Pingkun Yan

List of Publications by Citations

139 papers	4,209 citations	33 h-index	61 g-index
159 ext. papers	5,285 ext. citations	4.9 avg, IF	6.01 L-index

#	Paper	IF	Citations
139	Low-Dose CT Image Denoising Using a Generative Adversarial Network With Wasserstein Distance and Perceptual Loss. *IEEE Transactions on Medical Imaging*, **2018**, 37, 1348-1357	11.7	546
138	Magnetic resonance imaging/ultrasound fusion guided prostate biopsy improves cancer detection following transrectal ultrasound biopsy and correlates with multiparametric magnetic resonance imaging. *Journal of Urology*, **2011**, 186, 1281-5	2.5	367
137	Manifold Regularized Sparse NMF for Hyperspectral Unmixing. *IEEE Transactions on Geoscience and Remote Sensing*, **2013**, 51, 2815-2826	8.1	262
136	Deep learning in medical image registration: a survey. *Machine Vision and Applications*, **2020**, 31, 1	2.8	162
135	Saliency Detection by Multiple-Instance Learning. *IEEE Transactions on Cybernetics*, **2013**, 43, 660-72	10.2	145
134	Automatic segmentation of high-throughput RNAi fluorescent cellular images. *IEEE Transactions on Information Technology in Biomedicine*, **2008**, 12, 109-17		121
133	D'Amico risk stratification correlates with degree of suspicion of prostate cancer on multiparametric magnetic resonance imaging. *Journal of Urology*, **2011**, 185, 815-20	2.5	99
132	Discrete deformable model guided by partial active shape model for TRUS image segmentation. *IEEE Transactions on Biomedical Engineering*, **2010**, 57, 1158-66	5	83
131	Alternatively Constrained Dictionary Learning For Image Superresolution. *IEEE Transactions on Cybernetics*, **2014**, 44, 366-77	10.2	73
130	Single-image super-resolution via local learning. *International Journal of Machine Learning and Cybernetics*, **2011**, 2, 15-23	3.8	73
129	Deeply-supervised CNN for prostate segmentation **2017**,		71
128	Boundary-Weighted Domain Adaptive Neural Network for Prostate MR Image Segmentation. *IEEE Transactions on Medical Imaging*, **2020**, 39, 753-763	11.7	71
127	Visual Saliency by Selective Contrast. *IEEE Transactions on Circuits and Systems for Video Technology*, **2013**, 23, 1150-1155	6.4	68
126	Multi-spectral saliency detection. *Pattern Recognition Letters*, **2013**, 34, 34-41	4.7	62
125	Image Super-Resolution Via Double Sparsity Regularized Manifold Learning. *IEEE Transactions on Circuits and Systems for Video Technology*, **2013**, 23, 2022-2033	6.4	62
124	Segmentation of volumetric MRA images by using capillary active contour. *Medical Image Analysis*, **2006**, 10, 317-29	15.4	62
123	Linear SVM classification using boosting HOG features for vehicle detection in low-altitude airborne videos **2011**,		53

