Vasilis Ntziachristos

List of Publications by Year in descending order

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341 papers

24,448 citations

72 h-index 145

g-index

361 all docs

361 docs citations

361 times ranked

18039 citing authors

#	Article	IF	CITATIONS
1	Alginate beads as a highly versatile test-sample for optoacoustic imaging. Photoacoustics, 2022, 25, 100301.	7.8	2
2	Intraoperative imaging in pathology-assisted surgery. Nature Biomedical Engineering, 2022, 6, 503-514.	22.5	39
3	Deep learning-based quantitative optoacoustic tomography of deep tissues in the absence of labeled experimental data. Optica, 2022, 9, 32.	9.3	22
4	Genetically encoded photo-switchable molecular sensors for optoacoustic and super-resolution imaging. Nature Biotechnology, 2022, 40, 598-605.	17.5	23
5	CXCR4 peptide-based fluorescence endoscopy in a mouse model of Barrett's esophagus. EJNMMI Research, 2022, 12, 2.	2.5	6
6	360º optoacoustic capsule endoscopy at 50ÂHz for esophageal imaging. Photoacoustics, 2022, 25, 100333.	7.8	4
7	Weighted modelâ€based optoacoustic reconstruction for partialâ€view geometries. Journal of Biophotonics, 2022, , e202100334.	2.3	2
8	Targeted Hsp70 fluorescence molecular endoscopy detects dysplasia in Barrett's esophagus. European Journal of Nuclear Medicine and Molecular Imaging, 2022, 49, 2049-2063.	6.4	10
9	Standardization and implementation of fluorescence molecular endoscopy in the clinic. Journal of Biomedical Optics, 2022, 27, .	2.6	4
10	Image processing improvements afford second-generation handheld optoacoustic imaging of breast cancer patients. Photoacoustics, 2022, 26, 100343.	7.8	14
11	Label-free analytic histology of carotid atherosclerosis by mid-infrared optoacoustic microscopy. Photoacoustics, 2022, 26, 100354.	7.8	5
12	Enabling precision monitoring of psoriasis treatment by optoacoustic mesoscopy. Science Translational Medicine, 2022, 14, eabm8059.	12.4	12
13	Validation of Novel Molecular Imaging Targets Identified by Functional Genomic mRNA Profiling to Detect Dysplasia in Barrett's Esophagus. Cancers, 2022, 14, 2462.	3.7	4
14	Fast raster-scan optoacoustic mesoscopy enables assessment of human melanoma microvasculature in vivo. Nature Communications, 2022, 13, 2803.	12.8	13
15	Deep-Learning-Based Electrical Noise Removal Enables High Spectral Optoacoustic Contrast in Deep Tissue. IEEE Transactions on Medical Imaging, 2022, 41, 3182-3193.	8.9	12
16	Disentangling the Frequency Content in Optoacoustics. IEEE Transactions on Medical Imaging, 2022, 41, 3373-3384.	8.9	7
17	Raster-scanning optoacoustic mesoscopy imaging as an objective disease severity tool in atopic dermatitis patients. Journal of the American Academy of Dermatology, 2021, 84, 1121-1123.	1.2	15
18	<scp>LVâ€GAN</scp> : A deep learning approach for limitedâ€view optoacoustic imaging based on hybrid datasets. Journal of Biophotonics, 2021, 14, e202000325.	2.3	18

