Michela Marafini

List of Publications by Year
in descending order

95	1,325	331538	414303
papers	citations	21 h-index	32 g-index

97	97	97	1206
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The next-generation liquid-scintillator neutrino observatory LENA. Astroparticle Physics, 2012, 35, 685-732.	1.9	181
2	Toward Radioguided Surgery with Î²^{â^'} Decays: Uptake of a Somatostatin Analogue, DOTATOC, in Meningioma and High-Grade Glioma. Journal of Nuclear Medicine, 2015, 56, 3-8.	2.8	92
3	Measurement of charged particle yields from PMMA irradiated by a 220 MeV/u¹²Cbeam. Physics in Medicine and Biology, 2014, 59, 1857-1872.	1.6	60
4	A novel radioguided surgery technique exploiting Î²â^' decays. Scientific Reports, 2014, 4, 4401.	1.6	48
5	Charged particleâ€™s flux measurement from PMMA irradiated by 80 MeV/u carbon ion beam. Physics in Medicine and Biology, 2012, 57, 5667-5678.	1.6	37
6	Study of the performance of a large scale water-Cherenkov detector (MEMPHYS). Journal of Cosmology and Astroparticle Physics, 2013, 2013, 024-024.	1.9	37
7	Properties of para-Terphenyl as a Detector for <formula formulatype="inline"><tex Notation="TeX">$alpha $</tex></formula>, <formula formulatype="inline"><tex Notation="TeX">$eta $</tex></formula> and <formula formulatype="inline"><tex Notation="TeX">$gamma $</tex></formula> Radiation.	1.2	35
8	First ex vivo validation of a radioguided surgery technique with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mi>Î²</mml:mi></mml:mrow></mml:math>-radiation.. Physica Medica, 2016, 32, 1139-1144.	0.4	30
9	Secondary radiation measurements for particle therapy applications: prompt photons produced by⁴He,¹²C and¹⁶O ion beams in a PMMA target. Physics in Medicine and Biology, 2017, 62, 1438-1455.	1.6	30
10	Radioguided surgery with Î² radiation: a novel application with Ga68. Scientific Reports, 2018, 8, 16171.	1.6	28
11	Precise measurement of prompt photon emission from 80 MeV/u carbon ion beam irradiation. Journal of Instrumentation, 2012, 7, P03001-P03001.	0.5	26
12	Time Evolution of DOTATOC Uptake in Neuroendocrine Tumors in View of a Possible Application of Radioguided Surgery with Î²^{â^'} Decay. Journal of Nuclear Medicine, 2015, 56, 1501-1506.	2.8	26
13	The INSIDE Project: Innovative Solutions for In-Beam Dosimetry in Hadrontherapy. Acta Physica Polonica A, 2015, 127, 1465-1467.	0.2	26
14	High intensity neutrino oscillation facilities in Europe. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	25
15	ORANGE: A high sensitivity particle tracker based on optically read out GEM. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 845, 285-288.	0.7	25
16	Design of a new tracking device for on-line beam range monitor in carbon therapy. Physica Medica, 2017, 34, 18-27.	0.4	25
17	MONDO: a neutron tracker for particle therapy secondary emission characterisation. Physics in Medicine and Biology, 2017, 62, 3299-3312.	1.6	25
18	Feasibility of beta-particle radioguided surgery for a variety of â€œnuclear medicineâ€•radionuclides. Physica Medica, 2017, 43, 127-133.	0.4	24

