### Katia Parodi

# List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/1331211/katia-parodi-publications-by-year.pdf

Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. 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.

48 2,702 30 135 h-index g-index citations papers 3,602 157 3.5 5.4 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
135	X-ray CT adaptation based on a 2D-3D deformable image registration framework using simulated in-room proton radiographies <i>Physics in Medicine and Biology</i> , <b>2022</b> ,	3.8	2
134	Dosimetric impact of deep learning-based CT auto-segmentation on radiation therapy treatment planning for prostate cancer <i>Radiation Oncology</i> , <b>2022</b> , 17, 21	4.2	1
133	FLASH: Current status and the transition to clinical use <i>Medical Physics</i> , <b>2022</b> , 49, 1972-1973	4.4	2
132	Combining inter-observer variability, range and setup uncertainty in a variance-based sensitivity analysis for proton therapy <i>Physics and Imaging in Radiation Oncology</i> , <b>2021</b> , 20, 117-120	3.1	0
131	Distant metastasis time to event analysis with CNNs in independent head and neck cancer cohorts. <i>Scientific Reports</i> , <b>2021</b> , 11, 6418	4.9	7
130	The impact of path estimates in iterative ion CT reconstructions for clinical-like cases. <i>Physics in Medicine and Biology</i> , <b>2021</b> , 66,	3.8	2
129	Assessment of the Sun Nuclear ArcCHECK to detect errors in 6MV FFF VMAT delivery of brain SABR using ROC analysis. <i>Journal of Applied Clinical Medical Physics</i> , <b>2021</b> , 22, 35-44	2.3	O
128	A comprehensive Monte Carlo study of out-of-field secondary neutron spectra in a scanned-beam proton therapy gantry room. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2021</b> , 31, 215-228	7.6	3
127	Performance evaluation of a staggered three-layer DOI PET detector using a 1 mm LYSO pitch with PETsys TOFPET2 ASIC: comparison of HAMAMATSU and KETEK SiPMs. <i>Physics in Medicine and Biology</i> , <b>2021</b> , 66,	3.8	1
126	On the potential of ROI imaging in x-ray CT - A comparison of novel dynamic beam attenuators with current technology. <i>Medical Physics</i> , <b>2021</b> , 48, 3479-3499	4.4	0
125	An empirical artifact correction for proton computed tomography. <i>Physica Medica</i> , <b>2021</b> , 86, 57-65	2.7	2
124	Measurement-based range evaluation for quality assurance of CBCT-based dose calculations in adaptive proton therapy. <i>Medical Physics</i> , <b>2021</b> , 48, 4148-4159	4.4	1
123	Sub-millimeter precise photon interaction position determination in large monolithic scintillators via convolutional neural network algorithms. <i>Physics in Medicine and Biology</i> , <b>2021</b> , 66,	3.8	3
122	Validation of the collapsed cone algorithm for HDR liver brachytherapy against Monte Carlo simulations. <i>Brachytherapy</i> , <b>2021</b> , 20, 936-947	2.4	0
121	Deformable image registration of the treatment planning CT with proton radiographies in perspective of adaptive proton therapy. <i>Physics in Medicine and Biology</i> , <b>2021</b> , 66, 045008	3.8	4
120	22 dB Signal-to-Noise Ratio Real-Time Proton Sound Detector for Experimental Beam Range Verification. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2021</b> , 68, 3-13	3.9	3
119	Variance-based sensitivity analysis for uncertainties in proton therapy: A framework to assess the effect of simultaneous uncertainties in range, positioning, and RBE model predictions on RBE-weighted dose distributions. <i>Medical Physics</i> , <b>2021</b> , 48, 805-818	4.4	1

