Lei Xing

List of Publications by Year in descending order

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22147 13087 17,793 416 68 113 citations h-index g-index papers 425 425 425 14152 all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Guidance document on delivery, treatment planning, and clinical implementation of IMRT: Report of the IMRT subcommittee of the AAPM radiation therapy committee. Medical Physics, 2003, 30, 2089-2115.	1.6	693
2	Stereotactic Body Radiation Therapy in Multiple Organ Sites. Journal of Clinical Oncology, 2007, 25, 947-952.	0.8	401
3	Segmentation of organsâ€atâ€risks in head and neck <scp>CT</scp> images using convolutional neural networks. Medical Physics, 2017, 44, 547-557.	1.6	398
4	Overview of image-guided radiation therapy. Medical Dosimetry, 2006, 31, 91-112.	0.4	380
5	Deep Generative Adversarial Neural Networks for Compressive Sensing MRI. IEEE Transactions on Medical Imaging, 2019, 38, 167-179.	5.4	373
6	Transferring Biomarker into Molecular Probe: Melanin Nanoparticle as a Naturally Active Platform for Multimodality Imaging. Journal of the American Chemical Society, 2014, 136, 15185-15194.	6.6	338
7	Evaluation of on-board kV cone beam CT (CBCT)-based dose calculation. Physics in Medicine and Biology, 2007, 52, 685-705.	1.6	270
8	Novel benzo-bis(1,2,5-thiadiazole) fluorophores for in vivo NIR-II imaging of cancer. Chemical Science, 2016, 7, 6203-6207.	3.7	263
9	Modified U-Net (mU-Net) With Incorporation of Object-Dependent High Level Features for Improved Liver and Liver-Tumor Segmentation in CT Images. IEEE Transactions on Medical Imaging, 2020, 39, 1316-1325.	5. 4	252
10	GPU computing in medical physics: A review. Medical Physics, 2011, 38, 2685-2697.	1.6	245
11	Transformation-Consistent Self-Ensembling Model for Semisupervised Medical Image Segmentation. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 523-534.	7.2	240
12	Effective anti-thrombotic therapy without stenting: intravascular optical coherence tomography-based management in plaque erosion (the EROSION study). European Heart Journal, 2017, 38, ehw381.	1.0	214
13	Compressed sensing based coneâ€beam computed tomography reconstruction with a firstâ€order	1.6	212
14	Implementing IMRT in clinical practice: a joint document of the American Society for Therapeutic Radiology and Oncology and the American Association of Physicists in Medicine. International Journal of Radiation Oncology Biology Physics, 2004, 58, 1616-1634.	0.4	211
15	Synergistic Assembly of Heavy Metal Clusters and Luminescent Organic Bridging Ligands in Metal–Organic Frameworks for Highly Efficient X-ray Scintillation. Journal of the American Chemical Society, 2014, 136, 6171-6174.	6.6	198
16	Nonculprit Plaques in Patients With Acute Coronary Syndromes Have More Vulnerable Features Compared With Those With Non–Acute Coronary Syndromes. Circulation: Cardiovascular Imaging, 2012, 5, 433-440.	1.3	188
17	Model-based image reconstruction for four-dimensional PET. Medical Physics, 2006, 33, 1288-1298.	1.6	187
18	Intrafractional Motion of the Prostate During Hypofractionated Radiotherapy. International Journal of Radiation Oncology Biology Physics, 2008, 72, 236-246.	0.4	184

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19	Distinct Morphological Features of RupturedÂCulprit Plaque for Acute Coronary Events Compared to Those With Silent RuptureÂand Thin-Cap Fibroatheroma. Journal of the American College of Cardiology, 2014, 63, 2209-2216.	1.2	179
20	Four-dimensional cone-beam computed tomography using an on-board imager. Medical Physics, 2006, 33, 3825-3833.	1.6	176
