Daniel A Low

List of Publications by Year
in descending order

96 papers	2,953 citations	218677 26 h-index	189892 50 g-index
96 all docs	96 docs citations	96 times ranked	3030 citing authors

#	Article	IF	Citations
1	Tolerance limits and methodologies for <scp>IMRT</scp> measurementâ€based verification <scp>QA</scp>: Recommendations of <scp>AAPM</scp> Task Group No. 218. Medical Physics, 2018, 45, e53-e83.	3.0	600
2	Randomized Phase III Noninferiority Study Comparing Two Radiotherapy Fractionation Schedules in Patients With Low-Risk Prostate Cancer. Journal of Clinical Oncology, 2016, 34, 2325-2332.	1.6	490
3	Longitudinal diffusion MRI for treatment response assessment: Preliminary experience using an MRIâ€guided triâ€cobalt 60 radiotherapy system. Medical Physics, 2016, 43, 1369-1373.	3.0	95
4	The addition of androgen deprivation therapy and pelvic lymph node treatment to prostate bed salvage radiotherapy (NRG Oncology/RTOG 0534 SPPORT): an international, multicentre, randomised phase 3 trial. Lancet, The, 2022, 399, 1886-1901.	13.7	89
5	Online Adaptive Radiation Therapy: Implementation of a New Process of Care. Cureus, 2017, 9, e1618.	0.5	77
6	Deep learning approaches using 2D and 3D convolutional neural networks for generating male pelvic synthetic computed tomography from magnetic resonance imaging. Medical Physics, 2019, 46, 3788-3798.	3.0	65
7	4Ï€ Noncoplanar Stereotactic Body Radiation Therapy for Head-and-Neck Cancer: Potential to Improve Tumor Control and Late Toxicity. International Journal of Radiation Oncology Biology Physics, 2015, 91, 401-409.	0.8	62
8	Technology for Innovation in Radiation Oncology. International Journal of Radiation Oncology Biology Physics, 2015, 93, 485-492.	0.8	58
9	A Novel Fast Helical 4D-CT Acquisition Technique toÂGenerate Low-Noise Sorting Artifactâ€“Free Images atÂUser-Selected Breathing Phases. International Journal of Radiation Oncology Biology Physics, 2014, 89, 191-198.	0.8	53
10	The development and verification of a highly accurate collision prediction model for automated noncoplanar plan delivery. Medical Physics, 2015, 42, 6457-6467.	3.0	53
11	Automated contouring error detection based on supervised geometric attribute distribution models for radiation therapy: A general strategy. Medical Physics, 2015, 42, 1048-1059.	3.0	45
12	Magnetic resonance linear accelerator technology and adaptive radiation therapy: An overview for clinicians. Ca-A Cancer Journal for Clinicians, 2022, 72, 34-56.	329.8	45
13	Initial clinical observations of intra- and interfractional motion variation in MR-guided lung SBRT. British Journal of Radiology, 2018, 91, 20170522.	2.2	44
14	Feasibility evaluation of diffusion-weighted imaging using an integrated MRI-radiotherapy system for response assessment to neoadjuvant therapy in rectal cancer. British Journal of Radiology, 2017, 90, 20160739.	2.2	43
15	Retrospective evaluation of decision-making for pancreatic stereotactic MR-guided adaptive radiotherapy. Radiotherapy and Oncology, 2018, 129, 319-325.	0.6	43
16	Feasibility of extreme dose escalation for glioblastoma multiforme using 4Ï€ radiotherapy. Radiation Oncology, 2014, 9, 239.	2.7	42
17	Feasibility of prostate robotic radiation therapy on conventional C-arm linacs. Practical Radiation Oncology, 2014, 4, 254-260.	2.1	38
18	Technical Challenges of Real-Time Adaptive MR-Guided Radiotherapy. Frontiers in Oncology, 2021, 11, 634507.	2.8	38

