

Katia Parodi

List of Publications by Year in descending order

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154
papers

4,317
citations

117571

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all docs

157
docs citations

157
times ranked

3013
citing authors

#	ARTICLE	IF	CITATIONS
1	The role of Monte Carlo simulation in understanding the performance of proton computed tomography. <i>Zeitschrift Fur Medizinische Physik</i> , 2022, 32, 23-38.	0.6	10
2	Evaluation of the impact of a scanner prototype on proton CT and helium CT image quality and dose efficiency with Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , 2022, 67, 055003.	1.6	4
3	X-ray CT adaptation based on a 2D to 3D deformable image registration framework using simulated in-room proton radiographies. <i>Physics in Medicine and Biology</i> , 2022, 67, 045003.	1.6	4
4	Dosimetric impact of deep learning-based CT auto-segmentation on radiation therapy treatment planning for prostate cancer. <i>Radiation Oncology</i> , 2022, 17, 21.	1.2	12
5	A patient-specific hybrid phantom for calculating radiation dose and equivalent dose to the whole body. <i>Physics in Medicine and Biology</i> , 2022, 67, 035005.	1.6	2
6	FLASH: Current status and the transition to clinical use. <i>Medical Physics</i> , 2022, 49, 1972-1973.	1.6	5
7	Evaluation of an anthropomorphic ion chamber and 3D gel dosimetry head phantom at a 0.35 T MR-linac using separate 1.5 T MR-scanners for gel readout. <i>Zeitschrift Fur Medizinische Physik</i> , 2022, , .	0.6	3
8	Range uncertainty reductions in proton therapy may lead to the feasibility of novel beam arrangements which improve organ at risk sparing. <i>Medical Physics</i> , 2022, 49, 4693-4704.	1.6	10
9	Roadmap: helium ion therapy. <i>Physics in Medicine and Biology</i> , 2022, 67, 15TR02.	1.6	24
10	Comparative accuracy and resolution assessment of two prototype proton computed tomography scanners. <i>Medical Physics</i> , 2022, 49, 4671-4681.	1.6	4
11	Image guidance for FLASH radiotherapy. <i>Medical Physics</i> , 2022, 49, 4109-4122.	1.6	10
12	Deformable image registration of the treatment planning CT with proton radiographies in perspective of adaptive proton therapy. <i>Physics in Medicine and Biology</i> , 2021, 66, 045008.	1.6	9
13	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> , 2021, 68, 3-13.	3.5	8
14	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> , 2021, 48, 805-818.	1.6	5
15	Incoming Editor-in-Chief. <i>Physics in Medicine and Biology</i> , 2021, 66, 010301.	1.6	0
16	Proof of concept image artifact reduction by energy-modulated proton computed tomography (EMpCT). <i>Physica Medica</i> , 2021, 81, 237-244.	0.4	11
17	Electromagnetic Signal of a Proton Beam in Biological Tissues for a Potential Range-Verification Approach in Proton Therapy. <i>Physical Review Applied</i> , 2021, 15, .	1.5	2
18	Enhancement of the ionoacoustic effect through ultrasound and photoacoustic contrast agents. <i>Scientific Reports</i> , 2021, 11, 2725.	1.6	9

