

Aidan Brooks

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/9238275/aidan-brooks-publications-by-year.pdf>

Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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	Piezo-deformable mirrors for active mode matching in advanced LIGO.. <i>Optics Express</i> , 2022 , 30, 10491-10501	3.5	1
211	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
210	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
209	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
208	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
207	Point absorbers in Advanced LIGO. <i>Applied Optics</i> , 2021 , 60, 4047-4063	1.7	8
206	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
205	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
204	Observation of Gravitational Waves from Two Neutron Star-Black Hole Coalescences. <i>Astrophysical Journal Letters</i> , 2021 , 915, L5	7.9	142
203	Approaching the motional ground state of a 10-kg object. <i>Science</i> , 2021 , 372, 1333-1336	33.3	14
202	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
201	Environmental noise in advanced LIGO detectors. <i>Classical and Quantum Gravity</i> , 2021 , 38, 145001	3.3	15
200	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
199	Point Absorber Limits to Future Gravitational-Wave Detectors.. <i>Physical Review Letters</i> , 2021 , 127, 241102	7.4	0
198	Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGO-Virgo's Third Observing Run. <i>Astrophysical Journal</i> , 2021 , 923, 14	4.7	4
197	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
196	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

195	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
194	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
193	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
192	High dynamic range thermally actuated bimorph mirror for gravitational wave detectors. <i>Applied Optics</i> , 2020 , 59, 2784-2790	1.7	11
191	Enhancing the dynamic range of deformable mirrors with compression bias. <i>Optics Express</i> , 2020 , 28, 38480-38490	3.3	8
190	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
189	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. <i>Astrophysical Journal Letters</i> , 2020 , 902, L21	7.9	32
188	A cryogenic silicon interferometer for gravitational-wave detection. <i>Classical and Quantum Gravity</i> , 2020 , 37, 165003	3.3	50
187	Improving the robustness of the advanced LIGO detectors to earthquakes. <i>Classical and Quantum Gravity</i> , 2020 , 37, 235007	3.3	4
186	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
185	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
184	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
183	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
182	Exploring the sensitivity of gravitational wave detectors to neutron star physics. <i>Physical Review D</i> , 2019 , 99,	4.9	48
181	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
180	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
179	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
178	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

177	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
176	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
175	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
174	Tests of General Relativity with GW170817. <i>Physical Review Letters</i> , 2019 , 123, 011102	7.4	204
173	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
172	Search for Substellar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. <i>Physical Review Letters</i> , 2019 , 123, 161102	7.4	68
171	Constraining the p-Mode-g-Mode Tidal Instability with GW170817. <i>Physical Review Letters</i> , 2019 , 122, 061104	7.4	22
170	Quantum-Enhanced Advanced LIGO Detectors in the Era of Gravitational-Wave Astronomy. <i>Physical Review Letters</i> , 2019 , 123, 231107	7.4	182
169	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
168	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
167	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. <i>Physical Review Letters</i> , 2018 , 120, 091101	7.4	120
166	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
165	First Search for Nontensorial Gravitational Waves from Known Pulsars. <i>Physical Review Letters</i> , 2018 , 120, 031104	7.4	50
164	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
163	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA 2018 , 21, 1		2
162	Search for Substellar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2018 , 121, 231103	7.4	49
161	GW170817: Measurements of Neutron Star Radii and Equation of State. <i>Physical Review Letters</i> , 2018 , 121, 161101	7.4	867
160	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018 , 120, 201102	7.4	60

