

# Vasilis Ntziachristos

## List of Publications by Year in descending order

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341  
papers

24,448  
citations

10389

72  
h-index

8866

145  
g-index

361  
all docs

361  
docs citations

361  
times ranked

18039  
citing authors

#	ARTICLE	IF	CITATIONS
1	Shedding light onto live molecular targets. <i>Nature Medicine</i> , 2003, 9, 123-128.	30.7	1,872
2	Going deeper than microscopy: the optical imaging frontier in biology. <i>Nature Methods</i> , 2010, 7, 603-614.	19.0	1,536
3	Looking and listening to light: the evolution of whole-body photonic imaging. <i>Nature Biotechnology</i> , 2005, 23, 313-320.	17.5	1,482
4	Intraoperative tumor-specific fluorescence imaging in ovarian cancer by folate receptor- $\beta$ targeting: first in-human results. <i>Nature Medicine</i> , 2011, 17, 1315-1319.	30.7	1,453
5	Molecular Imaging by Means of Multispectral Optoacoustic Tomography (MSOT). <i>Chemical Reviews</i> , 2010, 110, 2783-2794.	47.7	705
6	FLUORESCENCE MOLECULAR IMAGING. <i>Annual Review of Biomedical Engineering</i> , 2006, 8, 1-33.	12.3	677
7	Multispectral opto-acoustic tomography of deep-seated fluorescent proteins in vivo. <i>Nature Photonics</i> , 2009, 3, 412-417.	31.4	632
8	A review of clinical photoacoustic imaging: Current and future trends. <i>Photoacoustics</i> , 2019, 16, 100144.	7.8	494
9	Advances in real-time multispectral optoacoustic imaging and its applications. <i>Nature Photonics</i> , 2015, 9, 219-227.	31.4	483
10	In Vivo Imaging of Proteolytic Activity in Atherosclerosis. <i>Circulation</i> , 2002, 105, 2766-2771.	1.6	346
11	Volumetric real-time multispectral optoacoustic tomography of biomarkers. <i>Nature Protocols</i> , 2011, 6, 1121-1129.	12.0	293
12	Optical-based molecular imaging: contrast agents and potential medical applications. <i>European Radiology</i> , 2003, 13, 231-243.	4.5	273
13	Fast Semi-Analytical Model-Based Acoustic Inversion for Quantitative Optoacoustic Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2010, 29, 1275-1285.	8.9	255
14	FMT-XCT: in vivo animal studies with hybrid fluorescence molecular tomography and X-ray computed tomography. <i>Nature Methods</i> , 2012, 9, 615-620.	19.0	242
15	Real-time in vivo imaging of invasive- and biomaterial-associated bacterial infections using fluorescently labelled vancomycin. <i>Nature Communications</i> , 2013, 4, 2584.	12.8	231
16	High-sensitivity compact ultrasonic detector based on a pi-phase-shifted fiber Bragg grating. <i>Optics Letters</i> , 2011, 36, 1833.	3.3	230
17	Looking at sound: optoacoustics with all-optical ultrasound detection. <i>Light: Science and Applications</i> , 2018, 7, 53.	16.6	230
18	Tumor-Specific Uptake of Fluorescent Bevacizumab-IRDye800CW Microdosing in Patients with Primary Breast Cancer: A Phase I Feasibility Study. <i>Clinical Cancer Research</i> , 2017, 23, 2730-2741.	7.0	212

