

Pantelis Karaiskos

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4150811/publications.pdf>

Version: 2024-02-01

104
papers

2,406
citations

147801

31
h-index

243625

44
g-index

105
all docs

105
docs citations

105
times ranked

1317
citing authors

#	ARTICLE	IF	CITATIONS
1	Monte Carlo dosimetry of a new ¹⁹² Ir high dose rate brachytherapy source. Medical Physics, 2000, 27, 2521-2527.	3.0	94
2	Monte Carlo and TLD dosimetry of an ¹⁹² Ir high dose-rate brachytherapy source. Medical Physics, 1998, 25, 1975-1984.	3.0	84
3	Lung cancer histology classification from CT images based on radiomics and deep learning models. Medical and Biological Engineering and Computing, 2021, 59, 215-226.	2.8	74
4	Dosimetric accuracy of a deterministic radiation transport based brachytherapy treatment planning system. Part II: Monte Carlo and experimental verification of a multiple source dwell position plan employing a shielded applicator. Medical Physics, 2011, 38, 1981-1992.	3.0	68
5	Results from the TARC experiment: spallation neutron phenomenology in lead and neutron-driven nuclear transmutation by adiabatic resonance crossing. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 478, 577-730.	1.6	67
6	Dosimetric characterization of CyberKnife radiosurgical photon beams using polymer gels. Medical Physics, 2008, 35, 2312-2320.	3.0	65
7	Dose verification in clinical imrt prostate incidents. International Journal of Radiation Oncology Biology Physics, 2004, 59, 1540-1547.	0.8	63
8	The effect of finite patient dimensions and tissue inhomogeneities on dosimetry planning of ¹⁹² Ir HDR breast brachytherapy: A Monte Carlo dose verification study. International Journal of Radiation Oncology Biology Physics, 2005, 61, 1596-1602.	0.8	59
9	Monte Carlo dosimetry of a new ¹⁹² Ir pulsed dose rate brachytherapy source. Medical Physics, 2002, 30, 9-16.	3.0	58
10	Dosimetric accuracy of a deterministic radiation transport based brachytherapy treatment planning system. Part I: Single sources and bounded homogeneous geometries. Medical Physics, 2010, 37, 649-661.	3.0	58
11	On the output factor measurements of the CyberKnife iris collimator small fields: Experimental determination of the correction factors for microchamber and diode detectors. Medical Physics, 2012, 39, 4875-4885.	3.0	58
12	Monte Carlo dosimetry of the selectSeed ¹²⁵ I interstitial brachytherapy seed. Medical Physics, 2001, 28, 1753-1760.	3.0	56
13	Beta versus gamma dosimetry close to Ir-192 brachytherapy sources. Medical Physics, 2001, 28, 1875-1882.	3.0	55
14	On the implementation of a recently proposed dosimetric formalism to a robotic radiosurgery system. Medical Physics, 2010, 37, 2369-2379.	3.0	55
15	MRI-Related Geometric Distortions in Stereotactic Radiotherapy Treatment Planning: Evaluation and Dosimetric Impact. Technology in Cancer Research and Treatment, 2017, 16, 1120-1129.	1.9	50
16	Current state of the art brachytherapy treatment planning dosimetry algorithms. British Journal of Radiology, 2014, 87, 20140163.	2.2	48
17	Wide dynamic dose range of VIPAR polymer gel dosimetry. Physics in Medicine and Biology, 2001, 46, 2143-2159.	3.0	46
18	Dosimetry comparison of ¹⁹² Ir Sources. Medical Physics, 2002, 29, 2239-2246.	3.0	45

