Wesley S Culberson

List of Publications by Year
in descending order

51 papers	460 citations	949033 11 h-index	939365 18 g-index
51 all docs	51 docs citations	51 times ranked	507 citing authors

#	Article	IF	Citations
1	Fiducial visibility on planar images during motion-synchronized tomotherapy treatments. Biomedical Physics and Engineering Express, 2022, 8, 027001.	0.6	0
2	Investigating aperture-based approximations to model a focused Dynamic Collimation System for pencil beam scanning proton therapy. Biomedical Physics and Engineering Express, 2022, , .	0.6	2
3	The Effect of Mouse Size on Dose from an X-Rad320 Irradiator. Radiation Research, 2022, , .	0.7	1
4	Tracking target/chest relationship changes during motionâ€synchronized tomotherapy treatments. Medical Physics, 2022, , .	1.6	3
5	Using 4D dose accumulation to calculate organâ€atâ€risk dose deviations from motionâ€synchronized liver and lung tomotherapy treatments. Journal of Applied Clinical Medical Physics, 2022, , e13627.	0.8	1
6	Characterization of imaging performance of a novel helical kVCT for use in imageâ€guided and adaptive radiotherapy. Journal of Applied Clinical Medical Physics, 2022, 23, e13648.	0.8	10
7	Effects of variableâ€width jaw motion on beam characteristics for Radixact SynchronyÂ®. Journal of Applied Clinical Medical Physics, 2021, 22, 175-181.	0.8	4
8	Development and validation of the Dynamic Collimation Monte Carlo simulation package for pencil beam scanning proton therapy. Medical Physics, 2021, 48, 3172-3185.	1.6	9
9	3D dosimetric validation of ultrasound-guided radiotherapy with a dynamically deformable abdominal phantom. Physica Medica, 2021, 84, 159-167.	0.4	9
10	Technical note: On the impact of the kV imaging configuration on doses from planar images during motionâ€synchronized treatments on RadixactÂ®. Journal of Applied Clinical Medical Physics, 2021, 22, 227-231.	0.8	4
11	Dosimetry evaluation of the GammaPod stereotactic radiosurgery device based on established AAPM and IAEA protocols. Medical Physics, 2020, 47, 3614-3620.	1.6	5
12	Experimental and Monte Carlo characterization of a dynamic collimation system prototype for pencil beam scanning proton therapy. Medical Physics, 2020, 47, 5343-5356.	1.6	5
13	Technical Note: Patient dose from kilovoltage radiographs during motionâ€synchronized treatments on Radixact^{Â®}. Medical Physics, 2020, 47, 5772-5778.	1.6	10
14	Evaluation of radixact motion synchrony for 3D respiratory motion: Modeling accuracy and dosimetric fidelity. Journal of Applied Clinical Medical Physics, 2020, 21, 96-106.	0.8	34
15	On the stability of wellâ€type ionization chamber source strength calibration coefficients. Medical Physics, 2020, 47, 4491-4501.	1.6	4
16	Characterizing a PTW microDiamond detector in kilovoltage radiation beams. Medical Physics, 2020, 47, 4553-4562.	1.6	8
17	On the implementation of the planâ€class specific reference field using multidimensional clustering of plan features and alternative strategies for improved dosimetry in modulated clinical linear accelerator treatments. Medical Physics, 2020, 47, 3621-3635.	1.6	3
18	An investigation into the robustness of dynamically collimated proton therapy treatments. Medical Physics, 2020, 47, 3545-3553.	1.6	10