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19	Multispectral photoacoustic imaging of fluorochromes in small animals. <i>Optics Letters</i> , 2007, 32, 2891.	3.3	208
20	Multispectral Optoacoustic Tomography (MSOT) of Human Breast Cancer. <i>Clinical Cancer Research</i> , 2017, 23, 6912-6922.	7.0	202
21	Eigenspectra optoacoustic tomography achieves quantitative blood oxygenation imaging deep in tissues. <i>Nature Communications</i> , 2016, 7, 12121.	12.8	195
22	Video rate optoacoustic tomography of mouse kidney perfusion. <i>Optics Letters</i> , 2010, 35, 2475.	3.3	187
23	Precision assessment of label-free psoriasis biomarkers with ultra-broadband optoacoustic mesoscopy. <i>Nature Biomedical Engineering</i> , 2017, 1, .	22.5	187
24	Intraoperative Near-Infrared Fluorescence Tumor Imaging with Vascular Endothelial Growth Factor and Human Epidermal Growth Factor Receptor 2 Targeting Antibodies. <i>Journal of Nuclear Medicine</i> , 2011, 52, 1778-1785.	5.0	186
25	DNAâ€Nanostuctureâ€Goldâ€Nanorod Hybrids for Enhanced In Vivo Optoacoustic Imaging and Photothermal Therapy. <i>Advanced Materials</i> , 2016, 28, 10000-10007.	21.0	185
26	Acoustic Inversion in Optoacoustic Tomography: A Review. <i>Current Medical Imaging</i> , 2014, 9, 318-336.	0.8	176
27	Real-time imaging of cardiovascular dynamics and circulating gold nanorods with multispectral optoacoustic tomography. <i>Optics Express</i> , 2010, 18, 19592.	3.4	174
28	Shortwave infrared polymethine fluorophores matched to excitation lasers enable non-invasive, multicolour in vivo imaging in real time. <i>Nature Chemistry</i> , 2020, 12, 1123-1130.	13.6	172
29	Secretin-Activated Brown Fat Mediates Prandial Thermogenesis to Induce Satiation. <i>Cell</i> , 2018, 175, 1561-1574.e12.	28.9	167
30	Accurate Model-Based Reconstruction Algorithm for Three-Dimensional Optoacoustic Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2012, 31, 1922-1928.	8.9	166
31	Dynamic imaging of PEGylated indocyanine green (ICG) liposomes within the tumor microenvironment using multi-spectral optoacoustic tomography (MSOT). <i>Biomaterials</i> , 2015, 37, 415-424.	11.4	165
32	Optoacoustic mesoscopy for biomedicine. <i>Nature Biomedical Engineering</i> , 2019, 3, 354-370.	22.5	142
33	Molecular fluorescence-guided surgery of peritoneal carcinomatosis of colorectal origin: a single-centre feasibility study. <i>The Lancet Gastroenterology and Hepatology</i> , 2016, 1, 283-290.	8.1	140
34	Optical Imaging of Cancer Heterogeneity with Multispectral Optoacoustic Tomography. <i>Radiology</i> , 2012, 263, 461-468.	7.3	134
35	Sensitive, small, broadband and scalable optomechanical ultrasound sensor in silicon photonics. <i>Nature Photonics</i> , 2021, 15, 341-345.	31.4	133
36	Unmixing Molecular Agents From Absorbing Tissue in Multispectral Optoacoustic Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2014, 33, 48-60.	8.9	128

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37	Bioengineered bacterial vesicles as biological nano-heaters for optoacoustic imaging. <i>Nature Communications</i> , 2019, 10, 1114.	12.8	128
38	Model-based optoacoustic inversion with arbitrary-shape detectors. <i>Medical Physics</i> , 2011, 38, 4285-4295.	3.0	127
39	In vivo imaging of <i>Drosophila melanogaster</i> pupae with mesoscopic fluorescence tomography. <i>Nature Methods</i> , 2008, 5, 45-47.	19.0	125
40	Multispectral Opto-acoustic Tomography (MSOT) of the Brain and Glioblastoma Characterization. <i>NeuroImage</i> , 2013, 65, 522-528.	4.2	123
41	Functional optoacoustic neuro-tomography for scalable whole-brain monitoring of calcium indicators. <i>Light: Science and Applications</i> , 2016, 5, e16201-e16201.	16.6	122
42	Gold Nanoprisms as Optoacoustic Signal Nanoamplifiers for In Vivo Bioimaging of Gastrointestinal Cancers. <i>Small</i> , 2013, 9, 68-74.	10.0	121
43	Optoacoustic Imaging of Human Vasculature: Feasibility by Using a Handheld Probe. <i>Radiology</i> , 2016, 281, 256-263.	7.3	115
44	The effects of acoustic attenuation in optoacoustic signals. <i>Physics in Medicine and Biology</i> , 2011, 56, 6129-6148.	3.0	113
45	Real-time handheld multispectral optoacoustic imaging. <i>Optics Letters</i> , 2013, 38, 1404.	3.3	110
46	Vaccinia virus-mediated melanin production allows MR and optoacoustic deep tissue imaging and laser-induced thermotherapy of cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 3316-3320.	7.1	109
47	Calcium Sensor for Photoacoustic Imaging. <i>Journal of the American Chemical Society</i> , 2018, 140, 2718-2721.	13.7	109
48	Multifunctional Photosensitizer-Based Contrast Agents for Photoacoustic Imaging. <i>Scientific Reports</i> , 2014, 4, 5342.	3.3	108
49	Pushing the Optical Imaging Limits of Cancer with Multi-Frequency-Band Raster-Scan Optoacoustic Mesoscopy (RSOM). <i>Neoplasia</i> , 2015, 17, 208-214.	5.3	107
50	Multispectral optoacoustic tomography at 64, 128, and 256 channels. <i>Journal of Biomedical Optics</i> , 2014, 19, 036021.	2.6	106
51	Non-invasive Measurement of Brown Fat Metabolism Based on Optoacoustic Imaging of Hemoglobin Gradients. <i>Cell Metabolism</i> , 2018, 27, 689-701.e4.	16.2	105
52	Model-based optoacoustic inversions with incomplete projection data. <i>Medical Physics</i> , 2011, 38, 1694-1704.	3.0	104
53	Three-dimensional multispectral optoacoustic mesoscopy reveals melanin and blood oxygenation in human skin <i>in vivo</i> . <i>Journal of Biophotonics</i> , 2016, 9, 55-60.	2.3	101
54	Molecular imaging probes for multi-spectral optoacoustic tomography. <i>Chemical Communications</i> , 2017, 53, 4653-4672.	4.1	99

