

Susanna Guatelli

List of Publications by Year in Descending Order

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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.

182
papers

21,591
citations

28
h-index

146
g-index

197
ext. papers

25,338
ext. citations

2.3
avg, IF

4.99
L-index

#	Paper	IF	Citations
182	Implementation of the EPICS2017 database for photons in Geant4.. <i>Physica Medica</i> , 2022 , 95, 94-115	2.7	0
181	Energy imparted and ionization yield in nanometre-sized volumes. <i>Radiation Physics and Chemistry</i> , 2022 , 192, 109910	2.5	1
180	Evaluation of silicon strip detectors in transmission mode for online beam monitoring in microbeam radiation therapy at the Australian Synchrotron.. <i>Journal of Synchrotron Radiation</i> , 2022 , 29, 125-137	2.4	
179	Detection and discrimination of neutron capture events for NCEPT dose quantification.. <i>Scientific Reports</i> , 2022 , 12, 5863	4.9	
178	Flexible Polymer X-ray Detectors with Non-fullerene Acceptors for Enhanced Stability: Toward Printable Tissue Equivalent Devices for Medical Applications. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 57703-57712	9.5	1
177	Application of an SOI Microdosimeter for Monitoring of Neutrons in Various Mixed Radiation Field Environments. <i>IEEE Transactions on Nuclear Science</i> , 2021 , 1-1	1.7	2
176	Response of SOI microdosimeter in fast neutron beams: experiment and Monte Carlo simulations. <i>Physica Medica</i> , 2021 , 90, 176-187	2.7	
175	Modelling of protons spectra encountered in space using medical accelerator and its microdosimetric characterization. <i>Advances in Space Research</i> , 2021 , 67, 2534-2543	2.4	2
174	In-field and out-of-field microdosimetric characterisation of a 62 MeV proton beam at CATANA. <i>Medical Physics</i> , 2021 , 48, 4532-4541	4.4	0
173	Characterization of a novel large area microdosimeter system for low dose rate radiation environments. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2021 , 1002, 165238	1.2	1
172	X-TREAM protocol for in vitro microbeam radiation therapy at the Australian Synchrotron. <i>Journal of Applied Physics</i> , 2021 , 129, 244902	2.5	2
171	Muon event localisation with AI. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2021 , 1001, 165237	1.2	
170	Towards high spatial resolution tissue-equivalent dosimetry for microbeam radiation therapy using organic semiconductors. <i>Journal of Synchrotron Radiation</i> , 2021 , 28, 1444-1454	2.4	3
169	Report on G4-Med, a Geant4 benchmarking system for medical physics applications developed by the Geant4 Medical Simulation Benchmarking Group. <i>Medical Physics</i> , 2021 , 48, 19-56	4.4	31
168	Radiation Shielding Evaluation of Spacecraft Walls Against Heavy Ions Using Microdosimetry. <i>IEEE Transactions on Nuclear Science</i> , 2021 , 68, 897-905	1.7	1
167	Study of the X-ray radiation interaction with a multislit collimator for the creation of microbeams in radiation therapy. <i>Journal of Synchrotron Radiation</i> , 2021 , 28, 392-403	2.4	3
166	A benchmarking study of Geant4 for Auger electrons emitted by medical radioisotopes. <i>Applied Radiation and Isotopes</i> , 2021 , 174, 109777	1.7	1

