Su Ruan

List of Publications by Year
in descending order

158 papers	4,202 citations	186209 28 h-index	128225 60 g-index
174 all docs	174 docs citations	174 times ranked	4900 citing authors

#	ARTICLE	IF	CITATIONS
1	Learning-Based Cancer Treatment Outcome Prognosis Using Multimodal Biomarkers. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 231-244.	2.7	1
2	A Tri-Attention fusion guided multi-modal segmentation network. Pattern Recognition, 2022, 124, 108417.	5.1	21
3	AI-Based Detection, Classification and Prediction/Prognosis in Medical Imaging. PET Clinics, 2022, 17, 183-212.	1.5	31
4	Deep co-supervision and attention fusion strategy for automatic COVID-19 lung infection segmentation on CT images. Pattern Recognition, 2022, 124, 108452.	5.1	24
5	Segmentation of multicorrelated images with copula models and conditionally random fields. Journal of Medical Imaging, 2022, 9, 014001.	0.8	0
6	A Quantitative Comparison between Shannon and Tsallis–Havrda–Charvat Entropies Applied to Cancer Outcome Prediction. Entropy, 2022, 24, 436.	1.1	5
7	Missing Data Imputation via Conditional Generator and Correlation Learning for Multimodal Brain Tumor Segmentation. Pattern Recognition Letters, 2022, 158, 125-132.	2.6	5
8	Weakly Supervised Tumor Detection in PET Using Class Response for Treatment Outcome Prediction. Journal of Imaging, 2022, 8, 130.	1.7	7
9	Lymphoma segmentation from 3D PET-CT images using a deep evidential network. International Journal of Approximate Reasoning, 2022, 149, 39-60.	1.9	16
10	Automatic <scp>COVID</scp>–19 <scp>CT</scp> segmentation using <scp>U‐Net</scp> integrated spatial and channel attention mechanism. International Journal of Imaging Systems and Technology, 2021, 31, 16-27.	2.7	118
11	Deep PET/CT Fusion with Dempster-Shafer Theory for Lymphoma Segmentation. Lecture Notes in Computer Science, 2021, , 30-39.	1.0	2
12	Latent Correlation Representation Learning for Brain Tumor Segmentation With Missing MRI Modalities. IEEE Transactions on Image Processing, 2021, 30, 4263-4274.	6.0	92
13	3D Medical Multi-modal Segmentation Network Guided by Multi-source Correlation Constraint. , 2021, , .		5
14	A novel systematic approach for cancer treatment prognosis and its applications in oropharyngeal cancer with microRNA biomarkers. Bioinformatics, 2021, 37, 3106-3114.	1.8	0
15	Belief Function-Based Semi-Supervised Learning For Brain Tumor Segmentation. , 2021, , .		9
16	Deep Learning Using Havrda-Charvat Entropy for Classification of Pulmonary Optical Endomicroscopy. Irbm, 2021, 42, 400-406.	3.7	6
17	Feature-enhanced generation and multi-modality fusion based deep neural network for brain tumor segmentation with missing MR modalities. Neurocomputing, 2021, 466, 102-112.	3.5	20
18	Evidential Segmentation of 3D PET/CT Images. Lecture Notes in Computer Science, 2021, , 159-167.	1.0	5

