

Zhaokai Meng

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

1,065
citations

394421

19
h-index

477307

29
g-index

48
all docs

48
docs citations

48
times ranked

778
citing authors

#	ARTICLE	IF	CITATIONS
1	Single-scattering properties of tri-axial ellipsoidal mineral dust aerosols: A database for application to radiative transfer calculations. <i>Journal of Aerosol Science</i> , 2010, 41, 501-512.	3.8	130
2	Dual Raman-Brillouin Microscope for Chemical and Mechanical Characterization and Imaging. <i>Analytical Chemistry</i> , 2015, 87, 7519-7523.	6.5	106
3	Seeing cells in a new light: a renaissance of Brillouin spectroscopy. <i>Advances in Optics and Photonics</i> , 2016, 8, 300.	25.5	100
4	Background clean-up in Brillouin microspectroscopy of scattering medium. <i>Optics Express</i> , 2014, 22, 5410.	3.4	87
5	Stimulated Brillouin Scattering Microscopic Imaging. <i>Scientific Reports</i> , 2016, 5, 18139.	3.3	78
6	Impulsive Brillouin microscopy. <i>Optica</i> , 2017, 4, 124.	9.3	62
7	Subcellular measurements of mechanical and chemical properties using dual Raman-Brillouin microspectroscopy. <i>Journal of Biophotonics</i> , 2016, 9, 201-207.	2.3	54
8	Assessment of Local Heterogeneity in Mechanical Properties of Nanostructured Hydrogel Networks. <i>ACS Nano</i> , 2017, 11, 7690-7696.	14.6	49
9	Optimizing signal collection efficiency of the VIPA-based Brillouin spectrometer. <i>Journal of Innovative Optical Health Sciences</i> , 2015, 08, 1550021.	1.0	44
10	Flow cytometry using Brillouin imaging and sensing via time-resolved optical (BISTRO) measurements. <i>Analyst</i> , 2015, 140, 7160-7164.	3.5	40
11	Precise Determination of Brillouin Scattering Spectrum Using a Virtually Imaged Phase Array (VIPA) Spectrometer and Charge-Coupled Device (CCD) Camera. <i>Applied Spectroscopy</i> , 2016, 70, 1356-1363.	2.2	39
12	Brillouin spectroscopy as a new method of screening for increased CSF total protein during bacterial meningitis. <i>Journal of Biophotonics</i> , 2015, 8, 408-414.	2.3	37
13	Differentiating melanoma and healthy tissues based on elasticity-specific Brillouin microspectroscopy. <i>Biomedical Optics Express</i> , 2019, 10, 1774.	2.9	33
14	Continuous-wave stimulated Raman scattering (cwSRS) microscopy. <i>Applied Physics B: Lasers and Optics</i> , 2013, 112, 99-103.	2.2	28
15	Microscopic coherent Raman imaging using low-cost continuous wave lasers. <i>Laser Physics Letters</i> , 2013, 10, 065701.	1.4	27
16	Nonlinear Brillouin spectroscopy: what makes it a better tool for biological viscoelastic measurements. <i>Biomedical Optics Express</i> , 2019, 10, 1750.	2.9	25
17	Electronically tunable coherent Raman spectroscopy using acousto-optics tunable filter. <i>Optics Express</i> , 2015, 23, 24669.	3.4	22
18	Pure electrical, highly-efficient and sidelobe free coherent Raman spectroscopy using acousto-optics tunable filter (AOTF). <i>Scientific Reports</i> , 2016, 6, 20017.	3.3	21

