Angelika Unterhuber

List of Publications by Year in descending order

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89 papers 4,264 citations

147801 31 h-index 59 g-index

89 all docs 89 docs citations

89 times ranked 3403 citing authors

#	Article	IF	CITATIONS
1	Enhanced Visualization of Macular Pathology With the Use of Ultrahigh-Resolution Optical Coherence Tomography. JAMA Ophthalmology, 2003, 121, 695.	2.4	436
2	In vivo retinal optical coherence tomography at 1040 nm - enhanced penetration into the choroid. Optics Express, 2005, 13, 3252.	3.4	374
3	Optical coherence tomography today: speed, contrast, and multimodality. Journal of Biomedical Optics, 2014, 19, 071412.	2.6	371
4	Ultrahigh resolution optical coherence tomography and pancorrection for cellular imaging of the living human retina. Optics Express, 2008, 16, 11083.	3.4	185
5	Ultrahigh resolution optical coherence tomography of the monkey fovea. Identification of retinal sublayers by correlation with semithin histology sections. Experimental Eye Research, 2004, 78, 1117-1125.	2.6	171
6	Three-dimensional optical coherence tomography at 1050â€,nm versus 800â€,nm in retinal pathologies: enhanced performance and choroidal penetration in cataract patients. Journal of Biomedical Optics, 2007, 12, 041211.	2.6	161
7	Assessment of Central Visual Function in Stargardt's Disease/Fundus Flavimaculatus with Ultrahigh-Resolution Optical Coherence Tomography. , 2005, 46, 310.		152
8	Adaptive optics with a magnetic deformable mirror: applications in the human eye. Optics Express, 2006, 14, 8900.	3.4	146
9	Adaptive optics optical coherence tomography at 120,000 depth scans/s for non-invasive cellular phenotyping of the living human retina. Optics Express, 2009, 17, 19382.	3.4	136
10	Three-dimensional adaptive optics ultrahigh-resolution optical coherence tomography using a liquid crystal spatial light modulator. Vision Research, 2005, 45, 3432-3444.	1.4	129
11	Measurement of Tear Film Thickness Using Ultrahigh-Resolution Optical Coherence Tomography. , 2013, 54, 5578.		125
12	Chromatic aberration correction of the human eye for retinal imaging in the near infrared. Optics Express, 2006, 14, 6213.	3.4	103
13	Full-field time-encoded frequency-domain optical coherence tomography. Optics Express, 2006, 14, 7661.	3.4	100
14	Dispersion encoded full range frequency domain optical coherence tomography. Optics Express, 2009, 17, 7.	3.4	98
15	Minimum distance mapping using three-dimensional optical coherence tomography for glaucoma diagnosis. Journal of Biomedical Optics, 2007, 12, 041204.	2.6	96
16	Endoscope-tip interferometer for ultrahigh resolution frequency domain optical coherence tomography in mouse colon. Optics Express, 2006, 14, 1878.	3.4	91
17	Ocular aberrations as a function of wavelength in the near infrared measured with a femtosecond laser. Optics Express, 2005, 13, 400.	3.4	85
18	Imaging ex vivo healthy and pathological human brain tissue with ultra-high-resolution optical coherence tomography. Journal of Biomedical Optics, 2005, 10, 011006.	2.6	82

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19	Precise Thickness Measurements of Bowman's Layer, Epithelium, and Tear Film. Optometry and Vision Science, 2012, 89, E795-E802.	1.2	67
20	Tear Film Thickness After Treatment With Artificial Tears in Patients With Moderate Dry Eye Disease. Cornea, 2015, 34, 421-426.	1.7	67
21	In vivo tear film thickness measurement and tear film dynamics visualization using spectral domain optical coherence tomography. Optics Express, 2015, 23, 21043.	3.4	62
22	Correlated Multimodal Imaging in Life Sciences: Expanding the Biomedical Horizon. Frontiers in Physics, 2020, 8, .	2.1	61
23	Imaging ex vivo and in vitro brain morphology in animal models with ultrahigh resolution optical coherence tomography. Journal of Biomedical Optics, 2004, 9, 719.	2.6	54
24	The Association Between Subjective and Objective Parameters for the Assessment of Dry-Eye Syndrome. Investigative Ophthalmology and Visual Science, 2015, 56, 1467-1472.	3.3	53
25	Ultrahigh Resolution Optical Coherence Tomography In Macular Dystrophy. American Journal of Ophthalmology, 2005, 140, 976-983.e2.	3.3	50
26	Effect of hyaluronic acid on tear film thickness as assessed with ultraâ€high resolution optical coherence tomography. Acta Ophthalmologica, 2015, 93, 439-443.	1.1	50
27	ULTRAHIGH RESOLUTION OPTICAL COHERENCE TOMOGRAPHY OF MACULAR HOLES. Retina, 2006, 26, 1034-1041.	1.7	49
28	In vivo ultrahigh-resolution optical coherence tomography of mouse colon with an achromatized endoscope. Journal of Biomedical Optics, 2006, $11,064003$.	2.6	48
29	Anisotropic aberration correction using region of interest based digital adaptive optics in Fourier domain OCT. Biomedical Optics Express, 2015, 6, 1124.	2.9	44
30	Dual modality optical coherence and whole-body photoacoustic tomography imaging of chick embryos in multiple development stages. Biomedical Optics Express, 2014, 5, 3150.	2.9	43
31	Integrated single- and two-photon light sheet microscopy using accelerating beams. Scientific Reports, 2017, 7, 1435.	3.3	43
32	Fast dispersion encoded full range optical coherence tomography for retinal imaging at 800 nm and 1060 nm. Optics Express, 2010, 18, 4898.	3.4	36
33	A Controlled, Randomized Double-Blind Study to Evaluate the Safety and Efficacy of Chitosan- $\langle i \rangle N \langle i \rangle$ -Acetylcysteine for the Treatment of Dry Eye Syndrome. Journal of Ocular Pharmacology and Therapeutics, 2017, 33, 375-382.	1.4	36
34	Enhanced medical diagnosis for dOCTors: a perspective of optical coherence tomography. Journal of Biomedical Optics, 2021, 26, .	2.6	34
35	Functional optical coherence tomography and photoacoustic microscopy imaging for zebrafish larvae. Biomedical Optics Express, 2020, 11, 2137.	2.9	33
36	Frequency-doubled DBR-tapered diode laser for direct pumping of Ti:sapphire lasers generating sub-20 fs pulses. Optics Express, 2011, 19, 12156.	3.4	31

