# CITATION REPORT List of articles citing

BEAM: a Monte Carlo code to simulate radiotherapy treatment units

DOI: 10.1118/1.597552 Medical Physics, 1995, 22, 503-24.

Source: https://exaly.com/paper-pdf/26527052/citation-report.pdf

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

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

#	Paper	IF	Citations
1192	The energy correction factor of LiF thermoluminescent dosemeters in megavoltage electron beams: Monte Carlo simulations and experiments. <i>Physics in Medicine and Biology</i> , <b>1996</b> , 41, 979-93	3.8	43
1191	The IPEMB code of practice for electron dosimetry for radiotherapy beams of initial energy from 2 to 50 MeV based on an air kerma calibration. Institution of Physics and Engineering in Medicine and Biology. <i>Physics in Medicine and Biology</i> , <b>1996</b> , 41, 2557-603	3.8	43
1190	A Monte Carlo study of the quality dependence of diamond thermoluminescent dosimeters in radiotherapy beams. <i>Physics in Medicine and Biology</i> , <b>1997</b> , 42, 1913-27	3.8	7
1189	A dual source photon beam model used in convolution/superposition dose calculations for clinical megavoltage x-ray beams. <i>Medical Physics</i> , <b>1997</b> , 24, 1960-74	4.4	113
1188	Refinements of the finite-size pencil beam model of three-dimensional photon dose calculation. <i>Medical Physics</i> , <b>1997</b> , 24, 743-50	4.4	23
1187	Correcting kernel tilting and hardening in convolution/superposition dose calculations for clinical divergent and polychromatic photon beams. <i>Medical Physics</i> , <b>1997</b> , 24, 1729-41	4.4	28
1186	Monte Carlo and analytical calculation of proton pencil beams for computerized treatment plan optimization. <i>Physics in Medicine and Biology</i> , <b>1997</b> , 42, 1033-53	3.8	66
1185	Accurate characterization of Monte Carlo calculated electron beams for radiotherapy. <i>Medical Physics</i> , <b>1997</b> , 24, 401-16	4.4	115
1184	Calculating output factors for photon beam radiotherapy using a convolution/superposition method based on a dual source photon beam model. <i>Medical Physics</i> , <b>1997</b> , 24, 1975-85	4.4	49
1183	Electron fluence correction factors for conversion of dose in plastic to dose in water. <i>Medical Physics</i> , <b>1997</b> , 24, 161-76	4.4	22
1182	Electron beam dose calculations with the VMC algorithm and the verification data of the NCI working group. <i>Physics in Medicine and Biology</i> , <b>1997</b> , 42, 501-20	3.8	44
1181	Ionization profiles of conformed therapeutic electron beams. 1997, 132, 326-330		O
1180	Full Monte Carlo simulation and optimization of a high-power bremsstrahlung converter. <i>Radiation Physics and Chemistry</i> , <b>1997</b> , 49, 207-219	2.5	12
1179	Design of field flattening filters for a high-power bremsstrahlung converter by full Monte Carlo simulation. <i>Radiation Physics and Chemistry</i> , <b>1997</b> , 49, 307-317	2.5	13
1178	Measuring the electron fluence of clinical accelerators. <b>1997</b> , 27, 511-521		2
1177	Calibration of a mosfet detection system for 6-MV in vivo dosimetry. <b>1998</b> , 40, 987-93		78
1176	State of the art and development prospects for radiotherapy computation methods. <b>1998</b> , 85, 740-745	5	

1175	Physical aspects of treatment planning in linac-based radiosurgery of intracranial lesions. <b>1998</b> , 3, 59-6	6	1	
1174	Clinical considerations of Monte Carlo for electron radiotherapy treatment planning. <i>Radiation Physics and Chemistry</i> , <b>1998</b> , 53, 217-227	2.5	44	
1173	Super-Monte Carlo: A photon/electron dose calculation algorithm for radiotherapy. <i>Radiation Physics and Chemistry</i> , <b>1998</b> , 53, 275-281	2.5	4	
1172	Characterization of computer simulated radiotherapy beams for Monte-Carlo treatment planning. <i>Radiation Physics and Chemistry</i> , <b>1998</b> , 53, 329-344	2.5	52	
1171	Do we need Monte Carlo treatment planning for linac based radiosurgery? A case study. <i>Medical Dosimetry</i> , <b>1998</b> , 23, 161-8	1.3	24	
1170	On compensator design for photon beam intensity-modulated conformal therapy. <i>Medical Physics</i> , <b>1998</b> , 25, 668-75	4.4	62	
1169	Monte Carlo calculations of electron beam output factors for a medical linear accelerator. <i>Physics in Medicine and Biology</i> , <b>1998</b> , 43, 3479-94	3.8	69	
1168	A CT-based Monte Carlo simulation tool for dosimetry planning and analysis. <i>Medical Physics</i> , <b>1998</b> , 25, 1-11	4.4	161	
1167	Dosimetric evaluation of a widely used kilovoltage x-ray unit for endocavitary radiotherapy. <i>Medical Physics</i> , <b>1998</b> , 25, 1464-71	4.4	13	
1166	Use of a new type of radiochromic film, a new parallel-plate micro-chamber, MOSFETs, and TLD 800 microcubes in the dosimetry of small beams. <i>Medical Physics</i> , <b>1998</b> , 25, 503-11	4.4	90	
1165	The indirect use of CT numbers to establish material properties needed for Monte Carlo calculation of dose distributions in patients. <i>Medical Physics</i> , <b>1998</b> , 25, 1195-201	4.4	53	
1164	Effects of changes in stopping-power ratios with field size on electron beam relative output factors. <i>Medical Physics</i> , <b>1998</b> , 25, 1711-6	4.4	24	
1163	Megavoltage imaging with low Z targets: implementation and characterization of an investigational system. <i>Medical Physics</i> , <b>1998</b> , 25, 1910-8	4.4	37	
1162	The use of deconvolution and total least squares in recovering a radiation detector line spread function. <i>Medical Physics</i> , <b>1998</b> , 25, 152-60	4.4	21	
1161	Forward and adjoint methods for radiotherapy planning. <i>Medical Physics</i> , <b>1998</b> , 25, 1702-10	4.4	8	
1160	A Monte Carlo study of verification imaging in high dose rate brachytherapy. <i>Medical Physics</i> , <b>1998</b> , 25, 404-14	4.4	12	
1159	Dose perturbation caused by high-density inhomogeneities in small beams in stereotactic radiosurgery. <i>Physics in Medicine and Biology</i> , <b>1998</b> , 43, 3509-18	3.8	28	
1158	Monte Carlo dosimetry study of a 6 MV stereotactic radiosurgery unit. <i>Physics in Medicine and Biology</i> , <b>1998</b> , 43, 2755-68	3.8	69	

1157	Spectral reconstruction of clinical megavoltage photon beams and the implications of spectral determination on the dosimetry of such beams. <i>Physics in Medicine and Biology</i> , <b>1998</b> , 43, 1507-21	3.8	22
1156	Innovations in Three-Dimensional Treatment Planning and Quality Assurance. <b>1998</b> , 84, 127-139		6
1155	A macropencil beam model: clinical implementation for conformal and intensity modulated radiation therapy. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 1067-88	3.8	22
1154	Absorbed dose beam quality correction factors kappaQ for the NE2571 chamber in a 5 MV and a 10 MV photon beam. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 647-63	3.8	29
1153	Monte Carlo modelling of a virtual wedge. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, N251-9	3.8	21
1152	Calculation of absorbed dose and biological effectiveness from photonuclear reactions in a bremsstrahlung beam of end point 50 MeV. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 2099-125	3.8	22
1151	Stopping-power ratios for clinical electron beams from a scatter-foil linear accelerator. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 2321-41	3.8	14
1150	Correlated histogram representation of Monte Carlo derived medical accelerator photon-output phase space. <i>Medical Physics</i> , <b>1999</b> , 26, 1196-211	4.4	63
1149	Monte Carlo simulation of a typical 60Co therapy source. <i>Medical Physics</i> , <b>1999</b> , 26, 2494-502	4.4	144
1148	Multileaf collimator interleaf transmission. <i>Medical Physics</i> , <b>1999</b> , 26, 176-86	4.4	35
1148	Multileaf collimator interleaf transmission. <i>Medical Physics</i> , <b>1999</b> , 26, 176-86  The flatness of Siemens linear accelerator x-ray fields. <i>Medical Physics</i> , <b>1999</b> , 26, 220-8	4.4	35 30
	The flatness of Siemens linear accelerator x-ray fields. <i>Medical Physics</i> , <b>1999</b> , 26, 220-8  Evaluation of a commercial three-dimensional electron beam treatment planning system. <i>Medical</i>		
1147	The flatness of Siemens linear accelerator x-ray fields. <i>Medical Physics</i> , <b>1999</b> , 26, 220-8  Evaluation of a commercial three-dimensional electron beam treatment planning system. <i>Medical</i>	4.4	30
1147 1146	The flatness of Siemens linear accelerator x-ray fields. <i>Medical Physics</i> , <b>1999</b> , 26, 220-8  Evaluation of a commercial three-dimensional electron beam treatment planning system. <i>Medical Physics</i> , <b>1999</b> , 26, 2571-80  Monte Carlo investigation of electron beam output factors versus size of square cutout. <i>Medical</i>	4.4	30
1147 1146 1145	The flatness of Siemens linear accelerator x-ray fields. <i>Medical Physics</i> , <b>1999</b> , 26, 220-8  Evaluation of a commercial three-dimensional electron beam treatment planning system. <i>Medical Physics</i> , <b>1999</b> , 26, 2571-80  Monte Carlo investigation of electron beam output factors versus size of square cutout. <i>Medical Physics</i> , <b>1999</b> , 26, 743-50  Dose measurements compared with Monte Carlo simulations of narrow 6 MV multileaf collimator	4.4	30 20 53
1147 1146 1145	The flatness of Siemens linear accelerator x-ray fields. <i>Medical Physics</i> , <b>1999</b> , 26, 220-8  Evaluation of a commercial three-dimensional electron beam treatment planning system. <i>Medical Physics</i> , <b>1999</b> , 26, 2571-80  Monte Carlo investigation of electron beam output factors versus size of square cutout. <i>Medical Physics</i> , <b>1999</b> , 26, 743-50  Dose measurements compared with Monte Carlo simulations of narrow 6 MV multileaf collimator shaped photon beams. <i>Medical Physics</i> , <b>1999</b> , 26, 1874-82  Monte Carlo calculations to characterize the source for neutron therapy facilities. <i>Medical Physics</i> , <b>1999</b> , 26, 783-92	4.4	30 20 53 65
1147 1146 1145 1144	The flatness of Siemens linear accelerator x-ray fields. <i>Medical Physics</i> , <b>1999</b> , 26, 220-8  Evaluation of a commercial three-dimensional electron beam treatment planning system. <i>Medical Physics</i> , <b>1999</b> , 26, 2571-80  Monte Carlo investigation of electron beam output factors versus size of square cutout. <i>Medical Physics</i> , <b>1999</b> , 26, 743-50  Dose measurements compared with Monte Carlo simulations of narrow 6 MV multileaf collimator shaped photon beams. <i>Medical Physics</i> , <b>1999</b> , 26, 1874-82  Monte Carlo calculations to characterize the source for neutron therapy facilities. <i>Medical Physics</i> , <b>1999</b> , 26, 783-92	4·4 4·4 4·4 4·4	30 20 53 65

1139	Treatment head design for multileaf collimated high-energy electrons. <i>Medical Physics</i> , <b>1999</b> , 26, 2161-7 <sub>4.4</sub>	46
1138	Validation of Monte Carlo generated phase-space descriptions of medical linear accelerators. <i>Medical Physics</i> , <b>1999</b> , 26, 1476-83	41
1137	XVMC <b>Schnelle</b> Monte-Carlo-Dosisberechnung f <b>d</b> die Bestrahlungsplanung bei Photonenstrahlung. <b>1999</b> , 9, 255-260	2
1136	Dose calculations for external photon beams in radiotherapy. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, R99-155	319
1135	Clinical implementation of a Monte Carlo treatment planning system. <i>Medical Physics</i> , <b>1999</b> , 26, 2133-43 <sub>4.4</sub>	237
1134	Calculating photon beam characteristics with Monte Carlo techniques. <i>Medical Physics</i> , <b>1999</b> , 26, 1883-924.4	39
1133	Comparisons between MCNP, EGS4 and experiment for clinical electron beams. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 705-17	91
1132	Experimental investigation of a fast Monte Carlo photon beam dose calculation algorithm. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 3039-54	43
1131	An MCNP-based model of a linear accelerator x-ray beam. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 1219 <sub>3</sub> 30	41
1130	Methods for the determination of effective monitor chamber thickness. <i>Medical Physics</i> , <b>1999</b> , 26, 1871-3.4	2
1129	Finding mechanisms responsible for the spectral distribution of electron beams produced by a linear accelerator. <i>Medical Physics</i> , <b>1999</b> , 26, 2589-96	10
1128	Monte Carlo modelling of electron beams from medical accelerators. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, R157-89	129
1127	On the initial angular variances of clinical electron beams. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 2803 <sub>3</sub> 20	9
1126	Monte Carlo modelling of radiotherapy kV x-ray units. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 1767-89 3.8	79
1125	Comparison of EGS4 and MCNP4b Monte Carlo codes for generation of photon phase space distributions for a Varian 2100C. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 3009-26	84
1124	Dose enhancement by a thin foil of high-Z material: a Monte Carlo study. <i>Medical Physics</i> , <b>1999</b> , 26, 1245 <sub>2</sub> 54	26
1123	Fast Monte Carlo dose calculation for photon beams based on the VMC electron algorithm. <i>Medical Physics</i> , <b>1999</b> , 26, 1466-75	261
1122	An investigation of photon energy spectrum and its effect on film dosimetry in dynamic treatment fields.	

1121	Beta versus gamma for catheter-based intravascular brachytherapy: dosimetric perspectives in the presence of metallic stents and calcified plaques. <b>2000</b> , 46, 1043-9		35
1120	Potential therapeutic misadministration due to inappropriate electron beam field shaping. <i>Journal of Applied Clinical Medical Physics</i> , <b>2000</b> , 1, 95-9	2.3	
1119	Development and modification of a virtual source model for Monte Carlo based IMRT verification.		
1118	A virtual linear accelerator for verification of treatment planning systems. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 2887-96	3.8	17
1117	Determination of electron fluence ratios for various materials in an electron beam.		
1116			1
1115	Dose calculations with the BEAM Monte Carlo code at extended SSDs.		
1114	Dose measurement in heterogeneous phantoms with an extrapolation chamber.		
1113	Dynamic wedge versus physical wedge: a Monte Carlo study.		
1112	Revised relationship between R/sub 50/ and E/sub 0/ for electron beams.		
1111	Revised relationship between R/sub 50/ and E/sub 0/ for electron beams.  Backscatter towards the monitor ion chamber in high-energy photon and electron beams: charge integration versus Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3159-70	3.8	37
	Backscatter towards the monitor ion chamber in high-energy photon and electron beams: charge integration versus Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3159-70	3.8 3.8	37 9
1111	Backscatter towards the monitor ion chamber in high-energy photon and electron beams: charge integration versus Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3159-70  Electron fluence perturbation correction factors for solid state detectors irradiated in megavoltage electron beams. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 255-65		
1111	Backscatter towards the monitor ion chamber in high-energy photon and electron beams: charge integration versus Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3159-70  Electron fluence perturbation correction factors for solid state detectors irradiated in megavoltage electron beams. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 255-65  Energy correction factors of LiF powder TLDs irradiated in high-energy electron beams and applied	3.8	9
1111	Backscatter towards the monitor ion chamber in high-energy photon and electron beams: charge integration versus Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3159-70  Electron fluence perturbation correction factors for solid state detectors irradiated in megavoltage electron beams. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 255-65  Energy correction factors of LiF powder TLDs irradiated in high-energy electron beams and applied to mailed dosimetry for quality assurance networks. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3657-74  Reconstruction of megavoltage photon spectra from electronic portal imager derived transmission measurements. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, N115-31	3.8	9
1111 1110 1109 1108	Backscatter towards the monitor ion chamber in high-energy photon and electron beams: charge integration versus Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3159-70  Electron fluence perturbation correction factors for solid state detectors irradiated in megavoltage electron beams. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 255-65  Energy correction factors of LiF powder TLDs irradiated in high-energy electron beams and applied to mailed dosimetry for quality assurance networks. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3657-74  Reconstruction of megavoltage photon spectra from electronic portal imager derived transmission measurements. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, N115-31  Photon scatter in intensity modulating filters evaluated by first Compton scatter and Monte Carlo calculations and experiments in broad beams. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 2747-60	3.8 3.8 3.8 3.8	9 11 11
1111 1110 1109 1108	Backscatter towards the monitor ion chamber in high-energy photon and electron beams: charge integration versus Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3159-70  Electron fluence perturbation correction factors for solid state detectors irradiated in megavoltage electron beams. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 255-65  Energy correction factors of LiF powder TLDs irradiated in high-energy electron beams and applied to mailed dosimetry for quality assurance networks. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3657-74  Reconstruction of megavoltage photon spectra from electronic portal imager derived transmission measurements. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, N115-31  Photon scatter in intensity modulating filters evaluated by first Compton scatter and Monte Carlo calculations and experiments in broad beams. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 2747-60	3.8 3.8 3.8 3.8	9 11 11 5

1103	IORT apparatus design improvement through the evaluation of electron spectral distributions using Monte Carlo methods. <i>Medical Physics</i> , <b>2000</b> , 27, 215-20	4.4	4
1102	A language for generating tomographic images of mathematical phantoms. <i>Medical Physics</i> , <b>2000</b> , 27, 173-9	4.4	1
1101	Photon dose calculation of a three-dimensional treatment planning system compared to the Monte Carlo code BEAM. <i>Medical Physics</i> , <b>2000</b> , 27, 1579-87	4.4	50
1100	A two-step algorithm for predicting portal dose images in arbitrary detectors. <i>Medical Physics</i> , <b>2000</b> , 27, 2109-16	4.4	43
1099	The effect of dose calculation uncertainty on the evaluation of radiotherapy plans. <i>Medical Physics</i> , <b>2000</b> , 27, 478-84	4.4	71
1098	A virtual source model for Monte Carlo modeling of arbitrary intensity distributions. <i>Medical Physics</i> , <b>2000</b> , 27, 166-72	4.4	55
1097	Considerations for modelling MLCs with Monte Carlo techniques. <b>2000</b> , 458-460		2
1096	Photon beam characterization and modelling for Monte Carlo treatment planning. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 411-27	3.8	111
1095	Energy- and intensity-modulated electron beams for radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 2293-311	3.8	92
1094	Investigation of variance reduction techniques for Monte Carlo photon dose calculation using XVMC. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 2163-83	3.8	203
1093	Electron spectra derived from depth dose distributions. <i>Medical Physics</i> , <b>2000</b> , 27, 514-26	4.4	26
1092	Validation of a Monte Carlo dose calculation tool for radiotherapy treatment planning. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 2969-85	3.8	88
1091	Photon-beam radiation therapy and Monte Carlo. <b>2000</b> , 2, 31-38		1
1090	A systematic evaluation of air cavity dose perturbation in megavoltage x-ray beams. <i>Medical Physics</i> , <b>2000</b> , 27, 1011-7	4.4	40
1089	Patient-dependent beam-modifier physics in Monte Carlo photon dose calculations. <i>Medical Physics</i> , <b>2000</b> , 27, 935-47	4.4	24
1088	Monte Carlo and experimental investigations of multileaf collimated electron beams for modulated electron radiation therapy. <i>Medical Physics</i> , <b>2000</b> , 27, 2708-18	4.4	56
1087	Monte Carlo dose calculations and radiobiological modelling: analysis of the effect of the statistical noise of the dose distribution on the probability of tumour control. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3009-23	3.8	22
1086	OMEGA Monte Carlo test of the Gamma Knife dosimetry.		

1085	The effect of statistical uncertainty on inverse treatment planning based on Monte Carlo dose calculation. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 3601-13	3.8	43
1084	Modeling photon output caused by backscattered radiation into the monitor chamber from collimator jaws using a Monte Carlo technique. <i>Medical Physics</i> , <b>2000</b> , 27, 737-44	4.4	53
1083	Monte Carlo characterization of clinical electron beams in transverse magnetic fields. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 2947-67	3.8	17
1082	Monte Carlo verification of IMRT dose distributions from a commercial treatment planning optimization system. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 2483-95	3.8	126
1081	Electron beam modeling and commissioning for Monte Carlo treatment planning. <i>Medical Physics</i> , <b>2000</b> , 27, 180-91	4.4	55
1080	Implementation of FFT convolution and multigrid superposition models in the FOCUS RTP system. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 817-33	3.8	82
1079	Evaluation of the validity of a convolution method for incorporating tumour movement and set-up variations into the radiotherapy treatment planning system. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 923-31	3.8	59
1078	A review of radiation dosimetry applications using the MCNP Monte Carlo code. <b>2001</b> , 89,		16
1077	Description and dosimetric verification of the PEREGRINE Monte Carlo dose calculation system for photon beams incident on a water phantom. <i>Medical Physics</i> , <b>2001</b> , 28, 1322-37	4.4	131
1076	Monte Carlo simulation of electron beams from an accelerator head using PENELOPE. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 1163-86	3.8	161
1075	The effect of scattering foil parameters on electron-beam Monte Carlo calculations. <i>Medical Physics</i> , <b>2001</b> , 28, 2527-34	4.4	32
1074	A Monte Carlo approach for small electron beam dosimetry. <b>2001</b> , 58, 179-85		4
1073	Monte Carlo dose calculations for dynamic IMRT treatments. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 929-41	3.8	67
1072	Monte Carlo based treatment planning for modulated electron beam radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 2177-99	3.8	34
1071	Intensity modulated irradiation of a thorax phantom: comparisons between measurements, Monte Carlo calculations and pencil beam calculations. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 1695-706	3.8	29
1070	A Monte Carlo study of radiation transport through multileaf collimators. <i>Medical Physics</i> , <b>2001</b> , 28, 249	974.5406	82
1069	A multiple source model for 6 MV photon beam dose calculations using Monte Carlo. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 1407-27	3.8	69
1068	Monte Carlo simulation of a dynamic MLC based on a multiple source model. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 3241-57	3.8	27

## (2001-2001)

	Electron fluence correction factors for various materials in clinical electron beams. <i>Medical Physics</i> , <b>2001</b> , 28, 1727-34	4.4	5
1066	Comparison of commercially available three-dimensional treatment planning algorithms for monitor unit calculations in the presence of heterogeneities. <i>Journal of Applied Clinical Medical Physics</i> , <b>2001</b> , 2, 32-41	2.3	8
1065	Comparison of RTP dose distributions in heterogeneous phantoms with the BEAM Monte Carlo simulation system. <i>Journal of Applied Clinical Medical Physics</i> , <b>2001</b> , 2, 21-31	2.3	30
1064	Verification of tangential breast treatment dose calculations in a commercial 3D treatment planning system. <i>Journal of Applied Clinical Medical Physics</i> , <b>2001</b> , 2, 73-84	2.3	5
1063	Monte Carlo evaluation of tissue inhomogeneity effects in the treatment of the head and neck. <b>2001</b> , 50, 1339-49		39
1062	Dose effects of guide wires for catheter-based intravascular brachytherapy. <b>2001</b> , 51, 1103-10		14
1061	A study on beams passing through hip prosthesis for pelvic radiation treatment. <b>2001</b> , 51, 1167-75		52
1060	Monte Carlo simulation for MLC-based intensity-modulated radiotherapy. <i>Medical Dosimetry</i> , <b>2001</b> , 26, 157-68	1.3	46
1059	The development of a high-power bremsstrahlung radiator for the production of monochromatic X-rays. <i>Radiation Physics and Chemistry</i> , <b>2001</b> , 61, 439-441	2.5	
1058	Monte Carlo simulation of a clinical linear accelerator. <b>2001</b> , 55, 759-65		33
1057	[Foundations of the Monte Carlo method for dose calculation in radiotherapy]. 2001, 11, 73-82		2
31	[Foundations of the Monte Carlo method for dose calculation in radiotherapy]. <b>2001</b> , 11, 73-82  [EGs-Ray, a program for visualization of Monte Carlo calculations in radiation physics]. <b>2001</b> , 11, 119-23		6
31			
1056	[EGs-Ray, a program for visualization of Monte Carlo calculations in radiation physics]. <b>2001</b> , 11, 119-23  [Monte Carlo simulation of a dynamic multileaf collimator:implementation and applications]. <b>2001</b> ,	3.8	6
1056	[EGs-Ray, a program for visualization of Monte Carlo calculations in radiation physics]. <b>2001</b> , 11, 119-23  [Monte Carlo simulation of a dynamic multileaf collimator:implementation and applications]. <b>2001</b> , 11, 172-8  A method of simulating dynamic multileaf collimators using Monte Carlo techniques for		2
1056 1055 1054	[EGs-Ray, a program for visualization of Monte Carlo calculations in radiation physics]. <b>2001</b> , 11, 119-23  [Monte Carlo simulation of a dynamic multileaf collimator:implementation and applications]. <b>2001</b> , 11, 172-8  A method of simulating dynamic multileaf collimators using Monte Carlo techniques for intensity-modulated radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 2283-98  Monte Carlo simulation and dosimetric verification of radiotherapy beam modifiers. <i>Physics in</i>	3.8	6 2 40
1056 1055 1054 1053	[EGs-Ray, a program for visualization of Monte Carlo calculations in radiation physics]. 2001, 11, 119-23  [Monte Carlo simulation of a dynamic multileaf collimator:implementation and applications]. 2001, 11, 172-8  A method of simulating dynamic multileaf collimators using Monte Carlo techniques for intensity-modulated radiation therapy. <i>Physics in Medicine and Biology</i> , 2001, 46, 2283-98  Monte Carlo simulation and dosimetric verification of radiotherapy beam modifiers. <i>Physics in Medicine and Biology</i> , 2001, 46, 3007-29  A model to determine the initial phase space of a clinical electron beam from measured beam data.	3.8	6 2 40 23

