

Vasilis Ntziachristos

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

331
papers

18,148
citations

64
h-index

127
g-index

361
ext. papers

22,032
ext. citations

9.2
avg, IF

7.33
L-index

#	Paper	IF	Citations
331	360 optoacoustic capsule endoscopy at 50Hz for esophageal imaging.. <i>Photoacoustics</i> , 2022 , 25, 1003339		0
330	Weighted model-based optoacoustic reconstruction for partial-view geometries.. <i>Journal of Biophotonics</i> , 2022 , e202100334	3.1	0
329	CXCR4 peptide-based fluorescence endoscopy in a mouse model of Barrett's esophagus.. <i>EJNMMI Research</i> , 2022 , 12, 2	3.6	0
328	Alginate beads as a highly versatile test-sample for optoacoustic imaging.. <i>Photoacoustics</i> , 2022 , 25, 100301		1
327	Image processing improvements afford second-generation handheld optoacoustic imaging of breast cancer patients.. <i>Photoacoustics</i> , 2022 , 26, 100343	9	2
326	Label-free analytic histology of carotid atherosclerosis by mid-infrared optoacoustic microscopy.. <i>Photoacoustics</i> , 2022 , 26, 100354	9	0
325	Enabling precision monitoring of psoriasis treatment by optoacoustic mesoscopy.. <i>Science Translational Medicine</i> , 2022 , 14, eabm8059	17.5	0
324	Validation of Novel Molecular Imaging Targets Identified by Functional Genomic mRNA Profiling to Detect Dysplasia in Barrett's Esophagus. <i>Cancers</i> , 2022 , 14, 2462	6.6	0
323	Fast raster-scan optoacoustic mesoscopy enables assessment of human melanoma microvasculature in vivo.. <i>Nature Communications</i> , 2022 , 13, 2803	17.4	0
322	Deep-learning-based electrical noise removal enables high spectral optoacoustic contrast in deep tissue. <i>IEEE Transactions on Medical Imaging</i> , 2022 , 1-1	11.7	2
321	Targeted Hsp70 fluorescence molecular endoscopy detects dysplasia in Barrett's esophagus. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2021 , 1	8.8	3
320	Genetically encoded photo-switchable molecular sensors for optoacoustic and super-resolution imaging. <i>Nature Biotechnology</i> , 2021 ,	44.5	5
319	Wide-Field Mid-Infrared Hyperspectral Imaging by Snapshot Phase Contrast Measurement of Optothermal Excitation. <i>Analytical Chemistry</i> , 2021 , 93, 15323-15330	7.8	0
318	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,	11.5	8
317	A Bio-Conjugated Fullerene as a Subcellular-Targeted and Multifaceted Phototheranostic Agent. <i>Advanced Functional Materials</i> , 2021 , 31, 2101527	15.6	10
316	Sensitive, small, broadband and scalable optomechanical ultrasound sensor in silicon photonics. <i>Nature Photonics</i> , 2021 , 15, 341-345	33.9	32
315	Facile Synthesis of a Croconaine-Based Nanof ormulation for Optoacoustic Imaging and Photothermal Therapy. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2002115	10.1	15