165	Incorporating Clinical Imaging into the Delivery of Microbeam Radiation Therapy. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 9101	2.6	0
164	Characterisation of a well-type NaI(Tl) detector by means of a Monte Carlo simulation for radionuclide metrology application. <i>Applied Radiation and Isotopes</i> , 2021 , 176, 109889	1.7	
163	Geant4 X-ray fluorescence with updated libraries. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2021 , 507, 11-19	1.2	0
162	Review of the Geant4-DNA Simulation Toolkit for Radiobiological Applications at the Cellular and DNA Level.. <i>Cancers</i> , 2021 , 14,	6.6	4
161	Fully integrated Monte Carlo simulation for evaluating radiation induced DNA damage and subsequent repair using Geant4-DNA. <i>Scientific Reports</i> , 2020 , 10, 20788	4.9	12
160	Toward personalized synchrotron microbeam radiation therapy. <i>Scientific Reports</i> , 2020 , 10, 8833	4.9	11
159	The impact of sensitive volume thickness for silicon on insulator microdosimeters in hadron therapy. <i>Physics in Medicine and Biology</i> , 2020 , 65, 035004	3.8	3
158	A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 169-174	1.7	7
157	Experimental investigation of the characteristics of radioactive beams for heavy ion therapy. <i>Medical Physics</i> , 2020 , 47, 3123-3132	4.4	4
156	Geant4 electromagnetic physics progress. <i>EPJ Web of Conferences</i> , 2020 , 245, 02009	0.3	2
155	Dose quantification in carbon ion therapy using in-beam positron emission tomography. <i>Physics in Medicine and Biology</i> , 2020 , 65, 235052	3.8	2
154	A validated Geant4 model of a whole-body PET scanner with four-layer DOI detectors. <i>Physics in Medicine and Biology</i> , 2020 , 65, 235051	3.8	1
153	Advances in modelling gold nanoparticle radiosensitization using new Geant4-DNA physics models. <i>Physics in Medicine and Biology</i> , 2020 , 65, 225017	3.8	6
152	Microdosimetry of a therapeutic proton beam with a mini-TEPC and a MicroPlus-Bridge detector for RBE assessment. <i>Physics in Medicine and Biology</i> , 2020 , 65, 245018	3.8	8
151	First application of a high-resolution silicon detector for proton beam Bragg peak detection in a 0.95 T magnetic field. <i>Medical Physics</i> , 2020 , 47, 181-189	4.4	1
150	Validation of Geant4 for silicon microdosimetry in heavy ion therapy. <i>Physics in Medicine and Biology</i> , 2020 , 65, 045014	3.8	5
149	Improved integrated nucleus-nucleus inelastic cross sections for light nuclides in Geant4. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2020 , 463, 27-29	1.2	1
148	SOI Thin Microdosimeters for High LET Single-Event Upset Studies in Fe, O, Xe, and Cocktail Ion Beam Fields. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 146-153	1.7	7

147	Evaluation of GATE-RTion (GATE/Geant4) Monte Carlo simulation settings for proton pencil beam scanning quality assurance. <i>Medical Physics</i> , 2020 , 47, 5817-5828	4.4	0
146	Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 2490-2500	1.7	3
145	Evaluation of organ doses following high dose rate (HDR) brachytherapy of breast cancer: a Geant4 Monte Carlo simulation study. <i>Journal of Physics: Conference Series</i> , 2019 , 1248, 012048	0.3	
144	Evaluation of organ doses following prostate treatment with permanent brachytherapy seeds: a Geant4 Monte Carlo simulation study. <i>Journal of Physics: Conference Series</i> , 2019 , 1248, 012049	0.3	1
143	Evaluation of silicon based microdosimetry for Boron Neutron Capture Therapy Quality Assurance. <i>Physica Medica</i> , 2019 , 66, 8-14	2.7	3
142	Tissue equivalence of diamond for heavy charged particles. <i>Radiation Measurements</i> , 2019 , 122, 1-9	1.5	5
141	INVESTIGATING VARIABLE RBE IN A 12C MINIBEAM FIELD WITH MICRODOSIMETRY AND GEANT4. <i>Radiation Protection Dosimetry</i> , 2019 , 183, 160-166	0.9	2
140	Comparative study of alternative Geant4 hadronic ion inelastic physics models for prediction of positron-emitting radionuclide production in carbon and oxygen ion therapy. <i>Physics in Medicine and Biology</i> , 2019 , 64, 155014	3.8	5
139	Electron track structure simulations in a gold nanoparticle using Geant4-DNA. <i>Physica Medica</i> , 2019 , 63, 98-104	2.7	20
138	Characterization of prompt gamma rays for in-vivo range verification in hadron therapy: A Geant4 simulation study. <i>Journal of Physics: Conference Series</i> , 2019 , 1154, 012030	0.3	1
137	Characterization of prompt gamma ray emission for in vivo range verification in particle therapy: A simulation study. <i>Physica Medica</i> , 2019 , 62, 20-32	2.7	4
136	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
135	Monte Carlo investigation of the characteristics of radioactive beams for heavy ion therapy. <i>Scientific Reports</i> , 2019 , 9, 6537	4.9	7
134	A Monte Carlo study on the feasibility of real-time in vivo source tracking during ultrasound based HDR prostate brachytherapy treatments. <i>Physica Medica</i> , 2019 , 59, 30-36	2.7	4
133	Track structure simulations of proximity functions in liquid water using the Geant4-DNA toolkit. <i>Journal of Applied Physics</i> , 2019 , 125, 104301	2.5	13
132	Today's monolithic silicon array detector for small field dosimetry: the Octa. <i>Journal of Physics: Conference Series</i> , 2019 , 1154, 012002	0.3	0
131	Evolution of Diamond based Microdosimetry. <i>Journal of Physics: Conference Series</i> , 2019 , 1154, 012007	0.3	3
130	3D sensitive volume microdosimeter with improved tissue equivalency: charge collection study and its application in 12C ion therapy. <i>Journal of Physics: Conference Series</i> , 2019 , 1154, 012012	0.3	2

