Randall K Ten Haken

List of Publications by Citations

244 papers	17,468 citations	67 h-index	127 g-index
249 ext. papers	19,568 ext. citations	2.6 avg, IF	6.27 L-index

#	Paper	IF	Citations
244	Use of normal tissue complication probability models in the clinic. *International Journal of Radiation Oncology Biology Physics*, **2010**, 76, S10-9	4	1027
243	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, 577-87	4	744
242	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, S3-9	4	639
241	Analysis of radiation-induced liver disease using the Lyman NTCP model. *International Journal of Radiation Oncology Biology Physics*, **2002**, 53, 810-21	4	585
240	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	4	583
239	Radiation-associated liver injury. *International Journal of Radiation Oncology Biology Physics*, **2010**, 76, S94-100	4	467
238	High-dose radiation improved local tumor control and overall survival in patients with inoperable/unresectable non-small-cell lung cancer: long-term results of a radiation dose escalation study. *International Journal of Radiation Oncology Biology Physics*, **2005**, 63, 324-33	4	399
237	A method for incorporating organ motion due to breathing into 3D dose calculations. *Medical Physics*, **1999**, 26, 715-20	4.4	392
236	Radiation dose-volume effects in the stomach and small bowel. *International Journal of Radiation Oncology Biology Physics*, **2010**, 76, S101-7	4	382
235	Comparing different NTCP models that predict the incidence of radiation pneumonitis. Normal tissue complication probability. *International Journal of Radiation Oncology Biology Physics*, **2003**, 55, 724-35	4	367
234	Escalated focal liver radiation and concurrent hepatic artery fluorodeoxyuridine for unresectable intrahepatic malignancies. *Journal of Clinical Oncology*, **2000**, 18, 2210-8	2.2	324
233	Measurement of prostate movement over the course of routine radiotherapy using implanted markers. *International Journal of Radiation Oncology Biology Physics*, **1995**, 31, 113-8	4	294
232	Uncertainties in CT-based radiation therapy treatment planning associated with patient breathing. *International Journal of Radiation Oncology Biology Physics*, **1996**, 36, 167-74	4	277
231	Phase II trial of high-dose conformal radiation therapy with concurrent hepatic artery floxuridine for unresectable intrahepatic malignancies. *Journal of Clinical Oncology*, **2005**, 23, 8739-47	2.2	271
230	Dose escalation in non-small-cell lung cancer using three-dimensional conformal radiation therapy: update of a phase I trial. *Journal of Clinical Oncology*, **2001**, 19, 127-36	2.2	268
229	The use of 3-D dose volume analysis to predict radiation hepatitis. *International Journal of Radiation Oncology Biology Physics*, **1992**, 23, 781-8	4	266
228	Final toxicity results of a radiation-dose escalation study in patients with non-small-cell lung cancer (NSCLC): predictors for radiation pneumonitis and fibrosis. *International Journal of Radiation Oncology Biology Physics*, **2006**, 65, 1075-86	4	264

227	The reproducibility of organ position using active breathing control (ABC) during liver radiotherapy. *International Journal of Radiation Oncology Biology Physics*, **2001**, 51, 1410-21	4	250
226	Dose-volume histogram and 3-D treatment planning evaluation of patients with pneumonitis. *International Journal of Radiation Oncology Biology Physics*, **1994**, 28, 575-81	4	229
225	Partial volume tolerance of the liver to radiation. *Seminars in Radiation Oncology*, **2005**, 15, 279-83	5.5	207
224	Improvement of CT-based treatment-planning models of abdominal targets using static exhale imaging. *International Journal of Radiation Oncology Biology Physics*, **1998**, 41, 939-43	4	198
223	Radiation-associated kidney injury. *International Journal of Radiation Oncology Biology Physics*, **2010** , 76, S108-15	4	189
222	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, e93-9	4	187
221	Cardiac Events After Radiation Therapy: Combined Analysis of Prospective Multicenter Trials for Locally Advanced Non-Small-Cell Lung Cancer. *Journal of Clinical Oncology*, **2017**, 35, 1395-1402	2.2	176
220	Parotid gland sparing in patients undergoing bilateral head and neck irradiation: techniques and early results. *International Journal of Radiation Oncology Biology Physics*, **1996**, 36, 469-80	4	173
219	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, 559-68	4	169
218	Daily prostate targeting using implanted radiopaque markers. *International Journal of Radiation Oncology Biology Physics*, **2002**, 52, 699-703	4	168
217	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, 1281-6	4	157
216	Salivary gland sparing and improved target irradiation by conformal and intensity modulated irradiation of head and neck cancer. *World Journal of Surgery*, **2003**, 27, 832-7	3.3	154
215	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, 660-9	4	153
214	Dose escalation for non-small cell lung cancer using conformal radiation therapy. *International Journal of Radiation Oncology Biology Physics*, **1997**, 37, 1079-85	4	149
213	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, 1393-402	4	140
212	Guest editor's introduction to QUANTEC: a users guide. *International Journal of Radiation Oncology Biology Physics*, **2010**, 76, S1-2	4	137
211	Non-small cell lung cancer therapy-related pulmonary toxicity: an update on radiation pneumonitis and fibrosis. *Seminars in Oncology*, **2005**, 32, S42-54	5.5	137
210	A pilot study of [18F]fluorodeoxyglucose positron emission tomography scans during and after radiation-based therapy in patients with non small-cell lung cancer. *Journal of Clinical Oncology*, **2007**, 25, 3116-23	2.2	134

