

XosÃ© LuÃ¡s DeÃ¡n-Ben

List of Publications by Year in descending order

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Version: 2024-02-01

81
papers

2,515
citations

230014

27
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252626

46
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85
all docs

85
docs citations

85
times ranked

1837
citing authors

#	ARTICLE	IF	CITATIONS
1	Dual-Mode Volumetric Optoacoustic and Contrast Enhanced Ultrasound Imaging With Spherical Matrix Arrays. <i>IEEE Transactions on Medical Imaging</i> , 2022, 41, 846-856.	5.4	6
2	Non-invasive imaging of tau-targeted probe uptake by whole brain multi-spectral optoacoustic tomography. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2022, 49, 2137-2152.	3.3	23
3	Optoacoustic visualization of individual core-shell microparticles in vivo. , 2022, , .		0
4	Whole body imaging of mice in under 2 sec with single-sweep volumetric optoacoustic tomography (sSVOT). , 2022, , .		0
5	Compact optical link acquisition for high-speed optoacoustic imaging. , 2022, , .		1
6	Optoacoustic imaging with an air-coupled transducer using coaxially aligned focused illumination. <i>AIP Advances</i> , 2022, 12, .	0.6	2
7	Editorial: Advances in Photoacoustic Neuroimaging. <i>Frontiers in Neuroscience</i> , 2022, 16, 859515.	1.4	2
8	Transcranial imaging with the optoacoustic memory effect. , 2022, , .		2
9	Broadband Model-Based Optoacoustic Mesoscopy Enables Deep-Tissue Imaging beyond the Acoustic Diffraction Limit. <i>Laser and Photonics Reviews</i> , 2022, 16, .	4.4	11
10	Rapid Volumetric Optoacoustic Tracking of Nanoparticle Kinetics across Murine Organs. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 172-178.	4.0	13
11	Real-time 3D optoacoustic tracking of cell-sized magnetic microrobots circulating in the mouse brain vasculature. <i>Science Advances</i> , 2022, 8, eabm9132.	4.7	48
12	Multiscale optical and optoacoustic imaging of amyloid- β^2 deposits in mice. <i>Nature Biomedical Engineering</i> , 2022, 6, 1031-1044.	11.6	39
13	Development of concurrent magnetic resonance imaging and volumetric optoacoustic tomography: A phantom feasibility study. <i>Journal of Biophotonics</i> , 2021, 14, e202000293.	1.1	19
14	Deep Learning for Automatic Segmentation of Hybrid Optoacoustic Ultrasound (OPUS) Images. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021, 68, 688-696.	1.7	32
15	Flash Scanning Volumetric Optoacoustic Tomography for High Resolution Whole-Body Tracking of Nanoagent Kinetics and Biodistribution. <i>Laser and Photonics Reviews</i> , 2021, 15, 2000484.	4.4	12
16	Single-sweep volumetric optoacoustic tomography of whole mice. <i>Photonics Research</i> , 2021, 9, 899.	3.4	15
17	Optoacoustic imaging of the skin. <i>Experimental Dermatology</i> , 2021, 30, 1598-1609.	1.4	47
18	Deep learning of image- and time-domain data enhances the visibility of structures in optoacoustic tomography. <i>Optics Letters</i> , 2021, 46, 3029.	1.7	9

