Jose Asuncion Ramos-MÃ©ndez

List of Publications by Year
in descending order

54 papers	1,109 citations	489802 18 h-index	466096 32 g-index
57 all docs	57 docs citations	57 times ranked	961 citing authors

#	Article	IF	Citations
1	Development of Ultra-High Dose-Rate (FLASH) Particle Therapy. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 252-262.	2.7	17
2	Impact of DNA Geometry and Scoring on Monte Carlo Track-Structure Simulations of Initial Radiation-Induced Damage. Radiation Research, 2022, 198, .	0.7	8
3	Report on G4â€Med, a Geant4 benchmarking system for medical physics applications developed by the Geant4 Medical Simulation Benchmarking Group. Medical Physics, 2021, 48, 19-56.	1.6	92
4	Assessment of DNA damage with an adapted independent reaction time approach implemented in Geant4â€DNA for the simulation of diffusionâ€controlled reactions between radioâ€induced reactive species and a chromatin fiber. Medical Physics, 2021, 48, 890-901.	1.6	10
5	Boronated Condensed DNA as a Heterochromatic Radiation Target Model. Biomacromolecules, 2021, 22, 1675-1684.	2.6	5
6	Dispersion calibration for the National Ignition Facility electronâ€“positronâ€“proton spectrometers for intense laser matter interactions. Review of Scientific Instruments, 2021, 92, 033516.	0.6	6
7	On the Equivalence of the Biological Effect Induced by Irradiation of Clusters of Heavy Atom Nanoparticles and Homogeneous Heavy Atom-Water Mixtures. Cancers, 2021, 13, 2034.	1.7	4
8	The relation between microdosimetry and induction of direct damage to DNA by alpha particles. Physics in Medicine and Biology, 2021, 66, 155016.	1.6	11
9	Validation of the TOPAS Monte Carlo toolkit for HDR brachytherapy simulations. Brachytherapy, 2021, 20, 911-921.	0.2	12
10	Geant4-DNA simulation of the pre-chemical stage of water radiolysis and its impact on initial radiochemical yields. Physica Medica, 2021, 88, 86-90.	0.4	20
11	TOPAS-nBio validation for simulating water radiolysis and DNA damage under low-LET irradiation. Physics in Medicine and Biology, 2021, 66, 175026.	1.6	16
12	DNA damage modeled with Geant4-DNA: effects of plasmid DNA conformation and experimental conditions. Physics in Medicine and Biology, 2021, 66, 245017.	1.6	5
13	DNA condensation with a boron-containing cationic peptide for modeling boron neutron capture therapy. Radiation Physics and Chemistry, 2020, 166, 108521.	1.4	9
14	Independent reaction times method in Geant4â€DNA: Implementation and performance. Medical Physics, 2020, 47, 5919-5930.	1.6	27
15	Cellular Response to Proton Irradiation: A Simulation Study with TOPAS-nBio. Radiation Research, 2020, 194, 9.	0.7	30
16	A parameter sensitivity study for simulating DNA damage after proton irradiation using TOPAS-nBio. Physics in Medicine and Biology, 2020, 65, 085015.	1.6	31
17	The TOPAS tool for particle simulation, a Monte Carlo simulation tool for physics, biology and clinical research. Physica Medica, 2020, 72, 114-121.	0.4	126
18	Monte Carlo track-structure for the radionuclide Copper-64: characterization of S-values, nanodosimetry and quantification of direct damage to DNA. Physics in Medicine and Biology, 2020, 65, 155005.	1.6	6