21	Fully automated quantitative cephalometry using convolutional neural networks. Journal of Medical Imaging, 2017, 4, 014501.	0.8	168
22	Patient-specific reconstruction of volumetric computed tomography images from a single projection view via deep learning. Nature Biomedical Engineering, 2019, 3, 880-888.	11.6	163
23	Iterative image reconstruction for CBCT using edgeâ€preserving prior. Medical Physics, 2009, 36, 252-260.	1.6	162
24	Scatter correction for coneâ€beam CT in radiation therapy. Medical Physics, 2009, 36, 2258-2268.	1.6	161
25	Machine learning techniques for biomedical image segmentation: An overview of technical aspects and introduction to stateâ€ofâ€art applications. Medical Physics, 2020, 47, e148-e167.	1.6	151
26	X-Ray Luminescence Computed Tomography via Selective Excitation: A Feasibility Study. IEEE Transactions on Medical Imaging, 2010, 29, 1992-1999.	5.4	148
27	Predictors for Neoatherosclerosis. Circulation: Cardiovascular Imaging, 2012, 5, 660-666.	1.3	143
28	Clinical Significance of Lipid-Rich PlaqueÂDetected by Optical CoherenceÂTomography. Journal of the American College of Cardiology, 2017, 69, 2502-2513.	1.2	142
29	Synthesis, Characterization, and Biomedical Applications of a Targeted Dual-Modal Near-Infrared-II Fluorescence and Photoacoustic Imaging Nanoprobe. ACS Nano, 2017, 11, 12276-12291.	7.3	137
30	Role of beam orientation optimization in intensity-modulated radiation therapy. International Journal of Radiation Oncology Biology Physics, 2001, 50, 551-560.	0.4	133
31	Objective assessment of deformable image registration in radiotherapy: A multiâ€institution study. Medical Physics, 2008, 35, 5944-5953.	1.6	132
32	Metal artifact reduction in xâ€ray computed tomography (CT) by constrained optimization. Medical Physics, 2011, 38, 701-711.	1.6	130
33	Tomographic molecular imaging of x-ray-excitable nanoparticles. Optics Letters, 2010, 35, 3345.	1.7	129
34	Synthesis and Radioluminescence of PEGylated Eu ³⁺ â€doped Nanophosphors as Bioimaging Probes. Advanced Materials, 2011, 23, H195-9.	11.1	121
35	PHD Inhibition Mitigates and Protects Against Radiation-Induced Gastrointestinal Toxicity via HIF2. Science Translational Medicine, 2014, 6, 236ra64.	5.8	120
36	X-ray-Induced Shortwave Infrared Biomedical Imaging Using Rare-Earth Nanoprobes. Nano Letters, 2015, 15, 96-102.	4.5	120

#	Article	IF	Citations
37	Augmented Bladder Tumor Detection Using Deep Learning. European Urology, 2019, 76, 714-718.	0.9	117
38	Incorporating prior knowledge into beam orientaton optimization in IMRT. International Journal of Radiation Oncology Biology Physics, 2002, 54, 1565-1574.	0.4	113
39	EROSION Study (Effective Anti-Thrombotic Therapy Without Stenting: Intravascular Optical Coherence) Tj ETQq1 10, .	1 0.78431 1.4	4 rgBT /Cv
40	Dosimetric verification of a commercial inverse treatment planning system. Physics in Medicine and Biology, 1999, 44, 463-478.	1.6	111
41	Intraoperative Imaging of Tumors Using Cerenkov Luminescence Endoscopy: A Feasibility Experimental Study. Journal of Nuclear Medicine, 2012, 53, 1579-1584.	2.8	111
42	A radiomics approach based on support vector machine using MR images for preoperative lymph node status evaluation in intrahepatic cholangiocarcinoma. Theranostics, 2019, 9, 5374-5385.	4.6	108
43	Enhanced 4D coneâ€beam CT with interâ€phase motion model. Medical Physics, 2007, 34, 3688-3695.	1.6	105
44	Noise suppression in scatter correction for coneâ€beam CT. Medical Physics, 2009, 36, 741-752.	1.6	104
45	Development of deep neural network for individualized hepatobiliary toxicity prediction after liver <scp>SBRT</scp> . Medical Physics, 2018, 45, 4763-4774.	1.6	103