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19	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> , 2021, 66, 055006.	1.6	15
20	Roadmap: proton therapy physics and biology. <i>Physics in Medicine and Biology</i> , 2021, 66, 05RM01.	1.6	67
21	Accounting for prompt gamma emission and detection for range verification in proton therapy treatment planning. <i>Physics in Medicine and Biology</i> , 2021, 66, 055005.	1.6	3
22	Fluence-modulated proton CT optimized with patient-specific dose and variance objectives for proton dose calculation. <i>Physics in Medicine and Biology</i> , 2021, 66, 064001.	1.6	4
23	Distant metastasis time to event analysis with CNNs in independent head and neck cancer cohorts. <i>Scientific Reports</i> , 2021, 11, 6418.	1.6	19
24	The impact of path estimates in iterative ion CT reconstructions for clinical-like cases. <i>Physics in Medicine and Biology</i> , 2021, 66, 095007.	1.6	4
25	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> , 2021, 22, 35-44.	0.8	4
26	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> , 2021, 31, 215-228.	0.6	19
27	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> , 2021, 66, 125016.	1.6	13
28	On the potential of ROI imaging in "x-ray CT" A comparison of novel dynamic beam attenuators with current technology. <i>Medical Physics</i> , 2021, 48, 3479-3499.	1.6	1
29	An empirical artifact correction for proton computed tomography. <i>Physica Medica</i> , 2021, 86, 57-65.	0.4	7
30	Measurement-based range evaluation for quality assurance of CBCT-based dose calculations in adaptive proton therapy. <i>Medical Physics</i> , 2021, 48, 4148-4159.	1.6	8
31	Sub-millimeter precise photon interaction position determination in large monolithic scintillators via convolutional neural network algorithms. <i>Physics in Medicine and Biology</i> , 2021, 66, 135017.	1.6	10
32	Validation of the collapsed cone algorithm for HDR liver brachytherapy against Monte Carlo simulations. <i>Brachytherapy</i> , 2021, 20, 936-947.	0.2	1
33	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> , 2021, 48, 5356-5366.	1.6	17
34	Validation of proton dose calculation on scatter corrected 4D cone beam computed tomography using a porcine lung phantom. <i>Physics in Medicine and Biology</i> , 2021, 66, 175022.	1.6	6
35	Radioactive Beams for Image-Guided Particle Therapy: The BARB Experiment at GSI. <i>Frontiers in Oncology</i> , 2021, 11, 737050.	1.3	16
36	Investigating the accuracy of co-registered ionoacoustic and ultrasound images in pulsed proton beams. <i>Physics in Medicine and Biology</i> , 2021, 66, 185007.	1.6	10

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37	Optimization of the backing material of a low frequency PVDF detector for ion beam monitoring during small animal proton irradiation. , 2021, , .		2
38	Combining inter-observer variability, range and setup uncertainty in a variance-based sensitivity analysis for proton therapy. Physics and Imaging in Radiation Oncology, 2021, 20, 117-120.	1.2	5
39	Experimental demonstration of accurate Bragg peak localization with ionoacoustic tandem phase detection (iTPD). Physics in Medicine and Biology, 2021, 66, 245020.	1.6	6
40	Technical Design Report for a Carbon-11 Treatment Facility. Frontiers in Medicine, 2021, 8, 697235.	1.2	4
41	Latest developments in in-vivo imaging for proton therapy. British Journal of Radiology, 2020, 93, 20190787.	1.0	34
42	Anthropomorphic lung phantom based validation of in-room proton therapy 4D-CBCT image correction for dose calculation. Zeitschrift Fur Medizinische Physik, 2020, 32, 74-74.	0.6	7
43	The zâ€sDBA, a new concept for a dynamic sheetâ€based fluence field modulator in xâ€ray CT. Medical Physics, 2020, 47, 4827-4837.	1.6	4
44	Developments in deep learning based corrections of cone beam computed tomography to enable dose calculations for adaptive radiotherapy. Physics and Imaging in Radiation Oncology, 2020, 15, 77-79.	1.2	12
45	Radioactive Beams in Particle Therapy: Past, Present, and Future. Frontiers in Physics, 2020, 8, 00326.	1.0	31
46	MR-guided proton therapy: a review and a preview. Radiation Oncology, 2020, 15, 129.	1.2	85
47	Roadmap toward the 10 ps time-of-flight PET challenge. Physics in Medicine and Biology, 2020, 65, 21RM01.	1.6	136
48	A Monte Carlo feasibility study on quantitative laser-driven proton radiography. Zeitschrift Fur Medizinische Physik, 2020, 32, 109-109.	0.6	3
49	A feasibility study of zebrafish embryo irradiation with laser-accelerated protons. Review of Scientific Instruments, 2020, 91, 063303.	0.6	18
50	Modeling RBEâ€weighted dose variations in irregularly moving abdominal targets treated with carbon ion beams. Medical Physics, 2020, 47, 2768-2778.	1.6	7
51	Influence of momentum acceptance on range monitoring of 11C and 15O ion beams using in-beam PET. Physics in Medicine and Biology, 2020, 65, 125006.	1.6	10
52	The dosimetric impact of replacing the TG-43 algorithm by model based dose calculation for liver brachytherapy. Radiation Oncology, 2020, 15, 60.	1.2	10
53	A new treatment planning approach accounting for prompt gamma range verification and interfractional anatomical changes. Physics in Medicine and Biology, 2020, 65, 095005.	1.6	5
54	Patient-specific CT calibration based on ion radiography for different detector configurations in ¹ H, ⁴ He and ¹² C ion pencil beam scanning. Physics in Medicine and Biology, 2020, 65, 245014.	1.6	7

