

Giovanni Santin

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

83

papers

24,420

citations

27

h-index

95

g-index

95

ext. papers

28,128

ext. citations

2

avg, IF

4.4

L-index

#	Paper	IF	Citations
83	Geant4 simulation toolkit. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2003 , 506, 250-303	1.2	13788
82	. <i>IEEE Transactions on Nuclear Science</i> , 2006 , 53, 270-278	1.7	3723
81	Recent developments in Geant4. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2016 , 835, 186-225	1.2	1435
80	GATE: a simulation toolkit for PET and SPECT. <i>Physics in Medicine and Biology</i> , 2004 , 49, 4543-61	3.8	1239
79	Limits on neutrino oscillations from the CHOOZ experiment. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1999 , 466, 415-430	4.2	1104
78	Search for neutrino oscillations on a long base-line at the CHOOZ nuclear power station. <i>European Physical Journal C</i> , 2003 , 27, 331-374	4.2	759
77	Initial results from the CHOOZ long baseline reactor neutrino oscillation experiment. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1998 , 420, 397-404	4.2	620
76	GATE: a Geant4-based simulation platform for PET and SPECT integrating movement and time management. <i>IEEE Transactions on Nuclear Science</i> , 2003 , 50, 1516-1521	1.7	140
75	GATE (geant4 application for tomographic emission): a PET/SPECT general-purpose simulation platform. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2003 , 125, 75-79		99
74	Diffusion-controlled reactions modeling in Geant4-DNA. <i>Journal of Computational Physics</i> , 2014 , 274, 841-882	4.1	93
73	Monte Carlo simulations of a scintillation camera using GATE: validation and application modelling. <i>Physics in Medicine and Biology</i> , 2003 , 48, 3021-42	3.8	88
72	Geometry Description Markup Language for Physics Simulation and Analysis Applications. <i>IEEE Transactions on Nuclear Science</i> , 2006 , 53, 2892-2896	1.7	80
71	GRAS: a general-purpose 3-D Modular Simulation tool for space environment effects analysis. <i>IEEE Transactions on Nuclear Science</i> , 2005 , 52, 2294-2299	1.7	77
70	Modeling Radiation Chemistry in the Geant4 Toolkit. <i>Progress in Nuclear Science and Technology</i> , 2011 , 2, 503-508	0.3	72
69	Anthology of the Development of Radiation Transport Tools as Applied to Single Event Effects. <i>IEEE Transactions on Nuclear Science</i> , 2013 , 60, 1876-1911	1.7	71
68	Recent Improvements in Geant4 Electromagnetic Physics Models and Interfaces. <i>Progress in Nuclear Science and Technology</i> , 2011 , 2, 898-903	0.3	67
67	Validation of the GATE Monte Carlo simulation platform for modelling a CsI(Tl) scintillation camera dedicated to small-animal imaging. <i>Physics in Medicine and Biology</i> , 2004 , 49, 271-85	3.8	66

66	Monte Carlo simulation in PET and SPECT instrumentation using GATE. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004 , 527, 180-189	1.2	63
65	Measurement of the production cross-section of positive pions in the collision of 8.9 GeV/c protons on beryllium. <i>European Physical Journal C</i> , 2007 , 52, 29-53	4.2	55
64	Measurement of the production cross-section of positive pions in pAl collisions at 12.9 GeV/c. <i>Nuclear Physics B</i> , 2006 , 732, 1-45	2.8	54
63	Determination of neutrino incoming direction in the CHOOZ experiment and its application to supernova explosion location by scintillator detectors. <i>Physical Review D</i> , 1999 , 61,	4.9	53
62	The HARP detector at the CERN PS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007 , 571, 527-561	1.2	49
61	Monte Carlo Simulation for the ECAT EXACT HR+ system using GATE. <i>IEEE Transactions on Nuclear Science</i> , 2005 , 52, 627-633	1.7	38
60	Simulating radial dose of ion tracks in liquid water simulated with Geant4-DNA: A comparative study. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014 , 333, 92-98	1.2	30
59	Effects of Heavy-Ion Irradiation on Vertical 3-D NAND Flash Memories. <i>IEEE Transactions on Nuclear Science</i> , 2018 , 65, 318-325	1.7	29
58	Research plans in Europe for radiation health hazard assessment in exploratory space missions. <i>Life Sciences in Space Research</i> , 2019 , 21, 73-82	2.4	28
57	Influence of Beam Conditions and Energy for SEE Testing. <i>IEEE Transactions on Nuclear Science</i> , 2012 , 59, 1149-1160	1.7	28
56	The magnitude and effects of extreme solar particle events. <i>Journal of Space Weather and Space Climate</i> , 2014 , 4, A20	2.5	27
55	Measurement of the production of charged pions by protons on a tantalum target. <i>European Physical Journal C</i> , 2007 , 51, 787-824	4.2	27
54	Evaluation of early radiation DNA damage in a fractal cell nucleus model using Geant4-DNA. <i>Physica Medica</i> , 2019 , 62, 152-157	2.7	26
53	Monte Carlo simulation of the radiation environment encountered by a biochip during a space mission to Mars. <i>Astrobiology</i> , 2009 , 9, 311-23	3.7	24
52	Measurement of the production cross-sections of π^+ in pAl and pCu interactions at 12GeV/c. <i>Astroparticle Physics</i> , 2008 , 29, 257-281	2.4	22
51	Characterization of the particle radiation environment at three potential landing sites on Mars using ESA's MEREM models. <i>Icarus</i> , 2012 , 218, 723-734	3.8	20
50	Large-angle production of charged pions by 3 GeV/c-12 GeV/c protons on carbon, copper and tin targets. <i>European Physical Journal C</i> , 2008 , 53, 177-204	4.2	20
49	Charge Collection in Power MOSFETs for SEB Characterisation-Evidence of Energy Effects. <i>IEEE Transactions on Nuclear Science</i> , 2010 ,	1.7	17