314	Interferometric optical fiber sensor for optoacoustic endomicroscopy. <i>Journal of Biophotonics</i> , 2021 , 14, e202000501	3.1	1
313	Multifunctional Magneto-Plasmonic FeO/Au Nanocomposites: Approaching Magnetophoretically-Enhanced Photothermal Therapy. <i>Nanomaterials</i> , 2021 , 11,	5.4	5
312	Optoacoustic imaging in endocrinology and metabolism. <i>Nature Reviews Endocrinology</i> , 2021 , 17, 323-335.2	5.2	11
311	Multicompartmental non-invasive sensing of postprandial lipemia in humans with multispectral optoacoustic tomography. <i>Molecular Metabolism</i> , 2021 , 47, 101184	8.8	3
310	Croconaine-based nanoparticles enable efficient optoacoustic imaging of murine brain tumors. <i>Photoacoustics</i> , 2021 , 22, 100263	9	4
309	Intravascular molecular-structural imaging with a miniaturized integrated near-infrared fluorescence and ultrasound catheter. <i>Journal of Biophotonics</i> , 2021 , 14, e202100048	3.1	0
308	Raster-scanning optoacoustic mesoscopy imaging as an objective disease severity tool in atopic dermatitis patients. <i>Journal of the American Academy of Dermatology</i> , 2021 , 84, 1121-1123	4.5	9
307	LV-GAN: A deep learning approach for limited-view optoacoustic imaging based on hybrid datasets. <i>Journal of Biophotonics</i> , 2021 , 14, e202000325	3.1	10
306	Imaging atherosclerotic plaques by targeting Galectin-3 and activated macrophages using (Zr)-DFO-Galectin3-F(ab') mAb. <i>Theranostics</i> , 2021 , 11, 1864-1876	12.1	5
305	Principles and Practice of Intraoperative Fluorescence Imaging 2021 , 143-152		
304	In Vivo Three-Dimensional Raster Scan Optoacoustic Mesoscopy Using Frequency Domain Inversion. <i>IEEE Transactions on Medical Imaging</i> , 2021 , 40, 3349-3357	11.7	0
303	Ultra-broadband axicon transducer for optoacoustic endoscopy. <i>Scientific Reports</i> , 2021 , 11, 1654	4.9	5
302	A practical guide to photoswitching optoacoustics tomography. <i>Methods in Enzymology</i> , 2021 , 657, 365-383		
301	A Low-Cost Optoacoustic Sensor for Environmental Monitoring. <i>Sensors</i> , 2021 , 21,	3.8	1
300	Silicon-Photonics Point Sensor for High-Resolution Optoacoustic Imaging. <i>Advanced Optical Materials</i> , 2021 , 9, 2100256	8.1	0
299	Functional multispectral optoacoustic tomography imaging of hepatic steatosis development in mice. <i>EMBO Molecular Medicine</i> , 2021 , 13, e13490	12	2
298	Multispectral optoacoustic tomography of lipid and hemoglobin contrast in human carotid atherosclerosis. <i>Photoacoustics</i> , 2021 , 23, 100283	9	5
297	Speckle reduction in ultrasound endoscopy using refraction based elevational angular compounding. <i>Scientific Reports</i> , 2021 , 11, 18370	4.9	0

296	Label-free concurrent 5-modal microscopy (Co5M) resolves unknown spatio-temporal processes in wound healing. <i>Communications Biology</i> , 2021 , 4, 1040	6.7	1
295	Multispectral optoacoustic tomography of peripheral arterial disease based on muscle hemoglobin gradients-a pilot clinical study. <i>Annals of Translational Medicine</i> , 2021 , 9, 36	3.2	5
294	Chemotherapeutic effects on breast tumor hemodynamics revealed by eigenspectra multispectral optoacoustic tomography (eMSOT). <i>Theranostics</i> , 2021 , 11, 7813-7828	12.1	1
293	Bioengineered bacterial vesicles for optoacoustics-guided phototherapy. <i>Methods in Enzymology</i> , 2021 , 657, 349-364	1.7	
292	In vitro optoacoustic flow cytometry with light scattering referencing. <i>Scientific Reports</i> , 2021 , 11, 2181	4.9	4
291	Reporter gene-based optoacoustic imaging of E. coli targeted colon cancer in vivo.. <i>Scientific Reports</i> , 2021 , 11, 24430	4.9	2
290	Multiplexed whole-animal imaging with reversibly switchable optoacoustic proteins. <i>Science Advances</i> , 2020 , 6, eaaz6293	14.3	18
289	Deep Learning-Based Spectral Unmixing for Optoacoustic Imaging of Tissue Oxygen Saturation. <i>IEEE Transactions on Medical Imaging</i> , 2020 , 39, 3643-3654	11.7	21
288	Pushing the boundaries of optoacoustic microscopy by total impulse response characterization. <i>Nature Communications</i> , 2020 , 11, 2910	17.4	14
287	Longitudinal imaging of T cell-based immunotherapy with multi-spectral, multi-scale optoacoustic tomography. <i>Scientific Reports</i> , 2020 , 10, 4903	4.9	4
286	High-resolution optoacoustic imaging of tissue responses to vascular-targeted therapies. <i>Nature Biomedical Engineering</i> , 2020 , 4, 286-297	19	46
285	Multispectral optoacoustic tomography of muscle perfusion and oxygenation under arterial and venous occlusion: A human pilot study. <i>Journal of Biophotonics</i> , 2020 , 13, e201960169	3.1	13
284	Challenging a Preconception: Optoacoustic Spectrum Differs from the Optical Absorption Spectrum of Proteins and Dyes for Molecular Imaging. <i>Analytical Chemistry</i> , 2020 , 92, 10717-10724	7.8	15
283	Deep tissue volumetric optoacoustic tracking of individual circulating tumor cells in an intracardially perfused mouse model. <i>Neoplasia</i> , 2020 , 22, 441-446	6.4	6
282	Sensitivity Enhanced Photoacoustic Imaging Using a High-Frequency PZT Transducer with an Integrated Front-End Amplifier. <i>Sensors</i> , 2020 , 20,	3.8	4
281	Short-wavelength optoacoustic spectroscopy based on water muting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 4007-4014	11.5	4
280	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	16.7	23
279	Soft ultrasound priors in optoacoustic reconstruction: Improving clinical vascular imaging. <i>Photoacoustics</i> , 2020 , 19, 100172	9	14

