Michael D. AbrÃ moff

List of Publications by Year
in descending order

285 papers	19,926 citations	29994 54 h-index	19136 118 g-index
290 all docs	290 docs citations	290 times ranked	12189 citing authors

#	Article	IF	Citations
1	Ridge-Based Vessel Segmentation in Color Images of the Retina. IEEE Transactions on Medical Imaging, 2004, 23, 501-509.	5.4	2,914
2	Retinal Imaging and Image Analysis. IEEE Reviews in Biomedical Engineering, 2010, 3, 169-208.	13.1	1,021
3	Pivotal trial of an autonomous AI-based diagnostic system for detection of diabetic retinopathy in primary care offices. Npj Digital Medicine, 2018, 1, 39.	5.7	796
4	Improved Automated Detection of Diabetic Retinopathy on a Publicly Available Dataset Through Integration of Deep Learning. , 2016, 57, 5200.		749
5	Automated 3-D Intraretinal Layer Segmentation of Macular Spectral-Domain Optical Coherence Tomography Images. IEEE Transactions on Medical Imaging, 2009, 28, 1436-1447.	5.4	535
6	Comparative study of retinal vessel segmentation methods on a new publicly available database. , 2004, 5370, 648.		496
7	Retinal neurodegeneration may precede microvascular changes characteristic of diabetic retinopathy in diabetes mellitus. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2655-64.	3.3	442
8	Automatic detection of red lesions in digital color fundus photographs. IEEE Transactions on Medical Imaging, 2005, 24, 584-592.	5.4	422
9	Retinopathy Online Challenge: Automatic Detection of Microaneurysms in Digital Color Fundus Photographs. IEEE Transactions on Medical Imaging, 2010, 29, 185-195.	5.4	414
10	Automated Detection and Differentiation of Drusen, Exudates, and Cotton-Wool Spots in Digital Color Fundus Photographs for Diabetic Retinopathy Diagnosis. , 2007, 48, 2260.		328
11	Automated Analysis of Retinal Images for Detection of Referable Diabetic Retinopathy. JAMA Ophthalmology, 2013, 131, 351.	1.4	312
12	Selective Loss of Inner Retinal Layer Thickness in Type 1 Diabetic Patients with Minimal Diabetic Retinopathy. , 2009, 50, 3404.		304
13	Intraretinal Layer Segmentation of Macular Optical Coherence Tomography Images Using Optimal 3-D Graph Search. IEEE Transactions on Medical Imaging, 2008, 27, 1495-1505.	5.4	300
14	Deep learning in ophthalmology: The technical and clinical considerations. Progress in Retinal and Eye Research, 2019, 72, 100759.	7.3	300
15	Decreased Retinal Ganglion Cell Layer Thickness in Patients with Type 1 Diabetes. , 2010, 51, 3660.		294
16	End-to-End Adversarial Retinal Image Synthesis. IEEE Transactions on Medical Imaging, 2018, 37, 781-791.	5.4	277
17	Automated Segmentation of the Optic Disc from Stereo Color Photographs Using Physiologically Plausible Features. , 2007, 48, 1665.		275
18	Early Neurodegeneration in the Retina of Type 2 Diabetic Patients. , 2012, 53, 2715.		273

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19	Evaluation of a System for Automatic Detection of Diabetic Retinopathy From Color Fundus Photographs in a Large Population of Patients With Diabetes. Diabetes Care, 2008, 31, 193-198.	4.3	243
20	Automated Early Detection of Diabetic Retinopathy. Ophthalmology, 2010, 117, 1147-1154.	2.5	221
21	Multiscale AM-FM Methods for Diabetic Retinopathy Lesion Detection. IEEE Transactions on Medical Imaging, 2010, 29, 502-512.	5.4	220
22	Validation of automated screening for referable diabetic retinopathy with the IDxâ€DR device in the Hoorn Diabetes Care System. Acta Ophthalmologica, 2018, 96, 63-68.	0.6	195
23	Segmentation of the Optic Disc, Macula and Vascular Arch in Fundus Photographs. IEEE Transactions on Medical Imaging, 2007, 26, 116-127.	5.4	192
