

Edmund Koch

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7446130/publications.pdf>

Version: 2024-02-01

225
papers

2,880
citations

172457

29
h-index

254184

43
g-index

231
all docs

231
docs citations

231
times ranked

3400
citing authors

#	ARTICLE	IF	CITATIONS
1	Alveolar dynamics in acute lung injury: Heterogeneous distension rather than cyclic opening and collapse*. Critical Care Medicine, 2009, 37, 2604-2611.	0.9	160
2	Simultaneous dual-band optical coherence tomography in the spectral domain for high resolution in vivo imaging. Optics Express, 2009, 17, 19486.	3.4	110
3	NADPH oxidase 4 protects against development of endothelial dysfunction and atherosclerosis in LDL receptor deficient mice. European Heart Journal, 2016, 37, 1753-1761.	2.2	110
4	Label-Free Delineation of Brain Tumors by Coherent Anti-Stokes Raman Scattering Microscopy in an Orthotopic Mouse Model and Human Glioblastoma. PLoS ONE, 2014, 9, e107115.	2.5	77
5	Stem Cell-Derived Photoreceptor Transplants Differentially Integrate Into Mouse Models of Cone-Rod Dystrophy. , 2016, 57, 3509.		71
6	Intrinsic Indicator of Photodamage during Label-Free Multiphoton Microscopy of Cells and Tissues. PLoS ONE, 2014, 9, e110295.	2.5	69
7	Trends in Fourier transform infrared spectroscopic imaging. Analytical and Bioanalytical Chemistry, 2009, 394, 671-678.	3.7	59
8	Shear flow-induced optical inhomogeneity of blood assessed in vivo and in vitro by spectral domain optical coherence tomography in the 1.3-1.4µm wavelength range. Journal of Biomedical Optics, 2011, 16, 116020.	2.6	56
9	Characterization of a Mouse Model With Complete RPE Loss and Its Use for RPE Cell Transplantation. , 2014, 55, 5431.		54
10	Optical coherence tomography in biomedical research. Analytical and Bioanalytical Chemistry, 2011, 400, 2721-2743.	3.7	51
11	Gender determination of fertilized unincubated chicken eggs by infrared spectroscopic imaging. Analytical and Bioanalytical Chemistry, 2011, 400, 2775-2782.	3.7	47
12	Vibrational Spectroscopic Imaging and Multiphoton Microscopy of Spinal Cord Injury. Analytical Chemistry, 2012, 84, 8707-8714.	6.5	47
13	In ovo sexing of chicken eggs by fluorescence spectroscopy. Analytical and Bioanalytical Chemistry, 2017, 409, 1185-1194.	3.7	47
14	Sexing of chicken eggs by fluorescence and Raman spectroscopy through the shell membrane. PLoS ONE, 2018, 13, e0192554.	2.5	47
15	A metabolic switch regulates the transition between growth and diapause in C. elegans. BMC Biology, 2020, 18, 31.	3.8	47
16	Experimental methods for flow and aerosol measurements in human airways and their replicas. European Journal of Pharmaceutical Sciences, 2018, 113, 95-131.	4.0	46
17	Imaging of the three-dimensional alveolar structure and the alveolar mechanics of a ventilated and perfused isolated rabbit lung with Fourier domain optical coherence tomography. Journal of Biomedical Optics, 2006, 11, 014015.	2.6	45
18	Evaluation of the atrophogenic potential of hydrocortisone 1% cream and pimecrolimus 1% cream in uninvolved forehead skin of patients with atopic dermatitis using optical coherence tomography. Experimental Dermatology, 2011, 20, 832-836.	2.9	44