118	Incoming Editor-in-Chief. <i>Physics in Medicine and Biology</i> , <b>2021</b> , 66, 010301	3.8	
117	Proof of concept image artifact reduction by energy-modulated proton computed tomography (EMpCT). <i>Physica Medica</i> , <b>2021</b> , 81, 237-244	2.7	3
116	Enhancement of the ionoacoustic effect through ultrasound and photoacoustic contrast agents. <i>Scientific Reports</i> , <b>2021</b> , 11, 2725	4.9	2
115	Porcine lung phantom-based validation of estimated 4D-MRI using orthogonal cine imaging for low-field MR-Linacs. <i>Physics in Medicine and Biology</i> , <b>2021</b> , 66, 055006	3.8	2
114	Accounting for prompt gamma emission and detection for range verification in proton therapy treatment planning. <i>Physics in Medicine and Biology</i> , <b>2021</b> , 66, 055005	3.8	1
113	Fluence-modulated proton CT optimized with patient-specific dose and variance objectives for proton dose calculation. <i>Physics in Medicine and Biology</i> , <b>2021</b> , 66, 064001	3.8	3
112	Proton range uncertainty reduction benefits for skull base tumors in terms of normal tissue complication probability (NTCP) and healthy tissue doses. <i>Medical Physics</i> , <b>2021</b> , 48, 5356-5366	4.4	4
111	Radioactive Beams for Image-Guided Particle Therapy: The BARB Experiment at GSI. <i>Frontiers in Oncology</i> , <b>2021</b> , 11, 737050	5.3	2
110	Technical Design Report for a Carbon-11 Treatment Facility Frontiers in Medicine, 2021, 8, 697235	4.9	O
109	MR-guided proton therapy: a review and a preview. <i>Radiation Oncology</i> , <b>2020</b> , 15, 129	4.2	34
109	MR-guided proton therapy: a review and a preview. <i>Radiation Oncology</i> , <b>2020</b> , 15, 129  Roadmap toward the 10 ps time-of-flight PET challenge. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 21RM		34 6 <sub>3</sub>
108	Roadmap toward the 10 ps time-of-flight PET challenge. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 21RM A Monte Carlo feasibility study on quantitative laser-driven proton radiography. <i>Zeitschrift Fur</i>	19.18	63
108	Roadmap toward the 10 ps time-of-flight PET challenge. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 21RM A Monte Carlo feasibility study on quantitative laser-driven proton radiography. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2020</b> , 32, 109-109  A feasibility study of zebrafish embryo irradiation with laser-accelerated protons. <i>Review of</i>	7.6	63
108 107 106	Roadmap toward the 10 ps time-of-flight PET challenge. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 21RN  A Monte Carlo feasibility study on quantitative laser-driven proton radiography. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2020</b> , 32, 109-109  A feasibility study of zebrafish embryo irradiation with laser-accelerated protons. <i>Review of Scientific Instruments</i> , <b>2020</b> , 91, 063303  Modeling RBE-weighted dose variations in irregularly moving abdominal targets treated with	7.6	63 1 9
108 107 106	Roadmap toward the 10 ps time-of-flight PET challenge. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 21RM A Monte Carlo feasibility study on quantitative laser-driven proton radiography. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2020</b> , 32, 109-109  A feasibility study of zebrafish embryo irradiation with laser-accelerated protons. <i>Review of Scientific Instruments</i> , <b>2020</b> , 91, 063303  Modeling RBE-weighted dose variations in irregularly moving abdominal targets treated with carbon ion beams. <i>Medical Physics</i> , <b>2020</b> , 47, 2768-2778  Influence of momentum acceptance on range monitoring of C and O ion beams using in-beam PET.	7.6 1.7	63 1 9
108 107 106 105	Roadmap toward the 10 ps time-of-flight PET challenge. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 21RM  A Monte Carlo feasibility study on quantitative laser-driven proton radiography. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2020</b> , 32, 109-109  A feasibility study of zebrafish embryo irradiation with laser-accelerated protons. <i>Review of Scientific Instruments</i> , <b>2020</b> , 91, 063303  Modeling RBE-weighted dose variations in irregularly moving abdominal targets treated with carbon ion beams. <i>Medical Physics</i> , <b>2020</b> , 47, 2768-2778  Influence of momentum acceptance on range monitoring of C and O ion beams using in-beam PET. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 125006  The dosimetric impact of replacing the TG-43 algorithm by model based dose calculation for liver	7.6 1.7 4.4 3.8	63 1 9 3