159	Exploring the sensitivity of next generation gravitational wave detectors. <i>Classical and Quantum Gravity</i> , 2017 , 34, 044001	3.3	454
158	All-sky search for short gravitational-wave bursts in the first Advanced LIGO run. <i>Physical Review D</i> , 2017 , 95,	4.9	54
157	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
156	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , 2017 , 34, 104002	3.3	74
155	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
154	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
153	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017 , 118, 121102	7.4	65
152	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , 2017 , 839, 12	4.7	107
151	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017 , 529, 1600209	2.6	45
150	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
149	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
148	A gravitational-wave standard siren measurement of the Hubble constant. <i>Nature</i> , 2017 , 551, 85-88	50.4	413
147	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. <i>Physical Review Letters</i> , 2017 , 119, 161101	7.4	4272
146	Multi-messenger Observations of a Binary Neutron Star Merger. <i>Astrophysical Journal Letters</i> , 2017 , 848, L12	7.9	1935
145	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
144	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
143	Quantum correlation measurements in interferometric gravitational-wave detectors. <i>Physical Review A</i> , 2017 , 95,	2.6	9
142	All-sky search for periodic gravitational waves in the O1 LIGO data. <i>Physical Review D</i> , 2017 , 96,	4.9	54

141	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
140	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
139	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. <i>Physical Review Letters</i> , 2017 , 118, 151102	7.4	18
138	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
137	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017 , 850, L39	7.9	127
136	Effects of transients in LIGO suspensions on searches for gravitational waves. <i>Review of Scientific Instruments</i> , 2017 , 88, 124501	1.7	4
135	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
134	Search for continuous gravitational waves from neutron stars in globular cluster NGC 6544. <i>Physical Review D</i> , 2017 , 95,	4.9	14
133	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
132	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017 , 850, L40	7.9	50
131	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. <i>Astrophysical Journal Letters</i> , 2017 , 851, L35	7.9	809
130	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. <i>Astrophysical Journal Letters</i> , 2016 , 826, L13	7.9	183
129	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
128	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
127	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STARBLACK HOLE MERGERS FROM ADVANCED LIGO'S FIRST OBSERVING RUN. <i>Astrophysical Journal Letters</i> , 2016 , 832, L21	7.9	130
126	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
125	All-sky search for long-duration gravitational wave transients with initial LIGO. <i>Physical Review D</i> , 2016 , 93,	4.9	27
124	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

123	First low frequency all-sky search for continuous gravitational wave signals. <i>Physical Review D</i> , 2016 , 93,	4.9	29
122	Sensitivity of the Advanced LIGO detectors at the beginning of gravitational wave astronomy. <i>Physical Review D</i> , 2016 , 93,	4.9	208
121	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. <i>Physical Review D</i> , 2016 , 93,	4.9	253
120	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
119	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
118	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , 2016 , 116, 131102	7.4	188
117	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , 2016 , 116, 131103	7.4	328
116	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
115	Observing gravitational-wave transient GW150914 with minimal assumptions. <i>Physical Review D</i> , 2016 , 93,	4.9	94
114	Tests of General Relativity with GW150914. <i>Physical Review Letters</i> , 2016 , 116, 221101	7.4	837
113	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , 2016 , 116, 241102	7.4	515
112	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
111	Binary Black Hole Mergers in the First Advanced LIGO Observing Run. <i>Physical Review X</i> , 2016 , 6,	9.1	723
110	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , 2016 , 818, L22	7.9	512
109	Observation of Gravitational Waves from a Binary Black Hole Merger. <i>Physical Review Letters</i> , 2016 , 116, 061102	7.4	6108
108	Overview of Advanced LIGO adaptive optics. <i>Applied Optics</i> , 2016 , 55, 8256-8265	0.2	35
107	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. <i>Classical and Quantum Gravity</i> , 2016 , 33,	3.3	155
106	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

