

# Wufan Chen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4371179/publications.pdf>

Version: 2024-02-01

160  
papers

2,278  
citations

218381

26  
h-index

264894

42  
g-index

163  
all docs

163  
docs citations

163  
times ranked

2921  
citing authors

#	ARTICLE	IF	CITATIONS
1	Retrieval of Brain Tumors by Adaptive Spatial Pooling and Fisher Vector Representation. PLoS ONE, 2016, 11, e0157112.	1.1	171
2	Nonlocal Prior Bayesian Tomographic Reconstruction. Journal of Mathematical Imaging and Vision, 2008, 30, 133-146.	0.8	126
3	Robustness of Radiomic Features in [11C]Choline and [18F]FDG PET/CT Imaging of Nasopharyngeal Carcinoma: Impact of Segmentation and Discretization. Molecular Imaging and Biology, 2016, 18, 935-945.	1.3	100
4	Cascade of multi-scale convolutional neural networks for bone suppression of chest radiographs in gradient domain. Medical Image Analysis, 2017, 35, 421-433.	7.0	96
5	Adaptive Denoising by Singular Value Decomposition. IEEE Signal Processing Letters, 2011, 18, 215-218.	2.1	95
6	Denoising of 3D magnetic resonance images by using higher-order singular value decomposition. Medical Image Analysis, 2015, 19, 75-86.	7.0	85
7	Pattern Classification for Gastrointestinal Stromal Tumors by Integration of Radiomics and Deep Convolutional Features. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1181-1191.	3.9	74
8	Spectral conjugate gradient methods with sufficient descent property for large-scale unconstrained optimization. Optimization Methods and Software, 2008, 23, 275-293.	1.6	71
9	Iterative Reconstruction for X-Ray Computed Tomography Using Prior-Image Induced Nonlocal Regularization. IEEE Transactions on Biomedical Engineering, 2014, 61, 2367-2378.	2.5	71
10	Radiomics Analysis of PET and CT Components of PET/CT Imaging Integrated with Clinical Parameters: Application to Prognosis for Nasopharyngeal Carcinoma. Molecular Imaging and Biology, 2019, 21, 954-964.	1.3	70
11	Brain extraction based on locally linear representation-based classification. NeuroImage, 2014, 92, 322-339.	2.1	66
12	Robustness versus disease differentiation when varying parameter settings in radiomics features: application to nasopharyngeal PET/CT. European Radiology, 2018, 28, 3245-3254.	2.3	58
13	Machine Learning Methods for Optimal Radiomics-Based Differentiation Between Recurrence and Inflammation: Application to Nasopharyngeal Carcinoma Post-therapy PET/CT Images. Molecular Imaging and Biology, 2020, 22, 730-738.	1.3	51
14	SMU-Net: Saliency-Guided Morphology-Aware U-Net for Breast Lesion Segmentation in Ultrasound Image. IEEE Transactions on Medical Imaging, 2022, 41, 476-490.	5.4	47
15	Noise correlation in CBCT projection data and its application for noise reduction in low-dose CBCT. Medical Physics, 2014, 41, 031906.	1.6	39
16	Adaptively regularized constrained total least-squares image restoration. IEEE Transactions on Image Processing, 2000, 9, 588-596.	6.0	37
17	Relation-Induced Multi-Modal Shared Representation Learning for Alzheimer's Disease Diagnosis. IEEE Transactions on Medical Imaging, 2021, 40, 1632-1645.	5.4	36
18	3.5D dynamic PET image reconstruction incorporating kinetics-based clusters. Physics in Medicine and Biology, 2012, 57, 5035-5055.	1.6	33

