

Ilias Tachtsidis

List of Publications by Year in descending order

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199
papers

6,128
citations

87843

38
h-index

88593

70
g-index

206
all docs

206
docs citations

206
times ranked

4579
citing authors

#	ARTICLE	IF	CITATIONS
1	The present and future use of functional near-infrared spectroscopy (fNIRS) for cognitive neuroscience. <i>Annals of the New York Academy of Sciences</i> , 2020, 1464, 5-29.	1.8	498
2	The physiological origin of task-evoked systemic artefacts in functional near infrared spectroscopy. <i>NeuroImage</i> , 2012, 61, 70-81.	2.1	445
3	False positives and false negatives in functional near-infrared spectroscopy: issues, challenges, and the way forward. <i>Neurophotonics</i> , 2016, 3, 031405.	1.7	378
4	Long-Term Enhancement of Brain Function and Cognition Using Cognitive Training and Brain Stimulation. <i>Current Biology</i> , 2013, 23, 987-992.	1.8	283
5	Current Status and Issues Regarding Pre-processing of fNIRS Neuroimaging Data: An Investigation of Diverse Signal Filtering Methods Within a General Linear Model Framework. <i>Frontiers in Human Neuroscience</i> , 2018, 12, 505.	1.0	251
6	A Review on the Use of Wearable Functional Near-Infrared Spectroscopy in Naturalistic Environments. <i>Japanese Psychological Research</i> , 2018, 60, 347-373.	0.4	177
7	Synchronization between arterial blood pressure and cerebral oxyhaemoglobin concentration investigated by wavelet cross-correlation. <i>Physiological Measurement</i> , 2007, 28, 161-173.	1.2	169
8	Estimating a modified Grubb's exponent in healthy human brains with near infrared spectroscopy and transcranial Doppler. <i>Physiological Measurement</i> , 2009, 30, 1-12.	1.2	157
9	From Åbsis to the present day: a review of clinical near-infrared spectroscopy measurements of cerebral cytochrome-c-oxidase. <i>Journal of Biomedical Optics</i> , 2016, 21, 091307.	1.4	144
10	Best practices for fNIRS publications. <i>Neurophotonics</i> , 2021, 8, 012101.	1.7	142
11	Investigation of cerebral haemodynamics by near-infrared spectroscopy in young healthy volunteers reveals posture-dependent spontaneous oscillations. <i>Physiological Measurement</i> , 2004, 25, 437-445.	1.2	109
12	Using Fiberless, Wearable fNIRS to Monitor Brain Activity in Real-world Cognitive Tasks. <i>Journal of Visualized Experiments</i> , 2015, , .	0.2	109
13	Increase in cerebral aerobic metabolism by normobaric hyperoxia after traumatic brain injury. <i>Journal of Neurosurgery</i> , 2008, 109, 424-432.	0.9	104
14	Identifying and quantifying main components of physiological noise in functional near infrared spectroscopy on the prefrontal cortex. <i>Frontiers in Human Neuroscience</i> , 2013, 7, 864.	1.0	100
15	Modelling confounding effects from extracerebral contamination and systemic factors on functional near-infrared spectroscopy. <i>NeuroImage</i> , 2016, 143, 91-105.	2.1	99
16	A new broadband near-infrared spectroscopy system for in-vivo measurements of cerebral cytochrome-c-oxidase changes in neonatal brain injury. <i>Biomedical Optics Express</i> , 2014, 5, 3450.	1.5	87
17	Clinical Brain Monitoring with Time Domain NIRS: A Review and Future Perspectives. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1612.	1.3	77
18	Cytochrome c oxidase response to changes in cerebral oxygen delivery in the adult brain shows higher brain-specificity than haemoglobin. <i>NeuroImage</i> , 2014, 85, 234-244.	2.1	71

