Randall K Ten Haken

List of Publications by Year
in descending order

247 papers	21,245 citations	10956 71 h-index	10424 139 g-index
249 all docs	249 docs citations	249 times ranked	11889 citing authors

#	Article	IF	Citations
1	Use of Normal Tissue Complication Probability Models in the Clinic. International Journal of Radiation Oncology Biology Physics, 2010, 76, S10-S19.	0.4	1,376
2	Quantitative Analyses of Normal Tissue Effects in the Clinic (QUANTEC): An Introduction to the Scientific Issues. International Journal of Radiation Oncology Biology Physics, 2010, 76, S3-S9.	0.4	879
3	Dose, volume, and function relationships in parotid salivary glands following conformal and intensity-modulated irradiation of head and neck cancer. International Journal of Radiation Oncology Biology Physics, 1999, 45, 577-587.	0.4	840
4	Analysis of radiation-induced liver disease using the Lyman NTCP model. International Journal of Radiation Oncology Biology Physics, 2002, 53, 810-821.	0.4	688
5	Radiation pneumonitis as a function of mean lung dose: an analysis of pooled data of 540 patients. International Journal of Radiation Oncology Biology Physics, 1998, 42, 1-9.	0.4	664
6	Radiation-Associated Liver Injury. International Journal of Radiation Oncology Biology Physics, 2010, 76, S94-S100.	0.4	592
7	Radiation Doseâ€"Volume Effects in the Stomach and Small Bowel. International Journal of Radiation Oncology Biology Physics, 2010, 76, S101-S107.	0.4	457
8	High-dose radiation improved local tumor control and overall survival in patients with inoperable/unresectable nonâ€"small-cell lung cancer: Long-term results of a radiation dose escalation study. International Journal of Radiation Oncology Biology Physics, 2005, 63, 324-333.	0.4	450
9	A method for incorporating organ motion due to breathing into 3D dose calculations. Medical Physics, 1999, 26, 715-720.	1.6	442
10	Comparing different NTCP models that predict the incidence of radiation pneumonitis. International Journal of Radiation Oncology Biology Physics, 2003, 55, 724-735.	0.4	423
11	Escalated Focal Liver Radiation and Concurrent Hepatic Artery Fluorodeoxyuridine for Unresectable Intrahepatic Malignancies. Journal of Clinical Oncology, 2000, 18, 2210-2218.	0.8	362
12	Uncertainties in CT-based radiation therapy treatment planning associated with patient breathing. International Journal of Radiation Oncology Biology Physics, 1996, 36, 167-174.	0.4	325
13	Measurement of prostate movement over the course of routine radiotherapy using implanted markers. International Journal of Radiation Oncology Biology Physics, 1995, 31, 113-118.	0.4	323
14	Phase II Trial of High-Dose Conformal Radiation Therapy With Concurrent Hepatic Artery Floxuridine for Unresectable Intrahepatic Malignancies. Journal of Clinical Oncology, 2005, 23, 8739-8747.	0.8	308
15	The use of 3-D dose volume analysis to predict radiation hepatitis. International Journal of Radiation Oncology Biology Physics, 1992, 23, 781-788.	0.4	306
16	Dose Escalation in Nonâ€"Small-Cell Lung Cancer Using Three-Dimensional Conformal Radiation Therapy: Update of a Phase I Trial. Journal of Clinical Oncology, 2001, 19, 127-136.	0.8	302
17	Final toxicity results of a radiation-dose escalation study in patients with nonâ€"small-cell lung cancer (NSCLC): Predictors for radiation pneumonitis and fibrosis. International Journal of Radiation Oncology Biology Physics, 2006, 65, 1075-1086.	0.4	294
18	Cardiac Events After Radiation Therapy: Combined Analysis of Prospective Multicenter Trials for Locally Advanced Nonâ€"Small-Cell Lung Cancer. Journal of Clinical Oncology, 2017, 35, 1395-1402.	0.8	283

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19	The reproducibility of organ position using active breathing control (ABC) during liver radiotherapy. International Journal of Radiation Oncology Biology Physics, 2001, 51, 1410-1421.	0.4	275
20	Dose-volume histogram and 3-D treatment planning evaluation of patients with pneumonitis. International Journal of Radiation Oncology Biology Physics, 1994, 28, 575-581.	0.4	260
21	Radiation-Associated Kidney Injury. International Journal of Radiation Oncology Biology Physics, 2010, 76, S108-S115.	0.4	245
22	Partial Volume Tolerance of the Liver to Radiation. Seminars in Radiation Oncology, 2005, 15, 279-283.	1.0	244
23	Chemo-IMRT of Oropharyngeal Cancer Aiming to Reduce Dysphagia: Swallowing Organs Late Complication Probabilities and Dosimetric Correlates. International Journal of Radiation Oncology Biology Physics, 2011, 81, e93-e99.	0.4	216
24	Improvement of CT-based treatment-planning models of abdominal targets using static exhale imaging. International Journal of Radiation Oncology Biology Physics, 1998, 41, 939-943.	0.4	215
25	The impact of dose on parotid salivary recovery in head and neck cancer patients treated with radiation therapy. International Journal of Radiation Oncology Biology Physics, 2007, 67, 660-669.	0.4	189
26	Parotid gland sparing in patients undergoing bilateral head and neck irradiation: Techniques and early results. International Journal of Radiation Oncology Biology Physics, 1996, 36, 469-480.	0.4	188
27	Comprehensive irradiation of head and neck cancer using conformal multisegmental fields: assessment of target coverage and noninvolved tissue sparing. International Journal of Radiation Oncology Biology Physics, 1998, 41, 559-568.	0.4	182
28	Dose escalation for non-small cell lung cancer using conformal radiation therapy. International Journal of Radiation Oncology Biology Physics, 1997, 37, 1079-1085.	0.4	179
29	Daily prostate targeting using implanted radiopaque markers. International Journal of Radiation Oncology Biology Physics, 2002, 52, 699-703.	0.4	178
30	Effect of Midtreatment PET/CT-Adapted Radiation Therapy With Concurrent Chemotherapy in Patients With Locally Advanced Nonâ€“Small-Cell Lung Cancer. JAMA Oncology, 2017, 3, 1358.	3.4	177
31	Prospective study of inner ear radiation dose and hearing loss in head-and-neck cancer patients. International Journal of Radiation Oncology Biology Physics, 2005, 61, 1393-1402.	0.4	176
32	Salivary Gland Sparing and Improved Target Irradiation by Conformal and Intensity Modulated Irradiation of Head and Neck Cancer. World Journal of Surgery, 2003, 27, 832-837.	0.8	173
33	Automated localization of the prostate at the time of treatment using implanted radiopaque markers: Technical feasibility. International Journal of Radiation Oncology Biology Physics, 1995, 33, 1281-1286.	0.4	169
34	Guest Editor's Introduction to QUANTEC: A Users Guide. International Journal of Radiation Oncology Biology Physics, 2010, 76, S1-S2.	0.4	166
35	Deep reinforcement learning for automated radiation adaptation in lung cancer. Medical Physics, 2017, 44, 6690-6705.	1.6	161
36	Partial irradiation of the liver. Seminars in Radiation Oncology, 2001, 11, 240-246.	1.0	158