#	ARTICLE	IF	CITATIONS
19	Dose and dose averaged LET comparison of ^1H , ^4He , ^6Li , ^8Be , ^{10}B , ^{12}C , ^{14}N , and ^{16}O ion beams forming a spread-out Bragg peak. <i>Medical Physics</i> , 2011, 38, 6585-6591.	3.0	45
20	Experimental verification of neutron phenomenology in lead and transmutation by adiabatic resonance crossing in accelerator driven systems. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1999, 458, 167-180.	4.1	42
21	Three-dimensional dose verification of the clinical application of gamma knife stereotactic radiosurgery using polymer gel and MRI. <i>Physics in Medicine and Biology</i> , 2005, 50, 1979-1990.	3.0	42
22	Dose verification of single shot gamma knife applications using VIPAR polymer gel and MRI. <i>Physics in Medicine and Biology</i> , 2005, 50, 1235-1250.	3.0	41
23	Monte Carlo dosimetry of ^{60}Co HDR brachytherapy sources. <i>Medical Physics</i> , 2003, 30, 712-721.	3.0	40
24	A dosimetric comparison of ^{169}Yb and ^{192}Ir for HDR brachytherapy of the breast, accounting for the effect of finite patient dimensions and tissue inhomogeneities. <i>Medical Physics</i> , 2006, 33, 4583-4589.	3.0	40
25	Dosimetric accuracy of a deterministic radiation transport based ^{192}Ir brachytherapy treatment planning system. Part III. Comparison to Monte Carlo simulation in voxelized anatomical computational models. <i>Medical Physics</i> , 2013, 40, 011712.	3.0	40
26	Limitations of the point and line source approximations for the determination of geometry factors around brachytherapy sources. <i>Medical Physics</i> , 2000, 27, 124-128.	3.0	38
27	Dosimetry close to an ^{192}Ir HDR source using N-vinylpyrrolidone based polymer gels and magnetic resonance imaging. <i>Medical Physics</i> , 2001, 28, 1416-1426.	3.0	38
28	Thermoluminescent dosimetry of the selectSeed 125I interstitial brachytherapy seed. <i>Medical Physics</i> , 2002, 29, 709-716.	3.0	37
29	3D dose verification in ^{192}Ir HDR prostate monotherapy using polymer gels and MRI. <i>Medical Physics</i> , 2003, 30, 2031-2039.	3.0	36
30	An analytical dosimetry model as a step towards accounting for inhomogeneities and bounded geometries in ^{192}Ir brachytherapy treatment planning. <i>Physics in Medicine and Biology</i> , 2003, 48, 1625-1647.	3.0	35
31	A Monte Carlo investigation of the dosimetric characteristics of the VariSource ^{192}Ir high dose rate brachytherapy source. <i>Medical Physics</i> , 1999, 26, 1498-1502.	3.0	33
32	Dosimetric impact of rotational errors on the quality of VMAT-CRS for multiple brain metastases: Comparison between single- and two-isocenter treatment planning techniques. <i>Journal of Applied Clinical Medical Physics</i> , 2020, 21, 32-44.	1.9	32
33	Dose perturbation in the radiotherapy of breast cancer patients implanted with the MagnaSite: a Monte Carlo study. <i>Journal of Applied Clinical Medical Physics</i> , 2011, 12, 58-70.	1.9	31
34	A Simple and Efficient Methodology To Improve Geometric Accuracy in Gamma Knife Radiation Surgery: Implementation in Multiple Brain Metastases. <i>International Journal of Radiation Oncology Biology Physics</i> , 2014, 90, 1234-1241.	0.8	31
35	A Monte Carlo dosimetry study of vaginal ^{192}Ir brachytherapy applications with a shielded cylindrical applicator set. <i>Medical Physics</i> , 2004, 31, 3080-3086.	3.0	28
36	Comparison of optimized single and multifield irradiation plans of antiproton, proton and carbon ion beams. <i>Radiotherapy and Oncology</i> , 2010, 95, 87-93.	0.6	28