#	ARTICLE	IF	CITATIONS
19	In Ovo Sexing of Domestic Chicken Eggs by Raman Spectroscopy. <i>Analytical Chemistry</i> , 2016, 88, 8657-8663.	6.5	41
20	Depth-resolved birefringence imaging of collagen fiber organization in the human oral mucosa <i>in vivo</i> . <i>Biomedical Optics Express</i> , 2019, 10, 1942.	2.9	41
21	Acute Lung Injury Causes Asynchronous Alveolar Ventilation That Can Be Corrected by Individual Sighs. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2016, 193, 396-406.	5.6	40
22	Regional lung aeration and ventilation during pressure support and biphasic positive airway pressure ventilation in experimental lung injury. <i>Critical Care</i> , 2010, 14, R34.	5.8	38
23	Comparison of two <i>in vivo</i> microscopy techniques to visualize alveolar mechanics. <i>Journal of Clinical Monitoring and Computing</i> , 2009, 23, 323-332.	1.6	36
24	Intraoperative imaging of cortical cerebral perfusion by time-resolved thermography and multivariate data analysis. <i>Journal of Biomedical Optics</i> , 2011, 16, 016001.	2.6	35
25	IDH1 mutation in human glioma induces chemical alterations that are amenable to optical Raman spectroscopy. <i>Journal of Neuro-Oncology</i> , 2018, 139, 261-268.	2.9	35
26	Three-dimensional Fourier domain optical coherence tomography <i>in vivo</i> imaging of alveolar tissue in the intact thorax using the parietal pleura as a window. <i>Journal of Biomedical Optics</i> , 2010, 15, 016030.	2.6	33
27	Effects of tissue fixation on coherent anti-Stokes Raman scattering images of brain. <i>Journal of Biomedical Optics</i> , 2013, 19, 071402.	2.6	33
28	Simultaneous three-dimensional optical coherence tomography and intravital microscopy for imaging subpleural pulmonary alveoli in isolated rabbit lungs. <i>Journal of Biomedical Optics</i> , 2009, 14, 054020.	2.6	32
29	Transverse motion as a source of noise and reduced correlation of the Doppler phase shift in spectral domain OCT. <i>Optics Express</i> , 2009, 17, 19698.	3.4	32
30	Characterization of Light Lesion Paradigms and Optical Coherence Tomography as Tools to Study Adult Retina Regeneration in Zebrafish. <i>PLoS ONE</i> , 2013, 8, e80483.	2.5	32
31	Improved three-dimensional Fourier domain optical coherence tomography by index matching in alveolar structures. <i>Journal of Biomedical Optics</i> , 2009, 14, 1.	2.6	31
32	An advanced algorithm for dispersion encoded full range frequency domain optical coherence tomography. <i>Optics Express</i> , 2012, 20, 24925.	3.4	30
33	Investigation of the human tympanic membrane oscillation <i>ex vivo</i> by Doppler optical coherence tomography. <i>Journal of Biophotonics</i> , 2014, 7, 434-441.	2.3	30
34	Detection of carious lesions utilizing depolarization imaging by polarization sensitive optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2018, 23, 1.	2.6	30
35	Non-linear optical microscopy of kidney tumours. <i>Journal of Biophotonics</i> , 2014, 7, 23-27.	2.3	29
36	Rapid Label-Free Analysis of Brain Tumor Biopsies by Near Infrared Raman and Fluorescence Spectroscopy—A Study of 209 Patients. <i>Frontiers in Oncology</i> , 2019, 9, 1165.	2.8	29

#	ARTICLE	IF	CITATIONS
37	Assessing the efficacy of coherent anti-Stokes Raman scattering microscopy for the detection of infiltrating glioblastoma in fresh brain samples. <i>Journal of Biophotonics</i> , 2017, 10, 404-414.	2.3	28
38	Optical Analysis of Glioma: Fourier-Transform Infrared Spectroscopy Reveals the <i>IDH1</i> Mutation Status. <i>Clinical Cancer Research</i> , 2018, 24, 2530-2538.	7.0	27
39	Intraoperative optical imaging of intrinsic signals: a reliable method for visualizing stimulated functional brain areas during surgery. <i>Journal of Neurosurgery</i> , 2013, 119, 853-863.	1.6	25
40	Limits of Fourier domain Doppler-OCT at high velocities. <i>Sensors and Actuators A: Physical</i> , 2009, 156, 8-13.	4.1	24
41	Dynamic alveolar mechanics in acute lung injury. <i>Critical Care Medicine</i> , 2010, 38, 345.	0.9	24
42	Rapid and label-free classification of human glioma cells by infrared spectroscopic imaging. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2008, 73A, 1158-1164.	1.5	23
43	Effects of axial, transverse, and oblique sample motion in FD OCT in systems with global or rolling shutter line detector. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2008, 25, 2791.	1.5	23
44	Endoscopic optical coherence tomography with wide field-of-view for the morphological and functional assessment of the human tympanic membrane. <i>Journal of Biomedical Optics</i> , 2018, 24, 1.	2.6	23
45	Variable stretch reduces the pro-inflammatory response of alveolar epithelial cells. <i>PLoS ONE</i> , 2017, 12, e0182369.	2.5	22
46	Biochemical Monitoring of Spinal Cord Injury by FT-IR Spectroscopy—Effects of Therapeutic Alginate Implant in Rat Models. <i>PLoS ONE</i> , 2015, 10, e0142660.	2.5	20
47	In vivo imaging in the oral cavity by endoscopic optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2018, 23, 1.	2.6	20
48	Virtual four-dimensional imaging of lung parenchyma by optical coherence tomography in mice. <i>Journal of Biomedical Optics</i> , 2010, 15, 036016.	2.6	19
49	Label-free multiphoton microscopy reveals relevant tissue changes induced by alginate hydrogel implantation in rat spinal cord injury. <i>Scientific Reports</i> , 2018, 8, 10841.	3.3	19
50	Endoscopic optical coherence tomography device for forward imaging with broad field of view. <i>Journal of Biomedical Optics</i> , 2012, 17, 1.	2.6	18
51	Label-free identification of the glioma stem-like cell fraction using Fourier-transform infrared spectroscopy. <i>International Journal of Radiation Biology</i> , 2014, 90, 710-717.	1.8	18
52	In vivo imaging of human oral hard and soft tissues by polarization-sensitive optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2017, 22, 1.	2.6	17
53	Linear optical coherence tomography system with a downconverted fringe pattern. <i>Optics Letters</i> , 2004, 29, 1644.	3.3	16
54	Four-dimensional imaging of murine subpleural alveoli using high-speed optical coherence tomography. <i>Journal of Biophotonics</i> , 2013, 6, 148-152.	2.3	16