278	Multi-Parametric Standardization of Fluorescence Imaging Systems Based on a Composite Phantom. <i>IEEE Transactions on Biomedical Engineering</i> , 2020 , 67, 185-192	5	10
277	Optoacoustic mesoscopy shows potential to increase accuracy of allergy patch testing. <i>Contact Dermatitis</i> , 2020 , 83, 206-214	2.7	6
276	Indocyanine green matching phantom for fluorescence-guided surgery imaging system characterization and performance assessment. <i>Journal of Biomedical Optics</i> , 2020 , 25, 1-15	3.5	10
275	Full-frequency correction of spatial impulse response in back-projection scheme using space-variant filtering for optoacoustic mesoscopy. <i>Photoacoustics</i> , 2020 , 19, 100193	9	2
274	A Distance-Based Loss for Smooth and Continuous Skin Layer Segmentation in Optoacoustic Images. <i>Lecture Notes in Computer Science</i> , 2020 , 309-319	0.9	4
273	A sparse deep learning approach for automatic segmentation of human vasculature in multispectral optoacoustic tomography. <i>Photoacoustics</i> , 2020 , 20, 100203	9	14
272	Label-free metabolic imaging by mid-infrared optoacoustic microscopy in living cells. <i>Nature Biotechnology</i> , 2020 , 38, 293-296	44.5	40
271	Visualizing cortical response to optogenetic stimulation and sensory inputs using multispectral handheld optoacoustic imaging. <i>Photoacoustics</i> , 2020 , 17, 100153	9	5
270	Targeting Endothelin Receptors in a Murine Model of Myocardial Infarction Using a Small Molecular Fluorescent Probe. <i>Molecular Pharmaceutics</i> , 2020 , 17, 109-117	5.6	0
269	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	17.6	71
268	Resolution of Spatial and Temporal Heterogeneity in Bevacizumab-Treated Breast Tumors by Eigenspectra Multispectral Optoacoustic Tomography. <i>Cancer Research</i> , 2020 , 80, 5291-5304	10.1	7
267	Three-dimensional optoacoustic imaging of nailfold capillaries in systemic sclerosis and its potential for disease differentiation using deep learning. <i>Scientific Reports</i> , 2020 , 10, 16444	4.9	10
266	Improving ultrasound images with elevational angular compounding based on acoustic refraction. <i>Scientific Reports</i> , 2020 , 10, 18173	4.9	1
265	A submicrometre silicon-on-insulator resonator for ultrasound detection. <i>Nature</i> , 2020 , 585, 372-378	50.4	38
264	Quantitative fluorescence endoscopy: an innovative endoscopy approach to evaluate neoadjuvant treatment response in locally advanced rectal cancer. <i>Gut</i> , 2020 , 69, 406-410	19.2	15
263	Skin Surface Detection in 3D Optoacoustic Mesoscopy Based on Dynamic Programming. <i>IEEE Transactions on Medical Imaging</i> , 2020 , 39, 458-467	11.7	6
262	A Synthetic Total Impulse Response Characterization Method for Correction of Hand-Held Optoacoustic Images. <i>IEEE Transactions on Medical Imaging</i> , 2020 , 39, 3218-3230	11.7	16
261	Multispectral Optoacoustic Tomography: Intra- and Interobserver Variability Using a Clinical Hybrid Approach. <i>Journal of Clinical Medicine</i> , 2019 , 8,	5.1	15

