Wook-Geun Shin

List of Publications by Year
in descending order

34	738	623188	525886
papers	citations	14	27
		h-index	g-index

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

#	Article	IF	Citations
1	Review of the Geant4-DNA Simulation Toolkit for Radiobiological Applications at the Cellular and DNA Level. Cancers, 2022, 14, 35.	1.7	43
2	3D star shot analysis using MAGAT gel dosimeter for integrated imaging and radiation isocenter verification of MR‑Linac system. Journal of Applied Clinical Medical Physics, 2022, 23, e13615.	0.8	7
3	Assessment of DNA damage with an adapted independent reaction time approach implemented in Geant4‑DNA for the simulation of diffusion‑controlled reactions between radio‑induced reactive species and a chromatin fiber. Medical Physics, 2021, 48, 890-901.	1.6	10
4	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.	0.6	14
5	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.	0.8	2
6	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.	1.1	2
7	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.	1.0	9
8	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
9	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
10	A Geant4-DNA Evaluation of Radiation-Induced DNA Damage on a Human Fibroblast. Cancers, 2021, 13, 4940.	1.7	13
11	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.	0.0	0
12	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.	0.7	10
13	Independent reaction times method in Geant4‑DNA: Implementation and performance. Medical Physics, 2020, 47, 5919-5930.	1.6	27
14	Fully integrated Monte Carlo simulation for evaluating radiation induced DNA damage and subsequent repair using Geant4-DNA. Scientific Reports, 2020, 10, 20788.	1.6	43
15	Development of integrated prompt gamma imaging and positron emission tomography system for <i>in vivo</i> 3-D dose verification: a Monte Carlo study. Physics in Medicine and Biology, 2020, 65, 105005.	1.6	10
16	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.	1.6	1
17	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
18	Development of a Geant4‑based independent patient dose validation system with an elaborate multileaf collimator simulation model. Journal of Applied Clinical Medical Physics, 2019, 20, 94-106.	0.8	5

#	Article	IF	Citations
19	Evaluation of early radiation DNA damage in a fractal cell nucleus model using Geant4-DNA. Physica Medica, 2019, 62, 152-157.	0.4	54
20	Determining the energy spectrum of clinical linear accelerator using an optimized photon beam transmission protocol. Medical Physics, 2019, 46, 3285-3297.	1.6	6
21	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.	0.5	0
22	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.	1.8	23
23	Development of a new Geant4-DNA electron elastic scattering model for liquid-phase water using the ELSEPA code. Journal of Applied Physics, 2018, 124, .	1.1	21
24	Geant4â€DNA example applications for track structure simulations in liquid water: A report from the Geant4â€DNA Project. Medical Physics, 2018, 45, e722.	1.6	265
25	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.	0.4	0
26	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.	0.7	7
27	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.	1.6	17
28	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.	0.7	9
29	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.	0.7	15
30	Validation of energy-weighted algorithm for radiation portal monitor using plastic scintillator. Applied Radiation and Isotopes, 2016, 107, 160-164.	0.7	19
31	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.	0.3	5
32	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.	0.7	16
33	Feasibility study for the assessment of the exposed dose with TENORM added in consumer products. Radiation Protection Dosimetry, 2015, 167, 255-259.	0.4	9
34	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.	0.3	6