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55	Multispectral Optoacoustic Tomography of Matrix Metalloproteinase Activity in Vulnerable Human Carotid Plaques. <i>Molecular Imaging and Biology</i> , 2012, 14, 277-285.	2.6	98
56	A submicrometre silicon-on-insulator resonator for ultrasound detection. <i>Nature</i> , 2020, 585, 372-378.	27.8	98
57	Raster-scan optoacoustic mesoscopy in the 25-125 MHz range. <i>Optics Letters</i> , 2013, 38, 2472.	3.3	97
58	Acceleration of Optoacoustic Model-Based Reconstruction Using Angular Image Discretization. <i>IEEE Transactions on Medical Imaging</i> , 2012, 31, 1154-1162.	8.9	96
59	Three-dimensional optoacoustic tomography using a conventional ultrasound linear detector array: Whole-body tomographic system for small animals. <i>Medical Physics</i> , 2013, 40, 013302.	3.0	95
60	Monoclonal antibody-targeted PEGylated liposome-ICG encapsulating doxorubicin as a potential theranostic agent. <i>International Journal of Pharmaceutics</i> , 2015, 482, 2-10.	5.2	95
61	Mesoscopic and Macroscopic Optoacoustic Imaging of Cancer. <i>Cancer Research</i> , 2015, 75, 1548-1559.	0.9	94
62	High-resolution optoacoustic imaging of tissue responses to vascular-targeted therapies. <i>Nature Biomedical Engineering</i> , 2020, 4, 286-297.	22.5	92
63	Multispectral Fluorescence Ultramicroscopy: Three-Dimensional Visualization and Automatic Quantification of Tumor Morphology, Drug Penetration, and Antiangiogenic Treatment Response. <i>Neoplasia</i> , 2014, 16, 1-W7.	5.3	90
64	Ultrawideband reflection-mode optoacoustic mesoscopy. <i>Optics Letters</i> , 2014, 39, 3911.	3.3	90
65	Performance of a Multispectral Optoacoustic Tomography (MSOT) System equipped with 2D vs. 3D Handheld Probes for Potential Clinical Translation. <i>Photoacoustics</i> , 2016, 4, 1-10.	7.8	90
66	Bacterial encapsulins as orthogonal compartments for mammalian cell engineering. <i>Nature Communications</i> , 2018, 9, 1990.	12.8	88
67	Advancing Surgical Vision with Fluorescence Imaging. <i>Annual Review of Medicine</i> , 2016, 67, 153-164.	12.2	86
68	Near-infrared fluorescence molecular endoscopy detects dysplastic oesophageal lesions using topical and systemic tracer of vascular endothelial growth factor A. <i>Gut</i> , 2019, 68, 7-10.	12.1	85
69	Tackling standardization in fluorescence molecular imaging. <i>Nature Photonics</i> , 2018, 12, 505-515.	31.4	84
70	In-vivo handheld optoacoustic tomography of the human thyroid. <i>Photoacoustics</i> , 2016, 4, 65-69.	7.8	80
71	Broadband mesoscopic optoacoustic tomography reveals skin layers. <i>Optics Letters</i> , 2014, 39, 6297.	3.3	79
72	Quantitative Optoacoustic Signal Extraction Using Sparse Signal Representation. <i>IEEE Transactions on Medical Imaging</i> , 2009, 28, 1997-2006.	8.9	77