100	Contrast-enhanced, conebeam CT-based, fractionated radiotherapy and follow-up monitoring of orthotopic mouse glioblastoma: a proof-of-concept study. <i>Radiation Oncology</i> , <b>2020</b> , 15, 19	4.2	3
99	Method to quickly and accurately calculate absorbed dose from therapeutic and stray photon exposures throughout the entire body in individual patients. <i>Medical Physics</i> , <b>2020</b> , 47, 2254-2266	4.4	5
98	Experimental comparison of clinically used ion beams for imaging applications using a range telescope. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 155004	3.8	2
97	Development of a Hybrid Image Reconstruction Algorithm Combining PET and Compton Events for Whole Gamma Imaging <b>2020</b> ,		1
96	Radiation protection modelling for 2.5 Petawatt-laser production of ultrashort x-ray, proton and ion bunches: Monte Carlo model of the Munich CALA facility. <i>Journal of Radiological Protection</i> , <b>2020</b> ,	1.2	3
95	Dose quantification in carbon ion therapy using in-beam positron emission tomography. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 235052	3.8	2
94	3D Compton image reconstruction method for whole gamma imaging. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 225038	3.8	5
93	Beam characterization and feasibility study for a small animal irradiation platform at clinical proton therapy facilities. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 245045	3.8	2
92	Latest developments in in-vivo imaging for proton therapy. British Journal of Radiology, 2020, 93, 2019	073847	10
91	The role of Monte Carlo simulation in understanding the performance of proton computed tomography. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2020</b> , 32, 23-23	7.6	4
90	Anthropomorphic lung phantom based validation of in-room proton therapy 4D-CBCT image correction for dose calculation. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2020</b> , 32, 74-74	7.6	1
89	The z-sbDBA, a new concept for a dynamic sheet-based fluence field modulator in x-ray CT. <i>Medical Physics</i> , <b>2020</b> , 47, 4827-4837	4.4	1
88	Radioactive Beams in Particle Therapy: Past, Present, and Future. Frontiers in Physics, 2020, 8, 00326	3.9	9
87	Optimization and performance study of a proton CT system for pre-clinical small animal imaging. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 155008	3.8	2
86	Roadmap: proton therapy physics and biology. Physics in Medicine and Biology, 2020,	3.8	17
85	3D Monte Carlo bone marrow dosimetry for Lu-177-PSMA therapy with guidance of non-invasive 3D localization of active bone marrow via Tc-99m-anti-granulocyte antibody SPECT/CT. <i>EJNMMI Research</i> , <b>2019</b> , 9, 76	3.6	4
84	Technical Note: Relative proton stopping power estimation from virtual monoenergetic images reconstructed from dual-layer computed tomography. <i>Medical Physics</i> , <b>2019</b> , 46, 1821-1828	4.4	7
83	Range verification of radioactive ion beams of C and O using in-beam PET imaging. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 145014	3.8	9

#### (2018-2019)

82	Experimental comparison of proton CT and dual energy x-ray CT for relative stopping power estimation in proton therapy. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 165002	3.8	30	
81	Comparative study of alternative Geant4 hadronic ion inelastic physics models for prediction of positron-emitting radionuclide production in carbon and oxygen ion therapy. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 155014	3.8	5	
8o	Single isocenter stereotactic radiosurgery for patients with multiple brain metastases: dosimetric comparison of VMAT and a dedicated DCAT planning tool. <i>Radiation Oncology</i> , <b>2019</b> , 14, 103	4.2	21	
79	Comparison of planned dose on different CT image sets to four-dimensional Monte Carlo dose recalculation using the patient's actual breathing trace for lung stereotactic body radiation therapy. <i>Medical Physics</i> , <b>2019</b> , 46, 3268-3277	4.4	5	
78	I-BEAT: Ultrasonic method for online measurement of the energy distribution of a single ion bunch. <i>Scientific Reports</i> , <b>2019</b> , 9, 6714	4.9	9	
77	Analytical simulator of proton radiography and tomography for different detector configurations. <i>Physica Medica</i> , <b>2019</b> , 59, 92-99	2.7	8	
76	Dosimetric accuracy and radiobiological implications of ion computed tomography for proton therapy treatment planning. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 125008	3.8	23	
75	Optimization of Phase Space files from clinical linear accelerators. <i>Physica Medica</i> , <b>2019</b> , 64, 54-68	2.7	4	
74	Evaluation of proton and photon dose distributions recalculated on 2D and 3D Unet-generated pseudoCTs from T1-weighted MR head scans. <i>Acta Oncolgica</i> , <b>2019</b> , 58, 1429-1434	3.2	20	
73	Towards a novel small animal proton irradiation platform: the SIRMIO project. <i>Acta Oncolgica</i> , <b>2019</b> , 58, 1470-1475	3.2	8	
72	Technical Note: Sheet-based dynamic beam attenuator - A novel concept for dynamic fluence field modulation in x-ray CT. <i>Medical Physics</i> , <b>2019</b> , 46, 5528-5537	4.4	6	
71	CBCT correction using a cycle-consistent generative adversarial network and unpaired training to enable photon and proton dose calculation. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 225004	3.8	31	
70	Applicability of Capacitive Micromachined Ultrasonic Transducers for the detection of proton-induced thermoacoustic waves <b>2019</b> ,		2	
69	Comparing Unet training with three different datasets to correct CBCT images for prostate radiotherapy dose calculations. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 035011	3.8	20	
68	Dose-guided patient positioning in proton radiotherapy using multicriteria-optimization. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2019</b> , 29, 216-228	7.6	9	
67	Feasibility of 4DCBCT-based proton dose calculation: An ex vivo porcine lung phantom study. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2019</b> , 29, 249-261	7.6	10	
66	Gel dosimetry for three dimensional proton range measurements in anthropomorphic geometries. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2019</b> , 29, 162-172	7.6	10	
65	Ionizing radiation-induced acoustics for radiotherapy and diagnostic radiology applications. <i>Medical Physics</i> , <b>2018</b> , 45, e707-e721	4.4	25	