#	ARTICLE	IF	CITATIONS
19	Low-dose cerebral perfusion computed tomography image restoration via low-rank and total variation regularizations. <i>Neurocomputing</i> , 2016, 197, 143-160.	3.5	33
20	Denoise diffusion-weighted images using higher-order singular value decomposition. <i>NeuroImage</i> , 2017, 156, 128-145.	2.1	33
21	Few-view cone-beam CT reconstruction with deformed prior image. <i>Medical Physics</i> , 2014, 41, 121905.	1.6	32
22	Longitudinal measurement and hierarchical classification framework for the prediction of Alzheimer's disease. <i>Scientific Reports</i> , 2017, 7, 39880.	1.6	32
23	Multiresolution Elastic Registration of X-Ray Angiography Images Using Thin-Plate Spline. <i>IEEE Transactions on Nuclear Science</i> , 2007, 54, 152-166.	1.2	30
24	Content-Based Image Retrieval Using Spatial Layout Information in Brain Tumor T1-Weighted Contrast-Enhanced MR Images. <i>PLoS ONE</i> , 2014, 9, e102754.	1.1	30
25	Denosing MR Images Using Non-Local Means Filter with Combined Patch and Pixel Similarity. <i>PLoS ONE</i> , 2014, 9, e100240.	1.1	29
26	Cerebral perfusion computed tomography deconvolution via structure tensor total variation regularization. <i>Medical Physics</i> , 2016, 43, 2091-2107.	1.6	29
27	MRI Gibbs ringing artifact reduction by means of machine learning using convolutional neural networks. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 2133-2145.	1.9	26
28	Prediction of local recurrence and distant metastasis using radiomics analysis of pretreatment nasopharyngeal [18F]FDG PET/CT images. <i>Annals of Nuclear Medicine</i> , 2021, 35, 458-468.	1.2	26
29	Dynamic Positron Emission Tomography Image Restoration via a Kinetics-Induced Bilateral Filter. <i>PLoS ONE</i> , 2014, 9, e89282.	1.1	22
30	Phase- and GVF-Based Level Set Segmentation of Ultrasonic Breast Tumors. <i>Journal of Applied Mathematics</i> , 2012, 2012, 1-22.	0.4	19
31	Multispectral Interlaced Sparse Sampling Photoacoustic Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 3463-3474.	5.4	18
32	Noise Estimation for Single-Slice Sinogram of Low-Dose X-Ray Computed Tomography Using Homogenous Patch. <i>Mathematical Problems in Engineering</i> , 2012, 2012, 1-16.	0.6	17
33	Liver DCE-MRI Registration in Manifold Space Based on Robust Principal Component Analysis. <i>Scientific Reports</i> , 2016, 6, 34461.	1.6	17
34	Bone Suppression of Chest Radiographs With Cascaded Convolutional Networks in Wavelet Domain. <i>IEEE Access</i> , 2019, 7, 8346-8357.	2.6	17
35	Prediction of CT Substitutes from MR Images Based on Local Diffeomorphic Mapping for Brain PET Attenuation Correction. <i>Journal of Nuclear Medicine</i> , 2016, 57, 1635-1641.	2.8	16
36	Model-Based Photoacoustic Tomography Image Reconstruction With Non-local and Sparsity Regularizations. <i>IEEE Access</i> , 2019, 7, 102136-102148.	2.6	16

