Gabriele Vedovato

List of Publications by Year
in descending order

116 papers	7,071 citations	147566 31 h-index	56606 83 g-index
117 all docs	117 docs citations	117 times ranked	5118 citing authors

#	Article	IF	Citations
1	Advanced Virgo: a second-generation interferometric gravitational wave detector. Classical and Quantum Gravity, 2015, 32, 024001.	1.5	2,530
2	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	8.2	808
3	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	8.2	447
4	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, 2016, 19, 1.	8.2	427
5	Method for detection and reconstruction of gravitational wave transients with networks of advanced detectors. Physical Review D, 2016, 93, .	1.6	275
6	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. Classical and Quantum Gravity, 2016, 33, 134001.	1.5	225
7	Status of the Virgo project. Classical and Quantum Gravity, 2011, 28, 114002.	1.5	171
8	Gravitational bar detectors set limits to Planck-scale physics on macroscopic variables. Nature Physics, 2013, 9, 71-73.	6.5	102
9	First Search for Gravitational Wave Bursts with a Network of Detectors. Physical Review Letters, 2000, 85, 5046-5050.	2.9	95
10	Methods and results of the IGEC search for burst gravitational waves in the years 1997â€“2000. Physical Review D, 2003, 68, .	1.6	90
11	SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGO'S FIFTH AND VIRGO'S FIRST SCIENCE RUN. Astrophysical Journal, 2010, 715, 1453-1461.	1.6	90
12	Calibration and sensitivity of the Virgo detector during its second science run. Classical and Quantum Gravity, 2011, 28, 025005.	1.5	85
13	Localization of gravitational wave sources with networks of advanced detectors. Physical Review D, 2011, 83, .	1.6	84
14	The ultracryogenic gravitational-wave detector AURIGA. Classical and Quantum Gravity, 1997, 14, 1491-1494.	1.5	73
15	pÌ„p annihilation cross section at very low energy. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 369, 77-85.	1.5	66
16	Measurements of Superattenuator seismic isolation by Virgo interferometer. Astroparticle Physics, 2010, 33, 182-189.	1.9	62
17	Noise from scattered light in Virgo's second science run data. Classical and Quantum Gravity, 2010, 27, 194011.	1.5	59
18	3-Mode Detection for Widening the Bandwidth of Resonant Gravitational Wave Detectors. Physical Review Letters, 2005, 94, .	2.9	56

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19	Feedback Cooling of the Normal Modes of a Massive Electromechanical System to Submillikelvin Temperature. Physical Review Letters, 2008, 101, 033601.	2.9	56
20	Nonequilibrium Steady-State Fluctuations in Actively Cooled Resonators. Physical Review Letters, 2009, 103, 010601.	2.9	56
21	LOCALIZATION OF SHORT DURATION GRAVITATIONAL-WAVE TRANSIENTS WITH THE EARLY ADVANCED LIGO AND VIRGO DETECTORS. Astrophysical Journal, 2015, 800, 81.	1.6	51
22	Results of the IGEC-2 search for gravitational wave bursts during 2005. Physical Review D, 2007, 76, .	1.6	50
23	Status report and near future prospects for the gravitational wave detector AURIGA. Classical and Quantum Gravity, 2002, 19, 1925-1933.	1.5	45
24	Antiproton stopping power in hydrogen below 120 keV and the Barkas effect. Physical Review A, 1993, 47, 4517-4520.	1.0	44
25	Leveraging waveform complexity for confident detection of gravitational waves. Physical Review D, 2016, 93, .	1.6	42
26	Meson spectroscopy with antineutrons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 287, 368-374.	1.5	39
27	Regression of environmental noise in LIGO data. Classical and Quantum Gravity, 2015, 32, 165014.	1.5	39
28	Search for an Ultralight Scalar Dark Matter Candidate with the AURIGA Detector. Physical Review Letters, 2017, 118, 021302.	2.9	38
29	coherent WaveBurst, a pipeline for unmodeled gravitational-wave data analysis. SoftwareX, 2021, 14, 100678.	1.2	37
30	Detecting and reconstructing gravitational waves from the next galactic core-collapse supernova in the advanced detector era. Physical Review D, 2021, 104, .	1.6	35
31	Multimessenger science reach and analysis method for common sources of gravitational waves and high-energy neutrinos. Physical Review D, 2012, 85, .	1.6	32
32	New results on meson spectroscopy from Obelix. Nuclear Physics A, 1993, 558, 13-26.	0.6	29
33	Status and perspectives of the Virgo gravitational wave detector. Journal of Physics: Conference Series, 2010, 203, 012074.	0.3	29
34	The Seismic Superattenuators of the Virgo Gravitational Waves Interferometer. Journal of Low Frequency Noise Vibration and Active Control, 2011, 30, 63-79.	1.3	28
35	Spin-parity analysis of the final state Ï€+Ï€âˆ'Ï€0 from annihilation at rest in hydrogen targets at three densities. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 408, 476-486.	1.5	27
36	The Advanced Virgo detector. Journal of Physics: Conference Series, 2015, 610, 012014.	0.3	27

