Wook-Geun Shin

List of Publications by Year
in descending order

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34	738	623734	526287
papers	citations	14 h-index	27 g-index

34	34	34	515
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Evaluation of early radiation DNA damage in a fractal cell nucleus model using Geant4-DNA. Physica Medica, 2019, 62, 152-157.	0.7	54
3	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
4	Review of the Geant4-DNA Simulation Toolkit for Radiobiological Applications at the Cellular and DNA Level. Cancers, 2022, 14, 35.	3.7	43
5	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
6	Independent reaction times method in Geant4â€DNA: Implementation and performance. Medical Physics, 2020, 47, 5919-5930.	3.0	27
7	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
8	Development of a new Geant4-DNA electron elastic scattering model for liquid-phase water using the ELSEPA code. Journal of Applied Physics, 2018, 124, .	2.5	21
9	Geant4-DNA simulation of the pre-chemical stage of water radiolysis and its impact on initial radiochemical yields. Physica Medica, 2021, 88, 86-90.	0.7	20
10	Validation of energy-weighted algorithm for radiation portal monitor using plastic scintillator. Applied Radiation and Isotopes, 2016, 107, 160-164.	1.5	19
11	Independent dose verification system with Monte Carlo simulations using TOPAS for passive scattering proton therapy at the National Cancer Center in Korea. Physics in Medicine and Biology, 2017, 62, 7598-7616.	3.0	17
12	A Monte Carlo study of an energy-weighted algorithm for radionuclide analysis with a plastic scintillation detector. Applied Radiation and Isotopes, 2015, 101, 53-59.	1.5	16
13	TOPAS-nBio validation for simulating water radiolysis and DNA damage under low-LET irradiation. Physics in Medicine and Biology, 2021, 66, 175026.	3.0	16
14	Effective dose evaluation of NORM-added consumer products using Monte Carlo simulations and the ICRP computational human phantoms. Applied Radiation and Isotopes, 2016, 110, 230-235.	1.5	15
15	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
16	A Geant4-DNA Evaluation of Radiation-Induced DNA Damage on a Human Fibroblast. Cancers, 2021, 13, 4940.	3.7	13
17	Radioisotope identification using an energy-weighted algorithm with a proof-of-principle radiation portal monitor based on plastic scintillators. Applied Radiation and Isotopes, 2020, 156, 109010.	1.5	10
18	Development of integrated prompt gamma imaging and positron emission tomography system for in vivo 3-D dose verification: a Monte Carlo study. Physics in Medicine and Biology, 2020, 65, 105005.	3.0	10

#	Article	IF	Citations
19	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.	3.0	10
20	Feasibility study for the assessment of the exposed dose with TENORM added in consumer products. Radiation Protection Dosimetry, 2015, 167, 255-259.	0.8	9
21	An effective dose assessment technique with NORM added consumer products using skin-point source on computational human phantom. Applied Radiation and Isotopes, 2016, 118, 56-61.	1.5	9
22	DNA double-strand breaks in cancer cells as a function of proton linear energy transfer and its variation in time. International Journal of Radiation Biology, 2021, 97, 1-12.	1.8	9
23	Development of an effective dose coefficient database using a computational human phantom and Monte Carlo simulations to evaluate exposure dose for the usage of NORM-added consumer products. Applied Radiation and Isotopes, 2017, 129, 42-48.	1.5	7
24	3D star shot analysis using MAGAT gel dosimeter for integrated imaging and radiation isocenter verification of MRâ€Linac system. Journal of Applied Clinical Medical Physics, 2022, 23, e13615.	1.9	7
25	Determining the energy spectrum of clinical linear accelerator using an optimized photon beam transmission protocol. Medical Physics, 2019, 46, 3285-3297.	3.0	6
26	Characteristic Evaluation of Exposed Dose with NORM added Consumer Product based on ICRP Reference Phantom. Journal of Radiation Protection and Research, 2014, 39, 159-167.	0.6	6
27	A Monte Carlo study of the relationship between the time structures of prompt gammas and the in-vivo radiation dose in proton therapy. Journal of the Korean Physical Society, 2015, 67, 248-253.	0.7	5
28	Development of a Geant4â€based independent patient dose validation system with an elaborate multileaf collimator simulation model. Journal of Applied Clinical Medical Physics, 2019, 20, 94-106.	1.9	5
29	Evaluation of the dosimetric effect of scattered protons in clinical practice in passive scattering proton therapy. Journal of Applied Clinical Medical Physics, 2021, 22, 104-118.	1.9	2
30	Optimization of target, moderator, and collimator in the accelerator-based boron neutron capture therapy system: A Monte Carlo study. Nuclear Engineering and Technology, 2021, 53, 1970-1978.	2.3	2
31	Development of advanced skin dose evaluation technique using a tetrahedral-mesh phantom in external beam radiotherapy: a Monte Carlo simulation study. Physics in Medicine and Biology, 2019, 64, 165005.	3.0	1
32	Abstract ID: 96 Feasibility study of in vivo dose verification by analyzing time-structure of the prompt gammas in cancer treatment using proton beam. Physica Medica, 2017, 42, 21.	0.7	0
33	Feasibility study for radionuclide identification using multi-array plastic scintillator and energy weighted algorithm of radiation portal monitors: a Monte Carlo study. Journal of Instrumentation, 2019, 14, P12015-P12015.	1.2	0
34	Calculation of Beam Quality Correction Factor for Relative Positions of SOBP and Ionization Chamber Using Monte Carlo Simulations. New Physics: Sae Mulli, 2021, 71, 885-889.	0.1	0