

Aidan Brooks

List of Publications by Citations

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

212 papers	42,945 citations	77 h-index	207 g-index
227 ext. papers	52,311 ext. citations	6.2 avg, IF	5.59 L-index

#	Paper	IF	Citations
212	Observation of Gravitational Waves from a Binary Black Hole Merger. <i>Physical Review Letters</i> , 2016 , 116, 061102	7.4	6108
211	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. <i>Physical Review Letters</i> , 2017 , 119, 161101	7.4	4272
210	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. <i>Physical Review Letters</i> , 2016 , 116, 241103	7.4	2136
209	Multi-messenger Observations of a Binary Neutron Star Merger. <i>Astrophysical Journal Letters</i> , 2017 , 848, L12	7.9	1935
208	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. <i>Astrophysical Journal Letters</i> , 2017 , 848, L13	7.9	1614
207	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. <i>Physical Review Letters</i> , 2017 , 118, 221101	7.4	1609
206	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. <i>Physical Review Letters</i> , 2017 , 119, 141101	7.4	1270
205	Advanced LIGO. <i>Classical and Quantum Gravity</i> , 2015 , 32, 074001	3.3	1098
204	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. <i>Classical and Quantum Gravity</i> , 2010 , 27, 173001	3.3	869
203	GW170817: Measurements of Neutron Star Radii and Equation of State. <i>Physical Review Letters</i> , 2018 , 121, 161101	7.4	867
202	Tests of General Relativity with GW150914. <i>Physical Review Letters</i> , 2016 , 116, 221101	7.4	837
201	LIGO: the Laser Interferometer Gravitational-Wave Observatory. <i>Reports on Progress in Physics</i> , 2009 , 72, 076901	14.4	822
200	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. <i>Astrophysical Journal Letters</i> , 2017 , 851, L35	7.9	809
199	Characterization of the LIGO detectors during their sixth science run. <i>Classical and Quantum Gravity</i> , 2015 , 32, 115012	3.3	790
198	Binary Black Hole Mergers in the First Advanced LIGO Observing Run. <i>Physical Review X</i> , 2016 , 6,	9.1	723
197	GW190425: Observation of a Compact Binary Coalescence with Total Mass $\sim 3.4 M_{\odot}$. <i>Astrophysical Journal Letters</i> , 2020 , 892, L3	7.9	591
196	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. <i>Nature Photonics</i> , 2013 , 7, 613-619	33.9	572

195	GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object. <i>Astrophysical Journal Letters</i> , 2020 , 896, L44	7.9	571
194	A gravitational wave observatory operating beyond the quantum shot-noise limit. <i>Nature Physics</i> , 2011 , 7, 962-965	16.2	554
193	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2018 , 21, 3	32.5	543
192	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , 2016 , 116, 241102	7.4	515
191	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , 2016 , 818, L22	7.9	512
190	Exploring the sensitivity of next generation gravitational wave detectors. <i>Classical and Quantum Gravity</i> , 2017 , 34, 044001	3.3	454
189	GW190521: A Binary Black Hole Merger with a Total Mass of $150 M_{\odot}$. <i>Physical Review Letters</i> , 2020 , 125, 101102	7.4	420
188	A gravitational-wave standard siren measurement of the Hubble constant. <i>Nature</i> , 2017 , 551, 85-88	50.4	413
187	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. <i>Living Reviews in Relativity</i> , 2016 , 19, 1	32.5	393
186	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	7.9	381
185	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , 2016 , 116, 131103	7.4	328
184	An upper limit on the stochastic gravitational-wave background of cosmological origin. <i>Nature</i> , 2009 , 460, 990-4	50.4	267
183	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. <i>Physical Review D</i> , 2016 , 93,	4.9	253
182	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. <i>Astrophysical Journal Letters</i> , 2016 , 833, L1	7.9	209
181	Sensitivity of the Advanced LIGO detectors at the beginning of gravitational wave astronomy. <i>Physical Review D</i> , 2016 , 93,	4.9	208
180	Properties and Astrophysical Implications of the $150 M_{\odot}$ Binary Black Hole Merger GW190521. <i>Astrophysical Journal Letters</i> , 2020 , 900, L13	7.9	207
179	Tests of General Relativity with GW170817. <i>Physical Review Letters</i> , 2019 , 123, 011102	7.4	204
178	Population Properties of Compact Objects from the Second LIGO-Virgo Gravitational-Wave Transient Catalog. <i>Astrophysical Journal Letters</i> , 2021 , 913, L7	7.9	194

