Virginijus Barzda

List of Publications by Year in descending order

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43 papers

1,292 citations

394421 19 h-index 35 g-index

47 all docs

47 docs citations

47 times ranked

 $\begin{array}{c} 1027 \\ \text{citing authors} \end{array}$

#	Article	IF	CITATIONS
1	Machine learning-enabled cancer diagnostics with widefield polarimetric second-harmonic generation microscopy. Scientific Reports, 2022, 12, .	3.3	13
2	Second harmonic generation theory for a helical macromolecule with high sensitivity to structural disorder. Physical Chemistry Chemical Physics, 2021, 23, 20201-20217.	2.8	9
3	Disruption of Drosophila larval muscle structure and function by UNC45 knockdown. BMC Molecular and Cell Biology, 2021, 22, 38.	2.0	2
4	Characterization of pathological thyroid tissue using polarization-sensitive second harmonic generation microscopy. Laboratory Investigation, 2020, 100, 1280-1287.	3.7	19
5	Dual†and singleâ€shot susceptibility ratio measurements with circular polarizations in secondâ€harmonic generation microscopy. Journal of Biophotonics, 2020, 13, e201960167.	2.3	15
6	Polarimetric second-harmonic generation microscopy of the hierarchical structure of collagen in stage I-III non-small cell lung carcinoma. Biomedical Optics Express, 2020, 11, 1851.	2.9	30
7	Complex Susceptibilities and Chiroptical Effects of Collagen Measured with Polarimetric Second-Harmonic Generation Microscopy. Scientific Reports, 2019, 9, 12488.	3.3	33
8	Characterization of Pancreatic Cancer Tissue Using Multiphoton Excitation Fluorescence and Polarization-Sensitive Harmonic Generation Microscopy. Frontiers in Oncology, 2019, 9, 272.	2.8	32
9	Human Cardiac Tissue Collagen Polarity Revealed Using Polarimetric Second-Harmonic Generation Microscopy., 2019,,.		O
10	Collagen chirality and threeâ€dimensional orientation studied with polarimetric secondâ€harmonic generation microscopy. Journal of Biophotonics, 2019, 12, e201800241.	2.3	51
11	Live imaging of contracting muscles with wide-field second harmonic generation microscopy using a high power laser. Biomedical Optics Express, 2019, 10, 5130.	2.9	21
12	Three-dimensional nonlinear Stokes–Mueller polarimetry. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 541.	2.1	6
13	Polar organization of collagen in human cardiac tissue revealed with polarimetric second-harmonic generation microscopy. Biomedical Optics Express, 2019, 10, 5025.	2.9	14
14	Polarimetric second harmonic generation microscopy: An analytical tool for starch bioengineering. Starch/Staerke, 2018, 70, 1700031.	2.1	10
15	Monte Carlo simulation of polarizationâ€sensitive secondâ€harmonic generation and propagation in biological tissue. Journal of Biophotonics, 2018, 11, e201800036.	2.3	5
16	Collagen fibril organization within rat vertebral bone modified with metastatic involvement. Journal of Structural Biology, 2017, 199, 153-164.	2.8	28
17	Examination of Drosophila eye development with third harmonic generation microscopy. Biomedical Optics Express, 2017, 8, 4504.	2.9	5
18	Wide-field second harmonic generation microscopy using a high power Yb laser. , 2017, , .		0

#	Article	IF	CITATIONS
19	High power, highly efficient mode-locked Yb:KGW laser oscillator. , 2017, , .		1
20	Changes of collagen ultrastructure in breast cancer tissue determined by second-harmonic generation double Stokes-Mueller polarimetric microscopy. Biomedical Optics Express, 2016, 7, 4054.	2.9	78
21	Experimental demonstration of third-harmonic generation nonlinear Stokes-Mueller polarimetric microscopy. , $2016, , .$		0
22	Nonlinear Stokes-Mueller polarimetry. Physical Review A, 2016, 93, .	2.5	37
23	Second harmonic generation double stokes Mueller polarimetric microscopy of myofilaments. Biomedical Optics Express, 2016, 7, 559.	2.9	31
24	Organized Aggregation of Porphyrins in Lipid Bilayers for Third Harmonic Generation Microscopy. Angewandte Chemie - International Edition, 2015, 54, 13928-13932.	13.8	30
25	Second harmonic generation microscopy investigation of the crystalline ultrastructure of three barley starch lines affected by hydration. Biomedical Optics Express, 2015, 6, 3694.	2.9	27
26	Tumor tissue characterization using polarization-sensitive second harmonic generation microscopy. , 2015, , .		8
27	Ultrastructural features of collagen in thyroid carcinoma tissue observed by polarization second harmonic generation microscopy. Biomedical Optics Express, 2015, 6, 3475.	2.9	56
28	Double Stokes Mueller polarimetry of second-harmonic generation in ordered molecular structures. Journal of the Optical Society of America B: Optical Physics, 2015, 32, 451.	2.1	61
29	Interferometric Backward Third Harmonic Generation Microscopy for Axial Imaging with Accuracy Beyond the Diffraction Limit. PLoS ONE, 2014, 9, e94458.	2.5	5
30	Characterization of collagen in non-small cell lung carcinoma with second harmonic polarization microscopy. Biomedical Optics Express, 2014, 5, 3562.	2.9	55
31	Second Harmonic Generation Mediated by Aligned Water in Starch Granules. Journal of Physical Chemistry B, 2014, 118, 141216070413005.	2.6	16
32	Second harmonic generation polarization properties of myofilaments. Journal of Biomedical Optics, 2014, 19, 056005.	2.6	18
33	The Advanced Interdisciplinary Research Laboratory: A Student Team Approach to the Fourth-Year Research Thesis Project Experience. Journal of Chemical Education, 2014, 91, 655-661.	2.3	21
34	Organization of Astaxanthin within Oil Bodies of Haematococcus pluvialis Studied with Polarization-Dependent Harmonic Generation Microscopy. PLoS ONE, 2014, 9, e107804.	2.5	13
35	Carotenoid based bio-compatible labels for third harmonic generation microscopy. Physical Chemistry Chemical Physics, 2012, 14, 10653.	2.8	17
36	Hierarchical Model of Fibrillar Collagen Organization for Interpreting the Second-Order Susceptibility Tensors in Biological Tissue. Biophysical Journal, 2012, 103, 2093-2105.	0.5	116

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#	Article	IF	Citations
37	Nonlinear Optical Properties of Type I Collagen Fibers Studied by Polarization Dependent Second Harmonic Generation Microscopy. Journal of Physical Chemistry B, 2011, 115, 12759-12769.	2.6	131
38	Nonlinear Optical Properties of Semiconductor Nanowires. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 915-921.	2.9	15
39	Invited Review Article: Imaging techniques for harmonic and multiphoton absorption fluorescence microscopy. Review of Scientific Instruments, 2009, 80, 081101.	1.3	142
40	Influence of semicrystalline order on the second-harmonic generation efficiency in the anisotropic bands of myocytes. Applied Optics, 2007, 46, 1852.	2.1	53
41	Femtosecond Yb:KGd(WO4)2laser oscillator pumped by a high power fiber-coupled diode laser module. Optics Express, 2006, 14, 12163.	3.4	57
42	Diode-pumped high power continuous-wave Yb:KGW laser. , 2006, , .		1
43	High pulse energy femtosecond Yb:KGW laser. , 2006, , .		O