#	Article	IF	Citations
19	Monitoring of Hadrontherapy Treatments by Means of Charged Particle Detection. Frontiers in Oncology, 2016, 6, 177.	1.3	23
20	Secondary radiation measurements for particle therapy applications: nuclear fragmentation produced by⁴He ion beams in a PMMA target. Physics in Medicine and Biology, 2017, 62, 1291-1309.	1.6	23
21	High granularity tracker based on a Triple-GEM optically read by a CMOS-based camera. Journal of Instrumentation, 2015, 10, P12010-P12010.	0.5	22
22	Combined readout of a triple-GEM detector. Journal of Instrumentation, 2018, 13, P05001-P05001.	0.5	22
23	Review and performance of the Dose Profiler, a particle therapy treatments online monitor. Physica Medica, 2019, 65, 84-93.	0.4	19
24	Performance of optically readout GEM-based TPC with a ⁵⁵Fe source. Journal of Instrumentation, 2019, 14, P07011-P07011.	0.5	18
25	The CYGNO Experiment. Instruments, 2022, 6, 6.	0.8	18
26	Optical readout of a triple-GEM detector by means of a CMOS sensor. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 562-564.	0.7	17
27	CYGNO: a gaseous TPC with optical readout for dark matter directional search. Journal of Instrumentation, 2020, 15, C07036-C07036.	0.5	17
28	Secondary radiation measurements for particle therapy applications: charged particles produced by⁴He and¹²C ion beams in a PMMA target at large angle. Physics in Medicine and Biology, 2018, 63, 055018.	1.6	16
29	Detection of Interfractional Morphological Changes in Proton Therapy: A Simulation and In Vivo Study With the INSIDE In-Beam PET. Frontiers in Physics, 2021, 8, .	1.0	16
30	Study of the time and space distribution of emitters from carbon ion beam irradiation on PMMA. Nuclear Instruments & Methods in Physics Research B, 2012, 283, 1-8.	0.6	15
31	A density-based clustering algorithm for the CYGNO data analysis. Journal of Instrumentation, 2020, 15, T12003-T12003.	0.5	15
32	Prompt-Î³ production of 220 MeV/u¹²C ions interacting with a PMMA target. Journal of Instrumentation, 2015, 10, P10034-P10034.	0.5	14
33	The <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mrow><mml:mi>Î²</mml:mi></mml:mrow><mml:mrow><mml:mo>-</mml:mo></ radio-guided surgery: Method to estimate the minimum injectable activity from ex-vivo test. Physica Medica, 2019, 58, 114-120.	0.4	13
34	Inter-fractional monitoring of ^{12}C ions treatments: results from a clinical trial at the CNAO facility. Scientific Reports, 2020, 10, 20735.	1.6	13
35	Identification of low energy nuclear recoils in a gas time projection chamber with optical readout. Measurement Science and Technology, 2021, 32, 025902.	1.4	13
36	The MEMPHYS project. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 639, 287-289.	0.7	12