1049	Quantifying effects of lead shielding in electron beams: a Monte Carlo study. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 757-69	3.8	12
1048	Photon scatter kernels for intensity modulating radiation therapy filters. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 3215-28	3.8	4
1047	Monte Carlo dose verification for intensity-modulated arc therapy. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 2269-82	3.8	28
1046	Practical aspects of in situ 16O (gamma,n) 15O activation using a conventional medical accelerator for the purpose of perfusion imaging. <i>Medical Physics</i> , <b>2001</b> , 28, 1669-78	4.4	3
1045	Comparison of the Batho, ETAR and Monte Carlo dose calculation methods in CT based patient models. <i>Medical Physics</i> , <b>2001</b> , 28, 582-9	4.4	36
1044	Dosimetric investigation and portal dose image prediction using an amorphous silicon electronic portal imaging device. <i>Medical Physics</i> , <b>2001</b> , 28, 911-24	4.4	151
1043	A measured data set for evaluating electron-beam dose algorithms. <i>Medical Physics</i> , <b>2001</b> , 28, 950-8	4.4	19
1042	Dynamic wedge versus physical wedge: a Monte Carlo study. <i>Medical Physics</i> , <b>2001</b> , 28, 612-9	4.4	20
1041	Multiple pulse electron beam converter design for high power radiography. <b>2001</b> , 72, 2599-2604		1
1040	Verification of IMRT dose distributions using a water beam imaging system. <i>Medical Physics</i> , <b>2001</b> , 28, 2466-74	4.4	15
1039	Conformal photon-beam therapy with transverse magnetic fields: a Monte Carlo study. <i>Medical Physics</i> , <b>2001</b> , 28, 127-33	4.4	18
1038	Monte Carlo calculation of output factors for circular, rectangular, and square fields of electron accelerators (6-20 MeV). <i>Medical Physics</i> , <b>2001</b> , 28, 938-49	4.4	38
1037	Electron beam collimation with focused and curved leaf end MLCsexperimental verification of Monte Carlo optimized designs. <i>Medical Physics</i> , <b>2002</b> , 29, 631-7	4.4	12
1036	Benchmarking of the dose planning method (DPM) Monte Carlo code using electron beams from a racetrack microtron. <i>Medical Physics</i> , <b>2002</b> , 29, 1035-41	4.4	10
1035	History by history statistical estimators in the BEAM code system. <i>Medical Physics</i> , <b>2002</b> , 29, 2745-52	4.4	122
1034	Depth dose enhancement of electron beams subject to external uniform longitudinal magnetic fields: a Monte Carlo study. <i>Medical Physics</i> , <b>2002</b> , 29, 484-91	4.4	12
1033	A simple method for bremsstrahlung spectra reconstruction from transmission measurements. <i>Medical Physics</i> , <b>2002</b> , 29, 932-8	4.4	12
1032	A Monte Carlo study on internal wedges using BEAM. <i>Medical Physics</i> , <b>2002</b> , 29, 876-85	4.4	7

#### (2002-2002)

1031	Underdosage of the upper-airway mucosa for small fields as used in intensity-modulated radiation therapy: a comparison between radiochromic film measurements, Monte Carlo simulations, and collapsed cone convolution calculations. <i>Medical Physics</i> , <b>2002</b> , 29, 1528-35	4.4	77	
1030	Measurement of absorbed dose with a bone-equivalent extrapolation chamber. <i>Medical Physics</i> , <b>2002</b> , 29, 433-40	4.4	5	
1029	Evaluation of factors to convert absorbed dose calibrations from graphite to water for the NPL high-energy photon calibration service. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 441-54	3.8	12	
1028	Experimental validation of the DPM Monte Carlo code using minimally scattered electron beams in heterogeneous media. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 1837-51	3.8	17	
1027	DOSIMETRY IN THE IRRADIATION OF THIN CULTURE LAYERS USING A 60Co RADIOTHERAPY UNIT AT 20 CM SSD. <b>2002</b> , 30, 187-192		1	
1026	Optimization of accelerator target and detector for portal imaging using Monte Carlo simulation and experiment. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 3331-49	3.8	32	
1025	Beam quality of high-energy photon beams at the Ghent University linear accelerator. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, L15-L18	3.8	2	
1024	Multileaf collimation of electronsclinical effects on electron energy modulation and mixed beam therapy depending on treatment head design. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 1013-24	3.8	25	
1023	A fluence-convolution method to calculate radiation therapy dose distributions that incorporate random set-up error. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 3465-73	3.8	69	
1022	The role of de-excitation electrons in measurements with graphite extrapolation chambers. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 801-22	3.8	4	
1021	Dose effect of guidewire position in intravascular brachytherapy. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 1733-40	3.8	5	
1020	Full forward Monte Carlo calculation of portal dose from MLC collimated treatment beams. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 377-90	3.8	32	
1019	Evaluation of the EGSnrc Monte Carlo code for interface dosimetry near high-Z media exposed to kilovolt and 60Co photons. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 1691-705	3.8	44	
1018	A Monte Carlo investigation of fluence profiles collimated by an electron specific MLC during beam delivery for modulated electron radiation therapy. <i>Medical Physics</i> , <b>2002</b> , 29, 2472-83	4.4	16	
1017	Are neutrons responsible for the dose discrepancies between Monte Carlo calculations and measurements in the build-up region for a high-energy photon beam?. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 3251-61	3.8	12	
1016	Dose discrepancies between Monte Carlo calculations and measurements in the buildup region for a high-energy photon beam. <i>Medical Physics</i> , <b>2002</b> , 29, 2459-63	4.4	56	
1015	Monte Carlo calculation of nine megavoltage photon beam spectra using the BEAM code. <i>Medical Physics</i> , <b>2002</b> , 29, 391-402	4.4	343	
1014	A Monte Carlo dose calculation tool for radiotherapy treatment planning. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 1671-89	3.8	136	

1013	Monte Carlo study of a highly efficient gas ionization detector for megavoltage imaging and image-guided radiotherapy. <i>Medical Physics</i> , <b>2002</b> , 29, 165-75	4.4	39
1012	Tumour dose enhancement using modified megavoltage photon beams and contrast media. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 2433-49	3.8	95
1011	Deterministic calculations of photon spectra for clinical accelerator targets. <i>Medical Physics</i> , <b>2002</b> , 29, 1019-28	4.4	10
1010	Influence of initial electron beam characteristics on monte carlo calculated absorbed dose distributions for linear accelerator electron beams. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 4019-41	3.8	35
1009	Using Monte Carlo methods to commission electron beams: a feasibility study. <i>Medical Physics</i> , <b>2002</b> , 29, 771-86	4.4	41
1008	The effect of dose calculation accuracy on inverse treatment planning. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 391-407	3.8	80
1007	Direct aperture optimization: a turnkey solution for step-and-shoot IMRT. <i>Medical Physics</i> , <b>2002</b> , 29, 10	074148	272
1006	Energy spectra, angular spread, fluence profiles and dose distributions of 6 and 18 MV photon beams: results of monte carlo simulations for a varian 2100EX accelerator. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 1025-46	3.8	126
1005	Sensitivity of megavoltage photon beam Monte Carlo simulations to electron beam and other parameters. <i>Medical Physics</i> , <b>2002</b> , 29, 379-90	4.4	201
1004	A DICOM-RT-based toolbox for the evaluation and verification of radiotherapy plans. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 4223-32	3.8	58
1003	Reconstruction of electron spectra using singular component decomposition. <i>Medical Physics</i> , <b>2002</b> , 29, 578-91	4.4	19
1002	Dosimetry characteristics of degraded electron beams investigated by Monte Carlo calculations in a setup for intraoperative radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 239-56	3.8	21
1001	A method for photon beam Monte Carlo multileaf collimator particle transport. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 3225-49	3.8	95
1000	Blurring artifacts in megavoltage radiography with a flat-panel imaging system: comparison of Monte Carlo simulations with measurements. <i>Medical Physics</i> , <b>2002</b> , 29, 2559-70	4.4	28
999	Investigation of photon beam output factors for conformal radiation therapyMonte Carlo simulations and measurements. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, N133-43	3.8	73
998	A Monte Carlo tutorial and the application for radiotherapy treatment planning. <i>Medical Dosimetry</i> , <b>2002</b> , 27, 43-50	1.3	12
997	Monte Carlo simulation of surface percent depth dose. <b>2002</b> , 56, 505-10		3
996	Monte carlo clinical dosimetry. <b>2002</b> , 7, 43-51		4

795 The state of Monte Carlo calculations in radiation treatment planning. **2002**, 7, 93-100

994	Radiotherapy dose perturbation of metallic esophageal stents. <b>2002</b> , 54, 1276-85		38
993	Evaluation of deep inspiration breath-hold lung treatment plans with Monte Carlo dose calculation. <b>2002</b> , 53, 1058-70		47
992	Beam modeling for a convolution/superposition-based treatment planning system. <i>Medical Dosimetry</i> , <b>2002</b> , 27, 11-9	1.3	3
991	The IPEM code of practice for electron dosimetry for radiotherapy beams of initial energy from 4 to 25 MeV based on an absorbed dose to water calibration. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 2929-	<b>₹0</b> 8	71
990	An MCNP-based model of a medical linear accelerator x-ray photon beam. <b>2003</b> , 26, 140-4		5
989	Determination of 3D dose distribution by PAG and Monte-Carlo simulations. 2003, 207, 124-130		6
988	Radiotherapy dose calculations in the presence of hip prostheses. <i>Medical Dosimetry</i> , <b>2003</b> , 28, 107-12	1.3	45
987	Dose effects of stents in intravascular brachytherapy for in-stent restenosis: a Monte Carlo calculation. <b>2003</b> , 55, 842-8		10
986	Routine IMRT verification by means of an automated Monte Carlo simulation system. <b>2003</b> , 56, 58-68		53
985	Investigation of radiosurgical beam profiles using Monte Carlo method. <i>Medical Dosimetry</i> , <b>2003</b> , 28, 1-6	1.3	14
984	Image reconstruction and the effect on dose calculation for hip prostheses. <i>Medical Dosimetry</i> , <b>2003</b> , 28, 113-7	1.3	20
983	Using Monte Carlo simulations to commission photon beam output factorsa feasibility study. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 3865-74	3.8	33
982	Development and validation of a BEAMnrc component module for accurate Monte Carlo modelling of the Varian dynamic Millennium multileaf collimator. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 4045-63	<b>3</b> .8	66
981	Monte Carlo modelling of external radiotherapy photon beams. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, R107-64	3.8	275
980	Development and clinical application of a fast superposition algorithm in radiation therapy. <b>2003</b> , 69, 79-90		18
979	Determining the incident electron fluence for Monte Carlo-based photon treatment planning using a standard measured data set. <i>Medical Physics</i> , <b>2003</b> , 30, 574-82	4.4	84
978	Commissioning 6 MV photon beams of a stereotactic radiosurgery system for Monte Carlo treatment planning. <i>Medical Physics</i> , <b>2003</b> , 30, 3124-34	4.4	31

977	Dosimetric considerations for patients with HIP prostheses undergoing pelvic irradiation. Report of the AAPM Radiation Therapy Committee Task Group 63. <i>Medical Physics</i> , <b>2003</b> , 30, 1162-82	4.4	168
976	Dose verification of an IMRT treatment planning system with the BEAM EGS4-based Monte Carlo code. <i>Medical Physics</i> , <b>2003</b> , 30, 144-57	4.4	41
975	Ionization chamber dosimetry of small photon fields: a Monte Carlo study on stopping-power ratios for radiosurgery and IMRT beams. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 2081-99	3.8	76
974	Scattered radiation from applicators in clinical electron beams. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 2493-507	3.8	19
973	A virtual photon energy fluence model for Monte Carlo dose calculation. <i>Medical Physics</i> , <b>2003</b> , 30, 301	·141.4	150
972	The volume effect of detectors in the dosimetry of small fields used in IMRT. <i>Medical Physics</i> , <b>2003</b> , 30, 341-7	4.4	220
971	A technique to sharpen the beam penumbra for Gamma Knife radiosurgery. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 1843-53	3.8	15
970	Physical aspects of dynamic stereotactic radiosurgery with very small photon beams (1.5 and 3 mm in diameter). <i>Medical Physics</i> , <b>2003</b> , 30, 111-8	4.4	60
969	Total skin electron therapy treatment verification: Monte Carlo simulation and beam characteristics of large non-standard electron fields. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 2783-96	3.8	19
968	Summary and recommendations of a National Cancer Institute workshop on issues limiting the clinical use of Monte Carlo dose calculation algorithms for megavoltage external beam radiation therapy. <i>Medical Physics</i> , <b>2003</b> , 30, 3206-16	4.4	37
967	Which accelerator photon beams are "clinic-like" for reference dosimetry purposes?. <i>Medical Physics</i> , <b>2003</b> , 30, 1546-55	4.4	36
966	Head scatter off-axis for megavoltage x rays. <i>Medical Physics</i> , <b>2003</b> , 30, 533-43	4.4	19
965	Basic dosimetry of radiosurgery narrow beams using Monte Carlo simulations: a detailed study of depth of maximum dose. <i>Medical Physics</i> , <b>2003</b> , 30, 2904-11	4.4	11
964	Photon beam relative dose validation of the DPM Monte Carlo code in lung-equivalent media. <i>Medical Physics</i> , <b>2003</b> , 30, 563-73	4.4	60
963	Comparison of beam characteristics of a gold x-ray target and a tungsten replacement target. <i>Medical Physics</i> , <b>2004</b> , 31, 91-7	4.4	10
962	Comparison of measured and Monte Carlo calculated dose distributions in inhomogeneous phantoms in clinical electron beams. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 2339-54	3.8	27
961	Monte Carlo calculation of effective attenuation coefficients for various compensator materials. <i>Medical Physics</i> , <b>2003</b> , 30, 2537-44	4.4	12
960	Comparison of dose calculation algorithms with Monte Carlo methods for photon arcs. <i>Medical Physics</i> , <b>2003</b> , 30, 2686-94	4.4	28

## (2004-2003)

Ş	959	Incorporation of a combinatorial geometry package and improved scoring capabilities in the EGSnrc Monte Carlo Code system. <i>Medical Physics</i> , <b>2003</b> , 30, 1076-85	4.4	3
Ş	958	Monte Carlo simulation of portal dosimetry on a rectilinear voxel geometry: a variable gantry angle solution. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, N231-8	3.8	12
9	957	An investigation of entrance surface dose calculations for diagnostic radiology using Monte Carlo simulations and radiotherapy dosimetry formalisms. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 1809-24	3.8	21
ç	956	Interface perturbation effects in high-energy electron beams. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 687-705	3.8	30
9	955	A vectorized Monte Carlo code for radiotherapy treatment planning dose calculation. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, N111-20	3.8	6
Ş	954	Monte Carlo model of the Elekta SLiplus accelerator: validation of a new MLC component module in BEAM for a 6 MV beam. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 371-85	3.8	44
9	953	Monte Carlo calculations of output factors for clinically shaped electron fields. <i>Journal of Applied Clinical Medical Physics</i> , <b>2004</b> , 5, 42-63	2.3	5
ç	952	Monte Carlo-based treatment planning for a spoiler system with experimental validation using plane-parallel ionization chambers. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 5145-55	3.8	2
Ş	951	Spectrum reconstruction from dose measurements as a linear inverse problem. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 5087-99	3.8	13
ç	950	An experimental and Monte Carlo investigation of the energy dependence of alanine/EPR dosimetry: I. Clinical x-ray beams. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 257-70	3.8	46
Ş	949	Investigation of the optimal backscatter for an aSi electronic portal imaging device. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 1723-38	3.8	58
ç	948	Monte Carlo source model for photon beam radiotherapy: photon source characteristics. <i>Medical Physics</i> , <b>2004</b> , 31, 3106-21	4.4	44
9	947	Performance of electronic portal imaging devices (EPIDs) used in radiotherapy: image quality and dose measurements. <i>Medical Physics</i> , <b>2004</b> , 31, 985-96	4.4	36
ç	946	Dose properties of a laser accelerated electron beam and prospects for clinical application. <i>Medical Physics</i> , <b>2004</b> , 31, 2053-67	4.4	28
Ş	945	Efficient particle transport simulation through beam modulating devices for Monte Carlo treatment planning. <i>Medical Physics</i> , <b>2004</b> , 31, 1235-42	4.4	29
Ş	944	Medical Physics top ten. <i>Medical Physics</i> , <b>2004</b> , 31, 682-682	4.4	1
9	943	Enhanced spectral discrimination through the exploitation of interface effects in photon dose data. <i>Medical Physics</i> , <b>2004</b> , 31, 264-76	4.4	12
ç	942	Monte Carlo computation of dosimetric amorphous silicon electronic portal images. <i>Medical Physics</i> , <b>2004</b> , 31, 2135-46	4.4	105

941	Large efficiency improvements in BEAMnrc using directional bremsstrahlung splitting. <i>Medical Physics</i> , <b>2004</b> , 31, 2883-98	4.4	160
940	Calibration of a scintillation dosemeter for beta rays using an extrapolation ionization chamber. <i>Medical Physics</i> , <b>2004</b> , 31, 1123-7	4.4	4
939	Analysis of the penumbra enlargement in lung versus the quality index of photon beams: a methodology to check the dose calculation algorithm. <i>Medical Physics</i> , <b>2004</b> , 31, 943-9	4.4	12
938	An investigation of accelerator head scatter and output factor in air. <i>Medical Physics</i> , <b>2004</b> , 31, 2527-33	4.4	21
937	A Monte Carlo multiple source model applied to radiosurgery narrow photon beams. <i>Medical Physics</i> , <b>2004</b> , 31, 2192-204	4.4	14
936	Evidence for using Monte Carlo calculated wall attenuation and scatter correction factors for three styles of graphite-walled ion chamber. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 2491-501	3.8	12
935	Integrating a MRI scanner with a 6 MV radiotherapy accelerator: dose deposition in a transverse magnetic field. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 4109-18	3.8	189
934	Near surface photon energy spectra outside a 6 MV field edge. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, N293-301	3.8	39
933	Commissioning of a medical accelerator photon beam Monte Carlo simulation using wide-field profiles. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 4929-42	3.8	18
932	GATE: a simulation toolkit for PET and SPECT. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 4543-61	3.8	1239
931	MLC leaf width impact on the clinical dose distribution: a Monte Carlo approach. <b>2004</b> , 59, 1548-59		21
930	Monitor unit calculation for Monte Carlo treatment planning. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 1671-87	3.8	33
929	Ionization chamber-based reference dosimetry of intensity modulated radiation beams. <i>Medical Physics</i> , <b>2004</b> , 31, 2454-65	4.4	86
928	Monte Carlo simulation of complex radiotherapy treatments. <b>2004</b> , 6, 60-68		12
927	Accuracy of the Burns equation for stopping-power ratio as a function of depth and R50. <i>Medical Physics</i> , <b>2004</b> , 31, 2961-3	4.4	7
926	REFERENCES. <b>2004</b> , 4, 95-100		2
925	Reference photon dosimetry data and reference phase space data for the 6 MV photon beam from varian clinac 2100 series linear accelerators. <i>Medical Physics</i> , <b>2005</b> , 32, 137-48	4.4	57
924	Dosimetry of a prototype retractable eMLC for fixed-beam electron therapy. <i>Medical Physics</i> , <b>2004</b> , 31, 443-62	4.4	65

923	Modelling of electron contamination in clinical photon beams for Monte Carlo dose calculation. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 2657-73	3.8	41
922	Modelling 6 MV photon beams of a stereotactic radiosurgery system for Monte Carlo treatment planning. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 1689-704	3.8	44
921	Adaptation of GEANT4 to Monte Carlo dose calculations based on CT data. <i>Medical Physics</i> , <b>2004</b> , 31, 2811-8	4.4	98
920	Validation of GEANT4, an object-oriented Monte Carlo toolkit, for simulations in medical physics. <i>Medical Physics</i> , <b>2004</b> , 31, 484-92	4.4	120
919	Radiation characteristics of helical tomotherapy. <i>Medical Physics</i> , <b>2004</b> , 31, 396-404	4.4	157
918	Influence of initial electron beam parameters on Monte Carlo calculated absorbed dose distributions for radiotherapy photon beams. <i>Medical Physics</i> , <b>2004</b> , 31, 907-13	4.4	70
917	Measurements of output factors with different detector types and Monte Carlo calculations of stopping-power ratios for degraded electron beams. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 4493-50	6 <sup>3.8</sup>	23
916	Optimization of combined electron and photon beams for breast cancer. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 1973-89	3.8	25
915	Monte Carlo as a four-dimensional radiotherapy treatment-planning tool to account for respiratory motion. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 3639-48	3.8	75
914	An EGSnrc Monte Carlo study of the microionization chamber for reference dosimetry of narrow irregular IMRT beamlets. <i>Medical Physics</i> , <b>2004</b> , 31, 2416-22	4.4	74
913	Intensity modulated radiation therapy with electrons using algorithm based energy/range selection methods. <b>2004</b> , 73, 223-31		23
912	HADES, a code for simulating a variety of radiographic techniques.		1
911	OPTIMISING NEURAL NETWORK ARCHITECTURES FOR COMPENSATOR DESIGN. <b>2005</b> , 38, 1083-1088		
910	Monte Carlo calculation of Varian 2300C/D Linac photon beam characteristics: a comparison between MCNP4C, GEANT3 and measurements. <b>2005</b> , 62, 469-77		50
909	A comparison of Monte Carlo and Fermi-Eyges-Hogstrom estimates of heart and lung dose from breast electron boost treatment. <b>2005</b> , 61, 621-8		12
908	In vivo dose verification of IMRT treated head and neck cancer patients. <b>2005</b> , 44, 572-8		23
907	Electron beam treatment verification using measured and Monte Carlo predicted portal images. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 4977-94	3.8	19
906	Effects on electron beam penumbra using the photon MLC to reduce bremsstrahlung leakage for an add-on electron MLC. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 1191-203	3.8	14

905	Dose properties of x-ray beams produced by laser-wakefield-accelerated electrons. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, N1-10	3.8	3
904	A software tool for 2D/3D visualization and analysis of phase-space data generated by Monte Carlo modelling of medical linear accelerators. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, N257-67	3.8	
903	Development of a Monte Carlo model for the Brainlab microMLC. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 787-99	3.8	33
902	Monte Carlo based modulated electron beam treatment planning using a few-leaf electron collimatorfeasibility study. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 847-57	3.8	24
901	Enhanced bremsstrahlung spectrum reconstruction from depth-dose gradients. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 3245-61	3.8	4
900	The influence of beam model differences in the comparison of dose calculation algorithms for lung cancer treatment planning. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 801-15	3.8	19
899	Effect of statistical uncertainties on Monte Carlo treatment planning. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 891-907	3.8	24
898	Off-axis chamber response in the depth of photon dose maximum. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 1449-57	3.8	8
897	Influence of ion chamber response on in-air profile measurements in megavoltage photon beams. <i>Medical Physics</i> , <b>2005</b> , 32, 2918-27	4.4	29
896	A Monte Carlo derived TG-51 equivalent calibration for helical tomotherapy. <i>Medical Physics</i> , <b>2005</b> , 32, 1346-53	4.4	34
895	Theoretical and experimental validation of treatment planning for narrow MLC defined photon fields. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 2701-14	3.8	18
894	Monte Carlo modeling of the response of NRC's 90Sr/90Y primary beta standard. <i>Medical Physics</i> , <b>2005</b> , 32, 3084-94	4.4	12
893	Photon-beam subsource sensitivity to the initial electron-beam parameters. <i>Medical Physics</i> , <b>2005</b> , 32, 1164-75	4.4	25
892	Validation of Monte Carlo calculated surface doses for megavoltage photon beams. <i>Medical Physics</i> , <b>2005</b> , 32, 286-98	4.4	50
891	Final Aperture Superposition Technique applied to fast calculation of electron output factors and depth dose curves. <i>Medical Physics</i> , <b>2005</b> , 32, 3286-94	4.4	5
890	Head-and-neck IMRT treatments assessed with a Monte Carlo dose calculation engine. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 817-30	3.8	40
889	An experimental and Monte Carlo investigation of the energy dependence of alanine/EPR dosimetry: II. Clinical electron beams. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 1119-29	3.8	286
888	Application of a radiophotoluminescent glass plate dosimeter for small field dosimetry. <i>Medical Physics</i> , <b>2005</b> , 32, 1548-54	4.4	16

