

Thomas Corbitt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5038924/publications.pdf>

Version: 2024-02-01

89
papers

43,669
citations

19608

61
h-index

42291

92
g-index

93
all docs

93
docs citations

93
times ranked

16801
citing authors

#	ARTICLE	IF	CITATIONS
1	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	1.8	20
2	Passive laser power stabilization via an optical spring. Optics Letters, 2022, 47, 2746.	1.7	2
3	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
4	Laser power stabilization via radiation pressure. Optics Letters, 2021, 46, 1946.	1.7	3
5	Population Properties of Compact Objects from the Second LIGO–Virgo Gravitational-Wave Transient Catalog. Astrophysical Journal Letters, 2021, 913, L7.	3.0	514
6	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
7	Broadband reduction of quantum radiation pressure noise via squeezed light injection. Nature Photonics, 2020, 14, 19-23.	15.6	37
8	Quantum Backaction Cancellation in the Audio Band. Physical Review X, 2020, 10, .	2.8	7
9	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
10	GW190521: A Binary Black Hole Merger with a Total Mass of 150% . Physical Review Letters, 2020, 125, 101102.	2.0	106
11	GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object. Astrophysical Journal Letters, 2020, 896, L44.	3.0	1,090
12	GW190425: Observation of a Compact Binary Coalescence with Total Mass $3.4 M_{\odot}$. Astrophysical Journal Letters, 2020, 892, L3.	3.0	1,049
13	Quantum correlations between light and the kilogram-mass mirrors of LIGO. Nature, 2020, 583, 43-47.	13.7	102
14	Room-temperature optomechanical squeezing. Nature Physics, 2020, 16, 784-788.	6.5	45
15	Properties and Astrophysical Implications of the $150 M_{\odot}$ Binary Black Hole Merger GW190521. Astrophysical Journal Letters, 2020, 900, L13.	3.0	406
16	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. Astrophysical Journal Letters, 2020, 902, L21.	3.0	65
17	Optomechanical entanglement at room temperature: A simulation study with realistic conditions. Physical Review A, 2020, 102, .	1.0	5
18	Numerical Evaluation of Ponderomotive Entanglement in Realistic Experimental Conditions. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
19	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015â€“2017 LIGO Data. <i>Astrophysical Journal</i> , 2019, 879, 10.	1.6	88
20	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.	1.6	72
21	Search for Substellar Mass Ultracompact Binaries in Advanced LIGOâ€™s Second Observing Run. <i>Physical Review Letters</i> , 2019, 123, 161102.	2.9	119
22	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.	3.0	566
23	Exploring the sensitivity of gravitational wave detectors to neutron star physics. <i>Physical Review D</i> , 2019, 99, .	1.6	78
24	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.	1.6	30
25	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO[*]. <i>Astrophysical Journal</i> , 2019, 875, 122.	1.6	61
26	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal</i> , 2019, 875, 160.	1.6	97
27	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. <i>Astrophysical Journal</i> , 2019, 875, 161.	1.6	71
28	Measurement of quantum back action in the audio band at room temperature. <i>Nature</i> , 2019, 568, 364-367.	13.7	69
29	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGOâ€™s Second Observing Run. <i>Astrophysical Journal</i> , 2019, 874, 163.	1.6	26
30	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.	1.6	29
31	Radiation-pressure-mediated control of an optomechanical cavity. <i>Physical Review A</i> , 2018, 97, .	1.0	22
32	Search for Substellar-Mass Ultracompact Binaries in Advanced LIGOâ€™s First Observing Run. <i>Physical Review Letters</i> , 2018, 121, 231103.	2.9	77
33	GW170817: Measurements of Neutron Star Radii and Equation of State. <i>Physical Review Letters</i> , 2018, 121, 161101.	2.9	1,473
34	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018, 120, 201102.	2.9	85
35	Observation of an optical spring with a beam splitter. <i>Optics Letters</i> , 2018, 43, 2193.	1.7	4
36	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , 2017, 34, 104002.	1.5	98