122	Vehicle Detection and Motion Analysis in Low-Altitude Airborne Video Under Urban Environment. *IEEE Transactions on Circuits and Systems for Video Technology*, **2011**, 21, 1522-1533	6.4	53
121	Adaptively learning local shape statistics for prostate segmentation in ultrasound. *IEEE Transactions on Biomedical Engineering*, **2011**, 58, 633-41	5	53
120	Greedy regression in sparse coding space for single-image super-resolution. *Journal of Visual Communication and Image Representation*, **2013**, 24, 148-159	2.7	51
119	Learning deep similarity metric for 3D MR-TRUS image registration. *International Journal of Computer Assisted Radiology and Surgery*, **2019**, 14, 417-425	3.9	49
118	MR Image Super-Resolution via Wide Residual Networks With Fixed Skip Connection. *IEEE Journal of Biomedical and Health Informatics*, **2019**, 23, 1129-1140	7.2	48
117	Fast fit-free analysis of fluorescence lifetime imaging via deep learning. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 24019-24030	11.5	48
116	3D Model based Object Class Detection in An Arbitrary View **2007**,		48
115	Robust visual tracking with discriminative sparse learning. *Pattern Recognition*, **2013**, 46, 1762-1771	7.7	47
114	Changes in prostate cancer detection rate of MRI-TRUS fusion vs systematic biopsy over time: evidence of a learning curve. *Prostate Cancer and Prostatic Diseases*, **2017**, 20, 436-441	6.2	42
113	Selecting Key Poses on Manifold for Pairwise Action Recognition. *IEEE Transactions on Industrial Informatics*, **2012**, 8, 168-177	11.9	39
112	Age-related changes in prostate zonal volumes as measured by high-resolution magnetic resonance imaging (MRI): a cross-sectional study in over 500 patients. *BJU International*, **2012**, 110, 1642-7	5.6	39
111	Vehicle detection and tracking in airborne videos by multi-motion layer analysis. *Machine Vision and Applications*, **2012**, 23, 921-935	2.8	35
110	Integrative analysis for COVID-19 patient outcome prediction. *Medical Image Analysis*, **2021**, 67, 101844	15.4	35
109	Deep Recurrent Neural Networks for Prostate Cancer Detection: Analysis of Temporal Enhanced Ultrasound. *IEEE Transactions on Medical Imaging*, **2018**, 37, 2695-2703	11.7	35
108	Net-FLICS: fast quantitative wide-field fluorescence lifetime imaging with compressed sensing - a deep learning approach. *Light: Science and Applications*, **2019**, 8, 26	16.7	34
107	Adversarial Image Registration with Application for MR and TRUS Image Fusion. *Lecture Notes in Computer Science*, **2018**, 197-204	0.9	33
106	Transfer learning for pedestrian detection. *Neurocomputing*, **2013**, 100, 51-57	5.4	32
105	Adaptive shape prior constrained level sets for bladder MR image segmentation. *IEEE Journal of Biomedical and Health Informatics*, **2014**, 18, 1707-16	7.2	32

104	Sparse coding for image denoising using spike and slab prior. *Neurocomputing*, **2013**, 106, 12-20	5.4	32
103	Exploiting Interslice Correlation for MRI Prostate Image Segmentation, from Recursive Neural Networks Aspect. *Complexity*, **2018**, 2018, 1-10	1.6	32
102	Multi-Organ Segmentation Over Partially Labeled Datasets With Multi-Scale Feature Abstraction. *IEEE Transactions on Medical Imaging*, **2020**, 39, 3619-3629	11.7	30
101	Detection and grading of prostate cancer using temporal enhanced ultrasound: combining deep neural networks and tissue mimicking simulations. *International Journal of Computer Assisted Radiology and Surgery*, **2017**, 12, 1293-1305	3.9	29
100	Multiparametric magnetic resonance imaging-transrectal ultrasound fusion-assisted biopsy for the diagnosis of local recurrence after radical prostatectomy. *Urologic Oncology: Seminars and Original Investigations*, **2015**, 33, 425.e1-425.e6	2.8	29
99	The role of image guided biopsy targeting in patients with atypical small acinar proliferation. *Journal of Urology*, **2015**, 193, 473-478	2.5	28
98	A method of rapid quantification of patient-specific organ doses for CT using deep-learning-based multi-organ segmentation and GPU-accelerated Monte Carlo dose computing. *Medical Physics*, **2020**, 47, 2526-2536	4.4	25
97	Robust alternative minimization for matrix completion. *IEEE Transactions on Systems, Man, and Cybernetics*, **2012**, 42, 939-49		25
96	Segmenting images by combining selected atlases on manifold. *Lecture Notes in Computer Science*, **2011**, 14, 272-9	0.9	25
95	Medical image segmentation using minimal path deformable models with implicit shape priors. *IEEE Transactions on Information Technology in Biomedicine*, **2006**, 10, 677-84		25
94	Learning saliency by MRF and differential threshold. *IEEE Transactions on Cybernetics*, **2013**, 43, 2032-43	10.2	24
93	Prostate segmentation in MR images using discriminant boundary features. *IEEE Transactions on Biomedical Engineering*, **2013**, 60, 479-88	5	23
92	. *IEEE Transactions on Aerospace and Electronic Systems*, **2014**, 50, 2890-2905	3.7	22
91	Transfer learning from RF to B-mode temporal enhanced ultrasound features for prostate cancer detection. *International Journal of Computer Assisted Radiology and Surgery*, **2017**, 12, 1111-1121	3.9	21
90	Ego motion guided particle filter for vehicle tracking in airborne videos. *Neurocomputing*, **2014**, 124, 168-177	5.4	20
89	Biopsy needle detection in transrectal ultrasound. *Computerized Medical Imaging and Graphics*, **2011**, 35, 653-9	7.6	20
88	A Homographic Framework for the Fusion of Multi-view Silhouettes **2007**,		20
87	Correlation-Based Tracking of Multiple Targets With Hierarchical Layered Structure. *IEEE Transactions on Cybernetics*, **2018**, 48, 90-102	10.2	18