129	Modelling the Biological Beamline at HIMAC using Geant4. <i>Journal of Physics: Conference Series</i> , 2019 , 1154, 012003	0.3	8
128	Evaluation of the influence of physical and chemical parameters on water radiolysis simulations under MeV electron irradiation using Geant4-DNA. <i>Journal of Applied Physics</i> , 2019 , 126, 114301	2.5	18
127	Modelling of the Silicon-On-Insulator microdosimeter response within the International Space Station for astronauts radiation protection. <i>Radiation Measurements</i> , 2019 , 128, 106182	1.5	4
126	Characterization of the Mixed Radiation Field Produced by Carbon and Oxygen Ion Beams of Therapeutic Energy: A Monte Carlo Simulation Study. <i>Journal of Medical Physics</i> , 2019 , 44, 263-269	0.7	2
125	Physics models for Monte Carlo simulations in carbon ion therapy. <i>Interdisciplinary Research on Particle Collisions and Quantitative Spectroscopy</i> , 2019 , 255-283	0.5	0
124	Validation of a Monte Carlo simulation for Microbeam Radiation Therapy on the Imaging and Medical Beamline at the Australian Synchrotron. <i>Scientific Reports</i> , 2019 , 9, 17696	4.9	7
123	Progress of Geant4 electromagnetic physics developments and applications. <i>EPJ Web of Conferences</i> , 2019 , 214, 02046	0.3	9
122	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. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	11
121	Influence of track structure and condensed history physics models of Geant4 to nanoscale electron transport in liquid water. <i>Physica Medica</i> , 2019 , 58, 149-154	2.7	27
120	. <i>IEEE Transactions on Nuclear Science</i> , 2019 , 66, 519-527	1.7	5
119	SOI Thin Microdosimeter Detectors for Low-Energy Ions and Radiation Damage Studies. <i>IEEE Transactions on Nuclear Science</i> , 2019 , 66, 320-326	1.7	8
118	A New Standard DNA Damage (SDD) Data Format. <i>Radiation Research</i> , 2019 , 191, 76-92	3.1	32
117	Thin Silicon Microdosimeter Utilizing 3-D MEMS Fabrication Technology: Charge Collection Study and Its Application in Mixed Radiation Fields. <i>IEEE Transactions on Nuclear Science</i> , 2018 , 65, 467-472	1.7	19
116	Geant4-DNA track-structure simulations for gold nanoparticles: The importance of electron discrete models in nanometer volumes. <i>Medical Physics</i> , 2018 , 45, 2230-2242	4.4	40
115	The relative biological effectiveness for carbon, nitrogen, and oxygen ion beams using passive and scanning techniques evaluated with fully 3D silicon microdosimeters. <i>Medical Physics</i> , 2018 , 45, 2299-2308	4.4	22
114	MICRODOSIMETRIC APPLICATIONS IN PROTON AND HEAVY ION THERAPY USING SILICON MICRODOSIMETERS. <i>Radiation Protection Dosimetry</i> , 2018 , 180, 365-371	0.9	3
113	Investigation of track structure and condensed history physics models for applications in radiation dosimetry on a micro and nano scale in Geant4. <i>Biomedical Physics and Engineering Express</i> , 2018 , 4, 024001	1.5	36
112	A silicon strip detector array for energy verification and quality assurance in heavy ion therapy. <i>Medical Physics</i> , 2018 , 45, 953-962	4.4	6