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19	Brain mitochondrial oxidative metabolism during and after cerebral hypoxia–ischemia studied by simultaneous phosphorus magnetic-resonance and broadband near-infrared spectroscopy. <i>NeuroImage</i> , 2014, 102, 173-183.	2.1	70
20	A physiological model of cerebral blood flow control. <i>Mathematical Biosciences</i> , 2005, 194, 125-173.	0.9	65
21	The Effect on Cerebral Tissue Oxygenation Index of Changes in the Concentrations of Inspired Oxygen and End-Tidal Carbon Dioxide in Healthy Adult Volunteers. <i>Anesthesia and Analgesia</i> , 2009, 109, 906-913.	1.1	64
22	A novel GLM-based method for the Automatic IDentification of functional Events (AIDE) in fNIRS data recorded in naturalistic environments. <i>NeuroImage</i> , 2017, 155, 291-304.	2.1	63
23	Near-infrared spectroscopic quantification of changes in the concentration of oxidized cytochrome c oxidase in the healthy human brain during hypoxemia. <i>Journal of Biomedical Optics</i> , 2007, 12, 024002.	1.4	60
24	False Positives In Functional Nearinfrared Topography. <i>Advances in Experimental Medicine and Biology</i> , 2009, 645, 307-314.	0.8	58
25	Multichannel near infrared spectroscopy indicates regional variations in cerebral autoregulation in infants supported on extracorporeal membrane oxygenation. <i>Journal of Biomedical Optics</i> , 2012, 17, 067008.	1.4	56
26	Monitoring Cerebral Autoregulation After Brain Injury. <i>Anesthesia and Analgesia</i> , 2015, 121, 198-205.	1.1	56
27	Systematic investigation of changes in oxidized cerebral cytochrome c oxidase concentration during frontal lobe activation in healthy adults. <i>Biomedical Optics Express</i> , 2012, 3, 2550.	1.5	55
28	Inhaled 45–50% argon augments hypothermic brain protection in a piglet model of perinatal asphyxia. <i>Neurobiology of Disease</i> , 2016, 87, 29-38.	2.1	52
29	Measurement of Frontal Lobe Functional Activation and Related Systemic Effects: A Near-Infrared Spectroscopy Investigation. <i>Advances in Experimental Medicine and Biology</i> , 2008, 614, 397-403.	0.8	52
30	False positives and false negatives in functional near-infrared spectroscopy: issues, challenges, and the way forward. <i>Neurophotonics</i> , 2016, 3, 030401.	1.7	47
31	Optimal wavelength combinations for near-infrared spectroscopic monitoring of changes in brain tissue hemoglobin and cytochrome c oxidase concentrations. <i>Biomedical Optics Express</i> , 2015, 6, 933.	1.5	45
32	MAESTROS: A Multiwavelength Time-Domain NIRS System to Monitor Changes in Oxygenation and Oxidation State of Cytochrome-C-Oxidase. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2019, 25, 1-12.	1.9	45
33	Spatial sensitivity and penetration depth of three cerebral oxygenation monitors. <i>Biomedical Optics Express</i> , 2014, 5, 2896.	1.5	44
34	Towards a wearable near infrared spectroscopic probe for monitoring concentrations of multiple chromophores in biological tissue <i>in vivo</i> . <i>Review of Scientific Instruments</i> , 2016, 87, 065112.	0.6	44
35	Changes in cerebral oxygenation and haemodynamics during postural blood pressure changes in patients with autonomic failure. <i>Physiological Measurement</i> , 2006, 27, 777-785.	1.2	43
36	A novel non-amplification assay for the detection of <i>Leishmania</i> spp. in clinical samples using gold nanoparticles. <i>Journal of Microbiological Methods</i> , 2014, 96, 56-61.	0.7	43

