

I Alex Vitkin

List of Publications by Year in descending order

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266
papers

8,819
citations

44069

48
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83
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274
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274
docs citations

274
times ranked

5156
citing authors

#	ARTICLE	IF	CITATIONS
1	Speckle variance detection of microvasculature using swept-source optical coherence tomography. <i>Optics Letters</i> , 2008, 33, 1530.	3.3	679
2	Tissue polarimetry: concepts, challenges, applications, and outlook. <i>Journal of Biomedical Optics</i> , 2011, 16, 110801.	2.6	546
3	High speed, wide velocity dynamic range Doppler optical coherence tomography (Part I): System design, signal processing, and performance. <i>Optics Express</i> , 2003, 11, 794.	3.4	243
4	Optimized speckle variance OCT imaging of microvasculature. <i>Optics Letters</i> , 2010, 35, 1257.	3.3	237
5	Mueller matrix decomposition for extraction of individual polarization parameters from complex turbid media exhibiting multiple scattering, optical activity, and linear birefringence. <i>Journal of Biomedical Optics</i> , 2008, 13, 044036.	2.6	204
6	<i>In vivo</i> Optical Coherence Tomography Imaging of Preinvasive Bronchial Lesions. <i>Clinical Cancer Research</i> , 2008, 14, 2006-2011.	7.0	198
7	Polarized light imaging in biomedicine: emerging Mueller matrix methodologies for bulk tissue assessment. <i>Journal of Biomedical Optics</i> , 2015, 20, 061104.	2.6	190
8	Dynamic focus control in high-speed optical coherence tomography based on a microelectromechanical mirror. <i>Optics Communications</i> , 2004, 232, 123-128.	2.1	145
9	Mueller matrix decomposition for polarized light assessment of biological tissues. <i>Journal of Biophotonics</i> , 2009, 2, 145-156.	2.3	145
10	Endoscopic Doppler optical coherence tomography in the human GI tract: initial experience. <i>Gastrointestinal Endoscopy</i> , 2005, 61, 879-890.	1.0	130
11	Optical and acoustic properties at 1064 nm of polyvinyl chloride-plastisol for use as a tissue phantom in biomedical optoacoustics. <i>Physics in Medicine and Biology</i> , 2005, 50, N141-N153.	3.0	129
12	Improved phase-resolved optical Doppler tomography using the Kasai velocity estimator and histogram segmentation. <i>Optics Communications</i> , 2002, 208, 209-214.	2.1	123
13	Doppler optical cardiogram gated 2D color flow imaging at 1000 fps and 4D <i>in vivo</i> visualization of embryonic heart at 45 fps on a swept source OCT system. <i>Optics Express</i> , 2007, 15, 1627.	3.4	120
14	High speed, wide velocity dynamic range Doppler optical coherence tomography (Part II): Imaging <i>in vivo</i> cardiac dynamics of <i>Xenopus laevis</i> . <i>Optics Express</i> , 2003, 11, 1650.	3.4	109
15	Determination of optical properties of turbid media using pulsed photothermal radiometry. <i>Physics in Medicine and Biology</i> , 1992, 37, 1203-1217.	3.0	106
16	OPTICAL AND THERMAL CHARACTERIZATION OF NATURAL (<i>in vivo</i> <i>Sepia officinalis</i>) MELANIN. <i>Photochemistry and Photobiology</i> , 1994, 59, 455-462.	2.5	100
17	High speed, wide velocity dynamic range Doppler optical coherence tomography (Part III): <i>in vivo</i> endoscopic imaging of blood flow in the rat and human gastrointestinal tracts. <i>Optics Express</i> , 2003, 11, 2416.	3.4	97
18	Robust concentration determination of optically active molecules in turbid media with validated three-dimensional polarization sensitive Monte Carlo calculations. <i>Optics Express</i> , 2005, 13, 148.	3.4	88

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19	Feasibility of interstitial Doppler optical coherence tomography for in vivo detection of microvascular changes during photodynamic therapy. <i>Lasers in Surgery and Medicine</i> , 2006, 38, 754-761.	2.1	85
20	Why do veins appear blue? A new look at an old question. <i>Applied Optics</i> , 1996, 35, 1151.	2.1	84
21	Interstitial Doppler optical coherence tomography. <i>Optics Letters</i> , 2005, 30, 1791.	3.3	84
22	Optimized phase gradient measurements and phase-amplitude interplay in optical coherence elastography. <i>Journal of Biomedical Optics</i> , 2016, 21, 116005.	2.6	84
23	Polarized light propagation in multiply scattering media exhibiting both linear birefringence and optical activity: Monte Carlo model and experimental methodology. <i>Journal of Biomedical Optics</i> , 2007, 12, 014029.	2.6	81
24	Polarization birefringence measurements for characterizing the myocardium, including healthy, infarcted, and stem-cell-regenerated tissues. <i>Journal of Biomedical Optics</i> , 2010, 15, 047009.	2.6	80
25	Micromachined 2-D scanner for 3-D optical coherence tomography. <i>Sensors and Actuators A: Physical</i> , 2005, 117, 331-340.	4.1	77
26	Energy dependence (75kVp to 18MV) of radiochromic films assessed using a real-time optical dosimeter. <i>Medical Physics</i> , 2007, 34, 458-463.	3.0	76
27	Influence of the order of the constituent basis matrices on the Mueller matrix decomposition-derived polarization parameters in complex turbid media such as biological tissues. <i>Optics Communications</i> , 2010, 283, 1200-1208.	2.1	74
28	Polarimetry in turbid, birefringent, optically active media: A Monte Carlo study of Mueller matrix decomposition in the backscattering geometry. <i>Journal of Applied Physics</i> , 2009, 105, .	2.5	72
29	Optical rotation and linear and circular depolarization rates in diffusively scattered light from chiral, racemic, and achiral turbid media. <i>Journal of Biomedical Optics</i> , 2002, 7, 291.	2.6	68
30	The effects of dynamic optical properties during interstitial laser photocoagulation. <i>Physics in Medicine and Biology</i> , 2000, 45, 1335-1357.	3.0	67
31	Interstitial Doppler Optical Coherence Tomography as a Local Tumor Necrosis Predictor in Photodynamic Therapy of Prostatic Carcinoma: An <i>in vivo</i> Study. <i>Cancer Research</i> , 2008, 68, 9987-9995.	0.9	67
32	Characterization and real-time optical measurements of the ionizing radiation dose response for a new radiochromic medium. <i>Medical Physics</i> , 2005, 32, 2510-2516.	3.0	65
33	Micromachined array tip for multifocus fiber-based optical coherence tomography. <i>Optics Letters</i> , 2004, 29, 1754.	3.3	63
34	Magnetic resonance imaging of temperature changes during interstitial microwave heating: A phantom study. <i>Medical Physics</i> , 1997, 24, 269-277.	3.0	61
35	Hybrid M-mode-like OCT imaging of three-dimensional microvasculature in vivo using reference-free processing of complex valued B-scans. <i>Optics Letters</i> , 2015, 40, 1472.	3.3	61
36	Proof-of-principle demonstration of a Mueller matrix decomposition method for polarized light tissue characterization in vivo. <i>Journal of Biomedical Optics</i> , 2009, 14, 014029.	2.6	60