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73	Liposome-Gold Nanorod Hybrids for High-Resolution Visualization Deep in Tissues. <i>Journal of the American Chemical Society</i> , 2012, 134, 13256-13258.	13.7	77
74	Synthesis and Preclinical Characterization of the PSMA-Targeted Hybrid Tracer PSMA-I&F for Nuclear and Fluorescence Imaging of Prostate Cancer. <i>Journal of Nuclear Medicine</i> , 2019, 60, 71-78.	5.0	76
75	Label-free metabolic imaging by mid-infrared optoacoustic microscopy in living cells. <i>Nature Biotechnology</i> , 2020, 38, 293-296.	17.5	74
76	Implications of Ultrasound Frequency in Optoacoustic Mesoscopy of the Skin. <i>IEEE Transactions on Medical Imaging</i> , 2015, 34, 672-677.	8.9	73
77	Cardiovascular optoacoustics: From mice to men – A review. <i>Photoacoustics</i> , 2019, 14, 19-30.	7.8	72
78	Sensitive interferometric detection of ultrasound for minimally invasive clinical imaging applications. <i>Laser and Photonics Reviews</i> , 2014, 8, 450-457.	8.7	71
79	Modeling the shape of cylindrically focused transducers in three-dimensional optoacoustic tomography. <i>Journal of Biomedical Optics</i> , 2013, 18, 076014.	2.6	65
80	Polyglycerolsulfate Functionalized Gold Nanorods as Optoacoustic Signal Nanoamplifiers for In Vivo Bioimaging of Rheumatoid Arthritis. <i>Theranostics</i> , 2014, 4, 629-641.	10.0	65
81	Near-field radiofrequency thermoacoustic tomography with impulse excitation. <i>Medical Physics</i> , 2010, 37, 4602-4607.	3.0	64
82	Imaging Systemic Inflammatory Networks in Ischemic Heart Disease. <i>Journal of the American College of Cardiology</i> , 2015, 65, 1583-1591.	2.8	64
83	Performance of iterative optoacoustic tomography with experimental data. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	61
84	Multispectral optoacoustic tomography of myocardial infarction. <i>Photoacoustics</i> , 2013, 1, 3-8.	7.8	61
85	Emerging Intraoperative Imaging Modalities to Improve Surgical Precision. <i>Molecular Imaging and Biology</i> , 2018, 20, 705-715.	2.6	61
86	Cell type-specific delivery of short interfering RNAs by dye-functionalised theranostic nanoparticles. <i>Nature Communications</i> , 2014, 5, 5565.	12.8	58
87	High-contrast imaging of reversibly switchable fluorescent proteins via temporally unmixed multispectral optoacoustic tomography. <i>Optics Letters</i> , 2015, 40, 367.	3.3	57
88	Near-Infrared Photoacoustic Imaging Probe Responsive to Calcium. <i>Analytical Chemistry</i> , 2016, 88, 10785-10789.	6.5	57
89	Simultaneous visualization of tumour oxygenation, neovascularization and contrast agent perfusion by real-time three-dimensional optoacoustic tomography. <i>European Radiology</i> , 2016, 26, 1843-1851.	4.5	57
90	Imaging the Bio-Distribution of Fluorescent Probes Using Multispectral Epi-Illumination Cryoslicing Imaging. <i>Molecular Imaging and Biology</i> , 2011, 13, 874-885.	2.6	55

