Ettore Majorana

List of Publications by Citations

158 papers	7,479 citations	34 h-index	85 g-index
167 ext. papers	9,242 ext. citations	3.3 avg, IF	2.95 L-index

#	Paper	IF	Citations
158	Advanced Virgo: a second-generation interferometric gravitational wave detector. *Classical and Quantum Gravity*, **2015**, 32, 024001	3.3	1567
157	The Einstein Telescope: a third-generation gravitational wave observatory. *Classical and Quantum Gravity*, **2010**, 27, 194002	3.3	675
156	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. *Living Reviews in Relativity*, **2018**, 21, 3	32.5	543
155	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. *Living Reviews in Relativity*, **2016**, 19, 1	32.5	393
154	Sensitivity studies for third-generation gravitational wave observatories. *Classical and Quantum Gravity*, **2011**, 28, 094013	3.3	382
153	Scientific objectives of Einstein Telescope. *Classical and Quantum Gravity*, **2012**, 29, 124013	3.3	256
152	The third generation of gravitational wave observatories and their science reach. *Classical and Quantum Gravity*, **2010**, 27, 084007	3.3	214
151	Virgo: a laser interferometer to detect gravitational waves. *Journal of Instrumentation*, **2012**, 7, P03012-P03012	1.2	212
150	The Virgo status. *Classical and Quantum Gravity*, **2006**, 23, S635-S642	3.3	166
149	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. *Classical and Quantum Gravity*, **2016**, 33,	3.3	155
148	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. *Living Reviews in Relativity*, **2020**, 23, 3	32.5	144
147	Status of the Virgo project. *Classical and Quantum Gravity*, **2011**, 28, 114002	3.3	140
146	Increasing the Astrophysical Reach of the Advanced Virgo Detector via the Application of Squeezed Vacuum States of Light. *Physical Review Letters*, **2019**, 123, 231108	7.4	134
145	Long-term operation of the Rome "Explorer" cryogenic gravitational wave detector. *Physical Review D*, **1993**, 47, 362-375	4.9	116
144	Status of Virgo. *Classical and Quantum Gravity*, **2008**, 25, 114045	3.3	115
143	Virgo status. *Classical and Quantum Gravity*, **2008**, 25, 184001	3.3	110
142	Status of VIRGO. *Classical and Quantum Gravity*, **2004**, 21, S385-S394	3.3	87

141	Calibration and sensitivity of the Virgo detector during its second science run. *Classical and Quantum Gravity*, **2011**, 28, 025005	3.3	83
140	Measurement of the VIRGO superattenuator performance for seismic noise suppression. *Review of Scientific Instruments*, **2001**, 72, 3643-3652	1.7	80
139	The present status of the VIRGO Central Interferometer*. *Classical and Quantum Gravity*, **2002**, 19, 1421-1428	3.3	80
138	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	4.7	79
137	The status of VIRGO. *Classical and Quantum Gravity*, **2006**, 23, S63-S69	3.3	79
136	A Standard Siren Measurement of the Hubble Constant from GW170817 without the Electromagnetic Counterpart. *Astrophysical Journal Letters*, **2019**, 871, L13	7.9	77
135	Measurement of the seismic attenuation performance of the VIRGO Superattenuator. *Astroparticle Physics*, **2005**, 23, 557-565	2.4	69
134	Construction of KAGRA: an underground gravitational-wave observatory. *Progress of Theoretical and Experimental Physics*, **2018**, 2018,	5.4	57
133	First Cooling Below 0.1 K of the New Gravitational-Wave Antenna Nautilus of the Rome Group. *Europhysics Letters*, **1991**, 16, 231-235	1.6	56
132	Measurements of Superattenuator seismic isolation by Virgo interferometer. *Astroparticle Physics*, **2010**, 33, 182-189	2.4	54
131	Status of Virgo. *Classical and Quantum Gravity*, **2005**, 22, S869-S880	3.3	52
130	Status of Virgo detector. *Classical and Quantum Gravity*, **2007**, 24, S381-S388	3.3	51
129	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. *Astrophysical Journal*, **2021**, 909, 218	4.7	46
128	The basic physics of the binary black hole merger GW150914. *Annalen Der Physik*, **2017**, 529, 1600209	2.6	45
127	Suspension last stages for the mirrors of the Virgo interferometric gravitational wave antenna. *Review of Scientific Instruments*, **1999**, 70, 3463-3472	1.7	45
126	Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B. *Astrophysical Journal*, **2017**, 841, 89	4.7	42
125	Calibration of advanced Virgo and reconstruction of the gravitational wave signal h (t) during the observing run O2. *Classical and Quantum Gravity*, **2018**, 35, 205004	3.3	35
124	First cryogenic test operation of underground km-scale gravitational-wave observatory KAGRA. *Classical and Quantum Gravity*, **2019**, 36, 165008	3.3	34

