Angelo Sassaroli

List of Publications by Year
in descending order

61	1,572	393982	315357
papers	citations	19 h-index	38 g-index

61	61	61	1585
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comment on the modified Beerâ€“Lambert law for scattering media. Physics in Medicine and Biology, 2004, 49, N255-N257.	1.6	265
2	Cerebral blood flow and autoregulation: current measurement techniques and prospects for noninvasive optical methods. Neurophotonics, 2016, 3, 031411.	1.7	245
3	Cerebral Autoregulation in the Microvasculature Measured with Near-Infrared Spectroscopy. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 959-966.	2.4	94
4	Frequency-Domain Techniques for Cerebral and Functional Near-Infrared Spectroscopy. Frontiers in Neuroscience, 2020, 14, 300.	1.4	68
5	Optical Characterization of Two-Layered Turbid Media for Non-Invasive, Absolute Oximetry in Cerebral and Extracerebral Tissue. PLoS ONE, 2013, 8, e64095.	1.1	58
6	DISCRIMINATION OF MENTAL WORKLOAD LEVELS IN HUMAN SUBJECTS WITH FUNCTIONAL NEAR-INFRARED SPECTROSCOPY. Journal of Innovative Optical Health Sciences, 2008, 01, 227-237.	0.5	54
7	Spatially weighted BOLD signal for comparison of functional magnetic resonance imaging and near-infrared imaging of the brain. NeuroImage, 2006, 33, 505-514.	2.1	50
8	Practical Steps for Applying a New Dynamic Model to Near-Infrared Spectroscopy Measurements of Hemodynamic Oscillations and Transient Changes. Academic Radiology, 2014, 21, 185-196.	1.3	46
9	Absolute measurement of cerebral optical coefficients, hemoglobin concentration and oxygen saturation in old and young adults with near-infrared spectroscopy. Journal of Biomedical Optics, 2012, 17, 081406.	1.4	45
10	Broadband Optical Mammography: Chromophore Concentration and Hemoglobin Saturation Contrast in Breast Cancer. PLoS ONE, 2015, 10, e0117322.	1.1	43
11	Equivalence of four Monte Carlo methods for photon migration in turbid media. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 2110.	0.8	42
12	Fast perturbation Monte Carlo method for photon migration in heterogeneous turbid media. Optics Letters, 2011, 36, 2095.	1.7	40
13	Phantoms for diffuse optical imaging based on totally absorbing objects, part 2: experimental implementation. Journal of Biomedical Optics, 2014, 19, 076011.	1.4	40
14	Dual-slope method for enhanced depth sensitivity in diffuse optical spectroscopy. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, 1743.	0.8	39
15	Perspective: Prospects of non-invasive sensing of the human brain with diffuse optical imaging. APL Photonics, 2018, 3, .	3.0	34
16	Phase dualâ€slopes in frequencyâ€domain nearâ€infrared spectroscopy for enhanced sensitivity to brain tissue: First applications to human subjects. Journal of Biophotonics, 2020, 13, e201960018.	1.1	30
17	Perturbation theory for the diffusion equation by use of the moments of the generalized temporal point-spread function I Theory. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2006, 23, 2105.	0.8	27
18	Reduced speed of microvascular blood flow in hemodialysis patients versus healthy controls: a coherent hemodynamics spectroscopy study. Journal of Biomedical Optics, 2014, 19, 026005.	1.4	25

#	Article	IF	Citations
19	Phasor representation of oxy- and deoxyhemoglobin concentrations: what is the meaning of out-of-phase oscillations as measured by near-infrared spectroscopy?. Journal of Biomedical Optics, 2010, 15, 040512.	1.4	22
20	Quantitative measurements of cerebral blood flow with near-infrared spectroscopy. Biomedical Optics Express, 2019, 10, 2117.	1.5	21
21	Perturbation theory for the diffusion equation by use of the moments of the generalized temporal point-spread function III Frequency-domain and time-domain results. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 1723.	0.8	18
22	Multi-Distance Frequency-Domain Optical Measurements of Coherent Cerebral Hemodynamics. Photonics, 2019, 6, 83.	0.9	16
23	Transformational change in the field of diffuse optics: From going bananas to going nuts. Journal of Innovative Optical Health Sciences, 2020, 13, .	0.5	16
24	Dual-Slope Diffuse Reflectance Instrument for Calibration-Free Broadband Spectroscopy. Applied Sciences (Switzerland), 2021, 11, 1757.	1.3	15
25	NEAR-INFRARED, BROAD-BAND SPECTRAL IMAGING OF THE HUMAN BREAST FOR QUANTITATIVE OXIMETRY: APPLICATIONS TO HEALTHY AND CANCEROUS BREASTS. Journal of Innovative Optical Health Sciences, 2010, 03, 267-277.	0.5	14
26	Depth dependence of coherent hemodynamics in the human head. Journal of Biomedical Optics, 2018, 23, 1.	1.4	14
27	Dual-slope imaging in highly scattering media with frequency-domain near-infrared spectroscopy. Optics Letters, 2020, 45, 4464.	1.7	14
28	Higher-order perturbation theory for the diffusion equation in heterogeneous media: application to layered and slab geometries. Applied Optics, 2009, 48, D62.	2.1	13
29	Blood-pressure-induced oscillations of deoxy- and oxyhemoglobin concentrations are in-phase in the healthy breast and out-of-phase in the healthy brain. Journal of Biomedical Optics, 2016, 21, 101410.	1.4	13
30	Depth sensitivity of frequency domain optical measurements in diffusive media. Biomedical Optics Express, 2017, 8, 2990.	1.5	12
31	Design of a sourceâ€“detector array for dual-slope diffuse optical imaging. Review of Scientific Instruments, 2020, 91, 093702.	0.6	12
32	Perturbation theory for the diffusion equation by use of the moments of the generalized temporal point-spread function II Continuous-wave results. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2006, 23, 2119.	0.8	11
33	Frequency-resolved analysis of coherent oscillations of local cerebral blood volume, measured with near-infrared spectroscopy, and systemic arterial pressure in healthy human subjects. PLoS ONE, 2019, 14, e0211710.	1.1	11
34	Verification method of Monte Carlo codes for transport processes with arbitrary accuracy. Scientific Reports, 2021, 11, 19486.	1.6	11
35	Optical Mammography in Patients with Breast Cancer Undergoing Neoadjuvant Chemotherapy. Academic Radiology, 2017, 24, 1240-1255.	1.3	10
36	Broadband absorption spectroscopy of heterogeneous biological tissue. Applied Optics, 2021, 60, 7552.	0.9	9

