Gadi Wollstein

List of Publications by Citations

93 papers	**2,876** citations	**28** h-index	**52** g-index
100 ext. papers	**3,444** ext. citations	**5.4** avg, IF	**4.96** L-index

#	Paper	IF	Citations
93	Optical coherence tomography longitudinal evaluation of retinal nerve fiber layer thickness in glaucoma. *JAMA Ophthalmology*, **2005**, 123, 464-70		277
92	OCT for glaucoma diagnosis, screening and detection of glaucoma progression. *British Journal of Ophthalmology*, **2014**, 98 Suppl 2, ii15-9	5.5	222
91	Comparison of three optical coherence tomography scanning areas for detection of glaucomatous damage. *American Journal of Ophthalmology*, **2005**, 139, 39-43	4.9	201
90	Optical coherence tomography (OCT) macular and peripapillary retinal nerve fiber layer measurements and automated visual fields. *American Journal of Ophthalmology*, **2004**, 138, 218-25	4.9	167
89	Genome-wide association analysis identifies TXNRD2, ATXN2 and FOXC1 as susceptibility loci for primary open-angle glaucoma. *Nature Genetics*, **2016**, 48, 189-94	36.3	159
88	Effects of age on optical coherence tomography measurements of healthy retinal nerve fiber layer, macula, and optic nerve head. *Ophthalmology*, **2009**, 116, 1119-24	7.3	152
87	Retinal nerve fibre layer and visual function loss in glaucoma: the tipping point. *British Journal of Ophthalmology*, **2012**, 96, 47-52	5.5	116
86	A feature agnostic approach for glaucoma detection in OCT volumes. *PLoS ONE*, **2019**, 14, e0219126	3.7	75
85	Association of CAV1/CAV2 genomic variants with primary open-angle glaucoma overall and by gender and pattern of visual field loss. *Ophthalmology*, **2014**, 121, 508-16	7.3	73
84	In vivo lamina cribrosa micro-architecture in healthy and glaucomatous eyes as assessed by optical coherence tomography **2013**, 54, 8270-4		72
83	Effect of corneal drying on optical coherence tomography. *Ophthalmology*, **2006**, 113, 985-991	7.3	71
82	Ultrahigh-resolution optical coherence tomography in glaucoma. *Ophthalmology*, **2005**, 112, 229-37	7.3	69
81	Polarization microscopy for characterizing fiber orientation of ocular tissues. *Biomedical Optics Express*, **2015**, 6, 4705-18	3.5	59
80	Macular assessment using optical coherence tomography for glaucoma diagnosis. *British Journal of Ophthalmology*, **2012**, 96, 1452-5	5.5	57
79	Retinal Structures and Visual Cortex Activity are Impaired Prior to Clinical Vision Loss in Glaucoma. *Scientific Reports*, **2016**, 6, 31464	4.9	55
78	Clinical Utility of Optical Coherence Tomography in Glaucoma **2016**, 57, OCT556-67		52
77	Retinal optical coherence tomography image enhancement via deep learning. *Biomedical Optics Express*, **2018**, 9, 6205-6221	3.5	50

