Hermann Fuchs

List of Publications by Year
in descending order

31	541	567281 15	642732 23
papers	citations	h-index	g-index

31	31	31	471
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An external perpendicular magnetic field does not influence survival and DNA damage after proton and carbon ion irradiation in human cancer cells. Zeitschrift Fur Medizinische Physik, 2022, , .	1.5	0
2	Roadmap: helium ion therapy. Physics in Medicine and Biology, 2022, 67, 15TR02.	3.0	24
3	Efficient full Monte Carlo modelling and multi-energy generative model development of an advanced X-ray device. Zeitschrift Fur Medizinische Physik, 2022, , .	1.5	0
4	The practical radius of a pencil beam in proton therapy. Zeitschrift Fur Medizinische Physik, 2021, 31, 166-174.	1.5	1
5	Technical Note: Design and commissioning of a water phantom for proton dosimetry in magnetic fields. Medical Physics, 2021, 48, 505-512.	3.0	3
6	MRâ€guided proton therapy: Impact of magnetic fields on the detector response. Medical Physics, 2021, 48, 2572-2579.	3.0	12
7	Computerâ€assisted beam modeling for particle therapy. Medical Physics, 2021, 48, 841-851.	3.0	12
8	Benchmarking a GATE/Geant4 Monte Carlo model for proton beams in magnetic fields. Medical Physics, 2020, 47, 223-233.	3.0	12
9	Clinical implementation and commissioning of the MedAustron Particle Therapy Accelerator for nonâ€isocentric scanned proton beam treatments. Medical Physics, 2020, 47, 380-392.	3.0	20
10	Experimental benchmarking of RayStation proton dose calculation algorithms inside and outside the target region in heterogeneous phantom geometries. Physica Medica, 2020, 76, 182-193.	0.7	15
11	Technical Note: GATEâ€RTion: a GATE/Geant4 release for clinical applications in scanned ion beam therapy. Medical Physics, 2020, 47, 3675-3681.	3.0	25
12	Characterization of the PTW-34089 type 147 mm diameter large-area ionization chamber for use in light-ion beams. Physics in Medicine and Biology, 2020, 65, 17NT02.	3.0	5
13	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
14	A GATE/Geant4 beam model for the MedAustron non-isocentric proton treatment plans quality assurance. Physica Medica, 2020, 71, 115-123.	0.7	25
15	Implementation of a dose calculation algorithm based on Monte Carlo simulations for treatment planning towards MRI guided ion beam therapy. Physica Medica, 2020, 74, 155-165.	0.7	13
16	Towards offline PET monitoring of proton therapy at MedAustron. Zeitschrift Fur Medizinische Physik, 2019, 29, 59-65.	1.5	11
17	Characterization of EBT3 radiochromic films for dosimetry of proton beams in the presence of magnetic fields. Medical Physics, 2019, 46, 3278-3284.	3.0	10
18	Evaluation of electromagnetic and nuclear scattering models in GATE/Geant4 for proton therapy. Medical Physics, 2019, 46, 2444-2456.	3.0	39

#	Article	IF	Citations
19	Characteristic of EBT-XD and EBT3 radiochromic film dosimetry for photon and proton beams. Physics in Medicine and Biology, 2018, 63, 065007.	3.0	62
20	A pencil beam algorithm for magnetic resonance imageâ€guided proton therapy. Medical Physics, 2018, 45, 2195-2204.	3.0	25
21	Implementation of dosimetry equipment and phantoms at the MedAustron light ion beam therapy facility. Medical Physics, 2018, 45, 352-369.	3.0	31
22	Magnetic field effects on particle beams and their implications for dose calculation in <scp>MR</scp>â€guided particle therapy. Medical Physics, 2017, 44, 1149-1156.	3.0	47
23	Evaluation of GATE/Geant4 multiple Coulomb scattering algorithms for a 160 MeV proton beam. Nuclear Instruments & Methods in Physics Research B, 2017, 410, 122-126.	1.4	17
24	Benchmarking GATE/Geant4 for¹⁶O ion beam therapy. Physics in Medicine and Biology, 2017, 62, N474-N484.	3.0	4
25	EP-1504: Monte Carlo modeling of non-isocentric proton pencil beam scanning treatments. Radiotherapy and Oncology, 2017, 123, S806-S807.	0.6	0
26	Can particle beam therapy be improved using helium ions? â€“ a planning study focusing on pediatric patients. Acta OncolÃ³gica, 2016, 55, 751-759.	1.8	47
27	Investigation of prompt Î³ ray emission for online monitoring in ion therapy. Journal of Physics: Conference Series, 2015, 599, 012042.	0.4	0
28	Implementation of spot scanning dose optimization and dose calculation for helium ions in Hyperion. Medical Physics, 2015, 42, 5157-5166.	3.0	19
29	A pencil beam algorithm for helium ion beam therapy. Medical Physics, 2012, 39, 6726-6737.	3.0	25
30	Comparison of basic features of proton and helium ion pencil beams in water using GATE. Zeitschrift Fur Medizinische Physik, 2012, 22, 170-178.	1.5	22
31	New data on direct ion storage dosemeters. Radiation Protection Dosimetry, 2007, 128, 120-123.	0.8	3