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37	Oxygen dependency of mitochondrial metabolism indicates outcome of newborn brain injury. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2019, 39, 2035-2047.	2.4	43
38	Relationship Between Brain Tissue Haemodynamics, Oxygenation And Metabolism In The Healthy Human Adult Brain During Hyperoxia And Hypercapnea. <i>Advances in Experimental Medicine and Biology</i> , 2009, 645, 315-320.	0.8	42
39	Simultaneous monitoring of cerebral perfusion and cytochrome c oxidase by combining broadband near-infrared spectroscopy and diffuse correlation spectroscopy. <i>Biomedical Optics Express</i> , 2018, 9, 2588.	1.5	39
40	Acute LPS sensitization and continuous infusion exacerbates hypoxic brain injury in a piglet model of neonatal encephalopathy. <i>Scientific Reports</i> , 2019, 9, 10184.	1.6	36
41	Attention and Capacity Limits in Perception: A Cellular Metabolism Account. <i>Journal of Neuroscience</i> , 2020, 40, 6801-6811.	1.7	35
42	Cerebral Near Infrared Spectroscopy Monitoring in Term Infants With Hypoxic Ischemic Encephalopathy—A Systematic Review. <i>Frontiers in Neurology</i> , 2020, 11, 393.	1.1	35
43	Investigation of Frontal Cortex, Motor Cortex and Systemic Haemodynamic Changes During Anagram Solving. <i>Advances in Experimental Medicine and Biology</i> , 2008, 614, 21-28.	0.8	35
44	Theoretical investigation of measuring cerebral blood flow in the adult human head using bolus Indocyanine Green injection and near-infrared spectroscopy. <i>Applied Optics</i> , 2007, 46, 1604.	2.1	32
45	Hyperspectral imaging solutions for brain tissue metabolic and hemodynamic monitoring: past, current and future developments. <i>Journal of Optics (United Kingdom)</i> , 2018, 20, 044009.	1.0	32
46	Measurement of Cerebral Tissue Oxygenation in Young Healthy Volunteers During Acetazolamide Provocation: A Transcranial Doppler and Near-Infrared Spectroscopy Investigation. <i>Advances in Experimental Medicine and Biology</i> , 2008, 614, 389-396.	0.8	30
47	Investigation of in vivo measurement of cerebral cytochrome-c-oxidase redox changes using near-infrared spectroscopy in patients with orthostatic hypotension. <i>Physiological Measurement</i> , 2007, 28, 199-211.	1.2	28
48	Multi-channel multi-distance broadband near-infrared spectroscopy system to measure the spatial response of cellular oxygen metabolism and tissue oxygenation. <i>Biomedical Optics Express</i> , 2016, 7, 4424.	1.5	28
49	Hyperoxia results in increased aerobic metabolism following acute brain injury. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2017, 37, 2910-2920.	2.4	28
50	Detection of Leishmania-specific DNA and surface antigens using a combination of functionalized magnetic beads and cadmium selenite quantum dots. <i>Journal of Microbiological Methods</i> , 2016, 123, 62-67.	0.7	27
51	Non-invasive measurement of a metabolic marker of infant brain function. <i>Scientific Reports</i> , 2017, 7, 1330.	1.6	27
52	Pressure passivity of cerebral mitochondrial metabolism is associated with poor outcome following perinatal hypoxic ischemic brain injury. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2019, 39, 118-130.	2.4	27
53	Investigation of the Pattern of the Hemodynamic Response as Measured by Functional Near-Infrared Spectroscopy (fNIRS) Studies in Newborns, Less Than a Month Old: A Systematic Review. <i>Frontiers in Human Neuroscience</i> , 2018, 12, 371.	1.0	26
54	Analysis of the Changes in the Oxidation of Brain Tissue Cytochrome-c-Oxidase in Traumatic Brain Injury Patients during Hypercapnoea. <i>Advances in Experimental Medicine and Biology</i> , 2011, 701, 9-14.	0.8	26

