Ilaria Mattei

List of Publications by Year
in descending order

52 papers	671 citations	623574 14 h-index	610775 24 g-index
54 all docs	54 docs citations	54 times ranked	623 citing authors

#	Article	IF	Citations
1	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
2	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
3	A novel radioguided surgery technique exploiting Î²â^' decays. Scientific Reports, 2014, 4, 4401.	1.6	48
4	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
5	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
6	Fast neutron measurements with 7Li and 6Li enriched CLYC scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 825, 51-61.	0.7	32
7	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
8	Precise measurement of prompt photon emission from 80 MeV/u carbon ion beam irradiation. Journal of Instrumentation, 2012, 7, P03001-P03001.	0.5	26
9	Design of a new tracking device for on-line beam range monitor in carbon therapy. Physica Medica, 2017, 34, 18-27.	0.4	25
10	Monitoring of Hadrontherapy Treatments by Means of Charged Particle Detection. Frontiers in Oncology, 2016, 6, 177.	1.3	23
11	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
12	Review and performance of the Dose Profiler, a particle therapy treatments online monitor. Physica Medica, 2019, 65, 84-93.	0.4	19
13	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
14	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
15	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
16	Prompt-Î³ production of 220 MeV/u¹²C ions interacting with a PMMA target. Journal of Instrumentation, 2015, 10, P10034-P10034.	0.5	14
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	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

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19	Benchmarking Geant4 hadronic models for promptâ€•Î³ monitoring in carbon ionÂtherapy. Medical Physics, 2017, 44, 4276-4286.	1.6	10
20	An Intraoperative $eta ^{-}$ Detecting Probe for Radio-Guided Surgery in Tumour Resection. IEEE Transactions on Nuclear Science, 2016, 63, 2533-2539.	1.2	9
21	Ion charge separation with new generation of nuclear emulsion films. Open Physics, 2019, 17, 233-240.	0.8	9
22	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
23	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
24	Development and characterization of aÎ”E-TOF detector prototype for the FOOT experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 916, 116-124.	0.7	8
25	FLUKA simulation of target fragmentation in proton therapy. Physica Medica, 2020, 80, 342-346.	0.4	8
26	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
27	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
28	Charge identification of fragments with the emulsion spectrometer of the FOOT experiment. Open Physics, 2021, 19, 383-394.	0.8	6
29	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
30	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
31	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
32	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
33	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
34	Nuclear physics and particle therapy. Advances in Physics: X, 2016, 1, 661-686.	1.5	4
35	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
36	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

#	Article	IF	Citations
37	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
38	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
39	Intraoperative Î²â˜ detecting probe for radio-guided surgery in tumour resection. , 2015, , .		2
40	Scintillating Fiber Devices for Particle Therapy Applications. IEEE Transactions on Nuclear Science, 2018, 65, 2054-2060.	1.2	1
41	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
42	Enhancing the understanding of fragmentation processes in hadrontherapy and radioprotection in space with the FOOT experiment. Physica Scripta, 2021, 96, 114013.	1.2	1
43	Measurement of prompt photons and gamma PET from 80 MeV/u carbon beam on PMMA target. , 2011, , .		0
44	Charged and Neutral Particles Production from 80 MeV/u ¹²C ion beam on a PMMA target. , 2012, , .		0
45	An innovative radio-guided surgery technique for complete resection of tumors. Journal of Physics: Conference Series, 2014, 566, 012020.	0.3	0
46	Intraoperative beta- detecting probe for radio-guided surgery of brain tumors. , 2014, , .		0
47	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
48	In-room performance evaluation of a novel online charged secondary particles monitor of light ions PT treatments. , 2018, , .		0
49	A 16 Ã— 8 Digital-SiPM Array With Distributed Trigger Generator for Low SNR Particle Tracking. , 2019, , .		0
50	Nuclear interactions and medicine. European Physical Journal Plus, 2019, 134, 1.	1.2	0
51	PAPRICA: The Pair Production Imaging Chamberâ€"Proof of Principle. Frontiers in Physics, 2021, 9, .	1.0	0
52	The MONDO Tracker: Characterisation and Study of Secondary Ultrafast Neutrons Production in Carbon Ion Radiotherapy. Frontiers in Physics, 2020, 8, .	1.0	0