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37	Non-Small Cell Lung Cancer Therapy-Related Pulmonary Toxicity: An Update on Radiation Pneumonitis and Fibrosis. Seminars in Oncology, 2005, 32, 42-54.	0.8	158
38	Parotid Gland Function After Radiotherapy: The Combined Michigan and Utrecht Experience. International Journal of Radiation Oncology Biology Physics, 2010, 78, 449-453.	0.4	155
39	A Pilot Study of [¹⁸F]Fluorodeoxyglucose Positron Emission Tomography Scans During and After Radiation-Based Therapy in Patients With Nonâ€“Small-Cell Lung Cancer. Journal of Clinical Oncology, 2007, 25, 3116-3123.	0.8	154
40	Use of Magnetic Resonance Imaging to Assess Blood-Brain/Blood-Glioma Barrier Opening During Conformal Radiotherapy. Journal of Clinical Oncology, 2005, 23, 4127-4136.	0.8	149
41	Dose escalation for stage C (T3) prostate cancer: minimal rectal toxicity observed using conformal therapy. Radiotherapy and Oncology, 1992, 23, 53-54.	0.3	146
42	Individualized Adaptive Stereotactic Body Radiotherapy for Liver Tumors in Patients at High Risk for Liver Damage. JAMA Oncology, 2018, 4, 40.	3.4	140
43	Using Fluorodeoxyglucose Positron Emission Tomography to Assess Tumor Volume During Radiotherapy for Nonâ€“Small-Cell Lung Cancer and Its Potential Impact on Adaptive Dose Escalation and Normal Tissue Sparing. International Journal of Radiation Oncology Biology Physics, 2009, 73, 1228-1234.	0.4	137
44	Association of 11C-Methionine PET Uptake With Site of Failure After Concurrent Temozolomide and Radiation for Primary Glioblastoma Multiforme. International Journal of Radiation Oncology Biology Physics, 2009, 73, 479-485.	0.4	135
45	CT-based definition of thoracic lymph node stations: An atlas from the University of Michigan. International Journal of Radiation Oncology Biology Physics, 2005, 63, 170-178.	0.4	134
46	Local Control After Stereotactic Body Radiation Therapy for Liver Tumors. International Journal of Radiation Oncology Biology Physics, 2021, 110, 188-195.	0.4	131
47	A method for incorporating organ motion due to breathing into 3D dose calculations in the liver: Sensitivity to variations in motion. Medical Physics, 2003, 30, 2643-2649.	1.6	129
48	Clinical investigation survival prediction in high-grade gliomas by MRI perfusion before and during early stage of RT. International Journal of Radiation Oncology Biology Physics, 2006, 64, 876-885.	0.4	128
49	Three dimensional conformal radiotherapy for the treatment of prostate cancer: Low risk of chronic rectal morbidity observed in a large series of patients. International Journal of Radiation Oncology Biology Physics, 1995, 33, 797-801.	0.4	127
50	Inclusion of organ deformation in dose calculations. Medical Physics, 2003, 30, 290-295.	1.6	126
51	An application of dose volume histograms to the treatment of intrahepatic malignancies with radiation therapy. International Journal of Radiation Oncology Biology Physics, 1990, 19, 1041-1047.	0.4	116
52	A quantitative assessment of the addition of MRI to CT-based, 3-D treatment planning of brain tumors. Radiotherapy and Oncology, 1992, 25, 121-133.	0.3	116
53	Concurrent Temozolomide and Dose-Escalated Intensity-Modulated Radiation Therapy in Newly Diagnosed Glioblastoma. Clinical Cancer Research, 2012, 18, 273-279.	3.2	115
54	Determination of ventilatory liver movement via radiographic evaluation of diaphragm position. International Journal of Radiation Oncology Biology Physics, 2001, 51, 267-270.	0.4	113

