

Paul Fulda

List of Publications by Year in descending order

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132
papers

35,486
citations

13865

67
h-index

16183

124
g-index

138
all docs

138
docs citations

138
times ranked

13865
citing authors

#	ARTICLE	IF	CITATIONS
1	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	7.8	2,701
2	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. Astrophysical Journal Letters, 2017, 848, L13.	8.3	2,314
3	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. Physical Review Letters, 2017, 118, 221101.	7.8	1,987
4	Advanced LIGO. Classical and Quantum Gravity, 2015, 32, 074001.	4.0	1,929
5	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. Physical Review Letters, 2017, 119, 141101.	7.8	1,600
6	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	7.8	1,473
7	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	7.8	1,224
8	The Einstein Telescope: a third-generation gravitational wave observatory. Classical and Quantum Gravity, 2010, 27, 194002.	4.0	1,211
9	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.	8.3	1,090
10	GW190425: Observation of a Compact Binary Coalescence with Total Mass $\hat{\sim} 3.4 M_{\odot}$. Astrophysical Journal Letters, 2020, 892, L3.	8.3	1,049
11	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	4.0	1,029
12	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	8.3	968
13	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. Classical and Quantum Gravity, 2010, 27, 173001.	4.0	956
14	GW190521: A Binary Black Hole Merger with a Total Mass of $150 M_{\odot}$. Physical Review Letters, 2020, 125, 101102.	8.3	856
15	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	31.4	825
16	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	26.7	808
17	Exploring the sensitivity of next generation gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 044001.	4.0	735
18	A gravitational wave observatory operating beyond the quantum shot-noise limit. Nature Physics, 2011, 7, 962-965.	16.7	716

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19	A gravitational-wave standard siren measurement of the Hubble constant. <i>Nature</i> , 2017, 551, 85-88.	27.8	674
20	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , 2016, 116, 241102.	7.8	673
21	Sensitivity studies for third-generation gravitational wave observatories. <i>Classical and Quantum Gravity</i> , 2011, 28, 094013.	4.0	644
22	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , 2016, 818, L22.	8.3	633
23	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.	8.3	566
24	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , 2016, 116, 131103.	7.8	466
25	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2020, 23, 3.	26.7	447
26	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. <i>Living Reviews in Relativity</i> , 2016, 19, 1.	26.7	427
27	Properties and Astrophysical Implications of the 150 M_{\odot} Binary Black Hole Merger GW190521. <i>Astrophysical Journal Letters</i> , 2020, 900, L13.	8.3	406
28	Quantum-Enhanced Advanced LIGO Detectors in the Era of Gravitational-Wave Astronomy. <i>Physical Review Letters</i> , 2019, 123, 231107.	7.8	359
29	Scientific objectives of Einstein Telescope. <i>Classical and Quantum Gravity</i> , 2012, 29, 124013.	4.0	355
30	The third generation of gravitational wave observatories and their science reach. <i>Classical and Quantum Gravity</i> , 2010, 27, 084007.	4.0	287
31	Sensitivity of the Advanced LIGO detectors at the beginning of gravitational wave astronomy. <i>Physical Review D</i> , 2016, 93, .	4.7	286
32	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , 2016, 116, 131102.	7.8	269
33	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. <i>Astrophysical Journal Letters</i> , 2016, 833, L1.	8.3	230
34	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. <i>Classical and Quantum Gravity</i> , 2016, 33, 134001.	4.0	225
35	Sensitivity and performance of the Advanced LIGO detectors in the third observing run. <i>Physical Review D</i> , 2020, 102, .	4.7	196
36	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 851, L16.	8.3	189

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37	First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binaryâ€“Black-hole Merger GW170814. <i>Astrophysical Journal Letters</i> , 2019, 876, L7.	8.3	179
38	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L39.	8.3	156
39	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STARâ€“BLACK HOLE MERGERS FROM ADVANCED LIGOâ€™S FIRST OBSERVING RUN. <i>Astrophysical Journal Letters</i> , 2016, 832, L21.	8.3	146
40	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.	4.5	144
41	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , 2017, 839, 12.	4.5	131
42	LIGO detector characterization in the second and third observing runs. <i>Classical and Quantum Gravity</i> , 2021, 38, 135014.	4.0	128
43	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. <i>Astrophysical Journal</i> , 2014, 785, 119.	4.5	125
44	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.	1.6	120
45	Search for Substellar Mass Ultracompact Binaries in Advanced LIGOâ€™s Second Observing Run. <i>Physical Review Letters</i> , 2019, 123, 161102.	7.8	119
46	Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1. <i>Physical Review D</i> , 2010, 82, .	4.7	111
47	All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run. <i>Physical Review D</i> , 2010, 81, .	4.7	107
48	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. <i>Astrophysical Journal</i> , 2010, 722, 1504-1513.	4.5	104
49	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.	4.5	104
50	Identification and mitigation of narrow spectral artifacts that degrade searches for persistent gravitational waves in the first two observing runs of Advanced LIGO. <i>Physical Review D</i> , 2018, 97, .	4.7	104
51	Quantum correlations between light and the kilogram-mass mirrors of LIGO. <i>Nature</i> , 2020, 583, 43-47.	27.8	102
52	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , 2017, 34, 104002.	4.0	98
53	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal</i> , 2019, 875, 160.	4.5	97
54	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. <i>Physical Review Letters</i> , 2011, 107, 271102.	7.8	94