64	AN ONLINE, RADIATION HARD PROTON ENERGY-RESOLVING SCINTILLATOR STACK FOR LASER-DRIVEN PROTON BUNCHES. <i>Radiation Protection Dosimetry</i> , <b>2018</b> , 180, 291-295	0.9	1
63	The biological treatment planning evolution of clinical fractionated radiotherapy using high LET. <i>International Journal of Radiation Biology</i> , <b>2018</b> , 94, 752-755	2.9	6
62	Clinical workflow optimization to improve 4DCT reconstruction for Toshiba Aquilion CT scanners. Zeitschrift Fur Medizinische Physik, <b>2018</b> , 28, 88-95	7.6	3
61	Improving the modelling of irradiation-induced brain activation for in vivo PET verification of proton therapy. <i>Radiotherapy and Oncology</i> , <b>2018</b> , 128, 101-108	5.3	5
60	Full Monte Carlo-Based Biologic Treatment Plan Optimization System for Intensity Modulated Carbon Ion Therapy on Graphics Processing Unit. <i>International Journal of Radiation Oncology Biology Physics</i> , <b>2018</b> , 100, 235-243	4	8
59	Reply to: Comment on: Dual-energy CT quantitative imaging: A comparison study between twin-beam and dual-source CT scanners [Med. Phys. 44(1), 171[179 (2017)][IMedical Physics, 2018, 45, 3997-3998	4.4	1
58	A Dedicated Tomographic Image Reconstruction Algorithm for Integration-Mode Detector Configuration in Ion Imaging <b>2018</b> ,		2
57	Overview of Applications of Laser-Driven Particle Acceleration (Editors Paul R. Bolton, Katia Parodi, and Jfig Schreiber) by CRC Press (Taylor and Francis Group) ISBN 97814987664185 June 2018. <i>Quantum Beam Science</i> , <b>2018</b> , 2, 25	1.6	1
56	In vivo range verification in particle therapy. <i>Medical Physics</i> , <b>2018</b> , 45, e1036-e1050	4.4	66
55	Time-of-flight spectrometry of ultra-short, polyenergetic proton bunches. <i>Review of Scientific Instruments</i> , <b>2018</b> , 89, 123302	1.7	3
54	Simulation of proton range monitoring in an anthropomorphic phantom using multi-slat collimators and time-of-flight detection of prompt-gamma quanta. <i>Physica Medica</i> , <b>2018</b> , 54, 1-14	2.7	6
53	Two-dimensional noise reconstruction in proton computed tomography using distance-driven filtered back-projection of simulated projections. <i>Physics in Medicine and Biology</i> , <b>2018</b> , 63, 215009	3.8	15
52	Toward a new treatment planning approach accounting for in vivo proton range verification. <i>Physics in Medicine and Biology</i> , <b>2018</b> , 63, 215025	3.8	11
51	ScatterNet: A convolutional neural network for cone-beam CT intensity correction. <i>Medical Physics</i> , <b>2018</b> , 45, 4916-4926	4.4	54
50	Experimental fluence-modulated proton computed tomography by pencil beam scanning. <i>Medical Physics</i> , <b>2018</b> , 45, 3287-3296	4.4	12
49	Comparative Monte Carlo study on the performance of integration- and list-mode detector configurations for carbon ion computed tomography. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 1096-1	11328	22
48	Software platform for simulation of a prototype proton CT scanner. <i>Medical Physics</i> , <b>2017</b> , 44, 1002-10	164.4	38
47	Dual-energy CT quantitative imaging: a comparison study between twin-beam and dual-source CT scanners. <i>Medical Physics</i> , <b>2017</b> , 44, 171-179	4.4	75

