

Sara Marcatili

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

1,151
citations

566801

15
h-index

433756

31
g-index

50
all docs

50
docs citations

50
times ranked

1295
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of the use and potential of the GATE Monte Carlo simulation code for radiation therapy and dosimetry applications. <i>Medical Physics</i> , 2014, 41, 064301.	1.6	332
2	Single photon timing resolution and detection efficiency of the IRST silicon photo-multipliers. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 581, 461-464.	0.7	68
3	Characterization of a PET detector head based on continuous LYSO crystals and monolithic, 64-pixel silicon photomultiplier matrices. <i>Physics in Medicine and Biology</i> , 2010, 55, 7299-7315.	1.6	55
4	Development and validation of RAYDOSE: a Geant4-based application for molecular radiotherapy. <i>Physics in Medicine and Biology</i> , 2013, 58, 2491-2508.	1.6	52
5	Studies of silicon photomultipliers at cryogenic temperatures. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 628, 389-392.	0.7	50
6	Electrical Characterization of Silicon Photo-Multiplier Detectors for Optimal Front-End Design. , 2006, , .		48
7	Advantages and pitfalls of the silicon photomultiplier (SiPM) as photodetector for the next generation of PET scanners. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 617, 223-226.	0.7	40
8	Silicon Photomultipliers (SiPM) as novel photodetectors for PET. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 648, S232-S235.	0.7	38
9	Energy, Timing and Position Resolution Studies With 16-Pixel Silicon Photomultiplier Matrices for Small Animal PET. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 2586-2593.	1.2	36
10	Development of the first prototypes of Silicon PhotoMultiplier (SiPM) at ITC-irst. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 572, 422-426.	0.7	33
11	Internal dosimetry with the Monte Carlo code GATE: validation using the ICRP/ICRU female reference computational model. <i>Physics in Medicine and Biology</i> , 2017, 62, 1885-1904.	1.6	27
12	Drugs That Modify Cholesterol Metabolism Alter the p38/JNK-Mediated Targeted and Nontargeted Response to Alpha and Auger Radioimmunotherapy. <i>Clinical Cancer Research</i> , 2019, 25, 4775-4790.	3.2	26
13	Novel Silicon Photomultipliers for PET Applications. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 877-881.	1.2	25
14	Model-based versus specific dosimetry in diagnostic context: Comparison of three dosimetric approaches. <i>Medical Physics</i> , 2015, 42, 1288-1296.	1.6	23
15	Preliminary results from a current mode CMOS front-end circuit for silicon photomultiplier detectors. , 2007, , .		22
16	Silicon photomultipliers and SiPM matrices as photodetectors in nuclear medicine. , 2007, , .		21
17	Energy and Timing Resolution Studies With Silicon Photomultipliers (SiPMs) and 4-Pixel SiPM Matrices for PET. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 543-548.	1.2	21
18	Silicon photomultiplier performance tests in magnetic resonance pulsed fields. , 2007, , .		18