## (2005-2005)

887	Photon and electron collimator effects on electron output and abutting segments in energy modulated electron therapy. <i>Medical Physics</i> , <b>2005</b> , 32, 3178-84	4.4	3	
886	Using a photon phase-space source for convolution/superposition dose calculations in radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 4111-24	3.8	6	
885	Dual scattering foil design for poly-energetic electron beams. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 755-67	3.8	6	
884	Microionization chamber for reference dosimetry in IMRT verification: clinical implications on OAR dosimetric errors. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 959-70	3.8	16	
883	Micro ionization chamber dosimetry in IMRT verification: clinical implications of dosimetric errors in the PTV. <b>2005</b> , 75, 342-8		28	
882	Absolute dose calculations for Monte Carlo simulations of radiotherapy beams. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 3375-92	3.8	88	
881	Sensitivity of large-field electron beams to variations in a Monte Carlo accelerator model. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 769-78	3.8	18	
880	Characterization of a new MOSFET detector configuration for in vivo skin dosimetry. <i>Medical Physics</i> , <b>2005</b> , 32, 1571-8	4.4	39	
879	Monte Carlo calculations of the absorbed dose and energy dependence of plastic scintillators. <i>Medical Physics</i> , <b>2005</b> , 32, 1265-9	4.4	28	
878	Accuracy of the photon and electron physics in GEANT4 for radiotherapy applications. <i>Medical Physics</i> , <b>2005</b> , 32, 1696-711	4.4	94	
877	Monte Carlo techniques for scattering foil design and dosimetry in total skin electron irradiations. <i>Medical Physics</i> , <b>2005</b> , 32, 1460-8	4.4	12	
876	ORANGE: a Monte Carlo dose engine for radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 625-41	3.8	20	
875	Characteristics of the photoneutron contamination present in a high-energy radiotherapy treatment room. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 531-9	3.8	19	
874	Energy modulated electron therapy using a few leaf electron collimator in combination with IMRT and 3D-CRT: Monte Carlo-based planning and dosimetric evaluation. <i>Medical Physics</i> , <b>2005</b> , 32, 2976-86	4.4	33	
873	Monte Carlo simulation of large electron fields. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 741-53	3.8	22	
872	Absorbed dose to water reference dosimetry using solid phantoms in the context of absorbed-dose protocols. <i>Medical Physics</i> , <b>2005</b> , 32, 2945-53	4.4	54	
871	Dosimetric verification of IMRT treatment planning using Monte Carlo simulations for prostate cancer. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, 869-78	3.8	40	
870	Estimation of tumour dose enhancement due to gold nanoparticles during typical radiation treatments: a preliminary Monte Carlo study. <i>Physics in Medicine and Biology</i> , <b>2005</b> , 50, N163-73	3.8	317	

869	Commissioning stereotactic radiosurgery beams using both experimental and theoretical methods.  Physics in Medicine and Biology, <b>2006</b> , 51, 2549-66	3.8	78
868	Comparison of dose calculation algorithms for treatment planning in external photon beam therapy for clinical situations. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 5785-807	3.8	242
867	The IMRT information process-mastering the degrees of freedom in external beam therapy. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, R381-402	3.8	21
866	Improving IMRT dose accuracy via deliverable Monte Carlo optimization for the treatment of head and neck cancer patients. <i>Medical Physics</i> , <b>2006</b> , 33, 4033-43	l·4	33
865	Generation and modelling of megavoltage photon beams for contrast-enhanced radiation therapy.  Physics in Medicine and Biology, <b>2006</b> , 51, 5487-504	3.8	45
864	Comparison of a finite-element multigroup discrete-ordinates code with Monte Carlo for radiotherapy calculations. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 2253-65	3.8	100
863	Efficient x-ray tube simulations. <i>Medical Physics</i> , <b>2006</b> , 33, 2683-90	l·4	70
862	The response of prototype plane-parallel ionization chambers in small megavoltage x-ray fields.  Medical Physics, 2006, 33, 3997-4004	l·4	5
861	Analytic IMRT dose calculations utilizing Monte Carlo to predict MLC fluence modulation. <i>Medical Physics</i> , <b>2006</b> , 33, 828-39	l·4	10
860	Calculation of lateral buildup ratio using Monte Carlo simulation for electron radiotherapy. <i>Medical Physics</i> , <b>2007</b> , 34, 175-82	l·4	17
859	Dosimetry for quantitative analysis of the effects of low-dose ionizing radiation in radiation therapy patients. <i>Radiation Research</i> , <b>2006</b> , 165, 240-7	3.1	14
858	Monte Carlo dosimetric evaluation of high energy vs low energy photon beams in low density tissues. <b>2006</b> , 79, 131-8		7
857	Gamma histograms for radiotherapy plan evaluation. <b>2006</b> , 79, 224-30		44
856	Application of the quality index methodology for dosimetric verification of build-up effect beyond air-tissue interface in treatment planning system algorithms. <b>2006</b> , 79, 208-10		0
855	Comparison of dose-volume histograms of IMRT treatment plans for ethmoid sinus cancer computed by advanced treatment planning systems including Monte Carlo. <b>2006</b> , 81, 250-6		17
854	Characterization of scattered radiation in kV CBCT images using Monte Carlo simulations. <i>Medical Physics</i> , <b>2006</b> , 33, 4320-9	ļ·4	129
853	Fifty years of Monte Carlo simulations for medical physics. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, R283	g <u>.</u> 801	272
852	Review of electron beam therapy physics. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, R455-89	;.8	123

## (2006-2006)

851	Determination of the initial beam parameters in Monte Carlo linac simulation. <i>Medical Physics</i> , <b>2006</b> , 33, 850-8	4.4	36
850	Monte Carlo simulation of the photon beam characteristics from medical linear accelerators. <b>2006</b> , 119, 510-3		10
849	Assessment of a new multileaf collimator concept using GEANT4 Monte Carlo simulations. <i>Medical Physics</i> , <b>2006</b> , 33, 1125-32	4.4	13
848	An inhomogeneity correction algorithm for irregular fields of high-energy photon beams based on Clarkson integration and the 3D beam subtraction method. <i>Journal of Applied Clinical Medical Physics</i> , <b>2006</b> , 7, 1-13	2.3	2
847	Radiation Therapy Treatment Planning, Monte Carlo Calculations in. 2006,		
846	History of tomotherapy. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, R427-53	3.8	214
845	Le rle des simulations numfiques Monte Carlo dans les domaines associs îla physique des rayonnements ionisants. <b>2006</b> , 41, S161-S175		
844	Monte Carlo study of electron dose distributions produced by the elekta precise linear accelerator. <b>2006</b> , 11, 287-292		4
843	Monte Carlo-based dosimetry of head-and-neck patients treated with SIB-IMRT. 2006, 64, 968-77		32
842	Principles and requirements of external beam dosimetry. <b>2006</b> , 41, S2-S21		9
842	Principles and requirements of external beam dosimetry. <b>2006</b> , 41, S2-S21  Monte Carlo simulations of dose deposition applied to clinical radiation therapy. <b>2006</b> , 41, S36-S44		9
ĺ		26	
841	Monte Carlo simulations of dose deposition applied to clinical radiation therapy. <b>2006</b> , 41, S36-S44	26 3.8	4
841	Monte Carlo simulations of dose deposition applied to clinical radiation therapy. <b>2006</b> , 41, S36-S44  Assessment of induction of secondary tumours due to various radiotherapy modalities. <b>2006</b> , 118, 219-  Ultra-thin TLDs for skin dose determination in high energy photon beams. <i>Physics in Medicine and</i>		13
841 840 839	Monte Carlo simulations of dose deposition applied to clinical radiation therapy. 2006, 41, S36-S44  Assessment of induction of secondary tumours due to various radiotherapy modalities. 2006, 118, 219-  Ultra-thin TLDs for skin dose determination in high energy photon beams. <i>Physics in Medicine and Biology</i> , 2006, 51, 3549-67  EPR dosimetry of radiotherapy photon beams in inhomogeneous media using alanine films. <i>Physics in Medicine and Biology</i> , 2006, 51, 6315-28  A virtual-accelerator-based verification of a Monte Carlo dose calculation algorithm for electron beam treatment planning in homogeneous phantoms. <i>Physics in Medicine and Biology</i> , 2006, 51, 1533-46	3.8 3.8	4 13 29
841 840 839 838	Monte Carlo simulations of dose deposition applied to clinical radiation therapy. <b>2006</b> , 41, S36-S44  Assessment of induction of secondary tumours due to various radiotherapy modalities. <b>2006</b> , 118, 219-  Ultra-thin TLDs for skin dose determination in high energy photon beams. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 3549-67  EPR dosimetry of radiotherapy photon beams in inhomogeneous media using alanine films. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 6315-28	3.8 3.8	4 13 29 8
8 <sub>4</sub> 1 8 <sub>4</sub> 0 8 <sub>3</sub> 9 8 <sub>3</sub> 8 8 <sub>3</sub> 7	Monte Carlo simulations of dose deposition applied to clinical radiation therapy. 2006, 41, S36-S44  Assessment of induction of secondary tumours due to various radiotherapy modalities. 2006, 118, 219-  Ultra-thin TLDs for skin dose determination in high energy photon beams. <i>Physics in Medicine and Biology</i> , 2006, 51, 3549-67  EPR dosimetry of radiotherapy photon beams in inhomogeneous media using alanine films. <i>Physics in Medicine and Biology</i> , 2006, 51, 6315-28  A virtual-accelerator-based verification of a Monte Carlo dose calculation algorithm for electron beam treatment planning in homogeneous phantoms. <i>Physics in Medicine and Biology</i> , 2006, 51, 1533-4.  Coordinate transformations for BEAM/EGSnrc Monte Carlo dose calculations of non-coplanar fields received from a DICOM-compliant treatment planning system. <i>Physics in Medicine and Biology</i> , 2006	3.8 3.8 43.8	4 13 29 8 4

833	Monte Carlo correction factors for a Farmer 0.6 cm3 ion chamber dose measurement in the build-up region of the 6 MV clinical beam. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 1523-32	3.8	20
832	Clinical comparison of head and neck and prostate IMRT plans using absorbed dose to medium and absorbed dose to water. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 4967-80	3.8	54
831	Dynamic IMRT treatments of sinus region tumors: comparison of Monte Carlo calculations with treatment planning system calculations and ion chamber measurements. <b>2006</b> , 5, 489-95		7
830	Dose build-up behind air cavities for Co-60, 4, 6 and 8 MV. Measurements and Monte Carlo simulations. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 5937-50	3.8	17
829	Efficient photon beam dose calculations using DOSXYZnrc with BEAMnrc. <i>Medical Physics</i> , <b>2006</b> , 33, 304	16 <sub>1</sub> 5 <sub>1</sub> 6	101
828	Reconstruction of electron spectra from depth doses with adaptive regularization. <i>Medical Physics</i> , <b>2006</b> , 33, 354-9	4.4	8
827	Thick, segmented CdWO4-photodiode detector for cone beam megavoltage CT: a Monte Carlo study of system design parameters. <i>Medical Physics</i> , <b>2006</b> , 33, 4567-77	4.4	17
826	Direct aperture optimization for IMRT using Monte Carlo generated beamlets. <i>Medical Physics</i> , <b>2006</b> , 33, 3666-79	4.4	34
825	Retrospective monte carlo dose calculations with limited beam weight information. <i>Medical Physics</i> , <b>2007</b> , 34, 334-46	4.4	15
824	Development and commissioning of a multileaf collimator model in monte carlo dose calculations for intensity-modulated radiation therapy. <i>Medical Physics</i> , <b>2006</b> , 33, 770-81	4.4	31
823	Monte Carlo study of a Cyberknife stereotactic radiosurgery system. <i>Medical Physics</i> , <b>2006</b> , 33, 2955-63	4.4	64
822	First macro Monte Carlo based commercial dose calculation module for electron beam treatment planningnew issues for clinical consideration. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 2781-99	3.8	49
821	Using fluence separation to account for energy spectra dependence in computing dosimetric a-Si EPID images for IMRT fields. <i>Medical Physics</i> , <b>2006</b> , 33, 4468-80	4.4	27
820	Monte Carlo modelling of a-Si EPID response: the effect of spectral variations with field size and position. <i>Medical Physics</i> , <b>2006</b> , 33, 4527-40	4.4	48
819	Inclusion of compensator-induced scatter and beam filtration in pencil beam dose calculations. <i>Medical Physics</i> , <b>2006</b> , 33, 2896-904	4.4	3
818	A practical Monte Carlo MU verification tool for IMRT quality assurance. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 2503-15	3.8	15
817	Monte Carlo simulations of dose near a nonradioactive gold seed. <i>Medical Physics</i> , <b>2006</b> , 33, 4614-21	4.4	23
816	Investigations of different kilovoltage X-ray energy for three-dimensional converging stereotactic radiotherapy system: Monte Carlo simulations with CT data. <i>Medical Physics</i> , <b>2006</b> , 33, 4635-42	4.4	13

# (2007-2006)

815	Comprehensive evaluation of a commercial macro Monte Carlo electron dose calculation implementation using a standard verification data set. <i>Medical Physics</i> , <b>2006</b> , 33, 1540-51	4.4	46
814	On the effective point of measurement in megavoltage photon beams. <i>Medical Physics</i> , <b>2006</b> , 33, 1829-	3. <del>9</del> .4	61
813	Dose Calculation Algorithms. <b>2006</b> , 187-196		8
812	Radiation Dosimetry for Oncology. <b>2006</b> ,		
811	Dosimetric characteristics of electron beams produced by a mobile accelerator for IORT. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 6197-214	3.8	37
810	Improved accuracy in simulation of electron and x-ray beams in external beam radiotherapy. 2007,		1
809	Electron radiotherapy: a study on dosimetric uncertainty using small cutouts. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, N1-11	3.8	10
808	Monte Carlo in radiotherapy: experience in a distributed computational environment. <b>2007</b> , 74, 021001		1
807	Characterization of materials for prosthetic implants using the BEAMnrc Monte Carlo code. <b>2007</b> , 74, 021016		5
806	Characteristics of kilovoltage x-ray beams used for cone-beam computed tomography in radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 1595-615	3.8	106
805	Monte Carlo-based QA for IMRT of head and neck cancers. <b>2007</b> , 74, 021021		
804	Dosimetric evaluation of a Monte Carlo IMRT treatment planning system incorporating the MIMiC. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 6931-41	3.8	5
803	Electron dosimetry of angular fields. <b>2007</b> , 80, 202-8		
802	Monte Carlo simulation of a computed tomography x-ray tube. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 5945-55	3.8	43
801	Azimuthal particle redistribution for the reduction of latent phase-space variance in Monte Carlo simulations. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 4345-60	3.8	24
800	Monte Carlo study of correction factors for the use of plastic phantoms in clinical electron dosimetry. <i>Medical Physics</i> , <b>2007</b> , 34, 4368-77	4.4	6
799	Design and dosimetry of a few leaf electron collimator for energy modulated electron therapy. <i>Medical Physics</i> , <b>2007</b> , 34, 4782-91	4.4	26
798	Comment on "Testing of the analytical anisotropic algorithm for photon dose calculation" [Med. Phys. 33, 4130-4148 (2006)]. <i>Medical Physics</i> , <b>2007</b> , 34, 3414	4.4	8

797	Surface dosimetry for oblique tangential photon beams: a Monte Carlo simulation study. <i>Medical Physics</i> , <b>2008</b> , 35, 70-6	4.4	18
796	Impact of inhomogeneity corrections on dose coverage in the treatment of lung cancer using stereotactic body radiation therapy. <i>Medical Physics</i> , <b>2007</b> , 34, 2985-94	4.4	72
795	Quantification of the impact of MLC modeling and tissue heterogeneities on dynamic IMRT dose calculations. <i>Medical Physics</i> , <b>2007</b> , 34, 1244-52	4.4	14
794	On the discrepancies between Monte Carlo dose calculations and measurements for the 18 MV varian photon beam. <i>Medical Physics</i> , <b>2007</b> , 34, 1206-16	4.4	32
793	Monte carlo evaluation of the AAA treatment planning algorithm in a heterogeneous multilayer phantom and IMRT clinical treatments for an Elekta SL25 linear accelerator. <i>Medical Physics</i> , <b>2007</b> , 34, 1665-77	4.4	71
79²	Treatment planning for a small animal using Monte Carlo simulation. <i>Medical Physics</i> , <b>2007</b> , 34, 4810-7	4.4	30
791	Patient-specific dosimetry of conventional and intensity modulated radiation therapy using a novel full Monte Carlo phase space reconstruction method from electronic portal images. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 2277-99	3.8	26
790	Monte Carlo study of si diode response in electron beams. <i>Medical Physics</i> , <b>2007</b> , 34, 1734-42	4.4	14
789	Multibeam tomotherapy: a new treatment unit devised for multileaf collimation, intensity-modulated radiation therapy. <i>Medical Physics</i> , <b>2007</b> , 34, 3926-42	4.4	4
788	Estimation of the focal spot size and shape for a medical linear accelerator by Monte Carlo simulation. <i>Medical Physics</i> , <b>2007</b> , 34, 485-8	4.4	40
787	Efficiency improvements of x-ray simulations in EGSnrc user-codes using bremsstrahlung cross-section enhancement (BCSE). <i>Medical Physics</i> , <b>2007</b> , 34, 2143-54	4.4	39
786	. 2007,		1
785	Determination of parameters for a multiple-source model of megavoltage photon beams using optimization methods. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 1441-67	3.8	41
7 <sup>8</sup> 4	Evaluation of the analytical anisotropic algorithm in an extreme water-lung interface phantom using Monte Carlo dose calculations. <i>Journal of Applied Clinical Medical Physics</i> , <b>2006</b> , 8, 33-46	2.3	53
783	Monte Carlo determination of radiation-induced cancer risks for prostate patients undergoing intensity- modulated radiation therapy. <i>Journal of Applied Clinical Medical Physics</i> , <b>2007</b> , 8, 14-27	2.3	30
782	A Monte Carlo tool for combined photon and proton treatment planning verification. <b>2007</b> , 74, 021014		5
781	Monte Carlo simulation of the SIEMENS IGRT carbon fibre tabletop. <b>2007</b> , 74, 021017		2
7 <sup>8</sup> 0	Source Model Tuning for a 6 MV Photon Beam used in Radiotherapy. <b>2007</b> , 74, 021008		

779	Modelling of an Orthovoltage X-ray Therapy Unit with the EGSnrc Monte Carlo Package. <b>2007</b> , 74, 02100	)9	10
778	Monte Carlo dose calculations using MCNP4C and EGSnrc/BEAMnrc codes to study the energy dependence of the radiochromic film response to beta-emitting sources. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 3931-48	3.8	4
777	A virtual-accelerator-based verification of a Monte Carlo dose calculation algorithm for electron beam treatment planning in clinical situations. <b>2007</b> , 82, 208-17		3
776	Determination of zero-field size percent depth doses and tissue maximum ratios for stereotactic radiosurgery and IMRT dosimetry: comparison between experimental measurements and Monte Carlo simulation. <i>Medical Physics</i> , <b>2007</b> , 34, 3149-57	4-4	26
775	Correction of CT artifacts and its influence on Monte Carlo dose calculations. <i>Medical Physics</i> , <b>2007</b> , 34, 2119-32	4.4	88
774	A virtual photon source model of an Elekta linear accelerator with integrated mini MLC for Monte Carlo based IMRT dose calculation. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 4449-63	3.8	50
773	A Monte Carlo study of the variation of electron fluence in water from a 6 MV photon beam outside of the field. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 3563-78	3.8	26
772	Variations in energy spectra and water-to-material stopping-power ratios in three-dimensional conformal and intensity-modulated photon fields. <i>Medical Physics</i> , <b>2007</b> , 34, 1388-97	4.4	18
771	Dose calculation validation of Vmc++ for photon beams. <i>Medical Physics</i> , <b>2007</b> , 34, 1809-18	4.4	27
770	Report of the AAPM Task Group No. 105: Issues associated with clinical implementation of Monte Carlo-based photon and electron external beam treatment planning. <i>Medical Physics</i> , <b>2007</b> , 34, 4818-53	4.4	448
769	Evaluation of the effect of patient dose from cone beam computed tomography on prostate IMRT using Monte Carlo simulation. <i>Medical Physics</i> , <b>2008</b> , 35, 52-60	4.4	38
768	MMCTP: a radiotherapy research environment for Monte Carlo and patient-specific treatment planning. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, N297-308	3.8	29
767	Monte Carlo investigation of breast intraoperative radiation therapy with metal attenuator plates. <i>Medical Physics</i> , <b>2007</b> , 34, 4578-84	4.4	17
766	An experimental and computational investigation of the standard temperature-pressure correction factor for ion chambers in kilovoltage x rays. <i>Medical Physics</i> , <b>2007</b> , 34, 4690-9	4.4	30
765	Amorphous silicon EPID calibration for dosimetric applications: comparison of a method based on Monte Carlo prediction of response with existing techniques. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 3351-68	3.8	29
764	On the dosimetric behaviour of photon dose calculation algorithms in the presence of simple geometric heterogeneities: comparison with Monte Carlo calculations. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 1363-85	3.8	191
763	Effect of electron beam obliquity on lateral buildup ratio: a Monte Carlo dosimetry evaluation. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 3965-77	3.8	15
762	[Model for the response of radiographic films and implications for quality assurance]. <b>2007</b> , 17, 197-204		2

761	A new method for output factor determination in MLC shaped narrow beams. <i>Physica Medica</i> , <b>2007</b> , 23, 58-66	2.7	60
760	Consequences of removing the flattening filter from linear accelerators in generating high dose rate photon beams for clinical applications: A Monte Carlo study verified by measurement. <b>2007</b> , 261, 755-759		10
759	Uncertainty estimation in intensity-modulated radiotherapy absolute dosimetry verification. <b>2007</b> , 68, 301-10		24
758	Ant colony method to control variance reduction techniques in the Monte Carlo simulation of clinical electron linear accelerators. <b>2007</b> , 580, 510-513		7
757	Monte Carlo treatment planning for photon and electron beams. <i>Radiation Physics and Chemistry</i> , <b>2007</b> , 76, 643-686	2.5	107
756	Telematics-based online client-server/client collaborative environment for radiotherapy planning simulations. <b>2007</b> , 45, 1053-63		1
755	Interface software for DOSXYZnrc Monte Carlo dose evaluation on a commercial radiation treatment planning system. <b>2007</b> , 25, 309-14		2
754	Monte Carlo characterization of materials for prosthetic implants and dosimetric validation of Pinnacle3 TPS. <b>2008</b> , 266, 5001-5006		7
753	Depth distribution of multiple order X-ray scatter. <i>Radiation Physics and Chemistry</i> , <b>2008</b> , 77, 381-390	2.5	6
752	Characterisation of mega-voltage electron pencil beam dose distributions: viability of a measurement-based approach. <b>2008</b> , 31, 10-7		2
75 <sup>1</sup>	A Monte Carlo model of an industrial gauge for radiation protection purposes. 2008, 31, 42-8		
750	Vega library for processing DICOM data required in Monte Carlo verification of radiotherapy treatment plans. <b>2008</b> , 31, 290-9		14
749	The change of response of ionization chambers in the penumbra and transmission regions: impact for IMRT verification. <b>2008</b> , 46, 373-80		13
748	Determination of radiotherapy X-ray spectra using a screen-film system. <b>2008</b> , 46, 1029-37		6
747	Surface and build-up region dose analysis for clinical radiotherapy photon beams. <b>2008</b> , 66, 1438-42		22
746	Local correlation between monte-carlo dose and radiation-induced fibrosis in lung cancer patients. <b>2008</b> , 70, 921-30		16
745	. <b>2008</b> , 55, 671-678		6
744	Kilovoltage x-ray dosimetryan experimental comparison between different dosimetry protocols. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 4431-42	3.8	19

