Marie Claude Bordage

List of Publications by Year
in descending order

32	2,169	279798 23	414414 32
papers	citations	h-index	g-index

32	32	32	1345
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Track structure modeling in liquid water: A review of the Geant4-DNA very low energy extension of the Geant4 Monte Carlo simulation toolkit. Physica Medica, 2015, 31, 861-874.	0.7	373
2	Crossâ€Sections, Rate Constants and Transport Coefficients in Silane Plasma Chemistry. Contributions To Plasma Physics, 1996, 36, 3-49.	1.1	323
3	Geant4â€DNA example applications for track structure simulations in liquid water: A report from the Geant4â€DNA Project. Medical Physics, 2018, 45, e722.	3.0	265
4	LXCat: an Openâ€Access, Webâ€Based Platform for Data Needed for Modeling Low Temperature Plasmas. Plasma Processes and Polymers, 2017, 14, 1600098.	3.0	188
5	Microdosimetry of electrons in liquid water using the low-energy models of Geant4. Journal of Applied Physics, 2017, 122, .	2.5	74
6	Comparisons of sets of electronâ€“neutral scattering cross sections and swarm parameters in noble gases: I. Argon. Journal Physics D: Applied Physics, 2013, 46, 334001.	2.8	70
7	Comparisons of sets of electronâ€“neutral scattering cross sections and swarm parameters in noble gases: II. Helium and neon. Journal Physics D: Applied Physics, 2013, 46, 334002.	2.8	61
8	Implementation of new physics models for low energy electrons in liquid water in Geant4-DNA. Physica Medica, 2016, 32, 1833-1840.	0.7	61
9	Comparisons between different methods of solution of the Boltzmann equation adapted to the calculation of swarm parameters in a weakly ionised medium. Journal Physics D: Applied Physics, 1984, 17, 2199-2214.	2.8	59
10	Geant4â€DNA trackâ€structure simulations for gold nanoparticles: The importance of electron discrete models in nanometer volumes. Medical Physics, 2018, 45, 2230-2242.	3.0	56
11	Evaluation of early radiation DNA damage in a fractal cell nucleus model using Geant4-DNA. Physica Medica, 2019, 62, 152-157.	0.7	54
12	An implementation of discrete electron transport models for gold in the Geant4 simulation toolkit. Journal of Applied Physics, 2016, 120, .	2.5	50
13	The application of a modified form of theSN method to the calculation of swarm parameters of electrons in a weakly ionised equilibrium medium. Journal of Computational Physics, 1983, 50, 116-137.	3.8	49
14	Influence of track structure and condensed history physics models of Geant4 to nanoscale electron transport in liquid water. Physica Medica, 2019, 58, 149-154.	0.7	44
15	Fully integrated Monte Carlo simulation for evaluating radiation induced DNA damage and subsequent repair using Geant4-DNA. Scientific Reports, 2020, 10, 20788.	3.3	43
16	Review of the Geant4-DNA Simulation Toolkit for Radiobiological Applications at the Cellular and DNA Level. Cancers, 2022, 14, 35.	3.7	43
17	Dose point kernels in liquid water: An intra-comparison between GEANT4-DNA and a variety of Monte Carlo codes. Applied Radiation and Isotopes, 2014, 83, 137-141.	1.5	42
18	Comparisons of sets of electronâ€“neutral scattering cross sections and swarm parameters in noble gases: III. Krypton and xenon. Journal Physics D: Applied Physics, 2013, 46, 334003.	2.8	35

#	Article	IF	Citations
19	Electron track structure simulations in a gold nanoparticle using Geant4-DNA. Physica Medica, 2019, 63, 98-104.	0.7	35
20	Determination of a set of electron impact cross sections in tetrafluoromethane consistent with experimental determination of swarm parameters. Journal of Applied Physics, 1996, 80, 1325-1336.	2.5	34
21	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, .	2.5	34
22	A survey of the numerical methods currently in use to describe the motion of an electron swarm in a weakly ionized gas. Transport Theory and Statistical Physics, 1986, 15, 705-757.	0.4	26
23	Track structure simulations of proximity functions in liquid water using the Geant4-DNA toolkit. Journal of Applied Physics, 2019, 125, .	2.5	25
24	Assessment of Radio-Induced Damage in Endothelial Cells Irradiated with 40 kVp, 220 kVp, and 4 MV X-rays by Means of Micro and Nanodosimetric Calculations. International Journal of Molecular Sciences, 2019, 20, 6204.	4.1	23
25	Spectroscopic measurements on discharges along a dielectric surface. Journal of Applied Physics, 1982, 53, 8568-8576.	2.5	21
26	Determination of Electron Collision Cross Sections Set for Tetramethysilane. Plasma Science and Technology, 2007, 9, 756-759.	1.5	15
27	Low-energy electron dose-point kernel simulations using new physics models implemented in Geant4-DNA. Nuclear Instruments & Methods in Physics Research B, 2017, 398, 13-20.	1.4	15
28	Progress of Geant4 electromagnetic physics developments and applications. EPJ Web of Conferences, 2019, 214, 02046.	0.3	15
29	Electron transport in DNA bases: An extension of the Geant4-DNA Monte Carlo toolkit. Nuclear Instruments & Methods in Physics Research B, 2021, 488, 70-82.	1.4	14
30	A Geant4-DNA Evaluation of Radiation-Induced DNA Damage on a Human Fibroblast. Cancers, 2021, 13, 4940.	3.7	13
31	Monte Carlo dosimetry of a realistic multicellular model of follicular lymphoma in a context of radioimmunotherapy. Medical Physics, 2020, 47, 5222-5234.	3.0	5
32	Geant4 electromagnetic physics progress. EPJ Web of Conferences, 2020, 245, 02009.	0.3	4