#	ARTICLE	IF	CITATIONS
19	First results in the application of silicon photomultiplier matrices to small animal PET. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 610, 196-199.	0.7	17
20	Ultra-fast prompt gamma detection in single proton counting regime for range monitoring in particle therapy. Physics in Medicine and Biology, 2020, 65, 245033.	1.6	17
21	Advances in position-sensitive photodetectors for PET applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 604, 319-322.	0.7	15
22	Realistic multi-cellular dosimetry for ¹⁷⁷ Lu-labelled antibodies: model and application. Physics in Medicine and Biology, 2016, 61, 6935-6952.	1.6	15
23	The therapeutic effectiveness of ¹⁷⁷ Lu-lilotomab in B-cell non-Hodgkin lymphoma involves modulation of G2/M cell cycle arrest. Leukemia, 2020, 34, 1315-1328.	3.3	12
24	Monolithic 64-channel SiPM matrices for small animal PET. , 2009, , .		11
25	A large area diamond-based beam tagging hodoscope for ion therapy monitoring. EPJ Web of Conferences, 2018, 170, 09005.	0.1	11
26	Development and characterization of a modular acquisition system for a 4D PET block detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 659, 494-498.	0.7	10
27	A Study of the Radiation Tolerance of CVD Diamond to 70 MeV Protons, Fast Neutrons and 200 MeV Pions. Sensors, 2020, 20, 6648.	2.1	10
28	A time-of-flight-based reconstruction for real-time prompt-gamma imaging in proton therapy. Physics in Medicine and Biology, 2021, 66, 135003.	1.6	10
29	Timing performances of a data acquisition system for Time of Flight PET. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 695, 210-212.	0.7	9
30	Dosimetry for nonuniform activity distributions: A method for the calculation of 3D absorbed dose distribution without the use of voxel S-values, point kernels, or Monte Carlo simulations. Medical Physics, 2013, 40, 042505.	1.6	8
31	New results on the characterization of ITC-irst Silicon Photomultipliers. , 2006, , .		7
32	Characteristics of a prototype matrix of Silicon PhotoMultipliers (SiPM). Journal of Instrumentation, 2009, 4, P03016-P03016.	0.5	7
33	Evaluation of the first Silicon Photomultiplier matrices for a small animal PET scanner. , 2008, , .		6
34	Advanced radiation measurement techniques in diagnostic radiology and molecular imaging. Radiation Protection Dosimetry, 2008, 131, 136-142.	0.4	6
35	Characterization of a prototype matrix of Silicon PhotoMultipliers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 610, 101-104.	0.7	6
36	Characterization of Ca co-doped LSO:Ce scintillators coupled to SiPM for PET applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 628, 423-425.	0.7	6

#	ARTICLE	IF	CITATIONS
37	Influence of sub-nanosecond time of flight resolution for online range verification in proton therapy using the line-cone reconstruction in Compton imaging. Physics in Medicine and Biology, 2021, 66, 125012.	1.6	6
38	On the Role of Single Particle Irradiation and Fast Timing for Efficient Online-Control in Particle Therapy. Frontiers in Physics, 2020, 8, .	1.0	6
39	A 4D-PET block detector based on Silicon Photomultipliers. , 2010, , .		3
40	Multi-scale hybrid models for radiopharmaceutical dosimetry with Geant4. Physics in Medicine and Biology, 2014, 59, 7625-7641.	1.6	3
41	Performance of four digital algorithms for $\langle \text{mml:math display="inline" id="d1e167" altimg="si5.svg" \rangle \langle \text{mml:mrow} \langle \text{mml:mi} \hat{I}^3 \langle \text{mml:mi} \langle \text{mml:mo linebreak="goodbreak" linebreakstyle="after" \hat{a} \rangle \langle \text{mml:math} \rangle \text{ timing with LaBr} \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e177" altimg="si58.svg" \rangle \langle \text{mml:msub} \langle \text{mml:mrow} / \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:ms} \rangle \langle \text{mml:math} \rangle \text{ timing with LaBr} \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e177" altimg="si58.svg" \rangle \langle \text{mml:msub} \langle \text{mml:mrow} / \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:ms} \rangle \langle \text{mml:math} \rangle \text{ timing with LaBr}$	0.7	3
42	Novel Silicon Photomultipliers for PET Application. , 2006, , .		2
43	Comparison of different reconstruction methods for planar images in small gamma cameras. Journal of Instrumentation, 2011, 6, C01030-C01030.	0.5	2
44	A 100 ps TOF Detection System for On-Line Range-Monitoring in Hadrontherapy. , 2019, , .		2
45	X-ray beam induced current analysis of CVD diamond detectors in the perspective of a beam tagging hodoscope development for hadrontherapy on-line monitoring. Diamond and Related Materials, 2021, 112, 108236.	1.8	2
46	An FPGA based DAQ system for the readout of SiPM matrices in PET applications. , 2008, , .		1
47	Calibration and performances of a multichannel DAQ system for Silicon Photomultiplier (SiPM) matrices in PET applications. , 2009, , .		1
48	Characterization and test of a data acquisition system for PET. , 2011, , .		1
49	Proof of concept of an imaging system demonstrator for PET applications with SiPM. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 720, 67-69.	0.7	1
50	Production and characterization of large-size diamond detectors for particle tracking and medical applications. , 2018, , .		0