#	ARTICLE	IF	CITATIONS
37	Photoacoustic imaging of living mice enhanced with a low-cost contrast agent. <i>Biomedical Optics Express</i> , 2019, 10, 5744.	1.5	16
38	Direct Cellularity Estimation on Breast Cancer Histopathology Images Using Transfer Learning. <i>Computational and Mathematical Methods in Medicine</i> , 2019, 2019, 1-13.	0.7	15
39	Rigid motion correction for magnetic resonance fingerprinting with sliding-window reconstruction and image registration. <i>Magnetic Resonance Imaging</i> , 2019, 57, 303-312.	1.0	15
40	Reconstruction of super-resolution lung 4D-CT using patch-based sparse representation. , 2012, , .		14
41	Iterative reconstruction for sparse-view X-ray CT using alpha-divergence constrained total generalized variation minimization. <i>Journal of X-Ray Science and Technology</i> , 2017, 25, 673-688.	0.7	14
42	Projection data restoration guided non-local means for low-dose computed tomography reconstruction. , 2011, , .		13
43	Sinogram Restoration for Low-Dosed X-Ray Computed Tomography Using Fractional-Order Perona-Malik Diffusion. <i>Mathematical Problems in Engineering</i> , 2012, 2012, 1-13.	0.6	13
44	Fetus MRI at 7 T: $B_{1}$ Shimming Strategy and SAR Safety Implications. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2013, 61, 2146-2152.	2.9	13
45	Low-dose dynamic myocardial perfusion CT imaging using a motion adaptive sparsity prior. <i>Medical Physics</i> , 2017, 44, e188-e201.	1.6	13
46	Photoacoustic Tomography Image Restoration With Measured Spatially Variant Point Spread Functions. <i>IEEE Transactions on Medical Imaging</i> , 2021, 40, 2318-2328.	5.4	13
47	Automatic 3-D segmentation and volumetric light fluence correction for photoacoustic tomography based on optimal 3-D graph search. <i>Medical Image Analysis</i> , 2022, 75, 102275.	7.0	11
48	On the Dynamics of an Impulsive Reaction-Diffusion Predator-Prey System with Ratio-Dependent Functional Response. <i>Acta Applicandae Mathematicae</i> , 2011, 115, 329-349.	0.5	10
49	Hierarchical and symmetric infant image registration by robust longitudinal example-guided correspondence detection. <i>Medical Physics</i> , 2015, 42, 4174-4189.	1.6	10
50	Ultrasonography Monitoring of Trauma-Induced Heterotopic Ossification: Guidance for Rehabilitation Procedures. <i>Frontiers in Neurology</i> , 2018, 9, 771.	1.1	10
51	Linear Registration of Brain MRI Using Knowledge-Based Multiple Intermediator Libraries. <i>Frontiers in Neuroscience</i> , 2019, 13, 909.	1.4	10
52	2-Dicyanomethylenethiazole based NIR absorbing organic nanoparticles for photothermal therapy and photoacoustic imaging. <i>Journal of Materials Chemistry B</i> , 2019, 7, 3950-3957.	2.9	10
53	Cross-sectional photoacoustic tomography image reconstruction with a multi-curve integration model. <i>Computer Methods and Programs in Biomedicine</i> , 2020, 197, 105731.	2.6	10
54	Automatic three-dimensional segmentation of endoscopic airway OCT images. <i>Biomedical Optics Express</i> , 2019, 10, 642.	1.5	10

#	ARTICLE	IF	CITATIONS
55	New approach to the automatic segmentation of coronary artery in X-ray angiograms. Science in China Series F: Information Sciences, 2008, 51, 25-39.	1.1	9
56	Metal artifact reduction in CT based on adaptive steering filter and nonlocal sinogram inpainting. , 2010, , .		9
57	Dynamic PET denoising incorporating a composite image guided filter. , 2014, , .		9
58	Variability of Gross Tumor Volume in Nasopharyngeal Carcinoma Using 11C-Choline and 18F-FDG PET/CT. PLoS ONE, 2015, 10, e0131801.	1.1	9
59	Motion guided Spatiotemporal Sparsity for high quality 4D-CBCT reconstruction. Scientific Reports, 2017, 7, 17461.	1.6	9
60	A novel phaseâ€unwrapping method based on pixel clustering and local surface fitting with application to Dixon waterâ€fat MRI. Magnetic Resonance in Medicine, 2018, 79, 515-528.	1.9	9
61	Multi-Constraint Latent Representation Learning for Prognosis Analysis Using Multi-Modal Data. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 3737-3750.	7.2	9
62	Texture-Preserving Image Deblurring. IEEE Signal Processing Letters, 2010, 17, 1018-1021.	2.1	8
63	Multispectral interlaced sparse sampling photoacoustic tomography based on directional total variation. Computer Methods and Programs in Biomedicine, 2022, 214, 106562.	2.6	8
64	An Improved FCM Algorithm Incorporating Spatial Information for Image Segmentation. , 2008, , .		7
65	A variable universe fuzzy control algorithm based on fuzzy neural network. , 2008, , .		7
66	Quantitative Ultrasound Assessment of Cartilage Degeneration in Ovariectomized Rats with Low Estrogen Levels. Ultrasound in Medicine and Biology, 2016, 42, 290-298.	0.7	7
67	Pre-Processing of CT Brain Images for Content-Based Image Retrieval. , 2008, , .		6
68	A study on CT sinogram statistical distribution by information divergence theory. , 2011, , .		6
69	Denoising Multi-Channel Images in Parallel MRI by Low Rank Matrix Decomposition. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	6
70	Brain Image Segmentation Based on Multi-Weight Probability Map. IEEE Access, 2019, 7, 14736-14746.	2.6	6
71	Divergence-Based Magnetic Resonance Electrical Properties Tomography. IEEE Transactions on Biomedical Engineering, 2021, 68, 192-203.	2.5	6
72	Evaluation of the diagnostic value of joint PET myocardial perfusion and metabolic imaging for vascular stenosis in patients with obstructive coronary artery disease. Journal of Nuclear Cardiology, 2021, 28, 3070-3080.	1.4	6