24	Fast detection of the optic disc and fovea in color fundus photographs. Medical Image Analysis, 2009, 13, 859-870.	7.0	188
25	Three-Dimensional Analysis of Retinal Layer Texture: Identification of Fluid-Filled Regions in SD-OCT of the Macula. IEEE Transactions on Medical Imaging, 2010, 29, 1321-1330.	5.4	186
26	Artificial intelligence for diabetic retinopathy screening: a review. Eye, 2020, 34, 451-460.	1.1	183
27	Three-Dimensional Segmentation of Fluid-Associated Abnormalities in Retinal OCT: Probability Constrained Graph-Search-Graph-Cut. IEEE Transactions on Medical Imaging, 2012, 31, 1521-1531.	5.4	169
28	Identifying Ethical Considerations for Machine Learning Healthcare Applications. American Journal of Bioethics, 2020, 20, 7-17.	0.5	160
29	Effect of Age on Individual Retinal Layer Thickness in Normal Eyes as Measured With Spectral-Domain Optical Coherence Tomography. , 2013, 54, 4934.		157
30	Automated Measurement of the Arteriolar-to-Venular Width Ratio in Digital Color Fundus Photographs. IEEE Transactions on Medical Imaging, 2011, 30, 1941-1950.	5.4	153
31	Splat Feature Classification With Application to Retinal Hemorrhage Detection in Fundus Images. IEEE Transactions on Medical Imaging, 2013, 32, 364-375.	5.4	147
32	Segmentation of the Optic Disc in 3-D OCT Scans of the Optic Nerve Head. IEEE Transactions on Medical Imaging, 2010, 29, 159-168.	5.4	144
33	Validating Retinal Fundus Image Analysis Algorithms: Issues and a Proposal. , 2013, 54, 3546.		142
34	Intra-retinal layer segmentation of 3D optical coherence tomography using coarse grained diffusion map. Medical Image Analysis, 2013, 17, 907-928.	7.0	140
35	Diabetic retinopathy is a neurodegenerative disorder. Vision Research, 2017, 139, 101-107.	0.7	139
36	Progress on retinal image analysis for age related macular degeneration. Progress in Retinal and Eye Research, 2014, 38, 20-42.	7.3	132

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37	Image structure clustering for image quality verification of color retina images in diabetic retinopathy screening. Medical Image Analysis, 2006, 10, 888-898.	7.0	128
38	Automated Segmentation of the Choroid from Clinical SD-OCT. , 2012, 53, 7510.		128
39	Web-Based Screening for Diabetic Retinopathy in a Primary Care Population: The EyeCheck Project. Telemedicine Journal and E-Health, 2005, 11, 668-674.	1.6	110
40	Association of visual function and ganglion cell layer thickness in patients with diabetes mellitus type 1 and no or minimal diabetic retinopathy. Vision Research, 2011, 51, 224-228.	0.7	110
41	Information Fusion for Diabetic Retinopathy CAD in Digital Color Fundus Photographs. IEEE Transactions on Medical Imaging, 2009, 28, 775-785.	5.4	105
42	On Combining Computer-Aided Detection Systems. IEEE Transactions on Medical Imaging, 2011, 30, 215-223.	5.4	103
43	A data-driven approach to referable diabetic retinopathy detection. Artificial Intelligence in Medicine, 2019, 96, 93-106.	3.8	103
44	Evaluation of a Computer-Aided Diagnosis System for Diabetic Retinopathy Screening on Public Data. , 2011, 52, 4866.		101
45	Telehealth Practice Recommendations for Diabetic Retinopathy, Second Edition. Telemedicine Journal and E-Health, 2011, 17, 814-837.	1.6	99
46	Optimal Filter Framework for Automated, Instantaneous Detection of Lesions in Retinal Images. IEEE Transactions on Medical Imaging, 2011, 30, 523-533.	5.4	97
47	Multiple surface segmentation using convolution neural nets: application to retinal layer segmentation in OCT images. Biomedical Optics Express, 2018, 9, 4509.	1.5	95