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55	Systemic physiology augmented functional near-infrared spectroscopy: a powerful approach to study the embodied human brain. <i>Neurophotonics</i> , 2022, 9, .	1.7	26
56	Functional Optical Topography Analysis Using Statistical Parametric Mapping (SPM) Methodology with and without Physiological Confounds. <i>Advances in Experimental Medicine and Biology</i> , 2010, 662, 237-243.	0.8	25
57	Immediate remote ischemic postconditioning after hypoxia ischemia in piglets protects cerebral white matter but not grey matter. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016, 36, 1396-1411.	2.4	24
58	Hypothermia protects brain mitochondrial function from hypoxemia in a murine model of sepsis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016, 36, 1955-1964.	2.4	23
59	Dexmedetomidine Combined with Therapeutic Hypothermia Is Associated with Cardiovascular Instability and Neurotoxicity in a Piglet Model of Perinatal Asphyxia. <i>Developmental Neuroscience</i> , 2017, 39, 156-170.	1.0	23
60	Quantification of Systemic Interference in Optical Topography Data during Frontal Lobe and Motor Cortex Activation: An Independent Component Analysis. <i>Advances in Experimental Medicine and Biology</i> , 2011, 701, 45-51.	0.8	23
61	Comparison of short-channel separation and spatial domain filtering for removal of non-neural components in functional near-infrared spectroscopy signals. <i>Neurophotonics</i> , 2021, 8, 015004.	1.7	22
62	Functional NIRS Measurement of Cytochrome-C-Oxidase Demonstrates a More Brain-Specific Marker of Frontal Lobe Activation Compared to the Haemoglobins. <i>Advances in Experimental Medicine and Biology</i> , 2017, 977, 141-147.	0.8	22
63	An analysis framework for the integration of broadband NIRS and EEG to assess neurovascular and neurometabolic coupling. <i>Scientific Reports</i> , 2021, 11, 3977.	1.6	21
64	Computational modelling of the piglet brain to simulate near-infrared spectroscopy and magnetic resonance spectroscopy data collected during oxygen deprivation. <i>Journal of the Royal Society Interface</i> , 2012, 9, 1499-1509.	1.5	20
65	Changes in Cerebral Oxidative Metabolism during Neonatal Seizures Following Hypoxic-Ischemic Brain Injury. <i>Frontiers in Pediatrics</i> , 2016, 4, 83.	0.9	20
66	Optical monitoring of retinal respiration in real time: 670Ånm light increases the redox state of mitochondria. <i>Experimental Eye Research</i> , 2016, 152, 88-93.	1.2	20
67	A Hybrid Multi-Distance Phase and Broadband Spatially Resolved Spectrometer and Algorithm for Resolving Absolute Concentrations of Chromophores in the Near-Infrared Light Spectrum. <i>Advances in Experimental Medicine and Biology</i> , 2010, 662, 169-175.	0.8	20
68	Short-term effects of early initiation of magnesium infusion combined with cooling after hypoxia-ischemia in term piglets. <i>Pediatric Research</i> , 2019, 86, 699-708.	1.1	19
69	Nimodipine Reduces Dysfunction and Demyelination in Models of Multiple Sclerosis. <i>Annals of Neurology</i> , 2020, 88, 123-136.	2.8	19
70	Measurement of the absolute optical properties and cerebral blood volume of the adult human head with hybrid differential and spatially resolved spectroscopy. <i>Physics in Medicine and Biology</i> , 2006, 51, 703-717.	1.6	18
71	Separation of superficial and cerebral hemodynamics using a single distance time-domain NIRS measurement. <i>Biomedical Optics Express</i> , 2014, 5, 1465.	1.5	17
72	Image reconstruction of oxidized cerebral cytochrome C oxidase changes from broadband near-infrared spectroscopy data. <i>Neurophotonics</i> , 2017, 4, 021105.	1.7	17