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19	Multi-task deep learning based CT imaging analysis for COVID-19 pneumonia: Classification and segmentation. Computers in Biology and Medicine, 2020, 126, 104037.	3.9	369
20	Fusion based on attention mechanism and context constraint for multi-modal brain tumor segmentation. Computerized Medical Imaging and Graphics, 2020, 86, 101811.	3.5	22
21	Incoherent dictionary learning via mixed-integer programming and hybrid augmented Lagrangian. , 2020, 101, 102703.		0
22	Brain Tumor Segmentation with Missing Modalities via Latent Multi-source Correlation Representation. Lecture Notes in Computer Science, 2020, , 533-541.	1.0	19
23	A Multi-Modality Fusion Network Based on Attention Mechanism for Brain Tumor Segmentation. , 2020, , .		27
24	RADIOGAN:Deep Convolutional Conditional Generative Adversarial Network to Generate PET Images. , 2020, , .		5
25	Deep learning based automatic detection of uninformative images in pulmonary optical endomicroscopy. , 2020, , .		0
26	Detection and segmentation of lymphomas in 3D PET images via clustering with entropy-based optimization strategy. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1715-1724.	1.7	23
27	A review: Deep learning for medical image segmentation using multi-modality fusion. Array, 2019, 3-4, 100004.	2.5	307
28	3-D RPET-NET: Development of a 3-D PET Imaging Convolutional Neural Network for Radiomics Analysis and Outcome Prediction. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 225-231.	2.7	31
29	Mixed Integer Programming For Sparse Coding: Application to Image Denoising. IEEE Transactions on Computational Imaging, 2019, 5, 354-365.	2.6	12
30	Gaussian-based Spatial Hybrid Distances for Detection and Segmentation of Lymphoid Lesions in 3D PET Images. , 2019, , .		0
31	A Prior Knowledge Intergrated Scheme for Detection and Segmentation of Lymphomas in 3D PET Images based on DBSCAN and GAs. , 2019, , .		0
32	A Background-based Data Enhancement Method for Lymphoma Segmentation in 3D PET Images. , 2019, , .		2
33	Treatment Outcome Prediction for Cancer Patients Based on Radiomics and Belief Function Theory. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 216-224.	2.7	21
34	Joint Tumor Segmentation in PET-CT Images Using Co-Clustering and Fusion Based on Belief Functions. IEEE Transactions on Image Processing, 2019, 28, 755-766.	6.0	77
35	Adaptive kernelized evidential clustering for automatic 3D tumor segmentation in FDGâ€"PET images. Multimedia Systems, 2019, 25, 127-133.	3.0	3
36	Deep Learning Model Integrating Dilated Convolution and Deep Supervision for Brain Tumor Segmentation in Multi-parametric MRI. Lecture Notes in Computer Science, 2019, , 574-582.	1.0	4

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37	Multiorgan segmentation using distance-aware adversarial networks. Journal of Medical Imaging, 2019, 6, 1.	0.8	24
38	Medical Image Synthesis with Deep Convolutional Adversarial Networks. IEEE Transactions on Biomedical Engineering, 2018, 65, 2720-2730.	2.5	392
39	A deep Boltzmann machine-driven level set method for heart motion tracking using cine MRI images. Medical Image Analysis, 2018, 47, 68-80.	7.0	23
40	Spatial Evidential Clustering With Adaptive Distance Metric for Tumor Segmentation in FDG-PET Images. IEEE Transactions on Biomedical Engineering, 2018, 65, 21-30.	2.5	31
41	3D lymphoma detection in PET-CT images with supervoxel and CRFs. , 2018, , .		1
42	K-SVD with a Real â„"<inf>0</inf> Optimization: Application to Image Denoising. , 2018, , .		0
43	Semi-automatic lymphoma detection and segmentation using fully conditional random fields. Computerized Medical Imaging and Graphics, 2018, 70, 1-7.	3.5	31
44	Active learning with noise modeling for medical image annotation. , 2018, , .		4
45	Heart motion tracking on cine MRI based on a deep Boltzmann machine-driven level set method. , 2018, , .		1
46	Feature selection and classification using multiple kernel learning for brain tumor segmentation. , 2018, , .		6
47	Unsupervised co-segmentation of tumor in PET-CT images using belief functions based fusion. , 2018, , .		6
48	Feature selection for outcome prediction in oesophageal cancer using genetic algorithm and random forest classifier. Computerized Medical Imaging and Graphics, 2017, 60, 42-49.	3.5	95
49	Segmenting Multi-Source Images Using Hidden Markov Fields With Copula-Based Multivariate Statistical Distributions. IEEE Transactions on Image Processing, 2017, 26, 3187-3195.	6.0	27
50	Medical Image Synthesis with Context-Aware Generative Adversarial Networks. Lecture Notes in Computer Science, 2017, 10435, 417-425.	1.0	321
51	Joint Segmentation of Multiple Thoracic Organs in CT Images with Two Collaborative Deep Architectures. Lecture Notes in Computer Science, 2017, 10553, 21-29.	1.0	24
52	Segmentation of Organs at Risk in thoracic CT images using a SharpMask architecture and Conditional Random Fields. , 2017, 2017, 1003-1006.		40
53	Tumor delineation in FDG-PET images using a new evidential clustering algorithm with spatial regularization and adaptive distance metric. , 2017, , .		0
54	Fully automated esophagus segmentation with a hierarchical deep learning approach. , 2017, 2017, 503-506.		13