86	Feature Fusion Encoder Decoder Network for Automatic Liver Lesion Segmentation **2019**,		18
85	Is visual registration equivalent to semiautomated registration in prostate biopsy?. *BioMed Research International*, **2015**, 2015, 394742	3	18
84	Global structure constrained local shape prior estimation for medical image segmentation. *Computer Vision and Image Understanding*, **2013**, 117, 1017-1026	4.3	18
83	Motion compensated lossy-to-lossless compression of 4-D medical images using integer wavelet transforms. *IEEE Transactions on Information Technology in Biomedicine*, **2005**, 9, 132-8		18
82	Label image constrained multiatlas selection. *IEEE Transactions on Cybernetics*, **2015**, 45, 1158-68	10.2	17
81	Shape prior constrained PSO model for bladder wall MRI segmentation. *Neurocomputing*, **2018**, 294, 19-28	5.4	17
80	. *IEEE Transactions on Aerospace and Electronic Systems*, **2014**, 50, 1374-1389	3.7	16
79	SpatioTemporal Regularity Flow (SPREF): Its Estimation and Applications. *IEEE Transactions on Circuits and Systems for Video Technology*, **2007**, 17, 584-589	6.4	16
78	Feature competition and partial sparse shape modeling for cardiac image sequences segmentation. *Neurocomputing*, **2015**, 149, 904-913	5.4	15
77	Image registration by normalized mapping. *Neurocomputing*, **2013**, 101, 181-189	5.4	15
76	Prostate biopsy for the interventional radiologist. *Journal of Vascular and Interventional Radiology*, **2014**, 25, 675-84	2.4	14
75	Deep neural maps for unsupervised visualization of high-grade cancer in prostate biopsies. *International Journal of Computer Assisted Radiology and Surgery*, **2019**, 14, 1009-1016	3.9	13
74	High compression deep learning based single-pixel hyperspectral macroscopic fluorescence lifetime imaging. *Biomedical Optics Express*, **2020**, 11, 5401-5424	3.5	13
73	Investigation of Physical Phenomena Underlying Temporal-Enhanced Ultrasound as a New Diagnostic Imaging Technique: Theory and Simulations. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 400-410	3.2	12
72	Single-Image Super-Resolution via Sparse Coding Regression **2011**,		12
71	MRA image segmentation with capillary active contour. *Lecture Notes in Computer Science*, **2005**, 8, 51-8	0.9	12
70	Hierarchical incorporation of shape and shape dynamics for flying bird detection. *Neurocomputing*, **2014**, 131, 179-190	5.4	11
69	Visual Attention Accelerated Vehicle Detection in Low-Altitude Airborne Video of Urban Environment. *IEEE Transactions on Circuits and Systems for Video Technology*, **2012**, 22, 366-378	6.4	11