#	ARTICLE	IF	CITATIONS
55	Endogenous Two-Photon Excited Fluorescence Provides Label-Free Visualization of the Inflammatory Response in the Rodent Spinal Cord. <i>BioMed Research International</i> , 2015, 2015, 1-9.	1.9	15
56	Intraoperative optical imaging of functional brain areas for improved image-guided surgery. <i>Biomedizinische Technik</i> , 2013, 58, 225-36.	0.8	14
57	In Vivo Endoscopic Optical Coherence Tomography of the Healthy Human Oral Mucosa: Qualitative and Quantitative Image Analysis. <i>Diagnostics</i> , 2020, 10, 827.	2.6	14
58	A novel adaptive control system for noisy pressure-controlled ventilation: a numerical simulation and bench test study. <i>Intensive Care Medicine</i> , 2010, 36, 164-168.	8.2	13
59	Signal power decrease due to fringe washout as an extension of the limited Doppler flow measurement range in spectral domain optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2010, 15, 041511.	2.6	13
60	Chemical reactions between poly(carbonate) and poly(vinyl amine) thermally induced by a high magnetic field pulse. <i>Polymer</i> , 2013, 54, 6732-6738.	3.8	13
61	Relation of joint spectral and time domain optical coherence tomography (jSTdOCT) and phase-resolved Doppler OCT. <i>Optics Express</i> , 2014, 22, 23129.	3.4	13
62	Improved non-invasive Optical Coherence Tomography detection of different engineered nanoparticles in food-mimicking matrices. <i>Food Chemistry</i> , 2016, 212, 571-575.	8.2	13
63	Advanced analysis of domain walls in Mg doped LiNbO ₃ crystals with high resolution OCT. <i>Optics Express</i> , 2017, 25, 14871.	3.4	13
64	Analysis of in vitro and in vivo bidirectional flow velocities by phase-resolved Doppler Fourier-domain OCT. <i>Sensors and Actuators A: Physical</i> , 2009, 156, 14-21.	4.1	12
65	Infrared spectroscopic imaging of renal tumor tissue. <i>Journal of Biomedical Optics</i> , 2011, 16, 096006.	2.6	12
66	Intra-operative optical diagnostics with vibrational spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 400, 2745-2753.	3.7	12
67	Hyperspectral imaging - A new modality for eye diagnostics. <i>Biomedizinische Technik</i> , 2012, 57, .	0.8	12
68	Total liquid ventilation: a new approach to improve 3D OCT image quality of alveolar structures in lung tissue. <i>Optics Express</i> , 2013, 21, 31782.	3.4	12
69	Evaluation of the clinical practicability of intraoperative optical imaging comparing three different camera setups. <i>Biomedizinische Technik</i> , 2013, 58, 237-48.	0.8	12
70	Label-free multiphoton microscopy reveals altered tissue architecture in hippocampal sclerosis. <i>Epilepsia</i> , 2017, 58, e1-e5.	5.1	12
71	Three-Dimensional, Time-Resolved Profiling of Ferroelectric Domain Wall Dynamics by Spectral-Domain Optical Coherence Tomography. <i>Annalen Der Physik</i> , 2017, 529, 1700139.	2.4	12
72	Sexing of turkey poults by Fourier transform infrared spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 396, 465-470.	3.7	11