48	Vessel Boundary Delineation on Fundus Images Using Graph-Based Approach. IEEE Transactions on Medical Imaging, 2011, 30, 1184-1191.	5.4	93
49	Visual Stimulusâ€“Induced Changes in Human Near-Infrared Fundus Reflectance. , 2006, 47, 715.		86
50	Current Challenges and Barriers to Real-World Artificial Intelligence Adoption for the Healthcare System, Provider, and the Patient. Translational Vision Science and Technology, 2020, 9, 45.	1.1	85
51	Automated Segmentation of the Cup and Rim from Spectral Domain OCT of the Optic Nerve Head. , 2009, 50, 5778.		82
52	Automated Segmentation of Neural Canal Opening and Optic Cup in 3D Spectral Optical Coherence Tomography Volumes of the Optic Nerve Head. , 2010, 51, 5708.		79
53	A multiple-instance learning framework for diabetic retinopathy screening. Medical Image Analysis, 2012, 16, 1228-1240.	7.0	77
54	Structural and Biochemical Analyses of Choroidal Thickness in Human Donor Eyes. , 2014, 55, 1352.		77

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55	Stratified Sampling Voxel Classification for Segmentation of Intraretinal and Subretinal Fluid in Longitudinal Clinical OCT Data. IEEE Transactions on Medical Imaging, 2015, 34, 1616-1623.	5.4	77
56	Diagnostic Accuracy of a Device for the Automated Detection of Diabetic Retinopathy in a Primary Care Setting. Diabetes Care, 2019, 42, 651-656.	4.3	77
57	The Iowa Ophthalmology Wet Laboratory Curriculum for Teaching and Assessing Cataract Surgical Competency. Ophthalmology, 2007, 114, e21-e26.	2.5	76
58	A quality assessment tool for artificial intelligence-centered diagnostic test accuracy studies: QUADAS-AI. Nature Medicine, 2021, 27, 1663-1665.	15.2	76
59	Validity of Automated Choroidal Segmentation in SS-OCT and SD-OCT. , 2015, 56, 3202.		74
60	An improved arteriovenous classification method for the early diagnostics of various diseases in retinal image. Computer Methods and Programs in Biomedicine, 2017, 141, 3-9.	2.6	73
61	Lessons Learned About Autonomous AI: Finding a Safe, Efficacious, and Ethical Path Through the Development Process. American Journal of Ophthalmology, 2020, 214, 134-142.	1.7	72
62	Adoption and Perceptions of Electronic Health Record Systems by Ophthalmologists: An American Academy of Ophthalmology Survey. Ophthalmology, 2008, 115, 1591-1597.e5.	2.5	71
63	Three-Dimensional Automated Choroidal Volume Assessment on Standard Spectral-Domain Optical Coherence Tomography and Correlation With the Level ofÂDiabetic Macular Edema. American Journal of Ophthalmology, 2014, 158, 1039-1048.e1.	1.7	70
64	Re-engineering the Resident Applicant Selection Process in Ophthalmology: A Literature Review and Recommendations for Improvement. Survey of Ophthalmology, 2008, 53, 164-176.	1.7	68
65	Automated 3-D method for the correction of axial artifacts in spectral-domain optical coherence tomography images. Biomedical Optics Express, 2011, 2, 2403.	1.5	67
66	Automated Method for Identification and Artery-Venous Classification of Vessel Trees in Retinal Vessel Networks. PLoS ONE, 2014, 9, e88061.	1.1	66
67	Human Photoreceptor Outer Segments Shorten During Light Adaptation. , 2013, 54, 3721.		63
68	Results of Automated Retinal Image Analysis for Detection of Diabetic Retinopathy from the Nakuru Study, Kenya. PLoS ONE, 2015, 10, e0139148.	1.1	63
69	Multimodal Segmentation of Optic Disc and Cup From SD-OCT and Color Fundus Photographs Using a Machine-Learning Graph-Based Approach. IEEE Transactions on Medical Imaging, 2015, 34, 1854-1866.	5.4	62
