Niels Bassler

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4387678/publications.pdf

Version: 2024-02-01

104	1,625	304701	361001
papers	citations	22 h-index	35 g-index

104	104	104	1208
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A systematic review on the usage of averaged LET in radiation biology for particle therapy. Radiotherapy and Oncology, 2021, 161, 211-221.	0.6	44
2	Proton scanning and X-ray beam irradiation induce distinct regulation of inflammatory cytokines in a preclinical mouse model. International Journal of Radiation Biology, 2020, 96, 1238-1244.	1.8	14
3	Calculation of the Beam-Modulation Effect of the Lung in Carbon Ion and Proton Therapy With Deterministic Pencil Beam Algorithms. Frontiers in Physics, 2020, 8, .	2.1	1
4	Doseâ€•rather than fluenceâ€averaged LET should be used as a singleâ€parameter descriptor of proton beam quality for radiochromic film dosimetry. Medical Physics, 2020, 47, 2289-2299.	3.0	12
5	Mapping initial and general recombination in scanning proton pencil beams. Physics in Medicine and Biology, 2020, 65, 115003.	3.0	8
6	Ionization quenching in scintillators used for dosimetry of mixed particle fields. Physics in Medicine and Biology, 2019, 64, 095018.	3.0	10
7	Comparison of Coding Transcriptomes in Fibroblasts Irradiated With Low and High LET Proton Beams and Cobalt-60 Photons. International Journal of Radiation Oncology Biology Physics, 2019, 103, 1203-1211.	0.8	7
8	THE ROLE OF PARTICLE SPECTRA IN MODELING THE RELATIVE BIOLOGICAL EFFECTIVENESS OF PROTON RADIOTHERAPY BEAMS. Radiation Protection Dosimetry, 2019, 183, 251-254.	0.8	5
9	MONTE CARLO SIMULATIONS OF SPATIAL LET DISTRIBUTIONS IN CLINICAL PROTON BEAMS. Radiation Protection Dosimetry, 2018, 180, 296-299.	0.8	15
10	CALIBRATION OF GAFCHROMIC EBT3 FILM FOR DOSIMETRY OF SCANNING PROTON PENCIL BEAM (PBS). Radiation Protection Dosimetry, 2018, 180, 324-328.	0.8	10
11	Quantitative evaluation of potential irradiation geometries for carbonâ€ion beam grid therapy. Medical Physics, 2018, 45, 1210-1221.	3.0	6
12	Computational models and tools. Medical Physics, 2018, 45, e1073-e1085.	3.0	5
13	Validation of new 2D ripple filters in proton treatments of spherical geometries and non-small cell lung carcinoma cases. Physics in Medicine and Biology, 2018, 63, 245020.	3.0	6
14	Optimal reference genes for normalization of qPCR gene expression data from proton and photon irradiated dermal fibroblasts. Scientific Reports, 2018, 8, 12688.	3.3	5
15	[OA188] Passive ion beam modulation techniques for particle therapy raster scanning facilities. Physica Medica, 2018, 52, 72.	0.7	0
16	PV-0571: Transcriptomic changes in fibroblasts irradiated with proton beam scanning or Co-60 gamma rays. Radiotherapy and Oncology, 2018, 127, S300-S301.	0.6	0
17	Chemically tuned linear energy transfer dependent quenching in a deformable, radiochromic 3D dosimeter. Physics in Medicine and Biology, 2017, 62, N73-N89.	3.0	17
18	Relative biological effectiveness (RBE) and distal edge effects of proton radiation on early damage in vivo. Acta OncolÃ³gica, 2017, 56, 1387-1391.	1.8	64