#	Article	IF	Citations
37	Domain adaptation for robust workload level alignment between sessions and subjects using fNIRS. Journal of Biomedical Optics, 2021, 26, .	1.4	9
38	Cerebral Blood Volume and Vasodilation are Independently Diminished by Aging and Hypertension: A Near Infrared Spectroscopy Study. Journal of Alzheimer's Disease, 2014, 42, S189-S198.	1.2	8
39	PHASE DIFFERENCE BETWEEN LOW-FREQUENCY OSCILLATIONS OF CEREBRAL DEOXY- AND OXY-HEMOGLOBIN CONCENTRATIONS DURING A MENTAL TASK. Journal of Innovative Optical Health Sciences, 2011, 04, 151-158.	0.5	7
40	Coherent hemodynamics spectroscopy in a single step. Biomedical Optics Express, 2014, 5, 3403.	1.5	7
41	The meaning of â€œcoherentâ€•and its quantification in coherent hemodynamics spectroscopy. Journal of Innovative Optical Health Sciences, 2018, 11, .	0.5	7
42	Sensitivity of frequency-domain optical measurements to brain hemodynamics: simulations and human study of cerebral blood flow during hypercapnia. Biomedical Optics Express, 2021, 12, 766.	1.5	7
43	Optical mammography: bilateral breast symmetry in hemoglobin saturation maps. Journal of Biomedical Optics, 2016, 21, 101403.	1.4	6
44	Nonlinear extension of a hemodynamic linear model for coherent hemodynamics spectroscopy. Journal of Theoretical Biology, 2016, 389, 132-145.	0.8	5
45	Noninvasive Optical Measurements of Dynamic Cerebral Autoregulation by Inducing Oscillatory Cerebral Hemodynamics. Frontiers in Neurology, 2021, 12, 745987.	1.1	5
46	Two-step verification method for Monte Carlo codes in biomedical optics applications. Journal of Biomedical Optics, 2022, 27, .	1.4	5
47	Broadband diffuse optical spectroscopy of two-layered scattering media containing oxyhemoglobin, deoxyhemoglobin, water, and lipids. Journal of Innovative Optical Health Sciences, 2022, 15, .	0.5	4
48	Functional brain mapping with dual-slope frequency-domain near-infrared spectroscopy. , 2022, , .		2
49	COHERENT HEMODYNAMICS SPECTROSCOPY BASED ON A PACED BREATHING PARADIGM â€” REVISITED. Journal of Innovative Optical Health Sciences, 2014, 07, 1450013.	0.5	1
50	Study of capillary transit time distribution in coherent hemodynamics spectroscopy. Journal of Innovative Optical Health Sciences, 2015, 08, 1550025.	0.5	1
51	Broadband optical mammography instrument for depth-resolved imaging and local dynamic measurements. Review of Scientific Instruments, 2016, 87, 024302.	0.6	1
52	Folate deficiency impairs brain oxygen delivery in rat. FASEB Journal, 2010, 24, lb392.	0.2	0
53	Skeletal Muscle Oxygen Consumption Measurements with Dual-Slope Frequency-Domain Near-Infrared Spectroscopy. , 2020, , .		0
54	Multi-Distance Frequency-Domain Optical Measurements of Cerebral Blood Flow During Hypercapnia. , 2020, , .		0

#	Article	IF	Citations
55	Dual-Slope Optical Measurements of Cerebral Blood Flow and Autoregulation During Hypercapnia. , 2021, , .		0
56	Dual-Slope Imaging in Frequency-Domain Near-Infrared Spectroscopy. , 2020, , .		0
57	Dual-slope method for focal depth sensitivity enhancement in near-infrared spectroscopy. , 2020, , .		0
58	Dual-slope broadband diffuse reflectance spectrometer for absolute absorption spectra of turbid media. , 2021, , .		0
59	Theoretical Analysis and Design of Instrumentation to Optimize Modulation Frequencies for Frequency-Domain Dual-Slope. , 2022, , .		0
60	New data types for frequency-domain dual-slopes in near-infrared spectroscopy and imaging. , 2022, , .		0
61	Spatial Sensitivity of Frequency-Domain Dual-Slopes in Heterogeneous Media. , 2022, , .		0