Thomas S Hwang

List of Publications by Citations

84 papers	4,263 citations	32 h-index	64 g-index
88 ext. papers	5,105 ext. citations	4.4 avg, IF	5.5 L-index

#	Paper	IF	Citations
84	Quantitative optical coherence tomography angiography of vascular abnormalities in the living human eye. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E2395-402	11.5	474
83	Detailed Vascular Anatomy of the Human Retina by Projection-Resolved Optical Coherence Tomography Angiography. *Scientific Reports*, **2017**, 7, 42201	4.9	406
82	OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY FEATURES OF DIABETIC RETINOPATHY. *Retina*, **2015**, 35, 2371-6	3.6	253
81	Automated Quantification of Capillary Nonperfusion Using Optical Coherence Tomography Angiography in Diabetic Retinopathy. *JAMA Ophthalmology*, **2016**, 134, 367-73	3.9	252
80	Projection-resolved optical coherence tomographic angiography. *Biomedical Optics Express*, **2016**, 7, 816-28	3.5	234
79	Optical Coherence Tomography Angiography **2016**, 57, OCT27-36		219
78	Retinal precursors and the development of geographic atrophy in age-related macular degeneration. *Ophthalmology*, **2008**, 115, 1026-31	7.3	160
77	Visualization of 3 Distinct Retinal Plexuses by Projection-Resolved Optical Coherence Tomography Angiography in Diabetic Retinopathy. *JAMA Ophthalmology*, **2016**, 134, 1411-1419	3.9	130
76	Effect of Adding Dexamethasone to Continued Ranibizumab Treatment in Patients With Persistent Diabetic Macular Edema: A DRCR Network Phase 2 Randomized Clinical Trial. *JAMA Ophthalmology*, **2018**, 136, 29-38	3.9	121
75	DETECTION OF NONEXUDATIVE CHOROIDAL NEOVASCULARIZATION IN AGE-RELATED MACULAR DEGENERATION WITH OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY. *Retina*, **2015**, 35, 2204-11	3.6	115
74	Advanced image processing for optical coherence tomographic angiography of macular diseases. *Biomedical Optics Express*, **2015**, 6, 4661-75	3.5	100
73	Subretinal Hyperreflective Material in the Comparison of Age-Related Macular Degeneration Treatments Trials. *Ophthalmology*, **2015**, 122, 1846-53.e5	7.3	96
72	Automated Quantification of Nonperfusion in Three Retinal Plexuses Using Projection-Resolved Optical Coherence Tomography Angiography in Diabetic Retinopathy **2016**, 57, 5101-5106		87
71	Evaluation of artifact reduction in optical coherence tomography angiography with real-time tracking and motion correction technology. *Biomedical Optics Express*, **2016**, 7, 3905-3915	3.5	86
70	Spectral-domain optical coherence tomography characteristics of intermediate age-related macular degeneration. *Ophthalmology*, **2013**, 120, 140-50	7.3	82
69	Evaluation of Automatically Quantified Foveal Avascular Zone Metrics for Diagnosis of Diabetic Retinopathy Using Optical Coherence Tomography Angiography **2018**, 59, 2212-2221		67
68	Automated Quantification of Nonperfusion Areas in 3 Vascular Plexuses With Optical Coherence Tomography Angiography in Eyes of Patients With Diabetes. *JAMA Ophthalmology*, **2018**, 136, 929-936	3.9	59