#	Article	IF	Citations
19	Differential gene expression in primary fibroblasts induced by proton and cobalt-60 beam irradiation. Acta OncolÃ³gica, 2017, 56, 1406-1412.	1.8	17
20	Development of an interlaced-crossfiring geometry for proton grid therapy. Acta OncolÃ³gica, 2017, 56, 1437-1443.	1.8	11
21	Relative Biological Effectiveness of Antiprotons the AD-4/ACE Experiment. , 2017, , .		1
22	Technical Note: Improving proton stopping power ratio determination for a deformable siliconeâ€based 3D dosimeter using dual energy CT. Medical Physics, 2016, 43, 2780-2784.	3.0	11
23	A general algorithm for calculation of recombination losses in ionization chambers exposed to ion beams. Medical Physics, 2016, 43, 5484-5492.	3.0	11
24	The relative biological effectiveness of antiprotons. Radiotherapy and Oncology, 2016, 121, 453-458.	0.6	6
25	Dosimetric comparisons of carbon ion treatment plans for 1D and 2D ripple filters with variable thicknesses. Physics in Medicine and Biology, 2016, 61, 4327-4341.	3.0	9
26	RBE for Carbon ions In Vivo for Tumor Control and Normal Tissue Damage. Radiotherapy and Oncology, 2016, 118, S3.	0.6	0
27	Simulation of recombination in an air filled ionization chamber. Radiotherapy and Oncology, 2016, 118, S25-S26.	0.6	0
28	Alanine as a Dose Verification Tool for Carbon Ion In-Vivo Irradiation. Radiotherapy and Oncology, 2016, 118, S6.	0.6	0
29	Improved proton stopping power ratio estimation for a deformable 3D dosimeter using Dual Energy CT. Radiotherapy and Oncology, 2016, 118, S99-S100.	0.6	0
30	The alanine detector in BNCT dosimetry: Dose response in thermal and epithermal neutron fields. Medical Physics, 2015, 42, 400-411.	3.0	21
31	Antiproton annihilation physics in the Monte Carlo particle transport code SHIELD-HIT12A. Nuclear Instruments & Methods in Physics Research B, 2015, 347, 65-71.	1.4	3
32	Fluence inhomogeneities due to a ripple filter induced MoirÃ© effect. Physics in Medicine and Biology, 2015, 60, N59-N69.	3.0	10
33	Relative biological effectiveness of carbon ions for tumor control, acute skin damage and late radiation-induced fibrosis in a mouse model. Acta OncolÃ³gica, 2015, 54, 1623-1630.	1.8	37
34	LET-painting increases tumour control probability in hypoxic tumours. Acta OncolÃ³gica, 2014, 53, 25-32.	1.8	112
35	Monte Carlo simulations of new 2D ripple filters for particle therapy facilities. Acta OncolÃ³gica, 2014, 53, 40-49.	1.8	19
36	A method for selection of beam angles robust to intra-fractional motion in proton therapy of lung cancer. Acta OncolÃ³gica, 2014, 53, 1058-1063.	1.8	21

#	Article	IF	Citations
37	The image quality of ion computed tomography at clinical imaging dose levels. Medical Physics, 2014, 41, 111908.	3.0	28
38	Improved proton computed tomography by dual modality image reconstruction. Medical Physics, 2014, 41, 031904.	3.0	16
39	Clinical oxygen enhancement ratio of tumors in carbon ion radiotherapy: the influence of local oxygenation changes. Journal of Radiation Research, 2014, 55, 902-911.	1.6	50
40	Formation of radical anions of radiosensitizers and related model compounds via electrospray ionization. International Journal of Mass Spectrometry, 2014, 365-366, 56-63.	1.5	28
41	Efficient calculation of local dose distributions for response modeling in proton and heavier ion beams. European Physical Journal D, 2014, 68, 1.	1.3	6
42	Evaluation of the Stability of the Water Equivalent Path Length in Proton Therapy of Lung Tumors Using 4D-CT Images. International Journal of Radiation Oncology Biology Physics, 2014, 90, S923.	0.8	0
43	Dependence of simulated positron emitter yields in ion beam cancer therapy on modeling nuclear fragmentation. Applied Radiation and Isotopes, 2014, 83, 165-170.	1.5	6
44	PyTRiP - a toolbox and GUI for the proton/ion therapy planning system TRiP. Journal of Physics: Conference Series, 2014, 489, 012045.	0.4	5
45	Improvements in the stopping power library libdEdx and release of the web GUI dedx.au.dk. Journal of Physics: Conference Series, 2014, 489, 012003.	0.4	6
46	15: Oxygen ions achieve better tumour control probability in hypoxic tumours than carbon ions do. Radiotherapy and Oncology, 2014, 110, S7-S8.	0.6	0
47	84: Comparing Ion Computed Tomography under clinical constraints. Radiotherapy and Oncology, 2014, 110, S41.	0.6	0
48	SHIELD-HIT12A - a Monte Carlo particle transport program for ion therapy research. Journal of Physics: Conference Series, 2014, 489, 012004.	0.4	22
49	Dosimetry auditing procedure with alanine dosimeters for light ion beam therapy. Radiotherapy and Oncology, 2013, 108, 99-106.	0.6	21
50	Evaluation of the relative thermoluminescence efficiency of LiF:Mg,Ti and LiF:Mg,Cu,P TL detectors to low-energy heavy ions. Radiation Measurements, 2013, 51-52, 7-12.	1.4	15
51	Fluence correction factors for graphite calorimetry in a low-energy clinical proton beam: I. Analytical and Monte Carlo simulations. Physics in Medicine and Biology, 2013, 58, 3481-3499.	3.0	22
52	In response to the commentary â€˜Particle species dependence of cell survival relative biological effectiveness: Evident and not negligibleâ€™ by Thomas Friedrich, Marco Durante & Michael Scholz. Acta OncolÃ³gica, 2013, 52, 591-591.	1.8	2
53	Antiproton induced DNA damage: proton like in flight, carbon-ion like near rest. Scientific Reports, 2013, 3, 1770.	3.3	21
54	PD-0491: Development of an angle dependent robustness quality factor for proton/ion beam in cancer treatment. Radiotherapy and Oncology, 2013, 106, S191.	0.6	0

