Mithun Kuniyil Ajith Singh

List of Publications by Year
in descending order

59	571	623188	713013
papers	citations	14 h-index	21 g-index

62	62	62	474
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Handheld Real-Time LED-Based Photoacoustic and Ultrasound Imaging System for Accurate Visualization of Clinical Metal Needles and Superficial Vasculature to Guide Minimally Invasive Procedures. Sensors, 2018, 18, 1394.	2.1	75
2	Photoacoustic-guided focused ultrasound (PAFUSion) for identifying reflection artifacts in photoacoustic imaging. Photoacoustics, 2015, 3, 123-131.	4.4	61
3	In vivo demonstration of reflection artifact reduction in photoacoustic imaging using synthetic aperture photoacoustic-guided focused ultrasound (PAFUSion). Biomedical Optics Express, 2016, 7, 2955.	1.5	42
4	Towards Clinical Translation of LED-Based Photoacoustic Imaging: A Review. Sensors, 2020, 20, 2484.	2.1	41
5	Design and evaluation of a laboratory prototype system for 3D photoacoustic full breast tomography. Biomedical Optics Express, 2013, 4, 2555.	1.5	36
6	Photoacoustic imaging of the human placental vasculature. Journal of Biophotonics, 2020, 13, e201900167.	1.1	36
7	Portable and Affordable Light Source-Based Photoacoustic Tomography. Sensors, 2020, 20, 6173.	2.1	33
8	Oxygen Saturation Imaging Using LED-Based Photoacoustic System. Sensors, 2021, 21, 283.	2.1	32
9	Tomographic imaging with an ultrasound and LED-based photoacoustic system. Biomedical Optics Express, 2020, 11, 2152.	1.5	29
10	Photoacoustic-guided focused ultrasound for accurate visualization of brachytherapy seeds with the photoacoustic needle. Journal of Biomedical Optics, 2016, 21, 120501.	1.4	25
11	Photoacoustic Imaging of Human Vasculature Using LED versus Laser Illumination: A Comparison Study on Tissue Phantoms and In Vivo Humans. Sensors, 2021, 21, 424.	2.1	24
12	In Vivo Tumor Vascular Imaging with Light Emitting Diode-Based Photoacoustic Imaging System. Sensors, 2020, 20, 4503.	2.1	20
13	Handheld Probe-Based Dual Mode Ultrasound/Photoacoustics for Biomedical Imaging. Progress in Optical Science and Photonics, 2016, , 209-247.	0.3	17
14	Photoacoustic reflection artifact reduction using photoacoustic-guided focused ultrasound: comparison between plane-wave and element-by-element synthetic backpropagation approach. Biomedical Optics Express, 2017, 8, 2245.	1.5	15
15	Optimizing Irradiation Geometry in LED-Based Photoacoustic Imaging with 3D Printed Flexible and Modular Light Delivery System. Sensors, 2020, 20, 3789.	2.1	10
16	Technical validation studies of a dual-wavelength LED-based photoacoustic and ultrasound imaging system. Photoacoustics, 2021, 22, 100267.	4.4	9
17	Deep learning-enhanced LED-based photoacoustic imaging. , 2020, , .		7
18	Clinical Translation of Photoacoustic Imagingâ€"Opportunities and Challenges from an Industry Perspective. Progress in Optical Science and Photonics, 2020, , 379-393.	0.3	6