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55	Fraction Size and Dose Parameters Related to the Incidence of Pericardial Effusions. International Journal of Radiation Oncology Biology Physics, 1998, 40, 155-161.	0.4	106
56	Developing and Validating a Survival Prediction Model for NSCLC Patients Through Distributed Learning Across 3 Countries. International Journal of Radiation Oncology Biology Physics, 2017, 99, 344-352.	0.4	102
57	Normal tissue complication probability modeling for acute esophagitis in patients treated with conformal radiation therapy for non-small cell lung cancer. Radiotherapy and Oncology, 2005, 77, 176-181.	0.3	101
58	Improving Normal Tissue Complication Probability Models: The Need to Adopt a â€œData-Poolingâ€• Culture. International Journal of Radiation Oncology Biology Physics, 2010, 76, S151-S154.	0.4	101
59	Use of Veff and iso-NTCP in the implementation of dose escalation protocols. International Journal of Radiation Oncology Biology Physics, 1993, 27, 689-695.	0.4	99
60	Dose reconstruction in deforming lung anatomy: Dose grid size effects and clinical implications. Medical Physics, 2005, 32, 2487-2495.	1.6	95
61	Daily targeting of intrahepatic tumors for radiotherapy. International Journal of Radiation Oncology Biology Physics, 2002, 52, 266-271.	0.4	92
62	Treatment of cancers involving the liver and porta hepatis with external beam irradiation and intraarterial hepatic fluorodeoxyuridine. International Journal of Radiation Oncology Biology Physics, 1991, 20, 555-561.	0.4	90
63	Combining Physical and Biologic Parameters to Predict Radiation-Induced Lung Toxicity in Patients With Non-Small-Cell Lung Cancer Treated With Definitive Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2012, 84, e217-e222.	0.4	88
64	Potential benefits of eliminating planning target volume expansions for patient breathing in the treatment of liver tumors. International Journal of Radiation Oncology Biology Physics, 1997, 38, 613-617.	0.4	87
65	Results of high-dose thoracic irradiation incorporating beam's eye view display in non-small cell lung cancer: A retrospective multivariate analysis. International Journal of Radiation Oncology Biology Physics, 1993, 27, 273-284.	0.4	86
66	Prostate position late in the course of external beam therapy: patterns and predictors. International Journal of Radiation Oncology Biology Physics, 2000, 47, 655-660.	0.4	85
67	Partial irradiation of the parotid gland. Seminars in Radiation Oncology, 2001, 11, 234-239.	1.0	78
68	Long-term results of high-dose conformal radiotherapy for patients with medically inoperable T1â€"3N0 nonâ€"small-cell lung cancer: Is low incidence of regional failure due to incidental nodal irradiation?. International Journal of Radiation Oncology Biology Physics, 2006, 64, 120-126.	0.4	78
69	A Comparison of Doseâ€"Response Models for the Parotid Gland in a Large Group of Head-and-Neck Cancer Patients. International Journal of Radiation Oncology Biology Physics, 2010, 76, 1259-1265.	0.4	77
70	Reporting and analyzing statistical uncertainties in Monte Carloâ€"based treatment planning. International Journal of Radiation Oncology Biology Physics, 2006, 65, 1249-1259.	0.4	76
71	Verification data for electron beam dose algorithms. Medical Physics, 1992, 19, 623-636.	1.6	73
72	Results following treatment to doses of 92.4 or 102.9 Gy on a phase I dose escalation study for non-small cell lung cancer. Lung Cancer, 2004, 44, 79-88.	0.9	71

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73	Introduction to machine and deep learning for medical physicists. Medical Physics, 2020, 47, e127-e147.	1.6	68
74	Machine learning and modeling: Data, validation, communication challenges. Medical Physics, 2018, 45, e834-e840.	1.6	67
75	Radiation Doseâ€Volume Effects for Liver SBRT. International Journal of Radiation Oncology Biology Physics, 2021, 110, 196-205.	0.4	67
76	How extensive of a 4D dataset is needed to estimate cumulative dose distribution plan evaluation	1.6	64
77	Alterations in normal liver doses due to organ motion. International Journal of Radiation Oncology Biology Physics, 2003, 57, 1472-1479.	0.4	63
78	Artificial Intelligence: reshaping the practice of radiological sciences in the 21st century. British Journal of Radiology, 2020, 93, 20190855.	1.0	63
79	A fluence convolution method to account for respiratory motion in three-dimensional dose calculations of the liver: A Monte Carlo study. Medical Physics, 2003, 30, 1776-1780.	1.6	62
80	Time to metabolic atrophy after permanent prostate seed implantation based on magnetic resonance spectroscopic imaging. International Journal of Radiation Oncology Biology Physics, 2004, 59, 665-673.	0.4	62
81	Retrospective analysis of prostate cancer patients with implanted gold markers using off-line and adaptive therapy protocols. International Journal of Radiation Oncology Biology Physics, 2005, 63, 123-133.	0.4	61
82	Benefit of using biologic parameters (EUD and NTCP) in IMRT optimization for treatment of intrahepatic tumors. International Journal of Radiation Oncology Biology Physics, 2005, 62, 571-578.	0.4	60
83	Prediction of Liver Function by Using Magnetic Resonance-based Portal Venous Perfusion Imaging. International Journal of Radiation Oncology Biology Physics, 2013, 85, 258-263.	0.4	60
84	Three-dimensional motion analysis of an improved head immobilization system for simulation, CT, MRI, and PET imaging. Radiotherapy and Oncology, 1991, 20, 224-228.	0.3	59
85	Advances in Radiation Oncology. Annual Review of Medicine, 2006, 57, 19-31.	5.0	58
86	The big data effort in radiation oncology: Data mining or data farming?. Advances in Radiation Oncology, 2016, 1, 260-271.	0.6	58
87	A feasibility study of mutual information based setup error estimation for radiotherapy. Medical Physics, 2001, 28, 2507-2517.	1.6	57
88	Use of principal component analysis to evaluate the partial organ tolerance of normal tissues to radiation. International Journal of Radiation Oncology Biology Physics, 2005, 62, 829-837.	0.4	57
89	Methodological issues in radiation dose-volume outcome analyses: Summary of a joint AAPM/NIH workshop. Medical Physics, 2002, 29, 2109-2127.	1.6	56
90	Physical Models and Simpler Dosimetric Descriptors of Radiation Late Toxicity. Seminars in Radiation Oncology, 2007, 17, 108-120.	1.0	52