# (2008-2009)

743	In vivo verification of superficial dose for head and neck treatments using intensity-modulated techniques. <i>Medical Physics</i> , <b>2009</b> , 36, 59-70	4.4	39
742	Quantifying the effect of off-focal radiation on the output of kilovoltage x-ray systems. <i>Medical Physics</i> , <b>2008</b> , 35, 4149-60	4.4	16
741	Monte Carlo simulation of backscatter from lead for clinical electron beams using EGSnrc. <i>Medical Physics</i> , <b>2008</b> , 35, 1241-50	4.4	18
740	Clinical implementation of full Monte Carlo dose calculation in proton beam therapy. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 4825-53	3.8	191
739	A graphical user interface for calculation of 3D dose distribution using Monte Carlo simulations. <b>2008</b> , 102, 012003		4
738	Evaluation of a commercial biologically based IMRT treatment planning system. <i>Medical Physics</i> , <b>2008</b> , 35, 5851-60	4.4	67
737	Total scatter factors of small beams: a multidetector and Monte Carlo study. <i>Medical Physics</i> , <b>2008</b> , 35, 504-13	4.4	113
736	Accurate patient dosimetry of kilovoltage cone-beam CT in radiation therapy. <i>Medical Physics</i> , <b>2008</b> , 35, 1135-44	4.4	127
735	An overview of Monte Carlo treatment planning for radiotherapy. <b>2008</b> , 131, 123-9		32
734	Tissue segmentation in Monte Carlo treatment planning: a simulation study using dual-energy CT images. <b>2008</b> , 86, 93-8		48
733	Clinical implications of the implementation of advanced treatment planning algorithms for thoracic treatments. <b>2008</b> , 86, 48-54		27
732	Prototyping a large field size IORT applicator for a mobile linear accelerator. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 2089-102	3.8	15
731	Monte Carlo simulation of large electron fields. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 1497-510	3.8	26
730	PENLINAC: extending the capabilities of the Monte Carlo code PENELOPE for the simulation of therapeutic beams. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 4573-93	3.8	8
729	Validation of calculations for electrons modulated with conventional photon multileaf collimators. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 1183-208	3.8	23
728	Investigation of an efficient source design for Cobalt-60-based tomotherapy using EGSnrc Monte Carlo simulations. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 575-92	3.8	18
727	Accelerator beam data commissioning equipment and procedures: report of the TG-106 of the Therapy Physics Committee of the AAPM. <i>Medical Physics</i> , <b>2008</b> , 35, 4186-215	4.4	276
726	Monte Carlo calculation of helical tomotherapy dose delivery. <i>Medical Physics</i> , <b>2008</b> , 35, 3491-500	4.4	25

725	Dosimetric verification of a Monte Carlo electron beam model for an add-on eMLC. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 391-404	3.8	16
724	A comparison of dose warping methods for 4D Monte Carlo dose calculations in lung. <b>2008</b> , 102, 01201	3	5
723	Dosimetry in an IMRT phantom designed for a remote monitoring program. <i>Medical Physics</i> , <b>2008</b> , 35, 2519-27	4.4	8
722	Radiotherapy treatment verification using radiological thickness measured with an amorphous silicon electronic portal imaging device: Monte Carlo simulation and experiment. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 3903-19	3.8	17
721	Dosimetric evaluation of a dedicated stereotactic linear accelerator using measurement and Monte Carlo simulation. <i>Medical Physics</i> , <b>2008</b> , 35, 3943-54	4.4	10
720	Dosimetric and radiobiological evaluation of dose distribution perturbation due to head heterogeneities for Linac and Gamma Knife stereotactic radiotherapy. <b>2008</b> , 47, 917-27		10
719	Thimble ionization chambers in medium-energy x-ray beams and the role of constructive details of the central electrode: Monte Carlo simulations and measurements. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 4893-906	3.8	20
718	Monte-Carlo-based perturbation and beam quality correction factors for thimble ionization chambers in high-energy photon beams. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 2823-36	3.8	84
717	A Monte-Carlo derived dual-source model for helical tomotherapy treatment planning. <b>2008</b> , 7, 141-7		
716	Chamber-quality factors in 60Co for three plane-parallel chambers for the dosimetry of electrons, protons and heavier charged particles: PENELOPE Monte Carlo simulations. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 5917-26	3.8	18
715	Monte Carlo calculations of correction factors for plane-parallel ionization chambers in clinical electron dosimetry. <i>Medical Physics</i> , <b>2008</b> , 35, 4033-40	4.4	17
714	Implementation of Monte Carlo Dose calculation for CyberKnife treatment planning. 2008, 102, 012016	5	28
713	Evaluation of dose prediction errors and optimization convergence errors of deliverable-based head-and-neck IMRT plans computed with a superposition/convolution dose algorithm. <i>Medical Physics</i> , <b>2008</b> , 35, 3722-7	4.4	24
712	Influence of focal spot on characteristics of very small diameter radiosurgical beams. <i>Medical Physics</i> , <b>2008</b> , 35, 3317-30	4.4	35
711	Benchmarking EGSnrc in the kilovoltage energy range against experimental measurements of charged particle backscatter coefficients. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 1527-43	3.8	39
710	A theoretical approach for non-equilibrium radiation dosimetry. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 3493-9	3.8	11
709	A low Z linac and flat panel imager: comparison with the conventional imaging approach. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 6305-19	3.8	30
708	Response of the alanine/ESR dosimetry system to MV X-rays relative to (60)Co radiation. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 2753-70	3.8	299

#### (2009-2008)

707	Using a Monte Carlo model to predict dosimetric properties of small radiotherapy photon fields. <i>Medical Physics</i> , <b>2008</b> , 35, 4671-84	4.4	124
706	Reference dosimetry condition and beam quality correction factor for CyberKnife beam. <i>Medical Physics</i> , <b>2008</b> , 35, 4591-8	4.4	28
705	Monte Carlo simulation of an x-ray volume imaging cone beam CT unit. <i>Medical Physics</i> , <b>2009</b> , 36, 127-3	64.4	37
704	Effects of tumor motion in GRID therapy. <i>Medical Physics</i> , <b>2008</b> , 35, 4435-42	4.4	5
703	Dual-energy CT-based material extraction for tissue segmentation in Monte Carlo dose calculations. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 2439-56	3.8	142
702	A flexible Monte Carlo tool for patient or phantom specific calculations: comparison with preliminary validation measurements. <b>2008</b> , 102, 012004		5
701	VMC++ versus BEAMnrc: a comparison of simulated linear accelerator heads for photon beams. <i>Medical Physics</i> , <b>2008</b> , 35, 1521-31	4.4	20
700	Low dose megavoltage cone beam computed tomography with an unflattened 4 MV beam from a carbon target. <i>Medical Physics</i> , <b>2008</b> , 35, 5777-86	4.4	68
699	Efficiency improvements for ion chamber calculations in high energy photon beams. <i>Medical Physics</i> , <b>2008</b> , 35, 1328-36	4.4	151
698	Relationship between %dd(10)x and stopping-power ratios for flattening filter free accelerators: a Monte Carlo study. <i>Medical Physics</i> , <b>2008</b> , 35, 2104-9	4.4	44
697	Measurement of multiple scattering of 13 and 20 MeV electrons by thin foils. <i>Medical Physics</i> , <b>2008</b> , 35, 4121-31	4.4	24
696	Comparison of conventional and Monte Carlo dose calculations for prostate treatments. <b>2008</b> , 102, 013	2010	1
695	A simple Monte Carlo based optimisation model to determine image contrast in an imaging system. <b>2008</b> , 102, 012019		
694	Surface dosimetry in a CT scanner using MOSFET detectors and Monte Carlo simulations. <b>2008</b> , 102, 01	2026	4
693	Electron beam therapy at extended source-to-surface distance: a Monte Carlo investigation. <i>Journal of Applied Clinical Medical Physics</i> , <b>2008</b> , 9, 57-67	2.3	6
692	eIMRT: a web platform for the verification and optimization of radiation treatment plans. <i>Journal of Applied Clinical Medical Physics</i> , <b>2009</b> , 10, 205-220	2.3	4
691	Characterization of cylindrical ionization chambers for patient specific IMRT QA. <i>Journal of Applied Clinical Medical Physics</i> , <b>2009</b> , 10, 241-251	2.3	12
690	Validation of the final aperture superposition technique to calculate electron output factors and depth dose curves. <i>Medical Physics</i> , <b>2009</b> , 36, 3397-405	4.4	1

689	Monte Carlo evaluations of the absorbed dose and quality dependence of AL2O3 in radiotherapy photon beams. <i>Medical Physics</i> , <b>2009</b> , 36, 4421-4	4.4	11
688	Treatment head disassembly to improve the accuracy of large electron field simulation. <i>Medical Physics</i> , <b>2009</b> , 36, 4577-91	4.4	20
687	Study of the effective point of measurement for ion chambers in electron beams by Monte Carlo simulation. <i>Medical Physics</i> , <b>2009</b> , 36, 2034-42	4.4	21
686	Fast, accurate photon beam accelerator modeling using BEAMnrc: a systematic investigation of efficiency enhancing methods and cross-section data. <i>Medical Physics</i> , <b>2009</b> , 36, 5451-66	4.4	17
685	Monte Carlo simulation and patient dosimetry for a kilovoltage cone-beam CT unit. <i>Medical Physics</i> , <b>2009</b> , 36, 4156-67	4.4	56
684	Measurement-based Monte Carlo dose calculation system for IMRT pretreatment and on-line transit dose verifications. <i>Medical Physics</i> , <b>2009</b> , 36, 1167-75	4.4	15
683	An analytical approach to estimating the first order x-ray scatter in heterogeneous medium. <i>Medical Physics</i> , <b>2009</b> , 36, 3145-56	4.4	19
682	A prediction study on radiation-induced second malignancies for IMRT treatment delivery. <b>2009</b> , 8, 141-	8	18
681	Clinical implementation of enhanced dynamic wedges into the Pinnacle treatment planning system: Monte Carlo validation and patient-specific QA. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 447-65	3.8	7
680	Internal calibration of gel dosimeters: A feasibility study. <b>2009</b> , 164, 012014		5
679	Primary standards of absorbed dose for electron beams. <b>2009</b> , 46, S59-S79		25
678	Pretreatment verification of IMSRT using electronic portal imaging and Monte Carlo calculations. <b>2009</b> , 8, 413-23		1
677	A numerical approach to dose optimization for moving targets using monte carlo simulations. <i>Radiation Research</i> , <b>2009</b> , 171, 245-53	3.1	
6 <del>7</del> 6	An analytical approach to estimating the first order scatter in heterogeneous medium. II. A practical application. <i>Medical Physics</i> , <b>2009</b> , 36, 3157-67	4.4	19
675	Simulating oblique incident irradiation using the BEAMnrc Monte Carlo code. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, N93-N100	3.8	5
674	Ionization chamber gradient effects in nonstandard beam configurations. <i>Medical Physics</i> , <b>2009</b> , 36, 465	4 <sub>‡.6</sub> 43	61
673	Delivery of modulated electron beams with conventional photon multi-leaf collimators. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 327-39	3.8	40
672	The influence of a novel transmission detector on 6 MV x-ray beam characteristics. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 3173-83	3.8	38

## (2009-2010)

671	Low-Z target optimization for spatial resolution improvement in megavoltage imaging. <i>Medical Physics</i> , <b>2010</b> , 37, 124-31	4.4	18
670	The determination of beam quality correction factors: Monte Carlo simulations and measurements. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 4723-41	3.8	20
669	Relative biological damage and electron fluence in and out of a 6 MV photon field. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 6623-33	3.8	29
668	Cone-beam CT dosimetry for the positional variation in isocenter: a Monte Carlo study. <i>Medical Physics</i> , <b>2009</b> , 36, 3512-20	4.4	10
667	Monte Carlo modeling of small photon fields: quantifying the impact of focal spot size on source occlusion and output factors, and exploring miniphantom design for small-field measurements. <i>Medical Physics</i> , <b>2009</b> , 36, 3132-44	4.4	67
666	Determining superficial dosimetry for the internal canthus from the Monte Carlo simulation of kV photon and MeV electron beams. <b>2009</b> , 32, 68-80		3
665	Effects of collimator backscatter in an Elekta linac by Monte Carlo simulation. 2009, 32, 129-35		9
664	Evaluation of a commercial VMC++ Monte Carlo based treatment planning system for electron beams using EGSnrc/BEAMnrc simulations and measurements. <i>Physica Medica</i> , <b>2009</b> , 25, 111-21	2.7	16
663	Monte Carlo simulations of electron beams collimated with a dual electron multileaf collimator: a feasibility study. <b>2009</b> , 2, 210-8		1
662	Skin dose study of chest wall treatment with tomotherapy. <b>2009</b> , 27, 355-62		11
661	Monte Carlo dose verification of prostate patients treated with simultaneous integrated boost intensity modulated radiation therapy. <b>2009</b> , 4, 18		6
660	Radiation dose from kilovoltage cone beam computed tomography in an image-guided radiotherapy procedure. <b>2009</b> , 73, 610-7		126
659	Converging stereotactic radiotherapy using kilovoltage X-rays: experimental irradiation of normal rabbit lung and dose-volume analysis with Monte Carlo simulation. <b>2009</b> , 75, 468-74		1
658	Non-convergence of Geant4 hadronic models for 10 and 30 MeV protons in 18O and 14N. <b>2009</b> , 67, 406	-14	1
657	A virtual source model of electron contamination of a therapeutic photon beam. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 7329-44	3.8	32
656	Monte Carlo based, patient-specific RapidArc QA using Linac log files. <i>Medical Physics</i> , <b>2010</b> , 37, 116-23	4.4	70
655	Fast direct Monte Carlo optimization using the inverse kernel approach. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 4051-67	3.8	11
654	Solid water as phantom material for dosimetry of electron backscatter using low-energy electron beams: a Monte Carlo evaluation. <i>Medical Physics</i> , <b>2009</b> , 36, 1587-94	4.4	3

653	Influence of source parameters on large-field electron beam profiles calculated using Monte Carlo methods. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 105-16	3.8	6
652	Depth dependence of electron backscatter: an energy spectral and dosimetry study using Monte Carlo simulation. <i>Medical Physics</i> , <b>2009</b> , 36, 594-601	4.4	4
651	Electron beam quality control using an amorphous silicon EPID. <i>Medical Physics</i> , <b>2009</b> , 36, 1859-66	4.4	12
650	An evaluation of ionization chambers for the relative dosimetry of kilovoltage x-ray beams. <i>Medical Physics</i> , <b>2009</b> , 36, 3971-81	4.4	63
649	Simulation of large x-ray fields using independently measured source and geometry details. <i>Medical Physics</i> , <b>2009</b> , 36, 5622-32	4.4	11
648	Determination of electron energy, spectral width, and beam divergence at the exit window for clinical megavoltage x-ray beams. <i>Medical Physics</i> , <b>2009</b> , 36, 698-707	4.4	24
647	Monte carlo simulation of an X-ray pixel beam microirradiation system. <i>Radiation Research</i> , <b>2009</b> , 171, 332-41	3.1	2
646	A comprehensive system for dosimetric commissioning and Monte Carlo validation for the small animal radiation research platform. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 5341-57	3.8	69
645	Dosimetric characterisation of bismuth shields in CT: measurements and Monte Carlo simulations. <b>2009</b> , 133, 105-10		18
644	A Monte Carlo-based procedure for independent monitor unit calculation in IMRT treatment plans. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 4299-310	3.8	19
643	Simulations of a Scintillator Compton Gamma Imager for Safety and Security. <b>2009</b> , 56, 1262-1268		20
642	The effect of different lung densities on the accuracy of various radiotherapy dose calculation methods: implications for tumour coverage. <b>2009</b> , 91, 405-14		123
641	Evaluation of the dose calculation accuracy in intensity-modulated radiation therapy for mesothelioma, focusing on low doses to the contralateral lung. <i>Journal of Applied Clinical Medical Physics</i> , <b>2009</b> , 10, 34-42	2.3	8
640	Effect of dental restorations and prostheses on radiotherapy dose distribution: a Monte Carlo study. <i>Journal of Applied Clinical Medical Physics</i> , <b>2009</b> , 10, 80-89	2.3	39
639	Variations of lung density and geometry on inhomogeneity correction algorithms: a Monte Carlo dosimetric evaluation. <i>Medical Physics</i> , <b>2009</b> , 36, 3619-30	4.4	30
638	Kilovoltage beam Monte Carlo dose calculations in submillimeter voxels for small animal radiotherapy. <i>Medical Physics</i> , <b>2009</b> , 36, 4991-9	4.4	32
637	Comprehensive fluence model for absolute portal dose image prediction. <i>Medical Physics</i> , <b>2009</b> , 36, 138	89±948	32
636	Monte Carlo calculations of correction factors for plastic phantoms in clinical photon and electron beam dosimetry. <i>Medical Physics</i> , <b>2009</b> , 36, 2992-3001	4.4	13

# (2010-2009)

635	Inference of the optimal pretarget electron beam parameters in a Monte Carlo virtual linac model through simulated annealing. <i>Medical Physics</i> , <b>2009</b> , 36, 2309-19	4.4	11
634	Report of AAPM Therapy Physics Committee Task Group 74: in-air output ratio, Sc, for megavoltage photon beams. <i>Medical Physics</i> , <b>2009</b> , 36, 5261-91	4.4	67
633	An enhanced sector integration model for output and dose distribution calculation of irregular concave shaped electron beams. <i>Medical Physics</i> , <b>2009</b> , 36, 2966-75	4.4	2
632	Dosimetric dependence of the dimensional characteristics on a lead shield in electron radiotherapy: a Monte Carlo study. <i>Journal of Applied Clinical Medical Physics</i> , <b>2009</b> , 10, 75-91	2.3	7
631	A Convenient Multiple Source Model for VARIAN 2300C 6 MV-X Beam Based on Monte Carlo Simulated Linac. <b>2009</b> , 168, 706-712		
630	Monte Carlo-based adaptive EPID dose kernel accounting for different field size responses of imagers. <i>Medical Physics</i> , <b>2009</b> , 36, 3582-95	4.4	17
629	High-performance computing for Monte Carlo radiotherapy calculations. 2009, 367, 2607-17		7
628	Estimation of computed tomography dose index in cone beam computed tomography: MOSFET measurements and Monte Carlo simulations. <b>2010</b> , 98, 683-91		11
627	Monte Carlo calculation of monitor unit for electron arc therapy. <i>Medical Physics</i> , <b>2010</b> , 37, 1571-8	4.4	1
626	Modeling a complex micro-multileaf collimator using the standard BEAMnrc distribution. <i>Medical Physics</i> , <b>2010</b> , 37, 1761-7	4.4	23
625	Comparison of RTPS and Monte Carlo dose distributions in heterogeneous phantoms for photon beams. <i>Japanese Journal of Radiological Technology</i> , <b>2010</b> , 66, 322-33		4
624	Monte Carlo simulation of the effect of miniphantom on in-air output ratio. <i>Medical Physics</i> , <b>2010</b> , 37, 5228-37	4.4	2
623	Measurement and modeling of the effect of support arm backscatter on dosimetry with a varian EPID. <i>Medical Physics</i> , <b>2010</b> , 37, 2269-78	4.4	47
622	Suggesting a new design for multileaf collimator leaves based on Monte Carlo simulation of two commercial systems. <i>Journal of Applied Clinical Medical Physics</i> , <b>2010</b> , 11, 3101	2.3	4
621	Characterization of a 60Co unit at a secondary standard dosimetry laboratory: Monte Carlo simulations compared to measurements and results from the literature. <i>Medical Physics</i> , <b>2010</b> , 37, 2777	7- <del>86</del> 1	10
620	Dosimetric consequences of misalignment and realignment in prostate 3DCRT using intramodality ultrasound image guidance. <i>Medical Physics</i> , <b>2010</b> , 37, 2787-95	4.4	14
619	Automated beam model optimization. <i>Medical Physics</i> , <b>2010</b> , 37, 2110-20	4.4	5
618	A diamond target for megavoltage cone-beam CT. <i>Medical Physics</i> , <b>2010</b> , 37, 1246-53	4.4	19

617	Dosimetric evaluation of the OneDoseTM MOSFET for measuring kilovoltage imaging dose from image-guided radiotherapy procedures. <i>Medical Physics</i> , <b>2010</b> , 37, 4880-5	4.4	12
616	Depth scaling of solid phantom for intensity modulated radiotherapy beams. <b>2010</b> , 51, 707-13		4
615	References. <b>2010</b> , 10, 93-106		
614	Depth dose dependence of the mouse bone using kilovoltage photon beams: A Monte Carlo study for small-animal irradiation. <i>Radiation Physics and Chemistry</i> , <b>2010</b> , 79, 567-574	2.5	6
613	Measurement and evaluation of inhomogeneity corrections and monitor unit verification for treatment planning. <i>Medical Dosimetry</i> , <b>2010</b> , 35, 19-27	1.3	7
612	Dosimetry of a small air cavity for clinical electron beams: A Monte Carlo study. <i>Medical Dosimetry</i> , <b>2010</b> , 35, 92-100	1.3	6
611	Perturbation correction factors for cylindrical ionization chambers in high-energy electron beams. <b>2010</b> , 3, 93-7		4
610	Optimization of dual electron multileaf collimator materials by use of EGSnrc. <b>2010</b> , 3, 165-70		
609	ICRP Publication 116. Conversion coefficients for radiological protection quantities for external radiation exposures. <b>2010</b> , 40, 1-257		232
608	Quantitative and analytical comparison of isodose distributions for shaped electron fields from ADAC Pinnacle treatment planning system and Monte Carlo simulations. <b>2010</b> , 68, 2174-80		
607	Ant colony method to control variance reduction techniques in the Monte Carlo simulation of clinical electron linear accelerators of use in cancer therapy. <b>2010</b> , 233, 1534-1541		6
606	Four-dimensional dosimetry validation and study in lung radiotherapy using deformable image registration and Monte Carlo techniques. <b>2010</b> , 5, 45		24
605	Verification of a commercial implementation of the Macro-Monte-Carlo electron dose calculation algorithm using the virtual accelerator approach. <b>2010</b> , 20, 51-60		9
604	Dosimetric verification and clinical evaluation of a new commercially available Monte Carlo-based dose algorithm for application in stereotactic body radiation therapy (SBRT) treatment planning. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 4445-64	3.8	62
603	Effect of transverse magnetic fields on a simulated in-line 6 MV linac. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 4861-9	3.8	21
602	Adapting a generic BEAMnrc model of the BrainLAB m3 micro-multileaf collimator to simulate a local collimation device. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, N451-63	3.8	19
601	Kilovoltage cone-beam CT: comparative dose and image quality evaluations in partial and full-angle scan protocols. <i>Medical Physics</i> , <b>2010</b> , 37, 3648-59	4.4	49
600	Monte Carlo dose calculation improvements for low energy electron beams using eMC. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 4577-88	3.8	16

# (2010-2010)

599	Toward automatic field selection and planning using Monte Carlo-based direct aperture optimization in modulated electron radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 4563-76	3.8	15	
598	On Monte Carlo modeling of megavoltage photon beams: a revisited study on the sensitivity of beam parameters. <i>Medical Physics</i> , <b>2011</b> , 38, 188-201	4.4	24	
597	Estimation of absorbed doses from paediatric cone-beam CT scans: MOSFET measurements and Monte Carlo simulations. <b>2010</b> , 138, 257-63		11	
596	An integrated 6 MV linear accelerator model from electron gun to dose in a water tank. <i>Medical Physics</i> , <b>2010</b> , 37, 2279-88	4.4	23	
595	Beam characteristics and radiation output of a kilovoltage cone-beam CT. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 5231-48	3.8	28	
594	Stereotactic fields shaped with a micro-multileaf collimator: systematic characterization of peripheral dose. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 873-81	3.8	16	
593	An investigation of the accuracy of Monte Carlo portal dosimetry for verification of IMRT with extended fields. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 4589-600	3.8	6	
592	Monte Carlo evaluation of RapidArc oropharynx treatment planning strategies for sparing of midline structures. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 4465-79	3.8	12	
591	Investigation of three radiation detectors for accurate measurement of absorbed dose in nonstandard fields. <i>Medical Physics</i> , <b>2010</b> , 37, 2404-13	4.4	24	
590	Contrast enhancement of EPID images via difference imaging: a feasibility study. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, N533-45	3.8	7	
589	A two-stage sequential linear programming approach to IMRT dose optimization. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 883-902	3.8	6	
588	Monte Carlo commissioning of clinical electron beams using large field measurements. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 4083-105	3.8	10	
587	Ant colony algorithm implementation in electron and photon Monte Carlo transport: application to the commissioning of radiosurgery photon beams. <i>Medical Physics</i> , <b>2010</b> , 37, 3782-90	4.4	4	
586	A Monte Carlo study of a flattening filter-free linear accelerator verified with measurements. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 7333-44	3.8	54	
585	Comparison of monte carlo collimator transport methods for photon treatment planning in radiotherapy. <i>Medical Physics</i> , <b>2010</b> , 37, 492-504	4.4	10	
584	Two new DOSXYZnrc sources for 4D Monte Carlo simulations of continuously variable beam configurations, with applications to RapidArc, VMAT, TomoTherapy and CyberKnife. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 4431-43	3.8	56	
583	Small photon beam measurements using radiochromic film and Monte Carlo simulations in a water phantom. <b>2010</b> , 96, 250-3		37	
582	Dosimetric evolution of the breast electron boost target using 3D ultrasound imaging. <b>2010</b> , 96, 185-9	1	13	

