Yalin Zheng

List of Publications by Citations

138 papers	2,519 citations	27 h-index	46 g-index
154 ext. papers	3,384 ext. citations	3.6 avg, IF	5.45 L-index

#	Paper	IF	Citations
138	Convolutional Neural Networks for Diabetic Retinopathy. *Procedia Computer Science*, **2016**, 90, 200-205	1.6	338
137	Automated Vessel Segmentation Using Infinite Perimeter Active Contour Model with Hybrid Region Information with Application to Retinal Images. *IEEE Transactions on Medical Imaging*, **2015**, 34, 1797-807	11.7	258
136	Dense Fully Convolutional Segmentation of the Optic Disc and Cup in Colour Fundus for Glaucoma Diagnosis. *Symmetry*, **2018**, 10, 87	2.7	80
135	Learning Active Contour Models for Medical Image Segmentation **2019**,		64
134	Automated "disease/no disease" grading of age-related macular degeneration by an image mining approach **2012**, 53, 8310-8		63
133	Multiscale sequential convolutional neural networks for simultaneous detection of fovea and optic disc. *Biomedical Signal Processing and Control*, **2018**, 40, 91-101	4.9	62
132	Automatic 2-D/3-D Vessel Enhancement in Multiple Modality Images Using a Weighted Symmetry Filter. *IEEE Transactions on Medical Imaging*, **2018**, 37, 438-450	11.7	60
131	Automated segmentation of foveal avascular zone in fundus fluorescein angiography **2010**, 51, 3653-9		59
130	CS-Net: Channel and Spatial Attention Network for Curvilinear Structure Segmentation. *Lecture Notes in Computer Science*, **2019**, 721-730	0.9	56
129	An artificial intelligence-based deep learning algorithm for the diagnosis of diabetic neuropathy using corneal confocal microscopy: a development and validation study. *Diabetologia*, **2020**, 63, 419-430	10.3	54
128	Retinal vessel segmentation: an efficient graph cut approach with retinex and local phase. *PLoS ONE*, **2015**, 10, e0122332	3.7	53
127	Computerized assessment of intraretinal and subretinal fluid regions in spectral-domain optical coherence tomography images of the retina. *American Journal of Ophthalmology*, **2013**, 155, 277-286.e1	4.9	48
126	Automated segmentation of lumbar vertebrae in digital videofluoroscopic images. *IEEE Transactions on Medical Imaging*, **2004**, 23, 45-52	11.7	48
125	Measurement of the Intertablet Coating Uniformity of a Pharmaceutical Pan Coating Process With Combined Terahertz and Optical Coherence Tomography In-Line Sensing. *Journal of Pharmaceutical Sciences*, **2017**, 106, 1075-1084	3.9	47
124	Intensity and Compactness Enabled Saliency Estimation for Leakage Detection in Diabetic and Malarial Retinopathy. *IEEE Transactions on Medical Imaging*, **2017**, 36, 51-63	11.7	44
123	Imaging and evaluation of corneal vascularization using fluorescein and indocyanine green angiography **2012**, 53, 650-8		43
122	Saliency driven vasculature segmentation with infinite perimeter active contour model. *Neurocomputing*, **2017**, 259, 201-209	5.4	42