76	In vivo three-dimensional characterization of the healthy human lamina cribrosa with adaptive optics spectral-domain optical coherence tomography **2014**, 55, 6459-66		46
75	Cholinergic nervous system and glaucoma: From basic science to clinical applications. *Progress in Retinal and Eye Research*, **2019**, 72, 100767	20.5	45
74	Automated lamina cribrosa microstructural segmentation in optical coherence tomography scans of healthy and glaucomatous eyes. *Biomedical Optics Express*, **2013**, 4, 2596-608	3.5	45
73	Imaging of the lamina cribrosa in glaucoma: perspectives of pathogenesis and clinical applications. *Current Eye Research*, **2013**, 38, 903-9	2.9	45
72	Can Macula and Optic Nerve Head Parameters Detect Glaucoma Progression in Eyes with Advanced Circumpapillary Retinal Nerve Fiber Layer Damage?. *Ophthalmology*, **2018**, 125, 1907-1912	7.3	35
71	Repeatability of in vivo 3D lamina cribrosa microarchitecture using adaptive optics spectral domain optical coherence tomography. *Biomedical Optics Express*, **2014**, 5, 1114-23	3.5	35
70	Adaptive optics optical coherence tomography in glaucoma. *Progress in Retinal and Eye Research*, **2017**, 57, 76-88	20.5	34
69	A Common Variant in MIR182 Is Associated With Primary Open-Angle Glaucoma in the NEIGHBORHOOD Consortium **2016**, 57, 4528-4535		31
68	New developments in optical coherence tomography. *Current Opinion in Ophthalmology*, **2015**, 26, 110-5	5.1	30
67	In-vivo effects of intraocular and intracranial pressures on the lamina cribrosa microstructure. *PLoS ONE*, **2017**, 12, e0188302	3.7	30
66	Assessing the Association of Mitochondrial Genetic Variation With Primary Open-Angle Glaucoma Using Gene-Set Analyses **2016**, 57, 5046-5052		29
65	Non-invasive MRI Assessments of Tissue Microstructures and Macromolecules in the Eye upon Biomechanical or Biochemical Modulation. *Scientific Reports*, **2016**, 6, 32080	4.9	27
64	Imaging of the optic nerve and retinal nerve fiber layer: an essential part of glaucoma diagnosis and monitoring. *Survey of Ophthalmology*, **2014**, 59, 458-67	6.1	27
63	Formalin Fixation and Cryosectioning Cause Only Minimal Changes in Shape or Size of Ocular Tissues. *Scientific Reports*, **2017**, 7, 12065	4.9	26
62	In vivo assessment of aqueous humor dynamics upon chronic ocular hypertension and hypotensive drug treatment using gadolinium-enhanced MRI **2014**, 55, 3747-57		25
61	In Vivo Evaluation of White Matter Integrity and Anterograde Transport in Visual System After Excitotoxic Retinal Injury With Multimodal MRI and OCT **2015**, 56, 3788-800		24
60	Characterisation of Schlemms canal cross-sectional area. *British Journal of Ophthalmology*, **2014**, 98 Suppl 2, ii10-4	5.5	24
59	DNA copy number variants of known glaucoma genes in relation to primary open-angle glaucoma. *Investigative Ophthalmology and Visual Science*, **2014**, 55, 8251-8		24

58	Gold nanorods as a contrast agent for Doppler optical coherence tomography. *PLoS ONE*, **2014**, 9, e90690	3.7	22
57	Reproducibility of in-vivo OCT measured three-dimensional human lamina cribrosa microarchitecture. *PLoS ONE*, **2014**, 9, e95526	3.7	20
56	Age-related Changes in Eye, Brain and Visuomotor Behavior in the DBA/2J Mouse Model of Chronic Glaucoma. *Scientific Reports*, **2018**, 8, 4643	4.9	17
55	Glaucoma Structural and Functional Progression in American and Korean Cohorts. *Ophthalmology*, **2016**, 123, 783-8	7.3	16
54	Widespread brain reorganization perturbs visuomotor coordination in early glaucoma. *Scientific Reports*, **2019**, 9, 14168	4.9	15
53	Association of a Primary Open-Angle Glaucoma Genetic Risk Score With Earlier Age at Diagnosis. *JAMA Ophthalmology*, **2019**, 137, 1190-1194	3.9	15
52	Cardiac-Gated En Face Doppler Measurement of Retinal Blood Flow Using Swept-Source Optical Coherence Tomography at 100,000 Axial Scans per Second **2015**, 56, 2522-30		15
51	Structural and Functional Evaluations for the Early Detection of Glaucoma. *Expert Review of Ophthalmology*, **2016**, 11, 367-376	1.5	14
50	Longitudinal modeling of glaucoma progression using 2-dimensional continuous-time hidden Markov model. *Lecture Notes in Computer Science*, **2013**, 16, 444-51	0.9	14
49	Designing visible-light optical coherence tomography towards clinics. *Quantitative Imaging in Medicine and Surgery*, **2019**, 9, 769-781	3.6	11
48	Tortuous Pore Path Through the Glaucomatous Lamina Cribrosa. *Scientific Reports*, **2018**, 8, 7281	4.9	11
47	The Future of Imaging in Detecting Glaucoma Progression. *Ophthalmology*, **2017**, 124, S76-S82	7.3	11
46	Histogram Matching Extends Acceptable Signal Strength Range on Optical Coherence Tomography Images **2015**, 56, 3810-9		11
45	Attention-Guided 3D-CNN Framework for Glaucoma Detection and Structural-Functional Association Using Volumetric Images. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 3421-3430	7.7	10
44	Thick Prelaminar Tissue Decreases Lamina Cribrosa Visibility **2017**, 58, 1751-1757		10
43	Structural and functional correlates of visual field asymmetry in the human brain by diffusion kurtosis MRI and functional MRI. *NeuroReport*, **2016**, 27, 1225-31	1.7	10
42	A Problem of Proportions in OCT-Based Morphometry and a Proposed Solution **2016**, 57, 484-5		10
41	Testosterone Pathway Genetic Polymorphisms in Relation to Primary Open-Angle Glaucoma: An Analysis in Two Large Datasets **2018**, 59, 629-636		9