46	Synergistically Enhancing the Therapeutic Effect of Radiation Therapy with Radiation Activatable and Reactive Oxygen Species-Releasing Nanostructures. ACS Nano, 2018, 12, 4946-4958.	7.3	101
47	Retrospective IMRT Dose Reconstruction Based on Cone-Beam CT and MLC Log-File. International Journal of Radiation Oncology Biology Physics, 2008, 70, 634-644.	0.4	99
48	Segment-based dose optimization using a genetic algorithm. Physics in Medicine and Biology, 2003, 48, 2987-2998.	1.6	98
49	Predicting respiratory tumor motion with multi-dimensional adaptive filters and support vector regression. Physics in Medicine and Biology, 2009, 54, 5735-5748.	1.6	98
50	Prostate cancer classification with multiparametric MRI transfer learning model. Medical Physics, 2019, 46, 756-765.	1.6	98
51	Optimizing 4D cone-beam CT acquisition protocol for external beam radiotherapy. International Journal of Radiation Oncology Biology Physics, 2007, 67, 1211-1219.	0.4	97
52	Strained Cyclooctyne as a Molecular Platform for Construction of Multimodal Imaging Probes. Angewandte Chemie - International Edition, 2015, 54, 5981-5984.	7.2	97
53	Inverse planning incorporating organ motion. Medical Physics, 2000, 27, 1573-1578.	1.6	96
54	Pseudo beam's-eye–view as applied to beam orientation selection in intensity-modulated radiation therapy. International Journal of Radiation Oncology Biology Physics, 2001, 51, 1361-1370.	0.4	94

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55	Iterative methods for inverse treatment planning. Physics in Medicine and Biology, 1996, 41, 2107-2123.	1.6	92
56	Multiobjective evolutionary optimization of the number of beams, their orientations and weights for intensity-modulated radiation therapy. Physics in Medicine and Biology, 2004, 49, 747-770.	1.6	90
57	American Society for Therapeutic Radiology and Oncology (ASTRO) and American College of Radiology (ACR) Practice Guidelines for Image-Guided Radiation Therapy (IGRT). International Journal of Radiation Oncology Biology Physics, 2010, 76, 319-325.	0.4	90
58	Prognostic Imaging Biomarkers in Glioblastoma: Development and Independent Validation on the Basis of Multiregion and Quantitative Analysis of MR Images. Radiology, 2016, 278, 546-553.	3.6	90
59	Image interpolation in 4D CT using a BSpline deformable registration model. International Journal of Radiation Oncology Biology Physics, 2006, 64, 1537-1550.	0.4	89
60	Formulating adaptive radiation therapy (ART) treatment planning into a closed-loop control framework. Physics in Medicine and Biology, 2007, 52, 4137-4153.	1.6	85
61	Dose reduction for kilovotage cone-beam computed tomography in radiation therapy. Physics in Medicine and Biology, 2008, 53, 2897-2909.	1.6	81
62	Investigation of X-ray Fluorescence Computed Tomography (XFCT) and K-Edge Imaging. IEEE Transactions on Medical Imaging, 2012, 31, 1620-1627.	5.4	81
63	First Demonstration of Multiplexed X-Ray Fluorescence Computed Tomography (XFCT) Imaging. IEEE Transactions on Medical Imaging, 2013, 32, 262-267.	5.4	79
64	A unifying probabilistic Bayesian approach to derive electron density from MRI for radiation therapy treatment planning. Physics in Medicine and Biology, 2014, 59, 6595-6606.	1.6	75
65	Radiomics and radiogenomics for precision radiotherapy. Journal of Radiation Research, 2018, 59, i25-i31.	0.8	74
66	Improved compressed sensing-based cone-beam CT reconstruction using adaptive prior image constraints. Physics in Medicine and Biology, 2012, 57, 2287-2307.	1.6	73