67	Spatial correlation between hyperpigmentary changes on color fundus photography and hyperreflective foci on SDOCT in intermediate AMD **2012**, 53, 4626-33		59
66	Reflectance-based projection-resolved optical coherence tomography angiography [Invited]. *Biomedical Optics Express*, **2017**, 8, 1536-1548	3.5	57
65	Sensitivity and Specificity of OCT Angiography to Detect Choroidal Neovascularization. *Ophthalmology Retina*, **2017**, 1, 294-303	3.8	55
64	Automated motion correction using parallel-strip registration for wide-field en face OCT angiogram. *Biomedical Optics Express*, **2016**, 7, 2823-36	3.5	55
63	Automated volumetric segmentation of retinal fluid on optical coherence tomography. *Biomedical Optics Express*, **2016**, 7, 1577-89	3.5	54
62	Phenotypic Spectrum of Pentosan Polysulfate Sodium-Associated Maculopathy: A Multicenter Study. *JAMA Ophthalmology*, **2019**, 137, 1275-1282	3.9	48
61	Wide-Field OCT Angiography Investigation of the Relationship Between Radial Peripapillary Capillary Plexus Density and Nerve Fiber Layer Thickness **2017**, 58, 5188-5194		45
60	Optical Coherence Tomography Reflective Drusen Substructures Predict Progression to Geographic Atrophy in Age-related Macular Degeneration. *Ophthalmology*, **2016**, 123, 2554-2570	7.3	44
59	MEDnet, a neural network for automated detection of avascular area in OCT angiography. *Biomedical Optics Express*, **2018**, 9, 5147-5158	3.5	43
58	Injection frequency and anatomic outcomes 1 year following conversion to aflibercept in patients with neovascular age-related macular degeneration. *British Journal of Ophthalmology*, **2014**, 98, 1205-7	5.5	41
57	Subretinal transplantation of forebrain progenitor cells in nonhuman primates: survival and intact retinal function **2009**, 50, 3425-31		41
56	Combination systemic and intravitreal antiviral therapy in the management of acute retinal necrosis syndrome. *Ophthalmic Surgery Lasers and Imaging Retina*, **2014**, 45, 399-407	1.4	40
55	Evaluation of electronic health record implementation in ophthalmology at an academic medical center (an American Ophthalmological Society thesis). *Transactions of the American Ophthalmological Society*, **2013**, 111, 70-92		35
54	Automated segmentation of retinal layer boundaries and capillary plexuses in wide-field optical coherence tomographic angiography. *Biomedical Optics Express*, **2018**, 9, 4429-4442	3.5	33
53	DETECTION OF CLINICALLY UNSUSPECTED RETINAL NEOVASCULARIZATION WITH WIDE-FIELD OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY. *Retina*, **2020**, 40, 891-897	3.6	32
52	Plexus-specific retinal vascular anatomy and pathologies as seen by projection-resolved optical coherence tomographic angiography. *Progress in Retinal and Eye Research*, **2021**, 80, 100878	20.5	32
51	Development and validation of a deep learning algorithm for distinguishing the nonperfusion area from signal reduction artifacts on OCT angiography. *Biomedical Optics Express*, **2019**, 10, 3257-3268	3.5	31
50	Electronic health record systems in ophthalmology: impact on clinical documentation. *Ophthalmology*, **2013**, 120, 1745-55	7.3	29

