

# Lixu Gu

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

569  
citations

623188

14  
h-index

713013

21  
g-index

62  
all docs

62  
docs citations

62  
times ranked

808  
citing authors

#	ARTICLE	IF	CITATIONS
1	A homotopy-based sparse representation for fast and accurate shape prior modeling in liver surgical planning. <i>Medical Image Analysis</i> , 2015, 19, 176-186.	7.0	40
2	Automatic detection of coronary artery stenosis by convolutional neural network with temporal constraint. <i>Computers in Biology and Medicine</i> , 2020, 118, 103657.	3.9	38
3	A hybrid deformable model for real-time surgical simulation. <i>Computerized Medical Imaging and Graphics</i> , 2012, 36, 356-365.	3.5	34
4	Multi-label ocular disease classification with a dense correlation deep neural network. <i>Biomedical Signal Processing and Control</i> , 2021, 63, 102167.	3.5	32
5	Pulmonary nodule detection in CT images based on shape constraint CV model. <i>Medical Physics</i> , 2015, 42, 1241-1254.	1.6	29
6	A robust and real-time vascular intervention simulation based on Kirchhoff elastic rod. <i>Computerized Medical Imaging and Graphics</i> , 2014, 38, 735-743.	3.5	23
7	Flow instability detected in ruptured versus unruptured cerebral aneurysms at the internal carotid artery. <i>Journal of Biomechanics</i> , 2018, 72, 187-199.	0.9	23
8	A novel remote-controlled robotic system for cerebrovascular intervention. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2018, 14, e1943.	1.2	23
9	Weakly supervised vessel segmentation in X-ray angiograms by self-paced learning from noisy labels with suggestive annotation. <i>Neurocomputing</i> , 2020, 417, 114-127.	3.5	23
10	Cardiovascular-interventional-surgery virtual training platform and its preliminary evaluation. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2015, 11, 375-387.	1.2	20
11	A novel active learning framework for classification: Using weighted rank aggregation to achieve multiple query criteria. <i>Pattern Recognition</i> , 2019, 93, 581-602.	5.1	16
12	A novel robotic system for vascular intervention: principles, performances, and applications. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2019, 14, 671-683.	1.7	16
13	Intra-Operative 2-D Ultrasound and Dynamic 3-D Aortic Model Registration for Magnetic Navigation of Transcatheter Aortic Valve Implantation. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 2152-2165.	5.4	15
14	A robust automated markerless registration framework for neurosurgery navigation. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2015, 11, 436-447.	1.2	15
15	Myocardium Segmentation From DE MRI Using Multicomponent Gaussian Mixture Model and Coupled Level Set. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 2650-2661.	2.5	15
16	Dense Correlation Network for Automated Multi-Label Ocular Disease Detection with Paired Color Fundus Photographs. , 2020, , .		15
17	Self-speculation of clinical features based on knowledge distillation for accurate ocular disease classification. <i>Biomedical Signal Processing and Control</i> , 2021, 67, 102491.	3.5	13
18	3D Segmentation of Medical Images Using a Fast Multistage Hybrid Algorithm. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2006, 1, 23-31.	1.7	12

#	ARTICLE	IF	CITATIONS
19	Measurement of Intra-Orbital Structures in Normal Chinese Adults Based on a Three-Dimensional Coordinate System. <i>Current Eye Research</i> , 2018, 43, 1477-1483.	0.7	12
20	Multi-sequence myocardium segmentation with cross-constrained shape and neural network-based initialization. <i>Computerized Medical Imaging and Graphics</i> , 2019, 71, 49-57.	3.5	11
21	Exploring potential association between flow instability and rupture in patients with matched-pairs of ruptured and unruptured intracranial aneurysms. <i>BioMedical Engineering OnLine</i> , 2016, 15, 166.	1.3	10
22	Mammographic Image Classification System via Active Learning. <i>Journal of Medical and Biological Engineering</i> , 2019, 39, 569-582.	1.0	9
23	Novel Multistage Three-Dimensional Medical Image Segmentation: Methodology and Validation. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2006, 10, 740-748.	3.6	8
24	Classification of Ocular Diseases Employing Attention-Based Unilateral and Bilateral Feature Weighting and Fusion. , 2020, , .		8
25	Computer-assisted Preoperative Planning and Surgical Navigation System in Dental Implantology. , 2007, , .		7
26	An advanced hybrid cutting method with an improved state machine for surgical simulation. <i>Computerized Medical Imaging and Graphics</i> , 2009, 33, 63-71.	3.5	7
27	A Wavelet Frame Method with Shape Prior for Ultrasound Video Segmentation. <i>SIAM Journal on Imaging Sciences</i> , 2016, 9, 495-519.	1.3	7
28	Lung respiration motion modeling: a sparse motion field presentation method using biplane x-ray images. <i>Physics in Medicine and Biology</i> , 2017, 62, 7855-7873.	1.6	7
29	SS-CADA: A Semi-Supervised Cross-Anatomy Domain Adaptation for Coronary Artery Segmentation. , 2021, , .		7
30	Virtual Surgery Deformable Modelling Employing GPU Based Computation. , 2007, , .		6
31	BEM-based simulation of lung respiratory deformation for CT-guided biopsy. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2017, 12, 1585-1597.	1.7	6
32	A pilot study on magnetic navigation for transcatheter aortic valve implantation using dynamic aortic model and US image guidance. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2013, 8, 677-690.	1.7	5
33	Minimization of annotation work: diagnosis of mammographic masses via active learning. <i>Physics in Medicine and Biology</i> , 2018, 63, 115003.	1.6	5
34	Vesselness-constrained robust PCA for vessel enhancement in x-ray coronary angiograms. <i>Physics in Medicine and Biology</i> , 2018, 63, 155019.	1.6	5
35	Generation of a local lung respiratory motion model using a weighted sparse algorithm and motion prior-based registration. <i>Computers in Biology and Medicine</i> , 2020, 123, 103913.	3.9	5
36	Sparse group composition for robust left ventricular epicardium segmentation. <i>Computerized Medical Imaging and Graphics</i> , 2015, 46, 56-63.	3.5	4