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37	Investigation on Planck scale physics by the AURIGA gravitational bar detector. New Journal of Physics, 2014, 16, 085012.	1.2	23
38	Wider look at the gravitational-wave transients from GWTC-1 using an unmodeled reconstruction method. Physical Review D, 2019, 100, .	1.6	23
39	Study of thef0(1500)/f2(1565)production in the exclusive annihilationnÌ„pâ†'Ï€+Ï€+Ï€â^'in flight. Physical Review D, 1998, 57, 55-66.	1.6	21
40	Protonium annihilation in P-wave using low-density (Ï±/Ï±â^¼10â^'3) hydrogen targets. Measurements of cascade times and widths. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 285, 15-20.	1.5	20
41	Upper Limits on Gravitational-Wave Emission in Association with the 27ÂDecÂ2004 Giant Flare of SGR1806-20. Physical Review Letters, 2005, 95, 081103.	2.9	19
42	IGEC2: A 17-month search for gravitational wave bursts in 2005â€"2007. Physical Review D, 2010, 82, .	1.6	19
43	Observing an intermediate-mass black hole GW190521 with minimal assumptions. Physical Review D, 2021, 103, .	1.6	19
44	INITIAL OPERATION OF THE INTERNATIONAL GRAVITATIONAL EVENT COLLABORATION. International Journal of Modern Physics D, 2000, 09, 237-245.	0.9	18
45	Single and multinucleon antiprotonâ€"4He annihilation at rest. Nuclear Physics A, 2002, 700, 159-192.	0.6	17
46	A measurement of the ratio from annihilation in deuterium and hydrogen gas. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 284, 448-452.	1.5	16
47	Protonium annihilation into KSKL at three different target densities. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 386, 486-494.	1.5	16
48	Ï‡2testing of optimal filters for gravitational wave signals: An experimental implementation. Physical Review D, 2000, 61, .	1.6	16
49	A joint search for gravitational wave bursts with AURIGA and LIGO. Classical and Quantum Gravity, 2008, 25, 095004.	1.5	16
50	A new measurement of the Pontecorvo reaction with the OBELIX spectrometer at LEAR. Nuclear Physics A, 1993, 562, 617-643.	0.6	15
51	An experimental study of antiproton-4He annihilation at rest. Nuclear Physics A, 1994, 569, 761-790.	0.6	15
52	A burst search for gravitational waves from binary black holes. Classical and Quantum Gravity, 2009, 26, 204004.	1.5	14
53	Measurement of the frequency of the annihilation reaction p â†' Ï€Ï€ at rest in a NTP hydrogen target. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 337, 226-234.	1.5	13
54	Annihilation cross-sections of antineutrons on C, Al, Cu, Sn and Pb at low momenta (180â€"280 MeV/c) with the OBELIX spectrometer. Il Nuovo Cimento A, 1994, 107, 943-953.	0.2	13