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19	Radioresistance of the breast tumor is highly correlated to its level of cancer stem cell and its clinical implication for breast irradiation. Radiotherapy and Oncology, 2017, 124, 455-461.	0.6	37
20	Dosimetric validation of a magnetic resonance image gated radiotherapy system using a motion phantom and radiochromic film. Journal of Applied Clinical Medical Physics, 2017, 18, 163-169.	1.9	35
21	High-Quality T2-Weighted 4-Dimensional Magnetic Resonance Imaging for Radiation Therapy Applications. International Journal of Radiation Oncology Biology Physics, 2015, 92, 430-437.	0.8	32
22	Incorporating Cancer Stem Cells in Radiation Therapy Treatment Response Modeling and theÂImplication in Glioblastoma Multiforme Treatment Resistance. International Journal of Radiation Oncology Biology Physics, 2015, 91, 866-875.	0.8	31
23	A treatment planning comparison between modulated tri-cobalt-60 teletherapy and linear acceleratorâ€“based stereotactic body radiotherapy for central early-stage nonâ^'small cell lung cancer. Medical Dosimetry, 2016, 41, 87-91.	0.9	31
24	Distortionâ€free diffusion <scp>MRI</scp> using an <scp>MRI</scp>â€guided Triâ€Cobalt 60 radiotherapy system: Sequence verification and preliminary clinical experience. Medical Physics, 2017, 44, 5357-5366.	3.0	31
25	Clinical Outcomes Using Magnetic Resonanceâ€“Guided Stereotactic Body Radiation Therapy in Patients With Locally Advanced Cholangiocarcinoma. Advances in Radiation Oncology, 2020, 5, 189-195.	1.2	31
26	Magnetic resonance imaging-guided stereotactic body radiotherapy for prostate cancer (mirage): a phase iii randomized trial. BMC Cancer, 2021, 21, 538.	2.6	29
27	Feasibility of magnetic resonance imagingâ€“guided liver stereotactic body radiation therapy: A comparison between modulated tri-cobalt-60 teletherapy and linear acceleratorâ€“based intensity modulated radiation therapy. Practical Radiation Oncology, 2015, 5, 330-337.	2.1	28
28	Magnetic resonance imaging guided reirradiation of recurrent and second primary head and neck cancer. Advances in Radiation Oncology, 2017, 2, 167-175.	1.2	28
29	Ablative radiotherapy for liver tumors using stereotactic MRI-guidance: A prospective phase I trial. Radiotherapy and Oncology, 2022, 170, 14-20.	0.6	28
30	Using Big Data Analytics to Advance Precision Radiation Oncology. International Journal of Radiation Oncology Biology Physics, 2018, 101, 285-291.	0.8	25
31	A neural network approach for fast, automated quantification of DIR performance. Medical Physics, 2017, 44, 4126-4138.	3.0	24
32	Dose domain regularization of MLC leaf patterns for highly complex IMRT plans. Medical Physics, 2015, 42, 1858-1870.	3.0	23
33	Integral dose investigation of non-coplanar treatment beam geometries in radiotherapy. Medical Physics, 2013, 41, 011905.	3.0	21
34	Accuracy of Routine Treatment Planning 4-Dimensional and Deep-Inspiration Breath-Hold Computed Tomography Delineation of the Left Anterior Descending Artery in Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2015, 91, 825-831.	0.8	21
35	Tolerance doses for late adverse events after hypofractionated radiotherapy for prostate cancer on trial NRG Oncology/RTOG 0415. Radiotherapy and Oncology, 2019, 135, 19-24.	0.6	21
36	Does the Î³ dose distribution comparison technique default to the distance to agreement test in clinical dose distributions?. Medical Physics, 2013, 40, 071722.	3.0	20

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37	Clinical outcomes of stereotactic magnetic resonance imageâ€guided adaptive radiotherapy for primary and metastatic tumors in the abdomen and pelvis. Cancer Medicine, 2021, 10, 5897-5906.	2.8	20
38	Dosimetric impact of interfraction prostate and seminal vesicle volume changes and rotation: A post-hoc analysis of a phase III randomized trial of MRI-guided versus CT-guided stereotactic body radiotherapy. Radiotherapy and Oncology, 2022, 167, 203-210.	0.6	20
39	Respiratory motion-resolved, self-gated 4D-MRI using Rotating Cartesian K-space (ROCK): Initial clinical experience on an MRI-guided radiotherapy system. Radiotherapy and Oncology, 2018, 127, 467-473.	0.6	19
40	Accuracy of UTE-MRI-based patient setup for brain cancer radiation therapy. Medical Physics, 2015, 43, 262-267.	3.0	18
41	A comprehensive formulation for volumetric modulated arc therapy planning. Medical Physics, 2016, 43, 4263-4272.	3.0	17
42	Stereotactic MRI-guided Adaptive Radiation Therapy (SMART) for Locally Advanced Pancreatic Cancer: A Promising Approach. Cureus, 2018, 10, e2324.	0.5	17
43	Near Real-Time Assessment of Anatomic and Dosimetric Variations for Head and Neck Radiation Therapy via Graphics Processing Unitâ€"based Dose Deformation Framework. International Journal of Radiation Oncology Biology Physics, 2015, 92, 415-422.	0.8	16
44	A Method for Assessing Ground-Truth Accuracy of the 5DCT Technique. International Journal of Radiation Oncology Biology Physics, 2015, 93, 925-933.	0.8	16
45	MRIâ€linac systems will replace conventional IGRT systems within 15Âyears. Medical Physics, 2019, 46, 3753-3756.	3.0	15
46	A novel software and conceptual design of the hardware platform for intensity modulated radiation therapy. Medical Physics, 2016, 43, 917-929.	3.0	14
47	Multislice motion modeling for <scp>MRI</scp>â€guided radiotherapy gating. Medical Physics, 2019, 46, 465-474.	3.0	13
48	Comparison of breathing gated CT images generated using a 5DCT technique and a commercial clinical protocol in a porcine model. Medical Physics, 2015, 42, 4033-4042.	3.0	12
49	Pattern of solid and hematopoietic second malignancy after local therapy for prostate cancer. Radiotherapy and Oncology, 2017, 123, 133-138.	0.6	12
50	Estimation and validation of patientâ€specific highâ€resolution lung elasticity derived from 4DCT. Medical Physics, 2018, 45, 666-677.	3.0	12
51	Feasibility of using intermediate x-ray energies for highly conformal extracranial radiotherapy. Medical Physics, 2014, 41, 041709.	3.0	11
52	Technical Note: Simulation of 4DCT tumor motion measurement errors. Medical Physics, 2015, 42, 6084-6089.	3.0	11
53	Tomotherapy improves local control and changes failure patterns in locally advanced malignant pleural mesothelioma. Practical Radiation Oncology, 2015, 5, 366-373.	2.1	11
54	The relative accuracy of 4D dose accumulation for lung radiotherapy using rigid dose projection versus dose recalculation on every breathing phase. Medical Physics, 2017, 44, 1120-1127.	3.0	11