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73	Quantification of the severity of hypoxic-ischemic brain injury in a neonatal preclinical model using measurements of cytochrome-c-oxidase from a miniature broadband-near-infrared spectroscopy system. <i>NeuroPhotonics</i> , 2019, 6, 1.	1.7	17
74	Effects of arterial blood gas levels on cerebral blood flow and oxygen transport. <i>Biomedical Optics Express</i> , 2011, 2, 966.	1.5	16
75	Relationship Between Cerebral Oxygenation and Metabolism During Rewarming in Newborn Infants After Therapeutic Hypothermia Following Hypoxic-Ischemic Brain Injury. <i>Advances in Experimental Medicine and Biology</i> , 2016, 923, 245-251.	0.8	16
76	The role of anterior prefrontal cortex (area 10) in face-to-face deception measured with fNIRS. <i>Social Cognitive and Affective Neuroscience</i> , 2021, 16, 129-142.	1.5	16
77	Facial and neural mechanisms during interactive disclosure of biographical information. <i>NeuroImage</i> , 2021, 226, 117572.	2.1	16
78	Investigation of Confounding Factors in Measuring Tissue Saturation with NIRS Spatially Resolved Spectroscopy. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1072, 307-312.	0.8	14
79	Investigation of Frontal Lobe Activation with fNIRS and Systemic Changes During Video Gaming. <i>Advances in Experimental Medicine and Biology</i> , 2013, 789, 89-95.	0.8	14
80	Dependence on NIRS Source-Detector Spacing of Cytochrome c Oxidase Response to Hypoxia and Hypercapnia in the Adult Brain. <i>Advances in Experimental Medicine and Biology</i> , 2013, 789, 353-359.	0.8	14
81	Modelling Blood Flow and Metabolism in the Preclinical Neonatal Brain during and Following Hypoxic-Ischaemia. <i>PLoS ONE</i> , 2015, 10, e0140171.	1.1	13
82	Oscillations in Cerebral Haemodynamics in Patients with Falciparum Malaria. <i>Advances in Experimental Medicine and Biology</i> , 2013, 765, 101-107.	0.8	13
83	In Vivo Imaging of Flavoprotein Fluorescence During Hypoxia Reveals the Importance of Direct Arterial Oxygen Supply to Cerebral Cortex Tissue. <i>Advances in Experimental Medicine and Biology</i> , 2016, 876, 233-239.	0.8	13
84	BrainSignals Revisited: Simplifying a Computational Model of Cerebral Physiology. <i>PLoS ONE</i> , 2015, 10, e0126695.	1.1	12
85	Estimating Functional Connectivity Symmetry between Oxy- and Deoxy-Haemoglobin: Implications for fNIRS Connectivity Analysis. <i>Algorithms</i> , 2018, 11, 70.	1.2	12
86	Role of Optical Neuromonitoring in Neonatal Encephalopathy – Current State and Recent Advances. <i>Frontiers in Pediatrics</i> , 2021, 9, 653676.	0.9	12
87	Time-domain NIRS system based on supercontinuum light source and multi-wavelength detection: validation for tissue oxygenation studies. <i>Biomedical Optics Express</i> , 2021, 12, 6629.	1.5	12
88	Changes in the Attenuation of Near Infrared Spectra by the Healthy Adult Brain During Hypoxaemia Cannot be Accounted for Solely by Changes in the Concentrations of Oxy- and Deoxy-Haemoglobin. , 2008, 614, 217-225.		12
89	Cerebral and Peripheral Tissue Oxygenation in Children Supported on ECMO for Cardio-Respiratory Failure. <i>Advances in Experimental Medicine and Biology</i> , 2010, 662, 447-453.	0.8	12
90	Decomposition of Near-Infrared Spectroscopy Signals Using Oblique Subspace Projections: Applications in Brain Hemodynamic Monitoring. <i>Frontiers in Physiology</i> , 2016, 7, 515.	1.3	11

