Heng Li

List of Publications by Year
in descending order

80 papers	2,529 citations	159585 30 h-index	206112 48 g-index
83 all docs	83 docs citations	83 times ranked	2161 citing authors

#	Article	IF	Citations
1	Consensus Guidelines for Implementing Pencil-Beam Scanning Proton Therapy for Thoracic Malignancies on Behalf of the PTCOG Thoracic and Lymphoma Subcommittee. International Journal of Radiation Oncology Biology Physics, 2017, 99, 41-50.	0.8	162
2	Clinical Implementation of Intensity Modulated Proton Therapy for Thoracic Malignancies. International Journal of Radiation Oncology Biology Physics, 2014, 90, 809-818.	0.8	125
3	Proton Beam Radiotherapy and Concurrent Chemotherapy for Unresectable Stage III Non–Small Cell Lung Cancer. JAMA Oncology, 2017, 3, e172032.	7.1	119
4	Dosimetric effects caused by couch tops and immobilization devices: Report of AAPM Task Group 176. Medical Physics, 2014, 41, 061501.	3.0	114
5	Comparison of 2D Radiographic Images and 3D Cone Beam Computed Tomography for Positioning Head-and-Neck Radiotherapy Patients. International Journal of Radiation Oncology Biology Physics, 2008, 71, 916-925.	0.8	112
6	Comprehensive Investigation on Controlling for CT Imaging Variabilities in Radiomics Studies. Scientific Reports, 2018, 8, 13047.	3.3	89
7	On the interplay effects with proton scanning beams in stage III lung cancer. Medical Physics, 2014, 41, 021721.	3.0	87
8	Commissioning dose computation models for spot scanning proton beams in water for a commercially available treatment planning system. Medical Physics, 2013, 40, 041723.	3.0	80
9	Scatter kernel estimation with an edge-spread function method for cone-beam computed tomography imaging. Physics in Medicine and Biology, 2008, 53, 6729-6748.	3.0	77
10	Impact of respiratory motion on worst-case scenario optimized intensity modulated proton therapy for lung cancers. Practical Radiation Oncology, 2015, 5, e77-e86.	2.1	75
11	Intensity modulated proton therapy treatment planning using single-field optimization: The impact of monitor unit constraints on plan quality. Medical Physics, 2010, 37, 1210-1219.	3.0	72
12	Robust optimization in intensity-modulated proton therapy to account for anatomy changes in lung cancer patients. Radiotherapy and Oncology, 2015, 114, 367-372.	0.6	72
13	Improving Outcomes for Esophageal Cancer using Proton Beam Therapy. International Journal of Radiation Oncology Biology Physics, 2016, 95, 488-497.	0.8	64
14	Motion-robust intensity-modulated proton therapy for distal esophageal cancer. Medical Physics, 2016, 43, 1111-1118.	3.0	63
15	Use of treatment log files in spot scanning proton therapy as part of patient-specific quality assurance. Medical Physics, 2013, 40, 021703.	3.0	60
16	Towards Effective and Efficient Patient-Specific Quality Assurance for Spot Scanning Proton Therapy. Cancers, 2015, 7, 631-647.	3.7	59
17	Dosimetric benefits of robust treatment planning for intensity modulated proton therapy for base-of-skull cancers. Practical Radiation Oncology, 2014, 4, 384-391.	2.1	56
18	Evaluation and mitigation of the interplay effects of intensity modulated proton therapy for lung cancer in a clinical setting. Practical Radiation Oncology, 2014, 4, e259-e268.	2.1	56

