

# Philip Wijesinghe

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

1,416  
citations

394286

19  
h-index

377752

34  
g-index

52  
all docs

52  
docs citations

52  
times ranked

1743  
citing authors

#	ARTICLE	IF	CITATIONS
1	Emergent physics-informed design of deep learning for microscopy. JPhys Photonics, 2021, 3, 021003.	2.2	9
2	Speckle-dependent accuracy in phase-sensitive optical coherence tomography. Optics Express, 2021, 29, 16950.	1.7	11
3	Does artificial intelligence have a role in the IVF clinic?. Reproduction and Fertility, 2021, 2, C29-C34.	0.6	15
4	Coherence function-encoded optical palpation. Optics Letters, 2021, 46, 4534.	1.7	2
5	Tissue Mechanics. , 2021, , 2-1-2-20.		1
6	Optical Coherence Elastography Techniques. , 2021, , 1-34.		0
7	Optical elastography on the microscale. , 2020, , 185-229.		3
8	Handheld volumetric manual compression-based quantitative microelastography. Journal of Biophotonics, 2020, 13, e201960196.	1.1	11
9	Enhancing Resistance of Silk Fibroin Material to Enzymatic Degradation by Cross-Linking Both Crystalline and Amorphous Domains. ACS Biomaterials Science and Engineering, 2020, 6, 2459-2468.	2.6	14
10	Diagnostic Accuracy of Quantitative Micro-Elastography for Margin Assessment in Breast-Conserving Surgery. Cancer Research, 2020, 80, 1773-1783.	0.4	54
11	Three-dimensional imaging of cell and extracellular matrix elasticity using quantitative micro-elastography. Biomedical Optics Express, 2020, 11, 867.	1.5	30
12	Widefield light sheet microscopy using an Airy beam combined with deep-learning super-resolution. OSA Continuum, 2020, 3, 1068.	1.8	13
13	Optical palpation for the visualization of tumor in human breast tissue. Journal of Biophotonics, 2019, 12, e201800180.	1.1	13
14	Strain Tensor Imaging in Compression Optical Coherence Elastography. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-12.	1.9	18
15	Light sheet microscopy with acoustic sample confinement. Nature Communications, 2019, 10, 669.	5.8	25
16	Volumetric quantitative optical coherence elastography with an iterative inversion method. Biomedical Optics Express, 2019, 10, 384.	1.5	14
17	Analysis of spatial resolution in phase-sensitive compression optical coherence elastography. Biomedical Optics Express, 2019, 10, 1496.	1.5	43
18	Finger-mounted quantitative micro-elastography. Biomedical Optics Express, 2019, 10, 1760.	1.5	19

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19	Handheld probe for quantitative micro-elastography. Biomedical Optics Express, 2019, 10, 4034.	1.5	21
20	Optimal compressive multiphoton imaging at depth using single-pixel detection. Optics Letters, 2019, 44, 4981.	1.7	20
21	Wide-field multiphoton imaging with TRAFIX. , 2019, , .		1
22	Optical Coherence Tomography of the Tympanic Membrane and Middle Ear: A Review. Otolaryngology - Head and Neck Surgery, 2018, 159, 424-438.	1.1	44
23	Computational optical palpation: a finite-element approach to micro-scale tactile imaging using a compliant sensor. Journal of the Royal Society Interface, 2017, 14, 20160878.	1.5	31
24	Optical coherence elastography for cellular-scale stiffness imaging of mouse aorta. , 2017, , .		0
25	Stem cell migration and mechanotransduction on linear stiffness gradient hydrogels. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5647-5652.	3.3	370
26	The emergence of optical elastography in biomedicine. Nature Photonics, 2017, 11, 215-221.	15.6	210
27	Optical coherence tomography-based contact indentation for diaphragm mechanics in a mouse model of transforming growth factor alpha induced lung disease. Scientific Reports, 2017, 7, 1517.	1.6	5
28	Ultrahigh-Resolution Optical Coherence Elastography Images Cellular-Scale Stiffness of Mouse Aorta. Biophysical Journal, 2017, 113, 2540-2551.	0.2	20
29	In vivo volumetric quantitative micro-elastography of human skin. Biomedical Optics Express, 2017, 8, 2458.	1.5	27
30	Ultrahigh-resolution optical coherence elastography through a micro-endoscope: towards in vivo imaging of cellular-scale mechanics. Biomedical Optics Express, 2017, 8, 5127.	1.5	20
31	Depth-encoded optical coherence elastography for simultaneous volumetric imaging of two tissue faces. Optics Letters, 2017, 42, 1233.	1.7	6
32	Wide-field optical coherence micro-elastography for intraoperative assessment of human breast cancer margins. Biomedical Optics Express, 2016, 7, 4139.	1.5	82
33	Quantitative optical coherence elastography as an inverse elasticity problem (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50		
34	Computational optical palpation: micro-scale force mapping using finite-element methods (Conference) Tj ETQq0 0 0 rgBT /Overlock 10		
35	Parametric approaches to micro-scale characterization of tissue volumes in vivo and ex vivo: Imaging microvasculature, attenuation, birefringence, and stiffness (Conference Presentation). , 2016, , .		0
36	Towards intraoperative assessment of tumor margins in breast surgery using optical coherence elastography (Conference Presentation). , 2016, , .		0

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37	Deciphering Cell-to-Cell Communication in Acquisition of Cancer Traits: Extracellular Membrane Vesicles Are Regulators of Tissue Biomechanics. OMICS A Journal of Integrative Biology, 2016, 20, 462-469.	1.0	19
38	Investigation of optical coherence micro-elastography as a method to visualize micro-architecture in human axillary lymph nodes. BMC Cancer, 2016, 16, 874.	1.1	9
39	Compression optical coherence elastography for improved diagnosis of disease (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock 10		
40	Ultrahigh resolution optical coherence elastography using a Bessel beam for extended depth of field. , 2016, , .		0
41	Quantitative Compression Optical Coherence Elastography as an Inverse Elasticity Problem. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 277-287.	1.9	39
42	Ultrahigh-resolution optical coherence elastography. Optics Letters, 2016, 41, 21.	1.7	42
43	Mapping the mechanical heterogeneity of human breast tissue using optical coherence elastography. , 2016, , .		1
44	Sensitivity and resolution in optical coherence micro-elastography. , 2015, , .		2
45	In vivo optical elastography: stress and strain imaging of human skin lesions. , 2015, , .		2
46	Parametric imaging of viscoelasticity using optical coherence elastography. Physics in Medicine and Biology, 2015, 60, 2293-2307.	1.6	29
47	Investigation of Optical Coherence Microelastography as a Method to Visualize Cancers in Human Breast Tissue. Cancer Research, 2015, 75, 3236-3245.	0.4	91
48	Quantifying Tissue Stiffness and the Effect of Nonlinearity using Compression Optical Coherence Elastography. , 2015, , .		1
49	Transforming growth factor alpha expression in a transgenic mouse model impairs lung and diaphragm mechanics. , 2015, , .		0
50	Three-dimensional optical coherence micro-elastography of skeletal muscle tissue. Biomedical Optics Express, 2014, 5, 3090.	1.5	29