#	Article	IF	Citations
55	Recent improvements in the SHIELD-HIT code. International Journal of Radiation Biology, 2012, 88, 195-199.	1.8	13
56	Initial recombination in the track of heavy charged particles: Numerical solution for air filled ionization chambers. Acta OncolÃ³gica, 2012, 51, 368-375.	1.8	8
57	The impact of modeling nuclear fragmentation on delivered dose and radiobiology in ion therapy. Physics in Medicine and Biology, 2012, 57, 5169-5185.	3.0	32
58	A community call for a dedicated radiobiological research facility to support particle beam cancer therapy. Radiotherapy and Oncology, 2012, 105, 1-3.	0.6	28
59	Stopping power for particle therapy: The generic library libdEdx and clinically relevant stopping-power ratios for light ions. International Journal of Radiation Biology, 2012, 88, 209-212.	1.8	29
60	72 ANTIPROTONS FOR RADIOBIOLOGY AND CANCER THERAPY THE AD-4/ACE EXPERIMENT. Radiotherapy and Oncology, 2012, 102, S24-S25.	0.6	1
61	175 DOSE AND LET PAINTING WITH CHARGED PARTICLES. Radiotherapy and Oncology, 2012, 102, S82-S83.	0.6	0
62	265 NUCLEAR FRAGMENTATION IN CLINICAL HEAVY ION BEAMS, SHOULD WE WORRY?. Radiotherapy and Oncology, 2012, 102, S140.	0.6	0
63	284 MEASUREMENT OF THE DOSE AVERAGED LET IN MIXED PARTICLE FIELDS USING ALANINE DETECTORS. Radiotherapy and Oncology, 2012, 102, S149.	0.6	0
64	295 STRATEGIES TO OVERCOME HYPOXIA â€“ A ROADMAP TO LET OPTIMIZED TREATMENT PLANNING FOR ION THERAPY. Radiotherapy and Oncology, 2012, 102, S156-S157.	0.6	1
65	Optimizing SHIELD-HIT for carbon ion treatment. Physics in Medicine and Biology, 2012, 57, 2393-2409.	3.0	31
66	Fluence correction factors and stopping power ratios for clinical ion beams. Acta OncolÃ³gica, 2011, 50, 797-805.	1.8	22
67	Analytical expressions for water-to-air stopping-power ratios relevant for accurate dosimetry in particle therapy. Physics in Medicine and Biology, 2011, 56, 2515-2533.	3.0	24
68	In vitro RBE-LET dependence for multiple particle types. Acta OncolÃ³gica, 2011, 50, 757-762.	1.8	107
69	Dose determination using alanine detectors in a mixed neutron and gamma field for boron neutron capture therapy of liver malignancies. Acta OncolÃ³gica, 2011, 50, 817-822.	1.8	11
70	Dose response of alanine detectors irradiated with carbon ion beams. Medical Physics, 2011, 38, 1859-1866.	3.0	24
71	Amorphous track predictions in â€˜libamtrackâ€™ for alanine relative effectiveness in ion beams. Radiation Measurements, 2011, 46, 1551-1553.	1.4	3
72	Characterization of the optical properties and stability of Presageâ„¢ following irradiation with photons and carbon ions. Acta OncolÃ³gica, 2011, 50, 829-834.	1.8	20