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37	Serial endoscopy in azoxymethane treated mice using ultra-high resolution optical coherence tomography. Cancer Biology and Therapy, 2007, 6, 1753-1762.	3.4	28
38	Widefield fluorescence lifetime imaging of protoporphyrin IX for fluorescenceâ€guided neurosurgery: An ex vivo feasibility study. Journal of Biophotonics, 2019, 12, e201800378.	2.3	28
39	Single-pulse CARS based multimodal nonlinear optical microscope for bioimaging. Optics Express, 2015, 23, 13082.	3.4	27
40	Macroscopic fluorescence-lifetime imaging of NADH and protoporphyrin IX improves the detection and grading of 5-aminolevulinic acid-stained brain tumors. Scientific Reports, 2020, 10, 20492.	3.3	24
41	Combination of High-Resolution Optical Coherence Tomography and Raman Spectroscopy for Improved Staging and Grading in Bladder Cancer. Applied Sciences (Switzerland), 2018, 8, 2371.	2.5	22
42	Ultrashort pulse Kagome hollow-core photonic crystal fiber delivery for nonlinear optical imaging. Optics Letters, 2019, 44, 1588.	3.3	22
43	Three―and fourâ€dimensional visualization of cell migration using optical coherence tomography. Journal of Biophotonics, 2009, 2, 370-379.	2.3	21
44	Power Scaling of Nonlinear Frequency Converted Tapered Diode Lasers for Biophotonics. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 307-321.	2.9	18
45	Intraocular lens–capsular bag imaging with ultrahigh-resolution optical coherence tomography. Journal of Cataract and Refractive Surgery, 2005, 31, 818-823.	1.5	16
46	Hybrid single-source online Fourier transform coherent anti-Stokes Raman scattering/optical coherence tomography. Optics Letters, 2014, 39, 5709.	3.3	14
47	Depth resolved label-free multimodal optical imaging platform to study morpho-molecular composition of tissue. Photochemical and Photobiological Sciences, 2019, 18, 997-1008.	2.9	14
48	Automatic assessment of tear film and tear meniscus parameters in healthy subjects using ultrahigh-resolution optical coherence tomography. Biomedical Optics Express, 2019, 10, 2744.	2.9	14
49	Visible light optical coherence tomography. , 2002, 4619, 90.		13
50	Ultrahighâ€resolution anterior segment optical coherence tomography for analysis of corneal microarchitecture during wound healing. Acta Ophthalmologica, 2019, 97, e761-e771.	1.1	12
51	Fluorescence Lifetime Imaging and Spectroscopic Co-Validation for Protoporphyrin IX-Guided Tumor Visualization in Neurosurgery. Frontiers in Oncology, 2021, 11, 741303.	2.8	12
52	Towards real-time wide-field fluorescence lifetime imaging of 5-ALA labeled brain tumors with multi-tap CMOS cameras. Biomedical Optics Express, 2020, 11, 1598.	2.9	11
53	Surgical microscope with integrated fluorescence lifetime imaging for 5-aminolevulinic acid fluorescence-guided neurosurgery. Journal of Biomedical Optics, 2020, 25, 1.	2.6	10
54	Morpho-Molecular Metabolic Analysis and Classification of Human Pituitary Gland and Adenoma Biopsies Based on Multimodal Optical Imaging. Cancers, 2021, 13, 3234.	3.7	8