#	Article	IF	Citations
19	LET-Dependent Intertrack Yields in Proton Irradiation at Ultra-High Dose Rates Relevant for FLASH Therapy. Radiation Research, 2020, 194, 351-362.	0.7	39
20	Monte Carlo simulation of the effect of magnetic fields on brachytherapy dose distributions in lung tissue material. PLoS ONE, 2020, 15, e0238704.	1.1	3
21	Title is missing!. , 2020, 15, e0238704.		0
22	Title is missing!. , 2020, 15, e0238704.		0
23	Radio-enhancement by gold nanoparticles and their impact on water radiolysis for x-ray, proton and carbon-ion beams. Physics in Medicine and Biology, 2019, 64, 175005.	1.6	36
24	Evaluation of the influence of physical and chemical parameters on water radiolysis simulations under MeV electron irradiation using Geant4-DNA. Journal of Applied Physics, 2019, 126, .	1.1	34
25	Monte Carlo Geometry Modeling for Particle Transport Using Conformal Geometric Algebra. Advances in Applied Clifford Algebras, 2019, 29, 1.	0.5	0
26	Simultaneous optimization of RBE-weighted dose and nanometric ionization distributions in treatment planning with carbon ions. Physics in Medicine and Biology, 2019, 64, 015015.	1.6	5
27	Helium CT : Monte Carlo simulation results for an ideal source and detector with comparison to proton CT. Medical Physics, 2018, 45, 3264-3274.	1.6	19
28	Monte Carlo simulation of chemistry following radiolysis with TOPAS-nBio. Physics in Medicine and Biology, 2018, 63, 105014.	1.6	58
29	A New Standard DNA Damage (SDD) Data Format. Radiation Research, 2018, 191, 76.	0.7	49
30	Fast calculation of nanodosimetric quantities in treatment planning of proton and ion therapy. Physics in Medicine and Biology, 2018, 63, 235015.	1.6	17
31	TOPAS-nBio: An Extension to the TOPAS Simulation Toolkit for Cellular and Sub-cellular Radiobiology. Radiation Research, 2018, 191, 125.	0.7	124
32	Geometrical structures for radiation biology research as implemented in the TOPAS-nBio toolkit. Physics in Medicine and Biology, 2018, 63, 175018.	1.6	36
33	The effect of beam purity and scanner complexity on proton CT accuracy. Medical Physics, 2017, 44, 284-298.	1.6	25
34	Flagged uniform particle splitting for variance reduction in proton and carbon ion track-structure simulations. Physics in Medicine and Biology, 2017, 62, 5908-5925.	1.6	9
35	Validation of the radiobiology toolkit TOPAS-nBio in simple DNA geometries. Physica Medica, 2017, 33, 207-215.	0.4	70
36	Session 24: Imaging and image processing II â€“ X-Ray and multimodal imaging. Biomedizinische Technik, 2017, 62, .	0.9	2

#	Article	IF	Citations
37	Modeling the effects of magnetic fields on clinical brachytherapy with Monte Carlo methods. AIP Conference Proceedings, 2016, , .	0.3	0
38	Diagnosis of ADHD children by wavelet analysis. AIP Conference Proceedings, 2016, , .	0.3	4
39	Dose assessment for the fetus considering scattered and secondary radiation from photon and proton therapy when treating a brain tumor of the mother. Physics in Medicine and Biology, 2016, 61, 683-695.	1.6	28
40	WE-H-BRA-04: Biological Geometries for the Monte Carlo Simulation Toolkit TOPASNBio. Medical Physics, 2016, 43, 3843-3843.	1.6	0
41	Experimental depth dose curves of a 67.5 MeV proton beam for benchmarking and validation of Monte Carlo simulation. Medical Physics, 2015, 42, 4199-4210.	1.6	6
42	Extension of TOPAS for the simulation of proton radiation effects considering molecular and cellular endpoints. Physics in Medicine and Biology, 2015, 60, 5053-5070.	1.6	56
43	Improved efficiency in Monte Carlo simulation for passive-scattering proton therapy. Physics in Medicine and Biology, 2015, 60, 5019-5035.	1.6	9
44	A framework for implementation of organ effect models in TOPAS with benchmarks extended to proton therapy. Physics in Medicine and Biology, 2015, 60, 5037-5052.	1.6	8
45	SUâ€Eâ€Jâ€148: Tools for Development of 4D Proton CT. Medical Physics, 2015, 42, 3298-3299.	1.6	1
46	SUâ€Eâ€Tâ€554: Monte Carlo Calculation of Source Terms and Attenuation Lengths for Neutrons Produced by 50â€“200 MeV Protons On Brass. Medical Physics, 2015, 42, 3463-3463.	1.6	0
47	SUâ€Eâ€Tâ€466: Implementation of An Extension Module for Dose Response Models in the TOPAS Monte Carlo Toolkit. Medical Physics, 2015, 42, 3441-3442.	1.6	0
48	Difference between healthy children and ADHD based on wavelet spectral analysis of nuclear magnetic resonance images. , 2014, , .		0
49	Geometrical splitting technique to improve the computational efficiency in Monte Carlo calculations for proton therapy. Medical Physics, 2013, 40, 041718.	1.6	24
50	WE-C-108-07: Optimal Parameters for Variance Reduction in Monte Carlo Simulations for Proton Therapy. Medical Physics, 2013, 40, 475-475.	1.6	0
51	Geometrical splitting technique to improve the computational efficiency in Monte Carlo calculations for proton therapy. , 2012, , .		0
52	SU-E-T-478: Geometrical Splitting Technique to Improve the Computational Efficiency in Monte Carlo Calculations for Proton Therapy. Medical Physics, 2012, 39, 3815-3815.	1.6	1
53	Optical Fiber Sensor with a Sol-gel Deposited TiO2 Sensing Film for Volatile Organic Compounds Detection. , 2007, , .		0
54	TOPAS-nBio simulation of temperature-dependent indirect DNA strand break yields. Physics in Medicine and Biology, 0, , .	1.6	5