waves from binary black hole inspirals in LIGO data. Physical Review D, 2006, 73, .	1.6	75
130	First low-latency LIGO+Virgo search for binary inspirals and their electromagnetic counterparts. Astronomy and Astrophysics, 2012, 541, A155.	2.1	75
131	Search for gravitational waves associated with the gamma ray burst GRB030329 using the LIGO detectors. Physical Review D, 2005, 72, .	1.6	74
132	The characterization of Virgo data and its impact on gravitational-wave searches. Classical and Quantum Gravity, 2012, 29, 155002.	1.5	73
133	Search for intermediate mass black hole binaries in the first observing run of Advanced LIGO. Physical Review D, 2017, 96, .	1.6	73
134	On the Progenitor of Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 850, L40.	3.0	73
135	Calibration of the Advanced LIGO detectors for the discovery of the binary black-hole merger GW150914. Physical Review D, 2017, 95, .	1.6	72
136	Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs. Astrophysical Journal, 2019, 883, 149.	1.6	72
137	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. Astrophysical Journal, 2019, 875, 161.	1.6	71
138	Search for Gravitational-Wave Bursts from Soft Gamma Repeaters. Physical Review Letters, 2008, 101, 211102.	2.9	69
139	All-sky search for short gravitational-wave bursts in the first Advanced LIGO run. Physical Review D, 2017, 95, .	1.6	69
140	The basic physics of the binary black hole merger GW150914. Annalen Der Physik, 2017, 529, 1600209.	0.9	69
141	Optically targeted search for gravitational waves emitted by core-collapse supernovae during the first and second observing runs of advanced LIGO and advanced Virgo. Physical Review D, 2020, 101, .	1.6	69
142	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. Physical Review Letters, 2014, 112, 131101.	2.9	68
143	First Search for Nontensorial Gravitational Waves from Known Pulsars. Physical Review Letters, 2018, 120, 031104.	2.9	68
144	All-sky search for periodic gravitational waves in the full S5 LIGO data. Physical Review D, 2012, 85, .	1.6	66

#	Article	IF	Citations
145	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. Astrophysical Journal, 2015, 813, 39.	1.6	66
146	Directed search for continuous gravitational waves from the Galactic center. Physical Review D, 2013, 88, .	1.6	65
147	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. Astrophysical Journal Letters, 2020, 902, L21.	3.0	65
148	All-sky search for periodic gravitational waves in the O1 LIGO data. Physical Review D, 2017, 96, .	1.6	64
149	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.	3.0	63
150	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. Astrophysical Journal, Supplement Series, 2012, 203, 28.	3.0	62
151	Search for anisotropic gravitational-wave backgrounds using data from Advanced LIGO and Advanced Virgo's first three observing runs. Physical Review D, 2021, 104, .	1.6	62
152	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO [*] . Astrophysical Journal, 2019, 875, 122.	1.6	61
153	Search for gravitational waves associated with 39 gamma-ray bursts using data from the second, third, and fourth LIGO runs. Physical Review D, 2008, 77, .	1.6	60
154	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.	1.6	60
155	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. Astrophysical Journal, 2012, 755, 2.	1.6	60
156	First all-sky search for continuous gravitational waves from unknown sources in binary systems. Physical Review D, 2014, 90, .	1.6	60
157	First targeted search for gravitational-wave bursts from core-collapse supernovae in data of first-generation laser interferometer detectors. Physical Review D, 2016, 94, .	1.6	60
158	First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data. Physical Review D, 2017, 96, .	1.6	60
159	Narrow-band search for gravitational waves from known pulsars using the second LIGO observing run. Physical Review D, 2019, 99, .	1.6	60
160	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
161	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.	1.6	59