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37	Blood flow-induced physically based guidewire simulation for vascular intervention training. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1571-1583.	1.7	4
38	Vessel Enhancement Based on Length-constrained Hessian Information. , 2018, , .		4
39	Real-time aortic valve segmentation from transesophageal echocardiography sequence. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 447-458.	1.7	3
40	Robust 3D organ segmentation using a fast hybrid algorithm. International Congress Series, 2004, 1268, 69-74.	0.2	2
41	Validation and prediction of traditional Chinese physical operation on spinal disease using multiple deformation models. International Journal of Computer Assisted Radiology and Surgery, 2011, 6, 201-208.	1.7	2
42	Semiautomatic segmentation of aortic valve from sequenced ultrasound image using a novel shape-constraint GCV model. Medical Physics, 2014, 41, 072901.	1.6	2
43	Robust and efficient 3D registration via depth map-based feature point matching in image-guided neurosurgery. , 2014, , .		2
44	Myocardium segmentation combining T2 and DE MRI using Multi-Component Bivariate Gaussian mixture model. , 2014, , .		2
45	A pulmonary deformation registration framework for biplane X-ray and CT using Sparse Motion Composition. , 2017, , .		2
46	Myocardium segmentation from DE MRI with guided random walks and sparse shape representation. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1579-1590.	1.7	2
47	Prediction of late displacement of the globe in orbital blowout fractures. Acta Ophthalmologica, 2020, 98, e197-e202.	0.6	2
48	Spline curve deformation model with prior shapes for identifying adhesion boundaries between large lung tumors and tissues around lungs in CT images. Medical Physics, 2020, 47, 1011-1020.	1.6	2
49	Target localization during respiration motion based on LSTM: A pilot study on robotic puncture system. International Journal of Medical Robotics and Computer Assisted Surgery, 2021, 17, e2247.	1.2	2
50	The trend of artificial intelligence method in computer aided diagnosis. Scientia Sinica Vitae, 2020, 50, 1321-1334.	0.1	2
51	Deep Co-Training Active Learning for Mammographic Images Classification. , 2020, , .		2
52	Scalable sparse shape composition and its application to liver surgical planning. , 2014, , .		1
53	I don't know: Double-strategies based active learning for mammographic mass classification. , 2017, , .		1
54	Analyzing Different Unstated Goal Constraints on Reinforcement Learning Algorithm for Reacher Task in the Robotic Scrub Nurse Application. , 2020, , .		1

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55	The Clinical Feasibility of 2-D US and Computed Tomography Registration Technology for Human Liver Imaging. Journal of Medical Imaging and Health Informatics, 2015, 5, 1509-1512.	0.2	0
56	Target vessel identification in endoscopic coronary artery bypass grafting. , 2015, , .		0
57	Safety protection based on electromagnetic navigation in robot-assisted vascular interventional surgery. , 2017, , .		0
58	CT-ultrasound registration for electromagnetic navigation of cardiac intervention. , 2017, , .		0
59	A statistical weighted sparse-based local lung motion modelling approach for model-driven lung biopsy. International Journal of Computer Assisted Radiology and Surgery, 2020, 15, 1279-1290.	1.7	0
60	Collaborative Multi-View Convolutions With Gating For Accurate And Fast Volumetric Medical Image Segmentation. , 2021, , .		0
61	Surgical instrument segmentation method based on improved MobileNetV2 network. , 2021, , .		0