70	Approach for a Clinically Useful Comprehensive Classification of Vascular and Neural Aspects of Diabetic Retinal Disease. , 2018, 59, 519.		62
71	Computation and visualization of three-dimensional soft tissue motion in the orbit. IEEE Transactions on Medical Imaging, 2002, 21, 296-304.	5.4	61
72	Automated detection of diabetic retinopathy: barriers to translation into clinical practice. Expert Review of Medical Devices, 2010, 7, 287-296.	1.4	60

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73	Evaluation of a System for Automatic Detection of Diabetic Retinopathy From Color Fundus Photographs in a Large Population of Patients With Diabetes. Diabetes Care, 2008, 31, e64-e64.	4.3	57
74	Three-dimensional Distribution of the Vitelliform Lesion, Photoreceptors, and Retinal Pigment Epithelium in the Macula of Patients With Best Vitelliform Macular Dystrophy. JAMA Ophthalmology, 2012, 130, 357.	2.6	54
75	Automated Separation of Binary Overlapping Trees in Low-Contrast Color Retinal Images. Lecture Notes in Computer Science, 2013, 16, 436-443.	1.0	53
76	Cost-effectiveness of Autonomous Point-of-Care Diabetic Retinopathy Screening for Pediatric Patients With Diabetes. JAMA Ophthalmology, 2020, 138, 1063.	1.4	50
77	The automatic detection of the optic disc location in retinal images using optic disc location regression. , 2006, 2006, 4432-5.		49
78	Updating the Staging System for Diabetic Retinal Disease. Ophthalmology, 2021, 128, 490-493.	2.5	49
79	Choriocapillaris Degeneration in Geographic Atrophy. American Journal of Pathology, 2019, 189, 1473-1480.	1.9	48
80	Teaching and Assessing Professionalism in Ophthalmology Residency Training Programs. Survey of Ophthalmology, 2007, 52, 300-314.	1.7	47
81	INTRAVITREAL BEVACIZUMAB FOR TREATMENT OF PROLIFERATIVE AND NONPROLIFERATIVE TYPE 2 IDIOPATHIC MACULAR TELANGIECTASIA. Retina, 2011, 31, 1848-1855.	1.0	47
82	Practice Guidelines for Ocular Telehealth-Diabetic Retinopathy, Third Edition. Telemedicine Journal and E-Health, 2020, 26, 495-543.	1.6	47
83	Vessel segmentation in 3D spectral OCT scans of the retina. , 2008, , .		46
84	Automatic classification of retinal vessels into arteries and veins. Proceedings of SPIE, 2009, , .	0.8	46
85	A combined machine-learning and graph-based framework for the segmentation of retinal surfaces in SD-OCT volumes. Biomedical Optics Express, 2013, 4, 2712.	1.5	46
86	Quantitative analysis of retinal OCT. Medical Image Analysis, 2016, 33, 165-169.	7.0	45
87	Choroidal Features of Acute Macular Neuroretinopathy via Optical Coherence Tomography Angiography and Correlation With Serial Multimodal Imaging. JAMA Ophthalmology, 2017, 135, 1177.	1.4	45
88	Multimodal Retinal Vessel Segmentation From Spectral-Domain Optical Coherence Tomography and Fundus Photography. IEEE Transactions on Medical Imaging, 2012, 31, 1900-1911.	5.4	43
89	Relationships of Retinal Structure and Humphrey 24-2 Visual Field Thresholds in Patients With Glaucoma. Investigative Ophthalmology and Visual Science, 2015, 56, 259-271.	3.3	43
90	Foundational Considerations for Artificial Intelligence Using Ophthalmic Images. Ophthalmology, 2022, 129, e14-e32.	2.5	43

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91	Quantification of External Limiting Membrane Disruption Caused by Diabetic Macular Edema from SD-OCT. , 2012, 53, 8042.		42
92	Contextual computer-aided detection: Improving bright lesion detection in retinal images and coronary calcification identification in CT scans. Medical Image Analysis, 2012, 16, 50-62.	7.0	41