123	Noise from scattered light in Virgo's second science run data. *Classical and Quantum Gravity*, **2010**, 27, 194011	3.3	31
122	The Virgo 3 km interferometer for gravitational wave detection. *Journal of Optics*, **2008**, 10, 064009		29
121	The maraging-steel blades of the Virgo super attenuator. *Measurement Science and Technology*, **2000**, 11, 467-476	2	26
120	Evaluation of heat extraction through sapphire fibers for the GW observatory KAGRA. *Classical and Quantum Gravity*, **2014**, 31, 105004	3.3	25
119	Back-action-evading transducing scheme for cryogenic gravitational wave antennas. *Physical Review D*, **1993**, 48, 448-465	4.9	25
118	Low-frequency terrestrial tensor gravitational-wave detector. *Classical and Quantum Gravity*, **2016**, 33, 075003	3.3	24
117	Search for gravitational waves associated with GRB 050915a using the Virgo detector. *Classical and Quantum Gravity*, **2008**, 25, 225001	3.3	23
116	Vibration-free cryostat for low-noise applications of a pulse tube cryocooler. *Review of Scientific Instruments*, **2006**, 77, 095102	1.7	23
115	Status and perspectives of the Virgo gravitational wave detector. *Journal of Physics: Conference Series*, **2010**, 203, 012074	0.3	22
114	The VIRGO large mirrors: a challenge for low loss coatings. *Classical and Quantum Gravity*, **2004**, 21, S935-S945	3.3	21
113	Upper limit for nuclearite flux from the Rome gravitational wave resonant detectors. *Physical Review D*, **1993**, 47, 4770-4773	4.9	20
112	Evaluation and preliminary measurement of the interaction of a dynamical gravitational near field with a cryogenic gravitational wave antenna. *Zeitschrift F□ Physik C-Particles and Fields*, **1991**, 50, 21-29		20
111	The Seismic Superattenuators of the Virgo Gravitational Waves Interferometer. *Journal of Low Frequency Noise Vibration and Active Control*, **2011**, 30, 63-79	1.5	19
110	The variable finesse locking technique. *Classical and Quantum Gravity*, **2006**, 23, S85-S89	3.3	19
109	Virgo upgrade investigations. *Journal of Physics: Conference Series*, **2006**, 32, 223-229	0.3	19
108	Properties of seismic noise at the Virgo site. *Classical and Quantum Gravity*, **2004**, 21, S433-S440	3.3	19
107	Vacuum-compatible vibration isolation stack for an interferometric gravitational wave detector TAMA300. *Review of Scientific Instruments*, **2002**, 73, 2428-2433	1.7	19
106	The Advanced Virgo detector. *Journal of Physics: Conference Series*, **2015**, 610, 012014	0.3	18

105	The commissioning of the central interferometer of the Virgo gravitational wave detector. *Astroparticle Physics*, **2004**, 21, 1-22	2.4	18
104	Experimental evidence for an optical spring. *Physical Review A*, **2006**, 74,	2.6	17
103	Gravitational waves by gamma-ray bursts and the Virgo detector: the case of GRB 050915a. *Classical and Quantum Gravity*, **2007**, 24, S671-S679	3.3	16
102	A local control system for the test masses of the Virgo gravitational wave detector. *Astroparticle Physics*, **2004**, 20, 617-628	2.4	16
101	Gravitational wave burst search in the Virgo C7 data. *Classical and Quantum Gravity*, **2009**, 26, 085009	3.3	15
100	VIRGO: a large interferometer for gravitational wave detection started its first scientific run. *Journal of Physics: Conference Series*, **2008**, 120, 032007	0.3	15
99	Lock acquisition of the Virgo gravitational wave detector. *Astroparticle Physics*, **2008**, 30, 29-38	2.4	13
98	The Virgo automatic alignment system. *Classical and Quantum Gravity*, **2006**, 23, S91-S101	3.3	13
97	Coincidence analysis between periodic source candidates in C6 and C7 Virgo data. *Classical and Quantum Gravity*, **2007**, 24, S491-S499	3.3	13
96	Last stage control and mechanical transfer function measurement of the VIRGO suspensions. *Review of Scientific Instruments*, **2002**, 73, 2143-2149	1.7	13
95	Measurement of the optical parameters of the Virgo interferometer. *Applied Optics*, **2007**, 46, 3466-84	1.7	12
94	First locking of the Virgo central area interferometer with suspension hierarchical control. *Astroparticle Physics*, **2004**, 20, 629-640	2.4	12
93	Monitoring the acoustic emission of the blades of the mirror suspension for a gravitational wave interferometer. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2002**, 301, 389-397	2.3	12
92	First joint gravitational wave search by the AURIGAEXPLORERNAUTILUSVirgo Collaboration. *Classical and Quantum Gravity*, **2008**, 25, 205007	3.3	11
91	Search for inspiralling binary events in the Virgo Engineering Run data. *Classical and Quantum Gravity*, **2004**, 21, S709-S716	3.3	11
90	Low-loss coatings for the VIRGO large mirrors **2004**,		11
89	Characterization of the room temperature payload prototype for the cryogenic interferometric gravitational wave detector KAGRA. *Review of Scientific Instruments*, **2016**, 87, 034501	1.7	10
88	Performance of the Virgo interferometer longitudinal control system during the second science run. *Astroparticle Physics*, **2011**, 34, 521-527	2.4	10