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19	Imaging atherosclerotic plaques by targeting Galectin-3 and activated macrophages using (⁸⁹ Zr)-DFO- Galectin3-F(ab') ₂ mAb. Theranostics, 2021, 11, 1864-1876.	10.0	16
20	Principles and Practice of Intraoperative Fluorescence Imaging., 2021,, 143-152.		1
21	<i>In Vivo</i> Three-Dimensional Raster Scan Optoacoustic Mesoscopy Using Frequency Domain Inversion. IEEE Transactions on Medical Imaging, 2021, 40, 3349-3357.	8.9	3
22	Ultra-broadband axicon transducer for optoacoustic endoscopy. Scientific Reports, 2021, 11, 1654.	3.3	8
23	A practical guide to photoswitching optoacoustics tomography. Methods in Enzymology, 2021, 657, 365-383.	1.0	0
24	A Low-Cost Optoacoustic Sensor for Environmental Monitoring. Sensors, 2021, 21, 1379.	3.8	7
25	A Bioâ€Conjugated Fullerene as a Subcellularâ€Targeted and Multifaceted Phototheranostic Agent. Advanced Functional Materials, 2021, 31, 2101527.	14.9	22
26	Sensitive, small, broadband and scalable optomechanical ultrasound sensor in silicon photonics. Nature Photonics, 2021, 15, 341-345.	31.4	133
27	Facile Synthesis of a Croconaineâ€Based Nanoformulation for Optoacoustic Imaging and Photothermal Therapy. Advanced Healthcare Materials, 2021, 10, e2002115.	7.6	34
28	Interferometric optical fiber sensor for optoacoustic endomicroscopy. Journal of Biophotonics, 2021, 14, e202000501.	2.3	7
29	Multifunctional Magneto-Plasmonic Fe3O4/Au Nanocomposites: Approaching Magnetophoretically-Enhanced Photothermal Therapy. Nanomaterials, 2021, 11, 1113.	4.1	21
30	Optoacoustic imaging in endocrinology and metabolism. Nature Reviews Endocrinology, 2021, 17, 323-335.	9.6	45
31	Multicompartmental non-invasive sensing of postprandial lipemia in humans with multispectral optoacoustic tomography. Molecular Metabolism, 2021, 47, 101184.	6.5	9
32	Filling the Gap: Entirely Beige/Brite Adipose Tissues in One of the Smallest Mammals, <i>Suncus etruscus</i> . FASEB Journal, 2021, 35, .	0.5	0
33	Noninvasive visualization of electrical conductivity in tissues at the micrometer scale. Science Advances, 2021, 7, .	10.3	8
34	Croconaine-based nanoparticles enable efficient optoacoustic imaging of murine brain tumors. Photoacoustics, 2021, 22, 100263.	7.8	19
35	Intravascular molecularâ€structural imaging with a miniaturized integrated nearâ€infrared fluorescence and ultrasound catheter. Journal of Biophotonics, 2021, 14, e202100048.	2.3	3
36	Siliconâ€Photonics Point Sensor for Highâ€Resolution Optoacoustic Imaging. Advanced Optical Materials, 2021, 9, 2100256.	7.3	9