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55	Signal post processing in frequency domain OCT and OCM using a filter bank approach. , 2007, , .		7
56	Epi-detecting label-free multimodal imaging platform using a compact diode-pumped femtosecond solid-state laser. Journal of Biomedical Optics, 2017, 22, 1.	2.6	7
57	Line Scan Raman Microspectroscopy for Label-Free Diagnosis of Human Pituitary Biopsies. Molecules, 2019, 24, 3577.	3.8	6
58	Towards ultrahigh resolution OCT based endoscopical pituitary gland and adenoma screening: a performance parameter evaluation. Biomedical Optics Express, 2020, 11, 7003.	2.9	6
59	Ultrahigh Resolution Optical Coherence Tomography. , 2015, , 277-318.		4
60	Imaging brain morphology with ultrahigh-resolution optical coherence tomography. , 2003, , .		2
61	Endoscopic ultrahigh-resolution OCT for in vivo imaging colon disease model mice. , 2005, , .		2
62	Combined OCT and CARS using a single ultrashort pulse Ti:Sapphire laser. , 2011, , .		2
63	Molecular Multicolor Multiphoton in Vivo Bioimaging Based on a Direct Diode Pumped Ti:sapphire Oscillator. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-9.	2.9	2
64	Toward Quantitative in vivo Label-Free Tracking of Lipid Distribution in a Zebrafish Cancer Model. Frontiers in Cell and Developmental Biology, 2021, 9, 675636.	3.7	2
65	Diagnosis of Pituitary Adenoma Biopsies by Ultrahigh Resolution Optical Coherence Tomography Using Neuronal Networks. Frontiers in Endocrinology, 2021, 12, 730100.	3.5	2
66	Serial endoscopy in azoxymethane treated mice using ultra-high-resolution optical coherence tomography. , 2007, , .		1
67	Ultra-high-speed polarization sensitive OCT in the human retina using a single spectrometer. , 2011, , .		1
68	Frequency-doubled diode laser for direct pumping of Ti:sapphire lasers. Proceedings of SPIE, 2012, , .	0.8	1
69	Generation of 3.5 W of diffraction-limited green light from SHG of a single tapered diode laser in a cascade of nonlinear crystals. , 2014, , .		1
70	Broad Bandwidth Laser and Nonlinear Optical Sources for OCT., 2015,, 563-618.		1
71	Improved Protoporphyrin IX-Guided Neurosurgical Tumor Detection with Frequency-Domain Fluorescence Lifetime Imaging. Applied Sciences (Switzerland), 2022, 12, 1002.	2.5	1
72	High resolution spectroscopic optical coherence tomography in the 900-1100 nm wavelength range. , 2002, 4619, 249.		0

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73	Sensitivity estimation of spectroscopic optical coherence tomography., 2002,,.		O
74	Ophthalmic ultrahigh resolution OCT using a portable low cost Ti:Al 2 O 3 laser. , 2003, , .		0
75	Quantification of photoreceptor layer thickness in different macular pathologies using ultrahigh-resolution optical coherence tomography. , 2004, , .		0
76	Adaptive optics using a liquid crystal spatial light modulator for ultrahigh-resolution optical coherence tomography. , 2006, , .		0
77	Visualization of 3D cell migration using high speed ultrahigh resolution optical coherence tomography. Proceedings of SPIE, 2009, , .	0.8	0
78	Dispersion encoded full range frequency domain OCT., 2009,,.		0
79	Mutant and wild type cell chemotaxis in 3D and 4D with ultrahigh- resolution optical coherence tomography. , 2010, , .		0
80	Direct pumping of ultrashort Ti:sapphire lasers by a frequency doubled diode laser. , 2011, , .		0
81	Fast dispersion encoded full range OCT for retinal imaging at 800 nm and 1060 nm. , 2011, , .		0
82	Direct pumping of ultrashort Ti:sapphire lasers by a frequency doubled diode laser. , 2011, , .		0
83	A high power directly diode pumped Ti:sapphire laser with synchronized Yb-fiber amplifier for nonlinear optical microscopy and optical coherence tomography. , 2014, , .		0
84	An Achromatized Endoscope for Ultrahigh-Resolution Optical Coherence Tomography., 2005,,.		0
85	In vivo Retinal Optical Coherence Tomography at 1030 nm with Enhanced Penetration into the Choroid. , 2005, , .		0
86	Imaging APC/Min(+/ \hat{a}^{-}) colon cancer model mice with ultrahigh resolution endoscopic FD-OCT at 800nm. , 2005, , .		0
87	Parallel Image Acquisition in Frequency Domain OCT. , 2005, , .		0
88	Comparison between a supercontinuum source and a titanium sapphire laser in achieving ultrahigh resolution spectral domain optical coherence tomography (SD-OCT)., 2017,,.		0
89	New approach of staging and grading in bladder cancer with optical coherence tomography and Raman spectroscopy. , 2019, , .		0