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91	Poor Baseline Pulmonary Function May Not Increase the Risk of Radiation-Induced Lung Toxicity. International Journal of Radiation Oncology Biology Physics, 2013, 85, 798-804.	0.4	50
92	Unraveling biophysical interactions of radiation pneumonitis in non-small-cell lung cancer via Bayesian network analysis. Radiotherapy and Oncology, 2017, 123, 85-92.	0.3	50
93	Automated determination of patient setup errors in radiation therapy using spherical radio-opaque markers. Medical Physics, 1993, 20, 1145-1152.	1.6	49
94	Quantization of setup uncertainties in 3-D dose calculations. Medical Physics, 1999, 26, 2397-2402.	1.6	49
95	Plasma Levels of IL-8 and TGF-Î²1 Predict Radiation-Induced Lung Toxicity in Non-Small Cell Lung Cancer: A Validation Study. International Journal of Radiation Oncology Biology Physics, 2017, 98, 615-621.	0.4	48
96	Liver Function After Irradiation Based on Computed Tomographic Portal Vein Perfusion Imaging. International Journal of Radiation Oncology Biology Physics, 2008, 70, 154-160.	0.4	47
97	Clinical experience with three-dimensional treatment planning. Seminars in Radiation Oncology, 1992, 2, 257-266.	1.0	46
98	Potential for dose-escalation and reduction of risk in pancreatic cancer using IMRT optimization with lexicographic ordering and gEUD-based cost functions. Medical Physics, 2007, 34, 521-529.	1.6	46
99	Changes in Global Function and Regional Ventilation and Perfusion on SPECT During the Course of Radiotherapy in Patients With Non-Small-Cell Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2012, 82, e631-e638.	0.4	46
100	Balancing accuracy and interpretability of machine learning approaches for radiation treatment outcomes modeling. BJR|Open, 2019, 1, 20190021.	0.4	45
101	A comparison of 131I-labeled monoclonal antibody 17-1A treatment to external beam irradiation on the growth of LS174T human colon carcinoma xenografts. International Journal of Radiation Oncology Biology Physics, 1990, 18, 1033-1041.	0.4	44
102	Esophagus sparing with IMRT in lung tumor irradiation: An EUD-based optimization technique. International Journal of Radiation Oncology Biology Physics, 2005, 63, 179-187.	0.4	43
103	Radiogenomics and radiotherapy response modeling. Physics in Medicine and Biology, 2017, 62, R179-R206.	1.6	43
104	Modeling of Normal Tissue Complications Using Imaging and Biomarkers After Radiation Therapy for Hepatocellular Carcinoma. International Journal of Radiation Oncology Biology Physics, 2018, 100, 335-343.	0.4	43
105	Early Changes in Serial CBCT-Measured Parotid Gland Biomarkers Predict Chronic Xerostomia After Head and Neck Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2018, 102, 1319-1329.	0.4	43
106	A multiobjective Bayesian networks approach for joint prediction of tumor local control and radiation pneumonitis in nonsmallâ€cell lung cancer (<scp>NSCLC</scp>) for responseâ€adapted radiotherapy. Medical Physics, 2018, 45, 3980-3995.	1.6	43
107	Effect of Normal Lung Definition on Lung Dosimetry and Lung Toxicity Prediction in Radiation Therapy Treatment Planning. International Journal of Radiation Oncology Biology Physics, 2013, 86, 956-963.	0.4	42
108	Development of a Fully Cross-Validated Bayesian Network Approach for Local Control Prediction in Lung Cancer. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 232-241.	2.7	42

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109	Technical considerations in the use of 3-D beam arrangements in the abdomen. Radiotherapy and Oncology, 1991, 22, 19-28.	0.3	41
110	Flattening-filter-based empirical methods to parametrize the head scatter factor. Medical Physics, 1996, 23, 343-352.	1.6	41
111	Machine Learning and Imaging Informatics in Oncology. Oncology, 2020, 98, 344-362.	0.9	40
112	Expanding the use and effectiveness of dose-volume histograms for 3-D treatment planning I: Integration of 3-D dose-display. International Journal of Radiation Oncology Biology Physics, 1994, 29, 1125-1131.	0.4	39
113	Defining target volumes for non-small cell lung carcinoma. Seminars in Radiation Oncology, 2004, 14, 308-314.	1.0	39
114	Impact of Fraction Size on Lung Radiation Toxicity: Hypofractionation may be Beneficial in Dose Escalation of Radiotherapy for Lung Cancers. International Journal of Radiation Oncology Biology Physics, 2010, 76, 782-788.	0.4	39
115	An analysis of knowledge-based planning for stereotactic body radiation therapy of the spine. Practical Radiation Oncology, 2017, 7, e355-e360.	1.1	38
116	Combining handcrafted features with latent variables in machine learning for prediction of radiationâ€induced lung damage. Medical Physics, 2019, 46, 2497-2511.	1.6	38
117	Three-dimensional conformal radiation may deliver considerable dose of incidental nodal irradiation in patients with early stage node-negative non-small cell lung cancer when the tumor is large and centrally located. Radiotherapy and Oncology, 2007, 82, 153-159.	0.3	37
118	Semiquantification and Classification of Local Pulmonary Function by V/Q Single Photon Emission Computed Tomography in Patients with Non-small Cell Lung Cancer: Potential Indication for Radiotherapy Planning. Journal of Thoracic Oncology, 2011, 6, 71-78.	0.5	37
119	Response of pancreatic cancer to local irradiation with high-energy neutrons. Cancer, 1985, 56, 1235-1241.	2.0	36
120	Measurement of patient setup errors using port films and a computer-aided graphical alignment tool. Medical Dosimetry, 1996, 21, 97-104.	0.4	36
121	Evaluating changes in tumor volume using magnetic resonance imaging during the course of radiotherapy treatment of high-grade gliomas: Implications for conformal dose-escalation studies. International Journal of Radiation Oncology Biology Physics, 2005, 62, 328-332.	0.4	36
122	Estimating functional liver reserve following hepatic irradiation: Adaptive normal tissue response models. Radiotherapy and Oncology, 2014, 111, 418-423.	0.3	36
123	Big Data in Designing Clinical Trials: Opportunities and Challenges. Frontiers in Oncology, 2017, 7, 187.	1.3	36
124	Response of sarcomas of bone and of soft tissue to neutron beam therapy. International Journal of Radiation Oncology Biology Physics, 1984, 10, 821-824.	0.4	35
125	Clinical evaluation of neutron beam therapy. Current results and prospects, 1983. Cancer, 1985, 55, 10-17.	2.0	35
126	Measurement of backscatter to the monitor chamber of medical accelerators using target charge. Medical Physics, 1998, 25, 334-338.	1.6	35