67	Comparison of Intensive Versus Moderate Lipid-Lowering Therapy on Fibrous Cap and Atheroma Volume of Coronary Lipid-Rich Plaque Using Serial Optical Coherence Tomography and Intravascular Ultrasound Imaging. American Journal of Cardiology, 2016, 117, 800-806.	0.7	73
68	Superpixel-based and boundary-sensitive convolutional neural network for automated liver segmentation. Physics in Medicine and Biology, 2018, 63, 095017.	1.6	73
69	Aperture modulated arc therapy. Physics in Medicine and Biology, 2003, 48, 1333-1344.	1.6	69
70	Shifting machine learning for healthcare from development to deployment and from models to data. Nature Biomedical Engineering, 2022, 6, 1330-1345.	11.6	69
71	Significance of intraplaque neovascularisation for vulnerability: optical coherence tomography study. Heart, 2012, 98, 1504-1509.	1.2	68
72	Deep Sinogram Completion With Image Prior for Metal Artifact Reduction in CT Images. IEEE Transactions on Medical Imaging, 2021, 40, 228-238.	5.4	67

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73	4D cone beam CT via spatiotemporal tensor framelet. Medical Physics, 2012, 39, 6943-6946.	1.6	66
74	Self-Supervised Feature Learning via Exploiting Multi-Modal Data for Retinal Disease Diagnosis. IEEE Transactions on Medical Imaging, 2020, 39, 4023-4033.	5.4	66
75	Combining deep learning with anatomical analysis for segmentation of the portal vein for liver SBRT planning. Physics in Medicine and Biology, 2017, 62, 8943-8958.	1.6	65
76	Self-attention convolutional neural network for improved MR image reconstruction. Information Sciences, 2019, 490, 317-328.	4.0	65
77	Xâ€ray acoustic computed tomography with pulsed xâ€ray beam from a medical linear accelerator. Medical Physics, 2013, 40, 010701.	1.6	64
78	Nonculprit Plaque Characteristics in Patients With Acute Coronary Syndrome Caused by Plaque Erosion vs Plaque Rupture. JAMA Cardiology, 2018, 3, 207.	3.0	63
79	Fully automatic segmentation of type B aortic dissection from CTA images enabled by deep learning. European Journal of Radiology, 2019, 121, 108713.	1.2	61
80	Computational Challenges for Image-Guided Radiation Therapy: Framework and Current Research. Seminars in Radiation Oncology, 2007, 17, 245-257.	1.0	58
81	Learning deconvolutional deep neural network for high resolution medical image reconstruction. Information Sciences, 2018, 468, 142-154.	4.0	58
82	Artificial intelligence will soon change the landscape of medical physics research and practice. Medical Physics, 2018, 45, 1791-1793.	1.6	57
83	Optimization approaches to volumetric modulated arc therapy planning. Medical Physics, 2015, 42, 1367-1377.	1.6	56
84	Dose reconstruction for volumetric modulated arc therapy (VMAT) using cone-beam CT and dynamic log files. Physics in Medicine and Biology, 2010, 55, 3597-3610.	1.6	55
85	Projectionâ€domain scatter correction for cone beam computed tomography using a residual convolutional neural network. Medical Physics, 2019, 46, 3142-3155.	1.6	55
86	Using voxel-dependent importance factors for interactive DVH-based dose optimization. Physics in Medicine and Biology, 2002, 47, 1659-1669.	1.6	53
87	X-Ray Luminescence and X-Ray Fluorescence Computed Tomography: New Molecular Imaging Modalities. IEEE Access, 2014, 2, 1051-1061.	2.6	53
88	Wireless Capsule Endoscopy: A New Tool for Cancer Screening in the Colon With Deep-Learning-Based Polyp Recognition. Proceedings of the IEEE, 2020, 108, 178-197.	16.4	53
89	Early Change in Metabolic Tumor Heterogeneity during Chemoradiotherapy and Its Prognostic Value for Patients with Locally Advanced Non-Small Cell Lung Cancer. PLoS ONE, 2016, 11, e0157836.	1.1	53
90	Reducing respiratory motion artifacts in positron emission tomography through retrospective stacking. Medical Physics, 2006, 33, 2632-2641.	1.6	51