260	In Vitro Characterization of Hypoxia Preconditioned Serum (HPS)-Fibrin Hydrogels: Basis for an Injectable Biomimetic Tissue Regeneration Therapy. <i>Journal of Functional Biomaterials</i> , 2019 , 10,	4.8	4
259	Optoacoustic mesoscopy for biomedicine. <i>Nature Biomedical Engineering</i> , 2019 , 3, 354-370	19	68
258	Capsule optoacoustic endoscopy for esophageal imaging. <i>Journal of Biophotonics</i> , 2019 , 12, e201800439	3.1	12
257	Optoacoustic mesoscopy analysis and quantitative estimation of specific imaging metrics in Fitzpatrick skin phototypes II to V. <i>Journal of Biophotonics</i> , 2019 , 12, e201800442	3.1	16
256	Spatial and Spectral Mapping and Decomposition of Neural Dynamics and Organization of the Mouse Brain with Multispectral Optoacoustic Tomography. <i>Cell Reports</i> , 2019 , 26, 2833-2846.e3	10.6	13
255	Bioengineered bacterial vesicles as biological nano-heaters for optoacoustic imaging. <i>Nature Communications</i> , 2019 , 10, 1114	17.4	73
254	Multispectral Optoacoustic Tomography of Benign and Malignant Thyroid Disorders: A Pilot Study. <i>Journal of Nuclear Medicine</i> , 2019 , 60, 1461-1466	8.9	25
253	Synthetic data framework to estimate the minimum detectable concentration of contrast agents for multispectral optoacoustic imaging of small animals. <i>Journal of Biophotonics</i> , 2019 , 12, e201900021	3.1	
252	Phototrophic purple bacteria as optoacoustic in vivo reporters of macrophage activity. <i>Nature Communications</i> , 2019 , 10, 1191	17.4	15
251	Cardiovascular optoacoustics: From mice to men - A review. <i>Photoacoustics</i> , 2019 , 14, 19-30	9	41
250	Photocontrollable Proteins for Optoacoustic Imaging. <i>Analytical Chemistry</i> , 2019 , 91, 5470-5477	7.8	7
249	Motion Quantification and Automated Correction in Clinical RSOM. <i>IEEE Transactions on Medical Imaging</i> , 2019 , 38, 1340-1346	11.7	7
248	Multispectral Optoacoustic Tomography of Brown Adipose Tissue. <i>Handbook of Experimental Pharmacology</i> , 2019 , 251, 325-336	3.2	6
247	Amyloid Plaques of Alzheimer's Disease as Hotspots of Glutamatergic Activity. <i>Neuroscientist</i> , 2019 , 25, 288-297	7.6	18
246	Neurobiology and therapeutic applications of neurotoxins targeting transmitter release. <i>Pharmacology & Therapeutics</i> , 2019 , 193, 135-155	13.9	9
245	Fully automated identification of skin morphology in raster-scan optoacoustic mesoscopy using artificial intelligence. <i>Medical Physics</i> , 2019 , 46, 4046-4056	4.4	11
244	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). <i>Journal of Dermatological Science</i> , 2019 , 95, 123-125	4.3	4
243	Biodegradable fluorescent nanoparticles for endoscopic detection of colorectal carcinogenesis. <i>Advanced Functional Materials</i> , 2019 , 29, 1904992	15.6	11