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55	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.	4.5	90
56	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. <i>Astrophysical Journal</i> , 2011, 737, 93.	4.5	89
57	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015â€“2017 LIGO Data. <i>Astrophysical Journal</i> , 2019, 879, 10.	4.5	88
58	Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009â€“2010 LIGO and Virgo Data. <i>Physical Review Letters</i> , 2014, 113, 231101.	7.8	86
59	Search for gravitational waves from binary black hole inspiral, merger, and ringdown. <i>Physical Review D</i> , 2011, 83, .	4.7	85
60	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018, 120, 201102.	7.8	85
61	Search for Substellar-Mass Ultracompact Binaries in Advanced LIGOâ€™s First Observing Run. <i>Physical Review Letters</i> , 2018, 121, 231103.	7.8	77
62	Improving astrophysical parameter estimation via offline noise subtraction for Advanced LIGO. <i>Physical Review D</i> , 2019, 99, .	4.7	77
63	The characterization of Virgo data and its impact on gravitational-wave searches. <i>Classical and Quantum Gravity</i> , 2012, 29, 155002.	4.0	73
64	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L40.	8.3	73
65	Calibration of the Advanced LIGO detectors for the discovery of the binary black-hole merger GW150914. <i>Physical Review D</i> , 2017, 95, .	4.7	72
66	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.	4.5	72
67	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. <i>Astrophysical Journal</i> , 2019, 875, 161.	4.5	71
68	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017, 529, 1600209.	2.4	69
69	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. <i>Physical Review Letters</i> , 2014, 112, 131101.	7.8	68
70	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. <i>Astrophysical Journal</i> , 2015, 813, 39.	4.5	66
71	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. <i>Astrophysical Journal Letters</i> , 2020, 902, L21.	8.3	65
72	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. <i>Astrophysical Journal</i> , Supplement Series, 2012, 203, 28.	7.7	62

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73	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO. <i>Astrophysical Journal</i> , 2019, 875, 122.	4.5	61
74	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. <i>Astrophysical Journal</i> , 2012, 755, 2.	4.5	60
75	Approaching the motional ground state of a 10-kg object. <i>Science</i> , 2021, 372, 1333-1336.	12.6	59
76	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. <i>Astrophysical Journal</i> , Supplement Series, 2014, 211, 7.	7.7	57
77	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. <i>Astrophysical Journal Letters</i> , 2011, 734, L35.	8.3	55
78	Search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar. <i>Physical Review D</i> , 2011, 83, .	4.7	54
79	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.	4.5	52
80	Prospects for Detecting Gravitational Waves at 5ÅHz with Ground-Based Detectors. <i>Physical Review Letters</i> , 2018, 120, 141102.	7.8	47
81	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.	4.5	46
82	SUPPLEMENT: "LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914" (2016, <i>ApJL</i> , 826, L13). <i>Astrophysical Journal</i> , Supplement Series, 2016, 225, 8.	7.7	44
83	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.	4.0	42
84	Higher order Laguerre-Gauss mode degeneracy in realistic, high finesse cavities. <i>Physical Review D</i> , 2011, 84, .	4.7	40
85	Environmental noise in advanced LIGO detectors. <i>Classical and Quantum Gravity</i> , 2021, 38, 145001.	4.0	38
86	Experimental demonstration of higher-order Laguerre-Gauss mode interferometry. <i>Physical Review D</i> , 2010, 82, .	4.7	35
87	Implementation of an F -statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. <i>Classical and Quantum Gravity</i> , 2014, 31, 165014.	4.0	34
88	Generation of High-Purity Higher-Order Laguerre-Gauss Beams at High Laser Power. <i>Physical Review Letters</i> , 2013, 110, 251101.	7.8	33
89	The advanced LIGO input optics. <i>Review of Scientific Instruments</i> , 2016, 87, 014502.	1.3	32
90	Search for Multimessenger Sources of Gravitational Waves and High-energy Neutrinos with Advanced LIGO during Its First Observing Run, ANTARES, and IceCube. <i>Astrophysical Journal</i> , 2019, 870, 134.	4.5	32

