Maddalena Mantovani

List of Publications by Citations

94 papers	5,321 citations	25 h-index	72 g-index
102 ext. papers	6,631 ext. citations	3.6 avg, IF	2.58 L-index

#	Paper	IF	Citations
94	Advanced Virgo: a second-generation interferometric gravitational wave detector. *Classical and Quantum Gravity*, **2015**, 32, 024001	3.3	1567
93	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
92	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. *Living Reviews in Relativity*, **2016**, 19, 1	32.5	393
91	Sensitivity studies for third-generation gravitational wave observatories. *Classical and Quantum Gravity*, **2011**, 28, 094013	3.3	382
90	Virgo: a laser interferometer to detect gravitational waves. *Journal of Instrumentation*, **2012**, 7, P03012-P03012	212	
89	The Virgo status. *Classical and Quantum Gravity*, **2006**, 23, S635-S642	3.3	166
88	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. *Classical and Quantum Gravity*, **2016**, 33,	3.3	155
87	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
86	Status of the Virgo project. *Classical and Quantum Gravity*, **2011**, 28, 114002	3.3	140
85	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
84	Status of Virgo. *Classical and Quantum Gravity*, **2008**, 25, 114045	3.3	115
83	Virgo status. *Classical and Quantum Gravity*, **2008**, 25, 184001	3.3	110
82	Calibration and sensitivity of the Virgo detector during its second science run. *Classical and Quantum Gravity*, **2011**, 28, 025005	3.3	83
81	SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGOS FIFTH AND VIRGOS FIRST SCIENCE RUN. *Astrophysical Journal*, **2010**, 715, 1453-1461	4.7	79
80	The status of VIRGO. *Classical and Quantum Gravity*, **2006**, 23, S63-S69	3.3	79
79	A Standard Siren Measurement of the Hubble Constant from GW170817 without the Electromagnetic Counterpart. *Astrophysical Journal Letters*, **2019**, 871, L13	7.9	77
78	Measurements of Superattenuator seismic isolation by Virgo interferometer. *Astroparticle Physics*, **2010**, 33, 182-189	2.4	54

77	Status of Virgo. *Classical and Quantum Gravity*, **2005**, 22, S869-S880	3.3	52
76	Status of Virgo detector. *Classical and Quantum Gravity*, **2007**, 24, S381-S388	3.3	51
75	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
74	The basic physics of the binary black hole merger GW150914. *Annalen Der Physik*, **2017**, 529, 1600209	2.6	45
73	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
72	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
71	Noise from scattered light in Virgo's second science run data. *Classical and Quantum Gravity*, **2010**, 27, 194011	3.3	31
70	The Virgo 3 km interferometer for gravitational wave detection. *Journal of Optics*, **2008**, 10, 064009		29
69	Search for gravitational waves associated with GRB 050915a using the Virgo detector. *Classical and Quantum Gravity*, **2008**, 25, 225001	3.3	23
68	Status and perspectives of the Virgo gravitational wave detector. *Journal of Physics: Conference Series*, **2010**, 203, 012074	0.3	22
67	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
66	The variable finesse locking technique. *Classical and Quantum Gravity*, **2006**, 23, S85-S89	3.3	19
65	Virgo upgrade investigations. *Journal of Physics: Conference Series*, **2006**, 32, 223-229	0.3	19
64	The Advanced Virgo detector. *Journal of Physics: Conference Series*, **2015**, 610, 012014	0.3	18
63	Using the etalon effect for in situ balancing of the Advanced Virgo arm cavities. *Classical and Quantum Gravity*, **2009**, 26, 025005	3.3	17
62	Experimental evidence for an optical spring. *Physical Review A*, **2006**, 74,	2.6	17
61	Quantum Backaction on kg-Scale Mirrors: Observation of Radiation Pressure Noise in the Advanced Virgo Detector. *Physical Review Letters*, **2020**, 125, 131101	7.4	17
60	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