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55	Contrast-enhanced, conebeam CT-based, fractionated radiotherapy and follow-up monitoring of orthotopic mouse glioblastoma: a proof-of-concept study. <i>Radiation Oncology</i> , 2020, 15, 19.	1.2	8
56	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> , 2020, 47, 2254-2266.	1.6	11
57	Experimental comparison of clinically used ion beams for imaging applications using a range telescope. <i>Physics in Medicine and Biology</i> , 2020, 65, 155004.	1.6	6
58	Optimization and performance study of a proton CT system for pre-clinical small animal imaging. <i>Physics in Medicine and Biology</i> , 2020, 65, 155008.	1.6	14
59	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> , 2020, 40, 1048-1073.	0.6	4
60	Dose quantification in carbon ion therapy using in-beam positron emission tomography. <i>Physics in Medicine and Biology</i> , 2020, 65, 235052.	1.6	7
61	3D Compton image reconstruction method for whole gamma imaging. <i>Physics in Medicine and Biology</i> , 2020, 65, 225038.	1.6	26
62	Beam characterization and feasibility study for a small animal irradiation platform at clinical proton therapy facilities. <i>Physics in Medicine and Biology</i> , 2020, 65, 245045.	1.6	10
63	Development of a Hybrid Image Reconstruction Algorithm Combining PET and Compton Events for Whole Gamma Imaging. , 2020, , .		4
64	Proton Radiography for a Small-Animal Irradiation Platform Based on a Miniaturized Timepix Detector. , 2020, , .		1
65	Optimization of Phase Space files from clinical linear accelerators. <i>Physica Medica</i> , 2019, 64, 54-68.	0.4	5
66	Evaluation of proton and photon dose distributions recalculated on 2D and 3D Unet-generated pseudoCTs from T1-weighted MR head scans. <i>Acta Oncologica</i> , 2019, 58, 1429-1434.	0.8	33
67	Towards a novel small animal proton irradiation platform: the SIRMIO project. <i>Acta Oncologica</i> , 2019, 58, 1470-1475.	0.8	27
68	Technical Note: Sheet-based dynamic beam attenuator – A novel concept for dynamic fluence field modulation in x-ray CT. <i>Medical Physics</i> , 2019, 46, 5528-5537.	1.6	11
69	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> , 2019, 64, 225004.	1.6	79
70	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> , 2019, 9, 76.	1.1	21
71	Technical Note: Relative proton stopping power estimation from virtual monoenergetic images reconstructed from dual-layer computed tomography. <i>Medical Physics</i> , 2019, 46, 1821-1828.	1.6	16
72	Range verification of radioactive ion beams of 11C and 15O using in-beam PET imaging. <i>Physics in Medicine and Biology</i> , 2019, 64, 145014.	1.6	18