93	Rectus extraocular muscle paths and decompression surgery for Graves orbitopathy: mechanism of motility disturbances. Investigative Ophthalmology and Visual Science, 2002, 43, 300-7.	3.3	41
94	Utility of meibography in the evaluation of meibomian glands morphology in normal and diseased eyelids. Saudi Journal of Ophthalmology, 2011, 25, 61-66.	0.3	39
95	Vision-based, real-time retinal image quality assessment. , 2009, , .		37
96	Effects of Vitrectomy on Age-Related Macular Degeneration. Ophthalmology, 2010, 117, 1381-1386.	2.5	35
97	Automated construction of arterial and venous trees in retinal images. Journal of Medical Imaging, 2015, 2, 044001.	0.8	35
98	Robust Multiscale Stereo Matching from Fundus Images with Radiometric Differences. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2011, 33, 2245-2258.	9.7	34
99	Choroidal thickness maps from spectral domain and swept source optical coherence tomography: algorithmic versus ground truth annotation. British Journal of Ophthalmology, 2016, 100, 1372-1376.	2.1	34
100	Optical Coherence Tomography Analysis Based Prediction of Humphrey 24-2 Visual Field Thresholds in Patients With Glaucoma. , 2017, 58, 3975.		34
101	Curvature correction of retinal OCTs using graph-based geometry detection. Physics in Medicine and Biology, 2013, 58, 2925-2938.	1.6	33
102	Population-Based Evaluation of Retinal Nerve Fiber Layer, Retinal Ganglion Cell Layer, and Inner Plexiform Layer as a Diagnostic Tool For Glaucoma. Investigative Ophthalmology and Visual Science, 2014, 55, 8428-8438.	3.3	33
103	Comparison of Retinal and Choriocapillaris Thicknesses Following Sitting to Supine Transition in Healthy Individuals and Patients With Age-Related Macular Degeneration. JAMA Ophthalmology, 2015, 133, 297.	1.4	33
104	Incorporation of Regional Information in Optimal 3-D Graph Search with Application for Intraretinal Layer Segmentation of Optical Coherence Tomography Images. Lecture Notes in Computer Science, 2007, 20, 607-618.	1.0	33
105	A reimbursement framework for artificial intelligence in healthcare. Npj Digital Medicine, 2022, 5, .	5.7	33
106	Stimulus-Evoked Intrinsic Optical Signals in the Retina: Spatial and Temporal Characteristics. , 2009, 50, 4865.		32
107	BILATERAL INTRAVITREAL INJECTION OF ANTIVASCULAR ENDOTHELIAL GROWTH FACTOR THERAPY. Retina, 2011, 31, 31-35.	1.0	30
108	Automated Axon Counting in Rodent Optic Nerve Sections with AxonJ. Scientific Reports, 2016, 6, 26559.	1.6	30

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109	Spatial Correspondence Between Intraretinal Fluid, Subretinal Fluid, and Pigment Epithelial Detachment in Neovascular Age-Related Macular Degeneration. , 2017, 58, 4039.		30
110	Objective quantification of the motion of soft tissues in the orbit. IEEE Transactions on Medical Imaging, 2000, 19, 986-995.	5.4	29
111	Registration of 3D spectral OCT volumes using 3D SIFT feature point matching. Proceedings of SPIE, 2009, , .	0.8	29
112	Multi-Surface and Multi-Field Co-Segmentation of 3-D Retinal Optical Coherence Tomography. IEEE Transactions on Medical Imaging, 2014, 33, 2242-2253.	5.4	29
113	Retinal arterial but not venous tortuosity correlates with facioscapulohumeral muscular dystrophy severity. Journal of AAPOS, 2010, 14, 240-243.	0.2	28
114	A machine-learning graph-based approach for 3D segmentation of Bruchâ€™s membrane opening from glaucomatous SD-OCT volumes. Medical Image Analysis, 2017, 39, 206-217.	7.0	28
115	A Delphi consensus statement for digital surgery. Npj Digital Medicine, 2022, 5, .	5.7	28
116	INTRAOPERATIVE CHOROIDAL DETACHMENT DURING 23-GAUGE VITRECTOMY. Retina, 2011, 31, 893-901.	1.0	27