48	High-Energy Electron-Induced SEUs and Jovian Environment Impact. <i>IEEE Transactions on Nuclear Science</i> , 2017 , 1-1	1.7	16
47	Simulation of time curves in small animal PET using GATE. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004 , 527, 190-194	1.2	15
46	Impact of Spacecraft-Shell Composition on 1 GeV/Nucleon ^{56}Fe Ion-Fragmentation and Dose Reduction. <i>IEEE Transactions on Nuclear Science</i> , 2011 , 58, 3126-3133	1.7	14
45	Status of the DESIRE project: Geant4 physics validation studies and first results from Columbus/ISS radiation Simulations. <i>IEEE Transactions on Nuclear Science</i> , 2004 , 51, 1378-1384	1.7	14
44	Geant4 electromagnetic physics for high statistic simulation of LHC experiments. <i>Journal of Physics: Conference Series</i> , 2012 , 396, 022013	0.3	13
43	Accelerator-Based Tests of Shielding Effectiveness of Different Materials and Multilayers using High-Energy Light and Heavy Ions. <i>Radiation Research</i> , 2018 , 190, 526-537	3.1	13
42	Particle identification algorithms for the HARP forward spectrometer. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007 , 572, 899-921	1.2	12
41	A Heavy-Ion Detector Based on 3-D NAND Flash Memories. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 154-160	1.7	12
40	Experimental Dose Enhancement in Multi-Layer Shielding Structures Exposed to High-Energy Electron Environments. <i>IEEE Transactions on Nuclear Science</i> , 2013 , 60, 2486-2493	1.7	11
39	Sub-LET Threshold SEE Cross Section Dependency With Ion Energy. <i>IEEE Transactions on Nuclear Science</i> , 2015 , 62, 2797-2806	1.7	11
38	Implementation of the reverse/adjoint Monte Carlo method into Geant4. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010 , 621, 247-257	1.2	10
37	Soft proton flux on ATHENA focal plane and its impact on the magnetic diverter design. <i>Experimental Astronomy</i> , 2018 , 45, 411-428	1.3	10
36	Geant4 Monte Carlo Simulations of the Belt Proton Radiation Environment On Board the International Space Station/Columbus. <i>IEEE Transactions on Nuclear Science</i> , 2007 , 54, 1444-1453	1.7	9
35	Evolution of the GATE project: new results and developments. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2007 , 172, 101-103		9
34	Influence of geometry model approximations on Geant4 simulation results of the Columbus/ISS radiation environment. <i>Radiation Measurements</i> , 2007 , 42, 1342-1350	1.5	9
33	Geant4 Monte Carlo Simulations of the Galactic Cosmic Ray Radiation Environment On-Board the International Space Station/Columbus. <i>IEEE Transactions on Nuclear Science</i> , 2007 , 54, 1854-1862	1.7	8
32	Proton Dominance of Sub-LET Threshold GCR SEE Rate. <i>IEEE Transactions on Nuclear Science</i> , 2017 , 64, 388-397	1.7	7
31	Review of Deposited Dose Calculation Methods Using Ray Tracing Approximations. <i>IEEE Transactions on Nuclear Science</i> , 2008 , 55, 3106-3113	1.7	7