581	Reducing radiation exposure to patients from kV-CBCT imaging. <b>2010</b> , 97, 585-92		65
580	Effect of longitudinal magnetic fields on a simulated in-line 6 MV linac. <i>Medical Physics</i> , <b>2010</b> , 37, 4916	-23.4	23
579	Artificial Neural Network Model for Spectral Construction of a Linear Accelerator Megavoltage Photon Beam. <b>2010</b> ,		2
578	Monte Carlo simulation of small electron fields collimated by the integrated photon MLC. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 829-43	3.8	15
577	A direction-selective flattening filter for clinical photon beams. Monte Carlo evaluation of a new concept. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 4355-76	3.8	6
576	Study of intensity-modulated photon-electron radiation therapy using digital phantoms. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 6693-708	3.8	10
575	GATE V6: a major enhancement of the GATE simulation platform enabling modelling of CT and radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 881-901	3.8	488
574	Calculation of electron and isotopes dose point kernels with FLUKA Monte Carlo code for dosimetry in nuclear medicine therapy. <i>Medical Physics</i> , <b>2011</b> , 38, 3944-54	4.4	48
573	A PENELOPE-based system for the automated Monte Carlo simulation of clinacs and voxelized geometries-application to far-from-axis fields. <i>Medical Physics</i> , <b>2011</b> , 38, 5887-95	4.4	169
57 <sup>2</sup>	Aperture superposition dose model versus pencil beam superposition dose model for a finite size Cobalt-60 source for tomotherapy deliveries. <i>Medical Physics</i> , <b>2012</b> , 39, 206-13	4.4	3
571	Monte Carlo linear accelerator simulation of megavoltage photon beams: independent determination of initial beam parameters. <i>Medical Physics</i> , <b>2012</b> , 39, 40-7	4.4	33
570	Semiempirical analysis of materials' elemental composition to formulate tissue-equivalent materials: a preliminary study. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 2963-77	3.8	12
569	Accounting for the fringe magnetic field from the bending magnet in a Monte Carlo accelerator treatment head simulation. <i>Medical Physics</i> , <b>2011</b> , 38, 3260-9	4.4	6
568	The importance of tissue segmentation for dose calculations for kilovoltage radiation therapy. <i>Medical Physics</i> , <b>2011</b> , 38, 3039-49	4.4	37
567	Dosimetric validation of Acuros XB with Monte Carlo methods for photon dose calculations. <i>Medical Physics</i> , <b>2011</b> , 38, 2208-21	4.4	186
566	Dosimetric comparison of Acuros XB deterministic radiation transport method with Monte Carlo and model-based convolution methods in heterogeneous media. <i>Medical Physics</i> , <b>2011</b> , 38, 2651-64	4.4	141
565	Validation of an electron Monte Carlo dose calculation algorithm in the presence of heterogeneities using EGSnrc and radiochromic film measurements. <i>Journal of Applied Clinical Medical Physics</i> , <b>2011</b> , 12, 3392	2.3	15
564	Dosimetry of oblique tangential photon beams calculated by superposition/convolution algorithms: a Monte Carlo evaluation. <i>Journal of Applied Clinical Medical Physics</i> , <b>2010</b> , 12, 3424	2.3	21

563	Monte carlo electron source model validation for an Elekta Precise linac. Medical Physics, 2011, 38, 236	6-47.34	3
562	Imaging of moving fiducial markers during radiotherapy using a fast, efficient active pixel sensor based EPID. <i>Medical Physics</i> , <b>2011</b> , 38, 6152-9	4.4	3
561	Dose perturbation in the radiotherapy of breast cancer patients implanted with the Magna-Site: a Monte Carlo study. <i>Journal of Applied Clinical Medical Physics</i> , <b>2011</b> , 12, 3295	2.3	23
560	Predicting image blur in proton radiography: Comparisons between measurements and Monte Carlo simulations. <b>2011</b> , 652, 901-904		2
559	Simulation of the Mg(Ar) ionization chamber currents by different Monte Carlo codes in benchmark gamma fields. <b>2011</b> , 652, 559-563		3
558	Accurately simulating the production of radiotherapy portal images using non-zero beam angles. <b>2011</b> , 46, 1967-1970		2
557	Investigation of stereotactic radiotherapy dose using dosimetry film and Monte Carlo simulations. <b>2011</b> , 46, 1985-1988		9
556	Low-energy photons in high-energy photon fieldsMonte Carlo generated spectra and a new descriptive parameter. <b>2011</b> , 21, 183-97		17
555	A radiotherapy technique to limit dose to neural progenitor cell niches without compromising tumor coverage. <b>2011</b> , 104, 579-87		21
554	Validation and automation of the DYNJAWS component module of the BEAMnrc Monte Carlo code. <b>2011</b> , 34, 83-90		8
553	Development of a dosimetry inter-comparison for IMRT as part of site credentialing for a TROG multi-centre clinical trial for prostate cancer. <b>2011</b> , 34, 195-202		10
552	Measurement of focal spot size in a 5.5MeV linac. <b>2011</b> , 269, 1157-1165		14
551	Monte Carlo simulation of spectrum changes in a photon beam due to a brass compensator. <b>2011</b> , 269, 1444-1449		
550	Possibility of using cylindrical ionization chambers for percent depth-dose measurements in clinical electron beams. <i>Medical Physics</i> , <b>2011</b> , 38, 4647-54	4.4	
549	Monte Carlo-based simulation of dynamic jaws tomotherapy. <i>Medical Physics</i> , <b>2011</b> , 38, 5230-8	4.4	9
548	A new approach to account for the medium-dependent effect in model-based dose calculations for kilovoltage x-rays. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 3919-34	3.8	9
547	Characterizing a pulse-resolved dosimetry system for complex radiotherapy beams using organic scintillators. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 3033-45	3.8	32
546	Comparative study of a low-Z cone-beam computed tomography system. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 4453-64	3.8	6

545	Optimal material discrimination using spectral x-ray imaging. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 5969-83	3.8	14
544	CTC-ask: a new algorithm for conversion of CT numbers to tissue parameters for Monte Carlo dose calculations applying DICOM RS knowledge. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, N263-74	3.8	7
543	On the relationships between electron spot size, focal spot size, and virtual source position in Monte Carlo simulations. <i>Medical Physics</i> , <b>2011</b> , 38, 1579-86	4.4	18
542	Improved normal tissue sparing in head and neck radiotherapy using biological cost function based-IMRT. <b>2011</b> , 10, 575-83		6
541	Monte Carlo study on mucosal dose in oral and naval cavity using photon beams with small field. <b>2011</b> , 10, 261-271		4
540	Scattered radiation from dental metallic crowns in head and neck radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 5525-34	3.8	9
539	A virtual source model for kilo-voltage cone beam CT: source characteristics and model validation. <i>Medical Physics</i> , <b>2011</b> , 38, 5254-63	4.4	12
538	Monte Carlo modeling and simulations of the High Definition (HD120) micro MLC and validation against measurements for a 6 MV beam. <i>Medical Physics</i> , <b>2012</b> , 39, 415-23	4.4	16
537	Characterization of an extendable multi-leaf collimator for clinical electron beams. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 7621-38	3.8	9
536	Implementation of EPID transit dosimetry based on a through-air dosimetry algorithm. <i>Medical Physics</i> , <b>2012</b> , 39, 87-98	4.4	23
535	Modeling the truebeam linac using a CAD to Geant4 geometry implementation: dose and IAEA-compliant phase space calculations. <i>Medical Physics</i> , <b>2011</b> , 38, 4018-24	4.4	72
534	Variability of a peripheral dose among various linac geometries for second cancer risk assessment. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 5131-51	3.8	38
533	A Monte Carlo investigation of contaminant electrons due to a novel in vivo transmission detector. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 1207-23	3.8	10
532	Bone and mucosal dosimetry in skin radiation therapy: a Monte Carlo study using kilovoltage photon and megavoltage electron beams. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 3885-99	3.8	9
531	Evaluation of beam hardening and photon scatter by brass compensator for IMRT. <b>2012</b> , 53, 999-1005		3
530	The effect of copper conversion plates on low-Z target image quality. <i>Medical Physics</i> , <b>2012</b> , 39, 5362-7	14.4	4
529	Unfolding linac photon spectra and incident electron energies from experimental transmission data, with direct independent validation. <i>Medical Physics</i> , <b>2012</b> , 39, 6585-96	4.4	7
528	A combined dose calculation and verification method for a small animal precision irradiator based on onboard imaging. <i>Medical Physics</i> , <b>2012</b> , 39, 4155-66	4.4	37

# (2012-2012)

527	TOPAS: an innovative proton Monte Carlo platform for research and clinical applications. <i>Medical Physics</i> , <b>2012</b> , 39, 6818-37	4.4	435	
526	An implementation to read and write IAEA phase-space files in GEANT4-based simulations. <b>2012</b> , 88, 200-8		17	
525	Monte Carlo study of in-field and out-of-field dose distributions from a linear accelerator operating with and without a flattening-filter. <i>Medical Physics</i> , <b>2012</b> , 39, 5194-203	4.4	26	
524	Internal scatter, the unavoidable major component of the peripheral dose in photon-beam radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 1733-43	3.8	45	
523	Beam coordinate transformations from DICOM to DOSXYZnrc. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, N513-23	3.8	6	
522	Monte Carlo modelling of diode detectors for small field MV photon dosimetry: detector model simplification and the sensitivity of correction factors to source parameterization. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 5141-53	3.8	52	
521	Evaluation of metal artifacts in MVCT systems using a model based correction method. <i>Medical Physics</i> , <b>2012</b> , 39, 6297-308	4.4	6	
520	Kilovoltage energy imaging with a radiotherapy linac with a continuously variable energy range. <i>Medical Physics</i> , <b>2012</b> , 39, 1218-26	4.4	7	
519	Comparing dose in the build-up region between compensator- and MLC-based IMRT. <i>Journal of Applied Clinical Medical Physics</i> , <b>2012</b> , 13, 3748	2.3	6	
518	Treatment Planning for Stereotactic Body Radiation Therapy. <b>2012</b> , 91-114			
517	Beam generation and planar imaging at energies below 2.40 MeV with carbon and aluminum linear accelerator targets. <i>Medical Physics</i> , <b>2012</b> , 39, 4568-78	4.4	15	
516	Direct aperture optimization for FLEC-based MERT and its application in mixed beam radiotherapy. <i>Medical Physics</i> , <b>2012</b> , 39, 4820-31	4.4	16	
515	Investigation of the spatial resolution of an online dose verification device. <i>Medical Physics</i> , <b>2012</b> , 39, 697-705	4.4	8	
514	Photon energy-modulated radiotherapy: Monte Carlo simulation and treatment planning study. <i>Medical Physics</i> , <b>2012</b> , 39, 1265-77	4.4	18	
513	Detailed high-accuracy megavoltage transmission measurements: a sensitive experimental benchmark of EGSnrc. <i>Medical Physics</i> , <b>2012</b> , 39, 5990-6003	4.4	5	
512	Monte Carlo modeling of a Novalis Tx Varian 6 MV with HD-120 multileaf collimator. <i>Journal of Applied Clinical Medical Physics</i> , <b>2012</b> , 13, 3960	2.3	12	
511	Surface dose reduction from bone interface in kilovoltage X-ray radiation therapy: a Monte Carlo study of photon spectra. <i>Journal of Applied Clinical Medical Physics</i> , <b>2012</b> , 13, 3911	2.3	13	
510	Some Popular Monte Carlo Codes for Particle Transport. <b>2012</b> , 347-371			

509	Kilovoltage imaging doses in the radiotherapy of pediatric cancer patients. 2012, 82, 1680-8		28
508	Testicular doses in image-guided radiotherapy of prostate cancer. <b>2012</b> , 82, e39-47		16
507	Patient-specific three-dimensional concomitant dose from cone beam computed tomography exposure in image-guided radiotherapy. <b>2012</b> , 83, 419-26		49
506	Personalized assessment of kV cone beam computed tomography doses in image-guided radiotherapy of pediatric cancer patients. <b>2012</b> , 83, 1649-54		21
505	Superficial dose distribution in breast for tangential radiation treatment, Monte Carlo evaluation of Eclipse algorithms in case of phantom and patient geometries. <b>2012</b> , 102, 102-7		21
504	An experimental feasibility study on the use of scattering foil free beams for modulated electron radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 3259-72	3.8	14
503	A combined approach of variance-reduction techniques for the efficient Monte Carlo simulation of linacs. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 3013-24	3.8	19
502	Non-reference condition correction factor kNR of typical radiation detectors applied for the dosimetry of high-energy photon fields in radiotherapy. <b>2012</b> , 22, 181-96		14
501	An evaluation of calculation parameters in the EGSnrc/BEAMnrc Monte Carlo codes and their effect on surface dose calculation. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, N267-78	3.8	12
500	Beam characteristics and stopping-power ratios of small radiosurgery photon beams. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 5509-21	3.8	14
499	A novel beam hardening correction method requiring no prior knowledge, incorporated in an iterative reconstruction algorithm. <b>2012</b> , 51, 68-73		34
498	Validation of a virtual source model for Monte Carlo dose calculations of a flattening filter free linac. <i>Medical Physics</i> , <b>2012</b> , 39, 3262-9	4.4	16
497	A comparison of physical and dosimetric properties of lung substitute materials. <i>Medical Physics</i> , <b>2012</b> , 39, 2013-20	4.4	20
496	Monte Carlo evaluation of water equivalency of some plastic materials for realistic electron IORT beams. <b>2012</b> , 398, 012040		1
495	Noise suppression in reconstruction of low-Z target megavoltage cone-beam CT images. <i>Medical Physics</i> , <b>2012</b> , 39, 5111-7	4.4	1
494	Semiempirical simulation of x-ray detectors for imaging applications. <i>Medical Physics</i> , <b>2012</b> , 39, 7677-85	4.4	7
493	Characterizing the influence of detector density on dosimeter response in non-equilibrium small photon fields. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 4461-76	3.8	131
492	Monte Carlo verification of gel dosimetry measurements for stereotactic radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 3359-69	3.8	17

# (2013-2012)

491	Experimental validation of deterministic Acuros XB algorithm for IMRT and VMAT dose calculations with the Radiological Physics Center's head and neck phantom. <i>Medical Physics</i> , <b>2012</b> , 39, 2193-202	4.4	55
490	Performance of independent dose calculation in helical tomotherapy: implementation of the MCSIM code. <b>2012</b> , 35, 423-38		1
489	Calculation of correction factors for ionization chamber measurements with small fields in low-density media. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 4589-98	3.8	2
488	Comparison between Acuros XB and Brainlab Monte Carlo algorithms for photon dose calculation. <b>2012</b> , 188, 599-605		9
487	Monte Carlo calculations of the replacement correction factor, P(repl), for cylindrical chamber cavities in clinical photon and electron beams. <b>2012</b> , 5, 199-206		
486	Effect of the bone heterogeneity on the dose prescription in orthovoltage radiotherapy: A Monte Carlo study. <b>2011</b> , 17, 38-43		6
485	Dependences of mucosal dose on photon beams in head-and-neck intensity-modulated radiation therapy: a Monte Carlo study. <i>Medical Dosimetry</i> , <b>2012</b> , 37, 195-200	1.3	4
484	Application of variance reduction techniques in Monte Carlo simulation of clinical electron linear accelerator. <b>2012</b> , 661, 93-97		4
483	Secondary radiation in transmission-type X-ray tubes: Simulation, practical issues and solution in the context of X-ray microtomography. <b>2012</b> , 661, 7-12		13
482	Development of parallel monte carlo electron and photon transport (PMCEPT) code III: Applications to medical radiation physics. <b>2012</b> , 60, 1433-1440		2
481	Dose verification of IMRT by use of a COMPASS transmission detector. <b>2012</b> , 5, 63-70		13
480	Evaluation of normalized metal artifact reduction (NMAR) in kVCT using MVCT prior images for radiotherapy treatment planning. <i>Medical Physics</i> , <b>2013</b> , 40, 081701	4.4	19
479	Application of a Pencil Ionization Chamber (0.34 cm\$^{3}\$ Volume) for \$^{60}\$Co Beams: Experimental and Monte Carlo Results. <b>2013</b> , 60, 746-750		8
478	Evaluation of the EDGE detector in small-field dosimetry. <b>2013</b> , 63, 128-134		4
477	Feasibility of producing a short, high energy s-band linear accelerator using a klystron power source. <i>Medical Physics</i> , <b>2013</b> , 40, 041713	4.4	3
476	Radiation exposure to patients from image guidance procedures and techniques to reduce the imaging dose. <b>2013</b> , 108, 91-8		64
475	Dosimetric comparison between two MLC systems commonly used for stereotactic radiosurgery and radiotherapy: a Monte Carlo and experimental study. <i>Physica Medica</i> , <b>2013</b> , 29, 350-6	2.7	10
474	A Monte Carlo approach to validation of FFF VMAT treatment plans for the TrueBeam linac. <i>Medical Physics</i> , <b>2013</b> , 40, 021707	4.4	35

473	Using cavity theory to describe the dependence on detector density of dosimeter response in non-equilibrium small fields. <i>Physics in Medicine and Biology</i> , <b>2013</b> , 58, 2901-23	3.8	52
472	Evaluation of organ-specific peripheral doses after 2-dimensional, 3-dimensional and hybrid intensity modulated radiation therapy for breast cancer based on Monte Carlo and convolution/superposition algorithms: implications for secondary cancer risk assessment. <b>2013</b> ,		48
471	Generalized eMC implementation for Monte Carlo dose calculation of electron beams from different machine types. <i>Physics in Medicine and Biology</i> , <b>2013</b> , 58, 2841-59	3.8	18
470	Monte Carlo simulation and measurement of radiation leakage from applicators used in external electron radiotherapy. <i>Physica Medica</i> , <b>2013</b> , 29, 388-96	2.7	10
469	Out-of-field beam characteristics of a 6 MV photon beam: results of a Monte Carlo study. <b>2013</b> , 72, 182	-94	4
468	Improvement of the penumbra for small radiosurgical fields using flattening filter free low megavoltage beams. <b>2013</b> , 23, 291-9		16
467	Analysis of latent variance reduction methods in phase space Monte Carlo calculations for 6, 10 and 18 MV photons by using MCNP code. <b>2013</b> , 701, 93-98		5
466	Validation of XiO Electron Monte Carlo-based calculations by measurements in a homogeneous phantom and by EGSnrc calculations in a heterogeneous phantom. <i>Physica Medica</i> , <b>2013</b> , 29, 631-8	2.7	4
465	Prediction of back-scatter radiations to a beam monitor chamber of medical linear accelerators by use of the digitized target-current-pulse analysis method. <b>2013</b> , 6, 142-50		1
464	Development of multi-planar dose verification by use of a flat panel EPID for intensity-modulated radiation therapy. <b>2013</b> , 6, 226-32		2
463	An empirical formula to obtain tissue-phantom ratios from percentage depth-dose curves for small fields. <i>Physics in Medicine and Biology</i> , <b>2013</b> , 58, 4781-9	3.8	6
462	Use of a liquid ionization chamber for stereotactic radiotherapy dosimetry. <i>Physics in Medicine and Biology</i> , <b>2013</b> , 58, 2445-59	3.8	23
461	Monte Carlo-based diode design for correction-less small field dosimetry. <i>Physics in Medicine and Biology</i> , <b>2013</b> , 58, 4501-12	3.8	43
460	Monte Carlo calculated correction factors for diodes and ion chambers in small photon fields. <i>Physics in Medicine and Biology</i> , <b>2013</b> , 58, 2431-44	3.8	74
459	A source model for modulated electron radiation therapy using dynamic jaw movements. <i>Medical Physics</i> , <b>2013</b> , 40, 051707	4.4	3
458	Efficient and reliable 3D dose quality assurance for IMRT by combining independent dose calculations with measurements. <i>Medical Physics</i> , <b>2013</b> , 40, 021710	4.4	20
457	A review on the use of grid-based Boltzmann equation solvers for dose calculation in external photon beam treatment planning. <b>2013</b> , 2013, 692874		13
456	An investigation of the depth dose in the build-up region, and surface dose for a 6-MV therapeutic photon beam: Monte Carlo simulation and measurements. <b>2013</b> , 54, 374-82		34

455	Simulation of the radiation fields of the Beta Secondary Standard BSS 2. <b>2013</b> , 8, P02019-P02019		14
454	Application of a dummy eye shield for electron treatment planning. 2013, 54, 174-81		4
453	Model-based prediction of portal dose images during patient treatment. <i>Medical Physics</i> , <b>2013</b> , 40, 0317	71434	38
452	Spatial frequency spectrum of the x-ray scatter distribution in CBCT projections. <i>Medical Physics</i> , <b>2013</b> , 40, 111901	4.4	20
45 <sup>1</sup>	Quantitative analysis of in-air output ratio. <b>2013</b> , 54, 553-60		3
450	Dosimetric impact of Acuros XB deterministic radiation transport algorithm for heterogeneous dose calculation in lung cancer. <i>Medical Physics</i> , <b>2013</b> , 40, 051710	4.4	55
449	Cobalt-60 tomotherapy: clinical treatment planning and phantom dose delivery studies. <i>Medical Physics</i> , <b>2013</b> , 40, 081710	4.4	6
448	On the use of an analytic source model for dose calculations in precision image-guided small animal radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2013</b> , 58, 3377-95	3.8	24
447	Implementation and commissioning of an integrated micro-CTRT system with computerized independent jaw collimation. <i>Medical Physics</i> , <b>2013</b> , 40, 081706	4.4	24
446	Monte Carlo calculations for reference dosimetry of electron beams with the PTW Roos and NE2571 ion chambers. <i>Medical Physics</i> , <b>2013</b> , 40, 121722	4.4	16
445	Geant4 based simulation of radiation dosimetry in CUDA. 2013,		2
444	Characterization of optical transport effects on EPID dosimetry using Geant4. <i>Medical Physics</i> , <b>2013</b> , 40, 041708	4.4	18
443	An optically stimulated luminescence dosimeter for measuring patient exposure from imaging guidance procedures. <i>Physics in Medicine and Biology</i> , <b>2013</b> , 58, 5885-97	3.8	24
442	Monte Carlo simulation of electron modes of a Siemens Primus linac (8, 12 and 14 MeV). <b>2013</b> , 12, 352-3	359	5
441	An investigation into the use of MMCTP to tune accelerator source parameters and testing its clinical application. <i>Journal of Applied Clinical Medical Physics</i> , <b>2013</b> , 14, 3692	2.3	11
440	Dosimetric effects of a high-density spinal implant. <b>2013</b> , 444, 012108		7
439	Equivalent square formula for determining the surface dose of rectangular field from 6 MV therapeutic photon beam. <i>Journal of Applied Clinical Medical Physics</i> , <b>2013</b> , 14, 196-204	2.3	
438	Is wax equivalent to tissue in electron conformal therapy planning? A Monte Carlo study of material approximation introduced dose difference. <i>Journal of Applied Clinical Medical Physics</i> , <b>2013</b> , 14, 3991	2.3	5

