

# Carl Blair

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9367729/publications.pdf>

Version: 2024-02-01

65  
papers

40,971  
citations

57758

44  
h-index

114465

63  
g-index

65  
all docs

65  
docs citations

65  
times ranked

16358  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Observation of Gravitational Waves from a Binary Black Hole Merger. Physical Review Letters, 2016, 116, 061102.   | 7.8  | 8,753     |
| 2  | GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. Physical Review Letters, 2017, 119, 161101.                                 | 7.8  | 6,413     |
| 3  | Multi-messenger Observations of a Binary Neutron Star Merger <sup>*</sup> . Astrophysical Journal Letters, 2017, 848, L12.                                    | 8.3  | 2,805     |
| 4  | GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.                  | 7.8  | 2,701     |
| 5  | 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     |
| 6  | 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     |
| 7  | Advanced LIGO. Classical and Quantum Gravity, 2015, 32, 074001.   | 4.0  | 1,929     |
| 8  | GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. Physical Review Letters, 2017, 119, 141101.               | 7.8  | 1,600     |
| 9  | GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.   | 7.8  | 1,473     |
| 10 | Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.  | 7.8  | 1,224     |
| 11 | GW190425: Observation of a Compact Binary Coalescence with Total Mass $\hat{M} \approx 3.4 M_{\odot}$ . Astrophysical Journal Letters, 2020, 892, L3.         | 8.3  | 1,049     |
| 12 | GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.  | 8.3  | 968       |
| 13 | 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       |
| 14 | Exploring the sensitivity of next generation gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 044001.                                   | 4.0  | 735       |
| 15 | Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.  | 7.8  | 673       |
| 16 | ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.   | 8.3  | 633       |
| 17 | GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. Physical Review Letters, 2016, 116, 131103.  | 7.8  | 466       |
| 18 | Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, 2016, 19, 1.        | 26.7 | 427       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Quantum-Enhanced Advanced LIGO Detectors in the Era of Gravitational-Wave Astronomy. <i>Physical Review Letters</i> , 2019, 123, 231107.  | 7.8 | 359       |
| 20 | GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. <i>Physical Review D</i> , 2016, 93, .  | 4.7 | 315       |
| 21 | GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , 2016, 116, 131102.                                  | 7.8 | 269       |
| 22 | 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       |
| 23 | 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       |
| 24 | LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. <i>Astrophysical Journal Letters</i> , 2016, 826, L13.   | 8.3 | 210       |
| 25 | Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121101.                            | 7.8 | 194       |
| 26 | 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       |
| 27 | GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. <i>Physical Review Letters</i> , 2018, 120, 091101.                         | 7.8 | 166       |
| 28 | Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L39.                                      | 8.3 | 156       |
| 29 | 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. | 8.3 | 146       |
| 30 | A Standard Siren Measurement of the Hubble Constant from GW170817 without the Electromagnetic Counterpart. <i>Astrophysical Journal Letters</i> , 2019, 871, L13.                     | 8.3 | 145       |
| 31 | First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , 2017, 839, 12.   | 4.5 | 131       |
| 32 | Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , 2017, 34, 104002.   | 4.0 | 98        |
| 33 | 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.           | 4.0 | 94        |
| 34 | Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018, 120, 201102.                              | 7.8 | 85        |
| 35 | Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121102.                                    | 7.8 | 84        |
| 36 | Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2018, 121, 231103.  | 7.8 | 77        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L40.   | 8.3  | 73        |