177	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , 2016 , 116, 131102	7.4	188
176	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. <i>Astrophysical Journal Letters</i> , 2016 , 826, L13	7.9	183
175	Quantum-Enhanced Advanced LIGO Detectors in the Era of Gravitational-Wave Astronomy. <i>Physical Review Letters</i> , 2019 , 123, 231107	7.4	182
174	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,	4.9	172
173	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. <i>Classical and Quantum Gravity</i> , 2016 , 33,	3.3	155
172	Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar. <i>Astrophysical Journal</i> , 2008 , 683, L45-L49	4.7	148
171	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2020 , 23, 3	32.5	144
170	Observation of Gravitational Waves from Two Neutron Star-Black Hole Coalescences. <i>Astrophysical Journal Letters</i> , 2021 , 915, L5	7.9	142
169	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. <i>Astrophysical Journal</i> , 2010 , 713, 671-685	4.7	140
168	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017 , 118, 121101	7.4	137
167	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017 , 851, L16	7.9	133
166	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	7.9	130
165	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017 , 850, L39	7.9	127
164	Parameter estimation for compact binary coalescence signals with the first generation gravitational-wave detector network. <i>Physical Review D</i> , 2013 , 88,	4.9	122
163	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. <i>Physical Review Letters</i> , 2018 , 120, 091101	7.4	120
162	Search for gravitational waves from binary inspirals in S3 and S4 LIGO data. <i>Physical Review D</i> , 2008 , 77,	4.9	117
161	Searches for periodic gravitational waves from unknown isolated sources and Scorpius X-1: Results from the second LIGO science run. <i>Physical Review D</i> , 2007 , 76,	4.9	116
160	Search for gravitational waves from low mass binary coalescences in the first year of LIGO's S5 data. <i>Physical Review D</i> , 2009 , 79,	4.9	115

159	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. <i>Astrophysical Journal</i> , 2014 , 785, 119	4.7	109
158	Upper limits on gravitational wave emission from 78 radio pulsars. <i>Physical Review D</i> , 2007 , 76,	4.9	109
157	Calibration of the LIGO gravitational wave detectors in the fifth science run. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010 , 624, 223-240	1.2	108
156	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , 2017 , 839, 12	4.7	107
155	Searching for a Stochastic Background of Gravitational Waves with the Laser Interferometer Gravitational-Wave Observatory. <i>Astrophysical Journal</i> , 2007 , 659, 918-930	4.7	107
154	Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1. <i>Physical Review D</i> , 2010 , 82,	4.9	100
153	Search for gravitational waves from low mass compact binary coalescence in 186 days of LIGO's fifth science run. <i>Physical Review D</i> , 2009 , 80,	4.9	100
152	All-sky search for periodic gravitational waves in LIGO S4 data. <i>Physical Review D</i> , 2008 , 77,	4.9	98
151	All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run. <i>Physical Review D</i> , 2012 , 85,	4.9	96
150	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. <i>Astrophysical Journal</i> , 2010 , 722, 1504-1513	4.7	95
149	Observing gravitational-wave transient GW150914 with minimal assumptions. <i>Physical Review D</i> , 2016 , 93,	4.9	94
148	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	4.7	94
147	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	7.9	91
146	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,	4.9	91
145	Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model. <i>Physical Review X</i> , 2016 , 6,	9.1	89
144	Directional limits on persistent gravitational waves using LIGO S5 science data. <i>Physical Review Letters</i> , 2011 , 107, 271102	7.4	85
143	Upper limit map of a background of gravitational waves. <i>Physical Review D</i> , 2007 , 76,	4.9	85
142	Einstein@Home all-sky search for periodic gravitational waves in LIGO S5 data. <i>Physical Review D</i> , 2013 , 87,	4.9	84

