Panagiotis Papagiannis

List of Publications by Year in descending order

73 papers	2,157 citations	159573 30 h-index	243610 44 g-index
75 all docs	75 docs citations	75 times ranked	1108 citing authors

#	Article	IF	Citations
1	Review of clinical brachytherapy uncertainties: Analysis guidelines of GEC-ESTRO and the AAPM. Radiotherapy and Oncology, 2014, 110, 199-212.	0.6	243
2	Polymer gel water equivalence and relative energy response with emphasis on low photon energy dosimetry in brachytherapy. Physics in Medicine and Biology, 2004, 49, 3495-3514.	3.0	87
3	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
4	Dosimetric characterization of CyberKnife radiosurgical photon beams using polymer gels. Medical Physics, 2008, 35, 2312-2320.	3.0	65
5	A generic high-dose rate¹⁹²Ir brachytherapy source for evaluation of model-based dose calculations beyond the TG-43 formalism. Medical Physics, 2015, 42, 3048-3062.	3.0	64
6	The effect of finite patient dimensions and tissue inhomogeneities on dosimetry planning of 192Ir HDR breast brachytherapy: A Monte Carlo dose verification study. International Journal of Radiation Oncology Biology Physics, 2005, 61, 1596-1602.	0.8	59
7	Monte Carlo dosimetry of a new 192Ir pulsed dose rate brachytherapy source. Medical Physics, 2002, 30, 9-16.	3.0	58
8	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
9	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
10	Monte Carlo dosimetry of the selectSeed 125I interstitial brachytherapy seed. Medical Physics, 2001, 28, 1753-1760.	3.0	56
11	Beta versus gamma dosimetry close to Ir-192 brachytherapy sources. Medical Physics, 2001, 28, 1875-1882.	3.0	55
12	On the implementation of a recently proposed dosimetric formalism to a robotic radiosurgery system. Medical Physics, 2010, 37, 2369-2379.	3.0	55
13	Current state of the art brachytherapy treatment planning dosimetry algorithms. British Journal of Radiology, 2014, 87, 20140163.	2.2	48
14	Supplement 2 for the 2004 update of the <scp>AAPM</scp> Task Group No. 43 Report: Joint recommendations by the <scp>AAPM</scp> and <scp>GEC</scp>â€<scp>ESTRO</scp>. Medical Physics, 2017, 44, e297-e338.	3.0	48
15	In vivo thermoluminescence dosimetry dose verification of transperineal 192Ir high-dose-rate brachytherapy using CT-based planning for the treatment of prostate cancer. International Journal of Radiation Oncology Biology Physics, 2003, 57, 1183-1191.	0.8	46
16	Dosimetry comparison of 192Ir Sources. Medical Physics, 2002, 29, 2239-2246.	3.0	45
17	Dose and dose averaged LET comparison of ¹H, ⁴He, ⁶Li, ⁸Be, ¹⁰B, ¹²C, ¹⁴N, and ¹⁶O ion beams forming a spreadâ€out Bragg peak. Medical Physics, 2011, 38, 6585-6591.	3.0	45
18	Three-dimensional dose verification of the clinical application of gamma knife stereotactic radiosurgery using polymer gel and MRI. Physics in Medicine and Biology, 2005, 50, 1979-1990.	3.0	42