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55	Accurate tumor segmentation in FDG-PET images with guidance of complementary CT images. , 2017, , .		1
56	18F-FDG-PET partial volume effect correction using a modified recovery coefficient approach based on functional volume and local contrast: physical validation and clinical feasibility in oncology. Quarterly Journal of Nuclear Medicine and Molecular Imaging, 2017, 61, 301-313.	0.4	3
57	3D Lymphoma Segmentation in PET/CT Images Based on Fully Connected CRFs. Lecture Notes in Computer Science, 2017, , 3-12.	1.0	8
58	Predictive value of initial FDG-PET features for treatment response and survival in esophageal cancer patients treated with chemo-radiation therapy using a random forest classifier. PLoS ONE, 2017, 12, e0173208.	1.1	37
59	Comparison of 2D and 3D region-based deformable models and random walker methods for PET segmentation. , 2016, , .		0
60	An integrated model-driven method for in-treatment upper airway motion tracking using cine MRI in head and neck radiation therapy. Medical Physics, 2016, 43, 4700-4710.	1.6	14
61	Selecting radiomic features from FDG-PET images for cancer treatment outcome prediction. Medical Image Analysis, 2016, 32, 257-268.	7.0	59
62	Multilabel statistical shape prior for image segmentation. IET Image Processing, 2016, 10, 710-716.	1.4	7
63	Notice of Removal Tumor segmentation by fusion of MRI images using copula based statistical methods. , 2016, , .		0
64	Segmentation of lymphoma tumor in PET images using cellular automata: A preliminary study. Irbm, 2016, 37, 3-10.	3.7	8
65	Dissimilarity Metric Learning in the Belief Function Framework. IEEE Transactions on Fuzzy Systems, 2016, 24, 1555-1564.	6.5	32
66	Robust Cancer Treatment Outcome Prediction Dealing with Small-Sized and Imbalanced Data from FDG-PET Images. Lecture Notes in Computer Science, 2016, , 61-69.	1.0	4
67	Joint Feature Transformation and Selection Based on Dempster-Shafer Theory. Communications in Computer and Information Science, 2016, , 253-261.	0.4	1
68	PO-0971: Segmentation of organs at risk using superpixels on MRI or CT images in prostate radiotherapy. Radiotherapy and Oncology, 2015, 115, S515.	0.3	0
69	An evidential classifier based on feature selection and two-step classification strategy. Pattern Recognition, 2015, 48, 2318-2327.	5.1	56
70	Joint tumor growth prediction and tumor segmentation on therapeutic follow-up PET images. Medical Image Analysis, 2015, 23, 84-91.	7.0	25
71	Outcome prediction in tumour therapy based on Dempster-Shafer theory. , 2015, , .		6
72	Dempster-Shafer Theory Based Feature Selection with Sparse Constraint for Outcome Prediction in Cancer Therapy. Lecture Notes in Computer Science, 2015, , 695-702.	1.0	4