87	The NoEMi (Noise Frequency Event Miner) framework. *Journal of Physics: Conference Series*, **2012**, 363, 012037	0.3	10
86	Automatic Alignment for the first science run of the Virgo interferometer. *Astroparticle Physics*, **2010**, 33, 131-139	2.4	10
85	Improving the timing precision for inspiral signals found by interferometric gravitational wave detectors. *Classical and Quantum Gravity*, **2007**, 24, S617-S625	3.3	10
84	The Virgo Detector. *AIP Conference Proceedings*, **2005**,	0	10
83	Central heating radius of curvature correction (CHRoCC) for use in large scale gravitational wave interferometers. *Classical and Quantum Gravity*, **2013**, 30, 055017	3.3	9
82	Observation of the Brownian motion of a mechanical oscillator by means of a back action evading system. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1993**, 180, 43-49	2.3	9
81	Magnetic coupling to the advanced Virgo payloads and its impact on the low frequency sensitivity. *Review of Scientific Instruments*, **2018**, 89, 114501	1.7	9
80	Advanced Virgo Status. *Journal of Physics: Conference Series*, **2020**, 1342, 012010	0.3	8
79	The Advanced Virgo monolithic fused silica suspension. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2016**, 824, 644-645	1.2	8
78	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	3.3	8
77	Analysis of noise lines in the Virgo C7 data. *Classical and Quantum Gravity*, **2007**, 24, S433-S443	3.3	8
76	Status of coalescing binaries search activities in Virgo. *Classical and Quantum Gravity*, **2007**, 24, 5767-5775	3.3	8
75	Status of VIRGO. *Classical and Quantum Gravity*, **2003**, 20, S609-S616	3.3	8
74	Overview of KAGRA: Calibration, detector characterization, physical environmental monitors, and the geophysics interferometer. *Progress of Theoretical and Experimental Physics*, **2021**, 2021,	5.4	8
73	Virgo calibration and reconstruction of the gravitationnal wave strain during VSR1. *Journal of Physics: Conference Series*, **2010**, 228, 012015	0.3	7
72	The Virgo interferometric gravitational antenna. *Optics and Lasers in Engineering*, **2007**, 45, 478-487	4.6	7
71	Data analysis methods for non-Gaussian, nonstationary and nonlinear features and their application to VIRGO. *Classical and Quantum Gravity*, **2003**, 20, S915-S924	3.3	7
70	Test of a back-action evading scheme on a cryogenic gravitational wave antenna. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1996**, 215, 141-148	2.3	7