30	Inner Belt Anisotropy Investigations Based on the Standard Radiation Environment Monitor (SREM). <i>IEEE Transactions on Nuclear Science</i> , 2010 , 57, 2017-2023	1.7	6
29	Are Further Cross Section Measurements Necessary for Space Radiation Protection or Ion Therapy Applications? Helium Projectiles. <i>Frontiers in Physics</i> , 2020 , 8,	3.9	6
28	Characterization of Novel Lightweight Radiation Shielding Materials for Space Applications. <i>IEEE Transactions on Nuclear Science</i> , 2017 , 64, 2325-2332	1.7	4
27	Validation Through Experiments of a 3-D Time-Dependent Model of Internal Charging. <i>IEEE Transactions on Plasma Science</i> , 2017 , 45, 2566-2572	1.3	4
26	Jovian Radiation Belt Models, Uncertainties and Margins. <i>IEEE Transactions on Nuclear Science</i> , 2013 , 60, 2397-2403	1.7	4
25	Calibration of the weighed sensitive volume model to heavy ion experimental data 2011 ,		4
24	Detailed Comparison of Monte Carlo and Sector-Shielding Analyses for Space Applications. <i>IEEE Transactions on Nuclear Science</i> , 2006 , 53, 3745-3749	1.7	4
23	Geant4 electromagnetic physics: improving simulation performance and accuracy 2014 ,		4
22	Mechanisms of Electron-Induced Single-Event Latchup. <i>IEEE Transactions on Nuclear Science</i> , 2019 , 66, 437-443	1.7	4
21	Total nuclear reaction cross-section database for radiation protection in space and heavy-ion therapy applications. <i>New Journal of Physics</i> ,	2.9	4
20	Characterizing High-Energy Ion Beams With PIPS Detectors. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 1421-1427	1.7	3
19	Soft Proton Fluxes in and Around the Earth's Magnetotail. <i>IEEE Transactions on Plasma Science</i> , 2017 , 45, 1965-1971	1.3	3
18	2011 ,		3
17	2011 ,		3
16	Combined use of heavy ion and proton test data in the determination of a GaAs Power MESFET critical charge and sensitive depth 2011 ,		3
15	Neutrino tracking calorimetry with plastic scintillator bars. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2001 , 472, 460-463	1.2	3
14	A Heavy-Ion Beam Monitor Based on 3-D NAND Flash Memories. <i>IEEE Transactions on Nuclear Science</i> , 2021 , 68, 884-889	1.7	3
13	Mechanisms of Electron-Induced Single-Event Upsets in Medical and Experimental Linacs. <i>IEEE Transactions on Nuclear Science</i> , 2018 , 65, 1715-1723	1.7	2

12	High-Accuracy Simulations of the ISS Radiation Environment and Applications to Interplanetary Manned Missions. <i>IEEE Transactions on Nuclear Science</i> , 2013 , 60, 2427-2434	1.7	2
11	The radiation environment and effects for future ESA cosmic vision missions 2009 ,		2
10	Galileo GIOVE-A MEORAD Results and Analysis. <i>IEEE Transactions on Nuclear Science</i> , 2008 , 55, 3151-3157.	1.7	2
9	Monitoring and simulation of the radiation environment for manned and unmanned space missions. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2007 , 172, 321-323		2
8	Transmission imaging with a moving point source: influence of crystal thickness and collimator type. <i>IEEE Transactions on Nuclear Science</i> , 2005 , 52, 166-173	1.7	2
7	Space environments and effects analysis for ESA missions. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2006 , 150, 377-381		2
6	Influence of Spacecraft Shielding Structures on Galactic Cosmic Ray-Induced Soft Error Rate. <i>IEEE Transactions on Nuclear Science</i> , 2012 , 59, 1078-1085	1.7	1
5	Perspectives for provision of high quality space radiation environment data using the Energetic Particle Telescope (EPT) 2011 ,		1
4	Secondary Particles Generated by Protons in 3D NAND Flash Memories. <i>IEEE Transactions on Nuclear Science</i> , 2022 , 1-1	1.7	1
3	Plastic scintillator bar with WLS fiber calorimeter for neutrino physics. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2001 , 461, 316-318	1.2	0
2	Internal Charging Analysis of a Space Instrument in PEO With a Dedicated Modeling Chain. <i>IEEE Transactions on Plasma Science</i> , 2019 , 47, 3699-3709	1.3	
1	Energy Deposition by Ultra-High Energy Ions in Large and Small Sensitive Volumes. <i>IEEE Transactions on Nuclear Science</i> , 2022 , 1-1	1.7	