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37	Texture analysis of optical coherence tomography speckle for characterizing biological tissues in vivo. <i>Optics Letters</i> , 2013, 38, 1280.	3.3	60
38	Practical obstacles and their mitigation strategies in compressional optical coherence elastography of biological tissues. <i>Journal of Innovative Optical Health Sciences</i> , 2017, 10, 1742006.	1.0	60
39	Optical phantom materials for near infrared laser photocoagulation studies. , 1999, 25, 159-169.		59
40	Temperature and hydration effects on absorbance spectra and radiation sensitivity of a radiochromic medium. <i>Medical Physics</i> , 2008, 35, 4545-4555.	3.0	58
41	Rapid Detection of Necrosis in Breast Cancer with Desorption Electrospray Ionization Mass Spectrometry. <i>Scientific Reports</i> , 2016, 6, 35374.	3.3	57
42	Optical coherence elastography for strain dynamics measurements in laser correction of cornea shape. <i>Journal of Biophotonics</i> , 2017, 10, 1450-1463.	2.3	57
43	Balanced detection for low-noise precision polarimetric measurements of optically active, multiply scattering tissue phantoms. <i>Journal of Biomedical Optics</i> , 2004, 9, 213.	2.6	55
44	Comparative study of differential matrix and extended polar decomposition formalisms for polarimetric characterization of complex tissue-like turbid media. <i>Journal of Biomedical Optics</i> , 2012, 17, 105006.	2.6	55
45	Deformation-induced speckle-pattern evolution and feasibility of correlational speckle tracking in optical coherence elastography. <i>Journal of Biomedical Optics</i> , 2015, 20, 075006.	2.6	54
46	Methodology for examining polarized light interactions with tissues and tissuelike media in the exact backscattering direction. <i>Journal of Biomedical Optics</i> , 2000, 5, 330.	2.6	51
47	Effects of the Vascular Disrupting Agent ZD6126 on Interstitial Fluid Pressure and Cell Survival in Tumors. <i>Cancer Research</i> , 2006, 66, 2074-2080.	0.9	51
48	Photothermal reflectance investigation of processed silicon. I. Room-temperature study of the induced damage and of the annealing kinetics of defects in ion-implanted wafers. <i>Journal of Applied Physics</i> , 1990, 67, 2815-2821.	2.5	50
49	Speckle statistics in OCT images: Monte Carlo simulations and experimental studies. <i>Optics Letters</i> , 2014, 39, 3472.	3.3	50
50	Development of a laser photothermoacoustic frequency-swept system for subsurface imaging: Theory and experiment. <i>Journal of the Acoustical Society of America</i> , 2004, 116, 3523-3533.	1.1	49
51	Quantifying tissue microvasculature with speckle variance optical coherence tomography. <i>Optics Letters</i> , 2012, 37, 3180.	3.3	49
52	Optimum selection of input polarization states in determining the sample Mueller matrix: a dual photoelastic polarimeter approach. <i>Optics Express</i> , 2012, 20, 20466.	3.4	49
53	Rapid wide-field Mueller matrix polarimetry imaging based on four photoelastic modulators with no moving parts. <i>Optics Letters</i> , 2016, 41, 1038.	3.3	49
54	Differential diagnosis of human bladder mucosa pathologies in vivo with cross-polarization optical coherence tomography. <i>Biomedical Optics Express</i> , 2015, 6, 1464.	2.9	48