49	Automated registration and enhanced processing of clinical optical coherence tomography angiography. *Quantitative Imaging in Medicine and Surgery*, **2016**, 6, 391-401	3.6	28
48	Acute macular outer retinopathy (AMOR): a reappraisal of acute macular neuroretinopathy using multimodality diagnostic testing. *JAMA Ophthalmology*, **2011**, 129, 365-8		27
47	Lack of consensus in the diagnosis and treatment for ocular tuberculosis among uveitis specialists. *Ocular Immunology and Inflammation*, **2015**, 23, 25-31	2.8	25
46	Detection of Nonexudative Choroidal Neovascularization and Progression to Exudative Choroidal Neovascularization Using OCT Angiography. *Ophthalmology Retina*, **2019**, 3, 629-636	3.8	22
45	Internal en bloc resection and genetic analysis of retinal capillary hemangioblastoma. *JAMA Ophthalmology*, **2007**, 125, 1189-93		22
44	Isolated acquired unilateral horizontal gaze paresis from a putative lesion of the abducens nucleus. *Journal of Neuro-Ophthalmology*, **2002**, 22, 204-7	2.6	22
43	Plexus-Specific Detection of Retinal Vascular Pathologic Conditions with Projection-Resolved OCT Angiography. *Ophthalmology Retina*, **2018**, 2, 816-826	3.8	20
42	Classification of Choroidal Neovascularization Using Projection-Resolved Optical Coherence Tomographic Angiography **2018**, 59, 4285-4291		20
41	Optical coherence tomographic angiography of choroidal neovascularization ill-defined with fluorescein angiography. *British Journal of Ophthalmology*, **2017**, 101, 45-50	5.5	18
40	Quantitative Evaluation of Choroidal Neovascularization under Pro Re Nata Anti-Vascular Endothelial Growth Factor Therapy with OCT Angiography. *Ophthalmology Retina*, **2018**, 2, 931-941	3.8	18
39	Maximum value projection produces better OCT angiograms than mean value projection. *Biomedical Optics Express*, **2018**, 9, 6412-6424	3.5	18
38	Comparison of Monthly vs Treat-and-Extend Regimens for Individuals With Macular Edema Who Respond Well to Anti-Vascular Endothelial Growth Factor Medications: Secondary Outcomes From the SCORE2 Randomized Clinical Trial. *JAMA Ophthalmology*, **2018**, 136, 337-345	3.9	17
37	Reconstruction of high-resolution 6[illegible]-mm OCT angiograms using deep learning. *Biomedical Optics Express*, **2020**, 11, 3585-3600	3.5	17
36	Robust non-perfusion area detection in three retinal plexuses using convolutional neural network in OCT angiography. *Biomedical Optics Express*, **2020**, 11, 330-345	3.5	16
35	Automated Segmentation of Retinal Fluid Volumes From Structural and Angiographic Optical Coherence Tomography Using Deep Learning. *Translational Vision Science and Technology*, **2020**, 9, 54	3.3	16
34	Automated drusen detection in dry age-related macular degeneration by multiple-depth, optical coherence tomography. *Biomedical Optics Express*, **2017**, 8, 5049-5064	3.5	15
33	Three-dimensional structural and angiographic evaluation of foveal ischemia in diabetic retinopathy: method and validation. *Biomedical Optics Express*, **2019**, 10, 3522-3532	3.5	15
32	High-resolution wide-field OCT angiography with a self-navigation method to correct microsaccades and blinks. *Biomedical Optics Express*, **2020**, 11, 3234-3245	3.5	15

31	DcardNet: Diabetic Retinopathy Classification at Multiple Levels Based on Structural and Angiographic Optical Coherence Tomography. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 1859-1870	5	14
30	Automated three-dimensional registration and volume rebuilding for wide-field angiographic and structural optical coherence tomography. *Journal of Biomedical Optics*, **2017**, 22, 26001	3.5	13
29	Automated detection of photoreceptor disruption in mild diabetic retinopathy on volumetric optical coherence tomography. *Biomedical Optics Express*, **2017**, 8, 5384-5398	3.5	13
28	EFFECT OF SYSTEMIC BETA-BLOCKERS, ACE INHIBITORS, AND ANGIOTENSIN RECEPTOR BLOCKERS ON DEVELOPMENT OF CHOROIDAL NEOVASCULARIZATION IN PATIENTS WITH AGE-RELATED MACULAR DEGENERATION. *Retina*, **2015**, 35, 1964-8	3.6	13
27	Artificial intelligence in OCT angiography. *Progress in Retinal and Eye Research*, **2021**, 85, 100965	20.5	13
26	Detection of Reduced Retinal Vessel Density in Eyes with Geographic Atrophy Secondary to Age-Related Macular Degeneration Using Projection-Resolved Optical Coherence Tomography Angiography. *American Journal of Ophthalmology*, **2020**, 209, 206-212	4.9	13
25	Automated boundary detection of the optic disc and layer segmentation of the peripapillary retina in volumetric structural and angiographic optical coherence tomography. *Biomedical Optics Express*, **2017**, 8, 1306-1318	3.5	12
24	Automated detection of dilated capillaries on optical coherence tomography angiography. *Biomedical Optics Express*, **2017**, 8, 1101-1109	3.5	12
23	Assessing total retinal blood flow in diabetic retinopathy using multiplane en face Doppler optical coherence tomography. *British Journal of Ophthalmology*, **2018**, 102, 126-130	5.5	11
22	Changes in Electronic Health Record Use Time and Documentation over the Course of a Decade. *Ophthalmology*, **2019**, 126, 783-791	7.3	10
21	Binasal visual field defects from simultaneous bilateral retinal infarctions in sickle cell disease. *American Journal of Ophthalmology*, **2007**, 143, 893-6	4.9	10
20	Invariant features-based automated registration and montage for wide-field OCT angiography. *Biomedical Optics Express*, **2019**, 10, 120-136	3.5	10
19	Comparison of digital fundus photographic and echographic measurements for maximal linear dimension from eyes with choroidal melanoma. *Retina*, **2009**, 29, 1321-7	3.6	9
18	Disinfection capacity of PuriLens contact lens cleaning unit against Acanthamoeba. *Eye and Contact Lens*, **2004**, 30, 42-3	3.2	7
17	Culture-Proven Endophthalmitis After Intravitreal Injection: A 10-Year Analysis. *Ophthalmic Surgery Lasers and Imaging Retina*, **2019**, 50, 33-38	1.4	6
16	Optical Coherence Tomography Angiography Avascular Area Association With 1-Year Treatment Requirement and Disease Progression in Diabetic Retinopathy. *American Journal of Ophthalmology*, **2020**, 217, 268-277	4.9	6
15	Quantification of Nonperfusion Area in Montaged Widefield OCT Angiography Using Deep Learning in Diabetic Retinopathy. *Ophthalmology Science*, **2021**, 1, 100027		4
14	Clinicopathologic correlation of stage 2 macular hole. *Retina*, **2006**, 26, 92-5	3.6	3