59	Gravitational wave burst search in the Virgo C7 data. *Classical and Quantum Gravity*, **2009**, 26, 085009	3.3	15
58	VIRGO: a large interferometer for gravitational wave detection started its first scientific run. *Journal of Physics: Conference Series*, **2008**, 120, 032007	0.3	15
57	One hertz seismic attenuation for low frequency gravitational waves interferometers. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2005**, 554, 546-554	1.2	15
56	Lock acquisition of the Virgo gravitational wave detector. *Astroparticle Physics*, **2008**, 30, 29-38	2.4	13
55	The Virgo automatic alignment system. *Classical and Quantum Gravity*, **2006**, 23, S91-S101	3.3	13
54	Coincidence analysis between periodic source candidates in C6 and C7 Virgo data. *Classical and Quantum Gravity*, **2007**, 24, S491-S499	3.3	13
53	Vacuum-compatible low-loss Faraday isolator for efficient squeezed-light injection in laser-interferometer-based gravitational-wave detectors. *Applied Optics*, **2018**, 57, 9705-9713	1.7	13
52	Measurement of the optical parameters of the Virgo interferometer. *Applied Optics*, **2007**, 46, 3466-84	1.7	12
51	First joint gravitational wave search by the AURIGA□EXPLORER□NAUTILUS□Virgo Collaboration. *Classical and Quantum Gravity*, **2008**, 25, 205007	3.3	11
50	Performance of the Virgo interferometer longitudinal control system during the second science run. *Astroparticle Physics*, **2011**, 34, 521-527	2.4	10
49	The NoEMi (Noise Frequency Event Miner) framework. *Journal of Physics: Conference Series*, **2012**, 363, 012037	0.3	10
48	Automatic Alignment for the first science run of the Virgo interferometer. *Astroparticle Physics*, **2010**, 33, 131-139	2.4	10
47	Improving the timing precision for inspiral signals found by interferometric gravitational wave detectors. *Classical and Quantum Gravity*, **2007**, 24, S617-S625	3.3	10
46	The Virgo Detector. *AIP Conference Proceedings*, **2005**,	0	10
45	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
44	Advanced Virgo Status. *Journal of Physics: Conference Series*, **2020**, 1342, 012010	0.3	8
43	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
42	Design and prototype tests of a seismic attenuation system for the advanced-LIGO output mode cleaner. *Classical and Quantum Gravity*, **2006**, 23, S111-S118	3.3	8

41	Analysis of noise lines in the Virgo C7 data. *Classical and Quantum Gravity*, **2007**, 24, S433-S443	3.3	8
40	Status of coalescing binaries search activities in Virgo. *Classical and Quantum Gravity*, **2007**, 24, 5767-5775	3.3	8
39	Virgo calibration and reconstruction of the gravitationnal wave strain during VSR1. *Journal of Physics: Conference Series*, **2010**, 228, 012015	0.3	7
38	The Virgo interferometric gravitational antenna. *Optics and Lasers in Engineering*, **2007**, 45, 478-487	4.6	7
37	Extended-time-scale creep measurement on Maraging cantilever blade springs. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2008**, 593, 597-607	1.2	7
36	Interferometer Sensing and Control for the Advanced Virgo Experiment in the O3 Scientific Run. *Galaxies*, **2020**, 8, 85	2	7
35	The advanced Virgo longitudinal control system for the O2 observing run. *Astroparticle Physics*, **2020**, 116, 102386	2.4	7
34	Sub-nanoradiant beam pointing monitoring and stabilization system for controlling input beam jitter in gravitational wave interferometers. *Applied Optics*, **2014**, 53, 2906-16	1.7	6
33	Laser with an in-loop relative frequency stability of 1.0$\square$10$\square$21 on a 100-ms time scale for gravitational-wave detection. *Physical Review A*, **2009**, 79,	2.6	6
32	A state observer for the Virgo inverted pendulum. *Review of Scientific Instruments*, **2011**, 82, 094502	1.7	6
31	Noise studies during the first Virgo science run and after. *Classical and Quantum Gravity*, **2008**, 25, 184003	3.3	6
30	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
29	Status of the Advanced Virgo gravitational wave detector. *International Journal of Modern Physics A* , **2017**, 32, 1744003	1.2	5
28	Automatic Alignment system during the second science run of the Virgo interferometer. *Astroparticle Physics*, **2011**, 34, 327-332	2.4	5
27	Cleaning the Virgo sampled data for the search of periodic sources of gravitational waves. *Classical and Quantum Gravity*, **2009**, 26, 204002	3.3	5
26	A simple line detection algorithm applied to Virgo data. *Classical and Quantum Gravity*, **2005**, 22, S1189-S1196	3.3	5
25	NAP: a tool for noise data analysis. Application to Virgo engineering runs. *Classical and Quantum Gravity*, **2005**, 22, S1041-S1049	3.3	5
24	Testing the detection pipelines for inspirals with Virgo commissioning run C4 data. *Classical and Quantum Gravity*, **2005**, 22, S1139-S1148	3.3	5

