Srirang Manohar

List of Publications by Year
in descending order

87 papers	3,490 citations	147801 31 h-index	138484 58 g-index
89 all docs	89 docs citations	89 times ranked	3793 citing authors

#	Article	IF	Citations
1	Initial results of in vivo non-invasive cancer imaging in the human breast using near-infrared photoacoustics. Optics Express, 2007, 15, 12277.	3.4	260
2	The Twente Photoacoustic Mammoscope: system overview and performance. Physics in Medicine and Biology, 2005, 50, 2543-2557.	3.0	201
3	Photoacoustics: a historical review. Advances in Optics and Photonics, 2016, 8, 586.	25.5	189
4	Poly(vinyl alcohol) gels for use as tissue phantoms in photoacoustic mammography. Physics in Medicine and Biology, 2003, 48, 357-370.	3.0	151
5	Blood clearance and tissue distribution of PEGylated and non-PEGylated gold nanorods after intravenous administration in rats. Nanomedicine, 2011, 6, 339-349.	3.3	136
6	In vitrotoxicity studies of polymer-coated gold nanorods. Nanotechnology, 2010, 21, 145101.	2.6	134
7	Light Interactions with Gold Nanorods and Cells: Implications for Photothermal Nanotherapeutics. Nano Letters, 2011, 11, 1887-1894.	9.1	130
8	Current and future trends in photoacoustic breast imaging. Photoacoustics, 2019, 16, 100134.	7.8	118
9	Speedâ€ofâ€sound compensated photoacoustic tomography for accurate imaging. Medical Physics, 2012, 39, 7262-7271.	3.0	108
10	Synthesis and Bioconjugation of Gold Nanoparticles as Potential Molecular Probes for Light-Based Imaging Techniques. International Journal of Biomedical Imaging, 2007, 2007, 1-10.	3.9	105
11	Gold nanorods as molecular contrast agents in photoacoustic imaging: the promises and the caveats. Contrast Media and Molecular Imaging, 2011, 6, 389-400.	0.8	104
12	Photoacoustic mammography laboratory prototype: imaging of breast tissue phantoms. Journal of Biomedical Optics, 2004, 9, 1172.	2.6	99
13	Application of plasma spectrometry for the analysis of engineered nanoparticles in suspensions and products. Journal of Analytical Atomic Spectrometry, 2011, 26, 1701.	3.0	96
14	Photoacoustic Imaging of the Breast Using the Twente Photoacoustic Mammoscope: Present Status and Future Perspectives. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 730-739.	2.9	94
15	The state of the art in breast imaging using the Twente Photoacoustic Mammoscope: results from 31 measurements on malignancies. European Radiology, 2016, 26, 3874-3887.	4.5	94
16	Discrete dipole approximation simulations of gold nanorod optical properties: Choice of input parameters and comparison with experiment. Journal of Applied Physics, 2009, 105, .	2.5	84
17	Passive element enriched photoacoustic computed tomography (PER PACT) for simultaneous imaging of acoustic propagation properties and light absorption. Optics Express, 2011, 19, 2093.	3.4	84
18	Photoacoustic needle: minimally invasive guidance to biopsy. Journal of Biomedical Optics, 2013, 18, 070502.	2.6	82