#	ARTICLE	IF	CITATIONS
73	Hierarchical-order multimodal interaction fusion network for grading gliomas. <i>Physics in Medicine and Biology</i> , 2021, 66, 215016.	1.6	6
74	Automatic Segmentation of Coronary Angiograms Based on Probabilistic Tracking. , 2009, , .		5
75	Super-resolution reconstruction for 4D computed tomography of the lung via the projections onto convex sets approach. <i>Medical Physics</i> , 2014, 41, 111917.	1.6	5
76	Multimodal Brain-Tumor Segmentation Based on Dirichlet Process Mixture Model with Anisotropic Diffusion and Markov Random Field Prior. <i>Computational and Mathematical Methods in Medicine</i> , 2014, 2014, 1-10.	0.7	5
77	Improved liver mapping by pixel-wise curve fitting with adaptive neighborhood regularization. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 792-801.	1.9	5
78	An Efficient Augmented Lagrangian Method for Statistical X-Ray CT Image Reconstruction. <i>PLoS ONE</i> , 2015, 10, e0140579.	1.1	5
79	Automatic correction of the initial rotation angle error improves 3D reconstruction in endoscopic airway optical coherence tomography. <i>Biomedical Optics Express</i> , 2021, 12, 7616.	1.5	5
80	Region Feature Extraction of Brain CT Image for Classification. , 2008, , .		4
81	Liver CT image retrieval based on non-tensor product wavelet. , 2010, , .		4
82	Three-channel receive-only RF coil for vertical-field MR guided focused ultrasound surgery. , 2010, , .		4
83	Image fusion for low-dose computed tomography reconstruction. , 2011, , .		4
84	Sparse angular X-ray cone beam CT image iterative reconstruction using normal-dose scan induced nonlocal prior. , 2012, , .		4
85	A robust electrical conductivity imaging method with total variation and wavelet regularization. <i>Magnetic Resonance Imaging</i> , 2020, 69, 28-39.	1.0	4
86	An adaptive speed term based on generalized fuzzy operator for level set segmentation. , 0, , .		3
87	Unsupervised Segmentation of Medical Image Based on FCM and Mutual Information. , 2007, , .		3
88	Meticulous classification using support vector machine for brain images retrieval. , 2010, , .		3
89	Medical image registration based on phase congruency and RMI. , 2010, , .		3
90	Adaptive image segmentation based on local neighborhood information and Gaussian weighted Chi-square distance. , 2012, , .		3