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91	A Bayesian framework for the analysis of systems biology models of the brain. PLoS Computational Biology, 2019, 15, e1006631.	1.5	11
92	Absolute quantification of cerebral tissue oxygen saturation with multidistance broadband NIRS in newborn brain. Biomedical Optics Express, 2021, 12, 907.	1.5	11
93	Development of a Model to Aid NIRS Data Interpretation: Results from a Hypercapnia Study in Healthy Adults. Advances in Experimental Medicine and Biology, 2012, 737, 293-300.	0.8	11
94	Canonical Correlation Analysis in the Study of Cerebral and Peripheral Haemodynamics Interrelations with Systemic Variables in Neonates Supported on ECMO. Advances in Experimental Medicine and Biology, 2013, 765, 23-29.	0.8	11
95	Dual role of cerebral blood flow in regional brain temperature control in the healthy newborn infant. International Journal of Developmental Neuroscience, 2014, 37, 1-7.	0.7	10
96	Interrelationship Between Broadband NIRS Measurements of Cerebral Cytochrome C Oxidase and Systemic Changes Indicates Injury Severity in Neonatal Encephalopathy. Advances in Experimental Medicine and Biology, 2016, 923, 181-186.	0.8	10
97	Cerebral Tissue Oxygen Saturation Calculated Using Low Frequency Haemoglobin Oscillations Measured by Near Infrared Spectroscopy in Adult Ventilated Patients. , 2008, 614, 235-244.		10
98	Modelling Cerebrovascular Reactivity: A Novel Near-Infrared Biomarker of Cerebral Autoregulation?. Advances in Experimental Medicine and Biology, 2013, 765, 87-93.	0.8	10
99	Wavelet Cross-Correlation to Investigate Regional Variations in Cerebral Oxygenation in Infants Supported on Extracorporeal Membrane Oxygenation. Advances in Experimental Medicine and Biology, 2013, 765, 203-209.	0.8	10
100	Spectral Characteristics of Spontaneous Oscillations in Cerebral Haemodynamics are Posture Dependent. Advances in Experimental Medicine and Biology, 2003, 540, 31-36.	0.8	10
101	Regional cerebral oxygenation measured by multichannel near-infrared spectroscopy (optical) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T Thoracic and Cardiovascular Surgery, 2011, 141, e31-e33.	0.4	9
102	Hypothermia is not therapeutic in a neonatal piglet model of inflammation-sensitized hypoxia-induced ischemia. Pediatric Research, 2022, 91, 1416-1427.	1.1	9
103	A Hyperspectral Imaging System for Mapping Haemoglobin and Cytochrome-c-Oxidase Concentration Changes in the Exposed Cerebral Cortex. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-11.	1.9	9
104	Normobaric Hyperoxia Does Not Change Optical Scattering or Pathlength but Does Increase Oxidised Cytochrome c Oxidase Concentration in Patients with Brain Injury. Advances in Experimental Medicine and Biology, 2013, 765, 67-72.	0.8	9
105	Changes in Brain Tissue Oxygenation and Metabolism During Rewarming After Neonatal Encephalopathy are Related to Electrical Abnormality. Advances in Experimental Medicine and Biology, 2020, 1232, 25-31.	0.8	9
106	Multi-laboratory performance assessment of diffuse optics instruments: the BitMap exercise. Journal of Biomedical Optics, 2022, 27, .	1.4	9
107	Development of a Near Infrared Multi-Wavelength, Multi-Channel, Time-Resolved Spectrometer for Measuring Brain Tissue Haemodynamics and Metabolism. Advances in Experimental Medicine and Biology, 2014, 812, 181-186.	0.8	8
108	Quantification of Adult Cerebral Blood Volume using the NIRS Tissue Oxygenation Index. , 2006, 578, 237-243.		8