23	New algorithm for the Guided Lock technique for a high-Finesse optical cavity. *Astroparticle Physics*, **2020**, 117, 102405	2.4	5
22	THE VIRGO INTERFEROMETER FOR GRAVITATIONAL WAVE DETECTION. *International Journal of Modern Physics D*, **2011**, 20, 2075-2079	2.2	4
21	Characterization of the Virgo seismic environment. *Classical and Quantum Gravity*, **2012**, 29, 025005	3.3	4
20	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
19	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
18	A first study of environmental noise coupling to the Virgo interferometer. *Classical and Quantum Gravity*, **2005**, 22, S1069-S1077	3.3	4
17	Status of Advanced Virgo. *EPJ Web of Conferences*, **2018**, 182, 02003	0.3	4
16	Data Acquisition System of the Virgo Gravitational Waves Interferometric Detector. *IEEE Transactions on Nuclear Science*, **2008**, 55, 225-232	1.7	3
15	Evaluating mirror alignment systems using the optical sensing matrix. *Journal of Physics: Conference Series*, **2008**, 122, 012026	0.3	3
14	Length Sensing and Control in the Virgo Gravitational Wave Interferometer. *IEEE Transactions on Instrumentation and Measurement*, **2006**, 55, 1985-1995	5.2	3
13	Testing Virgo burst detection tools on commissioning run data. *Classical and Quantum Gravity*, **2006** , 23, S197-S205	3.3	3
12	Environmental noise studies in Virgo. *Journal of Physics: Conference Series*, **2006**, 32, 80-88	0.3	3
11	Geophysical noise in the virgo gravitational antenna. *Measurement Techniques*, **2009**, 52, 111-116	0.4	2
10	Status of Virgo. *Journal of Physics: Conference Series*, **2006**, 39, 32-35	0.3	2
9	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA **2018**, 21, 1		2
8	**2009**,		1
7	Experimental upper limit on the estimated thermal noise at low frequencies in a gravitational wave detector. *Physical Review D*, **2007**, 76,	4.9	1
6	Development of a Frequency Tunable Green Laser Source for Advanced Virgo+ Gravitational Waves Detector. *Galaxies*, **2020**, 8, 87	2	1

5	Temperature Control for an Intra-Mirror Etalon in Interferometric Gravitational Wave Detector Fabry–Perot Cavities. *Galaxies*, **2020**, 8, 80	2	0
4	Tools for noise characterization in Virgo. *Journal of Physics: Conference Series*, **2010**, 243, 012004	0.3	
3	A cross-correlation method to search for gravitational wave bursts with AURIGA and Virgo. *Classical and Quantum Gravity*, **2008**, 25, 114046	3.3	
2	Normal/independent noise in VIRGO data. *Classical and Quantum Gravity*, **2006**, 23, S829-S836	3.3	
1	A parallel in-time analysis system for Virgo.. *Journal of Physics: Conference Series*, **2006**, 32, 35-43	0.3	