242	Advances in Optoacoustic Neurotomography of Animal Models. <i>Trends in Biotechnology</i> , 2019 , 37, 1315-1326	13.26	8
241	In-vivo hybrid microscopy of small model organisms 2019 ,		3
240	Amplification of photoacoustic effect in bimodal polymer particles by self-quenching of indocyanine green. <i>Biomedical Optics Express</i> , 2019 , 10, 4775-4789	3.5	16
239	Optical features of human skin revealed by optoacoustic mesoscopy in the visible and short-wave infrared regions. <i>Optics Letters</i> , 2019 , 44, 4119-4122	3	8
238	Homogentisic acid-derived pigment as a biocompatible label for optoacoustic imaging of macrophages. <i>Nature Communications</i> , 2019 , 10, 5056	17.4	6
237	Fluorescence imaging reversion using spatially variant deconvolution. <i>Scientific Reports</i> , 2019 , 9, 18123	4.9	4
236	A review of clinical photoacoustic imaging: Current and future trends. <i>Photoacoustics</i> , 2019 , 16, 100144	9	194
235	A dual Ucp1 reporter mouse model for imaging and quantitation of brown and white fat recruitment. <i>Molecular Metabolism</i> , 2019 , 20, 14-27	8.8	26
234	Maximum Entropy Based Non-Negative Optoacoustic Tomographic Image Reconstruction. <i>IEEE Transactions on Biomedical Engineering</i> , 2019 , 66, 2604-2616	5	18
233	Characterization of Brown Adipose Tissue in a Diabetic Mouse Model with Spiral Volumetric Optoacoustic Tomography. <i>Molecular Imaging and Biology</i> , 2019 , 21, 620-625	3.8	9
232	Emerging Technologies to Image Tissue Metabolism. <i>Cell Metabolism</i> , 2019 , 29, 518-538	24.6	29
231	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	8.9	49
230	Non-invasive Measurement of Brown Fat Metabolism Based on Optoacoustic Imaging of Hemoglobin Gradients. <i>Cell Metabolism</i> , 2018 , 27, 689-701.e4	24.6	75
229	Synaptic vesicle cycle and amyloid β biting the hand that feeds. <i>Alzheimer's and Dementia</i> , 2018 , 14, 502-513	1.2	30
228	Assessing hyperthermia-induced vasodilation in human skin in vivo using optoacoustic mesoscopy. <i>Journal of Biophotonics</i> , 2018 , 11, e201700359	3.1	18
227	Optoacoustic sensing of hematocrit to improve the accuracy of hybrid fluorescence-ultrasound intravascular imaging. <i>Journal of Biophotonics</i> , 2018 , 11, e201700255	3.1	1
226	Alleviation of Trigeminal Nociception Using p75 Neurotrophin Receptor Targeted Lentiviral Interference Therapy. <i>Neurotherapeutics</i> , 2018 , 15, 489-499	6.4	1
225	Continuous wave laser diodes enable fast optoacoustic imaging. <i>Photoacoustics</i> , 2018 , 9, 31-38	9	30

224	Raster-Scanning Optoacoustic Mesoscopy for Gastrointestinal Imaging at High Resolution. <i>Gastroenterology</i> , 2018 , 154, 807-809.e3	13.3	11
223	A Bayesian Approach to Eigenspectra Optoacoustic Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2018 , 37, 2070-2079	11.7	11
222	Genetically Controlled Lysosomal Entrapment of Superparamagnetic Ferritin for Multimodal and Multiscale Imaging and Actuation with Low Tissue Attenuation. <i>Advanced Functional Materials</i> , 2018 , 28, 1706793	15.6	13
221	Quenched hexacene optoacoustic nanoparticles. <i>Journal of Materials Chemistry B</i> , 2018 , 6, 44-55	7.3	5
220	Calcium Sensor for Photoacoustic Imaging. <i>Journal of the American Chemical Society</i> , 2018 , 140, 2718-2726	16.4	86
219	WST11 Vascular Targeted Photodynamic Therapy Effect Monitoring by Multispectral Optoacoustic Tomography (MSOT) in Mice. <i>Theranostics</i> , 2018 , 8, 723-734	12.1	33
218	Non-linear optical microscopy and histological analysis of collagen, elastin and lysyl oxidase expression in breast capsular contracture. <i>European Journal of Medical Research</i> , 2018 , 23, 30	4.8	5
217	Potential Red-Flag Identification of Colorectal Adenomas with Wide-Field Fluorescence Molecular Endoscopy. <i>Theranostics</i> , 2018 , 8, 1458-1467	12.1	34
216	Extended Near-Infrared Optoacoustic Spectrometry for Sensing Physiological Concentrations of Glucose. <i>Frontiers in Endocrinology</i> , 2018 , 9, 112	5.7	20
215	Tackling standardization in fluorescence molecular imaging. <i>Nature Photonics</i> , 2018 , 12, 505-515	33.9	54
214	Looking at sound: optoacoustics with all-optical ultrasound detection. <i>Light: Science and Applications</i> , 2018 , 7, 53	16.7	124
213	Characterization of Reversibly Switchable Fluorescent Proteins in Optoacoustic Imaging. <i>Analytical Chemistry</i> , 2018 , 90, 10527-10535	7.8	17
212	Emerging Intraoperative Imaging Modalities to Improve Surgical Precision. <i>Molecular Imaging and Biology</i> , 2018 , 20, 705-715	3.8	39
211	Importance of Ultrawide Bandwidth for Optoacoustic Esophagus Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2018 , 37, 1162-1167	11.7	4
210	Secretin-Activated Brown Fat Mediates Prandial Thermogenesis to Induce Satiation. <i>Cell</i> , 2018 , 175, 1561-1574.e12	16.7	112
209	Optoacoustic microscopy at multiple discrete frequencies. <i>Light: Science and Applications</i> , 2018 , 7, 109	16.7	24
208	Use of Multispectral Optoacoustic Tomography to Diagnose Vascular Malformations. <i>JAMA Dermatology</i> , 2018 , 154, 1457-1462	5.1	33
207	Crystal structure of a biliverdin-bound phycobiliprotein: Interdependence of oligomerization and chromophorylation. <i>Journal of Structural Biology</i> , 2018 , 204, 519-522	3.4	6

