Angelo Sassaroli

List of Publications by Year in Descending Order

49 papers	1,025 citations	17 h-index	30 g-index
61 ext. papers	1,316 ext. citations	2.9 avg, IF	4.74 L-index

#	Paper	IF	Citations
49	Noninvasive Optical Measurements of Dynamic Cerebral Autoregulation by Inducing Oscillatory Cerebral Hemodynamics. *Frontiers in Neurology*, **2021**, 12, 745987	4.1	2
48	Dual-Slope Diffuse Reflectance Instrument for Calibration-Free Broadband Spectroscopy. *Applied Sciences (Switzerland)*, **2021**, 11, 1757	2.6	6
47	Broadband absorption spectroscopy of heterogeneous biological tissue. *Applied Optics*, **2021**, 60, 7552-7562	1.7	2
46	Verification method of Monte Carlo codes for transport processes with arbitrary accuracy. *Scientific Reports*, **2021**, 11, 19486	4.9	1
45	Domain adaptation for robust workload level alignment between sessions and subjects using fNIRS. *Journal of Biomedical Optics*, **2021**, 26,	3.5	1
44	Sensitivity of frequency-domain optical measurements to brain hemodynamics: simulations and human study of cerebral blood flow during hypercapnia. *Biomedical Optics Express*, **2021**, 12, 766-789	3.5	4
43	Dual-slope imaging in highly scattering media with frequency-domain near-infrared spectroscopy. *Optics Letters*, **2020**, 45, 4464-4467	3	6
42	Design of a source-detector array for dual-slope diffuse optical imaging. *Review of Scientific Instruments*, **2020**, 91, 093702	1.7	4
41	Transformational change in the field of diffuse optics: From going bananas to going nuts. *Journal of Innovative Optical Health Sciences*, **2020**, 13, 1930013	1.2	9
40	Phase dual-slopes in frequency-domain near-infrared spectroscopy for enhanced sensitivity to brain tissue: First applications to human subjects. *Journal of Biophotonics*, **2020**, 13, e201960018	3.1	15
39	Frequency-Domain Techniques for Cerebral and Functional Near-Infrared Spectroscopy. *Frontiers in Neuroscience*, **2020**, 14, 300	5.1	29
38	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	3.7	8
37	Multi-distance frequency-domain optical measurements of coherent cerebral hemodynamics. *Photonics*, **2019**, 6,	2.2	9
36	Quantitative measurements of cerebral blood flow with near-infrared spectroscopy. *Biomedical Optics Express*, **2019**, 10, 2117-2134	3.5	9
35	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, 1743-1761	1.8	15
34	Depth dependence of coherent hemodynamics in the human head. *Journal of Biomedical Optics*, **2018**, 23, 1-9	3.5	10
33	The meaning of "coherent" and its quantification in coherent hemodynamics spectroscopy. *Journal of Innovative Optical Health Sciences*, **2018**, 11,	1.2	5

32	Perspective: Prospects of non-invasive sensing of the human brain with diffuse optical imaging. *APL Photonics*, **2018**, 3,	5.2	19
31	Optical Mammography in Patients with Breast Cancer Undergoing Neoadjuvant Chemotherapy: Individual Clinical Response Index. *Academic Radiology*, **2017**, 24, 1240-1255	4.3	6
30	Depth sensitivity of frequency domain optical measurements in diffusive media. *Biomedical Optics Express*, **2017**, 8, 2990-3004	3.5	9
29	Cerebral blood flow and autoregulation: current measurement techniques and prospects for noninvasive optical methods. *Neurophotonics*, **2016**, 3, 031411	3.9	141
28	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	3.5	10
27	Optical mammography: bilateral breast symmetry in hemoglobin saturation maps. *Journal of Biomedical Optics*, **2016**, 21, 101403	3.5	6
26	Nonlinear extension of a hemodynamic linear model for coherent hemodynamics spectroscopy. *Journal of Theoretical Biology*, **2016**, 389, 132-45	2.3	4
25	Broadband optical mammography instrument for depth-resolved imaging and local dynamic measurements. *Review of Scientific Instruments*, **2016**, 87, 024302	1.7	1
24	Study of capillary transit time distribution in coherent hemodynamics spectroscopy. *Journal of Innovative Optical Health Sciences*, **2015**, 08, 1550025	1.2	1
23	Broadband optical mammography: chromophore concentration and hemoglobin saturation contrast in breast cancer. *PLoS ONE*, **2015**, 10, e0117322	3.7	33
22	Cerebral autoregulation in the microvasculature measured with near-infrared spectroscopy. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 959-66	7.3	68
21	Practical steps for applying a new dynamic model to near-infrared spectroscopy measurements of hemodynamic oscillations and transient changes: implications for cerebrovascular and functional brain studies. *Academic Radiology*, **2014**, 21, 185-96	4.3	30
20	Cerebral blood volume and vasodilation are independently diminished by aging and hypertension: a near infrared spectroscopy study. *Journal of Alzheimer's Disease*, **2014**, 42 Suppl 3, S189-98	4.3	8
19	COHERENT HEMODYNAMICS SPECTROSCOPY BASED ON A PACED BREATHING PARADIGM – REVISITED. *Journal of Innovative Optical Health Sciences*, **2014**, 07, 1450013	1.2	1
18	Phantoms for diffuse optical imaging based on totally absorbing objects, part 2: experimental implementation. *Journal of Biomedical Optics*, **2014**, 19, 076011	3.5	30
17	Coherent hemodynamics spectroscopy in a single step. *Biomedical Optics Express*, **2014**, 5, 3403-16	3.5	7
16	Reduced speed of microvascular blood flow in hemodialysis patients versus healthy controls: a coherent hemodynamics spectroscopy study. *Journal of Biomedical Optics*, **2014**, 19, 026005	3.5	22
15	Optical characterization of two-layered turbid media for non-invasive, absolute oximetry in cerebral and extracerebral tissue. *PLoS ONE*, **2013**, 8, e64095	3.7	40

14	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	3.5	32
13	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, 2110-7	1.8	29
12	Fast perturbation Monte Carlo method for photon migration in heterogeneous turbid media. *Optics Letters*, **2011**, 36, 2095-7	3	31
11	PHASE DIFFERENCE BETWEEN LOW-FREQUENCY OSCILLATIONS OF CEREBRAL DEOXY- AND OXY-HEMOGLOBIN CONCENTRATIONS DURING A MENTAL TASK. *Journal of Innovative Optical Health Sciences*, **2011**, 4, 151-158	1.2	5
10	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	3.5	20
9	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, 1723-42	1.8	14
8	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	1.2	10
7	Folate deficiency impairs brain oxygen delivery in rat. *FASEB Journal*, **2010**, 24, lb392	0.9	
6	Higher-order perturbation theory for the diffusion equation in heterogeneous media: application to layered and slab geometries. *Applied Optics*, **2009**, 48, D62-73	0.2	10
5	DISCRIMINATION OF MENTAL WORKLOAD LEVELS IN HUMAN SUBJECTS WITH FUNCTIONAL NEAR-INFRARED SPECTROSCOPY. *Journal of Innovative Optical Health Sciences*, **2008**, 01, 227-237	1.2	40
4	Spatially weighted BOLD signal for comparison of functional magnetic resonance imaging and near-infrared imaging of the brain. *NeuroImage*, **2006**, 33, 505-14	7.9	45
3	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, 2105-18	1.8	17
2	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, 2119-31	1.8	9
1	Comment on the modified Beer-Lambert law for scattering media. *Physics in Medicine and Biology*, **2004**, 49, N255-7	3.8	189