Jun Cheng

List of Publications by Citations

97 papers	2,342 citations	20 h-index	46 g-index
105 ext. papers	3,367 ext. citations	3.7 avg, IF	5.3 L-index

#	Paper	IF	Citations
97	CE-Net: Context Encoder Network for 2D Medical Image Segmentation. *IEEE Transactions on Medical Imaging*, **2019**, 38, 2281-2292	11.7	471
96	Joint Optic Disc and Cup Segmentation Based on Multi-Label Deep Network and Polar Transformation. *IEEE Transactions on Medical Imaging*, **2018**, 37, 1597-1605	11.7	339
95	Superpixel classification based optic disc and optic cup segmentation for glaucoma screening. *IEEE Transactions on Medical Imaging*, **2013**, 32, 1019-32	11.7	327
94	Disc-Aware Ensemble Network for Glaucoma Screening From Fundus Image. *IEEE Transactions on Medical Imaging*, **2018**, 37, 2493-2501	11.7	164
93	ORIGA(-light): an online retinal fundus image database for glaucoma analysis and research. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 3065-8	0.9	98
92	Sparse dissimilarity-constrained coding for glaucoma screening. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 1395-403	5	59
91	CS-Net: Channel and Spatial Attention Network for Curvilinear Structure Segmentation. *Lecture Notes in Computer Science*, **2019**, 721-730	0.9	56
90	Speckle Reduction in 3D Optical Coherence Tomography of Retina by A-Scan Reconstruction. *IEEE Transactions on Medical Imaging*, **2016**, 35, 2270-2279	11.7	44
89	JointRCNN: A Region-Based Convolutional Neural Network for Optic Disc and Cup Segmentation. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 335-343	5	39
88	CS-Net: Deep learning segmentation of curvilinear structures in medical imaging. *Medical Image Analysis*, **2021**, 67, 101874	15.4	37
87	Optical Coherence Tomography Angiography of Optic Disc and Macula Vessel Density in Glaucoma and Healthy Eyes. *Journal of Glaucoma*, **2019**, 28, 80-87	2.1	34
86	Dense Dilated Network With Probability Regularized Walk for Vessel Detection. *IEEE Transactions on Medical Imaging*, **2020**, 39, 1392-1403	11.7	31
85	Sliding window and regression based cup detection in digital fundus images for glaucoma diagnosis. *Lecture Notes in Computer Science*, **2011**, 14, 1-8	0.9	29
84	Structure-Preserving Guided Retinal Image Filtering and Its Application for Optic Disk Analysis. *IEEE Transactions on Medical Imaging*, **2018**, 37, 2536-2546	11.7	28
83	Integrating holistic and local deep features for glaucoma classification. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 1328-1331	0.9	25
82	Image quality classification for DR screening using deep learning. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 664-667	0.9	23
81	Objective distortion measure for binary text image based on edge line segment similarity. *IEEE Transactions on Image Processing*, **2007**, 16, 1691-5	8.7	21

80	Multi-Cell Multi-Task Convolutional Neural Networks for Diabetic Retinopathy Grading. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2018**, 2018, 2724-2727	0.9	21
79	Similarity regularized sparse group lasso for cup to disc ratio computation. *Biomedical Optics Express*, **2017**, 8, 3763-3777	3.5	20
78	Automatic glaucoma diagnosis through medical imaging informatics. *Journal of the American Medical Informatics Association: JAMIA*, **2013**, 20, 1021-7	8.6	20
77	Automatic optic disc segmentation with peripapillary atrophy elimination. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 6224-7	0.9	19
76	Noise Adaptation Generative Adversarial Network for Medical Image Analysis. *IEEE Transactions on Medical Imaging*, **2020**, 39, 1149-1159	11.7	19
75	A low-dimensional step pattern analysis algorithm with application to multimodal retinal image registration **2015**,		18
74	Learning supervised descent directions for optic disc segmentation. *Neurocomputing*, **2018**, 275, 350-357	5.4	17
73	Early age-related macular degeneration detection by focal biologically inspired feature **2012**,		17
72	Optical coherence tomography angiography of the macula and optic nerve head: microvascular density and test-retest repeatability in normal subjects. *BMC Ophthalmology*, **2018**, 18, 315	2.3	17
71	Encoding Structure-Texture Relation with P-Net for Anomaly Detection in Retinal Images. *Lecture Notes in Computer Science*, **2020**, 360-377	0.9	16
70	SkrGAN: Sketching-Rendering Unconditional Generative Adversarial Networks for Medical Image Synthesis. *Lecture Notes in Computer Science*, **2019**, 777-785	0.9	16
69	Peripapillary atrophy detection by sparse biologically inspired feature manifold. *IEEE Transactions on Medical Imaging*, **2012**, 31, 2355-65	11.7	14
68	A Deep Step Pattern Representation for Multimodal Retinal Image Registration **2019**,		14
67	Using deep learning for robustness to parapapillary atrophy in optic disc segmentation **2015**,		12
66	Quadratic divergence regularized SVM for optic disc segmentation. *Biomedical Optics Express*, **2017**, 8, 2687-2696	3.5	12
65	Sparse Range-Constrained Learning and Its Application for Medical Image Grading. *IEEE Transactions on Medical Imaging*, **2018**, 37, 2729-2738	11.7	10
64	Fibroatheroma identification in Intravascular Optical Coherence Tomography images using deep features. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 1501-1504	0.9	9
63	Automated analysis of angle closure from anterior chamber angle images **2014**, 55, 7669-73		9