40	Genetic correlations between intraocular pressure, blood pressure and primary open-angle glaucoma: a multi-cohort analysis. *European Journal of Human Genetics*, **2017**, 25, 1261-1267	5.3	9
39	Optic Nerve Head Measurements With Optical Coherence Tomography: A Phantom-Based Study Reveals Differences Among Clinical Devices **2016**, 57, OCT413-20		9
38	Location of the Central Retinal Vessel Trunk in the Laminar and Prelaminar Tissue of Healthy and Glaucomatous Eyes. *Scientific Reports*, **2017**, 7, 9930	4.9	8
37	Decreased Lamina Cribrosa Beam Thickness and Pore Diameter Relative to Distance From the Central Retinal Vessel Trunk **2016**, 57, 3088-92		8
36	Virtual Averaging Making Nonframe-Averaged Optical Coherence Tomography Images Comparable to Frame-Averaged Images. *Translational Vision Science and Technology*, **2016**, 5, 1	3.3	8
35	Agreement among graders on Heidelberg retina tomograph (HRT) topographic change analysis (TCA) glaucoma progression interpretation. *British Journal of Ophthalmology*, **2015**, 99, 519-23	5.5	7
34	Clinical Prediction Performance of Glaucoma Progression Using a 2-Dimensional Continuous-Time Hidden Markov Model with Structural and Functional Measurements. *Ophthalmology*, **2018**, 125, 1354-1361	7.3	7
33	Increased Inner Retinal Layer Reflectivity in Eyes With Acute CRVO Correlates With Worse Visual Outcomes at 12 Months **2018**, 59, 3503-3510		7
32	Estimating Global Visual Field Indices in Glaucoma by Combining Macula and Optic Disc OCT Scans Using 3-Dimensional Convolutional Neural Networks. *Ophthalmology Glaucoma*, **2021**, 4, 102-112	2.2	7
31	Trabecular Meshwork Response to Pressure Elevation in the Living Human Eye. *Journal of Visualized Experiments*, **2015**, e52611	1.6	6
30	Citicoline Modulates Glaucomatous Neurodegeneration Through Intraocular Pressure-Independent Control. *Neurotherapeutics*, **2021**, 18, 1339-1359	6.4	6
29	Retinal blood flow reduction in normal-tension glaucoma with single-hemifield damage by Doppler optical coherence tomography. *British Journal of Ophthalmology*, **2021**, 105, 124-130	5.5	6
28	In Vivo Sublayer Analysis of Human Retinal Inner Plexiform Layer Obtained by Visible-Light Optical Coherence Tomography. **2022**, 63, 18		5
27	Seeing the Hidden Lamina: Effects of Exsanguination on the Optic Nerve Head **2018**, 59, 2564-2575		5
26	Evaluating glaucoma damage: emerging imaging technologies. *Expert Review of Ophthalmology*, **2015**, 10, 183-195	1.5	4
25	Local quality assessment for optical coherence tomography **2008**,		3
24	Interplay between intraocular and intracranial pressure effects on the optic nerve head in vivo. *Experimental Eye Research*, **2021**, 213, 108809	3.7	3
23	Evaluating Glaucoma Treatment Effect on Intraocular Pressure Reduction Using Propensity Score Weighted Regression. *Scientific Reports*, **2019**, 9, 15496	4.9	2

List of Publications

4   Reply. *Ophthalmology*, **2019**, 126, e17   7.3

3   Longitudinal changes in the macula and optic nerve in familial dysautonomia. *Journal of Neurology*, **2021**, 268, 1402-1409   5.5

2   Determining the Location of the Fovea Centralis Via En-Face SLO and Cross-Sectional OCT Imaging in Patients Without Retinal Pathology. *Translational Vision Science and Technology*, **2021**, 10, 25   3.3

1   Comprehensive Glaucoma Imaging **2022**, 2099-2119