121	Quantifying changes in corneal neovascularization using fluorescein and indocyanine green angiography. *American Journal of Ophthalmology*, **2012**, 154, 850-858.e2	4.9	41
120	ROSE: A Retinal OCT-Angiography Vessel Segmentation Dataset and New Model. *IEEE Transactions on Medical Imaging*, **2021**, 40, 928-939	11.7	40
119	Corneal angiography for guiding and evaluating fine-needle diathermy treatment of corneal neovascularization. *Ophthalmology*, **2015**, 122, 1079-84	7.3	38
118	CS-Net: Deep learning segmentation of curvilinear structures in medical imaging. *Medical Image Analysis*, **2021**, 67, 101874	15.4	37
117	Automated glaucoma diagnosis using deep learning approach **2017**,		32
116	Imaging of Corneal Neovascularization: Optical Coherence Tomography Angiography and Fluorescence Angiography **2018**, 59, 1263-1269		31
115	Data mining techniques for the screening of age-related macular degeneration. *Knowledge-Based Systems*, **2012**, 29, 83-92	7.3	31
114	Fast segmentation of anterior segment optical coherence tomography images using graph cut. *Eye and Vision (London, England)*, **2015**, 2, 1	4.9	30
113	Reconstruction of 3D surface maps from anterior segment optical coherence tomography images using graph theory and genetic algorithms. *Biomedical Signal Processing and Control*, **2016**, 25, 91-98	4.9	30
112	Automatic segmentation of anterior segment optical coherence tomography images. *Journal of Biomedical Optics*, **2013**, 18, 56003	3.5	28
111	A comprehensive texture segmentation framework for segmentation of capillary non-perfusion regions in fundus fluorescein angiograms. *PLoS ONE*, **2014**, 9, e93624	3.7	27
110	FCNN: Fourier Convolutional Neural Networks. *Lecture Notes in Computer Science*, **2017**, 786-798	0.9	26
109	Lumbar spine visualisation based on kinematic analysis from videofluoroscopic imaging. *Medical Engineering and Physics*, **2003**, 25, 171-9	2.4	26
108	Retinal Vascular Network Topology Reconstruction and Artery/Vein Classification via Dominant Set Clustering. *IEEE Transactions on Medical Imaging*, **2020**, 39, 341-356	11.7	25
107	Retinal Artery and Vein Classification via Dominant Sets Clustering-Based Vascular Topology Estimation. *Lecture Notes in Computer Science*, **2018**, 56-64	0.9	24
106	Automated detection of leakage in fluorescein angiography images with application to malarial retinopathy. *Scientific Reports*, **2015**, 5, 10425	4.9	23
105	Nondestructive analysis of automotive paints with spectral domain optical coherence tomography. *Applied Optics*, **2016**, 55, 3695-700	0.2	22
104	High resolution corneal and single pulse imaging with line field spectral domain optical coherence tomography. *Optics Express*, **2016**, 24, 12395-405	3.3	20

103	Marginal corneal vascular arcades **2013**, 54, 7470-7		20
102	Non-destructive analysis of flake properties in automotive paints with full-field optical coherence tomography and 3D segmentation. *Optics Express*, **2017**, 25, 18614-18628	3.3	19
101	UV imaging reveals facial areas that are prone to skin cancer are disproportionately missed during sunscreen application. *PLoS ONE*, **2017**, 12, e0185297	3.7	18
100	Angiographic and In Vivo Confocal Microscopic Characterization of Human Corneal Blood and Presumed Lymphatic Neovascularization: A Pilot Study. *Cornea*, **2015**, 34, 1459-65	3.1	18
99	Neurovascular sequestration in paediatric malaria is visible clinically in the retina. *ELife*, **2018**, 7,	8.9	18
98	Automated layer segmentation of macular OCT images via graph-based SLIC superpixels and manifold ranking approach. *Computerized Medical Imaging and Graphics*, **2017**, 55, 42-53	7.6	17
97	Introducing the GEV Activation Function for Highly Unbalanced Data to Develop COVID-19 Diagnostic Models. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 2776-2786	7.2	17
96	Accurate, fast, data efficient and interpretable glaucoma diagnosis with automated spatial analysis of the whole cup to disc profile. *PLoS ONE*, **2019**, 14, e0209409	3.7	16
95	Automated Tortuosity Analysis of Nerve Fibers in Corneal Confocal Microscopy. *IEEE Transactions on Medical Imaging*, **2020**, 39, 2725-2737	11.7	16
94	Associations with Corneal Hysteresis in a Population Cohort: Results from 96 010 UK Biobank Participants. *Ophthalmology*, **2019**, 126, 1500-1510	7.3	14
93	Automated Detection of Vessel Abnormalities on Fluorescein Angiogram in Malarial Retinopathy. *Scientific Reports*, **2015**, 5, 11154	4.9	14
92	Deep-Channel uses deep neural networks to detect single-molecule events from patch-clamp data. *Communications Biology*, **2020**, 3, 3	6.7	13
91	CNN-GCN Aggregation Enabled Boundary Regression for Biomedical Image Segmentation. *Lecture Notes in Computer Science*, **2020**, 352-362	0.9	13
90	Automated segmentation of the choroid in retinal 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*, **2013**, 2013, 5869-72	0.9	12
89	Piloting a Deep Learning Model for Predicting Nuclear BAP1 Immunohistochemical Expression of Uveal Melanoma from Hematoxylin-and-Eosin Sections. *Translational Vision Science and Technology*, **2020**, 9, 50	3.3	12
88	Uniqueness-Driven Saliency Analysis for Automated Lesion Detection with Applications to Retinal Diseases. *Lecture Notes in Computer Science*, **2018**, 109-118	0.9	12
87	Corneal nerve tortuosity grading via ordered weighted averaging-based feature extraction. *Medical Physics*, **2020**, 47, 4983-4996	4.4	11
86	Deformation velocity imaging using optical coherence tomography and its applications to the cornea. *Biomedical Optics Express*, **2017**, 8, 5579-5593	3.5	10