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19	Radiomics features of the primary tumor fail to improve prediction of overall survival in large cohorts of CT- and PET-imaged head and neck cancer patients. PLoS ONE, 2019, 14, e0222509.	2.5	56
20	Phase 2 Study of Stereotactic Body Radiation Therapy and Stereotactic Body Proton Therapy for High-Risk, Medically Inoperable, Early-Stage Non-Small Cell Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2018, 101, 558-563.	0.8	55
21	Statistical Assessment of Proton Treatment Plans Under Setup and Range Uncertainties. International Journal of Radiation Oncology Biology Physics, 2013, 86, 1007-1013.	0.8	53
22	Toward a better understanding of the gamma index: Investigation of parameters with a surface€based	3.0	44
23	Dynamically accumulated dose and 4D accumulated dose for moving tumors. Medical Physics, 2012, 39, 7359-7367.	3.0	40
24	Early experience with intensity modulated proton therapy for lung-intact mesothelioma: A case series. Practical Radiation Oncology, 2015, 5, e345-e353.	2.1	40
25	Effects of Respiratory Motion on Passively Scattered Proton Therapy Versus Intensity Modulated Photon Therapy for Stage III Lung Cancer: Are Proton Plans More Sensitive to Breathing Motion?. International Journal of Radiation Oncology Biology Physics, 2013, 87, 576-582.	0.8	35
26	Proton energy optimization and reduction for intensity-modulated proton therapy. Physics in Medicine and Biology, 2014, 59, 6341-6354.	3.0	34
27	Selective robust optimization: A new intensity€modulated proton therapy optimization strategy. Medical Physics, 2015, 42, 4840-4847.	3.0	34
28	Reirradiation of thoracic cancers with intensity modulated proton therapy. Practical Radiation Oncology, 2018, 8, 58-65.	2.1	34
29	Improving spot€scanning proton therapy patient specific quality assurance with HPlusQA, a second€check dose calculation engine. Medical Physics, 2013, 40, 121708.	3.0	32
30	Reducing Dose Uncertainty for Spot-Scanning Proton Beam Therapy of Moving Tumors by Optimizing the Spot Delivery Sequence. International Journal of Radiation Oncology Biology Physics, 2015, 93, 547-556.	0.8	30
31	AAPM Task Group Report 290: Respiratory motion management for particle therapy. Medical Physics, 2022, 49, .	3.0	30
32	A Multi-Institutional Comparison of Dynamic Contrast-Enhanced Magnetic Resonance Imaging Parameter Calculations. Scientific Reports, 2017, 7, 11185.	3.3	29
33	Practical guidelines for handling head and neck computed tomography artifacts for quantitative image analysis. Computerized Medical Imaging and Graphics, 2018, 69, 134-139.	5.8	29
34	Clinical outcomes of intensity modulated proton therapy and concurrent chemotherapy in esophageal carcinoma: a single institutional experience. Advances in Radiation Oncology, 2017, 2, 301-307.	1.2	28
35	Multiple-CT optimization: An adaptive optimization method to account for anatomical changes in intensity-modulated proton therapy for head and neck cancers. Radiotherapy and Oncology, 2020, 142, 124-132.	0.6	28
36	Characterization of dose impact on IMRT and VMAT from couch attenuation for two Varian couches. Journal of Applied Clinical Medical Physics, 2011, 12, 23-31.	1.9	25

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37	A single-field integrated boost treatment planning technique for spot scanning proton therapy. Radiation Oncology, 2014, 9, 202.	2.7	24
38	Accuracy of deformable image registration on magnetic resonance images in digital and physical phantoms. Medical Physics, 2017, 44, 5153-5161.	3.0	22
39	Multiple-CT optimization of intensity-modulated proton therapy â€" Is it possible to eliminate adaptive planning?. Radiotherapy and Oncology, 2018, 128, 167-173.	0.6	22
40	Spot-Scanning Proton Therapy Patient-Specific Quality Assurance: Results from 309 Treatment Plans. International Journal of Particle Therapy, 2014, 1, 711-720.	1.8	20
41	Perturbation of waterâ€equivalent thickness as a surrogate for respiratory motion in proton therapy. Journal of Applied Clinical Medical Physics, 2016, 17, 368-378.	1.9	19
42	Limited Angle Dual Modality Breast Imaging. IEEE Transactions on Nuclear Science, 2007, 54, 504-513.	2.0	16
43	Anatomic change over the course of treatment for nonâ€"small cell lung cancer patients and its impact on intensity-modulated radiation therapy and passive-scattering proton therapy deliveries. Radiation Oncology, 2020, 15, 55.	2.7	16
44	Statistical evaluation of worst-case robust optimization intensity-modulated proton therapy plans using an exhaustive sampling approach. Radiation Oncology, 2019, 14, 129.	2.7	13
45	Patientâ€specific quantification of respiratory motionâ€induced dose uncertainty for stepâ€andâ€shoot IMRT of lung cancer. Medical Physics, 2013, 40, 121712.	3.0	11
46	Evaluation of the systematic error in using 3D dose calculation in scanning beam proton therapy for lung cancer. Journal of Applied Clinical Medical Physics, 2014, 15, 47-56.	1.9	11
47	Effects of alterations in positron emission tomography imaging parameters on radiomics features. PLoS ONE, 2019, 14, e0221877.	2.5	11
48	Effect of setup and inter-fraction anatomical changes on the accumulated dose in CT-guided breath-hold intensity modulated proton therapy of liver malignancies. Radiotherapy and Oncology, 2019, 134, 101-109.	0.6	11
49	Consensus Statement on Proton Therapy in Mesothelioma. Practical Radiation Oncology, 2021, 11, 119-133.	2.1	11
50	An Anthropomorphic Head and Neck Quality Assurance Phantom for Credentialing of Intensity-Modulated Proton Therapy. International Journal of Particle Therapy, 2017, 4, 40-47.	1.8	11
51	A CT-based software tool for evaluating compensator quality in passively scattered proton therapy. Physics in Medicine and Biology, 2010, 55, 6759-6771.	3.0	10
52	Dynamic contrast-enhanced magnetic resonance imaging for head and neck cancers. Scientific Data, 2018, 5, 180008.	5.3	10
53	Dosimetric evaluation of coneâ€beam CTâ€based synthetic CTs in pediatric patients undergoing intensityâ€modulated proton therapy. Journal of Applied Clinical Medical Physics, 2022, 23, e13604.	1.9	9
54	Proton therapy for early-stage non-small cell lung cancer (NSCLC). Translational Lung Cancer Research, 2018, 7, 199-204.	2.8	8