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91	Development of a QA phantom and automated analysis tool for geometric quality assurance of onâ€board MV and kV xâ€ray imaging systems. Medical Physics, 2008, 35, 1497-1506.	1.6	51
92	Featureâ€based rectal contour propagation from planning CT to cone beam CT. Medical Physics, 2008, 35, 4450-4459.	1.6	51
93	Inverse planning for functional image-guided intensity-modulated radiation therapy. Physics in Medicine and Biology, 2002, 47, 3567-3578.	1.6	50
94	Using total-variation regularization for intensity modulated radiation therapy inverse planning with field-specific numbers of segments. Physics in Medicine and Biology, 2008, 53, 6653-6672.	1.6	50
95	Auto-propagation of contours for adaptive prostate radiation therapy. Physics in Medicine and Biology, 2008, 53, 4533-4542.	1.6	50
96	Multiscale registration of planning CT and daily cone beam CT images for adaptive radiation therapy. Medical Physics, 2009, 36, 4-11.	1.6	50
97	Radioluminescent nanophosphors enable multiplexed small-animal imaging. Optics Express, 2012, 20, 11598.	1.7	50
98	High Resolution X-ray-Induced Acoustic Tomography. Scientific Reports, 2016, 6, 26118.	1.6	50
99	Markerless Pancreatic Tumor Target Localization Enabled By Deep Learning. International Journal of Radiation Oncology Biology Physics, 2019, 105, 432-439.	0.4	49
100	A fiducial detection algorithm for real-time image guided IMRT based on simultaneous MV and kV imaging. Medical Physics, 2008, 35, 3554-3564.	1.6	48
101	A modelâ€based scatter artifacts correction for cone beam CT. Medical Physics, 2016, 43, 1736-1753.	1.6	48
102	Narrow band deformable registration of prostate magnetic resonance imaging, magnetic resonance spectroscopic imaging, and computed tomography studies. International Journal of Radiation Oncology Biology Physics, 2005, 62, 595-605.	0.4	47
103	Reduction of Muscle Contractions during Irreversible Electroporation Therapy Using High-Frequency Bursts of Alternating Polarity Pulses: A Laboratory Investigation in an ExÂVivo Swine Model. Journal of Vascular and Interventional Radiology, 2018, 29, 893-898.e4.	0.2	46
104	Evaluation of the deformation and corresponding dosimetric implications in prostate cancer treatment. Physics in Medicine and Biology, 2012, 57, 5361-5379.	1.6	45
105	An adaptive planning strategy for station parameter optimized radiation therapy (SPORT): Segmentally boosted VMAT. Medical Physics, 2013, 40, 050701.	1.6	45
106	Predicting peritoneal recurrence and disease-free survival from CT images in gastric cancer with multitask deep learning: a retrospective study. The Lancet Digital Health, 2022, 4, e340-e350.	5.9	45
107	Independent monitor unit calculation for intensity modulated radiotherapy using the MIMiC multileaf collimator. Medical Physics, 2002, 29, 2041-2051.	1.6	44
108	Association between cholesterol crystals and culprit lesion vulnerability in patients with acute coronary syndrome: An optical coherence tomography study. Atherosclerosis, 2016, 247, 111-117.	0.4	44

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109	Four-dimensional inverse treatment planning with inclusion of implanted fiducials in IMRT segmented fields. Medical Physics, 2009, 36, 2215-2221.	1.6	43
110	Scatter correction in coneâ€beam CT via a half beam blocker technique allowing simultaneous acquisition of scatter and image information. Medical Physics, 2012, 39, 2386-2395.	1.6	43
111	Hard X-ray-induced optical luminescence via biomolecule-directed metal clusters. Chemical Communications, 2014, 50, 3549-3551.	2.2	43