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19	In situ characterization of microparticulate optoacoustic contrast agents in an intracardiac perfusion mouse model. <i>Optics Letters</i> , 2021, 46, 4350.	1.7	3
20	LightSpeed: A Compact, High-Speed Optical-Link-Based 3D Optoacoustic Imager. <i>IEEE Transactions on Medical Imaging</i> , 2021, 40, 2023-2029.	5.4	9
21	In-vitro and in-vivo characterization of CRANAD-2 for multi-spectral optoacoustic tomography and fluorescence imaging of amyloid-beta deposits in Alzheimer mice. <i>Photoacoustics</i> , 2021, 23, 100285.	4.4	32
22	Rapid Volumetric Optoacoustic Tracking of Individual Microparticles <i><i>In Vivo</i></i> Enabled by a NIR-Absorbing Goldâ€“Carbon Shell. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 48423-48432.	4.0	8
23	Ultrafast four-dimensional imaging of cardiac mechanical wave propagation with sparse optoacoustic sensing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	20
24	Spatial Compounding of Volumetric Data Enables Freehand Optoacoustic Angiography of Large-Scale Vascular Networks. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 1160-1169.	5.4	10
25	Speed of sound ultrasound transmission tomography image reconstruction based on BÃ©zier curves. <i>Ultrasonics</i> , 2020, 103, 106097.	2.1	12
26	Multifocal structured illumination optoacoustic microscopy. <i>Light: Science and Applications</i> , 2020, 9, 152.	7.7	15
27	Coregistration and Spatial Compounding of Optoacoustic Cardiac Images via Fourier Analysis of Four-Dimensional Data. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 6254.	1.3	3
28	Noninvasive multiparametric characterization of mammary tumors with transmission-reflection optoacoustic ultrasound. <i>Neoplasia</i> , 2020, 22, 770-777.	2.3	19
29	Compressed Optoacoustic Sensing of Volumetric Cardiac Motion. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 3250-3255.	5.4	5
30	Volumetric Optoacoustic Tomography Differentiates Myocardial Remodelling. <i>Molecular Imaging and Biology</i> , 2020, 22, 1235-1243.	1.3	5
31	Monitoring of Stimulus Evoked Murine Somatosensory Cortex Hemodynamic Activity With Volumetric Multi-Spectral Optoacoustic Tomography. <i>Frontiers in Neuroscience</i> , 2020, 14, 536.	1.4	12
32	Model-Based Reconstruction of Large Three-Dimensional Optoacoustic Datasets. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 2931-2940.	5.4	30
33	Deep tissue volumetric optoacoustic tracking of individual circulating tumor cells in an intracardially perfused mouse model. <i>Neoplasia</i> , 2020, 22, 441-446.	2.3	11
34	Highâ€“Speed Largeâ€“Field Multifocal Illumination Fluorescence Microscopy. <i>Laser and Photonics Reviews</i> , 2020, 14, 1900070.	4.4	16
35	In vivo optoacoustic monitoring of percutaneous laser ablation of tumors in a murine breast cancer model. <i>Optics Letters</i> , 2020, 45, 2006.	1.7	10
36	Towards a compact, high-speed optical linkbased 3D optoacoustic imager. , 2020, , .		4

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37	Non-invasive determination of murine placental and foetal functional parameters with multispectral optoacoustic tomography. <i>Light: Science and Applications</i> , 2019, 8, 71.	7.7	32
38	Self-Gated Respiratory Motion Rejection for Optoacoustic Tomography. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2737.	1.3	20
39	Optoacoustic image formation approachesâ€”a clinical perspective. <i>Physics in Medicine and Biology</i> , 2019, 64, 18TR01.	1.6	26
40	Optoacoustic Calcium Imaging of Deep Brain Activity in an Intracardially Perfused Mouse Brain Model. <i>Photonics</i> , 2019, 6, 67.	0.9	9
41	Special Issue on Photoacoustic Tomography. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 4186.	1.3	0
42	Acoustic Scattering Mediated Single Detector Optoacoustic Tomography. <i>Physical Review Letters</i> , 2019, 123, 174301.	2.9	22
43	Deep learning optoacoustic tomography with sparse data. <i>Nature Machine Intelligence</i> , 2019, 1, 453-460.	8.3	148
44	Uniform light delivery in volumetric optoacoustic tomography. <i>Journal of Biophotonics</i> , 2019, 12, e201800387.	1.1	12
45	Volumetric optoacoustic tomography enables non-invasive in vivo characterization of impaired heart function in hypoxic conditions. <i>Scientific Reports</i> , 2019, 9, 8369.	1.6	16
46	Optoacoustic properties of Doxorubicin â€” A pilot study. <i>PLoS ONE</i> , 2019, 14, e0217576.	1.1	3
47	Volumetric Optoacoustic Imaging Unveils High-Resolution Patterns of Acute and Cyclic Hypoxia in a Murine Model of Breast Cancer. <i>Cancer Research</i> , 2019, 79, 4767-4775.	0.4	47
48	Rapid volumetric optoacoustic imaging of neural dynamics across the mouse brain. <i>Nature Biomedical Engineering</i> , 2019, 3, 392-401.	11.6	168
49	Transmissionâ€”reflection optoacoustic ultrasound (TROPUS) computed tomography of small animals. <i>Light: Science and Applications</i> , 2019, 8, 18.	7.7	71
50	Real-time Volumetric Assessment of the Human Carotid Artery: Handheld Multispectral Optoacoustic Tomography. <i>Radiology</i> , 2019, 291, 45-50.	3.6	66
51	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.	1.3	11
52	Four-dimensional optoacoustic monitoring of tissue heating with medium intensity focused ultrasound. <i>Ultrasonics</i> , 2019, 94, 117-123.	2.1	12
53	Concurrent fluorescence and volumetric optoacoustic tomography of nanoagent perfusion and bio-distribution in solid tumors. <i>Biomedical Optics Express</i> , 2019, 10, 5093.	1.5	19
54	Endocardial irrigated catheter for volumetric optoacoustic mapping of radio-frequency ablation lesion progression. <i>Optics Letters</i> , 2019, 44, 5808.	1.7	9