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55	3D treatment planning system—Varian Eclipse for proton therapy planning. Medical Dosimetry, 2018, 43, 184-194.	0.9	7
56	Robust Optimization for Intensity Modulated Proton Therapy Plans with Multi-Isocenter Large Fields. International Journal of Particle Therapy, 2016, 3, 305-311.	1.8	7
57	Lesion Quantification in Dual-Modality Mammotomography. IEEE Transactions on Nuclear Science, 2007, 54, 107-115.	2.0	6
58	Transitioning from measurement-based to combined patient-specific quality assurance for intensity-modulated proton therapy. British Journal of Radiology, 2020, 93, 20190669.	2.2	6
59	An analytical model for the upper bound estimation of respiratory motion—induced dose uncertainty in spot-scanning proton beam therapy. Medical Physics, 2019, 46, 5249-5261.	3.0	5
60	Synchrotron-Based Pencil Beam Scanning Nozzle with an Integrated Mini-Ridge Filter: A Dosimetric Study to Optimize Treatment Delivery. Cancers, 2017, 9, 170.	3.7	4
61	Synthetic head and neck and phantom images for determining deformable image registration accuracy in magnetic resonance imaging. Medical Physics, 2018, 45, 4315-4321.	3.0	4
62	Accounting for, Mitigating, and Choice of Margins for Moving Tumors. Seminars in Radiation Oncology, 2018, 28, 194-200.	2.2	4
63	Quantitative image feature variability amongst CT scanners with a controlled scan protocol. , 2018, , .		4
64	Proton Therapy for Juvenile Pilocytic Astrocytoma: Quantifying Treatment Responses by Magnetic Resonance Diffusion Tensor Imaging. International Journal of Particle Therapy, 2016, 3, 414-420.	1.8	4
65	Executive Summary of Clinical and Technical Guidelines for Esophageal Cancer Proton Beam Therapy From the Particle Therapy Co-Operative Group Thoracic and Gastrointestinal Subcommittees. Frontiers in Oncology, 2021, 11, 748331.	2.8	4
66	Evaluating Proton Dose and Associated Range Uncertainty Using Daily Cone-Beam CT. Frontiers in Oncology, 2022, 12, 830981.	2.8	4
67	Blind Deblurring Reconstruction Technique with Applications in PET Imaging. International Journal of Biomedical Imaging, 2009, 2009, 1-6.	3.9	3
68	An improved method for analyzing and reporting patterns of in-field recurrence after stereotactic ablative radiotherapy in early-stage non-small cell lung cancer. Radiotherapy and Oncology, 2020, 145, 209-214.	0.6	3
69	Application of Blind Deblurring Reconstruction Technique to SPECT Imaging. International Journal of Biomedical Imaging, 2007, 2007, 1-9.	3.9	2
70	Is there a clinical benefit with a smooth compensator design compared with a plunged compensator design for passive scattered protons?. Medical Dosimetry, 2015, 40, 37-43.	0.9	2
71	Novel Hybrid Scattering- and Scanning-Beam Proton Therapy Approach. International Journal of Particle Therapy, 2016, 3, 37-50.	1.8	2
72	Biological Effectiveness and Relative Biological Effectiveness of Ion Beams for in-vitro Cell Irradiation. Cancer Science, 0, , .	3.9	2

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73	Derivation of Scatter Kernel in CBCT Imaging System. , 2006, , .		1
74	Principles of intensity-modulated proton therapy treatment planning. , 2021, , 56-79.e4.		1
75	Lesion radioactivity concentration estimation using dual modality gamma ray/X-ray imaging. Physica Medica, 2006, 21, 68-71.	0.7	0
76	Half-Cone SPECT System for Small Animal Imaging. , 0, , .		0
77	Blind Deblurring Reconstruction Technique with Applications in Spect Imaging. , 2006, , .		0
78	Esophagus Cancer. Practical Guides in Radiation Oncology, 2018, , 211-219.	0.1	0
79	Physics quality assurance. , 2021, , 80-105.e2.		0
80	Esophagus cancer. , 2021, , 198-204.e2.		0