

R Birney

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4677253/r-birney-publications-by-year.pdf>

Version: 2024-04-24

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.

132
papers

35,655
citations

60
h-index

137
g-index

137
ext. papers

45,387
ext. citations

6.7
avg, IF

4.87
L-index

#	Paper	IF	Citations
132	Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data. <i>Physical Review D</i> , 2022 , 105,	4.9	9
131	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
130	Search of the early O3 LIGO data for continuous gravitational waves from the Cassiopeia A and Vela Jr. supernova remnants. <i>Physical Review D</i> , 2022 , 105,	4.9	4
129	All-sky search for gravitational wave emission from scalar boson clouds around spinning black holes in LIGO O3 data. <i>Physical Review D</i> , 2022 , 105,	4.9	2
128	All-sky search for short gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. <i>Physical Review D</i> , 2021 , 104,	4.9	4
127	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
126	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
125	All-sky search for long-duration gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. <i>Physical Review D</i> , 2021 , 104,	4.9	1
124	All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data. <i>Physical Review D</i> , 2021 , 104,	4.9	15
123	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
122	All-sky search in early O3 LIGO data for continuous gravitational-wave signals from unknown neutron stars in binary systems. <i>Physical Review D</i> , 2021 , 103,	4.9	15
121	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
120	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
119	Observation of Gravitational Waves from Two Neutron Star-Black Hole Coalescences. <i>Astrophysical Journal Letters</i> , 2021 , 915, L5	7.9	142
118	Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog. <i>Physical Review D</i> , 2021 , 103,	4.9	81
117	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
116	GWTC-2: Compact Binary Coalescences Observed by LIGO and Virgo during the First Half of the Third Observing Run. <i>Physical Review X</i> , 2021 , 11,	9.1	311

115	Upper limits on the isotropic gravitational-wave background from Advanced LIGO and Advanced Virgo's third observing run. <i>Physical Review D</i> , 2021 , 104,	4.9	33
114	Search for anisotropic gravitational-wave backgrounds using data from Advanced LIGO and Advanced Virgo's first three observing runs. <i>Physical Review D</i> , 2021 , 104,	4.9	12
113	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
112	Exploration of co-sputtered Ta ₂ O ₅ /rO ₂ thin films for gravitational-wave detectors. <i>Classical and Quantum Gravity</i> , 2021 , 38, 195021	3.3	1
111	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
110	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	57 ¹
109	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	59 ¹
108	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
107	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
106	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
105	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. <i>Astrophysical Journal Letters</i> , 2020 , 902, L21	7.9	32
104	A cryogenic silicon interferometer for gravitational-wave detection. <i>Classical and Quantum Gravity</i> , 2020 , 37, 165003	3.3	50
103	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
102	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
101	GW190521: A Binary Black Hole Merger with a Total Mass of 150 M_{\odot} . <i>Physical Review Letters</i> , 2020 , 125, 101102	7.4	42 ⁰
100	GW190412: Observation of a binary-black-hole coalescence with asymmetric masses. <i>Physical Review D</i> , 2020 , 102,	4.9	212
99	Optically targeted search for gravitational waves emitted by core-collapse supernovae during the first and second observing runs of advanced LIGO and advanced Virgo. <i>Physical Review D</i> , 2020 , 101,	4.9	36
98	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	38 ¹

97	Directional limits on persistent gravitational waves using data from Advanced LIGO's first two observing runs. <i>Physical Review D</i> , 2019 , 100,	4.9	31
96	GWTC-1: A Gravitational-Wave Transient Catalog of Compact Binary Mergers Observed by LIGO and Virgo during the First and Second Observing Runs. <i>Physical Review X</i> , 2019 , 9,	9.1	1169
95	Search for the isotropic stochastic background using data from Advanced LIGO's second observing run. <i>Physical Review D</i> , 2019 , 100,	4.9	117
94	Mirror Coating Solution for the Cryogenic Einstein Telescope. <i>Physical Review Letters</i> , 2019 , 122, 231102, 7.4	7.4	11
93	All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run. <i>Physical Review D</i> , 2019 , 99,	4.9	17
92	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
91	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
90	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
89	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
88	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
87	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
86	Narrow-band search for gravitational waves from known pulsars using the second LIGO observing run. <i>Physical Review D</i> , 2019 , 99,	4.9	43
85	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
84	All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data. <i>Physical Review D</i> , 2019 , 100,	4.9	81
83	All-sky search for short gravitational-wave bursts in the second Advanced LIGO and Advanced Virgo run. <i>Physical Review D</i> , 2019 , 100,	4.9	39
82	High Precision Detection of Change in Intermediate Range Order of Amorphous Zirconia-Doped Tantalum Thin Films Due to Annealing. <i>Physical Review Letters</i> , 2019 , 123, 045501	7.4	17
81	Tests of General Relativity with GW170817. <i>Physical Review Letters</i> , 2019 , 123, 011102	7.4	204
80	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