#	ARTICLE	IF	CITATIONS
37	Polymer gel dosimetry using a three-dimensional MRI acquisition technique. <i>Medical Physics</i> , 2002, 29, 2506-2516.	3.0	27
38	RADIATION DOSES TO PATIENTS FROM EXTRACORPOREAL SHOCK WAVE LITHOTRIPSY. <i>Health Physics</i> , 2006, 90, 583-587.	0.5	27
39	Dose rate calculations around ¹⁹² Ir brachytherapy sources using a Sievert integration model. <i>Physics in Medicine and Biology</i> , 2000, 45, 383-398.	3.0	26
40	Triage biodosimetry using centromeric/telomeric PNA probes and Giemsa staining to score dicentric or excess fragments in non-stimulated lymphocyte prematurely condensed chromosomes. <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 2015, 793, 107-114.	1.7	25
41	Gamma Knife output factor measurements using VIP polymer gel dosimetry. <i>Medical Physics</i> , 2009, 36, 4277-4287.	3.0	24
42	Characterization of system-related geometric distortions in MR images employed in Gamma Knife radiosurgery applications. <i>Physics in Medicine and Biology</i> , 2016, 61, 6993-7011.	3.0	24
43	Polymer gel dosimetry for the TG-43 dosimetric characterization of a new ¹²⁵ I interstitial brachytherapy seed. <i>Physics in Medicine and Biology</i> , 2006, 51, 2101-2111.	3.0	22
44	Assessment and characterization of the total geometric uncertainty in Gamma Knife radiosurgery using polymer gels. <i>Medical Physics</i> , 2013, 40, 031704.	3.0	22
45	Dosimetry of ¹⁹² Ir wires for LDR interstitial brachytherapy following the AAPM TG-43 dosimetric formalism. <i>Medical Physics</i> , 2001, 28, 156-166.	3.0	21
46	Registration of electronic portal images for patient set-up verification. <i>Physics in Medicine and Biology</i> , 2004, 49, 3279-3289.	3.0	21
47	On the experimental validation of model-based dose calculation algorithms for ¹⁹² Ir HDR brachytherapy treatment planning. <i>Physics in Medicine and Biology</i> , 2017, 62, 4160-4182.	3.0	21
48	On the use of a novel Ferrous Xylenol-orange gelatin dosimeter for HDR brachytherapy commissioning and quality assurance testing. <i>Physica Medica</i> , 2018, 45, 162-169.	0.7	19
49	Evaluation of a TG-43 compliant analytical dosimetry model in clinical ¹⁹² Ir HDR brachytherapy treatment planning and assessment of the significance of source position and catheter reconstruction uncertainties. <i>Physics in Medicine and Biology</i> , 2004, 49, 55-67.	3.0	18
50	COMPARISON OF DOSE FROM RADIOLOGICAL EXAMINATION FOR SCOLIOSIS IN CHILDREN AMONG TWO PEDIATRIC HOSPITALS BY MONTE CARLO SIMULATION. <i>Health Physics</i> , 2008, 94, 471-478.	0.5	18
51	Monte Carlo and experimental determination of correction factors for gamma knife perfexion small field dosimetry measurements. <i>Physics in Medicine and Biology</i> , 2017, 62, 7532-7555.	3.0	18
52	Investigating the Clinical Aspects of Using CT vs. CT-MRI Images during Organ Delineation and Treatment Planning in Prostate Cancer Radiotherapy. <i>Technology in Cancer Research and Treatment</i> , 2011, 10, 231-242.	1.9	16
53	Treatment plan verification: A review on the comparison of dose distributions. <i>Physica Medica</i> , 2019, 67, 107-115.	0.7	16
54	Monte Carlo and thermoluminescence dosimetry of the new IsoSeed [®] model I25.S17 I125 interstitial brachytherapy seed. <i>Medical Physics</i> , 2005, 32, 3313-3317.	3.0	15

