Jinzhong Yang

List of Publications by Year
in descending order

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109 papers	4,760 citations	126907 33 h-index	106344 65 g-index
113 all docs	113 docs citations	113 times ranked	5557 citing authors

#	Article	IF	Citations
1	Measuring Computed Tomography Scanner Variability of Radiomics Features. Investigative Radiology, 2015, 50, 757-765.	6.2	519
2	<scp>ibex</scp>: An open infrastructure software platform to facilitate collaborative work in radiomics. Medical Physics, 2015, 42, 1341-1353.	3.0	274
3	Vision 20/20: Perspectives on automated image segmentation for radiotherapy. Medical Physics, 2014, 41, 050902.	3.0	262
4	Delta-radiomics features for the prediction of patient outcomes in nonâ€“small cell lung cancer. Scientific Reports, 2017, 7, 588.	3.3	254
5	Advances in Auto-Segmentation. Seminars in Radiation Oncology, 2019, 29, 185-197.	2.2	252
6	Autosegmentation for thoracic radiation treatment planning: A grand challenge at AAPM 2017. Medical Physics, 2018, 45, 4568-4581.	3.0	169
7	Can radiomics features be reproducibly measured from CBCT images for patients with nonâ€small cell lung cancer?. Medical Physics, 2015, 42, 6784-6797.	3.0	142
8	Harmonizing the pixel size in retrospective computed tomography radiomics studies. PLoS ONE, 2017, 12, e0178524.	2.5	127
9	A predictive model for distinguishing radiation necrosis from tumour progression after gamma knife radiosurgery based on radiomic features from MR images. European Radiology, 2018, 28, 2255-2263.	4.5	121
10	Spatial Precision in Magnetic Resonance Imagingâ€“Guided Radiation Therapy: The Role ofÂGeometric Distortion. International Journal of Radiation Oncology Biology Physics, 2016, 95, 1304-1316.	0.8	119
11	Deep Learning Algorithm for Auto-Delineation of High-Risk Oropharyngeal Clinical Target Volumes With Built-In Dice Similarity Coefficient Parameter Optimization Function. International Journal of Radiation Oncology Biology Physics, 2018, 101, 468-478.	0.8	118
12	The Rise of Radiomics and Implications for Oncologic Management. Journal of the National Cancer Institute, 2017, 109, .	6.3	104
13	Effect of tube current on computed tomography radiomic features. Scientific Reports, 2018, 8, 2354.	3.3	94
14	Impact of image preprocessing on the volume dependence and prognostic potential of radiomics features in non-small cell lung cancer. Translational Cancer Research, 2016, 5, 349-363.	1.0	87
15	Preliminary investigation into sources of uncertainty in quantitative imaging features. Computerized Medical Imaging and Graphics, 2015, 44, 54-61.	5.8	77
16	Cardiac atlas development and validation for automatic segmentation of cardiac substructures. Radiotherapy and Oncology, 2017, 122, 66-71.	0.6	76
17	Impact of heart and lung dose on early survival in patients with non-small cell lung cancer treated with chemoradiation. Radiotherapy and Oncology, 2016, 119, 495-500.	0.6	75
18	Automatic detection of contouring errors using convolutional neural networks. Medical Physics, 2019, 46, 5086-5097.	3.0	72