112	Cone Beam X-ray Luminescence Computed Tomography Based on Bayesian Method. IEEE Transactions on Medical Imaging, 2017, 36, 225-235.	5.4	43
113	Multi-Domain Image Completion for Random Missing Input Data. IEEE Transactions on Medical Imaging, 2021, 40, 1113-1122.	5.4	43
114	Computer verification of fluence map for intensity modulated radiation therapy. Medical Physics, 2000, 27, 2084-2092.	1.6	42
115	Feasibility study of beam orientation class-solutions for prostate IMRT. Medical Physics, 2004, 31, 2863-2870.	1.6	42
116	Clinical knowledge-based inverse treatment planning. Physics in Medicine and Biology, 2004, 49, 5101-5117.	1.6	41
117	Toward real-time Monte Carlo simulation using a commercial cloud computing infrastructure. Physics in Medicine and Biology, 2011, 56, N175-N181.	1.6	41
118	Rotation-Oriented Collaborative Self-Supervised Learning for Retinal Disease Diagnosis. IEEE Transactions on Medical Imaging, 2021, 40, 2284-2294.	5.4	41
119	Asymmetric Waveforms Decrease Lethal Thresholds in High Frequency Irreversible Electroporation Therapies. Scientific Reports, 2017, 7, 40747.	1.6	41
120	Dose verification for respiratory-gated volumetric modulated arc therapy. Physics in Medicine and Biology, 2011, 56, 4827-4838.	1.6	40
121	Segmentation of Pathological Structures by Landmark-Assisted Deformable Models. IEEE Transactions on Medical Imaging, 2017, 36, 1457-1469.	5.4	40
122	Image registration with auto-mapped control volumes. Medical Physics, 2006, 33, 1165-1179.	1.6	39
123	Search for IMRT inverse plans with piecewise constant fluence maps using compressed sensing techniques. Medical Physics, 2009, 36, 1895-1905.	1.6	39
124	Cerenkov Luminescence Endoscopy: Improved Molecular Sensitivity with \hat{l}^2 (sup> \hat{a}^2 (/sup>-Emitting Radiotracers. Journal of Nuclear Medicine, 2014, 55, 1905-1909.	2.8	39
125	Deep Learning-Based Spectral Unmixing for Optoacoustic Imaging of Tissue Oxygen Saturation. IEEE Transactions on Medical Imaging, 2020, 39, 3643-3654.	5.4	39
126	A Bayesian approach to realâ€time 3D tumor localization via monoscopic xâ€ray imaging during treatment delivery. Medical Physics, 2011, 38, 4205-4214.	1.6	38

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127	A three-source model for the calculation of head scatter factors. Medical Physics, 2002, 29, 2024-2033.	1.6	37
128	IMRT dose shaping with regionally variable penalty scheme. Medical Physics, 2003, 30, 544-551.	1.6	37
129	Inverse treatment planning with adaptively evolving voxel-dependent penalty scheme. Medical Physics, 2004, 31, 2839-2844.	1.6	36
130	NeRP: Implicit Neural Representation Learning With Prior Embedding for Sparsely Sampled Image Reconstruction. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 770-782.	7.2	36
131	37, 2351-2358.	1.6	35
132	An end-to-end examination of geometric accuracy of IGRT using a new digital accelerator equipped with onboard imaging system. Physics in Medicine and Biology, 2012, 57, 757-769.	1.6	35
133	Evaluation of the geometric accuracy of surrogateâ€based gated VMAT using intrafraction kilovoltage xâ€ray images. Medical Physics, 2012, 39, 2686-2693.	1.6	35
134	Order of Magnitude Sensitivity Increase in X-ray Fluorescence Computed Tomography (XFCT) Imaging With an Optimized Spectro-Spatial Detector Configuration: Theory and Simulation. IEEE Transactions on Medical Imaging, 2014, 33, 1119-1128.	5.4	35
135	Theoretical detection threshold of the protonâ€acoustic range verification technique. Medical Physics, 2015, 42, 5735-5744.	1.6	35
