Jianhua Yao

List of Publications by Year
in descending order

132 papers	8,296 citations	147726 31 h-index	53190 85 g-index
133 all docs	133 docs citations	133 times ranked	10863 citing authors

#	Article	IF	Citations
1	Deep Convolutional Neural Networks for Computer-Aided Detection: CNN Architectures, Dataset Characteristics and Transfer Learning. IEEE Transactions on Medical Imaging, 2016, 35, 1285-1298.	5.4	4,024
2	Improving Computer-Aided Detection Using<?Pub _newline?>Convolutional Neural Networks and Random View Aggregation. IEEE Transactions on Medical Imaging, 2016, 35, 1170-1181.	5.4	465
3	DeepPap: Deep Convolutional Networks for Cervical Cell Classification. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 1633-1643.	3.9	317
4	Learning to Read Chest X-Rays: Recurrent Neural Cascade Model for Automated Image Annotation. , 2016, , .		197
5	Medical Image Segmentation by Combining Graph Cuts and Oriented Active Appearance Models. IEEE Transactions on Image Processing, 2012, 21, 2035-2046.	6.0	182
6	Interstitial Myocardial Fibrosis Assessed as Extracellular Volume Fraction with Low-Radiation-Dose Cardiac CT. Radiology, 2012, 264, 876-883.	3.6	159
7	Senataxin Mutation Reveals How R-Loops Promote Transcription by Blocking DNA Methylation at Gene Promoters. Molecular Cell, 2018, 69, 426-437.e7.	4.5	147
8	Joint segmentation of anatomical and functional images: Applications in quantification of lesions from PET, PET-CT, MRI-PET, and MRI-PET-CT images. Medical Image Analysis, 2013, 17, 929-945.	7.0	141
9	Vertebral Body Compression Fractures and Bone Density: Automated Detection and Classification on CT Images. Radiology, 2017, 284, 788-797.	3.6	119
10	Computer-integrated revision total hip replacement surgery: concept and preliminary results. Medical Image Analysis, 1999, 3, 301-319.	7.0	107
11	A multi-center milestone study of clinical vertebral CT segmentation. Computerized Medical Imaging and Graphics, 2016, 49, 16-28.	3.5	104
12	Colonic Polyp Segmentation in CT Colonography-Based on Fuzzy Clustering and Deformable Models. IEEE Transactions on Medical Imaging, 2004, 23, 1344-1352.	5.4	102
13	Computer-aided Diagnosis of Pulmonary Infections Using Texture Analysis and Support Vector Machine Classification. Academic Radiology, 2011, 18, 306-314.	1.3	96
14	A Machine Learning Algorithm to Estimate Sarcopenia on Abdominal CT. Academic Radiology, 2020, 27, 311-320.	1.3	92
15	Deep learning-based muscle segmentation and quantification at abdominal CT: application to a longitudinal adult screening cohort for sarcopenia assessment. British Journal of Radiology, 2019, 92, 20190327.	1.0	86
16	Breast Tumor Analysis in Dynamic Contrast Enhanced MRI Using Texture Features and Wavelet Transform. IEEE Journal on Selected Topics in Signal Processing, 2009, 3, 94-100.	7.3	66
17	Computer-assisted detection of infectious lung diseases: A review. Computerized Medical Imaging and Graphics, 2012, 36, 72-84.	3.5	65
18	Convolutional Invasion and Expansion Networks for Tumor Growth Prediction. IEEE Transactions on Medical Imaging, 2018, 37, 638-648.	5.4	64