#	ARTICLE	IF	CITATIONS
91	A non-parametric method based on NBNN for automatic detection of liver lesion in CT images. , 2013, , .		3
92	Iterative image reconstruction for low-dose x-ray CT using a sinogram restoration induced edge-preserving prior. , 2014, , .		3
93	Optimal region-of-interest MRI R2* measurements for the assessment of hepatic iron content in thalassaemia major. Magnetic Resonance Imaging, 2014, 32, 647-653.	1.0	3
94	GRAPPA reconstruction with spatially varying calibration of self-€constraint. Magnetic Resonance in Medicine, 2015, 74, 1057-1069.	1.9	3
95	Automatic Segmentation of Myocardium from Black-Blood MR Images Using Entropy and Local Neighborhood Information. PLoS ONE, 2015, 10, e0120018.	1.1	3
96	New metric for optimizing Continuous Loop Averaging Deconvolution (CLAD) sequences under the 1/f noise model. PLoS ONE, 2017, 12, e0175354.	1.1	3
97	Sin-quadratic model for chest tomosynthesis respiratory signal analysis and its application in four dimensional chest tomosynthesis reconstruction. Medical Engineering and Physics, 2018, 52, 59-68.	0.8	3
98	Technical Note: Clustering-€based motion compensation scheme for multishot diffusion tensor imaging. Medical Physics, 2018, 45, 5515-5524.	1.6	3
99	Dynamic PET image reconstruction incorporating a median nonlocal means kernel method. Computers in Biology and Medicine, 2021, 139, 104713.	3.9	3
100	Unsupervised segmentation of medical image based on difference of mutual information. Science in China Series F: Information Sciences, 2006, 49, 484-493.	1.1	2
101	Denosing DTI Images Based on Regularized Filter and Fiber Tracking. AIP Conference Proceedings, 2007, , .	0.3	2
102	Cardiac MR Image Segmentation with Modified Active Contour Model. , 2007, , .		2
103	Medical image segmentation based on level set with new local fitting energy. , 2010, , .		2
104	Metric learning for maximizing MAP and its application to content-based medical image retrieval. , 2011, , .		2
105	Bayesian Image Restoration Using a Large-Scale Total Patch Variation Prior. Mathematical Problems in Engineering, 2011, 2011, 1-15.	0.6	2
106	Penalized weighted alpha-divergence approach to sinogram restoration for low-dose X-ray computed tomography. , 2012, , .		2
107	Dynamic PET image reconstruction using a spatial-temporal edge-preserving prior. , 2013, , .		2
108	PET reconstruction via nonlocal means induced prior. Journal of X-Ray Science and Technology, 2015, 23, 331-348.	0.7	2

#	ARTICLE	IF	CITATIONS
109	Improved Liver R2* Mapping by Averaging Decay Curves. Scientific Reports, 2017, 7, 6158.	1.6	2
110	Early Detection of Tibial Cartilage Degradation and Cancellous Bone Loss in an Ovariectomized Rat Model. BioMed Research International, 2017, 2017, 1-7.	0.9	2
111	eIRIS: Eigen-analysis approach for improved spine multi-shot diffusion MRI. Magnetic Resonance Imaging, 2018, 50, 134-140.	1.0	2
112	Morphology-adaptive total variation for the reconstruction of quantitative susceptibility map from the magnetic resonance imaging phase. PLoS ONE, 2018, 13, e0196922.	1.1	2
113	A novel phase-unwrapping method by using phase-jump detection and local surface fitting: application to Dixon water-fat MRI. Magnetic Resonance in Medicine, 2018, 80, 2630-2640.	1.9	2
114	Radial Motion Estimation of Myocardium in Rats with Myocardial Infarction: A Hybrid Method of FNCCGLAM and Polar Transformation. Ultrasound in Medicine and Biology, 2020, 46, 3413-3425.	0.7	2
115	Dynamic PET Image Reconstruction Incorporating Multiscale Superpixel Clusters. IEEE Access, 2021, 9, 28965-28975.	2.6	2
116	An Improved Exact FBP Algorithm for Image Reconstruction in Cone-beam Helical CT. , 2006, , .		1
117	Image Registration Based on Fuzzy Similarity. , 2007, , .		1
118	Brain CT Database for Content-Based Image Retrieval. , 2008, , .		1
119	A Rapid Elastic Registration Algorithm Based on Hermite Derivative Filter. , 2008, , .		1
120	Wavelet Domain Diffusion for DWI Images. , 2008, , .		1
121	Improved Compound Vector Field Based Active Contours Model. , 2009, , .		1
122	An Improved Helical Cone-Beam CT Image Reconstruction. , 2009, , .		1
123	Fuzzy region content based image retrieval and relevance feedback for medical cerebral image. , 2010, , .		1
124	Improving low-dose X-ray CT images by Weighted Intensity Averaging over Large-scale Neighborhoods. , 2010, , .		1
125	Tumor segmentation using the learned distance metric. , 2011, , .		1
126	Region-specific bag-of-visual-words representations for retrieving brain tumors in contrast-enhanced MRI. , 2012, , .		1