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127	A tilt and roll device for automated correction of rotational setup errors. Medical Physics, 1998, 25, 1739-1740.	1.6	35
128	Synchronized dynamic dose reconstruction. Medical Physics, 2006, 34, 91-102.	1.6	34
129	The prediction of radiation-induced liver dysfunction using a local dose and regional venous perfusion model. Medical Physics, 2007, 34, 604-612.	1.6	34
130	Imaging for Assessment of Radiation-Induced Normal Tissue Effects. International Journal of Radiation Oncology Biology Physics, 2010, 76, S140-S144.	0.4	34
131	Three-dimensional tumor dosimetry for radioimmunotherapy using serial autoradiography. International Journal of Radiation Oncology Biology Physics, 1992, 24, 329-334.	0.4	32
132	Functional and Molecular Image Guidance in Radiotherapy Treatment Planning Optimization. Seminars in Radiation Oncology, 2011, 21, 111-118.	1.0	32
133	Predictive Models for Regional Hepatic Function Based on 99mTc-IDA SPECT and Local Radiation Dose for Physiologic Adaptive Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2013, 86, 1000-1006.	0.4	31
134	Radiation Therapy Outcomes Models in the Era ofÂRadiomics and Radiogenomics: Uncertainties and Validation. International Journal of Radiation Oncology Biology Physics, 2018, 102, 1070-1073.	0.4	31
135	Integrating Multiomics Information in Deep Learning Architectures for Joint Actuarial Outcome Prediction in Non-Small Cell Lung Cancer Patients After Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2021, 110, 893-904.	0.4	31
136	Comparison of 131I- and 90Y-labeled monoclonal antibody 17-1A for treatment of human colon cancer xenografts. International Journal of Radiation Oncology Biology Physics, 1993, 25, 629-638.	0.4	30
137	An application of Bayesian statistical methods to adaptive radiotherapy. Physics in Medicine and Biology, 2005, 50, 3849-3858.	1.6	30
138	Metabolic tumor volume on PET reduced more than gross tumor volume on CT during radiotherapy in patients with non-small cell lung cancer treated with 3DCRT or SBRT. Journal of Radiation Oncology, 2013, 2, 191-202.	0.7	30
139	Changes in Functional Lung Regions During the Course of Radiation Therapy and Their Potential Impact on Lung Dosimetry for Non-Small Cell Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2014, 89, 145-151.	0.4	30
140	The Role of Machine Learning in Knowledge-Based Response-Adapted Radiotherapy. Frontiers in Oncology, 2018, 8, 266.	1.3	30
141	Determination of rotations in three dimensions using two-dimensional portal image registration. Medical Physics, 1998, 25, 703-708.	1.6	29
142	Multiple fields may offer better esophagus sparing without increased probability of lung toxicity in optimized IMRT of lung tumors. International Journal of Radiation Oncology Biology Physics, 2006, 65, 255-265.	0.4	28
143	Lhermitte Sign After Chemo-IMRT of Head-and-Neck Cancer: Incidence, Doses, and Potential Mechanisms. International Journal of Radiation Oncology Biology Physics, 2012, 83, 1528-1533.	0.4	28
144	Serum MicroRNA Signature Predicts Response to High-Dose Radiation Therapy in Locally Advanced Non-Small Cell Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2018, 100, 107-114.	0.4	28