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55	Hybrid method of strain estimation in optical coherence elastography using combined sub-wavelength phase measurements and supra-pixel displacement tracking. <i>Journal of Biophotonics</i> , 2016, 9, 499-509.	2.3	48
56	<i>In vivo</i> endoscopic multi-beam optical coherence tomography. <i>Physics in Medicine and Biology</i> , 2010, 55, 615-622.	3.0	47
57	Optical coherence tomography-based angiography device with real-time angiography B-scans visualization and hand-held probe for everyday clinical use. <i>Journal of Biophotonics</i> , 2018, 11, e201700292.	2.3	47
58	Electrostatic forward-viewing scanning probe for Doppler optical coherence tomography using a dissipative polymer catheter. <i>Optics Letters</i> , 2008, 33, 657.	3.3	46
59	Innovations in imaging for chronic total occlusions: a glimpse into the future of angiography's blind-spot. <i>European Heart Journal</i> , 2008, 29, 583-593.	2.2	46
60	Quantitative correlation between light depolarization and transport albedo of various porcine tissues. <i>Journal of Biomedical Optics</i> , 2012, 17, 045004.	2.6	46
61	High-power wavelength-swept laser in Littman telescope-less polygon filter and dual-amplifier configuration for multichannel optical coherence tomography. <i>Optics Letters</i> , 2009, 34, 2814.	3.3	45
62	Doppler optical coherence tomography monitoring of microvascular tissue response during photodynamic therapy in an animal model of Barrett's esophagus. <i>Gastrointestinal Endoscopy</i> , 2007, 66, 326-333.	1.0	44
63	Photodynamic therapy monitoring with optical coherence angiography. <i>Scientific Reports</i> , 2017, 7, 41506.	3.3	44
64	Three-dimensional optical phantom and its application in photodynamic therapy. <i>Lasers in Surgery and Medicine</i> , 1997, 21, 227-234.	2.1	43
65	Noninvasive in vivo structural and vascular imaging of human oral tissues with spectral domain optical coherence tomography. <i>Biomedical Optics Express</i> , 2012, 3, 826.	2.9	42
66	Angular measurements of light scattered by turbid chiral media using linear Stokes polarimeter. <i>Journal of Biomedical Optics</i> , 2006, 11, 041105.	2.6	41
67	Rapid time-gated polarimetric Stokes imaging using photoelastic modulators. <i>Optics Letters</i> , 2013, 38, 2997.	3.3	41
68	Wide-field tissue polarimetry allows efficient localized mass spectrometry imaging of biological tissues. <i>Chemical Science</i> , 2016, 7, 2162-2169.	7.4	41
69	Polarization studies in multiply scattering chiral media. <i>Optical Engineering</i> , 2000, 39, 353.	1.0	40
70	Polarization preservation in diffusive scattering from in vivo turbid biological media: effects of tissue optical absorption in the exact backscattering direction. <i>Optics Communications</i> , 2001, 190, 37-43.	2.1	40
71	In-vivo longitudinal imaging of microvascular changes in irradiated oral mucosa of radiotherapy cancer patients using optical coherence tomography. <i>Scientific Reports</i> , 2017, 7, 16505.	3.3	40
72	Polarized Light Assessment of Complex Turbid Media Such as Biological Tissues Using Mueller Matrix Decomposition. <i>Series in Medical Physics and Biomedical Engineering</i> , 2010, , 253-282.	0.1	40

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73	Polarimetry-based method to extract geometry-independent metrics of tissue anisotropy. Optics Letters, 2010, 35, 2570.	3.3	39
74	Probing multifractality in tissue refractive index: prospects for precancer detection. Optics Letters, 2013, 38, 211.	3.3	39
75	High power wavelength linearly swept mode locked fiber laser for OCT imaging. Optics Express, 2008, 16, 14095.	3.4	38
76	Do different turbid media with matched bulk optical properties also exhibit similar polarization properties?. Biomedical Optics Express, 2011, 2, 3248.	2.9	38
77	Optimized Mass Spectrometry Analysis Workflow with Polarimetric Guidance for ex vivo and in situ Sampling of Biological Tissues. Scientific Reports, 2017, 7, 468.	3.3	38
78	In Vivo Optical Imaging of Tumor and Microvascular Response to Ionizing Radiation. PLoS ONE, 2012, 7, e42133.	2.5	38
79	Doppler optical coherence tomography with a micro-electro-mechanical membrane mirror for high-speed dynamic focus tracking. Optics Letters, 2006, 31, 1262.	3.3	37
80	Cross-Polarization Optical Coherence Tomography with Active Maintenance of the Circular Polarization of a Sounding Wave in a Common Path System. Radiophysics and Quantum Electronics, 2018, 60, 897-911.	0.5	37
81	Monte Carlo study of pathlength distribution of polarized light in turbid media. Optics Express, 2007, 15, 1348.	3.4	36
82	A Spinal Cord Window Chamber Model for In Vivo Longitudinal Multimodal Optical and Acoustic Imaging in a Murine Model. PLoS ONE, 2013, 8, e58081.	2.5	35
83	Effects of gamma irradiation on collagen damage and remodeling. International Journal of Radiation Biology, 2015, 91, 240-247.	1.8	35
84	Photothermal reflectance investigation of processed silicon. II. Signal generation and lattice temperature dependence in ion-implanted and amorphous thin layers. Journal of Applied Physics, 1990, 67, 2822-2830.	2.5	34
85	Changes in optical properties of ex vivo rat prostate due to heating. Physics in Medicine and Biology, 2000, 45, 1375-1386.	3.0	34
86	Suitability of radiochromic medium for real-time optical measurements of ionizing radiation dose. Medical Physics, 2005, 32, 1140-1155.	3.0	34
87	Elastin overexpression by cell-based gene therapy preserves matrix and prevents cardiac dilation. Journal of Cellular and Molecular Medicine, 2012, 16, 2429-2439.	3.6	34
88	Enhanced optical rotation and diminished depolarization in diffusive scattering from a chiral liquid. Optics Communications, 1996, 132, 410-416.	2.1	33
89	A Monte Carlo study of penetration depth and sampling volume of polarized light in turbid media. Optics Communications, 2008, 281, 380-387.	2.1	33
90	Effects of formalin fixation on tissue optical polarization properties. Physics in Medicine and Biology, 2011, 56, N115-N122.	3.0	33