85	Scan-Less Line Field Optical Coherence Tomography, with Automatic Image Segmentation, as a Measurement Tool for Automotive Coatings. *Applied Sciences (Switzerland)*, **2017**, 7, 351	2.6	10
84	Obstacle Avoidance for Unmanned Undersea Vehicle in Unknown Unstructured Environment. *Mathematical Problems in Engineering*, **2013**, 2013, 1-12	1.1	10
83	Reduction of false positives in polyp detection using weighted support vector machines. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2007**, 2007, 4433-6		10
82	Regression of Instance Boundary by Aggregated CNN and GCN. *Lecture Notes in Computer Science*, **2020**, 190-207	0.9	10
81	Automatic Detection and Distinction of Retinal Vessel Bifurcations and Crossings in Colour Fundus Photography. *Journal of Imaging*, **2018**, 4, 4	3.1	9
80	Retinal Image Classification for the Screening of Age-Related Macular Degeneration **2011**, 325-338		9
79	A general model for multiphase texture segmentation and its applications to retinal image analysis. *Biomedical Signal Processing and Control*, **2013**, 8, 374-381	4.9	8
78	Volumetric image classification using homogeneous decomposition and dictionary learning: A study using retinal optical coherence tomography for detecting age-related macular degeneration. *Computerized Medical Imaging and Graphics*, **2017**, 55, 113-123	7.6	8
77	Standardization of choroidal thickness measurements using enhanced depth imaging optical coherence tomography. *International Journal of Ophthalmology*, **2015**, 8, 484-91	1.4	8
76	A Hierarchical Algorithm for Multiphase Texture Image Segmentation. *ISRN Signal Processing*, **2012**, 2012, 1-11		8
75	Cycle Structure and Illumination Constrained GAN for Medical Image Enhancement. *Lecture Notes in Computer Science*, **2020**, 667-677	0.9	8
74	Spatial Uncertainty-Aware Semi-Supervised Crowd Counting **2021**,		8
73	Retinal image classification using a histogram based approach **2010**,		7
72	Graph-based Region and Boundary Aggregation for Biomedical Image Segmentation. *IEEE Transactions on Medical Imaging*, **2021**, PP,	11.7	7
71	Improving Fetal Head Contour Detection by Object Localisation with Deep Learning. *Communications in Computer and Information Science*, **2020**, 142-150	0.3	7
70	Image Classification for Age-related Macular Degeneration Screening Using Hierarchical Image Decompositions and Graph Mining. *Lecture Notes in Computer Science*, **2011**, 65-80	0.9	7
69	**2019**,		7
68	Line-Field Optical Coherence Tomography as a tool for In vitro characterization of corneal biomechanics under physiological pressures. *Scientific Reports*, **2019**, 9, 6321	4.9	6

67	Pharmacokinetics of Meropenem for Use in Bacterial Keratitis **2015**, 56, 5731-8		6
66	Development and validation of a novel prognostic model for predicting AMD progression using longitudinal fundus images. *BMJ Open Ophthalmology*, **2020**, 5, e000569	3.2	6
65	A pipeline to evaluate inhibitors of the Pseudomonas aeruginosa exotoxin U. *Biochemical Journal*, **2021**, 478, 647-668	3.8	6
64	Identification of Feeder Vessels in Ocular Surface Neoplasia Using Indocyanine Green Angiography. *Current Eye Research*, **2018**, 43, 163-169	2.9	6
63	Sub-surface imaging of soiled cotton fabric using full-field optical coherence tomography. *Optics Express*, **2019**, 27, 13951-13964	3.3	5
62	Artificial intelligence utilising corneal confocal microscopy for the diagnosis of peripheral neuropathy in diabetes mellitus and prediabetes. *Diabetologia*, **2021**, 1	10.3	5
61	An effective variational model for simultaneous reconstruction and segmentation of blurred images. *Journal of Algorithms and Computational Technology*, **2016**, 10, 244-264	0.7	4
60	Automatic Feature Learning Method for Detection of Retinal Landmarks **2016**,		4
59	Retinal vascular topology estimation via dominant sets clustering **2018**,		4
58	Automated retinal lesion detection via image saliency analysis. *Medical Physics*, **2019**, 46, 4531-4544	4.4	4
57	Spatial statistical modelling of capillary non-perfusion in the retina. *Scientific Reports*, **2017**, 7, 16792	4.9	4
56	A Novel Choroid Segmentation Method for Retinal Diagnosis Using Deep Learning **2017**,		4
55	Classification of Retinal Vessels into Artery-Vein in OCT Angiography Guided by Fundus Images. *Lecture Notes in Computer Science*, **2020**, 117-127	0.9	4
54	Time Series Case Based Reasoning for Image Categorisation. *Lecture Notes in Computer Science*, **2011**, 423-436	0.9	4
53	Learning Unsupervised Parameter-Specific Affine Transformation for Medical Images Registration. *Lecture Notes in Computer Science*, **2021**, 24-34	0.9	4
52	Differentiating Generic versus Branded Pharmaceutical Tablets Using Ultra-High-Resolution Optical Coherence Tomography. *Coatings*, **2019**, 9, 326	2.9	3
51	Application of SPF moisturisers is inferior to sunscreens in coverage of facial and eyelid regions. *PLoS ONE*, **2019**, 14, e0212548	3.7	3
50	Fast Blur Detection and Parametric Deconvolution of Retinal Fundus Images. *Lecture Notes in Computer Science*, **2017**, 194-201	0.9	3