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19	Imaging of tumor vasculature using Twente photoacoustic systems. Journal of Biophotonics, 2009, 2, 701-717.	2.3	73
20	Iodide Impurities in Hexadecyltrimethylammonium Bromide (CTAB) Products: Lotâ˜'Lot Variations and Influence on Gold Nanorod Synthesis. Langmuir, 2010, 26, 5050-5055.	3.5	73
21	Initial results of finger imaging using photoacoustic computed tomography. Journal of Biomedical Optics, 2014, 19, 060501.	2.6	65
22	Concomitant speed-of-sound tomography in photoacoustic imaging. Applied Physics Letters, 2007, 91, .	3.3	64
23	Clinical Photoacoustic Breast Imaging: The Twente experience. IEEE Pulse, 2015, 6, 42-46.	0.3	64
24	Evaluation of superparamagnetic iron oxide nanoparticles (EndoremÂ®) as a photoacoustic contrast agent for intraâ€œoperative nodal staging. Contrast Media and Molecular Imaging, 2013, 8, 83-91.	0.8	63
25	Poly(vinyl alcohol) gels as photoacoustic breast phantoms revisited. Journal of Biomedical Optics, 2011, 16, 075002.	2.6	49
26	Imaging the Beta-Cell Mass: Why and How. Review of Diabetic Studies, 2008, 5, 6-12.	1.3	46
27	Initial results of imaging melanoma metastasis in resected human lymph nodes using photoacoustic computed tomography. Journal of Biomedical Optics, 2011, 16, 096021.	2.6	44
28	An optimized ultrasound detector for photoacoustic breast tomography. Medical Physics, 2013, 40, 032901.	3.0	41
29	Twente Photoacoustic Mammoscope 2: system overview and three-dimensional vascular network images in healthy breasts. Journal of Biomedical Optics, 2019, 24, 1.	2.6	38
30	Design and evaluation of a laboratory prototype system for 3D photoacoustic full breast tomography. Biomedical Optics Express, 2013, 4, 2555.	2.9	36
31	A new acoustic lens material for large area detectors in photoacoustic breast tomography. Photoacoustics, 2013, 1, 9-18.	7.8	34
32	Detection of Melanoma Metastases in Resected Human Lymph Nodes by Noninvasive Multispectral Photoacoustic Imaging. International Journal of Biomedical Imaging, 2014, 2014, 1-7.	3.9	32
33	Ultrafast vapourization dynamics of laser-activated polymeric microcapsules. Nature Communications, 2014, 5, 3671.	12.8	31
34	Tomographic imaging with an ultrasound and LED-based photoacoustic system. Biomedical Optics Express, 2020, 11, 2152.	2.9	29
35	Novel imaging techniques for intraoperative margin assessment in surgical oncology: A systematic review. International Journal of Cancer, 2021, 149, 635-645.	5.1	27
36	Differential Pathlength Spectroscopy for the Quantitation of Optical Properties of Gold Nanoparticles. ACS Nano, 2010, 4, 4081-4089.	14.6	26

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37	Photoacoustic-guided focused ultrasound for accurate visualization of brachytherapy seeds with the photoacoustic needle. Journal of Biomedical Optics, 2016, 21, 120501.	2.6	25
38	Semi-anthropomorphic photoacoustic breast phantom. Biomedical Optics Express, 2019, 10, 5921.	2.9	25
39	Assessment of the added value of the Twente Photoacoustic Mammoscope in breast cancer diagnosis. Medical Devices: Evidence and Research, 2011, 4, 107.	0.8	24
40	Appearance of breast cysts in planar geometry photoacoustic mammography using 1064-nm excitation. Journal of Biomedical Optics, 2013, 18, 126009.	2.6	22
41	Intraâ€operative ex vivo photoacoustic nodal staging in a rat model using a clinical superparamagnetic iron oxide nanoparticle dispersion. Journal of Biophotonics, 2013, 6, 493-504.	2.3	22
42	A framework for directional and higher-order reconstruction in photoacoustic tomography. Physics in Medicine and Biology, 2018, 63, 045018.	3.0	19
43	Handheld Probe-Based Dual Mode Ultrasound/Photoacoustics for Biomedical Imaging. Progress in Optical Science and Photonics, 2016, , 209-247.	0.5	17
44	Photoacoustic imaging in percutaneous radiofrequency ablation: device guidance and ablation visualization. Physics in Medicine and Biology, 2019, 64, 184001.	3.0	17
45	Multiple passive element enriched photoacoustic computed tomography. Optics Letters, 2011, 36, 2809.	3.3	16
46	Quantitative photoacoustic tomography by stochastic search: direct recovery of the optical absorption field. Optics Letters, 2016, 41, 4202.	3.3	16
47	Optical signatures of radiofrequency ablation in biological tissues. Scientific Reports, 2021, 11, 6579.	3.3	15
48	Imaging of acoustic attenuation and speed of sound maps using photoacoustic measurements. Proceedings of SPIE, 2008, , .	0.8	12
49	Photoacoustic mammography: prospects and promises. Breast Cancer Management, 2014, 3, 387-390.	0.2	12
50	Monomer adsorption of indocyanine green to gold nanoparticles. Nanoscale, 2011, 3, 4247.	5.6	11
51	Raman and Fluorescence Spectral Imaging of Live Breast Cancer Cells Incubated with PEGylated Gold Nanorods. Applied Spectroscopy, 2012, 66, 66-74.	2.2	11
52	Cells make themselves heard. Nature Photonics, 2015, 9, 216-218.	31.4	11
53	The â€˜nanobig rodâ€™ class of gold nanorods: optimized dimensions for improvedin vivotherapeutic and imaging efficacy. Nanotechnology, 2013, 24, 215102.	2.6	10
54	Spatially compounded plane wave imaging using a laser-induced ultrasound source. Photoacoustics, 2020, 18, 100154.	7.8	10