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91	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.	4.5	30
92	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.	4.5	29
93	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. <i>Astrophysical Journal</i> , 2019, 874, 163.	4.5	26
94	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. <i>Physical Review Letters</i> , 2017, 118, 151102.	7.8	24
95	Point absorbers in Advanced LIGO. <i>Applied Optics</i> , 2021, 60, 4047.	1.8	24
96	LIGO's quantum response to squeezed states. <i>Physical Review D</i> , 2021, 104, .	4.7	19
97	Quantum correlation measurements in interferometric gravitational-wave detectors. <i>Physical Review A</i> , 2017, 95, .	2.5	16
98	Higher-order Hermite-Gauss modes as a robust flat beam in interferometric gravitational wave detectors. <i>Physical Review D</i> , 2020, 102, .	4.7	16
99	Feedback control of optical beam spatial profiles using thermal lensing. <i>Applied Optics</i> , 2013, 52, 6452.	1.8	15
100	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.	4.5	12
101	Improving the robustness of the advanced LIGO detectors to earthquakes. <i>Classical and Quantum Gravity</i> , 2020, 37, 235007.	4.0	11
102	Alignment sensing for optical cavities using radio-frequency jitter modulation. <i>Applied Optics</i> , 2017, 56, 3879.	2.1	8
103	Ultrastable optical components using adjustable commercial mirror mounts anchored in a ULE spacer. <i>Applied Optics</i> , 2020, 59, 6999.	1.8	8
104	Power coupling losses for misaligned and mode-mismatched higher-order Hermite-Gauss modes. <i>Optics Letters</i> , 2021, 46, 2694.	3.3	7
105	Effects of transients in LIGO suspensions on searches for gravitational waves. <i>Review of Scientific Instruments</i> , 2017, 88, 124501.	1.3	6
106	Analytic HG-mode propagation through circular apertures with Zernike phase offset. <i>OSA Continuum</i> , 2020, 3, 1891.	1.8	6
107	The Generation of Higher-order Laguerre-Gauss Optical Beams for High-precision Interferometry. <i>Journal of Visualized Experiments</i> , 2013, , .	0.3	5
108	<i>In situ</i> 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.	4.0	5

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109	Computer-games for gravitational wave science outreach: <i>Black Hole Pong</i> and <i>Space Time Quest</i> . <i>Journal of Physics: Conference Series</i> , 2012, 363, 012057.	0.4	4
110	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, .	4.7	3
111	Small optic suspensions for Advanced LIGO input optics and other precision optical experiments. <i>Review of Scientific Instruments</i> , 2016, 87, 114504.	1.3	3
112	Multi-axis heterodyne interferometry at MHz frequencies: a short-arm measurement demonstration for LISA with off-the-shelf hardware. <i>Applied Optics</i> , 2019, 58, 6346.	1.8	3
113	Point Absorber Limits to Future Gravitational-Wave Detectors. <i>Physical Review Letters</i> , 2021, 127, 241102.	7.8	3
114	Phase effects in Gaussian beams on diffraction gratings. <i>Journal of Physics: Conference Series</i> , 2012, 363, 012014.	0.4	2
115	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, .	4.7	2
116	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, .	4.7	2
117	Progress and challenges in advanced ground-based gravitational-wave detectors. <i>General Relativity and Gravitation</i> , 2014, 46, 1.	2.0	2
118	Concepts and research for future detectors. <i>General Relativity and Gravitation</i> , 2014, 46, 1.	2.0	2
119	Characterization of dimensional stability for materials used in ultra-stable structures. , 2021, , .		2
120	Ground testing of the LISA telescope. , 2021, , .		2
121	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
122	Hydroxide catalysis bonding of Allvar Alloy 30, a negative thermal expansion alloy. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , 2020, 6, 1.	1.8	2
123	Review of the Laguerre-Gauss mode technology research program at Birmingham. <i>Journal of Physics: Conference Series</i> , 2012, 363, 012010.	0.4	1
124	Interferometer phase noise due to beam misalignment on diffraction gratings. <i>Optics Express</i> , 2013, 21, 29578.	3.4	1
125	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. , 2016, 19, 1.		1
126	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> , 2011, 83, .	4.7	0

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127	Publisher's Note: Search for gravitational waves from binary black hole inspiral, merger, and ringdown [Phys. Rev. D83, 122005 (2011)]. Physical Review D, 2012, 85, .	4.7	0
128	The effect of mirror surface distortions on higher order Laguerre-Gauss modes. Journal of Physics: Conference Series, 2012, 363, 012005.	0.4	0
129	Present and Future Ground-Based Detectors. , 2017, , 195-220.		0
130	LAGUERRE-GAUSS BEAMS FOR FUTURE GRAVITATIONAL WAVE DETECTORS. , 2012, , .		0
131	Tabletop Demonstrations of LG Mode Production and Cleaning. Springer Theses, 2014, , 67-97.	0.1	0
132	Laguerre-Gauss Beams for Test Mass Thermal Noise Reduction. Springer Theses, 2014, , 17-39.	0.1	0