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55	Compressed optoacoustic data acquisition based on a cluster of acoustic scatterers. , 2019, , .		0
56	Multifocal structured illumination optoacoustic microscopy. , 2019, , .		1
57	Ultrafast Volumetric Optoacoustic Imaging of Whole Isolated Beating Mouse Heart. Scientific Reports, 2018, 8, 14132.	1.6	16
58	Imaging of blood flow and oxygen state with a multi-segment optoacoustic ultrasound array. Photoacoustics, 2018, 10, 48-53.	4.4	43
59	Noninvasive Anatomical and Functional Imaging of Orthotopic Glioblastoma Development and Therapy using Multispectral Optoacoustic Tomography. Translational Oncology, 2018, 11, 1251-1258.	1.7	24
60	Optoacoustic imaging at kilohertz volumetric frame rates. Optica, 2018, 5, 857.	4.8	57
61	Multifocal structured illumination fluorescence microscopy with large field-of-view and high spatio-temporal resolution. , 2018, , .		1
62	Efficient 3-D Model-Based Reconstruction Scheme for Arbitrary Optoacoustic Acquisition Geometries. IEEE Transactions on Medical Imaging, 2017, 36, 1858-1867.	5.4	55
63	Combined Pulse-Echo Ultrasound and Multispectral Optoacoustic Tomography With a Multi-Segment Detector Array. IEEE Transactions on Medical Imaging, 2017, 36, 2129-2137.	5.4	48
64	Volumetric Optoacoustic Temperature Mapping in Photothermal Therapy. Scientific Reports, 2017, 7, 9695.	1.6	62
65	Characterization of Cardiac Dynamics in an Acute Myocardial Infarction Model by Four-Dimensional Optoacoustic and Magnetic Resonance Imaging. Theranostics, 2017, 7, 4470-4479.	4.6	26
66	In vivo whole-body optoacoustic scanner with real-time volumetric imaging capacity. Optica, 2016, 3, 1153.	4.8	57
67	On the link between the speckle free nature of optoacoustics and visibility of structures in limited-view tomography. Photoacoustics, 2016, 4, 133-140.	4.4	87
68	Visual Quality Enhancement in Optoacoustic Tomography Using Active Contour Segmentation Priors. IEEE Transactions on Medical Imaging, 2016, 35, 2209-2217.	5.4	37
69	Correlation between volumetric oxygenation responses and electrophysiology identifies deep thalamocortical activity during epileptic seizures. Neurophotonics, 2016, 4, 011007.	1.7	54
70	Noncontact monitoring of incision depth in laser surgery with air-coupled ultrasound transducers. Optics Letters, 2016, 41, 2704.	1.7	19
71	Real-Time Model-Based Inversion in Cross-Sectional Optoacoustic Tomography. IEEE Transactions on Medical Imaging, 2016, 35, 1883-1891.	5.4	46
72	High-frame rate four dimensional optoacoustic tomography enables visualization of cardiovascular dynamics and mouse heart perfusion. Scientific Reports, 2015, 5, 10133.	1.6	42

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73	Doxycycline Inducible Melanogenic Vaccinia Virus as Theranostic Anti-Cancer Agent. <i>Theranostics</i> , 2015, 5, 1045-1057.	4.6	19
74	High-contrast imaging of reversibly switchable fluorescent proteins via temporally unmixed multispectral optoacoustic tomography. <i>Optics Letters</i> , 2015, 40, 367.	1.7	57
75	Noninvasive Real-Time Visualization of Multiple Cerebral Hemodynamic Parameters in Whole Mouse Brains Using Five-Dimensional Optoacoustic Tomography. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2015, 35, 531-535.	2.4	80
76	Four dimensional hybrid ultrasound and optoacoustic imaging via passive element optical excitation in a hand-held probe. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	43
77	Adding fifth dimension to optoacoustic imaging: volumetric time-resolved spectrally enriched tomography. <i>Light: Science and Applications</i> , 2014, 3, e137-e137.	7.7	148
78	Functional optoacoustic imaging of moving objects using microsecond-delay acquisition of multispectral three-dimensional tomographic data. <i>Scientific Reports</i> , 2014, 4, 5878.	1.6	62
79	Modeling the shape of cylindrically focused transducers in three-dimensional optoacoustic tomography. <i>Journal of Biomedical Optics</i> , 2013, 18, 076014.	1.4	65
80	Functional optoacoustic human angiography with handheld video rate three dimensional scanner. <i>Photoacoustics</i> , 2013, 1, 68-73.	4.4	105
81	Expediting model-based optoacoustic reconstructions with tomographic symmetries. <i>Medical Physics</i> , 2013, 41, 013302.	1.6	35