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55	Region-of-interest breast images with the Twente Photoacoustic Mammoscope (PAM). , 2007, , .		9
56	Photoacoustic imaging of inhomogeneities embedded in breast tissue phantoms. , 2003, , .		8
57	Two-dimensional spatiotemporal monitoring of temperature in photothermal therapy using hybrid photoacousticâ€“ultrasound transmission tomography. Journal of Biomedical Optics, 2013, 18, 116009.	2.6	8
58	Tunable blood oxygenation in the vascular anatomy of a semi-anthropomorphic photoacoustic breast phantom. Journal of Biomedical Optics, 2021, 26, .	2.6	8
59	Pendant breast immobilization and positioning in photoacoustic tomographic imaging. Photoacoustics, 2021, 21, 100238.	7.8	8
60	Laser-induced synthetic aperture ultrasound imaging. Journal of Applied Physics, 2020, 128, .	2.5	5
61	Annular Fiber Probe for Interstitial Illumination in Photoacoustic Guidance of Radiofrequency Ablation. Sensors, 2021, 21, 4458.	3.8	5
62	Simultaneous imaging of ultrasound attenuation, speed of sound, and optical absorption in a photoacoustic setup. Proceedings of SPIE, 2009, , .	0.8	4
63	Characterization of a clinical prototype for photoacoustic mammography and some phantom studies. , 2005, , .		3
64	Breast imaging using the Twente photoacoustic mammoscope (PAM): new clinical measurements. , 2011, , .		3
65	Optical techniques for the intraoperative assessment of nodal status. Future Oncology, 2013, 9, 1741-1755.	2.4	3
66	Sensitivity of a partially learned modelâ€based reconstruction algorithm. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800222.	0.2	3
67	The Twente Photoacoustic Mammoscope 2: 3D vascular network visualization. , 2019, , .		3
68	<title>Three-dimensional photoacoustic imaging of breast tissue phantoms</title>. , 2004, , .		2
69	Photoacoustic imaging of breast tumor vascularization: a comparison with MRI and histopathology. , 2013, , .		2
70	Photoacoustic Imaging Assisted Radiofrequency Ablation: Illumination Strategies and Prospects. , 2019, , .		2
71	Identification and removal of reflection artifacts in minimally invasive photoacoustic imaging for accurate visualization of brachytherapy seeds. Proceedings of SPIE, 2017, , .	0.8	2
72	Suite of 3D test objects for performance assessment of hybrid photoacoustic-ultrasound breast imaging systems. Journal of Biomedical Optics, 2021, 27, .	2.6	2

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73	Spatial distributions of optical and acoustic properties and correlations with temperature in cyclically frozen-thawed poly(vinyl alcohol) gel breast phantoms. , 2011, , .		1
74	A custom-made linear array transducer for photoacoustic breast imaging. , 2012, , .		1
75	Design considerations for ultrasound detectors in photoacoustic breast imaging. , 2013, , .		1
76	Opening the â€œWhite Boxâ€•in Tissue Engineering: Visualization of Cell Aggregates in Optically Scattering Scaffolds. Tissue Engineering - Part C: Methods, 2016, 22, 534-542.	2.1	1
77	Photoacoustic staging of nodal metastases using SPIOs: Comparison between in vivo, inÂtoto and ex vivo imaging in a rat model. Biomedical Spectroscopy and Imaging, 2017, 5, 71-87.	1.2	1
78	A semi-anthropomorphic breast phantom with tunable blood oxygenation levels for use in quantitative photoacoustics. , 2019, , .		1
79	Light Emitting Diodes Based Photoacoustic and Ultrasound Tomography: Imaging Aspects andÂApplications. Progress in Optical Science and Photonics, 2020, , 245-266.	0.5	1
80	A 3D semi-anthropomorphic photoacoustic breast phantom. , 2019, , .		1
81	Photoacoustic detection of iron oxide nanoparticles in resected rat lymph nodes. , 2012, , .		0
82	FEM model based optimization of transducer geometry for photoacoustic imaging. , 2012, , .		0
83	Laser-induced ultrasound transmitters for 3D photoacoustic and ultrasound tomography. , 2019, , .		0
84	Diagnostics in Patients Suspect for Breast Cancer in The Netherlands. Current Oncology, 2021, 28, 4998-5008.	2.2	0
85	New directions for optical breast imaging and sensing: multimodal cancer imaging and lactation research. Current Opinion in Biomedical Engineering, 2022, , 100380.	3.4	0
86	Imaging results from a semi-anthropomorphic photoacoustic-ultrasound breast phantom carrying blood vessels. , 2021, , .		0
87	OUP accepted manuscript. BJS Open, 2022, 6, .	1.7	0