#	ARTICLE	IF	CITATIONS
73	Three-dimensional simultaneous optical coherence tomography and confocal fluorescence microscopy for investigation of lung tissue. <i>Journal of Biomedical Optics</i> , 2012, 17, 071310.	2.6	11
74	Simulating physiological interactions in a hybrid system of mathematical models. <i>Journal of Clinical Monitoring and Computing</i> , 2014, 28, 513-523.	1.6	11
75	Contactless in ovo sex determination of chicken eggs. <i>Current Directions in Biomedical Engineering</i> , 2017, 3, 131-134.	0.4	11
76	Label-free multiphoton imaging allows brain tumor recognition based on texture analysis—a study of 382 tumor patients. <i>Neuro-Oncology Advances</i> , 2020, 2, vdaa035.	0.7	11
77	Exogenous ethanol induces a metabolic switch that prolongs the survival of <i>Caenorhabditis elegans</i> dauer larva and enhances its resistance to desiccation. <i>Aging Cell</i> , 2020, 19, e13214.	6.7	11
78	Endoscopic Optical Coherence Tomography for Evaluation of Success of Tympanoplasty. <i>Otology and Neurotology</i> , 2020, 41, e901-e905.	1.3	11
79	Intravital microscopy of subpleural alveoli via transthoracic endoscopy. <i>Journal of Biomedical Optics</i> , 2011, 16, 046002.	2.6	10
80	3D optical coherence tomography as new tool for microscopic investigations of nucleate boiling on heated surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2012, 55, 5565-5569.	4.8	10
81	Defense of fake fingerprint attacks using a swept source laser optical coherence tomography setup. <i>Proceedings of SPIE</i> , 2013, , .	0.8	10
82	Inflammation-related alterations of lipids after spinal cord injury revealed by Raman spectroscopy. <i>Journal of Biomedical Optics</i> , 2016, 21, 061008.	2.6	10
83	Identification of distinctive features in human intracranial tumors by label-free nonlinear multimodal microscopy. <i>Journal of Biophotonics</i> , 2019, 12, e201800465.	2.3	10
84	Mapping of language and motor function during awake neurosurgery with intraoperative optical imaging. <i>Neurosurgical Focus</i> , 2020, 48, E3.	2.3	10
85	Ultrahigh-resolution FDOCT system for dermatology. , 2005, , .		9
86	Label-free differentiation of human pituitary adenomas by FT-IR spectroscopic imaging. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 727-735.	3.7	9
87	Feasibility of non-invasive detection of engineered nanoparticles in food mimicking matrices by Optical Coherence Tomography. <i>Food Chemistry</i> , 2014, 153, 444-449.	8.2	9
88	Framework for 2D-3D image fusion of infrared thermography with preoperative MRI. <i>Biomedizinische Technik</i> , 2017, 62, 599-607.	0.8	9
89	Structural Similarity Based Anatomical and Functional Brain Imaging Fusion. <i>Lecture Notes in Computer Science</i> , 2019, , 121-129.	1.3	9
90	Visual Function is Gradually Restored During Retina Regeneration in Adult Zebrafish. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 831322.	3.7	9

#	ARTICLE	IF	CITATIONS
91	In-vivo Fourier domain optical coherence tomography as a new tool for investigation of vasodynamics in the mouse model. <i>Journal of Biomedical Optics</i> , 2009, 14, 034027.	2.6	8
92	Highly sensitive time-resolved thermography and multivariate image analysis of the cerebral cortex for intrasurgical diagnostics. , 2013, , .		8
93	Motion correction of thermographic images in neurosurgery: Performance comparison. , 2014, , .		8
94	Application of optical and spectroscopic technologies for the characterization of carious lesions <i>in vitro</i> . <i>Biomedizinische Technik</i> , 2018, 63, 595-602.	0.8	8
95	Effects of Intermittent Treatment with Topical Corticosteroids and Calcineurin Inhibitors on Epidermal and Dermal Thickness Using Optical Coherence Tomography and Ultrasound. <i>Skin Pharmacology and Physiology</i> , 2022, 35, 41-50.	2.5	8
96	Investigation of murine vasodynamics by Fourier domain optical coherence tomography. , 2007, , .		7
97	Assessment of visual function during brain surgery near the visual cortex by intraoperative optical imaging. <i>Biomedizinische Technik</i> , 2013, 58, 249-56.	0.8	7
98	Wavelet Subspace Analysis of Intraoperative Thermal Imaging for Motion Filtering. <i>Lecture Notes in Computer Science</i> , 2014, , 411-420.	1.3	7
99	Imaging of nanoparticle-labeled stem cells using magnetomotive optical coherence tomography, laser speckle reflectometry, and light microscopy. <i>Journal of Biomedical Optics</i> , 2015, 20, 036018.	2.6	7
100	Doppler optical coherence tomography as a promising tool for detecting fluid in the human middle ear. <i>Current Directions in Biomedical Engineering</i> , 2016, 2, 443-447.	0.4	7
101	Optical molecular imaging of corpora amylacea in human brain tissue. <i>Biomedizinische Technik</i> , 2018, 63, 579-585.	0.8	7
102	Optical coherence tomography and multiphoton microscopy offer new options for the quantification of fibrotic aortic valve disease in ApoE ^{-/-} mice. <i>Scientific Reports</i> , 2021, 11, 5834.	3.3	7
103	High-dynamic-range areal profilometry using an imaging, dispersion-encoded low-coherence interferometer. <i>Optics Express</i> , 2020, 28, 17320.	3.4	7
104	Fingerprint fake detection by optical coherence tomography. , 2013, , .		6
105	Improved Imaging of Magnetically Labeled Cells Using Rotational Magnetomotive Optical Coherence Tomography. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 444.	2.5	6
106	Endoscopic optical coherence tomography for imaging the tympanic membrane. , 2011, , .		5
107	CARS and non-linear microscopy imaging of brain tumors. <i>Proceedings of SPIE</i> , 2013, , .	0.8	5
108	Quantitative fluorescence angiography for neurosurgical interventions. <i>Biomedizinische Technik</i> , 2013, 58, 269-79.	0.8	5