437	Feasibility of improving cone-beam CT number consistency using a scatter correction algorithm. Journal of Applied Clinical Medical Physics, <b>2013</b> , 14, 4346	2.3	16
436	[Dose distribution from kV-cone beam computed tomography in image-guided radiotherapy]. Japanese Journal of Radiological Technology, <b>2013</b> , 69, 753-60		3
435	[Presumption of the energy-spectrum of high-energy electron beam based on the beta-distribution model]. <i>Japanese Journal of Radiological Technology</i> , <b>2013</b> , 69, 1387-93		O
434	The influence of Monte Carlo source parameters on detector design and dose perturbation in small field dosimetry. <b>2014</b> , 489, 012006		2
433	On the correction, perturbation and modification of small field detectors in relative dosimetry. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 5937-52	3.8	80
432	Geant4 simulation of the Elekta XVI kV CBCT unit for accurate description of potential late toxicity effects of image-guided radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 7601-8	3.8	4
431	Photon beam dosimetry with EBT3 film in heterogeneous regions: Application to the evaluation of dose-calculation algorithms. <b>2014</b> , 65, 1829-1838		8
430	The accuracy of the out-of-field dose calculations using a model based algorithm in a commercial treatment planning system. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, N113-28	3.8	26
429	Using narrow beam profiles to quantify focal spot size, for accurate Monte Carlo simulations of SRS/SRT systems. <b>2014</b> , 489, 012014		2
428	Monte Carlo calculations of electron beam quality conversion factors for several ion chamber types. <i>Medical Physics</i> , <b>2014</b> , 41, 111701	4.4	21
427	Sensitivity of an Elekta iView GT a-Si EPID model to delivery errors for pre-treatment verification of IMRT fields. <b>2014</b> , 37, 763-70		5
426	Remote auditing of radiotherapy facilities using optically stimulated luminescence dosimeters. <i>Medical Physics</i> , <b>2014</b> , 41, 032102	4.4	28
425	Design and experimental testing of air slab caps which convert commercial electron diodes into dual purpose, correction-free diodes for small field dosimetry. <i>Medical Physics</i> , <b>2014</b> , 41, 101701	4.4	14
424	Delivery validation of an automated modulated electron radiotherapy plan. <i>Medical Physics</i> , <b>2014</b> , 41, 061715	4.4	9
423	Combining tissue-phantom ratios to provide a beam-quality specifier for flattening filter free photon beams. <i>Medical Physics</i> , <b>2014</b> , 41, 111716	4.4	17
422	Determination of the KQclinfclin,Qmsr fmsr correction factors for detectors used with an 800 MU/min CyberKnife([]) system equipped with fixed collimators and a study of detector response to small photon beams using a Monte Carlo method. <i>Medical Physics</i> , <b>2014</b> , 41, 071702	4.4	27
421	Small field in-air output factors: the role of miniphantom design and dosimeter type. <i>Medical Physics</i> , <b>2014</b> , 41, 021723	4.4	7
420	A Monte Carlo investigation of low-Z target image quality generated in a linear accelerator using Varian's VirtuaLinac. <i>Medical Physics</i> , <b>2014</b> , 41, 021719	4.4	27

419 Patient Dose Computation. **2014**, 235-247

418	An assessment of the efficiency of methods for measurement of the computed tomography dose index (CTDI) for cone beam (CBCT) dosimetry by Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 6307-26	3.8	26
417	Absorbed dose measurements for kV-cone beam computed tomography in image-guided radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 7297-313	3.8	12
416	Development and characterization of a three-dimensional radiochromic film stack dosimeter for megavoltage photon beam dosimetry. <i>Medical Physics</i> , <b>2014</b> , 41, 052104	4.4	6
415	Multi-institutional dosimetric and geometric commissioning of image-guided small animal irradiators. <i>Medical Physics</i> , <b>2014</b> , 41, 031714	4.4	37
414	MCTP system model based on linear programming optimization of apertures obtained from sequencing patient image data maps. <i>Medical Physics</i> , <b>2014</b> , 41, 081719	4.4	8
413	The variation of HVL with focal spot to chamber distance as a function of beam quality for the Pantak Therapax 150 X-ray unit and the implications on dose to water determination using the IPEMB code of practice. <b>2014</b> , 37, 559-66		4
412	Highly cited papers in Medical Physics. <i>Medical Physics</i> , <b>2014</b> , 41, 080401	4.4	5
411	Glass beads and Ge-doped optical fibres as thermoluminescence dosimeters for small field photon dosimetry. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 6875-89	3.8	16
410	Optimisation of the imaging and dosimetric characteristics of an electronic portal imaging device employing plastic scintillating fibres using Monte Carlo simulations. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 6827-40	3.8	5
409	A practical and theoretical definition of very small field size for radiotherapy output factor measurements. <i>Medical Physics</i> , <b>2014</b> , 41, 041707	4.4	60
408	Skin dose measurements using radiochromic films, TLDS and ionisation chamber and comparison with Monte Carlo simulation. <b>2014</b> , 162, 338-44		8
407	Commissioning of 6 MV medical linac for dynamic MLC-based IMRT on Monte Carlo code GEANT4. <b>2014</b> , 7, 246-53		5
406	Combined MV + kV inverse treatment planning for optimal kV dose incorporation in IGRT. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 1607-21	3.8	9
405	An algorithm for kilovoltage x-ray dose calculations with applications in kV-CBCT scans and 2D planar projected radiographs. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 2041-58	3.8	6
404	Calculation of the characteristics of clinical high-energy photon beams with EGS5-MPI. <b>2014</b> , 489, 01202	23	1
403	IMRT treatment Monitor Unit verification using absolute calibrated BEAMnrc and Geant4 Monte Carlo simulations. <b>2014</b> , 489, 012020		7
402	Monte Carlo photon beam modeling and commissioning for radiotherapy dose calculation algorithm. <i>Physica Medica</i> , <b>2014</b> , 30, 833-7	2.7	9

401	Monte Carlo based beam model using a photon MLC for modulated electron radiotherapy. <i>Medical Physics</i> , <b>2014</b> , 41, 021714	4.4	16
400	An alternative approach to account for patient organ doses from imaging guidance procedures. <b>2014</b> , 112, 112-8		16
399	A comprehensive procedure for characterizing arbitrary azimuthally symmetric photon beams. <i>Physica Medica</i> , <b>2014</b> , 30, 191-201	2.7	7
398	Three-dimensional gamma analysis of dose distributions in individual structures for IMRT dose verification. <b>2014</b> , 7, 303-9		9
397	A comparison of surface doses for very small field size x-ray beams: Monte Carlo calculations and radiochromic film measurements. <b>2014</b> , 37, 303-9		32
396	Correction-less dosimetry of nonstandard photon fields: a new criterion to determine the usability of radiation detectors. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 4973-5002	3.8	32
395	Variation of kQclin,Qmsr (fclin,fmsr) for the small-field dosimetric parameters percentage depth dose, tissue-maximum ratio, and off-axis ratio. <i>Medical Physics</i> , <b>2014</b> , 41, 101708	4.4	65
394	Fault-tolerant virtual cluster experiments on federated sites using BonFIRE. <b>2014</b> , 34, 17-25		5
393	Simulation of real-time EPID images during IMRT using Monte-Carlo. <i>Physica Medica</i> , <b>2014</b> , 30, 326-30	2.7	2
392	Validation of a commercial TPS based on the VMC(++) Monte Carlo code for electron beams: commissioning and dosimetric comparison with EGSnrc in homogeneous and heterogeneous phantoms. <i>Physica Medica</i> , <b>2014</b> , 30, 25-35	2.7	3
391	Monte Carlo comparison of superficial dose between flattening filter free and flattened beams. <i>Physica Medica</i> , <b>2014</b> , 30, 503-8	2.7	20
390	Performance of two commercial electron beam algorithms over regions close to the lung-mediastinum interface, against Monte Carlo simulation and point dosimetry in virtual and anthropomorphic phantoms. <i>Physica Medica</i> , <b>2014</b> , 30, 147-54	2.7	12
389	Measurement-based Monte Carlo simulation of high definition dose evaluation for nasopharyngeal cancer patients treated by using intensity modulated radiation therapy. <b>2014</b> , 71, 333-337		2
388	Application of the measurement-based Monte Carlo method in nasopharyngeal cancer patients for intensity modulated radiation therapy. <i>Radiation Physics and Chemistry</i> , <b>2014</b> , 95, 240-242	2.5	2
387	Dosimetry of small bone joint calculated by the analytical anisotropic algorithm: a Monte Carlo evaluation using the EGSnrc. <i>Journal of Applied Clinical Medical Physics</i> , <b>2013</b> , 15, 4588	2.3	3
386	The response of a radiophotoluminescent glass dosimeter in megavoltage photon and electron beams. <i>Medical Physics</i> , <b>2014</b> , 41, 122102	4.4	14
385	Performance of dose calculation algorithms from three generations in lung SBRT: comparison with full Monte Carlo-based dose distributions. <i>Journal of Applied Clinical Medical Physics</i> , <b>2014</b> , 15, 4662	2.3	86
384	Monte Carlo validation of optimal material discrimination using spectral x-ray imaging. <b>2014</b> , 9, T08003	-T0800	031

# (2015-2014)

383	[Investigation of the influence of metal markers on dose distributions and dose evaluation indices in intensity modulated radiation therapy plans for prostate cancer]. <i>Japanese Journal of Radiological Technology</i> , <b>2014</b> , 70, 1429-38		
382	Evaluating the relevance of dosimetric considerations to patient instructions regarding skin care during radiation therapy. <b>2014</b> , 13, 294-301		4
381	Monte Carlo modeling of HD120 multileaf collimator on Varian TrueBeam linear accelerator for verification of 6X and 6X FFF VMAT SABR treatment plans. <i>Journal of Applied Clinical Medical Physics</i> , <b>2014</b> , 15, 4686	2.3	30
380	Efficient scatter distribution estimation and correction in CBCT using concurrent Monte Carlo fitting. <i>Medical Physics</i> , <b>2015</b> , 42, 54-68	4.4	30
379	Monte Carlo investigation of collapsed versus rotated IMRT plan verification. <i>Journal of Applied Clinical Medical Physics</i> , <b>2014</b> , 15, 4681	2.3	3
378	References. <b>2014</b> , 14, 123-145		
377	The accuracy of Acuros XB algorithm for radiation beams traversing a metallic hip implant - comparison with measurements and Monte Carlo calculations. <i>Journal of Applied Clinical Medical Physics</i> , <b>2014</b> , 15, 4912	2.3	42
376	An improved Monte-Carlo model of the Varian EPID separating support arm and rear-housing backscatter. <b>2014</b> , 489, 012012		
375	Monte Carlo simulation of the transit dosimetric response of an a-Si electronic portal imaging device. <b>2014</b> , 489, 012005		3
374	WITHDRAWN: Techniques for improving the efficiency of ion chamber dose calculations using EGSnrc Monte Carlo code. <b>2014</b> ,		
373	A NEW MOBILE ELECTRON ACCELERATOR FOR INTRA OPERATIVE ELECTRON RADIATION THERAPY. <b>2014</b> , 27, 1460125		2
372	Breakdown of Bragg-Gray behaviour for low-density detectors under electronic disequilibrium conditions in small megavoltage photon fields. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 8187-212	3.8	22
371	An in vivo dose verification method for SBRT-VMAT delivery using the EPID. <i>Medical Physics</i> , <b>2015</b> , 42, 6955-63	4.4	20
370	A virtual source model for Monte Carlo simulation of helical tomotherapy. <i>Journal of Applied Clinical Medical Physics</i> , <b>2015</b> , 16, 4992	2.3	9
369	Validation of fluence-based 3D IMRT dose reconstruction on a heterogeneous anthropomorphic phantom using Monte Carlo simulation. <i>Journal of Applied Clinical Medical Physics</i> , <b>2015</b> , 16, 5199	2.3	10
368	Monte Carlo calculations of an Elekta Precise SL-25 photon beam model. <b>2015</b> , 1-12		О
367	Monte Carlo calculation based on hydrogen composition of the tissue for MV photon radiotherapy. Journal of Applied Clinical Medical Physics, <b>2015</b> , 16, 117-130	2.3	6
366	Evaluation of cumulative dose for cone-beam computed tomography (CBCT) scans within phantoms made from different compositions using Monte Carlo simulations. <i>Journal of Applied Clinical Medical Physics</i> , <b>2015</b> , 16, 346-364	2.3	1

365	Evaluation of backscatter dose from internal lead shielding in clinical electron beams using EGSnrc Monte Carlo simulations. <i>Journal of Applied Clinical Medical Physics</i> , <b>2015</b> , 16, 139-150	2.3	2
364	Discontinuous finite element space-angle treatment of the first order linear Boltzmann transport equation with magnetic fields: Application to MRI-guided radiotherapy. <i>Medical Physics</i> , <b>2016</b> , 43, 195	4.4	11
363	The influence of neutron contamination on dosimetry in external photon beam radiotherapy. <i>Medical Physics</i> , <b>2015</b> , 42, 6529-36	4.4	9
362	Independent calculation of monitor units for VMAT and SPORT. <i>Medical Physics</i> , <b>2015</b> , 42, 918-24	4.4	7
361	Monte Carlo validation of the TrueBeam 10XFFF phase-space files for applications in lung SABR. <i>Medical Physics</i> , <b>2015</b> , 42, 6863-74	4.4	7
360	A Monte Carlo simulation framework for electron beam dose calculations using Varian phase space files for TrueBeam Linacs. <i>Medical Physics</i> , <b>2015</b> , 42, 2389-403	4.4	18
359	Evaluation of a single-scan protocol for radiochromic film dosimetry. <i>Journal of Applied Clinical Medical Physics</i> , <b>2015</b> , 16, 5226	2.3	6
358	Jaw position uncertainty and adjacent fields in breast cancer radiotherapy. <i>Journal of Applied Clinical Medical Physics</i> , <b>2015</b> , 16, 240-251	2.3	3
357	Quantification of dose differences between two versions of Acuros XB algorithm compared to Monte Carlo simulationsthe effect on clinical patient treatment planning. <i>Journal of Applied Clinical Medical Physics</i> , <b>2015</b> , 16, 213-225	2.3	12
356	Feasibility of using Geant4 Monte Carlo simulation for IMRT dose calculations for the Novalis Tx with a HD-120 multi-leaf collimator. <b>2015</b> , 66, 1489-1494		
355	MULTI-PARAMETER INTERPOLATION OF BETA RADIATION DOSE RATES USING RADIAL BASIS FUNCTIONS. <b>2016</b> , 171, 463-469		
354	Monte Carlo-calculated patient organ doses from kV-cone beam CT in image-guided radiation therapy. <b>2015</b> , 1, 025203		2
353	Calculation of Dose Distribution for SBRT Patient Using Geant4 Simulation Code. 2015, 26, 36		3
352	Intermediate Megavoltage Photon Beams for Improved Lung Cancer Treatments. 2015, 10, e0145117		3
351	Comparison of film measurements and Monte Carlo simulations of dose delivered with very high-energy electron beams in a polystyrene phantom. <i>Medical Physics</i> , <b>2015</b> , 42, 1606-13	4.4	22
350	Treatment planning for radiotherapy with very high-energy electron beams and comparison of VHEE and VMAT plans. <i>Medical Physics</i> , <b>2015</b> , 42, 2615-25	4.4	37
349	Photonuclear reactions with zinc: A case for clinical linacs. <b>2015</b> , 130, 1		11
348	Phase space determination from measured dose data for intraoperative electron radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 375-401	3.8	6

## (2015-2015)

347	Properties of a commercial PTW-60019 synthetic diamond detector for the dosimetry of small radiotherapy beams. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 905-24	3.8	72
346	Monte Carlo modeling of the Siemens Optifocus multileaf collimator. <i>Physica Medica</i> , <b>2015</b> , 31, 301-6	2.7	2
345	On the measurement of dose in-air for small radiation fields: choice of mini-phantom material. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 2391-402	3.8	2
344	Validation of a quick three-dimensional dose verification system for pre-treatment IMRT QA. <b>2015</b> , 8, 73-80		4
343	A Monte Carlo investigation of cumulative dose measurements for cone beam computed tomography (CBCT) dosimetry. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 1519-42	3.8	19
342	Monte Carlo modelling the dosimetric effects of electrode material on diamond detectors. <b>2015</b> , 38, 101-8		1
341	Bremsstrahlung and photoneutron production in a steel shield for 15-22-MeV clinical electron beams. <b>2015</b> , 163, 148-59		2
340	Evaluation of an adaptive framework for resilient Monte Carlo executions. 2015,		2
339	Multileaf collimator tongue-and-groove effect on depth and off-axis doses: a comparison of treatment planning data with measurements and Monte Carlo calculations. <i>Medical Dosimetry</i> , <b>2015</b> , 40, 271-8	1.3	3
338	Clinical use of diodes and micro-chambers to obtain accurate small field output factor measurements. <b>2015</b> , 38, 357-67		11
337	Fast 3D dosimetric verifications based on an electronic portal imaging device using a GPU calculation engine. <b>2015</b> , 10, 85		14
336	Simulation of the dose rate per activity of beta-emitting radionuclides. <b>2015</b> , 167, 653-63		3
335	Experimental measurements and Monte Carlo modelling of the XSTRAHL 150 superficial X-ray therapy unit. <b>2015</b> , 14, 43-55		O
334	Investigation of practical approaches to evaluating cumulative dose for cone beam computed tomography (CBCT) from standard CT dosimetry measurements: a Monte Carlo study. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 5413-38	3.8	3
333	An investigation of kV CBCT image quality and dose reduction for volume-of-interest imaging using dynamic collimation. <i>Medical Physics</i> , <b>2015</b> , 42, 5258-69	4.4	14
332	Monte Carlo reference data sets for imaging research: Executive summary of the report of AAPM Research Committee Task Group 195. <i>Medical Physics</i> , <b>2015</b> , 42, 5679-91	4.4	58
331	A framework for implementation of organ effect models in TOPAS with benchmarks extended to proton therapy. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 5037-52	3.8	4
330	Electron dose distributions caused by the contact-type metallic eye shield: Studies using Monte Carlo and pencil beam algorithms. <i>Medical Dosimetry</i> , <b>2015</b> , 40, 240-3	1.3	1

329	Monte Carlo calculations support organ sparing in Deep-Inspiration Breath-Hold intensity-modulated radiotherapy for locally advanced lung cancer. <b>2015</b> , 117, 55-63	6
328	Medical linear accelerator mounted mini-beam collimator: design, fabrication and dosimetric characterization. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 6991-7005	2
327	Varian 2100C/D Clinac 18 MV photon phase space file characterization and modeling by using MCNP Code. <b>2015</b> , 130, 1	5
326	Characterization of an orthovoltage biological irradiator used for radiobiological research. <b>2015</b> , 56, 485-92	14
325	Dose to 'water-like' media or dose to tissue in MV photons radiotherapy treatment planning: still a matter of debate. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 309-37	53
324	The effect of energy spectrum change on DNA damage in and out of field in 10-MV clinical photon beams. <b>2015</b> , 53, 67-75	6
323	Some computer graphical user interfaces in radiation therapy. <b>2016</b> , 8, 255-67	8
322	Tikhonov regularization modified as improved method for determining electron energy spectra from percentage depth dose curves data of broad beams. <b>2016</b> ,	1
321	Energy Modulated Photon Radiotherapy: A Monte Carlo Feasibility Study. <b>2016</b> , 2016, 7319843	6
320	Monte Carlo simulations guided by imaging to predict the in vitro ranking of radiosensitizing nanoparticles. <b>2016</b> , 11, 6169-6179	10
319	A Review of Radiotherapy-Induced Late Effects Research after Advanced Technology Treatments. <b>2016</b> , 6, 13	43
318	Design and evaluation of electron beam energy degraders for breast boost irradiation. <b>2016</b> , 11, 112	4
317	Organ doses can be estimated from the computed tomography (CT) dose index for cone-beam CT on radiotherapy equipment. <b>2016</b> , 36, 215-29	12
316	Determination of output factor for 6 MV small photon beam: comparison between Monte Carlo simulation technique and microDiamond detector. <b>2016</b> , 694, 012019	3
315	Direct reconstruction of the source intensity distribution of a clinical linear accelerator using a maximum likelihood expectation maximization algorithm. <i>Physics in Medicine and Biology</i> , <b>2016</b> , 61, 1078 <sup>2</sup> 94	3
314	Implementation of a double Gaussian source model for the BEAMnrc Monte Carlo code and its influence on small fields dose distributions. <i>Journal of Applied Clinical Medical Physics</i> , <b>2016</b> , 17, 212-221 <sup>2.3</sup>	2
313	Validation of total skin electron irradiation (TSEI) technique dosimetry data by Monte Carlo simulation. <i>Journal of Applied Clinical Medical Physics</i> , <b>2016</b> , 17, 418-429	3
312	Automated dose verification in specialized radiotherapy (ADViSR): a tool for Monte Carlo based dose verification. <b>2016</b> , 2, 037003	2

311	Volume of interest CBCT and tube current modulation for image guidance using dynamic kV collimation. <i>Medical Physics</i> , <b>2016</b> , 43, 1808	4.4	5
310	Gafchromic EBT3 film dosimetry in electron beams - energy dependence and improved film read-out. <i>Journal of Applied Clinical Medical Physics</i> , <b>2016</b> , 17, 360-373	2.3	34
309	Dose perturbations at heterogeneous interfaces in radiotherapy IAn EGSnrc based Monte Carlo investigation. <b>2016</b> ,		
308	Dynamic intensity-weighted region of interest imaging for conebeam CT. <b>2016</b> , 24, 361-77		2
307	Study of unflattened photon beams shaped by multileaf collimator using BEAMnrc code. <b>2016</b> , 15, 392	-401	
306	Absolute cross sections for electronic excitation of condensed tetrahydrofuran (THF) by 11-16 eV electrons. <b>2016</b> , 145, 174703		7
305	Absolute vibrational cross sections for 1-19 eV electron scattering from condensed tetrahydrofuran (THF). <b>2016</b> , 144, 074701		15
304	A Monte Carlo calculation model of electronic portal imaging device for transit dosimetry through heterogeneous media. <i>Medical Physics</i> , <b>2016</b> , 43, 2242	4.4	3
303	Validation of MTF measurement for CBCT system using Monte Carlo simulations. 2016,		
302	Assessment of the quality of very high-energy electron radiotherapy planning. <b>2016</b> , 119, 154-8		20
302	Assessment of the quality of very high-energy electron radiotherapy planning. 2016, 119, 154-8  Comparison of 3-dimensional dose reconstruction system between fluence-based system and dose measurement-guided system. <i>Medical Dosimetry</i> , 2016, 41, 205-11	1.3	20
	Comparison of 3-dimensional dose reconstruction system between fluence-based system and dose	1.3	
301	Comparison of 3-dimensional dose reconstruction system between fluence-based system and dose measurement-guided system. <i>Medical Dosimetry</i> , <b>2016</b> , 41, 205-11  Evaluation of variance reduction techniques in BEAMnrc Monte Carlo simulation to improve the computing efficiencyPeer review under responsibility of The Egyptian Society of Radiation Sciences	1.3	4
301	Comparison of 3-dimensional dose reconstruction system between fluence-based system and dose measurement-guided system. <i>Medical Dosimetry</i> , <b>2016</b> , 41, 205-11  Evaluation of variance reduction techniques in BEAMnrc Monte Carlo simulation to improve the computing efficiencyPeer review under responsibility of The Egyptian Society of Radiation Sciences and Applications. View all notes. <b>2016</b> , 9, 424-430  Study of the dosimetric properties of an unflattened 6-MV photon beam by using the BEAMnrc	1.3	4
301 300 299	Comparison of 3-dimensional dose reconstruction system between fluence-based system and dose measurement-guided system. <i>Medical Dosimetry</i> , <b>2016</b> , 41, 205-11  Evaluation of variance reduction techniques in BEAMnrc Monte Carlo simulation to improve the computing efficiencyPeer review under responsibility of The Egyptian Society of Radiation Sciences and Applications. View all notes. <b>2016</b> , 9, 424-430  Study of the dosimetric properties of an unflattened 6-MV photon beam by using the BEAMnrc code. <b>2016</b> , 69, 657-665	1.3	12
301 300 299 298	Comparison of 3-dimensional dose reconstruction system between fluence-based system and dose measurement-guided system. <i>Medical Dosimetry</i> , <b>2016</b> , 41, 205-11  Evaluation of variance reduction techniques in BEAMnrc Monte Carlo simulation to improve the computing efficiencyPeer review under responsibility of The Egyptian Society of Radiation Sciences and Applications. View all notes. <b>2016</b> , 9, 424-430  Study of the dosimetric properties of an unflattened 6-MV photon beam by using the BEAMnrc code. <b>2016</b> , 69, 657-665  Relative biological damage in and out of field of 6, 10 and 18 MV clinical photon beams. <b>2016</b> , 131, 1	1.3	12
301 300 299 298 297	Comparison of 3-dimensional dose reconstruction system between fluence-based system and dose measurement-guided system. <i>Medical Dosimetry</i> , <b>2016</b> , 41, 205-11  Evaluation of variance reduction techniques in BEAMnrc Monte Carlo simulation to improve the computing efficiencyPeer review under responsibility of The Egyptian Society of Radiation Sciences and Applications. View all notes. <b>2016</b> , 9, 424-430  Study of the dosimetric properties of an unflattened 6-MV photon beam by using the BEAMnrc code. <b>2016</b> , 69, 657-665  Relative biological damage in and out of field of 6, 10 and 18 MV clinical photon beams. <b>2016</b> , 131, 1  Monte Carlo dose verification for lung SBRT with CMS/XiO superposition algorithm. <b>2016</b> , 2, 015020	1.3	12