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19	Population-based opportunistic osteoporosis screening: Validation of a fully automated CT tool for assessing longitudinal BMD changes. British Journal of Radiology, 2019, 92, 20180726.	1.0	61
20	Fully automated segmentation and quantification of visceral and subcutaneous fat at abdominal CT: application to a longitudinal adult screening cohort. British Journal of Radiology, 2018, 91, 20170968.	1.0	58
21	Patient specific tumor growth prediction using multimodal images. Medical Image Analysis, 2014, 18, 555-566.	7.0	57
22	Automated Detection, Localization, and Classification of Traumatic Vertebral Body Fractures in the Thoracic and Lumbar Spine at CT. Radiology, 2016, 278, 64-73.	3.6	57
23	Detection of Vertebral Body Fractures Based on Cortical Shell Unwrapping. Lecture Notes in Computer Science, 2012, 15, 509-516.	1.0	53
24	Interleaved text/image Deep Mining on a large-scale radiology database. , 2015, , .		52
25	3D left ventricular extracellular volume fraction by low-radiation dose cardiac CT: Assessment of interstitial myocardial fibrosis. Journal of Cardiovascular Computed Tomography, 2013, 7, 51-57.	0.7	47
26	Glucose Transporter-1 Distribution in Fibrotic Lung Disease. Chest, 2013, 143, 1685-1691.	0.4	47
27	Automated Quantification of High-Resolution CT Scan Findings in Individuals at Risk for Pulmonary Fibrosis. Chest, 2011, 140, 1590-1597.	0.4	46
28	Performance of a Previously Validated CT Colonography Computer-Aided Detection System in a New Patient Population. American Journal of Roentgenology, 2008, 191, 168-174.	1.0	45
29	A C-Arm Fluoroscopy-Guided Progressive Cut Refinement Strategy Using a Surgical Robot. Computer Aided Surgery, 2000, 5, 373-390.	1.8	40
30	Polyps: Linear and Volumetric Measurement at CT Colonography. Radiology, 2006, 241, 802-811.	3.6	38
31	Employing topographical height map in colonic polyp measurement and false positive reduction. Pattern Recognition, 2009, 42, 1029-1040.	5.1	38
32	Severity and outcome of cystic lung disease in women with tuberous sclerosis complex. European Respiratory Journal, 2015, 45, 171-180.	3.1	38
33	Combining fully convolutional networks and graph-based approach for automated segmentation of cervical cell nuclei. , 2017, , .		38
34	Improved classifier for computer-aided polyp detection in CT Colonography by nonlinear dimensionality reduction. Medical Physics, 2008, 35, 1377-1386.	1.6	37
35	A graph-theoretic approach for segmentation of PET images. , 2011, 2011, 8479-82.		37
36	Quantitative syndesmophyte measurement in ankylosing spondylitis using CT: longitudinal validity and sensitivity to change over 2â€…years. Annals of the Rheumatic Diseases, 2015, 74, 437-443.	0.5	31

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37	CT Grading of Lung Disease in Lymphangioleiomyomatosis. American Journal of Roentgenology, 2012, 199, 787-793.	1.0	30
38	Automatic Detection and Quantification of Tree-in-Bud (TIB) Opacities From CT Scans. IEEE Transactions on Biomedical Engineering, 2012, 59, 1620-1632.	2.5	29
39	Mutation-targeted therapy with sunitinib or everolimus in patients with advanced low-grade or intermediate-grade neuroendocrine tumours of the gastrointestinal tract and pancreas with or without cytoreductive surgery: protocol for a phase II clinical trial. BMJ Open, 2015, 5, e008248-e008248.	0.8	29
40	Automated Spinal Column Extraction and Partitioning. , 0, , .		28
41	3527-3538.	1.6	27
42	Tumor growth prediction with reaction-diffusion and hyperelastic biomechanical model by physiological data fusion. Medical Image Analysis, 2015, 25, 72-85.	7.0	27
43	Computer-aided detection of exophytic renal lesions on non-contrast CT images. Medical Image Analysis, 2015, 19, 15-29.	7.0	27
44	Artificial Intelligence in Musculoskeletal Imaging: A Paradigm Shift. Journal of Bone and Mineral Research, 2020, 35, 28-35.	3.1	27
45	Unsupervised Joint Mining of Deep Features and Image Labels for Large-Scale Radiology Image Categorization and Scene Recognition. , 2017, , .		26
46	Visceral Adiposity in Psoriasis is Associated With Vascular Inflammation by 18F-Fluorodeoxyglucose Positron-Emission Tomography/Computed Tomography Beyond Cardiometabolic Disease Risk Factors in an Observational Cohort Study. JACC: Cardiovascular Imaging, 2018, 11, 349-357.	2.3	26
47	CorteXpert: A model-based method for automatic renal cortex segmentation. Medical Image Analysis, 2017, 42, 257-273.	7.0	23
48	Co-segmentation of Functional and Anatomical Images. Lecture Notes in Computer Science, 2012, 15, 459-467.	1.0	23
49	CT Colonography with Computer-aided Polyp Detection: Volume and Attenuation Thresholds to Reduce False-Positive Findings Owing to the Ileocecal Valve. Radiology, 2006, 241, 426-432.	3.6	22
50	Zygapophyseal Joint Fusion in Ankylosing Spondylitis Assessed by Computed Tomography: Associations with Syndesmophytes and Spinal Motion. Journal of Rheumatology, 2017, 44, 1004-1010.	1.0	22
51	A C-arm fluoroscopy-guided progressive cut refinement strategy using a surgical robot. Computer Aided Surgery, 2000, 5, 373-390.	1.8	22
52	Automatic Segmentation and Measurement of Pleural Effusions on CT. IEEE Transactions on Biomedical Engineering, 2013, 60, 1834-1840.	2.5	20
53	Use of CT Imaging to Quantify Progression and Response to Treatment in Lymphangioleiomyomatosis. Chest, 2019, 155, 962-971.	0.4	20
54	Chest CT Scan at Radiation Dose of a Posteroanterior and Lateral Chest Radiograph Series. Chest, 2019, 155, 528-533.	0.4	20