209	Partial irradiation of the liver. *Seminars in Radiation Oncology*, **2001**, 11, 240-6	5.5	133
208	Dose escalation for stage C (T3) prostate cancer: minimal rectal toxicity observed using conformal therapy. *Radiotherapy and Oncology*, **1992**, 23, 53-4	5.3	133
207	Use of magnetic resonance imaging to assess blood-brain/blood-glioma barrier opening during conformal radiotherapy. *Journal of Clinical Oncology*, **2005**, 23, 4127-36	2.2	125
206	Parotid gland function after radiotherapy: the combined michigan and utrecht experience. *International Journal of Radiation Oncology Biology Physics*, **2010**, 78, 449-53	4	124
205	Effect of Midtreatment PET/CT-Adapted Radiation Therapy With Concurrent Chemotherapy in Patients With Locally Advanced Non-Small-Cell Lung Cancer: A Phase 2 Clinical Trial. *JAMA Oncology* , **2017**, 3, 1358-1365	13.4	121
204	Using fluorodeoxyglucose positron emission tomography to assess tumor volume during radiotherapy for non-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, 1228-34	4	121
203	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, 479-85	4	119
202	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	4	119
201	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, 2643-9	4.4	115
200	Survival prediction in high-grade gliomas by MRI perfusion before and during early stage of RT [corrected]. *International Journal of Radiation Oncology Biology Physics*, **2006**, 64, 876-85	4	113
199	Inclusion of organ deformation in dose calculations. *Medical Physics*, **2003**, 30, 290-5	4.4	113
198	Deep reinforcement learning for automated radiation adaptation in lung cancer. *Medical Physics*, **2017**, 44, 6690-6705	4.4	108
197	CT-based definition of thoracic lymph node stations: an atlas from the University of Michigan. *International Journal of Radiation Oncology Biology Physics*, **2005**, 63, 170-8	4	105
196	Determination of ventilatory liver movement via radiographic evaluation of diaphragm position. *International Journal of Radiation Oncology Biology Physics*, **2001**, 51, 267-70	4	102
195	An application of dose volume histograms to the treatment of intrahepatic malignancies with radiation therapy. *International Journal of Radiation Oncology Biology Physics*, **1990**, 19, 1041-7	4	98
194	A quantitative assessment of the addition of MRI to CT-based, 3-D treatment planning of brain tumors. *Radiotherapy and Oncology*, **1992**, 25, 121-33	5.3	97
193	Concurrent temozolomide and dose-escalated intensity-modulated radiation therapy in newly diagnosed glioblastoma. *Clinical Cancer Research*, **2012**, 18, 273-9	12.9	93
192	Fraction size and dose parameters related to the incidence of pericardial effusions. *International Journal of Radiation Oncology Biology Physics*, **1998**, 40, 155-61	4	93