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109	Effects of Assuming Constant Optical Scattering on Haemoglobin Concentration Measurements Using NIRS during a Valsalva Manoeuvre. <i>Advances in Experimental Medicine and Biology</i> , 2011, 701, 15-20.	0.8	8
110	Evaluation of Haemoglobin and Cytochrome Responses During Forearm Ischaemia Using Multi-wavelength Time Domain NIRS. <i>Advances in Experimental Medicine and Biology</i> , 2017, 977, 67-72.	0.8	8
111	Investigation of the quantification of hemoglobin and cytochrome-c-oxidase in the exposed cortex with near-infrared hyperspectral imaging: a simulation study. <i>Journal of Biomedical Optics</i> , 2020, 25, 1.	1.4	8
112	Spatial Distribution of Changes in Oxidised Cytochrome C Oxidase During Visual Stimulation Using Broadband Near Infrared Spectroscopy Imaging. <i>Advances in Experimental Medicine and Biology</i> , 2016, 923, 195-201.	0.8	7
113	Broadband NIRS Cerebral Cytochrome-C-Oxidase Response to Anoxia Before and After Hypoxic-Ischaemic Injury in Piglets. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1072, 151-156.	0.8	7
114	Modelling of Mitochondrial Oxygen Consumption and NIRS Detection of Cytochrome Oxidase Redox State. <i>Advances in Experimental Medicine and Biology</i> , 2010, 662, 285-291.	0.8	7
115	Near Infrared Light Scattering Changes Following Acute Brain Injury. <i>Advances in Experimental Medicine and Biology</i> , 2016, 876, 139-144.	0.8	7
116	In Vivo Measurement of Cerebral Mitochondrial Metabolism Using Broadband Near Infrared Spectroscopy Following Neonatal Stroke. <i>Advances in Experimental Medicine and Biology</i> , 2016, 876, 493-500.	0.8	7
117	Broadband-NIRS System Identifies Epileptic Focus in a Child with Focal Cortical Dysplasia—A Case Study. <i>Metabolites</i> , 2022, 12, 260.	1.3	7
118	Hyperoxia. <i>Journal of Neurosurgery</i> , 2008, 109, 421-423.	0.9	6
119	Prediction of brain tissue temperature using near-infrared spectroscopy. <i>Neurophotonics</i> , 2017, 4, 021106.	1.7	6
120	The role of parietal cortex in overimitation: a study with fNIRS. <i>Social Neuroscience</i> , 2018, 13, 214-225.	0.7	6
121	Watching synchronous mitochondrial respiration in the retina and its instability in a mouse model of macular degeneration. <i>Scientific Reports</i> , 2021, 11, 3274.	1.6	6
122	Optical Topography to Measure Variations in Regional Cerebral Oxygenation in an Infant Supported on Venous-Arterial Extra-Corporeal Membrane Oxygenation. <i>Advances in Experimental Medicine and Biology</i> , 2012, 737, 71-76.	0.8	6
123	Use of a Hybrid Optical Spectrometer for the Measurement of Changes in Oxidized Cytochrome c Oxidase Concentration and Tissue Scattering During Functional Activation. <i>Advances in Experimental Medicine and Biology</i> , 2012, 737, 119-124.	0.8	6
124	Near-Infrared Spectroscopy Measured Cerebral Blood Flow from Spontaneous Oxygenation Changes in Neonatal Brain Injury. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1232, 3-9.	0.8	6
125	Depth-resolved assessment of changes in concentration of chromophores using time-resolved near-infrared spectroscopy: estimation of cytochrome-c-oxidase uncertainty by Monte Carlo simulations. <i>Biomedical Optics Express</i> , 2019, 10, 4621.	1.5	6
126	Inferior parietal lobule is sensitive to different semantic similarity relations for concrete and abstract words. <i>Psychophysiology</i> , 2021, 58, e13750.	1.2	6

