

# Etienne Testa

## List of Publications by Year in descending order

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42  
papers

621  
citations

686830

13  
h-index

610482

24  
g-index

44  
all docs

44  
docs citations

44  
times ranked

555  
citing authors

#	ARTICLE	IF	CITATIONS
1	Real-time monitoring of the Bragg-peak position in ion therapy by means of single photon detection. Radiation and Environmental Biophysics, 2010, 49, 337-343.	0.6	83
2	Advanced Monte Carlo simulations of emission tomography imaging systems with GATE. Physics in Medicine and Biology, 2021, 66, 10TR03.	1.6	82
3	Probabilistic models and numerical calculation of system matrix and sensitivity in list-mode MLEM 3D reconstruction of Compton camera images. Physics in Medicine and Biology, 2016, 61, 243-264.	1.6	42
4	Intercomparison of dose enhancement ratio and secondary electron spectra for gold nanoparticles irradiated by X-rays calculated using multiple Monte Carlo simulation codes. Physica Medica, 2020, 69, 147-163.	0.4	42
5	A cost-effective monitoring technique in particle therapy via uncollimated prompt gamma peak integration. Applied Physics Letters, 2017, 110, .	1.5	39
6	Monte Carlo Simulations of Prompt-Gamma Emission During Carbon Ion Irradiation. IEEE Transactions on Nuclear Science, 2010, 57, 2768-2772.	1.2	31
7	Collimated prompt gamma TOF measurements with multi-slit multi-detector configurations. Journal of Instrumentation, 2015, 10, P01011-P01011.	0.5	27
8	Monitoring Ion Beam Therapy With a Compton Camera: Simulation Studies of the Clinical Feasibility. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 218-232.	2.7	26
9	Design Study of the Absorber Detector of a Compton Camera for On-Line Control in Ion Beam Therapy. IEEE Transactions on Nuclear Science, 2012, 59, 1850-1855.	1.2	24
10	Assessment of Geant4 Prompt-Gamma Emission Yields in the Context of Proton Therapy Monitoring. Frontiers in Oncology, 2016, 6, 10.	1.3	19
11	CCMod: a GATE module for Compton camera imaging simulation. Physics in Medicine and Biology, 2020, 65, 055004.	1.6	19
12	Low Statistics Reconstruction of the Compton Camera Point Spread Function in 3D Prompt-Gamma Imaging of Ion Beam Therapy. IEEE Transactions on Nuclear Science, 2013, 60, 3355-3363.	1.2	17
13	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
14	Technical Note: Experimental carbon ion range verification in inhomogeneous phantoms using prompt gammas. Medical Physics, 2015, 42, 2342-2346.	1.6	15
15	Study of the Influence of NanOx Parameters. Cancers, 2018, 10, 87.	1.7	13
16	Experimental Comparison of Knife-Edge and Multi-Parallel Slit Collimators for Prompt Gamma Imaging of Proton Pencil Beams. Frontiers in Oncology, 2016, 6, 156.	1.3	11
17	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
18	Four-dimensional radiotherapeutic dose calculation using biomechanical respiratory motion description. International Journal of Computer Assisted Radiology and Surgery, 2014, 9, 449-457.	1.7	9

#	ARTICLE	IF	CITATIONS
19	Considerations on the miniaturization of detectors for in vivo dosimetry in radiotherapy: A Monte Carlo study. Nuclear Instruments & Methods in Physics Research B, 2017, 399, 20-27.	0.6	8
20	Determination of the Effective Local Lethal Function for the NanOx Model. Radiation Research, 2020, 193, 331.	0.7	8
21	Influence of gold nanoparticles embedded in water on nanodosimetry for keV photon irradiation. Medical Physics, 2021, 48, 1874-1883.	1.6	8
22	Influence of Dose Rate on the Cellular Response to Low- and High-LET Radiations. Frontiers in Oncology, 2016, 6, 58.	1.3	7
23	Relationship between radioadaptive response and individual radiosensitivity to low doses of gamma radiation: an extended study of chromosome damage in blood lymphocytes of three donors. International Journal of Radiation Biology, 2018, 94, 54-61.	1.0	7
24	Comparison of biophysical models with experimental data for three cell lines in response to irradiation with monoenergetic ions. Physics and Imaging in Radiation Oncology, 2019, 12, 17-21.	1.2	7
25	Modeling cell response to low doses of photon irradiationâ€”Part 1: on the origin of fluctuations. Radiation and Environmental Biophysics, 2016, 55, 19-30.	0.6	6
26	Monte Carlo simulation of free radical production under keV photon irradiation of gold nanoparticle aqueous solution. Part I: Global primary chemical boost. Radiation Physics and Chemistry, 2020, 172, 108790.	1.4	6
27	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
28	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
29	Characterization of a beam-tagging hodoscope for hadrontherapy monitoring. Journal of Instrumentation, 2021, 16, P02028-P02028.	0.5	5
30	Estimate of the Biological Dose in Hadrontherapy Using GATE. Cancers, 2022, 14, 1667.	1.7	4
31	Image reconstruction for Compton camera applied to 3D prompt &#x03B3; imaging during ion beam therapy. , 2011, , .		3
32	Large surface gamma cameras for medical imaging: characterization of the bismuth germanate blocks. Journal of Instrumentation, 2018, 13, P08018-P08018.	0.5	3
33	Monte Carlo simulations of nanodosimetry and radiolytic species production for monoenergetic proton and electron beams: Benchmarking of GEANT4â€œDNA and LPCHEM codes. Medical Physics, 2022, , .	1.6	3
34	Biological systems: from water radiolysis to carbon ion radiotherapy. Journal of Physics: Conference Series, 2015, 629, 012004.	0.3	2
35	Modeling cell response to low doses of photon irradiation: Part 2â€œapplication to radiation-induced chromosomal aberrations in human carcinoma cells. Radiation and Environmental Biophysics, 2016, 55, 31-40.	0.6	2
36	A 100 ps TOF Detection System for On-Line Range-Monitoring in Hadrontherapy. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
37	X-ray beam induced current analysis of CVD diamond detectors in the perspective of a beam tagging hodoscope development for hadrontherapy on-line monitoring. <i>Diamond and Related Materials</i> , 2021, 112, 108236.	1.8	2
38	Detector characterization for an inline PET scanner in hadrontherapy. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 571, 396-398.	0.7	0
39	Electron density resolution determination and systematic uncertainties in proton computed tomography (pCT). , 2012, , .		0
40	Monte Carlo nuclear models evaluation and improvements for real-time prompt gamma ray monitoring in proton and carbon therapy. , 2012, , .		0
41	Energy-adaptive calculation of the most likely path in proton CT. <i>Physics in Medicine and Biology</i> , 2021, 66, 20NT02.	1.6	0
42	Relative stopping power resolution in time-of-flight proton CT. <i>Physics in Medicine and Biology</i> , 2022, 67, 165004.	1.6	0