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37	Stability and detection performance of a GEM-based Optical Readout TPC with He/CF₄ gas mixtures. Journal of Instrumentation, 2020, 15, P10001-P10001.	0.5	12
38	A Study of Monitoring Performances with the INSIDE System. Acta Physica Polonica A, 2015, 127, 1468-1470.	0.2	11
39	The MONDO project: A secondary neutron tracker detector for particle therapy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 845, 556-559.	0.7	10
40	Intraoperative probe detecting Î²â^' decays in brain tumour radio-guided surgery. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 845, 689-692.	0.7	10
41	Benchmarking Geant4 hadronic models for promptâ€•Î³ monitoring in carbon ionÂtherapy. Medical Physics, 2017, 44, 4276-4286.	1.6	10
42	Study of the Performance of an Optically Readout Triple-GEM. IEEE Transactions on Nuclear Science, 2018, 65, 604-608.	1.2	10
43	An Intraoperative $eta ^{-}$ Detecting Probe for Radio-Guided Surgery in Tumour Resection. IEEE Transactions on Nuclear Science, 2016, 63, 2533-2539.	1.2	9
44	Monitoring Carbon Ion Beams Transverse Position Detecting Charged Secondary Fragments: Results From Patient Treatment Performed at CNAO. Frontiers in Oncology, 2021, 11, 601784.	1.3	9
45	Measurements of the ÄŒerenkov light emitted by a TeO₂crystal. Journal of Instrumentation, 2012, 7, P11014-P11014.	0.5	8
46	Design of a tracking device for on-line dose monitoring in hadrontherapy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 845, 679-683.	0.7	8
47	Monte Carlo simulation of the Cherenkov radiation emitted by TeO2 crystal when crossed by cosmic muons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 732, 338-341.	0.7	7
48	Extended calibration range for prompt photon emission in ion beam irradiation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 745, 114-118.	0.7	7
49	Use of a CMOS image sensor for beta-emitting radionuclide measurements. Journal of Instrumentation, 2018, 13, P07003-P07003.	0.5	7
50	High resolution TPC based on optically readout GEM. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 453-455.	0.7	7
51	Development of a novel neutron tracker for the characterisation of secondary neutrons emitted in Particle Therapy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 958, 162862.	0.7	7
52	First evidence of luminescence in a He/CF₄ gas mixture induced by non-ionizing electrons. Journal of Instrumentation, 2020, 15, P08018-P08018.	0.5	7
53	MONDO: A neutron tracker for particle therapy secondary emission fluxes measurements. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 210-211.	0.7	6
54	Feasibility study on the use of CMOS sensors as detectors in radioguided surgery with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e651" altimg="si11.svg"><mml:msup><mml:mrow><mml:mi>Î²</mml:mi></mml:mrow><mml:mrow><mml:mo>â^'</mml:mo></mml:mrow></ emitters. Applied Radiation and Isotopes, 2020, 165, 109347.	0.7	6

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55	Performance of an optically read out time projection chamber with ultra-relativistic electrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 999, 165209.	0.7	6
56	Future large-scale water-Cherenkov detector. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	5
57	Measurement of charged particle yields from therapeutic beams in view of the design of an innovative hadrontherapy dose monitor. Journal of Instrumentation, 2015, 10, C02032-C02032.	0.5	5
58	Polycrystalline para-terphenyl scintillator adopted in a Î²^{â˜}detecting probe for radio-guided surgery. Journal of Physics: Conference Series, 2015, 620, 012009.	0.3	5
59	Addendum: Measurement of charged particle yields from PMMA irradiated by a 220 MeV/u ¹²C beam. Physics in Medicine and Biology, 2017, 62, 8483-8494.	1.6	5
60	The MONDO Detector Prototype Development and Test: Steps Toward an SPAD-CMOS-Based Integrated Readout (SBAM Sensor). IEEE Transactions on Nuclear Science, 2018, 65, 744-751.	1.2	5
61	A $16imes8$ Digital-SiPM Array With Distributed Trigger Generator for Low SNR Particle Tracking. IEEE Solid-State Circuits Letters, 2019, 2, 75-78.	1.3	5
62	Measurement of 12C Fragmentation Cross Sections on C, O, and H in the Energy Range of Interest for Particle Therapy Applications. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 269-282.	2.7	5
63	Measurements and optimization of the light yield of a TeO₂crystal. Journal of Instrumentation, 2014, 9, P10014-P10014.	0.5	4
64	Characterisation of the MONDO detector response to neutrons by means of a FLUKA Monte Carlo simulation. Radiation Measurements, 2018, 119, 144-149.	0.7	4
65	Secondary radiation measurements for particle therapy applications: Charged secondaries produced by 16O ion beams in a PMMA target at large angles. Physica Medica, 2019, 64, 45-53.	0.4	4
66	CYGNO: Triple-GEM Optical Readout for Directional Dark Matter Search. Journal of Physics: Conference Series, 2020, 1498, 012016.	0.3	4
67	Charge identification of nuclear fragments with the FOOT Time-Of-Flight system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1001, 165206.	0.7	4
68	Measurement of secondary particle production induced by particle therapy ion beams impinging on a PMMA target. EPJ Web of Conferences, 2016, 117, 05007.	0.1	3
69	Directional Dark Matter Searches with CYGNO. Particles, 2021, 4, 343-353.	0.5	3
70	Intraoperative Î²â˜ detecting probe for radio-guided surgery in tumour resection. , 2015, , .		2
71	Use of bremsstrahlung radiation to identify hidden weak Î²^{â˜} sources: feasibility and possible use in radio-guided surgery. Journal of Instrumentation, 2017, 12, P11006-P11006.	0.5	2
72	MPGD Optical Read Out for Directional Dark Matter Search. , 2018, , .		2