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73	Robust feature selection to predict tumor treatment outcome. Artificial Intelligence in Medicine, 2015, 64, 195-204.	3.8	24
74	Segmentation of pelvic organs at risk using superpixels and graph diffusion in prostate radiotherapy. , 2015, , .		4
75	Right ventricle segmentation from cardiac MRI: A collation study. Medical Image Analysis, 2015, 19, 187-202.	7.0	189
76	Modelling and Tracking of Deformable Structures in Medical Images. Lecture Notes in Computer Science, 2015, , 475-490.	1.0	0
77	Robust Feature Selection to Predict Lung Tumor Recurrence. Lecture Notes in Computational Vision and Biomechanics, 2015, , 103-112.	0.5	0
78	Brain tumor segmentation from multiple MRI sequences using multiple kernel learning. , 2014, , .		1
79	Advanced approach for PET breast cancer segmentation based on FAMIS methodology. , 2014, , .		0
80	Prostate cancer segmentation from multiparametric MRI based on fuzzy Bayesian model. , 2014, , .		6
81	Myocardium segmentation using a priori knowledge of shape and a spatial relation. , 2014, , .		0
82	3D automated lymphoma segmentation in PET images based on cellular automata. , 2014, , .		8
83	FDG-PET imaging for radiotherapy target volume definition in lung cancer. Irbm, 2014, 35, 41-45.	3.7	1
84	Factor analysis-based approach for early uptake automatic quantification of breast cancer by 18F-FDG PET images sequence. Biomedical Signal Processing and Control, 2014, 9, 19-31.	3.5	3
85	Eikonal-based region growing for efficient clustering. Image and Vision Computing, 2014, 32, 1045-1054.	2.7	18
86	Segmentation of heterogeneous or small FDG PET positive tissue based on a 3D-locally adaptive random walk algorithm. Computerized Medical Imaging and Graphics, 2014, 38, 753-763.	3.5	28
87	Prediction of Lung Tumor Evolution During Radiotherapy in Individual Patients With PET. IEEE Transactions on Medical Imaging, 2014, 33, 995-1003.	5.4	34
88	Fusion of multi-tracer PET images for dose painting. Medical Image Analysis, 2014, 18, 1247-1259.	7.0	41
89	Dealing with uncertainty and imprecision in image segmentation using belief function theory. International Journal of Approximate Reasoning, 2014, 55, 376-387.	1.9	20
90	Eikonal based region growing for superpixels generation: Application to semi-supervised real time organ segmentation in CT images. Irbm, 2014, 35, 20-26.	3.7	18

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91	Graph cut segmentation with a statistical shape model in cardiac MRI. Computer Vision and Image Understanding, 2013, 117, 1027-1035.	3.0	74
92	Signal Separation with A Priori Knowledge Using Sparse Representation. , 2013, , 315-332.		0
93	Does enhanced CT influence the biological GTV measurement on FDG-PET images?. Radiotherapy and Oncology, 2013, 108, 86-90.	0.3	9
94	Nonrigid Medical Image Registration Based on Mesh Deformation Constraints. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-8.	0.7	1
95	Predicting lung tumor evolution during radiotherapy from PET images using a patient specific model. , 2013, , .		2
96	Esophagus Segmentation from 3D CT Data Using Skeleton Prior-Based Graph Cut. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-6.	0.7	11
97	Analyzing the intrinsic relations between the diffusion and fluid deformable registration methods. , 2012, , .		0
98	3D random walk based segmentation for lung tumor delineation in PET imaging. , 2012, , .		14
99	Segmentation of Biological Target Volumes on Multi-tracer PET Images Based on Information Fusion for Achieving Dose Painting in Radiotherapy. Lecture Notes in Computer Science, 2012, 15, 545-552.	1.0	9
100	Using Belief Function Theory to Deal with Uncertainties and Imprecisions in Image Processing. Advances in Intelligent and Soft Computing, 2012, , 197-204.	0.2	5
101	Effects of reactive oxygen species on metabolism monitored by longitudinal1H single voxel MRS follow-up in patients with mitochondrial disease or cerebral tumors. Journal of Physics: Conference Series, 2011, 261, 012011.	0.3	2
102	A priori knowledge based frequency-domain quantification of prostate Magnetic Resonance Spectroscopy. Biomedical Signal Processing and Control, 2011, 6, 13-20.	3.5	2
103	Kernel feature selection to fuse multi-spectral MRI images for brain tumor segmentation. Computer Vision and Image Understanding, 2011, 115, 256-269.	3.0	153
104	Image fusion for following-up brain tumor evolution. , 2011, , .		8
105	Five-Year Longitudinal MRI Follow-up and 1H Single Voxel MRS in 14 Patients with Gliomatosis Treated with Temodal, Radiotherapy and Antiangiogenic Therapy. Neuroradiology Journal, 2011, 24, 401-414.	0.6	4
106	A topology preserving non-rigid registration algorithm with integration shape knowledge to segment brain subcortical structures from MRI images. Pattern Recognition, 2010, 43, 2418-2427.	5.1	15
107	A Sparse Representation Method for Magnetic Resonance Spectroscopy Quantification. IEEE Transactions on Biomedical Engineering, 2010, 57, 1620-1627.	2.5	25
108	An automatic method of brain tumor segmentation from MRI volume based on the symmetry of brain and level set method. , 2010, , .		0

