Steve Jiang

List of Publications by Year in descending order

72 papers	2,121 citations	257450 24 h-index	254184 43 g-index
73 all docs	73 docs citations	73 times ranked	2071 citing authors

#	Article	IF	Citations
1	Intentional deep overfit learning (IDOL): A novel deep learning strategy for adaptive radiation therapy. Medical Physics, 2022, 49, 488-496.	3.0	16
2	Siteâ€agnostic 3D dose distribution prediction with deep learning neural networks. Medical Physics, 2022, 49, 1391-1406.	3.0	10
3	Pilot Study of a Wearable Activity Monitor During Head and Neck Radiotherapy to Predict Clinical Outcomes. JCO Clinical Cancer Informatics, 2022, 6, e2100179.	2.1	4
4	Guest Editorial Special Section on Learning With Multimodal Data for Biomedical Informatics. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 2508-2511.	8.3	0
5	Prediction of Type and Recurrence of Atrial Fibrillation after Catheter Ablation via Left Atrial Electroanatomical Voltage Mapping Registration and Multilayer Perceptron Classification: A Retrospective Study. Sensors, 2022, 22, 4058.	3.8	1
6	Deep Interactive Denoiser (DID) for X-Ray Computed Tomography. IEEE Transactions on Medical Imaging, 2021, 40, 1-1.	8.9	3
7	Improving proton dose calculation accuracy by using deep learning. Machine Learning: Science and Technology, 2021, 2, 015017.	5.0	16
8	Deep learning can accelerate and quantify simulated localized correlated spectroscopy. Scientific Reports, 2021, 11, 8727.	3.3	13
9	Contact Tracing in Healthcare Settings During the COVID-19 Pandemic Using Bluetooth Low Energy and Artificial Intelligenceâ€"A Viewpoint. Frontiers in Artificial Intelligence, 2021, 4, 666599.	3.4	5
10	Deep Learningâ€"Based COVID-19 Pneumonia Classification Using Chest CT Images: Model Generalizability. Frontiers in Artificial Intelligence, 2021, 4, 694875.	3.4	19
11	A feasibility study on deep learningâ€based individualized 3D dose distribution prediction. Medical Physics, 2021, 48, 4438-4447.	3.0	10
12	A deep learning-based framework for segmenting invisible clinical target volumes with estimated uncertainties for post-operative prostate cancer radiotherapy. Medical Image Analysis, 2021, 72, 102101.	11.6	32
13	Synthesizing CT images from MR images with deep learning: model generalization for different datasets through transfer learning. Biomedical Physics and Engineering Express, 2021, 7, 025020.	1.2	15
14	PSA-Net: Deep learningâ€"based physician styleâ€"aware segmentation network for postoperative prostate cancer clinical target volumes. Artificial Intelligence in Medicine, 2021, 121, 102195.	6.5	24
15	Multi-Objective-Based Radiomic Feature Selection for Lesion Malignancy Classification. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 194-204.	6.3	24
16	A fast deep learning approach for beam orientation optimization for prostate cancer treated with intensityâ€modulated radiation therapy. Medical Physics, 2020, 47, 880-897.	3.0	18
17	Synthetic CT generation from CBCT images via deep learning. Medical Physics, 2020, 47, 1115-1125.	3.0	109
18	Incorporating human and learned domain knowledge into training deep neural networks: A differentiable doseâ€volume histogram and adversarial inspired framework for generating Pareto optimal dose distributions in radiation therapy. Medical Physics, 2020, 47, 837-849.	3.0	40