69	Correlation between the Maryland and Rome gravitational-wave detectors and the Mont Blanc, Kamioka and IMB particle detectors during SN 1987 A. *Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods*, **1991**, 106, 1257-1269		7
68	Noise behaviour of the Explorer gravitational wave antenna during transition to the superfluid phase. *Cryogenics*, **1992**, 32, 668-670	1.8	7
67	The advanced Virgo longitudinal control system for the O2 observing run. *Astroparticle Physics*, **2020**, 116, 102386	2.4	7
66	Laser with an in-loop relative frequency stability of 1.0×10-21 on a 100-ms time scale for gravitational-wave detection. *Physical Review A*, **2009**, 79,	2.6	6
65	A state observer for the Virgo inverted pendulum. *Review of Scientific Instruments*, **2011**, 82, 094502	1.7	6
64	Noise studies during the first Virgo science run and after. *Classical and Quantum Gravity*, **2008**, 25, 184003	3.3	6
63	The status of coalescing binaries search code in Virgo, and the analysis of C5 data. *Classical and Quantum Gravity*, **2006**, 23, S187-S196	3.3	6
62	Signal-to-noise ratio analysis for a back-action-evading measurement on a double harmonic oscillator. *Physical Review D*, **1994**, 50, 3596-3607	4.9	6
61	Status of the Advanced Virgo gravitational wave detector. *International Journal of Modern Physics A* , **2017**, 32, 1744003	1.2	5
60	Indium joints for cryogenic gravitational wave detectors. *Classical and Quantum Gravity*, **2015**, 32, 245013	3.3	5
59	Automatic Alignment system during the second science run of the Virgo interferometer. *Astroparticle Physics*, **2011**, 34, 327-332	2.4	5
58	Cleaning the Virgo sampled data for the search of periodic sources of gravitational waves. *Classical and Quantum Gravity*, **2009**, 26, 204002	3.3	5
57	The last-stage suspension of the mirrors for the gravitational wave antenna Virgo. *Classical and Quantum Gravity*, **2004**, 21, S425-S432	3.3	5
56	A simple line detection algorithm applied to Virgo data. *Classical and Quantum Gravity*, **2005**, 22, S1189-S1196	3.3	5
55	NAP: a tool for noise data analysis. Application to Virgo engineering runs. *Classical and Quantum Gravity*, **2005**, 22, S1041-S1049	3.3	5
54	Testing the detection pipelines for inspirals with Virgo commissioning run C4 data. *Classical and Quantum Gravity*, **2005**, 22, S1139-S1148	3.3	5
53	Test facility for resonance transducers of cryogenic gravitational wave antennas. *Measurement Science and Technology*, **1992**, 3, 501-507	2	5
52	Application of independent component analysis to the iKAGRA data. *Progress of Theoretical and Experimental Physics*, **2020**, 2020,	5.4	5

51	The Archimedes experiment. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2016**, 824, 646-647	1.2	5
50	Overview of KAGRA: KAGRA science. *Progress of Theoretical and Experimental Physics*, **2021**, 2021,	5.4	5
49	The status of KAGRA underground cryogenic gravitational wave telescope. *Journal of Physics: Conference Series*, **2020**, 1342, 012014	0.3	4
48	Vibration measurement in the KAGRA cryostat. *Classical and Quantum Gravity*, **2014**, 31, 224001	3.3	4
47	THE VIRGO INTERFEROMETER FOR GRAVITATIONAL WAVE DETECTION. *International Journal of Modern Physics D*, **2011**, 20, 2075-2079	2.2	4
46	Characterization of the Virgo seismic environment. *Classical and Quantum Gravity*, **2012**, 29, 025005	3.3	4
45	The Real-Time Distributed Control of the Virgo Interferometric Detector of Gravitational Waves. *IEEE Transactions on Nuclear Science*, **2008**, 55, 302-310	1.7	4
44	Data quality studies for burst analysis of Virgo data acquired during Weekly Science Runs. *Classical and Quantum Gravity*, **2007**, 24, S415-S422	3.3	4
43	Results of the Virgo central interferometer commissioning. *Classical and Quantum Gravity*, **2004**, 21, S395-S402	3.3	4
42	Status report of the low frequency facility experiment, Virgo R&D. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2003**, 318, 199-204	2.3	4
41	A first study of environmental noise coupling to the Virgo interferometer. *Classical and Quantum Gravity*, **2005**, 22, S1069-S1077	3.3	4
40	Weber-type gravitational wave antenna with two resonant transducers: A new tool for gravitational wave signal identification. *Physical Review D*, **1993**, 47, 5233-5237	4.9	4
39	Status of Advanced Virgo. *EPJ Web of Conferences*, **2018**, 182, 02003	0.3	4
38	Data Acquisition System of the Virgo Gravitational Waves Interferometric Detector. *IEEE Transactions on Nuclear Science*, **2008**, 55, 225-232	1.7	3
37	Length Sensing and Control in the Virgo Gravitational Wave Interferometer. *IEEE Transactions on Instrumentation and Measurement*, **2006**, 55, 1985-1995	5.2	3
36	Testing Virgo burst detection tools on commissioning run data. *Classical and Quantum Gravity*, **2006** , 23, S197-S205	3.3	3
35	Environmental noise studies in Virgo. *Journal of Physics: Conference Series*, **2006**, 32, 80-88	0.3	3
34	Vibration Free Cryostat for cooling suspended mirrors. *Journal of Physics: Conference Series*, **2006**, 32, 374-379	0.3	3