#	ARTICLE	IF	CITATIONS
55	Radiation doses in common X-ray examinations carried out in two dedicated paediatric hospitals. Radiation Protection Dosimetry, 2007, 124, 348-352.	0.8	13
56	Level of patient and operator dose in the largest cardiac centre in Greece. Radiation Protection Dosimetry, 2008, 129, 71-73.	0.8	13
57	Monte Carlo estimation of radiation doses during paediatric barium meal and cystourethrography examinations. Physics in Medicine and Biology, 2011, 56, 367-382.	3.0	13
58	On the development of a comprehensive MC simulation model for the Gamma Knife Perfexion radiosurgery unit. Physics in Medicine and Biology, 2016, 61, 1182-1203.	3.0	13
59	On the use of high dose rate and sources with the MammoSite [®] radiation therapy system. Medical Physics, 2007, 34, 3614-3619.	3.0	11
60	Dosimetric and radiobiological comparison of TG-43 and Monte Carlo calculations in ¹⁹² Ir breast brachytherapy applications. Physica Medica, 2016, 32, 1245-1251.	0.7	11
61	Assessment of sequence dependent geometric distortion in contrast-enhanced MR images employed in stereotactic radiosurgery treatment planning. Physics in Medicine and Biology, 2018, 63, 135006.	3.0	10
62	Fast, three-dimensional, MR Imaging for polymer gel dosimetric applications involving high dose and steep dose gradients. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 572-576.	1.6	9
63	ASSESSING RADIATION EXPOSURE INSIDE THE EARTH'S ATMOSPHERE. Radiation Protection Dosimetry, 2020, 190, 427-436.	0.8	9
64	Radiation Exposure in the Lower Atmosphere during Different Periods of Solar Activity. Atmosphere, 2022, 13, 166.	2.3	9
65	Quantification of Nanoscale Dose Enhancement in Gold Nanoparticle-Aided External Photon Beam Radiotherapy. Cancers, 2022, 14, 2167.	3.7	9
66	Estimation of Cosmic-Ray-Induced Atmospheric Ionization and Radiation at Commercial Aviation Flight Altitudes. Applied Sciences (Switzerland), 2022, 12, 5297.	2.5	9
67	On the dosimetric accuracy of a Sievert integration model in the proximity of ¹⁹² Ir HDR sources. International Journal of Radiation Oncology Biology Physics, 2002, 53, 1071-1084.	0.8	8
68	Real-time imaging for dose evaluation during antiproton irradiation. Physics in Medicine and Biology, 2010, 55, N123-N131.	3.0	8
69	A Web Simulation of Medical Image Reconstruction and Processing as an Educational Tool. Journal of Digital Imaging, 2015, 28, 24-31.	2.9	8
70	Dosimetric calculations and VIPAR polymer gel dosimetry close to the microSelectron HDR. Zeitschrift Fur Medizinische Physik, 2002, 12, 252-259.	1.5	7
71	Characterization of a new polymer gel for radiosurgery dosimetry using Magnetic Resonance Imaging. Journal of Instrumentation, 2009, 4, P06018-P06018.	1.2	7
72	Anatomy- vs. fluence-based planning for prostate cancer treatments using VMAT. Physica Medica, 2014, 30, 202-208.	0.7	7

#	ARTICLE	IF	CITATIONS
73	Although Non-diagnostic Between Necrosis and Recurrence, FDG PET/CT Assists Management of Brain Tumours After Radiosurgery. <i>In Vivo</i> , 2016, 30, 513-20.	1.3	7
74	Mechanical and dose delivery accuracy evaluation in radiosurgery using polymer gels. <i>Journal of Applied Clinical Medical Physics</i> , 2006, 7, 13-21.	1.9	6
75	Dose characterization of the new Bebig IsoSeed [®] I25.S17 using polymer gel and MRI. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 569, 529-532.	1.6	6
76	Evaluation of patient-specific MR distortion correction schemes for improved target localization accuracy in SRS. <i>Medical Physics</i> , 2021, 48, 1661-1672.	3.0	6
77	Target localization accuracy in frame-based stereotactic radiosurgery: Comparison between MR-only and MR/CT co-registration approaches. <i>Journal of Applied Clinical Medical Physics</i> , 2022, 23, e13580.	1.9	6
78	Review and comparison of geometric distortion correction schemes in MR images used in stereotactic radiosurgery applications. <i>Journal of Physics: Conference Series</i> , 2017, 931, 012031.	0.4	5
79	Dosimetric evaluation of the Leksell GammaPlan [®] Convolution dose calculation algorithm. <i>Physics in Medicine and Biology</i> , 2020, 65, 045011.	3.0	5
80	G2/M Checkpoint Abrogation With Selective Inhibitors Results in Increased Chromatid Breaks and Radiosensitization of 82-6 hTERT and RPE Human Cells. <i>Frontiers in Public Health</i> , 2021, 9, 675095.	2.7	5
81	Technical note: evaluation of dosimetric performance in a commercial 3D treatment planning system. <i>British Journal of Radiology</i> , 2005, 78, 899-905.	2.2	4
82	Biodosimetry for High-Dose Exposures Based on Dicentric Analysis in Lymphocytes Released from the G2-Block by Caffeine. <i>Radiation Protection Dosimetry</i> , 2016, 172, 230-237.	0.8	4
83	Time resolved dose rate distributions in brachytherapy. <i>Physica Medica</i> , 2017, 41, 13-19.	0.7	4
84	Geometric distortion assessment in 3T MR images used for treatment planning in cranial Stereotactic Radiosurgery and Radiotherapy. <i>PLoS ONE</i> , 2022, 17, e0268925.	2.5	4
85	Impact of systematic MLC positional uncertainties on the quality of single-isocenter multi-target VMAT [®] SRS treatment plans. <i>Journal of Applied Clinical Medical Physics</i> , 2022, 23, .	1.9	4
86	Influence of multiple brain metastases [™] size and number on the quality of SRS [®] VMAT dose delivery. <i>Journal of Physics: Conference Series</i> , 2017, 931, 012022.	0.4	3
87	Deformable image registration to assist clinical decision for radiotherapy treatment adaptation for head and neck cancer patients. <i>Biomedical Physics and Engineering Express</i> , 2021, 7, 055012.	1.2	3
88	Indoor Radiation Measurements in Greece. <i>Radiation Protection Dosimetry</i> , 1999, 82, 307-312.	0.8	2
89	Dosimetric evaluation of a new collimator insert system for stereotactic radiotherapy. <i>British Journal of Radiology</i> , 2007, 80, 446-451.	2.2	2
90	On the feasibility of real time imaging in radiotherapy using antiproton beams. <i>Journal of Instrumentation</i> , 2009, 4, P06002-P06002.	1.2	2