79	Search for intermediate mass black hole binaries in the first and second observing runs of the Advanced LIGO and Virgo network. <i>Physical Review D</i> , 2019 , 100,	4.9	39
78	Search for Substellar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. <i>Physical Review Letters</i> , 2019 , 123, 161102	7.4	68
77	Constraining the p-Mode-g-Mode Tidal Instability with GW170817. <i>Physical Review Letters</i> , 2019 , 122, 061104	7.4	22
76	Tests of general relativity with the binary black hole signals from the LIGO-Virgo catalog GWTC-1. <i>Physical Review D</i> , 2019 , 100,	4.9	258
75	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
74	Search for gravitational waves from Scorpius X-1 in the second Advanced LIGO observing run with an improved hidden Markov model. <i>Physical Review D</i> , 2019 , 100,	4.9	31
73	Properties of the Binary Neutron Star Merger GW170817. <i>Physical Review X</i> , 2019 , 9,	9.1	423
72	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
71	Effect of elevated substrate temperature deposition on the mechanical losses in tantalum thin film coatings. <i>Classical and Quantum Gravity</i> , 2018 , 35, 075001	3.3	16
70	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. <i>Physical Review Letters</i> , 2018 , 120, 091101	7.4	120
69	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
68	First Search for Nontensorial Gravitational Waves from Known Pulsars. <i>Physical Review Letters</i> , 2018 , 120, 031104	7.4	50
67	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
66	Full band all-sky search for periodic gravitational waves in the O1 LIGO data. <i>Physical Review D</i> , 2018 , 97,	4.9	37
65	Constraints on cosmic strings using data from the first Advanced LIGO observing run. <i>Physical Review D</i> , 2018 , 97,	4.9	60
64	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA 2018 , 21, 1		2
63	Amorphous Silicon with Extremely Low Absorption: Beating Thermal Noise in Gravitational Astronomy. <i>Physical Review Letters</i> , 2018 , 121, 191101	7.4	18
62	Search for Substellar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2018 , 121, 231103	7.4	49

61	GW170817: Measurements of Neutron Star Radii and Equation of State. <i>Physical Review Letters</i> , 2018 , 121, 161101	7.4	867
60	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018 , 120, 201102	7.4	60
59	Exploring the sensitivity of next generation gravitational wave detectors. <i>Classical and Quantum Gravity</i> , 2017 , 34, 044001	3.3	454
58	All-sky search for short gravitational-wave bursts in the first Advanced LIGO run. <i>Physical Review D</i> , 2017 , 95,	4.9	54
57	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , 2017 , 34, 104002	3.3	74
56	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
55	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
54	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017 , 118, 121102	7.4	65
53	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , 2017 , 839, 12	4.7	107
52	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017 , 529, 1600209	2.6	45
51	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
50	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
49	A gravitational-wave standard siren measurement of the Hubble constant. <i>Nature</i> , 2017 , 551, 85-88	50.4	413
48	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. <i>Physical Review Letters</i> , 2017 , 119, 161101	7.4	4272
47	Multi-messenger Observations of a Binary Neutron Star Merger. <i>Astrophysical Journal Letters</i> , 2017 , 848, L12	7.9	1935
46	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
45	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
44	All-sky search for periodic gravitational waves in the O1 LIGO data. <i>Physical Review D</i> , 2017 , 96,	4.9	54

43	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
42	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
41	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
40	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017 , 850, L39	7.9	127
39	Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory. <i>Astrophysical Journal Letters</i> , 2017 , 850, L35	7.9	104
38	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
37	Search for continuous gravitational waves from neutron stars in globular cluster NGC 6544. <i>Physical Review D</i> , 2017 , 95,	4.9	14
36	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
35	Investigation of the antimicrobial properties of modified multilayer diamond-like carbon coatings on 316 stainless steel. <i>Surface and Coatings Technology</i> , 2017 , 314, 72-78	4.4	24
34	First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data. <i>Physical Review D</i> , 2017 , 96,	4.9	39
33	First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data. <i>Physical Review D</i> , 2017 , 96,	4.9	54
32	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017 , 850, L40	7.9	50
31	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. <i>Astrophysical Journal Letters</i> , 2017 , 851, L35	7.9	809
30	Coatings and surface treatments for enhanced performance suspensions for future gravitational wave detectors. <i>Classical and Quantum Gravity</i> , 2017 , 34, 235012	3.3	2
29	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. <i>Astrophysical Journal Letters</i> , 2016 , 826, L13	7.9	183
28	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
27	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
26	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

25	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
24	All-sky search for long-duration gravitational wave transients with initial LIGO. <i>Physical Review D</i> , 2016 , 93,	4.9	27
23	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
22	First low frequency all-sky search for continuous gravitational wave signals. <i>Physical Review D</i> , 2016 , 93,	4.9	29
21	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. <i>Physical Review D</i> , 2016 , 93,	4.9	253
20	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
19	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
18	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , 2016 , 116, 131102	7.4	188
17	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , 2016 , 116, 131103	7.4	328
16	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
15	Observing gravitational-wave transient GW150914 with minimal assumptions. <i>Physical Review D</i> , 2016 , 93,	4.9	94
14	Tests of General Relativity with GW150914. <i>Physical Review Letters</i> , 2016 , 116, 221101	7.4	837
13	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , 2016 , 116, 241102	7.4	515
12	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
11	Binary Black Hole Mergers in the First Advanced LIGO Observing Run. <i>Physical Review X</i> , 2016 , 6,	9.1	723
10	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , 2016 , 818, L22	7.9	512
9	Observation of Gravitational Waves from a Binary Black Hole Merger. <i>Physical Review Letters</i> , 2016 , 116, 061102	7.4	6108
8	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. <i>Classical and Quantum Gravity</i> , 2016 , 33,	3.3	155

7	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
6	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
5	Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model. <i>Physical Review X</i> , 2016 , 6,	9.1	89
4	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
3	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
2	Investigation of Automotive Detailing Products by Ellipsometry and Contact Angle Analysis. <i>Acta Physica Polonica A</i> , 2009 , 116, 712-714	0.6	1
1	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