

# Eleonora Capocasa

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8982336/publications.pdf>

Version: 2024-02-01

113  
papers

45,924  
citations

18436

62  
h-index

22764

112  
g-index

114  
all docs

114  
docs citations

114  
times ranked

16258  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Search for intermediate-mass black hole binaries in the third observing run of Advanced LIGO and Advanced Virgo. <i>Astronomy and Astrophysics</i> , 2022, 659, A84.                                   | 2.1 | 32        |
| 2  | 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.                              | 1.6 | 15        |
| 3  | First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. <i>Progress of Theoretical and Experimental Physics</i> , 2022, 2022, .                                     | 1.8 | 20        |
| 4  | The Current Status and Future Prospects of KAGRA, the Large-Scale Cryogenic Gravitational Wave Telescope Built in the Kamioka Underground. <i>Galaxies</i> , 2022, 10, 63.                             | 1.1 | 13        |
| 5  | Improving the stability of frequency-dependent squeezing with bichromatic control of filter cavity length, alignment, and incident beam pointing. <i>Physical Review D</i> , 2022, 105, .              | 1.6 | 2         |
| 6  | All-sky, all-frequency directional search for persistent gravitational waves from Advanced LIGO’s and Advanced Virgo’s first three observing runs. <i>Physical Review D</i> , 2022, 105, .             | 1.6 | 18        |
| 7  | Thermally controlled optical resonator for vacuum squeezed states separation. <i>Applied Optics</i> , 2022, 61, 5226.  | 0.9 | 0         |
| 8  | Narrowband Searches for Continuous and Long-duration Transient Gravitational Waves from Known Pulsars in the LIGO-Virgo Third Observing Run. <i>Astrophysical Journal</i> , 2022, 932, 133.            | 1.6 | 33        |
| 9  | Overview of KAGRA: Detector design and construction history. <i>Progress of Theoretical and Experimental Physics</i> , 2021, 2021, .   | 1.8 | 198       |
| 10 | Overview of KAGRA: KAGRA science. <i>Progress of Theoretical and Experimental Physics</i> , 2021, 2021, .  | 1.8 | 31        |
| 11 | Overview of KAGRA: Calibration, detector characterization, physical environmental monitors, and the geophysics interferometer. <i>Progress of Theoretical and Experimental Physics</i> , 2021, 2021, . | 1.8 | 66        |
| 12 | Observation of Gravitational Waves from Two Neutron Star–Black Hole Coalescences. <i>Astrophysical Journal Letters</i> , 2021, 915, L5.  | 3.0 | 453       |
| 13 | Constraints on Cosmic Strings Using Data from the Third Advanced LIGO–Virgo Observing Run. <i>Physical Review Letters</i> , 2021, 126, 241102.   | 2.9 | 87        |
| 14 | 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, .                                       | 1.6 | 192       |
| 15 | 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, .                           | 1.6 | 62        |
| 16 | All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data. <i>Physical Review D</i> , 2021, 104, .   | 1.6 | 42        |
| 17 | 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, .  | 1.6 | 19        |
| 18 | All-sky search for short gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. <i>Physical Review D</i> , 2021, 104, .  | 1.6 | 33        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2020, 23, 3.                 | 8.2 | 447       |
| 20 | Application of independent component analysis to the iKAGRA data. <i>Progress of Theoretical and Experimental Physics</i> , 2020, 2020, .   | 1.8 | 7         |
| 21 | Prospects for improving the sensitivity of the cryogenic gravitational wave detector KAGRA. <i>Physical Review D</i> , 2020, 102, .   | 1.6 | 12        |
| 22 | Control of a filter cavity with coherent control sidebands. <i>Physical Review D</i> , 2020, 102, .   | 1.6 | 6         |
| 23 | A guide to LIGO's Virgo detector noise and extraction of transient gravitational-wave signals. <i>Classical and Quantum Gravity</i> , 2020, 37, 055002.                               | 1.5 | 188       |
| 24 | Advanced Virgo Status. <i>Journal of Physics: Conference Series</i> , 2020, 1342, 012010.   | 0.3 | 9         |
| 25 | An arm length stabilization system for KAGRA and future gravitational-wave detectors. <i>Classical and Quantum Gravity</i> , 2020, 37, 035004.  | 1.5 | 10        |
| 26 | Frequency-Dependent Squeezed Vacuum Source for Broadband Quantum Noise Reduction in Advanced Gravitational-Wave Detectors. <i>Physical Review Letters</i> , 2020, 124, 171101.        | 2.9 | 63        |
| 27 | Narrow-band search for gravitational waves from known pulsars using the second LIGO observing run. <i>Physical Review D</i> , 2019, 99, .   | 1.6 | 60        |
| 28 | Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015-2017 LIGO Data. <i>Astrophysical Journal</i> , 2019, 879, 10.  | 1.6 | 88        |
| 29 | All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data. <i>Physical Review D</i> , 2019, 100, .                                    | 1.6 | 102       |
| 30 | First cryogenic test operation of underground km-scale gravitational-wave observatory KAGRA. <i>Classical and Quantum Gravity</i> , 2019, 36, 165008.                                 | 1.5 | 45        |
| 31 | Tests of General Relativity with GW170817. <i>Physical Review Letters</i> , 2019, 123, 011102.  | 2.9 | 370       |
