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 CYGNO Experiment. Instruments, 2022, 6, 6.	0.8	18
2	PAPRICA: The Pair Production Imaging Chamberâ€"Proof of Principle. Frontiers in Physics, 2021, 9, .	1.0	0
3	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
4	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
5	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
6	Directional Dark Matter Searches with CYGNO. Particles, 2021, 4, 343-353.	0.5	3
7	Enhancing the understanding of fragmentation processes in hadrontherapy and radioprotection in space with the FOOT experiment. Physica Scripta, 2021, 96, 114013.	1.2	1
8	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
9	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
10	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
11	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
12	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
13	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
14	Performance of Prototype of Optically Readout TPC with a ⁵⁵Fe source. Journal of Physics: Conference Series, 2020, 1498, 012017.	0.3	0
15	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
16	Directional Dark Matter Searches with the CYGNO Project. Journal of Physics: Conference Series, 2020, 1468, 012039.	0.3	0
17	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
18	CYGNO: Triple-GEM Optical Readout for Directional Dark Matter Search. Journal of Physics: Conference Series, 2020, 1498, 012016.	0.3	4

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19	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
20	CYGNO: a gaseous TPC with optical readout for dark matter directional search. Journal of Instrumentation, 2020, 15, C07036-C07036.	0.5	17
21	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
22	A density-based clustering algorithm for the CYGNO data analysis. Journal of Instrumentation, 2020, 15, T12003-T12003.	0.5	15
23	The MONDO Tracker: Characterisation and Study of Secondary Ultrafast Neutrons Production in Carbon Ion Radiotherapy. Frontiers in Physics, 2020, 8, .	1.0	0
24	Radio-Guided Surgery with Î²â^' Radiation: Tests on Ex-Vivo Specimens. IFMBE Proceedings, 2019, , 693-697.	0.2	2
25	Performance of optically readout GEM-based TPC with a ⁵⁵Fe source. Journal of Instrumentation, 2019, 14, P07011-P07011.	0.5	18
26	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
27	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
28	Review and performance of the Dose Profiler, a particle therapy treatments online monitor. Physica Medica, 2019, 65, 84-93.	0.4	19
29	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
30	Tests of Eco-Friendly Gas Mixtures in GEM Based Detectors with Optical Readout. , 2019, , .		0
31	A 1 m3 Gas Time Projection Chamber with Optical Readout for Directional Dark Matter Searches: the CYGNO Experiment. , 2019, , .		0
32	A 16 Ã— 8 Digital-SiPM Array With Distributed Trigger Generator for Low SNR Particle Tracking. , 2019, , .		0
33	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
34	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
35	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
36	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

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37	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
38	In-room performance evaluation of a novel online charged secondary particles monitor of light ions PT treatments. , 2018, , .		0
39	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
40	Radioguided surgery with Î² radiation: a novel application with Ga68. Scientific Reports, 2018, 8, 16171.	1.6	28
41	MPGD Optical Read Out for Directional Dark Matter Search. , 2018, , .		2
42	Combined readout of a triple-GEM detector. Journal of Instrumentation, 2018, 13, P05001-P05001.	0.5	22
43	Study of the Performance of an Optically Readout Triple-GEM. IEEE Transactions on Nuclear Science, 2018, 65, 604-608.	1.2	10
44	Use of a CMOS image sensor for beta-emitting radionuclide measurements. Journal of Instrumentation, 2018, 13, P07003-P07003.	0.5	7
45	Position sensitive Î²^{â^'} detector based on p-terphenyl scintillator for medical applications. Journal of Instrumentation, 2018, 13, P07001-P07001.	0.5	1
46	Scintillating Fiber Devices for Particle Therapy Applications. IEEE Transactions on Nuclear Science, 2018, 65, 2054-2060.	1.2	1
47	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
48	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
49	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
50	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
51	Design of a new tracking device for on-line beam range monitor in carbon therapy. Physica Medica, 2017, 34, 18-27.	0.4	25
52	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
53	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
54	Benchmarking Geant4 hadronic models for promptâ€•Î³ monitoring in carbon ionÂtherapy. Medical Physics, 2017, 44, 4276-4286.	1.6	10

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55	MONDO: a neutron tracker for particle therapy secondary emission characterisation. Physics in Medicine and Biology, 2017, 62, 3299-3312.	1.6	25
56	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
57	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
58	Feasibility of beta-particle radioguided surgery for a variety of â€œnuclear medicineâ€•radionuclides. Physica Medica, 2017, 43, 127-133.	0.4	24
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	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
61	Monitoring of Hadrontherapy Treatments by Means of Charged Particle Detection. Frontiers in Oncology, 2016, 6, 177.	1.3	23
62	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
63	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
64	An Intraoperative $eta ^{-}$ Detecting Probe for Radio-Guided Surgery in Tumour Resection. IEEE Transactions on Nuclear Science, 2016, 63, 2533-2539.	1.2	9
65	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
66	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
67	Intraoperative Î²â^' detecting probe for radio-guided surgery in tumour resection. , 2015, , .		2
68	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
69	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
70	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
71	Prompt-Î³ production of 220 MeV/u¹²C ions interacting with a PMMA target. Journal of Instrumentation, 2015, 10, P10034-P10034.	0.5	14
72	A Study of Monitoring Performances with the INSIDE System. Acta Physica Polonica A, 2015, 127, 1468-1470.	0.2	11

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73	The INSIDE Project: Innovative Solutions for In-Beam Dosimetry in Hadrontherapy. Acta Physica Polonica A, 2015, 127, 1465-1467.	0.2	26
74	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
75	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
76	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
77	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. IEEE Transactions on Nuclear Science, 2014, 61, 1483-1487.	1.2	35
78	Measurements and optimization of the light yield of a TeO₂crystal. Journal of Instrumentation, 2014, 9, P10014-P10014.	0.5	4
79	An innovative radio-guided surgery technique for complete resection of tumors. Journal of Physics: Conference Series, 2014, 566, 012020.	0.3	0
80	Intraoperative beta- detecting probe for radio-guided surgery of brain tumors. , 2014, , .		0
81	A novel radioguided surgery technique exploiting Î²â^' decays. Scientific Reports, 2014, 4, 4401.	1.6	48
82	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
83	MEMPHYS â€“ MEgatonneMassPHYSics. Nuclear Physics, Section B, Proceedings Supplements, 2013, 237-238, 311-313.	0.5	0
84	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
85	High intensity neutrino oscillation facilities in Europe. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	25
86	Future large-scale water-Cherenkov detector. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	5
87	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
88	Charged and Neutral Particles Production from 80 MeV/u ¹²C ion beam on a PMMA target. , 2012, , .		0
89	Precise measurement of prompt photon emission from 80 MeV/u carbon ion beam irradiation. Journal of Instrumentation, 2012, 7, P03001-P03001.	0.5	26
90	Measurements of the ÄŒerenkov light emitted by a TeO₂crystal. Journal of Instrumentation, 2012, 7, P11014-P11014.	0.5	8

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91	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
92	The next-generation liquid-scintillator neutrino observatory LENA. Astroparticle Physics, 2012, 35, 685-732.	1.9	181
93	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
94	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
95	Measurement of prompt photons and gamma PET from 80 MeV/u carbon beam on PMMA target. , 2011, , .		0