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73	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> , 2019, 64, 165002.	1.6	58
74	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> , 2019, 64, 155014.	1.6	10
75	Single isocenter stereotactic radiosurgery for patients with multiple brain metastases: dosimetric comparison of VMAT and a dedicated DCAT planning tool. <i>Radiation Oncology</i> , 2019, 14, 103.	1.2	36
76	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> , 2019, 46, 3268-3277.	1.6	9
77	I-BEAT: Ultrasonic method for online measurement of the energy distribution of a single ion bunch. <i>Scientific Reports</i> , 2019, 9, 6714.	1.6	17
78	Analytical simulator of proton radiography and tomography for different detector configurations. <i>Physica Medica</i> , 2019, 59, 92-99.	0.4	10
79	Dosimetric accuracy and radiobiological implications of ion computed tomography for proton therapy treatment planning. <i>Physics in Medicine and Biology</i> , 2019, 64, 125008.	1.6	31
80	Applicability of Capacitive Micromachined Ultrasonic Transducers for the detection of proton-induced thermoacoustic waves. , 2019, , .		4
81	Comparing Unet training with three different datasets to correct CBCT images for prostate radiotherapy dose calculations. <i>Physics in Medicine and Biology</i> , 2019, 64, 035011.	1.6	56
82	Dose-guided patient positioning in proton radiotherapy using multicriteria-optimization. <i>Zeitschrift Fur Medizinische Physik</i> , 2019, 29, 216-228.	0.6	19
83	Feasibility of 4DCBCT-based proton dose calculation: An ex vivo porcine lung phantom study. <i>Zeitschrift Fur Medizinische Physik</i> , 2019, 29, 249-261.	0.6	16
84	Gel dosimetry for three dimensional proton range measurements in anthropomorphic geometries. <i>Zeitschrift Fur Medizinische Physik</i> , 2019, 29, 162-172.	0.6	22
85	Ionizing radiation-induced acoustics for radiotherapy and diagnostic radiology applications. <i>Medical Physics</i> , 2018, 45, e707-e721.	1.6	58
86	AN ONLINE, RADIATION HARD PROTON ENERGY-RESOLVING SCINTILLATOR STACK FOR LASER-DRIVEN PROTON BUNCHES. <i>Radiation Protection Dosimetry</i> , 2018, 180, 291-295.	0.4	3
87	The biological treatment planning evolution of clinical fractionated radiotherapy using high LET. <i>International Journal of Radiation Biology</i> , 2018, 94, 752-755.	1.0	8
88	Clinical workflow optimization to improve 4DCT reconstruction for Toshiba Aquilion CT scanners. <i>Zeitschrift Fur Medizinische Physik</i> , 2018, 28, 88-95.	0.6	5
89	Improving the modelling of irradiation-induced brain activation for in vivo PET verification of proton therapy. <i>Radiotherapy and Oncology</i> , 2018, 128, 101-108.	0.3	12
90	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> , 2018, 100, 235-243.	0.4	10

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91	A Dedicated Tomographic Image Reconstruction Algorithm for Integration-Mode Detector Configuration in Ion Imaging. , 2018, , .		2
92	Analytical Proof of Principle for a Novel Approach to Imaging with Polyenergetic Proton Beams. , 2018, , .		0
93	Overview of Applications of Laser-Driven Particle Acceleration (Editors Paul R. Bolton, Katia Parodi,) Tj ETQq1 1 0.784314 rgBT /Overlo Beam Science, 2018, 2, 25.	0.6	1
94	<i>In vivo</i> range verification in particle therapy. Medical Physics, 2018, 45, e1036-e1050.	1.6	119
95	Time-of-flight spectrometry of ultra-short, polyenergetic proton bunches. Review of Scientific Instruments, 2018, 89, 123302.	0.6	8
96	Simulation of proton range monitoring in an anthropomorphic phantom using multi-slat collimators and time-of-flight detection of prompt-gamma quanta. Physica Medica, 2018, 54, 1-14.	0.4	10
97	Two-dimensional noise reconstruction in proton computed tomography using distance-driven filtered back-projection of simulated projections. Physics in Medicine and Biology, 2018, 63, 215009.	1.6	21
98	Toward a new treatment planning approach accounting for <i>in vivo</i> proton range verification. Physics in Medicine and Biology, 2018, 63, 215025.	1.6	16
99	ScatterNet: A convolutional neural network for coneâ€beam CT intensity correction. Medical Physics, 2018, 45, 4916-4926.	1.6	101
100	Experimental fluenceâ€modulated proton computed tomography by pencil beam scanning. Medical Physics, 2018, 45, 3287-3296.	1.6	16
101	Reply to: â€Comment on: Dualâ€energy CT quantitative imaging: A comparison study between twinâ€beam and dualâ€source CT scanners [Med. Phys. 44(1), 171â€179 (2017)]â€ Medical Physics, 2018, 45, 3997-3998.	1.6	1
102	Comparative Monte Carlo study on the performance of integration- and list-mode detector configurations for carbon ion computed tomography. Physics in Medicine and Biology, 2017, 62, 1096-1112.	1.6	23
103	Software platform for simulation of a prototype proton <scp>CT</scp> scanner. Medical Physics, 2017, 44, 1002-1016.	1.6	48
104	Dualâ€energy CT quantitative imaging: a comparison study between twinâ€beam and dualâ€source CT scanners. Medical Physics, 2017, 44, 171-179.	1.6	101
105	Spectroscopic study of prompt-gamma emission for range verification in proton therapy. Physica Medica, 2017, 34, 7-17.	0.4	38
106	Initial development of goCMC: a GPU-oriented fast cross-platform Monte Carlo engine for carbon ion therapy. Physics in Medicine and Biology, 2017, 62, 3682-3699.	1.6	17
107	Application of single- and dual-energy CT brain tissue segmentation to PET monitoring of proton therapy. Physics in Medicine and Biology, 2017, 62, 2427-2448.	1.6	9
108	First clinical investigation of a 4D maximum likelihood reconstruction for 4D PET-based treatment verification in ion beam therapy. Radiotherapy and Oncology, 2017, 123, 339-345.	0.3	4