141	All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run. <i>Physical Review D</i> , 2010 , 81,	4.9	81
140	High-energy neutrino follow-up search of gravitational wave event GW150914 with ANTARES and IceCube. <i>Physical Review D</i> , 2016 , 93,	4.9	80
139	SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGO'S FIFTH AND VIRGO'S FIRST SCIENCE RUN. <i>Astrophysical Journal</i> , 2010 , 715, 1453-1461	4.7	79
138	A guide to LIGO/Virgo detector noise and extraction of transient gravitational-wave signals. <i>Classical and Quantum Gravity</i> , 2020 , 37, 055002	3.3	78
137	Search for gravitational waves from binary black hole inspiral, merger, and ringdown. <i>Physical Review D</i> , 2011 , 83,	4.9	77
136	All-sky LIGO search for periodic gravitational waves in the early fifth-science-run data. <i>Physical Review Letters</i> , 2009 , 102, 111102	7.4	77
135	Einstein@Home search for periodic gravitational waves in LIGO S4 data. <i>Physical Review D</i> , 2009 , 79,	4.9	77
134	Directly comparing GW150914 with numerical solutions of Einstein's equations for binary black hole coalescence. <i>Physical Review D</i> , 2016 , 94,	4.9	76
133	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. <i>Astrophysical Journal</i> , 2011 , 737, 93	4.7	75
132	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , 2017 , 34, 104002	3.3	74
131	Improved upper limits on the stochastic gravitational-wave background from 2009-2010 LIGO and Virgo data. <i>Physical Review Letters</i> , 2014 , 113, 231101	7.4	74
130	Einstein@Home search for periodic gravitational waves in early S5 LIGO data. <i>Physical Review D</i> , 2009 , 80,	4.9	73
129	Search for gravitational-wave bursts in the first year of the fifth LIGO science run. <i>Physical Review D</i> , 2009 , 80,	4.9	71
128	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	71
127	Search for gravitational-wave bursts in LIGO data from the fourth science run. <i>Classical and Quantum Gravity</i> , 2007 , 24, 5343-5369	3.3	70
126	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	3.3	69
125	First low-latency LIGO+Virgo search for binary inspirals and their electromagnetic counterparts. <i>Astronomy and Astrophysics</i> , 2012 , 541, A155	5.1	69
124	Search for Substellar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. <i>Physical Review Letters</i> , 2019 , 123, 161102	7.4	68

123	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017 , 118, 121102	7.4	65
122	Search for intermediate mass black hole binaries in the first observing run of Advanced LIGO. <i>Physical Review D</i> , 2017 , 96,	4.9	64
121	Search for gravitational-wave bursts from soft gamma repeaters. <i>Physical Review Letters</i> , 2008 , 101, 211102	7.4	64
120	Observation of Parametric Instability in Advanced LIGO. <i>Physical Review Letters</i> , 2015 , 114, 161102	7.4	63
119	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015–2017 LIGO Data. <i>Astrophysical Journal</i> , 2019 , 879, 10	4.7	63
118	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	3.3	62
117	All-sky search for periodic gravitational waves in the full S5 LIGO data. <i>Physical Review D</i> , 2012 , 85,	4.9	61
116	Calibration of the Advanced LIGO detectors for the discovery of the binary black-hole merger GW150914. <i>Physical Review D</i> , 2017 , 95,	4.9	60
115	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal</i> , 2019 , 875, 160	4.7	60
114	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018 , 120, 201102	7.4	60
113	Constraints on cosmic strings from the LIGO-Virgo gravitational-wave detectors. <i>Physical Review Letters</i> , 2014 , 112, 131101	7.4	59
112	The characterization of Virgo data and its impact on gravitational-wave searches. <i>Classical and Quantum Gravity</i> , 2012 , 29, 155002	3.3	59
111	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. <i>Astrophysical Journal</i> , 2015 , 813, 39	4.7	58
110	Directed search for continuous gravitational waves from the Galactic center. <i>Physical Review D</i> , 2013 , 88,	4.9	57
109	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. <i>Astrophysical Journal, Supplement Series</i> , 2012 , 203, 28	8	57
108	Search for gravitational waves associated with 39 gamma-ray bursts using data from the second, third, and fourth LIGO runs. <i>Physical Review D</i> , 2008 , 77,	4.9	55
107	All-sky search for short gravitational-wave bursts in the first Advanced LIGO run. <i>Physical Review D</i> , 2017 , 95,	4.9	54
106	All-sky search for periodic gravitational waves in the O1 LIGO data. <i>Physical Review D</i> , 2017 , 96,	4.9	54