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91	Drug-Based Optical Agents: Infiltrating Clinics at Lower Risk. <i>Science Translational Medicine</i> , 2012, 4, 134ps11.	12.4	55
92	Pushing the Boundaries of Neuroimaging with Optoacoustics. <i>Neuron</i> , 2017, 96, 966-988.	8.1	54
93	Efficient non-negative constrained model-based inversion in optoacoustic tomography. <i>Physics in Medicine and Biology</i> , 2015, 60, 6733-6750.	3.0	53
94	Spectral unmixing techniques for optoacoustic imaging of tissue pathophysiology. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2017, 375, 20170262.	3.4	53
95	Lymph Node Micrometastases and In-Transit Metastases from Melanoma: In Vivo Detection with Multispectral Optoacoustic Imaging in a Mouse Model. <i>Radiology</i> , 2016, 280, 137-150.	7.3	52
96	Molecular Fluorescence Endoscopy Targeting Vascular Endothelial Growth Factor A for Improved Colorectal Polyp Detection. <i>Journal of Nuclear Medicine</i> , 2016, 57, 480-485.	5.0	52
97	Wideband optical sensing using pulse interferometry. <i>Optics Express</i> , 2012, 20, 19016.	3.4	50
98	Hybrid multiphoton and optoacoustic microscope. <i>Optics Letters</i> , 2014, 39, 1819.	3.3	50
99	Ionoacoustic tomography of the proton Bragg peak in combination with ultrasound and optoacoustic imaging. <i>Scientific Reports</i> , 2016, 6, 29305.	3.3	50
100	Effects of small variations of speed of sound in optoacoustic tomographic imaging. <i>Medical Physics</i> , 2014, 41, 073301.	3.0	49
101	Potential Red-Flag Identification of Colorectal Adenomas with Wide-Field Fluorescence Molecular Endoscopy. <i>Theranostics</i> , 2018, 8, 1458-1467.	10.0	49
102	Imaging of mesoscopic-scale organisms using selective-plane optoacoustic tomography. <i>Physics in Medicine and Biology</i> , 2009, 54, 2769-2777.	3.0	48
103	Concurrent video-rate color and near-infrared fluorescence laparoscopy. <i>Journal of Biomedical Optics</i> , 2013, 18, 101302.	2.6	48
104	Continuous wave laser diodes enable fast optoacoustic imaging. <i>Photoacoustics</i> , 2018, 9, 31-38.	7.8	48
105	Multispectral Optoacoustic Tomography of Benign and Malignant Thyroid Disorders: A Pilot Study. <i>Journal of Nuclear Medicine</i> , 2019, 60, 1461-1466.	5.0	48
106	Combining microscopy with mesoscopy using optical and optoacoustic label-free modes. <i>Scientific Reports</i> , 2015, 5, 12902.	3.3	47
107	Optoacoustic Dermoscopy of the Human Skin: Tuning Excitation Energy for Optimal Detection Bandwidth With Fast and Deep Imaging <i>&amp;lt;i&gt;in vivo&amp;lt;/i&gt;</i> . <i>IEEE Transactions on Medical Imaging</i> , 2017, 36, 1287-1296.	8.9	47
108	Emerging Technologies to Image Tissue Metabolism. <i>Cell Metabolism</i> , 2019, 29, 518-538.	16.2	47