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91	Optical clearing of melanoma <i>in vivo</i> : characterization by diffuse reflectance spectroscopy and optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2016, 21, 081210.	2.6	33
92	Wide dynamic range detection of bidirectional flow in Doppler optical coherence tomography using a two-dimensional Kasai estimator. <i>Optics Letters</i> , 2007, 32, 253.	3.3	32
93	Can temporal analysis of optical coherence tomography statistics report on dextrorotatory-glucose levels in blood?. <i>Laser Physics</i> , 2011, 21, 1962-1971.	1.2	32
94	Analysis of layered scattering materials by pulsed photothermal radiometry: application to photon propagation in tissue. <i>Applied Optics</i> , 1995, 34, 2973.	2.1	30
95	Combined optical intensity and polarization methodology for analyte concentration determination in simulated optically clear and turbid biological media. <i>Journal of Biomedical Optics</i> , 2008, 13, 044037.	2.6	29
96	Quantitative Polarimetry for Tissue Characterization and Diagnosis. <i>Series in Optics and Optoelectronics</i> , 2013, , 73-108.	0.0	29
97	Flexible polarimetric probe for 3 \times 3 Mueller matrix measurements of biological tissue. <i>Scientific Reports</i> , 2017, 7, 11958.	3.3	29
98	Pixel classification method in optical coherence tomography for tumor segmentation and its complementary usage with OCT microangiography. <i>Journal of Biophotonics</i> , 2018, 11, e201700072.	2.3	29
99	The effect of pre-vertebroplasty tumor ablation using laser-induced thermotherapy on biomechanical stability and cement fill in the metastatic spine. <i>European Spine Journal</i> , 2007, 16, 1171-1178.	2.2	28
100	Optical coherence tomography platform for microvascular imaging and quantification: initial experience in late oral radiation toxicity patients. <i>Journal of Biomedical Optics</i> , 2013, 18, 076008.	2.6	28
101	Preclinical longitudinal imaging of tumor microvascular radiobiological response with functional optical coherence tomography. <i>Scientific Reports</i> , 2018, 8, 38.	3.3	28
102	Tissue multifractality and Born approximation in analysis of light scattering: a novel approach for precancers detection. <i>Scientific Reports</i> , 2014, 4, 6129.	3.3	27
103	Effects of molecular asymmetry of optically active molecules on the polarization properties of multiply scattered light. <i>Optics Express</i> , 2002, 10, 222.	3.4	25
104	Interstitial Doppler optical coherence tomography monitors microvascular changes during photodynamic therapy in a Dunning prostate model under varying treatment conditions. <i>Journal of Biomedical Optics</i> , 2007, 12, 034022.	2.6	25
105	Ex vivo imaging of chronic total occlusions using forward-looking optical coherence tomography. <i>Lasers in Surgery and Medicine</i> , 2007, 39, 28-35.	2.1	25
106	Depolarization of light in turbid media: a scattering event resolved Monte Carlo study. <i>Applied Optics</i> , 2010, 49, 153.	2.1	25
107	Colorization and Automated Segmentation of Human T2 MR Brain Images for Characterization of Soft Tissues. <i>PLoS ONE</i> , 2012, 7, e33616.	2.5	25
108	Assessment of local structural disorders of the bladder wall in partial bladder outlet obstruction using polarized light imaging. <i>Biomedical Optics Express</i> , 2014, 5, 621.	2.9	25

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109	Polarimetric assessment of healthy and radiofrequency ablated porcine myocardial tissue. <i>Journal of Biophotonics</i> , 2016, 9, 750-759.	2.3	25
110	Mueller matrix polarimetry for the characterization of complex random medium like biological tissues. <i>Pramana - Journal of Physics</i> , 2010, 75, 1071-1086.	1.8	24
111	Laser-induced photothermal reflectance investigation of silicon damaged by arsenic ion implantation: A temperature study. <i>Applied Physics Letters</i> , 1989, 54, 2392-2394.	3.3	23
112	Determination of the optical properties of turbid media using relative interstitial radiance measurements: Monte Carlo study, experimental validation, and sensitivity analysis. <i>Journal of Biomedical Optics</i> , 2007, 12, 064027.	2.6	23
113	Recent Trends in Multimodal Optical Coherence Tomography. I. Polarization-Sensitive OCT and Conventional Approaches to OCT Elastography. <i>Radiophysics and Quantum Electronics</i> , 2014, 57, 52-66.	0.5	23
114	Polarization image segmentation of radiofrequency ablated porcine myocardial tissue. <i>PLoS ONE</i> , 2017, 12, e0175173.	2.5	23
115	Detecting axial heterogeneity of birefringence in layered turbid media using polarized light imaging. <i>Biomedical Optics Express</i> , 2012, 3, 3250.	2.9	22
116	Recent Trends in Multimodal Optical Coherence Tomography. II. The Correlation-Stability Approach in OCT Elastography and Methods for Visualization of Microcirculation. <i>Radiophysics and Quantum Electronics</i> , 2014, 57, 210-225.	0.5	22
117	Analysis of low-scattering regions in optical coherence tomography: applications to neurography and lymphangiography. <i>Biomedical Optics Express</i> , 2019, 10, 4207.	2.9	22
118	Study of photodynamic reactions in human blood. <i>Journal of Biomedical Optics</i> , 2000, 5, 338.	2.6	21
119	Oxygen-independent degradation of HIF-1 α via bioengineered VHL tumour suppressor complex. <i>EMBO Molecular Medicine</i> , 2009, 1, 66-78.	6.9	21
120	Dual-Agent Photodynamic Therapy with Optical Clearing Eradicates Pigmented Melanoma in Preclinical Tumor Models. <i>Cancers</i> , 2020, 12, 1956.	3.7	21
121	Changes in relative light fluence measured during laser heating: implications for optical monitoring and modelling of interstitial laser photocoagulation. <i>Physics in Medicine and Biology</i> , 2001, 46, 2407-2420.	3.0	20
122	Probability density function formalism for optical coherence tomography signal analysis: a controlled phantom study. <i>Optics Letters</i> , 2016, 41, 2727.	3.3	20
123	Characterization of measurement artefacts in fluoroptic temperature sensors: Implications for laser thermal therapy at 810 nm. <i>Lasers in Surgery and Medicine</i> , 2005, 36, 297-306.	2.1	18
124	Two-photon microscopy of healthy, infarcted and stem cell treated regenerating heart. <i>Journal of Biophotonics</i> , 2011, 4, 297-304.	2.3	18
125	Models and measurements of light intensity changes during laser interstitial thermal therapy: implications for optical monitoring of the coagulation boundary location. <i>Physics in Medicine and Biology</i> , 2003, 48, 543-559.	3.0	17
126	Information content of point radiance measurements in turbid media: implications for interstitial optical property quantification. <i>Applied Optics</i> , 2006, 45, 2101.	2.1	17