105	First all-sky search for continuous gravitational waves from unknown sources in binary systems. <i>Physical Review D</i> , 2014 , 90,	4.9	54
104	SEARCH FOR GRAVITATIONAL-WAVE BURSTS ASSOCIATED WITH GAMMA-RAY BURSTS USING DATA FROM LIGO SCIENCE RUN 5 AND VIRGO SCIENCE RUN 1. <i>Astrophysical Journal</i> , 2010 , 715, 1438-1452	4.7	54
103	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. <i>Astrophysical Journal</i> , 2012 , 755, 2	4.7	53
102	SUPPLEMENT: THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914 (2016, ApJL, 833, L1). <i>Astrophysical Journal, Supplement Series</i> , 2016 , 227, 14	8	52
101	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. <i>Astrophysical Journal, Supplement Series</i> , 2014 , 211, 7	8	51
100	Search of S3 LIGO data for gravitational wave signals from spinning black hole and neutron star binary inspirals. <i>Physical Review D</i> , 2008 , 78,	4.9	51
99	First Search for Nontensorial Gravitational Waves from Known Pulsars. <i>Physical Review Letters</i> , 2018 , 120, 031104	7.4	50
98	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017 , 850, L40	7.9	50
97	A cryogenic silicon interferometer for gravitational-wave detection. <i>Classical and Quantum Gravity</i> , 2020 , 37, 165003	3.3	50
96	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. <i>Astrophysical Journal</i> , 2019 , 875, 161	4.7	49
95	Search for Substellar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2018 , 121, 231103	7.4	49
94	Exploring the sensitivity of gravitational wave detectors to neutron star physics. <i>Physical Review D</i> , 2019 , 99,	4.9	48
93	Search for gravitational wave radiation associated with the pulsating tail of the SGR 180620 hyperflare of 27 December 2004 using LIGO. <i>Physical Review D</i> , 2007 , 76,	4.9	48
92	Search for gravitational waves from Scorpius X-1 in the first Advanced LIGO observing run with a hidden Markov model. <i>Physical Review D</i> , 2017 , 95,	4.9	47
91	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. <i>Astrophysical Journal Letters</i> , 2011 , 734, L35	7.9	47
90	Search for gravitational waves from intermediate mass binary black holes. <i>Physical Review D</i> , 2012 , 85,	4.9	46
89	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	4.7	46
88	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017 , 529, 1600209	2.6	45

