

Aleksander L Matveyev

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2223388/publications.pdf>

Version: 2024-02-01

44
papers

702
citations

623734

14
h-index

642732

23
g-index

45
all docs

45
docs citations

45
times ranked

305
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimized phase gradient measurements and phase-amplitude interplay in optical coherence elastography. <i>Journal of Biomedical Optics</i> , 2016, 21, 116005.	2.6	84
2	Strain and elasticity imaging in compression optical coherence elastography: The two-decade perspective and recent advances. <i>Journal of Biophotonics</i> , 2021, 14, e202000257.	2.3	77
3	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
4	OCT-elastography-based optical biopsy for breast cancer delineation and express assessment of morphological/molecular subtypes. <i>Biomedical Optics Express</i> , 2019, 10, 2244.	2.9	54
5	Histological validation of in vivo assessment of cancer tissue inhomogeneity and automated morphological segmentation enabled by Optical Coherence Elastography. <i>Scientific Reports</i> , 2020, 10, 11781.	3.3	53
6	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
7	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
8	Optical coherence tomography for visualizing transient strains and measuring large deformations in laser-induced tissue reshaping. <i>Laser Physics Letters</i> , 2016, 13, 115603.	1.4	36
9	Revealing structural modifications in thermomechanical reshaping of collagenous tissues using optical coherence elastography. <i>Journal of Biophotonics</i> , 2019, 12, e201800250.	2.3	36
10	In vivo assessment of functional and morphological alterations in tumors under treatment using OCT-angiography combined with OCT-elastography. <i>Biomedical Optics Express</i> , 2020, 11, 1365.	2.9	31
11	Application of three-dimensional resonant acoustic spectroscopy method to rock and building materials. <i>Journal of the Acoustical Society of America</i> , 2001, 110, 1770-1777.	1.1	28
12	Diagnostic Accuracy of Cross-Polarization OCT and OCT-Elastography for Differentiation of Breast Cancer Subtypes: Comparative Study. <i>Diagnostics</i> , 2020, 10, 994.	2.6	24
13	Interplay of temperature, thermal stresses and strains in laser-assisted modification of collagenous tissues: Speckle-contrast and OCT-based studies. <i>Journal of Biophotonics</i> , 2020, 13, e201900199.	2.3	20
14	Nonlinear scattering of acoustic waves by natural and artificially generated subsurface bubble layers in sea. <i>Journal of the Acoustical Society of America</i> , 2003, 113, 741-749.	1.1	18
15	Real-Time Strain and Elasticity Imaging in Phase-Sensitive Optical Coherence Elastography Using a Computationally Efficient Realization of the Vector Method. <i>Photonics</i> , 2021, 8, 527.	2.0	16
16	Observation of internal stress relaxation in laser-reshaped cartilaginous implants using OCT-based strain mapping. <i>Laser Physics Letters</i> , 2020, 17, 085603.	1.4	15
17	Nonlinear Elasticity Assessment with Optical Coherence Elastography for High-Selectivity Differentiation of Breast Cancer Tissues. <i>Materials</i> , 2022, 15, 3308.	2.9	15
18	Optical Coherence Elastography as a Tool for Studying Deformations in Biomaterials: Spatially-Resolved Osmotic Strain Dynamics in Cartilaginous Samples. <i>Materials</i> , 2022, 15, 904.	2.9	8

#	ARTICLE	IF	CITATIONS
19	Compression optical coherence elastography versus strain ultrasound elastography for breast cancer detection and differentiation: pilot study. <i>Biomedical Optics Express</i> , 2022, 13, 2859.	2.9	8
20	Computationally efficient model of OCT scan formation by focused beams and its usage to demonstrate a novel principle of OCT-angiography. <i>Laser Physics Letters</i> , 2020, 17, 115604.	1.4	7
21	Simulating scan formation in multimodal optical coherence tomography: angular-spectrum formulation based on ballistic scattering of arbitrary-form beams. <i>Biomedical Optics Express</i> , 2021, 12, 7599.	2.9	5
22	Optical coherence elastography as a new method for estimation of chemotherapy efficacy on triple-negative breast cancer in the experiment. , 2019, , .		3
23	OCT-based characterization of the nonlinear properties of biological tissues in various states. , 2018, , .		2
24	Multimodal OCT characterization of human breast cancer morphological types: preliminary study. , 2018, , .		2
25	Manifestations of nonlinear elasticity of biological tissues in compressional optical coherence elastography. <i>Proceedings of SPIE</i> , 2017, , .	0.8	1
26	Multimodal OCT for complex assessment of tumors response to therapy. , 2017, , .		1
27	Comparison of elastic properties of tissue samples in various pathological states using optical coherence elastography. , 2019, , .		1
28	Compressional optical coherence elastography for performing histology-like assessment of breast cancers. , 2019, , .		1
29	Phase-sensitive OCT in monitoring of slow-rate strains in laser tissue reshaping. , 2019, , .		1
30	Optical coherence elastography for characterization of natural interstitial gaps and laser-irradiation-produced porosity in corneal and cartilaginous samples. , 2020, , .		1
31	Multimodal OCT for Malignancy Imaging. , 2020, , 425-464.		1
32	Novel Elastography-Inspired Approach to Angiographic Visualization in Optical Coherence Tomography. <i>Photonics</i> , 2022, 9, 401.	2.0	1
33	Robust strain mapping in optical coherence elastography by combining local phase-resolved measurements and cumulative displacement tracking. , 2016, , .		0
34	Multimodal OCT for assessment of vasculature-targeted PDT success. , 2017, , .		0
35	Quasistatic in-depth local strain relaxation/creep rate mapping using phase-sensitive optical coherence tomography. , 2017, , .		0
36	Quantitative Mapping of Strains and Young Modulus Based on Phase-Sensitive OCT. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
37	Quantitative compressional OCE: obviating pitfalls in using pre-calibrated compliant layers and some other practical obstacles. , 2018, , .		0
38	Two-dimensional OCT-relaxography of collagenous tissues. , 2018, , .		0
39	Assessment of optical coherence tomography speckle patterns in low-scatterer-concentration regions: simulations for lymphatic vessels mapping. , 2019, , .		0
40	Optical coherence elastography for visualization of spatio-temporal strain dynamics in thermo-mechanical modification of corneal and cartilaginous tissues. , 2019, , .		0
41	Why apparent contrast in elasticity of biological tissues is noticeably different for compression ultrasound elastography and OCE. , 2022, , .		0
42	Mapping large strains and supra-pixel displacements in phase-sensitive OCT. , 2021, , .		0
43	Improvement of breast cancer histological examination by means of multimodal OCT. , 2021, , .		0
44	Computationally efficient spectral model of OCT-scan formation with easily accounted scatterer motions for simulating multimodal OCT. , 2021, , .		0