

# Lei Ren

## List of Publications by Year in descending order

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49  
papers

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citations

516215

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749  
citing authors

#	ARTICLE	IF	CITATIONS
1	Real-Time Markerless Tracking of Lung Tumors Based on 2-D Fluoroscopy Imaging Using Convolutional LSTM. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 189-199.	2.7	2
2	Enhancement of 4-D Cone-Beam Computed Tomography (4D-CBCT) Using a Dual-Encoder Convolutional Neural Network (DeCNN). IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 222-230.	2.7	3
3	The markerless lung target tracking AAPM Grand Challenge (MATCH) results. Medical Physics, 2022, 49, 1161-1180.	1.6	15
4	Patient-specific deep learning model to enhance 4D-CBCT image for radiomics analysis. Physics in Medicine and Biology, 2022, 67, 085003.	1.6	4
5	A geometry-guided multi-beamlet deep learning technique for CT reconstruction. Biomedical Physics and Engineering Express, 2022, 8, 045004.	0.6	3
6	Dual-Intended Deep Learning Model for Breast Cancer Diagnosis in Ultrasound Imaging. Cancers, 2022, 14, 2663.	1.7	14
7	Fast four-dimensional cone-beam computed tomography reconstruction using deformable convolutional networks. Medical Physics, 2022, 49, 6461-6476.	1.6	4
8	Patient-specific synthetic magnetic resonance imaging generation from cone beam computed tomography for image guidance in liver stereotactic body radiation therapy. Precision Radiation Oncology, 2022, 6, 110-118.	0.4	0
9	Prostate-specific membrane antigen PET response associates with radiographic progression-free survival following stereotactic ablative radiation therapy in oligometastatic castration-sensitive prostate cancer.. Journal of Clinical Oncology, 2022, 40, 5011-5011.	0.8	2
10	Enhancing digital tomosynthesis (DTS) for lung radiotherapy guidance using patient-specific deep learning model. Physics in Medicine and Biology, 2021, 66, 035009.	1.6	17
11	Prior image-guided cone-beam computed tomography augmentation from under-sampled projections using a convolutional neural network. Quantitative Imaging in Medicine and Surgery, 2021, 11, 4767-4780.	1.1	4
12	4D radiomics: impact of 4D-CBCT image quality on radiomic analysis. Physics in Medicine and Biology, 2021, 66, 045023.	1.6	9
13	Building a patient-specific model using transfer learning for four-dimensional cone beam computed tomography augmentation. Quantitative Imaging in Medicine and Surgery, 2021, 11, 540-555.	1.1	7
14	Respiratory deformation registration in 4D-CT/cone beam CT using deep learning. Quantitative Imaging in Medicine and Surgery, 2021, 11, 737-748.	1.1	9
15	A geometry-guided deep learning technique for CBCT reconstruction. Physics in Medicine and Biology, 2021, 66, 15LT01.	1.6	6
16	Multi-Contrast Four-dimensional Magnetic Resonance Imaging (MC4D-MRI): development and initial evaluation in liver tumor patients. Medical Physics, 2021, 48, 7984.	1.6	5
17	Clinical implementation of AI technologies will require interpretable AI models. Medical Physics, 2020, 47, 1-4.	1.6	63
18	A multi-scale framework with unsupervised joint training of convolutional neural networks for pulmonary deformable image registration. Physics in Medicine and Biology, 2020, 65, 015011.	1.6	60