#	ARTICLE	IF	CITATIONS
37	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121101.	2.9	194
38	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121102.	2.9	84
39	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , 2017, 839, 12.	1.6	131
40	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017, 529, 1600209.	0.9	69
41	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. <i>Physical Review Letters</i> , 2017, 119, 141101.	2.9	1,600
42	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.	1.6	46
43	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. <i>Physical Review Letters</i> , 2017, 119, 161101.	2.9	6,413
44	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. <i>Astrophysical Journal Letters</i> , 2017, 848, L13.	3.0	2,314
45	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.	1.6	52
46	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 851, L16.	3.0	189
47	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L39.	3.0	156
48	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. <i>Physical Review Letters</i> , 2017, 118, 221101.	2.9	1,987
49	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L40.	3.0	73
50	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. <i>Astrophysical Journal Letters</i> , 2017, 851, L35.	3.0	968
51	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. <i>Astrophysical Journal Letters</i> , 2016, 833, L1.	3.0	230
52	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.	3.0	146
53	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , 2016, 116, 131102.	2.9	269
54	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , 2016, 116, 131103.	2.9	466

#	ARTICLE	IF	CITATIONS
55	SUPPLEMENT: α 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
56	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	2.9	1,224
57	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	2.9	673
58	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	2.9	2,701
59	Stable Optical Trap from a Single Optical Field Utilizing Birefringence. Physical Review Letters, 2016, 117, 213604.	2.9	20
60	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.	3.0	633
61	Observation of Gravitational Waves from a Binary Black Hole Merger. Physical Review Letters, 2016, 116, 061102.	2.9	8,753
62	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	1.5	1,029
63	Advanced LIGO. Classical and Quantum Gravity, 2015, 32, 074001.	1.5	1,929
64	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. Astrophysical Journal, 2015, 813, 39.	1.6	66
65	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. Astrophysical Journal, Supplement Series, 2014, 211, 7.	3.0	57
66	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. Physical Review Letters, 2014, 112, 131101.	2.9	68
67	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
68	Implementation of an F -statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. Classical and Quantum Gravity, 2014, 31, 165014.	1.5	34
69	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. Astrophysical Journal, 2014, 785, 119.	1.6	125
70	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
71	Suppression of quantum-radiation-pressure noise in an optical spring. Physical Review A, 2013, 88, .	1.0	15
72	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	15.6	825

#	ARTICLE	IF	CITATIONS
73	Structural thermal noise in gram-scale mirror oscillators. <i>New Journal of Physics</i> , 2012, 14, 115008.	1.2	13
74	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. <i>Astrophysical Journal, Supplement Series</i> , 2012, 203, 28.	3.0	62
75	The characterization of Virgo data and its impact on gravitational-wave searches. <i>Classical and Quantum Gravity</i> , 2012, 29, 155002.	1.5	73
76	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.	1.6	104
77	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. <i>Astrophysical Journal Letters</i> , 2011, 734, L35.	3.0	55
78	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. <i>Astrophysical Journal</i> , 2011, 737, 93.	1.6	89
79	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. <i>Physical Review Letters</i> , 2011, 107, 271102.	2.9	94
80	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. <i>Astrophysical Journal</i> , 2010, 722, 1504-1513.	1.6	104
81	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. <i>Classical and Quantum Gravity</i> , 2010, 27, 173001.	1.5	956
82	Standard Quantum Limit for Probing Mechanical Energy Quantization. <i>Physical Review Letters</i> , 2009, 103, 100402.	2.9	88
83	Route to ponderomotive entanglement of light via optically trapped mirrors. <i>New Journal of Physics</i> , 2008, 10, 095017.	1.2	30
84	An All-Optical Trap for a Gram-Scale Mirror. <i>Physical Review Letters</i> , 2007, 98, 150802.	2.9	318
85	Optical Dilution and Feedback Cooling of a Gram-Scale Oscillator to 6.9ÅmK. <i>Physical Review Letters</i> , 2007, 99, 160801.	2.9	193
86	Squeezed-state source using radiation-pressure-induced rigidity. <i>Physical Review A</i> , 2006, 73, .	1.0	92
87	Measurement of radiation-pressure-induced optomechanical dynamics in a suspended Fabry-Perot cavity. <i>Physical Review A</i> , 2006, 74, .	1.0	136
88	Mathematical framework for simulation of quantum fields in complex interferometers using the two-photon formalism. <i>Physical Review A</i> , 2005, 72, .	1.0	31
89	Review: Quantum noise in gravitational-wave interferometers. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2004, 6, S675-S683.	1.4	68