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37	Functional multispectral optoacoustic tomography imaging of hepatic steatosis development in mice. EMBO Molecular Medicine, 2021, 13, e13490.	6.9	9
38	Multispectral optoacoustic tomography of lipid and hemoglobin contrast in human carotid atherosclerosis. Photoacoustics, 2021, 23, 100283.	7.8	28
39	Speckle reduction in ultrasound endoscopy using refraction based elevational angular compounding. Scientific Reports, 2021, 11, 18370.	3.3	1
40	Label-free concurrent 5-modal microscopy (Co5M) resolves unknown spatio-temporal processes in wound healing. Communications Biology, 2021, 4, 1040.	4.4	5
41	Multispectral optoacoustic tomography of peripheral arterial disease based on muscle hemoglobin gradientsâ€"a pilot clinical study. Annals of Translational Medicine, 2021, 9, 36-36.	1.7	23
42	Chemotherapeutic effects on breast tumor hemodynamics revealed by eigenspectra multispectral optoacoustic tomography (eMSOT). Theranostics, 2021, 11, 7813-7828.	10.0	8
43	Bioengineered bacterial vesicles for optoacoustics-guided phototherapy. Methods in Enzymology, 2021, 657, 349-364.	1.0	2
44	In vitro optoacoustic flowÂcytometry with light scattering referencing. Scientific Reports, 2021, 11, 2181.	3.3	6
45	A protease-activated, near-infrared fluorescent probe for early endoscopic detection of premalignant gastrointestinal lesions. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	38
46	Wide-Field Mid-Infrared Hyperspectral Imaging by Snapshot Phase Contrast Measurement of Optothermal Excitation. Analytical Chemistry, 2021, 93, 15323-15330.	6.5	4
47	Reporter gene-based optoacoustic imaging of E. coli targeted colon cancer in vivo. Scientific Reports, 2021, 11, 24430.	3.3	8
48	Quantitative fluorescence endoscopy: an innovative endoscopy approach to evaluate neoadjuvant treatment response in locally advanced rectal cancer. Gut, 2020, 69, 406-410.	12.1	37
49	Skin Surface Detection in 3D Optoacoustic Mesoscopy Based on Dynamic Programming. IEEE Transactions on Medical Imaging, 2020, 39, 458-467.	8.9	6
50	Label-free metabolic imaging by mid-infrared optoacoustic microscopy in living cells. Nature Biotechnology, 2020, 38, 293-296.	17. 5	74
51	Visualizing cortical response to optogenetic stimulation and sensory inputs using multispectral handheld optoacoustic imaging. Photoacoustics, 2020, 17, 100153.	7.8	9
52	Targeting Endothelin Receptors in a Murine Model of Myocardial Infarction Using a Small Molecular Fluorescent Probe. Molecular Pharmaceutics, 2020, 17, 109-117.	4.6	9
53	Shortwave infrared polymethine fluorophores matched to excitation lasers enable non-invasive, multicolour in vivo imaging in real time. Nature Chemistry, 2020, 12, 1123-1130.	13.6	172
54	Resolution of Spatial and Temporal Heterogeneity in Bevacizumab-Treated Breast Tumors by Eigenspectra Multispectral Optoacoustic Tomography. Cancer Research, 2020, 80, 5291-5304.	0.9	14

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55	Three-dimensional optoacoustic imaging of nailfold capillaries in systemic sclerosis and its potential for disease differentiation using deep learning. Scientific Reports, 2020, 10, 16444.	3.3	19
56	Improving ultrasound images with elevational angular compounding based on acoustic refraction. Scientific Reports, 2020, 10, 18173.	3.3	2
57	A submicrometre silicon-on-insulator resonator for ultrasound detection. Nature, 2020, 585, 372-378.	27.8	98
58	Multiplexed whole-animal imaging with reversibly switchable optoacoustic proteins. Science Advances, 2020, 6, eaaz6293.	10.3	27
59	Deep Learning-Based Spectral Unmixing for Optoacoustic Imaging of Tissue Oxygen Saturation. IEEE Transactions on Medical Imaging, 2020, 39, 3643-3654.	8.9	39
60	Pushing the boundaries of optoacoustic microscopy by total impulse response characterization. Nature Communications, 2020, 11, 2910.	12.8	25
61	Longitudinal imaging of T cell-based immunotherapy with multi-spectral, multi-scale optoacoustic tomography. Scientific Reports, 2020, 10, 4903.	3.3	7
62	High-resolution optoacoustic imaging of tissue responses to vascular-targeted therapies. Nature Biomedical Engineering, 2020, 4, 286-297.	22.5	92
63	Multispectral optoacoustic tomography of muscle perfusion and oxygenation under arterial and venous occlusion: A human pilot study. Journal of Biophotonics, 2020, 13, e201960169.	2.3	27
64	Challenging a Preconception: Optoacoustic Spectrum Differs from the Optical Absorption Spectrum of Proteins and Dyes for Molecular Imaging. Analytical Chemistry, 2020, 92, 10717-10724.	6.5	26
65	Deep tissue volumetric optoacoustic tracking of individual circulating tumor cells in an intracardially perfused mouse model. Neoplasia, 2020, 22, 441-446.	5.3	11
66	Sensitivity Enhanced Photoacoustic Imaging Using a High-Frequency PZT Transducer with an Integrated Front-End Amplifier. Sensors, 2020, 20, 766.	3.8	5
67	Short-wavelength optoacoustic spectroscopy based on water muting. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4007-4014.	7.1	14
68	Spatial heterogeneity of oxygenation and haemodynamics in breast cancer resolved in vivo by conical multispectral optoacoustic mesoscopy. Light: Science and Applications, 2020, 9, 57.	16.6	45
69	Soft ultrasound priors in optoacoustic reconstruction: Improving clinical vascular imaging. Photoacoustics, 2020, 19, 100172.	7.8	26
70	Multi-Parametric Standardization of Fluorescence Imaging Systems Based on a Composite Phantom. IEEE Transactions on Biomedical Engineering, 2020, 67, 185-192.	4.2	19
71	Optoacoustic mesoscopy shows potential to increase accuracy of allergy patch testing. Contact Dermatitis, 2020, 83, 206-214.	1.4	10
72	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