#	ARTICLE	IF	CITATIONS
109	Heart valve stenosis in laser spotlights: Insights into a complex disease. <i>Clinical Hemorheology and Microcirculation</i> , 2014, 58, 65-75.	1.7	5
110	Ex vivo 4D visualization of aortic valve dynamics in a murine model with optical coherence tomography. <i>Biomedical Optics Express</i> , 2014, 5, 4201.	2.9	5
111	Visualization of dynamic boiling processes using high-speed optical coherence tomography. <i>Experiments in Fluids</i> , 2015, 56, 1.	2.4	5
112	Label free molecular sexing of monomorphic birds using infrared spectroscopic imaging. <i>Talanta</i> , 2016, 150, 155-161.	5.5	5
113	An intraoperative imaging system for neurosurgical thermography. , 2017, , .		5
114	Flow Measurement by Lateral Resonant Doppler Optical Coherence Tomography in the Spectral Domain. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 382.	2.5	5
115	Characterization of cortical hemodynamic changes following sensory, visual, and speech activation by intraoperative optical imaging utilizing phase-based evaluation methods. <i>Human Brain Mapping</i> , 2022, 43, 598-615.	3.6	5
116	Fiber optic distance sensor with sub-nm axial resolution. , 2005, , .		4
117	Time-resolved blood flow measurement in the in vivo mouse model by optical frequency domain imaging. , 2009, , .		4
118	Flow measurement by using the signal decrease of moving scatterers in spatially encoded Fourier domain optical coherence tomography. , 2009, , .		4
119	Toward a comprehensive interpretation of intravital microscopy images in studies of lung tissue dynamics. <i>Journal of Biomedical Optics</i> , 2015, 20, 066009.	2.6	4
120	Intraoperative mapping of the sensory cortex by time-resolved thermal imaging. <i>Biomedizinische Technik</i> , 2018, 63, 567-572.	0.8	4
121	Correlation between Lesion Progression and Depolarization Assessed by Polarization-Sensitive Optical Coherence Tomography. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2971.	2.5	4
122	Impact of a detector dead time in phase-resolved Doppler analysis using spectral domain optical coherence tomography. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2017, 34, 241.	1.5	4
123	Correlation of biomechanics and cancer cell phenotype by combined Brillouin and Raman spectroscopy of U87-MG glioblastoma cells. <i>Journal of the Royal Society Interface</i> , 2022, 19, .	3.4	4
124	Optical coherence tomography as approach for the minimal invasive localization of the germinal disc in ovo before chicken sexing. , 2010, , .		3
125	Enhanced joint spectral and time domain optical coherence tomography for quantitative flow velocity measurement. <i>Proceedings of SPIE</i> , 2011, , .	0.8	3
126	Improved OCT imaging of lung tissue using a prototype for total liquid ventilation. , 2011, , .		3