105	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
104	Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model. <i>Physical Review X</i> , 2016 , 6,	9.1	89
103	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
102	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
101	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
100			
99	Searching for stochastic gravitational waves using data from the two colocated LIGO Hanford detectors. <i>Physical Review D</i> , 2015 , 91,	4.9	26
98	Directed search for gravitational waves from Scorpius X-1 with initial LIGO data. <i>Physical Review D</i> , 2015 , 91,	4.9	38
97	Observation of Parametric Instability in Advanced LIGO. <i>Physical Review Letters</i> , 2015 , 114, 161102	7.4	63
96	Characterization of the LIGO detectors during their sixth science run. <i>Classical and Quantum Gravity</i> , 2015 , 32, 115012	3.3	790
95	Advanced LIGO. <i>Classical and Quantum Gravity</i> , 2015 , 32, 074001	3.3	1098
94	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. <i>Astrophysical Journal</i> , 2015 , 813, 39	4.7	58
93	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
92	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
91	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
90	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. <i>Astrophysical Journal</i> , 2014 , 785, 119	4.7	109
89	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
88	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

87	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
86	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
85	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
84	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
83	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. <i>Astrophysical Journal, Supplement Series</i> , 2014 , 211, 7	8	51
82	First all-sky search for continuous gravitational waves from unknown sources in binary systems. <i>Physical Review D</i> , 2014 , 90,	4.9	54
81	Constraints on cosmic strings from the LIGO-Virgo gravitational-wave detectors. <i>Physical Review Letters</i> , 2014 , 112, 131101	7.4	59
80	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
79	Achieving resonance in the Advanced LIGO gravitational-wave interferometer. <i>Classical and Quantum Gravity</i> , 2014 , 31, 245010	3.3	41
78	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
77	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
76	Search for long-lived gravitational-wave transients coincident with long gamma-ray bursts. <i>Physical Review D</i> , 2013 , 88,	4.9	30
75	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
74	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
73	Einstein@Home all-sky search for periodic gravitational waves in LIGO S5 data. <i>Physical Review D</i> , 2013 , 87,	4.9	84
72	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
71	Directed search for continuous gravitational waves from the Galactic center. <i>Physical Review D</i> , 2013 , 88,	4.9	57
70	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. <i>Astrophysical Journal</i> , 2012 , 755, 2	4.7	53

69	All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run. <i>Physical Review D</i> , 2012 , 85,	4.9	96
68	Search for gravitational waves from intermediate mass binary black holes. <i>Physical Review D</i> , 2012 , 85,	4.9	46
67	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
66	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
65	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
64	All-sky search for periodic gravitational waves in the full S5 LIGO data. <i>Physical Review D</i> , 2012 , 85,	4.9	61
63	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
62	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. <i>Astrophysical Journal, Supplement Series</i> , 2012 , 203, 28	8	57
61	The characterization of Virgo data and its impact on gravitational-wave searches. <i>Classical and Quantum Gravity</i> , 2012 , 29, 155002	3.3	59
60	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
59	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
58	First low-latency LIGO+Virgo search for binary inspirals and their electromagnetic counterparts. <i>Astronomy and Astrophysics</i> , 2012 , 541, A155	5.1	69
57	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
56	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
55	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. <i>Astrophysical Journal Letters</i> , 2011 , 734, L35	7.9	47
54	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. <i>Astrophysical Journal</i> , 2011 , 737, 93	4.7	75
53	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
52	Search for gravitational waves from binary black hole inspiral, merger, and ringdown. <i>Physical Review D</i> , 2011 , 83,	4.9	77

51	Directional limits on persistent gravitational waves using LIGO S5 science data. <i>Physical Review Letters</i> , 2011 , 107, 271102	7.4	85
50	A gravitational wave observatory operating beyond the quantum shot-noise limit. <i>Nature Physics</i> , 2011 , 7, 962-965	16.2	554
49	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. <i>Astrophysical Journal</i> , 2010 , 713, 671-685	4.7	140
48	Testing the suppression of opto-acoustic parametric interactions using optical feedback control. <i>Classical and Quantum Gravity</i> , 2010 , 27, 084028	3.3	5
47	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
46	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
45	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
44	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
43	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
42	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. <i>Astrophysical Journal</i> , 2010 , 722, 1504-1513	4.7	95
41	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
40	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
39	Observation of optical torsional stiffness in a high optical power cavity. <i>Applied Physics Letters</i> , 2009 , 94, 081105	3.4	7
38	An upper limit on the stochastic gravitational-wave background of cosmological origin. <i>Nature</i> , 2009 , 460, 990-4	50.4	267
37	Einstein@Home search for periodic gravitational waves in LIGO S4 data. <i>Physical Review D</i> , 2009 , 79,	4.9	77
36	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
35	LIGO: the Laser Interferometer Gravitational-Wave Observatory. <i>Reports on Progress in Physics</i> , 2009 , 72, 076901	14.4	822
34	Einstein@Home search for periodic gravitational waves in early S5 LIGO data. <i>Physical Review D</i> , 2009 , 80,	4.9	73