49	Measurement and computer modeling of temporary arrangements of polygonal actin structures in trabecular meshwork cells which consist of cross-linked actin networks and polygonal actin arrangements. *Journal of Ocular Pharmacology and Therapeutics*, **2014**, 30, 224-36	2.6	3
48	Simultaneous optical coherence tomography and Scheimpflug imaging using the same incident light. *Optics Express*, **2020**, 28, 39660-39676	3.3	3
47	Exploiting Reliability-Guided Aggregation for the Assessment of Curvilinear Structure Tortuosity. *Lecture Notes in Computer Science*, **2019**, 12-20	0.9	3
46	Image Classification Using Histograms and Time Series Analysis: A Study of Age-Related Macular Degeneration Screening in Retinal Image Data. *Lecture Notes in Computer Science*, **2010**, 197-209	0.9	3
45	3D Vessel Reconstruction In Oct-Angiography Via Depth Map Estimation **2021**,		3
44	Drusen and macular degeneration **2019**, 245-272		3
43	Detecting Change in Conjunctival Hyperemia Using a Pixel Densitometry Index. *Ocular Immunology and Inflammation*, **2019**, 27, 276-281	2.8	3
42	Classification of volumetric retinal images using overlapping decomposition and tree analysis **2013**,		2
41	Volumetric image mining based on decomposition and graph analysis: An application to retinal optical coherence tomography **2012**,		2
40	Hierarchical Detection of Hard Exudates in Color Retinal Images. *Journal of Software*, **2013**, 8,	3	2
39	Dictionary Learning-Based Volumetric Image Classification for the Diagnosis of Age-Related Macular Degeneration. *Lecture Notes in Computer Science*, **2014**, 272-284	0.9	2
38	Applications of optical coherence tomography in the non-contact assessment of automotive paints **2017**,		2
37	Imaging of vascular abnormalities in ocular surface disease. *Survey of Ophthalmology*, **2021**,	6.1	2
36	Keratoconus detection of changes using deep learning of colour-coded maps. *BMJ Open Ophthalmology*, **2021**, 6, e000824	3.2	2
35	Studying the pharmaceutical film coating process with terahertz sensing, optical coherence tomography and numerical modelling **2016**,		2
34	TransBridge: A Lightweight Transformer for Left Ventricle Segmentation in Echocardiography. *Lecture Notes in Computer Science*, **2021**, 63-72	0.9	2
33	Motif Based Feature Vectors: Towards a Homogeneous Data Representation for Cardiovascular Diseases Classification. *Lecture Notes in Computer Science*, **2021**, 235-241	0.9	2
32	A compactness based saliency approach for leakages detection in fluorescein angiogram. *International Journal of Machine Learning and Cybernetics*, **2017**, 8, 1971-1979	3.8	1