293	Robustness Analysis of a Geant4-GATE Simulator for Nanoradiosensitizers Characterization. <b>2016</b> , 15, 209-17		6
292	On the Detectability of Acoustic Waves Induced Following Irradiation by a Radiotherapy Linear Accelerator. <b>2016</b> , 63, 683-690		15
291	Approaching Oxygen-Guided Intensity-Modulated Radiation Therapy. <b>2016</b> , 876, 185-193		10
290	A comparison of electronic portal dosimetry verification methods for use in stereotactic radiotherapy. <i>Physica Medica</i> , <b>2016</b> , 32, 188-96	2.7	4
289	Accuracy of dose calculation algorithms for virtual heterogeneous phantoms and intensity-modulated radiation therapy in the head and neck. <b>2016</b> , 9, 77-87		14
288	Patient-specific compensation for Co-60 TBI treatments based on Monte Carlo design: A feasibility study. <i>Physica Medica</i> , <b>2016</b> , 32, 67-75	2.7	2
287	Experimental verification of 4D Monte Carlo simulations of dose delivery to a moving anatomy. <i>Medical Physics</i> , <b>2017</b> , 44, 299-310	4.4	9
286	A measurement-based generalized source model for Monte Carlo dose simulations of CT scans. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 1759-1776	3.8	4
285	Perturbation effects of the carbon fiber-PEEK screws on radiotherapy dose distribution. <i>Journal of Applied Clinical Medical Physics</i> , <b>2017</b> , 18, 62-68	2.3	46
284	Monte Carlo evaluation of Acuros XB dose calculation Algorithm for intensity modulated radiation therapy of nasopharyngeal carcinoma. <i>Radiation Physics and Chemistry</i> , <b>2017</b> , 140, 419-422	2.5	4
283	Comparison of Flattening Filter (FF) and Flattening-Filter-Free (FFF) 6 MV photon beam characteristics for small field dosimetry using EGSnrc Monte Carlo code. <i>Radiation Physics and Chemistry</i> , <b>2017</b> , 135, 63-75	2.5	11
282	Small field dose measurements using plastic scintillation detector in heterogeneous media. <i>Medical Physics</i> , <b>2017</b> , 44, 3815-3820	4.4	6
281	Design of a modulated orthovoltage stereotactic radiosurgery system. <i>Medical Physics</i> , <b>2017</b> , 44, 3776-3	7487	2
280	Dosimetric effect of internal metallic ports in temporary tissue expanders on postmastectomy radiation therapy: a Monte Carlo study. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 4623-4636	3.8	4
279	Measurement of skin surface dose distributions in radiation therapy using poly(vinyl alcohol) cryogel dosimeters. <i>Journal of Applied Clinical Medical Physics</i> , <b>2017</b> , 18, 153-162	2.3	12
278	Flagged uniform particle splitting for variance reduction in proton and carbon ion track-structure simulations. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 5908-5925	3.8	7
277	Monte Carlo-based investigations on the impact of removing the flattening filter on beam quality specifiers for photon beam dosimetry. <i>Medical Physics</i> , <b>2017</b> , 44, 2569-2580	4.4	5
276	Whole-Body Computed Tomography-Based Body Mass and Body Fat Quantification: A Comparison to Hydrostatic Weighing and Air Displacement Plethysmography. <b>2017</b> , 41, 302-308		9

# (2017-2017)

275	Dosimetric impact assessment using a general algorithm in geant4 simulations for a complex-shaped multileaf collimator. <i>Physica Medica</i> , <b>2017</b> , 41, 39-45	2.7	3	
274	Current modulated volume-of-interest imaging for kilovoltage intrafaction monitoring of the prostate. <i>Medical Physics</i> , <b>2017</b> , 44, 1479-1493	4.4	1	
273	Experimental evaluation of x-ray acoustic computed tomography for radiotherapy dosimetry applications. <i>Medical Physics</i> , <b>2017</b> , 44, 608-617	4.4	27	
272	Quantitative characterization of the X-ray beam at the Australian Synchrotron Imaging and Medical Beamline (IMBL). <b>2017</b> , 24, 110-141		49	
271	GATE Monte Carlo simulation of dose distribution using MapReduce in a cloud computing environment. <b>2017</b> , 40, 777-783			
270	Small composite field correction factors for the CyberKnife radiosurgery system: clinical and PCSR plans. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 9240-9259	3.8	1	
269	Characteristics of 2.5 MV beam and imaging dose to patients. <b>2017</b> , 125, 541-547		4	
268	A Monte Carlo study of the effect of an ultrasound transducer on surface dose during intrafraction motion imaging for external beam radiation therapy. <i>Medical Physics</i> , <b>2017</b> , 44, 5020-5033	4.4	4	
267	Dosimetric properties of a Solid Water High Equivalency (SW557) phantom for megavoltage photon beams. <i>Physica Medica</i> , <b>2017</b> , 39, 132-136	2.7	4	
266	Validation of a method for in vivo 3D dose reconstruction in SBRT using a new transmission detector. <i>Journal of Applied Clinical Medical Physics</i> , <b>2017</b> , 18, 69-75	2.3	14	
265	Is the PTW 60019 microDiamond a suitable candidate for small field reference dosimetry?. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 7036-7055	3.8	33	
264	Technical note: A new wedge-shaped ionization chamber component module for BEAMnrc to model the integral quality monitoring system (1). <i>Radiation Physics and Chemistry</i> , <b>2017</b> , 141, 346-351	2.5	6	
263	Use of a radial projection to reduce the statistical uncertainty of spot lateral profiles generated by Monte Carlo simulation. <i>Journal of Applied Clinical Medical Physics</i> , <b>2017</b> , 18, 88-96	2.3	5	
262	Dosimetric characterization of 3D printed bolus at different infill percentage for external photon beam radiotherapy. <i>Physica Medica</i> , <b>2017</b> , 39, 25-32	2.7	33	
261	Development of a flattening filter free multiple source model for use as an independent, Monte Carlo, dose calculation, quality assurance tool for clinical trials. <i>Medical Physics</i> , <b>2017</b> , 44, 4952-4960	4.4		
260	Monte Carlo simulation of radiation dose distribution in X-ray imaging at Shanghai Synchrotron Radiation Facility. <b>2017</b> , 2017, 552-555		1	
259	Monte Carlo simulation for scanning technique with scattering foil free electron beam: A proof of concept study. <b>2017</b> , 12, e0177380		3	
258	Electron Energy Distribution for a Research Electron LINAC. <i>Progress in Medical Physics</i> , <b>2017</b> , 28, 49	0.5	1	

257	Dosimetric characterization of an accessory mounted mini-beam collimator across clinically beam matched medical linear accelerators. <b>2017</b> , 3, 015014		1
256	Estimation of patient-specific imaging dose for real-time tumour monitoring in lung patients during respiratory-gated radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2018</b> , 63, 065016	3.8	4
255	Image guidance doses delivered during radiotherapy: Quantification, management, and reduction: Report of the AAPM Therapy Physics Committee Task Group 180. <i>Medical Physics</i> , <b>2018</b> , 45, e84-e99	4.4	61
254	Comparison of normal tissue dose calculation methods for epidemiological studies of radiotherapy patients. <b>2018</b> , 38, 775-792		7
253	Effect of secondary electron generation on dose enhancement in Lipiodol with and without a flattening filter. <i>Journal of Applied Clinical Medical Physics</i> , <b>2018</b> , 19, 211-217	2.3	2
252	A simple technique to improve calculated skin dose accuracy in a commercial treatment planning system. <i>Journal of Applied Clinical Medical Physics</i> , <b>2018</b> , 19, 191-197	2.3	21
251	Monte Carlo analysis of beam blocking grid design parameters: Scatter estimation and the importance of electron backscatter. <i>Medical Physics</i> , <b>2018</b> , 45, 1059-1070	4.4	2
250	Feasibility of using a dose-area product ratio as beam quality specifier for photon beams with small field sizes. <i>Physica Medica</i> , <b>2018</b> , 45, 106-116	2.7	2
249	Energy spectrum and dose enhancement due to the depth of the Lipiodol position using flattened and unflattened beams. <b>2018</b> , 23, 50-56		3
248	Measured and Monte Carlo simulated surface dose reduction for superficial X-rays incident on tissue with underlying air or bone. <i>Medical Physics</i> , <b>2018</b> , 45, 926-933	4.4	3
247	Performance of different theories for the angular distribution of bremsstrahlung produced by keV electrons incident upon a target. <i>Radiation Physics and Chemistry</i> , <b>2018</b> , 148, 73-85	2.5	7
246	Monte Carlo simulation of neutron dose equivalent by photoneutron production inside the primary barriers of a radiotherapy vault. <i>Physica Medica</i> , <b>2018</b> , 48, 1-5	2.7	2
245	Commissioning and validation of fluence-based 3D VMAT dose reconstruction system using new transmission detector. <b>2018</b> , 11, 165-173		4
244	Relative biological effectiveness study of Lipiodol based on microdosimetric-kinetic model. <i>Physica Medica</i> , <b>2018</b> , 46, 89-95	2.7	6
243	A Monte Carlo study of organ and effective doses of cone beam computed tomography (CBCT) scans in radiotherapy. <b>2018</b> , 38, 61-80		13
242	Experimental and Monte Carlo-based determination of the beam quality specifier for TomoTherapyHD treatment units. <b>2018</b> , 28, 142-149		1
241	Evaluation of coefficients to derive organ and effective doses from cone-beam CT (CBCT) scans: a Monte Carlo study. <b>2018</b> , 38, 189-206		6
240	Field-size correction factors of a radiophotoluminescent glass dosimeter for small-field and intensity-modulated radiation therapy beams. <i>Medical Physics</i> , <b>2018</b> , 45, 382-390	4.4	8

239	A model for the emission of K and L x rays from an x-ray tube. <b>2018</b> , 437, 36-47		6
238	Effect of dose-delivery time for flattened and flattening filter-free photon beams based on microdosimetric kinetic model. <b>2018</b> , 13, e0206673		3
237	Characterization of a plastic scintillating detector for the Small Animal Radiation Research Platform (SARRP). <i>Medical Physics</i> , <b>2019</b> , 46, 394-404	4.4	5
236	Effects of 10 MV and Flattening-Filter-Free Beams on Peripheral Dose in a Cohort of Pediatric Patients. <b>2018</b> , 102, 1560-1568		4
235	TOPAS-nBio: An Extension to the TOPAS Simulation Toolkit for Cellular and Sub-cellular Radiobiology. <i>Radiation Research</i> , <b>2019</b> , 191, 125-138	3.1	48
234	Noise and Resolution Performance Evaluation for Statistical and Non-Statistical Iterative CBCT Reconstruction Methods. <b>2018</b> ,		
233	Thoracic Organ Doses and Cancer Risk from Low Pitch Helical 4-Dimensional Computed Tomography Scans. <b>2018</b> , 2018, 8927290		1
232	Monte Carlo and Co-based kilovoltage x-ray dosimetry methods. <i>Medical Physics</i> , <b>2018</b> , 45, 5564-5576	4.4	4
231	Radiotherapy of lung cancers: FFF beams improve dose coverage at tumor periphery compromised by electronic disequilibrium. <i>Physics in Medicine and Biology</i> , <b>2018</b> , 63, 195007	3.8	8
230	Prototype modulated orthovoltage stereotactic radiosurgery cones. <b>2018</b> , 119, 33-41		1
229	A Monte Carlo study of impact of scan position for cone beam CT on doses to organs and effective dose. <i>Radiation Physics and Chemistry</i> , <b>2018</b> , 151, 25-35	2.5	2
228	Density scaling of phantom materials for a 3D dose verification system. <i>Journal of Applied Clinical Medical Physics</i> , <b>2018</b> , 19, 103-113	2.3	1
227	Monte Carlo dose verification of VMAT treatment plans using Elekta Agility 160-leaf MLC. <i>Physica Medica</i> , <b>2018</b> , 51, 22-31	2.7	10
226	Dosimetric verification and commissioning for a small animal image-guided irradiator. <i>Physics in Medicine and Biology</i> , <b>2018</b> , 63, 145001	3.8	9
225	A COMPARISON OF BETA SKIN DOSES CALCULATED WITH VARSKIN 5.35.3 AND MCNP5. <b>2018</b> , 182, 502	2-507	3
224	Monte Carlo study and design of system for implementation of Rotational Total Skin Electron Irradiation technique. <b>2018</b> , 13, P05029-P05029		
223	Monte Carlo verification of radiotherapy treatments with CloudMC. <b>2018</b> , 13, 99		8
222	Resolution and noise performance of sparse view X-ray CT reconstruction via Lp-norm regularization. <i>Physica Medica</i> , <b>2018</b> , 52, 72-80	2.7	4

221	Monte Carlo simulations in radiotherapy dosimetry. <b>2018</b> , 13, 121		36
220	A fast jaw-tracking model for VMAT and IMRT Monte Carlo simulations. <i>Journal of Applied Clinical Medical Physics</i> , <b>2018</b> , 19, 26-34	2.3	1
219	Investigation on the resolution of a micro cone beam CT scanner scintillating detector using Monte Carlo methods. <i>Physica Medica</i> , <b>2018</b> , 53, 17-24	2.7	
218	Physical Enhancement of the Effectiveness of X-Ray Irradiation. <b>2018</b> , 23-116		2
217	Dosimetric effects of incorrect jaw settings in cranial radiosurgery. <b>2018</b> , 4, 027004		O
216	Estimating the uncertainty of calculated out-of-field organ dose from a commercial treatment planning system. <i>Journal of Applied Clinical Medical Physics</i> , <b>2018</b> , 19, 319-324	2.3	5
215	Monte Carlo Dosimetry of Organ Doses from a Sweeping-Beam Total Body Irradiation Technique: Feasibility and First Results. <b>2019</b> , 421-427		
214	Determining dose enhancement factors of high-Z nanoparticles from simulations where lateral secondary particle disequilibrium exists. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 155016	3.8	13
213	An EGS Monte Carlo model for Varian TrueBEAM treatment units: Commissioning and experimental validation of source parameters. <i>Physica Medica</i> , <b>2019</b> , 64, 81-88	2.7	7
212	Electron modulated arc therapy (EMAT) using photon MLC for postmastectomy chest wall treatment I: Monte Carlo-based dosimetric characterizations. <i>Physica Medica</i> , <b>2019</b> , 67, 1-8	2.7	3
211	Gamma Radiation in the Vicinity of the Entrance to Linac Radiotherapy Room. 2019,		1
210	Technical Note: Accuracy of MTF measurements with an edge phantom at megavoltage x-ray energies. <i>Medical Physics</i> , <b>2019</b> , 46, 5685-5689	4.4	1
209	Response of a nanoDot OSLD system in megavoltage photon beams. <i>Physica Medica</i> , <b>2019</b> , 64, 74-80	2.7	4
208	Improved Monte Carlo clinical electron beam modelling. <i>Physica Medica</i> , <b>2019</b> , 66, 36-44	2.7	2
207	Estimation of effective imaging dose and excess absolute risk of secondary cancer incidence for four-dimensional cone-beam computed tomography acquisition. <i>Journal of Applied Clinical Medical Physics</i> , <b>2019</b> , 20, 57-68	2.3	4
206	[Efficient Commissioning of the Radiotherapy Treatment Planning System with the Golden Beam Data]. <i>Japanese Journal of Radiological Technology</i> , <b>2019</b> , 75, 725-735		
205	Dosimetric and Monte Carlo verification of jaws-only IMRT plans calculated by the Collapsed Cone Convolution algorithm for head and neck cancers. <b>2019</b> , 24, 105-114		6
204	Investigating the effect of dental implant materials with different densities on radiotherapy dose distribution using Monte-Carlo simulation and pencil beam convolution algorithm. <b>2019</b> , 48, 20180267		4

203	PENELOPE/PRIMO-calculated photon and electron spectra from clinical accelerators. <b>2019</b> , 14, 6		14
202	Technical Note: Monte Carlo study on the reduction in x-ray contamination of therapeutic electron beams for Intraoperative Radiation Therapy by means of improvements in the design of scattering foils. <i>Medical Physics</i> , <b>2019</b> , 46, 3378-3384	4.4	2
201	Fast method for the estimation of the absorbed dose in X-ray microtomography. <b>2019</b> , 452, 40-47		
200	Cherenkov emission-based external radiotherapy dosimetry: I. Formalism and feasibility. <i>Medical Physics</i> , <b>2019</b> , 46, 2370-2382	4.4	3
199	Impact of inline magnetic fields on dose distributions for VMAT in lung tumor. <i>Physica Medica</i> , <b>2019</b> , 59, 100-106	2.7	4
198	Inverse reconstruction of energy spectra of clinical electron beams using the generalized simulated annealing method. <i>Radiation Physics and Chemistry</i> , <b>2019</b> , 162, 31-38	2.5	2
197	Modeling the primary source intensity distribution: reconstruction and inter-comparison of six Varian TrueBeam sources. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 135005	3.8	2
196	Influence of cone beam CT (CBCT) scan parameters on size specific dose estimate (SSDE): a Monte Carlo study. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 115002	3.8	3
195	Monte Carlo dose verification for a single-isocenter VMAT plan in multiple brain metastases. <i>Medical Dosimetry</i> , <b>2019</b> , 44, e51-e58	1.3	О
194	VALIDATION OF A BEAMNRC MONTE CARLO SIMULATION OF A BROAD BEAM DIAGNOSTIC X-RAY UNIT. <b>2019</b> , 185, 440-451		1
193	Technical Note: Imaging dose resulting from optimized procedures with limited-angle intrafractional verification system during stereotactic body radiation therapy lung treatment. <i>Medical Physics</i> , <b>2019</b> , 46, 2709-2715	4.4	
192	Cherenkov emission-based external radiotherapy dosimetry: II. Electron beam quality specification and uncertainties. <i>Medical Physics</i> , <b>2019</b> , 46, 2383-2393	4.4	3
191	The effect of fluorescence on surface dose with superficial X-rays incident on tissue with underlying lead. <b>2019</b> , 42, 211-220		1
190	Toward a pre-clinical irradiator using clinical infrastructure. <i>Physica Medica</i> , <b>2019</b> , 58, 21-31	2.7	2
189	Establishment of radiation in (10-40) kV narrow spectrum series. <b>2019</b> ,		
188	Imaging and Dosimetry Study of Inter-fraction Setup Error in a Murine Xenograft Flank Tumor Radiation Model. <i>Radiation Research</i> , <b>2020</b> , 193, 161-170	3.1	1
187	Dependence of volume dose indices on dose calculation algorithms for VMAT-SBRT plans for peripheral lung tumor. <i>Medical Dosimetry</i> , <b>2019</b> , 44, 284-290	1.3	3
186	Monte Carlo and analytic modeling of an Elekta Infinity linac with Agility MLC: Investigating the significance of accurate model parameters for small radiation fields. <i>Journal of Applied Clinical Medical Physics</i> , <b>2019</b> , 20, 55-67	2.3	11

185	Robust mixed electron-photon radiation therapy optimization. <i>Medical Physics</i> , <b>2019</b> , 46, 1384-1396	4.4	5
184	Energy dependence of a radiophotoluminescent glass dosimeter for HDR Ir brachytherapy source. <i>Medical Physics</i> , <b>2019</b> , 46, 964-972	4.4	2
183	Beam modeling and beam model commissioning for Monte Carlo dose calculation-based radiation therapy treatment planning: Report of AAPM Task Group 157. <i>Medical Physics</i> , <b>2020</b> , 47, e1-e18	4.4	14
182	Deep DoseNet: a deep neural network for accurate dosimetric transformation between different spatial resolutions and/or different dose calculation algorithms for precision radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 035010	3.8	13
181	Comparison of dose distributions between transverse magnetic fields of 0.35 T and 1.5 T for radiotherapy in lung tumor using Monte Carlo calculation. <i>Medical Dosimetry</i> , <b>2020</b> , 45, 179-185	1.3	
180	Characterization of Gamma Knife PerfexionBource based on Monte Carlo simulation. <b>2020</b> , 13, 398-404		O
179	Construction and performance evaluation of a buildup bolus for breast intraoperative electron radiotherapy. <i>Radiation Physics and Chemistry</i> , <b>2020</b> , 174, 108952	2.5	1
178	Monte Carlo simulation of 6-MV dynamic wave VMAT deliveries by Vero4DRT linear accelerator using EGSnrc moving sources. <i>Journal of Applied Clinical Medical Physics</i> , <b>2020</b> , 21, 206-218	2.3	O
177	Monte Carlo assessment of low energy electron range in liquid water and dosimetry effects. <i>Physica Medica</i> , <b>2020</b> , 80, 363-372	2.7	3
176	Investigating the impact of collimator size variation on the single beam radiation of Gamma Knife PerfexionTM based on Monte Carlo simulation. <b>2020</b> , 1505, 012013		
175	Monte Carlo Evaluation of Dose Enhancement Due to CuATSM or GNP Uptake in Hypoxic Environments with External Beam Radiation. <b>2020</b> , 15, 3719-3727		1
174	Impact of lung density on isolated lung tumor dose in VMAT using inline MR-Linac. <i>Physica Medica</i> , <b>2020</b> , 80, 65-74	2.7	
173	Recommended dose voxel size and statistical uncertainty parameters for precision of Monte Carlo dose calculation in stereotactic radiotherapy. <i>Journal of Applied Clinical Medical Physics</i> , <b>2020</b> , 21, 120-1	3 <sup>2</sup> 0 <sup>3</sup>	2
172	Monte Carlo calculations of radiotherapy dose in "homogeneous" anatomy. <i>Physica Medica</i> , <b>2020</b> , 78, 156-165	2.7	1
171	Extending the IAEA-AAPM TRS-483 methodology for radiation therapy machines with field sizes down to 10 ½ cm. <i>Medical Physics</i> , <b>2020</b> , 47, 5209-5221	4.4	2
170	Monte Carlo Modeling of the Agility MLC for IMRT and VMAT Calculations. <b>2020</b> , 34, 2371-2380		2
169	Impact of the cavity on sinus wall dose in magnetic resonance image-guided radiation therapy. <i>Physica Medica</i> , <b>2020</b> , 74, 100-109	2.7	3
168	Low dose lung radiation therapy for pneumonia: an examination of historical dose distributions. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 155019	3.8	3

167	Flexible Inkjet-Printed Triple Cation Perovskite X-ray Detectors. 2020, 12, 15774-15784		46
166	Artifact-free CT images for electron beam therapy using a patient-specific non metallic shield. <i>Physica Medica</i> , <b>2020</b> , 75, 92-99	2.7	
165	Energy-reduced beta radiation fields from 90Sr/>90Y for the BSS 2. <b>2020</b> , 15, P05015-P05015		2
164	Correction factors for primary beta dosimetry. <b>2020</b> , 57, 065022		3
163	Impact of transverse magnetic fields on dose response of a nanoDot OSLD in megavoltage photon beams. <i>Physica Medica</i> , <b>2020</b> , 70, 153-160	2.7	2
162	Modeling the head of PRIMUS linear accelerator for electron-mode at 10 MeV for different applicators. <i>Journal of Applied Clinical Medical Physics</i> , <b>2020</b> , 21, 134-141	2.3	
161	Impact of transverse magnetic fields on dose response of a radiophotoluminescent glass dosimeter in megavoltage photon beams. <i>Medical Physics</i> , <b>2020</b> , 47, 1995-2004	4.4	
160	Determination of inflection points of CyberKnife dose profiles within acceptability criteria of deviations in measurements. <b>2020</b> , 25, 6-12		
159	A Monte Carlo investigation of dose length product of cone beam computed tomography scans. <b>2020</b> , 40, 393-409		2
158	External beam patient dose verification based on the integral quality monitor (IQM) output signals. <b>2020</b> , 6, 035014		
157	Monte Carlo dose calculations of shielding disks with different material combinations in intraoperative electron radiation therapy (IOERT). <b>2020</b> , 24, 128-134		1
156	Determining patient abdomen thickness from a single digital radiograph with a computational model: clinical results from a proof of concept study. <b>2020</b> , 93, 20200010		
155	Benchmarking of electron beam parameters based on Monte Carlo linear accelerator simulation <b>2020</b> , 9, 577-584		
154	Monte Carlo dosimetry of a cell culture irradiation model using a 6 MV X-ray beam. <i>Radiation Physics and Chemistry</i> , <b>2021</b> , 180, 109251	2.5	
153	IAEA-AAPM TRS-483-based reference dosimetry of the new RefleXion biology-guided radiotherapy (BgRT) machine. <i>Medical Physics</i> , <b>2021</b> , 48, 1884-1892	4.4	1
152	Evaluation of IGRT-Induced Imaging Doses and Secondary Cancer Risk for SBRT Early Lung Cancer Patients In Silico Study. <b>2021</b> , 20, 15330338211016472		O
151	Comparison of Monaco treatment planning system algorithms and Monte Carlo simulation for small fields in anthropomorphic RANDO phantom: The esophagus case <b>2021</b> , 17, 1370-1375		О
150	Effect of different target materials of LINAC head on photon spectrum. <b>2021</b> , 14, 204-209		