13	Comparison of Central Macular Fluid Volume With Central Subfield Thickness in Patients With Diabetic Macular Edema Using Optical Coherence Tomography Angiography. *JAMA Ophthalmology*, **2021**, 139, 734-741	3.9	3
12	An Open-Source Deep Learning Network for Reconstruction of High-Resolution OCT Angiograms of Retinal Intermediate and Deep Capillary Plexuses. *Translational Vision Science and Technology*, **2021**, 10, 13	3.3	2
11	Local Anatomic Precursors to New-Onset Geographic Atrophy in Age-Related Macular Degeneration as Defined on OCT. *Ophthalmology Retina*, **2021**, 5, 396-408	3.8	2
10	Improving the Transition to Ophthalmology Residency: A Survey of First-Year Ophthalmology Residents **2016**, 08, e10-e18		2
9	Prospective evaluation of optical coherence tomography for disease detection in the Casey mobile eye clinic. *Experimental Biology and Medicine*, **2021**, 246, 2214-2221	3.7	2
8	Teaching Ophthalmology Residents Clinical Optics Via a Flipped Classroom Curriculum. *Journal of Academic Ophthalmology (2017)*, **2019**, 11, e16-e21	0.7	1
7	Medicare Incentive Payments to United States Ophthalmologists for Use of Electronic Health Records: 2011-2016. *Ophthalmology*, **2019**, 126, 928-934	7.3	1
6	Normative intercapillary distance and vessel density data in the temporal retina assessed by wide-field spectral-domain optical coherence tomography angiography. *Experimental Biology and Medicine*, **2021**, 246, 2230-2237	3.7	1
5	Deep learning-based signal-independent assessment of macular avascular area on 6 mm optical coherence tomography angiogram in diabetic retinopathy: a comparison to instrument-embedded software. *British Journal of Ophthalmology*, **2021**,	5.5	1
4	Geographic Atrophy Progression Is Associated With Choriocapillaris Flow Deficits Measured With Optical Coherence Tomographic Angiography. **2021**, 62, 28		1
3	A deep learning network for classifying arteries and veins in montaged wide-field OCT angiograms. *Ophthalmology Science*, **2022**, 100149		0
2	Cases from the Osler Medical Service at Johns Hopkins University. Herpetic keratitis. *American Journal of Medicine*, **2002**, 113, 242-3	2.4	
1	Current Models for Inpatient and Emergency Room Ophthalmology Consultation in U.S. Residency Programs. *Journal of Academic Ophthalmology (2017)*, **2020**, 12, e171-e174	0.7	