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109	Near-field thermoacoustic imaging with transmission line pulsers. <i>Medical Physics</i> , 2012, 39, 4460-4466.	3.0	46
110	Use of Multispectral Optoacoustic Tomography to Diagnose Vascular Malformations. <i>JAMA Dermatology</i> , 2018, 154, 1457.	4.1	46
111	WST11 Vascular Targeted Photodynamic Therapy Effect Monitoring by Multispectral Optoacoustic Tomography (MSOT) in Mice. <i>Theranostics</i> , 2018, 8, 723-734.	10.0	45
112	Spatial heterogeneity of oxygenation and haemodynamics in breast cancer resolved in vivo by conical multispectral optoacoustic mesoscopy. <i>Light: Science and Applications</i> , 2020, 9, 57.	16.6	45
113	Optoacoustic imaging in endocrinology and metabolism. <i>Nature Reviews Endocrinology</i> , 2021, 17, 323-335.	9.6	45
114	Optoacoustic methods for frequency calibration of ultrasonic sensors. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011, 58, 316-326.	3.0	43
115	Frequency domain optoacoustic tomography using amplitude and phase. <i>Photoacoustics</i> , 2014, 2, 111-118.	7.8	43
116	Multimodal optoacoustic and multiphoton microscopy of human carotid atheroma. <i>Photoacoustics</i> , 2016, 4, 102-111.	7.8	43
117	Atheroma Susceptible to Thrombosis Exhibit Impaired Endothelial Permeability In Vivo as Assessed by Nanoparticle-Based Fluorescence Molecular Imaging. <i>Circulation: Cardiovascular Imaging</i> , 2017, 10, .	2.6	43
118	Motion correction in optoacoustic mesoscopy. <i>Scientific Reports</i> , 2017, 7, 10386.	3.3	43
119	Phthalocyanine photosensitizers as contrast agents for in vivo photoacoustic tumor imaging. <i>Biomedical Optics Express</i> , 2015, 6, 591.	2.9	42
120	Molecular photoacoustic imaging of breast cancer using an actively targeted conjugated polymer. <i>International Journal of Nanomedicine</i> , 2015, 10, 387.	6.7	41
121	Coordinated targeting of cold and nicotinic receptors synergistically improves obesity and type 2 diabetes. <i>Nature Communications</i> , 2018, 9, 4304.	12.8	41
122	Embedded ultrasound sensor in a silicon-on-insulator photonic platform. <i>Applied Physics Letters</i> , 2014, 104, 021116.	3.3	40
123	Comprehensive phantom for interventional fluorescence molecular imaging. <i>Journal of Biomedical Optics</i> , 2016, 21, 091309.	2.6	40
124	Fiber interferometer for hybrid optical and optoacoustic intravital microscopy. <i>Optica</i> , 2017, 4, 1180.	9.3	40
125	Synaptic vesicle cycle and amyloid $\beta$ : Biting the hand that feeds. <i>Alzheimer's and Dementia</i> , 2018, 14, 502-513.	0.8	40
126	Statistical optoacoustic image reconstruction using a-priori knowledge on the location of acoustic distortions. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	39



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127	In vivo frequency domain optoacoustic tomography. <i>Optics Letters</i> , 2012, 37, 3423.	3.3	39
128	Model-based optoacoustic imaging using focused detector scanning. <i>Optics Letters</i> , 2012, 37, 4080.	3.3	39
129	Optoacoustic microscopy at multiple discrete frequencies. <i>Light: Science and Applications</i> , 2018, 7, 109.	16.6	39
130	Deep Learning-Based Spectral Unmixing for Optoacoustic Imaging of Tissue Oxygen Saturation. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 3643-3654.	8.9	39
131	Intraoperative imaging in pathology-assisted surgery. <i>Nature Biomedical Engineering</i> , 2022, 6, 503-514.	22.5	39
132	Near Infrared Fluorescence (NIRF) Molecular Imaging of Oxidized LDL with an Autoantibody in Experimental Atherosclerosis. <i>Scientific Reports</i> , 2016, 6, 21785.	3.3	38
133	All-optical optoacoustic microscope based on wideband pulse interferometry. <i>Optics Letters</i> , 2016, 41, 1953.	3.3	38
134	A protease-activated, near-infrared fluorescent probe for early endoscopic detection of premalignant gastrointestinal lesions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	38
135	Three-dimensional optoacoustic reconstruction using fast sparse representation. <i>Optics Letters</i> , 2017, 42, 979.	3.3	37
136	Multispectral optoacoustic tomography of systemic sclerosis. <i>Journal of Biophotonics</i> , 2018, 11, e201800155.	2.3	37
137	A dual Ucp1 reporter mouse model for imaging and quantitation of brown and brite fat recruitment. <i>Molecular Metabolism</i> , 2019, 20, 14-27.	6.5	37
138	Quantitative fluorescence endoscopy: an innovative endoscopy approach to evaluate neoadjuvant treatment response in locally advanced rectal cancer. <i>Gut</i> , 2020, 69, 406-410.	12.1	37
139	Ultra-wideband three-dimensional optoacoustic tomography. <i>Optics Letters</i> , 2013, 38, 4671.	3.3	35
140	A macrophage uptaking near-infrared chemical probe CDnir7 for in vivo imaging of inflammation. <i>Chemical Communications</i> , 2014, 50, 6589.	4.1	35
141	Multispectral optoacoustic and MRI coregistration for molecular imaging of orthotopic model of human glioblastoma. <i>Journal of Biophotonics</i> , 2016, 9, 701-708.	2.3	35
142	Isotropic high resolution optoacoustic imaging with linear detector arrays in bi-directional scanning. <i>Journal of Biophotonics</i> , 2015, 8, 60-70.	2.3	34
143	Threshold Analysis and Biodistribution of Fluorescently Labeled Bevacizumab in Human Breast Cancer. <i>Cancer Research</i> , 2017, 77, 623-631.	0.9	34
144	Facile Synthesis of a Croconaine-Based Nanoformulation for Optoacoustic Imaging and Photothermal Therapy. <i>Advanced Healthcare Materials</i> , 2021, 10, e2002115.	7.6	34