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55	Reversible Projection Technique for Colon Unfolding. IEEE Transactions on Biomedical Engineering, 2010, 57, 2861-2869.	2.5	19
56	Vascular calcification in patients with large-vessel vasculitis compared to patients with hyperlipidemia. Seminars in Arthritis and Rheumatism, 2019, 48, 1068-1073.	1.6	19
57	Skeletal Muscle Magnetic Resonance Biomarkers in GNE Myopathy. Neurology, 2021, 96, e798-e808.	1.5	18
58	Regional infarction identification from cardiac CT images: a computer-aided biomechanical approach. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 1573-1583.	1.7	17
59	Spatial distribution of syndesmophytes along the vertebral rim in ankylosing spondylitis: preferential involvement of the posterolateral rim. Annals of the Rheumatic Diseases, 2016, 75, 1951-1957.	0.5	17
60	Respiratory magnetic resonance imaging biomarkers in Duchenne muscular dystrophy. Annals of Clinical and Translational Neurology, 2017, 4, 655-662.	1.7	17
61	Computer–aided detection of renal calculi from noncontrast CT images using TV–flow and MSER features. Medical Physics, 2015, 42, 144-153.	1.6	16
62	Technical and Clinical Factors Affecting Success Rate of a Deep Learning Method for Pancreas Segmentation on CT. Academic Radiology, 2020, 27, 689-695.	1.3	16
63	Adaptive deformable model for colonic polyp segmentation and measurement on CT colonography. Medical Physics, 2007, 34, 1655-1664.	1.6	14
64	Statistical Location Model for Abdominal Organ Localization. Lecture Notes in Computer Science, 2009, 12, 9-17.	1.0	14
65	Tumor sensitive matching flow: A variational method to detecting and segmenting perihepatic and perisplenic ovarian cancer metastases on contrast-enhanced abdominal CT. Medical Image Analysis, 2014, 18, 725-739.	7.0	13
66	Content-based image retrieval on CT colonography using rotation and scale invariant features and bag-of-words model. , 2010, , .		12
67	Computer-aided detection of sclerotic bone metastases in the spine using watershed algorithm and support vector machines. , 2011, , .		12
68	Cortical shell unwrapping for vertebral body abnormality detection on computed tomography. Computerized Medical Imaging and Graphics, 2014, 38, 628-638.	3.5	12
69	AN EFFICIENT FEATURE SELECTION ALGORITHM FOR COMPUTER-AIDED POLYP DETECTION. International Journal on Artificial Intelligence Tools, 2006, 15, 893-915.	0.7	11
70	Computer-aided grading of lymphangioleiomyomatosis (LAM) using HRCT. , 2008, 2008, 1-4.		11
71	Clinical and Histopathologic Features of Interstitial Lung Disease in Erdheim–Chester Disease. Journal of Clinical Medicine, 2018, 7, 243.	1.0	11
72	Texture-based computer-aided diagnosis system for lung fibrosis. , 2007, , .		10