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19	Optical assessment of changes in mechanical and chemical properties of adipose tissue in diet-induced obese rats. Journal of Biophotonics, 2017, 10, 1694-1702.	2.3	21
20	Lightweight Raman spectroscope using time-correlated photon-counting detection. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12315-12320.	7.1	19
21	Surface-enhanced Brillouin scattering in a vicinity of plasmonic gold nanostructures. Proceedings of SPIE, 2015, , .	0.8	7
22	Assessing the effect of prolonged use of desloratadine on adipose Brillouin shift and composition in rats. Journal of Biophotonics, 2021, 14, e202000269.	2.3	6
23	Probing microscopic mechanical properties of hard tissues with Brillouin spectroscopy. , 2015, , .		5
24	Atherosclerotic plaque detection by confocal Brillouin and Raman microscopies. , 2015, , .		4
25	Elasticity-based identification of tumor margins using Brillouin spectroscopy. Proceedings of SPIE, 2016, , .	0.8	4
26	Brillouin spectroscopy reveals changes in muscular viscoelasticity in Drosophila POMT mutants. , 2015, , .		3
27	Brillouin spectroscopy characterizes microscopic viscoelasticity associated with skin injury. , 2015, , .		3
28	Raman spectroscopy using time-correlated photon-counting detection. Proceedings of SPIE, 2013, , .	0.8	2
29	High-speed assessment of liquid viscoelasticity in flow cytometry using nonlinear Brillouin spectroscopy. Proceedings of SPIE, 2015, , .	0.8	2
30	Structure and electrical conductivity of amorphous solid-core carbon nanofibers produced in flames. Carbon, 2015, 85, 447.	10.3	2
31	Subcellular imaging of mechanical and chemical properties using Brillouin and Raman microspectroscopies. , 2015, , .		1
32	Probing axial orientation of collagen fibers with Brillouin microspectroscopy. Proceedings of SPIE, 2015, , .	0.8	1
33	Reinforcement of osteogenesis with nanofabricated hydroxyapatite and GelMA nanocomposite. Proceedings of SPIE, 2015, , .	0.8	1
34	Assessing the effect of a high-fat diet on rodents' adipose tissue using Brillouin and Raman spectroscopy. Proceedings of SPIE, 2016, , .	0.8	1
35	Investigation of burn effect on skin using simultaneous Raman-Brillouin spectroscopy, and fluorescence microspectroscopy. , 2017, , .		1
36	Stimulated Raman microscopy without ultrafast lasers. Proceedings of SPIE, 2013, , .	0.8	0

#	ARTICLE	IF	CITATIONS
37	Nonlinear Brillouin Imaging/Sensing via Time-Resolved Optical (BISTRO) Measurements. , 2015, , .		0
38	Brillouin microspectroscopy of nanostructured biomaterials: photonics assisted tailoring mechanical properties. Proceedings of SPIE, 2016, , .	0.8	0
39	Watching embryonic development in a new light: elasticity specific imaging with dual Brillouin/Raman microspectroscopy. , 2016, , .		0
40	Characterization of red blood cells (RBCs) using dual Brillouin/Raman micro-spectroscopy. , 2016, , .		0
41	High-speed elasticity-specific nonlinear Brillouin imaging/sensing via time-resolved optical (BISTRO) measurements. Proceedings of SPIE, 2016, , .	0.8	0
42	What is next for Brillouin microscopy in biology and medicine?. Proceedings of SPIE, 2017, , .	0.8	0
43	Brillouin microspectroscopy assessment of tissue differentiation during embryonic development. Proceedings of SPIE, 2017, , .	0.8	0
44	Brillouin micro-elastography of laser-processed materials. Proceedings of SPIE, 2017, , .	0.8	0
45	Some New Progresses in the Optical Properties of Nonspherical Ice Crystals and Dust Aerosols. , 2009, , .		0
46	High-speed flow cytometry using nonlinear Brillouin imaging/sensing via time-resolved optical (BISTRO) measurements. , 2016, , .		0
47	Toward investigating changes in cell mechanoelastic properties in response to nanosecond pulsed electric fields. Proceedings of SPIE, 2017, , .	0.8	0
48	CARS microscope enables BISTRO measurements. , 2017, , .		0