#	Article	IF	Citations
73	SU-E-T-712: An Antiproton Depth-Dose Curve Benchmark of Geant4. Medical Physics, 2011, 38, 3654-3654.	3.0	0
74	Experimental setup and first measurement of DNA damage induced along and around an antiproton beam. European Physical Journal D, 2010, 60, 209-214.	1.3	4
75	Radiation damage in charge-coupled devices. Radiation and Environmental Biophysics, 2010, 49, 373-378.	1.4	12
76	COTS Silicon diodes as radiation detectors in proton and heavy charged particle radiotherapy 1. Radiation and Environmental Biophysics, 2010, 49, 365-371.	1.4	17
77	Amorphous track models: A numerical comparison study. Radiation Measurements, 2010, 45, 1406-1409.	1.4	31
78	Liquid ionization chambers for LET determination. Radiation Measurements, 2010, 45, 1109-1111.	1.4	1
79	Real-time imaging for dose evaluation during antiproton irradiation. Physics in Medicine and Biology, 2010, 55, N123-N131.	3.0	8
80	Dose calculation in biological samples in a mixed neutron-gamma field at the TRIGA reactor of the University of Mainz. Acta OncolÃ³gica, 2010, 49, 1165-1169.	1.8	14
81	Comparison of optimized single and multifield irradiation plans of antiproton, proton and carbon ion beams. Radiotherapy and Oncology, 2010, 95, 87-93.	0.6	28
82	Neutron Fluence in Antiproton Radiotherapy, Measurements and Simulations. Acta OncolÃ³gica, 2010, 49, 1149-1159.	1.8	6
83	Investigation of the dosimetric impact of a Ni-Ti fiducial marker in carbon ion and proton beams. Acta OncolÃ³gica, 2010, 49, 1160-1164.	1.8	9
84	Dose- and LET-painting with particle therapy. Acta OncolÃ³gica, 2010, 49, 1170-1176.	1.8	120
85	SUâ€GGâ€Tâ€413: Comparison of Outâ€Ofâ€Field Neutron Equivalent Doses in Scanning Carbon and Proton Therapies for Cranial Fields. Medical Physics, 2010, 37, 3281-3281.	3.0	1
86	Monte Carlo simulations on the waterâ€toâ€air stopping power ratio for carbon ion dosimetry. Medical Physics, 2009, 36, 1230-1235.	3.0	24
87	Calculated LET spectrum from antiproton beams stopping in water. Acta OncolÃ³gica, 2009, 48, 223-226.	1.8	12
88	Antiproton radiotherapy: peripheral dose from secondary neutrons. Hyperfine Interactions, 2009, 194, 313-318.	0.5	5
89	THE PROPERTIES AND STABILITY OF PRESAGE FOLLOWING IRRADIATION WITH PHOTONS AND CARBON IONS IN THE OPTICAL SPECTRUM. Radiotherapy and Oncology, 2009, 92, S52.	0.6	0
90	V-79 Chinese Hamster cells irradiated with antiprotons, a study of peripheral damage due to medium and long range components of the annihilation radiation. International Journal of Radiation Biology, 2009, 85, 1148-1156.	1.8	7

#	Article	IF	Citations
91	DEPTH-DOSE AND LET DISTRIBUTIONS OF ANTIPROTON BEAMS IN VARIOUS TARGET MATERIALS. Radiotherapy and Oncology, 2009, 92, S228.	0.6	0
92	Carbon beam dosimetry using VIP polymer gel and MRI. Journal of Physics: Conference Series, 2009, 164, 012055.	0.4	9
93	Antiproton radiotherapy: peripheral dose from secondary neutrons. , 2009, , 661-666.		0
94	Verifying the WEPL Approximation for Several Tissue Substitutes - A Monte Carlo Study. International Journal of Radiation Oncology Biology Physics, 2008, 72, S669.	0.8	0
95	Antiproton therapy. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 530-534.	1.4	12
96	The antiproton depthâ€“dose curve measured with alanine detectors. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 929-936.	1.4	24
97	Antiproton radiotherapy. Radiotherapy and Oncology, 2008, 86, 14-19.	0.6	27
98	The antiproton depthâ€“dose curve in water. Physics in Medicine and Biology, 2008, 53, 793-805.	3.0	24
99	MO-E-AUD B-02: Antiproton Therapy: Monte Carlo Simulations of Normal Tissue Equivalent Dose From Annihilation Neutrons. Medical Physics, 2008, 35, 2874-2874.	3.0	1
100	The biological effectiveness of antiproton irradiation. Radiotherapy and Oncology, 2006, 81, 233-242.	0.6	60
101	Bubble detector measurements of a mixed radiation field from antiproton annihilation. Nuclear Instruments & Methods in Physics Research B, 2006, 251, 269-273.	1.4	8
102	Cancer Therapy with Antiprotons. AIP Conference Proceedings, 2005, , .	0.4	5
103	Biological effectiveness of antiproton annihilation. Nuclear Instruments & Methods in Physics Research B, 2004, 221, 210-214.	1.4	19
104	Biological effectiveness of antiproton annihilation. Nuclear Instruments & Methods in Physics Research B, 2004, 214, 181-185.	1.4	17