| 38 | The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017, 529, 1600209.  | 2.4  | 69        |
| 39 | First Search for Nontensorial Gravitational Waves from Known Pulsars. <i>Physical Review Letters</i> , 2018, 120, 031104.  | 7.8  | 68        |
| 40 | SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. <i>Astrophysical Journal</i> , 2015, 813, 39.  | 4.5  | 66        |
| 41 | SUPPLEMENT: $\infty$ THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914 $\infty$ (2016, <i>ApJL</i> , 833, L1). <i>Astrophysical Journal, Supplement Series</i> , 2016, 227, 14.  | 7.7  | 63        |
| 42 | Approaching the motional ground state of a 10-kg object. <i>Science</i> , 2021, 372, 1333-1336.  | 12.6 | 59        |
| 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.   | 4.5  | 52        |
| 44 | 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        |
| 45 | SUPPLEMENT: $\infty$ LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914 $\infty$ (2016, <i>ApJL</i> , 826, L13). <i>Astrophysical Journal, Supplement Series</i> , 2016, 225, 8.  | 7.7  | 44        |
| 46 | Environmental noise in advanced LIGO detectors. <i>Classical and Quantum Gravity</i> , 2021, 38, 145001.   | 4.0  | 38        |
| 47 | Constraining the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mi} \rangle \text{p} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Mode $\infty$ $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mi} \rangle \text{g} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Mode Tidal Instability with GW170817. <i>Physical Review Letters</i> , 2019, 122, 061104. | 7.8  | 36        |
| 48 | 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        |
| 49 | Gravitational wave detectors with broadband high frequency sensitivity. <i>Communications Physics</i> , 2021, 4, .   | 5.3  | 26        |
| 50 | First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. <i>Physical Review Letters</i> , 2017, 118, 151102.   | 7.8  | 24        |
| 51 | Point absorbers in Advanced LIGO. <i>Applied Optics</i> , 2021, 60, 4047.  | 1.8  | 24        |
| 52 | The next detectors for gravitational wave astronomy. <i>Science China: Physics, Mechanics and Astronomy</i> , 2015, 58, 1.   | 5.1  | 23        |
| 53 | Parametric instability in long optical cavities and suppression by dynamic transverse mode frequency modulation. <i>Physical Review D</i> , 2015, 91, .  | 4.7  | 20        |
| 54 | 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.  | 4.0  | 18        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Analytical model for ring heater thermal compensation in the Advanced Laser Interferometer Gravitational-wave Observatory. <i>Applied Optics</i> , 2016, 55, 2619.  | 2.1 | 17        |
| 56 | Quantum correlation measurements in interferometric gravitational-wave detectors. <i>Physical Review A</i> , 2017, 95, .  | 2.5 | 16        |
| 57 | Radiation pressure excitation of test mass ultrasonic modes via three mode opto-acoustic interactions in a suspended Fabry-Pérot cavity. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2013, 377, 1970-1973. | 2.1 | 9         |
| 58 | Effects of transients in LIGO suspensions on searches for gravitational waves. <i>Review of Scientific Instruments</i> , 2017, 88, 124501.  | 1.3 | 6         |
| 59 | Modular suspension system with low acoustic coupling to the suspended test mass in a prototype gravitational wave detector. <i>Review of Scientific Instruments</i> , 2018, 89, 074501.   | 1.3 | 4         |
| 60 | Three mode interactions as a precision monitoring tool for advanced laser interferometers. <i>Classical and Quantum Gravity</i> , 2014, 31, 185003.   | 4.0 | 3         |
| 61 | Constraining temperature distribution inside LIGO test masses from frequencies of their vibrational modes. <i>Physical Review D</i> , 2021, 103, .  | 4.7 | 2         |
| 62 | Revealing optical loss from modal frequency degeneracy in a long optical cavity. <i>Optics Express</i> , 2021, 29, 23902.   | 3.4 | 2         |
| 63 | Hartmann Wavefront Sensors for Advanced LIGO. , 2018, , .   |     | 1         |
| 64 | Parametric instability in the neutron star extreme matter observatory. <i>Classical and Quantum Gravity</i> , 2022, 39, 085007.   | 4.0 | 1         |
| 65 | The development of ground based gravitational wave astronomy and opportunities for Australia-China collaboration. <i>International Journal of Modern Physics A</i> , 2015, 30, 1545019.   | 1.5 | 0         |