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73	A Distance-Based Loss for Smooth and Continuous Skin Layer Segmentation in Optoacoustic Images. Lecture Notes in Computer Science, 2020, , 309-319.	1.3	5
74	A sparse deep learning approach for automatic segmentation of human vasculature in multispectral optoacoustic tomography. Photoacoustics, 2020, 20, 100203.	7.8	26
75	Indocyanine green matching phantom for fluorescence-guided surgery imaging system characterization and performance assessment. Journal of Biomedical Optics, 2020, 25, 1.	2.6	31
76	Full-frequency correction of spatial impulse response in back-projection scheme using space-variant filtering for optoacoustic mesoscopy. Photoacoustics, 2020, 19, 100193.	7.8	7
77	Amyloid Plaques of Alzheimer's Disease as Hotspots of Glutamatergic Activity. Neuroscientist, 2019, 25, 288-297.	3.5	27
78	Neurobiology and therapeutic applications of neurotoxins targeting transmitter release., 2019, 193, 135-155.		16
79	Fully automated identification of skin morphology in rasterâ€scan optoacoustic mesoscopy using artificial intelligence. Medical Physics, 2019, 46, 4046-4056.	3.0	13
80	Investigation of morphological, vascular and biochemical changes in the skin of an atopic dermatitis (AD) patient in response to dupilumab using raster scanning optoacoustic mesoscopy (RSOM) and handheld confocal Raman spectroscopy (CRS). Journal of Dermatological Science, 2019, 95, 123-125.	1.9	14
81	Biodegradable Fluorescent Nanoparticles for Endoscopic Detection of Colorectal Carcinogenesis. Advanced Functional Materials, 2019, 29, 1904992.	14.9	28
82	Advances in Optoacoustic Neurotomography of Animal Models. Trends in Biotechnology, 2019, 37, 1315-1326.	9.3	11
83	Multispectral Optoacoustic Tomography: Intra- and Interobserver Variability Using a Clinical Hybrid Approach. Journal of Clinical Medicine, 2019, 8, 63.	2.4	22
84	In Vitro Characterization of Hypoxia Preconditioned Serum (HPS)—Fibrin Hydrogels: Basis for an Injectable Biomimetic Tissue Regeneration Therapy. Journal of Functional Biomaterials, 2019, 10, 22.	4.4	10
85	Optoacoustic mesoscopy for biomedicine. Nature Biomedical Engineering, 2019, 3, 354-370.	22.5	142
86	Capsule optoacoustic endoscopy for esophageal imaging. Journal of Biophotonics, 2019, 12, e201800439.	2.3	23
87	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
88	Spatial and Spectral Mapping and Decomposition of Neural Dynamics and Organization of the Mouse Brain with Multispectral Optoacoustic Tomography. Cell Reports, 2019, 26, 2833-2846.e3.	6.4	19
89	Bioengineered bacterial vesicles as biological nano-heaters for optoacoustic imaging. Nature Communications, 2019, 10, 1114.	12.8	128
90	Multispectral Optoacoustic Tomography of Benign and Malignant Thyroid Disorders: A Pilot Study. Journal of Nuclear Medicine, 2019, 60, 1461-1466.	5.0	48