## (2017-2017)

46	Spectroscopic study of prompt-gamma emission for range verification in proton therapy. <i>Physica Medica</i> , <b>2017</b> , 34, 7-17	2.7	28	
45	Initial development of goCMC: a GPU-oriented fast cross-platform Monte Carlo engine for carbon ion therapy. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 3682-3699	3.8	14	
44	Application of single- and dual-energy CT brain tissue segmentation to PET monitoring of proton therapy. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 2427-2448	3.8	6	
43	First clinical investigation of a 4D maximum likelihood reconstruction for 4D PET-based treatment verification in ion beam therapy. <i>Radiotherapy and Oncology</i> , <b>2017</b> , 123, 339-345	5.3	3	
42	Feasibility of reducing differences in estimated doses in nuclear medicine between a patient-specific and a reference phantom. <i>Physica Medica</i> , <b>2017</b> , 39, 100-112	2.7	7	
41	Systematic out-of-field secondary neutron spectrometry and dosimetry in pencil beam scanning proton therapy. <i>Medical Physics</i> , <b>2017</b> , 44, 1912-1920	4.4	7	
40	Sensitivity of post treatment positron emission tomography/computed tomography to detect inter-fractional range variations in scanned ion beam therapy. <i>Acta Oncologica</i> , <b>2017</b> , 56, 1451-1458	3.2	18	
39	Feasibility of MR-only proton dose calculations for prostate cancer radiotherapy using a commercial pseudo-CT generation method. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 9159-9176	3.8	33	
38	Multi-criterial patient positioning based on dose recalculation on scatter-corrected CBCT images. <i>Radiotherapy and Oncology</i> , <b>2017</b> , 125, 464-469	5.3	7	
37	A Monte-Carlo study to assess the effect of 1.5 T magnetic fields on the overall robustness of pencil-beam scanning proton radiotherapy plans for prostate cancer. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 8470-8482	3.8	10	
36	Sub-3mm spatial resolution from a large monolithic LaBr3 (Ce) scintillator. <i>Current Directions in Biomedical Engineering</i> , <b>2017</b> , 3, 655-659	0.5	5	
35	Characterization of online high dynamic range imaging for laser-driven ion beam diagnostics using visible light. <i>Current Directions in Biomedical Engineering</i> , <b>2017</b> , 3, 343-346	0.5		
34	Concrete realization of the whole gamma imaging concept <b>2017</b> ,		1	
33	Considerations on employing a PMQ-doublet for narrow and broad proton energy distributions. <i>Current Directions in Biomedical Engineering</i> , <b>2017</b> , 3, 339-342	0.5	3	
32	Practical implications for the quality assurance of modulated radiation therapy techniques using point detector arrays. <i>Journal of Applied Clinical Medical Physics</i> , <b>2017</b> , 18, 20-31	2.3	2	
31	An automated, 0.5 Hz nano-foil target positioning system for intense laser plasma experiments. <i>High Power Laser Science and Engineering</i> , <b>2017</b> , 5,	4.3	15	
30	Decomposing a prior-CT-based cone-beam CT projection correction algorithm into scatter and beam hardening components. <i>Physics and Imaging in Radiation Oncology</i> , <b>2017</b> , 3, 49-52	3.1	14	
29	Submillimeter ionoacoustic range determination for protons in water at a clinical synchrocyclotron. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, L20-L30	3.8	39	