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127	Circulation Time in Man from Lung to Periphery as an Indirect Index of Cardiac Output. , 2005, 566, 311-316.		5
128	Rate of Change in Cerebral Oxygenation and Blood Pressure in Response to Passive Changes in Posture. , 2005, 566, 187-193.		5
129	Modelling Noninvasively Measured Cerebral Signals during a Hypoxemia Challenge: Steps towards Individualised Modelling. PLoS ONE, 2012, 7, e38297.	1.1	5
130	Simulation of Preterm Neonatal Brain Metabolism During Functional Neuronal Activation Using a Computational Model. Advances in Experimental Medicine and Biology, 2016, 876, 111-120.	0.8	5
131	Characterizing Fluctuations of Arterial and Cerebral Tissue Oxygenation in Preterm Neonates by Means of Data Analysis Techniques for Nonlinear Dynamical Systems. Advances in Experimental Medicine and Biology, 2016, 876, 511-519.	0.8	5
132	Near infrared spectroscopy reveals instability in retinal mitochondrial metabolism and haemodynamics with blue light exposure at environmental levels. Journal of Biophotonics, 2022, 15, e2916.	1.1	5
133	Investigation of functional near-infrared spectroscopy signal quality and development of the hemodynamic phase correlation signal. Neurophotonics, 2022, 9, .	1.7	5
134	Experimental validation of alternating transillumination for imaging intramural wave propagation. , 2011, 2011, 1676-9.		4
135	Changes in Cytochrome-C-Oxidase Account for Changes in Attenuation of Near-Infrared Light in the Healthy Infant Brain. Advances in Experimental Medicine and Biology, 2018, 1072, 7-12.	0.8	4
136	A Fibreless Multiwavelength NIRS System for Imaging Localised Changes in Cerebral Oxidised Cytochrome C Oxidase. Advances in Experimental Medicine and Biology, 2018, 1072, 339-343.	0.8	4
137	Metabolic brain measurements in the newborn: Advances in optical technologies. Physiological Reports, 2020, 8, e14548.	0.7	4
138	Serial blood cytokine and chemokine mRNA and microRNA over 48h are insult specific in a piglet model of inflammation-sensitized hypoxia-ischaemia. Pediatric Research, 2021, 89, 464-475.	1.1	4
139	Investigation of Oxygen Saturation Derived from Cardiac Pulsations Measured on the Adult Head Using NIR Spectroscopy. Advances in Experimental Medicine and Biology, 2006, 578, 209-215.	0.8	4
140	Reduction of Cytochrome c Oxidase During Vasovagal Hypoxia-Ischemia in Human Adult Brain: A Case Study. Advances in Experimental Medicine and Biology, 2013, 789, 21-27.	0.8	4
141	Modelling Blood Flow and Metabolism in the Piglet Brain During Hypoxia-Ischaemia: Simulating pH Changes. Advances in Experimental Medicine and Biology, 2013, 789, 331-337.	0.8	4
142	Analysis of Slow Wave Oscillations in Cerebral Haemodynamics and Metabolism Following Subarachnoid Haemorrhage. Advances in Experimental Medicine and Biology, 2014, 812, 195-201.	0.8	4
143	Hyperspectral Imaging of the Hemodynamic and Metabolic States of the Exposed Cortex: Investigating a Commercial Snapshot Solution. Advances in Experimental Medicine and Biology, 2018, 1072, 13-20.	0.8	4
144	ABroAD: A Machine Learning Based Approach to Detect Broadband NIRS Artefacts. Advances in Experimental Medicine and Biology, 2018, 1072, 319-324.	0.8	4

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145	Cytochrome-C-Oxidase Exhibits Higher Brain-Specificity than Haemoglobin in Functional Activation. , 2016, , .		4
146	Modelling Blood Flow and Metabolism in the Piglet Brain During Hypoxia-Ischaemia: Simulating Brain Energetics. Advances in Experimental Medicine and Biology, 2013, 789, 339-344.	0.8	3
147	The Use of Supercontinuum Laser Sources in Biomedical Diffuse Optics: Unlocking the Power of Multispectral Imaging. Applied Sciences (Switzerland), 2021, 11, 4616.	1.3	3
148	Measurement of the Optical Properties of the Adult Human Head with Spatially Resolved Spectroscopy and Changes of Posture. Advances in Experimental Medicine and Biology, 2003, 540, 13-18.	0.8	3
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