62	Steganalysis of halftone image using inverse halftoning. *Signal Processing*, **2009**, 89, 1000-1010	4.4	9
61	Optic Disc and Cup Segmentation with Blood Vessel Removal from Fundus Images for Glaucoma Detection. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2018**, 2018, 862-865	0.9	9
60	DeepDisc: Optic Disc Segmentation Based on Atrous Convolution and Spatial Pyramid Pooling. *Lecture Notes in Computer Science*, **2018**, 253-260	0.9	9
59	Automatic localization of optic disc based on deep learning in fundus images **2017**,		8
58	Automated anterior chamber angle localization and glaucoma type classification in OCT images. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 7380-3	0.9	8
57	Objective distortion measure for binary images		8
56	Three-dimensional graph-based skin layer segmentation in optical coherence tomography images for roughness estimation. *Biomedical Optics Express*, **2018**, 9, 3590-3606	3.5	8
55	Cycle Structure and Illumination Constrained GAN for Medical Image Enhancement. *Lecture Notes in Computer Science*, **2020**, 667-677	0.9	8
54	Automatic image classification in intravascular optical coherence tomography images **2016**,		8
53	Optic Disc Detection via Deep Learning in Fundus Images. *Lecture Notes in Computer Science*, **2017**, 134-141		7
52	Steganalysis of data hiding in binary text images		7
51	Glaucoma Detection Based on Deep Learning Network in Fundus Image. *Advances in Computer Vision and Pattern Recognition*, **2019**, 119-137	1.1	7
50	Techniques and Applications in Skin OCT Analysis. *Advances in Experimental Medicine and Biology*, **2020**, 1213, 149-163	3.6	7
49	Epidermal segmentation in high-definition optical coherence tomography. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 3045-8	0.9	6
48	Graph based lumen segmentation in optical coherence tomography images **2015**,		6
47	Universal digital filtering for denoising volumetric retinal OCT and OCT angiography in 3D shearlet domain. *Optics Letters*, **2020**, 45, 694-697	3	6
46	Speckle reduction in optical coherence tomography by image registration and matrix completion. *Lecture Notes in Computer Science*, **2014**, 17, 162-9	0.9	6
45	Focal biologically inspired feature for glaucoma type classification. *Lecture Notes in Computer Science*, **2011**, 14, 91-8	0.9	6