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109	Fusion and classification of multi-source images by SVM with selected features in a kernel space. , 2010, , .		0
110	Binary pattern matching from a local dissimilarity measure. , 2010, , .		0
111	Level set method based on a statistical shape constraint for MRI brain segmentation. , 2010, , .		1
112	Graph cut segmentation technique for MRI brain tumor extraction. , 2010, , .		8
113	Research on the Topology Preservation of the Demons Non-rigid Registration Algorithm. Zidonghua Xuebao/Acta Automatica Sinica, 2010, 36, 179-183.	0.3	1
114	Multi-kernel SVM based classification for tumor segmentation by fusion of MRI images. , 2009, , .		6
115	Multi-kernel SVM based classification for brain tumor segmentation of MRI multi-sequence. , 2009, , .		15
116	Ornamental Letters Image Classification Using Local Dissimilarity Maps. , 2009, , .		4
117	SVM Based Follow-up System for Brain Tumor Evolution from Magnetic Resonance Images. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 292-297.	0.4	1
118	A Priori Knowledge Based Frequency–Domain Quantification of Magnetic Resonance Spectroscopy. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 210-215.	0.4	1
119	Gray Level Local Dissimilarity Map and Global Dissimilarity Index for Quality of Medical Images. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 281-286.	0.4	4
120	Binary-image comparison with local-dissimilarity quantification. Pattern Recognition, 2008, 41, 1461-1478.	5.1	56
121	A brain tissue segmentation approach integrating fuzzy information into level set method. , 2008, , .		1
122	Fuzzy adaptive level set algorithm for brain tissue segmentation. , 2008, , .		3
123	Non-rigid registration based segmentation of brain subcortical structures using a priori knowledge. , 2008, 2008, 3971-4.		0
124	An improved method of “Demons” non-rigid image registration algorithm. , 2008, , .		2
125	A deformable model-based system for 3D analysis and visualization of tumor in PET/CT images. , 2008, 2008, 3130-3.		1
126	Segmentation of Brain Internal Structures Automatically Using Non-rigid Registration with Simultaneous Intensity and Geometric Match. , 2008, , .		0