136	Using edge-preserving algorithm with non-local mean for significantly improved image-domain material decomposition in dual-energy CT. Physics in Medicine and Biology, 2016, 61, 1332-1351.	1.6	35
137	Low Endothelial Shear Stress Predicts Evolution to High-Risk Coronary Plaque Phenotype in the Future. Circulation: Cardiovascular Interventions, 2017, 10, .	1.4	35
138	Incorporating dosimetric features into the prediction of 3D VMAT dose distributions using deep convolutional neural network. Physics in Medicine and Biology, 2019, 64, 125017.	1.6	35
139	TransCT: Dual-Path Transformer for Low Dose Computed Tomography. Lecture Notes in Computer Science, 2021, , 55-64.	1.0	35
140	Dosimetric featuresâ€driven machine learning model for DVH prediction in VMAT treatment planning. Medical Physics, 2019, 46, 857-867.	1.6	34
141	Automatic Polyp Recognition in Colonoscopy Images Using Deep Learning and Two-Stage Pyramidal Feature Prediction. IEEE Transactions on Automation Science and Engineering, 2020, , 1-15.	3.4	34
142	Estimating dual-energy CT imaging from single-energy CT data with material decomposition convolutional neural network. Medical Image Analysis, 2021, 70, 102001.	7.0	34
143	X-ray excitable luminescent polymer dots doped with an iridium(iii) complex. Chemical Communications, 2013, 49, 4319.	2.2	33
144	Development of XFCT imaging strategy for monitoring the spatial distribution of platinum-based chemodrugs: Instrumentation and phantom validation. Medical Physics, 2013, 40, 030701.	1.6	33

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145	Optimized Detector Angular Configuration Increases the Sensitivity of X-ray Fluorescence Computed Tomography (XFCT). IEEE Transactions on Medical Imaging, 2015, 34, 1140-1147.	5.4	33
146	Strategies for prediction and mitigation of radiation-induced liver toxicity. Journal of Radiation Research, 2018, 59, i40-i49.	0.8	33
147	Segmentation of parotid glands from registered CT and MR images. Physica Medica, 2018, 52, 33-41.	0.4	33
148	Ultrafast and scalable cone-beam CT reconstruction using MapReduce in a cloud computing environment. Medical Physics, 2011, 38, 6603-6609.	1.6	32
149	Clinical Implementation of Intrafraction Cone Beam Computed Tomography Imaging During Lung Tumor Stereotactic Ablative Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2013, 87, 917-923.	0.4	32
150	Hybrid multiscale landmark and deformable image registration. Mathematical Biosciences and Engineering, 2007, 4, 711-737.	1.0	32
151	Tissue Feature-Based and Segmented Deformable Image Registration for Improved Modeling of Shear Movement of Lungs. International Journal of Radiation Oncology Biology Physics, 2009, 74, 1256-1265.	0.4	31
152	Multisource modeling of flattening filter free (FFF) beam and the optimization of model parameters. Medical Physics, 2011, 38, 1931-1942.	1.6	31
153	Monte Carlo simulation of photon migration in a cloud computing environment with MapReduce. Journal of Biomedical Optics, 2011, 16, 125003.	1.4	31
154	Multiscale Image Registration. Mathematical Biosciences and Engineering, 2006, 3, 389-418.	1.0	31
155	Dose–volume based ranking of incident beam direction and its utility in facilitating IMRT beam placement. International Journal of Radiation Oncology Biology Physics, 2005, 63, 584-593.	0.4	30
156	Automated Contour Mapping With a Regional Deformable Model. International Journal of Radiation Oncology Biology Physics, 2008, 70, 599-608.	0.4	30
157	Bridging the gap between IMRT and VMAT: Dense angularly sampled and sparse intensity modulated radiation therapy. Medical Physics, 2011, 38, 4912-4919.	1.6	30