| 32 | 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       |
| 33 | Directional limits on persistent gravitational waves using data from Advanced LIGO's first two observing runs. <i>Physical Review D</i> , 2019, 100, .                                | 1.6 | 52        |
| 34 | 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, . | 2.8 | 2,022     |
| 35 | Search for the isotropic stochastic background using data from Advanced LIGO's second observing run. <i>Physical Review D</i> , 2019, 100, .  | 1.6 | 200       |
| 36 | A Standard Siren Measurement of the Hubble Constant from GW170817 without the Electromagnetic Counterpart. <i>Astrophysical Journal Letters</i> , 2019, 871, L13.                     | 3.0 | 145       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | 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        |
| 38 | 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        |
| 39 | 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        |
| 40 | 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. | 3.0 | 179       |
| 41 | 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        |
| 42 | Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. <i>Astrophysical Journal</i> , 2019, 874, 163.   | 1.6 | 26        |
| 43 | Vibration isolation system with a compact damping system for power recycling mirrors of KAGRA. <i>Classical and Quantum Gravity</i> , 2019, 36, 095015.   | 1.5 | 9         |
| 44 | Constraining the $p$ -Mode Tidal Instability with GW170817. <i>Physical Review Letters</i> , 2019, 122, 061104.   | 2.9 | 36        |
| 45 | Tests of general relativity with the binary black hole signals from the LIGO-Virgo catalog GWTC-1. <i>Physical Review D</i> , 2019, 100, .  | 1.6 | 470       |
| 46 | 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, .  | 1.6 | 46        |
| 47 | Properties of the Binary Neutron Star Merger GW170817. <i>Physical Review X</i> , 2019, 9, .  | 2.8 | 728       |
| 48 | 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.   | 1.5 | 94        |
| 49 | GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. <i>Physical Review Letters</i> , 2018, 120, 091101.   | 2.9 | 166       |
| 50 | 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.   | 1.5 | 18        |
| 51 | First Search for Nontensorial Gravitational Waves from Known Pulsars. <i>Physical Review Letters</i> , 2018, 120, 031104.   | 2.9 | 68        |
| 52 | Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2018, 21, 3.   | 8.2 | 808       |
| 53 | Search for Substellar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2018, 121, 231103.  | 2.9 | 77        |
| 54 | GW170817: Measurements of Neutron Star Radii and Equation of State. <i>Physical Review Letters</i> , 2018, 121, 161101.   | 2.9 | 1,473     |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Calibration of advanced Virgo and reconstruction of the gravitational wave signal $h(t)$ ( $t$ ) Tj ETQq1 1 0.784314 rgBT /Overlo   | 1.5 | 41        |
| 56 | Status of Advanced Virgo. EPJ Web of Conferences, 2018, 182, 02003.   | 0.1 | 9         |
| 57 | Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.                          | 2.9 | 85        |
| 58 | Full band all-sky search for periodic gravitational waves in the O1 LIGO data. Physical Review D, 2018, 97, .   | 1.6 | 46        |
| 59 | Constraints on cosmic strings using data from the first Advanced LIGO observing run. Physical Review D, 2018, 97, .   | 1.6 | 88        |
| 60 | Measurement of optical losses in a high-finesse 300Åm filter cavity for broadband quantum noise reduction in gravitational-wave detectors. Physical Review D, 2018, 98, . | 1.6 | 13        |
| 61 | Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.   |     | 2         |
| 62 | All-sky search for short gravitational-wave bursts in the first Advanced LIGO run. Physical Review D, 2017, 95, .   | 1.6 | 69        |
| 63 | Effects of waveform model systematics on the interpretation of GW150914. Classical and Quantum Gravity, 2017, 34, 104002.   | 1.5 | 98        |
| 64 | Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. Physical Review Letters, 2017, 118, 121101.                        | 2.9 | 194       |
| 65 | Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. Physical Review Letters, 2017, 118, 121102.                                | 2.9 | 84        |
| 66 | First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. Astrophysical Journal, 2017, 839, 12.   | 1.6 | 131       |
| 67 | The basic physics of the binary black hole merger GW150914. Annalen Der Physik, 2017, 529, 1600209.   | 0.9 | 69        |
| 68 | GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. Physical Review Letters, 2017, 119, 141101.                           | 2.9 | 1,600     |
| 69 | Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data. Astrophysical Journal, 2017, 847, 47.            | 1.6 | 46        |
| 70 | GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. Physical Review Letters, 2017, 119, 161101.   | 2.9 | 6,413     |
| 71 | Multi-messenger Observations of a Binary Neutron Star Merger <sup>*</sup> . Astrophysical Journal Letters, 2017, 848, L12.  | 3.0 | 2,805     |