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19	Technical Note: A feasibility study on deep learningâ€based radiotherapy dose calculation. Medical Physics, 2020, 47, 753-758.	3.0	33
20	Dose prediction with deep learning for prostate cancer radiation therapy: Model adaptation to different treatment planning practices. Radiotherapy and Oncology, 2020, 153, 228-235.	0.6	45
21	Boosting radiotherapy dose calculation accuracy with deep learning. Journal of Applied Clinical Medical Physics, 2020, 21, 149-159.	1.9	20
22	Dosimetric evaluation of synthetic CT generated with GANs for MRIâ€only proton therapy treatment planning of brain tumors. Journal of Applied Clinical Medical Physics, 2020, 21, 76-86.	1.9	35
23	Mining Domain Knowledge: Improved Framework Towards Automatically Standardizing Anatomical Structure Nomenclature in Radiotherapy. IEEE Access, 2020, 8, 105286-105300.	4.2	8
24	Using deep learning to predict beamâ€tunable Pareto optimal dose distribution for intensityâ€modulated radiation therapy. Medical Physics, 2020, 47, 3898-3912.	3.0	16
25	Development of a realâ€time indoor location system using bluetooth low energy technology and deep learning to facilitate clinical applications. Medical Physics, 2020, 47, 3277-3285.	3.0	4
26	Multifaceted radiomics for distant metastasis prediction in head & neck cancer. Physics in Medicine and Biology, 2020, 65, 155009.	3.0	16
27	Deep BOO! Automating Beam Orientation Optimization in Intensity-Modulated Radiation Therapy. Springer Proceedings in Advanced Robotics, 2020, , 338-354.	1.3	0
28	Predicting lung nodule malignancies by combining deep convolutional neural network and handcrafted features. Physics in Medicine and Biology, 2019, 64, 175012.	3.0	51
29	Electron modulated arc therapy (EMAT) using photon MLC for postmastectomy chest wall treatment I: Monte Carlo-based dosimetric characterizations. Physica Medica, 2019, 67, 1-8.	0.7	6
30	Automated Text Message Reminders Improve Radiation Therapy Compliance. International Journal of Radiation Oncology Biology Physics, 2019, 103, 1045-1052.	0.8	13
31	3D radiotherapy dose prediction on head and neck cancer patients with a hierarchically densely connected U-net deep learning architecture. Physics in Medicine and Biology, 2019, 64, 065020.	3.0	204
32	A feasibility study for predicting optimal radiation therapy dose distributions of prostate cancer patients from patient anatomy using deep learning. Scientific Reports, 2019, 9, 1076.	3.3	181
33	Generating synthesized computed tomography (CT) from cone-beam computed tomography (CBCT) using CycleGAN for adaptive radiation therapy. Physics in Medicine and Biology, 2019, 64, 125002.	3.0	170
34	Threeâ€dimensional dose prediction for lung IMRT patients with deep neural networks: robust learning from heterogeneous beam configurations. Medical Physics, 2019, 46, 3679-3691.	3.0	115
35	MRI-only brain radiotherapy: Assessing the dosimetric accuracy of synthetic CT images generated using a deep learning approach. Radiotherapy and Oncology, 2019, 136, 56-63.	0.6	105
36	Combining many-objective radiomics and 3D convolutional neural network through evidential reasoning to predict lymph node metastasis in head and neck cancer. Physics in Medicine and Biology, 2019, 64, 075011.	3.0	74

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37	Technical Note: Deriving ventilation imaging from 4DCTby deep convolutional neural network. Medical Physics, 2019, 46, 2323-2329.	3.0	23
38	Reliable lymph node metastasis prediction in head & neck cancer through automated multi-objective model. , 2019, , .		4
39	Super-Resolution 1H Magnetic Resonance Spectroscopic Imaging Utilizing Deep Learning. Frontiers in Oncology, 2019, 9, 1010.	2.8	49
40	A recursive ensemble organ segmentation (REOS) framework: application in brain radiotherapy. Physics in Medicine and Biology, 2019, 64, 025015.	3.0	25
41	Flattening filter free in intensityâ€modulated radiotherapy (IMRT) â€“ Theoretical modeling with delivery efficiency analysis. Medical Physics, 2019, 46, 34-44.	3.0	11
42	Cone-Beam Computed Tomography (CBCT) Segmentation by Adversarial Learning Domain Adaptation. Lecture Notes in Computer Science, 2019, , 567-575.	1.3	7
43	Generating Pareto Optimal Dose Distributions for Radiation Therapy Treatment Planning. Lecture Notes in Computer Science, 2019, , 59-67.	1.3	13
44	Individualized 3D Dose Distribution Prediction Using Deep Learning. Lecture Notes in Computer Science, 2019, , 110-118.	1.3	5
45	A Novel Deep Learning Framework for Standardizing the Label of OARs in CT. Lecture Notes in Computer Science, 2019, , 52-60.	1.3	5
46	Using Supervised Learning and Guided Monte Carlo Tree Search for Beam Orientation Optimization in Radiation Therapy. Lecture Notes in Computer Science, 2019, , 1-9.	1.3	1
47	A shell and kernel descriptor based joint deep learning model for predicting breast lesion malignancy. , 2019, , .		1
48	Iterative reconstruction with boundary detection for carbon ion computed tomography. Physics in Medicine and Biology, 2018, 63, 055002.	3.0	1
49	Convolutionâ€based modified Clarkson integration (<scp>CMCI</scp>) for electron cutout factor calculation. Journal of Applied Clinical Medical Physics, 2018, 19, 128-136.	1.9	2
50	Three-dimensional printer-aided casting of soft, custom silicone boluses (SCSBs) for head and neck radiation therapy. Practical Radiation Oncology, 2018, 8, e167-e174.	2.1	25
51	Threshold-driven optimization for reference-based auto-planning. Physics in Medicine and Biology, 2018, 63, 04NT01.	3.0	12
52	Minimal mask immobilization with optical surface guidance for head and neck radiotherapy. Journal of Applied Clinical Medical Physics, 2018, 19, 17-24.	1.9	39
53	Fully automated organ segmentation in male pelvic CT images. Physics in Medicine and Biology, 2018, 63, 245015.	3.0	97
54	Predicting Lymph Node Metastasis in Head and Neck Cancer by Combining Many-objective Radiomics and 3-dimensioal Convolutional Neural Network through Evidential Reasoning. , 2018, 2018, 1-4.		29