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127	COMPARISON OF OPTICAL POLARIMETRY AND DIFFUSION TENSOR MR IMAGING FOR ASSESSING MYOCARDIAL ANISOTROPY. <i>Journal of Innovative Optical Health Sciences</i> , 2010, 03, 109-121.	1.0	17
128	Multi-modal optical imaging characterization of atherosclerotic plaques. <i>Journal of Biophotonics</i> , 2016, 9, 1009-1020.	2.3	17
129	Laser photothermoacoustic heterodyned lock-in depth profilometry in turbid tissue phantoms. <i>Physical Review E</i> , 2005, 72, 051908.	2.1	16
130	Optical assessment of tissue anisotropy in <i>&lt;italic>ex vivo&/italic></i> distended rat bladders. <i>Journal of Biomedical Optics</i> , 2012, 17, 086010.	2.6	16
131	In Vivo Doppler Optical Coherence Tomography of Mucocutaneous Telangiectases in Hereditary Hemorrhagic Telangiectasia. <i>Gastrointestinal Endoscopy</i> , 2003, 58, 591-598.	1.0	15
132	Radiance-based monitoring of the extent of tissue coagulation during laser interstitial thermal therapy. <i>Optics Letters</i> , 2004, 29, 959.	3.3	15
133	Intra-irradiation changes in the signal of polymer-based dosimeter (GAFCHROMIC EBT) due to dose rate variations. <i>Physics in Medicine and Biology</i> , 2007, 52, N523-N529.	3.0	15
134	Stokes polarimetry in multiply scattering chiral media: effects of experimental geometry. <i>Applied Optics</i> , 2007, 46, 4491.	2.1	14
135	Quantification of glucose levels in flowing blood using M-mode swept source optical coherence tomography. <i>Laser Physics</i> , 2012, 22, 797-804.	1.2	14
136	Optimization of rapid Mueller matrix imaging of turbid media using four photoelastic modulators without mechanically moving parts. <i>Optical Engineering</i> , 2013, 52, 103114.	1.0	14
137	Microvascular contrast enhancement in optical coherence tomography using microbubbles. <i>Journal of Biomedical Optics</i> , 2016, 21, 076014.	2.6	14
138	Novel methodology to image stromal tissue and assess its morphological features with polarized light: towards a tumour microenvironment prognostic signature. <i>Biomedical Optics Express</i> , 2019, 10, 3963.	2.9	14
139	Laser thermal therapy: utility of interstitial fluence monitoring for locating optical sensors. <i>Physics in Medicine and Biology</i> , 2001, 46, N91-N96.	3.0	13
140	A Novel Strategy For Monitoring Laser Thermal Therapy Based on Changes in Optothermal Properties of Heated Tissues. <i>International Journal of Thermophysics</i> , 2005, 26, 233-241.	2.1	13
141	Interstitial point radiance spectroscopy of turbid media. <i>Journal of Applied Physics</i> , 2009, 105, 102025.	2.5	13
142	Toward a quantitative method for estimating tumour-stroma ratio in breast cancer using polarized light microscopy. <i>Biomedical Optics Express</i> , 2021, 12, 3241.	2.9	13
143	Novel quantitative signature of tumor stromal architecture: polarized light imaging differentiates between myxoid and sclerotic human breast cancer stroma. <i>Biomedical Optics Express</i> , 2020, 11, 3246.	2.9	13
144	Volumetric tumor delineation and assessment of its early response to radiotherapy with optical coherence tomography. <i>Biomedical Optics Express</i> , 2021, 12, 2952.	2.9	12