87	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO. <i>Astrophysical Journal</i> , 2019 , 875, 122	4.7	45
86	Development of Customized [F]luoride Elution Techniques for the Enhancement of Copper-Mediated Late-Stage Radiofluorination. <i>Scientific Reports</i> , 2017 , 7, 233	4.9	44
85	First targeted search for gravitational-wave bursts from core-collapse supernovae in data of first-generation laser interferometer detectors. <i>Physical Review D</i> , 2016 , 94,	4.9	43
84	First LIGO search for gravitational wave bursts from cosmic (super)strings. <i>Physical Review D</i> , 2009 , 80,	4.9	43
83	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	4.7	42
82	Achieving resonance in the Advanced LIGO gravitational-wave interferometer. <i>Classical and Quantum Gravity</i> , 2014 , 31, 245010	3.3	41
81	Upper limits on a stochastic gravitational-wave background using LIGO and Virgo interferometers at 600–1000 Hz. <i>Physical Review D</i> , 2012 , 85,	4.9	40
80	Search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar. <i>Physical Review D</i> , 2011 , 83,	4.9	40
79	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. <i>Astrophysical Journal</i> , 2009 , 701, L68-L74	4.7	40
78	Directed search for gravitational waves from Scorpius X-1 with initial LIGO data. <i>Physical Review D</i> , 2015 , 91,	4.9	38
77	SUPPLEMENT: LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914 (2016, ApJL, 826, L13). <i>Astrophysical Journal, Supplement Series</i> , 2016 , 225, 8	8	38
76	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	4.7	36
75	Search for gravitational wave ringdowns from perturbed black holes in LIGO S4 data. <i>Physical Review D</i> , 2009 , 80,	4.9	36
74	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	4.7	35
73	Overview of Advanced LIGO adaptive optics. <i>Applied Optics</i> , 2016 , 55, 8256-8265	0.2	35
72	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	3.3	34
71	First cross-correlation analysis of interferometric and resonant-bar gravitational-wave data for stochastic backgrounds. <i>Physical Review D</i> , 2007 , 76,	4.9	33
70	Search for gravitational radiation from intermediate mass black hole binaries in data from the second LIGO-Virgo joint science run. <i>Physical Review D</i> , 2014 , 89,	4.9	32

69	Search for high-energy neutrinos from gravitational wave event GW151226 and candidate LVT151012 with ANTARES and IceCube. <i>Physical Review D</i> , 2017 , 96,	4.9	32
68	Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data. <i>Physical Review D</i> , 2015 , 91,	4.9	32
67	Ultra-sensitive wavefront measurement using a Hartmann sensor. <i>Optics Express</i> , 2007 , 15, 10370-5	3.3	32
66	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. <i>Astrophysical Journal Letters</i> , 2020 , 902, L21	7.9	32
65	Search for high frequency gravitational-wave bursts in the first calendar year of LIGO's fifth science run. <i>Physical Review D</i> , 2009 , 80,	4.9	31
64	LIGO detector characterization in the second and third observing runs. <i>Classical and Quantum Gravity</i> ,	3.3	31
63	Search for gravitational waves associated with γ -ray bursts detected by the interplanetary network. <i>Physical Review Letters</i> , 2014 , 113, 011102	7.4	30
62	Search for long-lived gravitational-wave transients coincident with long gamma-ray bursts. <i>Physical Review D</i> , 2013 , 88,	4.9	30
61	First low frequency all-sky search for continuous gravitational wave signals. <i>Physical Review D</i> , 2016 , 93,	4.9	29
60	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	6.4	29
59	Observation of three-mode parametric interactions in long optical cavities. <i>Physical Review A</i> , 2008 , 78,	2.6	29
58	Results of the deepest all-sky survey for continuous gravitational waves on LIGO S6 data running on the Einstein@Home volunteer distributed computing project. <i>Physical Review D</i> , 2016 , 94,	4.9	29
57	Comprehensive all-sky search for periodic gravitational waves in the sixth science run LIGO data. <i>Physical Review D</i> , 2016 , 94,	4.9	28
56	All-sky search for long-duration gravitational wave transients with initial LIGO. <i>Physical Review D</i> , 2016 , 93,	4.9	27
55	Implementation of an \mathcal{F} -statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. <i>Classical and Quantum Gravity</i> , 2014 , 31, 165014	3.3	27
54	Searching for stochastic gravitational waves using data from the two colocated LIGO Hanford detectors. <i>Physical Review D</i> , 2015 , 91,	4.9	26
53	Search for gravitational wave ringdowns from perturbed intermediate mass black holes in LIGO-Virgo data from 2005–2010. <i>Physical Review D</i> , 2014 , 89,	4.9	26
52	Methods and results of a search for gravitational waves associated with gamma-ray bursts using the GEO 600, LIGO, and Virgo detectors. <i>Physical Review D</i> , 2014 , 89,	4.9	25