206	Blood vessel imaging using radiofrequency-induced second harmonic acoustic response. <i>Scientific Reports</i> , 2018 , 8, 15522	4.9	12
205	Coordinated targeting of cold and nicotinic receptors synergistically improves obesity and type 2 diabetes. <i>Nature Communications</i> , 2018 , 9, 4304	17.4	26
204	The application of frequency-domain photoacoustics to temperature-dependent measurements of the Grüneisen parameter in lipids. <i>Photoacoustics</i> , 2018 , 11, 56-64	9	11
203	Bacterial encapsulins as orthogonal compartments for mammalian cell engineering. <i>Nature Communications</i> , 2018 , 9, 1990	17.4	51
202	Multispectral optoacoustic tomography of systemic sclerosis. <i>Journal of Biophotonics</i> , 2018 , 11, e2018003155	15.5	28
201	Fluorescence molecular tomography of DiR-labeled mesenchymal stem cell implants for osteochondral defect repair in rabbit knees. <i>European Radiology</i> , 2017 , 27, 1105-1113	8	9
200	Optical imaging of post-embryonic zebrafish using multi orientation raster scan optoacoustic mesoscopy. <i>Light: Science and Applications</i> , 2017 , 6, e16186	16.7	19
199	Everolimus-eluting stents stabilize plaque inflammation in vivo: assessment by intravascular fluorescence molecular imaging. <i>European Heart Journal Cardiovascular Imaging</i> , 2017 , 18, 510-518	4.1	12
198	Targeting Elastase for Molecular Imaging of Early Atherosclerotic Lesions. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2017 , 37, 525-533	9.4	19
197	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	12.9	152
196	Optoacoustic Dermoscopy of the Human Skin: Tuning Excitation Energy for Optimal Detection Bandwidth With Fast and Deep Imaging in vivo. <i>IEEE Transactions on Medical Imaging</i> , 2017 , 36, 1287-1296	11.7	30
195	Optoacoustic microscopy based on pi-FBG ultrasound sensors 2017 ,		1
194	Benchmarking of fluorescence cameras through the use of a composite phantom. <i>Journal of Biomedical Optics</i> , 2017 , 22, 16009	3.5	11
193	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,	3.9	34
192	Precision assessment of label-free psoriasis biomarkers with ultra-broadband optoacoustic mesoscopy. <i>Nature Biomedical Engineering</i> , 2017 , 1,	19	127
191	Optoacoustic endoscopy with optical and acoustic resolution 2017 ,		1
190	Imaging of fatty tumors: appearance of subcutaneous lipomas in optoacoustic images. <i>Journal of Biophotonics</i> , 2017 , 10, 983-989	3.1	14
189	Electrolytic conductivity-related radiofrequency heating of aqueous suspensions of nanoparticles for biomedicine. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 11510-11517	3.6	8