111	A novel high-resolution 2D silicon array detector for small field dosimetry with FFF photon beams. <i>Physica Medica</i> , 2018 , 45, 117-126	2.7	18
110	High spatial resolution microdosimetry with monolithic E-E detector on 12C beam: Monte Carlo simulations and experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018 , 887, 70-80	1.2	8
109	CyberKnife fixed cone and Iris-defined small radiation fields: Assessment with a high-resolution solid-state detector array. <i>Journal of Applied Clinical Medical Physics</i> , 2018 , 19, 547-557	2.3	14
108	HDR brachytherapy in vivo source position verification using a 2D diode array: A Monte Carlo study. <i>Journal of Applied Clinical Medical Physics</i> , 2018 , 19, 163-172	2.3	5
107	On Monolithic Silicon Array Detectors for Small-Field Photon Beam Dosimetry. <i>IEEE Transactions on Nuclear Science</i> , 2018 , 65, 2640-2649	1.7	8
106	Geant4-DNA example applications for track structure simulations in liquid water: A report from the Geant4-DNA Project. <i>Medical Physics</i> , 2018 , 45, e722	4.4	145
105	In-field and out-of-field application in 12C ion therapy using fully 3D silicon microdosimeters. <i>Radiation Measurements</i> , 2018 , 115, 55-59	1.5	11
104	Opportunistic dose amplification for proton and carbon ion therapy via capture of internally generated thermal neutrons. <i>Scientific Reports</i> , 2018 , 8, 16257	4.9	12
103	Development of a new Geant4-DNA electron elastic scattering model for liquid-phase water using the ELSEPA code. <i>Journal of Applied Physics</i> , 2018 , 124, 224901	2.5	15
102	Optimisation of the design of SOI microdosimeters for hadron therapy quality assurance. <i>Physics in Medicine and Biology</i> , 2018 , 63, 215007	3.8	4
101	SOI microdosimetry and modified MKM for evaluation of relative biological effectiveness for a passive proton therapy radiation field. <i>Physics in Medicine and Biology</i> , 2018 , 63, 235007	3.8	17
100	Latest Geant4 developments for PIXE applications. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2018 , 436, 285-291	1.2	3
99	Software platform for simulation of a prototype proton CT scanner. <i>Medical Physics</i> , 2017 , 44, 1002-1016	4.4	38
98	Development of a high resolution voxelised head phantom for medical physics applications. <i>Physica Medica</i> , 2017 , 33, 182-188	2.7	16
97	Correction factors to convert microdosimetry measurements in silicon to tissue in C ion therapy. <i>Physics in Medicine and Biology</i> , 2017 , 62, 2055-2069	3.8	41
96	New silicon microdosimetry probes for RBE and biological dose studies using stationary and movable targets in 12C ion therapy. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012019	0.3	2
95	A convenient verification method of the entrance photo-neutron dose for an 18 MV medical linac using silicon p-i-n diodes. <i>Radiation Measurements</i> , 2017 , 106, 391-398	1.5	8
94	3D silicon microdosimetry and RBE study using 12C ion of different energies. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012037	0.3	

