Zhen Tian

List of Publications by Year
in descending order

33 papers	**987** citations	516215 **16** h-index	433756 **31** g-index
34 all docs	**34** docs citations	**34** times ranked	**1177** citing authors

#	Article	IF	Citations
1	Automatic inverse treatment planning of Gamma Knife radiosurgery via deep reinforcement learning. Medical Physics, 2022, 49, 2877-2889.	1.6	2
2	A prediction model for dosimetric‐based lung adaptive radiotherapy. Medical Physics, 2022, 49, 6319-6333.	1.6	3
3	Mask R-CNN-based tumor localization and segmentation in 4D Lung CT. , 2021, , .		2
4	High through-plane resolution CT imaging with self-supervised deep learning. Physics in Medicine and Biology, 2021, 66, 145013.	1.6	8
5	Lung tumor segmentation in 4D CT images using motion convolutional neural networks. Medical Physics, 2021, 48, 7141-7153.	1.6	7
6	CT prostate segmentation based on synthetic MRI‐aided deep attention fully convolution network. Medical Physics, 2020, 47, 530-540.	1.6	66
7	A new open‐source GPU‐based microscopic Monte Carlo simulation tool for the calculations of DNA damages caused by ionizing radiation â€" Part II: sensitivity and uncertainty analysis. Medical Physics, 2020, 47, 1971-1982.	1.6	14
8	A new open‐source GPU‐based microscopic Monte Carlo simulation tool for the calculations of DNA damages caused by ionizing radiation â€â€â€•Part I: Core algorithm and validation. Medical Physics, 2020, 47, 1958-1970.	1.6	19
9	Multi-Needle Detection in 3D Ultrasound Images Using Unsupervised Order-Graph Regularized Sparse Dictionary Learning. IEEE Transactions on Medical Imaging, 2020, 39, 2302-2315.	5.4	31
10	A preliminary study on a multiresolution‐level inverse planning approach for Gamma Knife radiosurgery. Medical Physics, 2020, 47, 1523-1532.	1.6	13
11	Automatic multi-needle localization in ultrasound images using large margin mask RCNN for ultrasound-guided prostate brachytherapy. Physics in Medicine and Biology, 2020, 65, 205003.	1.6	18
12	Deep learning-based real-time volumetric imaging for lung stereotactic body radiation therapy: a proof of concept study. Physics in Medicine and Biology, 2020, 65, 235003.	1.6	21
13	A machine-learningâ€"based prediction model of fistula formation after interstitial brachytherapy for locally advanced gynecological malignancies. Brachytherapy, 2019, 18, 530-538.	0.2	19
14	Deep learning-based image quality improvement for low-dose computed tomography simulation in radiation therapy. Journal of Medical Imaging, 2019, 6, 1.	0.8	23
15	Full Monte Carloâ€"Based Biologic Treatment Plan Optimization System for Intensity Modulated Carbon Ion Therapy on Graphics Processing Unit. International Journal of Radiation Oncology Biology Physics, 2018, 100, 235-243.	0.4	10
16	Risk factors for fistula formation after interstitial brachytherapy for locally advanced gynecological cancers involving vagina. Journal of Contemporary Brachytherapy, 2018, 10, 510-515.	0.4	7
17	New concept on an integrated interior magnetic resonance imaging and medical linear accelerator system for radiation therapy. Journal of Medical Imaging, 2017, 4, 015004.	0.8	5
18	Moving GPU-OpenCL-based Monte Carlo dose calculation toward clinical use: Automatic beam commissioning and source sampling for treatment plan dose calculation. Journal of Applied Clinical Medical Physics, 2017, 18, 69-84.	0.8	3

#	Article	IF	Citations
19	Accelerated Monte Carlo simulation on the chemical stage in water radiolysis using GPU. Physics in Medicine and Biology, 2017, 62, 3081-3096.	1.6	14
20	A new scheme for real-time high-contrast imaging in lung cancer radiotherapy: a proof-of-concept study. Physics in Medicine and Biology, 2016, 61, 2372-2388.	1.6	24
21	Multi-GPU implementation of a VMAT treatment plan optimization algorithm. Medical Physics, 2015, 42, 2841-2852.	1.6	12
22	Dosimetric benefit of adaptive re-planning in pancreatic cancer stereotactic body radiotherapy. Medical Dosimetry, 2015, 40, 318-324.	0.4	30
23	A GPU OpenCL based cross-platform Monte Carlo dose calculation engine (goMC). Physics in Medicine and Biology, 2015, 60, 7419-7435.	1.6	26
24	An analytic linear accelerator source model for GPU-based Monte Carlo dose calculations. Physics in Medicine and Biology, 2015, 60, 7941-7967.	1.6	10
25	Reconstructing cone-beam CT with spatially varying qualities for adaptive radiotherapy: a proof-of-principle study. Physics in Medicine and Biology, 2014, 59, 6251-6266.	1.6	4
26	A DVH-guided IMRT optimization algorithm for automatic treatment planning and adaptive radiotherapy replanning. Medical Physics, 2014, 41, 061711.	1.6	89
27	Automatic commissioning of a GPU-based Monte Carlo radiation dose calculation code for photon radiotherapy. Physics in Medicine and Biology, 2014, 59, 6467-6486.	1.6	8
28	Automatic treatment plan re-optimization for adaptive radiotherapy guided with the initial plan DVHs. Physics in Medicine and Biology, 2013, 58, 8725-8738.	1.6	35
29	Four‐dimensional cone beam CT reconstruction and enhancement using a temporal nonlocal means method. Medical Physics, 2012, 39, 5592-5602.	1.6	62
30	Low-dose CT reconstruction via edge-preserving total variation regularization. Physics in Medicine and Biology, 2011, 56, 5949-5967.	1.6	305
31	Low‐dose 4DCT reconstruction via temporal nonlocal means. Medical Physics, 2011, 38, 1359-1365.	1.6	62
32	4D Computed Tomography Reconstruction from Few-Projection Data via Temporal Non-local Regularization. Lecture Notes in Computer Science, 2010, 13, 143-150.	1.0	35
33	A 4D CT sorting algorithm based on image boundary discontinuity. , 2010, , .		0