117	Reproducibility of Diabetic Macular Edema Estimates From SD-OCT Is Affected by the Choice of Image Analysis Algorithm. , 2013, 54, 4184.		27
118	The SEE Study: Safety, Efficacy, and Equity of Implementing Autonomous Artificial Intelligence for Diagnosing Diabetic Retinopathy in Youth. Diabetes Care, 2021, 44, 781-787.	4.3	27
119	Automated segmentation of intraretinal layers from macular optical coherence tomography images. , 2007, 6512, 385.		26
120	Optical Coherence Tomography Noise Reduction Using Anisotropic Local Bivariate Gaussian Mixture Prior in 3D Complex Wavelet Domain. International Journal of Biomedical Imaging, 2013, 2013, 1-23.	3.0	26
121	Quantifying Disrupted Outer Retinal-Subretinal Layer in SD-OCT Images in Choroidal Neovascularization. , 2014, 55, 2329.		26
122	Thickness Mapping of Eleven Retinal Layers Segmented Using the Diffusion Maps Method in Normal Eyes. Journal of Ophthalmology, 2015, 2015, 1-14.	0.6	26
123	RetFM-J, an ImageJ-based module for automated counting andÂquantifying features of nuclei in retinal whole-mounts. Experimental Eye Research, 2016, 146, 386-392.	1.2	24
124	Effects of Aflibercept for Neovascular Age-Related Macular Degeneration: A Systematic Review and Meta-Analysis of Observational Comparative Studies. , 2017, 58, 5616-5627.		24
125	Multi-scale AM-FM for lesion phenotyping on age-related macular degeneration. , 2009, , .		23
126	Splat feature classification: Detection of the presence of large retinal hemorrhages. , 2011, , .		23

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127	Distribution of Damage to the Entire Retinal Ganglion Cell Pathway. JAMA Ophthalmology, 2012, 130, 1118.	2.6	23
128	Quantitative measurement of retinal ganglion cell populations via histology-based random forest classification. Experimental Eye Research, 2016, 146, 370-385.	1.2	23
129	Artificial Intelligence for Retinopathy of Prematurity. Ophthalmology, 2022, 129, e69-e76.	2.5	23
130	Objective and expert-independent validation of retinal image registration algorithms by a projective imaging distortion model. Medical Image Analysis, 2010, 14, 539-549.	7.0	22
131	Reproducibility of SD-OCTâ€"Based Ganglion Cellâ€"Layer Thickness in Glaucoma Using Two Different Segmentation Algorithms. , 2013, 54, 6998.		22
132	The Eye as a Window to the Brain: Neuroretinal Thickness Is Associated With Microstructural White Matter Injury in HIV-Infected Children. , 2016, 57, 3864.		22
133	Reporting Guidelines for Artificial Intelligence in Medical Research. Ophthalmology, 2020, 127, 1596-1599.	2.5	22
134	Segmentation of the Surfaces of the Retinal Layer from OCT Images. Lecture Notes in Computer Science, 2006, 9, 800-807.	1.0	22
135	Stimulus-Evoked Intrinsic Optical Signals in the Retina: Pharmacologic Dissection Reveals Outer Retinal Origins. , 2009, 50, 4873.		21
136	Variance Owing to Observer, Repeat Imaging, and Fundus Camera Type on Cup-to-disc Ratio Estimates by Stereo Planimetry. Journal of Glaucoma, 2009, 18, 305-310.	0.8	21
137	Automated Detection of Malarial Retinopathy-Associated Retinal Hemorrhages. , 2012, 53, 6582.		21
138	Multimodal registration of SD-OCT volumes and fundus photographs using histograms of oriented gradients. Biomedical Optics Express, 2016, 7, 5252.	1.5	21
139	Susceptibility to misdiagnosis of adversarial images by deep learning based retinal image analysis algorithms. , 2018, , .		21
140	Racial/Ethnic Disparities and Barriers to Diabetic Retinopathy Screening in Youths. JAMA Ophthalmology, 2021, 139, 791.	1.4	21
141	Automated 3D segmentation of intraretinal layers from optic nerve head optical coherence tomography images. Proceedings of SPIE, 2010, , .	0.8	20