#	Article	IF	Citations
19	Dose verification of single shot gamma knife applications using VIPAR polymer gel and MRI. Physics in Medicine and Biology, 2005, 50, 1235-1250.	3.0	41
20	Monte Carlo dosimetry of 60Co HDR brachytherapy sources. Medical Physics, 2003, 30, 712-721.	3.0	40
21	The effect of patient inhomogeneities in oesophageal192Ir HDR brachytherapy: a Monte Carlo and analytical dosimetry study. Physics in Medicine and Biology, 2004, 49, 2675-2685.	3.0	40
22	A dosimetric comparison of Yb169 and Ir192 for HDR brachytherapy of the breast, accounting for the effect of finite patient dimensions and tissue inhomogeneities. Medical Physics, 2006, 33, 4583-4589.	3.0	40
23	Dosimetric accuracy of a deterministic radiation transport based ¹⁹²Ir brachytherapy treatment planning system. Part III. Comparison to Monte Carlo simulation in voxelized anatomical computational models. Medical Physics, 2013, 40, 011712.	3.0	40
24	Dosimetry close to an 192Ir HDR source usingN-vinylpyrrolidone based polymer gels and magnetic resonance imaging. Medical Physics, 2001, 28, 1416-1426.	3.0	38
25	Thermoluminescent dosimetry of the selectSeed 125I interstitial brachytherapy seed. Medical Physics, 2002, 29, 709-716.	3.0	37
26	3D dose verification in 192Ir HDR prostate monotherapy using polymer gels and MRI. Medical Physics, 2003, 30, 2031-2039.	3.0	36
27	An analytical dosimetry model as a step towards accounting for inhomogeneities and bounded geometries in192Ir brachytherapy treatment planning. Physics in Medicine and Biology, 2003, 48, 1625-1647.	3.0	35
28	A generic TGâ€186 shielded applicator for commissioning modelâ€based dose calculation algorithms for highâ€doseâ€rate ¹⁹²Ir brachytherapy. Medical Physics, 2017, 44, 5961-5976.	3.0	34
29	Estimation of childrenâ€™s radiation dose from cardiac catheterisations, performed for the diagnosis or the treatment of a congenital heart disease using TLD dosimetry and Monte Carlo simulation. Journal of Radiological Protection, 2009, 29, 251-261.	1.1	33
30	Dosimetric impact of rotational errors on the quality of VMATâ€SRS for multiple brain metastases: Comparison between singleâ€and twoâ€isocenter treatment planning techniques. Journal of Applied Clinical Medical Physics, 2020, 21, 32-44.	1.9	32
31	Polymer gel dosimetry close to an125I interstitial brachytherapy seed. Physics in Medicine and Biology, 2005, 50, 4371-4384.	3.0	31
32	A Monte Carlo dosimetry study of vaginal Ir192 brachytherapy applications with a shielded cylindrical applicator set. Medical Physics, 2004, 31, 3080-3086.	3.0	28
33	Polymer gel dosimetry using a three-dimensional MRI acquisition technique. Medical Physics, 2002, 29, 2506-2516.	3.0	27
34	A retrospective dosimetric comparison of TG43 and a commercially available MBDCA for an APBI brachytherapy patient cohort. Physica Medica, 2015, 31, 669-676.	0.7	26
35	Radiation transmission data for radionuclides and materials relevant to brachytherapy facility shielding. Medical Physics, 2008, 35, 4898-4906.	3.0	25
36	A dosimetric comparison of Yb169 versus Ir192 for HDR prostate brachytherapy. Medical Physics, 2005, 32, 3832-3842.	3.0	24

#	Article	IF	Citations
37	Gamma Knife output factor measurements using VIP polymer gel dosimetry. Medical Physics, 2009, 36, 4277-4287.	3.0	24
38	Polymer gel dosimetry for the TG-43 dosimetric characterization of a new125I interstitial brachytherapy seed. Physics in Medicine and Biology, 2006, 51, 2101-2111.	3.0	22
39	Dosimetry of 192Ir wires for LDR interstitial brachytherapy following the AAPM TG-43 dosimetric formalism. Medical Physics, 2001, 28, 156-166.	3.0	21
40	On the experimental validation of model-based dose calculation algorithms for¹⁹²Ir HDR brachytherapy treatment planning. Physics in Medicine and Biology, 2017, 62, 4160-4182.	3.0	21
41	BrachyGuide: a brachytherapyâ€dedicated DICOM RT viewer and interface to Monte Carlo simulation software. Journal of Applied Clinical Medical Physics, 2015, 16, 208-218.	1.9	20
42	On the use of a novel Ferrous Xylenol-orange gelatin dosimeter for HDR brachytherapy commissioning and quality assurance testing. Physica Medica, 2018, 45, 162-169.	0.7	19
43	Evaluation of a TG-43 compliant analytical dosimetry model in clinical192Ir HDR brachytherapy treatment planning and assessment of the significance of source position and catheter reconstruction uncertainties. Physics in Medicine and Biology, 2004, 49, 55-67.	3.0	18
44	Comparison of radiation shielding requirements for HDR brachytherapy using Yb169 and Ir192 sources. Medical Physics, 2006, 33, 2541-2547.	3.0	17
45	Monte Carlo and thermoluminescence dosimetry of the new IsoSeedÂ® model I25.S17 I125 interstitial brachytherapy seed. Medical Physics, 2005, 32, 3313-3317.	3.0	15
46	On the impact of improved dosimetric accuracy on head and neck high dose rate brachytherapy. Radiotherapy and Oncology, 2016, 120, 92-97.	0.6	15
47	A user-oriented procedure for the commissioning and quality assurance testing of treatment planning system dosimetry in high-dose-rate brachytherapy. Brachytherapy, 2016, 15, 252-262.	0.5	13
48	On the use of high dose rate and sources with the MammoSite^{Â®} radiation therapy system. Medical Physics, 2007, 34, 3614-3619.	3.0	11
49	Dosimetric and radiobiological comparison of TG-43 and Monte Carlo calculations in 192Ir breast brachytherapy applications. Physica Medica, 2016, 32, 1245-1251.	0.7	11
50	Management of Acute Radiodermatitis in Non-Melanoma Skin Cancer Patients Using Electrospun Nanofibrous Patches Loaded with Pinus halepensis Bark Extract. Cancers, 2021, 13, 2596.	3.7	10
51	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
52	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
53	An evaluation of the TSE MR sequence for time efficient data acquisition in polymer gel dosimetry of applications involving high doses and steep dose gradients. Medical Physics, 2005, 32, 3339-3345.	3.0	8
54	New 125 I brachytherapy source IsoSeed I25.S17plus: Monte Carlo dosimetry simulation and comparison to sources of similar design. Journal of Contemporary Brachytherapy, 2013, 4, 240-249.	0.9	8