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109	Feasibility of reducing differences in estimated doses in nuclear medicine between a patient-specific and a reference phantom. <i>Physica Medica</i> , 2017, 39, 100-112.	0.4	12
110	Systematic out-of-field secondary neutron spectrometry and dosimetry in pencil beam scanning proton therapy. <i>Medical Physics</i> , 2017, 44, 1912-1920.	1.6	21
111	Sensitivity of post treatment positron emission tomography/computed tomography to detect inter-fractional range variations in scanned ion beam therapy. <i>Acta Oncologica</i> , 2017, 56, 1451-1458.	0.8	25
112	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> , 2017, 62, 9159-9176.	1.6	40
113	Multi-criterial patient positioning based on dose recalculation on scatter-corrected CBCT images. <i>Radiotherapy and Oncology</i> , 2017, 125, 464-469.	0.3	15
114	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> , 2017, 62, 8470-8482.	1.6	15
115	Practical implications for the quality assurance of modulated radiation therapy techniques using point detector arrays. <i>Journal of Applied Clinical Medical Physics</i> , 2017, 18, 20-31.	0.8	5
116	An automated, 0.5ÅHz nano-foil target positioning system for intense laser plasma experiments. <i>High Power Laser Science and Engineering</i> , 2017, 5, .	2.0	25
117	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> , 2017, 3, 49-52.	1.2	32
118	Submillimeter ionoacoustic range determination for protons in water at a clinical synchrotron. <i>Physics in Medicine and Biology</i> , 2017, 62, L20-L30.	1.6	55
119	Sub-3mm spatial resolution from a large monolithic LaBr ₃ (Ce) scintillator. <i>Current Directions in Biomedical Engineering</i> , 2017, 3, 655-659.	0.2	11
120	Characterization of online high dynamic range imaging for laser-driven ion beam diagnostics using visible light. <i>Current Directions in Biomedical Engineering</i> , 2017, 3, 343-346.	0.2	0
121	Concrete realization of the whole gamma imaging concept. , 2017, , .		3
122	Characterization of a Compton camera setup with monolithic LaBr ₃ (Ce) absorber and segmented GAGG scatter detectors. , 2017, , .		0
123	Considerations on employing a PMQ-doublet for narrow and broad proton energy distributions. <i>Current Directions in Biomedical Engineering</i> , 2017, 3, 339-342.	0.2	4
124	The FLUKA Code: An Accurate Simulation Tool for Particle Therapy. <i>Frontiers in Oncology</i> , 2016, 6, 116.	1.3	182
125	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> , 2016, 43, 495-504.	1.6	89
126	Initial clinical evaluation of PET-based ion beam therapy monitoring under consideration of organ motion. <i>Medical Physics</i> , 2016, 43, 975-982.	1.6	11