#	ARTICLE	IF	CITATIONS
127	Segmentation of brain magnetic resonance angiography images based on MAP-MRF with multi-pattern neighborhood system. , 2013, , .		1
128	Four dimensional cone-beam computed tomography reconstruction using motion tracking induced regional spatiotemporal sparsity. , 2016, , .		1
129	Enhancement of dynamic myocardial perfusion PET images based on low-rank plus sparse decomposition. Computer Methods and Programs in Biomedicine, 2018, 154, 57-69.	2.6	1
130	Soft Tissue/Bone Decomposition of Conventional Chest Radiographs Using Nonparametric Image Priors. Applied Bionics and Biomechanics, 2019, 2019, 1-17.	0.5	1
131	MR-Based Electrical Conductivity Imaging Using Second-Order Total Generalized Variation Regularization. Applied Sciences (Switzerland), 2020, 10, 7910.	1.3	1
132	Deep Longitudinal Feature Representations for Detection of Postradiotherapy Brain Injury at Presymptomatic Stage. IEEE Access, 2020, 8, 184710-184721.	2.6	1
133	Automated Skull Stripping in Mouse Functional Magnetic Resonance Imaging Analysis Using 3D U-Net. Frontiers in Neuroscience, 2022, 16, 801769.	1.4	1
134	Multiclass segmentation based on generalized fuzzy Gibbs random fields. , 0, , .		0
135	A Novel Method of Correcting the Sinogram Data for Positron Emission Tomography. , 2007, , .		0
136	Bayesian Reconstruction Using A Novel Nonlocal MRF Prior for PET Transmission Tomography. , 2007, , .		0
137	A Novel Nonlocal QuadraticMRF Prior Model for Positron Emission Tomography. , 2007, , .		0
138	An improved super-short-scan reconstruction for fan-beam computed tomography. , 2008, , .		0
139	Diagnosis system of computer-aided brain MRI using content-based image retrieval. , 2008, , .		0
140	Multispectral remote sensing image classification algorithm based on rough set theory. , 2009, , .		0
141	Decoupling of multi-channels RF coil and its application to intraoperative MR-guided focused ultrasound device. , 2010, , .		0
142	Cluster-based priors for MAP PET image reconstruction. , 2011, , .		0
143	Numerical optimization of intra-operative RF coil for open vertical-field MRgFUS using hybrid MoM/FDTD method. , 2011, , .		0
144	Inverse design of an organ-oriented RF Coil for the open vertical-field MR-guided focused ultrasound surgery. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
145	An improved ring artifact removal approach for flat-panel detector based computed tomography images. , 2013, , .		0
146	Performance evaluation of the Inveon PET scanner using GATE based on the NEMA NU-4 standards. , 2013, , .		0
147	Inter-slice Resolution Improvement of Lung 4D-CT via Adaptively Patch Partition and Sparse Representation. , 2013, , .		0
148	Estimating pharmacokinetic parameter maps from breast DCE-MRI with implicit regularization by guided image filtering. , 2014, , .		0
149	Anatomy-guided brain PET imaging incorporating a joint prior model. , 2014, , .		0
150	Second order total generalized variation for low-dose computed tomography image reconstruction. , 2014, , .		0
151	Spectral CT image restoration using average image induced nonlocal means filter. , 2014, , .		0
152	Four dimensional cone-beam computed tomography reconstruction using multi-phase projections. , 2016, , .		0
153	Noise suppression for cerebral perfusion CT via intrinsic tensor sparsity regularization: Initial study. , 2016, , .		0
154	A simple respiratory motion analysis method for chest tomosynthesis. , 2017, , .		0
155	An Initialization Method of B-Spline Transformation for Medical Atlases Alignment. , 2018, , .		0
156	A Total Variance Regularization Method for Conductivity Imaging Using MR Phase. , 2018, , .		0
157	Dual-modality joint reconstruction of PET-MRI incorporating a cross-guided prior. , 2018, , .		0
158	Radiomics analysis of baseline F-FDG PET/CT images for improved prognosis in nasopharyngeal carcinoma. , 2018, , .		0
159	Fracture Nonunion Treated with Low-Intensity Pulsed Ultrasound and Monitored with Ultrasonography: A Feasibility Study. BioMed Research International, 2021, 2021, 1-5.	0.9	0
160	Quantitative Analysis of Reconstructed Conductivity Images Using Phase-based Electrical Properties Method at 3T MR. , 2020, , .		0