158	Development of an autonomous treatment planning strategy for radiation therapy with effective use of populationâ€based prior data. Medical Physics, 2017, 44, 389-396.	1.6	30
159	Deep DoseNet: a deep neural network for accurate dosimetric transformation between different spatial resolutions and/or different dose calculation algorithms for precision radiation therapy. Physics in Medicine and Biology, 2020, 65, 035010.	1.6	30
160	Development and validation of a model to predict survival in colorectal cancer using a gradient-boosted machine. Gut, 2021, 70, 884-889.	6.1	30
161	L-shell x-ray fluorescence computed tomography (XFCT) imaging of Cisplatin. Physics in Medicine and Biology, 2014, 59, 219-232.	1.6	29
162	Incorporating prior knowledge via volumetric deep residual network to optimize the reconstruction of sparsely sampled MRI. Magnetic Resonance Imaging, 2020, 66, 93-103.	1.0	29

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163	Pancoronary Plaque Characteristics in STEMI Caused by Culprit Plaque Erosion Versus Rupture. JACC: Cardiovascular Imaging, 2021, 14, 1235-1245.	2.3	29
164	Selection of external beam radiotherapy approaches for precise and accurate cancer treatment. Journal of Radiation Research, 2018, 59, i2-i10.	0.8	28
165	Incorporating imaging information from deep neural network layers into image guided radiation therapy (IGRT). Radiotherapy and Oncology, 2019, 140, 167-174.	0.3	28
166	Difficulty-Aware Meta-learning for Rare Disease Diagnosis. Lecture Notes in Computer Science, 2020, , 357-366.	1.0	28
167	A three-dimensional algorithm for optimizing beam weights and wedge filters. Medical Physics, 1998, 25, 1858-1865.	1.6	27
168	Image-Guided Radiotherapy in Near Real Time With Intensity-Modulated Radiotherapy Megavoltage Treatment Beam Imaging. International Journal of Radiation Oncology Biology Physics, 2009, 75, 603-610.	0.4	27
169	37, 5627-5633.	1.6	27
170	Inverse planning for IMRT with nonuniform beam profiles using totalâ€variation regularization (TVR). Medical Physics, 2011, 38, 57-66.	1.6	27
171	Intrafraction Verification of Gated RapidArc by Using Beam-Level Kilovoltage X-Ray Images. International Journal of Radiation Oncology Biology Physics, 2012, 83, e709-e715.	0.4	27
172	Dose distribution prediction in isodose featureâ€preserving voxelization domain using deep convolutional neural network. Medical Physics, 2019, 46, 2978-2987.	1.6	27
173	Plug pattern optimization for gamma knife radiosurgery treatment planning. International Journal of Radiation Oncology Biology Physics, 2003, 55, 420-427.	0.4	26
174	In vivo prostate magnetic resonance spectroscopic imaging using two-dimensional J-resolved PRESS at 3 T. Magnetic Resonance in Medicine, 2005, 53, 1177-1182.	1.9	26
175	Burst and continuous high frequency irreversible electroporation protocols evaluated in a 3D tumor model. Physics in Medicine and Biology, 2018, 63, 135022.	1.6	26
176	Densely Connected Neural Network With Unbalanced Discriminant and Category Sensitive Constraints for Polyp Recognition. IEEE Transactions on Automation Science and Engineering, 2020, 17, 574-583.	3.4	26
177	Multicellular Spheroids as InÂVitro Models of Oxygen Depletion During FLASH Irradiation. International Journal of Radiation Oncology Biology Physics, 2021, 110, 833-844.	0.4	26
178	Neural Networks for Deep Radiotherapy Dose Analysis and Prediction of Liver SBRT Outcomes. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1821-1833.	3.9	25
179	Automatic intraprostatic lesion segmentation in multiparametric magnetic resonance images with proposed multiple branch UNet. Medical Physics, 2020, 47, 6421-6429.	1.6	25
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