

Lennart Volz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7391987/publications.pdf>

Version: 2024-02-01

19
papers

320
citations

933447

10
h-index

888059

17
g-index

19
all docs

19
docs citations

19
times ranked

239
citing authors

#	ARTICLE	IF	CITATIONS
1	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.	3.0	58
2	A theoretical framework to predict the most likely ion path in particle imaging. <i>Physics in Medicine and Biology</i> , 2017, 62, 1777-1790.	3.0	42
3	The impact of secondary fragments on the image quality of helium ion imaging. <i>Physics in Medicine and Biology</i> , 2018, 63, 195016.	3.0	25
4	Stopping power accuracy and achievable spatial resolution of helium ion imaging using a prototype particle CT detector system. <i>Current Directions in Biomedical Engineering</i> , 2017, 3, 401-404.	0.4	23
5	A High-Granularity Digital Tracking Calorimeter Optimized for Proton CT. <i>Frontiers in Physics</i> , 2020, 8, .	2.1	21
6	Helium CT : Monte Carlo simulation results for an ideal source and detector with comparison to proton CT. <i>Medical Physics</i> , 2018, 45, 3264-3274.	3.0	19
7	Design optimization of a pixel-based range telescope for proton computed tomography. <i>Physica Medica</i> , 2019, 63, 87-97.	0.7	18
8	Improving single-event proton CT by removing nuclear interaction events within the energy/range detector. <i>Physics in Medicine and Biology</i> , 2019, 64, 15NT01.	3.0	15
9	Experimental exploration of a mixed helium/carbon beam for online treatment monitoring in carbon ion beam therapy. <i>Physics in Medicine and Biology</i> , 2020, 65, 055002.	3.0	15
10	Extension of the Fermi's most-likely path in heterogeneous medium with prior knowledge information. <i>Physics in Medicine and Biology</i> , 2017, 62, 9207-9219.	3.0	14
11	Experimental comparison of photon versus particle computed tomography to predict tissue relative stopping powers. <i>Medical Physics</i> , 2022, 49, 474-487.	3.0	13
12	The accuracy of helium ion CT based particle therapy range prediction: an experimental study comparing different particle and x-ray CT modalities. <i>Physics in Medicine and Biology</i> , 2021, 66, 235010.	3.0	9
13	Image quality of list-mode proton imaging without front trackers. <i>Physics in Medicine and Biology</i> , 2020, 65, 135012.	3.0	8
14	A scintillator-based range telescope for particle therapy. <i>Physics in Medicine and Biology</i> , 2020, 65, 165001.	3.0	8
15	Helium radiography with a digital tracking calorimeter—a Monte Carlo study for secondary track rejection. <i>Physics in Medicine and Biology</i> , 2021, 66, 035004.	3.0	8
16	Theoretical considerations on the spatial resolution limit of single-event particle radiography. <i>Biomedical Physics and Engineering Express</i> , 2020, 6, 055002.	1.2	7
17	Characterization of monolithic CMOS pixel sensor chip with ion beams for application in particle computed tomography. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 958, 162626.	1.6	6
18	Investigating particle track topology for range telescopes in particle radiography using convolutional neural networks. <i>Acta Oncologica</i> , 2021, 60, 1413-1418.	1.8	6

#	ARTICLE	IF	CITATIONS
19	[OA027] Helium as a range probe in carbon ion therapy. Physica Medica, 2018, 52, 11.	0.7	5