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145	24-MHz Scanner for Optoacoustic Imaging of Skin and Burn. IEEE Transactions on Medical Imaging, 2014, 33, 535-545.	8.9	33
146	Assessing hyperthermia-induced vasodilation in human skin in vivo using optoacoustic mesoscopy. Journal of Biophotonics, 2018, 11, e201700359.	2.3	33
147	Elucidating Structure and Function <i>In Vivo</i> With Hybrid Fluorescence and Magnetic Resonance Imaging. Proceedings of the IEEE, 2008, 96, 382-396.	21.3	31
148	Optoacoustic determination of spatio-temporal responses of ultrasound sensors. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1234-1244.	3.0	31
149	Multispectral opto-acoustic tomography of exercised muscle oxygenation. Optics Letters, 2015, 40, 1496.	3.3	31
150	NeuBTracker imaging neurobehavioral dynamics in freely behaving fish. Nature Methods, 2017, 14, 1079-1082.	19.0	31
151	Flow-mediated dilatation test using optoacoustic imaging: a proof-of-concept. Biomedical Optics Express, 2017, 8, 3395.	2.9	31
152	A Synthetic Total Impulse Response Characterization Method for Correction of Hand-Held Optoacoustic Images. IEEE Transactions on Medical Imaging, 2020, 39, 3218-3230.	8.9	31
153	Indocyanine green matching phantom for fluorescence-guided surgery imaging system characterization and performance assessment. Journal of Biomedical Optics, 2020, 25, 1.	2.6	31
154	Towards clinically translatable NIR fluorescence molecular guidance for colonoscopy. Biomedical Optics Express, 2014, 5, 78.	2.9	30
155	siRNA liposome-gold nanorod vectors for multispectral optoacoustic tomography theranostics. Nanoscale, 2014, 6, 13451-13456.	5.6	30
156	Effects of multispectral excitation on the sensitivity of molecular optoacoustic imaging. Journal of Biophotonics, 2015, 8, 629-637.	2.3	30
157	Optoacoustic mesoscopy analysis and quantitative estimation of specific imaging metrics in Fitzpatrick skin phototypes II to V. Journal of Biophotonics, 2019, 12, e201800442.	2.3	30
158	Selective <i>In Vivo</i> Imaging of Syngeneic, Spontaneous, and Xenograft Tumors Using a Novel Tumor Cell-Specific Hsp70 Peptide-Based Probe. Cancer Research, 2014, 74, 6903-6912.	0.9	28
159	Sparsity-based acoustic inversion in cross-sectional multiscale optoacoustic imaging. Medical Physics, 2015, 42, 5444-5452.	3.0	28
160	Optical and Optoacoustic Model-Based Tomography: Theory and current challenges for deep tissue imaging of optical contrast. IEEE Signal Processing Magazine, 2015, 32, 88-100.	5.6	28
161	Optical imaging of post-embryonic zebrafish using multi orientation raster scan optoacoustic mesoscopy. Light: Science and Applications, 2017, 6, e16186-e16186.	16.6	28
162	Biodegradable Fluorescent Nanoparticles for Endoscopic Detection of Colorectal Carcinogenesis. Advanced Functional Materials, 2019, 29, 1904992.	14.9	28

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163	Maximum Entropy Based Non-Negative Optoacoustic Tomographic Image Reconstruction. IEEE Transactions on Biomedical Engineering, 2019, 66, 2604-2616.	4.2	28
164	Multispectral optoacoustic tomography of lipid and hemoglobin contrast in human carotid atherosclerosis. Photoacoustics, 2021, 23, 100283.	7.8	28
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