#	ARTICLE	IF	CITATIONS
127	Non-invasive imaging and monitoring of rodent retina using simultaneous dual-band optical coherence tomography. Proceedings of SPIE, 2011, , .	0.8	3
128	A new small-package super-continuum light source for optical coherence tomography. Proceedings of SPIE, 2013, , .	0.8	3
129	Magnetomotive imaging of iron oxide nanoparticles as cellular contrast agents for optical coherence tomography. Proceedings of SPIE, 2013, , .	0.8	3
130	Motion correction of thermographic images in neurosurgery. , 2015, , .		3
131	Cross-sectional and en-face depolarization imaging for the assessment of dental lesions. Current Directions in Biomedical Engineering, 2018, 4, 301-304.	0.4	3
132	Label-free Imaging of Tissue Architecture during Axolotl Peripheral Nerve Regeneration in Comparison to Functional Recovery. Scientific Reports, 2019, 9, 12641.	3.3	3
133	Brillouin Spectroscopy as an Innovative Tool to Investigate Biomechanical Properties of Native Human Aortic Valve and Bioprostheses Tissue. Structural Heart, 2021, 5, 29.	0.6	3
134	Quantifying the refractive index of ferroelectric domain walls in periodically poled LiNbO3 single crystals by polarization-sensitive optical coherence tomography. Optics Express, 2021, 29, 33615.	3.4	3
135	In vivo three-dimensional Fourier domain optical coherence tomography of subpleural alveoli combined with intra vital microscopy in the mouse model. , 2008, , .		3
136	Towards quantitative demineralization imaging for the assessment of carious lesions based on PS-OCT. EPJ Web of Conferences, 2020, 238, 04009.	0.3	3
137	Resonant Doppler imaging with common path OCT. Proceedings of SPIE, 2009, , .	0.8	2
138	Minimal invasive localization of the germinal disc in ovo for subsequent chicken sexing using optical coherence tomography. , 2010, , .		2
139	Three-dimensional functional imaging of lung parenchyma using optical coherence tomography combined with confocal fluorescence microscopy. , 2011, , .		2
140	Quantitative investigation of alveolar structures with OCT using total liquid ventilation during mechanical ventilation. Proceedings of SPIE, 2012, , .	0.8	2
141	Towards a comprehensive eye model for zebrafish retinal imaging using full range spectral domain optical coherence tomography. Proceedings of SPIE, 2014, , .	0.8	2
142	Imaging the tympanic membrane oscillation ex vivo with Doppler optical coherence tomography during simulated Eustachian catarrh. Proceedings of SPIE, 2015, , .	0.8	2
143	Cerebral cortex classification by conditional random fields applied to intraoperative thermal imaging. Current Directions in Biomedical Engineering, 2016, 2, 475-478.	0.4	2
144	Optical Coherence Tomography (OCT) for Time-Resolved Imaging of Alveolar Dynamics in Mechanically Ventilated Rats. Applied Sciences (Switzerland), 2017, 7, 287.	2.5	2