162	Upper limits on gravitational wave bursts in LIGO's second science run. Physical Review D, 2005, 72, .	1.6	57

#	Article	IF	CITATIONS
163	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. Astrophysical Journal, Supplement Series, 2014, 211, 7.	3.0	57
164	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. Astrophysical Journal Letters, 2011, 734, L35.	3.0	55
165	Search of S3 LIGO data for gravitational wave signals from spinning black hole and neutron star binary inspirals. Physical Review D, 2008, 78, .	1.6	54
166	Search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar. Physical Review D, 2011, 83, .	1.6	54
167	All-sky search for short gravitational-wave bursts in the second Advanced LIGO and Advanced Virgo run. Physical Review D, 2019, 100, .	1.6	54
168	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.	1.6	52
169	Search for intermediate mass black hole binaries in the first and second observing runs of the Advanced LIGO and Virgo network. Physical Review D, 2019, 100, .	1.6	52
170	Directional limits on persistent gravitational waves using data from Advanced LIGO's first two observing runs. Physical Review D, 2019, 100, .	1.6	52
171	Search for gravitational wave radiation associated with the pulsating tail of the SGR <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mn>1806</mml:mn><mml:mo>â^'</mml:mo><mml:mn>20</mml:mn></mml:math> hyperfor of 27 December 2004 using LIGO. Physical Review D. 2007. 76	fl <mark>a</mark> ré	51
172	Upper limits from the LIGO and TAMA detectors on the rate of gravitational-wave bursts. Physical Review D, 2005, 72, .	1.6	49
173	Search for gravitational waves from intermediate mass binary black holes. Physical Review D, 2012, 85,	1.6	48
174	Directed search for gravitational waves from Scorpius X-1 with initial LIGO data. Physical Review D, 2015, 91, .	1.6	47
175	First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data. Physical Review D, 2017, 96, .	1.6	47
176	Prospects for Detecting Gravitational Waves at 5ÂHz with Ground-Based Detectors. Physical Review Letters, 2018, 120, 141102.	2.9	47
177	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
178	Full band all-sky search for periodic gravitational waves in the O1 LIGO data. Physical Review D, 2018, 97, .	1.6	46
179	Search for gravitational waves from Scorpius X-1 in the second Advanced LIGO observing run with an improved hidden Markov model. Physical Review D, 2019, 100, .	1.6	46
180	First LIGO search for gravitational wave bursts from cosmic (super)strings. Physical Review D, 2009, 80, .	1.6	45

#	Article	IF	CITATIONS
181	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. Astrophysical Journal, 2009, 701, L68-L74.	1.6	45
182	SUPPLEMENT: "LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914―(2016, ApJL, 826, L13). Astrophysical Journal, Supplement Series, 2016, 225, 8.	3.0	44
183	Upper limits on a stochastic gravitational-wave background using LIGO and Virgo interferometers at 600–1000ÂHz. Physical Review D, 2012, 85, .	1.6	43
184	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
185	The NINJA-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. Classical and Quantum Gravity, 2014, 31, 115004.	1.5	42
186	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
187	Joint LIGO and TAMA300 search for gravitational waves from inspiralling neutron star binaries. Physical Review D, 2006, 73, .	1.6	40
188	Search for high-energy neutrinos from gravitational wave event GW151226 and candidate LVT151012 with ANTARES and IceCube. Physical Review D, 2017, 96, .	1.6	40
189	All-sky search for gravitational wave emission from scalar boson clouds around spinning black holes in LIGO O3 data. Physical Review D, 2022, 105, .	1.6	40
190	Searching for stochastic gravitational waves using data from the two colocated LIGO Hanford detectors. Physical Review D, 2015, 91, .	1.6	39
191	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
192	Search for gravitational wave ringdowns from perturbed black holes in LIGO S4 data. Physical Review D, 2009, 80, .	1.6	38