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55	First joint gravitational wave search by the AURIGAâ€“EXPLORERâ€“NAUTILUSâ€“Virgo Collaboration. Classical and Quantum Gravity, 2008, 25, 205007.	1.5	13
56	Performance of the Virgo interferometer longitudinal control system during the second science run. Astroparticle Physics, 2011, 34, 521-527.	1.9	13
57	Correlation between gamma-ray bursts and gravitational waves. Physical Review D, 2001, 63, .	1.6	12
58	The NoEMi (Noise Frequency Event Miner) framework. Journal of Physics: Conference Series, 2012, 363, 012037.	0.3	12
59	Parametric adaptive filtering and data validation in the bar GW detector AURIGA. Classical and Quantum Gravity, 2002, 19, 1457-1464.	1.5	11
60	Central heating radius of curvature correction (CHRoCC) for use in large scale gravitational wave interferometers. Classical and Quantum Gravity, 2013, 30, 055017.	1.5	11
61	Sensitivity comparison of searches for binary black hole coalescences with ground-based gravitational-wave detectors. Physical Review D, 2014, 90, .	1.6	11
62	Enhancing the significance of gravitational wave bursts through signal classification. Classical and Quantum Gravity, 2017, 34, 094003.	1.5	11
63	The 4 pi cylindrical detector SPC/XDC for X-ray and charged particles detection in antiproton annihilations in the OBELIX experiment at LEAR. IEEE Transactions on Nuclear Science, 1991, 38, 124-127.	1.2	10
64	Cleaning the Virgo sampled data for the search of periodic sources of gravitational waves. Classical and Quantum Gravity, 2009, 26, 204002.	1.5	10
65	Reconstruction of the gravitational wave signal h (t) during the Virgo science runs and independent validation with a photon calibrator. Classical and Quantum Gravity, 2014, 31, 165013.	1.5	10
66	Search for gravitational wave bursts by the network of resonant detectors. Classical and Quantum Gravity, 2002, 19, 1367-1375.	1.5	9
67	Search for binary black hole mergers in the third observing run of Advanced LIGO-Virgo using coherent WaveBurst enhanced with machine learning. Physical Review D, 2022, 105, .	1.6	9
68	New data on Î”++-baryon production in annihilation at rest. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 403, 177-184.	1.5	8
69	Virgo calibration and reconstruction of the gravitationnal wave strain during VSR1. Journal of Physics: Conference Series, 2010, 228, 012015.	0.3	8
70	A state observer for the Virgo inverted pendulum. Review of Scientific Instruments, 2011, 82, 094502.	0.6	8
71	The VME based OBELIX TOF on-line system. IEEE Transactions on Nuclear Science, 1990, 37, 315-319.	1.2	7
72	A VME multiprocessor system for online data analysis of nuclear physics experiments. IEEE Transactions on Nuclear Science, 1990, 37, 1222-1229.	1.2	7

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73	A logarithmic detection system for nuclear physics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 315, 109-112.	0.7	7
74	Fast numerical data analysis for resonant gravitational wave antennas and antennas arrays: Optimal filtering, signal timing and internal vetoes. Nuclear Physics, Section B, Proceedings Supplements, 1996, 48, 104-106.	0.5	7
75	On similarity of binary black hole gravitational-wave skymaps: to observe or to wait?. Monthly Notices of the Royal Astronomical Society: Letters, 2017, 466, L78-L82.	1.2	7
76	Detection of LIGO-Virgo binary black holes in the pair-instability mass gap. Physical Review D, 2021, 104, .	1.6	7
77	Optimal reconstruction of the input signal in resonant gravitational wave detectors: Data processing algorithm and physical limitations. Physical Review D, 1994, 50, 4737-4743.	1.6	6
78	Timing with resonant gravitational wave detectors: An experimental test. Physical Review D, 1998, 57, 2045-2050.	1.6	6
79	IGEC toolbox for coincidence search. Classical and Quantum Gravity, 2002, 19, 1541-1546.	1.5	6
80	Automatic Alignment system during the second science run of the Virgo interferometer. Astroparticle Physics, 2011, 34, 327-332.	1.9	6
81	Status of the Advanced Virgo gravitational wave detector. International Journal of Modern Physics A, 2017, 32, 1744003.	0.5	6
82	Astrophysical signal consistency test adapted for gravitational-wave transient searches. Physical Review D, 2019, 100, .	1.6	6
83	Characterization of the Virgo seismic environment. Classical and Quantum Gravity, 2012, 29, 025005.	1.5	5
84	MANDA system: A VME data acquisition system for nuclear physics experiments. IEEE Transactions on Nuclear Science, 1989, 36, 697-701.	1.2	4
85	A high energy physics run control system based on an object oriented approach. IEEE Transactions on Nuclear Science, 1991, 38, 311-315.	1.2	4
86	Nuclear physics with OBELIX. Nuclear Physics A, 1993, 558, 369-381.	0.6	4
87	Light baryon production in binary annihilation reactions at rest. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 460, 248-255.	1.5	4
88	Control of the laser frequency of the Virgo gravitational wave interferometer with an in-loop relative frequency stability of 1.0 Ã— 10â^'21 on a 100 ms time scale. , 2009, , .		4
89	THE VIRGO INTERFEROMETER FOR GRAVITATIONAL WAVE DETECTION. International Journal of Modern Physics D, 2011, 20, 2075-2079.	0.9	4
90	Prospects for intermediate mass black hole binary searches with advanced gravitational-wave detectors. Physical Review D, 2014, 90, .	1.6	4