28	Ionoacoustic tomography of the proton Bragg peak in combination with ultrasound and optoacoustic imaging. <i>Scientific Reports</i> , <b>2016</b> , 6, 29305	4.9	30
27	Helium ions for radiotherapy? Physical and biological verifications of a novel treatment modality. <i>Medical Physics</i> , <b>2016</b> , 43, 1995	4.4	68
26	On- and off-line monitoring of ion beam treatment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,</i> <b>2016</b> , 809, 113-11	9 <sup>1.2</sup>	35
25	Feasibility of automated proton therapy plan adaptation for head and neck tumors using cone beam CT images. <i>Radiation Oncology</i> , <b>2016</b> , 11, 64	4.2	41
24	Monte Carlo Simulations of Particle Interactions with Tissue in Carbon Ion Therapy. <i>International Journal of Particle Therapy</i> , <b>2016</b> , 2, 447-458	1.5	6
23	The FLUKA Code: An Accurate Simulation Tool for Particle Therapy. Frontiers in Oncology, <b>2016</b> , 6, 116	5.3	110
22	Comparison of proton therapy treatment planning for head tumors with a pencil beam algorithm on dual and single energy CT images. <i>Medical Physics</i> , <b>2016</b> , 43, 495	4.4	65
21	Initial clinical evaluation of PET-based ion beam therapy monitoring under consideration of organ motion. <i>Medical Physics</i> , <b>2016</b> , 43, 975-82	4.4	11
20	Investigating deformable image registration and scatter correction for CBCT-based dose calculation in adaptive IMPT. <i>Medical Physics</i> , <b>2016</b> , 43, 5635	4.4	62
19	High-Rate Capable Floating Strip Micromegas. <i>Nuclear and Particle Physics Proceedings</i> , <b>2016</b> , 273-275, 1173-1179	0.4	2
18	Phantom based evaluation of CT to CBCT image registration for proton therapy dose recalculation. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 595-613	3.8	38
17	Comparing cone-beam CT intensity correction methods for dose recalculation in adaptive intensity-modulated photon and proton therapy for head and neck cancer. <i>Acta Oncolgica</i> , <b>2015</b> , 54, 1651-7	3.2	62
16	Clinical implementation and range evaluation of in vivo PET dosimetry for particle irradiation in patients with primary glioma. <i>Radiotherapy and Oncology</i> , <b>2015</b> , 115, 179-85	5.3	30
15	Investigating the limits of PET/CT imaging at very low true count rates and high random fractions in ion-beam therapy monitoring. <i>Medical Physics</i> , <b>2015</b> , 42, 3979-91	4.4	19
14	Ionoacoustics: A new direct method for range verification. <i>Modern Physics Letters A</i> , <b>2015</b> , 30, 1540025	1.3	16
13	Vision 20/20: Positron emission tomography in radiation therapy planning, delivery, and monitoring. <i>Medical Physics</i> , <b>2015</b> , 42, 7153-68	4.4	44
12	Surface refraction of sound waves affects calibration of three-dimensional ultrasound. <i>Radiation Oncology</i> , <b>2015</b> , 10, 119	4.2	3
11	Investigating CT to CBCT image registration for head and neck proton therapy as a tool for daily dose recalculation. <i>Medical Physics</i> , <b>2015</b> , 42, 1354-66	4.4	86

#### LIST OF PUBLICATIONS

10	Comparison and limitations of DVH-based NTCP models derived from 3D-CRT and IMRT data for prediction of gastrointestinal toxicities in prostate cancer patients by using propensity score matched pair analysis. <i>International Journal of Radiation Oncology Biology Physics</i> , <b>2015</b> , 91, 435-43	4	28
9	Phase Space Generation for Proton and Carbon Ion Beams for External Users' Applications at the Heidelberg Ion Therapy Center. <i>Frontiers in Oncology</i> , <b>2015</b> , 5, 297	5.3	30
8	Projection-based deformable registration for tomographic imaging in ion beam therapy 2014,		1
7	Monte Carlo-based parametrization of the lateral dose spread for clinical treatment planning of scanned proton and carbon ion beams. <i>Journal of Radiation Research</i> , <b>2013</b> , 54 Suppl 1, i91-6	2.4	51
6	Implementation and workflow for PET monitoring of therapeutic ion irradiation: a comparison of in-beam, in-room, and off-line techniques. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 1281-98	3.8	86
5	Accuracy of proton beam range verification using post-treatment positron emission tomography/computed tomography as function of treatment site. <i>International Journal of Radiation Oncology Biology Physics</i> , <b>2011</b> , 79, 297-304	4	61
4	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
3	Patient study of in vivo verification of beam delivery and range, using positron emission tomography and computed tomography imaging after proton therapy. <i>International Journal of Radiation Oncology Biology Physics</i> , <b>2007</b> , 68, 920-34	4	286
2	PET/CT imaging for treatment verification after proton therapy: a study with plastic phantoms and metallic implants. <i>Medical Physics</i> , <b>2007</b> , 34, 419-35	4.4	111
1	A filtering approach based on Gaussian-powerlaw convolutions for local PET verification of proton radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 1991-2009	3.8	74