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19	Dosimetric comparison to the heart and cardiac substructure in a large cohort of esophageal cancer patients treated with proton beam therapy or Intensity-modulated radiation therapy. Radiotherapy and Oncology, 2017, 125, 48-54.	0.6	69
20	Dose Constraints to Prevent Radiation-Induced Brachial Plexopathy in Patients Treated for Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2012, 82, e391-e398.	0.8	67
21	Diffusion Tensor Image Registration Using Tensor Geometry and Orientation Features. Lecture Notes in Computer Science, 2008, 11, 905-913.	1.3	65
22	Lung tumor segmentation methods: Impact on the uncertainty of radiomics features for non-small cell lung cancer. PLoS ONE, 2018, 13, e0205003.	2.5	63
23	Quality Assurance Assessment of Diagnostic and Radiation Therapyâ€“Simulation CT Image Registration for Head and Neck Radiation Therapy: Anatomic Region of Interestâ€“based Comparison of Rigid and Deformable Algorithms. Radiology, 2015, 274, 752-763.	7.3	58
24	Computational resources for radiomics. Translational Cancer Research, 2016, 5, 340-348.	1.0	56
25	Initial Feasibility and Clinical Implementation of Daily MR-Guided Adaptive Head and Neck Cancer Radiation Therapy on a 1.5T MR-Linac System: Prospective R-IDEAL 2a/2b Systematic Clinical Evaluation of Technical Innovation. International Journal of Radiation Oncology Biology Physics, 2021, 109, 1606-1618.	0.8	52
26	Machine QA for the Elekta Unity system: A Report from the Elekta MRâ€linac consortium. Medical Physics, 2021, 48, e67-e85.	3.0	52
27	Auto-delineation of oropharyngeal clinical target volumes using 3D convolutional neural networks. Physics in Medicine and Biology, 2018, 63, 215026.	3.0	51
28	Generating High-Quality Lymph Node Clinical Target Volumes for Head and Neck Cancer Radiation Therapy Using a Fully Automated Deep Learning-Based Approach. International Journal of Radiation Oncology Biology Physics, 2021, 109, 801-812.	0.8	49
29	Modeling respiratory motion for reducing motion artifacts in 4D CT images. Medical Physics, 2013, 40, 041716.	3.0	47
30	Radiomics feature robustness as measured using an MRI phantom. Scientific Reports, 2021, 11, 3973.	3.3	45
31	The thin plate spline robust point matching (TPS-RPM) algorithm: A revisit. Pattern Recognition Letters, 2011, 32, 910-918.	4.2	43
32	A multimodality segmentation framework for automatic target delineation in head and neck radiotherapy. Medical Physics, 2015, 42, 5310-5320.	3.0	43
33	Automatic contouring of brachial plexus using a multi-atlas approach for lung cancer radiation therapy. Practical Radiation Oncology, 2013, 3, e139-e147.	2.1	37
34	Uncertainty analysis of quantitative imaging features extracted from contrast-enhanced CT in lung tumors. Computerized Medical Imaging and Graphics, 2016, 48, 1-8.	5.8	36
35	Advantages of simulating thoracic cancer patients in an upright position. Practical Radiation Oncology, 2014, 4, e53-e58.	2.1	35
36	Combining Radiation Therapy with Immune Checkpoint Blockade for Central Nervous System Malignancies. Frontiers in Oncology, 2016, 6, 212.	2.8	35