#	ARTICLE	IF	CITATIONS
91	On source models for ^{192}Ir HDR brachytherapy dosimetry using model based algorithms. Physics in Medicine and Biology, 2016, 61, 4235-4246.	3.0	2
92	Determination of the $R2^*$ relaxation rate constant for estimating hepatic iron concentration: A customized approach that considers liver fat infiltration. Physica Medica, 2020, 76, 150-158.	0.7	2
93	Radiation Dose to Bladder Wall from Technetium-99m Accumulated in the Bladder Contents. Radiation Protection Dosimetry, 2000, 87, 281-286.	0.8	1
94	Bladder Wall Dosimetry for ^{131}I Administered Activities. Radiation Protection Dosimetry, 2001, 95, 109-116.	0.8	1
95	Quality assurance of Siemen's virtual wedge TM by using film dosimetry. Physica Medica, 2005, 21, 65-67.	0.7	1
96	On the accuracy of a mutual information algorithm for PET-MR image registration. Journal of Instrumentation, 2009, 4, P07008-P07008.	1.2	1
97	EP-1726: Efficacy of vendor supplied distortion correction algorithms for a variety of MRI scanners. Radiotherapy and Oncology, 2017, 123, S947-S948.	0.6	1
98	On the use of EBT3 film for relative dosimetry of kilovoltage X ray beams. Physica Medica, 2020, 74, 56-65.	0.7	1
99	The Use of Genotoxicity Endpoints as Biomarkers of Low Dose Radiation Exposure in Interventional Cardiology. Frontiers in Public Health, 2021, 9, 701878.	2.7	1
100	On the potential of 2D ion chamber arrays for high-dose rate remote afterloading brachytherapy quality assurance. Physics in Medicine and Biology, 2022, 67, 085011.	3.0	1
101	Comparison and Evaluation of Different Radiotherapy Techniques Using Biodosimetry Based on Cytogenetics. Cancers, 2022, 14, 146.	3.7	1
102	On the use of time resolved dose rate distributions in brachytherapy. Physica Medica, 2016, 32, 207-208.	0.7	0
103	PO-0877: Multi-detector dosimetry for QA in advanced radiotherapy modalities: a comparative study. Radiotherapy and Oncology, 2018, 127, S462-S463.	0.6	0
104	SU-FF-T-540: Assessment of Clinical Response Factors of Acoustic Neuromas After Gamma Knife Treatment. Medical Physics, 2009, 36, 2648-2648.	3.0	0