33	First LIGO search for gravitational wave bursts from cosmic (super)strings. <i>Physical Review D</i> , 2009 , 80,	4.9	43
32	Search for gravitational waves from low mass compact binary coalescence in 186 days of LIGO fifth science run. <i>Physical Review D</i> , 2009 , 80,	4.9	100
31	Search for gravitational waves from low mass binary coalescences in the first year of LIGO S5 data. <i>Physical Review D</i> , 2009 , 79,	4.9	115
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	Search for gravitational wave ringdowns from perturbed black holes in LIGO S4 data. <i>Physical Review D</i> , 2009 , 80,	4.9	36
28	Search for high frequency gravitational-wave bursts in the first calendar year of LIGO fifth science run. <i>Physical Review D</i> , 2009 , 80,	4.9	31
27	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. <i>Astrophysical Journal</i> , 2009 , 701, L68-L74	4.7	40
26	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
25	All-sky search for periodic gravitational waves in LIGO S4 data. <i>Physical Review D</i> , 2008 , 77,	4.9	98
24	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
23	Feedback control of thermal lensing in a high optical power cavity. <i>Review of Scientific Instruments</i> , 2008 , 79, 104501	1.7	5
22	Astrophysically triggered searches for gravitational waves: status and prospects. <i>Classical and Quantum Gravity</i> , 2008 , 25, 114051	3.3	24
21	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
20	A joint search for gravitational wave bursts with AURIGA and LIGO. <i>Classical and Quantum Gravity</i> , 2008 , 25, 095004	3.3	15
19	Observation of three-mode parametric interactions in long optical cavities. <i>Physical Review A</i> , 2008 , 78,	2.6	29
18	Search for gravitational waves from binary inspirals in S3 and S4 LIGO data. <i>Physical Review D</i> , 2008 , 77,	4.9	117
17	Search for gravitational-wave bursts from soft gamma repeaters. <i>Physical Review Letters</i> , 2008 , 101, 211102	7.4	64
16	Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar. <i>Astrophysical Journal</i> , 2008 , 683, L45-L49	4.7	148

15	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
14	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
13	Upper limit map of a background of gravitational waves. <i>Physical Review D</i> , 2007 , 76,	4.9	85
12	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
11	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
10	Upper limits on gravitational wave emission from 78 radio pulsars. <i>Physical Review D</i> , 2007 , 76,	4.9	109
9	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
8	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
7	Ultra-sensitive wavefront measurement using a Hartmann sensor. <i>Optics Express</i> , 2007 , 15, 10370-5	3.3	32
6	Accurate and precise optical testing with a differential Hartmann wavefront sensor. <i>Applied Optics</i> , 2007 , 46, 861-6	1.7	11
5	Status of the Australian Consortium for Interferometric Gravitational Astronomy. <i>Classical and Quantum Gravity</i> , 2006 , 23, S41-S49	3.3	14
4	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
3	Australia's Role in Gravitational Wave Detection. <i>Publications of the Astronomical Society of Australia</i> , 2003 , 20, 223-241	5.5	1
2	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
1	LIGO detector characterization in the second and third observing runs. <i>Classical and Quantum Gravity</i> ,	3.3	31