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145	Pulsed photothermal radiometry in optically transparent media containing discrete optical absorbers. <i>Physics in Medicine and Biology</i> , 1994, 39, 1721-1744.	3.0	11
146	Development and testing of an optoacoustic imaging system for monitoring and guiding prostate cancer therapies. , 2004, , .		11
147	Analysis of scattering statistics and governing distribution functions in optical coherence tomography. <i>Biomedical Optics Express</i> , 2016, 7, 2551.	2.9	11
148	Thin-film photopyroelectric detection of thermal impulse response of single-crystalline YBa ₂ Cu ₃ O _{7-x} . <i>Measurement Science and Technology</i> , 1990, 1, 184-188.	2.6	10
149	Optothermal transfer simulation in laser-irradiated human dentin. <i>Journal of Biomedical Optics</i> , 2003, 8, 298.	2.6	10
150	In vivo real time monitoring of vasoconstriction and vasodilation by a combined diffuse reflectance spectroscopy and Doppler optical coherence tomography approach. <i>Lasers in Surgery and Medicine</i> , 2008, 40, 323-331.	2.1	10
151	Novel methods for elasticity characterization using optical coherence tomography: Brief review and future prospects. <i>Photonics & Lasers in Medicine</i> , 2014, 3, .	0.2	10
152	Talin Is Required Continuously for Cardiomyocyte Remodeling during Heart Growth in Drosophila. <i>PLoS ONE</i> , 2015, 10, e0131238.	2.5	10
153	Imaging pancreatobiliary ductal system with optical coherence tomography: A review. <i>World Journal of Gastrointestinal Endoscopy</i> , 2013, 5, 540.	1.2	10
154	Discriminating turbid media by scatterer size and scattering coefficient using backscattered linearly and circularly polarized light. <i>Biomedical Optics Express</i> , 2021, 12, 6831.	2.9	10
155	Theoretical, experimental, and computational aspects of optical property determination of turbid media by using frequency-domain laser infrared photothermal radiometry. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2001, 18, 2548.	1.5	9
156	Optical coherence and Doppler tomography for monitoring tissue changes induced by laser thermal therapy—An in vivo feasibility study. <i>Review of Scientific Instruments</i> , 2003, 74, 437-440.	1.3	9
157	Dynamic light scattering by flowing Brownian particles measured with optical coherence tomography: impact of the optical system. <i>Journal of Biomedical Optics</i> , 2016, 21, 017002.	2.6	9
158	Preclinical quantitative in-vivo assessment of skin tissue vascularity in radiation-induced fibrosis with optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2018, 23, 1.	2.6	9
159	The potential of biophotonic techniques in stem cell tracking and monitoring of tissue regeneration applied to cardiac stem cell therapy. <i>Journal of Biophotonics</i> , 2009, 2, 669-681.	2.3	8
160	Doppler optical coherence tomography for interventional cardiovascular guidance: in vivo feasibility and forward-viewing probe flow phantom demonstration. <i>Journal of Biomedical Optics</i> , 2010, 15, 011103.	2.6	8
161	Radiance detection of non-scattering inclusions in turbid media. <i>Biomedical Optics Express</i> , 2012, 3, 3001.	2.9	8
162	Experimental validation of optimum input polarization states for Mueller matrix determination with a dual photoelastic modulator polarimeter. <i>Optics Letters</i> , 2013, 38, 5272.	3.3	8

#	ARTICLE	IF	CITATIONS
163	Dynamic light scattering arising from flowing Brownian particles: analytical model in optical coherence tomography conditions. <i>Journal of Biomedical Optics</i> , 2014, 19, 127004.	2.6	8
164	Statistical properties of dynamic speckles from flowing Brownian scatterers in the vicinity of the image plane in optical coherence tomography. <i>Biomedical Optics Express</i> , 2017, 8, 2004.	2.9	8
165	A multiscale Mueller polarimetry module for a stereo zoom microscope. <i>Biomedical Engineering Letters</i> , 2019, 9, 339-349.	4.1	8
166	Accurate viscosity measurements of flowing aqueous glucose solutions with suspended scatterers using a dynamic light scattering approach with optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2017, 22, 1.	2.6	8
167	3D distribution three-dimensional mapping of biological tissues in optical coherence tomography. <i>Journal of Biophotonics</i> , 2018, 11, e201700055.	2.3	7
168	Longitudinal in-vivo quantification of tumour microvascular heterogeneity by optical coherence angiography in pre-clinical radiation therapy. <i>Scientific Reports</i> , 2022, 12, 6140.	3.3	7
169	Ultrasound backscatter microscopy/spectroscopy and optical coherence (Doppler) tomography for mechanism-specific monitoring of photodynamic therapy in vivo and in vitro. , 2002, , .		6
170	Peritumoural stroma collagen organization of invasive ductal carcinoma assessed by polarized light microscopy differs between OncotypeDX risk group. <i>Journal of Biophotonics</i> , 2020, 13, e202000188.	2.3	6
171	POLARIZED LIGHT and the asymmetry of life. <i>Optics and Photonics News</i> , 1996, 7, 30.	0.5	5
172	Optical method using fluence or radiance measurements to monitor thermal therapy. <i>Review of Scientific Instruments</i> , 2003, 74, 393-395.	1.3	5
173	High-sensitivity detection and monitoring of microcirculation using cutaneous and catheter probes for Doppler optical coherence tomography. , 2003, , .		5
174	Scan-pattern and signal processing for microvasculature visualization with complex SD-OCT: tissue-motion artifacts robustness and decorrelation time - blood vessel characteristics. , 2015, , .		5
175	Monte Carlo simulation of polarization-sensitive second-harmonic generation and propagation in biological tissue. <i>Journal of Biophotonics</i> , 2018, 11, e201800036.	2.3	5
176	Non-invasive voiding assessment in conscious mice. <i>Bladder</i> , 2018, 5, 33.	0.2	5
177	Features of Morphological Changes in Experimental CT-26 Tumors Growth. <i>Sovremennye Tehnologii V Medicine</i> , 2015, 7, 32-39.	1.1	5
178	The feasibility of monitoring exogenous dye uptake in tissue in vivo using pulsed photothermal radiometry. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 1992, 16, 235-239.	3.8	4
179	Doppler optical coherence tomography for monitoring the vascular effects of photodynamic therapy. , 2004, 5316, 147.		4
180	Perturbative diffusion theory formalism for interpreting temporal light intensity changes during laser interstitial thermal therapy. <i>Physics in Medicine and Biology</i> , 2007, 52, 1659-1674.	3.0	4