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91	Synthetic data framework to estimate the minimum detectable concentration of contrast agents for multispectral optoacoustic imaging of small animals. Journal of Biophotonics, 2019, 12, e201900021.	2.3	0
92	Phototrophic purple bacteria as optoacoustic in vivo reporters of macrophage activity. Nature Communications, 2019, 10, 1191.	12.8	22
93	Cardiovascular optoacoustics: From mice to men – A review. Photoacoustics, 2019, 14, 19-30.	7.8	72
94	Photocontrollable Proteins for Optoacoustic Imaging. Analytical Chemistry, 2019, 91, 5470-5477.	6.5	14
95	Motion Quantification and Automated Correction in Clinical RSOM. IEEE Transactions on Medical Imaging, 2019, 38, 1340-1346.	8.9	16
96	Homogentisic acid-derived pigment as a biocompatible label for optoacoustic imaging of macrophages. Nature Communications, 2019, 10, 5056.	12.8	13
97	Fluorescence imaging reversion using spatially variant deconvolution. Scientific Reports, 2019, 9, 18123.	3.3	4
98	A review of clinical photoacoustic imaging: Current and future trends. Photoacoustics, 2019, 16, 100144.	7.8	494
99	A dual Ucp1 reporter mouse model for imaging and quantitation of brown and brite fat recruitment. Molecular Metabolism, 2019, 20, 14-27.	6.5	37
100	Maximum Entropy Based Non-Negative Optoacoustic Tomographic Image Reconstruction. IEEE Transactions on Biomedical Engineering, 2019, 66, 2604-2616.	4.2	28
101	Characterization of Brown Adipose Tissue in a Diabetic Mouse Model with Spiral Volumetric Optoacoustic Tomography. Molecular Imaging and Biology, 2019, 21, 620-625.	2.6	11
102	Emerging Technologies to Image Tissue Metabolism. Cell Metabolism, 2019, 29, 518-538.	16.2	47
103	Synthesis and Preclinical Characterization of the PSMA-Targeted Hybrid Tracer PSMA-I& amp; F for Nuclear and Fluorescence Imaging of Prostate Cancer. Journal of Nuclear Medicine, 2019, 60, 71-78.	5.0	76
104	Near-infrared fluorescence molecular endoscopy detects dysplastic oesophageal lesions using topical and systemic tracer of vascular endothelial growth factor A. Gut, 2019, 68, 7-10.	12.1	85
105	In-vivo hybrid microscopy of small model organisms. , 2019, , .		4
106	Amplification of photoacoustic effect in bimodal polymer particles by self-quenching of indocyanine green. Biomedical Optics Express, 2019, 10, 4775.	2.9	28
107	Optical features of human skin revealed by optoacoustic mesoscopy in the visible and short-wave infrared regions. Optics Letters, 2019, 44, 4119.	3.3	13
108	Non-invasive Measurement of Brown Fat Metabolism Based on Optoacoustic Imaging of Hemoglobin Gradients. Cell Metabolism, 2018, 27, 689-701.e4.	16.2	105

