

Jaya Prakash

List of Publications by Year in descending order

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Version: 2024-02-01

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 | Bioengineered bacterial vesicles as biological nano-heaters for optoacoustic imaging. <i>Nature Communications</i> , 2019, 10, 1114. | 12.8 | 128 |
| 2 | Anam-Net: Anamorphic Depth Embedding-Based Lightweight CNN for Segmentation of Anomalies in COVID-19 Chest CT Images. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2021, 32, 932-946. | 11.3 | 95 |
| 3 | Basis pursuit deconvolution for improving model-based reconstructed images in photoacoustic tomography. <i>Biomedical Optics Express</i> , 2014, 5, 1363. | 2.9 | 69 |
| 4 | Least squares QR-based decomposition provides an efficient way of computing optimal regularization parameter in photoacoustic tomography. <i>Journal of Biomedical Optics</i> , 2013, 18, 080501. | 2.6 | 53 |
| 5 | Sparse Recovery Methods Hold Promise for Diffuse Optical Tomographic Image Reconstruction. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014, 20, 74-82. | 2.9 | 51 |
| 6 | WST11 Vascular Targeted Photodynamic Therapy Effect Monitoring by Multispectral Optoacoustic Tomography (MSOT) in Mice. <i>Theranostics</i> , 2018, 8, 723-734. | 10.0 | 45 |
| 7 | 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 |
| 8 | Three-dimensional optoacoustic reconstruction using fast sparse representation. <i>Optics Letters</i> , 2017, 42, 979. | 3.3 | 37 |
| 9 | Toward real-time availability of 3D temperature maps created with temporally constrained reconstruction. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 1394-1404. | 3.0 | 35 |
| 10 | 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. | 8.9 | 31 |
| 11 | Model-Resolution-Based Basis Pursuit Deconvolution Improves Diffuse Optical Tomographic Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2014, 33, 891-901. | 8.9 | 30 |
| 12 | Maximum Entropy Based Non-Negative Optoacoustic Tomographic Image Reconstruction. <i>IEEE Transactions on Biomedical Engineering</i> , 2019, 66, 2604-2616. | 4.2 | 28 |
| 13 | Soft ultrasound priors in optoacoustic reconstruction: Improving clinical vascular imaging. <i>Photoacoustics</i> , 2020, 19, 100172. | 7.8 | 26 |
| 14 | Accelerating frequency-domain diffuse optical tomographic image reconstruction using graphics processing units. <i>Journal of Biomedical Optics</i> , 2010, 15, 066009. | 2.6 | 25 |
| 15 | A LSQR-type method provides a computationally efficient automated optimal choice of regularization parameter in diffuse optical tomography. <i>Medical Physics</i> , 2013, 40, 033101. | 3.0 | 25 |
| 16 | Red blood cell phenotype fidelity following glycerol cryopreservation optimized for research purposes. <i>PLoS ONE</i> , 2018, 13, e0209201. | 2.5 | 25 |
| 17 | Fractional Regularization to Improve Photoacoustic Tomographic Image Reconstruction. <i>IEEE Transactions on Medical Imaging</i> , 2019, 38, 1935-1947. | 8.9 | 24 |
| 18 | Targeting Elastase for Molecular Imaging of Early Atherosclerotic Lesions. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2017, 37, 525-533. | 2.4 | 22 |

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|----|---|-----|-----------|
| 19 | Croconaine-based nanoparticles enable efficient optoacoustic imaging of murine brain tumors. <i>Photoacoustics</i> , 2021, 22, 100263. | 7.8 | 19 |
| 20 | 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. | 5.3 | 17 |
| 21 | Binary photoacoustic tomography for improved vasculature imaging. <i>Journal of Biomedical Optics</i> , 2021, 26, . | 2.6 | 15 |
| 22 | 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. | 7.1 | 14 |
| 23 | Siamese-SR: A Siamese Super-Resolution Model for Boosting Resolution of Digital Rock Images for Improved Petrophysical Property Estimation. <i>IEEE Transactions on Image Processing</i> , 2022, 31, 3479-3493. | 9.8 | 12 |
| 24 | Assessment of asthmatic inflammation using hybrid fluorescence molecular tomographyâ€“x-ray computed tomography. <i>Journal of Biomedical Optics</i> , 2016, 21, 015009. | 2.6 | 10 |
| 25 | Nonâ€“local means improves totalâ€“variation constrained photoacoustic image reconstruction. <i>Journal of Biophotonics</i> , 2021, 14, e202000191. | 2.3 | 10 |
| 26 | Reporter gene-based optoacoustic imaging of E. coli targeted colon cancer in vivo. <i>Scientific Reports</i> , 2021, 11, 24430. | 3.3 | 8 |
| 27 | Full-frequency correction of spatial impulse response in back-projection scheme using space-variant filtering for optoacoustic mesoscopy. <i>Photoacoustics</i> , 2020, 19, 100193. | 7.8 | 7 |
| 28 | Multi GPU parallelization of maximum likelihood expectation maximization method for digital rock tomography data. <i>Scientific Reports</i> , 2021, 11, 18536. | 3.3 | 6 |
| 29 | Virtual soldering environment using touch and gesture for engineering labs education. , 2010, , . | | 5 |
| 30 | Data-resolution based optimal choice of minimum required measurements for image-guided diffuse optical tomography. <i>Optics Letters</i> , 2013, 38, 88. | 3.3 | 5 |
| 31 | Spatially variant regularization based on model resolution and fidelity embedding characteristics improves photoacoustic tomography. <i>Journal of Biomedical Optics</i> , 2018, 23, 1. | 2.6 | 5 |
| 32 | Nonlinear optoacoustic readings from diffusive media at nearâ€“infrared wavelengths. <i>Journal of Biophotonics</i> , 2018, 11, e201600310. | 2.3 | 4 |
| 33 | Optoacoustic Tomography Using Accelerated Sparse Recovery and Coherence Factor Weighting. <i>Tomography</i> , 2016, 2, 138-145. | 1.8 | 3 |
| 34 | Prior image based temporally constrained reconstruction algorithm for magnetic resonance guided high intensity focused ultrasound. <i>Medical Physics</i> , 2015, 42, 6804-6814. | 3.0 | 2 |
| 35 | Weighted modelâ€“based optoacoustic reconstruction for partialâ€“view geometries. <i>Journal of Biophotonics</i> , 2022, , e202100334. | 2.3 | 2 |
| 36 | A PMUT based photoacoustic system as a microfluidic concentration detector. , 2022, , . | | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Modeling the variation in speed of sound between couplant and tissue improves the spectral accuracy of multispectral optoacoustic tomography. , 2019, , . | | 1 |
| 38 | Cooled infrared optoacoustic spectroscopy (CIROAS) for accurate sensing based on water muting. , 2021, , . | | 0 |
| 39 | Fractional regularization improves photoacoustic image reconstruction. , 2021, , . | | 0 |
| 40 | Fast sparse recovery and coherence factor weighting in optoacoustic tomography. Proceedings of SPIE, 2017, , . | 0.8 | 0 |