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91	Pair production in the field of a monopole with nonconserved quantum numbers. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1985, 27, 377-384.	1.5	3
92	The transputer based GA.SP data acquisition system. IEEE Transactions on Nuclear Science, 1992, 39, 103-108.	1.2	3
93	ON-LINE CONSISTENCY TESTS FOR BAR DETECTORS. International Journal of Modern Physics D, 2000, 09, 251-255.	0.9	3
94	Multimessenger Sources of Gravitational Waves and High-energy Neutrinos: Science Reach and Analysis Method. Journal of Physics: Conference Series, 2012, 363, 012022.	0.3	3
95	Nucleon decay induced by GUT monopole and possible nonconservation of charge. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1985, 29, 111-114.	1.5	2
96	A 64 Mbyte VME Histogramming Memory Card For The GA.SP gamma spectrometer. , 0, , .		2
97	The gravitational wave burst observatory: Present state and future perspectives. Nuclear Physics, Section B, Proceedings Supplements, 1999, 70, 537-544.	0.5	2
98	Noise monitor tools and their application to Virgo data. Journal of Physics: Conference Series, 2012, 363, 012024.	0.3	2
99	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
100	Minimally-modeled search of higher multipole gravitational-wave radiation in compact binary coalescences. Classical and Quantum Gravity, 2022, 39, 045001.	1.5	2
101	First results on nuclear physics with antineutrons by the OBELIX spectrometer. Nuclear Physics A, 1993, 553, 651-654.	0.6	1
102	Sub-Millisecond Absolute Timing: Toward an Actual Gravitational Observatory. Modern Physics Letters A, 1997, 12, 2261-2264.	0.5	1
103	Status of the commissioning of the Virgo interferometer. , 2012, , .		1
104	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. , 2016, 19, 1.		1
105	The Data Acquisition System For The OBELIX Central Detector. , 0, , .		0
106	A High Energy Physics Run Control System Based On An Object Oriented Approach. , 0, , .		0
107	The data acquisition system for the OBELIX central detector. IEEE Transactions on Nuclear Science, 1991, 38, 337-343.	1.2	0
108	Performances of the Obelix event builder and producer. , 0, , .		0

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109	Parallel data processing in GA.SP data acquisition system. , 0, , .		0
110	The micro spiral projection chamber (Î¼SPC). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 315, 74-76.	0.7	0
111	Performances of the Obelix event builder and producer. IEEE Transactions on Nuclear Science, 1993, 40, 598-602.	1.2	0
112	Results on spin-parity analysis of nÌ„p â†' Ï€+Ï€â^'Ï€+ in flight. Nuclear Physics, Section B, Proceedings Supplements, 1997, 56, 160-165.	0.5	0
113	A cross-correlation method to search for gravitational wave bursts with AURIGA and Virgo. Classical and Quantum Gravity, 2008, 25, 114046.	1.5	0
114	Tools for noise characterization in Virgo. Journal of Physics: Conference Series, 2010, 243, 012004.	0.3	0
115	C7 multi-messenger astronomy of GW sources. General Relativity and Gravitation, 2014, 46, 1.	0.7	0
116	The search of higher multipole radiation in gravitational waves from compact binary coalescences by a minimally-modelled pipeline. Journal of Physics: Conference Series, 2021, 2156, 012081.	0.3	0