68	Machine learning in medical imaging. *International Journal of Biomedical Imaging*, **2012**, 2012, 123727	5.2	11
67	Deep adaptive registration of multi-modal prostate images. *Computerized Medical Imaging and Graphics*, **2020**, 84, 101769	7.6	11
66	Deep learning predicts cardiovascular disease risks from lung cancer screening low dose computed tomography. *Nature Communications*, **2021**, 12, 2963	17.4	11
65	Knowledge-Based Analysis for Mortality Prediction From CT Images. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 457-464	7.2	11
64	Cross-Modal Attention for MRI and Ultrasound Volume Registration. *Lecture Notes in Computer Science*, **2021**, 66-75	0.9	11
63	A Deep Learning Health Data Analysis Approach: Automatic 3D Prostate MR Segmentation with Densely-Connected Volumetric ConvNets **2018**,		11
62	Tracking vehicles as groups in airborne videos. *Neurocomputing*, **2013**, 99, 38-45	5.4	10
61	Robust color correction in stereo vision **2011**,		10
60	Association of AI quantified COVID-19 chest CT and patient outcome. *International Journal of Computer Assisted Radiology and Surgery*, **2021**, 16, 435-445	3.9	10
59	Partial sparse shape constrained sector-driven bladder wall segmentation. *Machine Vision and Applications*, **2015**, 26, 593-606	2.8	9
58	Synergizing medical imaging and radiotherapy with deep learning. *Machine Learning: Science and Technology*, **2020**, 1, 021001	5.1	9
57	Modeling interaction for segmentation of neighboring structures. *IEEE Transactions on Information Technology in Biomedicine*, **2009**, 13, 252-62		9
56	Learning 4D action feature models for arbitrary view action recognition **2008**,		9
55	Sensorless Freehand 3D Ultrasound Reconstruction via Deep Contextual Learning. *Lecture Notes in Computer Science*, **2020**, 463-472	0.9	9
54	Realtime TRUS/MRI Fusion Targeted-Biopsy for Prostate Cancer: A Clinical Demonstration of Increased Positive Biopsy Rates. *Lecture Notes in Computer Science*, **2010**, 52-62	0.9	9
53	Estimating patient-specific shape prior for medical image segmentation **2011**,		8
52	Local learning-based image super-resolution **2011**,		8
51	Deep learning-based liver segmentation for fusion-guided intervention. *International Journal of Computer Assisted Radiology and Surgery*, **2020**, 15, 963-972	3.9	8

50	Segmentation of neighboring organs in medical image with model competition. *Lecture Notes in Computer Science*, **2005**, 8, 270-7	0.9	8
49	SIFT on manifold: An intrinsic description. *Neurocomputing*, **2013**, 113, 227-233	5.4	7
48	Medical Image Segmentation Using Descriptive Image Features **2011**,		7
47	Classifying Cancer Grades Using Temporal Ultrasound for Transrectal Prostate Biopsy. *Lecture Notes in Computer Science*, **2016**, 653-661	0.9	7
46	Toward a real-time system for temporal enhanced ultrasound-guided prostate biopsy. *International Journal of Computer Assisted Radiology and Surgery*, **2018**, 13, 1201-1209	3.9	6
45	Geometry constrained sparse coding for single image super-resolution **2012**,		6
44	Rapid pedestrian detection in unseen scenes. *Neurocomputing*, **2011**, 74, 3343-3350	5.4	6
43	Single-image super-resolution based on semi-supervised learning **2011**,		6
42	Local semi-supervised regression for single-image super-resolution **2011**,		6
41	Medical image segmentation with minimal path deformable models		6
40	Incremental shape statistics learning for prostate tracking in TRUS. *Lecture Notes in Computer Science*, **2010**, 13, 42-9	0.9	6
39	Learning from Noisy Label Statistics: Detecting High Grade Prostate Cancer in Ultrasound Guided Biopsy. *Lecture Notes in Computer Science*, **2018**, 21-29	0.9	6
38	PASiam: Predicting Attention Inspired Siamese Network, for Space-Borne Satellite Video Tracking **2019**,		5
37	Confidence guided enhancing brain tumor segmentation in multi-parametric MRI **2012**,		5
36	Optimal search guided by partial active shape model for prostate segmentation in TRUS images **2009**,		5
35	Action recognition using spatio-temporal regularity based features. *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, **2008**,	1.6	5
34	Unsupervised Domain Adaptation with Dual-Scheme Fusion Network for Medical Image Segmentation **2020**,		5
33	Coupled Directional Level Set for MR Image Segmentation **2012**,		4