44	Superpixel classification based optic cup segmentation. *Lecture Notes in Computer Science*, **2013**, 16, 421-8	0.9	6
43	Structure and Illumination Constrained GAN for Medical Image Enhancement. *IEEE Transactions on Medical Imaging*, **2021**, 40, 3955-3967	11.7	6
42	A Robust Outlier Elimination Approach for Multimodal Retina Image Registration. *Lecture Notes in Computer Science*, **2015**, 329-337	0.9	5
41	Speckle reduction of OCT via super resolution reconstruction and its application on retinal layer segmentation. *Artificial Intelligence in Medicine*, **2020**, 106, 101871	7.4	5
40	Glaucoma classification from retina optical coherence tomography angiogram. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 596-599	0.9	5
39	Automated in vivo 3D high-definition optical coherence tomography skin analysis system. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 3895-3898	0.9	4
38	Automated basal cell carcinoma detection in high-definition optical coherence tomography. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 2885-2888	0.9	4
37	A CAPTCHA recognition technology based on deep learning **2018**,		4
36	Superpixel classification for initialization in model based optic disc segmentation. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 1450-3	0.9	4
35	Multiple Modality Fusion for Glaucoma Diagnosis. *IFMBE Proceedings*, **2014**, 5-8	0.2	4
34	Automatic Localization of Optic Disc using Modified U-Net **2018**,		4
33	A cloud-based system for automatic glaucoma screening. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 1596-9	0.9	3
32	Speckle reduction in optical coherence tomography by matrix completion using bilateral random projection. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 186-9	0.9	3
31	Closed angle glaucoma detection in RetCam images. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 4096-9	0.9	3
30	Secure data hiding in binary document images for authentication		3
29	Superpixel Classification Based Optic Disc Segmentation. *Lecture Notes in Computer Science*, **2013**, 293-304	0.9	3
28	Structure-preserving guided retinal image filtering for optic disc analysis **2019**, 199-221		3
27	Memorizing Structure-Texture Correspondence for Image Anomaly Detection. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, PP,	10.3	3

26	Automatic glaucoma screening hybrid cloud system with pattern classification algorithms **2017**,		2
25	Supervised 3D graph-based automated epidermal thickness estimation **2017**,		2
24	Skin surface topographic assessment using in vivo high-definition optical coherence tomography **2015**,		2
23	An augmented reality assistance platform for eye laser surgery. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 4326-9	0.9	2
22	Self-assessment for optic disc segmentation. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 5861-4	0.9	2
21	Pathological Myopia detection from selective fundus image features **2012**,		2
20	Steganalysis of Binary Cartoon Image using Distortion Measure **2007**,		2
19	A Test-bed for Above-knee Intelligent Prosthesis **2006**,		2
18	Detection of data hiding in binary text images **2005**,		2
17	Digital resolution enhancement in low transverse sampling optical coherence tomography angiography using deep learning. *OSA Continuum*, **2020**, 3, 1664	1.4	2
16	Registration of Color and OCT Fundus Images Using Low-dimensional Step Pattern Analysis. *Lecture Notes in Computer Science*, **2015**, 214-221	0.9	2
15	Response: Optical Coherence Tomography Angiography of Optic Disc and Macula Vessel Density in Glaucoma and Healthy Eyes. *Journal of Glaucoma*, **2019**, 28, e132-e133	2.1	2
14	Large-Scale Left and Right Eye Classification in Retinal Images. *Lecture Notes in Computer Science*, **2018**, 261-268	0.9	2
13	Automatic fibroatheroma identification in intravascular optical coherence tomography volumes. *Journal of Ambient Intelligence and Humanized Computing*, **2019**, 1	3.7	1
12	ACHIKO-I retinal fundus image database and its evaluation on cup-to-disc ratio measurement **2013**,		1
11	Corneal graft detection for Descemet's stripping automated endothelial keratoplasty using optical coherence tomography. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*,	0.9	1
10	Focal edge association to glaucoma diagnosis. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 4481-4	0.9	1
9	The Channel Attention Based Context Encoder Network for Inner Limiting Membrane Detection. *Lecture Notes in Computer Science*, **2019**, 104-111	0.9	1

8	Automatic atherosclerotic heart disease detection in intracoronary optical coherence tomography images. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 174-7	0.9	0
7	Reproducibility of Corneal Graft Thickness measurements with COLGATE in patients who have undergone DSAEK (Descemet Stripping Automated Endothelial Keratoplasty). *BMC Medical Imaging* , **2012**, 12, 25	2.9	0
6	Efficient optic cup localization using regional propagation based on retinal structure priors. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 1430-3	0.9	0
5	Correction to Noise Adaptation Generative Adversarial Network for Medical Image Analysis *IEEE Transactions on Medical Imaging*, **2020**, 39, 2566-2567	11.7	
4	Extract-and-match geometric corner and step pattern approach for registration of fluoroscopic X-ray sequences. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 568-571	0.9	
3	Sector-based optic cup segmentation with intensity and blood vessel priors. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 1454-7	0.9	
2	Automatic Segmentation of Retinal Images for Glaucoma Screening **2014**, 233-253		
1	Fundus Image Quality-Guided Diabetic Retinopathy Grading. *Lecture Notes in Computer Science*, **2018**, 245-252	0.9	