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73	Radio-Guided Surgery with Î²â^' Radiation: Tests on Ex-Vivo Specimens. IFMBE Proceedings, 2019, , 693-697.	0.2	2
74	Micro pattern gas detector optical readout for directional dark matter searches. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 958, 162400.	0.7	2
75	Position sensitive Î²^{â^'} detector based on p-terphenyl scintillator for medical applications. Journal of Instrumentation, 2018, 13, P07001-P07001.	0.5	1
76	Scintillating Fiber Devices for Particle Therapy Applications. IEEE Transactions on Nuclear Science, 2018, 65, 2054-2060.	1.2	1
77	Charged particles and neutron trackers: Applications to particle therapy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 954, 161229.	0.7	1
78	Enhancing the understanding of fragmentation processes in hadrontherapy and radioprotection in space with the FOOT experiment. Physica Scripta, 2021, 96, 114013.	1.2	1
79	Measurement of prompt photons and gamma PET from 80 MeV/u carbon beam on PMMA target. , 2011, , .		0
80	Charged and Neutral Particles Production from 80 MeV/u ¹²C ion beam on a PMMA target. , 2012, , .		0
81	Site studies and R&D for a water ÄŒerenkov Megaton detector in Europe. Nuclear Physics, Section B, Proceedings Supplements, 2012, 229-232, 432.	0.5	0
82	MEMPHYS â€“ MEgatonneMassPHYSics. Nuclear Physics, Section B, Proceedings Supplements, 2013, 237-238, 311-313.	0.5	0
83	An innovative radio-guided surgery technique for complete resection of tumors. Journal of Physics: Conference Series, 2014, 566, 012020.	0.3	0
84	Intraoperative beta- detecting probe for radio-guided surgery of brain tumors. , 2014, , .		0
85	Abstract ID: 67 MC codes and range monitoring in particle therapy: The case of secondary charged particles. Physica Medica, 2017, 42, 49.	0.4	0
86	MONDO: A tracker for the characterization of secondary fast and ultrafast neutrons emitted in particle therapy. Journal of Physics: Conference Series, 2018, 956, 012013.	0.3	0
87	In-room performance evaluation of a novel online charged secondary particles monitor of light ions PT treatments. , 2018, , .		0
88	Tests of Eco-Friendly Gas Mixtures in GEM Based Detectors with Optical Readout. , 2019, , .		0
89	A 1 m3 Gas Time Projection Chamber with Optical Readout for Directional Dark Matter Searches: the CYGNO Experiment. , 2019, , .		0
90	A 16 Ã— 8 Digital-SiPM Array With Distributed Trigger Generator for Low SNR Particle Tracking. , 2019, , .		0

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91	Performance of Prototype of Optically Readout TPC with a ⁵⁵Fe source. Journal of Physics: Conference Series, 2020, 1498, 012017.	0.3	0
92	Directional Dark Matter Searches with the CYGNO Project. Journal of Physics: Conference Series, 2020, 1468, 012039.	0.3	0
93	PAPRICA: The Pair Production Imaging Chamberâ€"Proof of Principle. Frontiers in Physics, 2021, 9, .	1.0	0
94	Study of the Impact of Pre-processing Applied to Images Acquired by the Cygno Experiment. Lecture Notes in Computer Science, 2019, , 520-530.	1.0	0
95	The MONDO Tracker: Characterisation and Study of Secondary Ultrafast Neutrons Production in Carbon Ion Radiotherapy. Frontiers in Physics, 2020, 8, .	1.0	0