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37	Radiation Planning Assistant - A Streamlined, Fully Automated Radiotherapy Treatment Planning System. Journal of Visualized Experiments, 2018, , .	0.3	35
38	Retrospective Validation and Clinical Implementation of Automated Contouring of Organs at Risk in the Head and Neck: A Step Toward Automated Radiation Treatment Planning for Low- and Middle-Income Countries. Journal of Global Oncology, 2018, 4, 1-11.	0.5	34
39	Prospective observer and software-based assessment of magnetic resonance imaging quality in head and neck cancer: Should standard positioning and immobilization be required for radiation therapy applications?. Practical Radiation Oncology, 2015, 5, e299-e308.	2.1	31
40	Fully Automatic Treatment Planning for External-Beam Radiation Therapy of Locally Advanced Cervical Cancer: A Tool for Low-Resource Clinics. Journal of Global Oncology, 2019, 5, 1-9.	0.5	31
41	Head and neck cancer patient images for determining autoâ€segmentation accuracy in T2â€weighted magnetic resonance imaging through expert manual segmentations. Medical Physics, 2020, 47, 2317-2322.	3.0	29
42	Auto-segmentation of low-risk clinical target volume for head and neck radiation therapy. Practical Radiation Oncology, 2014, 4, e31-e37.	2.1	28
43	Atlas ranking and selection for automatic segmentation of the esophagus from CT scans. Physics in Medicine and Biology, 2017, 62, 9140-9158.	3.0	28
44	Automated treatment planning of postmastectomy radiotherapy. Medical Physics, 2019, 46, 3767-3775.	3.0	27
45	Potential for Improvements in Robustness and Optimality of Intensity-Modulated Proton Therapy for Lung Cancer with 4-Dimensional Robust Optimization. Cancers, 2019, 11, 35.	3.7	27
46	A robust hybrid method for nonrigid image registration. Pattern Recognition, 2011, 44, 764-776.	8.1	23
47	Impact of slice thickness, pixel size, and CT dose on the performance of automatic contouring algorithms. Journal of Applied Clinical Medical Physics, 2021, 22, 168-174.	1.9	23
48	Reproducibility of patient setup in the seated treatment position: A novel treatment chair design. Journal of Applied Clinical Medical Physics, 2017, 18, 223-229.	1.9	23
49	Statistical Modeling Approach to Quantitative Analysis of Interobserver Variability in Breast Contouring. International Journal of Radiation Oncology Biology Physics, 2014, 89, 214-221.	0.8	22
50	Accuracy of deformable image registration on magnetic resonance images in digital and physical phantoms. Medical Physics, 2017, 44, 5153-5161.	3.0	22
51	A snapshot of medical physics practice patterns. Journal of Applied Clinical Medical Physics, 2018, 19, 306-315.	1.9	22
52	Medical Physics, 2012, 39, 5136-5144.	3.0	20
53	Differences between planned and delivered dose for head and neck cancer, and their consequences for normal tissue complication probability and treatment adaptation. Radiotherapy and Oncology, 2020, 142, 100-106.	0.6	20
54	NSCLC tumor shrinkage prediction using quantitative image features. Computerized Medical Imaging and Graphics, 2016, 49, 29-36.	5.8	19

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55	Guidelines and Experience Using Imaging Biomarker Explorer (IBEX) for Radiomics. Journal of Visualized Experiments, 2018, , .	0.3	19
56	Matching and Homogenizing Convolution Kernels for Quantitative Studies in Computed Tomography. Investigative Radiology, 2019, 54, 288-295.	6.2	19
57	Motion of the Esophagus Due to Cardiac Motion. PLoS ONE, 2014, 9, e89126.	2.5	18
58	Automatic segmentation of cardiac substructures from noncontrast CT images: accurate enough for dosimetric analysis?. Acta OncolÃ³gica, 2019, 58, 81-87.	1.8	18
59	18F-Fluorodeoxyglucose Positron Emission Tomography Can Quantify and Predict Esophageal Injury During Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2016, 96, 670-678.	0.8	17
60	A methodology to investigate the impact of image distortions on the radiation dose when using magnetic resonance images for planning. Physics in Medicine and Biology, 2018, 63, 085005.	3.0	17
61	Quantifying the accuracy of deformable image registration for coneâ€beam computed tomography with a physical phantom. Journal of Applied Clinical Medical Physics, 2019, 20, 92-100.	1.9	16
62	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
63	A Region-Based Image Fusion Method Using the Expectation-Maximization Algorithm. , 2006, , .		15
64	Objectively Quantifying Radiation Esophagitis With Novel Computed Tomographyâ€“Based Metrics. International Journal of Radiation Oncology Biology Physics, 2016, 94, 385-393.	0.8	15
65	A Novel Methodology using CT Imaging Biomarkers to Quantify Radiation Sensitivity in the Esophagus with Application to Clinical Trials. Scientific Reports, 2017, 7, 6034.	3.3	15
66	CT images with expert manual contours of thoracic cancer for benchmarking autoâ€segmentation accuracy. Medical Physics, 2020, 47, 3250-3255.	3.0	15
67	Learning anatomy changes from patient populations to create artificial CT images for voxelâ€level validation of deformable image registration. Journal of Applied Clinical Medical Physics, 2016, 17, 246-258.	1.9	14
68	DTIâ€ÐROID: Diffusion tensor imagingâ€deformable registration using orientation and intensity descriptors. International Journal of Imaging Systems and Technology, 2010, 20, 99-107.	4.1	13
69	A statistical modeling approach for evaluating auto-segmentation methods for image-guided radiotherapy. Computerized Medical Imaging and Graphics, 2012, 36, 492-500.	5.8	13
70	Prospective Comparison of Toxicity and Cosmetic Outcome After Accelerated Partial Breast Irradiation With Conformal External Beam Radiotherapy or Single-Entry Multilumen Intracavitary Brachytherapy. Practical Radiation Oncology, 2019, 9, e4-e13.	2.1	13
71	Evaluation of the accuracy of deformable image registration on MRI with a physical phantom. Journal of Applied Clinical Medical Physics, 2020, 21, 166-173.	1.9	13
72	Characterization of a new physical phantom for testing rigid and deformable image registration. Journal of Applied Clinical Medical Physics, 2019, 20, 145-153.	1.9	12