51	Multimessenger search for sources of gravitational waves and high-energy neutrinos: Initial results for LIGO-Virgo and IceCube. <i>Physical Review D</i> , 2014 , 90,	4.9	25
50	Astrophysically triggered searches for gravitational waves: status and prospects. <i>Classical and Quantum Gravity</i> , 2008 , 25, 114051	3.3	24
49	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	4.7	22
48	Constraining the p-Mode-g-Mode Tidal Instability with GW170817. <i>Physical Review Letters</i> , 2019 , 122, 061104	7.4	22
47	Constraints on Cosmic Strings Using Data from the Third Advanced LIGO-Virgo Observing Run. <i>Physical Review Letters</i> , 2021 , 126, 241102	7.4	21
46	Search for Gravitational-wave Signals Associated with Gamma-Ray Bursts during the Second Observing Run of Advanced LIGO and Advanced Virgo. <i>Astrophysical Journal</i> , 2019 , 886, 75	4.7	21
45	The Science benefits and preliminary design of the southern hemisphere gravitational wave detector AIGO. <i>Journal of Physics: Conference Series</i> , 2008 , 122, 012001	0.3	20
44	First joint search for gravitational-wave bursts in LIGO and GEO 600 data. <i>Classical and Quantum Gravity</i> , 2008 , 25, 245008	3.3	19
43	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	3.3	18
42	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. <i>Physical Review Letters</i> , 2017 , 118, 151102	7.4	18
41	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. <i>Astrophysical Journal</i> , 2019 , 874, 163	4.7	17
40	Multicolor cavity metrology. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2012 , 29, 2092-103	1.8	16
39	A joint search for gravitational wave bursts with AURIGA and LIGO. <i>Classical and Quantum Gravity</i> , 2008 , 25, 095004	3.3	15
38	Environmental noise in advanced LIGO detectors. <i>Classical and Quantum Gravity</i> , 2021 , 38, 145001	3.3	15
37	Search of the Orion spur for continuous gravitational waves using a loosely coherent algorithm on data from LIGO interferometers. <i>Physical Review D</i> , 2016 , 93,	4.9	14
36	Search for continuous gravitational waves from neutron stars in globular cluster NGC 6544. <i>Physical Review D</i> , 2017 , 95,	4.9	14
35	Status of the Australian Consortium for Interferometric Gravitational Astronomy. <i>Classical and Quantum Gravity</i> , 2006 , 23, S41-S49	3.3	14
34	Approaching the motional ground state of a 10-kg object. <i>Science</i> , 2021 , 372, 1333-1336	33.3	14