#	ARTICLE	IF	CITATIONS
145	Optical Coherence Tomography for NDE. , 2018, , 1-44.		2
146	Brillouin confocal microscopy to determine biomechanical properties of SULEEI-treated bovine pericardium for application in cardiac surgery. Clinical Hemorheology and Microcirculation, 2021, 79, 179-192.	1.7	2
147	Design and testing of polar-orthotropic multi-layered composites under rotational load. Materials and Design, 2021, 207, 109853.	7.0	2
148	Optical coherence tomography for imaging of subpleural alveolar structure using a Fourier domain mode locked laser. , 2011, , .		2
149	Endoscopic optical coherence tomography for imaging the tympanic membrane. , 2011, , .		2
150	Raman-based imaging uncovers the effects of alginate hydrogel implants in spinal cord injury. , 2015, , .		2
151	Three-dimensional Fourier-domain optical coherence tomography of alveolar mechanics in stepwise inflated and deflated isolated and perfused rabbit lungs. Proceedings of SPIE, 2007, , .	0.8	1
152	Simultaneous dual-band spectral domain optical coherence tomography using a supercontinuum laser light source. , 2009, , .		1
153	Combining optical coherence tomography with fluorescence microscopy: a closer look into tissue. Proceedings of SPIE, 2010, , .	0.8	1
154	Investigation of alveolar tissue deformations using OCT combined with fluorescence microscopy. , 2011, , .		1
155	Axial resolution improvement by spectral data fusion in simultaneous dual-band optical coherence tomography. , 2011, , .		1
156	Lateral resonant Doppler imaging for quantitative flow extraction in spectral domain optical coherence tomography. , 2011, , .		1
157	Multimodal imaging of lung tissue using optical coherence tomography and two photon microscopy. Proceedings of SPIE, 2012, , .	0.8	1
158	Resolution improvement in dual-band OCT by filling the spectral gap. Proceedings of SPIE, 2012, , .	0.8	1
159	Velocity noise reduction by using enhanced joint spectral and time domain optical coherence tomography. , 2013, , .		1
160	Four-dimensional optical coherence tomography imaging of total liquid ventilated rats. , 2013, , .		1
161	High-resolution optical coherence tomography in mouse models of genetic and induced retinal degeneration. , 2013, , .		1
162	Intra-vital microscopy of lung tissue: A simulation based analysis of the image formation. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
163	Raman-based imaging uncovers the effects of alginate hydrogel implants in spinal cord injury. Proceedings of SPIE, 2015, , .	0.8	1
164	InÂvivo imaging of murine vasodynamics analyzing different mouse strains by optical coherence tomography. Atherosclerosis Supplements, 2017, 30, 311-318.	1.2	1
165	Functional and morphological imaging of the human tympanic membrane with endoscopic optical coherence tomography. Current Directions in Biomedical Engineering, 2017, 3, 99-101.	0.4	1
166	Molecular processes of corneal collagen cross-linking in keratoconus therapy. Current Directions in Biomedical Engineering, 2018, 4, 489-492.	0.4	1
167	Application of thermography for cerebral perfusion imaging during aneurysm surgery. Current Directions in Biomedical Engineering, 2018, 4, 29-32.	0.4	1
168	Spatially Resolved Cross-Linking Characterization by Imaging Low-Coherence Interferometry. Sensors, 2019, 19, 1152.	3.8	1
169	Combined Brillouin and Raman system for biomedical applications. EPJ Web of Conferences, 2020, 238, 04007.	0.3	1
170	Optical Imaging. , 2017, , 403-490.		1
171	Thin-film characterization with a dual-channel dispersion-encoded imaging low-coherence interferometry approach. , 2019, , .		1
172	Assessment of occlusal enamel alterations utilizing depolarization imaging based on PS-OCT. , 2019, , .		1
173	Three-dimensional Fourier-domain optical coherence tomography of alveolar mechanics in stepwise inflated and deflated isolated and perfused rabbit lungs. , 2007, , .		1
174	Resonant Doppler Imaging with Common Path OCT. , 2009, , .		1
175	Imaging the tympanic membrane oscillation ex vivo with Doppler optical coherence tomography during simulated Eustachian catarrh. , 2015, , .		1
176	3D handheld endoscope for optical coherence tomography of the human oral mucosa in vivo. , 2017, , .		1
177	Motion blur suppression by using an optical derotator for deformation measurement of rotating components. , 2020, , .		1
178	Non-destructive testing of a rotating glass-fibre-reinforced polymer disc by swept source optical coherence tomography. EPJ Web of Conferences, 2020, 238, 06007.	0.3	1
179	Linear OCT system with down conversion of the fringe pattern. , 2004, , .		0
180	Quantifizierung von Flussgeschwindigkeiten mit dem Verfahren der Fourier Domain Optische KohärenztomografieFlow Velocity Quantification with Fourier Domain Optical Coherence Tomography. TM Technisches Messen, 2009, 76, 198-210.	0.7	0