191	Improving normal tissue complication probability models: the need to adopt a "data-pooling" culture. *International Journal of Radiation Oncology Biology Physics*, **2010**, 76, S151-4	4	90
190	Daily targeting of intrahepatic tumors for radiotherapy. *International Journal of Radiation Oncology Biology Physics*, **2002**, 52, 266-71	4	90
189	Individualized Adaptive Stereotactic Body Radiotherapy for Liver Tumors in Patients at High Risk for Liver Damage: A Phase 2 Clinical Trial. *JAMA Oncology*, **2018**, 4, 40-47	13.4	90
188	Use of Veff and iso-NTCP in the implementation of dose escalation protocols. *International Journal of Radiation Oncology Biology Physics*, **1993**, 27, 689-95	4	84
187	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, 176-81	5.3	81
186	Dose reconstruction in deforming lung anatomy: dose grid size effects and clinical implications. *Medical Physics*, **2005**, 32, 2487-95	4.4	81
185	Local Control After Stereotactic Body Radiation Therapy for Liver Tumors. *International Journal of Radiation Oncology Biology Physics*, **2021**, 110, 188-195	4	80
184	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, 613-7	4	78
183	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, 555-61	4	78
182	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, e217-22	4	74
181	Prostate position late in the course of external beam therapy: patterns and predictors. *International Journal of Radiation Oncology Biology Physics*, **2000**, 47, 655-60	4	74
180	Verification data for electron beam dose algorithms. *Medical Physics*, **1992**, 19, 623-36	4.4	69
179	Partial irradiation of the parotid gland. *Seminars in Radiation Oncology*, **2001**, 11, 234-9	5.5	68
178	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, 273-84	4	68
177	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	5.9	66
176	Long-term results of high-dose conformal radiotherapy for patients with medically inoperable T1-3N0 non-small-cell lung cancer: is low incidence of regional failure due to incidental nodal irradiation?. *International Journal of Radiation Oncology Biology Physics*, **2006**, 64, 120-6	4	64
175	A comparison of dose-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, 1259-65	4	63
174	How extensive of a 4D dataset is needed to estimate cumulative dose distribution plan evaluation metrics in conformal lung therapy?. *Medical Physics*, **2007**, 34, 233-45	4.4	61

173	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	4	60
172	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, 1776-80	4.4	58
171	Time to metabolic atrophy after permanent prostate seed implantation based on magnetic resonance spectroscopic imaging. *International Journal of Radiation Oncology Biology Physics*, **2004**, 59, 665-73	4	57
170	Reporting and analyzing statistical uncertainties in Monte Carlo-based treatment planning. *International Journal of Radiation Oncology Biology Physics*, **2006**, 65, 1249-59	4	56
169	Alterations in normal liver doses due to organ motion. *International Journal of Radiation Oncology Biology Physics*, **2003**, 57, 1472-9	4	55
168	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, 829-37	4	55
167	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, 123-33	4	54
166	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, 571-8	4	54
165	Three-dimensional motion analysis of an improved head immobilization system for simulation, CT, MRI, and PET imaging. *Radiotherapy and Oncology*, **1991**, 20, 224-8	5.3	53
164	Prediction of liver function by using magnetic resonance-based portal venous perfusion imaging. *International Journal of Radiation Oncology Biology Physics*, **2013**, 85, 258-63	4	51
163	Advances in radiation oncology. *Annual Review of Medicine*, **2006**, 57, 19-31	17.4	50
162	A feasibility study of mutual information based setup error estimation for radiotherapy. *Medical Physics*, **2001**, 28, 2507-17	4.4	48
161	Physical models and simpler dosimetric descriptors of radiation late toxicity. *Seminars in Radiation Oncology*, **2007**, 17, 108-20	5.5	47
160	Methodological issues in radiation dose-volume outcome analyses: summary of a joint AAPM/NIH workshop. *Medical Physics*, **2002**, 29, 2109-27	4.4	46
159	Machine learning and modeling: Data, validation, communication challenges. *Medical Physics*, **2018**, 45, e834-e840	4.4	46
158	Quantization of setup uncertainties in 3-D dose calculations. *Medical Physics*, **1999**, 26, 2397-402	4.4	44
157	Automated determination of patient setup errors in radiation therapy using spherical radio-opaque markers. *Medical Physics*, **1993**, 20, 1145-52	4.4	44
156	Liver function after irradiation based on computed tomographic portal vein perfusion imaging. *International Journal of Radiation Oncology Biology Physics*, **2008**, 70, 154-60	4	40

155	Clinical experience with three-dimensional treatment planning. *Seminars in Radiation Oncology*, **1992**, 2, 257-266	5.5	40
154	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, 1033-41	4	40
153	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	4	39
152	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, 521-9	4.4	39
151	Technical considerations in the use of 3-D beam arrangements in the abdomen. *Radiotherapy and Oncology*, **1991**, 22, 19-28	5.3	39
150	The big data effort in radiation oncology: Data mining or data farming?. *Advances in Radiation Oncology*, **2016**, 1, 260-271	3.3	38
149	Esophagus sparing with IMRT in lung tumor irradiation: an EUD-based optimization technique. *International Journal of Radiation Oncology Biology Physics*, **2005**, 63, 179-87	4	38
148	Unraveling biophysical interactions of radiation pneumonitis in non-small-cell lung cancer via Bayesian network analysis. *Radiotherapy and Oncology*, **2017**, 123, 85-92	5.3	37
147	Flattening-filter-based empirical methods to parametrize the head scatter factor. *Medical Physics*, **1996**, 23, 343-52	4.4	37
146	Plasma Levels of IL-8 and TGF-β1 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	4	35
145	Artificial Intelligence: reshaping the practice of radiological sciences in the 21st century. *British Journal of Radiology*, **2020**, 93, 20190855	3.4	34
144	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, e631-8	4	34
143	Defining target volumes for non-small cell lung carcinoma. *Seminars in Radiation Oncology*, **2004**, 14, 308-14	5.5	34
142	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, 956-63	4	33
141	Radiogenomics and radiotherapy response modeling. *Physics in Medicine and Biology*, **2017**, 62, R179-R206	3.8	33
140	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, 782-8	4	33
139	Measurement of backscatter to the monitor chamber of medical accelerators using target charge. *Medical Physics*, **1998**, 25, 334-8	4.4	33
138	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, 1125-31	4	33