193	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
194	Constraining the <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -Modeâ€" <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>g</mml:mi></mml:math> -Mode Tidal Instability with GW170817. Physical Review Letters, 2019, 122, 061104.	2.9	36
195	First cross-correlation analysis of interferometric and resonant-bar gravitational-wave data for stochastic backgrounds. Physical Review D, 2007, 76, .	1.6	35
196	Search for gravitational radiation from intermediate mass black hole binaries in data from the second LIGO-Virgo joint science run. Physical Review D, 2014, 89, .	1.6	35
197	Comprehensive all-sky search for periodic gravitational waves in the sixth science run LIGO data. Physical Review D, 2016, 94, .	1.6	35
198	Implementation of an \$mathcal{F}\$-statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. Classical and Quantum Gravity, 2014, 31, 165014.	1.5	34

#	Article	IF	CITATIONS
199	All-sky search for short gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. Physical Review D, 2021, 104, .	1.6	33
200	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
201	Search for high frequency gravitational-wave bursts in the first calendar year of LIGO's fifth science run. Physical Review D, 2009, 80, .	1.6	32
202	A first search for coincident gravitational waves and high energy neutrinos using LIGO, Virgo and ANTARES data from 2007. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 008-008.	1.9	32
203	Search for Gravitational Waves Associated with <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>γ</mml:mi></mml:math> -ray Bursts Detected by the Interplanetary Network. Physical Review Letters. 2014. 113. 011102.	2.9	32
204	First low frequency all-sky search for continuous gravitational wave signals. Physical Review D, 2016, 93, .	1.6	32
205	Search for Multimessenger Sources of Gravitational Waves and High-energy Neutrinos with Advanced LIGO during Its First Observing Run, ANTARES, and IceCube. Astrophysical Journal, 2019, 870, 134.	1.6	32
206	Diving below the Spin-down Limit: Constraints on Gravitational Waves from the Energetic Young Pulsar PSR J0537-6910. Astrophysical Journal Letters, 2021, 913, L27.	3.0	32
207	Search for intermediate-mass black hole binaries in the third observing run of Advanced LIGO and Advanced Virgo. Astronomy and Astrophysics, 2022, 659, A84.	2.1	32
208	Search for long-lived gravitational-wave transients coincident with long gamma-ray bursts. Physical Review D, 2013, 88, .	1.6	31
209	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
210	Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data. Physical Review D, 2022, 105, .	1.6	31
211	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
212	Experimental test of higher-order Laguerre–Gauss modes in the 10 m Glasgow prototype interferometer. Classical and Quantum Gravity, 2013, 30, 035004.	1.5	29
213	Multimessenger search for sources of gravitational waves and high-energy neutrinos: Initial results for LIGO-Virgo and IceCube. Physical Review D, 2014, 90, .	1.6	29
214	Design of a speed meter interferometer proof-of-principle experiment. Classical and Quantum Gravity, 2014, 31, 215009.	1.5	29
215	Methods and results of a search for gravitational waves associated with gamma-ray bursts using the GEO 600, LIGO, and Virgo detectors. Physical Review D, 2014, 89, .	1.6	29
216	All-sky search for long-duration gravitational wave transients with initial LIGO. Physical Review D, 2016, 93, .	1.6	29

#	Article	IF	Citations
217	Search for Gravitational-wave Signals Associated with Gamma-Ray Bursts during the Second Observing Run of Advanced LIGO and Advanced Virgo. Astrophysical Journal, 2019, 886, 75.	1.6	29
218	Constraints from LIGO O3 Data on Gravitational-wave Emission Due to R-modes in the Glitching Pulsar PSR J0537–6910. Astrophysical Journal, 2021, 922, 71.	1.6	29
219	Search for gravitational wave ringdowns from perturbed intermediate mass black holes in LIGO-Virgo data from 2005–2010. Physical Review D, 2014, 89, .	1.6	28