188	Sonophore labeled RGD: a targeted contrast agent for optoacoustic imaging. <i>Photoacoustics</i> , 2017 , 6, 1-8	9	20
187	Molecular imaging probes for multi-spectral optoacoustic tomography. <i>Chemical Communications</i> , 2017 , 53, 4653-4672	5.8	80
186	Integrin-Targeted Hybrid Fluorescence Molecular Tomography/X-ray Computed Tomography for Imaging Tumor Progression and Early Response in Non-Small Cell Lung Cancer. <i>Neoplasia</i> , 2017 , 19, 8-16	6.4	11
185	Quantitative intravascular biological fluorescence-ultrasound imaging of coronary and peripheral arteries in vivo. <i>European Heart Journal Cardiovascular Imaging</i> , 2017 , 18, 1253-1261	4.1	20
184	NeuTracker-imaging neurobehavioral dynamics in freely behaving fish. <i>Nature Methods</i> , 2017 , 14, 1079-1082	10.82	21
183	Spectral unmixing techniques for optoacoustic imaging of tissue pathophysiology. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2017 , 375,	3	34
182	Multispectral Optoacoustic Tomography (MSOT) of Human Breast Cancer. <i>Clinical Cancer Research</i> , 2017 , 23, 6912-6922	12.9	147
181	Motion correction in optoacoustic mesoscopy. <i>Scientific Reports</i> , 2017 , 7, 10386	4.9	28
180	Microfluidic sorting of intrinsically magnetic cells under visual control. <i>Scientific Reports</i> , 2017 , 7, 6942	4.9	20
179	Pushing the Boundaries of Neuroimaging with Optoacoustics. <i>Neuron</i> , 2017 , 96, 966-988	13.9	37
178	Detection of intramyocardially injected DiR-labeled mesenchymal stem cells by optical and optoacoustic tomography. <i>Photoacoustics</i> , 2017 , 6, 37-47	9	16
177	Threshold Analysis and Biodistribution of Fluorescently Labeled Bevacizumab in Human Breast Cancer. <i>Cancer Research</i> , 2017 , 77, 623-631	10.1	30
176	Flow-mediated dilatation test using optoacoustic imaging: a proof-of-concept. <i>Biomedical Optics Express</i> , 2017 , 8, 3395-3403	3.5	26
175	Fiber interferometer for hybrid optical and optoacoustic intravital microscopy. <i>Optica</i> , 2017 , 4, 1180	8.6	27
174	Three-dimensional optoacoustic reconstruction using fast sparse representation. <i>Optics Letters</i> , 2017 , 42, 979-982	3	28
173	Simultaneous visualization of tumour oxygenation, neovascularization and contrast agent perfusion by real-time three-dimensional optoacoustic tomography. <i>European Radiology</i> , 2016 , 26, 1843-51	8.51	47
172	Statistical Molecular Target Detection Framework for Multispectral Optoacoustic Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2016 , 35, 2534-2545	11.7	16
171	In-vivo handheld optoacoustic tomography of the human thyroid. <i>Photoacoustics</i> , 2016 , 4, 65-69	9	52

170	Near-Infrared Photoacoustic Imaging Probe Responsive to Calcium. <i>Analytical Chemistry</i> , 2016 , 88, 10785-10789	5.0	29
169	Photoacoustic tomography of the proton Bragg peak in combination with ultrasound and optoacoustic imaging. <i>Scientific Reports</i> , 2016 , 6, 29305	4.9	30
168	Multispectral optoacoustic and MRI coregistration for molecular imaging of orthotopic model of human glioblastoma. <i>Journal of Biophotonics</i> , 2016 , 9, 701-8	3.1	22
167	Comprehensive phantom for interventional fluorescence molecular imaging. <i>Journal of Biomedical Optics</i> , 2016 , 21, 091309	3.5	20
166	Hybrid optical and acoustic resolution optoacoustic endoscopy. <i>Optics Letters</i> , 2016 , 41, 2708-10	3	24
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3 Optoacoustic flow-cytometry with light scattering referencing 1

2 Optoacoustic skin mesoscopy opens a window to systemic effects of diabetes 2

1 A Sparse Deep Learning Approach for Automatic Segmentation of Human Vasculature in Multispectral Optoacoustic Tomography 1