33	Analytical model for ring heater thermal compensation in the Advanced Laser Interferometer Gravitational-wave Observatory. <i>Applied Optics</i> , 2016 , 55, 2619-25	0.2	14
32	Diving below the Spin-down Limit: Constraints on Gravitational Waves from the Energetic Young Pulsar PSR J0537-6910. <i>Astrophysical Journal Letters</i> , 2021 , 913, L27	7.9	13
31	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	3.3	12
30	Direct measurement of absorption-induced wavefront distortion in high optical power systems. <i>Applied Optics</i> , 2009 , 48, 355-64	0.2	11
29	Accurate and precise optical testing with a differential Hartmann wavefront sensor. <i>Applied Optics</i> , 2007 , 46, 861-6	1.7	11
28	High dynamic range thermally actuated bimorph mirror for gravitational wave detectors. <i>Applied Optics</i> , 2020 , 59, 2784-2790	1.7	11
27	Search for transient gravitational waves in coincidence with short-duration radio transients during 2007-2013. <i>Physical Review D</i> , 2016 , 93,	4.9	10
26	Searches for Continuous Gravitational Waves from Young Supernova Remnants in the Early Third Observing Run of Advanced LIGO and Virgo. <i>Astrophysical Journal</i> , 2021 , 921, 80	4.7	10
25	Quantum correlation measurements in interferometric gravitational-wave detectors. <i>Physical Review A</i> , 2017 , 95,	2.6	9
24	A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs. <i>Astrophysical Journal</i> , 2020 , 893, 100	4.7	9
23	An off-axis Hartmann sensor for the measurement of absorption-induced wavefront distortion in advanced gravitational wave interferometers. <i>General Relativity and Gravitation</i> , 2005 , 37, 1575-1580	2.3	8
22	Enhancing the dynamic range of deformable mirrors with compression bias. <i>Optics Express</i> , 2020 , 28, 38480-38490	3.3	8
21	Constraints from LIGO O3 Data on Gravitational-wave Emission Due to R-modes in the Glitching Pulsar PSR J0537-6910. <i>Astrophysical Journal</i> , 2021 , 922, 71	4.7	8
20	Point absorbers in Advanced LIGO. <i>Applied Optics</i> , 2021 , 60, 4047-4063	1.7	8
19	Analysis and visualization of the output mode-matching requirements for squeezing in Advanced LIGO and future gravitational wave detectors. <i>Physical Review D</i> , 2020 , 101,	4.9	7
18	Observation of optical torsional stiffness in a high optical power cavity. <i>Applied Physics Letters</i> , 2009 , 94, 081105	3.4	7
17	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO/Virgo Run O3a. <i>Astrophysical Journal</i> , 2021 , 915, 86	4.7	6
16	In situ characterization of the thermal state of resonant optical interferometers via tracking of their higher-order mode resonances. <i>Classical and Quantum Gravity</i> , 2015 , 32, 135018	3.3	5

15	Testing the suppression of opto-acoustic parametric interactions using optical feedback control. <i>Classical and Quantum Gravity</i> , 2010 , 27, 084028	3.3	5
14	Feedback control of thermal lensing in a high optical power cavity. <i>Review of Scientific Instruments</i> , 2008 , 79, 104501	1.7	5
13	Effects of transients in LIGO suspensions on searches for gravitational waves. <i>Review of Scientific Instruments</i> , 2017 , 88, 124501	1.7	4
12	Search for intermediate-mass black hole binaries in the third observing run of Advanced LIGO and Advanced Virgo. <i>Astronomy and Astrophysics</i> ,	5.1	4
11	Improving the robustness of the advanced LIGO detectors to earthquakes. <i>Classical and Quantum Gravity</i> , 2020 , 37, 235007	3.3	4
10	Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGO-Virgo Third Observing Run. <i>Astrophysical Journal</i> , 2021 , 923, 14	4.7	4
9	Publisher's Note: All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run [Phys. Rev. D 81, 102001 (2010)]. <i>Physical Review D</i> , 2012 , 85,	4.9	3
8	Publisher's Note: Search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar [Phys. Rev. D 83, 042001 (2011)]. <i>Physical Review D</i> , 2012 , 85,	4.9	2
7	Publisher's Note: Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1 [Phys. Rev. D 82, 102001 (2010)]. <i>Physical Review D</i> , 2012 , 85,	4.9	2
6	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA 2018 , 21, 1		2
5	Australia's Role in Gravitational Wave Detection. <i>Publications of the Astronomical Society of Australia</i> , 2003 , 20, 223-241	5.5	1
4			
3	Piezo-deformable mirrors for active mode matching in advanced LIGO.. <i>Optics Express</i> , 2022 , 30, 10491-10501	3.9	1
2	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO-Virgo Run O3b. <i>Astrophysical Journal</i> , 2022 , 928, 186	4.7	1
1	Point Absorber Limits to Future Gravitational-Wave Detectors.. <i>Physical Review Letters</i> , 2021 , 127, 241102	4.4	0