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145	Fast neutrons in the treatment of salivary gland tumors. International Journal of Radiation Oncology Biology Physics, 1981, 7, 1667-1671.	0.4	27
146	Photon activation-15 O decay studies of tumor blood flow. Medical Physics, 1981, 8, 324-336.	1.6	27
147	A Customized Non-Axial External Beam Technique for Treatment of Prostate Carcinomas. Medical Dosimetry, 1992, 17, 123-127.	0.4	27
148	A deep survival interpretable radiomics model of hepatocellular carcinoma patients. Physica Medica, 2021, 82, 295-305.	0.4	27
149	Accounting for center-of-mass target motion using convolution methods in Monte Carlo-based dose calculations of the lung. Medical Physics, 2004, 31, 925-932.	1.6	26
150	Evaluating the influence of setup uncertainties on treatment planning for focal liver tumors. International Journal of Radiation Oncology Biology Physics, 2005, 63, 610-614.	0.4	26
151	Local and Global Function Model of the Liver. International Journal of Radiation Oncology Biology Physics, 2016, 94, 181-188.	0.4	26
152	Can radiomics personalise immunotherapy?. Lancet Oncology, The, 2018, 19, 1138-1139.	5.1	25
153	Circulating microRNAs as biomarkers of radiation-induced cardiac toxicity in non-small-cell lung cancer. Journal of Cancer Research and Clinical Oncology, 2019, 145, 1635-1643.	1.2	24
154	Practical methods of electron depth-dose measurement compared to use of the NACP design chamber in water. Medical Physics, 1987, 14, 1060-1066.	1.6	23
155	Prospects and Challenges for Clinical Decision Support in the Era of Big Data. JCO Clinical Cancer Informatics, 2018, 2, 1-12.	1.0	23
156	A mathematical model for correcting patient setup errors using a tilt and roll device. Medical Physics, 1999, 26, 2586-2588.	1.6	22
157	FusionArc optimization: A hybrid volumetric modulated arc therapy (VMAT) and intensity modulated radiation therapy (IMRT) planning strategy. Medical Physics, 2013, 40, 071713.	1.6	22
158	Pulmonary Artery Invasion, High-Dose Radiation, and Overall Survival in Patients With Non-Small Cell Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2014, 89, 313-321.	0.4	22
159	Timing and intensity of changes in FDG uptake with symptomatic esophagitis during radiotherapy or chemo-radiotherapy. Radiation Oncology, 2014, 9, 37.	1.2	22
160	Three-dimensional reconstruction of monoclonal antibody uptake in tumor and calculation of beta dose-rate nonuniformity. Cancer, 1994, 73, 912-918.	2.0	21
161	The influence of beam model differences in the comparison of dose calculation algorithms for lung cancer treatment planning. Physics in Medicine and Biology, 2005, 50, 801-815.	1.6	21
162	Dosimetric verification of a 3-D electron pencil beam dose calculation algorithm. Medical Physics, 1994, 21, 13-23.	1.6	20

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163	The Clinical Application of Intensity-Modulated Radiation Therapy. Seminars in Radiation Oncology, 2006, 16, 224-231.	1.0	20
164	Sensitivity analysis for lexicographic ordering in radiation therapy treatment planning. Medical Physics, 2012, 39, 3445-3455.	1.6	20
165	Implementing Radiation Dose-Volume Liver Response in Biomechanical Deformable Image Registration. International Journal of Radiation Oncology Biology Physics, 2017, 99, 1004-1012.	0.4	20
166	Greater reduction in mid-treatment FDG-PET volume may be associated with worse survival in non-small cell lung cancer. Radiotherapy and Oncology, 2019, 132, 241-249.	0.3	20
167	Individualized Adaptive Radiation Therapy Allows for Safe Treatment of Hepatocellular Carcinoma in Patients With Child-Turcotte-Pugh B Liver Disease. International Journal of Radiation Oncology Biology Physics, 2021, 109, 212-219.	0.4	20
168	Incorporating big data into treatment plan evaluation: Development of statistical DVH metrics and visualization dashboards. Advances in Radiation Oncology, 2017, 2, 503-514.	0.6	20
169	Thin-film, flat-panel, composite imagers for projection and tomographic imaging. IEEE Transactions on Medical Imaging, 1994, 13, 482-490.	5.4	19
170	Utility of Normal Tissue-to-Tumor Î±/Î² Ratio When Evaluating Isodoses of Isoeffective Radiation Therapy Treatment Plans. International Journal of Radiation Oncology Biology Physics, 2013, 85, e81-e87.	0.4	19
171	Predictive Models to Determine Clinically Relevant Deviations in Delivered Dose for Head and Neck Cancer. Practical Radiation Oncology, 2019, 9, e422-e431.	1.1	19
172	Fast neutrons and misonidazole for malignant astrocytomas. International Journal of Radiation Oncology Biology Physics, 1985, 11, 679-686.	0.4	18
173	Improvement of precision in spatial localization of radio-opaque markers using the two-film technique. Medical Physics, 1991, 18, 1126-1131.	1.6	18
174	Dosimetric Analysis of Radiation-induced Gastric Bleeding. International Journal of Radiation Oncology Biology Physics, 2012, 84, e1-e6.	0.4	18
175	Using Indocyanine Green Extraction to Predict Liver Function After Stereotactic Body Radiation Therapy for Hepatocellular Carcinoma. International Journal of Radiation Oncology Biology Physics, 2018, 100, 131-137.	0.4	18
176	Tolerance of the human spinal cord to high energy P(66)Be(49) neutrons. International Journal of Radiation Oncology Biology Physics, 1985, 11, 743-749.	0.4	17
177	Spinal cord dose from standard head and neck irradiation: implications for three-dimensional treatment planning. Radiotherapy and Oncology, 1998, 47, 185-189.	0.3	17
178	A room-based diagnostic imaging system for measurement of patient setup. Medical Physics, 1998, 25, 2385-2387.	1.6	16
179	The clinical application of a non-axial treatment plan for pancreatic and biliary malignancies. Radiotherapy and Oncology, 1992, 24, 198-200.	0.3	15
180	Body Mass Index Predicts the Incidence of Radiation Pneumonitis in Breast Cancer Patients. Cancer Journal (Sudbury, Mass), 2005, 11, 390-398.	1.0	15