#	ARTICLE	IF	CITATIONS
181	Optical angiography from optical coherence tomography using a computational phase-shift. Proceedings of SPIE, 2009, , .	0.8	0
182	3D Fourier domain optical coherence tomography of post perfusion fixated ethanol-filled isolated rabbit lungs. , 2009, , .		0
183	Blood flow measurement in the in vivo mouse model by the combination of Doppler OCT and the signal power decrease in spectral domain OCT. Proceedings of SPIE, 2009, , .	0.8	0
184	New model for space encoded Fourier domain optical Doppler tomography. Proceedings of SPIE, 2009, , .	0.8	0
185	Bird sexing by Fourier transform infrared spectroscopy. Proceedings of SPIE, 2010, , .	0.8	0
186	Investigations of the intravascular backscattering distribution of light in optical coherence tomography. Proceedings of SPIE, 2010, , .	0.8	0
187	The role of a detector dead time in phase-resolved Doppler analysis using spectral domain optical coherence tomography. , 2010, , .		0
188	Characterization of cytochrome c as marker for retinal cell degeneration by uv/vis spectroscopic imaging. , 2011, , .		0
189	Optical coherence tomography and confocal fluorescence microscopy as a combined method for studying morphological changes in lung dynamics. Proceedings of SPIE, 2011, , .	0.8	0
190	A Hybrid Model of Interacting Physiological Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 290-294.	0.4	0
191	An advanced algorithm for dispersion encoded full range frequency domain optical coherence tomography. , 2013, , .		0
192	Vibration of the human tympanic membrane measured with OCT in a range between 0.4 kHz and 6.4 kHz on an ex vivo sample. , 2013, , .		0
193	Optical coherence tomography as a reference method for the detection of nanoparticles in thin-film polymer matrices. , 2013, , .		0
194	3D Optical Coherence Tomography for Investigating Alveolar Structures During Total Liquid Ventilation. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.8	0
195	14. Optische Kohärenztomographie. , 2014, , 471-504.		0
196	Intraoperative imaging of cortical perfusion by time-resolved thermography using cold bolus approach. , 2014, , .		0
197	High Speed optische Kohärenztomografie als vielversprechendes Bildgebungsverfahren bei der Untersuchung des Blasensiedens. TM Technisches Messen, 2015, 82, 562-571.	0.7	0
198	4D optical coherence tomography of aortic valve dynamics in a murine mouse model ex vivo. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
199	Optimal processing of Doppler signals in OCT. , 2015, , .		0
200	Author Response: Possibility of Cytoplasmic Transportation Between Donorâ€™Host Cell Following Photoreceptor Transplantation. , 2016, 57, 5336.		0
201	Measurement of lung tissue dynamics in artificially ventilated rats with optical coherence tomography. Current Directions in Biomedical Engineering, 2017, 3, 79-81.	0.4	0
202	Polarization sensitive optical coherence tomography utilizing a buffered swept source laser. Current Directions in Biomedical Engineering, 2017, 3, 227-230.	0.4	0
203	Visualization of interfacial adhesive defects at dental restorations with spectral domain and polarization sensitive optical coherence tomography. Current Directions in Biomedical Engineering, 2018, 4, 559-562.	0.4	0
204	Imaging of the human tympanic membrane by endoscopic optical coherence tomography. Current Directions in Biomedical Engineering, 2018, 4, 305-308.	0.4	0
205	Common-Path Fourier Domain Optical Coherence Tomography of Irradiated Human Skin and Ventilated Isolated Rabbit Lungs. , 2005, , .		0
206	Fiber Optic Distance Sensor with Sub-nm Axial Resolution. , 2005, , .		0
207	An adaptive controller for noisy pressure controlled ventilation. IFMBE Proceedings, 2009, , 50-53.	0.3	0
208	Optical Angiography from Optical Coherence Tomography using a computational phase-shift. , 2009, , .		0
209	Investigation of alveolar tissue deformations using OCT combined with fluorescence microscopy. , 2011, , .		0
210	Optical coherence tomography for imaging of subpleural alveolar structure using a Fourier domain mode locked laser. , 2011, , .		0
211	Enhanced joint spectral and time domain optical coherence tomography for quantitative flow velocity measurement. , 2011, , .		0
212	Improved OCT imaging of lung tissue using a prototype for total liquid ventilation. , 2011, , .		0
213	Axial resolution improvement by spectral data fusion in simultaneous dual-band optical coherence tomography. , 2011, , .		0
214	4D optical coherence tomography of aortic valve dynamics in a murine mouse model ex vivo. , 2015, , .		0
215	Optimal processing of Doppler signals in OCT. , 2015, , .		0
216	Imaging of aortic valve dynamics in 4D OCT. Current Directions in Biomedical Engineering, 2015, 1, 254-256.	0.4	0

#	ARTICLE	IF	CITATIONS
217	Lateral resonant Doppler flow measurement by spectral domain optical coherence tomography. , 2017, , .		0
218	Optical Coherence Tomography for NDE. , 2019, , 469-511.		0
219	Qualitative image comparison between in vivo endoscopic optical coherence tomography and conventional histology of the healthy human oral mucosa. , 2019, , .		0
220	Endoscopic optical coherence tomography at the middle ear diagnostic. , 2019, , .		0
221	Imaging birefringent tissue in the human tympanic membrane by polarization-sensitive optical coherence tomography. EPJ Web of Conferences, 2020, 238, 04008.	0.3	0
222	One-shot roughness measurements based on dispersion-encoded low coherence interferometry. , 2020, , .		0
223	Determination of Alveolar Geometry by Optical Coherence Tomography to Develop a Numerical Model of the Fluid Dynamics in the Pulmonary Acinus. , 2007, , 337-342.		0
224	Brillouin and Raman imaging of domain walls in periodically-poled 5%-MgO:LiNbO ₃ . Optics Express, 2022, 30, 5051-5062.	3.4	0
225	Polarization-sensitive OCT using a single-mode fiber-based common-path probe. , 2021, , .		0