31	Quasi-tomography by free space line field spectral domain optical coherence reflectometry. *Measurement Science and Technology*, **2020**, 31, 065203	2	1
30	Improving the Resolution of Retinal OCT with Deep Learning. *Communications in Computer and Information Science*, **2018**, 325-332	0.3	1
29	Age-Related Macular Degeneration Screening Using Data Mining Approaches **2013**,		1
28	Simultaneous feature selection and classification based on genetic algorithms: an application to colonic polyp detection **2008**,		1
27	Learning from imbalanced data: a comparative study for colon CAD **2008**,		1
26	Supercontinuum ultra-high resolution line-field OCT; experimental spectrograph comparison and comparison with current clinical OCT systems by the imaging of a human cornea **2018**,		1
25	2D transform-domain Fourier filters for eliminating microsaccade noise in en face optical coherence tomography angiography **2019**,		1
24	Automatic Detection and Identification of Retinal Vessel Junctions in Colour Fundus Photography. *Communications in Computer and Information Science*, **2017**, 27-37	0.3	1
23	Cooperative Low-Rank Models for Removing Stripe Noise From OCTA Images. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 3480-3490	7.2	1
22	Predictive Association of Pre-Operative Defect Areas in the Outer Retinal Layers With Visual Acuity in Macular Hole Surgery. *Translational Vision Science and Technology*, **2021**, 10, 7	3.3	1
21	Topographical Response of Retinal Neovascularization to Aflibercept or Panretinal Photocoagulation in Proliferative Diabetic Retinopathy: Post Hoc Analysis of the CLARITY Randomized Clinical Trial. *JAMA Ophthalmology*, **2021**, 139, 501-507	3.9	1
20	Accuracy of a Machine-Learning Algorithm for Detecting and Classifying Choroidal Neovascularization on Spectral-Domain Optical Coherence Tomography. *Journal of Personalized Medicine*, **2021**, 11,	3.6	1
19	Intra-retinal layers segmentation of macular OCT images based on the graph optimal approach **2016**,		1
18	Automated Artery-Vein Classification in Fundus Color Images. *Communications in Computer and Information Science*, **2016**, 228-237	0.3	1
17	Cross-Domain Depth Estimation Network for 3D Vessel Reconstruction in OCT Angiography. *Lecture Notes in Computer Science*, **2021**, 13-23	0.9	1
16	Artificial intelligence to detect abnormal heart rhythm from scanned electrocardiogram tracings. *Journal of Arrhythmia*,	1.5	1
15	Corrections to Automated Tortuosity Analysis of Nerve Fibers in Corneal Confocal Microscopy *IEEE Transactions on Medical Imaging*, **2020**, 39, 3758-3758	11.7	0
14	Informed Consent In Facial Photograph Publishing: A Cross-sectional Pilot Study To Determine The Effectiveness Of Deidentification Methods.. *Journal of Empirical Research on Human Research Ethics* , **2022**, 15562646221075459	1.6	0

13	Machine learning-based predictions of dietary restriction associations across ageing-related genes.. *BMC Bioinformatics*, **2022**, 23, 10	3.6	0
12	A Novel Deep Learning Based OCTA De-striping Method. *Communications in Computer and Information Science*, **2020**, 189-197	0.3	0
11	AI-Based Method for Detecting Retinal Haemorrhage in Eyes with Malarial Retinopathy. *Communications in Computer and Information Science*, **2020**, 439-449	0.3	0
10	DAISY Descriptors Combined with Deep Learning to Diagnose Retinal Disease from High Resolution 2D OCT Images. *Communications in Computer and Information Science*, **2020**, 489-496	0.3	0
9	End-to-End Deep Learning Vector Autoregressive Prognostic Models to Predict Disease Progression with Uneven Time Intervals. *Lecture Notes in Computer Science*, **2021**, 517-531	0.9	0
8	Underwater Environment SDAP Method Using Multi Single-Beam Sonars. *Mathematical Problems in Engineering*, **2013**, 2013, 1-17	1.1	
7	Joint Destriping and Segmentation of OCTA Images. *Communications in Computer and Information Science*, **2020**, 423-435	0.3	
6	Spatial Modelling of Retinal Thickness in Images from Patients with Diabetic Macular Oedema. *Communications in Computer and Information Science*, **2020**, 114-126	0.3	
5	Dictionary Learning Informed Deep Neural Network with Application to OCT Images. *Lecture Notes in Computer Science*, **2019**, 1-8	0.9	
4	Deep Vectorization Convolutional Neural Networks for Denoising in Mammogram Using Enhanced Image. *Communications in Computer and Information Science*, **2020**, 220-227	0.3	
3	Automated Corneal Nerve Segmentation Using Weighted Local Phase Tensor. *Communications in Computer and Information Science*, **2020**, 459-469	0.3	
2	Spatial and spatio-temporal statistical analyses of retinal images: a review of methods and applications. *BMJ Open Ophthalmology*, **2020**, 5, e000479	3.2	
1	Guided Adversarial Adaptation Network for Retinal and Choroidal Layer Segmentation. *Lecture Notes in Computer Science*, **2021**, 82-91	0.9	