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109	Synaptic vesicle cycle and amyloid \hat{l}^2 : Biting the hand that feeds. Alzheimer's and Dementia, 2018, 14, 502-513.	0.8	40
110	Assessing hyperthermiaâ€induced vasodilation in human skin in vivo using optoacoustic mesoscopy. Journal of Biophotonics, 2018, 11, e201700359.	2.3	33
111	Optoacoustic sensing of hematocrit to improve the accuracy of hybrid fluorescenceâ€ultrasound intravascular imaging. Journal of Biophotonics, 2018, 11, e201700255.	2.3	3
112	Alleviation of Trigeminal Nociception Using p75 Neurotrophin Receptor Targeted Lentiviral Interference Therapy. Neurotherapeutics, 2018, 15, 489-499.	4.4	4
113	Continuous wave laser diodes enable fast optoacoustic imaging. Photoacoustics, 2018, 9, 31-38.	7.8	48
114	Raster-Scanning Optoacoustic Mesoscopy for Gastrointestinal Imaging at High Resolution. Gastroenterology, 2018, 154, 807-809.e3.	1.3	20
115	A Bayesian Approach to Eigenspectra Optoacoustic Tomography. IEEE Transactions on Medical Imaging, 2018, 37, 2070-2079.	8.9	17
116	Genetically Controlled Lysosomal Entrapment of Superparamagnetic Ferritin for Multimodal and Multiscale Imaging and Actuation with Low Tissue Attenuation. Advanced Functional Materials, 2018, 28, 1706793.	14.9	15
117	Quenched hexacene optoacoustic nanoparticles. Journal of Materials Chemistry B, 2018, 6, 44-55.	5.8	7
118	Calcium Sensor for Photoacoustic Imaging. Journal of the American Chemical Society, 2018, 140, 2718-2721.	13.7	109
119	Importance of Ultrawide Bandwidth for Optoacoustic Esophagus Imaging. IEEE Transactions on Medical Imaging, 2018, 37, 1162-1167.	8.9	6
120	Secretin-Activated Brown Fat Mediates Prandial Thermogenesis to Induce Satiation. Cell, 2018, 175, 1561-1574.e12.	28.9	167
121	Optoacoustic microscopy at multiple discrete frequencies. Light: Science and Applications, 2018, 7, 109.	16.6	39
122	Use of Multispectral Optoacoustic Tomography to Diagnose Vascular Malformations. JAMA Dermatology, 2018, 154, 1457.	4.1	46
123	Crystal structure of a biliverdin-bound phycobiliprotein: Interdependence of oligomerization and chromophorylation. Journal of Structural Biology, 2018, 204, 519-522.	2.8	12
124	Blood vessel imaging using radiofrequency-induced second harmonic acoustic response. Scientific Reports, 2018, 8, 15522.	3.3	19
125	Coordinated targeting of cold and nicotinic receptors synergistically improves obesity and type 2 diabetes. Nature Communications, 2018, 9, 4304.	12.8	41
126	The application of frequency-domain photoacoustics to temperature-dependent measurements of the Grüneisen parameter in lipids. Photoacoustics, 2018, 11, 56-64.	7.8	18