#	Article	IF	Citations
19	Doseâ€rate considerations for the INTRABEAM electronic brachytherapy system: Report from the American Association of Physicists in Medicine task group no. 292. Medical Physics, 2020, 47, e913-e919.	1.6	8
20	The Impact of Radiation Energy on Dose Homogeneity and Organ Dose in the GÃ¶ttingen Minipig Total-Body Irradiation Model. Radiation Research, 2020, 194, 544-556.	0.7	0
21	Deformable abdominal phantom for the validation of realâ€time image guidance and deformable dose accumulation. Journal of Applied Clinical Medical Physics, 2019, 20, 122-133.	0.8	10
22	Calculating dose from a 2.5ÂMV imaging beam using a commercial treatment planning system. Journal of Applied Clinical Medical Physics, 2019, 20, 25-35.	0.8	1
23	Ionization Chambers to Determine Neutron and Gamma-Ray Kerma in a Research Reactor. IEEE Transactions on Nuclear Science, 2019, 66, 2160-2169.	1.2	0
24	Experimental Evolution of Extreme Resistance to Ionizing Radiation in Escherichia coli after 50 Cycles of Selection. Journal of Bacteriology, 2019, 201, .	1.0	30
25	A convex windowless extrapolation chamber to measure surface dose rate from ¹⁰⁶Ru/¹⁰⁶Rh episcleral plaques. Medical Physics, 2019, 46, 2430-2443.	1.6	6
26	LET response variability of Gafchromic EBT3 film from a Co calibration in clinical proton beam qualities. Medical Physics, 2019, 46, 2716-2728.	1.6	13
27	Technical Note: Optimization of spot and trimmer position during dynamically collimated proton therapy. Medical Physics, 2019, 46, 1922-1930.	1.6	11
28	Surface dose rate from a flat 106Ru/106Rh episcleral plaque measured with a planar windowless extrapolation chamber and un-laminated EBT3 film. Radiation Measurements, 2019, 121, 18-25.	0.7	7
29	Secondary Neutron Dose From a Dynamic Collimation System During Intracranial Pencil Beam Scanning Proton Therapy: A Monte Carlo Investigation. International Journal of Radiation Oncology Biology Physics, 2019, 103, 241-250.	0.4	23
30	VMAT and IMRT planâ€specific correction factors for linacâ€based ionization chamber dosimetry. Medical Physics, 2019, 46, 913-924.	1.6	5
31	Characterization of the energy spectrum of a 137 Cs irradiator through measurements using a pulse-mode detector. Radiation Measurements, 2018, 114, 1-7.	0.7	2
32	Experimental investigation of GafChromic^{Â®} EBT3 intrinsic energy dependence with kilovoltage x rays, ¹³⁷Cs, and ⁶⁰Co. Medical Physics, 2018, 45, 448-459.	1.6	29
33	Windowless extrapolation chamber measurement of surface dose rate from a 90 Sr/ 90 Y ophthalmic applicator. Radiation Measurements, 2018, 108, 34-40.	0.7	8
34	Monte Carlo and60Coâ€based kilovoltage xâ€ray dosimetry methods. Medical Physics, 2018, 45, 5564-5576.	1.6	5
35	Technical Note: Characterization of clinical linear accelerator triggering latency for motion management system development. Medical Physics, 2018, 45, 4816-4821.	1.6	7
36	Prototype modulated orthovoltage stereotactic radiosurgery cones. Radiation Measurements, 2018, 119, 33-41.	0.7	1

#	Article	IF	Citations
37	Dosimetric characterization of a new directional lowâ€dose rate brachytherapy source. Medical Physics, 2018, 45, 3848-3860.	1.6	8
38	Air-kerma strength determination of an HDR 192 Ir source including a geometric sensitivity study of the seven-distance method. Medical Physics, 2017, 44, 311-320.	1.6	7
39	Design of a modulated orthovoltage stereotactic radiosurgery system. Medical Physics, 2017, 44, 3776-3787.	1.6	2
40	Insight gained from responses to surveys on reference dosimetry practices. Journal of Applied Clinical Medical Physics, 2017, 18, 182-190.	0.8	9
41	An analysis of the Arc<scp>CHECK</scp>â€<scp>MR</scp> diode array's performance for ViewRay quality assurance. Journal of Applied Clinical Medical Physics, 2017, 18, 161-171.	0.8	12
42	Dosimetric comparison of DEFGEL and PAGAT formulae paired with an MRI acquisition. Journal of Physics: Conference Series, 2017, 847, 012012.	0.3	4
43	Technical Note: Dose gradients and prescription isodose in orthovoltage stereotactic radiosurgery. Medical Physics, 2016, 43, 2072-2080.	1.6	1
44	Air-kerma modulation effects on the energy spectrum of a 137CS irradiator using Monte-Carlo techniques. Radiation Measurements, 2016, 95, 9-15.	0.7	2
45	A systematic characterization of the low-energy photon response of plastic scintillation detectors. Physics in Medicine and Biology, 2016, 61, 5569-5586.	1.6	28
46	Radiation Biology Irradiator Dose Verification Survey. Radiation Research, 2016, 185, 163-168.	0.7	44
47	Air-kerma strength determination of a new directional 103 Pd source. Medical Physics, 2015, 42, 7144-7152.	1.6	11
48	Development of a phantom to validate highâ€doseâ€rate brachytherapy treatment planning systems with heterogeneous algorithms. Medical Physics, 2015, 42, 1566-1574.	1.6	21
49	The use of TLDs for brachytherapy dosimetry. Radiation Measurements, 2014, 71, 276-281.	0.7	13
50	Experimental and Monte Carlo dosimetric characterization of a 1Âcm 103Pd brachytherapy source. Brachytherapy, 2014, 13, 657-667.	0.2	10
51	Calibration of the photon component of 198Au stents. Brachytherapy, 2005, 4, 51-58.	0.2	0