93	RBE study using solid state microdosimetry in heavy ion therapy. <i>Radiation Measurements</i> , 2017 , 106, 512-518	1.5	13
92	Synchrotron activation radiotherapy: Effects of dose-rate and energy spectra to tantalum oxide nanoparticles selective tumour cell radiosensitization enhancement. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012011	0.3	4
91	Feasibility study of a novel multi-strip silicon detector for use in proton therapy range verification quality assurance. <i>Radiation Measurements</i> , 2017 , 106, 378-384	1.5	4
90	Characterization of prompt gamma-ray emission with respect to the Bragg peak for proton beam range verification: A Monte Carlo study. <i>Physica Medica</i> , 2017 , 33, 197-206	2.7	21
89	Development of a Geant4 application to characterise a prototype neutron detector based on three orthogonal He tubes inside an HDPE sphere. <i>Physica Medica</i> , 2017 , 33, 189-196	2.7	3
88	Abstract ID: 28 Evaluation of silicon and diamond based microdosimetry for boron neutron capture therapy quality assurance. <i>Physica Medica</i> , 2017 , 42, 4	2.7	
87	Recent progress of GEANT4 electromagnetic physics for LHC and other applications. <i>Journal of Physics: Conference Series</i> , 2017 , 898, 042032	0.3	8
86	Contributions of secondary fragmentation by carbon ion beams in water phantom: Monte Carlo simulation. <i>Journal of Physics: Conference Series</i> , 2017 , 851, 012033	0.3	5
85	Characterization of proton pencil beam scanning and passive beam using a high spatial resolution solid-state microdosimeter. <i>Medical Physics</i> , 2017 , 44, 6085-6095	4.4	33
84	Comparison of phantom materials for use in quality assurance of microbeam radiation therapy. <i>Journal of Synchrotron Radiation</i> , 2017 , 24, 866-876	2.4	13
83	Microdosimetry of electrons in liquid water using the low-energy models of Geant4. <i>Journal of Applied Physics</i> , 2017 , 122, 024303	2.5	51
82	Validation of Geant4 fragmentation for Heavy Ion Therapy. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017 , 869, 68-75	1.2	21
81	Deriving spatially resolved beta dose rates in sediment using the Timepix pixelated detector. <i>Radiation Measurements</i> , 2017 , 106, 483-490	1.5	6
80	Systematic investigation on the validity of partition model dosimetry for Y radioembolization using Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , 2017 , 62, 7342-7356	3.8	5
79	Monte Carlo characterisation of the Dose Magnifying Glass for proton therapy quality assurance. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012015	0.3	1
78	Review of Geant4-DNA applications for micro and nanoscale simulations. <i>Physica Medica</i> , 2016 , 32, 1187-1200	1.7	76
77	Optimizing dose enhancement with TaO nanoparticles for synchrotron microbeam activated radiation therapy. <i>Physica Medica</i> , 2016 , 32, 1852-1861	2.7	16
76	2016 ,		2