137	Clinical evaluation of neutron beam therapy. Current results and prospects, 1983. *Cancer*, **1985**, 55, 10-7	6.4	33
136	An analysis of knowledge-based planning for stereotactic body radiation therapy of the spine. *Practical Radiation Oncology*, **2017**, 7, e355-e360	2.8	31
135	Synchronized dynamic dose reconstruction. *Medical Physics*, **2007**, 34, 91-102	4.4	31
134	Measurement of patient setup errors using port films and a computer-aided graphical alignment tool. *Medical Dosimetry*, **1996**, 21, 97-104	1.3	31
133	Response of sarcomas of bone and of soft tissue to neutron beam therapy. *International Journal of Radiation Oncology Biology Physics*, **1984**, 10, 821-4	4	31
132	Response of pancreatic cancer to local irradiation with high-energy neutrons. *Cancer*, **1985**, 56, 1235-41	6.4	31
131	Imaging for assessment of radiation-induced normal tissue effects. *International Journal of Radiation Oncology Biology Physics*, **2010**, 76, S140-4	4	30
130	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, 328-32	4	30
129	A tilt and roll device for automated correction of rotational setup errors. *Medical Physics*, **1998**, 25, 1739-40	4.4	30
128	Three-dimensional tumor dosimetry for radioimmunotherapy using serial autoradiography. *International Journal of Radiation Oncology Biology Physics*, **1992**, 24, 329-34	4	30
127	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, 153-9	5.3	29
126	The prediction of radiation-induced liver dysfunction using a local dose and regional venous perfusion model. *Medical Physics*, **2007**, 34, 604-12	4.4	29
125	Radiation Dose-Volume Effects for Liver SBRT. *International Journal of Radiation Oncology Biology Physics*, **2021**, 110, 196-205	4	29
124	A multiobjective Bayesian networks approach for joint prediction of tumor local control and radiation pneumonitis in nonsmall-cell lung cancer (NSCLC) for response-adapted radiotherapy. *Medical Physics*, **2018**, 45, 3980	4.4	28
123	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, 71-8	8.9	28
122	Determination of rotations in three dimensions using two-dimensional portal image registration. *Medical Physics*, **1998**, 25, 703-8	4.4	28
121	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, 629-38	4	28
120	Functional and molecular image guidance in radiotherapy treatment planning optimization. *Seminars in Radiation Oncology*, **2011**, 21, 111-8	5.5	27

119	An application of Bayesian statistical methods to adaptive radiotherapy. *Physics in Medicine and Biology*, **2005**, 50, 3849-58	3.8	27
118	Fast neutrons in the treatment of salivary gland tumors. *International Journal of Radiation Oncology Biology Physics*, **1981**, 7, 1667-71	4	26
117	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	4.2	26
116	Machine Learning and Imaging Informatics in Oncology. *Oncology*, **2020**, 98, 344-362	3.6	26
115	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	25
114	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, 255-65	4	25
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112	Photon activation-15O decay studies of tumor blood flow. *Medical Physics*, **1981**, 8, 324-36	4.4	25
111	Estimating functional liver reserve following hepatic irradiation: adaptive normal tissue response models. *Radiotherapy and Oncology*, **2014**, 111, 418-23	5.3	24
110	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, 1000-6	4	24
109	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, 145-51	4	24
108	A customized non-axial external beam technique for treatment of prostate carcinomas. *Medical Dosimetry*, **1992**, 17, 123-7	1.3	24
107	Introduction to machine and deep learning for medical physicists. *Medical Physics*, **2020**, 47, e127-e147	4.4	23
106	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	4	23
105	Big Data in Designing Clinical Trials: Opportunities and Challenges. *Frontiers in Oncology*, **2017**, 7, 187	5.3	22
104	Accounting for center-of-mass target motion using convolution methods in Monte Carlo-based dose calculations of the lung. *Medical Physics*, **2004**, 31, 925-32	4.4	22
103	A mathematical model for correcting patient setup errors using a tilt and roll device. *Medical Physics*, **1999**, 26, 2586-8	4.4	21
102	Local and Global Function Model of the Liver. *International Journal of Radiation Oncology Biology Physics*, **2016**, 94, 181-188	4	20