#	ARTICLE	IF	CITATIONS
181	Polarized light based birefringence measurements for monitoring myocardial regeneration. , 2009, , .		4
182	Biophysical studies of pulsed photothermal radiometry in tissues and tissuelike media. Medical Physics, 1997, 24, 2056-2056.	3.0	3
183	Three-dimensional photothermoacoustic depth-profilometric imaging by use of a linear frequency sweep lock-in heterodyne method. , 2004, , .		3
184	Frequency domain photothermoacoustic signal amplitude dependence on the optical properties of water: turbid polyvinyl chloride-plastisol system. Applied Optics, 2008, 47, 2564.	2.1	3
185	Analysis of multi-spectral photoplethysmograph biosensors. , 2013, , .		3
186	Quantitative assessment of oral microstructural and microvascular changes in late oral radiation toxicity, using noninvasive in-vivo optical coherence tomography. Photonics & Lasers in Medicine, 2016, 5, .	0.2	3
187	Photon mayhem: new directions in diagnostic and therapeutic photomedicine. Biomedical Engineering Letters, 2019, 9, 275-277.	4.1	3
188	Low-coherence photonic method of electrochemical processes monitoring. Scientific Reports, 2021, 11, 12600.	3.3	3
189	Optical Fiber Sensors for Biomedical Applications. , 2010, , 661-712.		3
190	The Development of the Methodology of Monitoring Experimental Tumors Using Multimodal Optical Coherence Tomography: the Choice of an Optimal Tumor Model. Sovremennyye Tehnologii V Medicine, 2015, 7, 6-15.	1.1	3
191	Diattenuation and retardance signature of plasmonic gold nanorods in turbid media revealed by Mueller matrix polarimetry. Scientific Reports, 2021, 11, 20017.	3.3	3
192	Turbid polarimetry for tissue characterization. Proceedings of SPIE, 2009, , .	0.8	2
193	OCT monitoring of cosmetic creams in human skin in vivo. , 2012, , .		2
194	Frequency domain photoacoustic correlation (radar) imaging: a novel methodology for non-invasive imaging of biological tissues. , 2012, , .		2
195	Front Matter: Volume 8801. , 2013, , .		2
196	An approach to OCT-based microvascular imaging using reference-free processing of complex valued B-scans. , 2015, , .		2
197	Optimization of phase-variation measurements in low-coherence methods: implications for OCE. , 2016, , .		2
198	Vessel-contrast enhancement in label-free optical coherence angiography based on phase and amplitude speckle variability. , 2016, , .		2

#	ARTICLE	IF	CITATIONS
199	Optical phantom materials for near infrared laser photocoagulation studies. Lasers in Surgery and Medicine, 1999, 25, 159-169.	2.1	2
200	Analytical microscopy of titanium nitride. Canadian Journal of Physics, 1991, 69, 290-297.	1.1	1
201	Structural and Doppler imaging of xenopus laevis embryos and murine skin tumors in vivo: a comparison of ultrasound biomicroscopy and optical coherence tomography. Ultrasound in Medicine and Biology, 2003, 29, S72.	1.5	1
202	Effects of detection geometry on polarimetric measurements of scattered light from turbid media containing optically active glucose molecules. , 2005, , .		1
203	A calibration technique for frequency domain photothermoacoustics. European Physical Journal: Special Topics, 2008, 153, 491-495.	2.6	1
204	Simultaneous 6-channel optical coherence tomography using a high-power telescope-less polygon-based swept laser in dual-amplifier configuration. , 2010, , .		1
205	Multivariate analysis methods for spectroscopic blood analysis. , 2012, , .		1
206	Imaging of electro-kinetic responses of tissues with optical coherence tomography. , 2013, , .		1
207	Correlating optical coherence tomography images with dose distribution in late oral radiation toxicity patients. Photonics & Lasers in Medicine, 2014, 3, .	0.2	1
208	Towards advanced OCT clinical applications. , 2015, , .		1
209	Characterization of atherosclerotic plaques by cross-polarization optical coherence tomography. , 2016, , .		1
210	Multiparameter thermo-mechanical OCT-based characterization of laser-induced cornea reshaping. Proceedings of SPIE, 2017, , .	0.8	1
211	Manifestations of nonlinear elasticity of biological tissues in compressional optical coherence elastography. Proceedings of SPIE, 2017, , .	0.8	1
212	Multimodal OCT for complex assessment of tumors response to therapy. , 2017, , .		1
213	Development of a photothermoacoustic frequency swept system: Theory and experiment. European Physical Journal Special Topics, 2005, 125, 643-647.	0.2	1
214	Multiphoton tomography and multimodal OCT for in vivo visualization of oral malignancy in the hamster cheek pouch. , 2018, , .		1
215	The Use of Cross-Polarization OCT in Determining the Dynamics of the State of Pathological and Normal Tissues During Radiation and Photodynamic Therapy. Sovremennye Tehnologii V Medicine, 2015, 7, 119-129.	1.1	1
216	Optical coherence angiography monitoring of tumor early response to PDT in experimental and clinical studies. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
217	Impact of velocity gradient in Poiseuille flow on the statistics of coherent radiation scattered by flowing Brownian particles in optical coherence tomography. Journal of Biomedical Optics, 2019, 24, 1.	2.6	1
218	Multimodal OCT for Malignancy Imaging. , 2020, , 425-464.		1
219	Bridging the macro to micro resolution gap with angiographic optical coherence tomography and dynamic contrast enhanced MRI. Scientific Reports, 2022, 12, 3159.	3.3	1
220	THE OPTICAL SHIELD OF CEPHALOPODS. Optics and Photonics News, 1995, 6, 40.	0.5	0
221	Shedding Some Light on the Blue Vein Enigma. Optics and Photonics News, 1997, 8, 39.	0.5	0
222	<title>Optical property determination of turbid media using frequency-domain infrared photothermal radiometry</title>. , 2000, , .		0
223	Semiquantitative analysis of atherosclerotic plaque using optical coherence tomography and time-of-flight secondary ion mass spectrometry. , 2003, 5140, 212.		0
224	Doppler optical coherence tomography for monitoring subsurface micro-structural and micro-vascular effects of cancer therapies. International Journal of Radiation Oncology Biology Physics, 2004, 60, S585-S586.	0.8	0
225	Interstitial Doppler optical coherence tomography. , 2005, 5855, 250.		0
226	Imaging tissue microstructure and microvasculature with Doppler Optical Coherence Tomography: 3-dimensional flow phantom study. , 2005, , .		0
227	Three-dimensional light-tissue interaction models for bioluminescence tomography. , 2005, 5969, 295.		0
228	Optical coherence tomography for imaging of chronic total occlusions. , 2005, 5969, 423.		0
229	Interstitial doppler OCT monitoring of microvascular shutdown during photodynamic therapy in a Dunning prostate model: irradiance rate dependences. , 2006, , .		0
230	Improved method for amplitude estimation of time domain optical coherence tomography. Canadian Conference on Electrical and Computer Engineering, 2008, , .	0.0	0
231	Phantoms for polarized light exhibiting controllable scattering, birefringence, and optical activity. , 2008, , .		0
232	Preface to Special Topic: Applied Biophysics. Journal of Applied Physics, 2009, 105, 101901.	2.5	0
233	A Monte Carlo study of Mueller matrix decomposition in complex tissue-like turbid media. Proceedings of SPIE, 2009, , .	0.8	0
234	Temporal and spatial speckle contrast in optical coherence tomography (OCT) -- imaging tissue structure and function. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
235	Front Matter: Volume 8090. Proceedings of SPIE, 2011, , .	0.8	0
236	Optical Coherence Tomography: Principles and Applications of Microvascular Imaging. , 2013, , 945-975.		0
237	Development of quantitative parameters to assess in-vivo optical coherence tomography images of late oral radiation toxicity patients. Proceedings of SPIE, 2013, , .	0.8	0
238	Imaging the electro-kinetic response of biological tissues with phase-resolved optical coherence tomography. Photonics & Lasers in Medicine, 2014, 3, .	0.2	0
239	Special Section Guest Editorial: Optical Coherence Tomography and Interferometry: Advanced Engineering and Biomedical Applications. Journal of Biomedical Optics, 2014, 19, 021101.	2.6	0
240	Imaging of electro-kinetic properties of tissue using the amplitude and the phase of optical coherence tomography. Proceedings of SPIE, 2014, , .	0.8	0
241	Robust strain mapping in optical coherence elastography by combining local phase-resolved measurements and cumulative displacement tracking. , 2016, , .		0
242	OCT-based approach to local relaxations discrimination from translational relaxation motions. Proceedings of SPIE, 2016, , .	0.8	0
243	Blood flow contrast enhancement in optical coherence tomography using microbubbles: a phantom study. , 2016, , .		0
244	Multimodal OCT for assessment of vasculature-targeted PDT success. , 2017, , .		0
245	Quasistatic in-depth local strain relaxation/creep rate mapping using phase-sensitive optical coherence tomography. , 2017, , .		0
246	85: The Role of Cytokine Signaling in the Reversal of Chronic Lymphedema. Radiotherapy and Oncology, 2020, 150, S38-S39.	0.6	0
247	Semi-Quantitative Analysis of Atherosclerotic Plaque using Optical Coherence Tomography and Time-of-Flight Secondary Ion Mass Spectrometry. , 2003, , .		0
248	SU-FF-T-231: Characterization and Real-Time Optical Measurements of the Ionizing Radiation Dose Response for a New Radiochromic Medium. Medical Physics, 2005, 32, 2003-2003.	3.0	0
249	SU-FF-T-126: 3D Gel Dosimetry of IMSRT Using Normoxic MAGAT Polymer Gel. Medical Physics, 2005, 32, 1978-1979.	3.0	0
250	SU-FF-T-138: Comparison of Change in Optical Density Between Three Radiochromic Films Due to 100 CGy Dose-To-Water Delivered by X-Rays in the 75 KVp to 18 MV Range. Medical Physics, 2006, 33, 2080-2080.	3.0	0
251	SU-FF-T-121: Characterization and Real-Time Measurements of Optical Density with GafChromic EBT Film. Medical Physics, 2006, 33, 2076-2076.	3.0	0
252	Po-Thur Eve General-28: Characterization and Real-Time Measurements of Optical Density with GafChromic EBT Film. Medical Physics, 2006, 33, 2665-2665.	3.0	0