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55	Deep-learning based surface region selection for deep inspiration breath hold (DIBH) monitoring in left breast cancer radiotherapy. Physics in Medicine and Biology, 2018, 63, 245013.	3.0	5
56	Accurate real time localization tracking in a clinical environment using Bluetooth Low Energy and deep learning. PLoS ONE, 2018, 13, e0205392.	2.5	43
57	A pilot study using kernelled support tensor machine for distant failure prediction in lung SBRT. Medical Image Analysis, 2018, 50, 106-116.	11.6	22
58	Mid-range probingâ€"towards range-guided particle therapy. Physics in Medicine and Biology, 2018, 63, 13NT01.	3.0	4
59	Segmentation of the prostate and organs at risk in male pelvic CT images using deep learning. Biomedical Physics and Engineering Express, 2018, 4, 055003.	1.2	65
60	Investigating rectal toxicity associated dosimetric features with deformable accumulated rectal surface dose maps for cervical cancer radiotherapy. Radiation Oncology, 2018, 13, 125.	2.7	29
61	Design and development of soft robot for head and neck cancer radiotherapy. , 2018, , .		0
62	Advances in Computing Infrastructure. , 2018, , 121-147.		0
63	Z-Index Parameterization for Volumetric CT Image Reconstruction via 3-D Dictionary Learning. IEEE Transactions on Medical Imaging, 2017, 36, 2466-2478.	8.9	31
64	Continuous leaf optimization for IMRT leaf sequencing. Medical Physics, 2016, 43, 5403-5411.	3.0	8
65	Predicting distant failure in early stage NSCLC treated with SBRT using clinical parameters. Radiotherapy and Oncology, 2016, 119, 501-504.	0.6	39
66	Vision-based control of a soft robot for maskless head and neck cancer radiotherapy. , 2016, , .		1
67	Cardiac dosimetric evaluation of deep inspiration breath-hold level variances using computed tomography scans generated from deformable image registration displacement vectors. Medical Dosimetry, 2016, 41, 22-27.	0.9	4
68	An Automated Treatment Plan Quality Control Tool for Intensity-Modulated Radiation Therapy Using a Voxel-Weighting Factor-Based Re-Optimization Algorithm. PLoS ONE, 2016, 11, e0149273.	2.5	9
69	Dosimetric benefit of adaptive re-planning in pancreatic cancer stereotactic body radiotherapy. Medical Dosimetry, 2015, 40, 318-324.	0.9	30
70	A real-time, soft robotic patient positioning system for maskless head-and-neck cancer radiotherapy: An initial investigation. , 2015, , .		3
71	The Role of Hypofractionated Radiation Therapy with Photons, Protons, and Heavy Ions for Treating Extracranial Lesions. Frontiers in Oncology, 2015, 5, 302.	2.8	20
72	International Symposium on Ion Therapy: Planning the First Hospital-Based Heavy Ion Therapy Center in the United States. International Journal of Particle Therapy, 2015, 2, 468-470.	1.8	4