#	Article	IF	Citations
181	Arterial Perfusion Imagingâ€"Defined Subvolume of Intrahepatic Cancer. International Journal of Radiation Oncology Biology Physics, 2014, 89, 167-174.	0.4	15
182	Use a survival model to correlate single-nucleotide polymorphisms of DNA repair genes with radiation doseâ€"response in patients with non-small cell lung cancer. Radiotherapy and Oncology, 2015, 117, 77-82.	0.3	15
183	Artificial Neural Network With Composite Architectures for Prediction of Local Control in Radiotherapy. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 242-249.	2.7	15
184	In phantom determination of collimator scatter factor. Medical Physics, 1996, 23, 1207-1212.	1.6	14
185	Ideal spatial radiotherapy dose distributions subject to positional uncertainties. Physics in Medicine and Biology, 2006, 51, 6329-6347.	1.6	14
186	Radiation-induced lung toxicity in non-small-cell lung cancer: Understanding the interactions of clinical factors and cytokines with the dose-toxicity relationship. Radiotherapy and Oncology, 2017, 125, 66-72.	0.3	14
187	TNFR1 and the TNFÎ± axis as a targetable mediator of liver injury from stereotactic body radiation therapy. Translational Oncology, 2021, 14, 100950.	1.7	14
188	A quantitative study of radionuclide characteristics for radioimmunotherapy from 3D reconstructions using serial autoradiography. International Journal of Radiation Oncology Biology Physics, 1996, 35, 165-172.	0.4	13
189	A Bayesian mixture model relating dose to critical organs and functional complication in 3D conformal radiation therapy. Biostatistics, 2005, 6, 615-632.	0.9	13
190	Optimizing global liver function in radiation therapy treatment planning. Physics in Medicine and Biology, 2016, 61, 6465-6484.	1.6	13
191	Quantum deep reinforcement learning for clinical decision support in oncology: application to adaptive radiotherapy. Scientific Reports, 2021, 11, 23545.	1.6	13
192	The impact of breathing motion versus heterogeneity effects in lung cancer treatment planning. Medical Physics, 2007, 34, 1462-1473.	1.6	12
193	Lower Incidence of Esophagitis in the Elderly Undergoing Definitive Radiation Therapy for Lung Cancer. Journal of Thoracic Oncology, 2017, 12, 539-546.	0.5	12
194	Quantumâ€inspired algorithm for radiotherapy planning optimization. Medical Physics, 2020, 47, 5-18.	1.6	12
195	A brain tumor dose escalation protocol based on effective dose equivalence to prior experience. International Journal of Radiation Oncology Biology Physics, 1998, 42, 137-141.	0.4	11
196	A practical approach for quantitative estimates of voxel-by-voxel liver perfusion using DCE imaging and a compartmental model. Medical Physics, 2006, 33, 3057-3062.	1.6	11
197	Response-driven imaging biomarkers for predicting radiation necrosis of the brain. Physics in Medicine and Biology, 2014, 59, 2535-2547.	1.6	11
198	Methods for Reducing Normal Tissue Complication Probabilities in Oropharyngeal Cancer: Dose Reduction or Planning Target Volume Elimination. International Journal of Radiation Oncology Biology Physics, 2016, 96, 645-652.	0.4	11

#	Article	IF	Citations
199	A phase II trial of mid-treatment FDG-PET adaptive, individualized radiation therapy plus concurrent chemotherapy in patients with non-small cell lung cancer (NSCLC).. Journal of Clinical Oncology, 2013, 31, 7522-7522.	0.8	11
200	Scaling neutron absorbed dose distributions from one medium to another. Medical Physics, 1983, 10, 436-443.	1.6	10
201	Priority-driven plan optimization in locally advanced lung patients based on perfusion SPECT imaging. Advances in Radiation Oncology, 2016, 1, 281-289.	0.6	10
202	Prediction of Radiation Esophagitis in Nonâ€"Small Cell Lung Cancer Using Clinical Factors, Dosimetric Parameters, and Pretreatment Cytokine Levels. Translational Oncology, 2018, 11, 102-108.	1.7	10
203	A model combining age, equivalent uniform dose and IL-8 may predict radiation esophagitis in patients with non-small cell lung cancer. Radiotherapy and Oncology, 2018, 126, 506-510.	0.3	10
204	Prediction of radiation-induced liver disease by Lyman normal-tissue complication probability model in three-dimensional conformal radiation therapy for primary liver carcinoma: In regards to Xu et al. (Int J Radiat Oncol Biol Phys 2006;65:189â€"195). International Journal of Radiation Oncology Biology Physics, 2006, 66, 1272.	0.4	9
205	Evaluating the Relationships Between Rectal Normal Tissue Complication Probability and the Portion of Seminal Vesicles Included in the Clinical Target Volume in Intensity-Modulated Radiotherapy for Prostate Cancer. International Journal of Radiation Oncology Biology Physics, 2009, 73, 334-340.	0.4	9
206	MRI to delineate the gross tumor volume of nasopharyngeal cancers: which sequences and planes should be used?. Radiology and Oncology, 2014, 48, 323-330.	0.6	9
207	A situational awareness Bayesian network approach for accurate and credible personalized adaptive radiotherapy outcomes prediction in lung cancer patients. Physica Medica, 2021, 87, 11-23.	0.4	9
208	A sensitivity study of micro-TLDs for in vivo dosimetry of radioimmunotherapy. Medical Physics, 1991, 18, 1195-1199.	1.6	8
209	Dosimetric implications of residual seminal vesicle motion in fiducial-guided intensity-modulated radiotherapy for prostate cancer. Medical Dosimetry, 2012, 37, 240-244.	0.4	8
210	Central Airway Toxicity After High Dose Radiation: A Combined Analysis of Prospective Clinical Trials for Non-Small Cell Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2020, 108, 587-596.	0.4	8
211	Precision radiotherapy via information integration of expert human knowledge and AI recommendation to optimize clinical decision making. Computer Methods and Programs in Biomedicine, 2022, 221, 106927.	2.6	8
212	A new look at displacement factor and point of measurement corrections in ionization chamber dosimetry. Medical Physics, 1983, 10, 307-313.	1.6	7
213	Mechanical and dosimetric quality control for computer controlled radiotherapy treatment equipment. Medical Physics, 1995, 22, 563-566.	1.6	7
214	A single plan approach for differentially dosing sequential target volumes. Medical Dosimetry, 1997, 22, 275-281.	0.4	7
215	In response to Dr. TomÃ© and Dr. Fenwick. International Journal of Radiation Oncology Biology Physics, 2004, 58, 1319-1320.	0.4	7
216	Predicting Outcome of Patients with High-grade Gliomas After Radiotherapy using Quantitative Analysis of T1-weighted Magnetic Resonance Imaging. International Journal of Radiation Oncology Biology Physics, 2007, 67, 1476-1483.	0.4	7