33	Status of the low frequency facility experiment. *Classical and Quantum Gravity*, **2002**, 19, 1675-1682	3.3	3
32	Vibration isolation systems for the beam splitter and signal recycling mirrors of the KAGRA gravitational wave detector. *Classical and Quantum Gravity*, **2021**, 38, 065011	3.3	3
31	Progress and challenges in advanced ground-based gravitational-wave detectors. *General Relativity and Gravitation*, **2014**, 46, 1	2.3	2
30	Concepts and research for future detectors. *General Relativity and Gravitation*, **2014**, 46, 1	2.3	2
29	Casimir energy for two and three superconducting coupled cavities: Numerical calculations. *European Physical Journal Plus*, **2017**, 132, 1	3.1	2
28	A vertical accelerometer for cryogenics implementation in third-generation gravitational-wave detectors. *Measurement Science and Technology*, **2014**, 25, 015103	2	2
27	A cryogenic payload for the 3rd generation of gravitational wave interferometers. *Astroparticle Physics*, **2011**, 35, 67-75	2.4	2
26	Geophysical noise in the virgo gravitational antenna. *Measurement Techniques*, **2009**, 52, 111-116	0.4	2
25	Status of Virgo. *Journal of Physics: Conference Series*, **2006**, 39, 32-35	0.3	2
24	Status of VIRGO **2004**, 5500, 58		2
23	Virgo and the worldwide search for gravitational waves. *AIP Conference Proceedings*, **2005**,	0	2
22	Virgo status and commissioning results. *Classical and Quantum Gravity*, **2005**, 22, S185-S191	3.3	2
21	Calibration of advanced Virgo and reconstruction of the detector strain h(t) during the observing run O3. *Classical and Quantum Gravity*, **2022**, 39, 045006	3.3	2
20	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA **2018**, 21, 1		2
19	Seismic glitchness at Sos Enattos site: impact on intermediate black hole binaries detection efficiency. *European Physical Journal Plus*, **2021**, 136, 1	3.1	2
18	Experimental upper limit on the estimated thermal noise at low frequencies in a gravitational wave detector. *Physical Review D*, **2007**, 76,	4.9	1
17	A first test of a sine-Hough method for the detection of pulsars in binary systems using the E4 Virgo engineering run data. *Classical and Quantum Gravity*, **2004**, 21, S717-S727	3.3	1
16	Single device telemetric algorithm for absolute position measurement using a CCD camera. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2002**, 295, 92-100	2.3	1

15	Influence of a mirror holder on thermal noise in gravitational wave interferometers. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2003**, 315, 409-417	2.3	1
14	Performances of a super conductive parabridge transducer for liquidhelium temperature applications. *Cryogenics*, **1994**, 34, 443-447	1.8	1
13	Anelastic properties of resonant transducers for cryogenic gravitational wave antennas. *Journal of Alloys and Compounds*, **1994**, 211-212, 644-648	5.7	1
12	Automated source of squeezed vacuum states driven by finite state machine based software. *Review of Scientific Instruments*, **2021**, 92, 054504	1.7	1
11	Towards ponderomotive squeezing with SIPS experiment. *Physica Scripta*, **2021**, 96, 114007	2.6	1
10	Anelastic and elastic properties of a synthetic monocrystal of bismuth germanate Bi4Ge3O12 at low temperatures. *Journal of Alloys and Compounds*, **1994**, 211-212, 640-643	5.7	0
9	Measurement of geophysical effects on the large-scale gravitational-wave interferometer. *International Journal of Modern Physics D*, **2020**, 29, 2050050	2.2	
8	Preliminary results on the cryogenic payload for the 3rd generation g.w. interferometers. *Journal of Physics: Conference Series*, **2010**, 228, 012030	0.3	
7	Tools for noise characterization in Virgo. *Journal of Physics: Conference Series*, **2010**, 243, 012004	0.3	
6	A cross-correlation method to search for gravitational wave bursts with AURIGA and Virgo. *Classical and Quantum Gravity*, **2008**, 25, 114046	3.3	
5	Normal/independent noise in VIRGO data. *Classical and Quantum Gravity*, **2006**, 23, S829-S836	3.3	
4	A parallel in-time analysis system for Virgo.. *Journal of Physics: Conference Series*, **2006**, 32, 35-43	0.3	
3	Decay times of anN-normal-mode system. *Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods*, **1993**, 108, 1065-1071		
2	Seismic noise background in the Baksan Neutrino Observatory. *European Physical Journal Plus*, **2022** , 137, 1	3.1	
1	Terrestrial detector for low-frequency gravitational waves based on full tensor measurement. *Journal of Physics: Conference Series*, **2016**, 716, 012001	0.3	