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127	Bacterial encapsulins as orthogonal compartments for mammalian cell engineering. Nature Communications, 2018, 9, 1990.	12.8	88
128	Multispectral optoacoustic tomography of systemic sclerosis. Journal of Biophotonics, 2018, 11, e201800155.	2.3	37
129	WST11 Vascular Targeted Photodynamic Therapy Effect Monitoring by Multispectral Optoacoustic Tomography (MSOT) in Mice. Theranostics, 2018, 8, 723-734.	10.0	45
130	Non-linear optical microscopy and histological analysis of collagen, elastin and lysyl oxidase expression in breast capsular contracture. European Journal of Medical Research, 2018, 23, 30.	2.2	9
131	Potential Red-Flag Identification of Colorectal Adenomas with Wide-Field Fluorescence Molecular Endoscopy. Theranostics, 2018, 8, 1458-1467.	10.0	49
132	Extended Near-Infrared Optoacoustic Spectrometry for Sensing Physiological Concentrations of Glucose. Frontiers in Endocrinology, 2018, 9, 112.	3.5	24
133	Tackling standardization in fluorescence molecular imaging. Nature Photonics, 2018, 12, 505-515.	31.4	84
134	Looking at sound: optoacoustics with all-optical ultrasound detection. Light: Science and Applications, 2018, 7, 53.	16.6	230
135	Characterization of Reversibly Switchable Fluorescent Proteins in Optoacoustic Imaging. Analytical Chemistry, 2018, 90, 10527-10535.	6.5	24
136	Multispectral Optoacoustic Tomography of Brown Adipose Tissue. Handbook of Experimental Pharmacology, 2018, 251, 325-336.	1.8	12
137	Emerging Intraoperative Imaging Modalities to Improve Surgical Precision. Molecular Imaging and Biology, 2018, 20, 705-715.	2.6	61
138	Fluorescence molecular tomography of DiR-labeled mesenchymal stem cell implants for osteochondral defect repair in rabbit knees. European Radiology, 2017, 27, 1105-1113.	4.5	14
139	Optical imaging of post-embryonic zebrafish using multi orientation raster scan optoacoustic mesoscopy. Light: Science and Applications, 2017, 6, e16186-e16186.	16.6	28
140	Everolimus-eluting stents stabilize plaque inflammation in vivo: assessment by intravascular fluorescence molecular imaging. European Heart Journal Cardiovascular Imaging, 2017, 18, 510-518.	1.2	14
141	Targeting Elastase for Molecular Imaging of Early Atherosclerotic Lesions. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 525-533.	2.4	22
142	Tumor-Specific Uptake of Fluorescent Bevacizumab–IRDye800CW Microdosing in Patients with Primary Breast Cancer: A Phase I Feasibility Study. Clinical Cancer Research, 2017, 23, 2730-2741.	7.0	212
143	Three-dimensional optoacoustic mesoscopy of the tumor heterogeneity in vivo using high depth-to-resolution multispectral optoacoustic tomography. , 2017, , .		0
144	Imaging of post-embryonic stage model organisms at high resolution using multi-orientation optoacoustic mesoscopy. , 2017, , .		0

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145	Optoacoustic Dermoscopy of the Human Skin: Tuning Excitation Energy for Optimal Detection Bandwidth With Fast and Deep Imaging <italic>in vivo</italic> . IEEE Transactions on Medical Imaging, 2017, 36, 1287-1296.	8.9	47
146	Optoacoustic microscopy based on pi-FBG ultrasound sensors. Proceedings of SPIE, 2017, , .	0.8	3
147	Benchmarking of fluorescence cameras through the use of a composite phantom. Journal of Biomedical Optics, 2017, 22, 016009.	2.6	24
148	Atheroma Susceptible to Thrombosis Exhibit Impaired Endothelial Permeability In Vivo as Assessed by Nanoparticle-Based Fluorescence Molecular Imaging. Circulation: Cardiovascular Imaging, 2017, 10, .	2.6	43
149	Precision assessment of label-free psoriasis biomarkers with ultra-broadband optoacoustic mesoscopy. Nature Biomedical Engineering, 2017, $1, \dots$	22.5	187
150	Optoacoustic endoscopy with optical and acoustic resolution. , 2017, , .		1
151	Imaging of fatty tumors: appearance of subcutaneous lipomas in optoacoustic images. Journal of Biophotonics, 2017, 10, 983-989.	2.3	19
152	Electrolytic conductivity-related radiofrequency heating of aqueous suspensions of nanoparticles for biomedicine. Physical Chemistry Chemical Physics, 2017, 19, 11510-11517.	2.8	10
153	Sonophore labeled RGD: a targeted contrast agent for optoacoustic imaging. Photoacoustics, 2017, 6, 1-8.	7.8	23
154	Molecular imaging probes for multi-spectral optoacoustic tomography. Chemical Communications, 2017, 53, 4653-4672.	4.1	99
155	Integrin-Targeted Hybrid Fluorescence Molecular Tomography/X-ray Computed Tomography for Imaging Tumor Progression and Early Response in Non-Small Cell Lung Cancer. Neoplasia, 2017, 19, 8-16.	5.3	17
156	Quantitative intravascular biological fluorescence-ultrasound imaging of coronary and peripheral arteries in vivo. European Heart Journal Cardiovascular Imaging, 2017, 18, 1253-1261.	1.2	26
157	NeuBtrackerâ€"imaging neurobehavioral dynamics in freely behaving fish. Nature Methods, 2017, 14, 1079-1082.	19.0	31
158	Spectral unmixing techniques for optoacoustic imaging of tissue pathophysiology. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20170262.	3.4	53
159	Multispectral Optoacoustic Tomography (MSOT) of Human Breast Cancer. Clinical Cancer Research, 2017, 23, 6912-6922.	7.0	202
160	Motion correction in optoacoustic mesoscopy. Scientific Reports, 2017, 7, 10386.	3.3	43
161	Microfluidic sorting of intrinsically magnetic cells under visual control. Scientific Reports, 2017, 7, 6942.	3.3	26
162	Pushing the Boundaries of Neuroimaging with Optoacoustics. Neuron, 2017, 96, 966-988.	8.1	54