#	Article	IF	Citations
217	The lethal effects of fermilab fast neutrons vary with the depth of cells in a water phantom. International Journal of Radiation Oncology Biology Physics, 1991, 20, 1341-1345.	0.4	6
218	Monte Carlo-based lung cancer treatment planning incorporating PET-defined target volumes. Journal of Applied Clinical Medical Physics, 2005, 6, 65-76.	0.8	6
219	Effect of daily localization and correction on the setup uncertainty: dependences on the measurement uncertainty, re-positioning uncertainty and action level. Physics in Medicine and Biology, 2007, 52, 6575-6587.	1.6	6
220	Designing Targets for Elective Nodal Irradiation in Lung Cancer Radiotherapy: A Planning Study. International Journal of Radiation Oncology Biology Physics, 2009, 73, 1397-1403.	0.4	6
221	Improved prediction of radiation pneumonitis by combining biological and radiobiological parameters using a data-driven Bayesian network analysis. Translational Oncology, 2022, 21, 101428.	1.7	6
222	The effect of missing backscatter on the dose distribution of a p (66)Be(49) neutron therapy beam. Medical Physics, 1982, 9, 559-562.	1.6	5
223	Activation of the major constituents of tissue and air by a fast neutron radiation therapy beam. Medical Physics, 1983, 10, 636-641.	1.6	5
224	Comment on â€œIntercomparison on normalized head-scatter factor measurement techniquesâ€•[Med. Phys. 22 , 249-253 (1995)]. Medical Physics, 1995, 22, 1471-1471.	1.6	5
225	Use of segmental boost fields in the irradiation of inguinal lymphatic nodes. Medical Dosimetry, 1999, 24, 27-32.	0.4	5
226	Modeling Patient-Specific Dose-Function Response for Enhanced Characterization of Personalized Functional Damage. International Journal of Radiation Oncology Biology Physics, 2018, 102, 1265-1275.	0.4	5
227	Pattern of failure after high-dose thoracic radiation for non-small cell lung cancer: the University of Michigan experience. Journal of Radiation Oncology, 2012, 1, 267-272.	0.7	4
228	Monte Carlo-based lung cancer treatment planning incorporating PET-defined target volumes. Journal of Applied Clinical Medical Physics, 2005, 6, 65-76.	0.8	4
229	Characteristics of Aâ€150 plasticâ€equivalent gas in Aâ€150 plastic ionization chambers for p (66)Be(49) neutrons. Medical Physics, 1982, 9, 884-887.	1.6	3
230	Effect of backscatter on cell survival for a clinical electron beam. Radiotherapy and Oncology, 1991, 21, 269-272.	0.3	3
231	Investigating the SPECT Dose-Function Metrics Associated With Radiation-Induced Lung Toxicity Risk in Patients With Non-small Cell Lung Cancer Undergoing Radiation Therapy. Advances in Radiation Oncology, 2021, 6, 100666.	0.6	3
232	Dynamic stochastic deep learning approaches for predicting geometric changes in head and neck cancer. Physics in Medicine and Biology, 2021, 66, 225006.	1.6	3
233	Radiation Sensitivity of the Liver: Models and Clinical Data. , 2017, , 39-47.		2
234	Phase II study of individualized adaptive stereotactic body radiotherapy (SBRT) for patients at high risk for liver damage.. Journal of Clinical Oncology, 2016, 34, 424-424.	0.8	2

#	Article	IF	Citations
235	The use of nonhydrogenous wedges for therapeutic neutron beam shaping. Medical Physics, 1982, 9, 204-207.	1.6	1
236	The effects of hydrogenous and nonhydrogenous filters on the quality of a p (66)Be(49) neutron beam. Medical Physics, 1982, 9, 199-203.	1.6	1
237	Determination of electron beam mean incident energy from d 5 0 (ionization) values. Medical Physics, 1987, 14, 985-991.	1.6	1
238	Relative electron beam measurements: Scaling depths in clear polystyrene to equivalent depths in water. Medical Physics, 1987, 14, 410-413.	1.6	1
239	Prognostic value of cytokine profile on survival in non-small cell lung cancer patients treated with radiotherapy.. Journal of Clinical Oncology, 2015, 33, 7525-7525.	0.8	1
240	Feasibility of functionâ€guided lung treatment planning with parametric response mapping. Journal of Applied Clinical Medical Physics, 2021, 22, 80-89.	0.8	1
241	Absolute neutron dosimetry: Effects of ionization chamber wall thickness. Medical Physics, 1985, 12, 46-52.	1.6	0
242	An application of Bayesian statistical methods to adaptive radiotherapy. Physics in Medicine and Biology, 2006, 51, 3603-3603.	1.6	0
243	In response to Dr. Yan et al.. International Journal of Radiation Oncology Biology Physics, 2006, 64, 1614-1615.	0.4	0
244	MINI01.13: Prediction of Lung Toxicity in the Definitive Radiotherapy of Nonâ€"Small Cell Lung Cancer using Clinical, Dosimetric and Biologic Factors. Journal of Thoracic Oncology, 2016, 11, S264-S265.	0.5	0
245	In Reply to Klement etÂal. International Journal of Radiation Oncology Biology Physics, 2021, 110, 250-251.	0.4	0
246	A Bayesian dose-finding design for outcomes evaluated with uncertainty. Clinical Trials, 2021, 18, 279-285.	0.7	0
247	In Reply to Tsurugai et al.. International Journal of Radiation Oncology Biology Physics, 2022, 113, 229.	0.4	0