75	The evolution in the stellar mass of brightest cluster galaxies over the past 10 billion years. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016 , 460, 2862-2874	4.3	26
74	Organ doses from hepatic radioembolization with ^{90}Y , ^{153}Sm , ^{166}Ho and ^{177}Lu : A Monte Carlo simulation study using Geant4. <i>Journal of Physics: Conference Series</i> , 2016 , 694, 012059	0.3	2
73	Geant4 Monte Carlo simulation of absorbed dose and radiolysis yields enhancement from a gold nanoparticle under MeV proton irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016 , 373, 126-139	1.2	52
72	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
71	An implementation of discrete electron transport models for gold in the Geant4 simulation toolkit. <i>Journal of Applied Physics</i> , 2016 , 120, 244901	2.5	34
70	Neutron shielding for a new projected proton therapy facility: A Geant4 simulation study. <i>Physica Medica</i> , 2016 , 32, 1862-1871	2.7	3
69	Local dose enhancement of proton therapy by ceramic oxide nanoparticles investigated with Geant4 simulations. <i>Physica Medica</i> , 2016 , 32, 1584-1593	2.7	23
68	First proof of bismuth oxide nanoparticles as efficient radiosensitisers on highly radioresistant cancer cells. <i>Physica Medica</i> , 2016 , 32, 1444-1452	2.7	37
67	Study of the effect of ceramic TaO nanoparticle distribution on cellular dose enhancement in a kilovoltage photon field. <i>Physica Medica</i> , 2016 , 32, 1216-1224	2.7	16
66	The investigation of prostatic calcifications using μPIXE analysis and their dosimetric effect in low dose rate brachytherapy treatments using Geant4. <i>Physics in Medicine and Biology</i> , 2015 , 60, 4335-53	3.8	8
65	3D-Mesa Bridge Silicon Microdosimeter: Charge Collection Study and Application to RBE Studies in ^{12}C Radiation Therapy. <i>IEEE Transactions on Nuclear Science</i> , 2015 , 62, 504-511	1.7	30
64	Comparative analysis of the secondary electron yield from carbon nanoparticles and pure water medium. <i>European Physical Journal D</i> , 2015 , 69, 1	1.3	7
63	Monte Carlo validation and optimisation of detector packaging for spectroscopic dosimetry for in vivo urethral dosimetry during low dose rate brachytherapy. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2015 , 38, 455-63	1.9	1
62	A GEANT4 web-based application to support Intra-Operative Electron Radiotherapy using the European grid infrastructure. <i>Concurrency Computation Practice and Experience</i> , 2015 , 27, 458-472	1.4	3
61	Investigation of optimized prompt gamma detection strategy for real-time Bragg Peak tracking in proton radiation therapy 2015 ,		1
60	Progress in Geant4 Electromagnetic Physics Modelling and Validation. <i>Journal of Physics: Conference Series</i> , 2015 , 664, 072021	0.3	10
59	MagicPlate-512: A 2D silicon detector array for quality assurance of stereotactic motion adaptive radiotherapy. <i>Medical Physics</i> , 2015 , 42, 2992-3004	4.4	20
58	3D Silicon Microdosimetry and RBE Study Using ^{12}C Ion of Different Energies. <i>IEEE Transactions on Nuclear Science</i> , 2015 , 62, 3027-3033	1.7	28

57	Track structure modeling in liquid water: A review of the Geant4-DNA very low energy extension of the Geant4 Monte Carlo simulation toolkit. <i>Physica Medica</i> , 2015 , 31, 861-874	2.7	259
56	A Novel Silicon Microdosimeter Using 3D Sensitive Volumes: Modeling the Response in Neutron Fields Typical of Aviation. <i>IEEE Transactions on Nuclear Science</i> , 2014 , 61, 1552-1557	1.7	10
55	Tissue Equivalence Study of a Novel Diamond-Based Microdosimeter for Galactic Cosmic Rays and Solar Particle Events. <i>IEEE Transactions on Nuclear Science</i> , 2014 , 61, 1544-1551	1.7	10
54	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
53	Benchmarking and validation of a Geant4-SHADOW Monte Carlo simulation for dose calculations in microbeam radiation therapy. <i>Journal of Synchrotron Radiation</i> , 2014 , 21, 518-28	2.4	23
52	Radiation dose enhancement at tissue-tungsten interfaces in HDR brachytherapy. <i>Physics in Medicine and Biology</i> , 2014 , 59, 6659	3.8	9
51	Characterization of an Alternative Diamond Based Microdosimeter Prototype. <i>IEEE Transactions on Nuclear Science</i> , 2014 , 61, 3479-3484	1.7	6
50	BrachyView, a novel inbody imaging system for HDR prostate brachytherapy: design and Monte Carlo feasibility study. <i>Medical Physics</i> , 2013 , 40, 071715	4.4	12
49	Charge Collection in n-SOI Planar Microdosimeters. <i>IEEE Transactions on Nuclear Science</i> , 2013 , 60, 4289-4296	4.7	3
48	A feasibility study of PETiPIX: an ultra high resolution small animal PET scanner. <i>Journal of Instrumentation</i> , 2013 , 8, P12004-P12004	1	1
47	Radiation damage on sub-cellular scales: beyond DNA. <i>Physics in Medicine and Biology</i> , 2013 , 58, 1251-67	3.8	22
46	Comparison of nanodosimetric parameters of track structure calculated by the Monte Carlo codes Geant4-DNA and PTra. <i>Physics in Medicine and Biology</i> , 2012 , 57, 1231-50	3.8	24
45	Monte Carlo calculation of the maximum therapeutic gain of tumor antivascular alpha therapy. <i>Medical Physics</i> , 2012 , 39, 1282-8	4.4	18
44	Alpha particle and proton relative thermoluminescence efficiencies in LiF:Mg,Cu,P:is track structure theory up to the task?. <i>Radiation Protection Dosimetry</i> , 2012 , 150, 359-74	0.9	16
43	Effect of a static magnetic field on nanodosimetric quantities in a DNA volume. <i>International Journal of Radiation Biology</i> , 2012 , 88, 183-8	2.9	9
42	Microdosimetry for targeted alpha therapy of cancer. <i>Computational and Mathematical Methods in Medicine</i> , 2012 , 2012, 153212	2.8	22
41	A comparison of X-ray and proton beam low energy secondary electron track structures using the low energy models of Geant4. <i>International Journal of Radiation Biology</i> , 2012 , 88, 164-70	2.9	10
40	Characterization of a Novel Diamond-Based Microdosimeter Prototype for Radioprotection Applications in Space Environments. <i>IEEE Transactions on Nuclear Science</i> , 2012 , 59, 3110-3116	1.7	13