#	Article	IF	Citations
55	Experimental determination of the Task Group-43 dosimetric parameters of the new I25.S17plus 125I brachytherapy source. Brachytherapy, 2014, 13, 618-626.	0.5	8
56	A Web Simulation of Medical Image Reconstruction and Processing as an Educational Tool. Journal of Digital Imaging, 2015, 28, 24-31.	2.9	8
57	Dosimetric calculations and VIPAR polymer gel dosimetry close to the microSelectron HDR. Zeitschrift Fur Medizinische Physik, 2002, 12, 252-259.	1.5	7
58	On the dose rate constant of the selectSeed I125 interstitial brachytherapy seed. Medical Physics, 2006, 33, 1522-1523.	3.0	7
59	Dose characterization of the new Bebig IsoSeedÂ® I25.S17 using polymer gel and MRI. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 529-532.	1.6	6
60	Gamma Knife relative dosimetry using VIP polymer gel and EBT radiochromic films. Journal of Physics: Conference Series, 2009, 164, 012053.	0.4	6
61	On the use of VIP gel dosimetry in HDR brachytherapy. Journal of Physics: Conference Series, 2009, 164, 012051.	0.4	6
62	A comparative assessment of inhomogeneity and finite patient dimension effects in 60 Co and 192 Ir high-dose-rate brachytherapy. Journal of Contemporary Brachytherapy, 2018, 10, 73-84.	0.9	5
63	Time resolved dose rate distributions in brachytherapy. Physica Medica, 2017, 41, 13-19.	0.7	4
64	The use of high field strength and parallel imaging techniques for MRI-based gel dosimetry in stereotactic radiosurgery. Journal of Instrumentation, 2009, 4, P07004-P07004.	1.2	2
65	Brachytherapy structural shielding calculations using Monte Carlo generated, monoenergetic data. Medical Physics, 2014, 41, 043901.	3.0	2
66	On source models for192Ir HDR brachytherapy dosimetry using model based algorithms. Physics in Medicine and Biology, 2016, 61, 4235-4246.	3.0	2
67	Source strength determination in iridium-192 and cobalt-60 brachytherapy: A European survey on the level of agreement between clinical measurements and manufacturer certificates. Physics and Imaging in Radiation Oncology, 2021, 19, 108-111.	2.9	2
68	Monte Carlo simulations to optimize experimental dosimetry of narrow beams used in Gamma Knife radio-surgery. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 580, 548-551.	1.6	1
69	Dose-rate to water calibrations for brachytherapy sources from the end-user perspective. Metrologia, 2012, 49, S249-S252.	1.2	1
70	Air-kerma evaluation at the maze entrance of HDR brachytherapy facilities. Journal of Radiological Protection, 2014, 34, 741-753.	1.1	1
71	On the use of EBT3 film for relative dosimetry of kilovoltage X ray beams. Physica Medica, 2020, 74, 56-65.	0.7	1
72	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

#	Article	IF	Citations
73	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