#	ARTICLE	IF	CITATIONS
19	Volumetric cine magnetic resonance imaging (VC-MRI) using motion modeling, free-form deformation and multi-slice undersampled 2D cine MRI reconstructed with spatio-temporal low-rank decomposition. <i>Quantitative Imaging in Medicine and Surgery</i> , 2020, 10, 432-450.	1.1	12
20	Development of realistic multi-contrast textured XCAT (MT-XCAT) phantoms using a dual-discriminator conditional-generative adversarial network (D-CGAN). <i>Physics in Medicine and Biology</i> , 2020, 65, 065009.	1.6	11
21	Intensity non-uniformity correction in MR imaging using residual cycle generative adversarial network. <i>Physics in Medicine and Biology</i> , 2020, 65, 215025.	1.6	27
22	MRI-based treatment planning for liver stereotactic body radiotherapy: validation of a deep learning-based synthetic CT generation method. <i>British Journal of Radiology</i> , 2019, 92, 20190067.	1.0	52
23	SPARE: Sparse-view reconstruction challenge for 4D cone-beam CT from a 1-min scan. <i>Medical Physics</i> , 2019, 46, 3799-3811.	1.6	47
24	Low dose cone-beam computed tomography reconstruction via hybrid prior contour based total variation regularization (hybrid-PCTV). <i>Quantitative Imaging in Medicine and Surgery</i> , 2019, 9, 1214-1228.	1.1	6
25	Enhancing liver tumor localization accuracy by prior-knowledge-guided motion modeling and a biomechanical model. <i>Quantitative Imaging in Medicine and Surgery</i> , 2019, 9, 1337-1349.	1.1	8
26	Augmentation of CBCT Reconstructed From Under-Sampled Projections Using Deep Learning. <i>IEEE Transactions on Medical Imaging</i> , 2019, 38, 2705-2715.	5.4	52
27	Technical Note: Imaging dose resulting from optimized procedures with limited-angle intrafractional verification system during stereotactic body radiation therapy lung treatment. <i>Medical Physics</i> , 2019, 46, 2709-2715.	1.6	0
28	Daily edge deformation prediction using an unsupervised convolutional neural network model for low dose prior contour based total variation CBCT reconstruction (PCTV-CNN). <i>Biomedical Physics and Engineering Express</i> , 2019, 5, 065013.	0.6	3
29	Monte Carlo analysis of beam blocking grid design parameters: Scatter estimation and the importance of electron backscatter. <i>Medical Physics</i> , 2018, 45, 1059-1070.	1.6	3
30	Low dose CBCT reconstruction via prior contour based total variation (PCTV) regularization: a feasibility study. <i>Physics in Medicine and Biology</i> , 2018, 63, 085014.	1.6	24
31	Image acquisition optimization of a limited-angle intrafraction verification (LIVE) system for lung radiotherapy. <i>Medical Physics</i> , 2018, 45, 340-351.	1.6	13
32	Principal component reconstruction (<sc>PCR</sc>) for cine <sc>CBCT</sc> with motion learning from 2D fluoroscopy. <i>Medical Physics</i> , 2018, 45, 167-177.	1.6	11
33	A Novel method to generate on-board 4D MRI using prior 4D MRI and on-board kV projections from a conventional LINAC for target localization in liver SBRT. <i>Medical Physics</i> , 2018, 45, 3238-3245.	1.6	11
34	Estimating 4D-<sc>CBCT</sc> from prior information and extremely limited angle projections using structural <sc>PCA</sc> and weighted free-form deformation for lung radiotherapy. <i>Medical Physics</i> , 2017, 44, 1089-1104.	1.6	22
35	Reducing scan angle using adaptive prior knowledge for a limited-angle intrafraction verification (LIVE) system for conformal arc radiotherapy. <i>Physics in Medicine and Biology</i> , 2017, 62, 3859-3882.	1.6	21
36	Clinical Study of Orthogonal-View Phase-Matched Digital Tomosynthesis for Lung Tumor Localization. <i>Technology in Cancer Research and Treatment</i> , 2017, 16, 866-878.	0.8	5

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37	Development of a Computerized 4-D MRI Phantom for Liver Motion Study. <i>Technology in Cancer Research and Treatment</i> , 2017, 16, 1051-1059.	0.8	6
38	Dosimetric Analysis of Microscopic Disease in SBRT for Lung Cancers. <i>Technology in Cancer Research and Treatment</i> , 2017, 16, 1113-1119.	0.8	0
39	Markerless Four-Dimensional-Cone Beam Computed Tomography Projection-Phase Sorting Using Prior Knowledge and Patient Motion Modeling: A Feasibility Study. <i>Cancer Translational Medicine</i> , 2017, 3, 185-193.	0.2	1
40	Sensitivity of 3D Dose Verification to Multileaf Collimator Misalignments in Stereotactic Body Radiation Therapy of Spinal Tumor. <i>Technology in Cancer Research and Treatment</i> , 2016, 15, NP25-NP34.	0.8	1
41	Scatter Reduction and Correction for Dual-Source Cone-Beam CT Using Prepatient Grids. <i>Technology in Cancer Research and Treatment</i> , 2016, 15, 416-427.	0.8	14
42	A Technique for Generating Volumetric Cine-Magnetic Resonance Imaging. <i>International Journal of Radiation Oncology Biology Physics</i> , 2016, 95, 844-853.	0.4	46
43	Dosimetric verification of lung cancer treatment using the CBCTs estimated from limited-angle on-board projections. <i>Medical Physics</i> , 2015, 42, 4783-4795.	1.6	24
44	An interprojection sensor fusion approach to estimate blocked projection signal in synchronized moving grid-based CBCT system. <i>Medical Physics</i> , 2015, 43, 268-278.	1.6	1
45	Preliminary clinical evaluation of a 4D-CBCT estimation technique using prior information and limited-angle projections. <i>Radiotherapy and Oncology</i> , 2015, 115, 22-29.	0.3	48
46	A limited-angle intrafraction verification (LIVE) system for radiation therapy. <i>Medical Physics</i> , 2014, 41, 020701.	1.6	54
47	A technique for estimating 4D-CBCT using prior knowledge and limited-angle projections. <i>Medical Physics</i> , 2013, 40, 121701.	1.6	74
48	Feasibility study of a synchronized-moving-grid (SMOG) system to improve image quality in cone-beam computed tomography (CBCT). <i>Medical Physics</i> , 2012, 39, 5099-5110.	1.6	27
49	Automatic registration between reference and on-board digital tomosynthesis images for positioning verification. <i>Medical Physics</i> , 2008, 35, 664-672.	1.6	27