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73	Computer aided detection of epidural masses on computed tomography scans. Computerized Medical Imaging and Graphics, 2014, 38, 606-612.	3.5	9
74	Quantitation of Circumferential Syndesmophyte Height along the Vertebral Rim in Ankylosing Spondylitis Using Computed Tomography. Journal of Rheumatology, 2015, 42, 472-478.	1.0	9
75	Osteoporotic and neoplastic compression fracture classification on longitudinal CT. , 2016, , .		9
76	Holistic segmentation of the lung in cine MRI. Journal of Medical Imaging, 2017, 4, 1.	0.8	9
77	Computer Aided Detection of Lytic Bone Metastases in the Spine using Routine CT Images. , 2007, , .		8
78	Reducing the false positive rate of computer aided detection for CT colonography using Content Based Image Retrieval. , 2009, , .		8
79	Automated extraction of anatomic landmarks on vertebrae based on anatomic knowledge and geometrical constraints. , 2014, , .		8
80	Identification of muscle and subcutaneous and intermuscular adipose tissue on thigh MRI of muscular dystrophy. , 2016, , .		8
81	Mixed spine metastasis detection through positron emission tomography/computed tomography synthesis and multiclassifier. Journal of Medical Imaging, 2017, 4, 024504.	0.8	8
82	A Semi-Supervised CNN Learning Method with Pseudo-class Labels for Atherosclerotic Vascular Calcification Detection. , 2019, , .		8
83	Automated segmentation of the thyroid gland on thoracic CT scans by multiatlas label fusion and random forest classification. Journal of Medical Imaging, 2015, 2, 044006.	0.8	7
84	Dynamics of syndesmophyte growth in AS as measured by quantitative CT: heterogeneity within and among vertebral disc spaces. Rheumatology, 2015, 54, 972-980.	0.9	7
85	Multi-atlas Segmentation with Joint Label Fusion of Osteoporotic Vertebral Compression Fractures on CT. Lecture Notes in Computer Science, 2016, , 74-84.	1.0	7
86	Cumulative Radiation Exposures from CT Screening and Surveillance Strategies for von Hippel-Lindau–associated Solid Pancreatic Tumors. Radiology, 2019, 290, 116-124.	3.6	7
87	A framework to measure myocardial extracellular volume fraction using dual-phase low dose CT images. Medical Physics, 2013, 40, 103501.	1.6	6
88	Open-Source Radiation Exposure Extraction Engine (RE3) with Patient-Specific Outlier Detection. Journal of Digital Imaging, 2016, 29, 406-419.	1.6	6
89	Multimodal Image Driven Patient Specific Tumor Growth Modeling. Lecture Notes in Computer Science, 2013, 16, 283-290.	1.0	6
90	DETECTION AND SEGMENTATION OF COLONIC POLYPS ON HAUSTRAL FOLDS. , 2007, , .		5

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91	Live level set: A hybrid method of livewire and level set for medical image segmentation. Medical Physics, 2008, 35, 4112-4120.	1.6	5
92	Automated measurement and segmentation of abdominal adipose tissue in MRI. , 2010, , .		5
93	Sclerotic rib metastases detection on routine CT images. , 2012, , .		5
94	Automatic anatomical labeling of abdominal arteries for small bowel evaluation on 3D CT scans. , 2013, , .		5
95	Optimization of a secondary <scp>VOI</scp> protocol for lung imaging in a clinical <scp>CT</scp> scanner. Journal of Applied Clinical Medical Physics, 2018, 19, 271-280.	0.8	5
96	CT Colonography Computer-Aided Polyp Detection using Topographical Height Map. , 2007, , .		4
97	Mesenteric vasculature-guided small bowel segmentation on high-resolution 3D CT angiography scans. , 2012, , .		4
98	Synergistic combination of clinical and imaging features predicts abnormal imaging patterns of pulmonary infections. Computers in Biology and Medicine, 2013, 43, 1241-1251.	3.9	4
99	Opportunities to Reduce CT Radiation Exposure, Experience Over 5 Years at the NIH Clinical Center. Radiation Protection Dosimetry, 2017, 175, 482-492.	0.4	4
100	Automatic Mapping of CT Scan Locations on Computational Human Phantoms for Organ Dose Estimation. Journal of Digital Imaging, 2019, 32, 175-182.	1.6	4
101	Efficient False Positive Reduction in Computer-Aided Detection Using Convolutional Neural Networks and Random View Aggregation. Advances in Computer Vision and Pattern Recognition, 2017, , 35-48.	0.9	4
102	A Variational Framework for Joint Detection and Segmentation of Ovarian Cancer Metastases. Lecture Notes in Computer Science, 2013, 16, 83-90.	1.0	4
103	Polyp height and width measurement using topographic height map. , 2008, , .		3
104	Prediction of polyp histology on CT colonography using content-based image retrieval. , 2010, , .		3
105	Detection of pelvic fractures using graph cuts and curvatures. , 2011, , .		3
106	Abdominal multi-organ localization on contrast-enhanced CT based on maximum a posteriori probability and minimum volume overlap. , 2011, , .		3
107	Tumor growth modeling based on dual phase CT and FDG-PET. , 2013, , .		3
108	Augmenting tumor sensitive matching flow to improve detection and segmentation of ovarian cancer metastases within a PDE framework. , 2013, , .		3