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73	Online adaptive planning for prostate stereotactic body radiotherapy using a 1.5ÂTesla magnetic resonance imaging-guided linear accelerator. Physics and Imaging in Radiation Oncology, 2021, 17, 20-24.	2.9	12
74	Stability of MRI contrast agents in high-energy radiation of a 1.5T MR-Linac. Radiotherapy and Oncology, 2021, 161, 55-64.	0.6	12
75	Training deepâ€learning segmentation models from severely limited data. Medical Physics, 2021, 48, 1697-1706.	3.0	10
76	3D-Printed Small-Animal Immobilizer for Use in Preclinical Radiotherapy. Journal of the American Association for Laboratory Animal Science, 2015, 54, 545-8.	1.2	10
77	Upright cone beam CT imaging using the onboard imager. Medical Physics, 2014, 41, 061906.	3.0	9
78	Submillimeter alignment of more than three contiguous vertebrae in spinal SRS / SBRT with 6â€degree couch. Journal of Applied Clinical Medical Physics, 2017, 18, 225-236.	1.9	8
79	Spatial normalization of diffusion tensor images based on anisotropic segmentation. , 2008, , .		7
80	Digital reconstruction of high-quality daily 4D cone-beam CT images using prior knowledge of anatomy and respiratory motion. Computerized Medical Imaging and Graphics, 2015, 40, 30-38.	5.8	7
81	Dose accumulation of daily adaptive plans to decide optimal plan adaptation strategy for head-and-neck patients treated with MR-Linac. Medical Dosimetry, 2022, 47, 103-109.	0.9	7
82	Brain stereotactic radiosurgery using MRâ€guided online adaptive planning for daily setup variation: An endâ€toâ€end test. Journal of Applied Clinical Medical Physics, 2022, 23, e13518.	1.9	7
83	Costâ€effective immobilization for whole brain radiation therapy. Journal of Applied Clinical Medical Physics, 2017, 18, 116-122.	1.9	6
84	Development and application of an elastic net logistic regression model to investigate the impact of cardiac substructure dose on radiation-induced pericardial effusion in patients with NSCLC. Acta OncolÃ³gica, 2020, 59, 1193-1200.	1.8	6
85	Image Fusion Using the Expectation-Maximization Algorithm and a Gaussian Mixture Model. , 2003, , 81-95.		6
86	Non-rigid Image Registration Using Geometric Features and Local Salient Region Features. , 0, , .		5
87	Differences in Normal Tissue Response in the Esophagus Between Proton and Photon Radiation Therapy for Non-Small Cell Lung Cancer Using InÂVivo Imaging Biomarkers. International Journal of Radiation Oncology Biology Physics, 2017, 99, 1013-1020.	0.8	5
88	Reirradiation of Recurrent Pediatric Brain Tumors after Initial Proton Therapy. International Journal of Particle Therapy, 2016, 3, 1-12.	1.8	5
89	Auto-segmentation of the brachial plexus assessed with TaCTICS â€“ A software platform for rapid multiple-metric quantitative evaluation of contours. Acta OncolÃ³gica, 2015, 54, 562-566.	1.8	4
90	The feasibility of endoscopy-CT image registration in the head and neck without prospective endoscope tracking. PLoS ONE, 2017, 12, e0177886.	2.5	4