142	Improving hard exudate detection in retinal images through a combination of local and contextual information. , 2010, , .		20
143	2-D Pattern of Nerve Fiber Bundles in Glaucoma Emerging from Spectral-Domain Optical Coherence Tomography. , 2012, 53, 483.		20
144	Use of a Supplemental Oxygen Protocol to Suppress Progression of Retinopathy of Prematurity. , 2017, 58, 887.		20

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145	Teaching and Assessing Systems-based Competency in Ophthalmology Residency Training Programs. Survey of Ophthalmology, 2007, 52, 680-689.	1.7	19
146	Using a patient image archive to diagnose retinopathy. , 2008, 2008, 5441-4.		19
147	Optimal segmentation of the optic nerve head from stereo retinal images. , 2006, , .		19
148	Automated segmentation of the optic disc margin in 3-D optical coherence tomography images using a graph-theoretic approach. Proceedings of SPIE, 2009, , .	0.8	18
149	Noninvasive functional imaging of the retina reveals outer retinal and hemodynamic intrinsic optical signal origins. Japanese Journal of Ophthalmology, 2009, 53, 334-344.	0.9	18
150	Quantitative Evaluation of Papilledema from Stereoscopic Color Fundus Photographs. , 2012, 53, 4490.		18
151	Optical density filters modeling media opacities cause decreased SDâ€OCT retinal layer thickness measurements with interâ€and intraâ€individual variation. Acta Ophthalmologica, 2015, 93, 355-361.	0.6	18
152	Use of Expectation Disconfirmation Theory to Test Patient Satisfaction with Asynchronous Telemedicine for Diabetic Retinopathy Detection. International Journal of Telemedicine and Applications, 2018, 2018, 1-14.	1.1	18
153	Automated Segmentation of 3-D Spectral OCT Retinal Blood Vessels by Neural Canal Opening False Positive Suppression. Lecture Notes in Computer Science, 2010, 13, 33-40.	1.0	18
154	DYSFUNCTIONAL AUTONOMIC REGULATION OF THE CHOROID IN CENTRAL SEROUS CHORIORETINOPATHY. Retina, 2018, 38, 1205-1210.	1.0	17
155	Automated and Computer-Assisted Detection, Classification, and Diagnosis of Diabetic Retinopathy. Telemedicine Journal and E-Health, 2020, 26, 544-550.	1.6	17
156	VALIDATION OF TABLET-BASED EVALUATION OF COLOR FUNDUS IMAGES. Retina, 2012, 32, 1629-1635.	1.0	16
157	Incorporation of gradient vector flow field in a multimodal graph-theoretic approach for segmenting the internal limiting membrane from glaucomatous optic nerve head-centered SD-OCT volumes. Computerized Medical Imaging and Graphics, 2017, 55, 87-94.	3.5	16
158	Automated 3D Segmentation of Multiple Surfaces with a Shared Hole: Segmentation of the Neural Canal Opening in SD-OCT Volumes. Lecture Notes in Computer Science, 2014, 17, 739-746.	1.0	16
159	Weakly supervised classification of medical images. , 2012, , .		15
160	Automated 3D Segmentation of Intraretinal Surfaces in SD-OCT Volumes in Normal and Diabetic Mice. Translational Vision Science and Technology, 2014, 3, 8.	1.1	15
161	HIV-Associated Neuroretinal Disorder in Patients With Well-Suppressed HIV-Infection: A Comparative Cohort Study. , 2016, 57, 1388.		15
162	Automated Segmentability Index for Layer Segmentation of Macular SD-OCT Images. Translational Vision Science and Technology, 2016, 5, 14.	1.1	15

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163	The spatial relation of diabetic retinal neurodegeneration with diabetic retinopathy. PLoS ONE, 2020, 15, e0231552.	1.1	15
164	Use of Varying Constraints in Optimal 3-D Graph Search for Segmentation of Macular Optical Coherence Tomography Images. , 2007, 10, 244-251.		15