#	ARTICLE	IF	CITATIONS
253	SU-FF-T-370: Real-Time Point-Based in Vivo Dosimetry Using Radiochromic Materials and Remote Optical Fiber System. Medical Physics, 2007, 34, 2487-2487.	3.0	0
254	Diagnostic photomedicine: probing biological tissues with polarized light. SPIE Newsroom, 2008, , .	0.1	0
255	Optical assessment of anisotropy in ex vivo rat bladders. , 2012, , .		0
256	Improving treatment efficacy with biological or biophysical feedback. SPIE Newsroom, 0, , .	0.1	0
257	An approach to OCT-based microvascular imaging using reference-free processing of complex-valued B-scans. , 2015, , .		0
258	Improved Arterial Tissue Differentiation by Spectroscopic Optical Coherence Tomography. Sovremennye Tehnologii V Medicine, 2015, 7, 13-20.	1.1	0
259	Analysis of the optical delay generator for rapid depth scanning in optical coherence tomography. , 2017, , .		0
260	Optical coherence elastography assesses tissue modifications in laser reshaping of cornea and cartilages. , 2018, , .		0
261	Alternative Contrast Mechanism in Optical Coherence Tomography: Temporal Speckle Synchronization Effects. Sovremennye Tehnologii V Medicine, 2018, 10, 39.	1.1	0
262	Quantitative compressional OCE: obviating pitfalls in using pre-calibrated compliant layers and some other practical obstacles. , 2018, , .		0
263	Two-dimensional OCT-relaxography of collagenous tissues. , 2018, , .		0
264	Assessment of optical coherence tomography speckle patterns in low-scatterer-concentration regions: simulations for lymphatic vessels mapping. , 2019, , .		0
265	Longitudinal in-vivo quantification of tumour microvasculature heterogeneity via optical coherence tomography (OCT) angiography in a pre-clinical model of radiation therapy. , 2021, , .		0
266	Quantification of radiation-induced microvasculature changes using optical coherence tomography and dynamic contrast enhanced MRI. , 2021, , .		0