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91	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
92	Dosimetric impact of esophagus motion in single fraction spine stereotactic body radiotherapy. Physics in Medicine and Biology, 2019, 64, 115010.	3.0	4
93	Technical Note: Density correction to improve CT number mapping in thoracic deformable image registration. Medical Physics, 2019, 46, 2330-2336.	3.0	4
94	Automatic registration of 2D MR cine images for swallowing motion estimation. PLoS ONE, 2020, 15, e0228652.	2.5	4
95	Our Experience Leading a Large Medical Physics Practice During the COVID-19 Pandemic. Advances in Radiation Oncology, 2021, 6, 100683.	1.2	4
96	The influence of nonâ€rigid anatomy and patient positioning on endoscopyâ€•CT image registration in the head and neck. Medical Physics, 2017, 44, 4159-4168.	3.0	3
97	Tissue-specific deformable image registration using a spatial-contextual filter. Computerized Medical Imaging and Graphics, 2021, 88, 101849.	5.8	3
98	Prospective evaluation of target and spinal cord motion and dosimetric changes with respiration in spinal stereotactic body radiation therapy utilizing 4-D CT. Journal of Radiosurgery and SBRT, 2016, 4, 191-201.	0.2	3
99	Auto-contouring for Image-Guidance and Treatment Planning. , 2022, , 231-293.		3
100	Automatic detection of graticule isocenter and scale from kV and MV images. Journal of Applied Clinical Medical Physics, 2019, 20, 18-28.	1.9	2
101	Impact of geometric distortion on dose deviation for photon and proton treatment plans. Journal of Applied Clinical Medical Physics, 2022, 23, .	1.9	2
102	Clinical Implementation and Initial Experience With a 1.5 Tesla MR-Linac for MR-Guided Radiation Therapy for Gynecologic Cancer: An R-IDEAL Stage 1 and 2a First in Humans Feasibility Study of New Technology Implementation. Practical Radiation Oncology, 2022, 12, e296-e305.	2.1	2
103	Impact of intra-fractional motion on dose distributions in lung IMRT. Journal of Radiotherapy in Practice, 2021, 20, 12-16.	0.5	1
104	Feasibility of spinal stereotactic body radiotherapy in Elekta Unity MR-Linac. Journal of Radiosurgery and SBRT, 2020, 7, 127-134.	0.2	1
105	Technical Note: Solving the â€œChinese postman problemâ€•for effective contour deformation. Medical Physics, 2018, 45, 767-772.	3.0	0
106	SU-E-J-99: Multi-Atlas Based Auto-Segmentation of Low-Risk Clinical Target Volume (CTV) for Head-and-Neck Radiotherapy. Medical Physics, 2011, 38, 3465-3465.	3.0	0
107	TH-E-218-05: Prediction of Respiratory Motion from Single Daily 3D Image Using Prior Model of Motion and Anatomic Variations. Medical Physics, 2012, 39, 4018-4018.	3.0	0
108	MO-D-108-09: Perturbation of Tissue Density Is An Important Metric to Be Considered When Planning for Respiratory Motion Management for Lung Proton Therapy. Medical Physics, 2013, 40, 397-398.	3.0	0

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109	SU-E-I-58: Understanding Uncertainties in Quantitative Image Features Extracted From Contrast-Enhanced CT Images. Medical Physics, 2013, 40, 138-138.	3.0	0