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127	Investigating deformable image registration and scatter correction for CBCT-based dose calculation in adaptive IMPT. <i>Medical Physics</i> , 2016, 43, 5635-5646.	1.6	92
128	High-Rate Capable Floating Strip Micromegas. <i>Nuclear and Particle Physics Proceedings</i> , 2016, 273-275, 1173-1179.	0.2	2
129	Ionoacoustic tomography of the proton Bragg peak in combination with ultrasound and optoacoustic imaging. <i>Scientific Reports</i> , 2016, 6, 29305.	1.6	50
130	Helium ions for radiotherapy? Physical and biological verifications of a novel treatment modality. <i>Medical Physics</i> , 2016, 43, 1995-2004.	1.6	87
131	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> , 2016, 809, 113-119.	0.7	46
132	Feasibility of automated proton therapy plan adaptation for head and neck tumors using cone beam CT images. <i>Radiation Oncology</i> , 2016, 11, 64.	1.2	52
133	Vision 20/20: Positron emission tomography in radiation therapy planning, delivery, and monitoring. <i>Medical Physics</i> , 2015, 42, 7153-7168.	1.6	54
134	Surface refraction of sound waves affects calibration of three-dimensional ultrasound. <i>Radiation Oncology</i> , 2015, 10, 119.	1.2	4
135	Patient data-based Monte Carlo simulation of in-beam single-ring OpenPET imaging. , 2015, , .		1
136	Investigating CT to CBCT image registration for head and neck proton therapy as a tool for daily dose recalculation. <i>Medical Physics</i> , 2015, 42, 1354-1366.	1.6	115
137	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> , 2015, 91, 435-443.	0.4	35
138	Phantom based evaluation of CT to CBCT image registration for proton therapy dose recalculation. <i>Physics in Medicine and Biology</i> , 2015, 60, 595-613.	1.6	49
139	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 Oncologica</i> , 2015, 54, 1651-1657.	0.8	83
140	Clinical implementation and range evaluation of in vivo PET dosimetry for particle irradiation in patients with primary glioma. <i>Radiotherapy and Oncology</i> , 2015, 115, 179-185.	0.3	43
141	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> , 2015, 42, 3979-3991.	1.6	22
142	Ionoacoustics: A new direct method for range verification. <i>Modern Physics Letters A</i> , 2015, 30, 1540025.	0.5	23
143	Phase Space Generation for Proton and Carbon Ion Beams for External Users™ Applications at the Heidelberg Ion Therapy Center. <i>Frontiers in Oncology</i> , 2015, 5, 297.	1.3	33
144	Monte Carlo Simulations of Particle Interactions with Tissue in Carbon Ion Therapy. <i>International Journal of Particle Therapy</i> , 2015, 2, 447-458.	0.9	8

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145	Projection-based deformable registration for tomographic imaging in ion beam therapy. , 2014, , .		2
146	Monte Carlo-based parametrization of the lateral dose spread for clinical treatment planning of scanned proton and carbon ion beams. Journal of Radiation Research, 2013, 54, i91-i96.	0.8	58
147	Implementation and workflow for PET monitoring of therapeutic ion irradiation: a comparison of in-beam, in-room, and off-line techniques. Physics in Medicine and Biology, 2011, 56, 1281-1298.	1.6	93
148	Accuracy of Proton Beam Range Verification Using Post-Treatment Positron Emission Tomography/Computed Tomography as Function of Treatment Site. International Journal of Radiation Oncology Biology Physics, 2011, 79, 297-304.	0.4	72
149	System solution for particle therapy PET. , 2009, , .		0
150	Clinical implementation of full Monte Carlo dose calculation in proton beam therapy. Physics in Medicine and Biology, 2008, 53, 4825-4853.	1.6	223
151	PET/CT imaging for treatment verification after proton therapy: A study with plastic phantoms and metallic implants. Medical Physics, 2007, 34, 419-435.	1.6	126
152	Patient Study of In Vivo Verification of Beam Delivery and Range, Using Positron Emission Tomography and Computed Tomography Imaging After Proton Therapy. International Journal of Radiation Oncology Biology Physics, 2007, 68, 920-934.	0.4	346
153	A filtering approach based on Gaussianâ€“powerlaw convolutions for local PET verification of proton radiotherapy. Physics in Medicine and Biology, 2006, 51, 1991-2009.	1.6	90
154	Quantitative assessment of radionuclide production yields in in-beam and offline PET measurements at different proton irradiation facilities. Physics in Medicine and Biology, 0, , .	1.6	0