32	Multi-atlas Based Image Selection with Label Image Constraint **2012**,		4
31	OASIS: One-pass aligned Atlas Set for Medical Image Segmentation. *Neurocomputing*, **2021**, 470, 130-130	5.4	4
30	Deep compressive macroscopic fluorescence lifetime imaging **2018**,		4
29	Deep neural networks for the assessment of surgical skills: A systematic review. *Journal of Defense Modeling and Simulation*,154851292110345	0.4	4
28	Pedestrian detection in unseen scenes by dynamically updating visual words. *Neurocomputing*, **2013**, 119, 232-242	5.4	3
27	Image Denoising via Improved Sparse Coding **2011**,		3
26	Ultrasound-Based Predication of Prostate Cancer in MRI-guided Biopsy. *Lecture Notes in Computer Science*, **2014**, 142-150	0.9	3
25	Functional Brain Imaging Reliably Predicts Bimanual Motor Skill Performance in a Standardized Surgical Task. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 2058-2066	5	3
24	Task-Oriented Low-Dose CT Image Denoising. *Lecture Notes in Computer Science*, **2021**, 441-450	0.9	3
23	End-to-end Ultrasound Frame to Volume Registration. *Lecture Notes in Computer Science*, **2021**, 56-65	0.9	3
22	Tissue mimicking simulations for temporal enhanced ultrasound-based tissue typing **2017**,		2
21	MP20-16 TRAINING AND SKILLS ASSESSMENT FOR FUSION-GUIDED PROSTATE BIOPSY: DEFINING THE LEARNING CURVE. *Journal of Urology*, **2016**, 195,	2.5	2
20	Monitoring of radiofrequency ablation with shear wave delay mapping **2015**,		2
19	Segmenting TRUS video sequences using local shape statistics **2010**,		2
18	A novel alternative algorithm for limited angle tomography **2011**,		2
17	Putting images on a manifold for atlas-based image segmentation **2011**,		2
16	Decreasing the Surgical Errors by Neurostimulation of Primary Motor Cortex and the Associated Brain Activation via Neuroimaging. *Frontiers in Neuroscience*, **2021**, 15, 651192	5.1	2
15	Multi-Task Learning for Registering Images With Large Deformation. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 1624-1633	7.2	2

List of Publications

#	Publication	Impact	Citations
14	Deep learning for biomechanical modeling of facial tissue deformation in orthognathic surgical planning.. *International Journal of Computer Assisted Radiology and Surgery*, **2022**, 1	3.9	2
13	**2011**,		1
12	Ultra-fast fit-free analysis of complex fluorescence lifetime imaging via deep learning		1
11	fNIRS as a Quantitative tool to Asses and Predict Surgical Skills **2019**,		1
10	Prediction of Coronary Calcification and Stenosis: Role of Radiomics From Low-Dose CT. *Academic Radiology*, **2021**, 28, 972-979	4.3	1
9	Polar transform network for prostate ultrasound segmentation with uncertainty estimation.. *Medical Image Analysis*, **2022**, 78, 102418	15.4	1
8	Deep learning-based motion artifact removal in functional near-infrared spectroscopy.. *Neurophotonics*, **2022**, 9, 041406	3.9	1
7	On a Sparse Shortcut Topology of Artificial Neural Networks. *IEEE Transactions on Artificial Intelligence*, **2021**, 1-1	4.7	0
6	Data Augmentation for Training Deep Neural Networks **2021**, 151-164		0
5	T Mapping Refined Finite Element Modeling to Predict Knee Osteoarthritis Progression. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 4592-4595	0.9	0
4	Division and Fusion: Rethink Convolutional Kernels for 3D Medical Image Segmentation. *Lecture Notes in Computer Science*, **2020**, 160-169	0.9	
3	Biomedical imaging and analysis through deep learning **2021**, 49-74		
2	Cardiovascular Disease Risk Improves COVID-19 Patient Outcome Prediction. *Lecture Notes in Computer Science*, **2021**, 467-476	0.9	
1	Transformed Grid Distance Loss for Supervised Image Registration. *Lecture Notes in Computer Science*, **2022**, 177-181	0.9	