39	In silico nanodosimetry: new insights into nontargeted biological responses to radiation. <i>Computational and Mathematical Methods in Medicine</i> , 2012 , 2012, 147252	2.8	15
38	Monte Carlo study of the energy response and depth dose water equivalence of the MOSkin radiation dosimeter at clinical kilovoltage photon energies. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2011 , 34, 273-9	1.9	9
37	Background Dose for Systemic Targeted Alpha Therapy. <i>Progress in Nuclear Science and Technology</i> , 2011 , 2, 187-190	0.3	2
36	Neutron Dosimeter Development Based on Medipix2. <i>IEEE Transactions on Nuclear Science</i> , 2010 ,	1.7	1
35	Monte carlo study of MOSFET packaging, optimised for improved energy response: single MOSFET filtration. <i>Radiation Protection Dosimetry</i> , 2010 , 141, 10-7	0.9	5
34	Effect of a magnetic field on the track structure of low-energy electrons: a Monte Carlo study. <i>European Physical Journal D</i> , 2010 , 60, 85-92	1.3	31
33	From imaging to dosimetry: GEANT4-based study on the application of Medipix to neutron dosimetry. <i>Radiation Measurements</i> , 2010 , 45, 1355-1358	1.5	7
32	Tissue equivalency of phantom materials for neutron dosimetry in proton therapy. <i>Medical Physics</i> , 2009 , 36, 5412-9	4.4	12
31	Packaging Effects on RadFET Sensors for High Energy Physics Experiments. <i>IEEE Transactions on Nuclear Science</i> , 2009 , 56, 2061-2069	1.7	13
30	Tissue Equivalence Correction in Silicon Microdosimetry for Protons Characteristic of the LEO Space Environment. <i>IEEE Transactions on Nuclear Science</i> , 2008 , 55, 3407-3413	1.7	18
29	. <i>IEEE Transactions on Nuclear Science</i> , 2007 , 54, 2619-2628	1.7	75
28	Geant4 Atomic Relaxation. <i>IEEE Transactions on Nuclear Science</i> , 2007 , 54, 585-593	1.7	44
27	Validation of Geant4 Atomic Relaxation Against the NIST Physical Reference Data. <i>IEEE Transactions on Nuclear Science</i> , 2007 , 54, 594-603	1.7	23
26	A Statistical Toolkit for Data Analysis. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2006 , 150, 50-53		
25	Technology transfer from HEP computing to the medical field: overview and application to dosimetry. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2006 , 150, 13-18		0
24	The GEANT4 toolkit capability in the hadron therapy field: simulation of a transport beam line. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2006 , 150, 54-57		16
23	Geant4 Anthropomorphic Phantoms 2006 ,		1
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