165	Segmentation of the optic nerve head combining pixel classification and graph search. , 2007, , .		14
166	3-D segmentation of retinal blood vessels in spectral-domain OCT volumes of the optic nerve head. Proceedings of SPIE, 2010, , .	0.8	14
167	Computational Quantification of Complex Fundus Phenotypes in Age-Related Macular Degeneration and Stargardt Disease. , 2011, 52, 2976.		14
168	Urinary Î²2-microglobulin and disease activity in patients with tubulointerstitial nephritis and uveitis syndrome. Journal of Ophthalmic Inflammation and Infection, 2018, 8, 24.	1.2	14
169	Autonomous Artificial Intelligence in Diabetic Retinopathy: From Algorithm to Clinical Application. Journal of Diabetes Science and Technology, 2021, 15, 695-698.	1.3	14
170	Automated measurement of retinal blood vessel tortuosity. Proceedings of SPIE, 2010, , .	0.8	13
171	Identification and reconnection of interrupted vessels in retinal vessel segmentation. , 2011, , .		13
172	Tools for Responding to Patient-Initiated Verbal Sexual Harassment: A Workshop for Trainees and Faculty. MedEdPORTAL: the Journal of Teaching and Learning Resources, 2021, 17, 11096.	0.5	13
173	Simultaneous Multiple Surface Segmentation Using Deep Learning. Lecture Notes in Computer Science, 2017, , 3-11.	1.0	13
174	Potential reduction in healthcare carbon footprint by autonomous artificial intelligence. Npj Digital Medicine, 2022, 5, 62.	5.7	13
175	Validation of Retinal Image Registration Algorithms by a Projective Imaging Distortion Model. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6472-5.	0.5	12
176	3-D segmentation of the rim and cup in spectral-domain optical coherence tomography volumes of the optic nerve head. Proceedings of SPIE, 2009, , .	0.8	12
177	Automated method for the identification and analysis of vascular tree structures in retinal vessel network. Proceedings of SPIE, 2011, , .	0.8	12
178	Independent component analysis using prior information for signal detection in a functional imaging system of the retina. Medical Image Analysis, 2011, 15, 35-44.	7.0	12
179	Adjustment of the Retinal Angle in SD-OCT of Glaucomatous Eyes Provides Better Intervisit Reproducibility of Peripapillary RNFL Thickness. , 2013, 54, 4808.		12
180	Novel method using 3-dimensional segmentation in spectral domain-optical coherence tomography imaging in the chick reveals defocus-induced regional and time-sensitive asymmetries in the choroidal thickness. Visual Neuroscience, 2016, 33, E010.	0.5	12

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181	Intravitreal Fluocinolone Acetonide May Decelerate Diabetic Retinal Neurodegeneration. , 2019, 60, 2134.		12
182	Active Learning for an Efficient Training Strategy of Computer-Aided Diagnosis Systems: Application to Diabetic Retinopathy Screening. Lecture Notes in Computer Science, 2010, 13, 603-610.	1.0	12
183	Spatiotemporal Independent Component Analysis for the Detection of Functional Responses in Cat Retinal Images. IEEE Transactions on Medical Imaging, 2007, 26, 1035-1045.	5.4	11
184	Optimal surface segmentation with convex priors in irregularly sampled space. Medical Image Analysis, 2019, 54, 63-75.	7.0	11
185	Feature-based pairwise retinal image registration by radial distortion correction. , 2007, , .		10
186	Retinal vessel width measurements based on a graph-theoretic method. , 2011, , .		10
187	Automated artery-venous classification of retinal blood vessels based on structural mapping method. Proceedings of SPIE, 2012, , .	0.8	10
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