101	FusionArc optimization: a hybrid volumetric modulated arc therapy (VMAT) and intensity modulated radiation therapy (IMRT) planning strategy. *Medical Physics*, **2013**, 40, 071713	4.4	20
100	Practical methods of electron depth-dose measurement compared to use of the NACP design chamber in water. *Medical Physics*, **1987**, 14, 1060-6	4.4	20
99	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	4	20
98	The Role of Machine Learning in Knowledge-Based Response-Adapted Radiotherapy. *Frontiers in Oncology*, **2018**, 8, 266	5.3	19
97	Balancing accuracy and interpretability of machine learning approaches for radiation treatment outcomes modeling. *BJR|Open*, **2019**, 1, 20190021	1.4	19
96	Timing and intensity of changes in FDG uptake with symptomatic esophagitis during radiotherapy or chemo-radiotherapy. *Radiation Oncology*, **2014**, 9, 37	4.2	19
95	Lhermitte sign after chemo-IMRT of head-and-neck cancer: incidence, doses, and potential mechanisms. *International Journal of Radiation Oncology Biology Physics*, **2012**, 83, 1528-33	4	19
94	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, 801-15	3.8	19
93	Three-dimensional reconstruction of monoclonal antibody uptake in tumor and calculation of beta dose-rate nonuniformity. *Cancer*, **1994**, 73, 912-8	6.4	19
92	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	4	18
91	Dosimetric verification of a 3-D electron pencil beam dose calculation algorithm. *Medical Physics*, **1994**, 21, 13-23	4.4	18
90	Thin-film, flat-panel, composite imagers for projection and tomographic imaging. *IEEE Transactions on Medical Imaging*, **1994**, 13, 482-90	11.7	18
89	Fast neutrons and misonidazole for malignant astrocytomas. *International Journal of Radiation Oncology Biology Physics*, **1985**, 11, 679-86	4	18
88	Combining handcrafted features with latent variables in machine learning for prediction of radiation-induced lung damage. *Medical Physics*, **2019**, 46, 2497-2511	4.4	17
87	Utility of normal tissue-to-tumor α/β ratio when evaluating isodoses of isoeffective radiation therapy treatment plans. *International Journal of Radiation Oncology Biology Physics*, **2013**, 85, e81-7	4	17
86	Sensitivity analysis for lexicographic ordering in radiation therapy treatment planning. *Medical Physics*, **2012**, 39, 3445-55	4.4	17
85	The clinical application of intensity-modulated radiation therapy. *Seminars in Radiation Oncology*, **2006**, 16, 224-31	5.5	17
84	Improvement of precision in spatial localization of radio-opaque markers using the two-film technique. *Medical Physics*, **1991**, 18, 1126-31	4.4	17

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82	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, 313-21	4	15
81	Spinal cord dose from standard head and neck irradiation: implications for three-dimensional treatment planning. *Radiotherapy and Oncology*, **1998**, 47, 185-9	5.3	15
80	A room-based diagnostic imaging system for measurement of patient setup. *Medical Physics*, **1998**, 25, 2385-7	4.4	15
79	Prospects and challenges for clinical decision support in the era of big data. *JCO Clinical Cancer Informatics*, **2018**, 2,	5.2	15
78	Ideal spatial radiotherapy dose distributions subject to positional uncertainties. *Physics in Medicine and Biology*, **2006**, 51, 6329-47	3.8	14
77	Body mass index predicts the incidence of radiation pneumonitis in breast cancer patients. *Cancer Journal (Sudbury, Mass)*, **2005**, 11, 390-8	2.2	14
76	In phantom determination of collimator scatter factor. *Medical Physics*, **1996**, 23, 1207-12	4.4	14
75	The clinical application of a non-axial treatment plan for pancreatic and biliary malignancies. *Radiotherapy and Oncology*, **1992**, 24, 198-200	5.3	14
74	Incorporating big data into treatment plan evaluation: Development of statistical DVH metrics and visualization dashboards. *Advances in Radiation Oncology*, **2017**, 2, 503-514	3.3	14
73	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	4.9	13
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71	Implementing Radiation Dose-Volume Liver Response in Biomechanical Deformable Image Registration. *International Journal of Radiation Oncology Biology Physics*, **2017**, 99, 1004-1012	4	12
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