| 72 | Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. Astrophysical Journal Letters, 2017, 848, L13.                            | 3.0 | 2,314     |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Search for intermediate mass black hole binaries in the first observing run of Advanced LIGO. <i>Physical Review D</i> , 2017, 96, .  | 1.6 | 73        |
| 74 | All-sky search for periodic gravitational waves in the O1 LIGO data. <i>Physical Review D</i> , 2017, 96, .   | 1.6 | 64        |
| 75 | 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        |
| 76 | 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       |
| 77 | Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L39.  | 3.0 | 156       |
| 78 | 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     |
| 79 | Search for continuous gravitational waves from neutron stars in globular cluster NGC 6544. <i>Physical Review D</i> , 2017, 95, .   | 1.6 | 19        |
| 80 | 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, .  | 1.6 | 59        |
| 81 | Status of the Advanced Virgo gravitational wave detector. <i>International Journal of Modern Physics A</i> , 2017, 32, 1744003.   | 0.5 | 6         |
| 82 | First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data. <i>Physical Review D</i> , 2017, 96, .  | 1.6 | 47        |
| 83 | First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data. <i>Physical Review D</i> , 2017, 96, .   | 1.6 | 60        |
| 84 | On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L40.  | 3.0 | 73        |
| 85 | GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. <i>Astrophysical Journal Letters</i> , 2017, 851, L35.  | 3.0 | 968       |
| 86 | Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. <i>Classical and Quantum Gravity</i> , 2016, 33, 134001.   | 1.5 | 225       |
| 87 | SUPPLEMENT: THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914 (2016, <i>ApJL</i> , 833, L1). <i>Astrophysical Journal, Supplement Series</i> , 2016, 227, 14. | 3.0 | 63        |
| 88 | Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. <i>Living Reviews in Relativity</i> , 2016, 19, 1.  | 8.2 | 427       |
| 89 | Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model. <i>Physical Review X</i> , 2016, 6, .   | 2.8 | 106       |
| 90 | 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, .           | 1.6 | 31        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 91  | 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       |
| 92  | LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. <i>Astrophysical Journal Letters</i> , 2016, 826, L13.   | 3.0 | 210       |
| 93  | Comprehensive all-sky search for periodic gravitational waves in the sixth science run LIGO data. <i>Physical Review D</i> , 2016, 94, .  | 1.6 | 35        |
| 94  | 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, .  | 1.6 | 60        |
| 95  | 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       |
| 96  | Directly comparing GW150914 with numerical solutions of Einstein's equations for binary black hole coalescence. <i>Physical Review D</i> , 2016, 94, .                                | 1.6 | 102       |
| 97  | All-sky search for long-duration gravitational wave transients with initial LIGO. <i>Physical Review D</i> , 2016, 93, .  | 1.6 | 29        |
| 98  | 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, .              | 1.6 | 17        |
| 99  | First low frequency all-sky search for continuous gravitational wave signals. <i>Physical Review D</i> , 2016, 93, .  | 1.6 | 32        |
| 100 | Estimation of losses in a 300Åm filter cavity and quantum noise reduction in the KAGRA gravitational-wave detector. <i>Physical Review D</i> , 2016, 93, .                            | 1.6 | 24        |
| 101 | GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. <i>Physical Review D</i> , 2016, 93, .  | 1.6 | 315       |
| 102 | Search for transient gravitational waves in coincidence with short-duration radio transients during 2007-2013. <i>Physical Review D</i> , 2016, 93, .                                 | 1.6 | 14        |
| 103 | GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , 2016, 116, 131102.                                  | 2.9 | 269       |
| 104 | GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , 2016, 116, 131103.  | 2.9 | 466       |
| 105 | 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. | 3.0 | 44        |
| 106 | Observing gravitational-wave transient GW150914 with minimal assumptions. <i>Physical Review D</i> , 2016, 93, .  | 1.6 | 119       |
| 107 | Tests of General Relativity with GW150914. <i>Physical Review Letters</i> , 2016, 116, 221101.  | 2.9 | 1,224     |
| 108 | Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , 2016, 116, 241102.  | 2.9 | 673       |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 109 | CW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103. | 2.9 | 2,701     |
| 110 | Binary Black Hole Mergers in the First Advanced LIGO Observing Run. Physical Review X, 2016, 6, .  | 2.8 | 898       |
| 111 | ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.                          | 3.0 | 633       |
| 112 | Observation of Gravitational Waves from a Binary Black Hole Merger. Physical Review Letters, 2016, 116, 061102.                              | 2.9 | 8,753     |
| 113 | Directed search for gravitational waves from Scorpius X-1 with initial LIGO data. Physical Review D, 2015, 91, .                             | 1.6 | 47        |