149	Calculated relative biological effectiveness (RBE) for initial DNA double-strand breaks (DSB) from flattening filter and flattening filter-free 6 MV X-ray fields. <b>2021</b> , 3, 20200072		1
148	The relation between XR-QA2 and RT-QA2 Gafchromicfilm optical density and absorbed dose in water produced by radionuclides. <b>2021</b> , 7,		1
147	Self-Shielding for the ZAP-X : Revised Characterization and Evaluation. <b>2021</b> , 13, e13660		1
146	Technical Note: Small field dose correction factors for radiochromic film in lung phantoms. <i>Medical Physics</i> , <b>2021</b> , 48, 2667-2672	4.4	1
145	Semiempirical, parameterized spectrum estimation for x-ray computed tomography. <i>Medical Physics</i> , <b>2021</b> , 48, 2199-2213	4.4	0
144	Monte Carlo study on dose distributions from total skin electron irradiation therapy (TSET). <i>Physics in Medicine and Biology</i> , <b>2021</b> ,	3.8	3
143	Monte Carlo as quality control tool of stereotactic body radiation therapy treatment plans. <i>Physica Medica</i> , <b>2021</b> , 84, 205-213	2.7	1
142	Conversion coefficients from absorbed dose to tissue to the newly proposed ICRU/ICRP operational quantities for radiation protection for beta reference radiation qualities. <b>2021</b> , 41,		1
141	Dosimetric impacts of beam-hardening filter removal for the CyberKnife system. <i>Physica Medica</i> , <b>2021</b> , 86, 98-105	2.7	
140	Monte Carlo study of dosimetric impact of gadolinium contrast medium in transverse field MR-Linac system. <i>Physica Medica</i> , <b>2021</b> , 86, 19-30	2.7	
139	Investigating the impacts of intrafraction motion on dosimetric outcomes when treating small targets with virtual cones. <i>Journal of Applied Clinical Medical Physics</i> , <b>2021</b> , 22, 60-71	2.3	О
138	Monte Carlo verification of output correction factors for a TrueBeam STx $^{\square}$ . <b>2021</b> , 173, 109701		
137	Dose Calculation Algorithms for External Radiation Therapy: An Overview for Practitioners. <b>2021</b> , 11, 6806		1
136	Stopping-power ratios for electron beams used in total skin electron therapy. <i>Medical Physics</i> , <b>2021</b> , 48, 5472-5478	4.4	1
135	Clinical impact of anisotropic analytical algorithm and Acuros XB dose calculation algorithms for intensity modulated radiation therapy in lung cancer patients. <b>2021</b> , 29, 1019-1031		0
134	Monte Carlo methods for device simulations in radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2021</b> , 66,	3.8	2
133	Properties of IBA Razor Nano Chamber in small-field radiation therapy using 6 MV FF, 6 MV FFF, and 10 MV FFF photon beams. <b>2021</b> , 60, 1419-1424		0
132	Dose distrubution evaluation of different dental implants on a real human dry-skull model for head and neck cancer radiotherapy. <i>Radiation Physics and Chemistry</i> , <b>2021</b> , 189, 109751	2.5	

131	Room scatter effects in Total Skin Electron Irradiation: Monte Carlo simulation study. <i>Journal of Applied Clinical Medical Physics</i> , <b>2017</b> , 18, 196-201	6
130	Monte Carlo Dose Calculation for Treatment Planning. <b>2006</b> , 197-206	4
129	User-Guided Provisioning in Federated Clouds for Distributed Calculations. 2015, 60-77	2
128	Electron spectrum reconstruction as nonlinear programming model using micro-adjusting algorithm. <b>2008</b> , 451-454	1
127	Application of Monte Carlo to Proton Beam Radiation Therapy. <b>2001</b> , 1051-1056	1
126	Effect of Voxel Size on Monte Carlo Dose Calculations for Radiotherapy Treatment Planning. <b>2001</b> , 549-554	3
125	Computational methods for treatment verification: the Full Monte Carlo contribution. 2000, 272-274	1
124	Parallel processing of radiotherapy Monte Carlo simulations on a remote Beowulf cluster. <b>2000</b> , 409-410	1
123	IMRT with Monte Carlo dose computation: what is the benefit?. <b>2000</b> , 423-424	1
122	The impact of Monte Carlo dose calculations on treatment outcomes. <b>2000</b> , 425-427	2
121	Modeling and Commissioning of Clinical Photon Beams for Monte Carlo Treatment Planning. <b>2000</b> , 434-436	5
120	Questions for comparison of clinical Monte Carlo codes. <b>2000</b> , 120-122	26
119	MCDOSE [A Monte Carlo Dose Calculation Tool for Radiation Therapy Treatment Planning. 2000, 123-125	4
118	Performance benchmarks of the MCV Monte Carlo system. <b>2000</b> , 129-131	12
117	Impact of radiopacified bone cement on radiotherapy dose calculation. 2020, 14, 12-16	1
116	A CUDA Monte Carlo simulator for radiation therapy dosimetry based on Geant4. <b>2014</b> ,	2
115	Transfer of the UK absorbed dose primary standard for photon beams from the research linac to the clinical linac at NPL. <b>2011</b> , 48, 365-374	4
114	Monte Carlo study of radiation dose enhancement by gadolinium in megavoltage and high dose rate radiotherapy. <b>2014</b> , 9, e109389	17

113	Evaluation of a novel reference chamber Etealth chamber Ithrough Monte Carlo simulations and experimental data. <i>International Journal of Cancer Therapy and Oncology</i> , <b>2015</b> , 3, 3222		3
112	Dosimetric verification of compensated beams using radiographic film. <b>2011</b> , 45, 310-4		6
111	Intensity Modulated Radiation Therapy Plans Verification Using a Gaussian Convolution Kernel to Correct the Single Chamber Response Function of the IhRT MatriXX Array. <b>2015</b> , 15, 483-491		3
110	Monte Carlo N Particle code - Dose distribution of clinical electron beams in inhomogeneous phantoms. <i>Journal of Medical Physics</i> , <b>2013</b> , 38, 15-21	0.7	4
109	Development and validation of MCNPX-based Monte Carlo treatment plan verification system. Journal of Medical Physics, <b>2015</b> , 40, 80-9	0.7	5
108	Development of a deformable dosimetric phantom to verify dose accumulation algorithms for adaptive radiotherapy. <i>Journal of Medical Physics</i> , <b>2016</b> , 41, 106-14	0.7	7
107	The role of Cobalt-60 in modern radiation therapy: Dose delivery and image guidance. <i>Journal of Medical Physics</i> , <b>2009</b> , 34, 133-6	0.7	18
106	Practical and clinical considerations in Cobalt-60 tomotherapy. <i>Journal of Medical Physics</i> , <b>2009</b> , 34, 137	- <b>40</b> 7	18
105	Monte Carlo simulation of a multi-leaf collimator design for telecobalt machine using BEAMnrc code. <i>Journal of Medical Physics</i> , <b>2010</b> , 35, 23-32	0.7	3
104	Review of fast Monte Carlo codes for dose calculation in radiation therapy treatment planning. Journal of Medical Signals and Sensors, <b>2011</b> , 1, 73	1	32
103	Estimation of Backscatter from Internal Shielding in Electron Beam Radiotherapy Using Monte Carlo Simulations (EGSnrc) and Gafchromic Film Measurements. <i>Journal of Medical Physics</i> , <b>2019</b> , 44, 239-245	0.7	1
102	Dosimetry Effects Caused by Unilateral and Bilateral Hip Prostheses: A Monte Carlo Case Study in Megavoltage Photon Radiotherapy for Computed Tomography Data without Metal Artifacts. <i>Journal of Medical Physics</i> , <b>2018</b> , 43, 236-246	0.7	3
101	Beam Characterization of 10-MV Photon Beam from Medical Linear Accelerator without Flattening Filter. <i>Journal of Medical Physics</i> , <b>2017</b> , 42, 65-71	0.7	3
100	Evaluation of NanoDot Optically Stimulated Luminescence Dosimeter for Cone-shaped Small-field Dosimetry of Cyberknife Stereotactic Radiosurgery Unit: A Monte Carlo Simulation and Dosimetric Verification Study. <i>Journal of Medical Physics</i> , <b>2019</b> , 44, 27-34	0.7	3
99	Accuracy of the Small Field Dosimetry Using the Acuros XB Dose Calculation Algorithm within and beyond Heterogeneous Media for 6 MV Photon Beams. <i>International Journal of Medical Physics, Clinical Engineering and Radiation Oncology</i> , <b>2012</b> , 01, 78-87	0.1	21
98	Radiation Beam Characterization and Dosimetry of Theratron Equinox-80 Telecobalt Machine Using BEAMnrc Monte Carlo Simulation Code. <i>International Journal of Medical Physics, Clinical Engineering and Radiation Oncology</i> , <b>2016</b> , 05, 298-316	0.1	1
97	Computing Efficiency Improvement in Monte Carlo Simulation of a 12 MV Photon Beam Medical LINAC. <b>2013</b> , 03, 14-21		5
96	Monte Carlo Commissioning of Low Energy Electron Radiotherapy Beams using NXEGS Software. <b>2004</b> , 1, 63-75		4

# (2000-2015)

95	Determination of Initial Beam Parameters of Varian 2100 CD Linac for Various Therapeutic Electrons Using PRIMO. <b>2015</b> , 16, 7795-801	5
94	Self-Shielding Analysis of the Zap-X System. <b>2017</b> , 9, e1917	7
93	Implementation of several variance reduction techniques into the XVMC Monte Carlo algorithm for photon beams. <b>2000</b> , 406-408	
92	A Monte Carlo study of backscatter in the monitor ion chamber for clinical photon and electron beams. <b>2000</b> , 466-468	1
91	Modulated Electron Beams for Treatment of Breast Cancer. <b>2000</b> , 173-175	
90	Direct computation of the Etep-and-shoot IMRT plan. <b>2000</b> , 35-36	
89	A Measured Data Set for Evaluating Electron Beam Dose Algorithms. <b>2000</b> , 231-233	
88	OMEGA Monte Carlo verification of dosimetric data for Gamma Knife 🛭 . <b>2000</b> , 464-465	
87	Analyzing dose distributions from a treatment planning system, Monte Carlo simulations and polymer gel measurements. <b>2000</b> , 386-388	
86	Monte Carlo Simulations of Multileaf Collimated Electrons. <b>2000</b> , 176-178	
85	Modification of a Virtual Source Model for Monte Carlo Based IMRT Verification. <b>2000</b> , 420-422	
84	Monte Carlo studies of energy modulated radiotherapy. <b>2000</b> , 170-172	
83	A Scaling Method for Multiple Source Models (SMSM). <b>2000</b> , 411-413	1
82	Monte Carlo simulation of wax compensating filters for radiotherapy of the head and neck. <b>2000</b> , 461-463	
81	Monte Carlo for the Cyberknife. <b>2000</b> , 344-346	
80	A Monte Carlo method for commissioning electron beams. <b>2000</b> , 449-451	
79	Simulation of Beam Modifiers for Monte Carlo Treatment Planing. <b>2000</b> , 437-439	
78	Monte-Carlo evaluation of a highly efficient photon detector for tomotherapy. <b>2000</b> , 150-152	O

77	Sampling Techniques. <b>2000</b> , 452-454
76	Macro Monte Carlo: Clinical Implementation in a Distributed Computing Environment. <b>2001</b> , 223-228
75	Energy Spectra and Dose Distributions of a Medical Linear Electron Accelerator Simulated with BEAM/EGS4 and MCNP. <b>2001</b> , 323-327
74	Simulation of a 32P Sourcewire and a 90Sr/90Y Sourcetrain Using MCNP4b and EGS4. <b>2001</b> , 523-527
73	Monte Carlo Simulation of an Arc Therapy Treatment by Means of a PC Distribution Model. 2001, 329-332
72	Monte Carlo Techniques for Primary Standards of Ionizing Radiation and for Dosimetry Protocols. <b>2001</b> , 291-298
71	Monte Carlo Conformal Treatment Planning as an Independent Assessment. 2001, 565-570
70	Symmetry-Based Variance Reduction Applied to 60Co Teletherapy Unit Monte Carlo Simulations. <b>2001</b> , 187-192
69	PC-Based Process Distribution to Solve Iterative Monte Carlo Simulations in Physical Dosimetry. <b>2001</b> , 211-216
68	The Impact of Monte Carlo Dose Calculations on Intensity-Modulated Radiation Therapy. <b>2001</b> , 205-210
67	Intra-Operative Radiation Therapy Optimization Using the Monte Carlo Method. 2001, 455-460
66	Monte Carlo Dose Distributions for Radiosurgery. <b>2001</b> , 561-564
65	Bestrahlungsplanung. <b>2002</b> , 333-368
64	In-air fluence profiles and water depth dose for uncollimated electron beams. <i>Journal of Medical Physics</i> , <b>2008</b> , 33, 141-6
63	Simulation of Medical Linear Accelerators with PENELOPE. <b>2012</b> , 313-325
62	Dose Prescription and Calculation. <b>2015</b> , 103-115
61	[10. Application of Monte Carlo Simulation to Radiological Technology -No.1 Focus on Photon for Radiation Therapy]. <i>Japanese Journal of Radiological Technology</i> , <b>2015</b> , 71, 533-41
60	Comparison between measured tissue phantom ratio values and calculated from percent depth doses with and without peak scatter correction factor in a 6 MV beam. <i>International Journal of</i> 2  Cancer Therapy and Opcology 2015, 3, 03024

59	A Monte Carlo model for independent dose verification in IMRT and VMAT for the Varian Novalis TX with high definition MLC. <i>International Journal of Cancer Therapy and Oncology</i> , <b>2015</b> , 3, 3312		2
58	Introduction. <b>2017</b> , 1-14		
57	On the Perturbation Correction Factor <i>p<sub>cav</sub></i> of the Markus Parallel-Plate Ion Chamber in Clinical Electron Beams. <i>International Journal of Medical Physics, Clinical Engineering and Radiation Oncology</i> , <b>2017</b> , 06, 150-161	0.1	О
56	Quality control of radiotherapy treatment plans with electrons. <i>Brazilian Journal of Radiation Sciences</i> , <b>2019</b> , 7,	0.4	
55	Simulation and measurement of spectra of reference filtered X radiation. <i>Journal of Engineering</i> , <b>2019</b> , 2019, 8706-8709	0.7	
54	Measurement of the Energy Spectrum of a 6 MV Linear Accelerator Using Compton Scattering Spectroscopy and Monte Carlo-Generated Corrections. <i>International Journal of Medical Physics</i> , Clinical Engineering and Radiation Oncology, <b>2020</b> , 09, 186-200	0.1	2
53	Distinct Long-term Effects of Precision X-Radiation on Reflex Saliva Flow Rate and Tissue Integrity in a Preclinical Model of Chronic Hyposalivation.		
52	Evaluation of Dose Distribution and Normal Tissue Complication Probability of a Combined Dose of Cone-Beam Computed Tomography Imaging with Treatment in Prostate Intensity-Modulated Radiation Therapy. <i>Journal of Medical Physics</i> , <b>2020</b> , 45, 78-87	0.7	O
51	Comprehensive characterization of ExacTrac stereoscopic image guidance system using Monte Carlo and Spektr simulations. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 245029	3.8	2
50	A Novel GPU-based Fast Monte Carlo Photon Dose Calculating Method for Accurate Radiotherapy Treatment Planning. <i>Journal of Biomedical Physics and Engineering</i> , <b>2020</b> , 10, 329-340	1	1
49	Examination of the Run-Time Differences between the EGSnrc and the EGS5 Monte Carlo Codes. <i>International Journal of Medical Physics, Clinical Engineering and Radiation Oncology</i> , <b>2020</b> , 09, 14-23	0.1	
48	Integration of the M6 Cyberknife in the Moderato Monte Carlo platform and prediction of beam parameters using machine learning. <i>Physica Medica</i> , <b>2020</b> , 70, 123-132	2.7	1
47	Evaluation Of Clinical Dose Distributions Using Monte Carlo Methods. 2007, 1956-1957		
46	Improve of Array Detector System for Dose distribution of Virtual Wedge in Clinical Photon Beams. <b>2007</b> , 2011-2013		
45	History of the Photon Beam Dose Calculation Algorithm in Radiation Treatment Planning System. <i>Progress in Medical Physics</i> , <b>2020</b> , 31, 54-62	0.5	О
44	Review of fast monte carlo codes for dose calculation in radiation therapy treatment planning. <i>Journal of Medical Signals and Sensors</i> , <b>2011</b> , 1, 73-86	1	14
43	Calculation of excess dose to the eye phantom due to a distanced shielding for electron therapy in head and neck cancers. <i>Journal of Medical Signals and Sensors</i> , <b>2012</b> , 2, 144-8	1	3
42	Monte Carlo Study of Fetal Dosimetry Parameters for 6 MV Photon Beam. <i>Journal of Medical Signals and Sensors</i> , <b>2013</b> , 3, 31-6	1	3

41	Monte Carlo Simulation of Siemens ONCOR Linear Accelerator with BEAMnrc and DOSXYZnrc Code. <i>Journal of Medical Signals and Sensors</i> , <b>2013</b> , 3, 172-9	1	8
40	Superficial and peripheral dose in compensator-based FFF beam IMRT. <i>Journal of Applied Clinical Medical Physics</i> , <b>2017</b> , 18, 151-156	2.3	1
39	Monte Carlo Investigation of Photon Beam Characteristics and its Variation with Incident Electron Beam Parameters for Indigenous Medical Linear Accelerator. <i>Journal of Medical Physics</i> , <b>2018</b> , 43, 1-8	0.7	3
38	Monte Carlo Simulation of Electron Beams produced by LIAC Intraoperative Radiation Therapy Accelerator. <i>Journal of Biomedical Physics and Engineering</i> , <b>2018</b> , 8, 43-52	1	7
37	Estimation of Dosimetric Parameters based on K and K Correction Factors for Small Field Radiation Therapy at 6 and 18 MV Linac Energies using Monte Carlo Simulation Methods. <i>Journal of Biomedical Physics and Engineering</i> , <b>2019</b> , 9, 37-50	1	
36	Monte Carlo Study of Unflattened Photon Beams Shaped by Multileaf Collimator. <i>Journal of Biomedical Physics and Engineering</i> , <b>2019</b> , 9, 137-150	1	1
35	Technical Note: Bremsstrahlung dose in the electron beam at extended distances in total skin electron therapy <i>Medical Physics</i> , <b>2021</b> , 49, 1297	4.4	
34	A probabilistic approach for determining Monte Carlo beam source parameters I: modeling of a CyberKnife M6 unit <i>Physics in Medicine and Biology</i> , <b>2022</b> ,	3.8	O
33	A probabilistic approach for determining Monte Carlo beam source parameters II: impact of beam modeling uncertainties on dosimetric functions and treatment plans <i>Physics in Medicine and Biology</i> , <b>2022</b> ,	3.8	0
32	Practical Dosimetry Considerations for Small MLC-Shaped Electron Fields at 60 cm SSD <i>Journal of Biomedical Physics and Engineering</i> , <b>2022</b> , 12, 101-108	1	
31	Engaging medical physics students in active and authentic learning through the use of monte-carlo simulation and inverse treatment planning <i>Physica Medica</i> , <b>2022</b> , 95, 116-125	2.7	
30	Various cost functions evaluation of commercial biologically based treatment planning system for nasopharyngeal cancer <i>Medical Dosimetry</i> , <b>2022</b> ,	1.3	
29	Monte Carlo study of small-field dosimetry for an ELEKTA Unity MR-Linac system. <i>Radiation Physics and Chemistry</i> , <b>2022</b> , 194, 110036	2.5	0
28	Determination of the electronic portal imaging device pixel-sensitivity-map for quality assurance applications. Part 1: Comparison of methods <i>Journal of Applied Clinical Medical Physics</i> , <b>2022</b> , e13603	2.3	1
27	Small static radiosurgery field dosimetry with small volume ionization chambers <i>Physica Medica</i> , <b>2022</b> , 97, 66-72	2.7	0
26	Geometrical Source Modeling of 6mv Flattening-Filter-Free (Fff) Beam from Truebeam Linear Accelerator and Commissioning Validation Using Monte Carlo Simulation Approach for Cancer Phototherapy. SSRN Electronic Journal,	1	
25	Monte Carlo Dose Calculation - A QA Method for SRT and SBRT Plans in Treating Multiple and Small Metastatic Lesions <i>Journal of Medical Physics</i> , <b>2022</b> , 47, 99-104	0.7	
24	Design and Evaluation of Structural Shielding of a Typical Radiotherapy Facility Using EGSnrc Monte Carlo Code <i>Journal of Medical Physics</i> , <b>2022</b> , 47, 27-33	0.7	

23	Effect of Differences in Insert Materials of Cutout Block on Dose Distribution in Electron Radiotherapy: Comparison between Measurements and Monte Carlo Simulation. <i>Japanese Journal of Radiological Technology</i> , <b>2022</b> ,		
22	Geometrical source modeling of 6MV flattening-filter-free (FFF) beam from TrueBeam linear accelerator and commissioning validation using Monte Carlo simulation approach for radiotherapy. <i>Radiation Physics and Chemistry</i> , <b>2022</b> , 110339	2.5	О
21	A phase space model of a Versa HD linear accelerator for application to Monte Carlo dose calculation in a real-time adaptive workflow. <i>Journal of Applied Clinical Medical Physics</i> ,	2.3	
20	Characterization of Transgenic NSG-SGM3 Mouse Model of Precision Radiation-Induced Chronic Hyposalivation. <i>Radiation Research</i> , <b>2022</b> ,	3.1	
19	Variations in size specific effective dose with patient stature and beam width for kV cone beam CT imaging in radiotherapy.		1
18	Skin dose distributions between Stanford and rotational techniques in total skin electron therapy (TSET).		1
17	Region-of-interest intra-arc MV imaging to facilitate sub-mm positional accuracy with minimal imaging dose during treatment deliveries of small cranial lesions.		О
16	Comparison and validation of multiple detectors against monte carlo simulation for the use of small-field dosimetry. <b>2022</b> , 47, 235		O
15	Treatment plan prescreening for patient-specific quality assurance measurements using independent Monte Carlo dose calculations. 12,		O
14	Small field output factor measurement and verification for CyberKnife robotic radiotherapy and radiosurgery system using 3D polymer gel, ionization chamber, diode, diamond and scintillator detectors, Gafchromic film and Monte Carlo simulation. <b>2023</b> , 192, 110576		O
13	Calculation of Experimental Penumbral Width of X-ray Dose Distributions Using Multiple Detectors. <b>2023</b> ,		О
12	Estimation of patient-size dependent imaging dose for stereoscopic/monoscopic real-time kV image guidance in lung and prostate SBRT. <b>2023</b> , 68, 095002		O
11	Assessment of organ and size-specific effective doses from cone beam CT (CBCT) in image-guided radiotherapy (IGRT) based on body mass index (BMI). <b>2023</b> , 208, 110889		О
10	Auto-commissioning of a Monte Carlo electron beam model with application to photon MLC shaped electron fields. <b>2023</b> , 68, 044004		O
9	Absorbed dose calculation for a realistic CT-derived mouse phantom irradiated with a standard Cs-137 cell irradiator using a Monte Carlo method. <b>2023</b> , 18, e0280765		О
8	On the field size definition and field output factors in small field dosimetry.		O
7	From model-based dose computation to tomotherapy.		О
6	Reflections on a life with Monte Carlo in Medical Physics.		O

Monte-Carlo techniques for radiotherapy applications I: introduction and overview of the different Monte-Carlo codes. 2023, 22,

Monte-Carlo techniques for radiotherapy applications II: equipment and source modelling, dose calculations and radiobiology. 2023, 22,

TOPAS-imaging: extensions to the TOPAS simulation toolkit for medical imaging systems. 2023, 68, 084001 o

In-silico evaluation of the effect of set-up errors on dose delivery during mouse irradiations with a cell irradiator-based collimator system.

A deep-learning-based dose verification tool utilizing fluence maps for a cobalt-60 compensator-based intensity-modulated radiation therapy system. 2023, 100440