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55	Prediction of soft tissue sarcoma response to radiotherapy using longitudinal diffusion MRI and a deep neural network with generative adversarial networkâ€based data augmentation. Medical Physics, 2021, 48, 3262-3372.	3.0	11
56	Interfractional Geometric Variations and Dosimetric Benefits of Stereotactic MRI Guided Online Adaptive Radiotherapy (SMART) of Prostate Bed after Radical Prostatectomy: Post-Hoc Analysis of a Phase II Trial. Cancers, 2021, 13, 2802.	3.7	11
57	Evaluation of T2-Weighted MRI for Visualization and Sparing of Urethra with MR-Guided Radiation Therapy (MRgRT) On-Board MRI. Cancers, 2021, 13, 3564.	3.7	11
58	Accelerated 3D <scp>bSSFP</scp> imaging for treatment planning on an <scp>MRI</scp>â€guided radiotherapy system. Medical Physics, 2018, 45, 2595-2602.	3.0	10
59	Reconstruction of a highâ€quality volumetric image and a respiratory motion model from patient CBCT projections. Medical Physics, 2019, 46, 3627-3639.	3.0	10
60	Feasibility of deriving a novel imaging biomarker based on patient-specific lung elasticity for characterizing the degree of COPD in lung SBRT patients. British Journal of Radiology, 2019, 92, 20180296.	2.2	10
61	An image regression motion prediction technique for MRIâ€guided radiotherapy evaluated in singleâ€plane cine imaging. Medical Physics, 2020, 47, 404-413.	3.0	10
62	Automatic CT simulation optimization for radiation therapy: A general strategy. Medical Physics, 2014, 41, 031913.	3.0	9
63	Dosimetric feasibility of magnetic resonance imagingâ€guided tri-cobalt 60 preoperative intensity modulated radiation therapy for soft tissue sarcomas of the extremity. Practical Radiation Oncology, 2015, 5, 350-356.	2.1	8
64	Correlation of Clinical and Dosimetric Parameters With Radiographic Lung Injury Following Stereotactic Body Radiotherapy. Technology in Cancer Research and Treatment, 2015, 14, 411-418.	1.9	8
65	Stereotactic Magnetic Resonance-guided Online Adaptive Radiotherapy for Oligometastatic Breast Cancer: A Case Report. Cureus, 2018, 10, e2368.	0.5	8
66	Modeling and incorporating cardiacâ€induced lung tissue motion in a breathing motion model. Medical Physics, 2014, 41, 043501.	3.0	7
67	Automatic detection of patient identification and positioning errors in radiation therapy treatment using 3-dimensional setup images. Practical Radiation Oncology, 2015, 5, 304-311.	2.1	7
68	Model-Interpolated Gating for Magnetic Resonance Imageâ€“Guided Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2018, 102, 885-894.	0.8	7
69	4D Imaging and 4D Radiation Therapy: A New Era of Therapy Design and Delivery. Frontiers of Radiation Therapy and Oncology, 2011, 43, 99-117.	1.4	6
70	Dose impact in radiographic lung injury following lung SBRT: Statistical analysis and geometric interpretation. Medical Physics, 2014, 41, 031701.	3.0	6
71	Tumor control probability and the utility of 4D vs 3D dose calculations for stereotactic body radiotherapy for lung cancer. Medical Dosimetry, 2015, 40, 64-69.	0.9	6
72	Dependence of Achievable Plan Quality onÂTreatment Technique and Planning Goal Refinement: A Head-and-Neck Intensity Modulated Radiation Therapy Application. International Journal of Radiation Oncology Biology Physics, 2015, 91, 817-824.	0.8	6