#	Article	IF	Citations
19	Human placental vasculature imaging using an LED-based photoacoustic/ultrasound imaging system. , 2018, , .		5
20	Imaging of human peripheral blood vessels during cuff occlusion with a compact LED-based photoacoustic and ultrasound system. , 2019, , .		4
21	Biomedical Photoacoustic Imaging and Sensing Using Affordable Resources. Sensors, 2021, 21, 2572.	2.1	3
22	Real-time in vivo imaging of human lymphatic system using an LED-based photoacoustic/ultrasound imaging system. , 2018, , .		3
23	Preclinical cancer imaging using a multispectral LED-based photoacoustic and ultrasound imaging system. , 2021, , .		2
24	Generative adversarial network-based photoacoustic image reconstruction from bandlimited and limited-view data. , 2021, , .		2
25	Identification and removal of reflection artifacts in minimally invasive photoacoustic imaging for accurate visualization of brachytherapy seeds. Proceedings of SPIE, 2017, , .	0.8	2
26	In vivo demonstration of real-time oxygen saturation imaging using a portable and affordable LED-based multispectral photoacoustic and ultrasound imaging system. , 2019, , .		2
27	Real-time improvement of LED-based photoacoustic image quality using intermittent pulse echo acquisitions. , 2020, , .		2
28	LED-based photoacoustic imaging for early detection of joint inflammation in rodents: towards achieving 3Rs in rheumatoid arthritis research. , 2020, , .		2
29	Functional, molecular and structural imaging using LED-based photoacoustic and ultrasound imaging system.. , 2020, , .		2
30	Improvement of LED-based photoacoustic imaging using sign coherence factor based on lag-delay-multiply-and-sum beamformer. , 2022, , .		2
31	Design considerations for ultrasound detectors in photoacoustic breast imaging. , 2013, , .		1
32	Flow imaging using an integrated photoacoustic/ultrasound probe. , 2015, , .		1
33	Breast imaging using an LED-based photoacoustic and ultrasound imaging system: a proof-of-concept study. , 2021, , .		1
34	Image quality enhancement for LED-based photoacoustic imaging. , 2021, , .		1
35	Optimizing acoustic detection for deep-tissue LED-based photoacoustic imaging. , 2021, , .		1
36	Light Emitting Diodes Based Photoacoustic and Ultrasound Tomography: Imaging Aspects andÂApplications. Progress in Optical Science and Photonics, 2020, , 245-266.	0.3	1

#	Article	IF	Citations
37	High-speed photoacoustic imaging using an LED-based photoacoustic imaging system. , 2018, , .		1
38	International Photoacoustic Standardisation Consortium (IPASC): overview (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td (		1
39	Characterization and technical validation of a multi-wavelength LED-based photoacoustic/ultrasound imaging system (Conference Presentation). , 2018, , .		1
40	Enhancing photoacoustic visualization of medical devices with elastomeric nanocomposite coatings. , 2019, , .		1
41	Low-cost photoacoustic computed tomography system using light-emitting-diodes. , 2020, , .		1
42	Photoacoustic imaging capabilities of light emitting diodes (LED) and laser sources: a comparison study. , 2020, , .		1
43	PhotoAcoustic-guided Focused UltraSound imaging (PAFUSion) for reducing reflection artifacts in photoacoustic imaging. Proceedings of SPIE, 2015, , .	0.8	0
44	Reflection-artifact-free photoacoustic imaging using PAFUSion (photoacoustic-guided focused) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46		0
45	LED-Based Photoacoustic and Ultrasound Imaging System for Guiding Minimally Invasive Procedures with Peripheral Tissue Targets. , 2018, , .		0
46	Point-of-care functional and molecular imaging using LED-based photoacoustics. , 2019, , .		0
47	Correction to: Overview of Coronavirus Disease and Imaging-Based Diagnostic Techniques. Medical Virology, 2021, , C1-C1.	2.1	0
48	Modular and flexible 3D printed holder for deep tissue imaging with LED array based photoacoustic imaging. , 2021, , .		0
49	In vivo demonstration of reflection artifact reduction in LED-based photoacoustic imaging using deep learning. , 2021, , .		0
50	PhotoAcoustic-guided Focused UltraSound imaging (PAFUSion) for reducing reflection artifacts in photoacoustic imaging. , 2015, , .		0
51	Multispectral photoacoustic characterization of ICG and porcine blood using an LED-based photoacoustic imaging system. , 2018, , .		0
52	Real-time guidance of minimally-invasive peripheral vascular access procedures using a point of care LED-based photoacoustic and ultrasound imaging system. , 2019, , .		0
53	3D printed kidney phantoms for an LED-based photoacoustic and ultrasound imaging system. , 2019, , .		0
54	Imaging tumor vasculature using LED based photoacoustic system. , 2020, , .		0

#	Article	IF	Citations
55	Overview of Coronavirus Disease and Imaging-Based Diagnostic Techniques. Medical Virology, 2020, , 73-107.	2.1	0
56	Tomographic imaging with an LED-based photoacoustic-ultrasound system. , 2020, , .		0
57	Light emitting diode based photoacoustic/ultrasound imaging reveals fast dynamic contrast in liver and changes in blood oxygenation (Conference Presentation). , 2020, , .		0
58	Guidance of lymphaticovenous anastomosis using LED-based photoacoustic lymphangiography: a human volunteer study. , 2022, , .		0
59	Three-dimensional handheld LED-based photoacoustic/ultrasound imaging: A potential point-of-care tool for diagnosing peripheral arterial disease. , 2022, , .		0