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109	Augment low-field intra-operative MRI with preoperative MRI using a hybrid non-rigid registration method. Computer Methods and Programs in Biomedicine, 2014, 117, 114-124.	2.6	3
110	Computer Aided Detection of Bone Metastases in the Thoracolumbar Spine. Lecture Notes in Computational Vision and Biomechanics, 2015, , 97-130.	0.5	3
111	Automated segmentation of the thyroid gland on CT using multi-atlas label fusion and random forest. , 2015, , .		3
112	Retrieval, visualization, and mining of large radiation dosage data. Information Retrieval, 2016, 19, 38-58.	1.6	3
113	Matching colonic polyps from prone and supine CT colonography scans based on statistical curvature information. , 2008, , .		2
114	Detection and station mapping of mediastinal lymph nodes on thoracic computed tomography using spatial prior from multi-atlas label fusion. , 2014, , .		2
115	Manifold Diffusion for Exophytic Kidney Lesion Detection on Non-contrast CT Images. Lecture Notes in Computer Science, 2013, 16, 340-347.	1.0	2
116	Centerline registration of prone and supine CT colonography scans based on correlation optimized warping and anatomical landmarks. , 2009, , .		1
117	Linear measurement of polyps in CT colonography using level sets on 3D surfaces. , 2009, 2009, 3617-20.		1
118	Tracking kidney tumor dimensional measurements via image morphing. , 2010, , .		1
119	Haustral fold detection for CT colonography images using Gabor filter. , 2010, , .		1
120	Improved method for predicting polyp location from CT colonography for optical colonoscopy. , 2010, , .		1
121	Improved 3D automatic segmentation and measurement of pleural effusions. , 2011, , .		1
122	Automatic detection and segmentation of abdominopelvic lymph nodes on computed tomography scans. , 2012, , .		1
123	Automatic quantification of Tree-in-Bud patterns from CT scans. , 2012, 2012, 1459-1462.		1
124	Supine and prone CT colonography registration by matching graphs of teniae coli. , 2012, , .		1
125	ROC-like optimization by sample ranking: Application to CT colonography. , 2012, , .		1
126	Mounier-Kuhn Syndrome Mimicking Lymphangioleiomyomatosis. Chest, 2018, 153, e19-e23.	0.4	1

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127	Renal Cortex Segmentation on Computed Tomography. , 2014, , 69-97.		1
128	Computer aided monitoring of fibrous dysplasia disease in craniofacial bones. , 0, , .		0
129	Template method to improve brain segmentation from inhomogeneous brain magnetic resonance images at high fields. , 2010, , .		0
130	Adipose Tissue Measurement Using Magnetic Resonance Imaging: A Survey. Current Medical Imaging, 2017, 13, .	0.4	0
131	Tracking diaphragm and chest wall movement on cine-MRI. , 2018, , .		0
132	Tumor Growth Prediction Using Convolutional Networks. Advances in Computer Vision and Pattern Recognition, 2019, , 239-260.	0.9	0