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73	An adversarial machine learning framework and biomechanical modelâ€guided approach for computing 3D lung tissue elasticity from endâ€expiration 3DCT. Medical Physics, 2021, 48, 667-675.	3.0	6
74	Objective function to obtain multiple representative waveforms for a novel helical CT scan protocol. Medical Physics, 2015, 42, 1164-1169.	3.0	5
75	Prospective study evaluating the use of IV contrast on IMRT treatment planning for lung cancer. Medical Physics, 2014, 41, 031708.	3.0	4
76	Systematic feasibility analysis of performing elastography using reduced dose CT lung image pairs. Medical Physics, 2020, 47, 3369-3375.	3.0	4
77	Investigating the minimum scan parameters required to generate free-breathing motion artefact-free fast-helical CT. British Journal of Radiology, 2018, 91, 20170597.	2.2	3
78	Comparison of lung tumor motion measured using a model-based 4DCT technique and a commercial protocol. Practical Radiation Oncology, 2018, 8, e175-e183.	2.1	3
79	Safetyâ€oriented design of inâ€house software for new techniques: A case study using a modelâ€based 4 DCT protocol. Medical Physics, 2019, 46, 1523-1532.	3.0	3
80	A motion prediction confidence estimation framework for predictionâ€based radiotherapy gating. Medical Physics, 2020, 47, 3297-3304.	3.0	3
81	Development and Validation of a Comprehensive Multivariate Dosimetric Model for Predicting Late Genitourinary Toxicity Following Prostate Cancer Stereotactic Body Radiotherapy. Frontiers in Oncology, 2020, 10, 786.	2.8	3
82	Comparison and evaluation of distortion correction techniques on an MRâ€guided radiotherapy system. Medical Physics, 2021, 48, 691-702.	3.0	3
83	Technical Note: Investigating internalâ€“external motion correlation using fast helical CT. Medical Physics, 2021, 48, 1823-1831.	3.0	3
84	Technical Note: Validation of an automatic ACR phantom quality assurance tool for an MRâ€guided radiotherapy system. Medical Physics, 2021, 48, 1540-1545.	3.0	3
85	Weak Magnetic Fields Enhance the Efficacy of Radiation Therapy. Advances in Radiation Oncology, 2021, 6, 100645.	1.2	3
86	Clinical assessment of geometric distortion for a 0.35T MRâ€guided radiotherapy system. Journal of Applied Clinical Medical Physics, 2021, 22, 303-309.	1.9	3
87	Quantitative early decision making metric for identifying irregular breathing in 4DCT. Medical Physics, 2015, 42, 5654-5660.	3.0	2
88	NRG Oncology medical physicistsâ€™ manpower survey quantifying support demands for multi-institutional clinical trials. Practical Radiation Oncology, 2018, 8, 324-331.	2.1	2
89	A quantitative analysis of biomechanical lung model consistency using 5DCT datasets. Medical Physics, 2020, 47, 5555-5567.	3.0	2
90	How Fast Does Real-Time Delivery Affirmation Need To Be?. International Journal of Radiation Oncology Biology Physics, 2014, 89, 623-625.	0.8	1

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91	Fast, Low-Dose Megavoltage-Topogram Localization on TomoTherapy: Initial Clinical Experience With Mesothelioma Patients. Practical Radiation Oncology, 2019, 9, 373-380.	2.1	1
92	Clinical Development and Evaluation of Megavoltage Topogram for Fast Patient Alignment on Helical Tomotherapy. Advances in Radiation Oncology, 2020, 5, 1334-1341.	1.2	1
93	Open access journals are the future of scientific publishing and medical physicist should embrace the change. Medical Physics, 2020, 47, 833-836.	3.0	1
94	Ventilation measurements using fastâ€helical freeâ€breathing computed tomography. Medical Physics, 2021, 48, 6094-6105.	3.0	1
95	Multi-Kinect v2 Camera Based Monitoring System for Radiotherapy Patient Safety. Studies in Health Technology and Informatics, 2016, 220, 352-8.	0.3	1
96	Technical Note: Dosimetric effects of couch position variability on treatment plan quality with an MRI-guided Co-60 radiation therapy machine. Medical Physics, 2016, 43, 4514-4519.	3.0	0