220	The status of GEO 600. Classical and Quantum Gravity, 2005, 22, S193-S198.	1.5	27
221	Constraints on dark photon dark matter using data from LIGO's and Virgo's third observing run. Physical Review D, 2022, 105, .	1.6	27
222	Astrophysically triggered searches for gravitational waves: status and prospects. Classical and Quantum Gravity, 2008, 25, 114051.	1.5	26
223	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. Astrophysical Journal, 2019, 874, 163.	1.6	26
224	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. Physical Review Letters, 2017, 118, 151102.	2.9	24
225	First joint search for gravitational-wave bursts in LIGO and GEO 600 data. Classical and Quantum Gravity, 2008, 25, 245008.	1.5	22
226	Publisher's Note: Sensitivity of the Advanced LIGO detectors at the beginning of gravitational wave astronomy [Phys. Rev. D 93 , 112004 (2016)]. Physical Review D, 2018, 97, .	1.6	22
227	All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run. Physical Review D, 2019, 99, .	1.6	22
228	Application of a Hough search for continuous gravitational waves on data from the fifth LIGO science run. Classical and Quantum Gravity, 2014, 31, 085014.	1.5	21
229	Search of the early O3 LIGO data for continuous gravitational waves from the Cassiopeia A and Vela Jr. supernova remnants. Physical Review D, 2022, 105, .	1.6	21
230	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.	1.6	20
231	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	1.8	20
232	Search for continuous gravitational waves from neutron stars in globular cluster NGC 6544. Physical Review D, 2017, 95, .	1.6	19
233	All-sky search for long-duration gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. Physical Review D, 2021, 104, .	1.6	19
234	Multicolor cavity metrology. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 2092.	0.8	18

#	Article	IF	CITATIONS
235	All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run. Classical and Quantum Gravity, 2018, 35, 065009.	1.5	18
236	All-sky, all-frequency directional search for persistent gravitational waves from Advanced LIGO's and Advanced Virgo's first three observing runs. Physical Review D, 2022, 105, .	1.6	18
237	Silica research in Glasgow. Classical and Quantum Gravity, 2002, 19, 1655-1662.	1.5	17
238	Search of the Orion spur for continuous gravitational waves using a loosely coherent algorithm on data from LIGO interferometers. Physical Review D, 2016, 93, .	1.6	17
239	A joint search for gravitational wave bursts with AURIGA and LIGO. Classical and Quantum Gravity, 2008, 25, 095004.	1.5	16
240	Local-oscillator noise coupling in balanced homodyne readout for advanced gravitational wave detectors. Physical Review D, 2015, 92, .	1.6	16
241	Quantum correlation measurements in interferometric gravitational-wave detectors. Physical Review A, 2017, 95, .	1.0	16
242	Commissioning, characterization and operation of the dual-recycled GEO 600. Classical and Quantum Gravity, 2004, 21, S1737-S1745.	1.5	15
243	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.	1.6	15
244	A report on the status of the GEO 600 gravitational wave detector. Classical and Quantum Gravity, 2003, 20, S581-S591.	1.5	14
245	Search for transient gravitational waves in coincidence with short-duration radio transients during 2007–2013. Physical Review D, 2016, 93, .	1.6	14
246	Candidates for a possible third-generation gravitational wave detector: comparison of ring-Sagnac and sloshing-Sagnac speedmeter interferometers. Classical and Quantum Gravity, 2017, 34, 024001.	1.5	13
247	Laser amplitude stabilization for advanced interferometric gravitational wave detectors. Classical and Quantum Gravity, 2005, 22, 4279-4283.	1.5	12
248	Waveguide grating mirror in a fully suspended 10 meter Fabry-Perot cavity. Optics Express, 2011, 19, 14955.	1.7	12
249	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