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127	Hausdorff distance-based multiresolution maps applied to image similarity measure. Imaging Science Journal, 2007, 55, 164-174.	0.2	5
128	Hausdorff Distance based 3D Quantification of Brain Tumor Evolution from MRI Images. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5597-600.	0.5	13
129	TUMOR SEGMENTATION FROM A MULTISPECTRAL MRI IMAGES BY USING SUPPORT VECTOR MACHINE CLASSIFICATION. , 2007, , .		33
130	An Improved Level Set Method for Automatically Volume Measure: Application in Tumor Tracking from MRI Images. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 808-11.	0.5	4
131	Statistical Shape Model-based Segmentation of brain MRI Images. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5255-8.	0.5	3
132	Fuzzy kappa for the agreement measure of fuzzy classifications. Neurocomputing, 2007, 70, 726-734.	3.5	36
133	A framework of fuzzy information fusion for the segmentation of brain tumor tissues on MR images. Image and Vision Computing, 2007, 25, 164-171.	2.7	150
134	Fuzzy Information Fusion Scheme Used to Segment Brain Tumor from MR Images. Lecture Notes in Computer Science, 2006, , 208-215.	1.0	3
135	TUMOR SEGMENTATION FROM PET/CT IMAGES USING LEVEL SETS METHOD. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 255-260.	0.4	1
136	FUZZY FUSION SYSTEM FOR BRAIN MRI IMAGE SEGMENTATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 249-254.	0.4	1
137	A fast binary-image comparison method with local-dissimilarity quantification. , 2006, , .		5
138	A Smart Identification Card System Using Facial Biometric: From Architecture to Application. Lecture Notes in Computer Science, 2006, , 61-70.	1.0	1
139	Brain tumor segmentation in MRI based on fuzzy aggregators. , 2005, , .		0
140	Fuzzy modelling of different tumorous cerebral tissues on MRI images based on fusion of feature information. , 2005, 2005, 3104-7.		3
141	Histogram-Based Generation Method of Membership Function for Extracting Features of Brain Tissues on MRI Images. Lecture Notes in Computer Science, 2005, , 189-194.	1.0	7
142	Possibilistic-clustering-based MR brain image segmentation with accurate initialization. , 2004, 5308, 876.		0
143	Segmentation based on information fusion applied to brain tissue on MRI. , 2004, 5298, 492.		2
144	Knowledge based fuzzy information fusion applied to classification of abnormal brain tissues from MRI. , 2003, , .		8

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145	Automatic brain tumor extraction using fuzzy information fusion. , 2002, , .		2
146	Fuzzy Markovian Segmentation in Application of Magnetic Resonance Images. Computer Vision and Image Understanding, 2002, 85, 54-69.	3.0	55
147	Knowledge-based segmentation and labeling of brain structures from MRI images. Pattern Recognition Letters, 2001, 22, 395-405.	2.6	24
148	On the number of clusters and the fuzziness index for unsupervised FCA application to BOLD fMRI time series. Medical Image Analysis, 2001, 5, 55-67.	7.0	72
149	A multistep Unsupervised Fuzzy Clustering Analysis of fMRI time series. Human Brain Mapping, 2000, 10, 160-178.	1.9	107
150	Phantom-based performance evaluation: Application to brain segmentation from magnetic resonance images. Medical Image Analysis, 2000, 4, 303-316.	7.0	16
151	Brain tissue classification of magnetic resonance images using partial volume modeling. IEEE Transactions on Medical Imaging, 2000, 19, 1179-1187.	5.4	124
152	Detection of Brain Activation Signal from Functional Magnetic Resonance Imaging Data. Journal of Neuroimaging, 1996, 6, 207-212.	1.0	4
153	Three-dimensional motion and reconstruction of coronary arteries from biplane cineangiography. Image and Vision Computing, 1994, 12, 683-689.	2.7	32
154	Mixture modeling applied to the partial volume effect in MRI data. , 0, , .		1
155	Cerebral magnetic resonance image segmentation using fuzzy Markov Random Fields. , 0, , .		7
156	Segmentation of anatomical structures from 3d brain mri using automatically-built statistical shape models. , 0, , .		4
157	A new similarity measure using hausdorff distance map. , 0, , .		3
158	A novel scheme of face verification using active appearance models. , 0, , .		3