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163	Detection of intramyocardially injected DiR-labeled mesenchymal stem cells by optical and optoacoustic tomography. Photoacoustics, 2017, 6, 37-47.	7.8	17
164	Threshold Analysis and Biodistribution of Fluorescently Labeled Bevacizumab in Human Breast Cancer. Cancer Research, 2017, 77, 623-631.	0.9	34
165	Flow-mediated dilatation test using optoacoustic imaging: a proof-of-concept. Biomedical Optics Express, 2017, 8, 3395.	2.9	31
166	Fiber interferometer for hybrid optical and optoacoustic intravital microscopy. Optica, 2017, 4, 1180.	9.3	40
167	Three-dimensional optoacoustic reconstruction using fast sparse representation. Optics Letters, 2017, 42, 979.	3.3	37
168	Optoacoustic Imaging of Human Vasculature: Feasibility by Using a Handheld Probe. Radiology, 2016, 281, 256-263.	7.3	115
169	High-Resolution Multispectral Optoacoustic Tomography of the Vascularization and Constitutive Hypoxemia of Cancerous Tumors. Neoplasia, 2016, 18, 459-467.	5.3	23
170	Eigenspectra optoacoustic tomography achieves quantitative blood oxygenation imaging deep in tissues. Nature Communications, 2016, 7, 12121.	12.8	195
171	Near Infrared Fluorescence (NIRF) Molecular Imaging of Oxidized LDL with an Autoantibody in Experimental Atherosclerosis. Scientific Reports, 2016, 6, 21785.	3.3	38
172	Functional optoacoustic neuro-tomography for scalable whole-brain monitoring of calcium indicators. Light: Science and Applications, 2016, 5, e16201-e16201.	16.6	122
173	Synthesis and evaluation of condensed magnetic nanocrystal clusters with inÂvivo multispectral optoacoustic tomography for tumour targeting. Biomaterials, 2016, 91, 128-139.	11.4	13
174	Performance of a Multispectral Optoacoustic Tomography (MSOT) System equipped with 2D vs. 3D Handheld Probes for Potential Clinical Translation. Photoacoustics, 2016, 4, 1-10.	7.8	90
175	Lymph Node Micrometastases and In-Transit Metastases from Melanoma: In Vivo Detection with Multispectral Optoacoustic Imaging in a Mouse Model. Radiology, 2016, 280, 137-150.	7.3	52
176	All-optical optoacoustic microscope based on wideband pulse interferometry. Optics Letters, 2016, 41, 1953.	3.3	38
177	Multimodal optoacoustic and multiphoton microscopy of human carotid atheroma. Photoacoustics, 2016, 4, 102-111.	7.8	43
178	Hybrid multispectral optoacoustic and ultrasound tomography for morphological and physiological brain imaging. Journal of Biomedical Optics, 2016, 21, 086005.	2.6	25
179	DNAâ€Nanostructure–Goldâ€Nanorod Hybrids for Enhanced In Vivo Optoacoustic Imaging and Photothermal Therapy. Advanced Materials, 2016, 28, 10000-10007.	21.0	185
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