Jaya Prakash

List of Publications by Year
in descending order

40 papers	941 citations	394421 19 h-index	454955 30 g-index
41 all docs	41 docs citations	41 times ranked	1068 citing authors

#	Article	IF	Citations
1	Weighted model–based optoacoustic reconstruction for partial–view geometries. Journal of Biophotonics, 2022, , e202100334.	2.3	2
2	A PMUT based photoacoustic system as a microfluidic concentration detector. , 2022, , .		2
3	Siamese-SR: A Siamese Super-Resolution Model for Boosting Resolution of Digital Rock Images for Improved Petrophysical Property Estimation. IEEE Transactions on Image Processing, 2022, 31, 3479-3493.	9.8	12
4	Non–local means improves total–variation constrained photoacoustic image reconstruction. Journal of Biophotonics, 2021, 14, e202000191.	2.3	10
5	Cooled infrared optoacoustic spectroscopy (CIROAS) for accurate sensing based on water muting. , 2021, , .		0
6	Anam-Net: Anamorphic Depth Embedding-Based Lightweight CNN for Segmentation of Anomalies in COVID-19 Chest CT Images. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 932-946.	11.3	95
7	Fractional regularization improves photoacoustic image reconstruction. , 2021, , .		0
8	Croconaine-based nanoparticles enable efficient optoacoustic imaging of murine brain tumors. Photoacoustics, 2021, 22, 100263.	7.8	19
9	Binary photoacoustic tomography for improved vasculature imaging. Journal of Biomedical Optics, 2021, 26, .	2.6	15
10	Multi GPU parallelization of maximum likelihood expectation maximization method for digital rock tomography data. Scientific Reports, 2021, 11, 18536.	3.3	6
11	Reporter gene-based optoacoustic imaging of E. coli targeted colon cancer in vivo. Scientific Reports, 2021, 11, 24430.	3.3	8
12	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
13	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
14	Soft ultrasound priors in optoacoustic reconstruction: Improving clinical vascular imaging. Photoacoustics, 2020, 19, 100172.	7.8	26
15	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
16	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
17	Bioengineered bacterial vesicles as biological nano-heaters for optoacoustic imaging. Nature Communications, 2019, 10, 1114.	12.8	128
18	Fractional Regularization to Improve Photoacoustic Tomographic Image Reconstruction. IEEE Transactions on Medical Imaging, 2019, 38, 1935-1947.	8.9	24

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19	Maximum Entropy Based Non-Negative Optoacoustic Tomographic Image Reconstruction. IEEE Transactions on Biomedical Engineering, 2019, 66, 2604-2616.	4.2	28
20	Modeling the variation in speed of sound between couplant and tissue improves the spectral accuracy of multispectral optoacoustic tomography. , 2019, , .		1
21	Nonlinear optoacoustic readings from diffusive media at near-infrared wavelengths. Journal of Biophotonics, 2018, 11, e201600310.	2.3	4
22	Red blood cell phenotype fidelity following glycerol cryopreservation optimized for research purposes. PLoS ONE, 2018, 13, e0209201.	2.5	25
23	WST11 Vascular Targeted Photodynamic Therapy Effect Monitoring by Multispectral Optoacoustic Tomography (MSOT) in Mice. Theranostics, 2018, 8, 723-734.	10.0	45
24	Spatially variant regularization based on model resolution and fidelity embedding characteristics improves photoacoustic tomography. Journal of Biomedical Optics, 2018, 23, 1.	2.6	5
25	Targeting Elastase for Molecular Imaging of Early Atherosclerotic Lesions. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 525-533.	2.4	22
26	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
27	Three-dimensional optoacoustic reconstruction using fast sparse representation. Optics Letters, 2017, 42, 979.	3.3	37
28	Fast sparse recovery and coherence factor weighting in optoacoustic tomography. Proceedings of SPIE, 2017, , .	0.8	0
29	Assessment of asthmatic inflammation using hybrid fluorescence molecular tomography–x-ray computed tomography. Journal of Biomedical Optics, 2016, 21, 015009.	2.6	10
30	Optoacoustic Tomography Using Accelerated Sparse Recovery and Coherence Factor Weighting. Tomography, 2016, 2, 138-145.	1.8	3
31	Prior image based temporally constrained reconstruction algorithm for magnetic resonance guided high intensity focused ultrasound. Medical Physics, 2015, 42, 6804-6814.	3.0	2
32	Basis pursuit deconvolution for improving model-based reconstructed images in photoacoustic tomography. Biomedical Optics Express, 2014, 5, 1363.	2.9	69
33	Sparse Recovery Methods Hold Promise for Diffuse Optical Tomographic Image Reconstruction. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 74-82.	2.9	51
34	Model-Resolution-Based Basis Pursuit Deconvolution Improves Diffuse Optical Tomographic Imaging. IEEE Transactions on Medical Imaging, 2014, 33, 891-901.	8.9	30
35	Toward real-time availability of 3D temperature maps created with temporally constrained reconstruction. Magnetic Resonance in Medicine, 2014, 71, 1394-1404.	3.0	35
36	A LSQR-type method provides a computationally efficient automated optimal choice of regularization parameter in diffuse optical tomography. Medical Physics, 2013, 40, 033101.	3.0	25

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37	Data-resolution based optimal choice of minimum required measurements for image-guided diffuse optical tomography. Optics Letters, 2013, 38, 88.	3.3	5
38	Least squares QR-based decomposition provides an efficient way of computing optimal regularization parameter in photoacoustic tomography. Journal of Biomedical Optics, 2013, 18, 080501.	2.6	53
39	Accelerating frequency-domain diffuse optical tomographic image reconstruction using graphics processing units. Journal of Biomedical Optics, 2010, 15, 066009.	2.6	25
40	Virtual soldering environment using touch and gesture for engineering labs education. , 2010, , .		5