250	Coupling of lateral grating displacement to the output ports of a diffractive Fabry–Perot cavity. Journal of Optics, 2009, 11, 085502.	1.5	9
251	Experimental demonstration of a suspended diffractively coupled optical cavity. Optics Letters, 2009, 34, 3184.	1.7	8
252	Novel sensing and control schemes for a three-mirror coupled cavity. Classical and Quantum Gravity, 2007, 24, 3825-3836.	1.5	7

#	Article	IF	Citations
253	Effects of static and dynamic higher-order optical modes in balanced homodyne readout for future gravitational waves detectors. Physical Review D, 2017, 95, .	1.6	7
254	Effects of transients in LIGO suspensions on searches for gravitational waves. Review of Scientific Instruments, 2017, 88, 124501.	0.6	6
255	Ultrahigh level of frequency stabilisation of an injection locked Nd:YAG laser with relevance to gravitational wave detection. Optics Communications, 2000, 186, 177-184.	1.0	5
256	Performance of the Glasgow 10 m prototype gravitational wave detector operating at \hat{l} =1064 nm. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 273, 277-284.	0.9	5
257	Quantum noise cancellation in asymmetric speed metres with balanced homodyne readout. New Journal of Physics, 2018, 20, 103040.	1.2	5
258	Upper limits on the strength of periodic gravitational waves from PSR J1939+2134. Classical and Quantum Gravity, 2004, 21, S671-S676.	1.5	4
259	Translational, rotational, and vibrational coupling into phase in diffractively coupled optical cavities. Optics Letters, 2011, 36, 2746.	1.7	4
260	Demonstration of an optical spring in the 100 g mirror regime. Classical and Quantum Gravity, 2016, 33, 075007.	1.5	4
261	Improved performance of the Glasgow 10Âm prototype gravitational wave detector using an injection-locked Nd:YAG laser source. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 287, 62-64.	0.9	3
262	Optical modulation techniques for length sensing and control of optical cavities. Applied Optics, 2007, 46, 7739.	2.1	3
263	Publisher's Note: All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run [Phys. Rev. D 81 , 102001 (2010)]. Physical Review D, 2012, 85, .	1.6	3
264	Experimental demonstration of coupled optical springs. Classical and Quantum Gravity, 2017, 34, 035020.	1.5	3
265	Status of the GEO600 gravitational wave detector. , 2003, , .		2
266	The status of GEO 600. , 2004, , .		2
267	Control sideband generation for dual-recycled laser interferometric gravitational wave detectors. Classical and Quantum Gravity, 2006, 23, 5661-5666.	1.5	2
268	Publisher's Note: Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1 [Phys. Rev. D82, 102001 (2010)]. Physical Review D, 2012, 85, .	1.6	2
269	Progress and challenges in advanced ground-based gravitational-wave detectors. General Relativity and Gravitation, $2014, 46, 1$.	0.7	2
270	Concepts and research for future detectors. General Relativity and Gravitation, 2014, 46, 1.	0.7	2

#	Article	IF	CITATIONS
271	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , $2018, 21, 1.$		2
272	Techniques in the optimization of length sensing and control systems for a three-mirror coupled cavity. Classical and Quantum Gravity, 2008, 25, 235003.	1.5	1
273	Lateral input-optic displacement in a diffractive Fabry-Perot cavity. Journal of Physics: Conference Series, 2010, 228, 012022.	0.3	1
274	Experimental demonstration of a suspended, diffractively coupled Fabry–Perot cavity. Classical and Quantum Gravity, 2010, 27, 084029.	1.5	1
275	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. , 2016, 19, 1.		1
276	Detector characterization in GEO 600. Classical and Quantum Gravity, 2003, 20, S731-S739.	1.5	0
277	Publisher's Note: All-sky search for periodic gravitational waves in LIGO S4 data [Phys. Rev. D77, 022001 (2008)]. Physical Review D, 2008, 77, .	1.6	0
278	Upper limit to the transverse to longitudinal motion coupling of a waveguide mirror. Classical and Quantum Gravity, 2015, 32, 175005.	1.5	0
279	Demonstration of a switchable damping system to allow low-noise operation of high- Q low-mass suspension systems. Physical Review D, 2017, 96, .	1.6	0